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ACTA MVSEI

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REVIEWERS FOR *BRUKENTHAL ACTA MUSEI XVII.4*

The staff is deeply grateful to the following specialists who gave of their time to review manuscripts submitted in 2022 for publication in *Brukenthal Acta Musei XVII.4*:

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BRUKENTHAL NATIONAL MUSEUM IN 2021: A CHRONICLE OF RESTORATION EXHIBITIONS AND EVENTS

Dana Roxana HRIB *

Abstract: *The present study is a synthetic presentation of Brukenthal National Museum's cultural offer in the field of restoration during 2021 and other significant aspects.*

Keywords: *Brukenthal National Museum, restoration, 2021.*

Rezumat: *Articolul de față constituie o prezentare sintetică a ofertei culturale a Muzeului Național Brukenthal în domeniul restaurării, pe parcursul anului 2021 și alte aspecte semnificative.*

Cuvinte-cheie: *Muzeul Național Brukenthal, restaurare, 2021.*

Three Brukenthal Centuries – the message of Prof. Sabin Adrian Luca, Director-General of Brukenthal National Museum:

„Born in 1721, Baron Samuel von Brukenthal – Governor of the Grand Principality of Transylvania (1877 – 1887) – remained in the collective memory not so much through the political and administrative role that history has given him, but through the cultural achievements he has assumed.

First of all, von Brukenthal is the founder of the first public museum opened in today's Romania territories – the Brukenthal Museum, an institution whose bicentennial activity we celebrated in 2017.

The accomplishment of his work as a collector brings together over 1,000 paintings (15th – 18th centuries), about 1,000 prints (16th – 18th century European engraving) and 2,000 plates included in albums, a book fund of about 16,000 volumes, impressive collections of numismatics, minerals and antiques given to the public, which he considered his spiritual heir.

Protector of local artistic circles, from painters to musicians, Samuel von Brukenthal set the patterns of the Sibiu cultural environment that would materialize, in 2007, in the first European Capital of Culture in our country.

The standardization of human survival, in modern times, concerns indicators related to the physical and social quality of life. The survival of cultural values, produced by the great spirits of mankind, is due to personalities such as Samuel von Brukenthal, through whose care we can speak today in Romania of Titian, Veronese, Cranach, Van Eyck, Brueghel and Memling, to name just a few of the masters who can be admired in exhibitions.

The vast legacy left by Baron Samuel von Brukenthal urges us to pay homage, in 2021, to the importance of his work as a collector and founder of cultural institutions, on the occasion of three centuries anniversary of his birth.”

1. Temporary exhibitions¹

The Magic of Restoration (Brukenthal Palace, Cartography Cabinet, 1.09 - 3.10. 2021)

Little known, the activity of restoring heritage involves a complex team effort so that today's general public, but also the future one, can experience the joy of knowing the values of the historical past. Each restoration-show is a great opportunity to reveal the osmosis between science and the art of restoration. The science starts with the research of the known past of the heritage item, contributing in a relevant way to the discovery of new data and aspects related to it, while also giving it the chance of its future existence. The art, on the other hand, is an experience above space and time, in which the restorer empathizes with the artist or craftsman who made the restored objects, encoding in their essence various realities, from the workshop where they were produced to the one of the history they have gone through and that of the present to which the exhibition addresses.

Thus, the 2021 exhibition displayed the outcome of the most spectacular restoration processes – items from the collections of Brukenthal National Museum: painting, prints, paper, leather, wood,

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¹ The short descriptions of temporary exhibitions are selected from the texts given by the curators for public information.

polychrome wood, textiles, ceramics, metal and stone. The exhibits were accompanied by panels containing documentary information on the restoration process and the name of the restorer.

2. Scientific symposium

_Online symposium "Deontology of repeated intervention in restoration" (28.10.2021): the theme was based on the restoration norms in force and the specialization programs organized by the Ministry of Culture on various supports. Restoration experts from the museum network were invited to the session, as well as specialists from the university.

3. Participating in exhibitions

_Sibiu Contemporary Art Festival 2nd edition / SCAF (Museum of Contemporary Art, 10.09 - 31.10.2021)

Organized by Brukenthal National Museum together with Brukenthal von Studio Association

_Annual Show of Sibiu Photography School 8th edition (Brukenthal Palace, Prints Cabinet, 11 - 31.12.2021)

Theme: Human Body

Organized by Brukenthal National Museum together with Image Art

_The Statue of Baron Samuel von Brukenthal: exhibition of projects (Casa Albastră / Blue House, Multimedia Room, 3 - 29.03.2021)

_ArmEGOrte (22.03 - 25.06.2021)

Museum of Oradea City

_Inter-County Visual Arts Salon of the UAP Sibiu 2021 (12.08-14.09.2021)

UAP Gallery Sibiu

_ Visual Arts Winter Salon of the UAP Sibiu (17.12.2021 - 2022)

UAP Gallery, Sibiu

4. Participating in projects

_Sibiu Contemporary Art Festival 2nd edition, 2021: a project organized by Brukenthal von Studio Association and co-financed by the City Hall of Sibiu through the Cultural Agenda.

5. Presentations, round tables, colloquia

_Artist meet-ups (Museum of Contemporary Art, 8.10.2021)

"300 Brukenthal" Colloquium (Museum of Contemporary Art, 22.10.2021)

6. Book-launches

_Catalogue Sibiu Contemporary Art Festival 2 (Museum of Contemporary Art, 25.09.2021)

The catalog was launched in print and digital format by scanning a QR code.

REFERENCES

_Dana Roxana Hrib (coord.), Muzeul Național Brukenthal din Sibiu, Raport de activitate 2021
http://www.brukenthalmuseum.ro/despre_noi/rapoarte.html

_online source on events:
<http://www.brukenthalmuseum.ro/index2.php/en/news/>

_online source on exhibitions:
<http://www.brukenthalmuseum.ro/index2.php/en/expo>

THE RESTORATION OF A FEW DAMASCUS STEEL HUNTING RIFLES

Dorin BARBU*

Abstract: *The Brukenenthal National Museum owns a variety of 19th century hunting rifles, with Damascus steel barrels. A few of these were restored and are being presented in this paper. In addition, the existing methods for restoring Damascus steel are presented, as well as a description of its forging process.*

Keywords: *hunting rifles, Damascus steel, restoration-conservation.*

Rezumat: *Muzeul Național Brukenenthal deține în colecția sa de arme mai multe puști de vânătoare din secolul al 19-lea, cu țevi din oțel de Damasc, o parte din acestea fiind restaurate și prezentate în lucrarea de față. Pe lângă prezentarea metodele existente de restaurare a oțelului de damasc, este descris și procesul de obținere al acestuia.*

Cuvinte-cheie: *puști de vânătoare, oțel de Damasc, restaurare-conservare.*

Most large museums have a variety of Damascus steel weapons on display. There are two varieties of Damascus steel: wootz Damascus and pattern-welded Damascus, both of which were apparently first produced prior to around 500 (Verhoeven, JOM, 1998, pp. 58-64). A common characteristic of both these varieties is an attractive surface pattern composed of swirling patterns of light-etched regions on a nearly black background.

Wootz Damascus is a high carbon (1-2%) crucible steel containing low levels of other impurities such as silicon, manganese, phosphorus and sulphur. It originates from India and is produced by melting a mixture of carbonisation material (wood, charcoal or leaves) and low-carbon iron at 1200°C in a small closed clay crucible. The results are ingots or wootz cakes, subsequently shaped into hockey pucks, about four inches in diameter and a bit less than two inches in height. Damascus swords were made by forging these ingots directly into a blade shape by repeated heating and hammering operations.

Upon examining some specimens of wootz steel, Verhoeven found that they contained bands of iron carbide particles known as Cementite (Fe_3C). These particles are generally around six to nine microns in diameter, well rounded and tightly clustered into bands spaced 30 to 70 microns apart, lined up parallel to the blade surface, like the grain inside a plank of wood. When the blade is etched

with acid, the carbides appear as white lines in a dark steel matrix. Just as the wavy growth rings in a tree produce the characteristic swirling patterns on cut wood, undulations in the carbide bands account for the intricate damascene patterns on the blade surfaces. The carbide particles are extremely hard, and it is thought that the combination of these bands of hard steel within a softer matrix of springier steel gives Damascus weapons a hard cutting edge combined with a tough flexibility (Verhoeven, 2001, p.75). Unfortunately, the technique of producing wootz Damascus steel is a lost art.

Pattern-welded Damascus is a compound of high- and low-carbon steel. While this steel has been an especially desired weapon-forging material since antiquity, it is only in the 18th and 19th that it started being used for firearms, especially hunting rifles. Pattern-welded Damascus is produced by forge welding alternating sheets of high- and low-carbon steel. This composite is then folded and forge-welded together, and the fold/forge cycle is repeated until a large number of layers is obtained. The steel is then heated until it turns bright red and then twisted with tongues to form a “screw” type bar. Depending on the quality of the gun barrel desired, a single twisted rod or multiple rods may be used. For instance, in cheaper Damascus barrels, only a single rod is used and this is heated and flattened into a ribbon. In better quality barrels, two, three, four, six or even eight rods may be

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used. If multiple rods are used, they are chosen so they create a pattern with the adjacent rods, twisted either left or right. The rods are then combined and welded together, then rolled into a single long ribbon (Fig 1.). This is then washed in acid. As the steel parts are harder, they resist the acid better and retain their white colour. The softer iron reacts with the acid to form a darker brown or black colour (Fig 2., 3.). The ribbon is coiled around a mandrel in a spiral form, and then heated and welded together by hammering, until it turns black. This forms the tube of the barrel (Fig 4.). The density and tenacity of the barrel are greatly improved by the hammering process (The Editor, 2010).

The Brukenenthal National Museum owns a variety of Damascus steel hunting rifles, among which:

– M 2921 Double-barrelled hunting rifle (early 20th century) with two adjoining cylindrical smooth bore barrels made of Damascus steel with two mechanisms whose hammers function as percussion strikers. Inscription: D.SCHUSTER IN HERRMANNSTADT. Two quails are engraved on the mechanism on the right, a fox on the left. A hare and two birds are engraved on the guard of the trigger. It is a breech-loaded shotgun, with a latch-operated break-action mechanism; the safety latch is located in front of the trigger guard. The fore-end is cracked, with missing wood pieces; the horn trigger-guard presents *Coleoptera* holes. The two hammers are missing.

Total length: 115cm, Barrel length: 74cm, Calibre: 16mm.

– M 2930 Hunting rifle (19th century) with a rifled octagonal barrel made of Damascus steel. A human figure is engraved at the base of the breech, below it, a devil's head, followed by an oval medallion with the inscription PIRKO IN WIEN. A wild boar is engraved on the percussion cap mechanism; the trigger-guard and the butt of the gun are engraved with plant motifs. A fallow deer is engraved on the side plate. Fore-end and stock are made out of walnut wood. A lion's head and a rhombic medallion are carved into the fore-end. Four silver medallions are also applied on the fore-end. The sighting mechanism consists of a front sight and a rear sight. Total length: 153cm, Barrel length: 115cm, Calibre: 13mm.

M 2931 Double-barrelled hunting rifle (19th century) with two adjoining cylindrical smooth bore barrels made of Damascus steel, with two percussion cap mechanisms. The fore-end and stock are made out of walnut wood, and have a rhombic

silver medallion with the engraved initials GM (Gothic) and two silver medallions at the base of the barrel. The cleaning rod and belt fastening bolt are missing. Total length: 104cm, Barrel length: 65cm, Calibre: 17mm.

– M 2934 Double-barrelled hunting rifle (19th century) with two adjoining cylindrical smooth bore barrels made of Damascus steel, with two percussion cap mechanisms. The fore-end and stock are made out of walnut wood. The lock plates of the mechanisms, the trigger guard and the fastening points of the barrels are engraved with plant motifs. The hammers and hammer screws are missing. Total length: 114.5cm, Barrel length: 72.5cm, Calibre: 17mm.

– M 2946 Double-barrelled hunting rifle (19th century) with two adjoining cylindrical smooth bore barrels, made of Damascus steel, with the inscription JOH: SPRINGER VORM: NOWOTNY IN WIEN in gold and a silver medallion. The two mechanisms are fish-shaped with engraved hammers: the one on the left with plant motifs, a fox, as well as a bird and the inscription IN WIEN, and the one on the right: a dog, two pheasants and the inscription SPRINGER. A dog is engraved on the trigger guard as well as on the butt plate. The bolts are engraved with plant motifs. Two silver medallions can be found on the fore-end. The muzzle is damaged. Total length: 105 cm., Barrel length: 66 cm., Calibre: 18 mm.

– M 3003 Double-barrelled hunting rifle (19th century) with two superposed rifled (seven grooves) cylindrical barrels, made of Damascus steel, with the inscription LUDWIG LOW: PESTEN in silver. The butt plate is engraved with a hunter holding a dead fox in his left hand and a hunting dog next to him; below a silver medallion with a nine-pointed crown and the initials KB (Gothic). The left percussion cap mechanism is engraved with a wild boar and the inscription PESTEN; a deer and the inscription LUDWIG are engraved on the right one. Two black goats are engraved on the guard and a deer on the butt plate. Stock with patch box for cleaning tools. Damaged muzzle; the stock is broken into two pieces; hammers, hammer fastening screws, cleaning rod, front sight and butt plate screw are missing. Total length: 107cm, Barrel length: 65cm, Calibre: 17mm.

– M 7316 Double-barrelled hunting rifle (19th century) with two adjoining cylindrical smooth bore barrels made of Damascus steel, with the inscription SCHUSTER HERMANNSTADT. It has two percussion cap mechanisms; the one on

the left is engraved with the inscription HERMANNSTADT and the one on the right with D.SCHUSTER. The stock and fore-end are made out of walnut wood. Total length: 121cm, Barrel length: 82cm, Calibre: 17mm.

– M 7338 Double-barrelled hunting rifle (19th century) with two adjoining cylindrical smooth bore barrels made of Damascus steel, with mark, two percussion cap mechanisms. The stock and fore-end are made out of walnut wood. The lock plates, the trigger guard and the screws are engraved with plant motifs. The left lock plate is engraved with two foxes and the right one with two hunting dogs. A deer and a squirrel are engraved on the guard; a turkey and a rabbit are engraved on the base of the barrels. Two silver strips are also inserted here. Total length: 121cm, Barrel length: 80cm, Calibre: 17mm.

Stambolov (Stambolov, 1988, p. 27) suggests two methods of restoring Damascus steel: the Plenderleith method with nitric acid (1,5ml nitric acid in 100 ml alcohol) and the Smithells method with picric acid (4 g picric acid in 100 ml alcohol). Sachse (Sachse, 1978, pp 113-123) suggests me-

chanically cleaning the steel with a rotating brush and metal polish, followed by degreasing and lacquering.

However, these methods are too aggressive for our weapons, which only show a superficial corrosion. Hence we applied the following technological flow:

- The guns were disassembled into component parts. The stuck screws were treated with Break-free;
- The iron components were mechanically cleaned, degreased with organic solvents (carbon tetrachloride) and treated with Balistol;
- The stock and fore-end were cleaned with solvanol (50% ethyl alcohol and 50% isopropyl alcohol) and steel wool, and glued with a devcon bicomponent epoxy resin. Afterwards they were puttied, finished with sand paper and polished with wax;
- The gaps in the horn were filled in with resin mixed with a mineral pigment matched in colour, made the cleaning rods and the fastening screws;
- The component parts were reassembled

REFERENCES

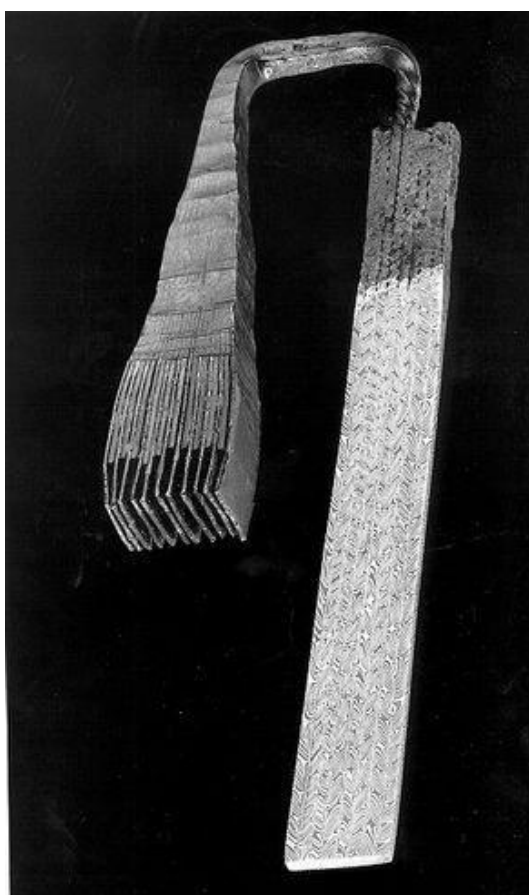
- Sachse, 1978 Sachse M., *Die Restaurierung von Damaszenerstahl*, Arbeitsblätter Heft 1, 1978
- Stambolov, 1988 Stambolov T., Bleck R.D., Eichelmann N., *Korrosion und Konservierung von Kunst und Kulturgut aus Metal*, vol. II Weimar, 1988
- The Editor, 2010 *Firearms History, Technology & Development* [online] available at: <https://firearmshistory.blogspot.com/2010/06/barrel-making-pattern-welded-or.html> [accessed 15.04.2022]
- Vaseline, 2021 *How To Make Damascus Steel Patterns Ideas Guide 2022*, [online] available at: <https://streetfornc.com/how-to-make-damascus-steel-patterns-ideas-guide-2022> [accessed 15.04.2022]
- Verhoeven, JOM, 1998 Verhoeven J.D., Pendray A.H., Dauksch W.E., *The Key Role Of Impurities in Ancient Damascus Steel Blades*, JOM, 50, 1998
- Verhoeven, 2001 Verhoeven J.D., *The mystery of Damascus Blades*, Scientific American, Inc. 2001

LIST OF ILLUSTRATIONS

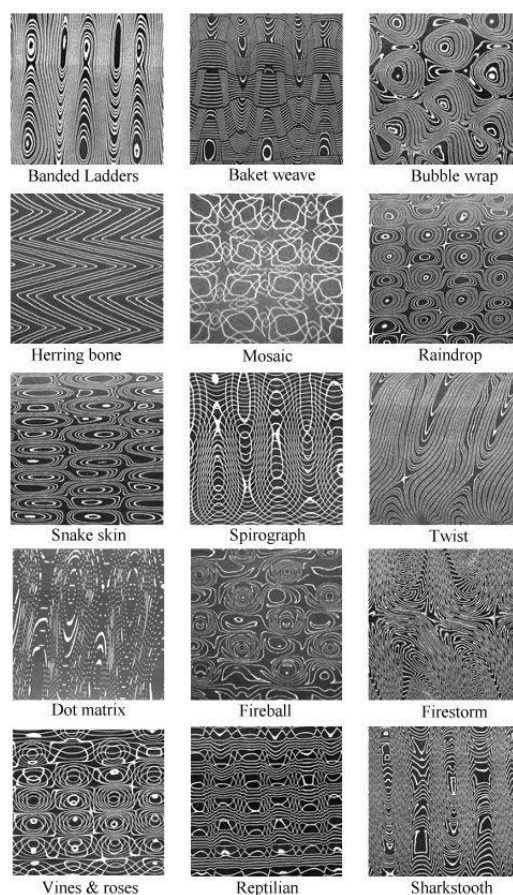
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1. (Sachse, 1978)



2. (Vaseline, 2021)

DAMASCUS PATTERNS



3. (The Editor, 2010)



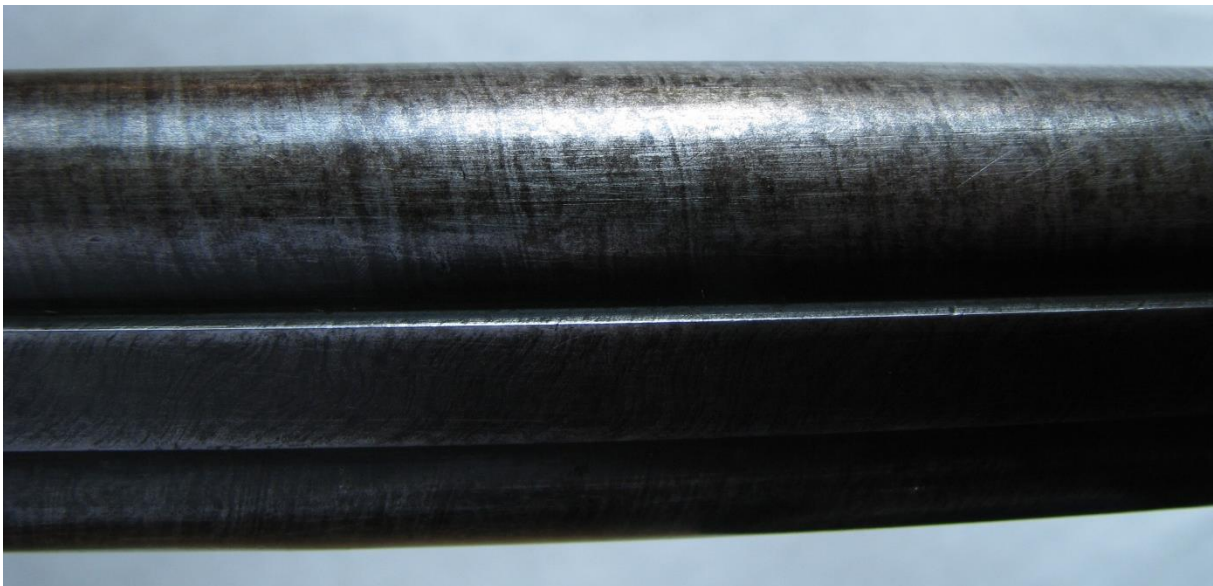
4. (Sachse, 1978)



5. M7338 disassembled



6. M7338 assembled



7. M2921 after restoration



8. M2930 after restoration



9. M2931 after restoration



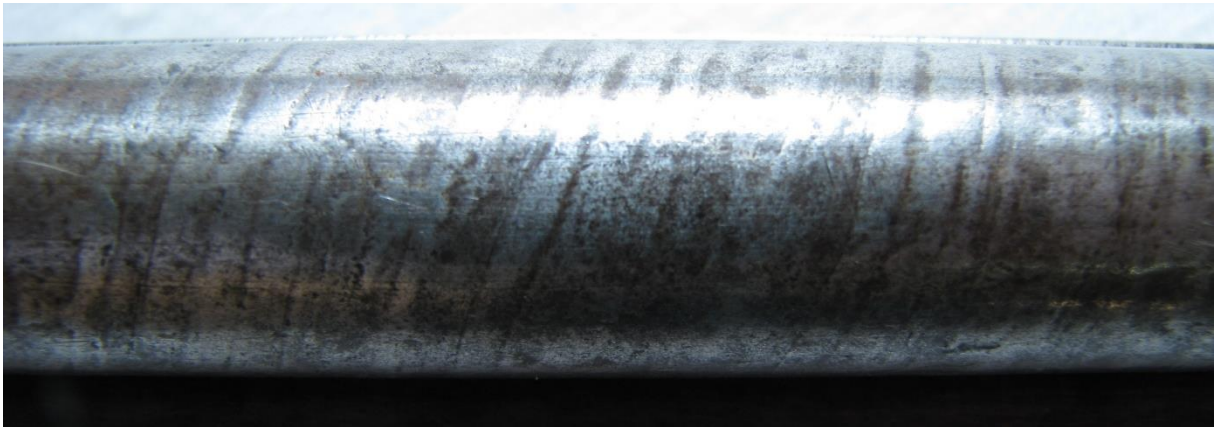
10. M2934 after restoration



11. M3003 after restoration



12. M2946 after restoration



13. M7316 after restoration



14. M7338 after restoration

THE RESTORATION OF A BATCH OF PATTERNS FOR HOST BAKING FROM THE GUILD COLLECTION OF THE HISTORY MUSEUM

Călin BOBIC*

Abstract: *The objects from guild collection from the Patrimony of the History Museum within the Brukenthal Museum Complex in Sibiu, in special the batch of patterns used to bake the Host from the 17th-18th centuries that offers important information about how they are made, their ritualistic role and the significance of the patterns to Host baking in catholic and protestant worship. In this paper we present different patterns used for baking unleavened dough for the Host from the perspective of restoration and conservation.*

Keywords: *Patterns, Host, guild, restoration, conservation.*

Rezumat: *Colecția de obiecte de breaslă din Patrimoniul Muzeului de Istorie din cadrul Complexului Muzeal Brukenthal din Sibiu, în particular lotul de tipare de ostie din secolele XVII - XVIII oferă informații importante cu privire la modul de confecționare a acestora, a rolului ritualic și al semnificației ostiei în cultul catolic și protestant.*

În lucrarea de față prezentăm diferite tipuri de tipare de ostie din perspectiva restaurării și conservării.

Cuvinte-cheie: *Tipare ostie, breaslă, restaurare, conservare*

INTRODUCTION

The term “printing”, according to the Explanatory Dictionary of the Romanian Language (1975, (2009): 955) has several definitions, meaning “the set of operations of printing a text” or pattern/ form according on which objects are cut or are poured”.

The unleavened dough baked in a pattern of object is called the Host. This is used in Catholic and Protestant worship in the communion ritual (DEX, 1975: 639).

DESCRIPTION OF OBJECTS

The batch of patterns used to baking the Host from the 17th-18th centuries from the collection (Negulici 2003, 71-76; Pascu 1954) consists in:

Pattern used to bake the Host, inv. no. M746

The piece is made of iron, by forging, with paddles secured by riveting, in a Transylvanian workshop in 1790. The paddles have a rectangular shape. On the inside face of paddles are incised: Christ, Holy Grail, the Lamb of God and the year of manufacture 1790 (Oprescu 1956). At the end of the paddles handles, the piece has a link, which is used to keep the paddles closed, while is pressing and baking the dough for the Host (Fig. 1-4).

Pattern used to bake the Host, inv. no. M747

The piece is made of wrought iron, with paddles

secured by riveting, in a Transylvanian workshop in XVIII th century. At the end of the paddle handles, the piece has a link, which is used to keep the paddles closed when pressing the dough during baking. In the field of both paddles there is an incised rhomboidal decoration and in the middle of each rhombus there is a stamped rosette (Fig.5-8).

– Pattern used to bake the Host, inv. no. M750

The piece is made of iron, by forging, with rectangular paddles, joined by riveting, in a Transylvanian workshop in the XVIII-th century. The paddles are made of brass and are decorated on both sides, with a network of incised squares and in the middle of each square is a stamped rosette. At the end of the paddles handles, a link is mounted, which is used to keep the paddles closed for pressing the dough during the baking (Fig.9-12).

– Pattern used to bake the Host, inv. no. M751

The piece is made of wrought iron, with rectangular paddles, joined by riveting, in a Transylvanian workshop in the XVII-th century. On the inside face of a paddle are incised: Christ crucified on the cross, the Lamb of God and the year of manufacture, 1638. The link located at the end of the pattern handle is used to keep the paddles closed when the dough is pressing and baking for to obtain the Host (Fig.13-16).

* Brukenthal National Museum, Sibiu

- Pattern used to bake the Host, inv. no. M758

The piece is made of iron, by forging, with circular paddles, joined by riveting, in a Transylvanian workshop in the XVIII-th century. The piece has a system with a ring used to close the hot paddles when the dough is pressed during baking. A paddle is decorated by incision, with the theme of the fight between David and Goliath. The second paddle of the piece is decorated by incision, with the reason Archangel Michael (Fig.17-21).

- Pattern used to bake the Host, inv. no. M753

The piece is made of wrought iron with circular paddles, joined by riveting, in a Transylvanian workshop in the XVIII century. The piece has a link system for pressing the dough between the hot paddles, during the baking. The paddles are decorated by an incision with an model, what representing a tulip and a pound, respectively (Fig.22-26).

Pattern used to bake the Host, inv. no. M756

The piece is made of wrought iron with heart-shaped paddles, joined by riveting, in a Transylvanian workshop in the XVIII-th century. At the bottom, the arms have a link to hold the hot paddles, which press the dough during the baking. The paddles are decorated on both sides with an incised rhomboidal pattern (Fig.27-30).

- Pattern used to bake the Host, inv. no. M752

The piece is made of iron, by forging, with circular paddles, joined by riveting, in a Transylvanian workshop in the XVIII-th century. The paddles are decorated on both sides by incision, one has the figure of the Lamb of God and the other has geometric and floral decorations (Fig.31-35).

DIAGNOSIS

The batch of patterns from the 17th-18th centuries, of the guild collection from the Patrimony of the History Museum within the Brukenenthal Museum Complex in Sibiu, which were used for Host baking, presents various physical, chemical degradations, and functional wears. These degradations are the result occurred after excessive heating the patterns in burning coals in time of baking of unleavened.

The corrosion products, in the form of iron-specific metal oxides are present on their entire surface in a discontinuous and uneven layer. Residual slag-like deposits are observed in the area of the paddles and clamping rivets.

In the M750 pattern, with brass paddles is observed on the entire surface, in a continuous and uniform layer, copper-specific corrosion products

along with iron-specific corrosion products because the paddles are mounted on arms with iron screws.

Following the analysis of all degradation factors, it results that the pieces in this batch of the collection require restoration and conservation operations.

RESTORATION AND CONSERVATION OF PATTERNS

The restoration itself includes identical technological flows for all the pieces, with the mention that the pattern with inv. no. M750, which has brass paddles, the technological flow of restoration for copper objects is applied to it.

The following restoration flow is used for the iron components of the patterns used to baking of the Host:

- Degreasing with ethyl alcohol of analytical purity;
- Mechanical cleaning with rotating steel brush for to remove exfoliating corrosion products and oxide crusts;
- Passivation with Fertan Antiruggine;
- Final filming with Paraloid B-72 solution, 5% concentration.
- The following restoration flow is used for the restoration of the brass paddles of the pattern with no. inv. 750:
- Washing with non-ionic detergent Romopal OF-10 of 1% concentration;
- Drying and degreasing with ethyl alcohol of analytical purity;
- Chemical cleaning in orthophosphoric acid of 10% concentration combined with intermediate brushes under running water until the complete disappearance of the corrosion products on the surface of the paddles;
- Neutralization in distilled water and drying in ethyl alcohol of analytical purity;
- Final polishing with Autosol.

CONCLUSIONS

The restoration of the batch of patterns from the 17th-18th centuries, from the collection of guild from the Patrimony of the History Museum within the Brukenenthal Museum Complex in Sibiu, which been used to baking of unleavened, is made based on the technological procedures. They are established following after assessing the state of conservation and characteristics specific to each piece.

From an exhibition point of view, the restoration of the patterns from the 17th-18th centuries, which been used to baking of unleavened, brings an add-

ed value related to the understanding of their importance and usefulness in the religious life of the community members.

REFERENCES

- DEX 1975, (2009) *Dicționarul explicativ al limbii române*, Editura Academiei RSR, 1975 (2009), p. 638, 955
- Stambolov, T., 1985 T. Stambolov, *The Corrosion and Conservation of Metallic Antiquities and Works of Arts*, Amsterdam, 1985
- Negulici 2003 Dorina Negulici *Feroanerie brașoveană sec. XV-XIX*, Brașov, 2003
- Pascu 1954 Ștefan Pascu *Meșteșugurile din Transilvania până în secolul XVI*, București 1954
- Oprescu 1956 George Oprescu *Bisericile cetăți ale sașilor din Ardeal*, ed. Academiei RPR, București 1956

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1. Before restauration



2. Before restauration detail



3. After restauration



4. After restauration detail



5. Before restauration



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7. After restauration



8. After restauration detail



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10. Before restauration detail



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13. Before restauration



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17. Before restauration



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SOME TECHNICAL REMARKS ON THE RED ARMY'S 1927 PATTERN SHASHKA DISCOVERED IN SIBIU, FOLLOWING ITS CONSERVATION

Alexandru Gh. SONOC*

Ioan BRAI**

Abstract: A Soviet 1927 pattern shashka (produced in 1930) was recently discovered on the attic of a house at the periphery of Sibiu. During its conservation, the almost completely rotten grip of its hilt had to be re-constructed. As the scabbard of this sabre (which was kept most likely a wartime souvenir, than hidden and forgotten) is missing, it is difficult to ascertain if it was a "cavalry shashka for Red Army soldiers and lower rank commanders" or one "for commanding and leading staff". Despite the fact that sometimes the Soviet 1927 pattern is compared with the 1881 Cossack pattern, which remained in use not only (as sometimes stated) till 1917, but even later, it is very interesting (but apparently not noted yet) that the 1927 pattern's variant "for Red Army soldiers and lower rank commanders" recalls rather the much earlier and more popular 1834 "Asian pattern sabre" by the fact that on the scabbards of the both there were socket rings for carrying a bayonet. On the scabbards of the 1881 Cossack pattern's both variants such a device lacked and on the variant for soldiers of the 1881 "dragoon" pattern the bayonet was carried in a special partition of the scabbard. After World War I there were major changes in weaponry and warfare and thus both in the armies of the Axis countries, as well as in the Polish army and in the Red Army the cavalry had to carry out partially different tasks than before. The Soviet 1927 pattern shashka, with its device for carrying a bayonet on the scabbard, was a solution proposed by V. G. Fyodorov to deal with these challenges. This pattern's variant with socket rings for bayonet was exported to Mongolia and to Afghanistan. In the Polish People's Army with it were armed during 1944-1945 only the officers of the uhlans in the 1st Cavalry Brigade. By contrary, to Lithuania was exported only the variant without this device.

Keywords: shashka, factory markings, authenticity, hilt reconstruction, deontology of conservation.

Rezumat: O șașcă sovietică model 1927 produsă în 1930, a fost recent descoperită în podul unei case de la periferia Sibiului. Cum teaca acestei săbii (care a fost cel mai probabil păstrată ca un suvenir de război, apoi ascunsă și uitată) nu s-a păstrat, este dificil de precizat dacă a fost o "șașcă de cavalerie pentru soldații Armatei Roșii și comandanții de rang inferior" sau una "pentru personalul de comandă și conducere". În ciuda faptului că uneori modelul sovietic 1927 este comparat cu modelul 1881 pentru cazaci, care a rămas în uz nu numai (cum uneori se afirmă) până în 1917, ci și mai târziu, este foarte interesant (deși se pare încă neremarcant) că modelul sovietic amintește mai curând de mai timpuriul și mai popularul "model de sabie asiatică" din 1834, prin faptul că pe tecile ambelor se găseau inele-suport pentru transportul unei baionete. Pe tecile ambelor variante ale modelului căzăcesc 1881 acest dispozitiv lipsește, iar la varianta pentru soldați a modelului 1881 "de dragon" baioneta era transportată într-un compartiment special al tecii. După Primul Război Mondial au fost schimbări majore în armament și în strategie și astfel cavaleria avea de îndeplinit, atât în armatele țărilor Axei, cât și în armata polonă și în Armata Roșie, sarcini parțial diferite de cele de dinainte. Șașca sovietică model 1927, cu dispozitivul său pentru transportul baionetei pe teacă, a fost o soluție propusă de V. G. Feodorov pentru a face față acestor provocări. Varianta cu inele-suport pentru baionetă a acestui model a fost exportată în Mongolia și în Afganistan. În Armata Populară Polonă cu aceasta au fost înarmați în perioada 1944-1945 doar ofițerii ulanilor din Brigada 1 Cavalerie. În Lituania a fost exportată, dimpotrivă, doar varianta fără acest dispozitiv.

Cuvinte-cheie: șașcă, marcaje de fabrică, autenticitate, reconstrucție de mâner, deontologia restaurării.

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1. The *shashka*'s discovery and its conservation.

Ioan Brai, an expert conservator, acquired from a woman a rusty, very deteriorated sabre found on the attic of a house near to the Rahova Market (thus, on the Oştirii Street, at the periphery of the Hipodrom III neighbourhood of the city Sibiu), where it came most likely as a wartime souvenir, which due to the later defeat of the Axis powers may have been hidden for some decades by its former owner. Although the conservator intended initially to use it as a house decoration, after its conservation he resold in 2020 this sabre to a collector from Şelimbăr, who became very interested in it when he heard about its discovery, only some hundreds of meters far away from his home. The fields beyond the last houses of Sibiu are located actually on the territory of three administrative territorial units: the city Sibiu, respectively the neighbour town Cislădie and the commune Şelimbăr. In early 21st c. on these fields began to be developed new residential areas. Previously, they were used for cultivating straw cereals, but especially as pastures and hayfields (as even nowadays), but also as a training ground for the Austro-Hungarian cavalry (in 19th c. till to the end of World War I) and later (till after the end of World War II), for the Romanian cavalry.

The sabre was found very poorly preserved, with no scabbard and barely few of the wooden hilt survived. On the entire piece there were visible signs of dust, dirt, strong rust (on the blade and tang) and thick layers of metal oxides specific to copper alloys on the guard and pommel. What remained of the wooden hilt was rotten and very fragile and also covered in dirt and dust (Fig. 1, 2).

Once brought to the conservation laboratory, the restoration process began by disassembling the hilt, which was very difficult due to the rust and dirt. A solution of 20% orthophosphoric acid was used to immerse the handle in, to remove some of the rust and to loosen the screw nuts holding the handle. After the hilt's removal, the screw nuts and the threaded end of the tang could not be saved, due to their degradation by rust (Fig. 3). The blade was degreased using organic solvents, and afterwards it was mechanically cleaned with a steel rotary wire brush (Fig. 4). Continuing the cleaning process, the blade was sandblasted using fine abrasive glass pearls (Fig. 5). The same treatment was used on the brass pommel and ferrule (Fig. 6). A new threaded end was made and brazed to the remaining tang of the blade (Fig. 7), and two new screw nuts and a washer were added. As the blade had very heavy pitting due to rust, the cavities

were filled with epoxy resin and sanded down to level to prevent any rust from forming again. As a final step, the blade was coated with Ballistol™ using a clean cloth (White 1995, 4-5). Ballistol™ is a gun mineral oil, used for maintaining firearms, other metal ferrous metals, leather, wood and many other materials.

The conservation of the blade and of the hilt's metallic parts suggested already that the item is a particular type of sabre, namely a *shashka*, which is specific especially for the Russian imperial Army (further abbreviated RIA) and for the Red Army, although it was initially the weapon of certain peoples from the Caucasus region and in mid-20th c. was used also by other armies. Considering the factory hallmark, the markings and other details of the pommel and of the ferrule, which were better visible and legible after their cleaning, the producer of the weapon, the year when it was made and thus its pattern could be precisely determined (as will be explained with more details below): it is a Soviet 1927 pattern *shashka*. The brass pommel was re-engraved to emphasize the Red Army's emblem corroded outlines using a reference photograph of an identical weapon's pommel (Fig. 8), afterwards both it and the ferrule were patinated. As a final aesthetic and protective treatment, they were polished with Autosol paste and wiped with a clean cloth, a final polish being performed with a cloth (Fig. 9), specially made for jewellers (Silbo). Autosol is a metal polishing paste, containing 15-30% aliphatic hydrocarbons, 5-15% aromatic hydrocarbons and <5% anionic surfactants. Silbo is a 100% cotton cloth, impregnated with <5% non-ionic surfactants, and 5% anionic surfactants.

Using the same reference photograph, a new wooden grip was carved, shaped, and fitted to the pommel and ferrule (Fig. 10). After the hilt was finished, it was stained and given a coat of linseed oil. After the oil penetrated the wood, a final coat of beeswax was applied, and the hilt was polished (Fig. 11). After the sabre was reassembled, it became complete and functional (Fig. 12-13).

2. The markings on the discovered item and some deontological thoughts on its conservation.

The discovery of a Soviet 1927 pattern *shashka*, stored for decades on the attic of a house in Romania is very interesting, not only for the discussion of its possible cultural and historical significance (which will be discussed on other occasion), but right by the fact that this item of a relatively recent date does not come from a museum's collection,

neither from the antiques trade nor from exchange among collectors or from inheritance, as usually, being thus a different kind of conservation experience, due both to its damages, usually surpassed only by those of archaeological finds and to the conservator's dilemma, who deciding on what should be done, had to ascertain: does this weapon still have any historical value or should it become just a simple, aesthetically acceptable but still less common house decoration?

As the different looking 1881 Cossack and "dragoon" patterns of *shashka* were generalised (despite the complaints of some regiments) in almost the whole RIA, the name of this particular type of sabre (*шашика*) and the Russian word which generally designates the sabre (*сабля*) became essentially synonymous (Veriyutin 2011, 157-158) and thus for Russian collectors (as well as for foreign collectors of Russian arms) the *shashka* became not only the most easily available type of Russian sabre, as along Caucasian type daggers it is also the most common among the "attic finds" in Russia (Khorev 2011, 40), but also the Russian sabre par excellence, eclipsing thus in popular awareness the older types of sabres, used there in Late Middle Age and Early Modern Age, which are more rare and expensive. For this reason, in Russia many aspects concerning the expertise and conservation of antique weapons are often exemplified based on shashkas, either on non-statutory Caucasian items or on the 1881 patterns ones (Khorev 2011, 42-43, 46-52, 78, 81-83, 88, 176-185 and 259-263). An interesting change in the study of recent bladed weapons, particularly of the Soviet 1927 pattern *shashka*, which some researchers (Frolov 2009, 128; Gusev 2011, 22) use to compare with the 1881 Cossack pattern, is the interest for items (generally damaged) discovered during excavations or in other circumstances, as they offer the possibility of a less studied aspect: the non-standard items produced in wartime in various factories for metallic repairs, which were really used in famous battles, as those for Moscow (Samgin 2015, 3; Samgin 2017, 5) and Stalingrad (Samgin 2017, 7-8, fig. 9). The possibility that also the *shashka* discovered in Sibiu may have been repaired since its production had to be considered during its conservation, as during the period when this pattern was produced (1928-1946) some details of the pommel's ornamentation changed and some of the factory markings as well. These markings, if they correspond to those which are known from written sources concerning its production or from comparisons between various items belong-

ing to the same pattern, are a valuable evidence for the authenticity of the discovered item.

On the sabre's oxidised eagle head-shaped brass pommel could be seen, even at its discovery, the Red Army's emblem (the five-pointed star surmounting the crossed hammer and sickle) in an oval cartouche ornamented with ears of wheat at left and at right, surmounted by the Cyrillic letters C. C. – C. P., the well-known abbreviation for *Союз Советских Социалистических Республик* (i. e. "Union of the Soviet Socialist Republics"), which is a first clue for dating this weapon not earlier than 1922, when this state was formed. After the conservation, on the rest of the pommel became visible, as background decoration, the usual "bitmap" or "dotted" motif (Fig. 6, 10 and 11).

Due to the corrosion of the blade, which apparently was uniform on its whole surface, the factory hallmark and other markings on it are lost after the conservation. As the brass fittings of the hilt (the pommel and the ferrule) were less affected than the steel parts of the weapons, on them the stamped markings are relatively well preserved. On the interior surface of the bird-head shaped pommel (respectively, on its "goitre") was stamped the number 12, as control or acceptance mark (Fig. 14). On the ferrule there are as well several markings, both letters and numbers. On the left side (Fig. 15), as considered if holding the sabre in normal position, its tip pointing to the sky, there is the Cyrillic letter O, and below, in a cartouche, the Cyrillic inscription ЗЛАТ(оусткая) ОР(ужейная) ФАБР(ика), i. e. "The Zlatoust Weapon Factory". The abbreviation points (.) after the Cyrillic letters T and P are not preserved, because a strong hit affected the Cyrillic letters OP and Ф, which are still readable. Under this cartouche, inside of another one, can be read (although partially damaged at the end) the year number 1930 (with the 0 damaged at right and pressed close to the stem of the Cyrillic letter r, followed by a point (.), which is the abbreviation for года, i. e. "year". Lower, on the same part, there is a numerical marking: 3. On the right side (Fig. 16) of this piece of the hilt there are two numerical markings: 366 and below 1. Considering both this information and the known Soviet patterns of bladed weapons produced since 1918 without to exclude the older RIA's patterns which continued to be produced afterwards or only continued to be used by the Red Army (Dolinek *et al.* 2000; Kulinsky 2001; Gusev 2011; Veriyutin 2011), as well as the look of the item after its conservation, it is easy to suppose that the discovered

sabre would be most likely a Soviet 1927 pattern *shashka*, produced in 1930.

Recently, S. V. Samgin published a study on the various variants of the Soviet 1927 pattern *shashka* (Samgin 2017), following an older one, on the non-standard versions of this pattern (Samgin 2015). Besides these studies, as the mentioned researcher noted (Samgin 2017, 8), the information about the 1927 pattern *shashka* is scattered (with more or less details) across various general works on Russian and/or Soviet weapons, in newspapers and on several sites hosting discussions among collectors, from former Soviet republics or (less often) from abroad. However, as resulting also from discussions among collectors, there are still some less known and also some less clear aspects concerning the 1927 pattern *shashka*, which originates both from the fact that it was used by foreign armies as well and from the particularities of the wartime production of weapons, whose result were new non-standard versions, often of poor quality.

On the discovered item, the factory hallmark belongs to an already documented version (Kwaśniewicz 2012, 231), which was used before the Revolution of 1917. Not in 1932 (Samgin 2017, 4, n. 2), but actually right in late 1931 it was changed into ЗЛАТ. ГОС. ЗАВОД or ЗГЗ (which means *Златоустовский государственный завод*, i. e. “The Zlatoust State Plant”), followed by the last two digits of the year of issue. The Cyrillic letter O is the acceptance hallmark of the Senior Artillery Inspector, which differs by year. It occurs indeed in 1930 and only than (so Eduard Terekhov) and not (as S. V. Samgin stated) generally during 1928-1930, as an alternative to НВ (Samgin 2017, 10, tab. 2). According to the Main Artillery Directorate’s Order Nr. 658 of 1928, which approved the Technical Specifications for the acceptance of the 1927 pattern cavalry shashkas, the unassembled blades and scabbards should be branded with the marks of the factory graders and in addition, on the ricasso, should be the mark of the factory and the year when the blade was manufactured, and on the tang the number of the oven load which was used to make the blade. All parts of the *shashka* will come to the Senior Artillery Inspector in finished form, but the scabbard unassembled and will go through three consecutive inspections. He had to brand the blade with the approved factory’s hallmark and will return it to the factory to be hilted and similarly will be done with the scabbard, for adding its brass fittings. All reinforcement parts (as the ferrule, the pommel, the fittings of the scabbard) had also to be branded

with his hallmark, separately, some of them (as the latter) on a hidden surface (Information kindly shared by E. Terekhov on www.sammler.ru, which is moderated by him and is a partner site of the prestigious Moscow based *Старый Цейхгауз. Российский военно-исторический журнал*). Finally, on the ricasso, next to the hallmark of the Senior Artillery Inspector, valid products (whose blades fit well in the scabbard), had to bear the marking Г(одно), i. e. “fit” (Information kindly shared by E. Terekhov on www.sammler.ru). Unfortunately, due to the corrosion of the blade, the markings on the blade of the *shashka* discovered in Sibiu are not preserved. Normally, during 1928-1931 the approved factory’s hallmark (Samgin 2017, 9, tab. 1) should be an inscription on the blade, recalling that found on the ferrule (ЗЛАТОУСТ. ОР. ФАБР.), but displayed differently, in a circle, in the centre of which, instead of the royal double-headed eagle, was placed the Red Army’s emblem (hammer and sickle over a five-pointed star). The year of issue was given in full, namely in four digits (Information kindly shared by E. Terekhov on www.sammler.ru). On the blade were stamped also verification markings. During 1928-1940 they occur on its right side, on the ricasso, expressing the hardness of the blade’s steel, measured initially in kilopascals (marked as “Кр”) and later (since 1934) in kilograms, marked as “Kg” (Samgin 2017, 4) and at least since 1938 (Fig. 18) in Cyrillic letters, as “Kr”.

The numbers inscribed on the right side of the discovered item’s ferrule are most likely military markings, which were applied in military units on the lower ring of the hilt and on the scabbard’s locket, indicating most often the number of weapons in the part (Samgin 2017, 4). They should not be confused with the Senior Artillery Inspector’s acceptance hallmarks, which are placed (excepting that on the ferrule) on the blade and on hidden surfaces of each part of the weapon (according, as mentioned above, to the Main Artillery Directorate’s Order Nr. 658 of 1928), particularly being noted by S. V. Samgin that inside of the pommel (Samgin 2017, 4). As a rule, the acceptance hallmarks coincide on items which have retained the factory assembly (Samgin 2017, 4), i. e. which have not been repaired (by rehilding, replacement of the blade, replacement of the hilt’s or scabbard’s fittings, other repairs of the scabbard or even a complete replacement of the scabbard). Thus, the *shashka* discovered in Sibiu was either repaired or rehilted long time before its conservation by Ioan Brai. On some items there are sometimes military re-brandings (Samgin 2017, 4), which may be due

most often (but perhaps not only) to transfers of weapons between units. In 1941, instead of verification and acceptance markings, only the Cyrillic letter M began to be applied on *shashka* parts (Samgin 2017, 4, n. 3).

Such technological markings are very important for ascertaining if the *shashka* is genuine or not, if it would not be a discovery, but an item bought from the international antiques market, because there are many fake items, coming generally from China, which due to their low quality (especially concerning the used materials, but also the typologically different tang fixed in the hilt) may no way be considered as replicas (Information kindly shared by E. Terekhov on www.sammler.ru). Among collectors there are frequent discussions about the authenticity of certain items, considering not only the meaning of various markings (often less known by them), but also differences in the size or position of the digits and letters. It should be noted that the hallmarks were made by impact, using specially made punches (stamps), that even if referring to the same year of production, the hallmarks may differ significantly, for many reasons: technological differences resulting from the complexity of the production of punches, the natural wear and tear of the punches and the inevitable use of different impact forces when stamping (Samgin 2017, 3-4). During the period when the Soviet 1927 pattern shashkas were produced (1928-1946) the most obvious changes concerned the hallmarks applied to the weapon during its manufacture (Samgin 2017, 3), especially because over the years the Zlatoust plant, which was their main producer, went through a series of reorganizations, which resulted in changes in its name and, accordingly, in changes in the approved factory's hallmark (Samgin 2017, 4, tab. 1). During the same period the acceptance hallmarks also changed more than once (Samgin 2017, 4, tab. 2).

The hallmarks on the discovered item are convergent both with S. V. Samgin's remarks on such markings (Samgin 2017, 4, tab. 1 and 2) and with E. Terekhov's ones concerning the quality control process. Thus, they are a sure evidence for the weapon's authenticity, despite the fact that the weathered ornamentation of the casted pommel, nowadays reduced almost to a flat relief, would recall rather that of later artefacts of the same type, produced during World War II, if considering S. V. Samgin's remarks on the development of the decorative design during 1928-1942 on the pommel (Samgin 2017, 3, fig. 1). This is a new evidence that the weapon was repaired, its pommel being

therefore changed with a later one, produced during World War II. Comparing the condition of the pommel before the conservation with its condition afterwards, the result is that the conservator's intervention on the outlines of the Communist Party's emblem (the crossed hammer and sickle) followed the existing lines, which are not actually too deep, as resulting the comparison with the clear readable outlines of the letters in the inscription C. C. P., written in still well preserved, nice rectangular alveoli, on which there were no interventions (besides the fact that an intervention would be technically difficult, practically impossible). Although such alveoli occur most frequently on shashkas produced during 1941-1945, but sometimes they may be seen also on earlier issues, from the late 1930's, on which the Red Army's emblem appears in a lower relief, which actually may have a technical cause, depending on the quality of the image carved in the pommel's casting mould.

The original hilts of the Soviet 1927 pattern shashkas were made from hardwood, mainly birch (Samgin 2017, 2), but as this detail was not known to him and the original one was almost completely destroyed, the conservator chose another kind of wood, that of walnut (*Juglans regia*). The used wood is both a reversible and a compatible material, as it is also a hardwood and as the birch was neither the only kind of wood used for *shashka* hilts, neither to make hilts for other types of bladed weapons in Russia. According the analysis of some 1907 pattern curved dagger (*bebut*) hilts from private collections in Russia, which were produced only almost two decades earlier than the Soviet 1927 pattern *shashka* (namely, during 1907-1917), the used wood was either that of the Caucasian walnut tree (*Pterocarya fraxinifolia*) or that of the hornbeam (*Carpinus betulus*), seemingly without any chronological difference. On a part of the hilt which was not stained and is hidden under the ferrule, the conservator signed and dated the hilt, whose shape and carving he reconstructed with high fidelity. The conservator's work can be therefore easily noted. The threaded end of the sabre's tang as well as the screw nuts and the washer used for fixing the hilt's grip were so damaged, that the latter's type could not be precisely determined and thus the conservator chose a more common type, although apparently it was used more often during World War II (even for repairing hilts of sabres from earlier issues).

Neither reconstructing the wooden part of the hilt or the threaded end of the sabre's tang than rather when deepening the weathered outlines of the Red

Army's emblem, the conservator faced a dilemma: should he keep a very weathered look for an item produced in large quantities, whose typological details are well known and whose look may be due also to the poorer quality and/or wear and tear of the casting mould's carving, or should he slightly emphasize certain weathered but still extant specific details as most close possible to the original look, in order to obtain a more attractive house decoration? He chose the right solution, as he would work with a museum artefact intended to be exhibited, although he had to deal actually with a house decoration which in future may be museumized. Thus, it is still possible to ascertain that this weapon belongs to a large series of identical and strongly standardised items, which are not studied with the aim of getting some unknown typological or chronological information (which anyway hardly could be expected), but from the perspective of the cultural history, in order to discuss certain problems as the Soviet 1927 pattern cavalry *shashka*'s forerunners, this weapon's military use (till 1946 by the Red Army and during 1946-1955 by its successor, the Soviet Army, respectively by some foreign armies since the 1930's till after World War II), followed by its recent revival, both as ethno-cultural identity symbol and as a weapon. The conservator's intervention was minimal, if compared with the item's condition of preservation and therefore deontologically correct. His intervention may be compared, in a certain measure, with a partial reconstruction after the treating intervention on a seriously damaged tooth which previously disturbed someone when eating and even affected his look when smiling: ascertaining pragmatically its shortcomings, benefits and costs, the treatment followed by the tooth's partial reconstruction are welcome, both for the rest of the body's health and for the satisfaction of the paying patient.

To identify more precisely to which variant of the Soviet 1927 pattern cavalry *shashka* this item belongs, relevant are its dimensions, as the conservation works could not affect much neither the length of the blade and its width, nor even the weapon's total length, but maybe in less insignificant measure the blade's thickness (measured on the ricasso) and the item's weight, due to the cleaning of the corrosion products. However, it should be remembered that *shashkas* of different arms factories or of different batches of the same factory could differ a bit too (Urazbakhtin 2018, 145).

Preserved in best conditions, almost as it had to be delivered by the factory, a Soviet 1927 pattern "cavalry *shashka* for Red Army soldiers and lower

rank commanders" (Dolinek *et al.* 2000, 230-231, fig. 286-287; Kulinsky 2001, II, 12-13, cat. nr. 3; Gusev 2011, 22-23; Veriyutin 2011, 201; Samgin 2017, 1) is 94.5 cm long and its blade is 81 cm long (Kulinsky 2001, II, 12; Gusev 2011, 22-23; Veriyutin 2011, 201; Samgin 2017, 1) and 3.3 cm width (Kulinsky 2001, II, 12; Veriyutin 2011, 201; Samgin 2017, 1), not 3.2 cm as sometimes stated (Dolinek *et al.* 2000, 230). It has a curvature of 1.8 cm and a weight of 1.39 kg, respectively 0.86 kg without scabbard (Kwaśniewicz 2005, 172). The other variant, "for commanding and leading staff" (Kulinsky 2001, II, cat. nr. 2) was of identical dimensions, but easier, due only to the lack of socket rings for carrying the bayonet for the 1891 pattern Mosin-Nagant rifle on its scabbard (Fig. 17-18). Recently, S. V. Samgin stated that the weight of a *shashka* with bayonet socket rings on its scabbard is c. 1.5 kg and without such devices c. 1.4 kg (Samgin 2017, 1). There is however a significant difference between these values and those mentioned by W. Kwaśniewicz, although (if considering the scabbard) the latter referred actually to a value which in fact corresponds (roughly) to that of the variant "for commanding and leading staff" of the 1927 pattern, including most likely the scabbard too, if comparing with the values indicated by S. V. Samgin.

Considering that the scabbard of the item discovered in Sibiu is lost, as well as the undoubted change in the weapon's original weight due both to its poor condition of preservation and to the conservator's intervention, it is impossible to ascertain to which of the two variants of the Soviet 1927 pattern this *shashka* actually belongs. As the ferule and the pommel are made of brass, it is certainly an army pattern weapon and not one used both by the People's Commissariat for Internal Affairs (*Народный Комиссариат Внутренних Дел*, abbreviated NKVD), actually the Inner Secret Service and by the Workers and Peasant's Red Militia (*Рабоче-крестьянская Красная Милиция*, abbreviated RKKM), actually the police, whose scabbard also did not have socket rings for carrying a bayonet and which had all metallic fittings of the scabbard and of the hilt made of nickel alloy (Gusev 2011, 26-27; cf. Kulinsky 2001, II, 10; Veriyutin 2011, 201). The existence of this distinct variant produced for the NKVD and for the Red Militia (Fig. 19-20) is contested by S. V. Samgin, who (contradicting thus researchers like A. N. Kulinsky, I. E. Gusev and V. I. Veriyutin and apparently even photographic evidences rendering Soviet law enforcers as Fig. 21-22) considered initially that such weapons are actually non-standard ones

(Samgin 2015, 1) and later stated that already in 1932, due to the shortness of brass, weapons with fittings made of ductile iron or iron coated with nickel or brass were delivered to all Soviet units armed with shashkas on a par with "the ordinary" ones (Samgin 2017, 3). For this reason, the mentioned author believes that the connection between such weapons and the NKVD is not a true one, being actually only an opinion which circulates among the collectors (Samgin 2017, 3), without to explain why such items (excepting only very few items sold on auctions mainly in the United States of America, which may be considered as forgeries) have no socket rings for the bayonet, if they were really produced in Zlatoust and not as non-standard weapons elsewhere during World War II, when there was indeed, as he correctly remarked (Samgin 2017, 3, fig. 6 and 9), an increasing production of non-standard shashkas with surrogate metallic fittings, as aluminium (even as casted whole hilts) or blued steel (not only for ferrules and pommels, but also for the scabbard's fittings, as the locket, the bayonet socket rings and the chape). There are also items with nickel alloy fittings whose blade are dated not only before World War II, as one made in 1938 (Fig. 19-20), but even in 1928 (Fig. 23), the very first year when the Soviet 1927 pattern was produced, which (if they are not rehilted weapons, of course) makes less credible the claim that the nickel alloy fittings occur as consequence of the shortness of brass or of the wartime production of non-standard weapons. S. V. Samgin's opinion on such weapons *without* the Red Army's emblem may be however right for items belonging to the variant with socket rings for bayonet (Samgin 2015, fig. 4; Samgin 2017, fig. 6), provided that they are not forged, as those auctioned in the U. S. A. Unlike those, items with metallic fittings of nickel alloy considered to belong to the variant produced for the NKVD and for the Red Militia have *always* the Red Army's emblem (Gusev 2011, 26-27; cf. Kulinsky 2001, II, 10; Veriyutin 2011, 201).

In the context of this controversy, interesting seems a quite unusual Soviet 1927 pattern *shashka* ("for soldiers and lower rank commanders") made in 1928 (Fig. 23), which is kept at the City Museum in Vršac (Markov, Petrović 2012, 93, cat. nr. 121) and is therefore an old and authentic weapon. Its hilt has a nickel alloy ferrule, as the 1927 pattern *shashka* of the NKVD and of the Red Militia (Gusev 2011, 26-27), but a brass pommel, like usual army shashkas and also socket rings for the bayonet, unlike the variant for the NKVD and for the Red Militia. This cannot be due to the wartime

shortness (as it was made in 1928) and is not a non-standard *shashka* as those produced in wartime conditions by the factories for railway wagons repairs from Ordzhonikidze (Vladikavkaz) and Tambov, as well as in some other places in Ordzhonikidze (Samgin 2015, 4-5, fig. 4-5; Samgin 2017, 6-7, fig. 7-8) and may indicate that it belonged rather to a special category of military staff of the army, similar to the Internal Secret Service and to the police, which may be the military intelligence, namely the Main Intelligence Directorate (Главное Разведывательное Управление, abbreviated GRU), than to a political commissar, who was attached to the commander at each level of the command chain, and who at the lower ones was even the commander's deputy.

The socket rings for carrying the bayonet for the 1891 pattern Mosin-Nagant rifle on the Soviet 1927 pattern *shashka* (Fig. 32-34) were a device which Vladimir Grigorevich Fyodorov (1874-1966), its inventor (Fig. 24), saw on older weapons of the RIA, as the 1834 "Asian pattern sabre" for soldiers (Kulinsky 2001, I, 144-146, cat. nr. 53) and the 1881 "dragoon" pattern for soldiers (Kulinsky 2001, I, 150-152, cat. nr. 56). Obviously, the Soviet device recalls that on the scabbard of the 1834 *shashka* (Fig. 25), which was the first RIA's statutory weapon of this type and was so popular, as there were very vocal protest of the lower ranks in the 16th and 17th Dragoon Regiments when it had to be replaced with the 1881 Cossack pattern *shashka* (which does not have a device for carrying the bayonet), that in 1889 they got back their old weapons (Kulinsky 2001, I, 157 and 161; cf. Urazbakhtin 2018, 134), which remained in use till 1917 (Kulinsky 2001, I, 146; Urazbakhtin 2018, 134), while the Cossack Hosts, i. e. the not full-time Cossack regiments, continued to use non-statutory shashkas until 1904, when they received their own statutory pattern (Kulinsky 2001, I, 142-143 and 165; Urazbakhtin 2018, 141). The device on the scabbard of the 1881 "dragoon" pattern *shashka* for soldiers, which was issued following the proposals of the commission for the modernisation of the Russian bladed weapons chaired by Lieutenant General Aleksandr Pavlovich Gorlov (1830-1905), the military attaché of Russia in London (Fig. 26), was more elaborated and its production needed more skill and time, but it had also an advantage, which later, when bluing or browning the steel weapons became a regular production process, was less important: the bayonet sank into a partition specially designed for it in the scabbard's interior, being thus better protected against humidity (Fig. 27-30). A device resembling

that of the 1834 pattern *shashka* was kept also on the Red Army's 1921 pattern cavalry sabre (Fig. 31) produced under V. G. Fyodorov's supervision, although the weapon's blade and hilt is inspired by the 1881 "dragoon" pattern for soldiers (Dolinek *et al.* 2000, 232-233, fig. 288-289). As unfortunately the bladed weapons produced during the Civil War (1917-1923) by Soviet Russia are, generally, less studied (especially because the rarity of the most types), this pattern is also less known, even to the Russian researchers and collectors. Two other less known weapons of this period, the extremely rare 1922 Cossack pattern *shashka* (Gusev 2011, 16-17), obviously inspired by the 1881 Cossack pattern *shashka*, and the rare 1923 cavalry *shashka* pattern inspired by the 1881 "dragoon" pattern *shashka* for soldiers (Gusev 2011, 18-19) have no device for carrying a bayonet, never so much as the latter's characteristic partition for the bayonet in its scabbard. Thus, the main and most conspicuous feature of the both new types of sabres is the new Red Army's emblem on their pommel, the same as on the 1927 pattern *shashka* discovered in Sibiu. Unlike on them, there is no symbol engraved on the pommel of the Red Army's 1921 pattern cavalry sabre, instead of Emperor Nicholas II's monogram.

During the whole 19th c. the Cossack cavalry troops had also lances (although before the 1840's not of formally regulated patterns) and made extensively use of them, unlike the RIA's regular cavalry, which before 1801 had no lances (Larsen, Yallop 2017, 7). Along rifles and *shashkas*, the Red Army also used lances (namely, the 1910 pattern), till 1930 (Larsen, Yallop 2017, 8). This was a crudely made weapon, completely of steel, with a short, hollow-ground, cruciform point. Because of its small horses, the Russian cavalry was generally unsuited to shock action with the sword or lance against European cavalries. For this reason, it tended to operate also as mounted infantry, with bayonets fixed to the scabbard of the *shashka* already on the RIA's 1834 "Asian pattern sabre" for soldiers. During World War I the Russian cavalry was involved in the only important full scale cavalry battle of the whole war and the last one in RIA's history: at Jaroslavice (nowadays in the Czech Republic), on August 21, 1915, when the Austro-Hungarian 4th Cavalry Division was pitched against the Russian 10th Cavalry Division in an indecisive clash, as part of a failed reconnaissance in force by the Austro-Hungarians.

Despite the changes in warfare after World War I, for most countries of the Axis the cavalry re-

mained very important, not only due to the industry's difficulty to provide enough motorised vehicles, but also for the various missions it could carry out: scouting, clearing the battle field after the infantry's advance, even fighting against the enemy's cavalry, securing the land behind the lines against partisans, particularly in areas which were impassable for motorised forces and where the infantry had a slow rate of march. Because charges of large cavalry units were believed to be rarely necessary, the cavalry tactics had to be adapted to new realities (some of them experienced already in World War I by the cavalry of certain countries), like fighting as a swiftly moving infantry, the use of machine guns and light artillery, the cooperation with bicyclists, motorcyclists and with field telephonists, but unlike the Wehrmacht the armies of other European countries of the Axis remained less prepared for such changes (On the cavalry troops of the European countries of the Axis: Kern 1963; Vitali 1976; Emilian 1977; Bayer 1980; Bayer 1982; Richter 1994; Richter 1995; Wilson 2000; Fowler, Chapell 2001; Fröhlich 2012). The same may be said about the Polish cavalry (Mitkiewicz 2013), but also about the Red Army's Cossack cavalry (Voskoboynikov 2008), which had to be kept till after the end of World War II, when the war industry could provide the whole support requested by the motorised warfare. Especially the campaign in the East and the following need to supply the lack of an own cavalry by organising experimental Cossack cavalry units led actually in 1943-1945 to a temporary rebirth of the German cavalry (Richter 1995, 40), because in autumn 1941 even its last cavalry unit was changed into an armoured division, and after the swift advance of the German troops stopped, the mounted reconnaissance became less necessary and was largely decimated after serving as a mobile reserve (Richter 1995, 31).

This explains why, considering particularly the experience of World War I and especially of the Civil War and of the Polish-Soviet War (when there were several cavalry fights), as well as new European trends, the Soviet 1927 pattern of "cavalry *shashka* for Red Army soldiers and lower rank commanders" reintroduced the scabbard with bayonet socket rings, which lacked at the RIA's 1881 Cossack pattern, after its experimental reintroduction on the Red Army's 1921 pattern cavalry sabre. During the Civil War and even till 1955 the Red Army used to support its cavalry attacks by the fire of heavy machine guns, mounted usually (in lack of armoured cars) on a *tachanka*, namely a horse-drawn open wagon (Fig. 37), a solution used dur-

ing World War II also by the Polish army. So, not only in the Red Army, but also in the Cossack cavalry in German or Italian service the *shashka* continued to be used as combat weapon so long the cavalry was deemed to be still useful. The Red Army's commanders were aware that cavalry charges of large units are already outdated and that after World War I the main role of the large and expensive German cavalry allowed to exist (before 1935) by the Versailles Treaty (16.4 % of the entire army, in which the artillery was fixed at only 10.9 %) was to be used as a swift moving force which has to serve dismounted, as infantry (Richter 1995, 3-4), as the Cossack cavalry was used already in mid-19th c. The Soviet 1927 pattern *shashka*, with its device for carrying a bayonet on the scabbard, was a solution proposed by V. G. Fyodorov to deal with these challenges, considering both his critics published in 1905 on the 1881 Cossack pattern *shashka* (Fedorov 2010, 120-155) and the developments in warfare after World War I, but also the Red Army's 1921 pattern cavalry sabre. For this reasons, this device was kept even on Soviet 1927 pattern shashkas given as military aid or sold to other countries.

The 1927 pattern shashkas delivered to Afghanistan and to Mongolia had the pommel adorned only with a "bitmap" or "dotted" motif (Urazbakhtin 2018, 144; cf. Samgin 2015, 3, fig. 3; Samgin 2017, 5, fig. 5). According to written sources from the Zlatoust factory, to Mongolia this variant of *shashka* (Fig. 32-34) was delivered in 1937, but the production seems to have been much larger, as an item used in winter 1941-1942 was found in 2012 during excavations on a battle field near Moscow (Samgin 2015, 3; Samgin 2017, 5). The year of the delivery of similar weapons to Afghanistan is less clear, but seems to be must be also before 1940. An Afghan long knife (*khyber*) with an less usual knucklebow hilt, which is kept at the Kremlin Armoury, was presented to Marshal K. E. Voroshilov, supposedly on the occasion to his visit to Afghanistan in 1958, is actually much earlier, being made in Kabul at the Mashin Khana (i. e. "The Machine House", as the local State Arsenal was called) during 1901-1909 (Novoselov 2018, 333, fig. 9). As the production of every kind of sabres at the State Arsenal in Kabul (where both before and after 1894 were made shashkas following the RIA's 1881 pattern) ceased already in early 20th c. (Miloserdov 2016, 4-10), it seems very likely that this weapon may have been brought to the Soviet Union by an Afghan delegation which came to negotiate the delivery of shashkas. This may have happened actually already in 1933, when for

an unknown commissioner were produced 10,000 shashkas with socket rings for the bayonet and 1,000 without, but (as resulting from later accusations) the factory's management did not take all measures to keep the state secret, for which a special room had to be prepared for a new batch of 2,000 weapons (Samgin 2015, 3; cf. Samgin 2015, 6), which may be therefore that delivered to Mongolia in 1937.

To Lithuania was exported only the variant "for commanders and leading staff", i. e. without socket rings for the bayonet (Gusev 2011, 24-25). Its pommel was adorned with the old Grand Duchy of Lithuania's coat of arms, the Vytis / Waikimas or Pogonia / Pagaune (Samgin 2015, 2, fig. 2; Samgin 2017, 5, fig. 4; Urazbakhtin 2018, 144), which renders a knight armed with sword and shield, in attack to the heraldic right (Fig. 35). Following the decision taken by the Political Bureau of the Central Committee of the All Union's Communist (Bolshevik) Party on August 5, 1934, not less than 3,000 such weapons were sold to Lithuania (Samgin 2015, 2; Samgin 2017, 5). Thus, before the outbreak of World War II, with the appointment of the Soviet Union's government, in which during November 6, 1925 – May 7, 1940 Kliment Efremovich Voroshilov (1881-1969) was the People's Commissar for Military and Navy Affairs (respectively, for Defence, as his cabinet official position was called since June 20, 1934), the Soviet 1927 pattern *shashka* was exported only to Lithuania, Mongolia and Afghanistan.

During World War II, the Polish Armed Forces in the U. S. S. R. (*Polskie Siły Zbrojne w ZSSR*) and then the Polish People's Army (*Ludowe Wojsko Polskie*) were armed with shashkas provided by the Red Army (On the use of Soviet shashkas by the Polish army: Bilnik, Gaponik 2011). It was the Soviet 1927 pattern *shashka*, given only to the uhlans of the 1st Cavalry Brigade during 1944-1945 (Kwaśniewicz 1999, 182; Kwaśniewicz 2005, 147). Actually, only its officers (and not its soldiers!) carried it as sidearm (Kwaśniewicz 1999, 182 and 226, cat. nr. 45), although it was not the variant "for commanders and leading staff", but that with device for attaching the bayonet used by Soviet "soldiers and lower rank commanders". Its hanging device was although changed (consisting of a single ring, fixed on the upper part of the scabbard's concave side), in order to allow the sabre's hanging according to the Polish manner (i. e. with the edge facing forwards, unlike the Caucasian, Russian and Soviet manner) attached to the belt or by means of a baldric on a textile or leather

strap over the chest (Kwaśniewicz 2005, 145 and 173) and sometimes it had the Tadeusz Kościuszko's version of the Polish eagle engraved on the pommel instead of the Red Army's emblem (Kwaśniewicz 1999, 182; Kwaśniewicz 2005, 145). It was the only foreign sabre used by the cavalry of the Polish army during World War II, if considering that the weapon of the Cavalry Squadron of the Independent Carpathian Rifle Brigade's Reconnaissance Battalion was actually the British 1908 pattern sword, and not a sabre (Kwaśniewicz 1999, 182; Kwaśniewicz 2005, 147). During 1945-1947 the cavalry of the Polish People's Army continued to use the Soviet 1927 pattern of *shashka*, but only the soldiers of the 1st, 2nd and 3rd Uhlan Regiments of the 1st Cavalry Division from Warsaw, disbanded in March 1947 (Kwaśniewicz

2005, 172). They got, apparently, weapons whose blades were made in 1942 and hilted using ferrules produced in 1937 (Kwaśniewicz 2005, 172).

Apparently, except the cavalry of the Polish Armed Forces in the USSR, the volunteer units (consisting mainly of former foreign war prisoners, with some Communist political refugees at various command levels) organised by the Soviet Union were not armed with Soviet pattern shashkas: the study of photographic sources evidences clearly that the officers of the two Romanian Volunteer Infantry divisions "Tudor Vladimirescu – Debrecen" and "Horea, Cloșca and Crișan" never got this weapon, neither before the war's end nor afterwards, with the imposing of the Communist rule and the reorganisation of the Romanian army following the Soviet model.

REFERENCES

- Bayer 1980 Bayer Hanns, *Die Kavallerie der Waffen SS*, Heidelberg (1980).
- Bayer 1982 Bayer Hanns, *Kavallerie Divisionen der Waffen SS im Bild*, Osnabrück (1982).
- Bilnik, Gaponik 2011 Bilnik Tadeusz, Gaponik Tadeusz, *Kawaleryjskie szaszki radzieckie w Wojsku Polskim*, Katowice (2011).
- Dolinek *et al.* 2000 Dolinek Vladimir, Francen Vladimir, Sach Jan, *Illustriertes Lexikon der Waffen im 1. und 2. Weltkrieg*, Utting am Ammersee (2000).
- Emilian 1977 Emilian Ion Valeriu, *Der phantastische Ritt. Rumäniens Kavallerie an der Seite der Deutschen Wehrmacht im Kampf gegen dem Bolschewismus*, Preussisch Oldendorf (1977).
- Fedorov 2010 Fedorov Vladimir, *Холодное оружие*, Moskva (2010).
- Fowler, Chappell 2001 Fowler Jeffrey T., Chappell Mike, *Axis Cavalry in World War II*, Botley (2001).
- Fröhlich 2012 Fröhlich Dávid, *Huszárok, előre! Magyar sereglovasság a II. Világháborúban*, Budapest (2012).
- Frolov 2009 Frolov B. E., *Холодное оружие кубанских казаков*, Krasnodar (2009).
- Gusev 2011 Gusev I. E., *Холодное оружие Страны Советов*, Minsk (2011).
- Kern 1963 Kern Erich, *General von Pannwitz und seine Kosaken*, Göttingen (1963).
- Khorev 2011 Khorev V., *Антикварное оружие. Экспертиза и реставрация*, Rostov-na-Donu (2011).
- Kulinsky 2001 Kulinsky A. N., *Русское холодное оружие XVII-XX вв.*, 2 vol., Sankt-Peterburg (2001).
- Kwaśniewicz 1999 Kwaśniewicz Włodzimierz, *Dzieje szabli w Polsce*, Warszawa (1999).
- Kwaśniewicz 2005 Kvasnevich Vlodzhimezh [Kwaśniewicz Włodzimierz], *Польские сабли*, Sankt-Peterburg (2005).
- Kwaśniewicz 2012 Kvasnevich Vlodzhimezh [Kwaśniewicz Włodzimierz], *Лексикон холодного и метательного оружия*, Sankt-Peterburg (2012).
- Larsen, Yallop 2017 Larsen Alan, Yallop Henry, *The Cavalry Lance*, Oxford (2017).
- Markov, Petrović 2012 Markov Zoran, Petrović Dragutin, *Cold Arms*, Vršac (2012).
- Miloserdov 2016 Miloserdov D. Yu., *Афганская шапка*. In: *Историческое оружиеведение 3*, Moskva (2016), p. 1-11.
- Mitkiewicz 2013 Mitkiewicz Leon, *Kawaleria samodzielna Rzeczpospolitej Polskiej w wojnie 1939 roku*, Międzyzdroje (2013).
- Novoselov 2018 Novoselov V. R., *Поступления холодного оружия в Оружейную Палату в советский период*. In: Novoselov V. R. (ed.), *Историческое оружие в музейных и частных собраниях*, 1st vol., Moskva (2018), p. 321-345.
- Richter 1994 Richter Klaus Christian, *Kavallerie der Wehrmacht*, Wölfersheim (1994).
- Richter 1995 Richter Klaus, *Weapons & Equipment of the German Cavalry*, Atglen (1995).
- Samgin 2015 Samgin Sergey, *Нестандартные советское шапки образца 1927 г.* In: *Историческое оружиеведение 2*, Moskva (2015), p. 1-5.
- Samgin 2017 Samgin Sergey, *Краткий обзор советской шапки образца 1927 года*. In:

- Историческое оружиеведение* 4, Moskva (2017), p. 1-11.
- Urazbakhtin 2018 Urazbakhtin Ruslan, *Shashka in late XIX–XX c.: Outline of Russian combat techniques*. In: *Acta Periodica Duellatorum* 6/2, Bern (2018), p. 125-173.
- Veriyutin 2011 Veriyutin V. I., *Энциклопедия холодного оружия России и СССР*, Rostov-na-Donu (2011).
- Vitali 1976 Vitali Giorgio, *Sciabole nella steppa. La cavalleria italiana nella Russia*, Milano (1976).
- Voskoboynikov 2008 Voskoboynikov G. L., *Советская конница в Великой Отечественной*, Moskva (2008).
- White 1995 White Philipp R., *The Care and Preservation of Firearms*, Ottawa (1995).
- Wilson 2000 Paul J. Wilson, *Himmler's Cavalry: The Equestrian SS*, Atglen (2000).

LIST OF ILLUSTRATIONS

1. The 1927 pattern *shashka* discovered in Sibiu, before its conservation.
2. The corroded hilt of the *shashka* discovered in Sibiu.
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19. A 1927 pattern *shashka* for the NKVD and Red Militia (issued in 1938). Private collection.
20. A 1927 pattern *shashka* for the NKVD and Red Militia (issued in 1938). Detail.
21. Soviet military of the NKVD or Red Militia. Private collection.
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1.

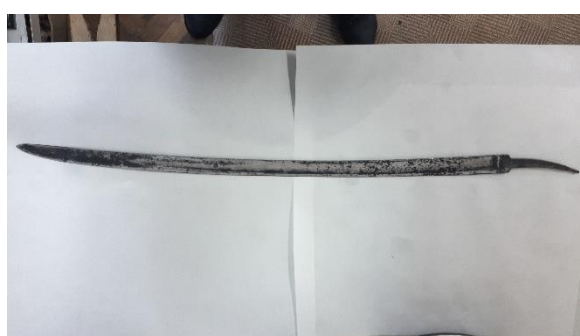


2.

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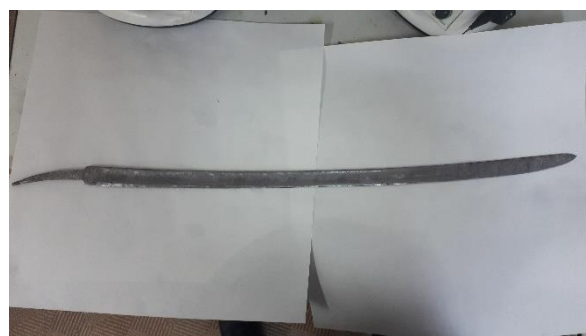


3.



4.

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5.



6.

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15.

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20. Șașcă model 1927 pentru NKVD și Miliția Roșie (produsă în 1938). Detaliu.



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22.

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22. Soviet military of the NKVD or Red Militia. Detail.



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37. *Tachanka*. Mikhail Vasilyevich Frunze Museum in Bishkek, Kyrgyzstan.

MANUSCRIPT MORALIA: CONSERVATION, INVESTIGATIONS, RESTORATION

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Abstract: *The Moralia manuscript is part of the Brukenthal National Museum's collection of medieval manuscripts in the Brukenthal Library.*

The article presents a short history of the manuscript, the state of preservation, workmanship details and the visualization by optical microscopy of the parchment and leather supports. Interventions performed for the conservation and restoration of the manuscript are described.

Keywords: *Moralia, parchment manuscript, conservation, restoration, optical microscopy.*

Rezumat: *Manuscrisul Moralia face parte din colecția de manuscrise medievale ale Muzeului Național Brukenthal din Biblioteca Brukenthal.*

În articol este prezentat un scurt istoric al cărții manuscris, starea de conservare, detaliile de realizare și vizualizarea prin microscopie optică a suporturilor din pergament și piele. Sunt descrise intervențiile efectuate pentru conservarea și restaurarea manuscrisului.

Cuvinte-cheie: *Moralia, manuscris pe pergament, conservare, restaurare, microscopie optică.*

Pope Gregory I the Great's *Commentary on Job* or *Moralia*, sive *Expositio in Job*, frequently known as *Magna Moralia*, or as *Moralia on Job* is one of the longest patristic works and also its author's major work, filling 35 books or 6 volumes. It was one of the most read and copied books during the Middle Age. Begun when Gregory was *apocrisarius* at the court of Tiberius II in Constantinople, the work is believed to have been written between 578-595 but possibly finished as early as 591, thus only after he returned to Rome, already since several years. It is based on talks Gregory gave on the *Book of Job* to his brethren brought from Caelius, who accompanied him to Constantinople or rather on sermons noted on wax tablets, which were transcribed on papyrus scrolls. The work was dedicated in 583 to Leander, Archbishop of Sevilla (c. 534-600/601). In the dedication of his work, Gregorius will blame himself for having waited too long to follow his vocation as a monk, which he felt he had for a long time. However, he was a monk only during 575-579, which is a hint for the period when he begun to write this work (On the life and work of Pope Gregory the Great: Dudden 1905; Fischer 1942; Dagens 1977; Richards 1980; Straw 1988; Fiedrowicz 1995; Riché 1996;

Markus 1997; Hack 2012; Demacopoulos 2015; Eich 2016. On Pope Gregory I the Great's *Commentary on Job*, see particularly Greschat 2005).

As we have it, the book is the result of Gregory's own revision and completion of it soon after his accession to the papal office (Markus 1997, 15), i. e. after September 3, 590. The most famous old manuscripts of this work are the Carolingian manuscript produced in Picardy at Laon in late 8th c. from the British Library in London (ms. 31031), which belonged to the monastery of Ottebeuren in Bavaria, the manuscript dated 945 from the Biblioteca Nacional de España in Madrid (ms. 80), produced in the monastery of Valeránica in Tordómar, the illustrated manuscript in the Cîteaux monastery, dated 1111, the 11th-12th c. illuminated manuscript from the abbey of Saint-Pierre at Préaux (now in the Bibliothèque municipale de Rouen, ms. 498) and the illuminated manuscript from the abbey of Saint-Bertin (Saint-Omer), dated 1163-1176, now in the Bibliothèque de l'Agglomération du Pays de Saint-Omer (ms. 0012). The first printed version was published by Nikolaus Kesler in Basel, in 1496.

Despite the fact that all illuminations (excepting

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the initials) of the volume kept in the Brukenthal National Museum's library were already cut off in late 19th c. (according to the library records), this copy may be dated, for palaeographic reasons, during the rule of the Árpád Royal House of Hungary (1000-1301). In the actual state of research it seems quite difficult to ascertain more precisely its date or to connect it with certain Hungarian royals, as King Coloman the Book-Lover / Könyves Kálmán (1095-1116) or St Elisabeth of Hungary (1207-1231), the daughter of King Andrew II (1205-1235) of Hungary and Croatia and later Landgravine of Thuringia (1221-1231), after her marriage with Landgrave Ludwig IV.

This volume of Pope Gregory I the Great's work entered the library of the Brukenthal Museum in 1879, coming from an old and rich library: that of the Evangelical Gymnasium of Sibiu, which since 1592 (due to the efforts of Albert Huet, *comes Saxonum*) functioned in the St Ladislaus's Chapel (demolished in 1898), close to the former St Mary's Roman Catholic church or the *Stadtpfarrkirche*, as is known the main Evangelical church in Sibiu (Albu 2006-2007). The fact that this book belonged to the mentioned gymnasium's library results undoubtedly from a note written in black ink on a page of the book, right below a 19th c. library inventory record (IX.Q.a.3, written in pencil and barred also by pencil): Lib(er). Biblioth(ecae). / Gymn(asii). Cibi(niensis). / A(ugustanae). C(onfessionis)., which means "Book from the Gymnasium of Augsburgian Confession in Sibiu's library". Considering the shape of the letters, this inscription should be dated quite late, during the late 18th c. (or even in early 19th c.).

On the book there is also an older note, with Gothic Latin letters on a piece of white paper glued on the inner side of the cover, in order to serve as well as a kind of *ex libris*. The text, written in faded iron gall ink, is: Liber Ecclesie (*sic!*) Cibiniens(*is*), which means "Book of the Church in Sibiu". Considering the shape of the letters, the inscription may be dated, most likely, in late 14th – early 15th c. It attests that the main church in Sibiu (the *Stadtpfarrkirche*, i. e. the actual cathedral of the Evangelical Church C. A.) and therefore not the library of a certain monastery from Sibiu owned this book already before the Reformation was introduced to Sibiu (1543), it means when the *Stadtpfarrkirche* was still the St Mary's Roman Catholic Church. Apparently, this book may be considered as a testimony of the favour which the Transylvanian Saxon city of Sibiu enjoyed from the first dynasty of the Hungarian Kingdom. Actu-

ally, it would be quite strange to consider the book as a gift of a member of the Royal House of Hungary to the church of Sibiu (as it is only a volume of the 6 of Pope Gregory the Great's writing), as it may also have been bought or simply "brought" from elsewhere in less clear conditions, as the Transylvanian Saxons (due to their conflict with the Bishop of Transylvania) plundered and burned twice, in 1277 and 1317, the cathedral in Alba Iulia. At that time (and even before) Alba Iulia was undoubtedly a more important city than Sibiu, both for political and religious reasons.

After the Reformation the properties of the Catholic orders were secularised and their libraries joined that of the local gymnasium, mentioned as such only after the Reformation, in 1555, but functioning previously as a school (documented already in 1380), located close to the church, like the gymnasium's library kept in the mentioned chapel, secularised as well following the Reformation. Due to the apparent lack of clear mid-16th c. records in this book which may be surely dated after the Reformation, it seems very likely that it survived by joining the gymnasium's library, as other Catholic books kept in the same church or brought from the former monasteries of the Catholic orders and from other establishments previously ruled by the latter (as the city's asylum), which were not considered to be harmful for the minds and the Lutheran faith of the gymnasium's students. As it was an already traditional source of moral arguments for the theological and even lay scholar discourse on morals, it continued perhaps to be used in teaching Ethics (from a Christian perspective) and maybe even by the clergymen who prepared their sermons.

B. Manuscript description

The *Moralia* manuscript, author Beatus Gregorius Papa (the Blessed Pope Gregory, i. e. Pope Gregory I the Great), owned by the Brukenthal Library, has the inv. no. MS 593 and the old identification number IX.Q.a.3.

The title of the book and the name of the author can be found at the beginning of chapter XXIII. (Fig. 1)

It has the following physical characteristics: dimensions L = 410 mm, l = 280 mm and variable thickness from 110 mm (spine) to 150 mm (outer edge) (Fig. 2).

The manuscript text block contains 319 sheets of parchment, each with dimensions of approximately

L = 390, l = 255 and variable thickness from 2 - 2.5 mm.

The pages were numbered by the curator with Arabic numerals from 1 to 193, in pencil, in the upper right corner.

The body text has the size of L = 280, l = 170 mm and is divided into 40 lines. (Fig. 3)

Drawing the horizontal lines, easily visible in the parchment, was done before writing with a sharp tool. There are pages where you can see the ruler holes at the end of the line.

The text is written in Latin, on both sides of the parchment sheet, on a single column, without ornamentation, in black and red Gothic letters. The writing has a pretty good level of execution.

Each chapter head is written in red letters and is positioned inside the body text.

Each drop cap is a large, red letter decorated inside the body of the letter with animal motifs, fantastic figures and / or plant motifs. They occupy 4 to 12 lines and are positioned outside or inside the body text. Some letters are coloured blue or green. The colourless ones give a feeling of absolute austerity and ornamental poverty.

On the outside margin appear different drawings, symbols, signs, writings that draw attention to certain passages from the text. Corrections of typos consisting of coarse scratches of inks or coatings with a white pigment are also visible (Fig. 4 a. b. c. d.).

The covers have the following physical characteristics: dimensions L = 410 mm, l = 280 mm and thickness of 10 mm.

The cover boards are made of wood, covered in light brown leather. The skin is embossed with geometric motifs.

The thickness of the skin covering the cover board is 1.8-2mm.

The binding of the manuscript is original, made with hemp thread and leather strips. The lining is made of parchment and red painted leather. The four double raised cords and the two head bands are functional (Middleton 1972, 79) (Fig. 5 a. b. c. d. e. f.).

C. State of conservation

The study carried out on the Moralia manuscript from the point of view of degradations, shows that most of the changes are a consequence of the aging

of its component materials as well as of the problems derived from its use and manipulation.

The sheets in the text block are made of parchment obtained from cowhide, according to the arrangement of the hair follicles observed with a magnifying glass and microscope (Chiriță 1983, 62), as well as the flexibility and softness of the sheets.

All sheets are white-yellow, matte, quite smooth on both surfaces.

Manufacturing defects such as traces of hair, calcium carbonate deposits (Frühmann 2018), holes or holes repaired with small original seams, made of hemp cord or twisted tendons are noted. These "repairs" are not corrected or eliminated during the restoration as they are considered to be original elements that are part of the preparing process of this documentary support (Fig. 6. a.b.c.d.).

The parchment sheets had dirt, dust deposits, and organic debris, melted wax, ink, and other stains of unknown origin. There were sheets with wrinkled, distorted, cut, broken areas, with and without losses of the support material. The human factor was also the cause of some damage to the text block: several parchment sheets were cut with a sharp tool, most likely a thinner one. Biological degradation caused by insects and rodents was visible. Slight scratches, cracks and small detachments of the inks were rarely observed.

The text block had lost its flatness due to the slight deformations of the binding, although the seam had still retained its functionality (at the bottom the head band was slightly detached).

Hemp cord and leather strips used to make the book binding had adherent dirt, dust and deposits of crystallized and aged adhesive (Fig. 7. a.b.c.d.e.).

Leather was used to make the covers. It showed dust deposits, dirt, various stains, cracks, discolorations, white salt stains. It was rigid, fragile, dehydrated. The front cover has a leather loss of 60% of the surface and a paste end paper made of parchment, with a loss of 25% of the surface, the left edge.

The back cover has a surface leather loss of 30% and paste end paper, made of parchment without losses.

The case shows adhesive and dirt deposits, stains of unknown nature and deposits of crystallized and aged adhesive. Locally, the traces of an inactive biological attack, caused by xylophagous insects, were visible. (Fig. 8 a. b. c. d.).

Optical microscopy study of parchment and leather surfaces. Photomicrographs.

The surface of the work was subjected to optical microscopy study, a non-destructive examination technique, to various magnifications of the microscope to evaluate the state of preservation of the board and some pages of the book. The photomicrographs had shown details of the examined areas of the leather cover surface and of the parchment pages. The images highlighted the characteristics of the surfaces and the degradation processes.

The book's cover:

- details of the front end paper surface, the lower edge (back of the cover), in the photomicrographs the geometry of the surface is visible: photomicrographs 20x (Fig. 9) and 100x (Fig. 10)
- details on the leather cover area, 20x (Fig. 11) and 60x (Fig. 12) photomicrographs. Traces of hair follicles are visible which allow the identification of the skin type.

Book pages:

- details of the degradations on page 63 (back of the page) in which are visible: - a seam defect, 20x (Fig. 13) and 40x (Fig. 14) photomicrographs, - a perforation (hole made by the writing template), 20x photomicrographs (Fig. 15) and 40x (Fig. 16), - the ink writing in the upper left corner is visible, 20x (Fig. 17) and 160x (Fig. 18) photomicrographs, - a hole, 20x photomicrographs (Fig. 19) and 40x (Fig. 20), - writing (defective area), 20x (Fig. 21) and 40x (Fig. 22) photomicrographs, - a parchment finishing defect, 20x (Fig. 23) and 40x photomicrographs (Fig. 24).
- details of the ornament on page 68 (back of the page), 20x (Fig. 25) and 160x (Fig. 26) photomicrographs.
- details of the fingerprint from page 98 (back of the page), 20x (Fig. 27) and 40x (Fig. 28) photomicrographs.
- details of the ornament on page 47 (back of the page), 20x (Fig. 29) and 100x (Fig. 30) photomicrographs.
- details of the ornament on page 125 (back), 20x (Fig. 31) and 100x (Fig. 32) photomicrographs.
- details of the ornament from page 162 (back), 20x (Fig. 33) and 100x (Fig. 34) photomicrographs.

- details of the writing in red on page 67: area in red, photomicrographs 20x (Fig. 35) and 100x (Fig. 36), - area in red from the top (XX), 20x (Fig. 37) and 100x (Fig. 38) photomicrographs.

D. Restoration treatment

As one of the oldest manuscripts in the Brukenthal Library collection, conservation and restoration interventions were minimal. The restoration was done on unopened volume.

The dusty and dirty surfaces of the parchment sheets and the leather from the covers were dry cleaned with soft brushes and special erasers of different finesse. All particles resulting from the erasers during the surface cleaning have been carefully removed by suction. Due to the fragility of the skin of the covers, they were covered with a veil when vacuuming with the mini-vacuum cleaner. The wax deposits were removed with the help of the scalpel.

Wet cotton swabs and chemical sponges were used for wet cleaning the surface of the parchment sheets and leather covers. Wooden sticks with a cotton end and 30% ethyl alcohol were used to remove the corrosion products deposited on the leather from the covers.

For the flattening of the parchment sheets, a slight humidification was necessary through applying *Gore-tex* tampons: (filter paper, thin layer of damp cotton wool, filter paper and *Melinex* sheet). This sandwich was pressed with sandbags of different weights. The procedure was repeated until the desired results were obtained. It took a long time to wait until the object came into balance with the environment. Where appropriate, interventions were made for gluing, fixing, punctual consolidation and consolidation of areas with ruptures and losses. The materials and substances which were used are: different thickness Japanese paper, cotton wrapped wool sticks, non-woven textile material, natural and synthetic adhesives, rice flour and polyvinyl acetate 1: 1 and/or *Klucel G* (Hydroxypropylcellulose).

A special cardboard box was made for storing the manuscript book.

Storage recommendations: a stable atmosphere, with a temperature between 16-18 ° C, a relative humidity of 40-50%, combined with a light intensity below 50 lux and an air filtration system (Kite 2006, 2009).

It is also important to periodically check the condition of the object every 3 months.

E. Conclusion:

The *Moralia* manuscript book is one of the oldest books in the Brukenthal Library. Its study highlighted the importance of the book, highlighted its degradation and the characteristics of the cover surfaces and tabs and allowed the choice of appro-

priate conservation and restoration interventions, the complexity of the materials from which it was made (leather and parchment) is a challenge for interventions performed. Also, the study of the manuscript book allowed the formulation of recommendations for storing the book in optimal conditions so as to ensure its preservation for the future.

REFERENCES

- Albu 2006-2007 Albu Ioan, *Inscripțiile din Capela Sf. Ladislau – Piața Huet*. In: *Studia Universitatis Cibiniensis*, series Historica 3-4, Sibiu (2006-2007), p. 87-103.
- Chiriță 1983 Chiriță Gh. *Tehnologia pieilor și a blănurilor* / vol. I, București (1983).
- Dagens 1977 Dagens Claude, *Saint Grégoire le Grand. Culture et expérience chrétiennes*, Paris (1977).
- Demacopoulos 2015 Demacopoulos George E., *Gregory the Great: Ascetic, Pastor, and First Man of Rome* (Notre Dame: 2015).
- Dudden 1905 Dudden Frederick Holmes, *Gregory the Great: His Place in History and Thought*, London (1905).
- Eich 2016 Eich Peter, *Gregor der Große. Bischof von Rom zwischen Antike und Mittelalter*, Paderborn (2016).
- Fiedrowicz 1995 Fiedrowicz Michael, *Das Kirchenverständnis Gregors des Großen. Eine Untersuchung seiner exegetischen und homiletischen Werke*, Freiburg – Basel – Wien (1995).
- Fischer 1942 Fischer Eugen Heinrich, *Gregor der Große und Byzanz. Ein Beitrag zur Geschichte der päpstlichen Politik*, Tübingen (1942).
- Frühmann 2018 Frühmann Bernadette, Cappa Federica, Vetter Wilfried, Schreiner Manfred & Father Petrus, 'Multianalytical approach for the analysis of the Codices Millenarius Maior and Millenarius Minor' in *Kremsmuenster Abbey, Upper Austria, Heritage Science* volume 6, Article number: 10 ,2018 , <https://doi.org/10.1186/s40494-018-0176-3> Online acces 4. 04. 2022
- Greschat Greschat Katharina, *Die Moralia in Job Gregors des Großen. Ein christologisch-ekklesiologischer Kommentar*, Tübingen (2005).
- Hack 2012 Hack Achim Thomas, *Gregor der Große und die Krankheit*, Stuttgart (2012).
- Kite 2006 Kite Marion, Thomson Roy , *Conservation of Leather and Related Materials*, Elsevier Ltd 2006 ISBN-13: 978-0-7506-4881-3 ISBN-10: 0-7506-4881-3, p.209
- Markus 1997 Markus, R. A., *Gregory the Great and His World*, Cambridge (1997).
- Middleton 1972 Middleton, Bernard C ,*The Restoration of Leather Bindings* American Library Association, Chicago, 1972,
- Richards 1980 Richards Jeffrey, *Consul of God. The Life and Times of Gregory the Great*, London – Boston, (1980).
- Riché 1996 Riché Pierre, *Gregor der Große. Leben und Werk*. Neue Stadt, München (1996).
- Straw 1988 Straw Carole E., *Gregory the Great: Perfection in Imperfection*, Berkeley (1988).

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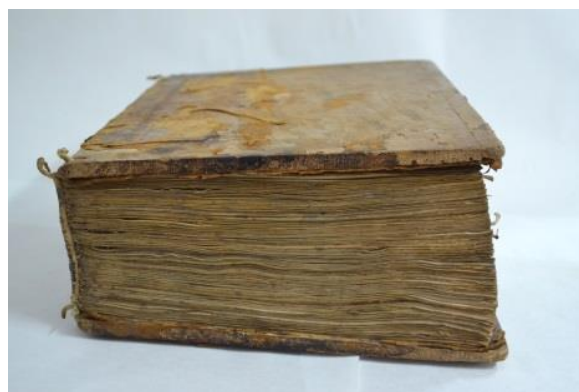
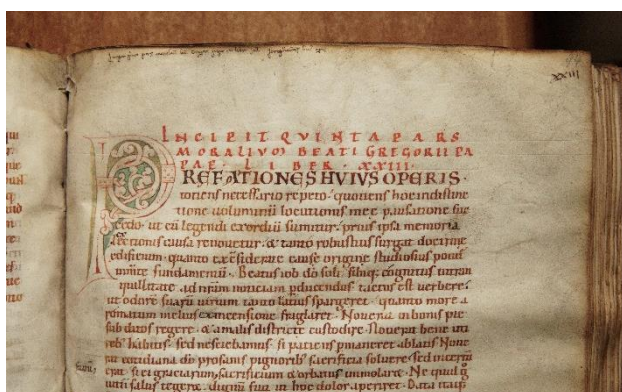
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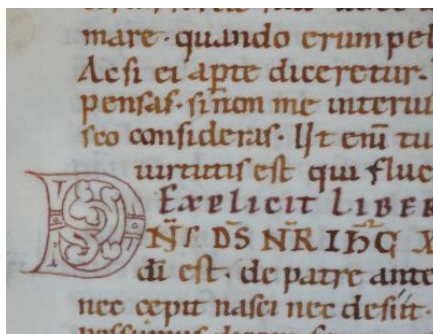
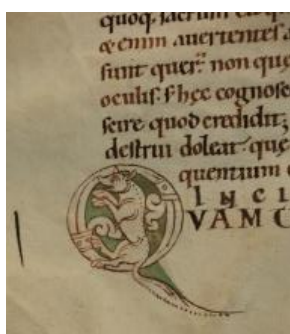
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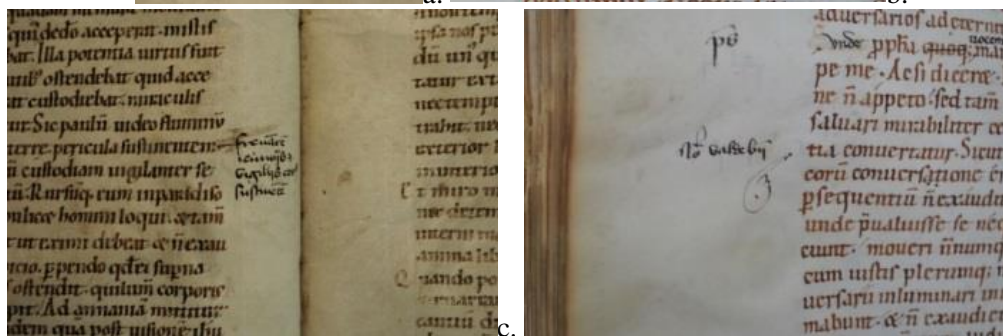


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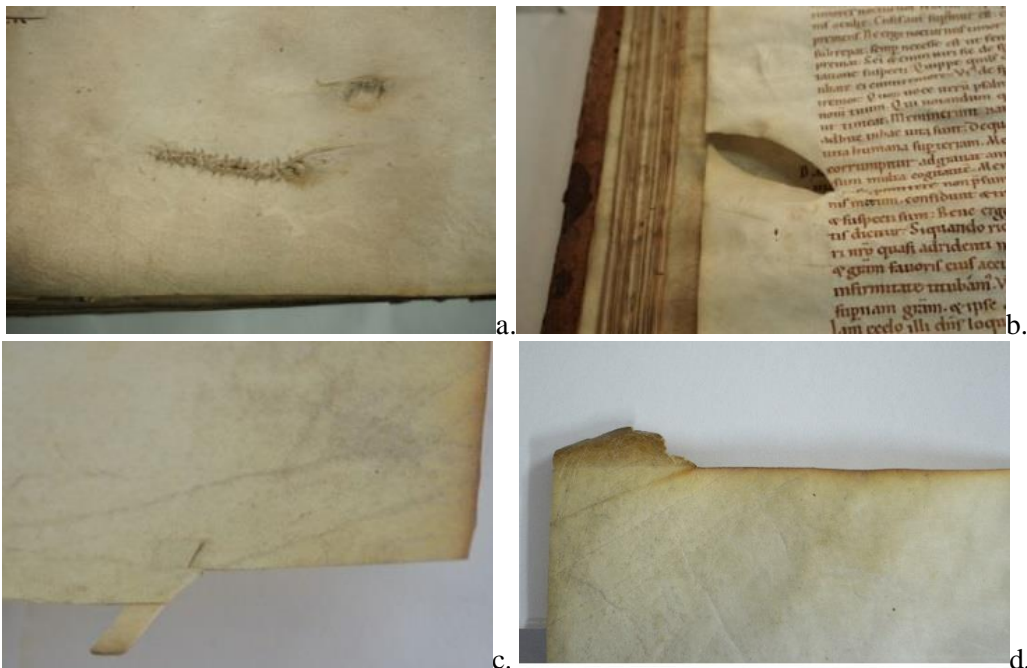
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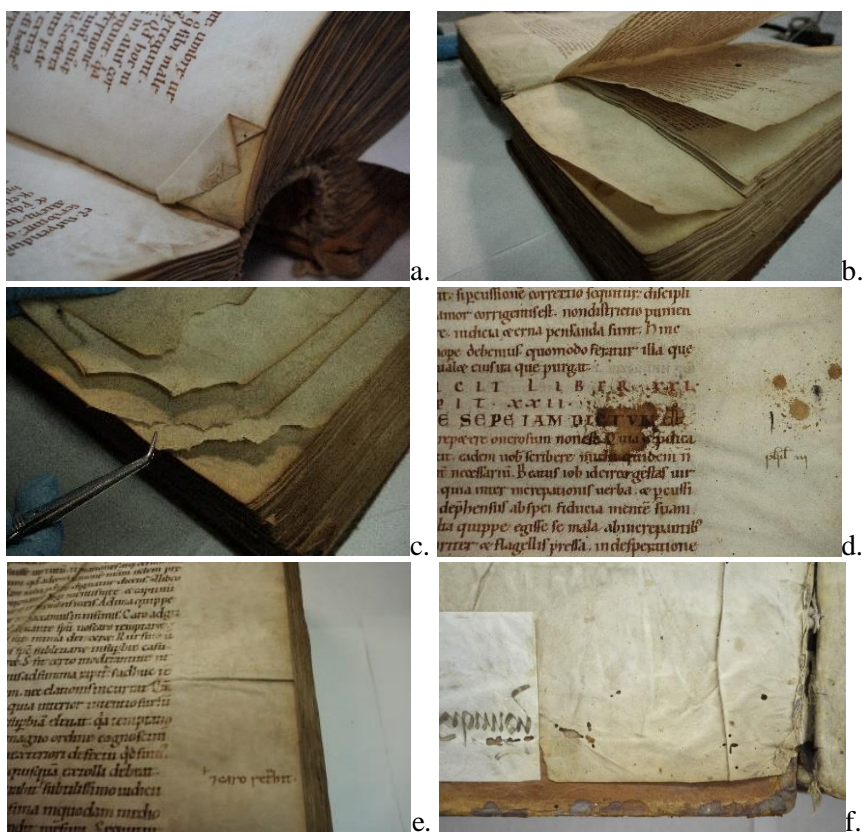
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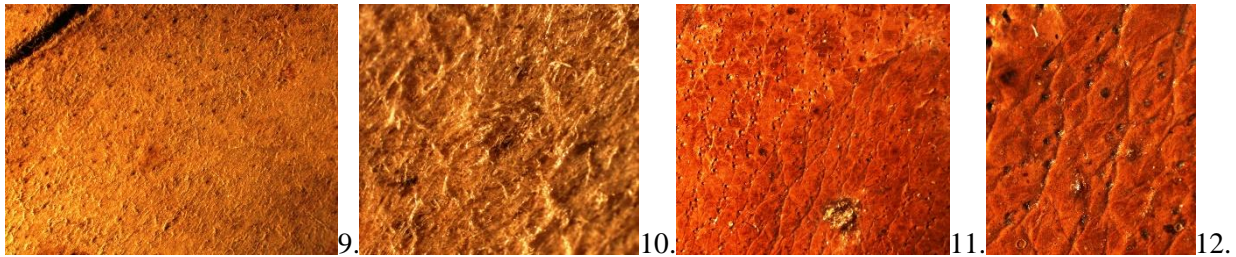
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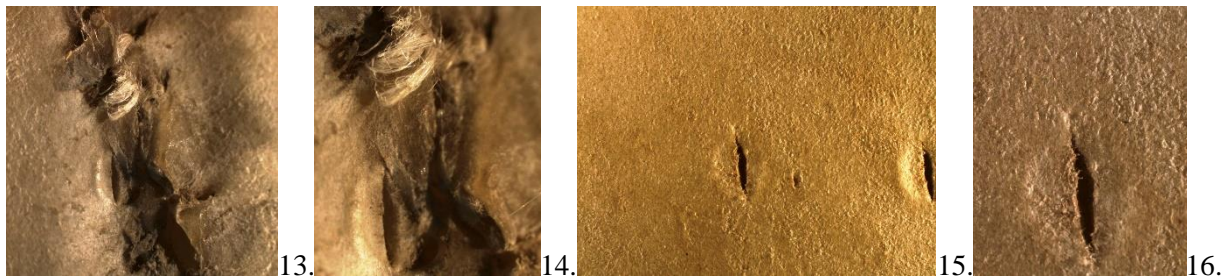
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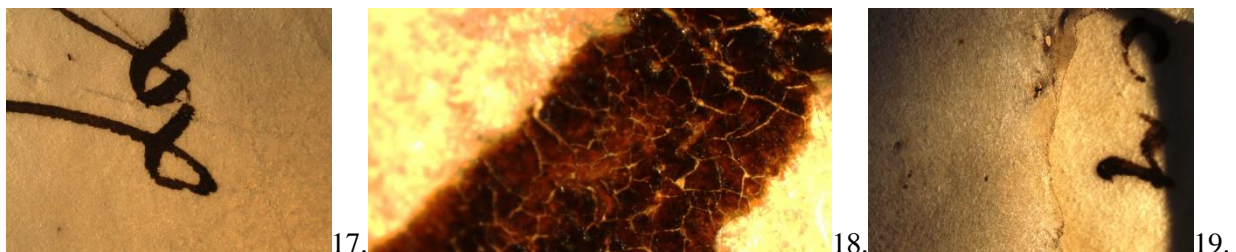
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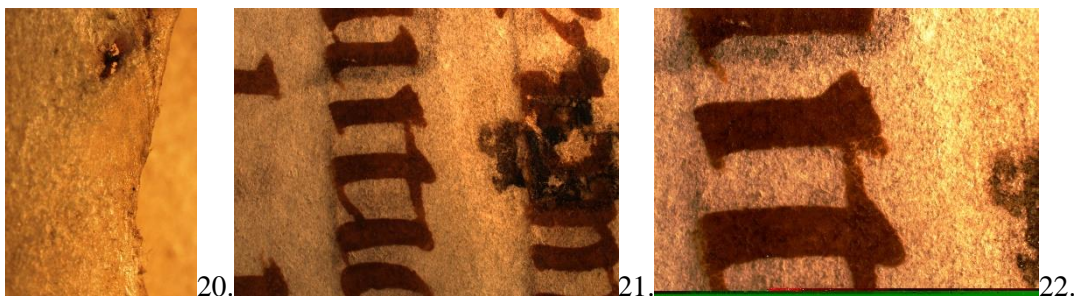
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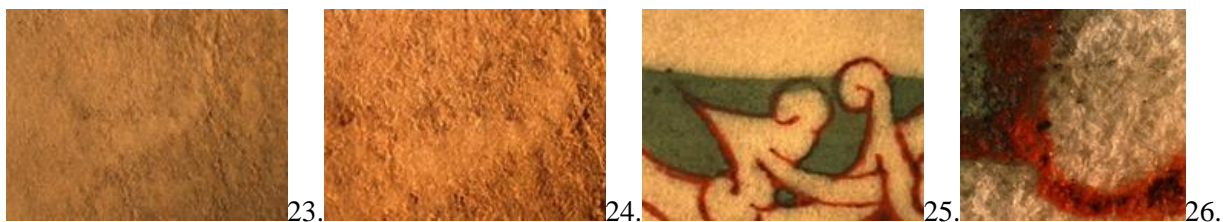
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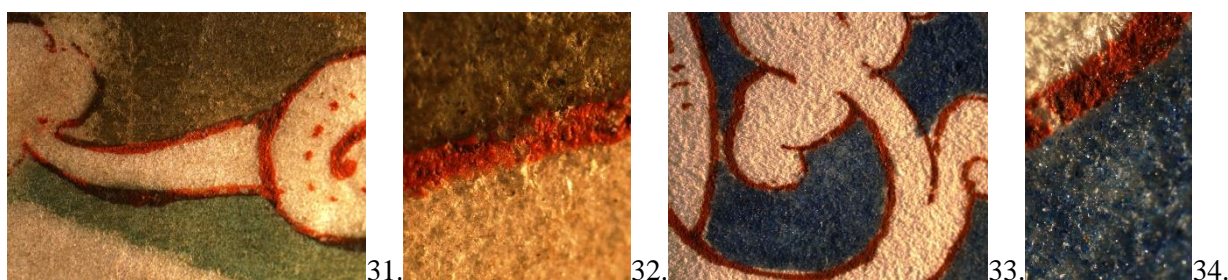
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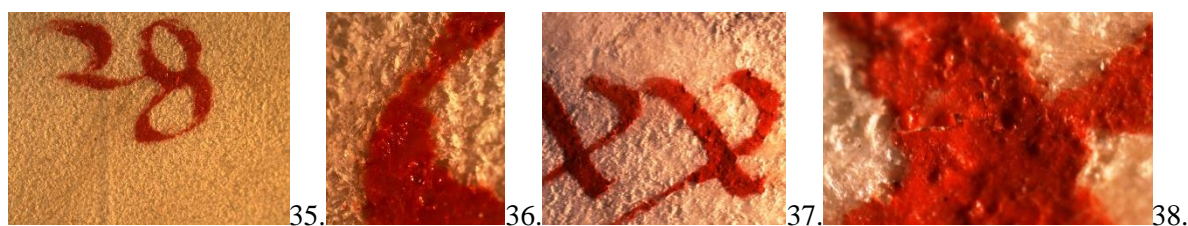
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A TAXONOMY OF AUTHORSHIP AND THE HAND OF SIR ANTHONY VAN DYCK: AN ANALYSIS OF SEVERAL VERSIONS OF AN EARLY 'PORTRAIT OF CORNELIS DE VOS WITH HIS FAMILY'

Jan DE MAERE*

Abstract: *The issues of authenticity, invention, and studio collaboration as a criterion for pricing and valuing paintings, had become a concern since the last quarter of the 16th century in Antwerp. Flemish vernacular language developed a nuanced vocabulary for artistic replication with a precise taxonomy reflecting the status of a painting. It stressed the difference between 'principael', 'origineel' and 'copijen'. For the first part of Van Dyck's career, when in Rubens' studio, little can be said about the specific characteristics of the best assistant's paintings compared to these of Van Dyck's own hand. Some of Sir Anthony Van Dyck's early paintings exist in different versions, copies, and replicas. Some are contemporary from his workshop while others are later random copies. As Rubens did, Van Dyck had apprentices and assistants (gezellen) to work on his paintings. Different versions need categorization and an adequate vocabulary in their relation to the 'hand of the master' in function of the 'Period Eye' concept (namely considering an anthropological analysis of a society's visual culture) and not in a 19th century Romantic concept of the 'sole genius', still prevalent today on the art market and in some scholarly connoisseurship.*

Keywords: *Vocabulary of authorship, connoisseurship, Anthony Van Dyck, Antwerp painting 1620.*

Rezumat: *Chestiunile autenticității, invenției și colaborării de atelier ca un criteriu al stabilirii prețului și evaluării lucrărilor devenise o preocupare la Anvers încă din ultimul sfert al sec. XVI. Limba vernaculară flamandă a dezvoltat un nuanțat vocabular al replicării artistice, cu o precisă taxonomie ce reflectă statutul unui tablou. Ea subliniază diferența dintre 'principael', 'origineel' și 'copijen'. Pentru prima parte a carierei lui Van Dyck, pe când el era în atelierul lui Rubens, puțin se poate spune despre caracteristicile specifice ale tablourilor celui mai bun asistent, comparate cu acelea datorate propriei mâini a lui Van Dyck. Unele dintre tablourile timpurii ale lui Sir Anthony Van Dyck există în diferite versiuni, copii și replici. Unele sunt contemporane, din atelierul său, în vreme ce altele sunt copii târzii, întâmplătoare. Ca și Rubens, Van Dyck a avut ucenici și asistenți (gezellen) spre a lucra la tablourile sale. Diferite versiuni necesită categorizare și un vocabular adecvat în ceea ce privește relația lor cu 'mâna maestrului' în funcție de conceptul de 'ochi al epocii' (având adică în vedere o analiză antropologică a culturii vizuale a societății) și nu după conceptul romantic din sec. XIX, al 'geniului unic', azi încă prevalent pe piața de artă și uneori într-un connoisseurship savant.*

Cuvinte-cheie: *vocabularul calității de a fi autor, connoisseurship, Anthony Van Dyck, pictura din Anvers la 1620.*

Authenticity was an essential criterion for pricing and valuing paintings in Antwerp since the early 16th century, an obvious terminological difference being made between 'principalen' and 'copijen'. It is evident that there was a direct correlation with a high price and various degrees of authenticity (De Pauw-De Veen 1969, 107-109, n. 20; De Poorter 2001, 202). In the actual art market, the word 'workshop' indicates a lesser qualitative criterion, but in art history it relates to the precise ontological context of the creation of the painting. An

Antwerp studio of a famous master was an organized industry, directed by a skilful and educated entrepreneur, the master. He was assisted, even for his original paintings by several assistants who had to follow his style. Only few had some creative freedom expressed in their individual 'ductus', as the young Van Dyck had in Rubens's studio (Neumeister 2019, 25). His artistic dialog with Rubens determined the first Antwerp period of his career.

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1. The young Anthony Van Dyck and his studio

To reconstruct the genesis and the degree of master-studio interaction, involved in the two best (known) versions of the portrait of Cornelis de Vos with his family, interdisciplinary examinations high-end technological methods, such as X-radiography, X-ray computer tomography, mammographic tomosynthesis and macroscopic X-ray fluorescence, can be employed to render the over-painted layers visible again. Here I analyse only the X-Ray photographs.

Recently, connoisseurship experienced a revival due to the latest technological developments of the material analysis and history of old master paintings. Nevertheless, technology did not offer a definite meta-methodological tool (Sheldon, Macaro 2014) replacing the traditional connoisseurship. It reveals the need of a special kind of interdisciplinary connoisseurship (Büttner 2017). Technology allows in some cases to refine the distinction between the production of the master and that of his workshop, and between different versions. The actual state of mastery and authorship in Anthony van Dyck's paintings is not tethered to the physical execution of paintings in the same way as in Modernity, where the polarization of the terms 'hand of the artist' and 'copy' are the primary locus for authorship.

Authenticity in Antwerp in early 17th century terms is more anchored in invention than in execution. As in the earlier painting practices of the 15th and 16th centuries, collaboration in famous artist's workshops, both vertically and horizontally, often involved assistant work on the same canvas (Faries 2003, 30). 'Multiple hands' is the rule for the most successful artists of the early 17th century in Antwerp, heavily relying on gifted assistants (Helmus 2006, 203), but the degree of implication of the master determined greatly pricing. This direct correlation offers an interesting insight into the various degrees of authenticity linked to the type of workshop organization. Copying the work of an established master was only tolerated under his strict control (Vlieghe 2000, 195-208).

The young Van Dyck wants to emulate Rubens and to develop at the same time his personal style, but Rubens's influence is always present. For history paintings, the young prodigy makes numerous preparatory drawings or bozzetti, but not for portraits. In these, he used the support as experimental field, often working out several versions in parallel (Neumeister 2019, 46). This is rarer in his early history paintings, almost absent in his portraits, but well documented for the many versions of the

Martyrdom of Saint Sebastian, worked out with a different degree of studio assistance for each. The relative consistency of the analysis of 12 early reference works (Harth *et al.* 2017, 5-22) on plain-weave linen establishes idiosyncratic modus for Van Dyck's first period 1613-1621 (Alba *et al.* 2013). They represent a sample of high-quality works, but even in the autograph parts there can be negligence in the ductus. These weaknesses differ often only slightly from assistant's work (Neumeister 2019, 44, n. 132). Replicas are often of such a high quality that they only become identifiable as such by comparison with the 'principael'. He innovates technically through his spontaneous demonstrative touch, leaving parts of the canvas empty, covering or not the earlier layer or preparation. In most cases, multiple hands were involved in these experiments. See therefore the study about the München Alte Pinakothek head studies c. 1618/1620 realized by a least 3 hands (Neumeister 2019, 81).

The most extensive primary source for Van Dyck's early career is a trial held from 1660 to 1662, focusing on whether or not the disputed paintings were to be considered originals or copies (Vander Auwera 2021b; cf. Galesloot 1868). Three of Van Dyck's former associates gave testimony regarding the authenticity of a set of apostle portraits that were attributed to Van Dyck. Jan Breughel the Younger testified that he had visited Van Dyck in his workshop in the Dom van Ceulen (probably early 1618 until March 16, 1620). Justus van Egmont and Herman Servaes (1598/1601-1674/1675) declared that they had worked as Van Dyck's assistants there at the beginning of Van Dyck's career (Vergara, Lammertse 2013, 20-28 and n. 75-81; cf. Galesloot 1868, 603-604). Scholars dispute the exact dates for the Dom van Ceulen workshop and the extent to which it was an independent studio or merely a flexible outgrowth of Rubens's atelier. Justus van Egmont (1601-1674) was recorded shortly after 1618 as an assistant to Van Dyck, as well as to Rubens (Valkeneers 2011). He made also copies retouched by van Dyck. In 1617/1618 Van Dyck accommodated on Rubens's property. Rubens names someone 'il meglio mio discepolo' (Balis 1993), I suppose he refers to Van Dyck but this is not certain. He assists Rubens on the Decius Mus tapestry series and on the ceilings of the Jesuit church (Balis, Van Hout 2012). The well-known correspondence between Rubens and Sir Dudley Carrington offers insight in Rubens' opinion about various degrees of authenticity. It indicates paintings entirely by himself, others executed by his assistants under his supervision, and

the ones begun by his assistants but finally re-touched by himself which should be regarded and sold as originals 'da mia mano' (Rooses, Ruelens 1898, 137, n. 5 and 162). The precise sharing of tasks among specialists in a horizontal collaboration was a common practice (Van der Stichelen 1990a, 87-89). Too much in demand, Rubens often directs clients for portraits to Van Dyck and Cornelis de Vos (Hartwieg 2018, 275). In principle, making copies of the work of an established master was not tolerated without the latter's strict control (De Pauw-De Veen 1969, 200).

2. Different versions

Many of Van Dyck's early paintings exist in different versions. Paintings executed on command had to be accepted by its commissioner (De Pauw-De Veen 1969, 204). Portraits are a distinct category, but they make also a distinction between the 'principael', a version or a copy. Families needed often more than one high-quality version of the portrait of a family member. It is not a surprise that Van Dyck made own-handed replicas of these, with or without the implication of studio assistants. Some repetitions of his compositions are made with broad sketchy brushstrokes in a way that allows them to be seen more easily as originals than as copies. They include enough change and quality difference to separate them. Alejandro Vergara writes (Vergara, Lammertse 2013, 59): 'He was flexible in how similar the different versions were and tries to make all versions look like originals by making changes in the compositions and by applying paint in a manner that looked spontaneous. Second versions were made for learning and experimenting.' 'Pentimenti' only indicate the master's hand when they have a significant meaning for the composition (Neumeister 2019, 43). The presence of the same important 'pentimenti' confirms that different versions were initiated and elaborated at the same moment.

The close observation done in January 2022 of the *Portrait of King Charles I Stuart and Queen Henrietta Maria* from the Brukenthal National Museum in Sibiu (oil on canvas 122 x 171 cm, inv. 342) reveals that it is clearly a copy (larger than the 'principael') of a later date and not produced in England circa 1632. The red preparation layer containing iron oxide indicates most probably a later Central European production. Its ductus and painterly strategy indicate a less gifted hand, long after the death of Van Dyck. The outline of the figures, the hand, the impasto and the and the rendering of the flesh and textile are notably inferior compared

to the refined 'principael' (canvas 113.5 x 163 cm) in the Archdiocesan Museum in Kroměříž / Kromsier (Czech Republic), painted in 1632 in London (Fig. 1). The latter was ordered by the king to Van Dyck to sit above the chimney in the drawing room of Somerset House. Due to its contemporary success, many copies of different qualities were made by professional copyists in the 17th century. They are present in Rotterdam (Boijmans Van Beuningen Museum), Firenze (Palazzo Pitti), St. Petersburg (the Hermitage Museum). Recently, I examined two English 17th century copies: at Chidington Castle's North Hall and another at Knole House. Both are 17th century copies by another hand, executed somewhat later than the 'principael'. They are different in impasto, style and ductus compared to the later Brukenthal version, to be situated in early 18th century (Fig. 2).

At first should be discussed X-ray examination of the two versions of *Saint Jerome* (1618/1620) (Fryklund *et al.* 2009). The relation of the size difference of both versions is interestingly, like the comparison between the Janssen (Fig. 14 and 16) and Cook versions (Fig. 15 and 17) of Van Dyck's *Portrait of Cornelis de Vos with his Family*. In both cases, one of the versions is wider and less horizontal in proportion than the other. Also, in style there is the same relation: the Rotterdam 'principael' (Fig. 3-4) in the Museum Boijmans van Beuningen (inv. VDV 22) has a looser touch more sketch like (as in the present Cook version); the Stockholm 'origineel' (Fig. 5) has less contrast and is of a more cautious execution. An assistant could be implicated in part of the painting.

Van Dyck made three different versions of for his *Betrayal of Christ*. One is in Corsham Court, Wiltshire (274 x 222 cm, c. 1618/20), but that in Minneapolis (141 x 113 cm, c. 1620/21) served as a preparatory study for that in the Prado (344 x 253 cm).

3. A vernacular Antwerp vocabulary concerning authenticity in late 16th-17th century

Issues of originality and authorship in paintings had become legal concerns for Antwerp dealers, collectors, and artists. The Flemish poet, writer, and painter Lucas de Heere (Ghent 1534-1584) was a pupil of Frans Floris I (Van Mander 1604). In an *Ode* (c. 1559), he coined the neologism 'kopie' (Nagel, Wood 2010, 7-34), derived from the French 'copie' to indicate Michiel Coxie's replica of Hubert and Jan van Eyck's *Altarpiece*, commissioned by King Philips II of Spain. The growth of large-scale art production for the open

market was boosted by artist workshops relying on pupils and professional assistants. This shift in artistic practice and the widening connotations of the terms 'originaal' and 'kopie' gave way to lawsuits. On October 3, 1575, the city council of Antwerp passed legislation proscribing forgeries, sanctioning them with a fine of 'drie ponden Brabantsch' (Van den Branden 1883, 230-231). The Antwerp city magistrate relied on painters from the Guild of Saint Luke as experts in the matter. Gabriele Druet, an art dealer, questioned in a court case on January 7, 1576, the authenticity of a signed 'FF. IN. et F.A.' *Cain Killing Abel* presumably by Frans Floris (Van de Velde 1975, 472-473, doc. 78). Frans Pourbus I and Frans Francken I, both former Floris pupils, gave an eyewitness testimony. Frans Francken the Elder admitted he was asked and directed by Floris to paint it 'doen conterfeiten', which means as a faithful replica considered as an original, and that he has seen Floris himself involved in painting it 11 years before, when he resided with Floris. This reveals a nuanced vocabulary relating to a replica in which the master was involved. Therefore, it was considered as an 'origineel'. It originated directly from the master's invention without being totally made by his hand. It was not made to deceive (Loh 2006).

A 'weerga' indicates a faithful reiteration of a painting, of an object, or of a person's physiognomy, as in a portrait 'naer t'leven', a 'nabeeld' or 'afbeeld'. This indicates a sequential relationship with a model, in nature or in art. It does not implicate a difference in quality of execution as there is in the production of unnamed studio assistants. Floris's workshop may have had 120 assistants over the years (Balis 2007), trained to work 'naer' (after) the master (Deceulaer, Diels 2006). Karel van Mander referred to van Eyck's original as 'de principale tafel' and to Coxcie's copie as 'dese geconterfeyte tafel' (Van Mander 1604, fol. 200v). The 'principael' (primacy) represented the first and best artistic expression of the several iterations of a composition by the master in a large hierarchical workshop. Assistants were often tasked to copy it, often with a certain limited degree of creativity, under (or not) the supervision of the master (Honig 1998, 196). It was generally regarded as painted by the artist, but not always unique or totally by his hand (Loh 2006, 239). Multiple versions by Veronese or Titian can now be considered as 'second originals and possibly with the involvement of the master' (Loh 2006, 240-241). Such multiple original versions containing multiple hands complicate the statute of the 'principael'; even if they maintain a close affiliation to the master's perceived author-

ship (Tummers 2008, 36). It illustrates a sense of responsibility and a guarantee of quality in a legal sense, but not necessarily the sole involvement of the master.

Even if in the contract between Rubens and Maria de Medici concerning the paintings for two Luxembourg galleries it was written that Rubens had to execute everything by his own hand (Thuillier, Foucart 1969, 98), it was understood that he did not work alone, but assisted by his studio in the usual way (Rooses 1910). Arnout Balis observes that: '*this fact is accepted in the Rubens- and Jordaens literature but silenced in the recent Van Dyck publications, even if Roose, Bode, Rosenbaum, Oldenburg and Glück mentioned it*' (Balis 1993, 45, n. 57).

'Naer t'leven', asserting a stance towards a source, is in Antwerp in the first quarter of the 17th century not only a claim to objectivity but also to the artist's creative approach to his model. We observe this in Van Dyck's 'Portrait of Cornelis de Vos with his Family'. Painting as 'Ars liberalis' implicates imagination ('uyt den gheest') and a pictorial strategy ('handelinge'/'ductus') (Wood 2005, 38-50). The young van Dyck started, in many cases more than one original. In the present author's opinion, to be able to experiment thoroughly his 'handelinge' in a sequential approach on more than one canvas.

4. Van Dyck's early studio practice 1617-1620

It was common practice to start more than one version at one time (Vander Auwera 2021a), as we observe in both canvasses c. 1623/25: the 'Allegory of Fruitfulness' (201.1 x 229.5 cm, Wallace collection London, inv. P 120) and the 'Allegory of Fertility' (180 x 241 cm, Musées royaux des Beaux-Arts de Belgique, Brussels, inv. 119) by Jacques Jordaens. Under the Wallace collection painting, an earlier complete version of the Brussels painting was discovered by X-ray examination. He reworked many times the 'principael' in the Wallace collection London (Vander Auwera 2016, 45-70. I am grateful to Joost Vander Auwera for indicating this publication.), upgrading it over time at the evolution of style. Therefore, as Vander Auwera writes on Jordaens's artistic relationship with Van Dyck and Rubens: 'The current periodization of his oeuvre and the dating of several works need more nuance and adjustment' (Vander Auwera 2021c, 45). A painting could become the 'principael' through its repeatedly reworking by the master, even if more than one version was initiated at the same moment. It remained often in the studio as an asset to be copied. Macro XRD (X-ray

diffraction), a new technology permitting to analyse the crystalline structure of paint molecules in paint layers, could differentiate these (I am grateful to Maximiliaan J. Martens for this information). 'The simultaneous initiation of multiple original versions was common practice, as we see in Jan Breughel the Younger's workshop register (Ertz 1984, 522-552: 'weergaey' 1627, nr. 15; 'cöpye' 1627, nr. 19; 'conterfeytsel', nr. 4.). This was also the case in Rubens', Van Dyck's and other Antwerp studios.

In the first period in Antwerp, Van Dyck elaborated his paintings in different stages, experimenting directly on the support, generally without other preparatory studies. Justin Davis writes: '*Of note is the absence of any compositional studies, bozzetti, modelli or head studies*' (Davis 2021, 50) and '*It is convincingly argued that Van Dyck's thorough and often complex preparatory thoughts and ideas were worked out on paper and on canvas in Van Dyck's first period*' (Davis 2021, 53). Alejandro Vergara shares this opinion (Vergara, Lammertse 2013, 55-56).

In Rubens's studio, where the young Van Dyck was active 1617-1620, different hands were often involved in portraiture, resulting in different levels of 'handelinge' on the same painting. Dr Otto Sperling observed this while visiting Rubens' studio in 1621 (Vander Auwera, Van Sprang 2007, 37). This is also the case c. 1617/18 in the two pendants *Portrait of Jean Charles de Cordes* (inv. 2618) and of his *Wife Jacqueline van Caestre* (inv. 2619), on panel (each 72.2 x 57 cm) in the Brussels Museum (Barnes *et al.* 2004, 18-19: 'not van Dyck'). Following Hélène Dubois and Nora De Poorter, both are by the young Van Dyck with studio assistance (I am grateful to Arnout Balis for his opinion on these paintings, communicated in March 2021 and to Joost Vander Auwera, communicated in February 2022). Both panels share a plank of the same tree (Seim 2022). Balis's opinion on this subject is that in the man's portrait, the head is by Rubens and the wife's head by Van Dyck, the rest of both paintings is worked out by at least two different assistants. Joost Vander Auwera shares this opinion. Both remarked independently that the quality of execution of the man's cloth is higher than that of the woman's dress. Two big size versions of the same sitters in the Lazienki Palace, belonging to the Warsaw National Museum (panel 105.5 x 76.2 cm, inv. LKr 840), were recently cleaned. The discussion if they could be accepted as original is still open.

The difficulty of authentication is also illustrated by the changing attributions of a portrait of Van Dyck in the Antwerp Rubenshuis, now by most scholars accepted as by Rubens (Van der Stichelen *et al.* 2014). These above-mentioned examples demonstrate that multiple anonymous hands were implicated in the 'handelinge' of an original portrait in Rubens's studio at that time when the young Van Dyck had a supervising function there; and when he was allowed there a certain degree of economic and creative freedom. Technical analysis of different versions can shed some light in this matter of complicated connoisseurship.

5. Cornelis de Vos (Hulst 1584-1651 Antwerp) and his family

Cornelis de Vos was one of the leading Antwerp portrait painters in Rubens' time. His physiognomy is known from Van Dyck's iconography (Hollstein 1993, 98). He collaborated with Pieter Paul Rubens from 1617 on, the year the young Anthony Van Dyck entered the Rubens studio. He married Suzanna Cock (May 27, 1617) and they had 6 children. The two eldest, Magdalena (baptized 19.9.1618) and Jean-Baptist (baptized 6.12.1619), are rendered in the present family portrait. The children are rendered approximately 2 year older than in Van Dyck's *Cornelis de Vos Family* discussed here both in the 'principael' (dated c. 1622) of the *Portrait of the Two Children* (oil on canvas, 78 x 92cm) in Berlin (Fig. 11) and in its mid-19th c. Brukenthal National Museum's copy (Fig. 12), wrongly called *The Painter's Two Daughters* (oil on canvas, 66.5 x 58.5 cm, inv. 1229; signed, located and dated *C. D. nach van d. Helst Berlin, / 1857*) by Carl Dörschlag (1837-1917), a German painter who donated to the museum this painting in 1888 when he was already (since 1871) teacher of Painting and Drawing at the Evangelical High School in Sibiu (Csaky 1909, 24, inv. 1229; cf. Csaky 1901, 331, 1181), but who studied at the Art Academy in Berlin and then (c. 1858) privately with Julius Schrader (1815-1900) before to settle (c. 1862) in Transylvania (On Carl Dörschlag: Grewolls 2011, 2180).

The family portrait (Fig. 10) from Musées Royaux des Beaux-Arts de Belgique in Brussels, by Cornelis de Vos himself, renders his family in 1621 (Van der Stichelen 1990b). In the present two versions painted circa 18 months earlier (Van der Stichelen 1990b, 8), his wife Suzanna wears a deep goffered ruff and a black stomacher, decorated with embroidered flowers in gold thread. Her facial features are also to be seen in a portrait bust by

Van Dyck's studio (Fig. 7) in the Budapest National Gallery (oil on canvas, 46.5 x 32.5 cm, inv. 25.2958). The comparison here below indicates the same facial figures in the Janssen version (Fig. 6) and in Budapest (Fig. 7) and different ones, especially the nose, in the later overpainted head of the Cook version (Fig. 8) of Susana Cock.

Van Dyck's portrait of Cornelis de Vos with his family is clearly influenced by Rubens' *Self-portrait with Isabella Brant* (München, c. 1609) and the *Portrait of Jan Breughel the Elder's Family* (Courtauld Institute Galleries, c. 1613). The latter is a few years earlier than *The Portrait of a Married Couple* in Vaduz (1618) and the *Man and Wife Portrait* in Budapest (inv. 754), one of the early experiments in intimate domestic portraiture prior to Van Dyck's departure to Italy (1621), before the later St. Petersburg family portrait. The unusual square format fits a seemingly loving scene between members of a young family. Its conventional style respects the heraldic placement, adding a psychological nuance to it, concerning Cornelis somewhat different in the two versions (cf. comments Maximiliaan J. Martens: 'contemplative & wilder', see Fig. 22-25). The painting seems to have been popular in the 17th century.

Van Dyck modified on purpose Rubens' magniloquent and forceful style to distinguish his art from that of Rubens. Already at the very start of his career, Van Dyck made head and hands-sketches 'ad vivum'. He experimented with different painting and style strategies on different canvasses as part of his working process. From isolated touches of primary colours, he moved to a uniform Rubensian-Venetian palette, often short-hand, spontaneously, rough, and hastily. From a bold streaky impasto to a smooth surface, often on the same canvas, he demonstrated his 'bravura' style. Often reporting the creative findings from one to another version (communication by Susan J. Barnes, Minneapolis, Minnesota, on June 30, 2015), he followed in this the example of Titian, much praised by Giorgio Vasari: '*discernere tra maniera a manina*' (Vasari 1568) and known to Karel van Mander (Van Mander 1604, fol. 177 r.).

6. The different versions of the family portrait c. 1620

The catalogue of the Cook collection mentions copies: one in the collection of Baron Janssen, Uccle (the present painting), another in the Frieslingh sale, Berlin, 1895 (attributed to Cornelis de Vos), and in the Wedewer sale, Berlin, 1908 (as Jordaens). Alan Mc Nairn mentions 3 old copies (Mc Nairn 1980, cat. nr. 72). Nora De Poorter

mentions 3 more copies (Barnes *et al.* 2004, cat. nr. 108). Arnout Balis remarks that sizes are not always given correctly in the Rubenianum files.

6.1. Sir John Charles Robinson, by whom sold in 1868 to Sir Francis Cook (1817-1901), Doughty House, Richmond. Cook collection, dimensions mentioned: 112 x 111.5 cm (Bürckhardt 3'8,1/2 x 3'7, 1/8 inch) as 'Jacob Jordaens'; later restituted to Katz; with Agnew, sold to Bührle (1951); bought by Somerville-Dickinson (sold in 1978); Mathiessen sold to Jersey collector David Wheeler; Sotheby's (July 7, 2021 nr. 14, sold for 2.453.000 £, canvas actual dimension **117 x 111.5 cm**, originally **129 x 111.5 cm**).

Exhibited: Meisterwercke Flämischer Malerei, Museum zu Allerheiligen, Schaffhausen 1955, nr. 23 (ill.) recension by F. Lanfer, Revue Bührle Collection Ausstellung, *Schweizer Journal*, 1955, ill. p. 50; collection E. G. Bührle, Kunsthau Zürich 1958, nr. 66; *Weltkunst aus Privatbesitz*, Museen Köln, Künsthalle, 18/5-4/8/1968, ill. F 5. Goering made attempts to buy the Bührle version during the World War II. Despite protracted negotiations, the sale did not take place. The Matthiessen-Dickinson painting has been viewed by Christopher Brown and Sir Oliver Miller who have confirmed the early dating c. 1620. Here it is seen as the 'principael'.

6.2. Dulière (Fig. 13), Rubenshuis, Antwerp, oil on canvas, **125 x 108 cm** (exhibition catalogue A. van Dyck Yokohama-Shivoka-Osaka, 1990, nr. 3). Provenance Frieslingh sale Berlin 1895 (as 'Attributed to Cornelis de Vos'). Here seen as a studio copy.

6.3. Frank T. Sabin London, from Coats collection. Christie's April 12, 1935, lot 82, as 'Attributed to Rubens'. Formerly: Berlin Lepke December 10, 1905, nr. 96a, from Wedewer collection, Wiesbaden, as 'Jordaens', canvas **137 x 121 cm** (cf. ill.) with more elaborated landscape. Here seen as a later copy by another artist.

6.4. Baron Albert Léon Janssen (Fig. 14 and 16), Uccle, acquired c. 1880/1890 (until his sale 1923) **115 x 111.5 cm**. I am grateful to Baron Paul-Emmanuel Janssen, La Hulpe and to Chevalier Philippe de Schaetzen, Uccle, for this information provided in December 2020. This version was in the collection of Baron Albert Léon Janssen te Ukkel (1849-1923, President of the Expo Mondiale 1910, industrialist, railway administrator, a banker and friend of King Leopold II). The grandfather Emmanuel (1879-1955, baron in 1930) of the actual Baron Paul-Emmanuel Janssen (born 1931) mar-

ried first a daughter Solvay and after her death secondly the only daughter of Baron Albert Léon Janssen (a distant family member). He bought part of his father-in-law's collection in 1923 (see catalogue by Wilhelm Martin curator-director of the Mauritshuis: Martin 1923), but not this Van Dyck, then considered as Cornelis de Vos. The Brussels dealer Arthur de Heuvel bought it in 1927 and showed it that year to L. Burchardt in Brussels, before selling it to Chevalier de Schaetzen, Liège. As 'by Cornelis de Vos' it is mentioned in the Cook collection catalogue; Anthony F. Reyre, Vermeer gallery London, 22 Old Bond Street, August 30, 1926; Gallery Arthur de Heuvel, Brussels, 1927 (seen by L. Burchardt there); Baron Frantz de Schaetzen (Tongeren 1875-1956), bought from Arthur de Heuvel; Baron Philippe de Schaetzen (Tongeren 1903-1973); Baron Alain de Schaetzen (Liège 1930-2002 Kortesseem), Château Ridderborn, Vliermaelroot, Kortesseem, until 1962; private collection in Geneva. Here seen as 'a second original', initiated simultaneously with the Cook 'principael' and elaborated alternatively and sequentially in different stages, as happened also in the Cook version.

6.5 Later 18th century copy, horizontal format, in a Berlin collection.

7. Comparison of the Cook and Baron Janssen versions

The present comparison of the two versions (Cook and Janssen) is based on the observation of their style and ductus (Fig. 14-15), as well as of their X-ray analysis (Fig. 16-17). I am grateful to the Hon. Michael Tollemache for his observations on the Cook version in July 2021 at Sotheby's London and to Maximiliaan J. Martens (University of Gent) for his observations on November 18, 2021 on the X-rays of both versions.). This research should be complemented with X-ray of the much-overpainted Dulière version (Fig. 13), on loan to the Rubenshuis until 1998, alas unavailable now. Last seen in a Paris collection, its actual location is unknown.

The recent conservation of the Janssen version removed the later additions and revealed the original paint layer (Fig. 28-29). Several pentimenti are easily discernible (similar to the Cook version) and refer to a rather immature hand of a young prodigy and the adaption of the progress in one version to the other. The facial features are well recognizable in their original state in the Janssen version, and the execution with bold strokes in some parts

points in the direction of the hand of Anthony van Dyck.

The Janssen version underwent in 2019 conservation treatment. Old varnish, retouching and overpaint were removed (Fig. 29) in the conservation studio of Mme Francine Swaelens (Brussels), except in some areas of the black mantle of Cornelis as well as on the left side ruff and on the red drapery. Between the left of Cornelis head and the red drapery, traces of something (a head) is overpainted with 'doodverf' (still visible in the cleaned state of the painting). The hand resting on the chair was covered with old overpaint, now removed. Probably, this hand was not meant to be seen and therefore covered (I am grateful to Arnout Balis and Joost Van der Auwera for each independently inspecting the cleaned state while visiting F. Swaelens's conservation studio. The latter observed all the different stages of the cleaning process). Before the cleaning, the infrared reflectography (IRR) revealed a fine and freehanded underdrawing with a brush; repositioning and modification of Suzanna's left hand; a light modification of the position and expression of Suzanna's face; enlargement of Suzanna's ruff; modification of the baby's head position (Fig. 28).

Both versions are lined. The coarse weave of the canvas with a dominant vertical warp is visible under raking light in both versions. The Janssen version consists of 2 stitched pieces of canvas. It was common practice to apply a larger amount of ground preparation layer along the seam in order to conceal its presence. The almost perfectly square Janssen version (112.5 x 111.5 cm) is smaller than the initial size of the now reduced Cook version (originally 129 x 115.5 cm; now 117.5 x 115.5 cm), which is more vertical oriented. Joost Van der Auwera pointed out that none of the versions are in the usual standard dimensions ('daaldermaat') of 123/125 x 95 cm (Bruyn 1979).

The results of the comparison of the X-ray analysis of both versions (Fig. 16-17, 20-21 and 24-25) are interesting. The Cook version reveals a second stage of execution, absent in the Janssen version, mostly done in lead white extensively on the head and ruff of Suzanna, the upper part of the head of John the Baptist and on part of his cloth, as well as on Suzanna's hand (Fig. 17, 21 and 26-27).

In both versions there is at some stage probably an assistant involved. It is far from clear if the last changes in the Cook version were made by Van Dyck himself or by an assistant using some energetic sketch like handling as the master does. Nora

De Poorter and others suggested that here, as in other early portraits such as in St. Petersburg, details of the dress were adjusted up to the latest fashion (1625/1630). But a painting by Cornelis De Vos, *Portrait of a Young Woman*, dated 1619 Aetatis 23 (oil on panel, 106 x 74 cm), in an Austrian collection (Fig. 9), shows an identical dress, ruff and stomacher as in the two versions. This demonstrates that this kind of dress was already in fashion in 1619.

In the two versions, an 'imprimatur' of greyish earthy pigments covers the preparation layer to prevent excessive absorption of oil from the paint layer. At some areas it is visible with the naked eye in both versions. In the Janssens version, whose ground consists of white chalk and bone glue, the 'imprimatur' and the pentimenti are visible in a radiograph by IRPA-KIK, Brussels (Fig. 14, 16). The Cook version is somewhat brighter in colour, especially in the areas reworked in the second stage of execution (Fig. 15, 17, 26, 27). The condition report July 2021 Sotheby's by Henry Gentle (who is an external specialist and not an employee of Sotheby's) describes accurately the condition of the Cook version: 'The painting is lined and there is good adhesion between the original canvas and the lining fabric. There is good tension across the picture plane. Cusping at the edges of the canvas is visible, an indication that the original canvas has not been reduced. Slight unevenness across the very top edge has been latterly corrected. The canvas is of a coarse nature and the canvas weave is visible under raking light with a dominant vertical warp. The paint layer is stable and secure and the vigorous and energetic method of paint application is apparent. Paint texture is very well preserved and impasto highlights are in original condition. Some of the darker passages have been applied swiftly but more thinly; as a result, over the passage of time, the paint in these areas has become a little more transparent revealing pale ground and canvas texture. Under U-V light these darker passages show a scattering of restoration to mitigate slight pin prick paint loss. Further fine restoration can be detected to the children's and Suzanna's faces, particularly to Suzanna's jaw line where subtle modelling has been slightly compromised. Some areas of the ground layer have been intentionally left exposed by the artist to act as a mid-tone; these areas include the white dress of Jan-Baptiste and the upper right of the composition in the sky. There are the remains of a discolored and degraded varnish in the darker passages; its removal would significantly improve the tonality and reveal subtleties within the composition hitherto

obscured. The chromatic integrity of the composition has not been compromised and the colors remain strong and saturate well. The painting presents well.'

Compared to the size of Cornelis and Suzanna (Fig. 26), the children are proportionally a bit smaller in the Janssen version (Fig. 18, 20) and somewhat bigger and situated higher up in the Cook version (Fig. 19, 21). The pattern of the children overlaps almost perfectly in height, but the children in the Cook version are somewhat larger. Maximiliaan Martens (18.11.2021) suggests that a 'sjabloon' was used for the transfer of the design of the children (Bauer 2007) although there is no visible sign of the transfer. The enlargement of the children is essentially the result of the second stage execution. According to the opinion of Claus Grimm (communicated on March 18, 2022), the execution of the children hair, faces and clothing and of Suzanna's hand (a pentimento, similar in both versions) is uniformly weaker in the Janssen and other versions, and moves steps further away from the master Van Dyck. He considers that the final state of the Cook version is clearly the fresher execution and that the pentimento of Suzanna's hand is of a better quality than in the Janssen version.

The head of Cornelis De Vos (Fig. 22-25) is by the same hand in both versions. In the Baron Janssen version (Fig. 22, 24) he has a contemplative stare (according to M. Martens). The ruff is simplified. The lace decoration on the right part (left for the viewer) renders the natural reflection of light delicately. The left side is much overpainted as there are parts of the black mantle. The hat, which was initially situated higher and bigger, is reduced in the final stage (Fig. 24). In the Cook version (Fig. 23, 25) the head of Cornelis De Vos has here a wilder expression, less suitable for a tranquil family man (so M. Martens). The lace is clearly the work of an assistant, the right eye of Cornelis is reinvented by the restorer and in the ultimate stage some colour accents were added in the face (Fig. 23), absent in the Janssen version. In the rendering of Cornelis de Vos in the Cook version (Fig. 25) the lace decoration on the right side (left for the viewer) was initially situated higher and the left side is mostly a restoration (as in the Janssen version). A few accents were added in the face in the ultimate stage.

Certain areas are worked out differently in each version: the gilded decoration on the stomacher and on the blank silk sleeve of Suzanna's dress and ruff are sketchy in the Cook (so M. Martens: 'the

young artist just indicating some values, left as such') and nicely worked out in the Janssen (Martens: 'the artist knows now what to do').

The body contours are blurred and not clearly defined (in both versions) to heighten the sense of lively movement. The pentimento reducing the size of the hand of Suzanna in both versions is visible with the naked eye and in X-ray (Fig. 18-19). In the Cook version (see the radiograph, Fig. 17), there is in the second stage some reworking with lead white, revealing saponification (Fig. 27).

8. Conclusion

Technical investigation evaluating the physical integrity of a painting, multi-disciplinary art history, their integration in a new kind of connoisseurship and peer-review, widen the scope of the attribution process today. It brings new insight into the concept of authenticity, overruling the powerful anachronistic concept of the single-handed masterpiece by the genial artist. Defining the socio-historical context of Van Dyck's *modus operandi* and eventual horizontal delegation in his studio during the first Antwerp period, when determining authorship in Antwerp at that time, the basic principle should be that the collaboration of the master with his workshop was standard procedure, even in portraits. The term 'origineel' refers to the initial version(s) authenticated by the master, without necessarily presuming a total single-handed execution. The extent to which Van Dyck's own hand was involved in the making was central for the patron and the 'liefhebber' / 'connoisseur' (cf. the above-mentioned Antwerp court case 1660/1661). The young Van Dyck ensured that his workshop output was of a consistent quality and did not permit his assistants to demonstrate strong fluctuations in style, even if he himself got that privilege when working in Rubens's studio.

Traditionally, a 'principael', the result of the master's sequential creative process, served as model for other versions and studio copies, and as an educative tool. Even if there was some collaboration with others at some stages in autograph paintings, merely retouched studio copies by the master, were differentiated and valued less, as the outcome of the Antwerp court case revealed. In some cases, starting more than one version at the same moment permitted stylistic and pictorial experimentation. It allowed the young Van Dyck to explore the limits of his genius in a different way than in the standard creative process.

Often family members wanted more than one version of a family portrait. These two versions may have been painted alongside each other, as Van Dyck often did (See 'principael', replicas, versions, and copies of the *Portrait of the Earl of Strafford*: Millar 1986). The present author's opinion is that they were worked out confronting each other, reporting creative findings resulting from experimentation in one version on the other (such as the reduction of the woman's ruff and Cornelis hat in the Cook collection, following the Janssen version).

The important pentimento in Suzanna's hand is present in both versions (Fig. 18-19) and confirms a simultaneous conception. In the Cook version it is reworked over in a later stage, using some energetic sketch-like handling. This seems to indicate that both versions were initiated at the same moment in the same studio and that they were upgraded simultaneously in different stages and in slightly different dimensions. The Cook version became through its extensive upgrading the 'principael', the Janssen version a second 'origineel', both with intervention of at least one other hand.

The artist experiments with the size of the composition (Cook more vertical; Janssens squarer) and slightly the interrelation of the figures. When comparing the two X-ray images, Maximiliaan J. Martens expresses the opinion that the Cook version was started first, boldly and spontaneously, and that the Janssen version (Fig. 14), second in creation, was based partly on the result of this experimentation, its execution handled in a more calm and secure way (cf. the difference in facial expression of Cornelis in the two versions, Fig. 22-25). In the Cook version, which Martens sees as the *principael*, the head of Suzanna (Fig. 8) is totally overpainted in a later stage, changing even the facial type (especially cheeks and nose). This is not the case in the Janssen version (Fig. 6). Therefore, Suzanna in the Cook version does not resemble the known portraits of Suzanna in its actual state (See condition report Sotheby's London, July 7, 2021 and the observations of Michael Tollemache when inspecting the painting on July 2, 2021). If we compare the three known versions, the Janssen (Fig. 14) and Dulière (Fig. 13) versions represent Suzanna as we know her from the painting in Budapest (Fig. 7) and from Cornelis De Vos own family portraits (Fig. 10). Why the later remodeling of the woman's face in the Cook version is done is not known.

Both versions communicate creatively, allowing the young Van Dyck to explore the idiosyncrasies of his genius. The Cook version is the first, the *principael*, more spontaneous and bolder. The comparison of the X-rays of the Cook and Janssen

version shows that at least these two original paintings for Cornelis de Vos were initiated at the same moment by Van Dyck and one of his assistants, working probably in Rubens's studio.

REFERENCES

- Alba *et al.* 2013 Alba Laura, Jover Maite, Gayo María Dolores, *Introduction to the Technical Studies: The artistic practice of the young Van Dyck*. In: Vergara Alejandro, Lammertse Friso (eds.), *The Young Van Dyck*, London (2013), p. 337-347.
- Balis 1993 Arnout Balis, *Fatto do mio discepolo, Rubens' studio practice reviewed: The Flight from Lot and his Family from Sodom*. In: Nakamura Toshiharu (ed.), *The Flight of Lot and his Family from Sodom: Rubens and his Workshop*, Tokyo (1993), p. 97-127.
- Balis 2007 Balis Arnout, *Rubens and his studio: Defining the Problem*. In: Vander Auwera Joos, Van Sprang Sabine (eds.), *Rubens: A Genius at Work*, Warnsveld (Lannoo) (2007), p. 30-51.
- Balis, Van Hout 2012 Balis Arnout, Van Hout Nico, *Rubens Unveiled. Notes on the Master's Painting Techniques*, Antwerp (2012).
- Barnes *et al.* 2004 Barnes Susan, De Poorter Nora, Millar Oliver, Vey Horst, *Van Dyck: A Complete Catalogue of the Paintings*, New Haven – London (2004).
- Bauer 2007 Bauer Linda, *Van Dyck, replicas and tracing*. In: *The Burlington Magazine* CXLIX, London (February 2007), p. 99-101.
- Bruyn 1979 Bruyn Josuah, *Een onderzoek naar de 17 de eeuwse Schilderijformaten, voornamelijk in Noord Holland*. In: *Oud Holland. Journal for Art of the Low Countries* 93/2, Den Haag (1979), p. 96-115.
- Büttner 2017 Büttner Nils, *The hands of Rubens: on copies and their reception*. In: Nakamura Toshiharu (ed.), *Appreciating the Traces of an Artists's Hand*, 2nd vol., Kyoto (2017), p. 41-53.
- Csaki 1901 Csaki M., *Baron Brukenthal'sches Museum in Hermannstadt. Führer durch die Gemäldegalerie*, 5th edition, Hermannstadt (1901).
- Csaki 1909 Csaki M., *Baron Brukenthalisches Museum in Hermannstadt. Führer durch die Gemäldegalerie*, 6th edition, Hermannstadt (1909).
- Davis 2021 Davis Justin, *Anthony van Dyck and his use of panels: an introduction*. In: *Jordaens Van Dyck Journal. The Research publication of the JVD Panel Painting Project* 1, Brussels (2021), p. 48-63.
- Deceulaer, Diels 2006 Deceulaer Harold, Diels Ann, *Artists, Artisans, Workshop practices and Assistants in the Low Countries*. In: Martens Maximiliaan, Peeters Natasja (eds.), *Invisible Hands? The role and Status of the Painter's Journeyman in the Low Countries c. 1450 – c. 1650*, Leuven (2006), p. 1-31.
- De Pauw-De Veen 1969 De Pauw-De Veen Lydia, *De begripen 'schilder, 'schilderij' en 'schilderen' in de zeventiende eeuw*, Brussel (1969).
- De Poorter 2000 De Poorter Nora, *Seriwerk en recyclage: doorgedreven efficiëntie in het geroutineerd atelier*. In: Vlieghe Hans, Balis Arnout, Van de Velde Carl (eds.), *Concept, Design & Execution in Flemish Painting (1550-1700)*, Turnhout (2000), p. 213-232.
- Ertz 1984 Ertz Klaus, *Jan Breughel II. Flämische Maler im Umkreis der Grossen Meister*, 1st vol., Freren (1984).
- Faries 2003 Faries Molly, *Technical Studies of Early Netherlandish painting: A Critical overview of recent developments*. In: Faries Molly, Spronk Ron (eds.), *Recent*

- Developments in the Technical Examination of Early Netherlandish painting: Methodology, Limitations & Perspectives*, Cambridge (2003), p. 1-37.
- Fryklund *et al.* 2009 Fryklund Carina, Boersma Annetje, Lammertse Friso (eds.), *Masterpiece or Copy? Two versions of van Dyck's St Jerome with an Angel*, Rotterdam (2009).
- Galesloot 1868 Galesloot L., *Un procès pour une vente de tableaux attribués Antoine van Dyck. 1660-1662*. In: *Annales de l'Académie Archéologie de Belgique XXIV*, 2nd series, 4th vol., Anvers (1868), pp. 561-606.
- Grewolls 2011 Grewolls Grete, *Wer war wer in Mecklenburg und Vorpommern. Das Personenlexikon*, Rostock (2011).
- Harth *et al.* 2017 Harth Astrid, Van der Snikt Geert, Schalm Olivier, Janssens Koen, Blanckaert Griet, *The Young Van Dyck's fingerprint: a technical approach to assess the authenticity of a disputed painting*. In: *Heritage Science Journal* 5:22, London (2017), pp. 1-13.
- Hartwieg 2018 Hartwieg Babette, *Formatveränderungen an Holztafelbildern von Rubens. Beobachtungen an der Beständen der Berliner Gemäldegalerie*. In: Lange Justus, Münch Birgit Ulrike (eds.), *Reframing Jordaens: Pictor Doctus – Techniken – Werkstattpraxis*, Petersberg (2018), p. 273-292.
- Hollstein 1993 Hollstein W. H., *The New Hollstein, Dutch & Flemish etchings, engravings and woodcuts 1450-1700*, 6th vol., Amsterdam (1993).
- Helmus 2006 Helmus Liesbeth M., *Journeymen and servants. Century employment contracts with painters from the Netherlands*. In: Faries Molly (ed.), *Making and Marketing. Studies of painting process in Fifteenth and Sixteenth Century Netherlandish Workshops*, Turnhout (2006), p. 201-210.
- Honig 1998 Honig Elisabeth, *Painting and the Market in Early Modern Antwerp*, New Haven – London (1998).
- Loh 2006 Loh Maria H., *Originals, reproductions and 'a particular taste' for pastiche in the Seventeenth-Century Republic of Painting*. In: De Marchi Neil, Van Miegroet Hans (eds.), *Mapping Markets for Paintings in Europe 1450-1750*, Turnhout (2006), p. 237-262.
- Martin 1923 Martin Wilhelm, *Catalogue des peintures de la collection du baron A. L. Janssen*, Bruxelles (1923).
- Mc Nairn 1980 Mc Nairn Alan (ed.), *The Young Van Dyck*, Ottawa (1980).
- Millar 1986 Millar Oliver, *Stafford and Van Dyck*. In: Ollard Richard, Tudor-Craig Pamela (ed), *For Veronica Wedgwood, These: Studies in Seventeenth Century History*, London (1986), p. 109-123.
- Nagel, Wood 2010 Nagel Alexander, Wood Christopher, *Anachronic Renaissance*, New York (2010).
- Neumeister 2019 Neumeister Mirjam, *Van Dyck. Gemälde von Anthonis Van Dyck*, München (2019).
- Rooses 1910 Rooses Max, *Rubens Bulletin*. In: *Jaarboek Koninklijk Museum voor Schone Kunste*, Antwerpen (1910), p. 216-220.
- Rooses, Ruelens 1898 Rooses Max, Ruelens Charles Louis, *Codex Diplomaticum. Correspondance de Rubens et documents épistolaires concernant sa vie et ses œuvres*, 2nd vol., Anvers (1898).
- Seim 2022 Seim Andrea, *Planks from the same oak tree found in different paintings*. In: *Jordaens Van Dyck Journal. The Research publication of the JVD Panel Painting Project* 3, Brussels (2022), p. 30-43.
- Sheldon, Macaro 2014 Sheldon Libby, Macaro Gabriella, *Materials as makers: how useful are distinc-*

- tive materials as indicators of Master or Copist?* In: Hermens Erma (ed.), *European Paintings 15th-18th century. Copying, Replicating and Emulating*, London – Copenhagen (2014), p. 105-112.
- Thuillier, Foucart 1969 Thuillier Jacques, Foucart Jacques, *Rubens. La Galerie Médicis au palais du Luxembourg*, Milan (1969).
- Tummers 2008 Tummers Anna, *By his hand: The paradox of Seventeenth century connoisseurship*. In: Tummers Anna, Jonckheere Koenraad (eds.), *Art Market and Connoisseurship: A Closer Look at Paintings by Rembrandt, Rubens and their Contemporaries*, Amsterdam (2008), p. 31-67.
- Valkeneers 2011 Valkeneers Prisca, *Van Timmerszoon tot Schilder aan het Hof. De adellijke ambities van Justus van Egmont*. In: *De Zeventiende Eeuw. Cultuur in den Nederlanden in interdisciplinair perspectief 27/2*, Deventer (2011), p. 270-299.
- Van den Branden 1883 Van den Branden Jos, *Geschiedenis der Antwerpse Schilderschool*, Antwerp (1883).
- Vander Auwera, Van Sprang 2007 Vander Auwera Joost, Van Sprang Sabine, *Rubens, een Genie aan het werk*, Lannoo (2007).
- Van der Auwera 2016 Van der Auwera Joost, *Jacques Jordaens 1593-1678. Allegory of Fertility. The History and Creation of a Masterpiece*, Milano (2016).
- Vander Auwera 2021a Vander Auwera Joost, *Jacques Jordaens and his use of panels. An introduction*. In: *Jordaens Van Dyck Journal. The Research publication of the JVD Panel Painting Project 1*, Brussels (2021), p. 38-47.
- Vander Auwera 2021b Joost Vander Auwera, *The 1660-1661 Antwerp court case about a series of Van Dyck's Apostles: two new documents and some reflections on the course of justice and the potential for new discoveries*. In: *Jordaens Van Dyck Journal. The Research publication of the JVD Panel Painting Project 1*, Brussels (2021), p. 561-606.
- Vander Auwera 2021c Joost Vander Auwera, *Jacques Jordaens and his use of panels: an introduction*. In: *Jordaens Van Dyck Journal. The Research publication of the JVD Panel Painting Project 2*, Brussels (2021), p. 38-47.
- Van der Stichelen 1990a Van der Stichelen Katelijne, *Zum Problem der Zusammenarbeit: nicht Jan Boeckhorst sondern Cornelis De Vos*. In: Luckhardt Jochen, Vlieghe Hans (eds.), *Jan Boeckhorst 1604-1668. Maler der Rubenszeit*, Freren (1990), p. 87-97.
- Van der Stichelen 1990b Van Der Stichelen Katelijne, *De Portretten van Cornelis De Vos 1584-1651: een krotische catalogus* (doctoral thesis, Koninklijke Academie Brussel, 1990), Brussel (1990).
- Van der Stichelen et al. 2014 Van der Stichelen Katelijne, Janssens Koen, Van der Snickt Geert, Alfeld Matthias, Van Beneden Ben, Demarsin Bert, Proesmans Marc, Marchal Guy, Dik Joris, *Young Anthony Van Dyck revisited: a multidisciplinary approach to a portrait once attributed to Peter Paul Rubens 'A Rubens for the Rubenshuis'*. In: *Art Matters: International Journal for Technical Art History* 6, London (2014), p. 21-35.
- Van de Velde 1975 Van de Velde Carl, *Frans Floris (1519-1570): leven en werken*, 1st vol., Brussel (1975).
- Van Mander 1604 Van Mander Karel, *Het Schilder-Boeck Waer in haer ghestalt, aerdt ende wesen, de leer-lustighe Jeught in verscheyden Deelen in Rijm-dicht wort voor ghedraghen; Daer nae in dry delen 't leven der vermaerde doorluchtighe Schilders des ouden, en nieuwen tyd. Eyntlyck d'wtlegghinhe op den Metamorphoseon Pub. Ouidij Nasonis; Oock daer beneffens wtbeeldinghe der*

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- Vasari 1568 Vasari Giorgio, *Le Vite de' più eccellenti pittori, scultori, e architettori*, 3rd vol., Firenze (1568).
- Vergara, Lammertse 2013 Vergara Alejandro, Lammertse Friso (eds.), *The Young Van Dyck*, London (2013).
- Vlieghe 2000 Vlieghe Hans, *The execution of Flemish paintings between 1550 and 1700: A Survey of the main stages, aspects of authenticity*. In: Vlieghe Hans, Balis Arnout, Van de Velde Carl (eds.), *Concept, Design & Execution in Flemish Painting (1550-1700)*, Turnhout (2000), p. 195-212.
- Wood 2005 Wood Christopher S., *Indoor-outdoor: The studio around 1500*. In: Cole Michael, Pardo Mary (eds.), *Inventions of the Studio, Renaissance to Romanticism*, Chapel Hill (2005), p. 36-196.

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RESTORATION OF THE WORK "RUIN WITH A PEASANT PUB"

Ioan MUNTEAN*

Abstract: Christian Wilhelm Ernst Dietrich's painting "Ruin of a Peasant Pub" is part of the heritage of the Brukenenthal National Museum in the "treasure" category. Although no extensive data about the historical restorations of it are preserved, based on the physical-chemical analyses performed, as well as the study of the painting in various types of light, we were able to establish the state of conservation and its diagnosis. In the previous restoration carried out in 1952, the canvas was attached on a plywood support, using a wax and resin based thermoplastic adhesive. Thus we had to use new materials for the restoration process, allowing the doubling of the textile support soaked in wax. The Beva 371 adhesive together with the doubling table with vacuum makes the doubling operation simple and fully controlled. Following the restoration interventions, the flexibility of the support was returned to the work and we removed the rigid and deformed plywood. The old retouch that had degraded chromatically was removed, along with the layer of yellowed varnish, and was replaced with suitable ones. The restored work can be returned to the public in the new exhibitions organized by our museum.

Keywords: Christian Wilhelm Ernst Dietrich, painting, restoration, adhesive Beva 371

Rezumat: Lucrarea „Ruină cu cârciumă țărănească” de Christian Wilhelm Ernst Dietrich, face parte din patrimoniul Muzeului Național Brukenenthal, fiind clasată la categoria tezaur. Deși nu erau menționate restaurări anetrioare ale acesteia, pe baza analizelor fizico – chimice efectuate, precum și a studierii picturii în diverse tipuri de lumină, am putut stabili starea de conservare și diagnosticul acesteia. În restaurarea anterioară efectuată în anul 1952 a fost realizată maruflarea pânzei pe un suport de placaj cu ajutorul unui adeziv termoplastic ceară și rășină. Noile materiale utilizate în procesul de restaurare permit dublarea suportului textil imprimat cu ceară. Adezivul Beva 371 împreună cu masa de dublat termostată face ca operațiunea de dublare să fie simplă și deplin controlată. În urma intervențiilor de restaurare, a fost redată lucrării flexibilitatea suportului și am eliminat placajul rigid și deformat. Retușul vechi care a virat cromatic și care nu mai era corespunzător, împreună cu stratul de vernis îngălbenit au fost eliminate și înlocuite cu unul potrivit. Lucrarea restaurată va putea fi redată publicului în noile expoziții organizate de muzeul nostru.

Cuvinte-cheie: Christian Wilhelm Ernst Dietrich, pictură, restaurare, adeziv Beva 371

When entering the laboratory, on 20.01.2021, the work "Ruin with a Peasant Pub" by Christian Wilhelm Ernst Dietrich, was scheduled to participate in the exhibition "Living the Enlightenment. Brukenenthal 300" organized by Dr. Iulia Mesea, Dr. Daniela Dâmboiu and Dr. Alexandru Sonoc. The painting was previously classified in the treasure category at the proposal of Dr. Valentin Mureșan, according to the order of classification no. 2547 / 01.11.2013. The state of conservation recorded in the classification document was "good" but in reality, although we were dealing with a stable state of preservation, there were a number of degradations that diminished its aesthetic appearance.

About the author, we know that he was born in

Weimar in 1712 and since its childhood he has been familiar with painting through his father, Johann Georg, who was a painter and miniatures artist. As a teenager he was sent to Dresden to study under the supervision of Johann Alexander Thiele. After completing a painting in two hours, he attracted the attention of Augustus II and received support from him to visit and study painting in major cities in Italy and the Netherlands. The remarkable talent of copying the painting of the old masters will leave its mark on his artistic activity. Rembrandt-style paintings by Dietrich are to be seen in galleries of St. Petersburg, Vienna, and Dresden, some of which date back from 1636 and 1638, or even bear the false signature of "Rembrandt." From 1741 he was appointed painter at the

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court of Augustus III in Dresden, for a salary of 400 thalers, and from 1746 he held the position of inspector of the galleries. From 1763 he became the director of the painting school of the Meissen porcelain factory, and from 1765 he was a professor at the Dresden Academy of Arts. He died in 1774¹.

Description of the painting. The genre of the work is landscape, with a composition that is structured diagonally, comprising large ruins of Roman baths at the lower part, and a sky at the top, whose light reminds us of Italian landscapes². The walls and arches of the baths are used as a backdrop for the rural genre scene in the foreground. The rendering of the characters and the dynamics of their gestures have their origins in Dutch painting. The chromatic of the work is based on a dialogue between ochre - brown earth colours and sky blue. This colour scheme receives some light or red accents (colour that renders the hat of the central character). A representation of Mary and Christ is shown on the tavern with a wooden floor and railing. The group of men on the right side of the work has a narrative aspect specific to Dutch paintings. The direction of lights projected through the arches of the ruin, but also the gestures of the character on the left, give an open character to the composition of the painting.

The execution technique is oil on canvas. The medium thick linen canvas was prepared with a primer made of red bolus. Following the chemical investigations, it was established that the chromatic palette is composed of browns and ochre, earth colours based on iron oxide, lead white and a blue pigment (Istudor 2011, 130). The coloured layers were applied with the brush by overlapping, with very fine gestures. Before the restoration, the work was radiographed, process that revealed previous restoration interventions, carried out in two distinct stages. Small cracks and areas with stratigraphic gaps are visible on the canvas, on its left side. These areas with stratigraphic gaps were also highlighted with the help of UV light.

The condition of the work before restoration was a

¹ https://en.wikisource.org/wiki/1911_Encyclop%C3%A6dia_Britannica/Dietrich,_Christian_Wilhelm_Ernst access: 28.04.2022

² <http://clasate.cimec.ro/Detaliu.asp?tit=pictura--Dietrich-Christian-Wilhelm-Ernst--Ruina-cu-carciuma-taraneasca&k=5275073D7C674946A613A4EB8B4CAC49> access: 28.04.2022

relatively good and stable, but it still presented aesthetic degradation that diminished its overall appearance. The previously made retouch had no longer matched chromatically. The varnish layer showed an accentuated yellowing, which determines the general modification of the original colours of the painting. According to the anamnesis of the object, no data is known about older restoration interventions, but it was certainly restored before at least twice, a fact revealed by the two types of primer used to fill the gaps. The last intervention was conducted in July and August 1952 by Hans Hemann, according to a note on the back of the paper. At that time, the painting that was executed in the oil-on-canvas technique was attached on wooden plywood with an adhesive composed of wax and resin (Lăzărescu 1996, 75). The work was researched using UV light of type A, with a wavelength between 400-315 nm. The fluorescence of the painting highlighted the restoration intervention from 1952, during which the chromatic integration operation was performed.

The proposals with the restoration operations and the working methodology were approved by the National Commission of Museums and Collections. We carried out the following operations according to these proposals: photographic documentation was conducted before restoration, in different types and directions of light.

Temporary protection of paint layers with Japanese paper and fish glue in a concentration of 3%.

Removing the canvas from the plywood rigid support. The operation began with the removal of the metal nails from the plywood and the chassis, after which, with the help of a light source with IR radiation, I heated the resin wax adhesive and removed the canvas from the wooden support. I always made sure that the heat input did not endanger the work.

Cleaning the art work' back, an operation that was performed mechanically without the help of a scalpel, and vacuuming after that the adhesive residue.

The preparation of the work for the doubling operation had followed, by ensuring the flatness of the support with the help of marble compresses. Due to the fact that during the doubling operation carried out in 1952 a wax-resin adhesive was used which was impregnated in the fibre of the textile support and which cannot be completely removed, we opted to perform the doubling operation using a compatible thermoplastic adhesive. Beva 371, in

the form of a film, is a thermoplastic adhesive with good adhesion even on surfaces with wax traces.

The doubling operation was performed using the doubling table that allows the control of the temperature and pressure exerted on the surface of the painting (Knut 1998, 125).

Due to the fact that the original chassis was poorly made but has a series of labels and inscriptions on it, we opted to improve it. A retraction slope and incisions for the tension feathers were made. The work was anchored on the modified chassis with the help of metal staples.

Then we had to remove the Japanese paper with warm water and cotton wool.

Carrying out the cleaning tests followed operation in which the aim was to remove the previous retouch that had changed chromatically, but also the unsuitable varnish layer. The tests were performed on small size surfaces, first with weak solutions, then with stronger ones. Their application was performed using of cotton swabs, an operation performed under the observation of the work surface through a magnifying glass, or a stereo binocular microscope. We aimed to remove the retouch without compromising the original colour layer, same for the actual cleaning of the work. The cleaning operation was performed with the solutions that proved to be suitable for this objective during the tests that was a mixture of acetone and white spirit in a proportion of 1-1.

General varnishing of the paint was made with dammar, a natural resin. The concentration of var-

nish is 15% dissolved in turpentine. The varnish was applied with a brush in a thin and uniform layer.

The chromatic integration of the areas with gaps in the colour layer, or with abrasions, was carried out with varnish-based colours that are reversible and have a high chemical stability. The product used was the Maimeri Restauro colour series. The technique for applying retouching was imitation style integration.

Final varnishing with aerosol varnish was also necessary; this also contains substances with the role of UV filter. The application was carried out by spraying. Photographic documentation after restoration was also conducted, in different types and directions of light. Finally, the work was mounted in its frame, with the help of flexible metal clamps.

Conclusion

For the restoration of the painting, a series of Physico-chemical investigations were made, based on which the state of conservation before the restoration was established, as well as the previous restoration interventions. The restoration proposals and the chosen working methodology were approved according to the legislation for the pieces included in the "treasure" category. These interventions allowed the recovery of the original aesthetics of the work, by removing the previous degraded retouches and the layer of yellowed varnish.

The work is to be exhibited in the temporary exhibitions organized by our museum.

REFERENCES

- Istudor 2011 Istudor Ioan, *Noțiuni de chimia picturii*, București (2011).
- Nicoaus 1998 Knut Nicolaus, *Manuel de Restauration des Tableaux*, Cologne (Cologne) 1998.
- Lăzărescu 1996 Lăzărescu Liviu, *Pictura în ulei*, Deva (1996).
- 1 https://en.wikisource.org/wiki/1911_Encyclop%C3%A6dia_Britannica/Dietrich,_Christian_Wilhelm_Ernst acces 28.04.2022
- 2 <http://clasate.cimec.ro/Detaliu.asp?tit=pictura--Dietrich-Christian-Wilhelm-Ernst--Ruina-cu-carciuma-taraneasca&k=5275073D7C674946A613A4EB8B4CAC49> access 28.04.2022

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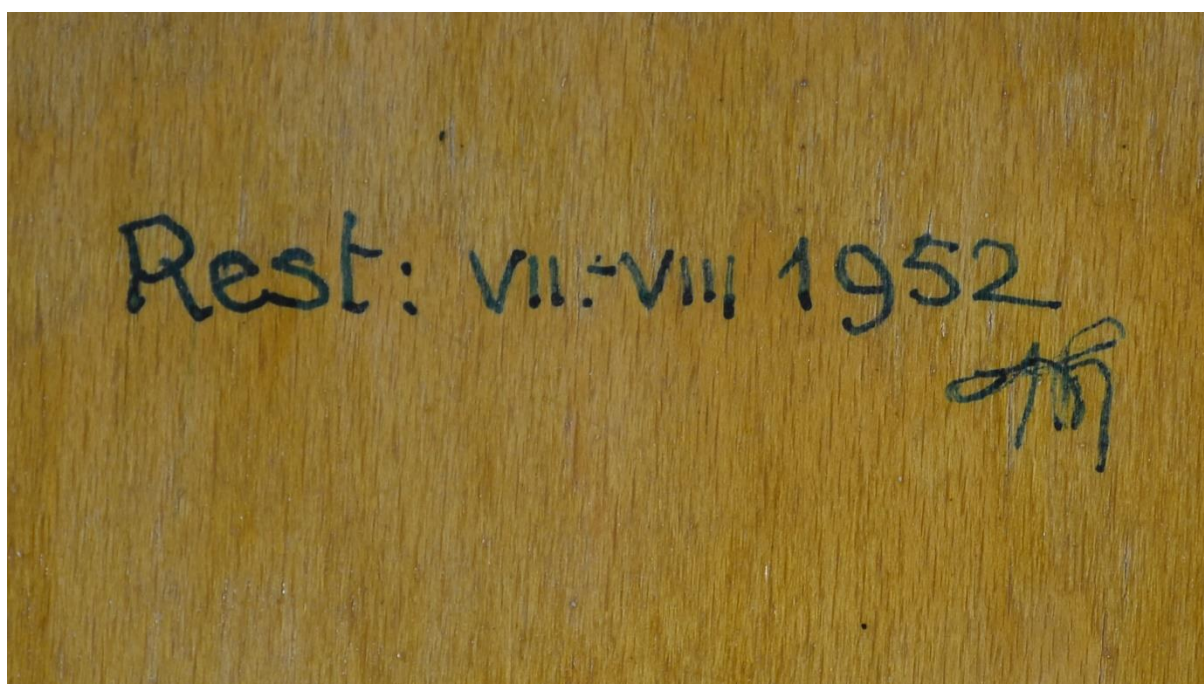
1. Ensemble before restoration



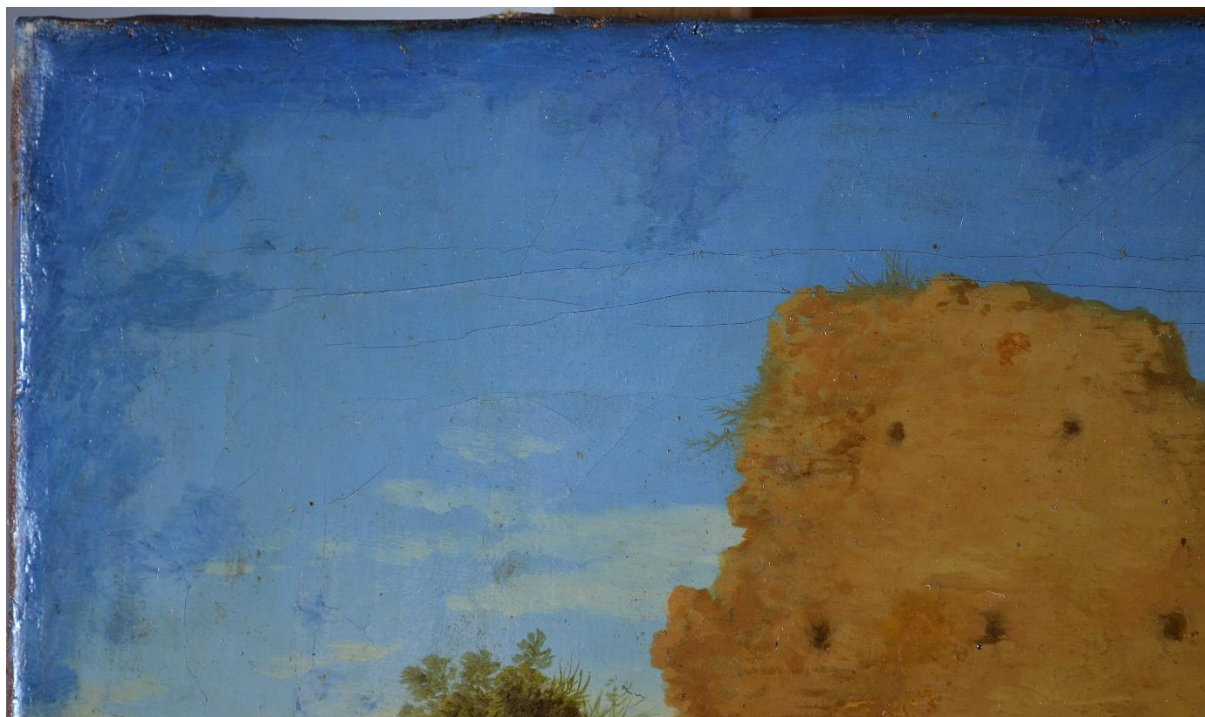
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3. Back of the painting, before restoration



4. Detail on the back of the painting, before restoration



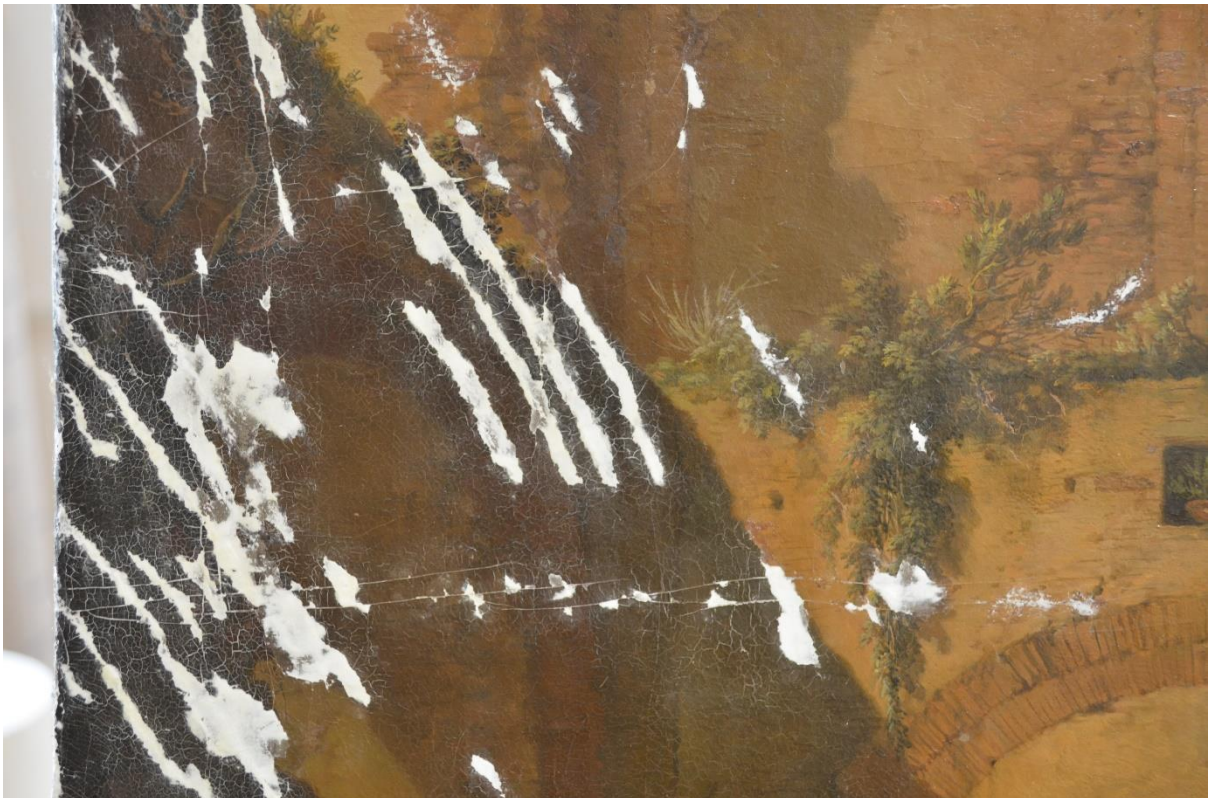
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6. Back of the painting, after removing the canvas from the plywood support



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9. Ensemble after restoration

SOME REMARKS ON A RECENTLY CONSERVED MID-18TH CENTURY OFFICER PORTRAIT BY JOSEF CREDISCH AND ON THE PAINTERS FROM THE VALEPAGI FAMILY FROM MEDIAȘ AND THEIR WORKS

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Abstract: *The conservation of the portrait of Petrus Traugott von Klausenburger (dated 1762) as Lieutenant in the bodyguard of Maria Theresia was triggered by a fruitful research on many connected questions: the life and work of its author (the Viennese painter Josef Credisch), the military and eventual administrative career of the portrayed officer and his kinship with Petrus von Klausenburger, a Royal Judge in Mediaș portrayed in 1759 by Stephan Adolph Valepagi, the life and work of this artist and his kinship with Johann Adolf Valepagi (another painter from Mediaș, but better known as a pharmacist), the kinship between the families von Klausenburger and Hann von Hannenheim, the importance of documenting in Mediaș a family of artists (Valepagi, related or not with the Valepage family from Westphalia), in the context of the scarce information about the names of the painters working in Transylvania during the first half of the 18th c. and especially about the families of artists in 17th-18th c. Transylvania (documented until now only in cities as Sibiu and Brașov). The painters from the Valepagi family working in Mediaș during the 18th c. took advantage of occasional commissions coming both from the families of the Royal Judges von Klausenburger and Hann von Hannenheim and from rural communities in this area, like those in Boian, Slimnic, Axente Sever and Bazna.*

Keywords: *Petrus Traugott von Klausenburger, Josef Credisch, Valepagi family, strainer, lining, transcription of backside inscriptions.*

Restaurarea portretului lui Petrus Traugott von Klausenburger (datat 1762), redat ca locotenent în garda personală a Mariei Theresia, a fost impulsionată de o rodnică cercetare a mai multor probleme conexe: viața și opera autorului său (pictorul vienez Josef Credisch), cariera militară și apoi administrativă a ofițerului portretizat și înrudirea sa cu Petrus von Klausenburger, un jude regal din Mediaș portretizat în 1759 de către Stephan Adolph Valepagi, viața și opera acestui artist și înrudirea sa cu Johann Adolf Valepagi, alt pictor din Mediaș, dar mai bine cunoscut ca farmacist), înrudirea dintre familiile von Klausenburger și Hann von Hannenheim, importanța atestării la Mediaș a unei familii de artiști (Valepagi, înrudiți sau nu cu familia Valepage din Westfalia), în contextul extrem de rarelor informații despre numele pictorilor care au lucrat în Transilvania în decursul primei jumătăți a sec. XVIII și mai ales despre familiile de artiști din sec. XVII-XVIII din Transilvania (atestare până acum doar în orașe mari ca Sibiu și Brașov). Pictorii din familia Valepagi care au lucrat la Mediaș în decursul sec. XVIII au profitat de comenzile ocazionale venite atât de la familiile juzilor regali von Klausenburger și Hann von Hannenheim, cât și de la comunități rurale din această regiune, precum cele de la Boian, Slimnic, Axente Sever și Bazna.

Cuvinte-cheie: *Petrus Traugott von Klausenburger, Josef Credisch, familia Valepagi, șasiu fix, dublare, transcriere de inscripții de pe verso*

In the Brukenthal National Museum's collection of National Painting there is a mid-18th c. portrait (Fig. 18, 20) of a young officer: it is *Petrus Traugott von Klausenburger* (oil on canvas, 105 x 77 cm, inv. 2342) by Josef Credisch (1717-1770). The painting, which is only one of the many but less studied 18th-19th c. portraits of Austrian and

Austrian-Hungarian officers from the museum's collection, is less known (Bielz 1936, 48-49, nr. cat. 554) and remained less studied, due right to its bad condition of preservation (Fig. 1).

According to the Accounting Note no. 119/12.05.1965, the work was purchased by the museum on December 5, 1965 from Gustav A.

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Fritsch, an inhabitant of Sibiu. Previously, it was owned by Adele Teutsch, also an inhabitant from Sibiu. As in 1936 the work was recorded as “family owned” (Bielz 1936, 48-49, cat. nr. 554), Adele Teutsch must be in a certain way related to the family of the portrayed character.

In 2021 it was brought to the Conservation Laboratory to be restored, after the preliminary research made in 2018 by Alexandru Gh. Sonoc revealed not only the officer's less known military career and his less considered relationship with a Transylvanian Saxon noble family from Mediaş (whose interesting portraits are due to one of the less known early 18th c. local painters), but brought also more information about the author of this officer portrait, who by contrary is not at all a Transylvanian painter, his work being therefore wrongly recorded in the collection of National Painting.

1. The description of the painting and biographical information about its author.

The restored work shows an officer portrait, three quarters to the right (Fig. 18). The portrayed character, depicted in almost three quarters height, is a young man, in guard hussar uniform (red pants and dolman with silver threads and buttons, green braided belt, decorated with silver ornaments). The officer's dolman has a green lining and is bordered with white fur. He has a powdered toupée wig, tied at the back with a blue ribbon. His figure is oval, with a high forehead, beautifully arched brown eyebrows, a long and straight nose, and a small mouth, with sensual lips. His right hand rests on his right hip, his left hand holds the handle of the sabre, which is decorated with silver, like its scabbard. A gold brocade ribbon with tassels of the same colour is hanging on the sabre hilt. Also on the right, probably on a small table, stands a tall stovepipe-style hussar hat, with a bluish top and which is decorated with a silver cord and egret. The depicted hat is actually the forerunner of the *shako* (from the Hungarian word *csákó*, i. e. “peak” or “projecting point of a cow's horn”, maybe as abbreviation of *csákós süveg*, i. e. “peaked cap”), which initially was the Hungarian border guards' military hat, resulted by adding a visor (at c. 1790) to their traditional headgear inspired by the shepherds' fur cap (*klabats*, from the Serbian word *клобук* or *клобучи*). The character stands out from the brown background by chromatic contrast. The composition is dominated by shades of brown and red, with accents of white, gold and blue. In the upper left corner, is painted the portrayed officer's family coat of arms (Fig. 4): on an Italian

azure shield, a silver swan to the right, with a wreath in its beak, treading over silver mountains of silver. The shield is surmounted by a black tournament helmet (*Bügelhelm*), decorated with gold, from which emerges a swan to the right, with a crown in its beak. The lambrequins are red (right) and blue (left) on the outside, silver (right) and gold (left) on the inside.

On the backside of the painting there are 2 inscriptions in italics, in a poor German (more precisely, in Austrian dialect) and Latin (Fig. 6), which reveal the portrayed person's identity, military rank and age, as well as the artist's name and where and when the portrait was painted: *Petrus Traugodt von Klausemburger. / Laidnant und mid glid einer Kaiserlichen und Koniniglichen / Leib Gard in Vienn. / 19 Jahr und 7 Monat alt* (i. e. “Petrus Traugott von Klausenburger. Lieutenant and member of an imperial and royal bodyguard. 19 years and 7 months old”), respectively *Ios. Credisch Pinxit Vienne / 1762. Die 7 Januari* (i. e. “Ios. Credisch painted in Vienna, on the day of January 7, 1762”).

The name of the painting's author may be found in various forms. A print (Fig. 22) due to the engraver Johannes Esaias Nilson (1721-1788), namely the portrait of Field Marshal Franz Leopold von Nádasdy auf Fogaras (1708-1783), Hereditary Count of Fogaras, Supreme Count of Komárom and Fejér, Banus of the Kingdom of Dalmatia, Croatia and Slavonia, Imperial and Royal Secret Councillor and Chamberlain is made after a painting by Crediz (according to the inscription on the print), who later was identified with Creditz, a Viennese painter born in 1717 and who died in 1770 (Thieme 1913, 77). The print is not dated by its author, but generally, during his period of activity (1741-1788). Due to the similarity of name and his lifespan, Crediz or Creditz may be identified with that Josef Credisch who in 1742 painted the main altar rendering the Holy Family (Fig. 23) in St. Joseph's church in Eberau / Monyorókerék / Livio-Čjeka (Burgenland, Austria), on the former estate of the Erdödy family (Schmeller-Kitt *et al.* 1976, 64) and who in 1762 painted Lieutenant Peter Traugott von Klausenburger's portrait in the Brukenenthal National Museum's collection.

Considering his few directly or indirectly known works, it may be assumed that he was a gifted painter of portraits and religious scenes, influenced by Austrian portrait painters as Jan Kupecky, Johann Gottfried Auerbach and Ignaz Unterberger, but also by religious scenes by the South Tyrolean painters Johann Martin Hohenberg (also called

Martino Altomonte) and Michelangelo Unterberger. His known customers belonged exclusively to the aristocracy of the Hungarian kingdom, particularly to the military one.

2. Remarks and corrections to the biography of Petrus Traugott von Klausenburger.

About Petrus Traugott von Klausenburger (1743-1765) the extant biographical information is still few (Bielz 1936, 48-49, cat. nr. 554; Tisza-Beői 1939, 113, cat. nr. 199) and sometimes contradictory, due to an inaccurate calculation of his birth year by Julius Bielz and to a wrong year of death mentioned also by the latter, in 1936. Only 3 years later, in 1939, presenting some valuable biographical information (mostly unknown to Julius Bielz) about this officer, Tisza-Beői Hellebronth Kálmán mentioned him under the wrong, incomplete and half-Magyarised form of Clausenburg-Kolozsváry Péter (Tisza-Beői 1939, 113, cat. nr. 199).

The portrayed person, Lieutenant Petrus Traugott von Klausenburger, was born in Mediaș / Mediasch / Medgyes (Bielz 1936, 48; Tisza-Beői 1939, 113), but neither in 1733, as stated by Julius Bielz (Bielz 1933, 48), nor in 1742, as stated by (Tisza-Beői 1939), than in 1743, as resulting from his age of 19 years and 7 months mentioned in the inscription on the backside of his portrait painted on January 7, 1762 by Josef Credisch, undoubtedly *ad vivum* that he knew precisely the officer's age, directly from himself. Considering this information, the officer was born in June or even in July 1743.

According also to the inscription on the backside of his portrait, in January 1762 he was a Lieutenant and member of an imperial and royal bodyguard. Tisza-Beői Hellebronth Kálmán stated even that Petrus Traugott von Klausenburger served in the imperial and royal bodyguard in Vienna from September 3, 1760 till December 9, 1763, wherefrom he was released with the rank of 2nd Captain (Vice-captain, i. e. nowadays Senior Lieutenant) and with the promise that, in the event of a vacancy, he would be assigned to one of the Transylvanian border guard infantry regiments (Tisza-Beői 1939, 113). This "imperial and royal bodyguard" is, undoubtedly, that of Maria Theresia Walburga Amalia Christina (1717-1780), Archduchess of Austria, imperial consort of Franz I Stephan (since September 13, 1745; married on February 12, 1736; widowed on August 18, 1765) and mother of two emperors of the Holy Roman Empire, respectively

Joseph II (1765-1790) and his brother and successor Leopold II (1790-1792), but also Queen of Hungary and Croatia (since October 20, 1740) and Queen of Bohemia (since May 12, 1743), as well as hereditary Grand Princess of Transylvania. Although he did not mention the monarch's name, J. Bielz, who described with many details the uniform of Petrus Traugott von Klausenburger (Bielz 1936, 49), stated expressly that the latter was a member and lieutenant of the Hungarian Royal aristocratic bodyguard in Vienna (Bielz 1936, 48). That is actually why the officer is rendered in the red uniform of the hussars, red being actually at that time also the colour of the court dress of the aristocrats from the Kingdom of Hungary, to which actually belonged the Grand Principality of Transylvania. In such a court dress of red colour is rendered also a Transylvanian Saxon, namely Baron Samuel von Brukenthal (1721-1803), the museum's founder, in a portrait from the Brukenthal National Museum's collection (oil on canvas, 91.05 x 74.5 cm, inv. 544), recently attributed to Johann Nepomuk Della Croce (1736-1819) and which according to Alexandru Gh. Sonoc may be dated in 1766 (Sonoc, Hrib 2016, 217, fig. 2). Although Transylvanian Saxons may have been present at the coronation of Maria Theresia in Pozsony / Bratislava), the Transylvanian Saxon community, as one of the three constitutionally recognized states in the Grand Principality of Transylvania, paid homage to the sovereign apparently later, only in October 1742, by the delegation led by Petrus Binder von Sachsenfels, Secret Royal Councillor and Senator of Sibiu, who commissioned in Vienna a large standing portrait of the monarch (oil on canvas, 262 x 171 cm, inv. 1402) to Veith Balthasar Hening (1707-1762), a less known painter and engraver from Nuremberg, and brought it the same month to Sibiu, where it is kept at the Brukenthal National Museum (Sonoc, Popa 2015, 115-116, fig. 13-14; cf. Mureșan 2011, 115-116, fig. 7-8; Sonoc 2011, 31, cat. nr. 6.13, fig. 6.13-6.13a). Thus, loyal Transylvanian nobles of Saxon origin were *hoffähig*, i. e. "presentable to the Court", which means they were allowed to audience to the monarch and able to receive not only military ranks and local administrative and judicial offices, but even court offices.

In a later period, Petrus Traugott von Klausenburger, who enjoyed imperial and royal favours most likely, became (despite his young age) a captain in the 2nd Regiment of Romanian Border Guards (Bielz 1936, 49), whose command was in Năsăud / Nußdorf / Naszód (Bistrița county) in

northeastern Transylvania and which was only recently established, in mid-April 1762. His period of service in this regiment corresponds to that when it was commanded by Vicecolonel (rank corresponding nowadays to Lieutenant Colonel) Georg Raschütz (1762-March 15, 1764) and Vicecolonel Baron Carl von Enzenberg (March 16, 1764-1777) (On the 2nd Regiment of Romanian Border Guards: Șotropa 1925; Pop 1999; Onofreiu, Bolovan 2006; Hirsch *et al.* 2021), more precisely to that when following the revolt of the Romanians but especially of the Szeklers, caused by the organisation of the military border and their conscription in border guard regiments (1763-1764), which culminated in the massacre committed by the Austrian army at Siculeni / Mádéfalva, known as *Siculicidium* (Mirk 2020), this regiment began to be reorganised by General Baron Josip Šišković, a member of the Court War Council and military-political commissioner in Transylvania, assisted by a commission consisting of Count János Lázár and Count Miklós Bethlen, both Government's Councillors, Commissioner Pivali (probably an officer in this regiment), István Halmágyi and Michael von Brukenenthal, both Government Secretaries, and eventually Vicecolonel G. Raschütz was pensioned (Șotropa 1925, 5). Although (according to Julius Bielz) Captain Petrus Traugott von Klausenburger died shortly afterwards, in 1765 (Bielz 1936, 48), being thus only 22 years old, Tisza-Beői Hellebronth Kálmán wrote that in 1767 Petrus Traugott von Klausenburger was a senator and Royal Judge in Mediaș (Tisza-Beői 1939, 113). Obviously, the former captain was not confused with Petrus von Klausenburger (1691-1759), who most likely may be (considering the age difference of 52 years!) rather his grandfather than father or uncle and was as well Royal Judge in Mediaș (Bielz 1936, 48, cat. nr. 553). Therefore, only an archive research (either of the Evangelical parish C. A. from Mediaș or in administrative documents at the State's Archives) may clarify when Petrus Traugott von Klausenburger actually died.

3. Remarks on two portraits by Stephan Adolph Valepagi from the Brukenenthal National Museum's collection: the Royal Judge Petrus von Klausenburger and his wife Susanna von Klausenburger née Adami.

Supposing that Petrus Traugott von Klausenburger may belong (most likely as grandson) to the family of Royal Judge Petrus von Klausenburger, whose portraits (Fig. 24-25) are kept in the Brukenenthal

National Museum's collection as well, some information about their author is necessary, because Stephan Adolph Valepagi (1729-1798) is a less known Transylvanian artist, although he may be counted between the few 18th c. Transylvanian portrait painters known by name.

The portrait of Royal Judge Petrus von Klausenburger (oil on canvas, 108.5 x 79.5 cm, inv. 2) by Stephan Adolph Valepagi (Fig. 24) was donated together with its pendant (Fig. 25) rendering the Royal Judge's wife Susanna von Klausenburger née Adami (oil on canvas, 108.5 x 83 cm, inv. 3) to the Brukenenthal Museum by Julius Hann von Hanneenheim, at that time an Evangelical priest in Hosman / Holzmengen / Holcmány (Sibiu county), whose family had in 18th c. matrimonial connections with this Royal Judge's wife's family: Anna Katharina von Klausenburger (1721-1774), who was also portrayed by Stephan Adolph Valepagi (in 1760), married the much older Stefan Hann von Hanneenheim (1711-1795), a Councillor of the Government of Transylvania, and thus her portrait (oil on canvas, 100 x 72 cm) was recorded in 1936 as being owned by the Hann von Hanneenheim family (Bielz 1936, 36, cat. nr. 415).

On the backside of the portrait of Royal Judge Petrus von Klausenburger there is an inscription in German and Latin, nowadays invisible, because the work was lined on May 6, 1898. According to its record (Csaki 1909, 1, cat. nr. 2), the inscription was: "Conterfey des Tit: Herrn Petri von Clausenburger Pro Regis Judicio Abcd. Im 68. Jahre seines Alters in Anno 1759 verfertigt. Pingxit v. Stephanus Adolph Anno 1759". In English this means: "The noble lord Petrus von Klausenburger, former Royal Judge. Made in the 68th year of his age, in 1759. Painted by Stephanus Adolph in 1759". In the museum's inventory register the portrayed person's name was wrongly recorded as *Petrus Stephanus Adolph Klausenburger*, by melting into his name the painter's first and middle name and by the omission of the nobility particle *von* (i. e. "of"). The portrait, although mentioned several times before World War II (Csaki 1909, 1, cat. nr. 2; Csaki 1926, 1, cat. nr. 2; Bielz 1936, 48, cat. nr. 553), was rarely commented. In the museum's gallery guide published in 1941 by Rudolf Spek (Spek 1941) the painting and its pendant are not mentioned at all, which means that at that time they were not exhibited, being stored.

Petrus von Klausenburger is rendered in three quarters height, in front view, as an elderly man, who wears a costume specific to the Saxon magis-

trates, in austere colours: over a brown robe, a gown embroidered with white fur, a brown belt, on which is hanging a tobacco chisel with silver embroidery (on the right), and on a keychain with silver chains, a golden key and a seal with a red gem (on the left). The right hand, with a ring with a black gem, rests on the mace of a cane with a chain, string or silver strap. He has an oval and bony figure, with a small mouth, a large aquiline nose, large blue eyes with grey eyebrows. On his bald or shaved skull he wears a toupée wig. At the top hangs a dark blue curtain with golden tassels. On the left, next to the character's head, is depicted his family coat of arms: on a red Italian shield, to the right, stepping over mountains of silver, a silver swan holding a laurel wreath in its beak. The shield is surmounted by a silver *Bügelhelm* type helmet, with a beret, having as its crest a silver swan with a laurel wreath in its beak, to the heraldic right. It has golden (right) and silver (left) lambrequins on the inside, with blue (right) and red (left) exterior. It is an expressive portrait, standing out from the brown-cherry background and suggesting in a rigid, hieratic manner the dignity of the character's age and social rank. The dull colours reinforce this impression and suggest that this portrait is a funerary one, as resulting also from the nowadays invisible inscription on the backside of the work.

On the backside of the portrait of Royal Judge Petrus von Klausenburger's wife (Fig. 25), Susanna von Klausenburger née Adami (born in 1701) there is also an inscription in German and in Latin, nowadays invisible, because this work was also lined, on May 6, 1898. According to its record (Csaki 1909, 1, cat. nr. 3), the inscription was: "Conterfey der Tit: Frau Susanna Clausenburgerin geborene Adamun im 58. Jahre ihres Alters in Anno 1759 verfertigt. Pingxit Stephanus Adolph 1759.". In English it means: "Portrait of the noble lady Susanna Clausenburgerin née Adamun [= Adamiin] in the 58th year of her age, made in 1759. Painted by Stephanus Adolphus [in] 1759". Her portrait, although mentioned several times before World War II (Csaki 1909, 1, cat. nr. 3; Csaki 1926, 1, cat. nr. 3; Bielz 1936, 49, cat. nr. 555), was also rarely commented.

This elderly woman is rendered in three quarters height, in front view, in Transylvanian Saxon patrician costume, consisting of a white blouse with sleeves decorated with lace and tied with black ribbons, a black velvet dress with lace collar and whose bodice has a gilded clasp with 5

decorated registers (having depicted on each of them a shield flanked by a quail and surmounted by a crown, on each shield being rendered a different bust, placed on a pedestal), a diaphanous white apron whose edges are adorned with lace, and a belt with articulated metal plates at its ends, decorated with floral motifs. On the head she wears a bonnet with embroidered top, from whose nape part are hanging two wide ribbons, over which there is a clear veil, fastened to the bonnet with two larger veil needles (whose ends are richly adorned with pearls and other precious stones) and with a simpler one, made of silver, at each of her temples, pinnae and earlobes. In her right hand, the woman holds a book (most likely of religious songs), with a black leather cover and a golden block. Her left hand is outstretched, its palm facing the onlooker, in an interrogative gesture. The portrait, awkwardly made but well individualised (high and wrinkled forehead, thin and arched eyebrows, big black eyes, big aquiline nose, thin lips). The top of the the brown-cherry background is occupied by a dark blue curtain with golden fringes, on which on either side of the character is hanging, on a golden ribbon, a medallion in a golden frame (Fig. 26). In the medallion on the left are depicted 7 leafy but broken trees, of different heights, growing on a field still partially covered by snow, and in the background a row of mountains, under a cloudy and windy sky. On the contrary, in the medallion on the right are depicted a fruitful apple tree and a flowering tree, growing on a field, with a row of mountains in the background, but under a clear sky. The almost hieratic woman's figure, of a reduced expressiveness, which stands out from the brown-cherry background and the dull chromatic of the work emphasizes her widow status.

Considering the extant information about the family von Klausenburger, which in fact results from the Julius Bielz's information about portraits of its members, it may be assumed that their only two surviving children are symbolised by the two fruit trees: the fruitful apple tree alludes to Anna Katharina von Klausenburger, in 1759 at the age of 38 years, already married to Government's Councillor Stefan Hann von Hanneenheim and most likely herself a mother of several children, and the flowering tree rather to Petrus Traugott von Klausenburger (at that time only 16 years old, probably orphaned and because of this grown by his grandparents) than to the latter's father, who may have died in a young age. As already mentioned, the portraits of Anna Katharina (by

Stephan Adolph Valepagi) and of Petrus Traugott (by Joseph Credisch), apparently her nephew, are dated later: in 1760, respectively in 1762.

4. Some biographic information about Stephan Adolf Valepagi.

The portraits of Petrus von Klausenburger and of his wife Susanna (both dated in 1759), both signed only *Stephanus Adolph*, are not the only ones by him known to the Transylvanian Saxon art historian Julius Bielz (1884-1958). As mentioned above, this painter portrayed in 1760 Anna Katharina von Klausenburger, who was married to the Government's Councillor Stefan Hann von Hannenheim, but her portrait was signed only with the artist's initials: S. A. V. (Bielz 1936, 36, cat. nr. 415). The same year was painted also the portrait of her husband (oil on canvas, 100 x 72 cm), signed and dated S. A. *Valepagi pinxit 1760* (Bielz 1936, 37, cat. nr. 424). In 1764 followed another portrait (oil on canvas, 105 x 76 cm), recorded in 1936 as owned by the Hann von Hannenheim family: that of Johann Daniel Hann von Hannenheim (1741-1763), also a Lieutenant in the imperial and royal bodyguard in Vienna, signed and dated *pinxit Stephanus Valepagi* and believed to be painted in Mediaș in 1764 (Bielz 1936, 37, cat. nr. 417), which means that it was painted or rather only finished than, as a posthumous portrait. It is not however the most recent portrait painted by Stephan Adolph Valepagi which is known in the current stage of research, because in 1777 this artist painted (but even less skilfully) two portraits of imperial donors: Maria Theresia and Joseph II (Fig. 37-38), which will be discussed below.

Except these two donors portraits, all portraits by Stephan Adolph Valepagi were painted on canvas and were signed only on the backside. Their sizes are relatively close, although their lengths vary between 100 and 108.5 cm and their widths between 72 and 83 cm. Most of them are dated (excepting only that of Lieutenant Johann Daniel Hann von Hannenheim) and most of them are three quarters height renderings (excepting only the portrait of Stefan Hann von Hannenheim and that of his wife, which both are half height renderings).

Stephan Adolph Valepagi was also a painter of religious scenes and a decorator of church furniture. Among these kinds of works, which are all located in Evangelical churches from the area around Mediaș, are recorded: the new altar of the Evangelical church A. C. from Boian / Bonnesdorf / Alsóbajom, dated in 1772 (Fig. 27), made by

Michael Zillmann, but for which Stephan Adolph Valepagi painted the panel of the Resurrection (Fig. 28) after a model by Wenceslas Coeberger (1560-1634) and the landscape (Fig. 29) of the Crucifixion scene (Smith 2016, 164-165); the organ (Fig. 30) in the Evangelical church from Slimnic / Stolzenburg / Szelindek, dated in 1773, made by Johannes Hahn (whose name is sometimes wrongly spelled as *Johann Hann*), but decorated by Stephan Adolph Valepagi (Filimon Dorotfei 2012, 161. For more details on the organ in Slimnic: Dávid 1996; Binder 2000); the altar in the same church is actually reassembled from 3 parts of 2 different altars (hence its unusual height in comparison to its width) and seems to have been only repainted by Stephan Adolph Valepagi, but roughly enough, that Victor Roth deemed these panels as "artistically deprived of any value, offering an evidence of the low level of the Transylvanian painting in early 18th c." (Roth 1916, 213-214); the altar painting (Fig. 34-35) showing the Crucifixion from Axente Sever (formerly Frâua) / Frauendorf / Asszonyfalva, dated in 1777 (Hannover Moser, 147); the pulpit of the Evangelical church in Bazna / Baßen / Bázna (Fig. 36), made by Georgius Schuller, but which was also painted by Stephan Adolph Valepagi in 1781 (Szekely *et al.* 2021, 174). Although on the pulpit from Bazna the artist did only a pure decorative work, which (excepting the inscription) consisted in simple wood painting, on the organ from Slimnic, besides performing a similar work he painted also two donors portraits, that of Maria Theresia and that of Joseph II (who during his first travel to Transylvania, in 1773, visited the village twice, on June 2 and July 11).

These two donors portraits (Fig. 37-38) are following the imperial propaganda's established models by famous painters, namely by Joseph Ducreux (1735-1802) for Maria Theresia and by Pompeo Girolamo Batoni (1708-1787) for Joseph II. The study for the portrait of Emperor Joseph II (dated 1769) by Pompeo Girolamo Batoni (Fig. 39) from Slovenská národná galéria in Bratislava (oil on canvas, 98 x 68.6 cm, inv. O 260) inspired also the emperor's portrait (Fig. 40) by Franz Nikolaus Streicher (1738-1811) from the Benedictine Abbey Michaelbeuern in Austria (oil on canvas, 132 x 88 cm), as well as many anonymous works, as that dated 1769-1770 (Fig. 41) in the Brukenenthal National Museum in Sibiu (oil on canvas, 99 x 76 cm, inv. 276) and one in the Museo del Risorgimento in Milan (Fig. 42). The composition of Maria Theresia's portrait with the Holy Crown of Hungary recalls very much that by an 18th c. Austrian anon-

ymous (Fig 43) from the Brukenthal National Museum's collection (oil on canvas, 145 x 105 cm, inv. 282), dated during 1769-1780, who rendered her alongside a table on which are laying the same crown and that of Bohemia. Unlike the mentioned portrait of Joseph II from the same museum's collection, which was acquired during 1893-1901 from a still unknown source, this portrait of the Dowager Empress Maria Theresia comes from the former collection of Baron Samuel von Brukenthal. Considering the short distance between Slimnic and Sibiu (17 km) or even between Mediaș and Sibiu (56 km), it may be supposed that Stephan Adolph Valepagi, if he was acquainted with the baron and may have enjoyed the privilege to visit him, could have used this opportunity to make a sketch after that portrait of Maria Theresia.

Thus, according to the current stage of research, Stephan Adolph Valepagi, who is documented as working during 1759-1781, began apparently as a portrait painter, but had to switch to the altar painting and to church furniture decoration (as earlier even Jeremias Stranovius the Elder occasionally did), due to the scarce possibilities of earning money in a cultural environment like the Transylvanian one, where the interest for other kinds of paintings than portraits and religious scenes just rose and where the first notable collection of paintings, that of Baron Samuel von Brukenthal, just arrived from Vienna to Sibiu after the latter was appointed Governor (1777). Despite this grim reality, the information about Stephan Adolph Valepagi's works is of a particular importance, because the most 17th-18th c. German painters from Transylvania are anonymous (Popica 2005, 145).

About the life of Stephan Adolph Valepagi the information is even scarcer than that about his works. He was born in Mediaș on July 9, 1729 and died there on September 25, 1798 (Vollmer 1940, 68). Alexandru Gh. Sonoc believes that this painter may be a relative (rather the son or nephew than a younger brother) of Johann Adolf Valepagi (whose first and last name are spelled sometimes *Adolph*, respectively *Walepagi*), a pharmacist from Mediaș, documented for first time in 1714 (Knall 2017, 26), but working there till 1730, as Ioan Panțureiu and Dr. Hermann Folberth discovered and communicated in 1965 (at a Pharmacy Meeting in Brașov) in their paper on the history of the pharmacies from Mediaș, according to a typescript (without inventory number) by Friedrich Johann Roth (1914-1977), a pharmacist from Sibiu, kept in Sibiu, at the Brukenthal National Museum's De-

partment of Natural History (Roth 1965-1977, 94 and 103, n. 29). Johann Adolf Valepagi was born also in Mediaș, on May 30, 1698 and died there on October 14, 1754 (Vollmer 1940, 68). Both painters from Mediaș spelled their last name also *Wal-lepagy* (Vollmer 1940, 68).

The family name *Valepagi* (or *Wallepagy*) is very strange, not only for Mediaș and for the Transylvanian Saxon community, but generally for Transylvania. The question is if the father (or even an earlier ancestor) of this pharmacist was a foreigner who settled in Mediaș or if this name is actually a Latin translation of a German name, but not necessarily of a local common one: it may be *Thaldorfer* (if considering the spelling *Wallepagy*, but especially the later documented one *Wallepagi*), or rather *Heildorfer* (if considering both the spelling *Valepagi* and his pharmacist profession). They are constructed considering the Latin nouns *vallis*, *-is* (or in Late Latin *valles*, *-is*), which means "valley" (in German *Tal*, archaic spelling *Thal*), respectively from the Latin verb *valeo*, *-ere*, *-ui*, *-itum* which means "to be strong", "to be well", "to be healthy", "to be sound" etc. (in German, approximately, *heilen*, with the meanings of "to make or to become strong", "to make or to become well", "to make or to become healthy", "to make or to become sound", "to heal", "to save" etc.) and *pagus*, *-i*, which means "village" (in German *Dorf*). The possibility to understand the Latin the partitive genitive *pagi* also as an equivalent of the ablative construction *ex pago*, i. e. "from the village" led to the rather archaic (and later popular) German translation of *paganus* (i. e. "villager", without any religious meaning) by *Dorfer* instead of *Dorfbewohner* or *Dorfsiedler*, either as a simple anthroponym or in various composed ones (derived, as in the two hypothetic examples suggested above, either from the name of the home village or from that of a village owned as fief). Thus, the variant *Heildorfer*, would seem rather as a self-taken one, suggesting primarily the claim to belong to a family of traditional healers, which may even descend from impoverished knights (who formerly owned a village and had therefore the right of using the Latin nobility particle *de* or *a*, in German *von* or *zu*, but losing the property of it, had to be called as the commoners, who use to mention their place of origin or residence in Latin with *ex* and in German with *aus*), rather than, having acquired a formal medical education (supposedly somewhere in Italy, where there was a famous tradition of medical studies, as in Salerno), someone who served a ruler was bestowed with a village, whose

name had to remember this event, but whose property later was lost.

This remains rather a simple hypothesis, if the Valepagi family from Transylvania would be actually a branch of the Valepage family from Westphalia (On the Valepage family: Rade 1995). In late 16th-late 17th c. the Valepage family is mentioned at the Lakeshof farm in Delbrück and in Bad Lippspringe (Standera 2018a; Standera 2018b). Jost Valepage built already in 1577 the main house of the Lakeshof farm (Standera 2018b, 32, n. 9). His grandson Hunold Valepage (who was born at Lakeshof in unknown year and died in Lippspringe on August 23, 1693), was married c. 1650/1653 with Amalia Thorwesten (who was born c. 1629 and died at Lakeshof on September 7, 1714), got in 1649 this farm as fiefdom (Standera 2018a, 32). Since 1666 the latter (rather as a tenant than as administrator) had also the benefits of the Catholic family von Westphalen's properties in Lippspringe (Standera 2018a, 32), which according to a source from 1686 he did not administrate personally, but through the family von Westphalen's serf court administrator (*Meier*) Gottschalk Wrachtrup (Standera 2018b, 32, n. 11).

Very interesting is the less known fact that the pharmacist Johann Adolf Valepagi from Mediaș was also a painter: at c. 1745, he painted (but did not sign) the portrait (oil on canvas, 105 x 70 cm) of Andreas Hann von Hannenheim (1679-1745), Royal Judge in Mediaș, which in 1936 was recorded as owned by the family Hann von Hannenheim (Bielz 1936, 36, cat. nr. 412). According to the short description by Julius Bielz, its composition was quite similar to that of the portrait of Petrus von Klausenburger by Stephan Adolph Valepagi, which was commented above. In a later period a branch of this family, but whose name is spelled differently (*Wallepagi*), is documented at c. 1850 in Sebeș / Mühlbach / Szászsebes, by the portraits of Daniel Josef Wallepagi (1795-1851), a soap maker and of his wife Susanna née Buchholzer (1798-1853), both made by Carl Berg in the wax embossing technique and recorded in 1936 as owned by their family (Bielz 1936, 87, cat. nr. 972-973). Currently, the both works (Wollmann 2011, 383 and 392, cat. nr. 61-62, fig. 38-39) are kept in Amberg (Wollmann 2011, 392). Other two such portraits coming also from Sebeș (Wollmann 2011, 392, cat. nr. 63-64), rendering Josef Wallepagi (1826-1900), maybe their son, who owned a copper foundry and forge located outside the town, in a place called by the local Romanians *Rât* (i. e. "Snout"), on the left bank of the river Sebeș, and

his wife Johanna née Umling (1832-1878), were recorded in 1968 as owned by a family in Stuttgart, but nowadays they are lost (Wollmann 2011, 392).

Where Stephan Adolph Valepagi may have got his training as painter is unknown, but if the aforementioned pharmacist from Mediaș was his father (as Alexandru Gh. Sonoc supposes), most likely he was also his first painting teacher. Later he may have studied in Sibiu, with an unknown painter who succeeded after 1729 Jeremias Stranovius the Younger and maybe also his more famous brother Tobias, the two sons of Jeremias Stranovius the Elder, who came from the city Žilín / Sillein / Zsolna (in actual Slovakia) and settled in Sibiu, where he died in 1702 (Vollmer 1938, 155), but this is only a supposition. The portraits by Stephan Adolph Valepagi are undoubtedly of a lower quality than those made in Sibiu by Jeremias Stranovius the Elder before the Austrian conquest of Transylvania (1686), but even than some anonymous portraits of Transylvanian Saxon patricians from Sibiu, dated decades later, during the first half of the 18th c., when according to Radu Popica the names of all painters working in Transylvania are unknown, excepting only Johann Ölhan the Elder from Brașov (Popica 2005, 145). Apparently, the mentioned researcher forgot about Johann Adolf Valepagi and Stephan Adolph Valepagi from Mediaș, but also about Nicolaus Müller (c. 1708 – after 1756), a disciple of Antoine Pesne (For more details on Nicolaus Müller's life and works, see Albișor, Sonoc 2017). As both Jeremias Stranovius the Elder and these anonymous artists, he is strongly influenced by late 16th – early 17th c. models from the Netherlands and from Central Europe (especially of the Danubian school painters), showing interest for the depiction of coats of arms and emblems, as well as for the details of the local female costume, but the figures are poorly individualised, almost without attempts of psychological introspection. Although his portraits does not show any influence of the hieratic pose of post-Byzantine portraits of donors and church founders, as may be noted in some works by Jeremias Stranovius the Elder, which surely were or may have been intended as epitaph portraits. If compared with Johann Ölhan the Elder, Stephan Adolph Valepagi makes a poor use of stage-lighting and chromatic effects, that the portraits by him are recalling rather coloured woodcuts or the paintings on peasant furniture, although the two altars from Boian and Bazna are of a better quality. Even the colours he used in his altar paintings are recalling the tones of the Transylvanian Saxon folk painting on furniture and may be actually furniture paints.

These facts, but considering also the lack of any innovation under the influence of the models of famous contemporary Austrian portrait painters may indicate that he got rather a local training, maybe in Sibiu, trying to imitate more skilled Transylvanian painters, but following older models, which they may have learned most likely in Germany, Austria, Hungary, Bohemia or even Poland and had rather an indirect contact with the religious painting from farer countries, as the Netherlands and Italy, where some compositional models may have their origin.

Although less skilled than other late 17th and 18th c. Transylvanian portrait painters, Stephan Adolph Valepagi appears as a quite prolific and versatile artist, appreciated by the provincial elites of the Transylvanian Saxons from Mediaș (where he most likely lived) and its hinterland, more precisely by the families of two local Royal Judges (which just became connected by marriage), but also by leaders of the rural communities which commissioned altar paintings or the decoration of church furniture. The most part of his known works are dated before Baron Samuel von Brukenthal was Governor of Transylvania (1777-1787). Apparently, the baron was not interested in them, as he did not collect them, considering Stephan Adolph Valepagi if not merely a decorator of church furniture, than rather a less skilled and old fashioned provincial portrait painter, as the latter actually used to be. If this artist is really a descendant of Johann Adolf Valepagi (documented during 1714-1745, but better known as a pharmacist than as a painter), the Valepagi would be a new family of artists documented in Transylvania, notably neither in Sibiu, the Grand Principality's capital, where in an earlier period is documented that of Jeremias Stranovius the Elder (who apparently came from the region of Spiš / Zips / Szepes / Spisz in actual Slovakia as consequence of the Counter-Reformation) and where in 1783, in a different religious and political context, the Neuhauser family came from Vienna (On the artists from the Neuhauser family: Bielz 1960), nor in Brașov (where that of Johann Ölhán the Elder is documented), but in a smaller urban centre, although not too far away from Sibiu, also in the territory inhabited by the Transylvanian Saxons and not in the counties controlled by the aristocracy. For the history of the Transylvanian painting this situation is very significant: it emphasizes the catalytic role of the Transylvanian Saxon patricians in imperial and royal service in promoting even in a still conservative local environment (like

that of smaller urban settlements) not simply "arts and crafts", but a different life style, with specific needs. Although long time after the Reformation, in the first half of the 18th c. there were still few earning opportunities for easel painters, who being considered rather craftsmen than artists had often to work as wall painters for secular buildings and as decorators of shields, carriages and furniture. The increasing of these opportunities in late 18th c. and during the first half of the 19th c. began to attract foreign artists, of which some even settled in this country. Notably, the both Valepagi painters from Mediaș were born there, lived there and died there, although (if considering their last name) their family could have settled in Transylvania in late 17th c. or even earlier, maybe from Westphalia.

(Alexandru Gh. Sonoc)

5. The officer portrait's preservation condition.

A first visual assessment of the painting's preservation condition revealed many problems (Fig. 1). The portrait was mounted in the frame with metal nails, stuck in the frame of the chassis (actually a strainer). The back of the work had been protected with a paper, now torn, which was glued to the perimeter of the frame (Fig. 2). Dust, small scratches and traces of nails occur both on the front and on the back of the frame.

The strainer is a rigid fir frame, with all the corners fixed in metal nails. It was not made properly, as it has no retraction slope and tension keys, and its right bar has many wood knots. On its lower bar there are two labels with the painting's inventory number. Over time, the wood of the bars has been covered in dust, dirt, insect droppings, got scratches and shows traces of adhesive (Fig. 2). Furthermore, along the edges of the painting there are marks linked to the sharp edge of the strainer at the fold-over edge, due to the insufficient space between the inside front edge of the strainer and the reverse of the canvas (Fig. 3). The deformations of the canvas were caused by this inadequate kind of stretcher, which has no keys. The little wooden wedges or keys have a particular purpose, to stretch out the canvas of the paintings. To do so, they should be placed into their slot and hammered down. In this manner, they will last longer and hold the canvas tension better. Excessive tightening of the canvas can cause tension cracks, espe-

cially in the corners and around the edges of the artwork (Byrne 1981).

The support used for painting is a linen cloth with medium grain and weaving knots. On the back were written, in black, two inscriptions (Fig. 6) which provide important data for documenting the work. In time, a canvas support expands and contracts with variations in relative humidity, it deteriorates with age and becomes very weak by oxidative and acid-catalysed degradation reactions. As the strainer does not adequately support the canvas, the sharp inner edges of it led to bar marks, and the insufficient tension of the canvas caused corner draws, buckles and bulges (Katlan 1992, 17-20) and even cleavages of the pictorial layers (Hill Stoner 2012, 157-158), which may be easily recognised on photographs documenting the painting's preservation condition (Fig. 3).

The photograph in radiant light (Fig. 1) highlights the deformations of the canvas and the marks left by the blows from the back. A 6 x 6 cm patch of cloth was applied to cover and strengthen a gap in the support. It covers a spot of red wax, used most likely as a grout to repair the torn canvas (Fig. 9). The reason why patches and labels are not a good idea is the planar deformation. Translated to canvas paintings, the planar deformations refers to distortions such as bulges or plateaus, a common consequence of gluing patches or labels to the back of canvases. Their outlines can become visible as distortions, on the front of the painting. Animal glues are appreciated for their tightening effect when used moderately in canvas preparation. This effect exacerbates the planar canvas deformations, when glue is applied on patches. Also, animal glues are extremely hygroscopic and will cause the canvas fibres to swell and shrink as the temperature and humidity levels rise and fall (Curtis 1999).

The backside of the painting is also covered in dust, insect droppings and white splashes (Fig. 2, 7). Consistent deposits of dust accumulated between the lower bar of the strainer and the canvas (Fig. 7). On its borders, the support was fastened on the strainer with metallic upholstery nails with brass-covered heads (Fig. 5), fixed at about 7 cm from each other. There are no other signs of fastening the canvas.

The thinly applied **pictorial layers** show impastos only in the areas of the face, of the coat's fur border and generally where white was used to decorate the portrayed officer's clothing (Fig. 3). The ground, the inert paint layer covering the support below the painting itself, can ordinarily be regarded for conservation purposes as part of the painting

layers. The ground lost its adhesion on some areas to either the support or the paint layers and fractured internally, resulting in cleavage and paint loss (Fig. 3).

The paint layers themselves are subject to a number of maladies as a result of natural decay, faulty original technique, unsuitable conditions, ill treatment, and improper earlier restorations. The degradation processes caused disruptions and cracks which endangered the paintwork of the entire picture. In this case, parts of the paint and ground lifted from the surface, a condition variously called "cleavage", "flaking", "blistering" or "scaling". Stratigraphic gaps can be seen on the entire surface of the painting. Most of these areas with losses, including coloured islets, were repainted, without the stratigraphy being brought to the same level by grouting (Fig. 11). Repaintings can be easily seen even on gaps-free surfaces, their appearance being dull (Fig. 14). The colour tone used for these repaintings was even different from the original chromatic (Fig. 11, 13-14). Where the gaps have not been covered by these repaintings, the original preparation used is revealed as a red bolus (Fig. 14).

As painting materials became more readily available in commercial preparations in the 18th c. and 19th c., systematic methods of painting that were once passed from master to apprentice were replaced by greater individual experimentation, which in some cases led to faulty technique (Wehlte 1975). Artists sometimes used too much oil, leading to ineradicable wrinkling, or they superimposed layers which dried at different rates, producing a wide craquelure as a result of unequal shrinkage. A notable defect arising from aging is the fading or changing of the original pigments by excessive light. Although this is more evident with thin-layer paintings, such as watercolours, it is also visible in oil paintings (Stanley Taft, Mayer 2000, 12-14).

The varnish, a protective film of resin, is missing, so that a consistent layer of adherent dirt, dust, insect droppings accumulated over time, directly on the surface of the painting (Fig. 3, 11-14).

6. Conservation works.

After the Conservation Commission approved the presented restoring proposals, the painting's photographic documentation was performed, using a digital camera, in direct and oblique light.

Afterwards, the metal nails (Fig. 5) were removed with a pair of pliers, in order to detach the work from the strainer. The paper glued on the strainer's bars (Fig. 2) was removed by using a scalpel and compresses with warm water, to soften the adhesive.

The purpose of keeping the original stretcher (or parts of it) with the painting is to preserve the information written on the stretcher or to retain the original stretcher in order to document the original assemblage of materials that comprised the painting as a whole artefact. At the beginning of the use of canvas on wooden frame, artists were mainly using strainers. Over time, the canvas comes loose and required to be restretched on a slightly larger strainer. Repeated, this action damages the edges of the painting. To prevent this purpose, adjustable corners were created.

In this case, the original strainer performs a limited function as part of a proper support system. Therefore, the necessary stretcher is a frame where the corners are mobile, by the presence of wedges, sometimes called keys, which allow the adjustment of tension. The large dimensions of the painting require the strainer's reinforcement by two cross braces (Fig. 19, 21). The two labels, on which is written in red the inventory number, were transferred on the new wooden stretcher (Fig. 21).

The traditional method to address these support problems is to reinforce the back of the canvas by attaching a new canvas to the old in a process called "lining", also referred to as "relining". To protect the work, the dust was removed from the painted surface using a soft brush. Afterwards, the painted surface was covered with Japanese foil, over which (also using a brush) was applied rabbit glue, in a concentration of 5% (Fig. 10). Before removing the canvas from the strainer, a soft bed made of overlapping layers of filter paper was prepared on the work table, on which the canvas was placed face down. After removing the nails that fastened the canvas to the strainer (Fig. 5), the backside was vacuumed and the patch which covered a gap was gently detached (Fig. 9). The flatness of the cloth's edges was obtained by covering it with moistened filter paper and placing them under presses made of polished marble plates. With increased care, especially around the text written in black, the canvas was cleaned with a scalpel and vacuumed (Fig. 8). At the end of this operation, the entire support was placed under marble plates.

In the meantime, a strainer with two inserted cross braces was made (Fig. 19, 21), on which was stretched the appropriate canvas for lining the original one. Stable, durable, strong yet supple, linen is the traditional choice for lining canvas. Linen is the most durable fabric to put paint on and due to its strength, is ideal for large paintings. Its warp and weft threads are equal in weight so less susceptible to the expanding or contracting problems created by moisture. Linen is very receptive to sizing and priming applications and it retains its natural oils which preserve the fibre's flexibility and keeps the canvas from becoming brittle. Linen has a more "natural" weaved finish than cotton and is available in a variety of textures, weights and smooth or rough finish. Because of its strength linen holds up to a heavy painting hand and does not become slack as easily.

A number of techniques and adhesives have been employed for lining, but with all methods there is a risk of altering the surface texture of the painting if the procedure is not carried out with the utmost care and skill. The most frequently used technique, until the mid-20th c., consisted of ironing a new canvas to the old one, using an adhesive composed of a warm mixture of animal glue and a farinaceous paste, sometimes with the addition of a small proportion of plasticizer. This method, though less common today, is still used, especially in Italy and France. The lining method, with fish glue in 14% concentration, seems the proper one for this painting because it has the advantage that the heat and moisture help to flatten raised ("cupped") paint and local deformations and tears in the canvas.

Over the linen cloth chosen for lining were brushed by foaming successive layers of sturgeon glue, until the surface became glossy, sticky and the space between the woven threads was covered. Before performing the lining operation, the two inscriptions from the original backside were copied (Fig. 6), in order to transfer them later to the new backside, on the lining canvas (Fig. 19, 21).

Originally executed with heated irons, the lining method increased in popularity by the introduction, around 1950, of the so-called "vacuum hot table". With this table, the two canvases are coated with molten adhesive (at about 70 °C) and joined together on an electrically heated metal plate. They are covered with a membrane, enabling the air between the two canvases to be evacuated with a pump through holes at the corners of the table; adhesion then occurs on cooling. Excessive vacuum pressure and heat can drastically alter a paint-

ing's texture. The more elaborate versions of this instrument are equipped with heating elements and humidification systems beneath the perforated table surface. These features make it possible to apply controlled humidity, heat, and gentle pressure to perform a variety of treatments, including tear realignment and repair, reduction of planar deformations, and the introduction of consolidating adhesives to reattach cleaving paint.

The lining operation, carried out successfully, solved also the problem of the slightly detached, cups-shaped colour layers, placing them in horizontal plane and restoring their adhesion to the support. The lining was followed by the transcription of the inscription on the lined backside and the fastening of the canvas, with metal staples, on the new chassis (Fig. 19, 21). On its cross brace was pasted the old label with the inventory number, but also a new one, with information about the painting (Fig. 21).

The painting's conservation continued with the removal of the "facing": with a cotton swab, moistened in lukewarm water, the glue applied over the Japanese sheet was softened, and it was easily removed.

The solvent testing, performed during the preservation condition's assessment, identified what solvents and materials to use to remove the dirt and the repaintings, without harming the original paint layer (Fig. 11-13). Some paintings show a greater sensitivity to cleaning than others. For these reasons, cleaning should be carried out only by an experienced professional, and the frequency of the procedure should be kept to an absolute minimum (Bomford 1997).

Going forward with this stage and removing the repaintings (Fig. 12-14), became visible the original dark green colour, used by the author for the lining of the officer's dolman, for the top of his military headdress and for the belt, which was covered with a different colour, namely with purple grey, applied later. Beneath the thick layer of dirt were hidden the light and fresh tones of the flesh, the white of the embroidery, and the vermilion red of the uniform (Fig. 16-18).

Where areas of paint are lost, craters or divots occurred, which must be infilled back to a level plane. In some cases, these divots could be millimetres and in others they could be as large as an inch. Losses are infilled with a type of putty or composite material that will create an even cohesive surface for inpainting. The putty prepared from purified mountain chalk and rabbit glue was

used to fill in the stratigraphic gaps, which then were finished and levelled (Fig. 15). The colour integration in watercolour colours was kept within the limits of the gap.

Almost every painting will have losses and damages. Before a more conscientious approach to restoration became general in the mid-20th c., areas of paintings that had a number of small losses were often (indeed, generally) entirely repainted. It was considered normal in any case to repaint not only losses or gravely damaged areas but also a wide area of surrounding original paint, often with materials that would visibly darken or fade with time. Large areas with significant detail missing were often repainted inventively in what was supposed to be the style of the original artist. It is customary nowadays to inpaint only the actual missing areas, matching carefully the artist's technique and paint texture. The aim is always to use pigments and mediums that do not change with time and might be easily removed in any future treatment. Exact imitation of the original entails a close study of the painter's technique, details of texture, brushstrokes and craquelure must also be simulated.

A variety of natural resins, sometimes mixed with drying oil or other constituents, have been used to varnish paintings. Although the traditional use of varnish was partly to protect the paint from accidental damage and abrasion, its main purpose was aesthetic: to saturate and intensify the colours and to give the surface a unified appearance. Mastic and dammar, the most commonly used natural resins, are subject to deterioration. Their chief limitations are that they become brittle, yellow, and less soluble with age. Synthetic resins have been widely adopted for use as picture varnishes. They are chosen for chemical stability with regard to light and atmosphere so that they can eventually be removed by safe solvents and will not rapidly discolour or physically deteriorate. Research continues, however, in order to find the "ideal" varnish, combining ease of application, chemical stability, and an acceptable aesthetic quality (Wallert *et al.* 1995, 6-9).

The Regalrez retouching varnishes, used for the overall varnishing of the painting, allow a better subsequent chromatic integration in varnish colours (Fig. 16-17). The conservator takes special care to limit the areas of paint only to the areas of paint loss, never overpainting the historic paint layer. After attaching appropriate fix plates and hooks to it (Fig. 21), the work was framed (Fig. 20).

During the restoration stages (Fig. 1-16), but also at the end of them (Fig. 17-21) were taken documentary photographs and was written a restoration file.

A conservator is trained in the chemical components of materials and solvents and understands the constituents of paint, the traditional methods employed to implement them. With this knowledge, the knowledge of art history and architectural periods, conservators are problem solvers, committed to preserving historic artworks for generations to come. In the care of paintings, it is essential to consider the continuance of their existence. The life expectancy of a painting is much longer than the life of a human, so there are two points to keep

in mind. First, that the treatment employed should be the best for the immediate preservation of the painting. Second, that it should be done so, that any future removal of the work can be accomplished without in any way endangering the original painting (Carr, Mark 1992). Most paintings have already experienced some conservation measures, and they will require conservation in the future. Any present treatment should be done for the best reasons and with the best materials that are available now to preserve the painting for the future.

(Cristina Fău)

REFERENCES

- Albișor, Sonoc 2017 Albișor Celestina, Sonoc Alexandru Gh., *The conservation of a painting due to the Transylvanian painter Nicolaus Müller and some remarks concerning his biography and work*. In: *Brukenenthal. Acta Musei XII.4*, Sibiu (2017), p. 735-744.
- Bielz 1936 Bielz Julius, *Porträtkatalog der Siebenbürgen Sachsen*, Hamburg (1936).
- Bielz 1960 Bielz Julius, *Die Wiener Malerfamilie Neuhauser in Siebenbürgen*. In: *Wiener Jahrbuch für Kunstgeschichte*, XVIII (XXII), Wien (1960), p. 87-102.
- Binder 2000 Binder Hermann, *Orgeln in Siebenbürgen. Ein Beitrag zur siebenbürgischen Orgelgeschichte von den Anfängen bis zur Mitte 19. Jahrhunderts*, Kludenbach, (2000).
- Bomford 1997 Bomford David, *Conservation of Paintings*, London (1997).
- Byrne 1981 Byrne A., *Tying wedges to stretcher frames*. In: *ICCM Bulletin* 7/4, Canberra (1981), p. 22–23.
- Carr, Mark 1992 Carr Dawson W., Leonard Mark, *Looking at Paintings: a Guide to Technical Terms*, Malibu (1992).
- Csaki 1909 Csaki M., *Freiherr Samuel von Brukenenthalisches Museum in Hermannstadt: Führer durch die Gemäldegalerie*, 6th edition, Hermannstadt (1909).
- Csaki 1926 Csaki M., *Freiherr Samuel von Brukenenthalisches Museum in Hermannstadt: Führer durch die Gemäldegalerie*, 8th (shortened) edition, Hermannstadt (1926).
- Curtis 1999 Curtis M., *Labels on Stretchers: Questionnaire Result* (unpublished typescript, under the supervision of James Hamm, Buffalo State College), Buffalo (1999).
- Dávid 1996 Dávid István, *Müemlek orgonak Erdélyben*, Budapest (1996).
- Filimon Dorotfei 2012 Filimon Dorotfei Doina, *Names of the church building in the Latin inscriptions of Transylvania (13th-19th c.)*. In: Gafton Alexandru, Guia Sorin, Milică Ioan (eds.), *Text și discurs religios. Lucrările Conferinței "Text și discurs religios", ediția a IV-a, Iași, 10-12 noiembrie 2011*, Iași (2012), p. 147-164.
- Hannover Moser 2013 Hannover Moser Birgitta Gabriela, *Siebenbürgen. Rund um Kronstadt, Schäßburg und Hermannstadt*, 2nd, updated edition, Berlin (2013).
- Hill Stoner, Rushfield 2012 Hill Stoner Joyce, Rushfield Rebecca, *Conservation of Easel Paintings*, London – New York (2012).
- Hirsch et al. 2021 Hirsch Sandra Cristina, Iudean Ovidiu Emil, Onofreiu Adrian, Popovici Vlad, Sabău Claudia Septimia, *Bibliografia istorică a Regimentului de graniță nr. 17 (2 românesc) de la Năsăud și a Țării Năsăudului (sec. al XVIII-lea – 1848)*, Cluj-Napoca (2021).
- Katlan 1992 Katlan Alexander W., *American artists' materials*, 2nd vol., Madison (1992).
- Knall 2017 Knall Helmuth Julius, *Chronik der Stadt Mediasch und der "Zwei Stühle" Mediasch und Schelk*. In: *Mediascher Infoblatt* 18/33, Tutzing

- (2017), p. 24-29.
- Mirk 2020 Mirk Szidonia-Kata (ed.), *Látom az életem nem igen gyönyörű. A madéfalvi veszedelem tanúkihallgatási jegyzőkönyve. 1764*, Csíkszereda, 2020.
- Mureșan 2011 Mureșan Valentin, *Portrete ale împărătesei Maria Theresia*. In: Sonoc Alexandru Gh. (coord.), *Efigii imperiale habsburgice din Sibiu*, Sibiu (2011), p. 111-120.
- Onofreiu, Bolovan 2006 Onofreiu Adrian, Bolovan Ioan, *Contribuții documentare privind istoria regimentului grăniceresc năsăudean*, București (2006).
- Pop 1999 Pop Ioan, *Istoria Regimentului II românesc de graniță de la Năsăud: 1762-1851*, Târgu Mureș (1999).
- Popica 2005 Popica Radu, *Johann Ölhán Senior – un pictor brașovean din secolul al XVIII-lea*. In: *Țara Bârsei. Revista de cultură a Muzeului "Casa Mureșenilor" Brașov. Articole de istorie, literatură, geografie, sociologie și muzicologie*, new series, 4, Brașov (2005), p. 145-150.
- Rade 1995 Rade Hans Jürgen, *Die Geschichte der Familie Valepage*. In: *Beiträge zur westphälischen Familienforschung* 53, Münster (1995), p. 343-453.
- Roth 1916 Roth Victor, *Siebenbürgische Altäre*, Strassburg (1916).
- Roth 1965-1977 Roth Friedrich Johann, *Repertoriul fișierelor de farmacii și farmaciștin din Ardealul de Sud până la sfârșitul secolului al XIX-lea* (typescript dated c. 1965-1977, kept in Sibiu, at the Brukenthal National Museum's Department for Natural History).
- Schmeller-Kitt et al. 1976 Schmeller-Kitt Adelheid, Berg Friedrich, Prickler-Wassitzky, Ubl Hansjörg, *Dehio-Handbuch – Die Kunstdenkmäler Österreichs – Burgenland*, Wien (1976).
- Smith 2016 Smith Lucy Abel, *Travels in Transylvania: The Great Târnava Valley*, London (2016).
- Sonoc 2011 Sonoc Alexandru Gh. (coord.), *Efigii imperiale habsburgice din Sibiu*, Sibiu (2011).
- Sonoc, Hrib 2016 Sonoc Alexandru Gh., Hrib Dana Roxana, *Meet the Brukenthals! Facts of life in the portraits*. In: *Brukenthal. Acta Musei* XI.2, Sibiu (2016), p. 215-229.
- Sonoc, Popa 2015 Sonoc Alexandru Gh., Popa Andrei, *Some paintings from the collection of the Brukenthal National Museum of Sibiu and their relation with two Habsburg coronation medals*. In: *Acta Musei Napocensis*, series Historica 52/2 (Cluj-Napoca: 2015), p. 107-132.
- Șotropa 1925 Șotropa Virgil, *Regimentul grăniceresc năsăudean*. In: *Arhiva Someșană. Revistă istorico-culturală* 2, Năsăud (1925), p. 1-12.
- Spek 1941 Spek R., *Muzeul Brukenthal Sibiu. Ghidul pinacotecei*, 5th edition, Sibiu (1941).
- Standera 2018a Standera Uwe, *Konfessionswechsel als Voraussetzung für die Karriere? Simon Johann Reese (um *1640, †1709) aus Grastrup im Kirchspiel Schötmar und seine Verbindungen nach Lippspringe zu den Familien Thorwesten und von Westphalen*. In: *Wo die Lippe springt. Informationsreihe des Heimatsvereins Bad Lippspringe e. V.* 30/79, Bad Lippspringe (2018), p. 30-35.

- Standera 2018b Standera Uwe, *Konfessionswechsel als Voraussetzung für die Karriere? Simon Johann Reese (um *1640, †1709) aus Grastrup im Kirchspiel Schötmar und seine Verbindungen nach Lippspringe zu den Familien Thorwesten und von Westphalen. Fortsetzung.* In: *Wo die Lippe springt. Informationsreihe des Heimatsvereins Bad Lippspringe e. V.* 30/80, Bad Lippspringe (2018), p. 29-33.
- Stanley Taft, Mayer 2000 Stanley Taft W. Jr., Mayer W. James, *The science of paintings*, New York – Berlin – Heidelberg – Barcelona – Hong Kong – London – Milan – Paris – Singapore –Tokyo (2000).
- Szekely *et al.* 2021 Szekely Ana, Zavacky Patricia, Mureșan Iulia-Alexandra, *Ghidul drumetului pe Via Transilvanica*, Tiha Bârgăului (2021)
- Thieme 1913 Thieme Ulrich, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*, 8th vol., Leipzig (1913).
- Tisza-Beői Hellebronth 1939 Tisza-Beői Hellebronth Kálmán, *A Magyar testőrségek névkönyve 1760-1918*, Budapest (1939).
- Vollmer 1938 Vollmer Hans, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*, 32th vol., Leipzig (1938).
- Vollmer 1940 Vollmer Hans, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*, 34th vol., Leipzig (1940).
- Wallert *et al.* 1995 Wallert Arie, Hermens Emma, Peek Marja (eds.), *Historical painting techniques, materials, and studio practice: Preprints of a Symposium, University of Leiden, the Netherlands, 26-29 June 1995*, Los Angeles (1995).
- Wehlte 1975 Wehlte Kurt, *The materials and techniques of painting*, New York (1975).
- Wollmann 2011 Wollmann Volker, *Portretele în relief din ceară ale fraților Wilhelm și Carl Berg din Sebeș.* In: *Terra Sebus. Acta Musei Sabesiensis* 3, Sebeș (2011), p. 379-419.

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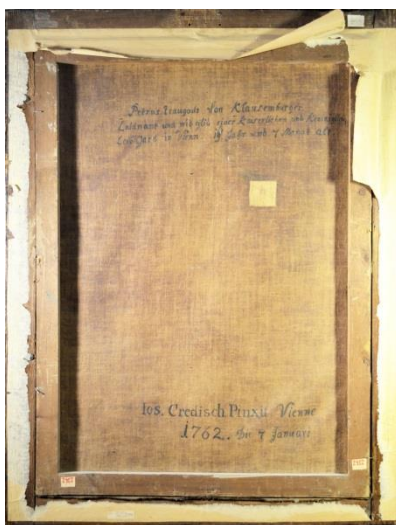
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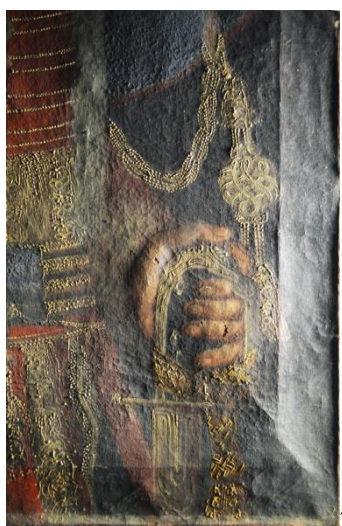


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1. Painting in radiant light, before conservation.
2. Backside, before conservation.



3.



4.

3. Detail in radiant light, with support and pictorial layers degradations.
4. Coat of arms



5.



6.

5. Upholstery metal nails.
6. Inscriptions on the backside.



7.



8.

7. Dust layers accumulated in the painting's lower part.
8. Backside detail: mechanical cleaning.



9. Backside: removal of the cloth patch.



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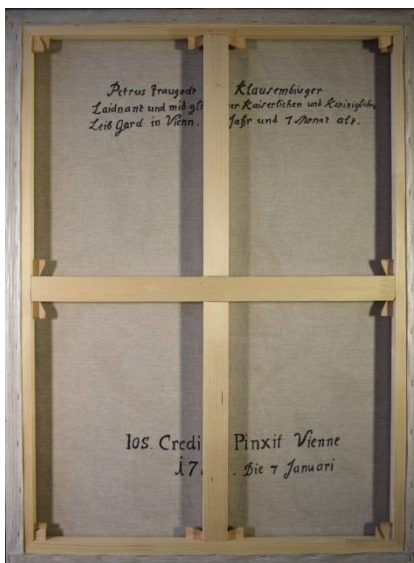


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16. Portrait detail, after chromatic integration.
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19. Backside, after conservation.



20.



21.

20. Painting after framing.
21. Backside, after framing.

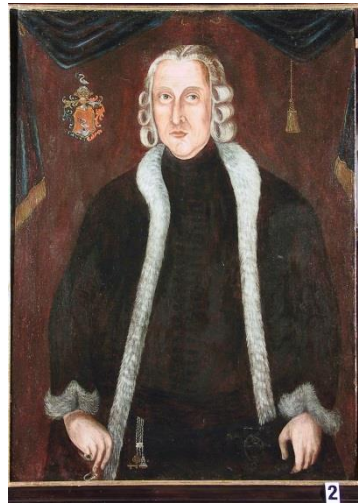
Some Remarks on a Recently Conserved Mid-18th Century Officer Portrait by Josef Credisch and on the Painters from the Valepági Family from Mediaș and their Works



22.



23.



24.

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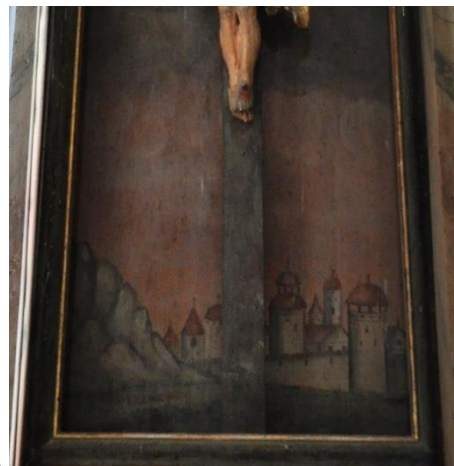
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RESTORATION OF TWO PENDANT PAINTINGS BY LAUTERER JOHANN ENTITLED: "ROCKY LANDSCAPE WITH A FLOCK" WITH INVENTORY NUMBER 669 AND "HILLY LANDSCAPE WITH A FLOCK" WITH INVENTORY NUMBER 670

Celestina Florina ALBIȘOR *

Abstract: This article presents two works of paintings in the treasure category, which are pendants: works with the number of Inv. 669 "Rocky landscape with a flock" and 670 "Hilly landscape with a flock" both painted by the same author, Lauterer Johann. I will present the degradations, the preliminary analyses before the beginning of the restoration stages as well as the evolution of the restoration performed. The paintings mentioned have been previously restored, predicting a well-executed doubling miss mounted on an inadequate chassis, with no retraction slope and tensioning wedges. The article was structured in three sub points: conservation state of works with Inv. No: 669, 670; research of the conservation state by performing the necessary analyzes for the works with Inv. No. 669, 670 explicitly documented with photographs.

Keyword:s preliminary analysis, degradation, photographic documentation.

Rezumat: Articolul de față face prezentarea a două lucrări de pictură aflate în categoria tezaur, care sunt pandante: lucrările cu nr. de inv. 669 „Peisaj stâncos cu o turmă” și 670 „Peisaj deluros cu o turmă” ambele pictate de același autor, Lauterer Johann. Voi prezenta degradările, analizele preliminare înaintea începerii etapelor de restaurare precum și evoluția restaurării efectuate. Lucrările menționate au mai fost restaurate anterior, prezintă o dublare bine executată dar montate pe un șasiu neadecvat, neavând pantă de retragere și pene de tensionare. Articolul a fost structurat în trei subpuncte: starea de conservare lucrările cu Nr de INV: 669, 670; cercetarea stării de conservare prin efectuarea analizelor necesare pentru lucrările cu Nr de Inv. 669, 670; și documentate explicit cu fotografii.

Cuvinte-cheie: analize preliminare, degradări, documentație fotografică.

Conservation status of artworks with Inv. No.: 669, 670

The paintings are carried out in the technique of oil on canvas. The canvases were anchored on an improperly made chassis, not being provided with a retraction slope, with only four tensioning feathers at both chassis and their sides being about 2.5 cm. Due to this fact, the edges of the chassis were imprinted in the stratigraphy of the painting. On the back of the chassis we have older labels, with the old inventory number and the collection labels. Along with these labels we also have one with the current inventory number 670 as well as 670 (Fig. 1, 2).

The canvases are doubled with glue of animal origin. The doubling canvas is oxidized in both works, lacking elasticity both having moisture halos.

The pictorial layers show local mechanical degradations, cracks, gaps, more accentuated redness in

the part of the moisture halos. You can see additions with putty that go beyond the lacunae edges (Fig. 3, 4).

The varnish is aged in both works, having a brownish appearance specific to those in rosin, changing the chromatics of the entire work. Prolonged exposure of painting to ultraviolet (UV) rays is an important factor of degradation (Baroni 1993, 43).

These rays present in the light are at the origin of the polymerization of the oils of the paintings, which results in the darkening due to some photo-oxidation phenomena and more generally, to the photochemical phenomena between the different component materials.

The metal elements, the nails, used to fix the canvas on the chassis have corrosion products specific to metal alloys containing iron.

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Research of the conservation state by performing the necessary analyzes for the paintings with Inv. No. 669, 670

X-rays of the works in the Treasury category of paintings 669, 670 were made to determine the degradations that are not visible to the naked eye.

Radiography is the recording, on special photographic film, of the structural image of an object, obtained with the help of X or gamma rays (Fig. 7, 8).

Radiography allows examining objects that are not transparent to light, based on the property of these radiations to be much more penetrating. The radiographic image highlights details of the materials components of the paintings, as well as aspects of previous restoration interventions.

One can observe as a result of the X-ray made, perimeter metal nails that have a very pronounced radiographic imprint, gaps and several anterior grouts more pronounced in the upper part as well as pictorial layers that present folding.

U.V. light study is a non-destructive research method, used in the diagnosis of works of art, to observe previous interventions or the obsolescence of the varnish (Radiografie 2017, 2022).

These paintings were requested in type a U.V. light with a wavelength of between 400 and 315 nm. Several degradations of the varnish can be observed, including chromatic integrations of older restoration interventions, areas with redheads, specific fluorescence indicating a thick layer of aged varnish and a superficial layer of dust (Fig. 9, 10).

Both works paintings show similar degradations, which proves that they were kept under the same conditions and were restored during the same period (Fig. 5, 6).

Ultraviolet rays, also called UV rays, are electromagnetic radiation with a wavelength less than the radiation of light perceived by the human eye. Röntgen rays (= X-ray) have an even shorter wavelength. The name "ultraviolet" comes from the purple color in the spectrum of white light, which has a neighboring wavelength, only slightly larger. (Raze ultraviolete)

Restoration operations proposals and working methodology

Photographic documentation was carried out before the restoration, in various types and kinds of light: direct light, UV light, as well as radiography of paintings.

Both works were protected with Japanese foil ("facing") and fish glue in a concentration of 4% heated that was applied by brushing from the inside out so as not to form air pockets between the foil and the pictorial layer.

The removal of the chassis canvas was carried out mechanically with the help of pliers; the metal nails were removed with great caution in order not to injure the original canvas. The cleaning of the back of the works was done mechanically with the help of the scalpel and the adhesive residues were removed by vacuuming. It was cleaned with great care, without putting pressure on the canvas, the dirt being removed with the help of a wide brush and vacuum cleaner.

The preparation of the paintings for the realization of the doubling operation was continued by providing flatness to the support with the help of marble compresses. We opted to perform the doubling operation, using a thermoplastic adhesive Beva 371 in the form of film and doubling cloth with similar *gren*. The doubling operation was carried out using the doubling table that allows controlling the temperature and pressure exerted on the surface of the painting. Before starting the actual doubling operation, carefully remove any traces of old glue. Whether organic adhesives with components of animal or vegetable origin (traditional method) are used, or adhesives based on high polymers are used, the doubled cloth must be primed (Mihalcu 1970, 205). In this case we will apply a Beva 371 layer both on the doubling canvas and on the original canvas.

Due to the fact that the original chassis are poorly made but have a series of labels and inscriptions on them, we opted for the realization of new chassis provided with retraction slope and tensioning feathers, the works on the new chassis with the help of metal staples were anchored, then we re-glued the labels with collagen glue. Japanese foil had to be removed, an operation carried out mechanically, with the help of cotton swabs, slightly humidified with lukewarm water. The role of the "facing" being one of protection of the pictorial layer prior to the doubling operation.

Carrying out cleaning tests, in which it was aimed at removing the touch that turned from a chromatic point of view. The tests were carried out on small areas in size, starting from weak cleaning solutions to stronger solutions. Their application was carried out with the help of cotton buds, an operation performed under the observation of the working surface through the head magnifying glass or the stereo binocular microscope. The aim was to remove

the retouch without endangering the original color layer.

Cleaning operations were carried out with solutions that proved good for cleaning the varnish. The lacunae areas were filled with putty based on micronized mountain chalk and rabbit glue 7%. "Rabbit glue is very elastic animal glue. Its adhesive qualities, as well as its elasticity recommend it as the most indicated in such operations. The elasticity of rabbit glue is superior to other animal glues. It does not form a gel, similar to skin glue, its gelatin having a lower molecular weight. Rabbit glue is among the best glues, considered to be the closest to the excellent medieval parchment glue. It unfortunately occurs less and less often (Istudor 2011, 86).

After drying the putty, the areas were sanded and brought to the same level the help of cotton swabs moistened in lukewarm water. The grouted areas have been integrated into the water-colors, so that the integration in varnish colors, a stage prior to it, is as easy as possible to achieve without having to load very much with varnish colors.

The general opening of the painting was made with the help of a Retouching varnish. The application of the varnish was carried out with the brush in a thin and even layer.

The chromatic integration operation was carried out using varnish-based colors that are reversible

and have a high chemical stability. The product used was the Maimeri Restauro color gamut; it was opted for the application of the touch in imitative style (Fig. 11, 12).

They were finally opened with aerosol-type varnish, by spraying, which also has in its composition armpits with the role of UV filter. The photographic documentation was made after the restoration for both works, in different types and the kings of light (Fig. 13, 14).

Even if the painting is protected with a UV filter varnish, it will be exposed away from direct natural light.

In terms of lighting requirements, IR and UV radiation emitted at the same time as the radiation from the visible are parasitic. And not only are they not necessary for the visualization process, but they are also harmful, some UV, even very harmful. The lighting sources used by museums, natural, fluorescent, incandescent lighting emit different amounts of IR and UV. The source that emits the largest amount of UV is also the most harmful given the higher energy of these short wavelength radiations (Moldoveanu 2003, 129).

The mounting of the works in the frame was carried out with the help of metal clamps, flexible Temart. After the completion of the restoration operations, the restoration documentation was drawn up.

REFERENCES

- Baroni 1993 Sandro Baroni, *Restaurarea și conservarea tablourilor*, Paris, 1993
- Istudor 2011 Istudor, Ioan, *Noțiuni de chimia picturii*, Ed Daim publishing House, Bucuresti, 2011
- Lăzăreanu, 1996- Liviu Lăzăreanu, *Pictura în ulei*, Editura Sigma plus 1996
- Mihalcu 1970 Mihail Mihalcu *Conservarea obiectelor de artă și a monumentelor istorice*, Editura Științifică București 1970
- Moldoveanu, 2003 Aurel Moldoveanu, *Conservarea bunurilor culturale* București 2003
- Radiografie 2017 <https://ro.wikipedia.org/wiki/Radiografie>; accessed: 08.04. 2022
- Raze ultraviolet 2022 https://ro.wikipedia.org/wiki/Raze_ultraviolete accessed : 08.04.2022

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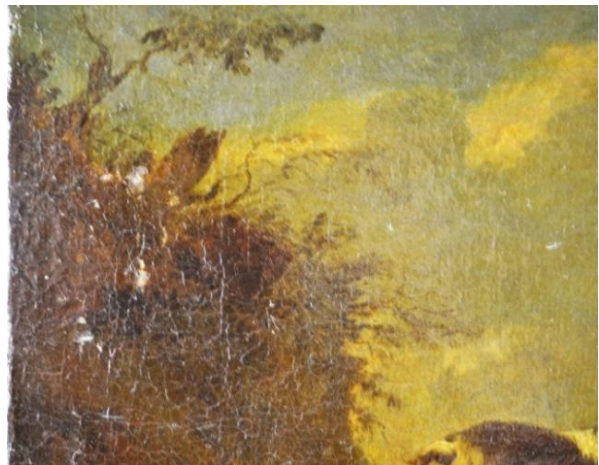
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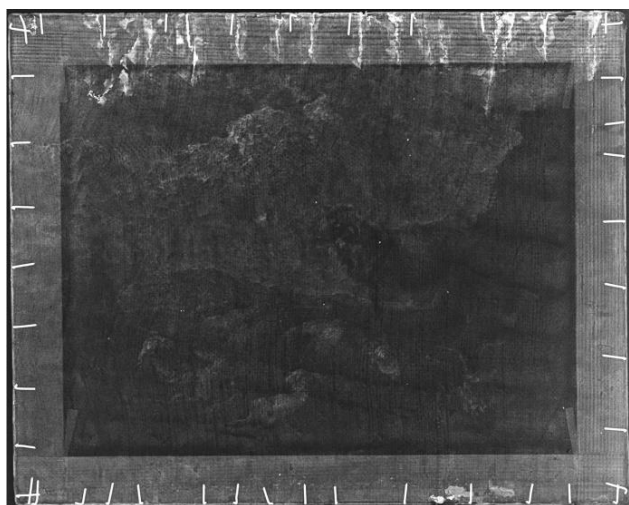
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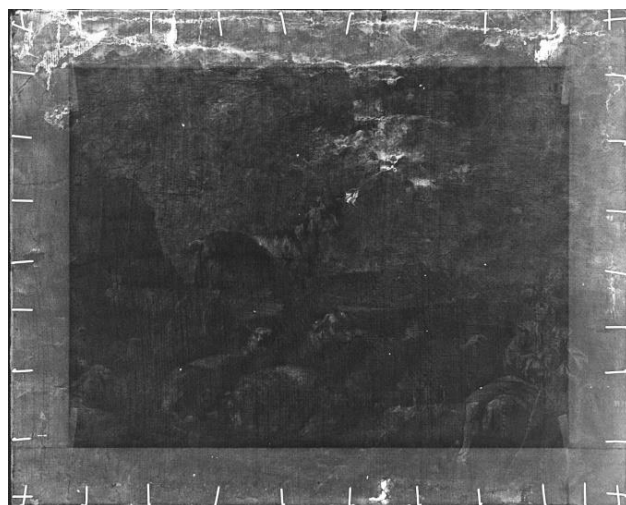
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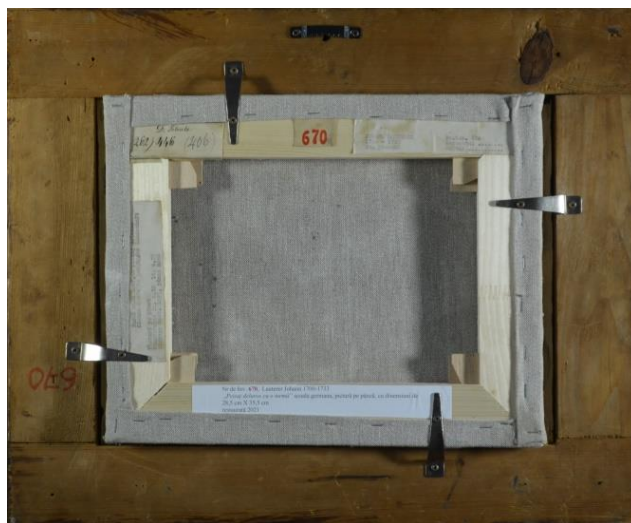
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RESTORATION OF THE ICON ON WOOD HOLY APOSTLE MARK

Alina Geanina IONESCU*

Abstract: Following the analysis of the conservation status on the icon on wood Saint Apostle Mark, dating from the 19th century, part of the collection of the ASTRA Museum, following the chemical and biological investigations and the drawing up of the specialized documentation, the piece benefited from restoration interventions within the ASTRA Center for Heritage.

The restoration operations complied with the principle of the minimum intervention, taking into account the great losses existing at the level of the painting layers. At the level of the wooden support, the restoration operations consisted of dusting, degreasing, reinforcements, grouting and cleanings. At the level of the painting layers, the restoration interventions consisted in dusting, prophylactic consolidation and the actual consolidation of the painting layers, cleaning, degreasing and partial grouting of the lacunae areas, carrying out the cleaning tests with solvent mixtures, partial chromatic integration and the final varnishing.

Keywords: icon on glass, conservation, restoration, valuation, heritage.

Rezumat: În urma analizei stării de conservare a icoanei pe lemn Sfântul Apostol Marcu, icoană de secol XIX din colecția Muzeului ASTRA, în urma realizării investigațiilor chimice și biologice și întocmirii documentației de specialitate, piesa a beneficiat de intervenții de restaurare în cadrul Centrului ASTRA pentru Patrimoniu.

Operațiile de restaurare au respectat principiul minimei intervenții, având în vedere pierderile foarte mari existente la nivelul straturilor picturale. La nivelul suportului din lemn, operațiile de restaurare au constat în desprăfuiri, degresări, consolidări, chituiuri și curățiri. La nivelul straturilor picturale, intervențiile de restaurare au constat în desprăfuiri, consolidarea profilactică și consolidarea propriu-zisă a straturilor picturale, curățirea, degresarea și chituirea parțială a zonelor lacunare, efectuarea testelor de curățire cu amestecuri de solvenți, integrarea cromatică parțială și vernisarea finală.

Cuvinte-cheie: icoană pe lemn, conservare, restaurare, valorificare, patrimoniu.

Introduction

The icon on wood depicting *Holy Apostle Mark* (Fig. 1), Inv. no. 19970 AL (Fig. 2), underwent restoration due to its poor state of conservation. The dimensions of the icon resulted from the measurements are 31.3-31.8 x 22.8-23.2 cm. Panel thickness: 2.7-2.9 cm – upper edge; 2.3-2.8 cm - lower edge; 2.6-2.8 cm - left side edge; 2.3-2.8 cm - right side edge.

The state of preservation of the icon before the restoration was conditioned by the aging of the materials and defective preservation. These factors led to the appearance of cracks and crevices, to the loss of wood and implicitly to the losses in the painting layers (in the upper register, left side), the clogging of the deposits.

The icon is painted in tempera on a linden wood panel consisting of a single board.

At the level of the wooden panel we signal small losses of wood, cutting with detachment and loss of the wooden support, a knot in the structure of the wood - straight side edge, small cracks and

cracks in the panel mass, weak inactive attack of xylophagous insects - *Anobium punctatum* - superficial and adherent deposits. On the back of the panel is written the inventory number "AL 19970 COMĂNEȘTI".

On the face of the icon we signal cracks, fissures, loss of painted wooden support, wear of the varnish layer, of the colour film and preparation layer, large losses of the painting layers (lacunae).

After carefully examining the icon, chemical and biological analyses were carried out and these provided us with essential data for carrying out the restoration operations¹.

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Chemical investigations² consisted of microscopic examinations, micro chemical and combustion tests, digital photomicrographs, and stratigraphy. A micro chemical analysis (Fig. 3-10) was carried out to identify the pigments of lead white, hematite, ultramarine blue, CaCO₃, coal black. Other pigments identified: Prussian blue, cinnabar red.

Biological investigations

Following the results of the biological analyses³ in order to identify the wood essence, it was found that the wood used for the panel is linden *Tilia sp.* Fig. 11.

In the longitudinal sections can be noticed spiral grain, which is specific to linden wood. The wood does not show an active attack of biodegradation agents and therefore did not require treatment with insecticidal solution.

Description of the restoration operations

The dusting of the icon, on the face, was carried out with soft brushes, avoiding the detached areas of the painting layers. This was followed by the prophylactic consolidation of the painting layers. Over the Japanese leaf we brushed a solution of 3% fish glue, with added preservative (0.1% acetyl-salicylic acid). This operation gave us the opportunity to work on the back of the icon without the risk of losing the detached colour fragments. The dusting of the back and the edges of the icon was carried out with rougher brushes, removing the superficial deposits.

On the edges of the icon and on the reverse side, in the lower left register, in the area where the cutting with detachment and loss of the wooden support occurred, where there were losses of wood, it was degreased with ethyl alcohol and grouted with sawdust, 6% fish glue and pigment in the chromatics of the wood.

The chemical cleaning operation on the reverse of the icon and on the edges was performed with a weak mixture of solvents, ammonia water (3 drops NH₄ in 100 ml distilled H₂O). This was followed by the actual consolidation of the painting layers by brushing with a solution of warm 6% fish glue. The consolidation operation itself was carried out by alternating the warm press (electric spatula)

with the cold press (sand bags and pieces of marble). The pressing with the electric spatula was performed by means of the monosiliconated polyester film, which has the property of being transparent and non-adherent. After 24 hours, the Japanese leaf was removed with pads soaked in warm water, taking care that the surplus water was removed with dry cotton swabs.

Next were the cleaning operations on the lacunae areas, degreasing with ethyl alcohol, clenching with warm 6% fish glue solution and partial grouting with chalk powder and 6% fish glue.

On the face of the icon, in the upper left register, where there were losses of support and implicitly losses of the painting layers, the lacunae surface was degreased, 6% fish glue was injected, it was grouted in several stages with a mixture of sawdust, glue and pigment. The last layer of grout was made up of chalk powder and 6% fish glue. Sanding was done with fine grain paper, the finishing was done with cork stopper, and the surplus grout was removed with pads soaked in 1:3 egg yolk emulsions with distilled water.

Following the cleaning tests, the mixtures based on isopropanol + ammonia + water (80:10:10) and (50:25:25) gave very good results.

Respecting the principle of minimum intervention, due to the very high losses existing at the level of the painting layers, the chromatic integration was partially achieved, with imitative and punctate retouch. Water-based colours (watercolours) were used for retouching (Fig. 12-21).

It was followed by checking the retouching with the UV lamp (Fig. 22) and heating the support using the IR lamp (Fig. 23), in order to be varnished. To protect the painting against external factors, we applied a layer of varnish based on natural resin (Dammar) in essence of turpentine (8% concentration solution), by brushing (Fig. 24).

Storage Recommendations

We recommend that the icon *St. Apostle Mark*, after restoration (Fig. 25-26), be stored or exposed in an environment with a relative humidity between 50-65%, a temperature between 18-20°C, without extensive or sudden fluctuations of their values, and the level of illumination to not exceed 180 lux.

Traian-Zănove Oprea, Alexandra-Teodora Stoleru, Ana-Maria Breaz, Annamaria-Livia Nicolau, Andrada-Sinziana Bogdan, Carmen Iliuț; Specialized assistance C.N.M. ASTRA: restorers Florin Păun, Șerban Lazăr.

² According to the analysis bulletin no. 787/2021 - expert chemical investigator Daniela Văcariu, CNM ASTRA.

³ According to the analysis bulletin no. 107/2021 - investigator, biologist Ileana Chirtea, CNM ASTRA.

REFERENCES

- Baroni 1992 Sandro Baroni, *Restauration et conservation des tableaux - manuel pratique*, Paris (1992).
- Bucur 2015 Mirel-Vasile Bucur, *Intervenții de restaurare în cazul ușilor împărătești de la biserica de lemn din Comănești, județul Gorj*. In: *Cibinium*, Sibiu (2015), p. 215-223.
- Dancu 1996 Iuliana Dancu, *Restaurarea icoanelor pe lemn și pe sticlă*, București (1966).
- Ionescu 2010 Alina Geanina Ionescu, *Conservarea și restaurarea icoanelor din colecțiile Muzeului ASTRA*, Sibiu (2010).
- Mâle 1976 Gilberte Emile Mâle, *Restauration des peintures de chevalet*, Paris (1976).

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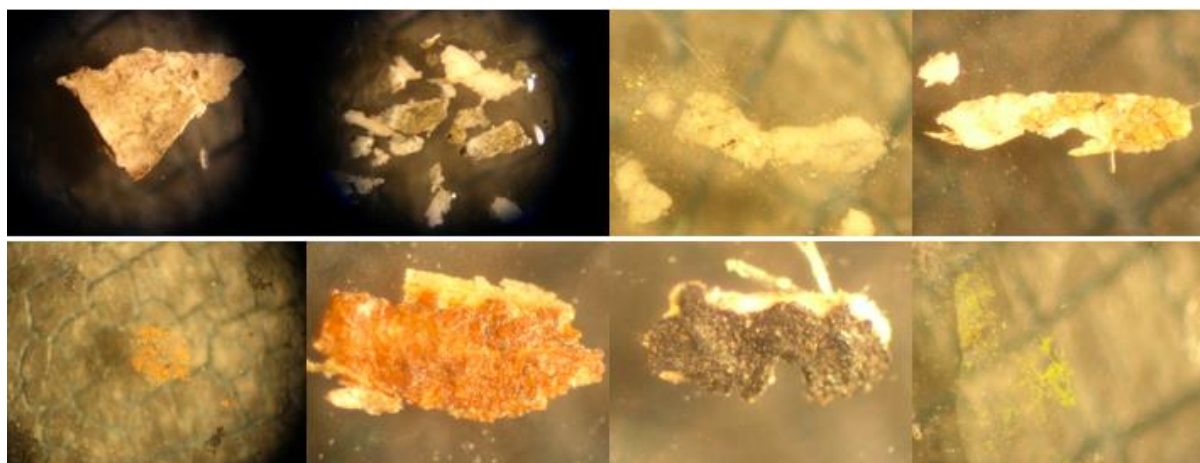
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1-2. Front and back, before restoration



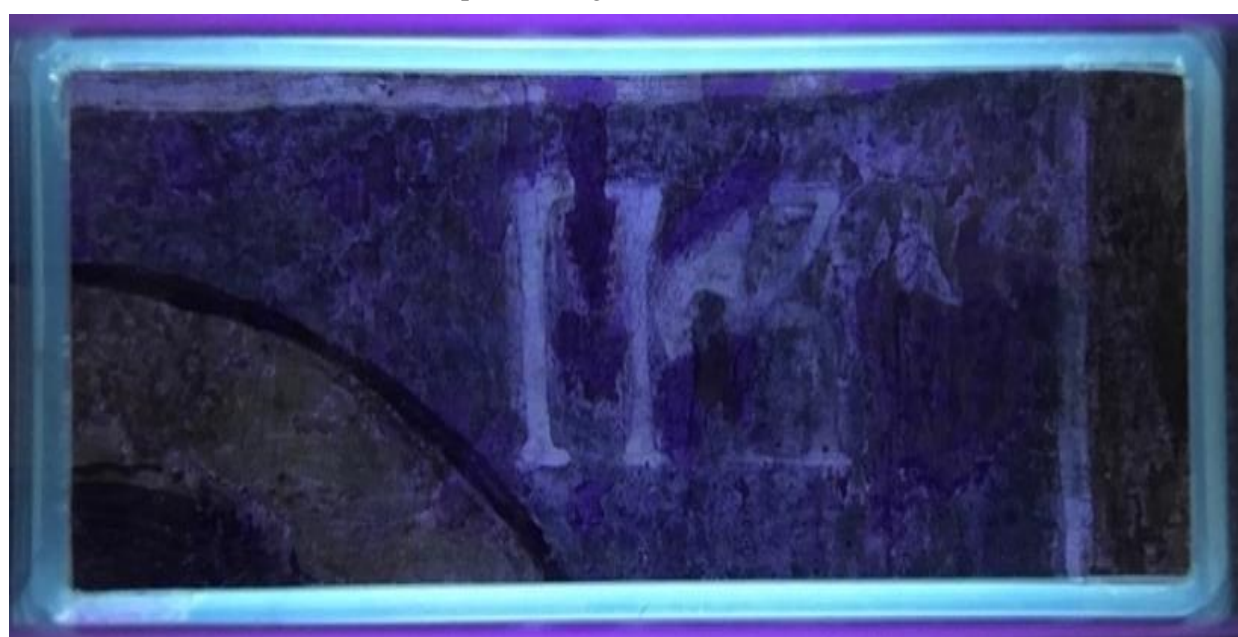
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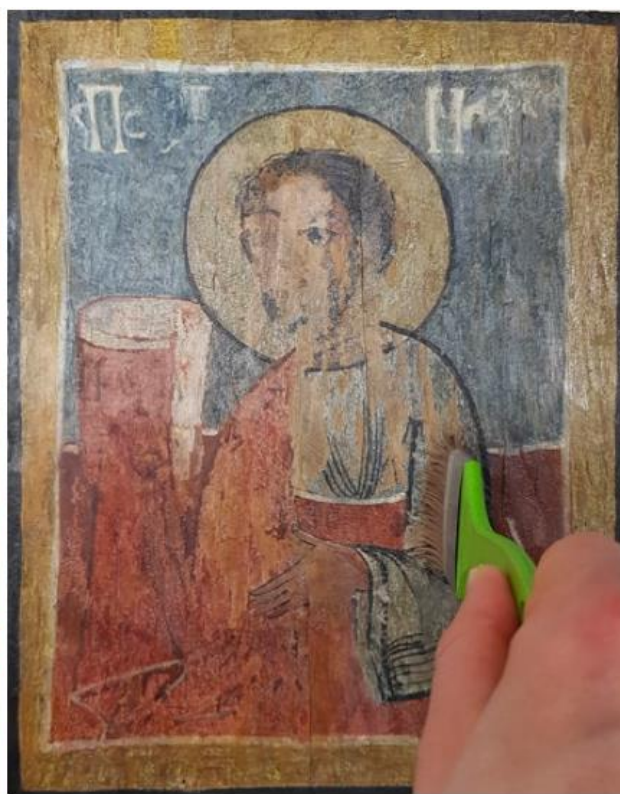
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GRAPHIC PORTFOLIO: TECHNICAL STUDY

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Abstract: *The article presents a technical study of Ludwig Hesshaimer's graphic works in which he illustrates the horrors of war. The study analysed the artistic technique of the fifteen engravings that make up the 'World War, a Deathly Dance' map. In order to identify the artistic technique for making engravings, they were also subjected to the study by optical microscopy which allowed highlighting the details of artistic technique, visualizing the structural details of the paper support and assessing the state of conservation of the works. The collection of works of art is extraordinarily complex and loaded with symbols, all the artistic printing procedures for its creation include woodcuts, etchings, crayon manner, dry point, engraving, photo-gravure, aquatint and mezzotint.*

Keywords: *Graphic portfolio, technical study, artistic printing procedures, optical microscopy, conservation, restoration.*

Rezumat: *În articol este prezentat un studiu tehnic al lucrărilor de grafică ale lui Ludwig Hesshaimer în care acesta ilustrează ororile războiului. În cadrul studiului a fost analizată tehnica artistică a celor cinci-sprezece gravuri care constituie mapa 'Războiul Mondial, un dans de moarte'. Pentru identificarea tehnicii artistice de realizare a gravurilor, acestea au fost supuse și studiului prin microscopie optică care a permis evidențierea detaliilor de tehnică artistică, vizualizarea detaliilor structurale ale suportului papetar și evaluarea stării de conservare a lucrărilor. Fondul de lucrări de artă este extraordinar de complex și încărcat cu simboluri, totalitatea procedeelor artistice de tipar pentru crearea acestuia incluzând xilogravura, acvaforte, maniera vernisului moale, pointe sèche, dălțița, fotocalcografie, acvatinta și mezzotinta.*

Cuvinte-cheie: *Portofoliu grafic, studiu tehnic, procedee artistice de tipar, microscopie optică, conservare, restaurare.*

Introduction

Ludwig Hesshaimer (Fig. 1) was born on March 10, 1872 in Braşov and died on January 10, 1956 in Rio de Janeiro. He was a graphic artist, illustrator, engraver and book illustrator. At the age of five he left Transylvania, the Hesshaimer family settling near Vienna, then in Trieste and Budapest. Initially he was a career officer in the Austrian army, being seconded to several garrisons in Sarajevo, Budapest, St. Pölten, Salzburg. From 1909 he spent a year and a half at the Academy of Fine Arts in Vienna, taking courses in the Department of Graphic Arts and Graphic Techniques under the guidance of Ludwig Michalek (1913-1979).

After completing his studies, he returned to the army as a drawing teacher at the Sarajevo military school. On the occasion of the visit of the apparent

heir, Archduke Franz Ferdinand to Sarajevo (June 28, 1914), Hesshaimer was to hand him an album of 10 personal drawings, but this did not materialize due to the assassination attempt, a tragic event that led to the outbreak of World War I. From February 1915 Hesshaimer served in the k.u.k. Kriegspressequartier (military press office), and prior to that, in 1914 - in the 59th Infantry Regiment "Archduke Rainer", with which he fought in Galicia. During this period he documented in his works of art the battles on the front and created the cycle "Heil und Sieg" ("Salvation and Victory") (Ittu 2014, 547).

Hesshaimer became the commanding officer of the art sector in the Department of Warpress.

At the end of the First World War, he began to conceive a new series of highly personal artworks,

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portraying the sordid aspects of war, generally silenced in the official art. The series was created as an expressionist-inspired, allegorical anti-war virulent manifesto (Popica, 82).

Technical study

In his cycle 'World War a Death Dance', the artist tries to reduce the trauma he suffered during the First World War. In March 1920, when the series was still in its infancy, he wrote an article in the *Hermannstädter Zeitschrift* describing the idea of this collection of artworks as a form of catharsis, a way for him to cope with the nightmares and memories of the time. Spent in the war. Constant artillery fire, horrific deaths and deplorable war conditions have given rise to post-traumatic stress disorder among soldiers. They reported symptoms such as tremor, amnesia, headache and hypersensitivity to noise, with no injuries. We can't be sure if Hesshaimer himself suffered from PTSD, but the nightmares and the melancholy he described suggest this fact.

The graphic portfolio, Inv. No. XV – 1120/1139, examined belongs to the Brukenenthal National Museum (Udrescu 2003, 106) and consists of two title pages, four dated illustrated text sheets and fifteen engravings numbered and signed by the artist. VAN GELDER ZONEN watermarked manual paper has an embossed round stamp. The year and the artist's initials flank the silhouette of death. A textile-wrapped cardboard folder with metal plate protects the artworks (Fig. 2).

Optical microscopy, the technique of non-destructive examination of their surface, was used to examine the artworks. The study by optical microscopy of the surface allowed the highlighting of the details of artistic technique, the visualization of the structural details of the paper support and the evaluation of the state of conservation of the works. It is important for the practice of restoration because they, properly evaluated, can be useful for choosing appropriate and specific interventions. The microscopic observation was made with a Leica stereomicroscope with a magnification of 600x, the photomicrographs being obtained at different magnifications, in direct light and in ultraviolet light (normal and UV light).

Artistic printing processes:

- **WOODCUT** is a relief process of printing on wooden boards, cut in length so the grain runs in parallel lines to the block. It consists of removing with chisels, gouges and knives the areas that remain white and keep the relief parts of the design that are printed (Olteanu 1992, 381).

The title pages were made in the woodcut. On the first title page with the Inv. No. XV-1120 is written the title of the folder «Der Weltkrieg. Ein Totentanz- ein dichtung in Radierungen», the name of the artist and the publishing house (Fig. 3). On the second title page, Inv. No XV-1120, Christ is crucified on the sword. The title and name of the artist are repeated. At the top is the Death with her scythe (Fig. 4).

The surfaces of the title pages were subjected to study by optical microscopy, the appearance of the images under a microscope being a factor in identifying the woodcut. It is noticeable that the ink is pressed out at the time of printing. 20x photomicrograph of the letter D (in Fig. 3 the examined area is marked in red) on the first page of the title (Fig. 5) and 20x in the ultraviolet light of the dry stamp (Fig. 6).

- **ETCHING** is an intaglio technique. The process consists in attacking with acids the contours drawn on a metal plate, most often copper, covered with a thin layer of anti-corrosion varnish or wax. The image is scratched with an etching needle, directly on the plate or transferred from a sheet of paper. By immersing the plate in an acid bath, the lines of the composition will deepen through corrosion. Some parts of the design may undergo longer-term corrosion in order to obtain darker tones (Chilvers 2003, 201).

Once etched, the protective material is removed from the metal and prints are made.

Two prints that illustrate this technique are the ones with inventory numbers: Inv. No. XV-1121 (Fig.7) and Inv. No. XV-1122 (Fig.8).

The surfaces of the two prints were subjected to the study by optical microscopy, in Fig. 7 and Fig. 8 was marked the place of photomicrograph captures from the upper edges area of the artworks. It is observed that the appearance of the ink layer is uneven, with accentuated edges: 40x photomicrograph (Fig.9) of the edge of the artwork with Inv. No. XV-1121 and 40x photomicrograph in ultraviolet light (Fig.10) of the artwork with Inv. No. XV-1122.

Also etched is the print with Inv. No. XV-1124 (Fig. 11). In the 20x photomicrographs made in ultraviolet light it is observed that the etched marks have a rigorous aspect, the end of the lines tend to be rounded and blunt (Fig. 12). The examined area where the photomicrographs are taken is being marked with a red circle, in Fig.10 and Fig.13, the examined area where the photomicrographs are

taken is being marked with a yellow triangle in Fig.10.

- PHOTOGRAVURE is a intaglio process in which a copper plate covered with a gelatin layer sensitized to the action of light is used. Photogravure was used both to reproduce artworks and as an artistic process. (Gravure Printing, 2019)

- SOFT-GROUND ETCHING is an intaglio process that mimics the marks drawn by a pencil on paper. The artist draws with a pencil not directly on the plate, but on a sheet of paper, which covers the varnished metal plate with a varnish containing animal fat that does not allow the anticorrosive layer to dry. By pressing the pencil, the sheet of paper adheres to the plate, taking with it particles of varnish. After corrosion, a solid, granular line is obtained, which reproduces the drawing in pencil (Stoicu 2010, 96).

In photogravure and soft-ground etching process, the graphic work with Inv. No. XV-1125 (Fig. 14) was done. In the 20x photomicrographs taken where is visible that the appearance of the graphic signs is unitary (Fig. 15), the examined are marked in Fig. 14 by a red circle, and respectively the fact that the ink layer is uniform (Fig. 16), the examined area where the photomicrograph was taken being marked in Fig.14 by a yellow triangle.

- ROULETTE On the engraving with inventory number XV-1126 (Fig. 17) was identified a portion on which the roulette was used. The roulette wheel is a tool made of a metal disc with serrated edges pre-cut with a handle that the engraver passes over the varnished metal plate to draw points (Chilvers, Osborne 1994, 435). The optical microscopy study showed that the roulette leaves regular graphic marks at a distance, 20x photomicrograph (Fig 18), the examined area where the photomicrograph was taken was marked with a red circle in Fig 17, and that the appearance of the graphic lines is fine, regular, the edges being rounded, 20x photomicrograph (Fig. 19), the examined area where the photomicrograph was taken being marked with a yellow triangle in Fig. 17. The print with the inventor number XV-1126 was made in the following procedures: roulette, etching, engraving and dry point.

- ENGRAVING. An intaglio technique, it is certainly one of the oldest etching methods. The engraver incises the design into a smooth metal plate with a tool called a burin. The linear marks suggest volumes and tones through crosshatchings and paths that follow the curvature of the shapes. The valleys of the incisions have clean walls and clear, sharp edges, compared to those made by acid

corrosion, thus ensuring perfect ink retention and identical reproducible marks for large runs (Olteanu 1992, 173). The engraving technique with the chisel is identified on the engraving with inventory number XV-1127 (Fig. 20). In the photomicrographs it is highlighted that the graphic lines have a rigorous aspect, that ends in a point: 20x photomicrograph (Fig 21), the examined area where the photomicrograph was taken being marked with a red circle in Fig 20, and 20x photomicrograph in ultraviolet light (Fig. 22), the examined area where the photomicrograph was taken being marked with a yellow triangle in Fig. 20.

The engraving with inventory number XV-1127 was made in the techniques of chisels, etchings, drypoint.

- DRYPOINT is an intaglio technique. The term, in French *Pointe Seche*, means “dry tip” referring to the tip of the engraving needle made of steel or with a diamond tip that scratched directly the surface of the plate resulting in a method poorer in the variety of tones. Prints made by this method as a whole are rarer because the metal plate deteriorates faster than other processes due to the metal ridges (burr) on the edges of the furrows, that give the specific characteristic of rich and furry appearance of this technique, wearing out (Salomon 2010, 259). Graphic artists usually use drypoint to correct the surface of the corroded plate. The print with the inventory number XV-1128 (Fig. 23) was made in drypoint and etchings technique. In the 20x photomicrograph made (Fig. 24) (the examined area where the photomicrograph was taken is marked with a red circle in Fig. 23), it is observed that the graphic lines have a spontaneous appearance, their heads are rounded.

The print with inventory number XV-1129 (Fig. 25) was made in the technique of photogravure, soft ground etching and drypoint. In 20x photomicrograph (Fig. 26, the examined area where the photomicrograph was taken being marked with a red circle in Fig. 25) it is observed that the graphic marks form a network of dots specific to the use in photogravure of the gravure screen. This is a rectangular optical device consisting of a combination of dots or lines drawn on a foil that is fixed in front of the printing plate covered with a photosensitive film so that the light projection of the desired image is decomposed into square dots. This network of dots in the print creates halftones. In 20x photomicrograph (Fig. 27) the graphic marks have a dense, vigorous appearance (the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig.25).

The print with inventory number XV-1130 (Fig. 28) was made in the technique of photoengraving, etchings and drypoint. In the 20x photomicrograph obtained (Fig. 29) it is observed that the graphic marks form a network of dots (the examined area where the photomicrograph was taken is marked with a red circle in Fig. 28). In 20x photomicrograph in ultraviolet light (Fig. 30) it is observed that the graphic signs have a dense, vigorous appearance (the examined area where the photomicrograph is taken is marked with a yellow triangle in Fig. 28), is visible a network of hatches, overlapping lines with edges. Clear but slightly modulated with rounded ends. These aspects contributed to the identification of the technique as etching.

The print with the inventory number XV-1131 (Fig. 31) was made in drypoint and roulette technique. In the 20x photomicrographs made, the regular graphic marks are visible (Fig. 32, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 31) and the appearance of the graphic lines which are fine, and spontaneous (Fig. 33, the examined area where was taken with a yellow triangle in Fig. 31).

The print with Inv. No. XV-1132 (Fig. 34) was made in drypoint and etching process. In 20x photomicrographs made, the graphic marks have a dense appearance, the ends of the lines are rounded (Fig. 35, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 32) and the appearance of the graphic lines is fine, regular, their ends are rounded (Fig. 36 and Fig. 37, the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig. 32).

For the creation of the print with Inv. No. XV-1133 (Fig. 38) Hesshaimer used photogravure and etching. In the 20x photomicrographs made, the graphic signs form a network of points (Fig. 39, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 38) and the appearance of the graphic lines is spontaneous, intense, their ends are rounded (Fig. 40, the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig. 38).

- **MEZZOTINT** is an intaglio process. Unlike other printing processes, in the mezzotint the entire surface of the plate is pre-granulated with the help of special tools provided with teeth (rock-er), which makes it possible, when printing, to obtain a surface of an intense and velvety tone. After granulation, the portions that should appear in white or lighter tones are smoothed with, blunt and glossy tools (scrapers). Polished surfaces no

longer catch ink or retain as much as necessary to result in gradual gradations of brightness (Cycleback 2014).

The print with Inv. No. XV-1134 (Fig. 41) is made in the mezzotint technique. In the 20x photomicrographs made, a network of non-uniform points is observed (Fig. 42, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 41) and respectively graphic signs in the form of dots (Fig. 43, the examined area where was taken photomicrograph is marked with a yellow triangle in Fig. 41).

The print with Inv. No. XV-1135 (Fig. 44) is made in the technique of photogravure and soft-ground etching process. In the 20x photomicrographs made the appearance of the graphic lines is uneven (Fig. 45, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 44) and respectively the graphic signs form a network of points (Fig. 46, the examined area where was taken with a yellow triangle in Fig. 44).

The print with Inv. No. XV-1136 (Fig. 47) is made in drypoint, etching and roulette. In the 20x photomicrographs made the graphic lines have a rigorous aspect (Fig. 48 the examined area where the photomicrograph was taken is marked with a red circle in Fig. 47) and respectively the graphic lines have a rigorous aspect, their heads are rounded (Fig. 49, the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig. 47).

The print with Inv. No. XV-1137 (Fig. 50) is made in drypoints and etchings technique. In the 20x photomicrographs made the graphic lines have a fine appearance (Fig. 51, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 50) and respectively the graphic lines have a rigorous appearance, their heads are rounded (Fig. 52, the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig. 50).

- **AQUATINT** an intaglio technique on a copper plate with a porous background. Troughs attacking with acid, tones of different intensities are obtained.

A metal plate is covered with a thin layer of anti-corrosion film over which sugar powder, salt, etc. are sifted. After the varnish has dried, the granules of sugar, salt or other powders dissolve in water leaving porosity on the surface. The plate is corroded (Chilvers, Osborne 1994, 22).

If in the case of etchings, the defining plastic sign was the line and its play of intersections, for the mezzotint the specific sign is the stain. Through overlapping spots and corrosion in steps, a fairly large inventory of shades can be provided, with values between very light greys and the most intense black.

The print with Inv. No. XV-1138 (Fig. 53) is made in aquatint, roulette, photogravure and soft-ground etching process. In the 20x photomicrographs made the graphic lines have a fine appearance (Fig. 54, the examined area where the photomicrograph was taken is marked with a red circle in Fig. 53) and respectively the graphic signs are visible that form a network of points (Fig. 55, the examined area where the photomicrograph was taken is marked with a yellow triangle in Fig. 53)

Conclusion

The print cycle entitled 'World War, a Death Dance; a graphic poem' by Ludwig Hesshaimers is extraordinarily complex and full of symbols. Representative is the motif of the macabre dance, specific to the traditional perception of war in the Saxon popular consciousness, but also in the German military musical folklore of that time, especially of the one that circulated among the bands from Flanders. Although the artist reveals images

that denote fear, horror and destruction, which bring to our attention, as a reminder, the human suffering caused by the relentless, often even irrational, pursuit of the politico-military objectives of the states involved, Hesshaimer, deeply religious, rejects the heroism of death, the falsity of the official discourse on the Great War, the belief in the immortality of the soul and in the possibility of Death to touch only the bodily covering of the tortured comforts the tortured psyche of the artist.

The aspect regarding the totality of artistic printing processes is equally complex. Ludwig Hesshaimer used woodcut, etching, soft-ground etching, dry-point, engraving, photogravure, aquatint, mezzotint to create this collection of works of art.

Optical microscopy proved to be a very useful tool for obtaining direct information that allowed the identification of the technique used for the analysed engravings.

Authors' Contributions:

Polixenia Popescu: optical microscopy study

Iulia-Maria Pascu: artistic technique identification

REFERENCES

- Chilvers 2003 Ian Chilvers, *Concise Dictionary Of Art & Artists*, Oxford University Press, 2003
- Chilvers, Osborne 1994 Ian Chilvers, Harold Osborne, *The Oxford Dictionary Of Art*, Oxford University Press, 1994
- Cycleback 2014 David Cycleback *Antique Printing Processes Identification Part 3 Of 6: Intaglio Prints*, September 2, 2014, [online] available at: <https://www.sportscollectorsdaily.com/antique-printing-processes-identification-part-3-6-intaglio-prints/> [Accessed 21 July 2022]
- Gravure Printing, 2019 Britannica, The Editors of Encyclopaedia. "gravure printing". Encyclopedia Britannica, 16 Aug. 2019, <https://www.britannica.com/technology/gravure-printing>. [Accessed 21 July 2022].
- Ittu 2014, 547 Gudrun-Liane Ittu 'Primul războiul mondial în operele artiștilor plastici germani din Transilvania' *Acta Terrae Fogarasiensis* III 547-560, 2014
- Olteanu 1992 Virgil Olteanu *Din istoria și arta cărții Lexicon*, Editura Enciclopedică, 1992
- Popica Radu Popica *Marele război văzut de artiștii brașoveni* [Pdf], available at http://www.scia.ap.istoria-artei.ro/resources/2019/Art%2005-R.Popica_artisti-brasoveni.pdf [Accessed 10 may 2022]
- Salomon 2010 Lorenza Salomon *Saper vedere la Stampa d'arte*, Mondadori electa S.p.A, Milano, 2010
- Stoicu 2010 Florin Stoicu *Tehnici și maniere în gravură*, ed. Polirom, Iași, 2010
- Udrescu 2003 Doina Udrescu *Arta Germană din Transilvania în colecțiile Muzeului Brukenthal din Sibiu; (1800 - 1950)* Forumul Democrat al Germanilor din România, 2003

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2.

1. Ludwig Hesshaimer
2. Cardboard map with metal plate



3.



4.



5.



6.

3. First page title, letter "D" edge, detail in UV light, 20x photomicrograph
4. Embossed round stamp, photomicrograph 20x
5. First page title, Inv. No. XV-1120
6. Second page title, Inv. No. XV-1120bis



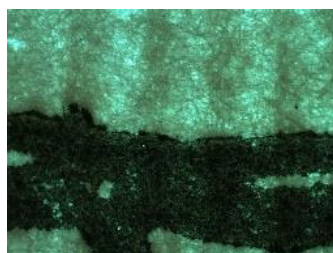
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8.

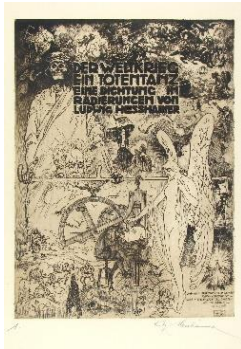


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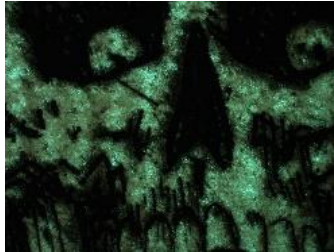


10.

7. Print, Inv. No. XV-1121
8. Print, Inv. No. XV-1122
9. Print, Inv. No. XV-1121, photomicrograph 40x
10. Print, Inv. No. XV-1122, photomicrograph 40x in UV light



11.



12.



13.

11. Print, Inv. No. XV-1124

12. Print, Inv. No. XV-1124, photomicrograph 20x in UV light

13. Print, Inv. No. XV-1124, photomicrograph 20x in UV light



14.



15.



16.

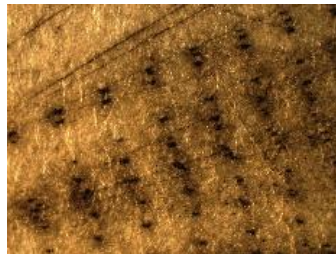
14. Print, Inv. No. XV-1125

15. Print, Inv. No. XV-1125, photomicrograph 20x

16. Print, Inv. No. XV-1125, photomicrograph 20x



17.



18.



19.

17. Print, Inv. No. XV-1126

18. Print, Inv. No. XV-1126, photomicrograph 20x

19. Print, Inv. No. XV-1126, photomicrograph 20x



20.



21.



22.

20. Print, Inv. No. XV-1127

21. Print, Inv. No. XV-1127, photomicrograph 20x

22. Print, Inv. No. XV-1127, photomicrograph 20x in UV light



23.



24.

23. Print, Inv. No. XV-1127, photomicrograph 20x in UV light

24. Print, Inv. No. XV-1128



25.



26.



27.

25. Print, Inv. No. XV-1129

26. Print, Inv. No. XV-1129, photomicrograph 20x

27. Print, Inv. No. XV-1129, photomicrograph 20x



28.



29.



30.

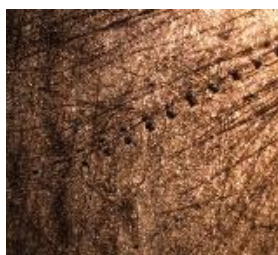
28. Print, Inv. No. XV-1130

29. Print, Inv. No. XV-1130, photomicrograph 20x

30. Print, Inv. No. XV-1130, photomicrograph 20x in UV light



31.



32.



33.

31. Print, Inv. No. XV-1131

32. Print, Inv. No. XV-1131, photomicrograph 20x

33. Print, Inv. No. XV-1131, photomicrograph 20x



34.



35



36.



37

34. Print, Inv. No. XV-1132

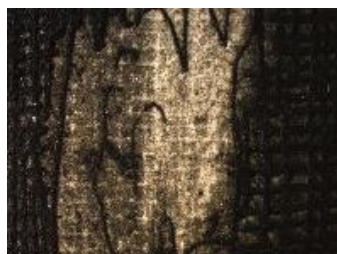
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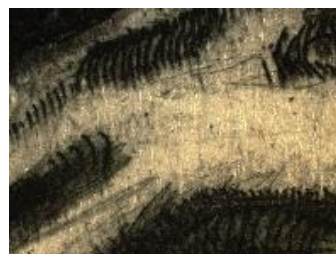
37. Print, Inv. No. XV-1132, photomicrograph 20x



38.



39.



40.

38. Print, Inv. No. XV-1133

39. Print, Inv. No. XV-1133, photomicrograph 20x

40. Print, Inv. No. XV-1133, photomicrograph 20x



41.



42.



43.

41. Print, Inv. No. XV-1134

42. Print, Inv. No. XV-1134, photomicrograph 20x

43. Print, Inv. No. XV-1134, photomicrograph 20x



44.



45.



46.

44. Print, Inv. No. XV-1135

45. Print, Inv. No. XV-1135, photomicrograph 20x

46. Print, Inv. No. XV-1135, photomicrograph 20x



47.



48.



49.

47. Print, Inv. No. XV-1136

48. Print, Inv. No. XV-1136, photomicrograph 20x

49. Print, Inv. No. XV-1136, photomicrograph 20x



50.



51.



52.

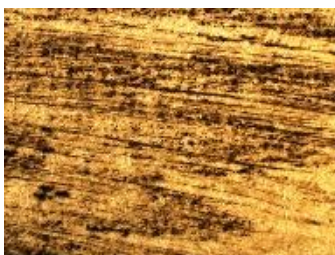
50. Print, Inv. No. XV-1137

51. Print, Inv. No XV-1137, photomicrograph 20x

52. Print, Inv. No XV-1137, photomicrograph 20x



53.



54.



55.

53. Print, Inv. No. XV-1138

54. Print, Inv. No XV-1138, photomicrograph 20x

55. Print, Inv. No. XV-1138, photomicrograph 20x

RESTORING A REVERSE GLASS ICON WITH THE THEME "SAINT GEORGE"

Mirel Vasile BUCUR*

Abstract: *In the beginning, we present the "Saint George" theme from the reverse painting on glass from Șcheii Brașovului (Transylvania). We present the state of conservation and the restoration process. This study will present the consolidation and cleaning of paint layer, the consolidation and the completion of the wooden elements. Finally, we expressed some recommendations regarding storage conditions and exposure.*

Keywords: *Saint George, reverse painting on glass, restoration, consolidation*

Rezumat: *La început prezentăm tema Sfântului Gheorghe în pictura pe sticlă din Șcheii Brașovului. Prezentăm starea de conservare a piesei și procesul de restaurare. Studiul arată consolidarea și curățirea straturilor picturale, consolidarea și completarea elementelor din lemn. În final recomandăm câteva condiții de conservare și expunere.*

Cuvinte-cheie: *Sfântul Gheorghe, pictura pe sticlă, restaurare, consolidare*

General considerations

Glass paintings took an honorary place in the homes of locals who considered them the bond between earthly and eternal life. Between these icons, we recognise a few that were considered to be quite important for the locals: The Madonna and Child, the Saviour: Christ Pantokrator or Christ in the vineyard, the Holy Trinity, representations of patron saints such as St. Nicholas, protector of the family, Saint George, protector of the earth, Saint Elijah Joseph, protector of the harvest, Saint Demetrius, protector of the shepherd, Saint Haralambos, protector against diseases (Ionescu 2009, Roșca 2010). Saint George of Cappadocia, the soldier of Emperor Diocletian, also known as the patron of the Romanian frontier guards in Transylvania who used to keep his effigy about them, was the protector of soldiers. Saint George appears thus much more frequently than any other saints painted on glass. The son of Cristian parents, Saint George refuses to offer sacrifice to the gods and thus falls out of favour with the emperor who has him tortured on account of it. Of the various tortures he had to suffer in the seven years of his martyrdom it was only his fight with the dragon that has been preserved in folk iconography. This episode was included in the hagiographic legend only in the 11th century when it was borrowed from popular tradition.

In Șcheii Brașovului, Saint George is represented

approximately after the same compositional imagery, but in different versions: on the left side of the image, the princess appears in front of a palace that looks similar to the Transylvanian house or church, the saint, who kills the dragon, is crowned by an flying angel; in another icon, dated from about 1900, the angel holds in his hand the crown, resembling a bishop's mitre (Fig. 6, 7), the nightly sky being adorned with stars and curtains (possibly flowers in other icons). The iconographer sometimes painted the divine glory in the form of a semicircle from which rays come out, and in the glory appears the hand of Christ blessing (Fig. 6).

Typical for Șchei paintings the value stands in the white or black lines over the flat tones to help lighting or shading the surface.

This icon is part of the collection of The Romanian Peasant Museum in Bucharest and is classified in the treasure category. Our icon is a representation of saints that are illustrated, in general, in iconography in equestrian portraits with one or multiple figures. (Dumitran 2018, 19).

Preservation state before restoration

The icon is made on factory glass; the colour layer is preserved relatively well. The chromatic range and the structure of the composition are reasons why we consider it an icon made in Țara Bârsei, possibly even in Șcheii Brașovului. We note the use of gold metal foil which shows local oxida-

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tions.

The lacunar surfaces are not stretched and we notice them especially in the lower part. Although the paint layer has been preserved to a good extent, it is fragile and slightly brittle, requiring general strengthening. In many places, especially on the edge of the gaps, we observe detached or free colour scales and scales that can be lost, the degradation being an evolutionary one.

The frame of the icon made of four wide sticks, profiled towards the inner edge, joined at 45° and the cover composed of three wooden planks are the original ones. It can be seen that due to the shrinkage of the wood and the rigid fastening with metal nails, the boards of the cover have moved apart, the colour layer being visible between the boards and as such unprotected. On the frame, you can see some small areas where the colour layer has been lost due to mechanical actions

The cover is composed of three boards, cut tangentially, initially fixed on the frame with wooden nails, later being added metal nails to strengthen the connection between the cover and the frame.

Although a series of small subsequent interventions can be observed the impressive amount of dirt accumulated between the colour layer and the cover confirms to us that the icon has not been restored to date. The previous interventions are limited to small pieces of sponge inserted marginally between the cover and the icon, to limit the play of the icon in the frame and some metal nails/bolts that were placed in the areas where cracks appeared along the fibre in the boards that make up the cover. There are some notes on the cover as follows: in the upper part, in the upper right corner, the current inventory number is written in white, on the middle board, the text written in black: "Ion Maria Moraru 1944 Perşani Fg." and on the lower one with black paint the old inventory number: 17158.

The dimensions of the glass are 39 x 34,5 cm and of the frame 49 x 44,5 cm. The pictorial layer shows small detachments and colour losses, especially in the area where the crack is.

The restoration interventions

First, the cover was removed and the icon was extracted from the frame. The cover was dusted with a rougher brush and then cleaned with 3% ammonia water.

The glass was carefully dusted with a fine brush on the painted side. The consolidation of the pictorial layers was performed by brushing with egg yolk emulsion in water (1:2 concentration).

After the consolidation of the pictorial layer, it had followed the cleaning with egg emulsion in a concentration of 1:3. Selectively, chromatic integration was achieved by imitative retouching with watercolours.

Chromatic integration was done on small areas with a mix of watercolours and yolk emulsion 1:4.

After cleaning each element, the frame was reassembled with new triangular splines and collagen-based adhesive (rabbit glue 15% - aqueous solution)

The icon was assembled in the frame, with the help of small pieces of synthetic felt glued to the edge of the frame with Covidez L180. This type of assembly is semi-rigid, limiting the movement of the icon in the frame, without creating high tensions. The final step was to put in place cap, which was secured with bolts.

The theme, which is a common one among the glass icons, shows almost a uniform spread in the Transylvanian space and even in the entire Christian European basin. We can see countless heroes who fight and kill scary beings in the literature, all worshipping Saint George. We have before us a cultural model spread throughout the whole Christian area, which manifests itself in an amazing variation in the icons on glass which had been made in Transylvania.

According to the Conservation Rules, we recommend that the icons be stored or exposed in a stable microclimate environment with a relative humidity of 50-65%, a temperature between 18-20°C, with no ample or sudden fluctuations in their values, and the illumination level should not exceed 180 lux.

REFERENCES

- Bucur 2007 Bucur, Mirel-Vasile, *Restaurarea icoanei pe sticlă „Sfânta Treime” de la Schitul Sub Piatră, comuna Sălciua, județul Alba în Conservarea și restaurarea patrimoniului cultural*, vol. VII, Centrul Mitropolitan de cercetări T.A.B.O.R., Editura Trinitas, Iași, 2007, p. 282-291
- Dancu 1975 Dancu, Iuliana, Dancu, Dumitru, *Pictura țărănească pe sticlă*, Editura Meridiane, București, 1975
- Ionescu 2009 Ionescu, Geanina-Alina, *Icoane pe lemn și sticlă din principalele colecții sibiene*, Editura ASTRA MUSEUM, Sibiu, 2009
- Irimie, Focșa 1971 Irimie, Cornel, Focșa, Marcela, *Icoane pe sticlă*, Editura Meridiane, București, 1971

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5. *Saint George*, CNM ASTRA Collection, No. inv. 157-OC
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16. Fixing the support glass in the frame
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11. Aspect după demontarea capacului
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13. Detalii după demontarea capacului
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17. Ansamblu după restaurare



1.



2.

1. *Saint George*, 19th century, CNM ASTRA Collection, No. inv. 27-OC
2. *Saint George*, Jianu Collection, Around 1900 (after Dancu, 1975)



3.



4.

3. *Saint George*, CNM ASTRA Collection, No. inv. 2740-OC
4. *Saint George*, CNM ASTRA Collection, No. inv. 1657-OC



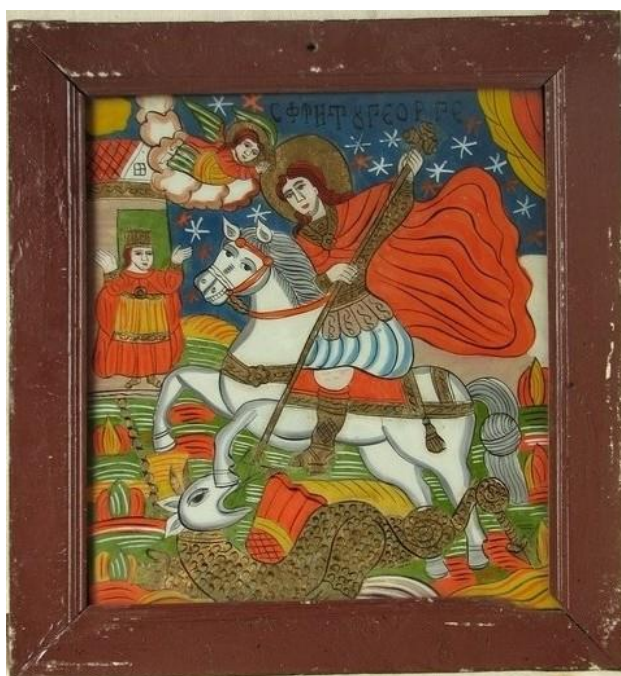
5.



6.

5. *Saint George*, CNM ASTRA Collection, No. inv. 157-OC

6. *Saint George*, CNM ASTRA Collection, No. inv. 179-OC



7.



8.

7. *Saint George*, CNM ASTRA Collection, No. inv. 1620-OC

8. *Saint George*, CNM ASTRA Collection, No. inv. 122-OC,



9. *Saint George*, No. inv. R-228, Collection of the Museum of the Romanian Peasant. Image of assembly before restoration



10.

10. Overview before restoration



11.

11. Appearance after removing the cover



12.

12. Details after removing the cover



13.

13. Details after removing the cover



14. Appearance during cleaning



15.

15. Consolidation of the colour film. Detail



16.

16. Fixing the support glass in the frame



17. Assembly after restoration

THE RESTORATION OF A "SAINT NICHOLAS" ICON PAINTED BY THE TĂMAȘ FAMILY FROM THE FĂGĂRAȘ COUNTY

Paul Victor LANGA*

Abstract: *This article presents an icon on glass with Saint Nicholas, painted by the Tămaș family from Făgăraș County, and the technological process of its restoration, an intervention necessary due to the degradation caused by poor working techniques and the action of environmental factors.*

Keywords: *icon on glass, Saint Nicholas, Tămaș family, Făgăraș County, restoration, degradation, painting techniques, environment*

Rezumat: *În acest articol este prezentată o icoană pe sticlă cu Sfântul Nicolae, zugrăvită de familia Tămaș din Țara Făgărașului și fluxul tehnologic de restaurare a acesteia ca urmare a unor degradări cauzate de tehnica deficitară de lucru și acțiunea factorilor din mediul ambiental.*

Cuvinte-cheie: *icoană pe sticlă, Sfântul Nicolae, familia Tămaș, Țara Făgărașului, restaurare, degradări, tehnica de lucru, mediu ambiental.*

The icon presented in this article is an icon on the glass that shows Saint Nicholas in the pose of a bishop. The character is represented full-figure, seated on a throne. Around the head is painted a yellow halo with a border and decorative motifs of orange squiggly lines. On his head he wears a red-orange mitre with a green lower register. The decoration of the mitre is made up of yellow ornaments on the bottom edge on which black winding lines are drawn and on the band that divides the cover in half, overlapping broken lines, decorative motifs accompanied everywhere by orange brush strokes that offer a stylized image of a phytomorphic ornament. On the upper register, to the left and to the right of the median ornament, we notice two green oval elements pointed in the upper part, also with a phytomorphic appearance. On the whole piece of clothing we see white brush strokes on the green and red areas that give a vibration to the backgrounds and create the illusion of three-dimensionality, especially in its lower register.

On the broad face framed by the black hair flowing past the ears which are rendered whole and the round, short grey beard, parted in the middle, under two eyebrows marked with a pale gray applied over their outline, are rendered the almond-shaped eyes with the gaze directed to the upper part to the left. The meditative gaze frames the long, slightly aquiline nose, rendered in profile, facing right. Beneath this, between the two thin tufts of grey

moustache, which descend to the beard, unconnected with it, is painted a demure red mouth, with two thin lips arched in a restrained smile.

His body is clothed in a green and blue surplice over which he wears an orange sakkos. Above the surplice, in the lower part of the sakkos, a rose coloured epitrichil is painted with a yellow border and a white star ornament and at the end with a red fringed termination. Above the sakkos, he wears a green omophorion with a yellow border. In the lower part, the omophorion is decorated with three red tassels. On his pectoral area, both on the left and on the right are painted two yellow quadrilobate flowers with orange brush strokes. The entire green background of the omophorion and the surplice sleeves is furrowed at certain equal intervals with white, black and red strokes. The garments, like the epitrichilus and the mitre, have a yellow border on the sleeves, collar and hem that sporadically presents black phytomorphic ornaments with orange brush strokes, as are also found on the lower edge of the mitre. The white brush strokes and lines on the orange garment give it a contrasting look between the dynamics of the folds in the middle area and the statuary look of the shoulders and legs that seem fixed in the saint's solemn gesture. The right hand raised from the elbow is painted with the fingers in a sign of blessing, the little finger raised, the ring finger joined to the thumb, and the index and middle fingers over-

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lapped. On the opposite side we notice a hand placed in the lap, with the palm raised towards the chest area where it holds a closed Gospel. Also, in the representation of the book, the painter denotes a geometric decoration, creates a game of planes through its parallelogram shape, rendered parallel to the bands of the omophorion that flow from the shoulders and intersect with the curved lines of the character and the throne, resulting in an antithesis between the dynamism of the position of the Gospel and the static posture given by the gesture of the saint holding it to his chest. Its ornamentation is rich, both the yellow outer band with orange vegetable motifs but also the interior decoration with a sculptural appearance, the four corners with semicircular red motifs that present vegetable decoration on the inside and curved yellow bands on the outside, the red oval element divided into three parts, flanked by other red circular elements above, below and to its sides, as well as the pinkish background vibrated by two red strokes in the form of round brackets enclosing the four secondary elements. Black-shod feet are placed on a red oval carpet, decorated with white dots and intersecting black lines, in front of the throne.

The solemn and imposing character specific to the status of bishop of Saint Nicholas is also highlighted by the massive, richly ornamented throne, which occupies half of the background. The white back, decorated with intersecting black lines, with black star ornaments at some line meetings and red dots in the grid formed by them, shows at the top a band of three registers identical in form, winding bands with two curves to the left and the character's right. The middle register is wide, pink, with two bunches of four green leaves each with white and red decorative brush strokes, arranged face to face, starting from the character and from the extremities of the register. A black Greek cross is painted between the bundles. The upper register consists of two thin yellow bands. The lower one has small orange dots on the left side, and the upper one has a stylized tunnel look, rendered by the snaking line that in some parts touches the strip below it. The lower register is composed of four bands, the first two being similar to the previously mentioned one, and the other two, from top to bottom, the first, wide, with orange vegetal ornaments, similar to those on the border of the sakkos and the Gospel, and the second, thin, on the left side orange and on the opposite side yellow. At the ends of the backrest are painted two columns with a fusiform appearance, convex in the lower part and elongated in the upper part where each presents two elements in the form of rising red leaves

on the sides. The decoration of the pillars is relatively simple, with a yellow border, and on the inside, on the pink background, some vegetal elements are simplistically rendered by black curved lines and white and red brush strokes, a substitute for the trees or spells on the pillars of the thrones or those of the iconostasis. In the upper part, the pillars show two globular elements, red and green with white strokes, above which are painted two quadrilobate floral elements similar to those on the omophorion. Also, at the base of the pillars, both on one side and on the other, there is another globular element in tone with their background. On the checkered green seat of the throne is painted a large pink pillow with a yellow band and tassels at the ends. The face of the throne is composed of two registers. The upper one is a green band with a yellow edge, bounded at equal intervals by double yellow bands, and the lower one of two boxes divided into four in the shape of an X bordered by a yellow border with black vegetal decoration with orange touches, the side sectors painted in red colour, and the others green, with black and white brush strokes, probably a stylized rendering of some leaves. The throne has two triangular legs, with outwardly curved sides, with yellow edges and orange strokes and on the inside a green background with stylized plant elements rendered by straight black lines and straight or wavy white and red brush strokes. Both legs have four red leaves at the ends, two on one side and two on the other, pointing upwards.

In the lower third of the icon we see a two-colour field, made up of three vertically arranged registers green, red, green, made up of semicircular elements stacked on the left, right and under the throne. Here we also meet those black brush strokes, straight or curved, accompanied by similar strokes of white or red. If in the lower part of each register, the lines are straight, oriented from the corners to the middle, those in the upper part have the appearance of round brackets that, with few exceptions, close and open, giving the background the illusion of continuity. Above this vibrant field are painted divergently against sweeping blue background white and red stars. In front of them, as if in an intermediate plane, on either side of the figure of Saint Nicholas, in the corners are painted two green draperies with red edges gathered in three folds, with four red tassels each, and next to the halo, a flower with four red petals interspersed with green leaves. In the upper part of the background, to the left and right of the halo, is written in white Cyrillic characters the inscription „*СФ НИК // ОЛАЕ*” (*SF [ântul] NIC// OLAE* - S

[aint] NICH // OLAS). Some technical details from the time of making the frame and cover of this icon, as well as the poor working technique, led us to think of attributing this icon to the last generation of painters of the Tămaş family from Făgăraş County. The whole composition has a decorative appearance, a large number of stars, geometric figures predominate, many of the ornaments are stylized in an excessive way (Dancu 1975, 71), the anatomical drawing is rendered very naively, a slight perspective of the planes is given only by the chromatic differences. (Băjenaru 2012, 154-156) Another characteristic note that leads us to attribute the icon to the Tămaş family, directing our attention even to the last iconographers, Petru Tămaş the son or Ana Tămaş, his sister, married Deji, are the large areas with restricted chromaticity of red, green, orange, blue, full of rhythm, richly ornamented and with many folds, which is also evident for this icon (Irimie, Focşa 1971, 14), as well as the lack of metal foil (Băjenaru 2012, 153).

The frame decorated with the comb, the predominant colour being brown, is fastened with metal nails at each corner, without a wooden wedge, and its bevel is processed coarsely, unevenly. The wooden cover on the back of the icon consists of two tangentially cut boards, worked with hatchet is attached to the frame with metal nails. A distance of approximately 2 cm can be observed between the planks. This was not caused by a contraction of the wood, as evidenced by the position of the original metal nails. At the same time, as signs of swelling and shrinkage of the wood we can mention some cracks, especially in the area of the nails, resulting from the opposing forces between the natural processes of the wood and the stability of the metal elements. On the upper stick, the frame shows a piercing in the middle area through which a string tied to the icon was passed for the purpose of hanging it on the wall, a fact known in most frames from the old icons on the glaze.

The glass is a relatively new one, industrially made, a fact found after opening the icon. Even though it has a waved appearance, characteristic of hand-worked glass, compared to that of the older icons on the glass it has a greater thickness. The painting is done in a fat tempera technique with oxides and egg yolk. The colour layer is relatively uniform, in some areas there are either granules of pigment coming from a poor contusing of it in the preparation of the colour, or transparent layers caused by the very thin layer of bedding colour. In some areas, the colour was matte, which leads us to think of a possible poor tempering of the colour

at the time of its preparation. Another general observation about the painting may be that it was done rather hastily. First, areas of bare glaze can be observed in a reduced proportion, and secondly, the layers are often chaotically overlapped and the brush strokes are often not very neat.

Upon entering the laboratory, the icon was in a good state of preservation. The frame and cover showed inactive xylophagous attack which resulted in a medium level embrittlement of these elements, with a greater extent in the areas of the lower and side sticks. The distance between the two boards of the cover led to the penetration of large amounts of dust, agglomerated deposits of plant matter, webs and spider pupae inside the icon and their deposition on the inner area of the cover but also on the colour layer. On the outside, both the frame and the cover showed a layer of dust and adhering dirt, as a result of improper storage, or greasy matter resulting from some rudimentary conservation or maintenance processes. In small areas of the face, hands and blue background and in some places in the clothing area, the colour layer showed exfoliation, detachment and loss of colour. Also on the painting layer, in the lower area of the icon, deposits of encrusted dirt resulting from periods of condensation combined with deposits of dust and cobwebs were found.

The technological process of the restoration began with the opening of the icon's cover and storing it separately from the work table. After removing the metal nails holding the two planks together, using tongs and spatulas to protect the adjacent areas, they were placed face down on another table. The next step was to extract the glaze from the frame and place it on a stable surface, as well as store the frame separately on a straight surface without separating the sticks¹.

The first operation carried out after disassembling the icon and separating its elements was the mechanical dry cleaning of the cover plates, which consisted in dusting and removing the dirt deposits on the reverse side. This was done with the help of rough and soft brushes, scalpel and steel wool. The back of the frame also went through this stage. The wooden elements were then structurally reinforced by injecting Paraloid B72 resin dissolved in 20% ethyl acetate in two stages. After the stage of con-

¹ Although there was a slight modification of the frame caused by microclimate fluctuations, due to its structural fragility, that operation was abandoned and it was kept in the form it was, without trying to approach the sticks in the corner area.

solidation of the wooden elements followed the wet cleaning of their reverse side with cotton wicks and ammoniacal water with a concentration of 2-3%, which contributed to the removal of dirty dust as well as traces of smoke. A solution of water, ethyl alcohol, and ammonia (90:10:10 drops) was used on the face of the frame and cover because fatty matter was also present.

One of the most sensitive stages was the removal of deposits from the surface of the painting layer. Although it generally held up very well, there were some areas of blind peeling, peeling, or weakly bonded colour that bounced with any shock, however small, and could result in colour loss and the creation of new layer gaps. This was when it was found that an urgent hydration of the layer with egg emulsion was needed because the colour layer had some sensitivity, possibly also due to high temperature exposures, lack of binder or hardening of the colour layer. Thus, after the mechanical removal of dust deposits, plant deposits, webs and cobwebs from the surface of the colour layer with soft, medium or thin brushes, we brushed with a soft thin brush a layer of egg emulsion (1 part yolk: 1 part water and vinegar for conservation) starting with the areas, we can say critical, which showed exfoliation and detachment, then continuing over the entire surface. During this stage, we noticed a particular sensitivity in the area of the orange brush strokes used for the vegetable decorations, the colour coming off in tight form. This, as in the other areas, was placed by pressing lightly with a brush with slightly coarse hair, moistened in emulsion, and before the layer was completely dry by pressing with a cotton pad passed over a non-stick sheet of *melinex* placed on colour layer. With

a stable surface I could move on to actually cleaning up the colour layer. This was done by brushing with egg emulsion (1:1) as in the previous step and with the help of small cotton wicks slightly soaked in water.² Because the cleaning was carried out in about three successive stages in which water and emulsion were alternated, for a consolidation of the colour layer a brushing with egg emulsion (1 part yolk: 2 parts water) was resorted to after the completion of the stage of complete removal of dirt.³ Finally, the layer gaps were cleaned with isopropyl alcohol and then followed the chromatic integration of them in the imitative watercolour technique.

The last operations in the technological process of restoration consisted of interventions aimed at the good conservation of the icon in the future. Before the glass was put into the frame, the rabbet was finished in the areas where the cut was rough, so that the glass would sit in a stable position without tension after the cover was placed. In the areas between the glass and the frame, but also in those between the glass and the cover, small pieces of felt were glued to avoid possible shocks and play of the glass in the frame. Finally, a wooden lath⁴ was made and inserted into the space between the two boards of the cover for protection and to avoid the penetration of various matters or insects under the cover. Finally, the cover and the lath were mounted with holzscrews to avoid shocks during installation, as was the case with metal nails knocks, but also for easy removal in the event of future interventions on the icon.

² Egg emulsion, used to not degrade the freshly hydrated layer and water to train the encrusted dirt.

³ Because the previous emulsions were also absorbed to some extent by the layer of deposits and combined with the water that came from the cleaning pads, the layer did not have enough binder for a definitive consolidation, the first being only with a prophylactic role.

⁴ Also chromatically integrated with the stain.

REFERENCES

- Băjenaru 2012 Băjenaru, Elena, *Icoane şi iconari din Ţara Făgăraşului*, Editura Oscar Print, 2012, pp. 153-156.
- Dancu 1975 Dancu, Juliana, Dancu, Dumitru, *Pictura ţărănească pe sticlă*, Editura Meridiane, 1975, p. 71.
- Irimie, Focşa 1971 Irimie, Cornel, Focşa, Marcela, *Icoane pe sticlă*, Editura Meridiane, 1968, p. 14.

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LISTA ILUSTRAȚIILOR

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1. Overview of icon face before restoration.



2. Overview of icon face after restoration



3. Overview of icon verso before restoration.



4.



5.

4. Detail of exfoliated areas on the saint's face.
5. Detail of exfoliated areas on the background.



6. Overview of the deposits inside.



7. Overview during cleaning.



8. Detail during the cleaning.