

Conservation and Restoration of Two Candleholders from Kaunas Church of St. George the Martyr: Reconstruction Proposals

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——— The paper is concerned with the process of developing the concept for the conservation, restoration, and reconstruction of the missing parts of the seventeenth-century candleholders from the Church of St. George the Martyr in Kaunas. The paper will review the issues encountered in the effort to find and select materials for the conservation and restoration of stone fragments. It will also describe the tests carried out during the process and highlight the role of chemical and non-interventional analysis as an auxiliary tool in the process of conservation and restoration.

Keywords: candleholders, Baroque, Kaunas Church of St. George the Martyr, Debnik limestone, stone conservation and restoration.



1.
One of the candleholders at the Church of St. George the Martyr in Kaunas, photo by Rima Valinčiūtė-Varnė, 2007

In the autumn of 2019, the Restoration Department of the Vilnius Academy of Arts was approached by Bernardine monks from the Church of St. George the Martyr in Kaunas. They wanted to have two stone candleholders in the Baroque style conserved and restored [fig. 1]. The paper reveals the art and technology research efforts by four sculpture restoration students.¹ The aim of the research was to identify the most appropriate methodology for the conservation and restoration of the fragments of the candleholders. Moreover, the clients wanted the existing seventeenth-century fragments to be restored to their original function and to be given a complete form; that is, the candleholders also had to be reconstructed in a way that was consistent with the principles and ethics of restoration.

When collecting data on candleholders, extremely valuable material was found in the files used to research the church and monastery of St. George the Martyr, conducted by Laima Šinkūnaitė and Rima Valinčiūtė-Varnė. This research was described in the monograph *The Monastery of*

¹ Students Rita Budvytytė, Agnė Jablonskytė, Erika Vilkinytė, Raimonda Žukauskaitė. The students were supervised by Ramunė Balandžiūnienė, sculpture restorer and lecturer.

Franciscan Observants of St. George the Martyr. A Vision of the Past,² featuring a great deal of historical photographs of the church that helped to identify the location of the candleholders in the church and their historical appearance. Very few research articles on stone restoration are available in Lithuanian, so the researchers mainly relied on international publications. The restoration methodology was developed on the basis of the following valuable publications: *Fills for the Repair of Marble* by the English sculpture conservator Jonathan Kemp, a paper which reviews various materials for filling surface voids, and “Paraloid B-72 as a Structural Adhesive and as a Barrier within Structural Adhesive Bonds: Evaluations of Strength and Reversibility,” a publication by Jerry Podany, Kathleen M. Garland, William R. Freeman, and Joe Rogers, which details a method for reassembling fragments using Paraloid B-72 and epoxy resin.³

As mentioned above, the monks wanted the candleholders to be suitable for their original purpose after restoration. To complete this task, we had to resort to the history of art, that is, to collect iconographic material, to find analogues of the candleholders, and to analyze the marks on their joining elements. At the time of writing this paper, the complex task of restoring the candleholders was not yet completed. Therefore, the paper concentrates on the research efforts and the decisions that had already been made.

Historical Data and Reconstruction Proposals

There is no precise data on when the candleholders appeared in the Gothic Church of St. George the Martyr, but given their extreme weight and size, it is likely that they were not frequently moved around and had a permanent place in the church. Analysis of the decor of the candleholders carried out by art historians Laima Šinkūnaitė and Rima Valinčiūtė-Varnė led to the assumption that the candleholders had probably been decorating the church since the end of the seventeenth century.⁴ Historical images

2 Laima Šinkūnaitė, Rima Valinčiūtė-Varnė, *Kauno Šv. Jurgio Kankinio pranciškonų observantų konventas. Praeities vizija* [The Monastery of Franciscan Observants of St. George the Martyr: A Vision of the Past], (Kaunas: Mažųjų brolių ordino Lietuvos Šv. Kazimiero provincija, 2018).

3 Jerry Podany, Kathleen M. Garland, William R. Freeman, and Joe Rogers, “Paraloid B-72 as a Structural Adhesive and as a Barrier within Structural Adhesive Bonds: Evaluations of Strength and Reversibility”, in *Journal of the American Institute for Conservation*, doi:org/10.1179/019713601806113120.

4 Laima Šinkūnaitė, Rima Valinčiūtė-Varnė, *Kauno Šv. Jurgio Kankinio pranciškonų observantų konventas*, 123.



2.
Interior of St. George's Church of Kaunas Theological Seminary: canons' pews in the presbytery, photo by Jokūbas Skrinška, circa 1933, Museum of the Samogitian Episcopate, GEK 1512



3.
The Great Altar of the Church of St. George the Martyr in Kaunas after 1936, Kaunas Archdiocesan Curia Archive, album 163 I/12

were sought when developing the concept for the restoration. Interwar photographs showed that the candleholders once had a round-shaped element at the top [figs. 2, 3]. However, there were doubts as to whether the composition of the candleholders in the iconographic material was authentic; after all, the photographs might have been taken after attempts to reconstruct the candleholders. The analogues that we managed to find [figs. 4–6] suggested that in the first half of the twentieth century, the already decayed candleholders were reassembled in such a way that a round-shaped detail, which may have once served as the foot of the candleholder, was placed at the top. This assumption was used as a basis for the first reconstruction proposal, where the feet of the candleholders have a round shape [fig. 7].

No precise historical data on the place of manufacture or the creator of the candleholders of the Kaunas Bernardine Church have been found so far. However, hints about the origin of the candleholders can be found in the characteristics of the material used. In the opinion of art historian Dr. Gintautas Žalėnas, the stone from which the candleholders were made could be Debnik (*Dębnik* in Polish) limestone, also known as “black marble.”⁵ This could be an important fact for a more precise attribution of the work. As Polish researchers Mariola Marszałek and Andrzej Skowroński point out, from the beginning of the seventeenth century, this rock was used primarily as a structural and decorative stone for tombstones and epitaphs, as well as for fragments of altarpieces, internal and external portals, balustrades, and the decoration of the floors and walls of buildings. The popularity of the stone was due to its suitability for polishing, producing a brilliant mirror-like surface. Examples of the use of Debnik limestone in the seventeenth and eighteenth centuries are particularly abundant in the Polish area, which is why scholars refer to this period as the “black marble period.” Articles made from Debnik limestone were widely exported to neighboring countries.⁶ Therefore, there is a very high probability that the candleholders from the Church of St. George the Martyr are the work of sculptors from the Debnik quarries, or at least that the stone came from there. The cultural historian Mindaugas Paknys, in his book *The 350-year History of Pažaislis*

5 From correspondence with Gintautas Žalėnas. Correspondent Raimonda Žukauskaitė, 2020.

6 Mariola Marszałek, Andrzej Skowroński, “Black “marble”: the characteristic material in Baroque architecture of Cracow (Poland)”, in *Materials, Technologies and Practice in Historic Heritage Structures*, ed. Maria Bostenaru Dan, Richard Plikryl, Ákos Török (Berlin; New York: Springer, 2010), 93–94, doi:org/10.1007/978-90-481-2684-2_6.



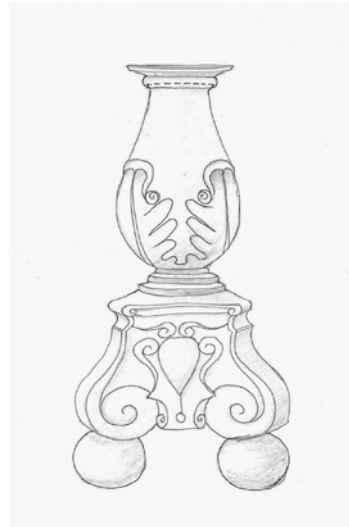
4. Candleholder; 1749, tin, casting, Church Heritage Museum, photo by Rita Budvytytė, 2020



5. Candleholder; 1749, tin, casting, Church Heritage Museum, Photo by Rita Budvytytė, 2020



6. Wooden candleholder with round-shaped feet, Pažaislis Church of the Visitation of the Blessed Virgin Mary to Elisabeth, Kaunas, photo by Rita Budvytytė, 2019



7. First proposal for the reconstruction of candleholders, aut. Raimonda Žukauskaitė, 2020

Monastery, has written in detail about the import of this stone to Lithuania.⁷ The Pažaislis church of the Visitation of the Blessed Virgin Mary to Elisabeth was the workplace of a German sculptor and stonemason, Master Nicolaus Wolscheid (Mikalojus Wolscheidas), who probably sculpted the four sculptures of the facade as well as some of the interior details of the church.⁸ The sculptor was buried in 1676 in the Church of St. George the Martyr in Kaunas. In memory of the deceased, a black stone epitaph plaque [fig. 8] was dedicated to him with the following inscription: *In this grave rests Nicolaus Wolcet / A great stonemason of Trier, who, while / He was working on the construction of the basilica of the Hill of Peace in / Erem, died on this 8th day of June in the year 1676, / From the Virgin birth fathers Camaldolese / in Erem, in the 34th year. / Thou, traveller; / Learn how to build an eternal house / Made of solid stones / And pray to God for me.*⁹ The plaque is now on display at the western fence in the south courtyard of the Church of St. George the Martyr [fig. 9]. These facts lead to the hypothesis that, perhaps, the candleholders were brought to St. George's church from Pažaislis as a sign of respect to the sculptor. Thus, a cautious assumption can be made that Wolscheid is the creator of the candle holders.

It should be noted that the Debnik limestone is a homogeneous, fine-grained, black or nearly black rock, sometimes containing fossils (gastropods, corals, hydrozoans) and/or thin filaments of calcite. The rock is characterized by a concentric structure in various shades of grey, while the inferior rock is heterogeneous, black and dark grey, detrital in texture, less dense, and naturally laminated.¹⁰ The aforementioned monograph on St. George's church and monastery refers to these candleholders as "marble."¹¹ This can be refuted because the stone from which the candleholders are carved, typical of Debnik limestone, contains fossils which are not found in marble (marble requires high temperatures and pressure to form, and therefore usually leaves no trace of fossils).

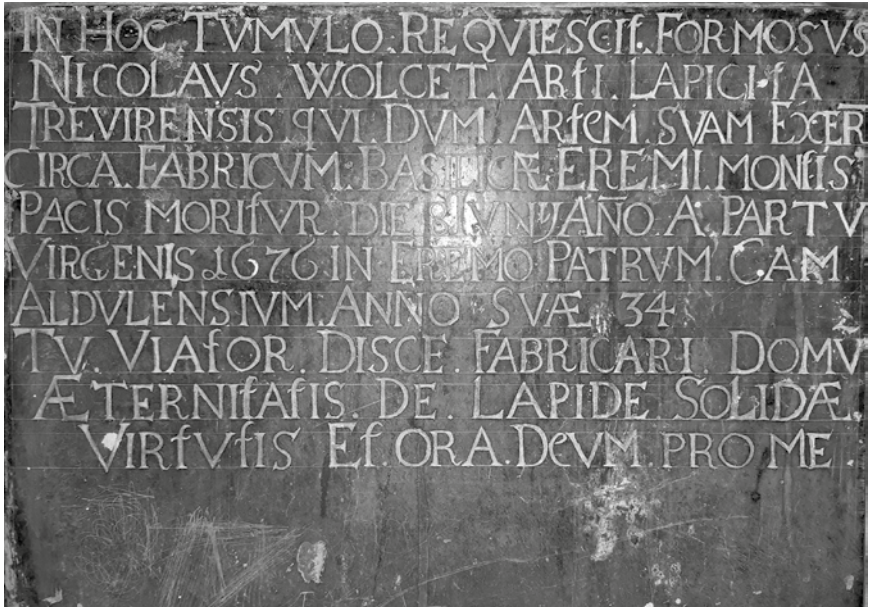
7 Mindaugas Paknys, *Pažaislio vienuolyno 350 metų istorija* [The 350-year History of the Pažaislis Monastery] (Vilnius: Lithuanian Culture Research Institute, 2014), 197–268.

8 *Lietuvos dailininkų žodynas*, vol. I: XVI–XVIII a. [Dictionary of Lithuanian Artists. Volume I: 16th – 18th c.], ed. Aistė Paliušytė (Vilnius: Kultūros, filosofijos ir meno institutas, 2005), 272.

9 Laima Šinkūnaitė, *Kelionė į Ramybės kalną. Pažaislio kamalduliu vienuolyno dailės ikonologija* [Journey to the Hill of Peace. The iconology of the art of the Camaldolese Monastery of Pažaislis], (Vilnius: Versus aureus, 2014), 178.

10 Mariola Marszałek, Andrzej Skowroński, "Black "marble", 94.

11 Laima Šinkūnaitė, Rima Valinčiūtė-Varnė, *Kauno Šv. Jurgio Kankinio pranciškonų observantų konventas*, 123.



8.

Epitaph to the sculptor Nicolaus Wolscheid, 1676, Kaunas, St. George's Monastery, photo by Raimonda Žukauskaitė, 2020



9.

The epitaph to the sculptor Nicolaus Wolscheid at the western fence in the southern courtyard of the Church of St. George the Martyr; photo by Ramunė Balandžiūnienė, 2022



10.
The portal of the Church of Sts. Peter and Paul in Vilnius, photo by Rima Valinčiūtė-Varnė, 2007



11.
Decorative element in the socle of the portal of the Church of Sts. Peter and Paul in Vilnius, photo by Erika Vilkinytė, 2020

During the restoration of the candleholders, another interesting fact came to light. A photograph of the Church of Sts. Peter and Paul in Vilnius was obtained from art historian Rima Valinčiūtė-Varnė [fig. 10]. It clearly shows that two strange decorative elements [fig. 11], which are very similar to the details of the candleholders in question, are embedded in the socle of the portal of the church. The Register of Cultural Heritage of the Republic of Lithuania identifies these details as “stone idols with relief decoration.” It also states that the stone details were embedded in the corners of the socle when the staircase was constructed in the second half of the twentieth century.¹² These elements raise a number of questions. Do they have a direct link to the candleholders being restored? Could they be the lost parts of the candleholders? When we measured the stone elements on the facade of the Church of Sts. Peter and Paul in Vilnius, we found that their dimensions were very similar to those of other fragments

¹² Register of Cultural Heritage, accessed January 20, 2022, <https://kvr.kpd.lt/#/static-heritage-search>. Ensemble of Vilnius Church of Sts Peter and Paul, the Lateran Monastery of the Canons Regular and other buildings. Vilnius Church of Sts Peter and Paul (UK K.VR 27300).



12.

S. Ciprian, Hearse of John III Sobieski, St. Stanislaus Church, Rome, 1696, copper engraving, Juliusz A. Chrościcki, *Pompa funebris Z dziejów kultury staropolskiej*, (Warszawa: Państwowe Wydawnictwo Naukowe, 1974), 129.
<https://core.ac.uk/download/pdf/51296093.pdf>.

of the candleholders being restored. The difference in dimensions is only a few centimeters. Although the fact that the candleholders we analyzed may have originated in Vilnius is a bit puzzling, we can see some connections. One of them is that the founders of the church in Pažaislis and the Church of Saints Peter and Paul in Vilnius were both noblemen from the Pacas family, and they were cousins. However, there are still many questions to be answered, and further research is needed.

The analysis of the candleholders also led to another cultural observation. *Pompa funebris*, a book by a Polish scholar named Juliusz Chrościcki, contains an image of the funeral hearse of the ruler John Sobieski in 1696 in the Church of St. Stanislaus in Rome¹³ [fig. 12]. The engraving shows two massive candleholders, very similar in style to those from the Church of St. George the Martyr. The candleholders depicted have a two-stage upper part, making them taller and more ornate than the candleholders from the Church of St. George the Martyr. Such massive candleholders were used at funerals and solemn services. The engraving, the round-shaped element

¹³ Juliusz Chrościcki, *Pompa funebris: z dziejów kultury staropolskiej* (Warszawa: PWN, 1974), 129.



13.
Second proposal for the reconstruction of the
candleholders, aut. Erika Vilkinytė, 2020



14.
Third proposal for the reconstruction of the
candleholders, Erika Vilkinytė, 2020

at the top of the candleholders in the interwar photographs, and the findings on the facade of the church in Vilnius suggest that the candleholders from St. George the Martyr may also have had a multi-stage upper part. On the basis of these findings, another reconstruction proposal has been put forward in which the upper part of the candleholders, as in the engraving, consists of two elements connected by a round-shaped detail [fig. 13]. However, such a composition would make the candleholders very heavy and immovable. Perhaps, the candleholders depicted in the engraving were of a different material composition.

In order to restore the aesthetic appearance and the intended function of the candleholders, a third option, temporary reconstruction, has also been proposed [fig. 14]. When examining the analogues, it was noted that a certain element was repeatedly found in every one of them. Thus, in the third option, it was proposed to use the element between the base and the upper part of the candleholders as their feet and the bobèche. Adhering

to the principles of compatibility and reversibility of materials, these parts had to be recreated by using new materials and techniques, thus achieving a harmonious unity of the work while clearly showing the difference between the new and the authentic.

Development and Justification of a Methodology for Conservation and Restoration

Stone conservation and restoration is a complex process that requires experience. Before conservation and restoration work began, a statement of defects was drawn up, one of the components of which is a description of the condition by visual observation. The description of the condition was supplemented by the chemical analysis report.

The candleholders are slightly different in height: the first is 129 cm and the second 121.5 cm. The bases are 44 cm high, the intermediate segments 9 cm high, and the top segments 76 cm and 68.5 cm high. The candleholders were found to be in a fair condition, with dust and dirt, random splashes of wax, and scratches on the stone surface. A fragment of the volute in the lower part of one candleholder was missing, a fragment of a decorative floral motif was broken, and in multiple places the stone and the edges of decorative elements were chipped or otherwise damaged. Traces of previous restoration were found, too: a black filler used to repair the cracks was made of charcoal, sand, and calcium carbonate (possibly crushed marble powder) with a protein collagen glue¹⁴ as the binding agent; the surface was painted with a layer of black oil-based paint¹⁵; and a fragment of the upper part of one of the candleholders reconstructed from mortar.

The visible surface of the base segments is polished, while the lower and upper segments and joining surfaces are not; there are signs of chiseling with tools of various sizes [fig. 15]. The intermediate segments have a slightly different profile, with only the visible surface polished, while the gluing surfaces are chiseled [figs. 16, 17]. The intermediate segments are glued into the sockets made for them in the base. A rectangular socket in the center of one element is empty, and a forged metal fastener is glued in the socket of another element. Only the outer surface of the upper segments is also

¹⁴ Jurga Bagdzevičienė, Žvakidžių poros cheminių tyrimų lapas, Lietuvos nacionalinis dailės muziejus Prano Gudyno restauravimo centras [Chemical Analysis Report of the Pair of Candleholders, Pranas Gudynas Centre for Restoration, Lithuanian National Museum of Art] (Vilnius, 2020).

¹⁵ Ibid.



15.
Bottom of the base of the candleholder; photo by Erika Vilkinytė, 2022.



16.
Intermediate segment No. 1, photo by Erika Vilkinytė, 2022



17.
Intermediate segment No. 2, photo by Erika Vilkinytė, 2022

polished; the lower and upper joining surfaces are chiseled. One element has rectangular holes both at the top and the bottom, while another element has rectangular metal bars glued at both the top and the bottom [figs. 18, 19]. There are three similar metal rods on each of the lower segments of the base segments, where the feet are located. The metal rods are rusty. The sockets found in the different elements of the candleholders, the glued metal rods, and the fact that the visible surfaces are polished but the joining surfaces are not, help us to better understand the principle of joining the parts of the candleholders and to identify the positions of the missing elements.

As there may be more than one approach to stone restoration, and as new approaches are proposed as time goes on, publications describing such proposals were sought. Several mixtures of different compositions were tested during the analysis of the methodologies described in stone conservation and restoration literature. Reference was made to Jonathan Kemp's article "Fills for the Repair of Marble," which provides an overview of different materials for filling surface fractures. The article stressed that fillers should meet the following requirements: they should be of softer material and reversible, that is, easily removable, non-toxic, and safe to use.¹⁶ The first group of mixes reviewed was lime. Tests were carried out on these mixtures. Their compositions and results are described in the table below.

	Composition	Result
1	Equal parts by volume of silica sand, marble powder, lime putty + black pigment paste (black pigment mixed with water).	The dried mass turns gray (probably due to lime) and crumbles when swiped with a finger.
2	Equal parts by volume of silica sand, marble powder, lime putty + black pigment paste, ~5% casein.	The dried mass turns gray and crumbles when swiped with a finger.
3	Equal parts by volume of 13% casein (40 g casein powder, 125 ml water, 16 g borax dissolved in 125 ml of hot water), marble powder + black pigment paste.	The solidified mass does not turn gray; it remains dark and rather fragile (can be broken by hand). Adhesion to the stone surface is quite good. The surface does not crumble when swiped with a finger and can be easily removed with a scalpel (no traces of the mass remain). Can be scrubbed with sand paper.

¹⁶ Jonathan Kemp, "Fills for the Repair of Marble", in *Journal of Architectural conservation*, no. 2, vol. 15, 2009, doi:org/10.1080/13556207.2009.10785048.



18.
Top of candleholder No. 1, photo by Erika Vilkinytė,
2022



19.
Top of candleholder No. 2, photo by Erika Vilkinytė,
2022

The mixture compositions and application results listed in the table show that the third option would be the most suitable for repairing the damaged surface.

Following the results of the chemical analysis,¹⁷ the conservation and restoration methodology now proposes to remove dust and dirt and to clean the surface with distilled water. Wax should be removed mechanically, using wooden tools to protect the stone surface. The proposal to remove wax by heating has been abandoned, as wax may soak into the stone and stain the surface. Seeking to expose the calcite filaments and traces of fossils in the stone, the option of removal of oil paint from the candleholders has also been considered [figs. 20, 21]. Importantly, the stone from which the candleholders are made is a carbonate rock that reacts with acids. Thus, it is proposed to avoid the use of any acidic medium. Previously it was proposed to remove the oil paint from the surface by cleaning it with cotton swabs soaked in a mixture of solvents consisting of turpentine and ethanol in equal parts by volume. The mixture dissolved the paint, but the desired result would require repeated cleaning of the same area several times. A more effective method of paint removal was desired. Therefore, an attempt was made to add one part by volume of acetone to the solvent mixture described above. This gave us a more effective mixture for paint

17 Jurga Bagdzevičienė, Žvakidžių poros cheminių tyrimų lapas, 2020.



20.
Calcite veins, photo by Erika Vilkinytė, 2021



21.
Traces of fossils, photo by Erika Vilkinytė, 2021

removal. The paint was unevenly applied to the surface of the candleholders: in some places the layer was thinner than in others. Thus, it was suggested to repeat the procedure where necessary. The conservation and restoration methodology proposes to abandon the idea of repairing the voids on the stone surface and to re-attach the broken off fragment by bonding. The bonding of the broken off fragment represents yet another problem. There was a fragment of the decorative floral motif that broke off from the upper part of one candleholder. It was necessary to find an adhesive with sufficiently strong bonding properties. The literature on the restoration of stone objects describes several methods of bonding. One of them is to re-attach the fragment by using a casein solution. This method is described in the book *Technology and Restoration of Sculpture Decoration* by Kęstutis Stepšys, an experienced sculpture conservator. In his book he states that a casein solution can be used to glue marble fragments, and recommends adding marble flour to thicken the solution.¹⁸ Another option is to use Paraloid B-72 and epoxy resin. This method is described in detail in the article “Paraloid B-72 as a Structural Adhesive and as a Barrier within Structural Adhesive Bonds: Evaluations of Strength and

¹⁸ Kęstutis Stepšys, *Skulptūrinio dekoru technologija ir restauravimas* [Technology and Restoration of Sculpture Decoration], (Vilnius: Vilniaus dailės akademijos leidykla, 2005), 62.

Reversibility.”¹⁹ The article indicates that a layer of Paraloid B-72 creates a soluble barrier between the epoxy resin and the stone surface. This is important because epoxy resins have been found to be thermosetting polymers that become insoluble over time.²⁰ Thus, it can be argued that the use of these two materials makes the bond strong but reversible. The bonding methods identified are still being tested, and the final decision is still pending, so the results cannot be presented in this paper.

Conclusion

Although the candleholders were received for restoration in 2019, the process was still in an intermediate stage when this article was written in 2021. Nevertheless, the research carried out and the conclusions drawn so far are very important and are therefore summarized in this paper. Historical material has been collected, reconstruction proposals have been drawn up, chemical analyses have been carried out, several filling mixtures have been tested, and the methodology for conservation and restoration work has been nearly completed. The pair of candleholders are rare and are unique in Lithuania, so efforts are being made to proceed with caution and select optimal restoration methods. In addition, it seems that due to the lack of data, the candleholders will not be reconstructed after all and will be exhibited without using them for their original purpose. Nevertheless, the exploration of the idea of reconstruction presented an excellent learning opportunity for the students, showing that a lot of historical and iconographic material needs to be gathered in order to provide a solution. It is necessary to have a good understanding of the period under analysis as well as how a piece of art fits the period. It is important to identify the plasticity and decorative properties of a piece of art. The collection of material for the reconstruction has led to the discovery of some valuable information that is likely to be useful in future restoration projects.

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¹⁹ Jerry Podany, Kathleen M. Garland, William R. Freeman, and Joe Rogers, “Paraloid B-72 as a Structural Adhesive and as a Barrier within Structural Adhesive Bonds: Evaluations of Strength and Reversibility”, in *Journal of the American Institute for Conservation*, doi:org/10.1179/019713601806113120.

²⁰ Janina Lukšėnienė and Ričardas Matuška, “Sintetiniai polimerai – dailininkų ir restauratorių medžiagos” [Synthetic Polymeres for the use of Artists and Restorers], in *Muziejinių eksponatų priežiūra*, part II: *Meno kūrinių restauravimo etiniai ir estetiniai principai* (Vilnius: Lietuvos muziejų asociacija, 2009), 320.

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Santrauka

Žvakidžių poros iš Kauno Šv. Jurgio Kankinio bažnyčios konservavimas ir restauravimas, rekonstrukcijos projektai-pasiūlymai

Ramunė Balandžiūnienė, Erika Vilkinytė, Raimonda Žukauskaitė

Reikšminiai žodžiai: žvakidės, barokas, Kauno Šv. Jurgio Kankinio bažnyčia, Debniko kalkakmenis (klintis), akmens konservavimas ir restauravimas.

Straipsnyje pristatytos XVII a. akmeninių žvakidžių poros iš Kauno Šv. Jurgio Kankinio bažnyčios konservavimo, restauravimo ir trūkstamų dalių atkūrimo koncepcijos paieškos. Pateikta istorinės ir ikonografinės medžiagos analizė, atlikta siekiant pasiūlyti žvakidžių trūkstamų dalių rekonstrukciją. Remiantis surinkta istorine medžiaga ir analogais pateikti trys žvakidžių trūkstamų dalių rekonstrukcijos pasiūlymai. Išanalizuotos literatūroje aprašytos akmeniui konservuoti ir restauruoti taikomos metodikos. Straipsnių pagrindu atlikti įvairių sudėčių mišinių bandymai, skirti paviršiaus išdaužoms užpildyti. Atrinktas vienas tinkamas mišinys. Taip pat pasiūlyti du nuskilusio fragmento priklijavimo metodai. Tinkamiausiam metodui išrinkti reikia atlikti papildomus bandymus. Detaliai aprašyti atlikti cheminiai ir natūros tyrimai. Vadovaujantis atliktais tyrimais ir bandymais pasiūlyta žvakidžių konservavimo ir restauravimo darbų metodika.