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## STUDIES ON GLASS IN VENETIAN STYLE OF THE $16^{TH}$ AND $17^{TH}$ CENTURIES IN AUSTRIA

This paper presents the results of archaeological research into glass from the 16<sup>th</sup> and 17<sup>th</sup> centuries in Austria, and in particular in the east of the country in Lower Austria and Vienna.

Chemical analyses of glass finds from the 13<sup>th</sup> to 17<sup>th</sup> centuries, which were carried out in cooperation with the TU Berlin, reveal a dissimilar pattern of development between western and eastern Austria in the composition of the colourless glass<sup>1</sup>, although these results should be tested by further research. It seems that soda ash glass remained common into the 17<sup>th</sup> century in the west, while in the east a definite shift from soda ash glass to wood ash glass took place in the 15<sup>th</sup> century. Vessels of wood ash glass are very common in the east from then on and presumably represent the production of local glassworks, which according to written sources were erected in large numbers in Lower Austria in this period.

Today the early glasses from the 15<sup>th</sup> and early 16<sup>th</sup> centuries, made originally of colourless glass, generally show strong signs of corrosion, ranging from a silver-brown disintegration of the glass surface to complete devitrification. The glasses maintain known medieval forms and diversify on this basis, for example with prunted beakers or with bottles with blue filament overlays, but there are also unknown forms such as a vessel, which is either a tabletop lamp or a mannerist goblet<sup>2</sup>.

Green-blue glasses crop up for a short period in the first half

<sup>&</sup>lt;sup>1</sup> Müller and Tarcsay, Stege 2004.

<sup>&</sup>lt;sup>2</sup> Tarcsay 2003a: 169. Tarcsay 1. Tarcsay 2.

of the 16<sup>th</sup> century<sup>3</sup>, but the 17<sup>th</sup> century is dominated again in its turn by the production of colourless wood ash glass for tableware.

According to written sources glass production in Venetian style began in this region in Vienna, where the first in a string of glassworks was founded in 1486. These installations were under urban or imperial patronage und evidently produced soda ash glass<sup>4</sup>. Without archaeological data however, we cannot know what these Viennese glasses looked like.

A long drawn out rivalry developed between Vienna and Hall in Tyrol, after the Hall glassworks was founded in 1534. This would appear to indicate a similar product range and an identical clientele.

The glassworks in Hall is well-known in art historical circles because of several early publications on the subject<sup>5</sup>. Archaeological excavations were carried out there by Alexander Zanesco in 2008 and 2009<sup>6</sup>. Post-excavation analysis is not yet complete, but it is clear that the finds will be good for several surprises, as they do not entirely reflect the product range as postulated to date.

Past and present excavations at the sites of 16<sup>th</sup> and 17<sup>th</sup> century glassworks in Austria<sup>7</sup> appear to show, however, that many glassworks were now specialising in the production of glass in Venetian style – albeit of very clear wood ash glass. In this way it is becomingly increasingly clear that modern-day Austria was one of the production centres of this glass ware.

The glassworks from the manor of Reichenau form the only glass production centre, which has been comprehensively presented to date. They are well described and illustrated in the so-called "Topographia Windhagiana". There were 4 glassworks in the 16<sup>th</sup> century, which were succeeded around 1600 by a new glasshouse in Reichenau, which continued until 1686. The technical structure of the glassworks and their furnaces can be

<sup>&</sup>lt;sup>3</sup> Tarcsay 2003a: 170. Tarcsay 3.

<sup>&</sup>lt;sup>4</sup> Tarcsay 1999: 7-11.

<sup>&</sup>lt;sup>5</sup> Egg 1962.

<sup>&</sup>lt;sup>6</sup> Zanesco 2009.

<sup>&</sup>lt;sup>7</sup> Felgenhauer-Schmiedt 1994.

partly reconstructed. A high level of technology, influenced not only by Italian glassmaking, but also showing further development towards the "Bohemian furnace", is shown not only by the detailed views in the "Topographia Windhagiana", but also from the use of standardized furnace stones.

The glass produced was wood ash glass rich in silicon. The production range included hollow, flat and solid glass. From the waste glass it is possible to say that almost half the glass vessels were colourless, almost a third were greenish and a fifth were otherwise green coloured; the rest were blue, violet, emerald green, opal as well as red, white and blue opaque. Colourless glass of Venetian style (Fig. 1), colourful plates, bowls and jugs, as well as simple everyday forms were found.

The Venetian-type glasses included above all goblets, plates, bowls and four-cornered bottles, which could be decorated with filigree, enamel or cut glass decoration, berry-shaped prunted addons, lion's heads and snake-shaped or coloured filaments. Some of these possibilities can be related to well-known, art historically narrowly-determinable, stylistic circles<sup>8</sup>.

Unfortunately apart from the glassworks there is a general lack of well-stratified glass finds complexes from the 16<sup>th</sup> century in Eastern Austria, yet the source base for the 17<sup>th</sup> century is considerably better. This means that on the basis of archaeological data it is not always possible to tell apart 16<sup>th</sup> and 17<sup>th</sup> century glass unambiguously.

A rather curious goblet from Orth Castle (Lower Austria), which was found in the fill of a 16<sup>th</sup> century drain, serves to illustrate the transition from the Middle Ages to the Renaissance period at this point. The glass is endowed with large filigree-decorated nodes and prunted add-ons on the bowl (Fig. 2)<sup>9</sup>; a comparable object can be found in the collections of the Museum of Applied Art in Vienna<sup>10</sup>.

Large glass complexes with better than average everyday ware

<sup>&</sup>lt;sup>8</sup> Tarcsay 2003b. Tarcsay 2009.

<sup>&</sup>lt;sup>9</sup> Tarcsay 2011.

<sup>10</sup> Egg 1962: Tafel IX, Abb. 17.

from the second half of the 16<sup>th</sup> and from the 17<sup>th</sup> centuries have been excavated for example in St. Pölten (Lower Austria)<sup>11</sup> and the former university in Vienna<sup>12</sup>. Extremely richly decorated glasses were recovered from the monastery at Pernegg (Lower Austria), (Fig. 3)<sup>13</sup>: They were decorated with branded and painted enamel, cut glass decoration and gold-plating and date as a group to the first quarter of the 17<sup>th</sup> century. The chronological end of the glass discussed here takes the form of a finds complex from the Herrengasse 13 in Vienna, which was disposed of c. 1700 and already included thickwalled scratched and cut objects of crystal glass, which illustrate the newly increased influence of Bohemian glassmaking<sup>14</sup>.

These previous results of research into glass in Austria confirm that archaeological examinations at the sites of glassworks not only provide us with new findings, but are also essential for new impulses in a glass research field dominated by historical and art historical approaches. They also show Austria's importance as the geographic link between Venice and Bohemia, the two important Central European glass centres, and its mediating role in the transfer of technological knowledge and innovation between these two poles.

(Translation: Paul Mitchell)

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<sup>&</sup>lt;sup>11</sup> Few examples see Tarcsay 2003a: 175, Abb. 9.

<sup>&</sup>lt;sup>12</sup> Tarcsay 1.

<sup>&</sup>lt;sup>13</sup> Tarcsay 2000.

<sup>&</sup>lt;sup>14</sup> Tarcsay 4.

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Fig. 1 - Some glassfinds from the glasshouse Reichenau am Freiwald/Lower Austria (picture from Tarcsay 2).



Fig. 2 - Goblet from Orth Castle/Lower Austria (picture from Tarcsay 2011: 60).

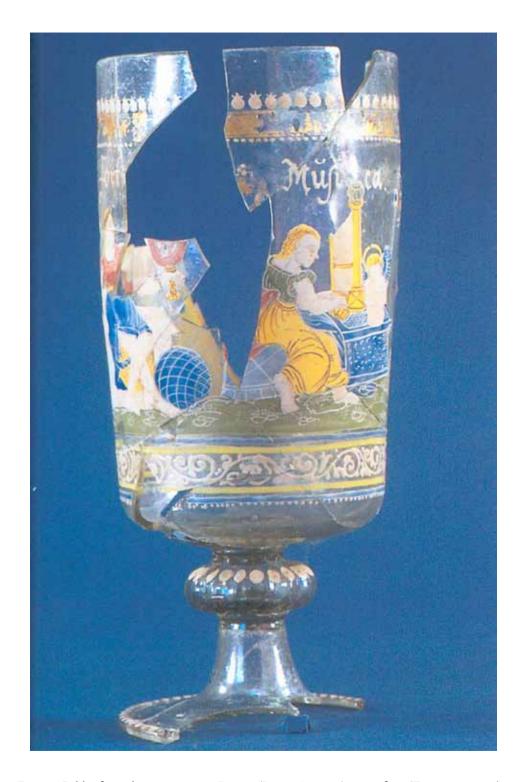


Fig. 3 - Goblet from the monastery at Pernegg/Lower Austria (picture from Tarcsay 2000: 243, Fig. 21.40). 104