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## Bigger and the largest amber products

#### Abstract

The limited dimensions of the raw material nodules have inspired the amber producers to master and improve the techniques of combining several or even a large number of matched elements to produce larger objects. Large fragile amber products, including intricate constructions and compositions, are a testimony to the development of science and technology, a valuable decoration of world museum collections and a balm for the soul of visitors. Large stocks of raw amber made it possible for Prussian King Fryderyk The Fist to commission an amber cabinet. The work was done in 1701–1713 by masters from Poland. Donated to Piotr The Great amber panels of Prussian King were supplemented by Italian artists – this is how the Amber Room was created. The lost chamber was reconstructed by a team of Russian amber artists in the years 1982–2003. Among the thousands of contemporary Polish amber artists stand out artists who masterly – assembly technique, stained-glass style or combined – construct impressive objects – they are created by: paintings, sculptures, furniture, altars. The largest of them is the Amber treasury of Lucjan Myrta and the Amber Altar of the Homeland, by Mariusz Drapikowski.

The largest lump of Baltic amber currently weighs 9658 g, its dimensions are: 40 x 18 x 14 cm (Kosmowska-Ceranowicz, 2004, p. 222; Fig. 1)¹. It was found in 1860 in Rarwino near Kamień Pomorski – it then weighed 9750 g. It is now in the collections of the Museum of Natural History of the Humboldt University in Berlin. In 1742, Gabriel Rzączyński wrote about a lump of amber with dimensions: 48 x 28 x 22 cm. From this specimen, the Gdańsk amber craftsman carved Diana and Akteon turned into a deer (Popiołek, 2011, p. 82). Lumps weighing over 3,000 grams are extremely rare, and those weighing over 1,000 grams are also unique (Kosmowska-Ceranowicz et al., 2003, p. 37, Fig. 2). The limited dimensions of the raw material

<sup>&</sup>lt;sup>1</sup> The illustrations are at the end of the article.

nodules inspired the amber producers to master the techniques of combining several or even a large number of matched elements to make larger objects.

### Prelude

The oldest among amber-shaped amber objects modeled from large single lump of raw material is found in Ukraine anthropomorphic female figurine from 17–13 thousand years BC. From Mesolithic areas in Denmark (Fraquet, 1987, Plate 1), and Poland, both anthropomorphic figures and naturalistic zoomorphic amulets have been preserved (Fig. 3). Neolithic amber's larger objects are idols, animal figurines and amulets symbolizing the sun (Choińska-Bochdan, 2003, Fig. 4). An amber cup, 12.7 cm high, made in the Bronze Age from a 400 g raw material nodule, was discovered in 1856 in Hove on the British Isles – now it belongs to the collections of Brighton Museum and Art Gallery. The cup's body is decorated with a delicate convex ornamental line (Fraquet, 1987, p. 11, Grimaldi, 1996, p. 147, Paterson, 2016).

From the larger amber decorations of antiquity, mostly small-sized figurines made of individual nodules (Grimaldi, 1996) have survived, there is such collection, among others, in the J. Paul Getty Museum in Los Angeles (Causey, 2018). In the area of the Roman Empire the method was mastered assembly of larger amber objects by combining a part of the designed whole. An example of such realizations is the whorl of a dozen amber segments set on a brown rod (Wielowiejski, 1999).

In the 16th century, many amber vessels were made – beer mugs and cups, among which there is also a bowl without a foot – "kulawka", the work of the King Sigismond The Third, assembled from several amber elements and ivory (Grabowska, 1982, pp. 19, 77; Mierzwińska, 1992, pp. 75, 102). At the end of the 16th century and at the beginning of the 17th century, large boxes of amber were constructed – from carved or engraved tiles joined with glue or with metal tapes (Mierzwińska, 1992, pp. 62, 115, 117, Fig. 5). Larger sizes of the products were achieved in the 17th century thanks to the use of wooden or metal skeletons covered with amber mosaics. Altogether, there were altars and furniture (Grabowska, 1982, Grążawska, 2014, Mierzwińska, 1992, 2014, Mierzwińska, Żak, 2001, Fig. 6).

### 1. Amber Room

Elements of amber veneer were often destroyed, thus creating the eighth wonder of the world - the Amber Room - amberers mounted amber planes, six millimeters thick, with closely fitting mosaic elements joined together, including welds (Bardovskaya et al., 2005; Gierłowski, 1999, pp. 53–59). Work in Berlin for King Frederick The First began in 1701 with amber Godfryd Wolfram. After 1707, two other amber craftsmen – Godfryd Turau and Ernest Schacht continued their work. After 12 years, amber facings for the royal cabinet reached an area of 68.50 squere meters, with 74.36 squere meters designed by Andreas Schlüter. All its creators, architect and masters came from Poland. Amber panels son of Frederic The First, Frederick William gave in 1716 to Piotr The Great. In the years 1755–1763, existing amber panels, according to the design of Franciszek Bartolomeo Rastrelli, another Italian, Alexander Martelli in Tsarskoye Selo underwent restorations and expanded to an area of 86.12 squere meters, arranging on the three walls of the square chamber: 10 x 10 m, height 7.8 m. Amber elements occupied one quarter of the surface of these walls, weighed about one ton, and "clippings" / waste of nine tons. Amber Room was lost in 1945, in 1982–2003 it was reconstructed (Figs 7, 8), based on the preserved photographic, graphic and painting documentation, by a team of artists, architects, masters and art historians, one of them was a Pole Wiesław Gierłowski (1925–2016). A particular task of the reconstructors was to determine the ways of joining the tiles, and to reconstruct the composition of the originally used welds.

The experience gained during the reconstruction of the Amber Room is distinguished by a group of Russian artists from the reconstruction workshop. Aleksandr Żurawlow, the head of this workshop (1943–2009), is the author of Pannoux Rus, with dimensions:  $300 \times 150$  cm (Fig. 9).

Among the thousands of contemporary Polish amber jewelers, experienced masters stand out who thanks to the original improvement of techniques of combining smaller elements implement projects of impressive size of objects – they are created: paintings, sculptures, furniture, altars and other artistic compositions.

## 2. Amber workshop products by Lucjan Myrty, an Amber treasury

Since 1966, several hundred large amber objects have been created thanks to the workshop of master craftsman Lucjan Myrta – these are caskets, sculptures, decorative objects – lamps, candlesticks, clocks, mirrors, frazes, chips; vessels, pictures, tables and chess sets, silver vessels (Czaja, 2007; Gierłowski, 2004, 2006; Fig. 10).

The work of Lucjan Myrta's life is the Amber treasury – a huge casket and utility safe with dimensions: length 200 cm, width 60 cm, height 275 cm – out of the base was made entirely of amber (Gierłowski, 2004, p. 33, 2008). The treasury weight is 955 kg, including 823 kg of amber – this is the largest item made of amber. Creating it for 12 years, the artist used 7 tons of amber of various varieties. Casket decorations made with the intaglio and relief technique present scenes from the life of Christ, and architectural elements have forms used in the buildings of Christ time.

# 3. Amber projects and realizations of Mariusz Drapikowski's studio, Amber Altar of the Homeland

In 2000, Mariusz Drapikowski performed for the church of St. Bridget in Gdańsk, an amber monstrance 176 cm high – in the Rococo style, with a stained-glass method, and in 2001, for this church, he started a project of special altar setting – Amber Altar of the Homeland (Gierłowski, 2000, Fig. 13). The planned surface of the amber stained glass construction is over 100 squere meters. Until now, the artist has made a dress – 2.5 m long from white amber – to the image of Our Lady of the Work People (Fig. 14), an eagle with a wingspan of 1.5 m, from yellow amber (Fig. 15), and two reliquaries. Prior to the project, the altar setting, in 2017, was made of metal and amber, an impressive size shrub vine (Kosior, 2018).

In 2005, the artist's studio in Gdańsk made, from nine kilograms of raw material, amber-brilliant Dress for the Jasna Góra Image of the Queen of Poland, dimensions: 121.8 x 81.3 cm (Kowalczyk P., 2005).

For a year, Mariusz Drapikowski and Kamil Drapikowski have been carrying out a project of building 12 altars of permanent adoration – made of silver with the use of amber, gold, decorative and precious stones and glass. These altars pilgrimage to destinations, which are points on the world map affected by the woes of wars,

experienced by conflicts, but also miraculously saved. So far, six of these altars have been made (Drapikowski, 2014, Figs 16, 17). The next altar is intended for the World Prayer Center for Peace, created in Niepokalanów, which will be completed in September 2018.

### 4. Amber as a raw material

The rich palette of natural varieties of Baltic amber – their various colors, various degrees of transparency (Leciejewicz, 2003, 2004, Figs 18, 19) – for amber artists are not enough. The dyeing of this raw material has been known and used since ancient times, and it has been used on a large scale during the reconstruction of the Amber Room. The creators' workshop also enriched other techniques of "refining raw nodules" – their clarification (Fig. 20) or foaming. A convenience for some creators is access to the size of slabs they expect, or the formation of ready-made forms obtained thanks to the development of the technology of pressing smaller fines of amber (Figs 21, 22).

On saving raw material allows you amber forming – giving shape to products or their elements by placing in prepared forms plasticized, by heating, raw amber – individual nuggets or several together. When machined using the classic method – punching fragments – "unnecessary clippings" account for up to 90% of the weight of the raw material used.

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## **Illustrations:**



Fig. 1. The largest lump of Baltic amber, 9658 g, from the collections of the Natural History Museum of the Humboldt University in Berlin. "Bernstein Tränen der Götter" exhibition at the Mining Museum in Bochum, Germany. Photo: A. Pielińska.



Fig. 2. The three largest lumps of Baltic amber from the collections of the Polish Academy of Sciences Museum of the Earth in Warsaw 2005 g, 2005 g, 1600 g, Photo: B. Gronus-Dutko

2. The three largest lumps of ic amber from the collections of Polish Academy of Sciences seum of the Earth in Warsaw: 5 g, 2005 g, 1600 g. Photo: Fronuś-Dutko.



Fig. 3. Mesolithic figurines of animals – a horse (8 x 11 x 2.5 cm, found in Dobiegniew) and wild boar – made of single amber nodules, copies from the collections of the State Archaeological Museum in Warsaw. The *Treasure of the Baltic. Amber in medicine* at the Museum of Pharmacy Msc. Antonina Leśniewska in Warsaw, 2012. Photo: A. Pieliński.

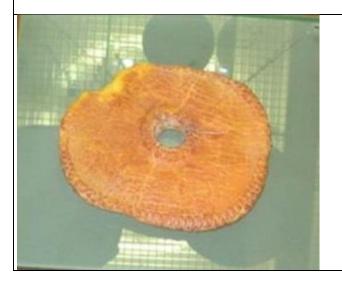


Fig. 4. Amber amulet symbolizing the sun, from the collections of the Archaeological Museum in Wrocław. Photo: A. Pielińska.



Fig. 5. Tazza with carved amber panels. Silver, chased and engraved, height 12.5 cm, diameter 14.5 cm. Made in Königsberg, workshop of Georg Schreiber, mid-17th century. From the collection of the Czartoryski Family. National Museum in Warsaw. Photo: Adam Pieliński.

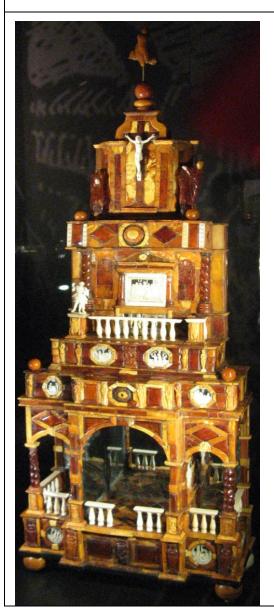


Fig. 6. A four-storey altar with wooden structure with amber lining decorated with ivory, height 85.5 cm. From the collections of the Castle Museum in Malbork at the exhibition "Amber Contexts". Photo: A. Pielińska, 2015.



Fig. 7. Amber Room panel. Model – 1/5 life size: 154 x 56 cm. Project: A. Chozackij, 1977; Details of the decoration of the reconstructed Amber Room. Photo: A. Pielińska, 1997.





Fig. 8. Fragments of amber mosaics of the reconstructed Amber Room. Photo A. Pielińska, 1997.



Fig. 9. Pannoux *Russia*, amber mosaic by Alexandr Zhuravlov: 300 x 150 cm. Photo: A. Pielińska.



Fig. 10. Amber objects made in the workshop of Lucjan Myrta in Sopot. From the collections of the Amber Museum in Gdańsk. Photo: A. Pieliński, 2017.



Fig. 11. Amber Monstrance of the Millennium, made with stained-glass style by Mariusz Drapikowski, height 176 cm. Photo: A. Pieliński, 2015





Fig. 12. Details of the Amber Monstrance of the Millennium. Photo: A. Pieliński.



Fig. 13. Amber Altar of the Homeland in the church of St. Bridget in Gdańsk. Photo: A. Pieliński.



Fig. 14. Amber dress for icon of the Mother of God – Protector of People of Labor – painted by priest Franciszek Znaniecki after the December massacre of 1970. Dress made of white amber, the surface darkens. Photo: A. Pieliński.



Fig. 15. The yellow amber eagle – rising to flight, symbolizing Poland, 150 cm. Photo: A. Pieliński, 2015.



Fig. 16. Pentaptych *Star of Kazakhstan*, currently in Oziornoje in Kazakhstan. Photo:. A. Pieliński.



Fig. 17. The altar-triptych "Light of Reconciliation and Peace", made by Mariusz Drapikowski Studio as part of the "12 Stars in the Crown of Mary Queen of Peace" project for the International Center of Prayer for Peace at the Shrine of the Mother of Words in Kibeho, Rwanda, 2016. Photo: A. Pieliński.



Fig. 18. Natural forms and varieties of Baltic amber. Amber artworks by Gabriela Gierłowska, at the International Fair of Amber, Jewelery and Gemstones Amberif 2015 in Gdańsk. Photo: A. Pieliński.



Fig. 19. Polished pieces of natural Baltic amber. *Amber Laboratory* by Gabriela Gierłowska, International Fair of Amber, Jewelery and Gemstones Amberif 2017. Photo: A. Pieliński.



Fig. 20. Samples of the Baltic amber modified in an autoclave, which became transparent, darkened. *Amber Laboratory* by Gabriela Gierłowska, International Fair of Amber, Jewelery and Gemstones Amberif 2017. Photo: A. Pieliński.



Fig. 21. Samples of pressed amber. *Amber Laboratory* by Gabriela Gierłowska, International Fair of Amber, Jewelery and Gemstones Amberif 2017. Photo: A. Pieliński.



22. Desk organizer, dedicated: "J.I. Kraszewskiemu Ostrołęczanie 1879", 24.2 x 15 cm: inkwell, sandpaper, stamp; silver base for feathers - "triumphal archway"; base from pressed amber "Factory B. Bernstein in Ostrołęka". A gift for the 50th jubilee of literary activity celebrated in 1879 in Cracow. Gift of Józef Ignacy Kraszewski for the National Museum in Poznań, 1884. Photo: A. Pieliński.