

A STUDY OF ABANDONED UKRAINIAN WOODEN CHURCHES IN POLAND. CURRENT STATE AND CONSERVATION RECOMMENDATIONS

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Abstract

The paper summarises conservation research carried out on abandoned wooden Ukrainian Greek-Catholic churches from south-eastern Poland. As an example, two architectural objects remaining in complete ruin are discussed: the church in Babice and the church in Mięgisz Stary. Both of them were erected in log construction and have rich interior polychrome. Conservation methodology was discussed, which must combine often contradictory challenges and aspects: both the need to stabilise the architectural body (which requires the replacement of a significant amount of historical substance) and the intention to preserve as much as possible the remains of the interior painting decoration (in the majority, polychrome was made directly on structural elements). The method of polychrome transfer was therefore discussed, which guarantees the preservation of the authentic character of the temples as well as their aesthetic and historical value. In addition, a detailed study of the remains of the iconostases of both temples (icons are currently stored in museum warehouses) and the issue of the possible restitution of the iconostases, along with a discussion of the necessary technical solutions for this procedure, are presented.

Keywords: *Ukrainian heritage; Wooden Greek-Catholic church; Iconostasis; Abandoned Wooden Church; Conservation of Wooden Heritage; Polychrome of Wooden church; Vernacular Sacral Building*

Introduction

South-eastern Poland, and in particular the Podkarpackie Voivodeship, is a land where two ethnic communities—Polish and Ukrainian—have lived together for millennia. While the former belonged to the Roman Catholic denomination, the latter followed the Greek Catholic rite, firmly rooted in the tradition of Orthodox Christianity.

The centuries-long coexistence of both communities has resulted in the development of a unique culture in these areas, combining the patterns and values of Eastern and Western Christianity. This was particularly evident in the wooden architecture that is very rich in these lands, the peak achievements of which are Polish churches and Ukrainian Greek-Catholic churches, the so-called "tserkvas".

Unfortunately, as a result of the displacement of Ukrainian communities in 1947 outside of the newly designated territories of Poland, the vast majority of Greek Catholic churches in Podkarpacie remained without their rightful owners. In the following years, abandoned churches fell into ruin, and their proud silhouette slowly began to disappear from the landscape

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of these lands. Over time, some Greek Catholic churches were converted to Roman Catholicism, which gave them a new life and was the reason for their survival. Others found new guardians among the extant Greek-Catholic communities in Poland. Unfortunately, not all temples were so lucky; many of them were completely destroyed, and those that have survived to this day are in a state of advanced ruin.

Preserving the remains of the Ukrainian wooden architecture heritage located in south-eastern Poland from complete destruction is a priority task. These buildings remind us not only of the cultural richness of these lands but are also a testimony to unique architectural and carpentry solutions on a global scale. Rescuing the remnants of Ukrainian heritage in the borderlands has become even more urgent nowadays, when due to the war east of Poland, more and more monuments to this nation are lost each day.

This research is dedicated to two exceptionally interesting abandoned and heavily ruined Greek Catholic churches located in the Podkarpackie region: the church in Babice and the church in Mięgisz Stary. The research covers both the architectural structures of the churches as well as their painted decorations (polychrome) and iconostases. The results of the research allow for the development of guidelines for the methodology for the conservation of architectural structures while preserving and conserving the painted decorations, as well as the reconstruction of load-bearing structures and the iconographic arrangement of iconostases and their possible restitution to the churches.

The wooden Greek-Catholic church in Babice

The wooden Greek Catholic church of the Dormition of the Mother of God is located in the south-western part of Babice village (Podkarpackie voivodeship), on a small hill steeply descending towards the San River valley (Fig. 1). The church is surrounded by the remains of old trees.



Fig. 1. The Greek Catholic Church of the Dormition of the Mother of God in Babice;
photo T. Tomaszek

According to local tradition, the building was erected in 1839 by the carpenter Kozubal from Krosno on the site of an earlier, also wooden, church and as a branch church of the Greek Catholic parish in Skopów [1]. (Up to date, the historical analyses have not allowed us to clearly determine whether the earlier building was completely destroyed (e.g., burned down) or was demolished before erecting the present church.) One year later, namely in 1840, a free-standing wooden belfry of frame construction was also built near the church and on its west side (slightly shifted to the south in relation to its axis) [2] (Fig. 2).



Fig. 2. A free-standing wooden bell tower near the Greek Catholic Church of the Dormition of the Mother of God in Babice, photo T. Tomaszek

The church was renovated around 1889 [3], and from that moment on, it was used without major transformations until World War II. Since the end of the war, due to the geopolitical changes resulting in the displacement of Ukrainian communities outside of Poland in 1947, the church has remained abandoned and slowly fell into ruin over the next decades [2]. It is now in danger of total collapse.

The wooden Greek Catholic church in Babice was built on a log structure. It is an oriented building, seemingly single-spaced, closed on three sides from the east, 17.70m long and 9.10m wide. A vestibule (in frame construction) is added to the main body from the west in post and beam construction, whereas from the north it was enriched with a sacristy (not preserved until today) (Fig. 3).



Fig. 3. Greek Catholic Church of the Dormition of the Mother of God in Babice; view from the north – traces of a lost sacristy on the wall; photo T. Tomaszek

The beams of the walls are made of coniferous wood, and the foundation beam (with a cross-sectional diameter of 35x35cm) is made of oak wood. In the corners, dovetail joints with a covered tenon have been used. According to the preserved traces, it can be assumed that the foundation beam of the lost sacristy was cornered to the northern foundation beam of the main body, and the beams of its eastern and western walls were fixed "in the notches" in the northern wall of the church. The framework of the walls of the church is fastened with a top plate. At the same level as the top plate, parallel to its northern and southern beams, there are beams connected with corner joints and supported inside the building with wooden poles (each with three poles). The girt beams and additional beams on the poles provide direct support for the roof structure. The pillars inside the main part of the church create a characteristic division of space, introducing side pseudo-aisles 150cm wide each (Figs. 4 and 5). Additional reinforcements in the form of vertical slats (called in Polish "lisice") were installed to stiffen the framework of the walls. And so, on the southern wall, they are located in three places, while on the northern wall, they are located in two places [1].

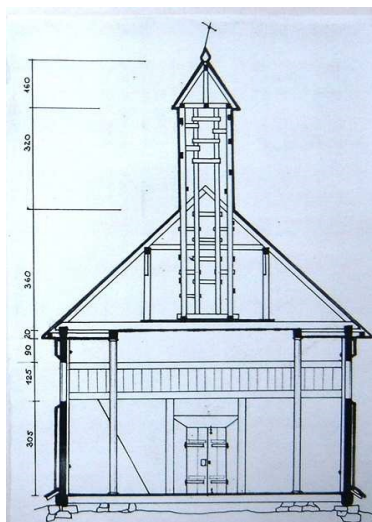


Fig. 4. Inventory drawing of the Greek-Catholic church in Babice - cross-section based on: P. Haszczyń, *Babice Historical Trail - Stop 3*, http://www.spbabice.edu.pl/pdf/sciezka_historyczna.pdf.



Fig. 5. Greek Catholic Church of the Dormition of the Mother of God in Babice; interior from the side of the choir, visible division into pseudo-aisles obtained with the help of the rows of pillars; *photo T. Tomaszek*

The walls of the church were covered from the outside with vertical boards with slats. The foundation beams, on the other hand, were covered with a narrow eave roof covered with shingles and resting on bolts. According to the archival sources [1] and preliminary in situ research, the building was originally set on a stone foundation, now only fragmentarily preserved. The main body of the church (nave and sanctuary) is topped with a single-ridge roof covered with sheet metal (originally shingled) [4], five-sloped, with a half-gable from the west. The roof truss is made of post-rafter construction. The stools were placed on beams connecting the southern and northern parts of the top plate [5]. An interesting, visually distinctive architectural element incorporated into the roof truss is the octagonal pseudo-lantern (frame structure) located in the middle of the ridge, ending with a pyramidal roof (similarly covered with sheet metal). The porch added from the west to the main body of the building is topped with a gable roof covered with shingles. The structure of its roof is rafter framing. Under the eaves of the church, along the entire length of the western wall, there is an ornamentally carved board. Inside the church, along its western wall and across its entire width, a choir was located. It is placed at a height of 300cm from the ground (floor), has a projection of 140cm, and is supported by two pillars in the front part and two at the western wall. It has a balustrade made of solid boards [5]. Wooden stairs adjacent to the western wall (from the south side of the nave) lead to the choir.

The sanctuary was separated from the single-space body of the building by means of a curtain wall made of planks (which is also the main body supporting structure of the iconostasis) (Fig. 6). The inner space of the church is limited from above by a flat ceiling, lowered on the sides and supported by pillars.



Fig. 6. Greek Catholic Church of the Dormition of the Mother of God in Babice - view of the sanctuary separated from the nave by a curtain wall of iconostasis (currently devoid of icons), photo T. Tomaszek.

The free-standing, wooden belfry located near the church was made of a frame structure. It is erected on a central square plan and it has vertical walls covered with boards. In the upper part it is enriched with a chamber like space with slightly inclined walls. It is crowned with a tent roof covered with shingles.

The wooden Greek Catholic church in Mięksiz Stary

The wooden orthodox church of the Protection of the Purest Mother of God in Mięksiz Stary (Fig. 7) belongs to the oldest and most typologically unique Greek Catholic churches of the Przemyśl region of the Podkarpacie voivodeship. Apart from keeping the typical characteristics of rural wooden Greek Catholic churches from the area of Podkarpacie, the

shape of its architectural structure explicitly refers to the masonry tradition of monumental Roman Catholic baroque churches. This is mainly noticeable both in the particularly accented central part of the church, the nave, covered by a wooden, orthogonal, dome-like structure topped with a roof lantern, as well as in the partially preserved illusionistic polychrome of the interior [6, 7].

Originally inside the church was a richly decorated iconostasis, which is currently stored in the Łańcut-Castle Museum [8].



Fig. 7. Orthodox church in Miękisz Stary; photo T. Tomaszek.

The Greek Catholic church in Miękisz Stary is erected in log construction and is divided into three main parts: the sanctuary, the nave, and the women's porch (gallery). From the north to the three-sided enclosed sanctuary adjoined is the sacristy, which is built in log construction but attached in frame construction. Whereas to the women's porch, from the west and north, adjoined are two porches in the frame construction. In February 2010, the western porch collapsed under the weight of snow. In the summer of 2012, its remains were stored by the local people in the interior of the church. The sanctuary is connected with the nave by frame construction.

The church was rebuilt many times, so several historical and stylistic layers are clearly visible. The oldest part (probably from the beginning of the 17th century) makes a framework of walls of the sanctuary, to which the current nave and woman's porch were added at the end of the 18th century, or, according to other sources, at the beginning of the 19th century (according to T. Spiss in 1801, and to "*Szematyzmy*" in 1811) [9]. Most likely at that time also the elliptical, Neo-Baroque vault of the nave was added with a new roof frame crowned by a lantern, as well as the interior walls, which were covered with illusionist wall paintings (including the images of the Evangelists painted on the tambour under the dome and the imagery of angels performing music located on the balustrade of the choir). In 1883, the shingles covering the roofs were replaced with a sheet, as evidenced by the date shown on the signature of the lantern over the nave. At that time, the main body of the church was also expanded to include the sacristy and two porches [9] (Figs. 8–10).

The building was renovated again in 1916 after the devastation caused during the First World War. The roof was patched, the choir was enlarged, and the boarding covering the outside walls was exchanged for a new one. According to local tradition, the works were conducted by Jews from Radymno. In 1989, a makeshift building protection was made, and the partial consolidation of wall polychrome in the women's porch was carried out [9].

Apart from a multi-zone, frame-like iconostasis, the furnishings of the church included two side altars with pictures in settings, feretories, a processional cross, candlesticks, liturgical vestments, and other small items adorning the interior of the temple. The majority of these items were transferred in 1964 and 1965 to the Provincial Depot of Movable Heritage in Łańcut [9], where they are currently stored in the warehouses of the Section of Orthodox Art of the Castle Museum in Łańcut [8].

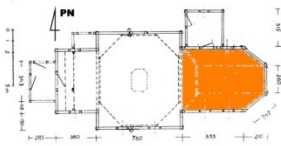


Fig. 8. Schematic view of the church – selected the oldest part of the building, the sanctuary, probably from the 17th century.

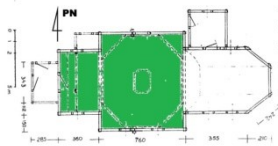


Fig. 9. Schematic view of the church – selected the nave and women's porch, added in the late 18th century

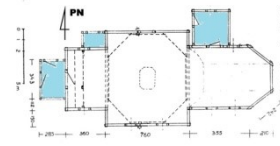


Fig. 10. Schematic view of the church - selected sacristy and two additional porches, added to the temple in 1883

According to the 2019 conservation surveys carried out, the state of preservation of the church and polychrome has deteriorated further since the last inventory carried out in 2006 [6]. In addition to the natural factors causing the degradation of the church, which are moisture, fungi, and the activity of wood eaters, vandalism has also come to the fore. It manifests itself in the destruction of the lower parts of the building and, above all, in the execution of a number of inscriptions or drawings on the layer of the original polychrome inside the church. (These inscriptions, with vulgar content, are made with spray paints and various types of markers.) Presumably, due to the loss of structural stability and the weight of the snow layer on the roof, the porch adjacent to the women's porch from the west collapsed (Fig. 11).



Fig. 11. Collapsed porch adjacent to the women's porch from the west, photo T. Tomaszek

Materials and Methods

The recognition of the current state of preservation of the abandoned (not in any use) Greek-Catholic churches in Babice and Miękisz Stary was carried out during the site inspection and in analytical laboratories. A visual inspection was carried out, and basic conservation inspections and analyses were conducted. The research included, in parallel, historical analyses, comparative analyses, and graphical and analytical methods.

Analyses of the state of preservation of the interior polychrome included *in situ* tests, such as observation in diffused light, UV, and IR (infrared) light. Partial uncovering in the paint layers as well as the ground layers was also made.

Detailed conservation analyses covered the remains of iconostases. For this purpose, meticulous archival studies were carried out, among others, in the Department of Orthodox Art of the Castle Museum in Lancut and the Provincial Inspectorate for the Protection of Monuments. On the basis of the existing archival annotations, the remains of the iconostases were located and are currently stored in warehouses. Then, the conservation inspection of individual elements of the iconostases (icons, elements of woodcarving, etc.) was carried out, and basic analyses were performed. Thus, the necessary uncovering was made in the painting layers, and the detailed state of preservation of the bearing base of the icons was determined. At the same time, on the basis of archival data and remaining elements, analyses were carried out in order to reconstruct the load-bearing structures of the iconostases as well as their spatial and iconographic arrangement.

In order to identify more precisely the condition status of the Greek-Catholic churches in Miękisz Stary and Babice, the analysis using the Resistance Drilling Method (RDM) was conducted *in situ*. For this purpose, the device called the resistograph IML-RESI F400-S was used. The examinations consisted of performing a number of drillings in selected wooden elements, which made it possible to determine the condition status of the wood tissue in cross sections of these spots (drilling points). This analytical method can be considered a quasi-non-destructive method, as for drilling, a very thin and flexible drill was used, so the diameter of the hole that remained after the execution of the measurement was not wider than the exit openings made by wood borers [10].

The data from the above-mentioned analyses were collected in the form of graphs showing the amplitude of the resistance in relation to the depth of the hole (the analytical method performed was based on the measurement of cutting resistance during drilling through the wooden element). It allowed the assessment of the range and an element of degradation, thus a preliminary assessment of the strength of wood (the test shows if the analysed wood has increased, medium, or reduced strength parameters) [11]. This technique is highly effective in the study of historical wooden structures [10-13].

Below is shown the exemplary graph from RDM analyses performed on the temple in Miękisz Stary (Fig. 12).

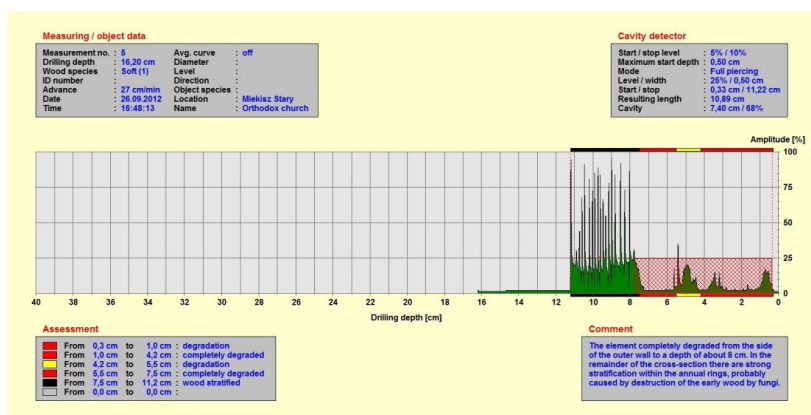


Fig. 12. The exemplary graph obtained during performed tests of drilling resistance of wooden elements of orthodox church in Miękisz Stary

The RDM analyses have confirmed the very bad condition status of the temples. They also showed that the most degraded remaining wooden elements are located in the lower parts of the churches. In general, there are parts roughly at a height of up to 1.5 metres from the ground. It is due to their direct contact with groundwater and thus increased moisture content. These tests have also shown that the type of degradation is clearly differentiated and results directly from the location of the analysed element in relation to the cardinal direction as well as a spot in the building.

Due to the very bad condition status and advanced degradation of the building material (wood), the studied churches represent typical degradation patterns for the wooden Greek Catholic churches located in the Podkarpacie region [14, 15]. As both temples studied have richly decorated interior polychromes, it affects the need for a comprehensive conservation approach requiring the application of solutions ensuring the structural stabilisation of the building while preserving at the same time the original polychrome images and ornamentation.

Equally important for restoring the original character of the churches in Babice and Mięksiz Stary is the restoration of iconostases to their interiors. Thus, the developed methodology for the conservation of temples must also include appropriate solutions to achieve this goal [16, 17].

Results and discussion

Interior polychrome of the church in Babice

The interior of the church is covered with tempera polychrome of an ornamental character, imitating architectural divisions and stone surfaces (marbling). Its state of preservation is critical, and it requires immediate conservation work (Figs. 13 and 14).



Fig. 13. Greek Catholic Church of the Dormition of the Mother of God in Babice - ornamental polychrome covering the walls and imitating architectural divisions, currently in very poor condition - view of the southern wall of the nave and the sanctuary (iconostasis wall), photo T. Tomaszek

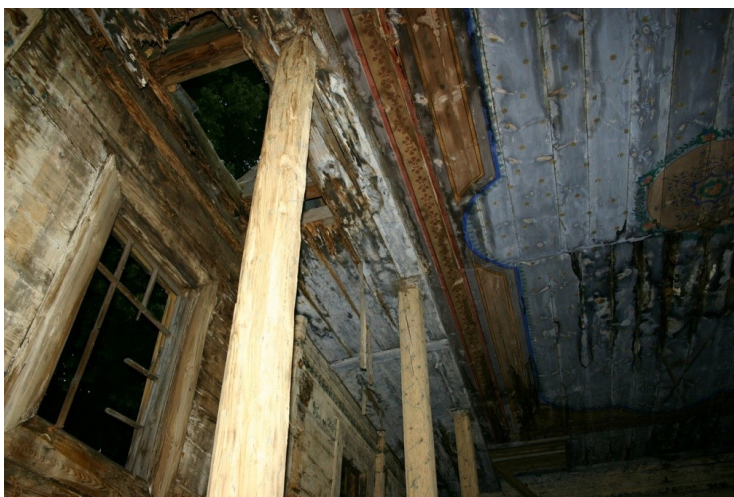


Fig. 14. The Greek Catholic Church of the Dormition of the Mother of God in Babice - advanced degradation of wooden structural elements covered with polychrome on the ceiling of the nave and the southern wall; from the south, right next to the wall, there is a visible hole in the ceiling and roof, photo T. Tomaszek

Interior polychrome of the church in Miękiż Stary

The interior polychrome of the church in Miękiż Stary was made in 1885 in the tempera technique on chalky ground. It includes an illusionistic representation of the open sky above the architectural entablature, placed in the dome, and the architectural divisions of the nave walls (Fig. 15). According to the information included in the evidence card of the monument [9], “(...) On the ceiling of the women's porch were placed figures of the Evangelists, and on the ceiling of the women's porch is a cross in the middle of the clouds, accompanied by angels playing trumpets. On the contrary, on the balustrade of the choir (the painting was made before the increase of its surface) are figures of angels playing various instruments”.

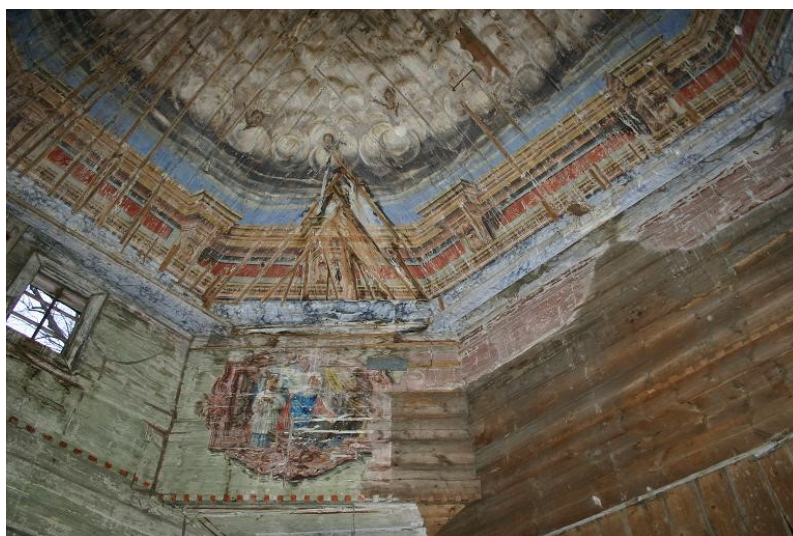


Fig. 15. Wall polychrome of the church in Miękiż Stary, visible illusionistic representation of the open sky placed in the dome above the architectural entablature and the figures of the Evangelists in the pendentive, photo T. Tomaszek

On the southern wall of the women's porch there is a depiction of the *Good Shepherd* signed with the text *Examination of Conscience*. On the northern wall, *The Return of the Prodigal Son* is signed *Father I have sinned*. On the southern wall of the women's porch there is also a foundation inscription (much of it is destroyed; a fragment is obscured by a pillar supporting the choir)" (Fig. 16). According to an archival note from the field penetration carried out by the Depository of Movable Heritage in Łańcut [18], the full text originally read: *This church was built in 1880 under the patronage of Jan Czyrneński, thanks to the efforts of Jan Furczyn and Wasyl Halas. It was polychromed in 1885* (all inscriptions in Ukrainian, translation T. Tomaszek).



Fig. 16. The foundation inscription on the southern wall of the women's porch, photo T. Tomaszek

At the beginning of the twentieth century, the original polychrome in the sanctuary was covered with oil and ornamental repainting [9].

In general, the state of preservation of the painting decor of the wooden church in Mięksiz Stary can be described as bad and vulnerable to further damage. The condition of individual fragments of the polychrome varies. This is primarily due to their location on the walls of the temple and, thus, the degree of destruction of individual fragments of the building.

Thus, there are noticeable differences in the state of preservation between the part of the painting decor located closer to the floor (approximately up to 1.5m high) and the rest of the polychrome made in the upper parts of the walls. This is related to the state of preservation of the lowest part of the building, where, as a result of the exposure of wood to the greater action of capillary moisture and other environmental corrosion factors, its most advanced structural destruction took place. Significant losses of wood occurring in these parts weakened the legibility of the painting composition. It is particularly visible on the walls of the women's porch. It is worth noting at this point that the polychrome layer is the most damaged or completely lost in the places where individual boards form the base for the painting layer. This is most clearly noticeable in the dome, although we also deal with this problem in other parts of the composition. These damages, resulting from weaker bonding of the mortar and the paint layer with the substrate in these places (or their complete detachment), were most likely caused by natural movements of the wood during changes in humidity inside the building. As a result of these movements, the layer of mortar cracked together with the paint layer, and then they crumbled at the contact point of the base boards [19].

The iconostasis of the church in Babice

Originally, inside the church in Babice, there was a richly decorated iconostasis. Its basic construction structure, in the form of a curtain wall made of planks (the iconostasis frame),

simultaneously separated the sanctuary from the nave in an unusual, single-space-like body of the church (Fig. 17).



Fig. 17. The Greek Catholic Church in Babice – the iconostasis curtain wall without icons, which is separating the sanctuary from the nave, photo T. Tomaszek

The remains of the iconostasis were still found in the church until the spring of 1963, when, in April and May, individual icons together with the majority of the valuable elements of the temple's movable equipment were transported to the Provincial Repository of Movable Heritage in Łańcut, later transformed into the Department of Orthodox Art of the Castle Museum in Łańcut [20, 21]. The takeover of the property of the church in Babice is documented in the protocols from 1963 (Fig. 18).

Just before the transportation of the mentioned elements to the Provincial Repository, an inventory of the temple's equipment was made *in situ*. This is evidenced by the penetration materials from 1963 that concern the Greek Catholic church in Babice, as well as the chapel in Babice and the whole village of Babice [4].

According to the information contained therein, some movable elements were already missing at the time of the inventory, including one icon from the bottom row of the iconostasis (In the quoted penetration materials, there is also a mention, introduced as a later footnote from 1966 at the end of the document, that one icon was taken to the Museum in Przemyśl without a delivery and acceptance report) [4]. In the original text of the document about the iconostasis itself, we can read the following:

“The iconostasis – wooden, folk work. Polychromed. Flanked by full, straight columns. Paintings painted on canvas nailed to a board, Tsar's gate: openwork, wooden, leaf motif, Deacon's gate: wooden, openwork, mesh motif. In the lower row, the 1st painting from the side altar is missing. Other: Maria, Christ painted on sheet metal, new (91x61). Praznichkov row and deesis full. No medallions or passion. On the other hand, above the side altars, there are 2 paintings depicting Cyril and Methodius. Paintings painted directly on the iconostasis wall, without ground. Oil, folk, new.” (translation from Polish language: Tomasz Tomaszek), [4], (Fig. 19).

- icon: Two Apostles (St. Peter and St. Paul), tempera on board
- Last Supper icon

Emmanuel medallion The protocol written on October 22, 1966, shows that the frame of the iconostasis with elements of woodcarving (which was not transported to the collection of the Department of Orthodox Art of the Castle Museum in Łańcut in 1963) remained in the church [23]. Its disassembly was probably not planned at that time because it also serves as a structural "curtain wall" separating the sanctuary from the nave. This element has been preserved in the church to this day (Figs. 20 and 21).



Fig. 20. The Greek Catholic in Babice - the frame of the iconostasis with elements of woodcarving (fragment) constituting the remains of the original equipment of the temple (and at the same time serving as a structural "curtain wall" separating the sanctuary from the nave), photo T. Tomaszek



Fig. 21. Greek Catholic Church in Babice – the frame of the iconostasis with elements of woodcarving (view on the back, i.e., from the side of the sanctuary), photo T. Tomaszek

The iconostasis of the church in Miękiszy Stary

The multi-zone iconostasis, the most important equipment of the Greek-Catholic church in Miękiszy Stary, was made around 1815. As the temple has been abandoned since 1947, as part

of the initiative to save the remains of Orthodox art left by Ukrainians after their resettlement, it was transported from the church together with the other movable furniture to the Department of Eastern Church Art in the Museum of the Łańcut Castle in 1964 and 1965 [24].

According to the preliminary studies conducted in the collections of the Department of Eastern Church Art in the Museum of the Łańcut Castle, to this day preserved parts of the iconostasis were all transported here in 1964. Most of them require urgent conservation. Some of the icons have a significant loss in the layer of paint and the layer of ground. Similar losses are noticeable in the elements of woodworking and frames. After the remains of iconostasis were moved to the warehouses of the museum, in its restoration workshop, some conservational excavations were made in the paint layers of the image and in the framing elements of some of the icons. From these uncoverings, it can be seen that the iconostasis was wholly repainted. It most likely happened as the result of renewing the furnishings of the church in connection with the 950th anniversary of the baptism of Kievan Rus in 1938 [25].

Apart from partial uncovering of the paint layer, they also carried out some tests on cleaning the surface of the icon by using ecological type of solutions [26]. More tests need to be done to determine the best method for cleaning similar icons from that area (Fig. 22).



Fig. 22. A fragment of the one of the icons from the 'namiestnych' tier – the place of the excavation to the original layer of paint (marked in white box), photo T. Tomaszek

The information obtained through the excavations described above suggests that the original layer of paint is reasonably well preserved and that the original composition has greater artistic merit than the later paintings.

Formal and iconographic solutions of Greek Catholic iconostases - a brief outline

The iconostases of the churches in Babice and Mięksiz Stary are a reduced form of a typical form of the Ukrainian iconostasis, widespread in south-eastern Poland and appearing in wooden Greek Catholic churches in the Podkarpackie Province as an indispensable, characteristic element of their equipment (Fig. 23). Thus, the spatial arrangement and themes depicted in individual icons of the iconostasis of the Babice and Mięksiz Stary churches repeat, in a slightly modified configuration, the compositional and iconographic patterns of the iconostasis walls, probably finally established no later than at the end of the 18th century (Fig. 24).

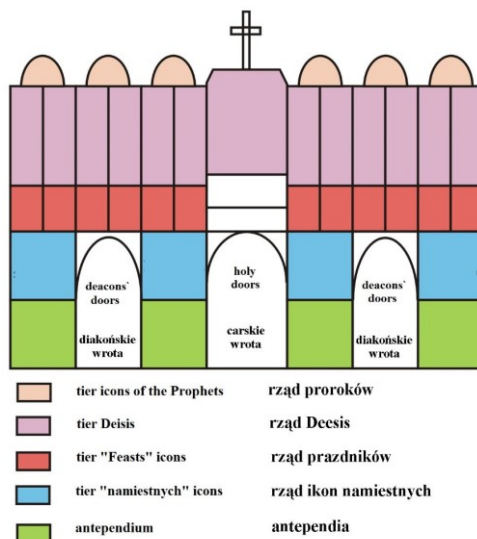


Fig. 23. A diagram of a typical shape of the Ukrainian iconostasis, author: T. Tomaszek



Fig. 24. Formal and iconographic arrangement of the iconostasis from Babice (diagram), author: T. Tomaszek

The above-mentioned typical appearance and the resulting strictly ideological message of the iconostasis from these areas owe their final form to many stylistic changes taking place over the last few centuries. And so, the turn of the 16th and 17th centuries, which was a period of extremely dynamic transformations in Orthodox art, could be considered particularly important. As Giemza notes, it was then that the flat pictorial partition was replaced with an independent, structural iconostasis with clear divisions into rows and axes, strongly emphasised by the architectural and decorative woodcarving detail [27]. Simultaneously with these changes in the visual structure, the ideological composition was also extended, and thus new iconographic motifs appeared, ever since then permanently accompanying the Orthodox art of the Polish-

Ukrainian borderland. The above changes also influenced the progressing modifications of the very construction of the iconostasis wall of Greek Catholic temples, which eventually became a self-supporting, independent element of equipment.

However, what is worth paying attention to when referring to Giemza [28] is that the basic iconographic scheme that has been strictly adhered to to this day was developed before the appearance of a fully developed iconostasis as such, i.e., on the flat septum stage. As a prototype of the later iconostasis wall, this partition was traditionally a painting on a long and horizontal support (epistylon), on which the multi-figure Deesis was most often depicted, and which was attached to the structural beams (beams) of the iconostasis wall (templon) in such a way that it remained a free space, taking the form of a clearance between the nave and the sanctuary. Against the background of this upper opening, and thus above the epistylon, a full or silhouette icon of the Crucifixion was placed, while below the painting depicting Deesis, i.e., on the side surfaces of the iconostasis wall, icons of the so-called Namiestne, i.e., directly related to the place where the temple was located, were placed [27].

Initially, only two Namiestne icons were used, of which the first, the so-called Chramowa, depicted the invocation of the church, while the second was subordinated to the local cult. Most probably already in the second half of the 15th century, two additional Namiestne icons were added, which were usually images of the Virgin Mary with the Child and Christ. Thus, the lower row was extended, now consisting of four icons, which in turn led to the formation of the original form of the iconostasis. More or less at the same time, two of the Namiestne icons were installed on the curtain walls located in the passage between the sanctuary and the nave, which was probably the first stage of the complete separation of the nave from the sanctuary, finally realised with the help of a fully developed iconostasis wall. At the same time, between the two icons, the tsar's door appeared, initially usually made of a solid board and decorated with paintings depicting the Evangelists and the Annunciation. A little later, the deacon's door and the Mandylion were introduced, which from then on were often placed in the supraport over the tsar's door (or, in a less common version, over the initially single deacon's door) [28].

The 16th century brought further significant changes, which affected both the spatial arrangement and the iconographic programme of the early iconostases. The first concerned the addition of a row of prazdniki (holiday icons) between the Namiestne icons and the painting depicting Deesis, and an independent row of icons depicting the Prophets (whose appearance really became widespread only in the 17th century). The second transformation of the Deesis group itself, in which the "icons of the Saints of *Deed*" placed so far on the sides of the trimorphone (usually representing a pair of Archangels, Apostles, Martyrs, Church Fathers, Monks, and Hermits) were replaced with the icons of the twelve Apostles, among whom there were also: Saint Paweł and the Evangelists Marek and Łukasz" [27].

One of the last major formal changes was the introduction of painted predellas around the middle of the 17th century, which took their place below the row of Namiestne icons and formed the lowest row of the iconostasis. The theme of the paintings in the predells has never been definitively defined, which is why they contain both ornamental and figural representations, with the latter often directly referring to the above-placed Namiestne icons [28].

According to the available knowledge, we can assume that the iconostasis in its original form, developed in the 16th century, already had a clear division into horizontal rows, but there were no clear articulations of vertical axes yet. The latter evolved much slower but ultimately also determined the artistic dismemberment of later iconostasis walls. It seems that the first obvious and intentional vertical divisions were introduced by separating the trimorphone and the individual figures of Deesis with vertical, painted stripes, as well as a relief treatment of the ground under the gilding [27]. In addition, these divisions were made visible by the introduction of the tsar's door and two deacon doors, which at the same time allowed for a composition with a clearly marked main vertical axis located exactly in the middle of the composition.

Full artistic dismemberment of the iconostasis was finally achieved as a result of framing individual paintings with uniform or profiled slats. Subsequently, this slatting was replaced with elements of richly developed woodcarving, which often took the form of openwork ornamentation, directly referring to patterns known from historical styles such as Renaissance or Baroque [29].

Changes in the form of the iconostasis, resulting from the addition of successive rows of icons as well as its final compositional and stylistic integration, resulted in obtaining an independent load-bearing structure, making it a fully autonomous element of the church equipment, independent of the structure of the wall separating the nave from the sanctuary.

An attempt to reconstruct the original arrangement of the preserved icons in the iconostasis frame of Babice Church

Preliminary conservation research allows us to assume that at least three of the icons stored currently in the Department of Orthodox Art of the Museum of the Castle in Łańcut are elements of the original iconostasis from the church in Babice. These icons are: The Deesis Icon (registration number MZŁ-SZR-895) is the central image of the Deesis row; the Icon of the Two Apostles (St. Peter and Saint Paul) depicts two of the twelve apostles of the Deesis row; and the Icon of the Last Supper (registration number MZŁ-SZR-898) is located above the tsar's doors. Their probable original arrangement is depicted in the illustration below (Fig. 25).



Fig. 25. Reconstruction of the probable original arrangement of the preserved icons in the iconostasis frame (diagram), author: T. Tomaszek

An attempt to reconstruct the load-bearing structure of the iconostasis of the church in Miękiśz Stary

The archive photo, showing the interior of the church together with the iconostasis before its removal to the warehouse of the museum mentioned above (Fig. 26), as well as the sketches made during its subsequent demolition (Fig. 27), make a unique documentation of conservational importance. It is a determinant of how the structure of the iconostasis was constructed and shows how it was located in the church.



Fig. 26. The archival photo showing the interior of the church in Miękisz Stary along with the old iconostasis, 1964; source: the archives of the Department of the Eastern Church Art in the Museum of the Łańcut Castle

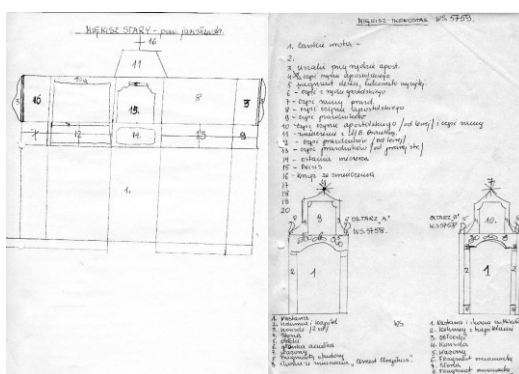


Fig. 27. The inventory drawings made in 1964 during the dismantling of the iconostasis; source: the archives of the Department of the Eastern Church Art in the Museum of the Łańcut Castle

The iconostasis from Miękisz Stary church is a typical example of 19th century iconostases developed in the border land of Podkarpacie (Fig. 23). It is built from the typical rows, following formal and ideological standards. In the bottom part, it has a high-tier "namiestnych" icon, dismembered by pilasters, with a *Holy Door* and the pair of the *Deacons` Doors*, extended to a two-row side "kioty". Above this, there are two rows of "Feasts" icons with the image of the *Last Supper* in the center. Traditionally, the tier of *Deisis* icons is located above it. And finally, in the crowning on the top of the iconostasis, there are icons of the Prophets, the Mother of God (*Panagii*), and a large cross with a carved figure of Christ.

According to the carried-out analysis, the iconostasis of the Greek-Catholic church in Miękisz Stary was built as a self-supporting structure that was independent from the construction of the church's walls. It was directly standing on the floor, and it was not permanently attached to any of the walls. An archival photo taken inside the temple after the demolition of the iconostasis shows the place where the iconostasis was just leaning on the wall

(Fig. 28). Most likely, it was attached to the wall by the hooks. This type of construction of the iconostasis, namely as a self-supporting structure that is an autonomous part of the equipment of the church and at the same time is independent of the wall structure, is very common in the Podkarpacie region [28].



Fig. 28. Interior of the church in Mięksisz Stary (from the side of the nave towards the sanctuary) after the dismantling of the iconostasis—see the traces showing where the iconostasis was supported by the wall, 1987, source: the archives of the Department of Eastern Church Art in the Museum of the Łańcut Castle

There is no doubt, however, that the iconostasis, if in any case it is returned to the church in Mięksisz Stary, would need extra structural reinforcement. This reinforcement could strengthen it with additional vertical support and provide protection against a possible loss of stability [30]. Thus, at this stage of conservation analysis, it is proposed to make a vertical support structure in the form of vertical slats permanently mounted in the floor. Their height should be slightly lower than the height of the iconostasis. These slats should be located on the back of the iconostasis, and all the individual elements of the iconostasis should be attached to these slats in a movable way, allowing their easy removal from the structure (dismantling) and allowing the natural work of the wood and its possible natural deformations over time and in a yearly cycle (Fig. 29).

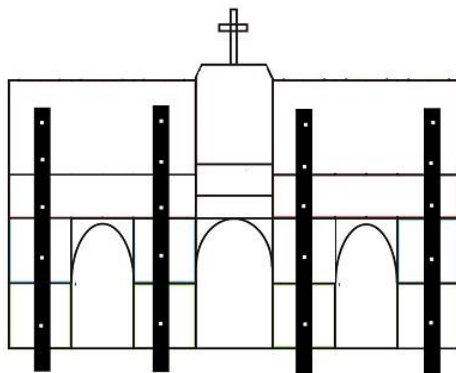


Fig. 29. The diagram of the strengthening and stabilising structure proposed for the iconostasis (made from its back) – noticeable the vertical slats, slightly lower than the height of the iconostasis, recessed into the ground – white "spots" on the slats indicate the proposed place of the movable connection (e.g., hooks) between the individual parts of the iconostasis and this moulded, stabilising structure. Author: T. Tomaszek

The guidelines for the Conservation Methodology

Architectural structure

Due to the advanced degree of degradation of a substantial amount of the wooden elements of both temples, it is expected to replace these degraded elements with new ones obtained from the same species of wood and fabricated following as much as possible the traditional processing methods. Following this approach, only the parts that are completely degraded should be subject to complete replacement. In the case of partially degraded items, when it will not affect their mechanical strength or the local or global stability of the object (building), it is recommended to remove only the damaged fragments. Then, in their place, the "insertions" obtained from a new wood (fabricated in a traditional way and maintaining the original form) should be substituted. If possible, the resulting additions should be combined with the remnants of the original elements using traditional carpentry joints. If such bindings are not sufficient, it is recommended to strengthen the contact points of the original with the "insertion" of an appropriately selected binder.

It is recommended to replace the degraded brick foundations with stone "plinths". At the same time, it is expected to return to the technological solutions that were most probably used originally. The "plinth" in this case is understood not as a stone masonry foundation but as loosely set stones stacked without mortar bonding. Another option will be to set the foundation with stone combined with mortar. In this case, an additional layer of insulation should be applied in the contact area of the foundation with the sill plate so that, as far as possible, the penetration of moisture rising through mortar is prevented.

The basic conservation issue is the determination of appropriate technical solutions that enable the execution of the above-mentioned treatments [31]. Due to the severity of the damage and the loss of the overall structural stability of the churches, it should be considered for conservation *in situ* by using the method of a slight elevation of the building, which will enable access to degraded parts in the lower areas. The intended elevation of the building above ground level and keeping it in a stable position (the same as ensuring the global stability of the object during conservation work) is possible through the use of a specially prepared frame construction system (a supporting and stabilising structure) fixed to the framework of walls and the pneumatic jacks arranged regularly in all corners (knots) (Fig. 30).

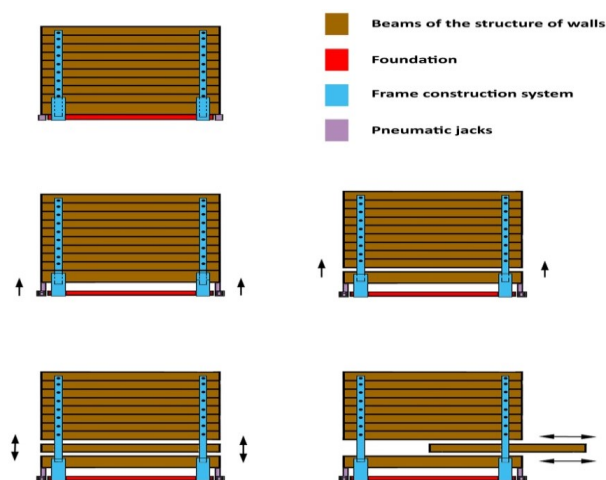


Fig. 30. The general scheme of the frame construction system fixed to the framework of walls, proposed for lifting the building and keeping it in a stable position (ensuring the global stability of the object during the conservation work), author: T. Tomasz

If the method of elevation of the building proved to be unfeasible for technical reasons, it is proposed to consider a possible dismantling of the temple to the individual elements. This procedure is possible but extremely difficult to achieve. The main problem is the need to allocate the large financial contributions required to conduct a very precise conservation inventory prior to its implementation.

Interior polychrome decoration

The condition status of the painted in tempera polychrome decoration is critical, and therefore it is demanding full technical and aesthetic conservation. Due to the complicated process of replacing degraded wooden elements or their degraded fragments with new elements, the partial transfer of polychrome from these elements (or fragments), which are allocated for complete removal and covered by painted decoration, should be conducted. The transfer of polychrome should be performed regardless of the general method of conservation intervention (approach) in relation to the main architectural structure of the temple, both in the case of the elevation of the structure as well as its dismantling into individual components.

The carried out analyzes have proved that the best conservation solution is a transfer of the paint layers to the new base simultaneously together with lying beneath it layer of grounding as well as the surface layer (external layer) of wooden element. In other words, it is recommended a mechanical “*decoupling*” of the outer surface of the painted wooden element along with the covering it the polychrome layer (and grounding) from a “substantial” part of this element. This “*separation*” can be made by cutting off, and the place of its execution must be at each time precisely determined after detailed analysis of the element (Fig. 31).

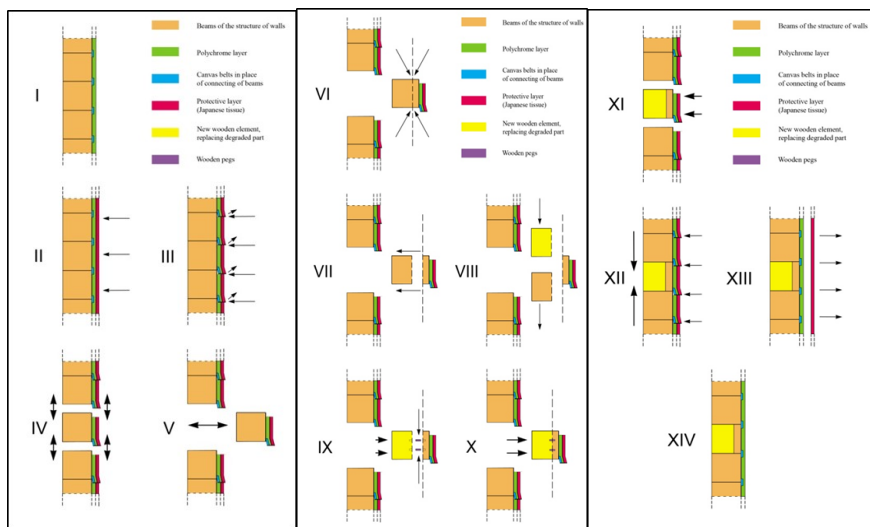


Fig. 31. The diagram of the execution of the transfer of polychrome to a new base (to the new elements, replacing degraded items); [I-XIV], author T. Tomaszek

Due to the significant weakening of mechanical strength caused by the advanced deterioration of wood, the remnants of the surface layer of the original substrate that are transferred together with the layers of paint and grounding require structural reinforcement. It is proposed to perform it using a structural impregnating with a solution of synthetic resin (Paraloid B72) [32]. After this intervention of strengthening the transferred remains of the surface layer of the wooden element (which is a direct substrate for the transferred paint layer), the transferred items should be fixed "anew" in their original place to the previously exchanged elements in the architectural structure.

It is necessary to maintain the original composition of the paintings (polychrome). With a view to the unforeseen deformations of the temple's architectural structures caused by the natural variations in timber volume and the possibility of having to disconnect in the future the transferred parts from the elements to which they will be fixed, it is assumed that the transferred elements will be fixed to the walls only by means of the wooden pegs.

Conclusions

Not used anymore for religious practices, and completely abandoned Ukrainian Greek Catholic churches located in south-eastern Poland require an especially complex conservation approach. The applied methodology must combine the often-contradictory challenges and aspects—both the need to stabilise the architectural structure (which requires the replacement of a significant amount of historical substance) and the intention to save and preserve as much as possible the remains of the richly painted interior decoration. The proposed transfer of polychrome guarantees the preservation of the authentic character of the temples as well as their aesthetic and historical value. It is worth emphasising that the elements covered by polychrome are also load-bearing fragments of the walls. Thus, any interventions interfering with the architectural structure of the church are also interfering with the polychrome layer. It is therefore necessary to thoroughly identify the state of preservation of individual elements and determine the degree of degradation of wood tissue in their cross-sections. This will allow the optimisation of the process of replacing degraded parts and minimising its scope to only the fragments necessary for replacement. The data to determine the scope of the elements required to be exchanged is provided by the RDM method used during the research described in this paper.

Due to technical difficulties, the transfer of polychrome requires the use of impregnating substances to consolidate the surface layer of polychromed elements. Further research is needed to optimise this treatment. Similarly, it is necessary to advance studies on methods for stabilising the fragments transferred to a new substrate.

A priority task in the process of conservation of abandoned Greek-Catholic churches from the Polish-Ukrainian borderlands is also the possible restitution of iconostases to their interiors. Iconostases are the most essential spatial and ideological elements of the temples, and therefore they are indispensable to bringing back the original symbolism and religious meaning. The conducted research provided important information on the spatial solutions of the iconostasis walls of the Greek-Catholic churches in Babice and Miękiś Stary, which solutions are typical for similar temples in this region. Thus, technical conservation solutions based on that data can be successfully applied to similar Ukrainian churches in the Podkarpacie region.

Acknowledgments

Special thanks are to Mr. Jarosław Giemza, head of the Department of Orthodox Art of the Castle Museum in Łańcut and Mrs. Teresa Żurawska, curator of the Castle Museum in Łańcut for their kind help and valuable comments regarding the Greek-Catholic churches in Babice and Miękiś Stary, as well as the icons from these both temples.

The special thanks are also to Mr. Wit Wojtowicz, Director of the Castle Museum in Łańcut, for the permission to publish photos of the elements of equipment (icons) from the church in Babice and church in Miękiś Stary, which are in the collection of the Department of Orthodox Art of the Castle Museum in Łańcut, and to publish digital copies of archival documents stored in the same department.

The research leading to these results has received funding from the commissioned task entitled “*VIA CARPATIA Universities of Technology Network named after the President of the*”

Republic of Poland Lech Kaczyński” contract no. MEiN/2022/DPI/2578 action entitled “In the neighborhood - inter-university research internships and study visits.”.

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Received: February 10, 2023

Accepted: August 2, 2023