RENAISSANCE AND BAROQUE GLASS FROM THE CENTRAL DANUBE REGION

Hedvika Sedláčková Dana Rohanová et al.



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Introduction

The origins of the study of glassmaking in the Czech lands were associated with archivists and historians who, in the late 19th and early 20th centuries, gathered written sources connected with this field of both economy and applied arts that has played an important part since the Middle Ages. The work of František Mareš, Christian Schirek, Anton Rzehak and Erwin von Czihak laid the foundations built upon by the future generations of researchers. In the 1930s they were joined by art historians such as F. X. Jiřík. However, the study of glassmaking was also connected with museums and art galleries, as well as private collections, which narrowed down the discipline to selected items of high artistic and historical value, true gems of their time. On the other hand, archaeological research conducted in towns and aristocratic residences yielded a large amount of glass from refuse pits, filled-up wells and cellars. For medieval glass, these were basically the only sources, which is why they soon attracted the attention of archaeologists. The study of medieval glass was pioneered by Dagmar Hejdová and Bořivoj Nechvátal in the 1960s, with archaeologists Eva Černá, František Frýda, Rudolf Krajíc, Pavel Šebesta and Bedřich Štauber, as well as Zdenka Himmelová († 2001) in Moravia, joining forces with them later. In Slovakia, the beginnings of the study of medieval and early modern age glass are associated with Klára Füryová and Marta Janovíčková who wrote an overview of the state of research until the 1980s. 1) Significant contributions also came from Jozef Hoššo († 2012), Bello Polla and Veronika Plachá, in collaboration with Bořivoj Nechvátal. Glass from renaissance refuse pits was first brought to light in 1963 by art historian Karel Hetteš, in his groundbreaking work on the influence of Venetian glass on the Czech production, and Dagmar Hejdová supplemented his study with material from research into a glasshouses in Rejdice, near Jablonec. Czech archaeologists involved in the gathering of information included Olga Drahotová who prepared the historical part of the publication History of Glassmaking in the Czech Lands (2005) that summed up the existing information from both published and unpublished sources from Bohemia, Moravia and a part of Silesia.

In contrast, the study of baroque glass has remained in the hands of art historians. The only contribution made by archaeologists has been the research into the Karlova huť glasshouses in the Jizerské hory mountains (1758–1775) that provided an overview of commonly used glass, ²⁾ and more recently research into glasshouses in Bedřichov, near Jablonec nad Nisou ³⁾ and Božejov, in the Pelhřimov region. ⁴⁾ The main objective of this publication, the outcome of the grant project "Renaissance Glass and the Origins of Baroque Glassmaking in Archaeological Finds from the Central Dan-

ubian Region" (GAČR no. P405/12/1411), is to assess the relationship between three geographically connected regions on the example of their glass production. The incorporation of these regions into the Habsburg monarchy after 1526 generated, above all, political ties, while their economic and cultural history differed.

From the onset of glassmaking, glass products had multinational character but they also always clearly reflected the economic situation in their regions illustrated by the availability of the more expensive imported goods, as well as by the amount and quality of the regional output. The collected material indeed shows a dramatic difference between the character of glass in Bratislava, Brno and Vienna, stemming from the different status of these cities. In Bratislava, to which political and administrative institutions were transferred after the occupation of Hungary by the Ottoman Empire, and that became a political and economic hub, a large proportion of glass was imported from Venice. Brno, which had become poor and lost its leading position in Moravia to Olomouc, could chiefly afford glass from regional sources, albeit of a great variety, and conservative Vienna, though being the seat of the monarchy, mainly relied on domestic products, yet in the high-class category. Due to the uninterrupted development and the amount of material, the Brno series brilliantly illustrate the process of transition from renaissance to baroque glass, not only in terms of shapes but also in the chemical composition of glass. Around the mid-17th century and in its second half, local glass reflected the poverty of Moravia after the Thirty Years' War, accompanied by the decline of some of the glasshouses. The absence of glass in Bratislava between ca. 1620 and 1670/80 can be explained by several factors, including uprisings of the Estates and plague epidemics.

The last third of the 17th century and largely also the first half of the 18th century can be considered the heyday of glassmaking in the Czech lands. Glass was in the uniform baroque style of thick-walled colourless crystal glass that enabled a novel manner of decoration – cutting. Glass series contain a multitude of vessel shapes, and the wide range of glass products is also evidenced by records from some of the glasshouses. On the other hand, refuse pits bear witness of the use of a limited assortment of cheap glass.

- 1) Füryová–Janovíčková 1991.
- 2) Kaván 1982.
- 3) Stará–Lacina 2007.
- **4)** Hrubý et al. 2009.

Glass products today cannot be assessed only in typological and chronological terms, which is why chemical analyses have become some of the basic sources of information. In a number of cases, optical assessment has proved wrong. About four hundred samples from Moravia, Bratislava and Vienna have enabled the drawing up of an overview of not only the chemical composition of glass but also of the development of glassmaking technologies and their application in the Danubian region. The overview was supplemented with analyses of glass samples from Moravian glasshouses acquired through prospection activities of Jiří Merta († 2015), Michal Gelnar and Aleš Knápek. The definition of the character of glass made in Hungary involved sixty samples acquired thanks to collaboration with Hungarian researchers from glasshouses in Pomáz, Visegrád and Budapest. It transpired that glass from Hungary was exported to Moravia as late as the second half of the 17th century. Samples from research into a renaissance glasshouses in Hall, Tyrol were supplied by Anna Awad, head of research (Museum Stadtarchäologie Hall), which enabled the identification of local (scarce) products in the examined series. Information about the composition of Czech glass comes from publications by Czech researchers that are sporadically supplemented by analyses, and from unpublished analyses of glass from Chrudim conducted by Dana Rohanová (research by Jan Frolík, Institute of Archaeology of the CAS, Prague, v. v. i.).

Chemical analyses of the glass were conducted with the use of the XRF (X-ray fluorescence spectrometry) method by the Central Laboratories of the University of Chemistry and Technology, Prague (Simona Randáková), and SEM/EDS (scanning electron microscopy) at the Institute of Inorganic Chemistry of the CAS, v. v. i., Husinec u Prahy (Dana Rohanová). All glass samples were also subjected to analyses regarding corrosion processes in refuse pits, and the state of their preservation was documented by means of optical microscopy. In the course of the research, students from the Department of Glass and Ceramics at the University of Chemistry and Technology, Prague carried out the programme "Conservation - Restoration of Glass and Ceramic Works of Arts and Crafts" and applied it to dozens of vessels. 5) The restored items will be displayed in the Bratislava City Museum in 2016. Students of the "Technology of Conservation and Restoration" programme participated in the preparation of samples for analyses and documentation on the optical microscope. 6)

In order to process the research material, Vilém Walter (Archaia Brno o. p. s.) created a database enabling the storage of information of typological and chronological character,

as well as the results of analyses. The online database with a web interface employs the MySQL system. The data is stored in a triple-level hierarchic structure (site → feature → fragment), and each of these items can be assigned textual information and picture documentation, including further types of files. The sites contain geographical coordinates, which enables their direct viewing on the map. The database is part of the project and includes information for which there was not enough space in the publication such as descriptions of features and detailed photo-documentation of the finds. The database will be available to the public and researchers from February 2016, and it will be possible to expand it with new finds.

Apart from the core team of researchers (Hedvika Sedláčková, Dana Rohanová, Branislav Lesák, Petra Šimončičová-Koóšová and Kinga Tarcsay) and experts from Archaia Brno o. p. s. took part in the project. The finds from Brno were processed in collaboration with the Brno City Museum, with Lea Chatrná in charge of their preparation and Miloš Strnad responsible for photo-documentation. Finds from Kroměříž were supplied by Helena Chybová, the series from Mikulov by Petr Kubín and the Olomouc series by Pavel Šlézar. Lenka Sedláčková (Archaia Brno o. p. s.) was responsible for the preparation of the picture documentation for printing, while other specialists provided information concerning refuse pits with glass from their own research.

Some of the project results have been published in studies and articles ⁷⁾ and presented at conferences and symposia in the Czech Republic and beyond its borders, for example, at the EAA in Plzeň (2013), the Study Days on Venetian Glass in Venice (2012–2015) and the 20. Congrès AIHV in Fribourg (2015).

- 5) Barbora Hrubá, Jitka Seifertová, Miroslava Špačková, Margarita Gorelíková, Jana Torňošová and Dominika Lukšíčková.
- **6)** Marie Netušilová, Olga Tomanová, Alena Csöszová, Anežka Černá and others.
- 7) ATTI Study on Venetian Glass 2014, Památky archeologické 2014 and 2016 forthcoming, Brno v minulosti a dnes 2014, Journal of Glass Studies 2015.