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LETTERS ON BIRCH BARK: HISTORY AND CONSERVATION OF OBJECTS FROM THE MUSEUM OF REV. JÓZEF JARZĘBOWSKI IN LICHEŃ STARY

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Introduction

Museums preserve a great variety of objects of which some have no peculiar artistic value, yet embody a particular historical worth, often also emotional. In many a case such museum exhibits made of or from untypical materials and executed with the use of refined techniques constitute a particular challenge to museum curators whose goal is to preserve everything so that all collections last the longest possible and in the best possible condition. Such objects can be found among the collection of the Museum of Rev. Józef Jarzebowski in Licheń Stary. Having launched its operation in 2010, the Museum is the continuation of the Museum of the Marian Brothers at Warsaw's Bielany founded in 1925, and following WW II transferred to Fawley Court in Great Britain, where it operated in 1953–2006. The Museum collection currently boasts over 10,000 objects containing, e.g., Polish and foreign antique books, letters, royal autographs, and documents, Polish writers' manuscripts, mementoes of the January Uprising, two collections of cold steel: European and Oriental, European painting, mementoes of prisoners of Nazi camps and of Soviet gulags. Among the latter there are two letters written on birch bark dispatched by the author signed as 'Janka' and 'Jaśka' to her mother from the Polovinka Gulag in the Urals in 1946 and 1947.

The letters on birch bark

The letter from 1946 (ACNO. ML/P/200/1) is composed of three leaves of birch bark tied with a string. The first of them is blank, with no ornaments or text. The second features three decorated Easter eggs and three pussy-willow twigs. Above these an inscription reads: 'ALLELUJA, ALLELUJA' [HALLELUJAH], HALLELUJAH], below: 'Ural. Połowinka. 21.IV.1946' [The Urals, Polovinka, 21 April 1946]. Both the drawing and the text were executed with a copying pencil. The obverse and reverse of the third leaf contains the letter's text, also written with an indelible pencil:

Najukochańsza Mateńko! / W dniu Zmartwychwstania / Pańskiego, łączę się z Tobą / w modlitwie i proszę Boga / o złączenie mię z Tobą i drogimi / mi osobami / całuje / Twe najukochańsze ręce / Janka P.S. Proszę o częste pisanie. Ja / jestem zdrowa. Proszę o zdjęcia / posłać można w paczce. Jakże / [My Beloved Mother! On the day of the Lord's Resurrection

I am together with you in prayer and I beg the Lord to be reunited with you and all my beloved. I am kissing your dear hands. Janka. P.S. Please, write often. I am in good health. Please, send photos they can be put in a parcel. How]

Twe zdrowie. Irenie podaj mój adres. Co jest z Tośkiem / [are you feeling. Give Irena my address. How is Tosiek] – on the reverse of the sheet the letter continues: Dla wszystkich krewnych / i znajomych serdeczne życzenia i pozdrowienia / Janka /

21.IV. 46.

[Best regards and greetings to all the relatives and friends Janka 21 April 1946]

The second letter, the one from 1947 (ACNO. ML/P/200/2), is a single leaf of birch bark, featuring on one side pressed yellow flowers pasted, with the inscription giving the location and year: 'Połowinka 1947' [Polovinka 1947]. The other side contains the text written in blue ink:

Najukochańsza Mateńko! /

Proszę przyjąć najserdeczniejsze życzenia w dniu / Twego Imienia, Daj Boże, aby to były ostatnie / tak smutne Imieniny. Pragnę, życzę / Tobie, zobaczyć Cię w dobrym zdrowiu. / W dniu Twoich Imienin będę z Tobą w kościele / na Mszy św., może Bozia wysłucha modlitwy / Matki u stóp ołtarza i Jej dziecka rzuconego przez los / gdzieś daleko i położy kres temu tułaczemu / życiu. /

Całuję Twe najukochańsze / ręce / Jaśka

[Dearest Mother! I am sending you my best wishes on your Name Day. I am begging the Lord for this to be the last such sad Name Day. My desire is, and wish it to you, to see you in good health. On your Name Day I shall be together with you at a Holy Mass, maybe the Lord will hear the prayer said at the altar of a Mother and of Her child cast by destiny somewhere far, and will bring an end to this life in exile. I am kissing your beloved hands Jaśka]

Historically, birch bark was used for many purposes, one of them being the application of its inner layers for writing, known in many cultures and at different places worldwide: from antiquity to the mass production of paper in the 10th century, but also later and occasionally until the present day.¹ The letters discussed in the article constitute a very special and unique fragment in the history of using birch bark for writing. In this particular case the use of bark was not of choice, but of necessity and determination. For people exiled to Soviet gulags birch bark was often the only material available for writing letters, allowing them to stay in touch with the family and friends. This gave them a semblance of normality in life; and despite many limitations and censorship, letters sustained their hope for survival and return home. Letters written on birch bark were sent from Siberia by Poles as well as citizens of other nations exiled there. Preserved until today, they constitute an important testimony to Stalinist persecutions. Their enormous historical and civilizational impact was confirmed by the fact that the Latvian collection was inscribed in the UNESCO Memory of the World Register² in 2009 (complemented in 2013 and 2017),³ and so was the Lithuanian collection in 2015.⁴ In Poland similar documents are scarce. Apart from the Licheń Stary Museum, they can be found in the collection of e.g., the Museum of the Second World War in Gdansk,⁵ the Sybir Memorial Museum in Białystok,⁶ and the Institute of National Remembrance in Warsaw.⁷ In 2022, the Lithuanian, Latvian, and Estonian National Committees for UNESCO with the contribution of Poland, Finland, Moldovia, and Ukraine proposed for all the specimens of writing on birch bark made in the 20th century during the exile to the Soviet Union to be included in the Memory of the World Register. Naturally, also the letters from Licheń Stary were included in the application.

How did the letters reach the Museum?

The history of the Museum of Rev. Józef Jarzębowski in Licheń Stary spans almost 100 years, having begun in 1925

ALLELUJA Iral - Potowinka 21.11.1946 714120 , lycae mp adamy attaic John Alroleve 12 200

1. The letter from 1946, state before conservation. Drawing on the obverse of the second sheet. Text on the obverse and reverse of the third sheet. The drawing and text executed with a copying pencil, Photo Michał Obarzanowski

when Fr Józef Jarzębowski (1897–1964) created a museum at the Gymnasium of the Marian Brothers at Warsaw's Bielany. The outbreak of WW II forced the evacuation of the collection out of Warsaw. Following a ten-year wandering across the Soviet Union, Japan, USA, and Mexico, in the course of which Fr Józef continued to acquire new objects, he and the most precious specimens from his collection finally reached Great Britain. There, at the Fawley Court estate near London, in 1954, the Divine Mercy College was reactivated, also providing premises for the Museum.⁸ Although England was meant to be only a stop-over on the return to free Poland, Fr Józef's dreams did not come true



 The letter from 1947, state before conservation. The obverse with pasted pressed flowers. The text written with a pen and ink on the obverse and reverse, Photo Michał Obarzanowski

during his lifetime. He died in 1964 in Switzerland, while the Museum operated in England until 2006 when the decision was made that the collection would return to Poland. And Poland provided its final home within the Sanctuary of Our Licheń's Mother the Sorrowful Queen of Poland in Licheń Stary where the Museum of Rev. Józef Jarzębowski was opened in 2010.

From the moment when the collection reached Licheń Stary its tidying was started. It has been a challenging task, since previously no accession book had been run, and some objects came from England devoid of any description or information on where they had come from. Therefore, today no data have been identified how and when the letters dispatched by Janka from the Siberian gulag reached the Museum collection, although it is likely that they were one of many donations to the Museum at Fawley Court among which mementoes related to Poles' struggle for independence in 1939–1945 and 1945–1989 dominated.

Who was Janka?

Without museum documentation it is impossible to find out what the surname of the letters' author was. All that we know from her signature is that her Christian name was 'Janka/Jaśka'. Also the time when the letters were written: 1946 and 1947 as well as the place: Polovinka are known. Using the available information, the Museum staff were able to identify Polovinka as one of the Soviet Gulags in the central Urals, established to provide workforce for a coal mine. In the



3. Janina Bronisława Stebnicka (1922–1997). Photo likely from 1938–1939, Stanisław Tyczyński's archive

Stalinist era, the exiled prisoners came from Poland, Germany, and Russia. The prisoners worked at the local mine and constructing a dam. It has also been confirmed that in 1945 arrested Home Army (AK) soldiers opposing the Communist regime were sent to Polovinka.

In 2011, issue 37 of Gość Niedzielny contained an article of Stanisław Zasada⁹ talking about these unusual exhibits. At the end of his paper the journalist posed several questions: Who was Janka? How did she end up in the gulag? Did she return safely to Poland? Soon afterwards, the paper's author received information pointing to Janina Stebnicka as the letter's author. It was verified when that person was imprisoned in the Polovinka Gulag. The dates of the imprisonment and those visible on the letters coincided. Following subsequent papers issued online and in Catholic magazines,¹⁰ Stanisław Tyczyński, Janina Stebnicka's son, contacted the Museum, and that was the gamechanger in the process of solving the mystery of Janka's letters. Mr Tyczyński confirmed the letters' authenticity, explaining that Irena was Janka's sister, while Tosiek mentioned by Janka in her letter was his father, at the time Janka's fiancé whom she had met in the resistance movement where she was a nurse. Furthermore, Mr Tyczyński provided the Museum with copies of various family documents, including his mother's photograph and the following biography.

Janina Bronisława Tyczyńska née Stebnicka was born in Lvov on 6 October 1922 as a daughter of Karolina Kostecka (d. 27 Mach 1970 in Krakow) and Eustachy Stebnicki

(d. 4 May 1933 in Lvov). She had a sister: Irena Stebnicka--Mokrzycka (b. 23 February 1925 in Lvov – d. 18 February in Krakow). After araduating from primary school, she went to the State Commercial Gymnasium in Lvov from where she graduated in 1940 already under the Soviet occupation. From November 1941 to June 1944, she was active within Home Army (AK) structures in Lvov, initially as a liaison officer, and later, despite her young age, as the Chief of Women's Training for the Northern Lvov District. Simultaneously, between October 1941 and June 1944, she worked at the Lvov shoe factory as a blue-collar worker. In the resistance movement she met her peer Antoni Tyczyński vel Henryk Szewczyński, nom de guerre 'Shrapnel'. When getting engaged, they were unaware that the destiny was going to separate them for many years. The first attempts to arrest Janina by NKVD in the Stebnickis' house in Stroma Street in Lvov took place in late July-early August 1944, after the Soviet troops had re-entered Lvov. From that time Janina went into hiding. Hoping that the danger of being arrested had passed, in spring 1945 she decided to visit her mother and sister. It remains unclear how NKVD learnt about Janina's visit home, yet the following day she was arrested and imprisoned in Kazimierzowska Street in Lvov (Prison No. 4), nicknamed 'The Bridgettines'. Sentenced to 10 years in gulag, she was a prisoner of the following: April 1945–October 1948, Urals Gulag, Molotovskaya Oblast, NKVD Shobock Gulag, Kolonna 204 st. Gulag, Polovinka. She worked mainly with forest felling and as a nurse at the camp hospital run by the Volga Germans. The counterintelligence of the Kedyw of the Lvov District knew about Janina Stebnicka's exile, this testified to by the parcels she received in the Gulag from UNRRA dispatched in Palestine. It is likely that the same (return) channel was used to send the cards written on birch bark to her mother Karolina Stebnicka via Palestine to the West. They could not reach Janina's mother in Lvov, since in 1945, both Janina's mother and her daughter Irena, Janina's sister, were repatriated, to settle down in Krakow. In October 1948, Janina was released from gulag, after which together with Zofia Dunikowska, a daughter of the sculptor Xawery Dunikowski, she was repatriated via Biala Podlaska to Poland, to reach Krakow via Częstochowa. Both women were greeted in Krakow by Xawery Dunikowski; Janina's mum was unaware of her return. It may have been only through Janina's contacts with the Krakow bohemians that she succeeded in finding her mother and sister Irena. On 3 February 1950, Janina graduated from a two-year commercial secondary school in Krakow, also passing her school-leaving examination. In 1949–1950, she graduated from the 1st level college at the Higher School of Economics in Krakow, to subsequently take up the 2nd level university course, on 9 August 1955 having been conferred the degree of a Master in Economics. It remains unknown under what circumstances Antoni Tyczyński vel Henryk Szewczyński found Janina in Krakow. On 25 April 1956, they got married in Krakow. On 25 January 1958, their son Stanisław was born. Janina and Antoni were not granted the opportunity to enjoy a happy life together with their son for long. Antoni Tyczyński died in Krakow on 21 March 1964. Janina Tyczyńska worked as the Chief accountant/Financial Director of many cultural institutions in Krakow, such as the Opera and the Operetta, Krakow Entertainment, The Rozmaitości/

Bagatela Theatre, Polish Music Publishers. Having retired in 1984, she passed away in Krakow on 18 June 1997.

Museum conservation of Janina Stebnicka's letters

The letters' story combined with the materials and technique used for their execution explains the changes and damages resulting in them. The Museum insisted on finding an efficient method of their preservation to prevent further degradation. Once again did Stanisław Tyczyński prove helpful in this respect: he actively searched for specialists who could conserve his mother's letters, additionally financing the project which was implemented by Janusz Czop, PhD, and Marta Winiarczyk, MA, from Krakow. The work was performed in harmony with the principles of museum conservation, covering three complementary areas: diagnosis, namely analysis and research to best identify the objects; treatment, consisting in repair, conservation, and restoration interventions; and finally, prevention, meaning actions aimed at eliminating or minimizing future damage and changes, all these in effect prolonging the object's life. For this reason preventive conservation based on objective research results is in contemporary museums a priority.

Initially, the state of preservation of both objects was assessed. The 1946 letter was written on three bark leaves, naturally connected along the left edge, and created by cutting and delaminating a single piece of birch bark. The leaves were additionally tied with a white-and-red string, passing through a knothole. All the leaves were brittle, fragile, and sensitive to touch. The first leaf was strongly bent, and did not shut to its original position. On the obverse it featured local delamination of thin layers of the bark exfoliating, and small tears on the edges. The bark of the letter had delaminated at places, and small losses could be observed. The text written with a copying pencil was legible, albeit having changed the colour to violet and faded in some places.

The 1947 letter was written on a very thin single leaf of birch bark. It was extremely brittle, fragile, and very sensitive to touch. There were local delaminations of the outer bark layers, while the upper right corner (when looking at the manuscript) was entirely torn off. Although legible, the dark-blue ink had faded in some places. The fact that pressed flowers were pasted on the reverse deformed that leaf: it was wrinkled, with pressed creases. Along the right edge there was even a damp patch. The flowers were well preserved, with minor losses of the petals. The yellow colour of the flowers had stayed vivid, while the green of the stems has faded and yellowed.

To sum up, it was determined that the condition of the 1946 letter, despite deformations and damages, was stable, while that of the 1947 letter was defined as bad. In both cases the brittleness and sensitivity of the fine birch bark leaves caused that every manipulation or moving of the 80-year-old objects created the risk of further damage. Moreover, the texts, drawings, and ornaments found on the letters were little resistant to changes caused by light.

The conservation project assumed as its main goal the protection of the letters against further deterioration in a manner maintaining the natural look of the birch bark and working out a safe method of their preservation and display.



4. The letter from 1947. Lack of scripture traces in IR demonstrates lack of soot in the investigated ink, Photo Michał Obarzanowski



5. The letter from 1946. The drawing and text visible in IR may suggest the presence of carbonaceous substance (soot or graphite), Photo Michał Obarzanowski

Prior to any further activities both objects were appropriately protected and stabilized on an underlayer of acidfree cardboard. To begin with, the letters were studied in a complex series of technological tests conducted by the following team of scientists of the Laboratory for Analysis and Non-Destructive Testing of Historical Objects at the National Museum in Krakow: Julio del Hoyo-Meléndez, PhD, Anna Klisińska-Kopacz, PhD, Anna Ryguła, PhD, and Michał Obarzanowski, MA. Photographs were taken in visible light (VIS), in ultraviolet light (UV), and infrared light (IR), which provided information on the state of preservation of the studied objects and on the technique used for their execution. Lack of traces of writing in IR on the 1947 letter pointed to the absence of soot in the tested ink. Meanwhile, the exposure of the drawing and text in IR light in the 1946 letter can testify to the presence of a carbonaceous substance (soot or graphite) in the tested layer. Optic microscope was used to study fragments of the painterly layer and of the writing. The 1947 letter showed a double nib trace, which confirmed the application of a pen and suggested that ink was used.

The next stage of the works was focused on the analysis of the elemental composition with X-ray fluorescence (XFR). Tests on the blue ink from the 1947 letter demonstrated high iron (Fe) and potassium (K) contents characteristic of



6. The letter from 1947. Double trace of a nib confirms the use of a pen and suggests the use of ink, Photo Anna Ryguła



7. The letter from 1946. Analysis of the elemental composition with X-ray fluorescence (XFR), Photo Anna Klisińska-Kopacz



8. The letter from 1947. Lightfastness testing of the object materials, Photo Julio M. del Hoyo-Meléndez

the blue pigment: Prussian blue. As for the violet drawing in the 1946 letter, high contents of chlorine (CI) and manganese (Mn) were found. The fact that these elements were identified suggested the application of organic crystal violet (C25H30N3CI) that belongs to the group of aniline dyes. The presence of manganese (Mn) results from the synthesis process in which manganese dioxide (MnO₂) is used as catalyst. The final confirmation of the chemical composition of the used substance required further analyses. Subsequently, FTIR infrared spectroscopy measurements were performed in which spectra characteristic of cellulose (1373, 1091, 877 cm-1) and lignin (1456, 1028 cm-1) confirmed the use of birch bark. The violet dye was identified with Rama spectroscopy. Its results showed spectra at 1621, 1367, 1298, 1182, 914 cm-1 characteristic of the crystal violet: Tris (4-(dimethylamino)phenyl)methylium chloride, which confirmed the earlier XRF results.¹¹ Additionally, spectra were also observed at 2721, 1582 cm-1 characteristic of graphite, which remained in harmony with the observation of the object in infrared light.

Another element of the study was lightfastness testing of the objects. Blue Wool Standards were used for reference to identify the range of changes observed within the investigated areas. Based on the results it could be said that the trace of the copying pencil (crystal violet) showed very low resistance to light, the birch bark and the flowers showed low resistance to light, while the violet 'lines' of the bark showed moderate resistance to light.

Before the conservation works tests on contemporary birch bark were conducted involving pasting underlayers with the use of different adhesives (modified wheat starch and methylocellulose) as well as of various types of filter paper of varied basic weight (6-g typewriter and 4-g long-fibre Japanese tissue with the kozo plant) as materials generally used in conservation of such objects.¹² Furthermore, various adhesion methods were tested: by natural drying, drying under weight, and Kauter-pressing. The Kauter base heated up to 80°C did not leave any visible changes on the light bark, quickly drying the tested lining adhesion. Having compared all the results, the staff selected the 4-g long-fibre Japanese kozo tissue adhered with methylocellulose, and Kauter-dried.

In the 1946 letter, to begin with the strongly bent first leaf was straightened up so that it could shut to its original position. The bark was locally humidified with the use of damp filter tissue, and pressed. Local tears of the bark were lined with small strips of Japanese tissue and Kauterpressed. Methycellulose was applied with the use of Kauter to line the delaminations on the leaf edges. The conservation of the 1947 letter was started with the elimination of the damp patch from the leaf edge by local Kauter ironing of a damp filter tissue. The mending was done from the side of the pasted flowers so as not to spoil the legibility od the text regardless of the high transparency of the used tissue. Tears and losses were lined in the same manner: with strips of Japanese tissue adhered with methycellulose, while the delaminations were mended with methycellulose only. In neither case was it decided to refill the losses, this owing to the assumed goal of preserving the natural and genuine aspect of the birch bark leaves, and the fact that after the conservation the existing losses would not cause the risk of further damage.

The last stage of the works encompassed designing and making of an individual casing for both letters allowing their safe storage, manipulating, and museum display. The 1946 letter was placed on a rigid underlayer made of acid-free cardboard and packed in a four-leaf envelope. The 1947 letter is very thin and little resistant to mechanical damage, therefore it was inserted between two thin layers of acrylic glass, which is an optimal solution in the case of such degraded objects on birch bark.¹³ The Optimum Museum Acrylic was used, together with a frame made of acid-free cardboard which secures a distance between the glass layers in order to avoid the letter and the flowers being pressed between the two. Two frame's outer edges had canvas pasted around. The frame with the letter was inserted in a four-leaf envelope. Both letters were placed in one box made of corrugated fibreboard.

In relation to the test results and conservation standards for museums¹⁴ recommendations for safe storage and display of the birch bark letters were formulated:

- Owing to the type of materials ranking among the group sensitive to chemical degradation it is recommended to store the letters at: T = 12–15°C (± 1°C) and RH = 45–55% (± 5%) and display them at: T = 18–20°C (± 1°C) and RH = 45–55% (± 5%).
- Store in dedicated packages.
- Display only in a display case, and the 1947 letter always in the frame.
- The objects must not be lit directly with sunlight. They should be lit with UV-free artificial light at max 50 lux. The aspired optimal light intensity should stand at < 50 lux, while also securing the comfort of viewers.
- The maximal display time: 8 weeks/12 months. Optimally, the objects should be displayed as rarely as possible for the shortest possible time.

Conclusion

Letters on birch bark dispatched from Soviet gulags in the 1940s and 50s are unique and rare artefacts in European museum collections. Few of them have been preserved, and each boasts a historical and emotional value, having additionally testified to the destiny of hundreds of thousands of individual life stories of those who suffered Soviet repressions in the Stalinist times. In the case of the two letters preserved at the Museum of Rev. Józef Jarzębowski in Licheń Stary it was possible to identify their author, as well as to learn about her life after the gulag, while thanks

Abstract: Artefacts made of and from untypical materials with the use of sophisticated techniques preserved in museums constitute an exceptional challenge to museum curators. Such is the case of two letters described in the paper, written on birch bark by someone signed as the female: Janka and Jaśka dispatched to her mother from the Soviet Polovinka Gulag in the Urals in 1946 and 1947. Currently, the artefacts are in the



9. The letter from 1946, state after conservation. Placed on a stiff underlayer made of acid-free cardboard, the letter is packed in a four-leaf envelope, Photo Janusz Czop



10. The letter from 1947, state after conservation. The letter is placed between two thin layers of acrylic glass together with a frame of acid-free cardboard. The frame with the letter is packed in a four-leaf envelope, Photo Janusz Czop

to the museum conservation the letters were preserved so that they could last and be available for viewing not only to the present, but also many generations to come.

collection of the Museum of Rev. Józef Jarzębowski in Licheń Stary, while their history was explained only in the 2010s. In 2022, the letters underwent museum conservation, which allowed to find out what material they were written on and what technique was used for the execution, following which they were appropriately preserved so that they can last the longest possible minimizing their deterioration.

Keywords: letters, birch bark, Soviet gulag, Museum of Rev. Józef Jarzębowski in Licheń Stary, museum conservation.

Endnotes

¹ See https://en.wikipedia.org/wiki/Birch_bark_manuscript (Accessed: 3 July 2023).

² UNESCO' Memory of the World International Register): an international project launched in 1992 in order to carry out activities aimed at preserving, safeguarding of and increasing accessibility to manuscripts, prints, inscriptions, audiovisual documents (recordings, videos) which are heritage of humanity. The project has allowed to create an international Register of the most valuable objects. The first of them were inscribed

in the Register in 1997. The Register is complemented every two years at special sessions of the Programme's International Advisory Committee. In 2017, it contained 427 documents, of which 15 were from Poland. See https://pl.wikipedia.org/wiki/Pami%C4%99%C4%87_%C5%9Awiata#c ite_note-2017list-1 (Accessed: 4 July 2023).

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