

---

## THE EXPORTATION OF BOHEMIAN GLASS A HISTORICAL REVIEW

Author(s): Václav Lukáš

Source: *Journal of Glass Studies*, 1981, Vol. 23 (1981), pp. 56-63

Published by: Corning Museum of Glass

Stable URL: <https://www.jstor.org/stable/24190683>

### REFERENCES

Linked references are available on JSTOR for this article:

[https://www.jstor.org/stable/24190683?seq=1&cid=pdf-reference#references\\_tab\\_contents](https://www.jstor.org/stable/24190683?seq=1&cid=pdf-reference#references_tab_contents)

You may need to log in to JSTOR to access the linked references.

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



is collaborating with JSTOR to digitize, preserve and extend access to *Journal of Glass Studies*

JSTOR

# THE EXPORTATION OF BOHEMIAN GLASS A HISTORICAL REVIEW

VÁCLAV LUKÁŠ

BOHEMIA, one of Europe's principal glass-making centers, located in the heart of Europe, is an area surrounded by heavily forested mountains. All of the raw materials needed for glass production have always been available, but supplies of wood, used as fuel in the glass furnaces and in making potash, were particularly abundant. Glassmaking centers were also established in areas near Bohemia such as Moravia (an integral part of the Czech state), Silesia (also incorporated for a time), Bavaria, the Upper Palatinate, Saxony, and also Thuringia, near the western border. Bohemia, however, was the leading glass manufacturing center of the region.<sup>1</sup> Before Bohemian glass had won world renown because of its extensive distribution abroad, glassmaking underwent a long period of development.

Scholars feel that the archeological finds of glass in Bohemia date earlier than the first millenium B.C. It was imported from the region of the Aegean Sea or from Egypt. It is almost certain that in the La Tène period (beginning 400 B.C.) glass was already being manufactured by the Celts, who settled in Bohemia. The Germanic and Slavonic tribes which succeeded them in the country apparently continued to produce glass, but neither its quantity nor quality satisfied the market. Glass was imported from several provinces in the Ro-

man Empire, from the Rhine region more than any other as shown by archeological finds.<sup>2</sup> We know that twenty-five glassworks (ten in Bohemia, three in Kladsko, seven in Moravia, and five in Silesia) existed in the territory of the medieval Czech state during the fourteenth and fifteenth centuries. Evidence from recent finds shows that shapes were varied and the glass composition was technically refined.<sup>3</sup> Such glasses were sold not only in Czechoslovakia but also were probably exported to neighboring countries. These beginnings of the export of glass are still somewhat obscure. Undoubtedly export was limited by the amount of glass available after the domestic market had been satisfied. In the last quarter of the fourteenth century some records of glass trade do exist. In 1376, Nicholas Quayser, glassmaker from Vysoké nad Jizerou in the (Krkonoše) Giant Mountains, contracted in Prague to supply many window roundels to Hlohov in Silesia.<sup>4</sup>

1. Author's study on the same theme printed in *Glass Review* 33, 1978, No. 1, pp. 4-7.

2. J. Filip, *Pravěké Československo*, Prague, 1948.

3. D. Hejdová, "Types of Medieval Glass Vessels in Bohemia," *Journal of Glass Studies* 17, 1975, pp. 142-150.

4. D. Hejdová, "Archeologický výskum sklářské hutí ve Sklenařicích, okres Semily.—Die archäologische Forschung am Standort der Glashütte in Sklenařice (Glaserdsdorf)," *Ars vetraria* 1, Jablonec nad Nisou, 1966, pp. 13-28.

The next period of Czech glass export was in the second half of the sixteenth century, but its extent was clearly limited. Glassmakers moved to the northern and other forested parts of Bohemia from the Saxon side of the Krušné mountains after the forests were depleted by ore processing needs. This was the period when Venetian glass, prized for its fragility and transparency, was coveted worldwide.<sup>5</sup> At the same time, Bohemian glass manufacturers worked to make glass equal to Venetian in quality, transparency, and purity so that excess production could be used to compete with Venetian products.

Acceptance by foreign markets was not achieved until the seventeenth century. Impure glass of a green/yellow cast was manufactured in Bohemia and nearby Germanic countries. Flaws were concealed by opaque enamel decorations on both window roundels and the so-called welcoming glasses (*Willkomm* or *Humpen*), conical footed beakers. Their enameled decorations were considered typically Czech: the eagle of the Holy Roman Empire with emblems of representatives of the imperial estates; portraits of the Emperor and the seven electors; a lily of the valley motif; gold borders with white enameled beads. Although these emblems and motifs appeared on glass in other countries, there is no indication that the glass was manufactured in Bohemia and then exported. Czech glassmakers were welcomed in many countries where they helped establish factories and introduced their own molds, decorating techniques, and motifs. North Bohemian glassmakers helped to found the first glassworks in Grimnitz (Brandenburg) in 1602.<sup>6</sup>

Written records survive from the second half of the sixteenth and early seventeenth centuries. Customs regulations, inventories, and other contemporary sources prove that Bohemian glass was being exported to Saxony, Austria, Thuringia, Augsburg, Nuremberg, and Danzig. It is more than likely that at least some of the glasses from the court cellars in Saxony (*Hofkellergläser*) are from Bohemia.<sup>7</sup> Mirrors, window roundels, and hollowware were also exported from both North

and South Bohemia. Bohemian glass soon rivaled Saxon and Tyrolean glasses despite Archduke Maximilian's proposal in 1602 that both Bohemian and Venetian glass be banned. A similar ban (thirty years previously) had displaced Czech glass in favor of Halle glass in Nuremberg.<sup>8</sup>

It was inevitable that European glassmakers would attempt to imitate the coveted Venetian glass. *Façon de Venise* flourished in present-day Belgium, Holland, and Spain. The necessary raw materials resembled those of Venice and the glasses produced were sometimes indistinguishable from their Venetian counterparts. Similar attempts in Bohemia were not as successful. Bohemian potash glass was not comparable to Venetian soda glass. Czech glassmakers strove to improve the quality of their glass and later fully exploited the engraved and cut possibilities.

Another important influence on glass production was that of the gem cutter. When Caspar Lehmann was granted an imperial privilege in 1609, the art of cutting precious stones was transferred to glass at the court of Emperor Rudolf II, a patron of the arts. The improved Bohemian glass was hard, transparent, and could be cut and engraved; it was a suitable replacement for rock crystal. Attempts to produce such a glass were probably made at the glassworks built in 1598 by Rudolf II near the hard-stone cutting mill of Císařský Mlýn in the Bubeneč district of Prague when it was managed by Martin Fridrich. Fridrich had been a foreman at Chřibská in northern Bohemia and had founded the previously mentioned glassworks of the Elector of Brandenburg at Grimnitz.<sup>9</sup>

5. K. Hetteš, *Venezianisches Glas*, Prague, Artia, 1960.

6. V. Lukáš, "The North Bohemian Glassworks of the Oldest Tradition," *Glass Review* 29, 1974, No. 9, pp. 18–21, No. 11, pp. 17–21.

7. R. Forberger, "Zur Wirtschaftsgeschichte des sächsischen Glases," in: *Sächsisches Glas vom 17. bis Anfang des 19. Jahrhunderts* (Exhibition catalog), Dresden, 1975.

8. R. Schmidt, *Das Glas*, 2. Auflage. Berlin-Leipzig, 1922, pp. 120–121, 272–273.

9. S. Urban, "The Workshop for Cutting of Precious Stones from 1595 to 1684," *Glass Review* 28, 1973, No. 4, pp. 18–23.

The destructive Thirty Years War in Europe (1619–1648) stopped all efforts to improve Bohemian glass. Success was not achieved until the 1670s. The development of so-called “Bohemian” crystal is usually attributed to Michal Müller, foreman of the Michl Glassworks (named for him) on the Vimperk estate in southern Bohemia. The factory had pure quartz and limestone, excellent raw materials, for its glass.<sup>10</sup> Bohemian crystal, however, actually resulted from consistent and independent efforts to improve the glass at many Czech glassworks. All achieved success at approximately the same time. This glass, transparent and brilliant, was used to make massive vessels enhanced by cut facets and decorative intaglio engraving according to the Baroque taste. Venetian glass soon lost its former position of eminence.

It was in Bohemia that the typical Baroque-style glass was introduced—a formidable goblet with lid and an engraved bowl on a cut, baluster stem. These glasses were evidently not popular on foreign markets, but there was great demand for simple and serviceable drinking glasses either plain or engraved and cut by anonymous engravers and cutters.

The Baroque goblets were soon imitated by German glass factories in Saxony, Brandenburg, Hesse, and other areas. Many manufactories for cutting glass were court enterprises, primarily, and employed renowned engravers to supply luxurious products for their aristocratic patrons. Their glass did not represent serious competition on the export market where Bohemian glass had been famous since 1700.

By the second half of the seventeenth century, Czech glassmakers had begun separating decorators and producers of glass. A guild for glass painters, engravers, and cutters had been organized on the Česká Kamenice estate in Northern Bohemia as early as 1661. At the same time the sale of glass products became a separate function. The first glass peddlars purchased glass from the factory and carried it to market in baskets on their backs. Eventually, wheelbarrows and carts were used, followed by several wagons needed to reach

wider, more remote markets and those in distant foreign countries. Wheelbarrows, sometimes in long convoys, were used in many areas because of the poor condition of the roads.

As the merchants became more knowledgeable about the needs and desires of their foreign customers, they began to influence glass production. After acquiring capital, some purchased glass blanks to be cut and engraved by their own village craftsmen. Gradually, such merchants gained control of glass decoration. There was a later attempt to control manufacture by a ban forbidding manufacturers to sell glass blanks abroad or to consign their blanks to glass decorators, but the ban was not successful.<sup>11</sup>

One of the most successful glass traders was Georg Franz Kreybich of Kamenický Šenov. From 1682 to 1721 he made over thirty business trips to Italy, Sweden, Great Britain, Russia, and Turkey. A qualified painter and glass engraver from North Bohemia, Kreybich began his mercantile career with a wheelbarrow carrying his engraving equipment to engrave to his customers' orders. Eventually, he traveled with two carter's wagons, but he was neither the first nor the only one to be so adventurous. His markets were unusually distant, and he kept fascinating records of the political and social conditions in the countries he visited.<sup>12</sup> In London, for example, he witnessed the “Glorious Revolution” of 1688 which dethroned James II, and was in Moscow in 1689 during the upheaval which brought Czar Peter I to the throne.<sup>13</sup>

At that time foreign trade was not common among north Bohemian glass merchants. Michal Müller of South Bohemia, mentioned before, exported fine crystal to Germany, Russia, Italy,

10. F. Mareš, *České sklo*, Prague, 1893, pp. 83–100.

11. K. Hetteš, *Sklo borských výtvarníků* (Exhibition catalog), Jablonec nad Nisou, 1964.

12. V. Sacher, *Tři sta let skláštví na území Nového Boru*, Borské Sklo, Nový Bor, 1967.

13. V. Lukáš, “G. F. Kreybich's Journey to London in 1688 and the Beginnings of English Engraved Glass,” *Glass Review* 35, 1980, No. 1, pp. 10–13.

Spain, and Holland with the help of some Dutch merchants. Glass was also sold in Venice, France, Prussia, Saxony, Sweden, Hungary, Poland, and Turkey. Georg Franz Kreybich of North Bohemia purchased glass from Michl's glassworks when he was dissatisfied with the quality of north Bohemian glass, and other merchants did the same.

It was a Jesuit missionary, P. Michal Salbe, who helped to stimulate exports. In 1701, Salbe had taken three dozen cut and engraved goblets from Michl's glassworks to South America. Three years later he proposed to the administrator of the Eggenberg estate that glass for export from Vimperk to the Spanish colonies be sent under the management of the Dutch merchant, Jan van der Muelen. Salbe outlined how the glass was to be decorated and what motifs would be popular in Spain and the "Spanish Indies." The glass was to be transported "along the river Vltava to the Elbe and to the sea, always by river, because in this way the glass will be transported by water as far as India with only one or two reloading procedures."<sup>14</sup>

The competition between Bohemian and Venetian glass in world markets and in Venice itself is documented by frequent Venetian bans between 1607–1710 against importation to Venice and its domains. The bans were frequently ignored. Ironically, it was one Giovanni Sola, earlier arrested and punished as a violator of these bans, who saved the Venetian reputation by importing (now with the approval of Venetian authorities) Bohemian raw material used to produce semi-crystal glass after Murano glassmakers had tried unsuccessfully to imitate the harder Bohemian glass. Despite such bans, Bohemian engraved glass continued to be imported to Venice.<sup>15</sup>

In addition to glass from Michl's south Bohemian glassworks, it is known that glass from both southern and eastern Bohemia was exported to Europe and overseas as early as the seventeenth century. A trade organization was never formed to encourage and develop such export.

A trade organization was founded in northern

Bohemia. There, tradition and system had established a separation of glass decorators, traders, and those who produced glass. The area was adjacent to the centers of production and export of cloth made in the Rumburk region. Called the Bohemian Netherlands, the area adjoined Lužice and Silesia where shipping was first controlled by Germans (Nuremberg) and later the Dutch and the English. Both glass and cloth production depended on the local availability of raw materials, i.e., potash for both, in addition to a supply of cheap but skilled labor. Cloth had long been manufactured and exported widely, particularly by sea; thus it was not unusual that glass and cloth were later exported together by the same merchants.<sup>16</sup>

Still another advantage was the proximity of the river Elbe, which connected northern Bohemia with Hamburg. The Jesuit, P. Salbe, had earlier pointed out the advantages of transporting glass by water, but the Elbe presented some obstacles. Because wood could be transported along the Elbe to Germany and sold at a profit, its cost to the local glassmakers became prohibitive. One after another, the North Bohemian glass factories closed. The glass decorators, whose skill gave the glass its real value, and the local merchants and shippers who did not want to see their foreign markets disappear, encouraged the purchase of glass blanks from more remote parts of Bohemia with plentiful wood supplies. The glass blanks were then sent to northern Bohemia (with as much as 70% breakage) to be decorated and then exported—at considerable profit.

One North Bohemian aristocrat was also a successful entrepreneur. Count Josef Kinsky (1705–1780) established textile, mirror, and other man-

14. D. Šrýtrová, "K počátku obchodu s českým sklem.—Zu den Anfängen des Handels mit dem böhmischen Glas," *Ars vitraria* 1, Jablonec nad Nisou, 1966, pp. 31–38.

15. A. Gasparetto, "Les Relations entre Venise et la Bohême dans l'industrie du verre au début de XVIIIe siècle," *Annales du 5e Congrès de l'Association pour l'Histoire du Verre*, Prague, 1970, pp. 163–176.

16. A. Kunze, *Die nordböhmisch-sächsische Leinwand und der Nürnberger Grosshandel*, Reichenberg, 1926.





FIG. 1. A meeting at Nový Bor on February 20, 1783, celebrating a truce; the peace treaty signed later in Versailles permitted a reopening of Bohemian glass markets overseas.

ufactories on his Sloup estate and wisely chose the village of Bor (Haida) as the industrial and trade center of the area and his estate. The village, which became a town in 1757, was on the newly constructed imperial road from Prague to Rumburk, to Lužice and Silesia. Its favorable location soon attracted glass merchants from the nearby villages, and it became a most important foreign trade center for Bohemian glass (Fig. 1).<sup>17</sup>

In the second third of the eighteenth century, financing of foreign trade changed. Merchants, unable to bear individual risks, formed trading companies to raise capital. Offices were established in all the important trade centers in Europe and overseas, especially in Spain and Portugal. From these centers Bohemian glass was shipped to the American colonies of European countries and left Dutch harbors enroute to the Dutch colonies. The Near East and North America were covered by similar arrangements (Fig. 2).

The apprenticeship of the sons of the North Bohemian traders was thorough. In an almost monastic system, they lived sometimes as long as fourteen years in a foreign country, learning the languages, laws, and commercial customs as well as the tastes and requirements of their customers. Upon their return to Bohemia, their experiences were of great value to the family enterprises. Ultimately the Piarists (*Patres piarium scholarum*) staffed a school founded at Nový Bor in 1763 to educate the young merchants. The curriculum included not only foreign languages, laws, and customs, but commerce and bookkeeping as well.<sup>18</sup>

17. A. Paudler, *Graf Josef Kinsky, Herr auf Bürgstein und Schwoyka*, Leipa, 1885.

18. V. Sacher, "Zušlechťování skla v Novém Boru pamatuje Švédý, 100 let rafinérie závodu 1 Borské sklo, Nový Bor, 1969.

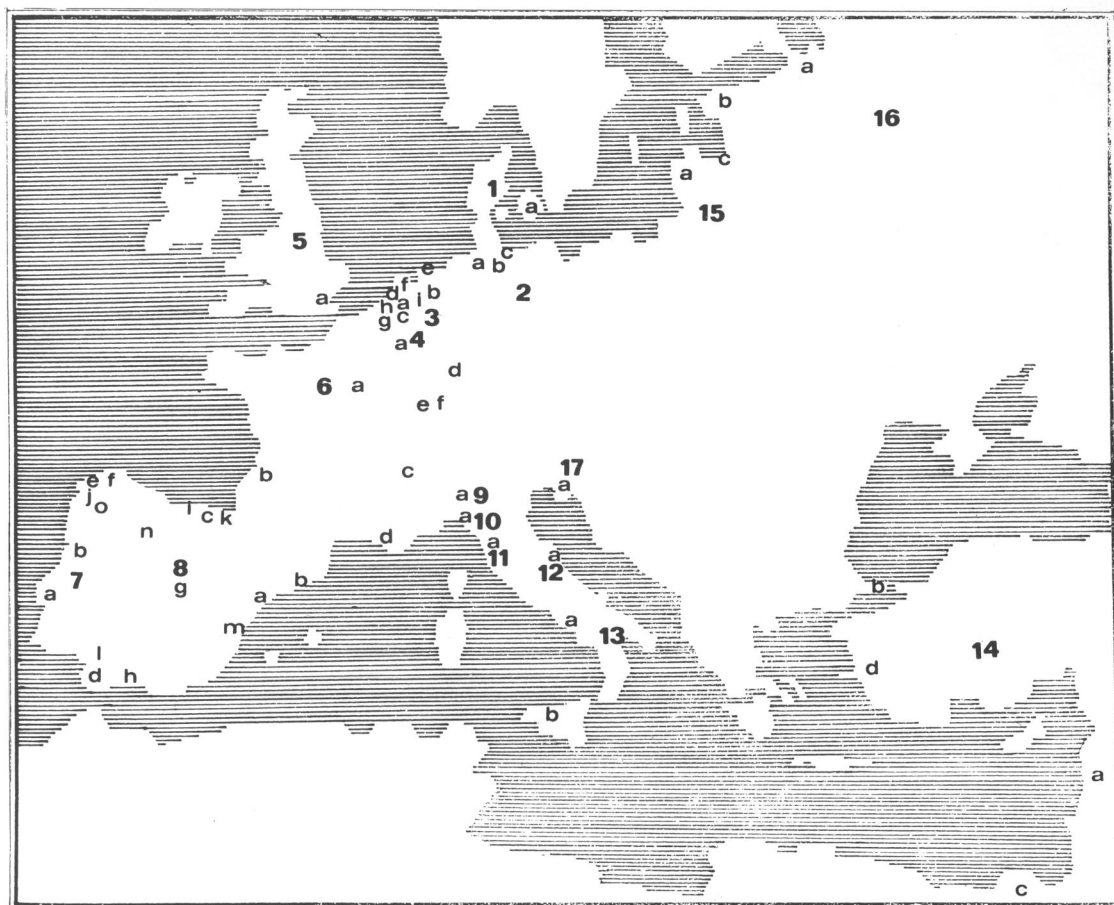


FIG. 2. Seats of the factories of Nový Bor glass merchants in the first half of the nineteenth century. 1. The Kingdom of Denmark: a. Copenhagen. 2. Imperial towns: a. Bremen, b. Hamburg, c. Lübeck, d. Frankfurt. 3. The United Provinces of the Netherlands: a. Amersfoort, b. Amsterdam, c. Dordrecht, d. The Hague, e. Leeuwarden, f. Leyden, g. Middelburg, h. Rotterdam, i. Utrecht. 4. The Austrian Netherlands: a. Brussels. 5. The Kingdom of Great Britain: a. London. 6. The Kingdom of France: a. Paris, b. Bordeaux, c. Lyons, d. Marseilles, e. Nancy, f. Strasbourg, g. Lisbon. 7. The Kingdom of Spain: a. Alicante, b. Barcelona, c. Bilbao, d. Cadiz, e. La Coruna, f. Ferolla, g. Madrid, h. Malaga, i. Santander, j. St. Iago, k. San Sebastian, l. Seville, m. Valencia, n. Valladolid, o. Vigo. 8. The Duchy of Milan: a. Milan. 9. The Republic of Genoa: a. Genoa. 10. The Grand Duchy of Tuscany: a. Livorno. 11. The Papal State: a. Ancona. 12. The Kingdom of Naples and Sicily: a. Naples, b. Palermo. 13. The Kingdom of Naples and Sicily: a. Naples, b. Palermo. 14. The Osman Empire: a. Beirut, b. Constantinople, c. Cairo, d. Smyrna. 15. The Kingdom of Poland: a. Libava. 16. The Czardom of Russia: a. Petrograd, b. Reval, c. Riga. 17. The Austrian Port: a. Trieste.

Glass from Kamenický Šenov was sold mostly to the Levant and Turkey (the “old” Turkish company was founded there in 1742), but the Bor companies traded chiefly with Spain, Portugal, Holland, and their colonies. There was also trade in Bavarian sheet glass, and Thuringian, English, Belgian, Dutch, and French glass products. Merchants sometimes supplemented glass export

shipments with yarn, cloth, and other products from Czech craftsmen and factories. The returning vessels carried fine English and Dutch cloth, colonial products, wines, and tobacco, furs, and canvas.<sup>19</sup> In 1790 the Kamenický Šenov glass

19. E. Schebek, *Böhmens Glasindustrie und Glashandel, Quellen zu ihrer Geschichte*, Prague, 1878.

merchants formed *Kompaniefuhrewerk*, a shipping company, to expedite their maritime transportation.

Trade of Bohemian glass, however, was the chief concern of the trading companies. Drinking glasses—both decorated and undecorated—were exported as well as mirrors, chandeliers, chandelier drops, glass beads, and the first products from the emerging costume jewelry industry in Jablonec.

Despite many problems, the glass trade was very profitable. Return on invested capital sometimes exceeded 30%, and the export business continued to grow. Bohemian glass exports totaled over 97,000 guildens in 1732; by 1752, the total was almost 290,000 guildens, and in 1768, 390,000 guildens.<sup>20</sup>

So much Bohemian glass was exported to France that the Bishop de Montmorency-Laval of Metz, requesting permission to build a glassworks at Baccarat in Lotharingia, commented that “France lacks an artistic glassworks, and as a result, products from Bohemia make their way here in such quantity that there is a great drain of money at a time when the kingdom has a great need of it in order to recover from the destruction of the Seven Years’ War.”<sup>21</sup>

Bohemian glass production expanded to meet demand: there were fifty-two glassworks operating in 1752; in the 1780s, sixty-five, and as many as seventy-nine in 1799. Their dependence on foreign sales was paralleled by concern over world economic fluctuations. Political changes and wars of long or short duration restricted or stopped such trade. Glass merchants did not prosper during Spanish wars between 1701–1714, wars with Turkey (threatening George Franz Kreybich’s journeys to Constantinople), Austrian wars (1740–1748), the Seven Years’ War (1756–1763), British wars with Spain and France, and struggles for independence in the North American colonies (1755–1783).

The Austrian government’s support of production and export of Bohemian glass (an important segment of the monarchy’s foreign trade) spurred

other countries to increase glass production. Tariffs were raised; foreign glass imports were banned to protect industries often founded or revived by Bohemian immigrant glassmakers. In Portugal, for example, after Bohemian glass imports were forbidden, trade companies sold Bohemian linen; in Sweden and Denmark glass was imported clandestinely. After Silesia became part of Prussia in 1742, Friedrich II’s protective measures were more detrimental to Silesian than Bohemian glass.

Trade obstacles were numerous. Transportation over poor roads was costly. The government of Saxony controlled the Elbe and forced merchants to unload their boats at Pirna, place the goods on wagons, and proceed by road so Saxon road-tax collectors did not lose their income. This policy raised transportation costs of Bohemian glass and linen two to three times higher.

Other problems developed in the Bohemian glass industry. Emigrating Czech glassmakers were competitors, and the government’s patent restrictions in 1772 were ineffective. Costs rose when wood became more expensive, and the potash was of poor quality. By overconfidence or lack of vigilance, merchants failed to react to the declining popularity of Baroque and Rococo styles and to change in time to the classical styles. Trading companies changed. Now run by the third generation, companies had too many shareholders; relations with foreign branch trading offices were too often interrupted; employees were no longer as enterprising. Thus exports inevitably suffered. From the early 1770s, Bohemian glass exports dropped; the value was 234,000 guildens in 1771 even though the glass was still coveted. A new threat was English lead glass, which developed about the same time that Bohemian crystal was perfected. The softer English glass was not a long-term threat after Bohemian adoption of diamond faceting, so-called “English cutting” style

20. A. Klíma, *Manufakturní období v. Čechách*, Prague, 1955.

21. R. de Chambrun, *Le bi-centenaire de Baccarat 1764–1964*, Paris, 1964.



which exploited the excellent optical properties of Bohemian glass and complemented the Neo-classical and Empire styles.

World events simultaneously hurt Bohemian glass export and prevented a surge in English domination of glass markets. Most damaging were France's Republican and Napoleonic wars, accompanied by Napoleon's continental trade system, the blockade of England, and freezing of maritime trade at the beginning of the nineteenth century. Another blow was the 1811 Austrian bankruptcy. Without western and overseas markets, Bohemian glass merchants looked to the East, especially to Russia and Turkey, adapting shapes, colors, and decorative motifs to please their new customers.<sup>22</sup>

After Napoleon's fall, world markets were upset by the popularity of English lead crystal and the introduction of cheap pressed glass, two factors which caused crises until the 1830s. Nový Bor, for example, which had forty-eight glass exporters in 1806, listed only three by mid-century.

Bohemian glassmakers refused to give up. They first imitated the "English cut" on potash glass and later on Bohemian lead glass but could not regain their lost markets. Belgium, Holland, and France had long imitated English glass much more successfully. Instead, it was necessary to produce something new, something to appeal to the taste and needs of the new middle class. Weary of long wars, desirous of peace and comfort, the prosperous citizens rejected the Empire style for the "Biedermeier" style in Germany, Austria, and other areas of the world.<sup>23</sup>

To satisfy the market, glassmakers produced colored, transparent glasses decorated by staining, enameling, and overlaying. The glass was cut, polished, and enameled. New types of glass were invented. Count Buquoy (1820) manufactured black hyalith decorated with gilding on his Nové Hradky estate in southern Bohemia. Friedrich Egermann, North Bohemian inventor, decorator, and merchant, produced lithyalin (resembling semiprecious stones) (1829) and developed

yellow (1820) and red (1832) stains.<sup>24</sup> Glassmakers all over Bohemia discovered new formulas, and developed and improved their glasses.

Soon the cutting and engraving styles were used on new, more elaborate shapes and styles of glasses. Souvenir glasses (friendship glasses) were typical. Of transparent and colored glass, many were made, cut, engraved, and painted for guests at the flourishing west Bohemian spas, often on the spot. Monograms, coats of arms, and even portraits were engraved, the most perfect of them by Dominik Biemann (1800–1857), renowned engraver-portraitist at spas.

Export of the new colored Bohemian glass caused a change in trading patterns. The old trading companies gradually closed, succeeded by more sophisticated organizations. Even at the peak of earlier trading company activity, some glass factories and decorating workshops maintained direct trade contacts with foreign customers. This contact continued. Supplier and export firms began showing sample collections and catalogs to customers either in factory showrooms or branch offices in large cities. From the 1820s to the middle of the century, sales of Bohemian glass boomed, thanks to the persistence of manufacturers, decorators, and inventors. Frequent exhibitions in Prague (1828–1836) allowed manufacturers and merchants to compare glass products, and salesmen expanded foreign markets.

In the second half of the nineteenth century, interest in Bohemian glass declined once again for many of the same reasons as in the earlier part of the century. Bohemian glassmakers adjusted to all their difficulties, nevertheless, and continued to have a large share of the market although they never achieved the position held before 1850.

---

22. K. Hetteš, "Česke sklo na Středním východe," *Nový Orient*, 1965, No. 2, pp. 56–57.

23. V. Lukáš, "Severočeské sklářství v devatenáctém století" in: *Severočeské sklo 19. století* (Exhibition catalog), Jablonec nad Nisou, 1970, pp. 7–14.

24. J. Brožová, *Bedřich Egermann 1777–1864* (Exhibition catalog), Nový Bor, 1977.