# European Glass

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Catherine Hess Timothy Husband

The J. Paul Getty Museum / Los Angeles

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Front cover: Wineglass (detail). See no. 32. Back cover: Footed bowl (detail). See no. 25. Half-title page: Pilgrim flask. See no. 20. Title page: Ewer (detail). See no. 18. Page vi: Goblet (detail). See no. 47.

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## Foreword

lass tantalizes the eye and fascinates the mind. The drama involved in its production—the manipulation of molten glass before a blazing furnace, by movements that must be swift and perfectly timed—only increases our respect for the glassmaker's art. The cool refinement of the objects in this volume belies the heat and haste of their creation.

The Museum's glass, like its fine collection of maiolica, was bought en bloc in 1984 from two brilliant collectors, one in New York and the other in London. More or less overnight, one of the best collections of European glass in America was assembled at the Getty, a group of such high quality that it would be impossible to duplicate it today.

Despite the fact that many pieces have been on display for a decade, the glass collection until now could have been called one of the Getty Museum's unsung glories. The collection has long deserved a proper catalogue. Happily, just such a catalogue appears at the same time that a much larger selection of the pieces themselves goes on display in a gallery designed for them in the new museum at the Getty Center.

I am grateful to Catherine Hess, Associate Curator in the Museum's Department of Sculpture and Works of Art, and Timothy Husband, Curator in the Department of Medieval Art and The Cloisters at the Metropolitan Museum of Art, for the collaboration that has produced this latest addition to the series of catalogues devoted to the Getty Museum's permanent collection.

John Walsh Director



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**Catherine Hess** 



## List of Abbreviations

In bibliographies and notes, frequently cited works have been identified by the following abbreviations:

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BAROVIER MENTASTI 1982B Barovier Mentasti, R., et al. *Mille anni di arte del vetro a Venezia*, exh. cat. Palazzo Ducale and Museo Correr, Venice, 1982.

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### Introduction: The Art of Glass

Considering the short life [of glass] due to its fragility, one cannot and must not give it too much love, and one must use it and understand it as an example of the life of man and of the things of this world, which, though beautiful, are transitory and frail.

VANNOCCIO BIRINGUCCIO, De la pirotechnia

n his Natural History,1 Pliny recounts that glass was first made in Syria by merchants dealing in natural soda, who landed their ship on the banks of the Belus River and began to prepare a meal.<sup>2</sup> To heat their food, the men lighted fires on the beach under cauldrons that they set upon blocks of soda from the ship's cargo. When the heated soda and sand mixed together, glass was created, flowing out from beneath the pots in molten form. Although bonfires cannot normally reach temperatures that are high enough to fuse glass, it is possible that the earliest instances in which glass was created resulted from just this sort of accident. And while it is known that glass was deliberately produced for the first time thousands of years before Pliny told his story in the first century A.D.,3 his anecdote does contain some accurate information. It is true, for instance, that glass was first made in the Middle East and that it was-and still is-basically formed by melting together sand and soda.

Silica from sand or flint, more than sixty percent of the earth's surface, provides the fundamental quartzose material of glass. An alkaline flux, such as soda from evaporating brine deposits or potash from different types of vegetation, serves to lower the melting temperature of the silica.<sup>4</sup> Then calcium in limestone or chalk from the fossilized remains of sea organisms makes the glass mixture stable and the resulting objects brilliant. This calcium was present as a natural impurity of sand, but by the seventeenth century, ever more sophisticated purifying processes had eliminated this useful impurity, and glassmakers were obliged to add lime intentionally to the mixture, or batch.

In Mediterranean glass centers, the alkali ingredient came from the soda (sodium carbonate) produced by burning a plant called *barilla*, or glasswort (salsoda soda or salicornia), which grows along the seashore, especially in Spain. This prized soda made Egyptian, Roman, Venetian, and Spanish glass especially ductile: thin, light, and capable of assuming elaborate shapes. In forest areas north of the Alps, however, the alkali was mainly provided by potash (potassium carbonate), which came from the ashes of certain forest plants—such as beech, bracken, ferns, oak, or pine—that were purified by leaching in large pots, hence the name: "pot of ashes." Potash in French and German glass, for instance, created a more durable product that was also harder to work because it cooled and became firm more quickly than soda glass.

The glass formula could include metallic compounds such as the oxides of tin, manganese, cobalt, copper, and iron—that would color the glass itself or be used to make enamels for painting and firing on the glass. It was discovered that compounds of antimony and manganese (known as "glassmakers' soap") could also neutralize the greenish or brownish color of untreated glass caused by traces of iron in the silica. The decolorizing properties of these compounds created transparent, colorless glass, a fact known to ancient Roman craftsmen and rediscovered by the Venetians in the fifteenth century.<sup>5</sup>

The basic process of glassmaking has not changed much over the millennia. It involves mixing the dry ingredients (together with some partly molten scrap glass, called cullet, if available),<sup>6</sup> fritting these ingredients in a furnace,<sup>7</sup> fusing them completely in a crucible set in the furnace (fig. 2), and



 Glass Furnaces. From Georg Agricola's De re metallica (Basel 1556), p. 474. Los Angeles, Getty Research Institute for the History of Art and the Humanities, 84–B21868. Photo: Getty Research Institute Library Special Collections.

collecting a "gather" (or gob) of molten glass to create a desired shape (such as on a form, in a mold, or with a stamp, or by inflating with a blowpipe). Further elaboration or decoration can be accomplished by reheating and reshaping the glass, by manipulating it with various tools (fig. 3),<sup>8</sup> or by attaching other pieces of glass to it (such as semimolten blobs or slices of colored glass sticks, called canes). The finished object is then placed in an annealing furnace for slow cooling so as to prevent thermal shock. Glass can also be decorated once it has cooled by means of painting, abrading, gilding, cutting, or engraving its surface.

Glass is one of the few solid materials that are noncrystalline and amorphous. This means that molten glass does not form crystals as it cools but, rather, becomes viscous and malleable until it reaches a cold, hard state.<sup>9</sup> Furthermore, that glass as a medium of artistic expression can only be worked when it is too hot to handle makes factors of speed and dexterity in the choreography of its production critically important. Possibly because of its high melting temperature



- Glassmaker's Tools. From Diderot and d'Alembert's Encyclopédie ou Dictionnaire raisonné des sciences, des arts, et des métiers (Paris 1765), vol. 17, pl. 18, Los Angeles, Getty Research Institute for
- 1765), vol. 17, pl. 18. Los Angeles, Getty Research Institute for the History of Art and the Humanities, 84–B31322. Photo: Getty Research Institute Library Special Collections.

and its challenges as a workable material, glass was invented fairly late in human history, postdating its close cousins ceramics and bronze—by a thousand years or more.

The compositional similarity of glass to both Egyptian faïence dating from 3300 B.C.<sup>10</sup> and to ceramic glazes dating earlier suggests that the first time glass was made by a craftsman might have been when an Egyptian potter misfired one of his ceramics or dripped glaze in the kiln. By 2500 B.C., glass was being intentionally produced in Mesopotamia, where small glass objects, such as beads, have been found. In addition, the first philological evidence of glass—Sumerian and Akkadian terms for the substance—appears at this time in the area later known as Babylonia.<sup>11</sup>

Around 1500 B.C. in western Asia and northern Mesopotamia, the first glass vessels were created using a technique called core-forming. A core made of animal dung, clay, sand, and water was kneaded together, attached to a rod, filed to an appropriate shape, and fired at a low temperature. This core was then dipped into molten glass and, if desired,



4. Diatreta hanging lamp. Possibly Roman (reportedly found in Syria), circa A.D. 300. Diam: 12.2 cm (4<sup>1</sup>/<sub>4</sub> in.). Corning, New York, The Corning Museum of Glass, Arthur Rubloff Bequest.

decorated. After the glass had cooled, the core was scraped out of the vessel (which, although often translucent, sometimes appears opaque because of core remnants left inside).

Thanks in part to the inventiveness of Hellenistic craftsmen, glassmaking became an active and innovative industry of the Roman Empire, especially the Mediterranean areas of its dominion. Between 75 and 50 B.C., glassmakers somewhere on the Syro-Palestinian coast discovered that molten glass could be attached to a metal blowing iron and inflated, producing thin, transparent vessels that, though brittle when cooled, were extremely hard.<sup>12</sup> The earliest known pieces of blown glass date to the middle of the first century B.C. and originate from sites in the eastern Mediterranean, including one in the Jewish quarter of the Old City of Jerusalem.<sup>13</sup> Along with the discovery of glass itself, this discovery that glass could be expanded with air constitutes one of the two defining moments in the history of the medium.

Blown glass, either free-blown or mold-blown,<sup>14</sup> produces well-formed vessels with relative speed and ease. Consequently, Roman glassmakers began to produce utilitarian bowls, cups, and jugs. Fortunately, many examples of this production have survived thanks to the Roman practice of burying objects of glass as grave goods.

Roman glass is also distinguished by its luxury objects. For the more extravagant examples of their skill, Roman artists revived the technique of mosaic glass, first used for coreformed vessels in the fifteenth century B.C., whereby bits of variously colored glass canes were fused together.<sup>15</sup> Roman glassmakers also revived the Hellenistic practice of making "gold 'sandwich' glass," whose delicate, gold-leaf decoration was preserved between two layers of glass.

Luxury glass of Imperial Rome was often formed or decorated using techniques of Roman invention. For example, Roman artists were the first to discover that the addition of certain metallic compounds could intentionally decolorize glass. They also created spectacular diatreta, or cage cups. Cage cups were first created by craftsmen between the third and fourth centuries A.D. and represent a high point of ancient glass cutting. In this technique, a thick blank of glass was blown and then dramatically undercut to produce an openwork design connected to the background layer by small, hidden struts (fig. 4). Roman artists were also known for the cameo glass vessels they created. The technique of cameo glass involved taking a blob of colored glass and either dipping it in or covering it with a thick coil of glass of an alternating color. The whole was then reheated, shaped into a vessel, and, after annealing, usually given to a gem cutter for engraving or carving. The most famous example of this technique is probably the so-called Portland Vase (actually the fragment of an amphora) now in the British Museum, London, and dating to between the first century B.C. and first century A.D. (fig. 5).

After Constantine the Great shifted the Christian capital from Rome to the site of ancient Byzantium (renamed Constantinople) in 330 A.D., the Roman glass industry continued to decline until the Sack of Rome in the early fifth century. Yet Roman glassmaking traditions were maintained in the West by several Germanic tribes, such as the Angles



5. Portland Vase. Possibly Roman, early first century B.C. H: 24.8 cm (9¼ in.). London, The British Museum, 4038. Photo: Mario Carrieri.

and the Saxons in present-day England and the Langobards (Lombards) in present-day Italy.

The chief inheritors of Roman glassmaking traditions were the Franks, a mixture of Germanic tribes found in areas of what are now France, Germany, and Belgium. From the fifth through the ninth century during the Merovingian and Carolingian dynasties, several new glass shapes were developed, the most elaborate of which was the claw beaker, or *Rüsselbecher* (trunk beaker), decorated with hollow, clawlike protrusions that may have served as elaborate and decorative grips (fig. 6). Elegant drinking horns and cone beakers, often decorated with trailed bands of glass, were also produced by Frankish glassmakers in the fifth and sixth centuries. By the ninth century, glass vessels began to be embellished with polychrome trailings or with colored glass canes, a technique derived from Roman practice that was to become most renowned as interpreted by Venetian craftsmen of the Renaissance.

Until the twentieth century, very little was known of medieval glass production, not only because, with Europe's conversion to Christianity, missionaries ended the "irreverent" practice of burying personal effects—including glass with the dead, but also because broken glass was sometimes collected for recycling. Nevertheless, since the 1930s, a few scholars have published important studies of glass shards and of the description and depiction of glass in medieval manuscripts. More recent archaeological studies, some of which were fostered by excavations following the Second World War, have provided an even wider understanding of the field.

The previously held idea that glass production disappeared for centuries after Roman Imperial production ended has now been replaced by the understanding that fine glass vessels were produced in the Middle Ages, albeit in fewer numbers. In the postwar ruins of the Church of the Augustinians in Rouen, for example, a thin and gracefully tulipshaped stemmed glass was found. This so-called verre des Augustins-variants of which have surfaced at Besançon and elsewhere in France-rivals the most exquisite wineglass forms ever designed (fig. 7). A handful of similarly elegant beakers with superbly executed relief cutting of stylized animal and foliate designs have been found throughout Europe, from Belgium to western Russia and Tuscany. Named after Saint Hedwig of Silesia (died 1243; canonized 1267), who purportedly owned several of them, these Hedwig beakers are the work of a masterful and, apparently, idiosyncratic artist (fig. 8). It is not known who this artist was or where he came from, although he was likely either Egyptian or Near Eastern. In addition, finds of glass fragments in Bohemia show that advanced techniques were employed to produce accomplished utilitarian vessels, often of highly refined shapes and decoration, in the late Middle Ages.

The production of other late medieval glass was primarily stimulated by the needs of the Church. For instance, vast numbers of glass tesserae were used in Bohemian and Byzantine church mosaics;16 stained-glass windows were installed in Gothic architecture as a means of impressing and imparting information to churchgoers;17 and glass vessels were used for practical purposes in churches as reliquaries, situlae, stoups, and lamps. Indeed, until the decline of the order at the end of the thirteenth century, Benedictine monks were among the most active patrons of glassmaking in the late Middle Ages. One monk, who was also a practicing glassmaker, is responsible for writing the first treatise on glassmaking, The Various Arts (De diversis artibus or Schedula diversarum artium), in the first half of the twelfth century. Known as Theophilus Presbyter, the author may be identifiable as the German metalworker Roger of Helmarshausen.

Between the end of the Roman Empire and the emergence of Venetian glassmaking in the late Middle Ages, the finest glass was produced by Islamic craftsmen from Egypt, Syria, Iran, and Mesopotamia. Among the greatest Islamic contributions to glassmaking was the development of the techniques of enameling and gilding on glass: powdered materials such as colored glass, metallic oxides, or gold were first suspended in a medium and then painted and fired on the glass to secure attachment. Islamic craftsmen had applied luster decoration to glass as early as the eighth century; by the tenth century, they were practicing a highly developed technique of glass cutting. The designs favored by these Islamic craftsmen included loose, attenuated patterns of arabesques, animals, and flowers. By roughly 1400, however, the Mongol conquests of Aleppo and Damascus had driven glassmakers westward, essentially bringing the Islamic glass industry to an end.

Not surprisingly, the position of Venice—an active port since the late Middle Ages linking East and West—was



 Claw beaker. Possibly Frankish, imported to England, probably sixth century. H: 16.7 cm (6½ in.). London, The British Museum, MLA 1947.10-9.1.



- Left: Verre des Augustins (goblet). French, late fourteenth century. H: 17.8 cm (7 in.). Rouen, Musée départemental des Antiquités, 1959.4-14.1.
- Below: Hedwig beaker. Probably Egyptian or Near Eastern, probably twelfth century. H: 14 cm (5½ in.). London, The British Museum, Department of Oriental Antiquities, OA 1959.4-14.1.



responsible for that city's flourishing glass industry, one of the most spectacular in the entire history of the medium. The arrival in Venice of skilled Islamic and Byzantine craftsmen and of their works of art could not help but inform and inspire local production. For example, at the fall of Constantinople in 1204, Christian soldiers of the Fourth Crusade were transported to the Byzantine capital on Venetian ships; as a result, Venetians were among the first to loot the city, bringing home with them masterpieces of Byzantine art as spoils. A splendid Byzantine dark-red glass bowl with enameling, gold painting, and silver-gilt mounts in the Treasury of San Marco appears to be just such a masterpiece (fig. 9).

The immigration of Byzantine glassmakers and enamelers to Venice in the late Middle Ages may help explain a group of related fourteenth-century beakers named after a piece in the British Museum inscribed *MAGISTER ALDREVANDIN ME FECI[T]* ("Master Aldrevandin made me"), the first signature to appear on a postclassical glass in the West (fig. 10).<sup>18</sup> The combination of European motifs with Islamic enameling techniques on these "Aldrevandin" beakers makes their attribution difficult to determine. However, since the name Aldrevandin is Venetian and since a glassmaker by that name is recorded as working in Murano in the early fourteenth century, scholars now surmise that these beakers were made by Venetian glassmakers who were strongly influenced by Byzantine methods of enameling. These beakers were carried along trade routes, appearing as far afield as England, Germany, Estonia, and Switzerland.

There appear to be recognizable connections between early Venetian and Byzantine glass; the connections between Venetian and Roman glass are more tenuous. No evidence exists that a continuous tradition of glassmaking had been maintained in Venice since ancient times. However, such a continuous tradition is possible, given that Roman glass dating to the fourth and fifth centuries has been found at nearby Aquileia and that glass was being produced on the Venetian island of Torcello as early as the seventh century.

From the thirteenth century, documentary proof of glassmaking in Venice abounds, although few objects remain. In 1268, Venetian glassmakers were organized in the guild of the *fiolarii*, or bottlemakers. Three years later, the first decree, or *capitolare*, was approved, establishing guild rules and regulating the conduct of guild members. It prohibited both the importation of foreign glass and the production of glass by foreigners; granted privileged status to glassmakers; required that specific furnaces and fuels be used; and estab-



9. Gilded and enameled bowl. Byzantine, probably tenth century. H: 17 cm (6<sup>3</sup>/<sub>4</sub> in.). Venice, Treasury of San Marco. Photo: Alinari/Art Resource, New York.



 Aldrevandin beaker. Probably Venetian, second half of the thirteenth-early fourteenth century. H: 13 cm (5<sup>1</sup>/<sub>8</sub> in.). London, The British Museum, MLA 76.11-4.3.

lished a seven-month working year, during which time glass could not be exported. The most draconian of all regulations stipulated that Muranese glassmakers could not work outside the Republic; if they did, they were subject to various penalties, including death. The 1271 *capitolare* stood for over five hundred years—being amended and added to many times<sup>19</sup>—until the guilds were dissolved in 1806 at the annexation of Venice by Napoleon.<sup>20</sup>

Records of 1282 show that Venetian glass was already being exported by German merchants. Such export glass would have been transported by foot either in a basket or on a rack attached to the carrier's back. (Transport in carts over rough roads would have damaged the vessels.) In 1292, the Great Council of Venice ordered that the city's glasshouses be transferred to the island of Murano because of the risk of fire posed by the furnaces. By so circumscribing the glassmaking community, the Great Council helped to guard the community's prized secrets of production.

When Venice defeated Genoa—its maritime rival—in 1380, the influence and wealth of the city increased even more. At the same time, the dominion of the Republic expanded to include areas from Bergamo to the Dalmatian coast and the eastern Mediterranean. By the end of the fifteenth century, Venice was a redoubtable commercial center and, with a population of more than one hundred thousand, one of Europe's great cities.

The full international power of Venice lasted only until 1453, when the fall of the eastern Roman Empire marked the diminution of Venetian military authority in the East. With the capture of Constantinople by the Turks, the Venetian Republic began to concentrate on its own area of *terra firma*,

increasing industry—such as metal-casting, maiolica production, lacemaking, and silk-weaving—in its territories. Glassmaking was extremely important among these industries, soon becoming a major source of wealth for the Republic.

The glass bodies of fine vessels were colored with various metallic oxides, such as manganese-colored purple and brown, cobalt-colored blue, and copper-colored green. Glass colored in this way may have been prized because of its resemblance to precious and semiprecious cut stones. Even more prized was Venetian clear glass, or cristallo, named after the hard and rare rock-crystal that it resembled. In 1457, the administrative authority, or Podestà, of Murano granted the first privilege of making cristallo to Angelo Barovier (1405-1460), with assistance from Antonio Mozetto. It is possible that Barovier was responsible for perfecting the technique of its manufacture, which, in addition to complicated purifying processes, adopted the ancient Roman practice of adding a manganese compound to decolorize the naturally brownishgreen glass. The depiction of a cristallo beaker in the celebrated Portinari Altarpiece of 1468-1476 by Hugo van der Goes (see no. 17, fig. 17a) is probably the earliest datable depiction of Venetian cristallo and indicates that clear glass was being produced in some quantity by the second half of the century. The late-fifteenth-century vogue for Venetian glass expanded beyond the Alps, with such important patrons as King Matthias Corvinus of Hungary (died 1490), Beatrix of Aragon (1457-1508), Louis XII of France (1462-1550) and Anne of Brittany (married 1499), and King Ferdinand (1452-1516) and Queen Isabella (1451-1504) of Spain, as well as Henry VII (1457-1509) and Henry VIII (1491-1547) of England, commissioning fine Venetian and Venetian-style glass for their collections.<sup>21</sup>

The reasons for its allure are not hard to understand: Venetian glassmakers were creating tour-de-force objects using innovative techniques of production and decoration, beginning with their special formulas for *cristallo*. These glassmakers began to place their goblets and wineglasses on decorative stems that served to emphasize the clarity of the vessels and the astonishing suppleness of which the medium was capable.<sup>22</sup> Muranese craftsmen revived ancient Roman techniques of producing mosaic glass, now called *millefiori*, and perfected Syrian and Byzantine techniques of enameling on glass. Glassmakers also discovered that adding tin oxide to the mix, or batch of glass, would produce an opaque white glass in imitation of the much-prized Chinese porcelain being imported at the time. They called this glass *lattimo* after the milk (*latte*) that it resembled.

The collecting activities of important patrons such as Lorenzo de' Medici and Isabella d'Este helped foster the fifteenth- and sixteenth-century mania for rock-crystal and colorful hardstones. To respond to these interests, Venetian craftsmen created glass imitating not only the brilliance of rock-crystal, as has been mentioned, but also the milky iridescence of opal and the veined colorism of chalcedony (see no. 21). A type of glass imitating quartz scattered with sparkling mica flecks was first created in the sixteenth century, becoming popular mainly in the seventeenth.<sup>23</sup> Called *avven*- *turina*, probably after a seventeenth-century document that reported that the glass resulted "più per ventura che per scientia" ("more from luck than from skill"), it was made by mixing bits of copper powder to the semimolten glass streaked with colored glass.<sup>24</sup>

In 1527, the brothers Filippo and Bernardo Serena applied for a patent to work glass canes in order to create filigree glass or *vetro a filigrana*.<sup>25</sup> This glass was made in three basic patterns: with parallel stripes (called "glass with threads," or *vetro a fili*; see no. 46), with spiral patterns (called "glass with twists," or *vetro a retorti*; see no. 30), or with a net design (called "glass with a small net," or *vetro a reticello*; see no. 44) that included a trapped air bubble between each interstice of the net. Although a new technique in the early sixteenth century, the practice of decorating glass with embedded canes had Hellenistic and Roman antecedents. Venetian filigree glass became wildly popular, spreading rapidly to other parts of Europe and remaining in vogue for two centuries.

Another such technique-which developed in Venice, based on ancient antecedents, and then quickly spread throughout Europe-was diamond-point engraving. In 1549, Vincenzo di Angelo dal Gallo applied for a patent to practice engraving on glass. Although any sharp stone with a hardness greater than that of glass could be used, most engraving instruments employed diamonds, just then arriving in Europe from India via Venice. Already in the first half of the century, glass was occasionally scratched with diamonds by nonprofessional engravers. These early glass engravers may have been guests using their own diamond rings to leave their mark, after a celebration of some sort, on their host's glass or windowpane. By the second half of the century, diamondpoint engraving was used by specialized craftsmen to render exquisite and intricate patterns, particularly on cristallo (see no. 32). In the seventeenth century, the technique was favored mainly in the North (see nos. 61-62), with Netherlandish glass engravers reaching what were, arguably, the highest levels of mastery (see no. 67).

In the second half of the sixteenth century, Venetian glass was firmly placed at the apogee of European glassmaking, with thirty-six glasshouses on the island of Murano by 1550, the greatest number in the island's history. Moreover, the influence and appeal of Venetian glass were felt not only throughout Europe—where it was exported and imitated but also in the Islamic Middle East. In 1583, a Venetian ship bound for Constantinople sank off the Dalmatian coast. Its cargo included Venetian glass in familiar Venetian forms, as well as in shapes—such as lamps, rosewater sprinklers, and bottles—produced for the Islamic market.

The process of glass production had been documented as early as sometime around the thirteenth century B.C., when an Assyrian craftsman recorded formulas for glass.<sup>26</sup> In modern times, after Theophilus Presbyter in the Middle Ages, the two most important Italian glassmakers to document their craft in writing were the Venetian Giovanni Darduin and the Florentine Antonio Neri. In his *ricettario*, or notebook—the earliest such document of a Venetian glass-



11. JACOPO LIGOZZI (Italian, circa 1547–1626). *Design for a Glass*, late sixteenth or early seventeenth century. Florence, Gabinetto dei Disegni e delle Stampe degli Uffizi, 97163.

maker—Darduin gathered together information from several sources and included formulas supplied by his father, Nicolò, a glass craftsman who died in 1599.<sup>27</sup> Neri—a glassmaker, chemist, and ordained priest who worked under Medici patronage—published his *L'arte vetraria* (The Art of Glassmaking) in 1612. With his emphasis on firsthand experience, Neri intended to instruct craftsmen in a practical way. Renaissance artists began to provide drawings and engravings for glass designs, and, in 1604, a little-known Roman painter and engraver, Giovanni Maggi, published sixteen hundred designs for glass in his work *Bichierografia* (The Depiction of Vessels), which he produced to gain the favor of the collector and art patron Cardinal del Monte.

After the introduction of printing in the fifteenth century, not only were practicing glassmakers documenting their craft, but writers on science—among them the Venetian Vannoccio Biringuccio (1480-circa 1539) and the Saxon Georgius Agricola (né Georg Bauer; 1494-1555)—began to deal with the subject as well. In 1540, Biringuccio published his *De la pirotechnia* (Concerning Pyrotechny), which was one of the first studies to provide comprehensive information as well as practical instructions on the subjects of mining, smelting, and metalworking. Moreover, it provided the first published description of the techniques of enameling and gilding on glass. Agricola was known as the "father of miner-

alogy" and his *De re metallica* (Concerning Metallurgy) was published posthumously in Basel in 1556. The book's twelfth and concluding section concerns the production of glass. Highly regarded by his contemporary Erasmus, Agricola unlike many earlier writers—based his studies on observation rather than speculation.

The circulation of information on the manufacture of glass and the attention given the field by scientists led, not surprisingly, to improvements in the glassmaking process. At this time, a better Venetian soda-lime formula was developed that made the glass more ductile, hence easier to work. Glassmakers were now able to produce the Mannerist forms they desired: inventive, virtuosic, fanciful, and impractical. The capricious designs for glassware by such artists as Jacques Callot (1592-1635), Bernardo Buontalenti (1536-1608), Baccio del Bianco (1604-1656), Jacopo Ligozzi (1547-1626) (fig. 11), and Stefano della Bella (1610-1664) are extreme examples of these flights of fancy.28 By the seventeenth century, this Mannerist impulse led to extravagent forms, such as the vetro a serpenti (or serpent-stem glass, also called winged glass or dragon glass) and vetro a fiori (or flower-stem glass), whose stems were essentially a sculptural vehicle for the glassmaker's skill. Not surprisingly, these vessel shapes, many of which became popular and widely copied in the Netherlands, were costly to produce.



Another type of glass was developed in mid-sixteenthcentury Venice and soon became very popular in the Netherlands: "ice-glass," so called because of its resemblance to cracked ice (see nos. 28, 47). Ice-glass was produced either by plunging the partly formed hot glass shape into a bucket of water to fissure the vessel's walls or else by rolling the shape over, thereby attaching to it bits and slivers of glass. This glass exemplifies not only the craftsman's bravura but also a certain perverse impulse: it subverts the clarity of *cristallo* that had been so difficult to attain.

The Venetian development of new decorative techniques such as filigree and ice-glass helped the Republic maintain supremacy in the glass market, with the result that enameling and gilding fell from fashion there. In the German-speaking lands, however-especially in Germany, Bohemia, Silesia, and Austria-enameling and gilding became ever more popular, with the result that artists in glass developed their own enameled idiom throughout the seventeenth and eighteenth centuries. Before this time, from the fourteenth through the sixteenth century, Northern glass generally comprised Waldglas or "forest glass." From the fourteenth century on, the middle classes wanted drinking vessels of a finer material than wood or earthenware but sturdier than the thin, more precious glass of the late Middle Ages. As a result-especially in Germany, France, and the Netherlands-thicker, more utilitarian vessel forms of a greenishblue color were produced. As its name implies, Waldglas was made in forest glasshouses (fig. 12), where the alkali

- 12. Left: Illustration to Sir John Mandeville's Travels. Probably Bohemian, circa 1420–1450. London, The British Library, Ms. 24189, fol. 16v. This depiction of a forest glasshouse shows a variety of glassmaking activities: a workman blows a glass bubble on a marver set on the ground; to the far right, a young man stokes the fire; to the left, a man uses a stick to take out finished but still hot objects from the annealing chamber. On the other side of the furnace, a man sorts through cooled pieces. Beyond the glasshouse, wood ash is being burned and carted away; at the upper right, two men carry baskets filled with glassware to market.
- Below: Making Crown Glass. From Diderot and d'Alembert's Encyclopédie ou Dictionnaire raisonné des sciences, des arts, et des métiers (Paris 1765), vol. 17, pl. 15. Los Angeles, Getty Research Institute for the History of Art and the Humanities, 84–B31322. Photo: Getty Research Institute Library Special Collections.



Verrerie en bois, topération de chauffer la Bosse pour l'ouvrir et en faire les Plat et le porter à la plotte.

potash from wood and bracken was used instead of soda. Its color derived from iron impurities in the type of sand used (see nos. 1-15).<sup>29</sup>

Glassmakers in France excelled in the craft of making windowpanes out of glass, a practice dating back to ancient Roman times.<sup>30</sup> Although little of this plain and unadorned architectural glass remains, a fair amount is known of its production from documentary evidence of glaziers' guilds and depictions of windows in naturalistic paintings beginning around 1400. Windowpanes were produced in two ways. Glass craftsmen from Normandy specialized in "crown glass" that they made by puncturing a "bubble" of glass and spinning it into a flat, round panel (fig. 13). This panel would then be cut into smaller sections, including the central "bull's-eye" piece, so called because it was dimpled in the middle from attachment to the iron. This method produced small but brilliantly polished panes.<sup>31</sup> Craftsmen from Lorraine specialized in broad glass, created with a cylinder of glass that was split down one side and then flattened. This process produced larger panes that were, however, duller because of surface contact during flattening. France's supremacy in flat-glass production continued through the Baroque period.<sup>32</sup>

Waldglas vessels were produced in idiosyncratic forms to meet their functional requirements. For example, they were frequently embellished with prunts, or blobs of glass, applied to the exterior of a vessel, possibly so that a drinker could securely grip it with hands made greasy by eating without utensils. Such forms include the *Maigelein* (a small, hemispherical cup with ribs; see no. 2), *Krautstrunk* ("cabbage stalk" or cylindrical prunted beaker; see nos. 4, 6), *Nuppenbecher* (with a "nappy," bumpy surface), *Warzenbecher* (the heavy, prunted "wart beaker"; see no. 15), *Keulenglas* (the tall, cudgel-shaped "club glass"), and, a bit later, *Römer* and *Berkemeyer* (prunted drinking vessels; see nos. 8, 12).

By the sixteenth century, large, clear-glass forms without prunts were being developed, partly to accommodate the demand for enameled decoration. Such vessel types as the Humpen (a schooner or cylindrical beaker; see nos. 58-59, 62, 64) and Stangenglas ("pole glass," or tall, narrow beaker, usually on a pedestal foot; see nos. 56-57, 61) provided the necessary broad surface expanses for painted figurative scenes and heraldic images. These larger vessels were also well suited to the communal drinking practiced at a variety of commemorative and festive occasions and often accompanied by public salutes or orations. The Germanic Passglas, marked with a series of horizontal lines demarcating from four to eight sections (or passen), playfully served this purpose. A Passglas would be handed from one participant to another, each required to drink down precisely to the next horizontal line; if unsuccessful, the drinker was obliged to continue drinking to the following line. Clearly, the more alcohol the drinker imbibed, the more uproariously difficult became the task.

Erasmus (died 1536) gives advice on the practice of celebratory drinking from a common glass in the first book of his *De civilitate morum puerilium* (On Good Manners for Boys), in which he admonishes boys to "Chew your food

before you drink and do not raise the cup to your lips without first wiping them with a napkin or cloth, especially if someone offers you his cup or when drinking from a common cup."<sup>33</sup> Large communal vessels usually held beer (that is, any fermented drink brewed from starchy grain with water and yeast), which, since the Middle Ages, had been consumed in Europe in quantity at breakfast and lunch as well as at dinner.<sup>34</sup>

Germanic glass painters of the sixteenth and seventeenth centuries rendered biblical, allegorical, genre, armorial, commemorative, erotic, and historical subjects in enamel paints. Other subjects became part of the names used to categorize the vessels themselves. Usually Humpen, these vessels (and the subjects with which they were decorated) were known as Hofkellerei (used in the "royal wine cellar" of a particular ducal castle), Ochsenkopf (the second highest mountain in the Fichtelgebirge range,<sup>35</sup> symbolically rendered as an "ox-head" among fir trees, which it resembles), Halloren (the guild house of the salt workers in the town of Halle and used by members of that guild during their Pentecost procession), and Jagd beakers (with "hunt" scenes taken from print sources; see no. 58). Kurfürsten (portraits of the emperor and his seven "electors" of the Holy Roman Empire) and, most common of all, Reichsadler (double-headed "imperial eagle" of the Holy Roman Empire) vessels presented to the drinking public an idealized and authoritative image of the political system and its leaders (see no. 59).<sup>36</sup>

During the seventeenth and eighteenth centuries, Germanic enameling reached a new level of sophistication with the advent of *Hausmaler* painting. Those who practiced this "at-home painting" were independent craftsmen who painted delicate mythological, hunting, and landscape scenes and genre subjects in thinner, more transparent enamels than had previously been used. Often employing a monochrome palette—usually iron red (*Eisenrot*) or lead black (*Schwarzlot*)—such artists as Johann Schaper (1621– 1670) and Ignaz Preissler (born 1670) practiced *Hausmalerei* on glass as well as faïence and porcelain (fig. 14).

While this enameled glass had a primarily local following, Venetian *cristallo* continued to be the glass of choice among the European well-to-do. Around the middle of the sixteenth century, manufactories producing Venetian-style glass were established all over Europe. This production is most commonly called *façon de Venise* glass, a name that dates back to the mid-sixteenth century, if not earlier.<sup>37</sup>

Even on the Italian peninsula, glassmaking factories were established to copy the Venetian product. For example, in 1579, Cosimo de' Medici enticed the glassmaker Bortolo d'Alvise away from his native Murano to help set up the Medici glasshouse in Florence. (Unfortunately, not one piece of glass remains that can be attributed with certainty to Florence, except for a number of elaborate medical and scientific instruments that were produced in the mid-seventeenth century for the *Accademia del Cimento*, a society founded by Ferdinand II de' Medici in 1657 and dedicated to the pursuit of scientific analysis.) Elsewhere in Italy, Altare, near the important port of Genoa, had been the location of glass-



14. IGNAZ PREISSLER (German, 1676–1741). Case Bottle, circa 1730. London, The Victoria and Albert Museum, C. 338–1936. houses since the ninth century, with a glassmakers' guild established in the fifteenth century and guild statutes formalized in 1495. Although nothing can be securely attributed to this center, it is quite possible that some glass accepted as Muranese was, in fact, produced in Altare.

Italian glassmakers were working at Hall in the Austrian Tirol by the 1530s, among the earliest known instances of Italians working in the North.<sup>38</sup> Venetian influence easily reached Hall, since the town is located just north of the Brenner Pass, the main traffic route through the Alps that links Italy and Austria. In 1534, Wolfgang Vitl from Augsburg founded a glasshouse in Hall with financial backing from the wealthy Fugger family of his hometown. Directed by another German from Augsburg, Sebastian Höchstetter, Vitl's glasshouse was granted privileges by Ferdinand I, king of Tirol, to produce glass there for a period of twenty years. Although the manufactory primarily employed German glass craftsmen, it produced glass that combined Venetian forms and decoration with local ones (see nos. 35-37).

The king's son, Archduke Ferdinand of Tirol, established his personal court glasshouse, or *Hofglashütte*, near his palace of Ambras at Innsbruck after moving there from Prague in 1563. For this enterprise, the archduke requested that his representative in Murano send to Innsbruck craftsmen from Murano, but only certain craftsmen: the kind "with the most fantasy in him."<sup>39</sup> Remarkably, the archduke's petition was granted by the Venetian Council of Ten. The *Hofglashütte* at Innsbruck, the earliest known court glass factory in the North, eventually eclipsed production at the glasshouse in Hall, which closed in 1635.

The archduke's glasshouse was the first in a series of royal glass manufactories that were located in the Germanspeaking lands and primarily established for the delectation of their founding rulers; consequently, they tended to be short-lived. Following Archduke Ferdinand of Tirol, *Landgrave* Wilhelm IV of Hesse-Kassel established a glasshouse at Kassel around 1580, for which he hired some Italian craftsmen who had been working in the Netherlands. Discord, however, caused the factory to close just a few years later. And in 1584, Duke Wilhelm V of Bavaria set up his own glass factory in Munich, which remained in operation until 1595.

Glassmaking had been practiced in Spain since at least the Middle Ages, with the most important centers being Barcelona, Seville, Almería, Murcia, Málaga, and Granada. By 1455 a glassmakers' guild had been established in Barcelona, the main Spanish center of glass production. One hundred years later, Venetian craftsmen began to settle there, producing fine Venetian-style glass. The fact that Spain was somewhat separate-geographically and culturally-from the rest of Europe meant that much Spanish glass would display elements of both the influential Venetian styles and local Moorish idioms. For example, alongside façon de Venise vessels of such high quality that it is difficult to distinguish them from their Venetian models are objects in provincial shapes-such as the spouted drinking vessels called the cántir and the porrón and the water sprinkler called the almorratxa-embellished with a wealth of undulating trailed and pincered decoration.



15. Plate. Barcelona, first half of the sixteenth century. London, The British Museum, MLA 69.6-24.62.

On the flat surfaces of plates, flasks, and jars produced in Barcelona appeared all-over enameling with intricate, *mudéjar*-inspired animals and foliage (fig. 15).<sup>40</sup>

After an active period in the Middle Ages, France did not produce table glass in any quantity until the sixteenth century. In the 1560s, a member of the Gonzaga family rulers of Mantua who also controled the Marquisate of Monferrat in which Altare was located—became Duke of Nevers by marriage. This marital alliance resulted in the promotion of a French *façon de Venise* glass industry because there was now great encouragement for Altarist glassmakers to move to France. They settled in Rouen, Nantes, Poitou, Paris, and Bordeaux, with significant numbers immigrating to Nevers and nearby Orléans. These two centers were to become the most important for the production of *façon de Venise* glass in France.<sup>41</sup>

By 1549, eight Muranese craftsmen were working in London glasshouses; in 1567, the glassmaker Jean Carré was invited to London from Antwerp to set up his own glasshouse.<sup>42</sup> It was Carré who invited the Venetian Giacomo Verzelini (1522–1616) to move to London in 1571 from Antwerp. After Carré's death in 1572, Verzelini took over Carré's glasshouse at Crutched Friars, and, two years later, he received the royal patent from Queen Elizabeth I to be the sole producer in England of *façon de Venise cristallo* for a period of twenty-one years. Although only nine pieces of Verzelini's glass from this factory survive, they show that he used the Venetian soda-lime formula to produce glass shapes that were rather simple and massive, in keeping with sixteenth-century English taste. His factory was the first in England to produce diamond-point engraved glasses of elaborate, all-over patterns and scenes, many of which may have been the work of the master French engraver Anthony de Lysle in the 1580s. Verzelini retired a wealthy man in 1592.

England was not to see any truly vernacular production for another one hundred years, during which time *façon de Venise* glass continued to be fashionable. A fair amount is known of the great popularity of Venetian styles in England in the seventeenth century thanks to the correspondence between John Greene (died 1703), of the London retailers Greene and Measy, and Alessio Morelli, his glass supplier in Venice. Between 1667 and 1673, Greene placed large, detailed orders with Morelli that included more than four hundred sketches of desired forms. This correspondence confirms that more "sober," sturdy, and simplified Venetian forms were current in England. Greene and Measy's transactions with Morelli also suggest that no local product of comparable quality was then available in England (fig. 16).



16. Annotated drawing from letter of John Greene to Alessio Morelli, circa 1670. London, The British Library, Sloane MS 857, fol. 17v.

However, the difficulties in dealing with a foreign purveyor and in receiving its fragile products unbroken led in the late seventeenth century to the development of an English substitute for Venetian glass, namely, so-called "lead crystal."

By contrast, far fewer manufactories producing *façon de* Venise glass were located in Germany and Bohemia, areas of strong vernacular glass traditions. Particularly in Bohemia, the requisite raw materials for Venetian-style glass (especially soda from the Alicante) were not only expensive but were also liable to seizure by competitors during shipment from Spain via Genoa. Venetian forms, although influential, were also more difficult to copy because the local potash-lime glass formula was harder to work than the Venetian soda-based one. The soda that was available was mainly reserved for only the finest production in certain factories. As a result, Bohemian glassmakers of the period, although inspired by Venetian trends, chose to develop their own distinct glass forms and decoration, in keeping with local materials, styles, and needs (see nos. 50-54, 56-62, 64).<sup>43</sup>

This is not to say that Venetian and Venetian-style glass was not coveted in Bohemia. Bohemia's upper classes—made wealthy by their country's own thriving glassmaking and mining industries—became desirous of the luxury glass they saw in the other courts of Europe. They imported glass from Venice and had *façon de Venise* glass produced in their native glassworks, a sophisticated production made possible by improvements in the local glass industry. These improvements went hand in hand with improvements in Bohemia's mining industry, since both glassmaking and mining are closely related in terms of their science, physics, and chemistry. Indeed, it is probably not by chance that some of the most important Bohemian glassmaking dynasties were started by families from the Saxon mining area of the Erzgebirge mountains. These families include the Schürers and the Preusslers, both of whom settled in northern Bohemia in the second quarter of the sixteenth century.<sup>44</sup>

By that time, a glassmaking industry was already firmly established in the Czech lands. This central European area including Bohemia, Franconia, Moravia, and Silesia—was well suited to the production of glass since it was surrounded by forested mountains,<sup>45</sup> included many rivers (sources of water power for mills), and had plentiful supplies of silica. In 1348, under the patronage of King Charles IV (reigned 1346–1378), glaziers were included in a guild for the first time. Bohemia soon became a leader in glassmaking, with an export as well as domestic trade. By 1400, twenty glasshouses were located in the Czech lands, increasing to twenty-four by 1500 and fifty-four by the end of the sixteenth century. Moreover, in that same century, entrepreneurial landlords began to encourage businesses—including glassmaking—to settle on their estates, thereby supplying the owners with glassware and additional income to help finance their new desire for luxury.

After Bohemia came under Austrian Habsburg rule in 1526, the single most important political development for the state of Bohemia occurred in 1583, when Rudolf II (reigned 1576–1612) moved his residence from Vienna to Prague. This brought artists to the region from Italy, the Netherlands, and France, making Prague a thriving European center of the arts. Such Mannerist crafts as hardstone cutting reached new artistic heights in Bohemia, encouraged, in part, by the abundance of stones found in its rich mineral areas. The Holy Roman Emperor invited important gem cutters—such as members of the Miseroni family from Milan and the Castrucci from Florence, as well as Caspar Lehmann (1563–1622) from Ülzen—to work for him in Prague.

As in the ancient world, Bohemian glass cutting grew out of the craft of gem cutting. Lehmann is often credited with being the first postclassical craftsman to decorate glass using a gem-cutting technique, in this instance, grinding down the surface with spindle-driven abrasive disks (fig. 17). He may have learned to use this wheel-engraving technique on glass in Munich while in the service of Duke Wilhelm v of Bavaria in the 1580s. Rudolf II named Lehmann imperial gem cutter and glass engraver in 1608, and, the following year, he granted Lehmann the imperial privilege to practice glass engraving. Knowledge of this technique ultimately passed to Lehmann's pupil, Georg Schwanhardt, who moved back to Nuremberg and established an important school of glass engravers.

Improvements in the potash-lime glass formula at this time produced thicker and more brilliant glass that was perfectly suited for wheel engraving, exploiting the refractive qualities of wheel-engraved decoration. Various techniques of wheel engraving were developed to create different types of decoration. These include *Tiefschnitt* (or intaglio) decoration, carved below the glass surface; *Hochschnitt* (or relief) decoration, created by cutting away the glass ground from its sculptural elements (see no. 68); and surface carving, developed for inscriptions and ornamental designs (see no. 67). These techniques, however, were only fully developed in the second half of the seventeenth century. Rudolf's death in 1612 and the subsequent anti-Habsburg uprising of 1618, culminating in the Thirty Years War, caused the period of cultural prosperity to come to an end. Only with the Peace



17. CASPAR LEHMANN (Bohemian, 1563/65-1622). Glass Panel, 1620.
H: 23 cm (9 in.); W: 18.3 cm (7<sup>1</sup>/<sub>4</sub>in.). Amsterdam, Rijksmuseum, R.B.K. 1986-29.

of Westphalia of 1648 did stability begin to return to the German-speaking lands.

During the seventeenth century, developments in science, especially in western Europe, influenced glass production. For instance, the fact that glass, although fragile, is a very stable material that can withstand chemical attack made it well suited for storing chemicals and for conducting experiments with them. Not surprisingly, glass was used to make such characteristic seventeenth-century scientific instruments as barometers, thermometers, hydrostatic scales, beakers, and distillation paraphernalia. Moreover, the optical properties of glass were being exploited for the first time since glass spectacles were invented in fourteenth-century Italy. The requirements of a suitable lens material stimulated the development of a perfectly clear and highly refractive glass. By 1609, Galileo constructed the first telescope fitted with a glass lens, and, several decades later, Descartes and Newton employed lenses in their experiments with light, optics, and astronomy.

The quest for a rock-crystal-like glass was also driven by aesthetic and economic concerns. Such glass had been prized since ancient times for its rarity and brilliance; by the seventeenth century, several glass-producing centers in Europe wanted their own craftsmen to satisfy the local appetite for Venetian *cristallo*, which was too expensive to buy and transport from abroad. (It is ironic that this most sought-after form of glass—which is an uncommonly *non*crystalline substance—was and continues to be called crystal, or *cristallo*, after the mineral.) The perfecting of such crystal-like glass occurred almost simultaneously in England and in Bohemia in the 1670s and 1680s.

From the beginning of the century, the English glass industry underwent a number of innovations.<sup>46</sup> The competition for wood was intense: other industries needed to use wood as fuel, and the Royal Navy needed it to construct ships. The substitution of coal—a plentiful commodity in England—for wood—a dwindling one—appeared to be the obvious solution. Around 1600, a covered crucible was developed, called a "crown pot," which protected molten glass from the gases in the combustion chamber that had been a problem with coal-fed furnaces. Edward Zouch was able to successfully use coal as fuel, for which he was granted a monopoly in 1611, leading to the official prohibition on the use of wood for glass furnaces that began in 1615.

Coal, however, did not normally create sufficient heat in the furnace to melt glass. As a result, the English "cone furnace" was created. A conical structure built as high as one hundred feet (and sometimes even higher), the cone furnace was able to reach greater temperatures because it produced a greater draft. In the early seventeenth century, the entire glass monopoly was acquired by Robert Mansell, a retired English admiral, who had recognized early on the potential of coal as fuel. For roughly forty years, Mansell developed a nationwide glass industry that became the most technically advanced in Europe.

Probably the greatest English innovation was the development in the 1670s of a new formula for a clear, highly



18. Decanter marked with George Ravenscroft's seal (visible on the upper left of neck). London, Savoy glasshouse, 1676–1678.
H: 20.8 cm (8<sup>1</sup>/<sub>8</sub> in.). London, The British Museum, MLA 1925.2–16.1, OA 110.

refractive glass by George Ravenscroft (1618–1681). In 1674, Ravenscroft was granted a patent to produce a "crystalline glass resembling rock crystal."<sup>47</sup> The first examples of this "crystal" were unstable and tended to crizzle.<sup>48</sup> By 1676, however, Ravenscroft had perfected the recipe and was allowed to mark these successful pieces with his own emblem: a raven's-head seal (fig. 18). Most likely early in 1676, Ravenscroft began to add a lead oxide to the glass flux, which served to enhance the brilliance of the product. Ravenscroft's early works were decidedly Italianate in form, revealing the lingering dominance of Venetian glass styles that his lead glass—being relatively elastic and easy to work—was able to mimic. Simpler and distinctly English forms would come to predominate, based on contemporary silverwork and furniture turning.

Not ten years later, the Bohemian glassmaker Michael Müller (1639–1709) and the Flemish nobleman Louis Le Vasseur d'Ossimont, collaborating at the Helmbach glassworks in the Winterberg region of southern Bohemia, succeeded in improving the Bohemian potash-lime formula by adding chalk to the potash flux in the batch. This served to create a clearer, more refractive, and more crystal-like glass



 FRANS GREENWOOD (Netherlandish, 1680-1763). Goblet with a Portrait of a Man with a Pipe, 1746. H: 25 cm (9% in.). Hamburg, Museum für Kunst und Gewerbe, 1891.42.

than ever before. Similar to Ravenscroft's initial recipe, the addition of a second alkali to the batch gave early Bohemian chalk glass the tendency to crizzle, but, by 1714, the problem had been solved. By the end of the century, English lead glass and Bohemian chalk glass were beginning to conquer the international glass market.

The improvements in glass formulas and manufacturing techniques in England and central Europe were undoubtedly fostered by the publication between 1660 and 1680 of two new editions of Antonio Neri's L'arte vetraria. In 1662, Christopher Merrett (1614-1695), a physician and naturalist from Gloucestershire, translated Neri into English for the first time, while adding some descriptions of tools, furnaces, and working methods that would be relevant to English glassmakers. The Art of Glass by Neri-Merrett was then translated into German and commented on by Johann Kunckel von Löwenstjern (circa 1630-1702/3), the celebrated court chemist and apothecary to the Elector of Saxony who later became physician to Friedrich Wilhelm, Elector of Brandenburg. Kunckel's version of The Art of Glass, called Ars vitraria experimentalis (or Vollkommene Glasmacherkunst), was published in Potsdam in 1679, the year Friedrich Wilhelm appointed him director of the elector's new glassworks at Brandenburg. Kunckel's background in chemistry must have helped him create and improve certain glass formulas. For example, the 1689 edition of the Ars vetraria included a recipe for chalk glass; and Kunckel's experiments in Potsdam led to the creation of Rubinglas (gold-ruby glass), produced by adding gold chloride to the batch, and Milchglas (milk glass), in imitation of porcelain and made by adding burnt bone. (Its phosphate acted as an opacifier in the same way that earlier Venetian lattimo had employed tin oxides.)<sup>49</sup>

Glassmakers in England exploited the refractive nature of lead "crystal" in the simple forms popular there by including "teardrops" of air in plain baluster stems or by cutting heavier, more elaborate pieces, with areas of geometric, prismlike patterns.<sup>50</sup> Some Dutch glass decorators used stippeled engraving-a Dutch specialty-on these simple English lead glass vessels.<sup>51</sup> Exponents of this technique-the greatest of whom included Frans Greenwood (1680–1763) and David Wolff (1732-1798)-produced remarkably threedimensional scenes by tapping the surface of the glass with a diamond point to build up an image with more and less dense areas of dots: the dots placed close together appear as areas in light, while those placed farther apart appear as areas in shadow (fig. 19). Indeed, Holland had been a great leader in engraved decoration since the seventeenth century. At that time, highly skilled amateurs such as Anna Roemers Visscher (1583/84-1651) and Willem Jacobszoon van Heemskerk (1613–1692) perfected another Dutch specialty: calligraphic diamond-point engraving (see no. 67).

From at least the middle of the seventeenth century, Dutch glass artists had practiced the more sculptural wheel engraving on glass. After Lehmann's pupil Georg Schwanhardt returned to Nuremberg in 1622, thus making wheel engraving on glass a specialty of that city, a lively art-export trade evolved between Nuremberg and the Dutch Republic. It is



20. CHRISTOPH WEIGEL (German, 1654–1725). *The Glasscutter*, circa 1680. Engraving. Corning, New York, The Corning Museum of Glass.



 Double-walled beaker. Bohemian, circa 1720–1740. H: 8.4 cm (3¼ in.); Diam: 7.4 cm (2% in.). Amsterdam, Rijksmuseum, R.B.K. 14834.

quite possible that the Dutch taste for wheel engraving on glass may have been influenced by the arrival of fine examples from Germany. Although few objects from the earliest period are known, Dutch wheel engraving began to flourish after 1670, leading to its heyday in the eighteenth century, when diamond-point engraving was passing from vogue.<sup>52</sup>

In contrast to the unadorned forms preferred in England, brilliant Bohemian "crystal" lent itself to the dramatic *Hochschnitt* and *Tiefschnitt* wheel-engraving technique popular in central Europe. At this time, the *Pokal*, or goblet, became a new and appropriately sculptural form to be decorated with these three-dimensional, carved designs (fig. 20). A new technique of wheel engraving on glass—employing abrasive disks of copper that were often powered by water was developed in the second half of the seventeenth century, primarily under three Germanic princes: Elector Friedrich Wilhelm of Brandenburg, in Potsdam; Count Christoph Leopold of Schaffgotsch in Hermsdorf in Silesia; and Landgrave Carl of Hesse in Kassel.

The greatest practitioners of seventeenth-century wheel engraving—including Martin Winter (died 1702), his brother Friedrich Winter (died 1711) (see no. 68), and Gottfried Spiller (died 1728)—were all Silesian. That Silesia was a region under Bohemian control until 1742 was an auspicious fact for glassmakers, given that Bohemian sales organizations helped advance a new and widespread taste for wheel-engraved crystal in the second half of the century. The export trade in Bohemian crystal thrived, reaching countries as diverse as Russia, Spain, Sweden, and Turkey. Moreover, around 1730, the ancient decorative technique of "gold 'sandwich' glass" was revived in Bohemia and Austria, where it was called *Zwischengoldglas*, or "gold between glass" (fig. 21). Not surprisingly, with such strong competition, the Venetian glass industry began to languish.

For a short time in the early eighteenth century, Venetian glass did enjoy a revival. Members of the Muranese Miotti family established a successful glasshouse, Al Gesù, which was active from the sixteenth century but important primarily in the seventeenth and eighteenth centuries. The Miottis established a prosperous business specializing in lattimo glass vessels on which they would copy popular prints in enamel paints. Often taken from Canaletto or Guardi, these images seem to have made Miotti glass, which resembled porcelain, sought-after souvenirs among connoisseur-collectors visiting Venice (fig. 22). The Venetian glass industry was also bolstered by the return of the Muranese glassmaker Giuseppe Briati. After a brief period apparently spent in Bohemia, he moved back to Venice in the 1730s and was granted a patent to produce glass for twenty years. Briati attempted to imitate Bohemian crystal but with limited success, except for his elaborate and brilliant chandeliers, for which he was duly admired.

Little Venetian glass of the period is well documented, making objects hard to trace. The most important collection of such glass is that in Rosenborg Castle, Copenhagen, which remains one of the only sources of secure information regarding Venetian glass of the eighteenth century.<sup>53</sup> In 1708/9, Frederick IV of Denmark visited Venice and returned with almost one thousand pieces of contemporary Venetian glass. To house this collection he had a special setting built in his castle, a room fashioned after a German *Porzellanzimmer*, or porcelain room, examples of which could be seen at Charlottenburg Castle in Berlin and at Nymphenburg Castle in Munich. The dark, small, and evocative Glass Room at Rosenborg Castle was fitted with numerous shelves and decorative gilt-lead mounts to hold the many hundreds of glass vessels in Frederick's collection (fig. 23). These objects tell us that Venetian luxury-glass production in the early eighteenth century included much *vetro a reticello, vetro a retorti*, glass with combed decoration,<sup>54</sup> imitation fruit, opal glass, and elaborate serpent- and flower-stem vessels.

As the eighteenth century progressed, it became evident that Venice was no longer the imperious power in glass production that it had been for more than three hundred years. Events leading to the decline of this industry included competition from foreign products, especially from England and Bohemia, and political developments that threatened the Republic's authority. In the sixteenth century, Turks had begun to fight back against Venice's power in the region, a power that formally ended with the 1718 Peace of Passarowitz. Even worse, perhaps, the Franco-Austrian struggle had moved into Venetian territory. Napoleon occupied Verona in 1796, and, soon afterward, the Venetian Republic fell. Austria, in turn, took over the beleaguered Venice in 1798. A few years later, the city fell to the French once again and was annexed by Napoleon. The last doge abdicated, and all of the guilds, including that of the glassmakers, were dissolved. This unsettling oscillation of power continued under a second period of Austrian domination in 1814.

England's glassmakers had their own problems around 1750, when excise taxes were levied on English glass to fund that country's war with France. This heavy taxation sent many English glassmakers north to work, untaxed, in Ireland. The result of this exodus was the creation of a flourishing Irish glass industry, with centers at Dublin, Belfast, Cork, and Waterford that specialized in heavy lead glass, often with cut decoration. In fact, much of the fine glass used in eighteenth-century America was sent there from Ireland.

In 1608, the first glasshouse in the American colonies was founded in Jamestown (though it closed soon afterward). It can be said, then, that glassmaking was America's first industry. In the 1820s, Americans invented the pressed-glass machine that made possible the first mass production of glass. Initially employed at William Stutson's Boston and Sandwich Glass Company in 1834, these presses created vessels swiftly and inexpensively, making glass available to a broader public than ever before. Since then, the functional and artistic potentials of the glass medium have continued to be exploited in the United States, especially with the rise of the studio-glass movement in the mid-twentieth century. This movement—



22. Plate with view of San Giorgio Maggiore. Probably from the Miotti glasshouse, Murano, 1741. Diam: 22.7 cm (8% in.). London, The British Museum, S.388.



23. The Glass Room of Rosenborg Castle. Woodcut published in C. Andersen's Rosenborg: Mindeblade fra De danske Kongers kronologiske Samling (Copenhagen, 1867). This intimate room was constructed to house the glass collection of Frederick IV.

which quickly spread to Europe—proclaimed that individual artists, rather than an ensemble of factory technicians, were now responsible for the entire glassmaking process. Working singlehandedly, they designed, made, and decorated their own works, which often were unique objects in highly sculptural forms. Their influence on glass production has been, and continues to be, significant.

The Getty Museum's collection of postclassical glass represents a small and well-defined chapter within the vast history of the medium. Inspired and otherwise affected by Syrian, Byzantine, Persian, Egyptian, Roman, Greek, and other Islamic and Middle Eastern antecedents, the Museum's collection is focused on the period of the most important technical and artistic developments in continental Europe. Its objects range in date from the late Middle Ages to the late seventeenth century, originating in important Italian, German, Bohemian, Netherlandish, Silesian, and Austrian centers of production. They represent such achievements as glass made to resemble rock crystal or chalcedony; glass blown into unusually large or remarkably refined shapes; and glass decorated with ornament that is intricately applied, elegantly enameled, or gilt. Such accomplishments are all the more impressive given the challenges and exigencies of the glassmaking process.

The Museum's collection of glass, except for one piece,<sup>55</sup> was acquired in 1984 from two sources: the collection of Ruth and Leopold Blumka, New York, and that of a private collector, London. The scope and high quality of the Museum's glass is a testament not only to the talents and discrimination of these collectors but also to those of the curator, Peter Fusco, who was responsible for acquiring these extraordinary examples of the glassmaker's art.

The sixty-eight objects presented in this catalogue are divided into four chapters: Northern domestic glass, Murano glass, façon de Venise glass in Northern glasshouses, and enameled and engraved glass of central and northern Europe. The chapters and the objects within them are arranged in chronological order. (The Museum's oldest piece dates from about 1400; its most recent, from about 1700.) Each chapter begins with a short introduction that is followed by the individual entries. The headings for these entries contain the name of the piece, its maker or place of manufacture, date, summary technique of manufacture, dimensions, and Museum accession number. A concise description of the piece precedes supporting information, such as reasons for dating and attribution and a listing of relevant comparative examples. Information concerning armorial devices, marks and inscriptions, provenance, exhibition history, bibliographic references, and condition of the object conclude each entry. A list of abbreviations used in the notes appears in the front matter; a glossary of technical terms and an index close the volume.

#### Catherine Hess

Notes

- 1. Pliny, *Natural History*, translated by D. E. Eichholz (London and Cambridge, 1962), bk. 36, chap. 65, ll. 191ff.
- 2. Near present-day Acre (ancient Ptolomaïs), just east of the Mediterranean coast. The shores of the Belus River, which flows from the base of Mount Carmel to the sea, was a good source for glassmaking sand because, as an inland beach, its pebbles are easy to crush and contain silica that is relatively free of impurities.
- 3. In fact, the first glass—obsidian—was not purposely made at all but resulted from volcanic eruptions roughly forty million years ago. Other naturally occurring glass includes pumice, also caused by volcanic action; fulgurites, resulting from lightning striking sand; and tektites, possibly produced by meteorites colliding with the earth.
- 4. Silica melts at 1720 degrees Celsius, and the addition of a flux lowered this high melting temperature, making it easier and cheaper to reach.
- 5. It was found, for instance, that the manganese dioxide of the mineral pyrolusite ("that which washes in fire") would neutralize, rather than remove, the coloring properties of itself and of the iron in a glass batch. When combined in the correct proportion, manganese and iron absorb each other's light (i.e., color). One must always keep in mind that, for most of the history of glass, the glassmaking procedure—including the discovery that manganese could be used as a decolorant—was understood empirically rather than scientifically.
- 6. The addition of cullet serves to aid the fusion of the batch, thereby lowering fuel costs. It also recycles broken, out-of-fashion, or malformed objects; this is why few glass wasters remain.
- 7. That is, partially fusing them in a special furnace and then pulverizing the mixture before use. Fritting helps to drive off unwanted materials, render the ingredients more stable, and control the ingredients' rate of fusion.
- 8. Glassmaker's tools include pucellas, or jacks (the handheld, tonglike instrument used to form narrow areas of a vessel, such as the mouth), the block (a concave form made of moistened wood or wet paper that is held in the hand to help shape the gather into a sphere), the marver (from the French for marble—marbre), which is the flat surface used for rolling the hot glass to shape and smooth it and to blend in applied decoration), shears (to cut the hot glass during manufacture), pincers (to pinch and decorate hot glass), the pontil or punty (the solid iron rod attached to the base of a vessel with a wad of hot glass to hold the vessel after inflation while it is being formed and decorated), and the puffer or soffietta (a tube with a conical nozzle through which air is blown. It is placed in the mouth of a vessel on the pontil so that the vessel can be further inflated after it has been removed from the blowpipe.) The area on the underside of the vessel where the pontil had been attached is most often ragged from the pontil break. The pontil is also used to create the *kick*: the conical indentation that rises into the interior of the vessel from the bottom. The kick serves to help the vessel stand upright in lieu of a perfectly flat base, which would be difficult to achieve. Some believe that the kick also functions to reduce the volume of the vessel or to lessen the possibility of cracking during cooling, as the flat bottom of a vessel is unforgiving of any contraction or expansion of the glass walls during the cooling process.

9. Some scientists prefer to call glass a rigid liquid rather than a solid. Glass has, in fact, many different molten states, since its viscosity changes rapidly with changes in temperature. In these states, glass can be pressed, molded, pulled, inflated, and joined to itself to varying degrees. For more information, see R. H. Brill, "A Note on the Scientist's Definition of Glass," JGS 4 (1962), pp. 127–138; R. Newton and S. Davison, Conservation of Glass (Cambridge, 1989), pp. 1–17.
- 10. Faïence, glass, glaze, and enamel are the four basic vitreous materials that are intentionally manufactured. More properly called glazed siliceous ware, "Egyptian faïence" is something of a misnomer: it has very little to do with the northern European tin-glazed earthenware dating from the sixteenth century, after which faïence is named. The other three products—glaze, enamel, and glass—can be chemically identical, though glass is the only one for which the coefficient of expansion during cooling is unimportant.
- D. P. Barag, "The Origins of Glass," in Artistic and Historical Communications: Ninth International Congress on Glass (Versailles, 1971), pp. 186–187.
- 12. New and perfectly formed glass is, in fact, much harder than steel. However, any defect in or deterioration of the glass surface makes the glass fracture, chip, or flake easily under stress. Furthermore, once started, a fracture can quickly spread across the glass because there are no internal barriers to stop or slow the break. Another unusual property of glass is that it is anelastic, that is, it efficiently absorbs energy when vibrated.
- N. Avigad, Archeological Discoveries in the Jewish Quarter of Jerusalem: Second Temple Period, exh. cat. (The Israel Museum, Jerusalem, 1976), p. 23.
- 14. Mold-blowing involves inflating the hot glass in a mold so that the glass, in one operation, assumes both the form of and the decorative patterns on the interior of the mold. The technique, discovered in the first century A.D. by glassmakers in the Syro-Palestinian area, required molds of two or more parts, since glass does not shrink away from a mold as does clay. One-piece dipmolds were also employed to impart a decorative pattern to the semimolten glass using pressure or gravity (rather than inflation), with the molded hot glass then being inflated once it had been removed from the mold.
- 15. Cane slices can be so elaborate that they resemble flowers, hence the name of the technique, *millefiori* (thousand flowers), when referring to Venetian glass of the Renaissance.
- 16. While the western portion of the Roman Empire came under the control of Germanic tribes in the fifth century, the eastern part—comprising present-day Turkey, Greece, the eastern Mediterranean, Egypt, and Libya—continued to be under the rule of the emperors in their new capital of Constantinople (the ancient city of Byzantium). The adjective "Byzantine" refers to this area, in which Roman traditions endured from roughly A.D. 400 to 1200.
- 17. A misnomer, stained glass was colored not only by staining (that is, by firing silver compounds so that they penetrate into the surface of the glass) but also by firing enamel colors on the glass surface. The practice of installing stained glass in churches had reached its height during the Gothic period. Baroque church windows needed to be clear, since the interiors required a more intense, theatrical lighting using fewer windows. Therefore, by the seventeenth century, stained glass was primarily used for windows in private homes and in public buildings, such as guilds and town halls.
- 18. Before this, for example, a number of ancient glass vessels and fragments display the signature of their maker, "Ennion," including a pitcher and a cup of the first century A.D. in the Corning Museum of Glass, Corning, New York (59.1.76 and 66.1.36).
- 19. The most significant emendations occurred in 1441, when city authorities passed the mariegola dell'arte dei verieri da Muran, or the guild register ("mariegola" being the Venetian dialect form of matricola, or "register") of the Muranese glassmakers' craft, and with passage of the 1776 capitolare.
- 20. See for example Zecchin 1987, p. 6; A. Polak, Glass: Its Tradition and Its Makers (New York, 1975), pp. 53–57; R. W. Douglas and S. Frank, A History of Glassmaking (Henley-on-Thames, 1972), pp. 6–8.

- 21. The earliest known piece of Venetian export glass is a beaker in the Corning Museum of Glass, Corning, New York, decorated with Saints Michael and Catherine and likely made for the wedding of Michael Behaim and Katerina Locherin on July 7, 1495.
- 22. Once Venetian glassmakers began to make the stem and foot in separate operations, they were able to embellish the stems even more, now including such elements as spherical knops or flattened ones called mereses.
- 23. A. Gasparetto in Barovier Mentasti 1982b, p. 29.
- 24. L. Zecchin, Il ricettario Darduin (Venice, 1986), pp. 184, 260.
- 25. These thin sticks of glass are created by stretching semimolten glass between two metal rods (or pontils) to which the glass is attached. This stretched ribbon of glass (or cane), when cooled, is basically round in section and uniform in thickness. Canes can then be gathered and fused together to create designs—such as the flowers of *millefiori*—when sliced in cross section or they can be manipulated and embedded into semimolten glass to create filigree patterns. Canes used for filigree glass were usually either clear (*cristallo*) or white (*lattimo*), but they could also be of different colors, such as red or blue.
- 26. This is known from fragments of cuneiform tablets from the library of Assurbanipal (668–627 B.C.) that demonstrate the existence of these earlier texts (see R. H. Brill, "Some Chemical Observations on the Cuneiform Glassmaking Texts," in Annales du 5<sup>e</sup> Congrès de l'Association Internationale pour l'Histoire du Verre [Liège, 1972], p. 330).
- 27. See Zecchin (note 24), p. 40.
- 28. D. Heikamp, Studien zur mediceischen Glaskunst (Florence, 1986), figs. 32-33, 106-121, 123-132, 134, 136-142, 144-146, 154-155, 157-159, 161-162, 164-168; pls. II-IV.
- 29. This darker glass was eventually appreciated and glass craftsmen continued to make it long after the technology of clear-glass production was known.
- 30. See for example Douglas and Frank (note 20), pp. 137–149; Polak (note 20), pp. 118–133.
- 31. Because the finished glass object is heated at the mouth of the furnace, its surface becomes partly melted and, as a result, smooth and shiny. Conversely, glass often becomes dull by contact with a mold or other forming surface during its manufacture.
- 32. Fifteenth- and sixteenth-century glass panes that had been fitted into a window with a lead framework were considered a precious fixture of the house and were taken by the owners when they moved. By the seventeenth century, larger cast-glass panes could be installed in a wooden frame, called a sash, from the French *chassis* (for "case" or "frame").
- 33. The Collected Works of Erasmus, edited by J. K. Sowards (Toronto, Buffalo, London, 1985), p. 282.
- 34. By contrast, wine—made from fermented grape juice—is one of the world's oldest beverages: it has been consumed in Europe since prehistoric times. From the sixteenth century, greencolored *Waldglas* was appreciated for the golden color it imparted to white wine, whereas Venetian *cristallo* was preferred by the upper classes for the consumption of red wine.
- 35. This mountain was important as a source of wealth and as the origin of several rivers, including the Main and the Eger. Ever since the Middle Ages, many glasshouses have been located in the central German Fichtelgebirge region.
- 36. See for example von Saldern 1965, pp. 51-67.
- See J. Barrelet, La verrerie en France de l'Epoque Gallo-Romaine à nos jours (Paris, 1953), p. 65; Theuerkauff-Liederwald 1994, pp. 25-26.
- 38. Egg 1962, p. 17.
- 39. Ibid., pp. 46-47.
- 40. See for example Frothingham 1963, pp. 31-74, and figs. 4-9.
- 41. The most illustrious of these glassmakers was Bernardo Perrotto from Altare (born 1619), known in France as Bernard Perrot.

Around midcentury, Perrot immigrated to Nevers and, later, to Orléans, where he received royal patronage and developed new forms of glass and methods of glass production. He is renowned, in particular, for his small-scale sculptures in glass and for the cast flat glass that he used to make portrait plaques, mirrors, and windows. His rights to make flat glass for windows and mirrors were rescinded by Louis XIV in 1696 in favor of the newly founded Manufacture Royale des Glaces de France at Saint-Gobain in Picardy, set up by under the patronage of the king. The importance of light and reflection to French Baroque interiors and the high cost of installing the Venetian mirrors in the Galerie des Glaces at Versailles (1678–1684) made Louis XIV and his finance minister, Jean-Baptiste Colbert, eager to improve the national flat-glass industry.

- 42. The influx of French Huguenot and Netherlandish Protestant glassmakers to England in the second half of the sixteenth century—a result of religious persecution on the continent—also helped England's glass industry thrive.
- 43. Until recently, little was known of this late-sixteenth- and earlyseventeenth-century luxury-glass production. However, the discovery in 1957 of numerous glass fragments in the drain of a house facing Prague's Saint Vitus Cathedral has increased our knowlede considerably. These fragments clearly display a mixture of Venetian and local styles (Hetteš 1963, pp. 43–53).
- Ibid., pp. 39–53; D. Hejdová and O. Drahotová in *Czechoslovakian Glass*, 1350–1980, exh. cat. (The Corning Museum of Glass, Corning, New York, 1981), pp. 13–17.
- 45. The minerals in these mountains were important components of glass, and their wood was used for fuel. These ranges include the Fichtelgebirge in central Germany (on the border with Bohemia just northeast of Nuremberg), the Krušné hory in northern Bohemia (Erzgebirge or Ore Mountains, along the border with Germany south of Dresden), Jizerské hory in northern Bohemia (Isergebirge or Jizera Mountains, extending into Poland north of Liberec), and Krkonoše (Riesengebirge or Giant Mountains, along the border with Silesia east of the Jizera Mountains).

- 46. See for example R. Charleston, English Glass and the Glass Used in England, c. 400-1940 (London, 1984), pp. 42-108.
- 47. Ibid., pp. 109-126.
- 48. An incorrect chemical balance in the glass batch can cause moisture in the air to leach alkali fluxes from the glass, thereby degrading it. Crizzling, which first appears as moisture on the surface of the vessel, leads to the emergence of a fine network of cracks throughout the piece, and, if left unchecked, to the ultimate disintegration of the glass itself.
- 49. These translations and elaborations of Neri's 1612 publication remained the most important manuals on glassmaking until the nineteenth century. In the interim, the only other great source of information on glassmaking was Diderot and d'Alembert's *Encyclopédie* of 1772, which included an extensive entry on glassmaking with numerous illustrations.
- 50. By the late eighteenth century, steam power was being used to cut glass. It was at this time that English cut "crystal" gained world prominence.
- 51. Tait 1991, p. 184.
- 52. See P. C. Ritsema van Eck, "Early Wheel Engraving in the Netherlands," *JGS* 26 (1984), pp. 86–101; and Ritsema van Eck 1995, pp. 172–175.
- 53. See G. Boesen, Venetiansk Glas på Rosenborg (Copenhagen, 1960).
- 54. Popular in the eighteenth century in Venice and elsewhere (see no. 49), combed decoration produced a wavy or zigzag design. Marvering into the glass stripes of colored or white threads and then dragging or combing the threads in one direction at sequential points produced a distinctive pattern.
- 55. Ruth Blumka generously donated a *Stangenglas* (no. 57) to the Museum in 1985.



# CHAPTER 1

# Northern Domestic Glass of the Fifteenth through the Seventeenth Century

nowledge of medieval glass production has expanded greatly in recent years, primarily through the study of large quantities of excavated finds. What was once thought to have been a relatively limited industry, located principally in the Rhine Valley and some of the heavier-wooded regions of central Germany,<sup>1</sup> now proves to have been widespread throughout the European continent. Excavations of glasshouses in southern and southwestern Germany, in southern France, and in the Czech Republic have provided rich and detailed evidence of glass production as early as the thirteenth century.<sup>2</sup>

We now know that glass vessels were produced on a larger scale, in greater variety, and at much earlier dates than was heretofore envisioned.3 The long-held notion that Germanic glasshouses were limited by technology to the production of simple green Waldgläser (forest glasses) may be dismissed; it is now well established that glassmakers were more than capable of making colorless glass, as well as a variety of colored glasses, whether opaque or translucent. Nor was vessel production restricted to potash-lime glass, as has long been believed; lead glass was also manufactured in northwest Europe as early as the ninth century.<sup>4</sup> Other recent studies have shown that glassmaking was not simply a revived craft of the later Middle Ages; strong local traditions of glass production thrived continually from Carolingian times on.<sup>5</sup> Through excavated material, a wide range of vessel typesexecuted in an astonishing array of colors, techniques, and decorative vocabulary-are now known, though sadly and overwhelmingly in fragmentary condition. Many of these, particularly the more ordinary forms of fifteenth- and sixteenth-century green glass vessels, were distributed, in indistinguishable forms, over the whole of central Europe. Documented finds therefore often provide little indication of origin; an excavated glass may have been a local product or an import from a distant manufacturer. Even glasses excavated at major production sites, such as Spessart in southern Germany, can, at best, indicate one probable source of glasses that can also be found elsewhere in identical form. This is

because no glasshouse seems to have enjoyed, so to speak, copyright protection.

Utilitarian, domestic glass vessles-free- or mold-blown, and often with applied or pattern-molded decoration-were the mainstay of central European glasshouse production, that is, glasshouses located in the German-speaking regions and the bordering areas of the Benelux countries, eastern France, and the Czech Republic. These household vessels are distinguished by their indigenous forms, traditional materials, particular decorative vocabulary, and eschewal of any outside influence. (For example, the influence of Murano glass, which was widely exported to the North, is not directly detectable.) The Northern domestic glass pieces in the collection of the Getty Museum are distinguished by a wide range of typessome unique-and by an exceptionally good state of preservation. Small, fairly shallow drinking bowls (see no. 2) and small beakers rarely over 10 cm (4 in.) in height (see nos. 1 and 3) were among the most widely produced utilitarian glasses during the fifteenth and early sixteenth centuries in the North. These vessels were usually blown in one-piece dip molds and then further worked with other pattern molds, resulting in honeycomb, diamond, diagonal-spiral, verticalribbed, or, most commonly, cross-ribbed patterns, giving the exterior surface a pleasing visual effect.

In spite of the vast numbers produced and because of their wide distribution, little is known of the origin and manufacture of this glass. While types such as the small shallow drinking bowl have long been thought to be archetypically Germanic, they may also have been produced in large numbers in the southern Netherlands. On the other hand, documents clearly establish that large numbers of utilitarian vessels were imported into the Netherlands from various glasshouses in Hesse via the rivers Weser, Main, and Rhine.<sup>6</sup> These pattern-molded bowls and beakers existed in abundance by the middle of the fifteenth century—although no earlier models for the general types are known<sup>7</sup>—and both forms remained popular until the early sixteenth century. The small, shallow drinking bowls are generally referred to as *Maigelein*,<sup>8</sup> a term that first appears in reference to glass vessels in a 1462 inventory of Sigmundsburg Castle in the Tirol ("ii maygölgläsel").<sup>9</sup> The previously held belief that these forms of pattern-molded bowls and beakers were used and distributed throughout the German lands is now in question. In the region of Nordbaden, for example, shallow drinking bowls are not in archaeological evidence, whereas crossribbed beakers are found in abundance.<sup>10</sup> Plausible reasons for this phenomenon remain elusive.

Along with Maigelein and small beakers, one of the most common forms of ordinary glassware was the green glass vessel with a canted lip and an overall decoration of applied prunts. These glasses were referred to by the Lutheran priest Johannes Mathesius as Krautstrünke, literally "cabbage stalks," in his 1562 sermon "Glaspredigt."11 Evidence suggests that the Krautstrunk developed out of the bossed, so-called Schaffhausen beaker type probably early in the fifteenth century.<sup>12</sup> The "classic" Krautstrunk is barrel shaped, rests on a pincered foot ring, and is decorated with spiky, upwardpointing prunts and a glass trail around the neck. The relatively large numbers of surviving examples, all of which date from the late fifteenth through the early sixteenth century, indicate that Krautstrünke must have been produced in vast quantities. Their distribution, however, seems to have been more limited than that of the Maigelein or small beakers. The greatest concentrations have been found all along the Rhine Valley, from the canton of Graubunden in Switzerland, through Germany, and into the northern Netherlands; the type also occurs in southern Germany, Austria, and Bohemia, but rarely appears in France (other than in Alsace and Lotharingia), and infrequently in the southern Netherlands.13 There are three variations of the "classic" Krautstrunk type in the Museum collection (see nos. 3, 4, 6).

Other utilitarian glass forms include the *Berkemeyer* (see no. 8), a variant of *Römer*, the most ubiquitous of seventeenth-century drinking vessels, and a later example of the sort widely depicted in Dutch still-life painting (see no. 12). Recent scholarship in late medieval glass vessels has a direct bearing on a number of examples in the Getty Museum. For instance, a footed beaker (see no. 7), when acquired by the Museum, was dated to the early seventeenth century.<sup>14</sup> Comparable excavated material, however, now indicates that a date in the earlier part of the sixteenth century is more likely.

Spessart production is brought into question by several glasses in the Getty Museum. A finely pattern-molded beaker (no. 5) might have come from a glasshouse in this region, and there is evidence to suggest others did as well (see nos. 11, 15). Spessart encompasses a region in the border ter-

ritories of Bavaria and Hesse belonging to the archbishopric of Mainz (see map on page x). Glassworks in Spessart are first documented in 1349;<sup>15</sup> a detailed picture of the industry and its organization is provided by the glass regulations issued in 1406.<sup>16</sup> Excavations suggest that production in the sixteenth century, limited largely to *Kuttrolf*, pattern-molded beakers, prunted glasses, and bottles, had expanded by the seventeenth century to include a far greater variety of vessels, including enameled glasses, *façon de Venise* glasses, and utilitarian vessels such as bottles, vases, and the like.<sup>17</sup> The evidence is frequently insufficient, however, to attribute particular vessels with certainty to this major glass-producing region.

- 1. Rademacher 1963; until recently, this was the principal study of Germanic utilitarian domestic glass.
- 2. Sites include Bramwald in Göttingen; Laudengrund in Nordwestspessart; Niestetal in the Kaufungerwald of Hessen; Salzwiesen in the Nassachtal, Baden-Württemberg; Four de Pérupt in the Argonne region of France; and Moldava I (Teplitz) in the Erzgebirge of the Czech Republic.
- 3. See Baumgartner and Krueger 1988, pp. 13ff; Foy et al. 1989, pp. 121ff.
- 4. Baumgartner and Krueger 1988, pp. 161–163.
- 5. See for example D. Foy, *Le verre médiéval et son artisanat en France méditerranée* (Paris, 1988), which carefully studies glass production, of both vessels and flat glass, in Provence, the Alps, the Côte d'Azur, and Corsica from the ninth through early sixteenth centuries; and idem, "Essai de typologie des verres medievaux d'après les fouilles provençales et languedociennes," *JGS* 27 (1985), pp. 18–71, which thoroughly studies excavated glasses in this area of France.
- B. Dubbe, "Hessische Glasexport naar Nederland," Bulletin van de Koninklijke Nederlandsche Oudheidkundige Bond 15, no. 4 (September 15, 1962), pp. 301-310. For the range of glass vessels excavated from the Netherlands and dating from the fourteenth through the eighteenth century, see H. E. Henkes, Glas zonder glans: vijf eeuwen gebruiksglas uit de bodem van de Lage Landen 1300-1800, Rotterdam Papers 9 (1994).
- 7. Rückert 1982, p. 43, notes that these vessels have analogies with blown bowls made in Persia from the ninth through the twelfth century.
- There is, however, no clear basis for this, as a variety of small, ordinary drinking vessels, including prunted ones, are referred to in documents as *Maigelein*. See Rademacher 1963, pp. 97–98.
   Ibid., p. 140.
- 9. ma., p. 140.
- 10. See Baumgartner and Krueger 1988, p. 305 and note 2.
- 11. "Wer kan aber allerley gattung und form der gleser erzelen, die alten hatten jre hohe spechter, krautstrünck, engster, piergleser, teubelein, brüderlein, und feine kleine trinckgleserlein." ("But who can recount all the kinds and forms of glasses? The ancients had their tall [cylindrical] *spechter* [of green glass], [barrelshaped] *krautstrünk*, [long-necked] *engster*, *piergleser*, *teubelein*, *brüderlein*, and fine little drinking glasses.") Johann Mathesius,

Sarepta oder Bergpostill, sampt der Jochimsthalischen kurtzen Chroniken (Nuremberg, 1562), p. 277v. Other passages from the fifteenth sermon, "On Glassmaking," are published in Rademacher 1963, pp. 136–138. Mathesius was a follower and friend of Martin Luther's, beginning his career as the rector of a Latin school and later becoming priest of Joachimsthal (Jáchymov), where he died in 1562. A student of metallurgy and a great collector of minerals, Mathesius also knew Georg Agricola, whose views on mineralogy he popularized in his sermons (Hetteš 1963, p. 42, note 10).

 See Baumgartner and Krueger 1988, p. 296. Beakers with smaller prunts or nubs, ubiquitous in the fourteenth century, have been excavated in a thirteenth-century context as well. See J. Schneider, "Noppenbecher des 13. Jahrhunderts," *Zeitschrift für Schweizerische Archäologie und Kunstgeschichte* 37, no. 3 (1980), pp. 217–229.

- 13. Baumgartner and Krueger 1988, pp. 336–338.
- 14. "Acquisitions/1984," GettyMusJ 13 (1985), p. 255, no. 241.
- 15. For a useful but somewhat dated summary of the Spessart question, see E. Schneider, "Zur Frage der frühen Spessartgläser," Aschaffenburger Jahrbuch für Geschichte, Landeskunde und Kunst des Untermaingebietes 3 (1956), pp. 207–216; the more important earlier studies are cited here. For an extensive study of the early glass industry in Spessart, see Krimm 1982. See also Glück und Glas 1984; and S. Krimm, "Beobachtungen zur Standorttypologie vorindustrieller Glashütten im Spessart," JGS 28 (1986), pp. 82–97.
- 16. For an analysis of this document, see Krimm 1982, pp. 41ff. The text is provided on pp. 226-228.
- 17. Glück und Glas 1984, pp. 375-376; and Krimm 1982, pp. 156-159.



Germany (Lower Rhineland, Hesse, or possibly Franconia) 1400–1450

Mold-blown dark yellowish-green glass

HEIGHT: 7.1 cm (2<sup>13</sup>/<sub>16</sub> in.) MAX. DIAMETER: 7 cm (2<sup>3</sup>/<sub>4</sub> in.)

84.DK.522

The glass of this barrel-shaped vessel displays cloudy areas of minute grains of frit, some larger embedded impurities, and bubbles, including a large one in the lip. The wall is molded in a pattern of parallel ribs that spiral diagonally around the vessel. Rising from the interior bottom is a high, bulbous kick; the pontil mark is jagged.

Although this rimless beaker appears ordinary enough, it is one of a relatively small group of this design to have survived. One comparable example was found in the side altar of the Spitalkirche in Wemding, north of Donauwörth, in the Bavarian diocese of Eichstätt.<sup>1</sup> The glass, used as a reliquary, had a stopper said to have borne the seal of an Eichstätt bishop who is referred to as "Conrad ep[iscopus] Sicinen" in a document of 1438.<sup>2</sup> Another similar glass was recovered from a chapel altar in Soignies that can be dated to 1458.3 A very similar beaker was found in the excavation of the marketplace in the center of Göttingen.<sup>4</sup> This wellpreserved glass was unearthed in a cloaca along with numerous other glass vessels, including the so-called Schaffhausen type of bossed beakers (Nuppengläser) that were in wide distribution from the late thirteenth to the early fifteenth century, as well as other household objects in ceramic, wood, and leather. These objects, which can be dated to differing time spans, chronologically overlap in the first half of the fifteenth century.<sup>5</sup> Two other similar beakers were excavated at the site of medieval houses on the Stroosteeg in Utrecht, which can be dated no later than the first half of the fifteenth century.<sup>6</sup> Because the few examples of this type of vessel have been found at widely separated sites, production cannot be localized.7 The presence of Rhenish stoneware in the Göttingen find suggests that the beaker may have been produced

in Cologne or the Lower Rhineland, although an origin in Lower Saxony, Hesse, or Franconia is equally plausible.

## Arms None.

MARKS AND INSCRIPTIONS None.

#### Provenance

Leopold Seligmann, Cologne (sold, Sotheby's, London, June 30, 1932, lot 35); Maurice de Rothschild, Paris; Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

#### Exhibitions

None.

#### BIBLIOGRAPHY

Rademacher 1931, pp. 290-294, fig. 3 (lower left); Rademacher 1933, pp. 94ff., pl. 24c; "Acquisitions/1984," *Getty-MusJ* 13 (1985), p. 247, no. 200; Bremer-David et al. 1993, p. 242, no. 422.

## Condition

The glass is in an excellent state of preservation. Some surface accretions are evident on the interior surface.

- See L. F. Fuchs, "Reliquiengräber und Reliquiengläser," Die Christliche Kunst: Monatsschrift für alle Gebiete der christlichen Kunst und Kunstwissenschaft 30 (1933/34), p. 56; and Rückert 1982, p. 47, no. 23.
- Rückert 1982; the name may refer to Sitiense, a bishopric on Crete. The stopper was lost during the Second World War, making it impossible to clarify the meaning of the inscription.
- Musée Archéologique de Soignies, Belgium. See Chambon 1955, pl. I, no. 4.
- 4. Schütte 1976, pp. 101–117, esp. p. 107, fig. 6, no. 4.
- 5. Ibid., pp. 110–111, fig. 9V.
- 6. Isings and Wijnman 1977, pp. 82-83, figs. 2/1, 3.
- Similar pieces of glass, which have also been dated to the early fifteenth century but have a blue glass thread around the rim, have been excavated at Diocletian's palace at Split in Croatia.
   See M. R. DeMaine, "The Medieval Glass," in *Diocletian's Palace: Report on Joint Excavations in the Southeast Quarter* 3 (Split, 1979), pp. 127–137, fig. 25.





Germany Fifteenth century

Mold-blown dark green glass HEIGHT: 4.9 cm (1<sup>15</sup>/<sub>16</sub> in.) DIAMETER (at lip): 9 cm (3<sup>9</sup>/<sub>16</sub> in.)

84.dk.521

This bowl, whose glass is marked with many small bubbles, is molded in a broad, amorphous, cross-ribbed pattern. Rising from the interior bottom is a wide spiked kick.

Small, cross-ribbed-pattern drinking bowls (this example is taller than most) have survived in enormous numbers, although the vast majority are fragmentary and seem to have been in wide use in most of the fifteenth and early sixteenth centuries.

Apparently the production of these glasses was widespread, but the exact locations of the glasshouses that made them are largely unknown. The sites that can be archaeologically connected with *Maigelein* production are often encountered in unexpected locations. Such is the case with the Formathot glasshouse in Macquenoise, south of Charleroi in Belgium, where a similar vessel and fragments of many others have been excavated.<sup>1</sup>

What has long been thought to be an archetypal Germanic form of glass vessel evidently enjoyed a more universal currency.<sup>2</sup> Numerous examples of this higher-walled type have been excavated, for instance in Malines,<sup>3</sup> while other, closely comparable examples have been unearthed in the northern Netherlands at the Altena castle (1490–1525), at the Carthusian cloister at Delft (after 1471), and at Orthenpoort in 's Hertogenbosch (circa 1520).<sup>4</sup> It is probable that these were all imports from German glasshouses. Few examples have turned up in finds that date after about 1525, indicating that by this time they had gone out of fashion. Arms None.

MARKS AND INSCRIPTIONS None.

# PROVENANCE

Leopold Seligmann, Cologne (sold, Sotheby's, London, June 30, 1932, lot 33); Karl Ruhmann, Vienna; Ruth and Leopold Blumka, New York.

Exhibitions None.

#### BIBLIOGRAPHY

Rademacher 1931, pp. 290–294, fig. 3 (upper left); Rademacher 1933, pp. 94ff., pl. 22c; J. Vávra, *Das Glas und die Jahrtausende* (Prague, 1951), no. 95, pl. 38; "Acquisitions/ 1984," *GettyMusJ* 13 (1985), p. 247, no. 200; Bremer-David et al. 1993, p. 242, no. 423.

#### CONDITION

There is a small chip in the lip.

- 1. Chambon 1955, p. 307, no. 3, pl. 1, no. 3; also Baumgartner and Krueger 1988, no. 357, p. 307.
- 2. For the production of Germanic glasses in Lorraine during the sixteenth century, see Henkes 1994, pp. 54–57.
- 3. See Vandenberghe 1982, pp. 133–145, fig. 2, no. 13.
- 4. See Renaud 1962, pls. 1, 3; these pieces were excavated from a refuse pit at the Carthusian monastery near Delft that was demolished in 1571. While numerous fragments of *Krautstrünke* were excavated from a well on the site of the monastery of Saint John near Utrecht (demolished in 1529 to make way for the construction of Vredenburg by Charles v), relatively few examples of this type of drinking dish were found; see Kloek et al. 1986, p. 130, no. 18.





Germany Late fifteenth or early sixteenth century

Free-blown pale blue-green glass with applied decoration HEIGHT: 9.9 cm (3% in.) MAX. DIAMETER: 8.4 cm ( $3\frac{1}{4}$  in.)

84.dk.526

This beaker is made of clear glass with small, elliptical bubbles and minute impurities, including several pieces of frit. The wall of the barrel-shaped vessel is decorated with vertical rows of applied prunts, two alternating with three, and a trailed glass thread just below the lip. The vessel is supported by a relatively thick, applied, and pincered foot ring. A moderately high and pointed kick rises from the bottom.

Glasses of this type were already an established form by around 1400, as evidenced by the depiction of such a vessel in an Upper Rhenish painting of the Garden of Paradise dating to this time (fig. 3a). A comparable glass was excavated at Merwede Castle near Dordrecht in a find that predates 1421. Fragments of four other vessels, somewhat more expanded in the middle, were found in excavations at the public house Zum Wilden Mann at Weinmarkt 11 in Nuremberg; they probably date to after 1450.<sup>1</sup> Barrel-shaped vessels of this type are a variant form of the *Krautstrunk* but lack the characteristic turned-out lip. The barrel-shaped body, the large pointed prunts—occasionally overlapping each other—arranged in vertical rows of three alternating with two, the pincered foot ring, and the trailed glass thread suggest a date in the second half of the fifteenth century or the early sixteenth century.<sup>2</sup>

# Arms

None.

MARKS AND INSCRIPTIONS None.



3A UPPER RHENISH MASTER OF 1410. The Garden of Paradise (detail), circa 1410. Frankfurt am Main, Städelsches Kunstinstitut, HM 54. Photo: Ursula Edelmann.

#### Provenance

Hohenzollern Museum, Sigmaringen; Leopold Seligmann, Cologne (sold, Sotheby's, London, June 30, 1932, lot 24); Kreitz; A. Vecht, Amsterdam (sold, Sotheby's, London, November 10, 1938, lot 56); A. Vecht, Amsterdam (reacquired); Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

#### EXHIBITIONS

Tentoonstelling van Oude Kunst uit het Bezit van den internationalen Handel, Rijksmuseum, Amsterdam, 1936.

#### BIBLIOGRAPHY

Rademacher 1931, pp. 290–294, fig. A (upper right); Rademacher 1933, p. 113, pl. 45b; *Catalogus* 1936, no. 687; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 203; Bremer-David et al. 1993, p. 243, no. 426.

#### Condition

The glass is in a very good state of preservation.

- See R. Kahsnitz and R. Brandl, Aus dem Wirthaus Zum Wilden Mann: Funde aus dem mittelalterlichen Nürnberg, exh. cat. (Germanisches Nationalmuseum, Nuremberg, 1984), pp. 119–120, figs. I C 28–31; no. 31 is the closest of the comparisons, as the others have smaller, earlier, Schaffhausen-type prunts.
- See Ritsema van Eck and Zijlstra-Zweens 1993, p. 121, no. 166; and Henkes 1994, p. 69, no. 17.6.





Krautstrunk

Germany 1480-1520

Free-blown dark green glass with applied decoration HEIGHT:  $6.3 \text{ cm} (2\frac{1}{2} \text{ in.})$ DIAMETER (at lip):  $6.1 \text{ cm} (2\frac{3}{4} \text{ in.})$ 

84.DK.524

The body of this vessel is made of moderately heavy glass and decorated with two rows of prunts arranged diagonally. Trailed glass thread encircles the neck. The vessel is supported by an applied, pincered foot ring. A kick of moderate height rises from the interior bottom; the pontil mark is rough and projecting.

*Krautstrünke* were frequently used as reliquaries, and those with dated dedications help establish the chronology of stylistic variations. Examples with pincered foot rings and trailed glass thread around the neck, for example, bear dedication dates of 1485, 1486 (fig. 4a), and 1491; others with pincered foot rings and no trailed glass thread carry dates of 1504 and 1509, while those with unpincered foot rings and no trailed glass thread have dates of 1509, 1510, 1515, 1519, and 1520.<sup>1</sup> Other examples with foot rings comparable to the Getty example's are datable to the first decades of the sixteenth century (fig. 4b).<sup>2</sup>

Shorter and proportionately more expansive at the belly of the vessel, this variant form of the "classic" *Krautstrunk* does not appear suitable as a drinking vessel, suggesting that it may have been intended as a reliquary. Its surface deterioration may have been caused by its findspot in damp masonry. An equally broad-bellied *Krautstrunk* (though without a seal or a dedication document) is said to have been found in the church of Saint Martin in Leutkirch (Allgäu).<sup>3</sup>

Arмs None.



4A Krautstrunk with written dedication sealed inside. German or Swiss, 1486 or earlier. H: 12.9 cm (5<sup>1</sup>/<sub>8</sub> in.). Cathedral Treasury, Chur, Switzerland, F2024. © Historisches Museum Basel. Photo: Maurice Babey.





4B QUENTIN METSYS (Flemish, 1464/65-1530). The Virgin and Child, 1529. Paris, Musée du Louvre, RF 1475. © Photo R.M.N. A Kraustrunk, presumably containing wine, is on the ledge at the lower left. Together with the grapes on the right, this glass signifies eucharistic wine and, thus, Christ's blood.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 247, no. 201; Bremer-David et al. 1993, p. 243, no. 425.

#### Condition

The surface has deteriorated in areas and is marked with some iridescence and considerable surface accretions, particularly on the bottom.

- Baumgartner and Krueger 1988, p. 336. It is not clear whether a reliquary *Krautstrunk* with a date of 1458, making it one of the earliest examples, has trailed glass thread (Rademacher 1963, pl. 48d); therefore it cannot be used to extend the early end of this chronology.
- 2. Baumgartner and Krueger 1988, nos. 408, 415, 421.
- 3. Bonn, Rheinisches Landesmuseum, inv. no. 68.0486. See Baumgartner and Krueger 1988, p. 340, no. 408.



Germany 1450–1525

Mold-blown pale blue-green glass HEIGHT: 8.8 cm  $(3\frac{7}{16} \text{ in.})$ DIAMETER (at lip): 8 cm  $(3\frac{1}{4} \text{ in.})$ 

84.DK.523

This beaker is made of clear glass with numerous small elliptical bubbles, fine streaks of embedded impurities, and several large pieces of frit, including two near the lip. Its thin wall is molded in a fine, cross-ribbed pattern. The base has a high, spiked kick; the pontil mark is ringed with sharp projections of glass. A horizontal band of short, incised vertical lines, probably tooling marks, is evident below the lip.

This type of slightly flared glass, or Maigelbecher-with its finely patterned surface of slender, intersecting diagonal ribs creating a diamond pattern-was widely disseminated. Examples have been excavated at the Carthusian monastery near Delft.1 They are frequently depicted in fifteenth-century panel paintings; a familiar example is the central panel of the altarpiece of the Holy Sacrament completed by Dirk Bouts between 1464 and 1468 and now in Louvain (fig. 5a); another is a slightly earlier panel in the Louvre, possibly by a Portuguese master (fig. 5b). A glass of this type was excavated on the Stroosteeg in Utrecht,<sup>2</sup> and others were recovered from a cloaca in the marketplace of Göttingen, but from a later stratum-probably of the late fifteenth century-than that discussed above in connection with the Museum's beaker (no. 1).3 A mold-blown example of similar form with this distinctive diagonally cross-reeded pattern was excavated in Obermichelbach near Wittelshofen (Mainfranken), along with a number of coins, for the most part contained in the glass and minted in the second half of the fifteenth century, the latest being 1515 (fig. 5c).4

The archaeological finds, along with the secondary evidence provided by panel paintings, indicate that cross-ribbed pattern-molded *Maigelbecheren* enjoyed wide currency by the middle of the fifteenth century and endured into the sixteenth. Their wide dissemination suggests that they were extensively fabricated and cannot be localized to a particular



5A DIRK BOUTS (Netherlandish, circa 1415-1475). The Feast of Passover (detail). Panel of the left shutter of the Altarpiece of the Holy Sacrament, 1464-1468. Louvain, Stedelijke Musea-Museum Vander Kelen-Mertens, S/58/B. © IRPA-KIK, Brussels. A Maigelbecher can be seen at the lower right.





- 5B Left: Man with a Wineglass. Possibly Portuguese, circa 1450. Paris, Musée du Louvre, RF 1585. © Photo R.M.N.
- 5c Below: *Maigelein*. German, second half of the fifteenth or beginning of the sixteenth century. Munich, Bayerisches Nationalmuseum, 25/19.



region, much less a particular glasshouse. Spessart, nonetheless, has been suggested as a major, if not exclusive, center of manufacture.<sup>5</sup> The Lutheran minister Johannes Mathesius indicates that Spessart glasses were distinguished by their pattern-molded surfaces (*Shattierung*) and by the lack of applied decoration—bosses, prunts, pincered glass bands, or foot rings—that is so characteristic of most German *Waldgläser*.<sup>6</sup> It is also worth noting Krimm's observation that 108 glasshouses in Spessart were situated two kilometers or less from the network of medieval roads that connected this region with the urban markets of the Rhine-Main area, Cologne, and the Low Countries.<sup>7</sup>

Акмs None.

MARKS AND INSCRIPTIONS None.

## Provenance

Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 202; Bremer-David et al. 1993, p. 243, no. 424.

# Condition

The glass is very well preserved.

- 1. Renaud 1962, pp. 101-104, fig. 3, nos. 1, 5, 6, and pl. 4.
- 2. See Isings and Wijnman 1977, pp. 82-83, figs. 2/6.
- 3. Schütte 1976, pp. 110–111, and fig. 9.
- 4. See Rückert 1982, p. 48, no. 26.
- 5. See, for example, Rückert 1982, p. 48, no. 27, pl. 6, for a close comparison to the Getty glass.
- See Krimm 1982, pp. 226-228, for the document, and pp. 41ff. for a discussion of it. The text of *Sarepta oder Bergpostil* (Nuremberg, 1562) is given in Rademacher 1963, pp. 136-138. On early Spessart production, see Krimm 1982, pp. 156-158.
- 7. Krimm 1982, pp. 82-97.



Southern Germany or Switzerland 1490–1530

Free-blown blue-green glass with applied decoration HEIGHT: 10.5 cm ( $4\frac{1}{6}$  in.) DIAMETER (at lip): 8.7 cm ( $3\frac{1}{6}$  in.)

84.DK.525

This beaker is made of clear glass with numerous bubbles and embedded impurities. Its body is decorated with vertical rows of broad, rather amorphous prunts, two alternating with three. A trailed glass thread encircles the neck. The vessel is supported by an applied and pincered foot ring. The bottom rises in a broad and moderately high kick.

This variant form of *Krautstrunk* is distinguished by its nearly cylindrical body, canted rather than cupped lip, and flattened prunts arranged vertically in alternating rows of two and three. While the general type is widely disseminated throughout the Low Countries and the German-speaking lands of central Europe, the present glass appears to have originated outside the principal regions of distribution. A similar glass, for example, was excavated at a medieval site in Sarajevo, Bosnia.<sup>1</sup> But because this and other related vessels are made of clear glass and lack the characteristic glass trails around the neck, it has been suggested that these glasses were neither of local nor German manufacture but were of Italian origin, made for a German export market.<sup>2</sup>

A highly unusual beaker in Prague that is closely related in form to the Getty *Krautstrunk* may be an example of a glass made in Italy for export to Germany (fig. 6a). This vessel is made of colorless glass and has cobalt-colored trailed glass thread around the neck and colorless, cobalt-blue, and emerald-green flattened prunts. The quality and the color of the Prague glass, as well as the tooling of the applied decoration, are thought to be characteristic of Murano glass production.<sup>3</sup> Colored prunts were a frequent element of the Murano decorative vocabulary at the end of the fifteenth and the beginning of the sixteenth century; at the same time, Venetian glassmakers are known to have tailored their production for export markets.



6A Krautstrunk. German (or Venetian made for export), late fifteenth or early sixteenth century. Prague, Uměleckoprůmyslové Muzeum, 16.879.



In spite of the similarity in shape, however, the Museum's *Krautstrunk* seems to be of distinctly Germanic manufacture. In contrast to the Prague glass, for example, the foot ring is sharply pincered, the prunts are fewer and larger, and the glass trail is drawn from a drop in a single thread around the neck.

A comparable *Kraustrunk*, probably of German origin, was found in a well on the site of the monastery of Saint John at Utrecht; it can date no later than 1529, the year in which the monastery was destroyed by Charles v to make way for the building of the fortress of Vredenburg.<sup>4</sup> *Krautstrünke* with rows of prunts in alternating numbers are found with some frequency in southern Germany and Switzerland,<sup>5</sup> while the soft treatment of the prunts, in particular, can be associated with production in southwest Germany during the 1520s and 1530s.<sup>6</sup>

Arms None.

MARKS AND INSCRIPTIONS None.

#### Provenance

Hohenzollern Museum, Sigmaringen; Leopold Seligmann, Cologne (sold, Sotheby's, London, June 30, 1932, lot 23); Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

Exhibitions None.

# BIBLIOGRAPHY

Rademacher 1931, pp. 290–294, fig. 4 (lower right); Rademacher 1933, pp. 111ff., pl. 42d; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 253, no. 232; Bremer-David et al. 1993, p. 244, no. 427.

#### CONDITION

There is a slight chip in the lip. Otherwise the glass is very well preserved.

- L. Kojič and M. Wenzel, "Medieval Glass Found in Yugoslavia," JGS 9 (1967), p. 84; p. 80, fig. 9/4.
- 2. M. Wenzel, "A Reconsideration of Bosnian Medieval Glass," *JGS* 19 (1977), p. 68; the same glass is illustrated by a line drawing in fig. 2e.
- 3. Baumgartner and Krueger 1988, pp. 343-345, no. 414.
- Utrecht, Gemeentelijke Archeologisch Depot. See Kloek et al. 1986, p. 130, no. 17; and Henkes 1994, p. 69, no. 17.5.
- 5. For example, a glass found in the altar of the church of Saint Martin, Patersdorf, Bavaria. See A. Ress, "Mittelalterliche Glasfunde III. Teil," Amtsbericht des Bayerischen Landesamtes für Denkmalpflege 25 (1966), pp. 83–85, figs. 6–7. For Swiss examples from the parish churches of Brigels and of Saint Laurentius in Surcasti, Canton Graubunden, see Baumgartner and Krueger 1988, p. 338, no. 403; and p. 341, no. 409.
- 6. Similar treatment of prunts is evident on a glass now in the Basel Historisches Museum (inv. no. 1922.194) that belonged to Hans Stockar-Peyer and can be dated to around 1519, and on an enameled prunted beaker in the Hamburg Museum für Kunst und Gewerbe (inv. no. 1936.127) that can be dated around 1540. See *Die Renaissance im deutschen Südwesten* 1986, pp. 836–837, figs. R2, R3; and von Saldern 1995, p. 109, no. 43, and color pl. on p. 42.



Germany (possibly Lower Rhineland) 1500–1550

Free-blown pale yellow-green glass with applied decoration HEIGHT: 11.8 cm ( $4\frac{5}{8}$  in.) DIAMETER (at lip): 7.9 cm ( $3\frac{1}{8}$  in.)

84.DK.532

This conical beaker, made of glass marked with bubbles and a few minute impurities, is decorated with trailed glass below the lip and vertical rows, each with six rows of applied horizontal string prunts. The vessel is supported by an attached, truncated, conical foot of openwork string glass. The bottom rises to a moderate kick; the pontil mark is sharp and jagged.

The Museum's beaker belongs to a small group of conical glasses with openwork feet. Typically, these vessels are of green or dark green glass and are decorated with prunts, although singular examples are found with trailed glass applied in random patterns, milled trailed glass, and animal-head prunts.1 A prunted example in the Corning Museum appears to be one of the few examples, along with the Museum's, that has survived intact (fig. 7a).<sup>2</sup> A fragment of the same type was excavated in Maastricht with ceramics that can be dated to the end of the fifteenth or beginning of the sixteenth century;3 other beakers with similar feet have been dated to the early sixteenth century.<sup>4</sup> A similar though less conical glass appears in a panel by a follower of Quentin Metsys, and other examples are depicted on the table in a Last Supper by a south Netherlandish master of the beginning of the sixteenth century (fig. 7b).

The pale, yellowish-green glass and the prunts that are applied in horizontal dashes are unique to the Museum's example. A similar beaker, now in a private collection, is decorated with rows of abbreviated, dotlike prunts, something in between spiked prunts and our dashes.<sup>5</sup>



7A Footed beaker. German, beginning of the sixteenth century. Corning, New York, The Corning Museum of Glass, 79.3.178, Bequest of Jerome Strauss.





7B Attributed to THE MASTER OF 1518. *The Last Supper* (detail). Netherlandish, circa 1500–1525. Brussels, Royal Museums of Fine Arts of Belgium, 3242. Two footed beakers can be seen at the far left and right.

Arms None.

Marks and inscriptions None.

PROVENANCE Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 255, no. 241; Bremer-David et al. 1993, p. 244, no. 428.

# Condition

Some wear on the foot is evident. Some minor scratches appear just under the rim.

- 1. See Baumgartner and Krueger 1988, pp. 352-357, nos. 431-433, 435-436.
- 2. Ibid., no. 431, pp. 353-354.
- 3. Ibid., pp. 354–355, no. 432.
- 4. Ibid., pp. 354-356, nos. 430, 433, 435-436.
- See Baumgartner 1987, pp. 61–62, no. 43. An analogous treatment occurs on a stem vessel in the Amendt collection; ibid., pp. 76–77, no. 76.



Southern Germany (Lower Rhineland) or possibly the Netherlands 1500–1550

Free-blown blue-green glass with applied decoration HEIGHT: 13.5 cm ( $5^{\frac{5}{16}}$  in.) DIAMETER (at lip): 12.9 cm ( $5^{\frac{1}{16}}$  in.)

84.DK.527

This beaker, made of clear glass with some irregularly shaped bubbles and a few embedded impurities, has a funnel-shaped bowl with sloping sides flaring out slightly above the midsection. The lower vessel wall is decorated with diagonal rows of three prunts each. A trailed glass thread separates the undecorated upper section from the lower prunted section. The vessel is supported by an applied and pincered foot ring. A spiked kick of moderate height rises from the base; the pontil mark is smooth.

A variation of a Römer, the Berkemeyer is distinguished by a funnel-shaped rather than a globular bowl and, like the *Römer*, exists in numerous variations (fig. 8a).<sup>1</sup> The Getty example is of an early type in which the bowl and the lower part are essentially one conically shaped element that is divided roughly in half by an encircling glass thread; in later, more typical examples, the division of parts is clearly delineated, the lower part being distinctly cylindrical and the upper steeply conical (see no. 12).<sup>2</sup> The type seems to have been developed toward the end of the fifteenth century; an example is clearly depicted in the scene of the Birth of the Virgin in the Weingartener altar of Hans Holbein the Elder, dated 1493 (fig. 8b).3 Among the earliest Berkemeyers is an example excavated from a well that had apparently been filled in between 1472 and 1515, when the former parish church of Unsere Liebe Frau in Eichstätt, Bavaria, was constructed on the site. As the well was situated under the western end of the north transept, one would imagine that it was filled in earlier rather than later in the building campaign, probably when the house (or houses) to which it belonged was razed.4

The decoration of the early *Berkemeyer*—the large, upward-pointing prunts, the glass thread, the pincered foot



 8A GERRIT VAN HONTHORST (Netherlandish, 1592–1656).
 The Happy Violinist, circa 1624. Madrid, Thyssen-Bornemisza, 1986.21. © Fundación Colección Thyssen-Bornemisza, Madrid.





 8B HANS HOLBEIN THE ELDER (German, circa 1465-1524). The Birth of the Virgin (detail), 1493. Augsburg, Cathedral of Saint Mary, Weingartener Altar.

ring—is clearly appropriated from the *Krautstrunk*. A number of examples are further elaborated with twisted glass thread and fine, pattern-molded vessel decoration. The prunts are generally arranged in diagonal rows of two each.<sup>5</sup> Numerous examples have been excavated both in the southern<sup>6</sup> and northern Netherlands;<sup>7</sup> whether they were imported or produced locally is unclear.

An example probably fabricated in Germany but excavated in Delft has the same concept of form and decoration as the Museum's Berkemeyer.8 This type appears to persist well into the sixteenth century.9 It is often represented in paintings; one appears on one panel of a triptych by Dirk Jacobsz dated 1529 (fig. 8c).10 To compensate for the somewhat larger scale, the diameter of the body of the Museum's example is a bit less narrow in relation to that of the mouth, furnishing it with slightly more stolid proportions. Similar in this regard is a vessel that was also unearthed from the filled-in well at Eichstätt, indicating a date not much later than about 1500.11 Another glass of very similar porportions was probably excavated in Mainz.12 Furthermore, in the Museum's glass, the number of prunts in each row has been increased to three. This unusual arrangement is found on another, somewhat more cylindrical Berkemeyer that came from the church of Soy in the southern Low Countries; the origin is unknown, but, according to Chambon, Berkemeyers were also produced in the Netherlands.<sup>13</sup> The Museum's glass, however, corresponds more closely in both profile and prunt arrangement to examples recovered from the excavations at Schüsselbunden 16/Fischstrasse 1-3 in Lübeck.14

# Arms

None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 237; Bremer-David et al. 1993, p. 245, no. 430; *Masterpieces* 1997, p. 30, no. 21.

# Condition

There is abrasion on the bases of the foot-ring projections. One prunt has lost its tip. A section of the trailed glass thread above the prunts is missing.

#### Notes

- The term *Berkemeyer* does not seem to have been used in the sixteenth or seventeenth century. According to contemporary sources, what is now generally refered to as a *Berkemeyer* was, in fact, called a *Römer*. See H. J. Domsta, "Der Römer: Name und Form eines Trinkglases auf Abbildungen des späten 16. Jahrhunderts," *JGS* 28 (1986), pp. 118–120. However, according to Theuerkauff-Liederwald 1968, the term *Römer* was likewise seldom used in the sixteenth and seventeenth centuries (pp. 114–116).
- 2. See, for example, Ritsema van Eck 1993, nos. 171–173; and Henkes 1994, p. 189, fig. 125.
- See Deutsche Kunstdenkmäler: Ein Bildhandbuch: Bayern südlich der Donau (Munich, 1967), pl. A28.
- 4. Baumgartner and Krueger 1988, p. 363, no. 445.
- 5. This type of vessel also appears in contemporary paintings in the Low Countries, for example, in *The Meal of Saint Benedict* attributed to Jan Mostaert and now in the Musée Royal des Beaux-Arts, Brussels.
- 6. See, for example, Vandenberghe 1982, p. 134, fig. 1, no. 2.
- 7. See, for example, Renaud 1962, pp. 105–106, fig. 2, no. 4. This example was excavated from a refuse pit at the Carthusian monastery outside of Delft, which was demolished in 1571.

- H. J. E. van Beuningen Collection, Cothen. See Baumgartner and Krueger 1988, pp. 365–366, no. 450; and Henkes 1994, p. 74, no. 18.4.
- A larger but like-proportioned example that may date toward the middle of the century is in the Willet-Holthuysen Museum, Amsterdam, inv. no. 5209. See Theuerkauff-Liederwald 1968, pp. 131–132, fig. 12.
- A representation of a later, smaller variety with rows of three prunts each is found in a painting of a country festival by Pieter Aertsen, dated 1550 (Kunsthistorisches Museum, Vienna, inv. 2365). See ibid., pl. 165, no. 334.
- 11. Karl Amendt Collection, Düsseldorf; Baumgartner 1987, p. 78, no. 79.
- 12. Baumgartner and Krueger 1988, p. 365, no. 450.
- 13. Chambon 1955, p. 309, pl. III, no. 15.
- A. Falk and R. Hammel, Archäologische und schriftliche Quellen zur spätmittelalterlich-neuzeitlichen Geschichte der Hansestadt Lübeck: Lübecker Schriften zur Archäologie und Kulturgeschichte 10 (Bonn, 1987), pp. 19–23; no. 277 on p. 56; ill. 26/1 and pl. 11, no. 15.



8C DIRK JACOBSZ (Netherlandish, 1496–1567). A Group of Guardsmen (detail), 1529. Amsterdam, Rijksmuseum, SK A 402.

# Stemmed and Prunted Goblet

Germany (Lower Rhineland, possibly Cologne) 1500–1550

Free-blown blue-green glass with applied and diamond-point-engraved decoration HEIGHT: 14.6 cm  $(5\frac{3}{4}$  in.) DIAMETER (at mouth): 5.4 cm  $(2\frac{1}{6}$  in.) DIAMETER (at base): 9.7 cm  $(3\frac{13}{6}$  in.)

84.dk.509

This goblet is made of clear glass with a few minute bubbles. The straight, walled lip is separated from the body of the vessel by an encircling trailed glass thread. The globular bowl is decorated with diagonal rows comprised of three prunts each. The vessel is supported by a solid stem, decorated with a crimped and twisted band (fig. 9a) around the center that connects with a depressed and flanged trumpet foot. The surface of the foot is diamond-point engraved with a date and inscription. The pontil mark is sharp and projecting.

This unusual glass, stemmed and without a handle, appears to be half of a double cup in a variant form of Scheuer. The Scheuer-a type of low, single-handled cup that was fabricated in metalwork, wood, rock crystal, hardstones, and other materials-was produced widely in the thirteenth and fourteenth centuries and, after a hiatus, again in the late fifteenth and early sixteenth centuries.<sup>1</sup> Footed double cups, best known in metalwork, were used widely in ceremonies, toasts, and celebrations of betrothals and marriages.<sup>2</sup> The only known example of this double-cup form in glass was once in the Kunstgewerbeuseum, Berlin (fig. 9c) and was subsequently destroyed in the Second World War. However, it is not known whether the Berlin vessel (probably of Murano origin) was actually intended to be a double cup or whether it was discovered that a pair of similar vessels merely happened to fit together in this distinctly Northern manner. In the case of the Museum's glass, there is no physical evidence to suggest there was ever an upper section. Indeed, in contemporary representations, similar vessels are always shown without any form of cover. The Albrecht Bouts painting illustrated here (fig. 9d)-dating to about 1500 and based on the Dirk Bouts composition of 1464-1468 (see no. 5, fig. 5a)-reflects an apparent change of fashion: the earlier pattern-molded



9A Detail of stem.



9B Detail of foot.



beakers on the table have been replaced, in the later painting, by *Scheuern*.<sup>3</sup>

The shape of the bowl, the smooth and flattened prunts, and the trailed glass thread at the base of the vertical lip are all very similar in treatment to a *Scheuer* that dates to about 1500–1525 (fig. 9e).<sup>4</sup> The form of the vessel, with stem but lacking the *Scheuer* handle, is comparable to a vessel now in the Amendt Collection.<sup>5</sup> The short stem with a pincered and twisted encircled band (which suggests Murano influence) is, on the other hand, very close to that of another stemmed beaker of the early sixteenth century, probably excavated in Cologne, as well as to other sixteenth-century German footed beakers.<sup>6</sup> Other single-glass *Scheuern* are in the Amendt Collection, Düsseldorf,<sup>7</sup> and the Kunstgewerbemuseum, Berlin.<sup>8</sup>

Possibly the closest analogy to the Museum's goblet is a double cup of mounted rock crystal in the Badisches Landesmuseum, Karlsruhe (fig. 9f). This vessel and its silver mount date to the last decades of the fifteenth century and appear to have been made in the Baden-Württemberg area (Freiburg and Basel). The lower part of the double cup is a *Scheuer*, and the similarities between it and the Museum's goblet are striking: both have a similar high stem with projecting ornamentation at its midpoint, a sloping foot, bulbous cup, and vertical lip on the inward curve of the vessel body. Since the qualities of rock crystal often influenced glass production—with glass being prized for its simulation of those qualities—it is possible that such an object in precious rock crystal could have inspired the production of vessels in the more unassuming material of glass.

A date to the early decades of the sixteenth century is suggested by the comparisons cited above; this makes puzzling the engraved inscription on the foot (fig. 9b). It is conceivable that the glass was made in 1494, but it seems highly improbable that the precise date of manufacture of a relatively modest object would have been known, much less celebrated, a century later. It is more probable that the inscription does not refer to the glass it embellishes but rather celebrates a centenary, perhaps of a confraternity, civic organization, or the like, which may have been identified on an associated vessel. It is likewise possible, given the remarkably modern orthography of the engraved phrase, that this inscription was a much more recent addition to the vessel.

Arms None.

# MARKS AND INSCRIPTIONS

On the foot, engraved, 4. augustus. was Ick Out. 100. Jaer. A 1594 ("On August 4, 1594, I was one hundred years old").

# PROVENANCE Ruth and Leopold Blumka, New York.

# EXHIBITIONS

None.



Goblets (possibly double cups). Venetian, probably midsixteenth century. Formerly in Berlin, Staatliche Muzeen zu Berlin Preussischer Kulturbesitz, Kunstgewerbemuseum, K.256 and K.257. From F.-A. Dreier, Venezianische Gläser und Façon de Venise: Katalog des Kunstgewerbemuseums Berlin (Berlin, 1989), p. 10, fig. 6.

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#### CONDITION

The glass is in very fine condition.

- 1. See Baumgartner and Krueger 1988, pp. 231, 381.
- For the uses and meanings of double cups, see H. Kohlhaussen, "Der Doppelkopf: Seiner Bedeutung für das deutsche Brauchtum des 13. bis 17. Jahrhunderts," Zeitschrift für Kunstwissenschaft 14 (1960), pp. 24-56, nos. 1-2.
- 3. See Henkes 1994, pp. 108–110, fig. 72.
- 4. Formerly in the Biemann Collection, Zürich; see Baumgartner and Krueger 1988, p. 383, no. 478.
- 5. Baumgartner 1987, pp. 59-60, no. 39.
- 6. Ibid., pp. 84–85, no. 93; and Baumgartner and Krueger 1988, pp. 408–416.
- 7. Ibid., pp. 58–59, no. 37.
- 8. Dreier 1989, no. 14, pp. 45–46, where another of *millefiori* glass, formerly in Berlin and destroyed in the Second World War, is reproduced (p. 9, fig. 5).



9D ALBRECHT BOUTS (Netherlandish, died 1549). *The Last Supper* (detail), circa 1500. Brussels, Royal Museums of Fine Arts of Belgium, 2589. Photo: Brussels A.C.L. Two stemmed goblets can be seen on the table at the lower left and upper right.



- German, circa 1500–1525. H: 6.6 cm (2<sup>1</sup>/<sub>8</sub> in.).
   The Cleveland Museum of Art, 1991.14, Purchase from the J. H. Wade Fund. © CMA.
- 9F Double Scheuer made of rock crystal. Possibly German, circa 1450-1475. H: 26.5 cm (10<sup>3</sup>/<sub>8</sub> in.). Silver mounts: German or Swiss, 1487. Karlsruhe, Badisches Landesmuseum, 95/824.





Germany Sixteenth century

Free-blown dark blue-green glass with applied decoration HEIGHT: 25.2 cm ( $9^{15/16}$  in.) DIAMETER (at lip): 14.5 cm ( $5^{11/16}$  in.)

84.dk.510

The large, barrel-shaped body of this beaker is decorated with vertical rows, each comprised of six overlapping, flattened prunts aligned on a slight diagonal. Trailed glass encircles the undecorated lip. The vessel is supported by an applied and pincered foot ring. A spiked kick rises from the base. The pontil mark is irregular; parts of the pontil have flaked off and become attached to the glass at the edges.

While the applied prunts of this type of glass certainly relate it to the *Krautstrunk*, its outsized scale places it in a different class of vessel. At least in this large size, the prunted, barrel-shaped vessel appears to have developed in the early sixteenth century. An analogous example, with an unpincered foot ring and a less concentrated pattern of applied prunts, appears in Lucas Cranach's painting of an old man with young courtesans (fig. 10a), which can be dated to around 1530.<sup>1</sup> The Museum's glass is remarkable not only for its large size but also for the great number and density of its applied prunts. Though generally called German, production of this type of vessel has not been localized.<sup>2</sup>

Arms None.

Marks and inscriptions None.

Provenance

Hans Wilczek, Burg Kreuzenstein, Austria; Franz Ruhmann, Vienna; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.



 10A LUCAS CRANACH (German, 1472-1553). Old Man with Young Courtesans (detail), circa 1530. From M. Friedländer and J. Rosenberg, The Paintings of Lucas Cranach (London, 1978), no. 291.

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A. Walcher-Molthein, "Die deutschen Renaissancegläser auf Burg Kreuzenstein, I," *Belvedere*, 9/10, no. 3 (March 1926), p. 41, fig. 18; W. Born, "Five Centuries of Glass: I, The Franz Ruhmann Collection at Vienna," *Connoisseur* 101 (January 1938), pp. 12–13, fig. 6; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 204; "Recent Important Acquisitions Made by Public and Private Collections in the United States and Abroad," *JGS* 28 (1986), p. 100, fig. 8; Bremer-David et al. 1993, pp. 244–245, no. 429.

#### Condition

There is a minor crack along the edge of one prunt and a crack through the pontil mark on the underside measuring 8.2 cm  $(3\frac{14}{100} \text{ in.})$  from tip to tip. There is considerable wear on the bases of the projecting crimps.

- A similar example of this rare type of vessel with a pincered foot ring is in the Museum für Kunsthandwerk, Frankfurt, inv. no. 6187. See Bauer 1973, p. 103, no. 220, where it is called German, sixteenth century. See also Baumgartner and Krueger 1988, p. 351, no. 429; and, for another example, see F.-A. Dreier, *Glaskunst in Hessen-Kassel* (Kassel, 1969), fig. 3 and relevant text.
- Another example of apparent German origin—somewhat smaller (H: 18.5 cm [7<sup>1/4</sup> in.]) but with the same distribution of prunts—is now in the Schlossmuseum, Weimar. See A.-E. Theuerkauff-Liederwald (then Liederwald), "Thüringische Gläser des 16. Jahrhunderts unter Berücksichtigung der zeitgenössischen literarischen Quellen der Glasherstellung sowie Darstellungen von Gläsern auf Malerei und Graphik des 16. Jahrhunderts," Wissenschaftliche Zeitschrift der Friedrich-Schiller-Universität Jena 7, no. 2/3 (1957/1958), p. 350, fig. 16.





Germany Early seventeenth century

Free-blown blue-green glass with applied decoration HEIGHT: 12.1 cm  $(4^{3/4} \text{ in.})$ DIAMETER (at lip): 7.7 cm  $(3^{1/16} \text{ in.})$ DIAMETER (at base): 8.8 cm  $(3^{1/16} \text{ in.})$ 

84.DK.531

This conical vessel, made of glass with some impurities, several pieces of frit, and bubbles, is decorated with a thin, spiraltrailed thread, interrupted in places, and three glass rings suspended from loops attached below the lip. The vessel is supported by a truncated conical foot of wound-thread glass, thin and uniform near the rim but separated in places and bulbous and highly irregular near the join to the body. Extraneous glass has adhered to the rim of the foot, interfering with the stability of the vessel.

Only a handful of ring vessels of this type have survived, and most are dated to the seventeenth century.<sup>1</sup> In concept, the vessel is related to the barrel-shaped beakers decorated with looped prunts through which metal rings are attached (fig. 11a).<sup>2</sup> Certain of these vessels have been dated to the first half of the sixteenth century, and excavations have established that some were produced at the so-called Ziroff-Hütte in Spessart.3 An analogous glass ring, dating from the sixteenth century, was excavated at a glasshouse at Dion-le-Val in Brabant, but its intended function is not known.<sup>4</sup> A stemmed and enameled goblet in Prague, however, has attached glass rings and is dated 1594, confirming the existence of this curious decorative motif in the sixteenth century (fig.11b).<sup>5</sup> A beaker with similarly attached rings, now in Munich, is tentatively attributed to Spessart and may date from the second half of the sixteenth century.<sup>6</sup> It is possible that the tinkling sound made by the rings when these glasses were used was a pleasant auditory aspect of drinking from this type of vessel.

The blue-green glass and the squat proportions of the Museum's ring beaker may suggest a date early in the seventeenth century, as later examples are usually more attenuated and made of a yellowish-green glass. Furthermore, the rather



11A Ring beaker. German, first half of the sixteenth century.
H: 13.9 cm (5<sup>1/2</sup> in.). Düsseldorf, Kunstmuseum, Sammlung Karl Amendt, G87.




11B Footed beaker with a hunting scene. Bohemian, 1594. Prague, Uměleckoprůmyslové Muzeum, 10.398.

capricious if not haphazard beginning of the spiral-trailed glass foot is uncharacteristic of the more orderly workmanship of the later seventeenth century.

Fragments of similar beakers with coil-wound feet, presumed to have been influenced by German production, have been excavated at a glasshouse in Rejdice in northeastern Bohemia dating from the end of the sixteenth century.<sup>7</sup> One of these glasses is of proportions similar to the Museum's beaker and has a correspondingly heavily massed wound foot.<sup>8</sup> A comparable vessel datable to about 1600 was excavated at the Leliegracht in Amsterdam.<sup>9</sup>

#### Arms None.

None

MARKS AND INSCRIPTIONS None.

# Provenance

Gabriel Pichler, Vienna; acquired by Oscar Bondy, Vienna, November 29, 1927; Ruth and Leopold Blumka, New York.

# EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 240; Bremer-David et al. 1993, p. 245, no. 432.

## CONDITION

In spite of the fragility of its applied decoration, the glass is extremely well preserved. There is a crack running around the base. There are minor chips to the trailing.

- 1. Seventeenth-century examples include those discussed in Klesse and Reineking-von Bock 1973, p. 110, no. 180; and one in the Gemeentemuseum, The Hague (inv. no. OG 116-1954).
- See Klesse and Reineking-von Bock 1973, p. 110, no. 179; and Baumgartner 1987, pp. 60–61, no. 42.
- 3. Baumgartner 1987, p. 61, no. 42.
- 4. R. Chambon, "Le verrerie dans le Brabant Wallon au début de la Renaissance," *JGS* 3 (1961), pp. 44–46, fig. 7/32.
- 5. See Drahotová 1985, p. 76, pl. 47. A nearly identical vessel in cobalt-blue glass was excavated at the Bredestraat and Zomerstraat in Vlaardingen, the Netherlands, and also appears to date from around or before 1600; see Henkes 1994, p. 182, no. 43.3.
- 6. See Rückert 1982, pp. 123–124, no. 259, pl. 75; see also sales catalogue, Sotheby's, London, November 10, 1938, lot 85, for an example in "thistle" form.
- 7. See Hejdová 1981, pp. 26-28, fig. 9/15-19.
- 8. J. Urbancová, "Former Glassworks in the Jizera Mountains," *GR* 31, no. 5 (1986), pp. 4–5, fig. 10.
- 9. See Henkes 1994, p. 165, no. 39.2.



Germany or the Netherlands 1650–1675

Free-blown dark yellow-green glass with applied decoration HEIGHT:  $18.8 \text{ cm} (7\frac{8}{6} \text{ in.})$ DIAMETER (at lip):  $16.4 \text{ cm} (6\frac{7}{16} \text{ in.})$ 

84.dk.528

This beaker is made of very thick and reamy glass with numerous bubbles and embedded impurities, including some frit near the lip. The funnel-shaped bowl with beveled lip sits on a cylindrical stem decorated with two rows of large flat prunts. The transition from bowl to stem is marked by a milled glass thread. The underside of the low coiled foot has a shallow kick with a jagged pontil mark.

Similar examples of this form of *Berkemeyer* are decorated with inscriptions and dates that generally fall around the middle of the seventeenth century.<sup>1</sup> By the last quarter of the century the type frequently appears in the still-life paint-



12A CORNELIS DE HEEM (Netherlandish, 1631–1695). Still Life, late seventeenth century. Dresden, Staatliche Kunstsammlungen, Gemäldegalerie Alte Meister, 1225.



ings of numerous Dutch artists, including Abraham von Beyeren, Cornelis de Heem (fig. 12a), Abraham Mignon, Jan Miense Molenaer, Jan Steen, and others.<sup>2</sup> The form appears to have been particularly pervasive in Holland, where the name *Berkemeyer* originated.<sup>3</sup>

It is unclear if the particularly heavy glass, which obviously provided durability, was also seen as aesthetically pleasing. The irregular shape of the prunts and the yellowish tint to the glass are unusual and do not aid in establishing its origin.

# Arms

None.

MARKS AND INSCRIPTIONS None.

# Provenance

W. J. Snouck Hurgronje Collection, The Hague (sold, Mensing & Fils [Frederick Muller & Cie.], Amsterdam, July 8, 1931, lot 556); (sold, Sotheby's, London, November 10, 1938, lot 60); A. Vecht, Amsterdam; Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

# Exhibitions

Tentoonstelling van Oude Kunst uit het Bezit van den internationalen Handel, Rijksmuseum, Amsterdam, 1936.

# BIBLIOGRAPHY

*Catalogus* 1936, no. 692; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 256, no. 246; Bremer-David et al. 1993, pp. 248-249, no. 439.

# Condition

There are two minor chips in the lip and several scratches in the surface of the glass. Three sides of a rectangle are crudely engraved on the vessel wall below the bevel of the lip.

- See, for example, a *Berkemeyer* with calligraphic decoration by Anna Roemers Visscher, dated 1646, in the Rijksmuseum, Amsterdam (Theuerkauff-Liederwald 1968, p. 133, fig. 15; and Ritsema van Eck 1995, pp. 36-37, no. 15).
- 2. For a listing of many of these paintings, see Theuerkauff-Liederwald 1968, p. 133, note 101.
- 3. Ibid., pp. 133-134; and Ritsema van Eck and Zijlstra-Zweens 1993, pp. 130-132, nos. 182-185; sale catalogue, Sotheby's, London, November 10, 1938, lots 71-79, all of which are smaller than the Getty example but likewise originate from the Snouck Hurgronje Collection, The Hague.



Unzerbrechlicher Becher

Possibly central Germany 1643

Free-blown emerald-green glass with applied and diamond-point engraved decoration HEIGHT: 12.4 cm ( $4^{\frac{7}{8}}$  in.) DIAMETER (at lip): 2.8 cm ( $1^{\frac{1}{8}}$  in.)

84.dk.529

Made of very thick glass, this cylindrical vessel is separated into an upper-lip section and a lower section by an applied, heavy, trailed thread. The lower section is decorated with three rows of applied raspberry prunts arranged diagonally. The lip is diamond-point engraved with an inscription and a scene of a hound chasing a hare through foliate patterns (figs. 13a-c). Each prunt has a molded, central, star-shaped boss (fig. 13d).<sup>1</sup> The vessel is supported by a broad-banded foot of applied glass. The bottom rises in a slight kick; the area around the pontil mark is sharp and jagged.

This glass is one of a group of so-called Unzerbrechlichegläser (unbreakable glasses) or Dickwandbechern (thick-walled beakers), all of which are engraved with variants of the same inscription. All are generally dated to the late 1650s and early 1660s and have been called, for no given reason, Saxon. Klesse cites an additional seven glasses of the same type and with the same inscription, all of which date from 1656 to 1665;<sup>2</sup> a glass formerly in the Biemann Collection is dated 1653; a beaker with a different inscription but the same date as the Museum's example is in the Heeswijk Castle, Brabant.<sup>3</sup> This and the Museum's beaker are thus the earliest recorded examples of this type by a full decade. Both the former Biemann glass and the Getty example are further distinguished by the unusual star-shaped bosses in the center of each prunt.4 The similarity of form and the closeness of dating of these two pieces suggest a regional production.

Applied raspberry prunts appeared as early as the sixth century on Islamic glasses.<sup>5</sup> In Europe, it has generally been thought that this form of decoration was not current until the sixteenth and seventeenth centuries. Excavations of a glasshouse that probably belonged to the cloister of Bursfelde at Bramwald, Weserbergland (Landkreis Göttingen), yielded a

terra-cotta stamp used for making raspberry prunts in finds that dates to the first half of the thirteenth century.6 Fragments of thirteenth-century glasses with raspberry prunts of this type have been found at Magdeburg at Schwibbogen 9.7 These light-green to reddish-yellow glasses, which are also decorated with trailed glass thread, are, unlike the present example, very thin walled. Other fragments of early glasses with raspberry prunts have been found in sites as widely separated as Braunschweig (a find that probably dates prior to 1278)<sup>8</sup> and London.<sup>9</sup> Raspberry prunt molds that can be dated to the seventeenth century-including one with a star pattern-were excavated at the Ziroff-Hütte in Spessart.<sup>10</sup> Excavated material from Spessart glasshouses suggests the raspberry prunts in high relief supplanted the pointed prunt by around 1660. Although the Spessart production expanded to numerous types of Römers, beakers, and Stangen- and Passgläser, there is no clear evidence to link Unzerbrechlichegläser with Spessart.11

According to the inscriptions, these glasses were meant to be "thrown down" after drinking and then picked up and drunk from again.

Акмs None.

#### MARKS AND INSCRIPTIONS

Around the lip, engraved in diamond point, *Trinck mich auss und wirff mich Nider/Hebb mich auff und vill mich wider Anno* 1.6.4.3. ("Drink me dry and throw me down. Pick me up and fill me again. Year 1643").

PROVENANCE Ruth and Leopold Blumka, New York.

Exhibitions None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 207; Ricke 1989, p. 66, no. 107; Bremer-David et al. 1993, p. 249, no. 440.









13A-C Details of engraved inscriptions.



13D Detail of prunts.

#### Condition

There is a blind crack through the vessel wall below one prunt in the middle row; other prunts are slightly chipped or abraded, especially in the area of the stars. The base is heavily worn and abraded.

- For an example with prunts stamped on a rosette, see Ritsema van Eck and Zijlstra-Zweens 1993, no. 188 and note on p. 134.
   Klossa 1965, pp. 28, ao. pp. 26.
- 2. Klesse 1965, pp. 38–39, no. 36.
- F. G. A. M. Smit, *Line-Engraved Glass*, published privately (Peterborough, 1994), p. 33, no. 79.1.
- 4. An example, formerly in the Biemann Collection, Zürich, also has the star pattern in the prunt. See Rütti et al. 1981, p. 164, no. 695.
- 5. Ibid., p. 131, nos. 565-568.

- Baumgartner and Krueger 1988, p. 27, where one finds a citation for H.-G. Stephan, "Im Bramwald (Gemeinde Niemetal, Landkreis Göttingen). Archäologische Ausgrabungen im Bereich einer mittelalterlichen Waldglashütte," Universität Göttingen, Informationen, August/September 1986, pp. 16ff.
- 7. Zentraler Platz, find 52; see Baumgartner and Krueger 1988, p. 115, no. 62.
- Turnierstrasse in the old city (Braunschweiger Landesmuseum, Brunswick, inv. no. 85:1/13 517); see Baumgartner and Krueger 1988, p. 170, no. 133; and p. 172, no. 136.
- Swan Lane near London Bridge in 1981, but probably manufactured in northwest Europe (Museum of London, inv. no. SWA 81/5012); see Baumgartner and Krueger 1988, p. 174, no. 140.
- Deutsches Glasmuseum, Wertheim; see *Glück und Glas* 1984,
  p. 325. See also Ritsema van Eck and Zijlstra-Zweens 1993,
  p. 134, no. 188,2.
- 11. Glück und Glas 1984, p. 375.



Germany or the Netherlands Seventeenth century

Free-blown pale green glass with applied decoration and silver and silver-gilt mounts HEIGHT: 33.7 cm (13<sup>1</sup>/<sub>4</sub> in.) WIDTH: 9.2 cm (3<sup>5</sup>/<sub>8</sub> in.)

84.DK.520.1-.3

Made of glass marked with numerous impurities and unvitrified silicates, this vessel takes the form of a man wearing a doublet, breeches, and a brimmed hat who rests his hands on his hips. The facial features are executed in applied glass, and the dagging, piping, and fasteners of his costume are indicated with pincered glass thread. The plumed hatband, belt, buckle, and sword are executed in silver and silver gilt. The nose is open at its tip, and the head, surmounting a long glass tube, is removable. The figure stands on an attached depressed trumpet foot with a flanged rim turned upward, encircled by a silver-gilt mount.

The head of this exceedingly rare figure is connected to a tube that extends the full depth of the figure's body. As the nose is open, the entire construction can function as a pipette or straw to extract the liquid contents, presumably a potent liquor (fig. 14a). It is thus an anthropomorphic interpretation of the popular stag glasses on which the snout serves as the upper end of a straw (fig. 14b).

Amusing examples of glassblowing, trick glasses such as this were designed to be as difficult as possible to drink from without spilling the alcoholic beverage within. The goal of this exercise was to amuse the onlookers at the expense of the drinker. In drinking competitions, if any liquor was spilled, the imbiber was required to start again with a full glass. Certainly the more one drank, the harder it must have been to drink without mishap.

The only other known related piece is the body of a figure, now in Düsseldorf, that appears to come from the same workshop (fig. 14c).<sup>1</sup> Inverted wineglasses (*Sturzbecher*, or beakers meant to be emptied in one draft) in the form of female figures are more common, as are trick or joke glasses in the form of a horn, pistol, stag, bear, rabbit, penis, or boot. The silver mounts are unmarked and provide no more indication of origin than the vessel itself.



14A Alternate view with pipette removed.





late seventeenth to first half of the eighteenth century. H: 33.5 cm

(13<sup>1</sup>/<sub>4</sub> in.). Los Angeles County Museum of Art, M.82.124.4.a-b,



14C Flask in the form of a soldier. German, end of the sixteenth to first half of the seventeenth century. H:  $24 \text{ cm } (9\frac{1}{2} \text{ in.})$ . Düsseldorf, Kunstmuseum, 1939–10.

Arms None.

MARKS AND INSCRIPTIONS None.

Gift of Hans Cohn.

PROVENANCE Ruth and Leopold Blumka, New York.

Exhibitions None.

## BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 239; Ricke 1989, p. 66, no. 107; Bremer-David et al. 1993, p. 248, no. 437; *Masterpieces* 1997, p. 39, no. 28.

# CONDITION

The rim of the neck is worn. There is a small hole on the side of the figure's right leg under the sword.

NOTES 1. See Ricke 1989, p. 66, no. 107.

# Pattern-Molded Beaker

Possibly Germany Seventeenth century

Mold-blown dark green glass with applied decoration HEIGHT: 15.1 cm ( $5^{15}/_{16}$  in.) DIAMETER (at lip): 8.8 cm ( $3^{7}/_{16}$  in.)

84.dk.530

The glass of this beaker displays some bubbles and several pieces of frit, including a large one near the lip. The entire surface of the vessel—wall and base—is decorated with a pattern of raised hemispherical projections arranged in tight, diagonal rows. The vessel is supported by a thick, attached foot ring.

From the mid-sixteenth century throughout the seventeenth century, so-called *Warzengläser* (wart glasses) were produced extensively in glasshouses in central and southern Germany, the Netherlands, and France. The walls of these vessels were pattern molded, with rows of ovoid, hemispherical, or rectilinear embossments. In addition to colorless glass and the more usual tones of light- to bluish-green, these vessels were also produced in amber, violet, and other colors. Examples that were used as altar reliquaries and that bear seals serve as chronological indicators.<sup>1</sup>

The scale and proportions, the tightly organized and precisely executed surface pattern, and the dark, translucent, emerald-green color contribute to the exceptional quality of the Museum's glass. The cylindrical body with a modest kick supported by a substantial foot ring-a form that is essentially a small Humpen-appears to be Germanic.<sup>2</sup> The surface pattern is comprised of diagonal rows or regularly spaced convex bosses centered on a diamond-patterned ground. Analogously shaped and patterned vessels-some in a lighter green-are among the Germanic-influenced productions of Alsatian glasshouses dating from the second half of the sixteenth century.<sup>3</sup> The excavations at the glasshouse at Rejdice in northeastern Bohemia produced an array of patternmolded glasses in a variety of colors, several of which are very similar but not identical to the Museum's vessel.<sup>4</sup> This type of decoration, although on slightly different forms, is found on



15A Pattern-molded beaker. German, probably seventeenth or eighteenth century. H: 18.3 cm (7<sup>1</sup>/<sub>4</sub> in.). Munich, Bayerisches Nationalmuseum, G 1127.



numerous examples identified as Netherlandish of the mid-sixteenth to mid-seventeenth century.<sup>5</sup>

Tall, foot-ringed beakers with similar finely patterned decoration have also been excavated at the Eppstein Glashütte, Schöllkrippen, in Spessart.<sup>6</sup> In these examples, however, the pattern is evenly distributed across the surface of the vessel. The Museum's glass, on the other hand, appears to have been slightly pulled at the pontil end, rendering the pattern somewhat diffuse. A slightly smaller glass of the same form but with a different pattern was worked in the same fashion; it came from a chapel in Mittenhausen bei Obermarchtal and is thought to be of local Swabian manufacture.<sup>7</sup> A colorless glass with a corresponding pattern is likewise worked; slightly conical and supported by a wide, turned-out foot (fig. 15a), this vessel is tentatively attributed to the seventeenth- or eighteenth-century output of Spessart.8 In the absence of any clear evidence, however, the origin of the Museum's glass remains uncertain.

#### Arms N

None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York. EXHIBITIONS None.

## BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 256, no. 247; Bremer-David et al. 1993, p. 248, no. 438.

## Condition

The bottom of the foot ring is considerably worn. There are some minor scratches to the surface and some abrasion.

- 1. For examples, see Bremen 1967, pp. 37-48.
- A slightly smaller vessel of identical shape is in the Museo Vetrario, Murano; molded in a spiraled and checkered pattern, it is of unknown origin. See H. Tait, "Glass with Chequered Spiral-Trail Decoration: A Group Made in the Southern Netherlands in the Sixteenth and Seventeenth Centuries," *JGS* 9 (1967), pp. 97–98, fig. 9.
- 3. See Walcher-Molthein 1926, p. 40, fig. 10; and D. Foy et al. 1989, p. 265, no. 265; pp. 415–416, pl. IV/8.
- 4. Hejdová 1981, pp. 29–31, fig. 13.
- 5. Henkes 1994, pp. 137-141.
- 6. See Glück und Glas 1984, p. 29, fig. 4.
- Bremen 1967, no. 38, pp. 50-51. This vessel is called a *Doppel*pinte, indicating that the glass may have originally had measuring marks, making it a small *Passglas*.
- 8. Rückert 1982, p. 132, no. 302, pl. 85.



# CHAPTER 2

# Murano Glass of the Late Fifteenth through the Early Seventeenth Century

he invention of *cristallo*, which can be attributed with some certainty to Angelo Barovier around 1450 and is first mentioned in documents about the same time,<sup>1</sup> revolutionized not only glass made on the Venetian island of Murano but also the entire European glass industry. The creation of *cristallo*—so colorless, transparent, and free of impurities that it resembled rock crystal, after which it was named—was achieved by using a complicated formula of ingredients and methods that included the use of dioxide of manganese as a decolorizing agent, the fusing of the batch in a quartzose pot, the laborious purification of a soda flux made from marine plant ashes into an "alkali salt," the mixing of alkali in high proportions with silica to produce a frit, and the use of "water ferries" to rid the batch of excess salts.<sup>2</sup>

Barovier was granted permission by the Venetian Senate to produce large quantities of *cristallo* even during the annual obligatory closings of the Murano furnaces, a privilege that was enjoyed by Nicolò Mozetto after Barovier's death in 1460. Although principally associated with the development of *cristallo*, Barovier is also credited with the revival of enameling and with the development of chalcedony and opaque white glass, or *lattimo*. These technologies were not long monopolized by one glasshouse and were rapidly imitated by other glasshouses. Because of these innovations, Murano was thoroughly established as the preeminent center of glass production in Europe well before the end of the fifteenth century.

Because of its natural beauty, Murano had also become a fashionable resort for the Venetian nobility, who built palaces and luxuriant gardens there throughout the fifteenth and sixteenth centuries.<sup>3</sup> Aristocratic frequenters of the island no doubt stimulated the industry to combine its unrivaled glass technology with artistic innovation. Moreover, to protect the reputation of Murano's products and to enhance their value, the manufacture of ordinary glass was prohibited. Since foreign (and eventually all) buyers were required to go directly to the producers, watching the production of Murano glass became, as it remains today, a perennial magnet for tourists, a number of whom in the fifteenth century described what they saw in detail.<sup>4</sup>

Venice's geographic location and seafaring power made it an important entrepôt for trade between Europe and the eastern Mediterranean, increasing the wealth of the Republic and providing direct contact with Eastern cultures. Indeed, enameling on glass, a specialty of Syrian glassmakers from Aleppo and Damascus of the thirteenth and fourteenth centuries, was already being practiced by Muranese craftsmen in the fifteenth century. Syrian glass reached Venice, as it is listed in fourteenth-century Venetian inventories. Moreover, it is possible that with the decline of Syrian glassmaking in the fifteenth century, Syrian craftsmen settled in Venice, bringing with them the secrets of their craft. However, even though the sixteenth-century engineer and chemist Vannoccio Biringuccio described enameling and gilding with gold leaf on glass in his influential De la pirotechnia published in 1540, enameled glasses remain one of the more obscure chapters in the history of the glass industry on Murano.<sup>5</sup> To judge from Luigi Zecchin's writings, the Venetian archives yield very little information. One explanation may be that the enameling technique, apparently revived under Near Eastern influence, was widely known and therefore was not treated as one of Murano's technical "secrets." Although Barovier is credited with reinventing the enamel technique, there is no indication that he improved the technology. It is not known whether he was a glass painter,<sup>6</sup> but all indications suggest that he excelled in glass technology and glassworking rather than in glass decorating.<sup>7</sup>

Fascination with natural phenomena—resulting, at least in part, from the renewed interest in ancient Greek science in the Renaissance—led to the collecting of hard and semiprecious stones that glassmakers attempted to imitate. By the late fifteenth century, craftsmen had discovered how to make so-called *calcedonio* glass by adding swirls of metallic oxides to the glass batch. The opaque and variegated patterns of purple, green, blue, and yellow characteristic of glass objects made from such a batch re-created the appearance of stones such as chalcedony. It is likely that the classical and Byzantine stone vessels housed in Saint Mark's Treasury influenced this production.

By the fourteenth century, the makers of mosaic glass were able to produce white as well as a variety of colored glass, and it is in the mosaic glass workshops that the term *lattimo* is first encountered. In an entry of the treasurers of Orvieto for May 6, 1360, there is reference to a petition submitted by a certain Zampinus, to allow the Master Nello to manufacture "attimum" from which, as Luigi Zecchin has established, the term *lattimo* derives.<sup>8</sup> Only later—perhaps as late as the middle of the fifteenth century—had glassmakers on Murano developed, in emulation of imported Chinese blue and white porcelain, the technology that used tin oxide to manufacture *lattimo* that could be blown.<sup>9</sup>

Very few examples of glass vessels made entirely of lattimo glass survive,<sup>10</sup> whereas, in the beginning of the sixteenth century, canes of lattimo were used to manufacture filigrana glass inspired by antique models. Zecchin has demonstrated from sixteenth-century documents that glass with crisscross lattimo canes that trapped an air bubble at each interstice was then called *vetro a reticello* (little net), that glass with both straight and twisted lattimo canes was called vetro a retorti or retortoli (twists), and that vetro a filigrana (filigree) was a general term encompassing both.<sup>11</sup> Zecchin further discovered in documents of the Podestà of Murano that the brothers Filippo and Bernardo Catanei at the sign of the Sirena (they later changed the family name to Serena) applied for a twenty-five-year privilege to make glass in a technique they invented a facete con retortoli a fil (with twisted threads). On October 19, 1537, the council granted them sole right to produce this "twisted-thread" glass for ten years. By 1540 these terms appear frequently in Venetian and Muranese documents. In 1549, for example, vetro a retortoli appears in the mariegola-the guild register-and in the same year a decree stipulated that the stems and feet of vessels should be of *redesello* or *retortoli*; they should not be plain and hollow.<sup>12</sup>

In that same year, the Murano glass craftsman Vincenzo di Angelo dal Gallo applied for a patent to practice the technique of engraving on glass that he had developed in the 1530s. Although several important services of Murano glass plates were decorated with diamond-point engraving, the technique was favored in the North, especially in Germany, Holland, and England. Furthermore, around 1600 the lapidary's engraving tool of a rotating wheel covered with abrasive material was adapted for use on glass. This engraving technique was practiced only in centers (especially in Silesia and Bohemia) where a thick and resistant glass was developed that could withstand this more aggressive, sculptural engraving technique. Thin Murano glass was not suitable for this new type of engraving.

Given the arduous quest to manufacture the clearest glass possible, the production on Murano of ice-glass from roughly 1550 to 1600 appears as an almost wayward development. Ice-glass exhibits a rough and irregular surface, obscured by a pattern of fine cracks that resembles shattered ice. The demand for this type of glass was especially strong in the Netherlands and in Spain; in the sixteenth century, for example, Murano ice-glass was avidly collected by Philip II,<sup>13</sup> By the seventeenth century, ice-glass was being produced locally, especially in Liège and Barcelona.

Murano glass was exported north of the Alps as early as the late Middle Ages; according to documents and evidence from excavations, Venetian glass was arriving in England as early as the fifteenth century.<sup>14</sup> In addition, there is proof that by the sixteenth century, when the Syrian glass industry was starting to decline, Venetians began exporting their sought-after glass in some quantity to the Levant, often via Dubrovnik. The export of high-quality Murano glass stimulated a taste for these refined and exquisite vessels throughout Europe and beyond. However, the importation of this material was not only expensive but also risky, given the fragility of the products. As a result, in spite of strict limitations preventing local glassmakers from working outside Murano, other European glassmaking centers lured these craftsmen away to create glass in the Venetian style-à la façon de Venise-in their own cities and towns.

After the middle of the sixteenth century, no significant technical innovation in glassmaking occurred on Murano, and by that time glass in imitation of Venetian products was being successfully produced in many parts of Europe. In the late 1540s, English merchants with Flemish commercial interests contracted eight Muranese glassmakers to operate a façon de Venise workshop in England, probably established in the glasshouse at Belsize under Edward Seymour, Duke of Somerset.<sup>15</sup> In addition, the Venetian glassmaker Giacomo Verzelini (1522-1616), after first working in Antwerp for twenty years, was brought to England in 1571 to manage Jean Carré's factory at the Crutched Friars glasshouse in London, which Verzelini took over upon Carré's death in 1572. Verzelini succeeded in creating a clear cristallo-type glass that was well suited to diamond-point engraving. In addition, fragments of *filigrana* canes were excavated in Cologne on the Bischofsgartenstrasse in 1834, providing material evidence of a façon de Venise glasshouse that had been established there in 1609 but, according to documentary evidence, burned down in 1611.<sup>16</sup> It is also known that Muranese glassmakers were working in Florence in the late 1560s, when they were lured

away from Venice by Cosimo de' Medici, and in Antwerp around 1550. In the sixteenth century, in fact, one finds *façon de Venise* production at such centers as Liège, Beauwelz, Brussels, Middelburg, Hall, Innsbruck, Kassel, Munich, Amsterdam, Barcelona, Lyons, Nevers, and Orléans, and at Broumy and Bubenec in Bohemia.<sup>17</sup>

## Notes

In the field of Italian glass studies, Luigi Zecchin was—and still is preeminent. He devoted his career to scouring through archives and publishing his discoveries, analyses, and conclusions in several hundred articles that are troves of information and are the foundation of all related studies. These articles were mostly published in technical journals that are not generally available. Fortunately, Zecchin's principal writings have now been published in Venice in three volumes: *Vetro e vetrai di Murano: Studie sulla storia del vetro*, vol. 1 (1987), vol. 2 (1989), and vol. 3 (1990).

- 1. See Zecchin 1987, pp. 229–45. See also A. Neri, *L'arte vetraria* (Florence, 1612), chaps. 4–6 passim.
- Barovier Mentasti 1982a, pp. 38–39. For more detailed discussions of *cristallo* recipes and technology, see Zecchin 1987, pp. 108–122.
- 3. Barovier Mentasti 1982a, pp. 33-35.
- 4. Among these fifteenth-century literary travelers were Santo Brasca of Milan (1480); Pierre Casola, a Frenchman (1494); Felice Faber of Ulm (1480 and 1483); and Arnolf Harff of Cologne (1497). See Zecchin 1987, pp. 229–233; and Barovier Mentasti 1982a, pp. 33–35.
- 5. Overviews of this subject are found in Schmidt 1911, pp. 249– 286; Barovier Metasti 1982a, pp. 24–30 and 50–75; and Tait 1991, pp. 160–161 and 236–237.
- 6. Suggested by a frequently quoted document by Matthias Corvinus, King of Hungary (Barovier Mentasti 1982a, p. 38).
- 7. In any case, he cannot have been responsible for the so-called Barovier Marriage Cup now in the Museo Vetrario, Murano, as stylistically the painting must date to 1470 or 1480, considerably after his death.

- 8. "...quod voluit m. Zampininus, pro faciendo attimum pro magister Nello..." (Zecchin 1989, pp. 337-341). It is also believed that the term *attimum* is actually a Latinized version of the Italian term thought to derive from *latte*, for milk, because of the glass's opaque whiteness (see Clarke 1974, p. 23). *Lattimo* should not be confused with the *lactisino* or *latesin* (a 1496 inventory of Maria and Giovanni Barovier mentions a *copa di lactisino*, which in all probability refers to a light blue glass, as suggested in G. Boerio, *Dizionario del dialetto veneziano* [Venice, reprint 1856], s.v. *latesin*, p. 562).
- 9. Barovier Mentasti 1982a, pp. 39-40; and Clarke 1974, pp. 22-23.
- Indeed, only fourteen examples of such an early date are known of *lattimo* vessels decorated with enamels (see Clarke 1974, pp. 22, 48).
- 11. L. Zecchin, "Fortuna d'una parola sbagliata," JGS 10 (1968), pp. 110–113. G. Boesen, Venetianske Glas På Rosenborg (Copenhagen, 1960), nos. 48, 50–58, made similar discoveries; he uses the same terminology, substituting retorti for retortoli.
- 12. Zecchin 1989, pp. 181–186.
- Records from 1564 show he owned sixty-five pieces of ice-glass in various shapes (D. Klein and W. Lloyd, *The History of Glass* [London, 1984], p. 78).
- 14. R. J. Charleston, English Glass and the Glass Used in England, circa 400-1940 (London, 1984), pp. 42-45.
- 15. A. Gasparetto, "Les relations entre l'Angleterre et Venise aux XVI<sup>e</sup> et XVII<sup>e</sup> siècles et les influence sur les formes verrières anglaises," *Studies in Glass History and Design*, Eighth International Congress on Glass (London, 1968), p. 68; and Charleston (note 14), p. 53.
- 16. Klesse and Reineking-von Bock 1973, no. 317.
- 17. Heikamp 1986, pp. 47–48; Dreier 1989, pp. 16–20; and Theuerkauff-Liederwald 1994, pp. 24–26.



Italy (Murano) Late fifteenth or early sixteenth century

Free-blown colorless glass with gold leaf and enamel decoration HEIGHT: 13.5 cm (5% in.) DIAMETER (at lip): 10 cm (3% in.) DIAMETER (at base): 7.3 cm (2% in.)

84.DK.540

Made of clear glass with minute bubbles and impurities throughout, the conical bowl of this vessel rests on a hollow, truncated pedestal foot terminating in a flanged and folded rim. Below the edge of the lip is a decorative band consisting of a single row of red enamel dots followed by a band of gold leaf with an incised scale pattern, each element of which is centered on a red dot followed by a row of blue dots. The body of the vessel is decorated with a continuous pattern of interlaced tendrils, stylized palmettes, and marguerites in blue, dark red, and white enamel with detailing in black. Below and repeated on the opposite side are bowl-shaped forms with swags from which the foliage seems to stem. The pontil mark is rough.

A number of small enameled conical goblets of this type, which were probably used as wineglasses, have survived. Although the trumpet-shaped beaker form was also common north of the Alps, the Renaissance-style painting and the gilt scale pattern with dots around the rim of the enameled examples are typically Venetian decorative elements. The Museum's goblet is an unusual example, in that it is one of the few that relies entirely on vegetal and nonfigurative decoration. A fragment of a similar vessel with comparable intertwined tendrils and stylized foliate patterns, but with lions and dolphins interspersed, was excavated beneath the foundations of the campanile of San Marco after it collapsed in 1902; the vessel is now in the Museo Vetrario, Murano.<sup>1</sup> Another smiliar beaker with tritons is in the Corning Museum of Glass, Corning, New York.<sup>2</sup> Two similar beakers, one with figures on horseback and the other with dolphins and mermen, are in the British Museum, London.<sup>3</sup> Another similar

goblet from Prostějov, Czech Republic, is engraved in diamond point with the date 1518, providing a terminus ante quem.<sup>4</sup> The proportions of these vessels vary considerably, particularly in the degree of tapering at the base of the bowl, the Museum's example being the median. All appear to date from the late fifteenth or early sixteenth century.

Arмs None.

Marks and inscriptions None.

#### Provenance

Sold, Christie's, London, July 15, 1970, lot. 248; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 246, no. 192; Bremer-David et al. 1993, pp. 214–245, no. 372.

#### Condition

The gold leaf is quite worn. The base of the foot is somewhat worn. There are several minor surface scratches.

- 1. Gasparetto 1958, fig. 40 and pl. 48; and Dorigato 1986, p. 14.
- 2. Barovier Mentasti 1982b, pp. 92-93, no. 90.
- 3. Inv. no. MLA S. 391, 82.4-24.7; Tait 1991, p. 158, no. 200; the example with a more tapering form is described as of a slightly earlier date.
- 4. See Hetteš 1973, no. 7, fig. 5.





Italy (Murano) 1475–1500

Free- and mold-blown colorless and cobalt-blue glass with gold leaf, enamel, and applied decoration HEIGHT: 18.6 cm  $(7\frac{5}{16} \text{ in.})$ DIAMETER (at lip): 9 cm  $(3\frac{5}{16} \text{ in.})$ 

84.DK.533

The cylindrical bowl, made of colorless glass with minute impurities throughout, is dip-molded in gadrooned vertical ribs with traces of gold leaf that rise below the lip and taper off just above a base encircled with a broad, milled thread. The molded hollow-stemmed pedestal foot, made of ribbed, cobalt-blue glass with gold leaf, terminates in an applied flange of colorless glass folded up. The decorative band around the rim consists of rows of alternating red and blue enamel dots of varying configurations, all on a gold-leaf ground incised with a band of foliate and palmette patterns between horizontal lines (fig. 17a).

The trumpet-shaped cobalt-blue foot provides a pleasing counterbalance to the ribbed, colorless vessel, an effect that is all the more striking for the absence of a knop. The somewhat barrel-shaped body with a wide, vertical lip appears both with a foot (as a goblet) and without a foot (as a beaker; see fig. 17b).<sup>1</sup> The pincered foot ring in the goblet versions would therefore seem a somewhat vestigial decorative element. Such goblets were not always secular; taller versions were made with cross-mounted covers and presumably were intended as chalices.<sup>2</sup>

A beaker similarly fashioned of clear glass is depicted in the foreground of the central panel of the Portinari triptych and therefore must date prior to the completion of the altarpiece in 1476 (fig. 16b). Another early example of this beaker form is depicted as a vase holding small flowers in a miniature from the Hours of Englebert of Nassau, dating to circa 1477–1490, in the Bodleian Library, Oxford.<sup>3</sup> The presence of both Hispano-Moresque maiolica and Murano glass in the triptych and miniature indicates not only that both types of objects were highly valued but also that their influence was felt very far from their places of origin.

# Arms

None.

MARKS AND INSCRIPTIONS None.

## Provenance

Spitzer, Paris (sold, "Objets d'art et de haute curiosité," Paris, April 17–June 16, 1893, vol. 2, lot 1977); John Edward Taylor, London (sold, Christie's, London, July 4, 1912, lot 346); Durlacher, London; Ruth and Leopold Blumka, New York.



17A Detail of rim.





17B HUGO VAN DER GOES (Netherlandish, died 1482). Portinari Altarpiece (detail), 1468–1476. Florence, Galleria degli Uffizi. Photo: Alinari/Art Resource, New York, AL 48. The beaker on the right is a footless version of the Museum's goblet.

# Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

# BIBLIOGRAPHY

E. Garnier, "La verrerie," in *La Collection Spitzer*, vol. 3 (Paris, 1891), p. 98, no. 44; *Three Great Centuries* 1958, no. 7, p. 32; Acquisitions/1984," *GettyMusJ* 13 (1985), p. 244, no. 181; Bremer-David et al. 1993, p. 214, no. 370.

# Condition

There is some slight wear on the base of the foot; there are some minor scratches to the surface of the glass. The gold leaf is only moderately worn.

- Examples without a foot are in Prague, Uměleckoprůmyslové Muzeum, 1347/1886, and the F. Biemann Collection, Zurich. See Barovier Mentasti 1982b, p. 89, no. 83; and pp. 89–90, no. 85.
- 2. See Dorigato 1986, p. 20, and a "covered goblet" (chalice) in the Los Angeles County Museum of Art (inv. M.82.124.5 a,b).
- 3. Ms. Douce 219, fol. 145v.



Italy (Murano) Late fifteenth or early sixteenth century

Free-blown colorless (slightly purple) glass with gold leaf and enamel decoration HEIGHT: 27.2 cm ( $10^{11/16}$  in.) MAX. WIDTH: 19.3 cm ( $7^{5/6}$  in.)

84.DK.512

The slightly compressed globular body of this vessel with a tall, funnel neck is supported by a hollow-stemmed pedestal foot, flanged and folded up. Attached to the vessel wall are a curved tapered spout and solid, double-curved handle. Both were affixed after the enamel decoration, resulting in threads of color where the glass was drawn out. Thick trailed glass thread with white diagonal bands and traces of gold leaf encircles the upper neck at the joining of the handle. The body is decorated with an overall scale pattern in incised gold leaf, each element of which is centered on a large blue enamel dot and is outlined in white dots, while those on the neck and foot are each centered on a smaller green dot. At the merging of the neck and body, within a border composed of a dark red line and white and red dots, is a descending flame pattern in alternating blue and white with dark red central stripes. At the base of the body is a border consisting of a dark red line, white and green dots, and incised gold leaf that is repeated at the head and base of the foot.

Both ewers and jugs exist with overall incised scale patterns in gold leaf, but the red and white flame pattern around the neck makes the Museum's example particularly striking. Fragments of similar vessels decorated with this serpentine pattern have been excavated in Murano. A nearly identical pattern, representing the rays of the sun, is often depicted surrounding the holy monogram *IHS* as the insignia of the followers of Saint Bernard of Siena. Whether a reference to these reformed Franciscans was intended is a matter of speculation. Apparently the form of the ewer and the flame pattern were adapted by the Hall glasshouses, since a pair of such ewers in the Bayerisches Nationalmuseum, Munich, is attributed to the workshop of Wolfgang Vitl between 1535 and 1538.<sup>1</sup>

Ewers of identical shape were made in colorless glass without enamel decoration and in chalcedony glass



18A Ewer. Venetian, circa 1500. H: 30.2 cm (11½ in.) Frankfurt am Main, Museum für Kunsthandwerk, 6772/351.





18B Ewer. Venetian, circa 1500. H: 25.4 cm (10 in.). Los Angeles County Museum of Art, 84.2.1. Purchased with funds provided by William Randolph Hearst, Decorative Arts Council Acquisition Fund, Museum Associates General Acquisition Fund, Decorative Arts Curatorial Discretionary Fund, Mrs. Lorna Hammond, the Estate of William A. Dinneen, Mrs. Edwin Greble, Mrs. Walter Barlow, Mr. and Mrs. Allan C. Balch Collection, Alan Ross Smith, and Mrs. Wesley Heard. (fig. 18a).<sup>2</sup> Among the closest comparable examples to this piece are a fine ewer in the Los Angeles County Museum of Art, identical to the Getty example except that it is of cobaltblue glass and displays a foliate pattern below the neck instead of the flame or ray pattern (fig. 18b),<sup>3</sup> and a clear armorial ewer with the flame pattern at the base in the Uměleckoprůmyslové Muzeum, Prague.<sup>4</sup> Although the gilt scale decoration of the Getty ewer is typical of Murano, the form derives from an ancient Eastern type.<sup>5</sup>

# Arms

None.

# MARKS AND INSCRIPTIONS None.

# Provenance

Émile Gavet, Paris (sold, Galerie Georges Petit, Paris, May 31–June 9, 1897, lot 592); John Edward Taylor, London (sold, Christie's, London, July 4, 1912, lot 340); George Eumorfopoulos, London (sold, Sotheby's, London, June 6, 1940, lot 223); Ruth and Leopold Blumka, New York.

# EXHIBITIONS

Exhibition of Italian Art, 1200–1900, Royal Academy of Arts, London, January–March 1930; *Three Great Centuries of Venetian Glass*, The Corning Museum of Glass, Corning, New York, 1958.

# BIBLIOGRAPHY

*Exhibition of Italian Art, 1200–1900*, exh. cat. (Royal Academy of Arts, London, 1930), pp. 437–438, no. 955L; *Three Great Centuries* 1958, no. 23, pp. 44–45; Barovier Mentasti 1982b, p. 79, no. 69; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 244, no. 179; "Recent Important Acquisitions" 1986, p. 101, no. 10; Bremer-David et al. 1993, p. 217, no. 377; *Masterpieces* 1997, p. 10, no. 3.

## CONDITION

There is some wear to the base of the foot and to the gold leaf. There is a small scratch on the stem. There are cloudy deposits on the interior at the bottom and on the lower half of the spout.

- 1. Inv. no. G515; Rückert 1982, p. 81, no. 132, pl. 32.
- 2. Bauer and Gabbert 1973, p. 60, no. 106.
- 3. Barovier Mentasti 1982b, p. 79, no. 69.
- 4. Hetteš 1973, no. 4; and Drahotová 1985, pl. 41 at right.
- See, for example, the discussion of a Venetian ewer of circa 1500 in Berlin, thought at one time to be Syrian of circa A.D. 500, in F. Kämpfer and K. G. Beyer, *4000 Jahre Glas* (London, 1966), no. 67.



Italy (Murano) Circa 1500

Free- and mold-blown cobalt-blue glass with gold leaf, enamel, and applied decoration HEIGHT: 18 cm  $(7\frac{1}{16} \text{ in.})$ DIAMETER (at lip): 9.7 cm  $(3^{13}\frac{1}{16} \text{ in.})$ 

84.dk.534

The vessel is made of fairly heavy translucent glass with some elliptical bubbles and minute impurities. The bowl of the vessel has a straight, canted wall that flares out slightly toward the mouth. Applied milled glass thread encircles the base of the bowl. Attached to a tall, solid stem with three applied knops of crimped and twisted glass is a gently ribbed, hollow trumpet foot with the flanged rim folded up. The lip of the vessel is decorated with a broad band of applied gold leaf incised in parallel lines and in uppercase Roman letters (figs. 19a-c). The central portion is decorated with continuous and symmetrical foliated ornament in gold leaf highlighted with gold paint and with incised details and partially outlined with white enamel strokes and dots (fig. 19e). Below a band of gold leaf, parallel lines frame a pattern of guilloche in white dots, each loop centered on a green dot, followed by a band of fret decoration and a row of white dots. The stem and foot are decorated with gold leaf.

The broad decorative band of incised gold leaf and enamel that covers virtually the entire vessel wall is uncommon both in design and technique. The only comparable example is a Muranese beaker dated to the late fifteenth century in the British Museum, London (fig. 19d).<sup>1</sup> The unusual



19A-C Details of inscription.





19D Beaker. Venetian, second half of the fifteenth century.
H: 9.8 cm (3<sup>7</sup>/<sub>8</sub> in.). London, The British Museum, 1904, 7–6, 19. Purchased from Henry Wallis, Esq.

triple knop comprised of three wavy bands is also encountered on a similar cobalt-blue goblet in the Kunstgewebemuseum, Berlin;<sup>2</sup> the wall of this vessel is painted with scenes from the life of Adam and Eve that, on the basis of style, could be dated to the 1490s;<sup>3</sup> another vessel with a similar knop—including one wavy, cobalt-blue element between two colorless ones—is in the Hermitage Museum, St. Petersburg. Whether the inscription in Latin (fig. 19e)—an embellishment infrequently encountered in glass from Muranowas a personal motto or merely an aphoristic sentiment, is unclear.<sup>4</sup> Other comparable examples with similar inscriptions include a plate exhibited at the Musée Ariana, Geneva, in 1995, as well as examples in the British and Victoria and Albert Museums, London; the Württembergisches Landesmuseum; and the Musée du Louvre, Paris.<sup>5</sup>

# Arms

None.

## MARKS AND INSCRIPTIONS

In the gold leaf around the lip, incised, *VIRTUS LAUDATA CRESCIT* ("Virtue grows with praise").

## PROVENANCE Ruth and Leopold Blumka, New York.

## Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

#### BIBLIOGRAPHY

*Three Great Centuries* 1958, no. 17, pp. 38–39; "Acquisitions/ 1984," *GettyMusJ* 13 (1985), p. 244, no. 182; "Recent Important Acquisitions" 1986, p. 101, no. 12; Bremer-David et al. 1993, p. 214, no. 371.

#### Condition

The incised gold leaf of the vessel body is quite worn. The gold-leaf decoration on the foot survives mostly in the recessed areas. The base of the foot is considerably worn. Otherwise, the goblet is in excellent condition.

- 1. See Tait 1991, no. 199, right.
- 2. Inv. no. 35,51; see Dreier 1989, pp. 38-42, no. 9.
- 3. See Barovier Mentasti 1982a, p. 57, fig. 37.
- For other vessels with comparable gilt incised inscriptions, all probably made in the same workshop, see Klesse and Mayr 1987, no. 8.
- 5. See Baumgartner 1995, no. 172; and Barovier Mentasti 1982b, no. 88.



19E Artist's reconstruction of foliated ornament.



Italy (Murano) Late fifteenth or early sixteenth century

Free-blown colorless (slightly pink) glass with gold leaf, enamel, and applied decoration HEIGHT:  $37.7 \text{ cm} (14^{15/16} \text{ in.})$ MAX. WIDTH: 20 cm (7% in.)

84.dk.538

The vessel is made of heavy glass with numerous minute bubbles and impurities throughout. The gourd-shaped body of compressed depth rises to a tall, narrow, cylindrical neck flaring slightly at the mouth. The hollow, truncated pedestal foot has a flanged rim with the edge folded up. Above and below the bulge of the body on each side is an attached gilded lug (fig. 20a). Below the mouth and around the foot is a band of gold leaf framed by a single row of white enamel dots and incised in a cross-hatched pattern. At the base of the neck is a similar but unincised band. In the center of the body, repeated on both sides, is a decorative medallion in incised gold leaf (fig. 20b), composed of a series of concentric bands of guilloche and repeated circular patterns with blue dots, the whole surrounded with a single ring of white and blue dots arranged in triangular forms. At each side a diamond-shaped gilt medallion is incised in a tendril pattern with blue dots.

There are numerous vessels of this shape that may derive from a Near Eastern model. The Museum's example belongs to a small group that has almost identical decoration, generous proportions, and bodies that are distinctly of an ovoid rather than the more conventional round form.<sup>1</sup> A pair of these vessels (and the earliest of the group), now in the Museo Civico Medievale, Bologna, bear the arms of the Bentivoglio on one flask and those of the Sforza on the other (figs. 20c-d); to these can be added another, also with the arms of the Bentivoglio, that must have belonged to the same service.<sup>2</sup> As the Bentivoglio arms are lacking the pales of Aragon with which they were enhanced in 1489, the vessels must date earlier, possibly to the marriage of Giovanni Bentivoglio and Ginevra Sforza in 1464.3 Among the latest of this group is one with the arms of the Pfintzing family of Nuremberg; it probably dates from the 1520s.4 The Museum's flask belongs to the earlier end of the chronology.



20A Side view.

Arms None.

MARKS AND INSCRIPTIONS None.





20B Detail of medallion.

PROVENANCE Ruth and Leopold Blumka, New York.

#### Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958; The Secular Spirit: Life and Art at the End of the Middle Ages, The Metropolitan Museum of Art, The Cloisters, New York, 1975.

#### BIBLIOGRAPHY

Three Great Centuries 1958, p. 55, no. 39; The Secular Spirit 1975, p. 47, no. 45, pl. 2; Charleston 1977, pp. 91–93, no. 17; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 245, no. 180; Dreier 1989, p. 49, no. 17; Ritsema van Eck 1993, no. 3; Bremer-David et al. 1993, p. 217, no. 378.

## CONDITION

There is a small, blind crack in the foot running from the join to the band of gold leaf, and there is a flaw in the glass at the edge of the foot. The base of the foot has been abraded. There are some minor surface scratches.

- These are enumerated by Charleston 1977, pp. 91–92, to which may be added the example in the Rijksmuseum, Amsterdam (Ritsema van Eck and Zijlstra-Zweens 1993, no. 3), and another in the State Hermitage, St. Petersburg (Barovier Mentasti 1982a, p. 63, fig. 44).
- 2. Fritz and Mary Biemann Collection, Zurich; see Barovier Mentasti 1982b, p. 87, no. 81.
- 3. Dreier 1989, p. 49.
- 4. See Rückert 1982, vol. 1, p. 51, no. 36, color pl. 2.





20C-D Pair of pilgrim flasks. Venetian, second half of the fifteenth century. H: 40.5 cm (16 in.). Bologna, Museo Civico Medievale, 1364–1365.



Italy (Murano) Circa 1500

Free-blown chalcedony glass HEIGHT: 12.3 cm ( $4\frac{1}{6}$  in.) DIAMETER (at lip): 19.7 cm ( $7\frac{1}{4}$  in.) DIAMETER (at base): 10.6 cm ( $4\frac{1}{6}$  in.)

84.dk.660

The brownish-red, translucent body of this vessel is striated with whorls of variegated colors, predominantly in shades of pale Prussian blue thinning out to white and a sulfurous yellow. It flares out slightly toward the mouth, terminating in a folded lip, and is set on a high, spreading foot with a flanged rim folded up. There is surface bubbling on the inside of the lip, as well as some surface bluish-purple iridescence. The greenish whorls that appear on the inside of the vessel do not follow the patterns of those on the outside. The movement of color in the body is essentially horizontal, while that in the foot is vertical. The projecting pontil mark is rough.

The invention of *calcedonio*, or marbled glass in imitation of the semiprecious stone chalcedony, is credited to Angelo Barovier and is mentioned as early as 1460 in a contract that apprenticed Bartolomeo Visentin to Taddeo Barovier, brother of Angelo, and stipulated that for ten years he could not make "chalzadonii" in any other glasshouse.<sup>1</sup> The Museum's footed bowl is one of a fairly large group of nearly identically shaped vessels.<sup>2</sup> All have trumpet feet with the edge turned up and slightly everted lips but are otherwise unworked in order to achieve the verisimilitude of cut hardstone. The Getty example, however, is distinguished by its particularly brilliant coloring. Arms None.

MARKS AND INSCRIPTIONS None.

#### PROVENANCE

Fritz Biemann, Zurich (sold, Sotheby's, London, June 16, 1984, lot 48); [David, Inc., Vaduz].

#### Exhibitions

Meisterwerke der Glaskunst aus internationalem Privatbesitz, Städtische Kunsthalle, Düsseldorf, 1968; Sammlung Biemann Ausstellung 500 Jahre Glaskunst, Kunstgewerbemuseum, Cologne; Kunstgewerbemuseum, Berlin; Museum Bellerive, Zurich, 1978–1979; 3000 Jahre Glaskunst von der Antike bis zum Jugendstil, Kunsthalle, Lucerne, 1981; Mille anni di arte del vetro a Venezia, Palazzo Ducale, Museo Correr, Venice, 1982.

#### BIBLIOGRAPHY

A. von Saldern ed., Meisterwerke der Glaskunst aus internationalem Privatbesitz, exh. cat. (Städtische Kunsthalle, Düsseldorf, 1968), p. 28, no. 59; J.- C. Gateau, Die Glaskunst (Geneva, 1974), pp. 65, 125; Klesse and von Saldern 1978, pp. 106– 107, no. 43; Rütti et al. 1981, p. 157, no. 661; Barovier Mentasti 1982b, p. 94, no. 93; "Acquisitions/1984," GettyMusJ 13 (1985), p. 245, no. 184; Bremer-David et al. 1993, p. 215, no. 374; Masterpieces 1997, p. 30, no. 20.

#### Condition

There is some abrasion on the base of foot as well as on the rim of the lip. The base of the interior of the bowl is abraded and lacks the surface sheen of the rest of the glass.

- 1. Zecchin 1990, p. 146. See also Dreier 1989, pp. 54-56, no. 26.
- Lanmon 1993, no. 32; many are enumerated here. For related forms, see Klesse and Mayr 1987, no. 11; and see a ribbed chalcedony bowl in the British Museum, London (MLA 1870, 9-1,6), illustrated in Tait 1991, pp. 164–165, ill. 221, center.





Italy (Murano) Circa 1500

Free- and mold-blown cobalt-blue glass with gold leaf and enamel decoration HEIGHT: 17.8 cm (7 in.) DIAMETER (at lip): 24.1 cm ( $9\frac{1}{2}$  in.)

84.dk.535

The bowl of this vessel displays numerous small and some large bubbles and a few embedded impurities and flares out, terminating in a lip folded out. The base is dip-molded, with the projecting vertical ribs broadest near the center and tapered slightly down toward the join to the foot. The attached hollow pedestal foot terminates in a rim that is folded up. Below the lip is a border composed of rows of white and gold dots and bands of incised gold leaf. The broad central zone of the bowl is decorated with a border of cartouches-cusped with interlocked leafy patterns-in which, against an open diaper of white dots, lions or pairs of lions crouch, finely incised in the gold leaf (fig. 22a). Below is a band composed of incised gold leaf and a row of white dots. The ribs are gilded, while the extremely uneven stemmed foot is undecorated. The projecting pontil mark is rough and craggy.

This footed bowl belongs to a fairly small group of such vessels that are generally made of cobalt-blue, amethystcolored, or, more rarely, emerald-green glass. The earlier examples are of unelaborated form with a slightly everted lip. A few of these, dating from the second half of the fifteenth century, are enameled with narrative scenes, the most famous being the so-called Barovier Marriage Cup that is generally dated about 1460-1470.<sup>1</sup> Later examples, in both colored and colorless glass—of which even fewer have survived display gadrooned bowls, feet that are often ribbed, and decoration that relies heavily on enameled dots and a fishscale pattern. The band of decoration on the Museum's example—consisting of crouching lions in arcades—which occupies the entire area between the top of the gadroons and the lip, may be unique. Акмs None.

MARKS AND INSCRIPTIONS None.

#### Provenance

Prince of Liechtenstein, Vaduz; Ruth and Leopold Blumka, New York.

#### Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

#### BIBLIOGRAPHY

Three Great Centuries 1958, pp. 56-57, no. 42; "Acquisitions/ 1984," GettyMusJ 13 (1985), p. 245, no. 189; Bremer-David et al. 1993, p. 216, no. 375.

# CONDITION

Although worn, the finely incised gold leaf remains legible. The high points of the base of the foot are extremely abraded.

#### Notes

1. See Barovier Mentasti 1982b, pp. 74-78, no. 65.






22A. Artist's reconstruction of ornament with lions.







Italy (Murano) 1500–1520

Free-blown colorless glass with gold leaf, enamel, and applied decoration HEIGHT: 31.3 cm (12<sup>3</sup>/<sub>16</sub> in.) MAX. WIDTH: 17.5 cm (6<sup>7</sup>/<sub>8</sub> in.)

84.dk.539

The glass of this vessel displays a few minute bubbles. The gourd-shaped body of compressed depth rises to a tall, narrow, cylindrical neck flaring slightly at the mouth. The hollow, truncated pedestal foot has a flanged and gilded rim folded up. Above and below the bulge of the body on each side is an attached glass lug (fig. 23a). The enameled decoration consists of two bands of red-over-white dot work against a ground of a scale pattern incised in a band of gold leaf that frames a zone at the base of the neck; this zone consists of a cross-hatched white circle with yellow, blue, red, and turquoise leaf-pattern surrounds, repeated on the opposite side with a yellow and red foliate pattern between them. On the central portion of the vessel are depicted two youths with high boots, tunics, and sashes flying in the wind, standing before a double-boughed tree that supports a blank shield (fig. 23b). They are placed along what appears to be a stream in a landscape with a hilly background flanked by oversized flowers, with tufts of grass, cattails, and other plants in the foreground. The scene is repeated on the opposite side. The palette is comprised of blue, turquoise, red, yellow, white, and black. Below is a scale-patterned band similar to the ones on the neck. At the base of the vessel is a solid field of turquoise with slashes of yellow. A yellow stem with sprigs of stylized leaves and flowers threads through alternating circles of white and blue around the foot. The pontil mark is wide, with large chips in it, while the kick is shallow.

The painterly use of enamel, vibrant palette, landscape with water, and decorative vocabulary relate this flask to a small, superb group of vessels, the best known example of which is the centaur goblet in the Rothschild Collection, Waddesdon Manor.<sup>1</sup> The circle-and-line ornament on the foot, the broad, leafy patterns, and the extensive palette are all characteristic of this group of Murano enameled vessels that date to the end of the fifteenth or the beginning of



23A Side view.





23B Detail of enamel decoration.

the sixteenth century.<sup>2</sup> The subject matter of these glasses frequently involves centaurs, mermen, and other mythical creatures. The Museum's flask is unusual in that it lacks these subjects, while the landscape is far more developed. The sprays of abstracted cattails between the repeated scenes with the two heraldic supporters appear to be unique. The blank arms suggest that the vessel was a stock decorated item to which arms, likely cold-painted, could be added on demand. Although the source is unknown, the two youths holding up the shield may derive from a contemporary engraving (fig. 23c).

Arms None.

MARKS AND INSCRIPTIONS None.

#### Provenance

Hollingworth Magniac, Colworth (sold, Christie's, London, July 2 and 4, 1892, lot 868); Durlacher, London; Edward Steinkopff, London (sold, Christie's, London, May 22–23, 1935, lot 72); Riddell, London (?); Alexander von Frey, Paris (?); private collection, Paris (sold, Palais Galliera, Paris, November 29–December 3, 1965, lot 157); Ruth and Leopold Blumka, New York.

EXHIBITIONS None.



23C Engraving of two kneeling soldiers supporting a shield. Italian, late fifteenth century. London, The British Museum, 1852-3-1-6.

#### BIBLIOGRAPHY

J. C. Robinson, Notice of the Principal Works of Art in the Collection of Hollingworth Magniac, Esq. (London, 1861), p. 82, no. 152; "Acquisitions/1984," GettyMusJ 13 (1985), p. 246, no. 185; "Recent Important Acquisitions" 1986, pp. 102–103, no. 13; Bremer-David et al. 1993, p. 218, no. 380.

#### CONDITION

There is some wear on the base of the foot and some minor losses to the enamel decoration.

- 1. Charleston 1977, pp. 87-90, no. 16.
- 2. See Dorigato 1986, p. 13, for a pair of vessels that share these characteristics.

## Footed Bowl with Papal Arms

Coppa

Italy (Murano) 1513–1534

Free-blown colorless (slightly pinkish-brown) glass with gold leaf and enamel decoration HEIGHT: 16 cm ( $6\frac{1}{16}$  in.) DIAMETER (at lip): 30 cm ( $11\frac{15}{16}$  in.)

84.dk.655

This vessel, made of clear, fairly heavy glass with two very large and several sizable bubbles, stands on a short, hollow pedestal foot terminating in a trailed thread. Below the folded lip, on the exterior, between borders of white and green enamel dots arranged in triangular patterns and bands of gold leaf, is a decorated field of a scale pattern in incised gold leaf, each element of which is centered by three white enamel dots and is outlined by red, blue, and green dots (fig. 24a). In the center of the interior, in yellow, iron-red, blue, and white enamel, is an encircled coat of arms (fig. 24b).

There are a relatively large number of plates, footed bowls, and other vessels with Medici papal arms.<sup>1</sup> These could be associated with either of the two sixteenth-century Medici popes, Leo x (Giovanni de' Medici, reigned 1513–1521) or Clement VII (Giulio de' Medici, reigned 1523–1534). The arms appear in four variations: the keys with trefoil termini above the shield; the keys with trefoil termini partially obscured behind the shield; the keys with circular termini above the shield; and the keys with circular termini partially obscured behind the shield. The color and quality of the enamel, particularly in the yellow areas (which were difficult to fire successfully), also vary widely, suggesting that these vessels do not belong to a single or even to several commissions carried out during these two papacies. There is no evidence that the arms on these vessels were added later.<sup>2</sup>

The form of the bowl and the gilded decoration that was diamond-point engraved prior to enameling is found in several other examples.<sup>3</sup> The enamel dots on the lip are ovoid, indicating that the mouth of the vessel was flared after the enamel was applied.



24A Detail of scale pattern.



#### ARMS Or six balls gules surmounted by a papal miter.

MARKS AND INSCRIPTIONS None.

#### Provenance

(Sold, Sotheby's, London, February 23, 1976, lot 175 [with erroneous metric measurement]); [David, Inc., Vaduz].

#### EXHIBITIONS

Mille anni di arte del vetro a Venezia, Palazzo Ducale, Museo Correr, Venice, 1982.

#### BIBLIOGRAPHY

Barovier Mentasti 1982b, pp. 107–108, no. 122; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 245, no. 189; Bremer-David et al. 1993, p. 216, no. 376.

#### Condition

The incised gold leaf is somewhat worn but still very legible. A 12.7 cm (5 in.) section of the raised white dots on one side of the bowl is badly abraded. There is an inadvertent trail of glass on the inner edge of the foot, the base of which is very worn. There are fine surface scratches in a circular pattern around the coat of arms.

#### Notes

- 1. Most of these, including the Getty example, are enumerated in Klesse and Mayr 1987, no. 6.
- 2. See Lanmon 1993, p. 25.
- 3. Ibid., pp. 40-41, nos. 10-11, as examples.



24B Detail of papal arms.



Italy (Murano) Early sixteenth century

Free- and mold-blown colorless (slightly purple) glass with gold leaf and enamel decoration HEIGHT: 21.4 cm ( $9\frac{1}{2}$  in.) DIAMETER (at lip): 21.5 cm ( $8\frac{1}{4}$  in.)

84.dk.511

The glass of this vessel displays some minute bubbles. The bowl, the wall of which flares out slightly toward the mouth, has a convex base dip-molded with forty ribs of gadroons that curve upward, radiating out from a central point. Clear, thick, trailed glass thread with traces of gold leaf encircles the vessel just above the gadroon projections. A stem with a hollow, mold-blown, oblate-ribbed knop between two mereses connects the bowl to a compressed trumpet foot with flanged and folded rim. The ribs that decorate the foot rise from the central section of the base and taper up toward the knop. The bowl is decorated on the exterior below the lip with a row of white enamel dots, a band of gold leaf, and a row of red and green dots, followed by a broad band of continuous foliated ornament in incised gold leaf, accented with red, white, and green dots. Below is a band of vertical lappets in gold leaf with red dots, a row of white dots, and then a staggered row of green dots. In the interior center of the bowl is a gilt and incised scale pattern (almost entirely worn away) and a concentric pattern of green and white dots. There are traces of gold leaf on the knop. The pontil mark is broad and slightly jagged.

The high, straight-walled lip of this unusual footed bowl is enhanced with a broad central band of repeating leafy patterns. The piece is further distinguished by the exceptionally fine, narrow ribs in the foot and the gadroons in the bowl, as well as by an unusually large ribbed knop. A large armorial *coppa da parata* in the Kynžvart Castle in the Czech Republic shares these same features, although the two must have belonged to different services.<sup>1</sup>

Several features, including the unusually large size of the Getty footed bowl, and of its knop in particular, have led scholars to suggest that this bowl might be French. This tentative attribution might be based on the similarity of the Getty bowl to an armorial *tazza* in the Lehman Collection in the Metropolitan Museum of Art, New York, bearing the shields of Louis XII of France and Anne of Brittany and identified as "probably Venice, possibly . . . France."<sup>2</sup> It is possible that these similar and rather idiosyncratic pieces belong to a coherent group and that this group was created by Italian craftsmen in one of the recently established French glass-houses producing glass à *la façon de Venise*. Without further evidence, a localization to Murano must stand, given the object's fine execution and the similarity of the bowl to numerous plates and *coppe* of convincing Muranese attribution.

#### Акмs None.

none.

MARKS AND INSCRIPTIONS None.

#### Provenance

Prince of Liechtenstein, Vaduz; Ruth and Leopold Blumka, New York.

#### EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

#### BIBLIOGRAPHY

*Three Great Centuries* 1958, pp. 48–49, no. 29; "Acquisitions/ 1984," *GettyMusJ* 13 (1985), p. 245, no. 188; "Recent Important Acquisitions" 1986, p. 101, no. 11; Bremer-David et al. 1993, pp. 217–218, no. 379.

#### CONDITION

The gold leaf is worn but legible. The underside of the foot is worn.

- 1. See Barovier Mentasti 1982b, p. 105, no. 117.
- Lanmon 1993, pp. 11–12; listing comparable pieces in the Musée de la Renaissance, Écouen, France (J. Barrelet, La verrerie en France de l'époque gallo-romain à nos jours [Paris, 1953], pl. XXXI); in the Cleveland Museum of Art (Handbook of the Cleveland Museum of Art [1958], p. 227); in the Rijksmuseum, Amsterdam (Ritsema van Eck and Zijlstra-Zweens 1993, no. 1); and in Kynžvart Castle, Czech Republic (Barovier Mentasti 1982a, no. 117).





Italy (Murano) Early sixteenth century

Free- and mold-blown colorless glass with gold leaf and enamel decoration HEIGHT: 4.5 cm (1<sup>3</sup>/<sub>4</sub> in.) DIAMETER: 30.5 cm (12 in.)

84.dk.536

Made of glass with large bubbles and ridges, this shallow bowl is decorated with twelve radiating dip-molded ribs projecting from the underside, broad at the outer perimeter and tapering off near the pontil mark. The edge of the foot is folded under, and there is a slight kick at the base. On the underside of the brim below the edge of the lip is a decorated band of gold leaf incised with parallel lines and a scale pattern, each element centered on a pale blue enamel dot (fig. 26a). On the inner edge is a border of triangular pendentive frets, followed by a row of white dots. In the center, on the inside of the bowl, are concentric rings of white dots and bands of incised crosshatch and scale patterns in gold leaf (now almost entirely worn away).

The technique of gold leaf and enameling on the underside of the vessel creates a striking textural and coloristic effect. The viewed surfaces appear more metallic—an effect that is heightened by the dense scale pattern—and the blue enamel gains a subtle green tone. The decorative surface achieves contrast by reversing the technique in the center medallion. A more common form of bowl-the fortyribbed type—is depicted filled with cherries in a panel of a Madonna and Child by Piero di Cosimo, now in Stockholm (fig. 26b).1 Other similarly ribbed glass bowls are found in the Veste Coburg;2 the British Museum, London;3 the Museo Vetrario, Murano;<sup>4</sup> and the Metropolitan Museum of Art, New York.5 Indeed, in some respects the closest examples to the Getty bowl are footed vessels-such as tazze and coppewhose molded ribs are commonly more widely spaced.<sup>6</sup> One scholar believes that forty-ribbed bowls are relatively common-some of them may have been formed in the same mold-whereas bowls and tazze with twenty ribs are less common.<sup>7</sup> According to this theory, the Getty example, with twelve ribs, would also be uncommon. The heavy gadroons of such twelve-ribbed plates and bowls most frequently spiral out from the center, whereas those on the Getty bowl radiate out, giving the piece clarity and balance.

Arms None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.



26A Detail of scale pattern.





26B PIERO DI COSIMO (Italian, circa 1462–1521?). Madonna and Child, early sixteenth century. Stockholm, The Royal Palace, © The Royal Collections. Photo: Sven Nilsson.

#### EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 245, no. 189; Bremer-David et al. 1993, p. 215, no. 373.

#### CONDITION

The center decoration is nearly rubbed away. There is some wear on the bottom edge of the foot. Otherwise, the piece is in excellent condition.

- 1. Lanmon 1993, fig. 15.1.
- 2. Theuerkauff-Liederwald 1994, no. 14.
- 3. Tait 1979, p. 37, nos. 25-26.
- 4. Barovier Mentasti 1982a, p. 86, fig. 74, where the author mentions that in the sixteenth and seventeenth centuries, ribs of this kind on glass plates became ever thinner and more closely spaced; and Dorigato 1986, p. 18.
- 5. Lanmon 1993, pp. 48-51, nos. 15-16, where numerous other examples of similar plates are listed.
- 6. See, for example, Lanmon 1993, nos. 1, 14; Barovier Mentasti 1982a, fig. 47; and Tait 1979, nos. 7, 9.
- 7. Lanmon 1993, pp. 46-50, nos. 14-15.

## Double-Handled Filigrana Vase

Italy (Murano?) or *façon de Venise* (possibly northern Europe) 1550–1570

Free-blown colorless (slightly gray) glass with opaque white (*lattimo*) canes and applied decoration HEIGHT: 22.5 cm ( $8\frac{7}{8}$  in.) MAX. WIDTH: 14.5 cm ( $5\frac{3}{4}$  in.)

84.DK.654

The fairly heavy glass of this vase has innumerable minute bubbles and is embedded with small black impurities, mostly in the ribs but with the larger ones in the handles. The contoured body of the vessel is decorated with a horizontal trailing of colorless glass below the lip and two trailings of *vetro a retorti* on the shoulder. From the midsection of the vessel drawing to a point at the base are applied vertical ribs of alternating *vetro a fili* and *vetro a retorti*. The applied handles are of *vetro a retorti*; each has a globular terminus at the lower end. The hollow knop between colorless mereses and the flat, hollow foot with a flange folded up are both of *vetro a fili* alternating with *vetro a retorti*. The flat, rough pontil mark is embedded with metallic residue.

Neither the shape of the glass nor the imprecise handling of the decoration seems characteristic of Murano production. Analogous shapes are found on a sheet with designs for eight double-handled and covered vases (fig. 27a) probably related to the Medici glass workshop in Florence, which, during the late 1560s and early 1570s, was operated by the Muranese "master Bartolo."<sup>1</sup> Other analogous shapes are illustrated by Giovanni Maggi in his 1604 *Bichierografia.*<sup>2</sup>

By the later sixteenth century both the production and distribution of *filigrana* glasses were widespread in the North. For example, glasses with the same alternation of *vetro a fili* and *vetro a retorti* marvered to the exterior of the vessel (as on the Museum's glass) were excavated at the site of a patrician's house in central Sopron (Ódenburg), Hungary.<sup>3</sup> In addition, several examples exist that are described as possibly *façon de Venise*, often from the Netherlands.<sup>4</sup> Particularly close to the Getty vase in terms of form and decoration are a two-handled vase published by Schmidt as Muranese,<sup>5</sup> a covered cup or



27A Drawing of covered vases with handles. Italian, sixteenth century. Florence, Gabinetto dei Disegni e delle Stampe degli Uffizi, 97242. Photo: Canali Photobank, Italy.



reliquary published by Roffia and Mariacher as Muranese,<sup>6</sup> and a two-handled *Kelchglas*, or goblet, published by Theuerkauff-Liederwald as from Hall or possibly France.<sup>7</sup> Objects with similar ornamentation identified as Muranese of the mid-sixteenth century include a drinking glass and a standing covered cup in the British Museum, London.<sup>8</sup>

Arms

None.

MARKS AND INSCRIPTIONS None.

PROVENANCE [David, Inc., Vaduz].

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 246, no. 191; Bremer-David et al. 1993, p. 218, no. 381.

#### Condition

The base of the foot is abraded. Otherwise the piece is in excellent condition.

- 1. Heikamp 1986, no. 1/2, pp. 47–62, fig. 37.
- 2. Particularly volume three of the four-volume original manuscript, which is divided between the Biblioteca Magliabechiano and Gabinetto dei Disegni degli Uffizi, Florence (subsequently published in Florence, 1977).
- 3. I. Holl, "Glasfunde des 15-16. Jahrhunderts aus dem Hauses eines Patriziers in Sopron (Ungarn)," Zeitschrift für Archäologie des Mittelalters 6 (1978), pp. 95-103, fig. 3.
- See, for example, J. Strauss, Glass Drinking Vessels from the Collections of Jerome Strauss and the Ruth Bryan Strauss Memorial Foundation (Corning, New York, 1955), no. 119; Three Great Centuries 1958, no. 63; and Ritsema van Eck and Zijlstra-Zweens 1993, no. 74.
- 5. Schmidt 1922, fig. 67; formerly in the Schlossmuseum, Berlin.
- 6. Roffia and Mariacher 1983, p. 177, no. 79, fig. 80.
- 7. Theuerkauff-Liederwald 1994, pp. 210–211, no. 188; in the collections of the Veste Coburg.
- 8. Tait 1979, pp. 68-69, nos. 89, 92.



Italy (Murano) or *façon de Venise*, the Netherlands 1550–1600

Free-blown colorless (slightly grayish-brown) glass with applied decoration HEIGHT: 10.1 cm (4 in.) MAX. DIAMETER: 20 cm  $(7\frac{1}{8}$  in.)

84.DK.657

This situla, or pail, has a compressed lower body that rises from the waist in a flared straight wall to the mouth. The lip is formed by a thick trailed glass thread. Just below the lip is a circular trailing of blue glass. Attached to the lip are two loops, the ends of which are pinched with a pattern of parallel lines. The ends of a twisted handle hook through the loops. The surface is typically rough and jagged. There is a slight pontil mark.

A contract of 1570 concerns a certain "missèr Zuan Piero della Serena" who left Murano without permission to enter the service of Cosimo II de' Medici in Florence. The contract contains a list of vessels produced in the glasshouse of Bortolo d'Alvise of the sign of the "Three Moors"; one of the items mentioned is a "secchielo a giazo con un fil d'oro" ("ice-glass situla with a gold thread").<sup>1</sup> The form itself, however, may derive from an antique precedent. The profile and treatment of the twisted handle and loops of a second- or third-century A.D. Roman situla (for example, one excavated at Mérida near Badajoz, Spain [fig. 28a]) are very similar in profile to the Getty example.<sup>2</sup> It is also possible that such glass pails copied similar vessels in metalwork that had been produced since the early fifteenth century.

Beyond being decorative, the secular function of these vessels is unclear; one appears as a table accessory in Paolo Veronese's 1573 *Banquet in the House of Levi* (fig. 28b) in the Galleria dell'Accademia, Venice; it was, perhaps, a finger bowl. The liturgical use of these vessels is more apparent;<sup>3</sup> in Vittore Carpaccio's 1495 *The Dream of Saint Ursula*, also in the Galleria dell' Accademia, a similarly shaped metal situla with the protruding handle of an aspergillum hangs beneath a shrine (fig. 28c). A 1458 document mentions a "sechiello ad aqua santa" ("situla for holy water") that was kept in a box



28A Drawing of an excavated Roman situla of the second or third century A.D. From J. Price, "Some Roman Glass from Spain," in Annales du 6e Congrès de l'Association Internationale pour l'Histoire du Verre 1973 (Liège, 1974), p. 78, fig. 3/1.

with other glasses in the sacristy of the abbey of Santa Maria degli Angeli, Venice.<sup>4</sup>

The Museum's situla is distinguished by the glass trail around its neck and by the distension of its body at the base. This footless profile, uncharacteristic of situlas attributed to Murano,<sup>5</sup> and the grayish quality of the metal, with its small bubbles, suggest that this situla might be of Northern manufacture. However, a very similar pail is in the Rosenborg Castle, Copenhagen, and was probably acquired by or given to Frederick IV during his visit to Venice in 1709, suggesting not only that such vessels were made on Murano but also that they were still being produced in the early eighteenth century.<sup>6</sup>

Arмs None.

MARKS AND INSCRIPTIONS None.

PROVENANCE [David, Inc., Vaduz].

EXHIBITIONS None.





- 28B Above: PAOLO VERONESE (Italian, circa 1528-1588). The Banquet in the House of Levi (detail), 1573. Venice, Galleria dell' Accademia. From Il restauro del "Convito in Casa di Levi" di Paolo Veronese (Venice, 1984), p. 15, no. 2. The situla seen here may have served as a table accessory.
- 28C Right: VITTORE CARPACCIO (Italian, active 1490-died circa 1525). The Dream of Saint Ursula (detail), 1495. Venice, Galleria dell' Accademia. From V. Sgarbi, Carpaccio (Milan, 1994), p. 75. This hanging situla with aspergillum would have held holy water.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 247, no. 198; Bremer-David et al. 1993, p. 219, no. 382.

#### CONDITION

There is distinct wear on the highest elements of glass at the base of the vessel. There is also a small crack at the join of one of the loops to the lip.

- 1. Zecchin 1989, p. 174.
- 2. See J. Price, "Some Roman Glass from Spain," Annales du 6<sup>e</sup> Congrès de l'Association Internationale pour l'Histoire du Verre 1973 (Liège, 1974), pp. 65–84, esp. p. 78, fig. 3/1. Another example was found in a sarcophagus north of Callatis in Romania, which, on the basis of the coinage from the same find, can be dated after A.D. 141. See M. Bucovala, "Roumanie: Recent Discoveries of Glass in Rumania," Bulletin de l'Association Internationale pour l'Histoire du Verre 8 (1977–1980), p. 228, no. 5; p. 226, fig. 84.
- 3. Klesse and Mayr 1987, nos. 22, 34.
- Zecchin 1990, p. 146; see also R. J. Charleston in A. González-Palacios, ed., *Objects for a "Wunderkammer*," exh. cat. (June 10– July 31, 1981, P & D Colnaghi and Co., Ltd., London), pp. 94–96, no. 52.
- 5. See, for example, Barovier Mentasti 1982a, p. 101, fig. 89 (left).
- G. Boesen, Venetianske Glas på Rosenborg (Copenhagen, 1960), no. 5; see also Theuerkauff-Liederwald 1994, pp. 525–529, for several comparable examples described as Muranese and *façon de Venise*.





Italy (Murano) Late sixteenth or early seventeenth century

Free- and mold-blown colorless (slightly gray) glass with opaque white (*lattimo*) canes HEIGHT: 23.9 cm (9% in.) DIAMETER (at base): 7.2 cm ( $2^{13}/16$  in.)

84.dk.661

Made of glass with some surface flaws and irregularities, this oviform vessel tapers to a curved, elongated neck that terminates in a cup-shaped mouth with a pinched spout. The whole is supported by a compressed conical foot, added separately, with a rim that is folded under. The parallel cane decoration runs vertically throughout.

The true *Kuttrolf* or *Angster*, an ancient vessel type that was brought back into wide currency by the fifteenth century, generally has a neck (or part of the body) composed of three to five intertwined tubes that slow the flow of liquid first to drops and then to a very slow trickle.<sup>1</sup> As the pouring often created a bubbling or gurgling sound, the name may derive from *Kuttering* (German for "gurgling") or, more likely, from *gutta* (Latin for "drop of liquid"). The popularity of these vessels endured throughout the sixteenth and seventeenth centuries (see figs. 29b-c), but their form became simplified, reducing the neck to a single tube similar to that of the Near Eastern rosewater sprinkler. Even though the later versions were considered drinking vessels, their wide popularity lay in their aesthetic or amusement value rather than in their utilitarian appeal.<sup>2</sup>

The Museum's example belongs to a fairly large group—all executed in *vetro a retorti* and all with arched necks so that the pinched spout points upward—that appears to have been produced in the late sixteenth and early seventeenth centuries.<sup>3</sup> It is distinguished, however, by its remarkably graceful and balanced form.



29A Alternate view.



Arms None.

MARKS AND INSCRIPTIONS None.

#### Provenance

Fritz Biemann, Zurich (sold, Sotheby's, London, June 16, 1984, lot 58); [David, Inc., Vaduz].

#### Exhibitions

Meisterwerke der Glaskunst aus internationalem Privatbesitz, Städtische Kunsthalle, Düsseldorf, 1968; Sammlung Biemann Ausstellung 500 Jahre Glaskunst, Kunstgewerbemuseum, Cologne; Kunstgewerbemuseum, Berlin; Museum Bellerive, Zurich, 1978–1979; 3000 Jahre Glaskunst von der Antike bis zum Jugendstil, Kunsthalle, Lucerne, 1981.

#### BIBLIOGRAPHY

von Saldern 1968, p. 29, no. 65; F. Biemann, "Der Kuttrolf-Sonderling unter den Glasgefässen," Keramik-Freunde der Schweiz, Mitteilungsblatt 76 (April 1968), p. 13, pl. 10; Klesse and von Saldern 1978, p. 113, no. 55; Rütti et al. 1981, p. 159, no. 668; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 247, no. 196; "Recent Important Acquisitions" 1986, pp. 102– 103, no. 16; Ritsema van Eck and Zijlstra-Zweens 1993, no. 75; Bremer-David et al. 1993, p. 221, no. 387; *Masterpieces* 1997, p. 33, no. 24.

#### CONDITION

The base of the foot is slightly abraded. There are some surface scratches around the neck just below the auricular lip.

- 1. See Rademacher 1963, pp. 60-70.
- See F. Biemann, "Der Kuttrolf—Sonderling unter den Glasgefässen," Keramik-Freunde der Schweiz, Mitteilungsblatt 76 (April 1968), pp. 12–14, pls. 9–10.
- 3. For a similar example and a listing of others, see Klesse and Mayr 1987, no. 14. See also G. Weiss, *Ullstein Gläserbuch* (Berlin, Frankfurt, Vienna, 1966), pp. 100–101; and Ritsema van Eck and Zijlstra-Zweens 1993, no. 75.



29B JERG RATGEB (German, circa 1480–1526). The Last Supper (detail), circa 1510. Rotterdam, Museum Boymans-van Beuningen, 2294. A man drains a *Kuttrolf* of its wine at the upper left.



29C Drawing of a drinking song with *Kuttrolf* vessels as notes. German, sixteenth century. Nuremberg, Germanisches Nationalmuseum, HB 19187. Photo: Alfred Wolf. The presence of sausages, beer kegs, a tankard, a chicken, and musical instruments makes even clearer the connection between the *Kuttrolf* and the festive consumption of wine.



Italy (probably Murano) 1580–1600

Free- and mold-blown colorless (slightly gray) glass with opaque white (*lattimo*) canes HEIGHT: 21.6 cm ( $8\frac{1}{3}$  in.) MAX. WIDTH: 12.1 cm ( $4\frac{3}{3}$  in.)

84.dk.656

This oviform vessel, made of *vetro a fili* and *vetro a retorti*, is mold-blown in graduated horizontal bands of raised pyramidal facets divided into twenty-four vertical rows and running from the base to the upper zone of the body, followed by a reeded molding and a gadrooned shoulder that tapers in to the smooth and somewhat elongated flared neck. The body of the vessel displays occasional impurities and is joined by a compressed hollow spherical knop between two clear mereses to a conical pedestal foot with a rim that is folded under. There is a slight, smooth projecting pontil mark. The merese below the knop seems to be of a grayer glass than that above the knop.

Vessels of this form were fashioned both as vases and as spouted ewers.<sup>1</sup> There is sufficient variation in the design and quality of the glass to suggest that these types of vessels were made in diverse glasshouses.<sup>2</sup> Although the name for this type of vase probably refers to the pattern of umbones, or protuberances, around its body, the inspiration for the shape of the vessel is unclear.

This object originally included a cover that is now missing. A similar, though not *filigrana*, umbo vase in Brescia is described as also lacking a cover and was probably intended to serve as a pharmaceutical container.<sup>3</sup> Umbo vases that retain their covers include one in the Corning Museum of Glass<sup>4</sup> and another formerly in the Schlossmuseum, Berlin.<sup>5</sup> Similar vases, though of ice-glass, include one in the British Museum, London,<sup>6</sup> and another in the Museum für Angewandte Kunst, Vienna.<sup>7</sup> An umbo vase in *vetro a filigrana* is in the Bayerisches Nationalmuseum, Munich, where it is described as "probably *façon de Venise*" of the second half of the sixteenth century.<sup>8</sup> Arms None.

MARKS AND INSCRIPTIONS None.

#### PROVENANCE

John Malcolm, Poltalloch (1805–1893); George Malcolm, Poltalloch (sold, Christie's, London, February 8, 1977, lot 241); [David, Inc., Vaduz].

#### EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958; Kunst und Antiquitäten, Galerie und Orangerie Hannover-Herrenhausen, 1977; Mille anni di arte del vetro a Venezia, Palazzo Ducale, Museo Correr, Venice, 1982.

#### BIBLIOGRAPHY

J. Lessmann, "Meisterwerke der Glaskunst aus Renaissance und Barock," *Weltkunst* 47, no. 8 (April 15, 1977), p. 791; Barovier Mentasti 1982b, p. 31, and p. 124, no. 163; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 246, no. 194; Bremer-David et al. 1993, p. 220, no. 386.

#### CONDITION

The interior is slightly matte and iridescent and there is considerable abrasion on the base of the foot. The piece is missing its cover.

- 1. See also two examples in the British Museum, London (Tait 1979, p. 102, nos. 158–159).
- 2. See Rückert 1982, vol. 1, p. 66, no. 89, pl. 22.
- 3. Mariacher 1987, p. 130, no. 17b.
- Inv. 53.3.40; reproduced in *Three Great Centuries* 1958, pp. 72–73, no. 68.
- 5. Dreier 1989, p. 11, fig. 9; this object was destroyed during the Second World War.
- 6. Tait 1979, p. 97, no. 148; oviform but molded in relief with swags and lion masks.
- 7. Egg 1962, fig. 25; Schlosser et al. 1951, pl. 30.
- 8. Rückert 1982, vol. 1, p. 66, no. 89, also listing several comparable examples.



# Stemmed Filigrana Wineglass

Italy (probably Murano) Late sixteenth to early seventeenth century

Free- and mold-blown colorless (pinkish-gray) glass with *lattimo* canes HEIGHT: 12 cm ( $4^{\frac{3}{4}}$  in.) DIAMETER (at lip): 15 cm ( $5^{\frac{7}{8}}$  in.) DIAMETER (at base): 7.1 cm ( $2^{\frac{13}{16}}$  in.)

84.DK.652

This thin-walled vessel is made of *vetro a fili* and *vetro a retorti* with embedded impurities and bubbles. The shallow bowl is decorated with *lattimo* twists of varying patterns marvered down on the exterior side in concentric circles (fig. 31a). It is supported on an inverted baluster stem terminating in a conical, slightly asymmetrical foot with an upturned rim, both in *vetro a retorti* and *vetro a fili*. There is a sharp projecting pontil mark.

The graceful and refined proportions of this wineglass form make it one of the more elegant of late-sixteenthcentury designs from Murano (see fig. 31b). The most accomplished versions contrast the *vetro a retorti* used for the stem and foot with the *cristallo* of the bowl, which is elaborated with a variety of *vetro a retorti* canes arranged concentrically. Comparably fine examples exist in the Museo Vetrario, Murano, in the Kunstsammlungen of the Veste Coburg, and in the British Museum, London.<sup>1</sup>

To judge from graphic sources, the *tazza* form was already well established in the late sixteenth century.<sup>2</sup> It was also successfully executed in *vetro a reticello*, while other versions, usually dated somewhat later, follow the same profile but employ *vetro a retorti* throughout.<sup>3</sup> The shape in its various permutations remained in fashion for at least a century,<sup>4</sup> and the appearance of this much-appreciated form in design books suggests that its production was widely disseminated (fig. 31c).<sup>5</sup> The balance of the design is compromised in versions that added knopped stems or that deepened the bowl.<sup>6</sup>



31A Detail of bowl viewed from above.

#### Arms None.

None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Sold, Sotheby's, London, February 23, 1976, lot 175; [David, Inc., Vaduz].

EXHIBITIONS None.





318 MICHELANGELO MERISI DA CARAVAGGIO (Italian, 1573–1610). Young Bacchus, circa 1595. Florence, Galleria degli Uffizi. Photo: Alinari/Art Resource, New York.

#### BIBLIOGRAPHY

A. Polak, "Venetian Renaissance Glass: The Problems of Dating Vetro a Filigrana," Connoisseur 192, no. 774 (August 1976), p. 3; "Acquisitions/1984," GettyMusJ 13 (1985), p. 247, no. 197; Bremer-David et al. 1993, p. 222, no. 388.

#### CONDITION

There is a slight, closed fracture or perhaps trapped air at the joining of the bowl to the foot. There are a very few tiny surface scratches.

#### Notes

- 1. Barovier Mentasti 1982a, p. 99, fig. 88; Theuerkauff-Liederwald 1994, no. 259; Tait 1979, pp. 71 and 82, nos. 97 and 124. See Schmidt 1922, fig. 43. 2.
- See Barovier Mentasti 1982a, pp. 98-99, figs. 86, 88. For 3. another example nearly identical to the Museum's and now in the Museum Willet-Holthuysen, Amsterdam, see H. E. van Gelder, Glas en Ceramiek (Utrecht, 1955), pl. 8, no. 5; illustrated in Dorigato 1983, pp. 16-17, no. 31.
- See Klesse 1973, pp. 64–65, no. 504.  $4 \cdot$
- The drawing, by an anonymous draftsman, is from Ms. 1417,  $5 \cdot$ Biblioteca Casanatense, Rome. See Heikamp 1986, p. 111, fig. 95.
- 6. For some of the variations of the form, see Lanmon 1993, nos. 52–53.



31C Vessel designs, including two tazze (upper left and lower right). Possibly Italian, seventeenth century. Rome, Biblioteca Casanatense, MS 1417.



Italy (Murano) or *façon de Venise* (Tuscany) 1600–1650

Free-blown colorless (slightly gray) glass with diamond-point engraving HEIGHT: 15 cm (5% in.) DIAMETER (at lip): 13 cm (5% in.)

84.DK.541

Made of clear glass with innumerable minute bubbles and impurities, this vessel consists of a bowl of hemispherical form that, with a hollow bobbin stem graduated downward to a short tubular base, is attached to a flat, circular foot with a rim folded under. At the lip is a diamond-point engraved band of an inscription terminating in foliated ornament. The rest of the bowl's surface is engraved with decoration consisting of a crowned, double-headed eagle (fig. 32a) surrounded by a field of asymmetrical foliate patterns, dotted with flowers and inhabited by one large and two small birds (fig. 32b). The foot is engraved with a repeating pattern of bilaterally symmetrical tendrils, foliage, and dotted flowers.

This vessel can be associated with a small group of goblets, all of which have a hollow stem comprised of a series of three to five graduated and slightly compressed spheres. All are either undecorated (fig. 32c)<sup>1</sup> or are diamond-point engraved (fig. 32d).<sup>2</sup> An early-seventeenth-century drawing attributed to the "Designer of the façon de Venise Glasses" illustrates an analogous glass with a more conical bowl (fig. 32e).<sup>3</sup> In addition, the Roman artist Giovanni Maggi, in his 1604 compendium of drawings of glass vessels entitled Bichierografia, illustrates a number of glass vessels whose stems, like this glass, include a series of hollow knops.<sup>4</sup> A slightly later goblet with a similar stem but with a bucket bowl has a more spherical hollow cushion between the stem and the bowl, into which a medal of Pope Innocent XI (reigned 1676-1689) was inserted (fig. 32f). Later versions are executed in colored glass, vetro a retorti, and other techniques.<sup>5</sup>





32A-B Details of engraving.





32C Wineglass. Venetian, seventeenth century. New York, The Metropolitan Museum of Art 1975.1.1160, The Robert Lehman Collection.



32D Wineglass. Venetian, seventeenth century. H: 11.5 cm ( $4\frac{1}{2}$  in.). Cologne, Museum für Angewandte Kunst, F36.



- 32E DESIGNER OF THE FAÇON DE VENISE GLASSES. Drawing of Vessels. Possibly Italian, seventeenth century. Florence, Gabinetto dei Disegni e delle Stampe degli Uffizi, 97208. Photo: Canali Photobank, Italy.
- 32F Goblet. Venetian, seventeenth century. Corning, New York, The Corning Museum of Glass 79.3.459, Gift of The Ruth Bryan Strauss Memorial Foundation.



The diamond-point engraving of the Museum's goblet consists of a stylized foliate pattern rambling across most of the surface of the bowl, of flowers formed by unconnected dots, and of larger dots randomly strewn across the background. This engraved decoration is very close to that on a group of various Muranese vessels all dated to the end of the sixteenth century.<sup>6</sup> The unusual inscription giving the name of the unidentified Dr. Pietro Lessio, for whom the glass was presumably made, suggests a cisalpine origin, the Austrian double-headed eagle notwithstanding. Moreover, the family name may be a shortened version of Alessio or d'Alessio, a name found in southern as well as northern Italy.

#### Arms

None.

#### MARKS AND INSCRIPTIONS

Around the lip, engraved in diamond point, *SIG. DOTTORE D. PIETRO LESSIO.* 

#### Provenance

E. and A. Silberman, Vienna; Oscar Bondy, Vienna; Ruth and Leopold Blumka, New York.

#### EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

#### BIBLIOGRAPHY

*Three Great Centuries* 1958, no. 92, p. 90; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 246, no. 195; "Recent Important Acquisitions" 1986, p. 107, no. 31; Lanmon 1993, no. 69, fig. 1; Theuerkauff-Liederwald 1994, pp. 309, 318; Bremer-David et al. 1993, p. 219, no. 383.

#### Condition

There is some wear on the base of the foot.

- 1. For other examples, see Gasparetto 1958, no. 62; Theuerkauff-Liederwald 1994, no. 311; and Lanmon 1993, no. 42, where, in addition to the Getty glass, six wineglasses with similar stems are listed.
- 2. Theuerkauff-Liederwald 1994, no. 297, where several similar wineglasses are listed with similar engraving.
- 3. See Heikamp 1986, p. 65, no. 43.
- 4. The four-volume original manuscript is divided between the Biblioteca Magliabechiano and the Gabinetto dei Disegni e delle Stampe, Uffizi, Florence (subsequently published in Florence, 1977). This work was produced for the Roman collector Cardinal del Monte, whose great supporter was Ferdinand de' Medici.
- See, for example, a similar goblet with a transparent azure stem (Museo Vetrario, cl. v1, n. 65; illustrated in Dorigato 1983, pp. 16–17, no. 31), another in *vetro a retorti* (Museo Vetrario, Murano, cl. v1, n. 1444), or a third with four wings at right angles to one another on the stem (Museo Poldi Pezzoli, Milan; illustrated in Bussagli 1991, p. 188).
- 6. See Dorigato 1986, p. 22.



### CHAPTER 3

#### The Venetian Influence in Northern Glasshouses

hile sixteenth-century glassmaking in the Tirol is well documented, production there, compared to that of central Germany or Murano, was relatively limited.<sup>1</sup> The numbers of surviving examples are commensurately small. The Getty holdings in this area are relatively large and unusually strong, including seven very fine and exceedingly well-preserved examples that are attributed here to Tirolean glasshouses. However, attributions are difficult to assign with certainty, as there are very few examples that can be identified either with a particular *Glashütte* (glasshouse) or with a document; they are largely, and necessarily, based on secondary or circumstantial evidence.

In March of 1534, Wolgang Vitl, who had overseen the Tirolean mining interests of a fellow Augsburger, Ambros Höchstetter, was granted by the *Landesfürst* (reigning prince) Ferdinand I, then residing in Prague, the exclusive right to manufacture colorless glass in the Inntal region.<sup>2</sup> The glasshouse he established at Hall operated under his direction from around 1535 or 1536 until 1539, shortly before his death in early 1540. While glassmaking had a previous history in the region, Vitl's workshop was the first large-scale commercial glasshouse established in the Tirol. Using soda imported from Genoa, Spain, and, perhaps, Venice,<sup>3</sup> the Hall glasshouse—with the aid of Italian craftsmen, probably from Altare or Murano—produced thin-walled, colorless glass vessels, largely of Italianate rather than Germanic design, in imitation of Murano *cristallo.*<sup>4</sup>

The commercial success of the Tirolean glasshouses was largely dependent on the export, mostly to southern Germany, of glass vessels and flat or window glass, of which three million panels were produced annually.<sup>5</sup> Augsburg (home of the Höchstetters and the source of their financial backing) and Nuremberg were chief among the foreign markets, a fact reflected in the large number of Tirolean glass vessels with arms of families from these two cities. In light of the fact that Italian glassmakers in the Tirol were producing *cristallo* based on Murano designs, the assertion that Venetian glasses were imported and decorated in the Tirol for the Northern markets is not borne out in economic terms. Glass from Murano was considerably more costly than the Tirolean facsimile, to which the expense of transportation and taxes or tariffs had to be added; it was, in fact, the difficulty of commissioning and then importing glass that would satisfy the local taste that motivated the Höchstetters and later Ferdinand II to establish their own glasshouses.<sup>6</sup>

The Trapp welcome glass (no. 41), which bears arms in fired enamel rather than in cold paint, raises the fundamental question of the origin of enameled vessels with the arms of Tirolean and south German families. Venetian glasses with arms of Northern families were being produced through the first two decades of the sixteenth century; examples are a covered goblet with the arms of Jörg Kopidlnansky von Kopidlna of 1511 (no. 33a),7 a pilgrim flask with the arms of Margaret von Rappolstein and Christophorus Philippus, first count of Liechtenstein, of circa 1520,8 and another pilgrim flask with unidentified arms, probably of a south German family, of 1520-1530.9 However, by 1517 at Laibach and by 1534 at Hall, Austrian glasshouses producing Murano-style glass with "talented craftsmen brought from Italy" ("ingeniosos ob id artifices ex Italia conduxerit") had been established.<sup>10</sup> The fact that little Venetian enameled glass in the Renaissance manner can be dated later than about 1530 strongly suggests that the technique had by then become widely established in the North, obviating the need for imported glass.

One of the earliest examples of Northern production is a *Stangenglas* dated 1527 and bearing the arms of Michael Fürsich of Augsburg;<sup>11</sup> although this and other enameled heraldic glasses have long been attributed to Murano—perhaps more by convention than by compelling evidence the physical characteristics of the glass, the economics of the industry, and a fresh evaluation of what is known of the Hall *Glashütte*, all sugggest that local manufacture was more likely. On the other hand, the coats of arms on the Getty covered vessel (no. <u>36</u>) are executed in cold paint, as are those, for example, of Hans Kleebichler and Barbara Fieger of Hall on a covered goblet that probably dates to about 1550–1560.<sup>12</sup> The Getty vessel, which dates to about 1534–1536, also displays applied gold decoration that is, in part, nearly identical to the rich ornamentation on both a ewer of 1535–1538 and a plate of 1536, now in the Bayerisches Nationalmuseum, Munich;<sup>13</sup> it is thus evident that a variety of decorative techniques were being used concurrently in Tirolean glasshouses.

In 1570, Archduke Ferdinand 11, who had become Landesfürst of Tirol in 1563 but only arrived in Innsbruck from Prague in 1567, established a glasshouse at Innsbruck to satisfy his taste for glass in the Venetian manner. To achieve this goal, he deemed it necessary to import "einen guetten glassmacher, der allerlai seltzam und künstliche sortten und arbait von glasswerch machen kundte" ("a good glassmaker, who knows how to make all kinds of rare and artistic works of glass").14 By 1571 or 1572, a Muranese glassmaker, perhaps Pietro dell'Orso, was active in Innsbruck.<sup>15</sup> Ferdinand 11 also enlisted the services of Antonio Montano of Altare. Instructed to bring molds for vessels and soda for producing cristallo, Montano arrived in Innsbruck in 1572.<sup>16</sup> Between 1573 and 1590, intermittent activites at Innsbruck are documented for Salvatore Savonetti, Andrea Tudin, Bastiano Savonetti, and many others referred to but unnamed.<sup>17</sup>

To judge from the inventory compiled upon the death of Ferdinand II, the Hofglashütte (royal glasshouse) at Innsbruck produced glass in a great variety of forms, among the more striking of which are large, covered, vase-shaped goblets.<sup>18</sup> Hollow, mold-blown stems, molded and applied bosses, diamond-point engraving, gold leaf, and cold-painted decoration are characteristic of these vessels. As the Hofglashütte functioned largely in the personal service of Ferdinand II, production reflected his unorthodox taste, which seemingly placed greater value on the material rather than the design of Murano glass. The numerous Italian craftsmen in his employ were, however, allowed to produce "allerlei glaswerck" ("all sorts of glasses") once the court orders had been filled.19 Responding to the demands of the general market, this production most probably was more forthright in its emulation of Murano style. In 1577, under the archduke's instructions, Bastiano Savonetti brought in shipments of soda from the Ticino, manganese from the Piedmont, and various bronze molds, in particular, molds in the form of "pine."<sup>20</sup> The form of the glasses for which these "pine" molds were used may correspond to the type of pinecone flask found, for example, in the collections of the Veste Coburg.<sup>21</sup>

The production of the Innsbruck *Hofglashütte* can be identified (perhaps more certainly than that of Hall under the various Höchstetters) because of the collections in Vienna and Ambras Castle that can be traced back to Ferdinand II and because of the relative assurance with which the various shapes and types of decoration can be reconciled with descriptions in inventories of glass in the archducal residences.<sup>22</sup> The singular, outsized bowl (no. 43) is attributed to this workshop, largely on the basis of the style of the diamond-point engraved decoration.

The first façon de Venise glasshouse in the northern provinces of the Dutch-speaking regions was set up by Govaert van der Haghe from Antwerp in Middelburg in 1581, an endeavor that grew and flourished even after his death in 1606, when the manufactory was taken over by a Venetian, Antonio Miotti. Indeed, much of early façon de Venise glass in the Netherlands was made by Italian glassmakers who moved there to find work, a fact that renders it difficult, at best, to distinguish Muranese glass from Venetian-style glass made by Muranese craftsmen in the North. Throughout the seventeenth century, a number of glasshouses were established in the Netherlands, such as in Amsterdam, Rotterdam, and The Hague, as well as in smaller towns, such as Nijmegen and Zutphen. The Italian craftsmen active in these manufactories brought with them the knowledge and skill to execute Venetian-style glass and glass ornament that were popular in the Netherlands, such as filigrana glass, ice-glass, diamond-point engraving, and cristallo (see nos. 46-50), occasionally on forms that betray their Northern origin (see nos. 46, 48, which most probably served as beer vessels).23

- The earliest substantial contribution to the study of Tirolean glass is Zedinek 1927. Considerable documentation can be found in Schönherr 1900 and continuously in volumes of the Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses in Wien. Heinrich Heimer made productive use of this documentation in his "Die Glashütte zu Hall und die Augsburger Kaufsmannsfamilie der Höchstetter" (Ph.D. diss., Munich University, 1959). A smaller study is found in W. Schreiber, "Die Glashütte zu Hall in Tirol," in *Tiroler Heimblätter* (1959), pp. 89–98. The most recent and still the most comprehensive study, which relies extensively on Heimer, is Egg 1962. Also important is the relevant essay in Rückert 1982, vol. 1, pp. 79–80, and the following entries.
- 2. Egg 1962, p. 21.
- 3. Rückert 1982, vol. 1, p. 79.
- 4. Egg 1962, pp. 22–23.
- 5. Ibid., pp. 33-34.
- 6. Ibid., p. 45.
- 7. Formerly Dresden, Stadtmuseum. See von Saldern 1965, fig. 5.
- 8. London, The Wallace Collection, inv. xxv B95.
- 9. Nuremberg, Germanisches Nationalmuseum, gl. 151.
- 10. Egg 1962, pp. 22-23.

- Frankfurt, Museum fur Kunsthandwerk, inv. 6763. See A. Ohm, Europäisches und Aussereuropäisches Glas (Frankfurt, 1980), p. 131, no. 296.
- 12. From the glasshouse of Wolfgang Vitl; see Rückert 1982, nos. 131–132.
- 13. Prague, Uměleckoprůmyslové Muzeum. See Drahotová 1985, pl. 24.
- 14. Egg 1962, p. 46.
- 15. Ibid., p. 47.
- 16. Ibid., pp. 67-71.
- 17. Ibid., p. 51.
- 18. Ibid., pp. 51-52.
- 19. Ibid., pp. 50, 53-54.
- 20. Ibid., p. 49.
- 21. Theuerkauff-Liederwald 1994, pp. 198–199, nos. 179–180; in addition, fig. 29 reproduces the drawing by Giovanni Maggi from his 1604 *Bichierografia* showing just this kind of flask.
- 22. Egg 1962, the entries of which can be found on pp. 51-52.
- 23. For an extremely useful presentation of utilitarian glass of the Low Countries, drawn priuncipally from archaeological material, see Henkes 1994. Other discussions of Netherlandish glass include that presented by H. M. Zijlstra-Zweens in Ritsema van Eck and Zijlstra-Zweens 1993, pp. 14–16; and by F. Hudig in his Das Glas (Vienna, 1923).
# Goblet with the Arms of Liechtenberg

Façon de Venise, probably southern Bohemia 1500–1530

Free-blown colorless (slightly pinkish-brown) glass with gold leaf and enamel decoration HEIGHT: 23.5 cm ( $9\frac{14}{4}$  in.) DIAMETER (at lip): 16.2 cm ( $6\frac{3}{4}$  in.)

84.dk.537

This goblet is composed of a flared funnel body with a (seemingly milled) band around the base. The hollow-stem pedestal foot has a flanged rim with the edge folded up, with traces of gilding. Below the lip is a border consisting of a row of white dots, then another of blue, followed by a band of gold leaf incised with a scale pattern, each section of which is centered in a red dot, followed by a repeat of the rows of blue and white dots. The central zone of the body is decorated solely by an emblazoned coat of arms employing a palette of black, yellow, blue, white, ocher, and green, with trace lines in ocher.

Although the Getty glass has generally been considered to be Venetian,<sup>1</sup> there are several compelling reasons to ascribe it to a Northern workshop, probably in southeastern Bohemia. The form of the glass is a simplified version of a Murano model extensively produced-in colored glass or clear glass, usually with enamel decoration-throughout the latter half of the fifteenth century.<sup>2</sup> A comparable vessel in colorless glass, dated 1511, with its original cover and emblazoned with the arms of Jörg Kopidlnansky von Kopidlna, formerly in Dresden (fig. 33a), establishes that the form was introduced to the North at an early date. A glass very similar to the present one and almost certainly of Northern manufacture was formerly in the Krug Collection. Others with the same decoration on the lip are Venetian. Closely related to the Museum's glass are a pair of covered goblets, each emblazoned with the shield of the Slovakian town of Bardejov (figs. 33b-c). These glasses, inspired by Murano types, are distinguished by their weighty proportions, exceptionally wide mouths, and simplified tooling. Also characteristic are the sparse use of enamel, restricted to the dotted band below the lip, and the large, well-painted arms that float on the otherwise unadorned vessel wall.



33A Covered goblet with arms of Kopidlnansky von Kopidlna. Bohemian, 1511. Formerly in Dresden.
From A. von Saldern, *German Enameled Glass* (Corning, New York, 1965), p. 32, fig. 5.







33B-C Two from a set of six covered goblets. Venetian, beginning of the sixteenth century. H: 25 cm (9<sup>7</sup>/<sub>8</sub> in.). Bardejov, Slovak Republic, Sarišské Mœzeum, H.712 and H.713.

The influence of Murano glass on Bohemian glassmakers is not unusual. A goblet dated 1595 with *filigrana* decoration and with the arms of the Prague provost Georg Potanus von Breitenberg was excavated from a site near Saint Vitus's Cathedral in Prague.<sup>3</sup> The shape of the goblet and the use of *vetro a retorti* are distinctly Italianate, but the dotted lip band and the large, well-executed arms with an insistent use of black-line detailing (without inscriptions or floral and foliate decoration typical of Germanic armorial glasses) betray its Bohemian origin.

The enameled arms on this goblet have been identified as those of the Liechtenbergs (or Liechtenburgs), a Bohemian family who descended from the Hronowiczes of Moravia and traced their nobility back to the thirteenth century. The arms are shared with the Moravian family of Krzineczký von Ronow of Moravia, who were also a branch of the Hronowicze family.<sup>4</sup>

#### Arms

On the center of the bowl, in enamel, or two ragged staves in saltire, sable; the crest upon a cushion gules, tasseled or, a fish argent, in front of a panache of peacock's feather proper.

MARKS AND INSCRIPTIONS None.

#### Provenance

F. Kieslinger, Vienna; Ruth and Leopold Blumka, New York.

#### EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958; The Secular Spirit: Life and Art at the End of the Middle Ages, The Metropolitan Museum of Art, The Cloisters, New York, 1975.

#### Bibliography

Three Great Centuries 1958, p. 41, no. 19; The Secular Spirit 1975, p. 267, no. 263; "Acquisitions/1984," GettyMusJ 13 (1985), p. 245, no. 186; "Recent Important Acquisitions" 1986, p. 102, no. 14; Bremer-David et al. 1993, p. 255, no. 450.

#### Condition

The piece probably originally included a cover that is now missing. The gilding is very worn. The bottom of the turned foot is much abraded.

- 1. See Three Great Centuries 1958, p. 41, no. 19; The Secular Spirit 1975, p. 267, no. 263.
- R. J. Charleston, Masterpieces of Glass: A World History from the Corning Museum of Glass (Corning, New York, 1980), pp. 84–85, no. 34; Charleston and Archer 1977, pp. 82–86, no. 15; Schlosser et al. 1951, pl. 4; J. R. Bliss, "A Cuir Boulli Case and Other Decorative Arts from the Italian Renaissance," Arts in Virginia 29, no. 1 (1989), pp. 18–20; and Honey 1946, pp. 57 and 61, nos. 21 and 21b. See Klesse 1965, pp. 66–67, no. 76; and The Krug Collection of Glass: Part II, sale cat., Sotheby's, London, December 7, 1981, lot 362.
- 3. Hetteš 1963, pp. 43-44, fig. 1.
- 4. The heraldic information was provided by Dr. Ottfried Neubecker. See J. Siebmacher, Bürgerliches Wappenbuch, oder des grossen und allgemeinen Wappenbuches 4, pt. 10, Der Mährischer Adel (Nuremberg, 1899), p. 64, pl. 49 (Krzineczký) and p. 69, pl. 54 (Liechtenberg).

# Bowl of a Footed Beaker

Façon de Venise, probably Bohemia; or Italy (Murano) 1525–1575

Free-blown colorless (purplish-brown) glass with gold leaf, enamel, and diamond-point engraved decoration HEIGHT: 21.5 cm ( $8\frac{1}{16}$  in.) DIAMETER (at lip): 19 cm ( $7\frac{1}{2}$  in.) DIAMETER (at base): 7.8 cm ( $3\frac{1}{16}$  in.)

84.dk.547

This vessel is made of clear glass with numerous minute bubbles and embedded impurities throughout. The conical body is encircled with a gilded, cobalt-blue trailed glass thread below the lip. The decoration between the lip and the trailing consists of a broad band of gold with an incised scale pattern outlined with white dots and centered on green dots. This pattern is bordered above and below with lines of red, green, and blue dots. Between this enamel-and-gilt decoration and the trailing is a band of diamond-point engraved foliage in a repeated pattern. Below the trailing are ten vertical rows of upwardly pointing prunts, alternating between three and four prunts per row, each prunt with a stroke of blue enamel flanked on one side by a red stroke and on the other by a yellow stroke (fig. 34a). Along the lower portion are foliage sprays in red, blue, and green enamel. A leaf-and-tendril pattern is engraved between each row of prunts, while above each row of three prunts a bird is engraved, each with a green enamel dot on its wing and depicted pecking at a tendril (fig. 34b). At the base is a band of gold leaf. The frosted appearance of the bottom edge indicates it has been cut or ground down (fig. 34c). The underside displays a high kick and a pronounced shaling pontil mark (there are remains of iron attached to the mark) on top of another pontil mark and sharp projections of residual glass. The unusually high kick and messy pontil mark are not surprising, given the large size of the bowl: in order to sustain the bowl on the pontil and counterbalance its weight, the pontil would have had to be securely attached well inside the bowl's mass.

The top-heavy proportions of this vessel and the abraded appearance of its bottom edge suggest that an original foot had broken off and that someone attempted to sal-



34A Detail of prunts.



34B Detail of engraved decoration.



vage the piece by grinding down, and so minimizing, the break. Unfortunately, the bottom of the Museum's vessel shows no evidence—such as attachment marks on the kick or a second layer of glass fused to its underside—that would help reconstruct the foot.

A beaker at one time in the Petronell Castle, Austria (fig. 34d), may provide an example of the type of foot that had supported the Getty vessel.<sup>1</sup> The bowl of the so-called Petronell Beaker displays a similar large size, conical shape, rim decoration, and loose and vigorous surface embellishment. Most importantly, there is a gap in the beaker between the bowl's kick and its foot attachment. Usually, when a foot is applied to a beaker in this manner—that is, by attaching a second paraison to the underside of the partially formed bowl—the two layers of glass are fused together, making a single, thicker layer of glass between the bowl and foot (fig. 34e). In the case of the Petronell Beaker, the layer was imperfectly fused, leaving a bubble of air between bowl and foot. This type of imprecise attachment would explain the unusual appearance of the Getty beaker's kick.<sup>2</sup>

The Museum's vessel is clearly influenced by Italian examples (see no. 16) and can be compared to the wellknown fifteenth-century Muranese clear-glass example with colored prunts and cover in the British Museum, London (fig. 34f).<sup>3</sup> It is of interest that the London goblet has a diamond-point engraved inscription on the bottom that associates it with the overlords of Deblín, an estate and village near Brno in the Czech Republic.<sup>4</sup> Such Venetian glass must have influenced local Bohemian production. It is also possible that Venetian vessels were exported to Bohemia for use there.

Italianate elements notwithstanding, the pointed prunts indicate a Northern, possibly Bohemian, origin, but south Germany or the Tirol cannot be entirely discounted. Yet the diamond-point engraved design around the lip, composed of a series of reversed leafy "S" forms, contrasts with the strict bilateral symmetry common to Hall work, for example. The engraved design appears to be a simplified version of the white enamel decoration found on several fragments of glass recovered in Prague from the drain of a house at 37 Vikářská Street, facing the northern side of the Cathedral of Saint Vitus.<sup>5</sup> A similar white enamel frieze appears on a *Humpen* dated 1585 and bearing the Bohemian arms of Schönberg and Einsiedel.<sup>6</sup> Some of the excavated Prague fragments are also diamond-point engraved.

The intermingling of Italianate and Northern tastes evident in this vessel resulted in what might be viewed as an overly exuberant density of surface decoration; Bohemian glasshouses, in particular, eventually escaped the constraints of foreign influence and evolved more original vessel designs, drawing on the strengths of local traditions, indigenous ingredients, and developing technologies.<sup>7</sup>



34C Detail of underside.

#### Arмs None.

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MARKS AND INSCRIPTIONS None.

#### Provenance

Robert von Hirsch, Basel (sold, Sotheby's, London, June 22, 1978, lot 256); Ruth Blumka, New York.

### EXHIBITIONS None.

none.

#### BIBLIOGRAPHY

D. Klein and W. Lloyd, eds., *The History of Glass* (London, 1984), p. 74, ill. in color; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 249, no. 211; "Recent Important Acquisitions" 1986, p. 104, no. 22; Bremer-David et al. 1993, p. 254, no. 447; *Masterpieces* 1997, p. 12, no. 5.

#### Condition

The tips of many prunts are broken off. The gilded band below the lip is quite worn.



34D Willkomen Pokal. Austrian façon de Venise, 1500–1550. Formerly Petronell Castle, Austria.



34F Standing cup and cover. Venetian, fifteenth century. London, The British Museum, W-1-38.



34E Artist's rendering of beaker with reconstructed foot.

- 1. It is inscribed Anno 1613 den 12 Aprilis haben beede khay may Matthias und dero Gemahl Anna bey mier Hanns Christoph Unverzagt auss diesem alten Petronellischen Willkhumb im Schloss Petronell getrunken und dadurch die alt herkumne Gerechtigkeyt erhalten und von neven renoviert ("On April 12, 1613, both royal majesties Matthias and his wife, Anna, unabashedly drank out of this old Petronellian welcome glass in my [Hanns Christoph's] domicile, Petronell Castle, and thus preserved and renewed the old, righteous tradition"). The glass is also included in a 1650 inventory of the castle (Strasser and Spiegl 1989, p. 156 and fig. 1c).
- 2. I am grateful to Jutta-Annette Bruhn at the Corning Museum of Glass for bringing this to my attention.
- 3. Waddesdon bequest; see Tait 1979, p. 36, no. 23, and color pl. 2. Another Muranese clear glass of similar form—with colored prunts and cover—is in the Victoria and Albert Museum, London, and dated circa 1500 (Gasparetto 1958, fig. 45). A third Muranese example, dated to the end of the fifteenth century, whose prunts are not colored but are upwardly pointing like those of the Getty piece, is in the Museo Vetrario, Murano (Dorigato 1986, p. 14).
- 4. The inscription reads: *KWALTE HOSPODINA A PITE/2 CZERSTWIHO WINA ZA ZDRAWI/PANŮW Z DEBLINA* ("Praise the Lord and drink cool wine to the health of the masters [lords] of Deblín"; see Tait 1989, p. 36). It is not known when the inscription was added to this goblet.
- 5. Hetteš 1963, pp. 43-45, figs. 16-17.
- 6. Prague, Uměleckoprůmyslové Muzeum, inv. no. 9.892. See von Saldern 1965, p. 162, fig. 294.
- 7. Hetteš 1963, p. 52.



Façon de Venise, possibly the Glashütte of Wolfgang Vitl (active 1534–1540) Austria (Hall); or Italy (Murano) Circa 1534–1536

Free- and mold-blown colorless (slightly gray) glass with gilding and cold-painted decoration HEIGHT: 21.1 cm ( $8\%_{16}$  in.) DIAMETER (at lip): 9.9 cm (3% in.) MAX. DIAMETER: 13 cm (5% in.)

84.dk.546

The very clear glass of this vase is marked with minute embedded impurities. The body of the vessel rests on a moldblown, ribbed knop, which, in turn, is attached to a depressed trumpet foot with a flanged rim, its edge folded under. The ovoid bowl of the vessel rises from a tapered base expanding out until it is drawn in sharply at the shoulder. Separated by a narrow band of gold paint, the tall, cylindrical neck flares out slightly at the lip. The lower body is molded in a series of twenty-four vertical gadroons, the central portion in five horizontal rows of blunted diamond forms, and the shoulder, with another series of vertical gadroons tapering off into the base of the neck. The base of the neck is decorated in gold paint with a cusped border picked out in alternating red and green paint, followed by a gold band, then by a band of star patterns and foliate tendrils in green paint, a broad incised gold band with lozenges of green alternating with two red dots of cold paint and followed by another incised band. On opposite sides over the applied ornament are two heraldic shields (figs. 35a-b).

During the second half of the sixteenth century, moldblown vases of this type appear to have been produced in workshops in the North—some in the Netherlands—as well as in Murano.<sup>1</sup> As the Northern vases undoubtedly relied on a Muranese model and were, in all probability, produced by immigrant Italian craftsmen, it is difficult to differentiate between the Northern and Southern examples.<sup>2</sup> The glass itself has a slight manganese tint and is marked with innumerable minute bubbles and impurities that are characteristics of colorless glass produced in Hall. Furthermore, the gilding and the cold-painted decoration are also typical of





35А-в Details of heraldic shields.





35C Armorial plate. Austrian (Hall), 1536. Diam: 43.2 cm (17 in.). Munich, Bayerisches Nationalmuseum, G 551.

Austrian production from Hall and Innsbruck.<sup>3</sup> More specifically, the design of the painted decoration, particularly the cusped borders and the band of foliate meanders, finds a close (if more refined) parallel in the large reverse foil engraved plate with the arms of Duke Ernst of Bavaria, dated 1536 and attributed to Wolfgang Vitl (fig. 35c).<sup>4</sup>

Wolfgang Vitl's intention in establishing a glasshouse at Hall was to produce colorless glass of quality comparable to that manufactured in Murano and Laibach, and he engaged glassmakers from Italy in order to achieve his goal. To protect his efforts, Vitl succeeded in gaining from Ferdinand I a privilege that granted him sole right to produce colorless glass (referred to as "white" glass: *weisse Glöser machen*) in the Inntal region for fifteen to twenty years.<sup>5</sup> Another document in which the *Landesfürst* intercedes on behalf of Vitl (this time facilitating the importation of soda ash) establishes that Italian artisans were working at the Hall *Glashütte* by 1536.<sup>6</sup> Documents relating to the *Glashütte* at Hall are clear that the production, frequently described as *venedigisch* (Venetian), imitated Muranese glass and was intended to provide less expensive, quality vessels for transalpine clients. As documents establish that molds from Murano were brought to Tirolean and other Northern glasshouses, it is not surprising that vessels of identical form were produced in widely separated sites over the better part of the century.<sup>7</sup> Moreover, while the attribution in this instance is by no means secure, the direct trading links between Hall and both Augsburg and Nuremberg further argue for the Getty vase's origin in the *Glashütte* of Wolfgang Vitl at Hall.

Indeed, the arms in cold and gold paint on the lip of the vessel are those of the Volckamers and Harsdörfers, patrician families of Nuremberg.<sup>8</sup> The only marriage between these two families in the sixteenth century was that of Hans Volckamer, born in 1469, the son of Hans Volckamer and Clara Paumgärtner, to Anna, daughter of Hans Harsdörfer and Margaretha Nützel. Hans Volckamer, who was a *Septemvir* and *Losungsherr*, or tax official, married Anna Harsdörfer, his second wife, on July 14, 1514.<sup>9</sup> As Volckamer died on January 30, 1536, the glass was probably made before that date.<sup>10</sup>

#### Arms

On the rim, in cold paint *per fesse argent a demiwheel gules, and azure a fleur-de-lis argent*; on the opposite side, on a mount or a *triple-turreted tower argent*.

Marks and inscriptions None.

#### PROVENANCE

Wormser, Paris; Ruth and Leopold Blumka, New York.

#### Exhibitions

None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), pp. 250–251, no. 218; "Recent Important Acquisitions" 1986, p. 106, no. 28; Bremer-David et al. 1993, pp. 262–263, no. 461.

#### CONDITION

The vase probably originally included a cover that is missing. There are losses in the cold paint.

- 1. Rückert 1982, vol. 1, p. 66, no. 89, pl. 22, notes that this example does not produce the same fluorescence under ultraviolet light as glass from Murano.
- 2. Theuerkauff-Liederwald 1994 argues that several similarly decorated pieces are attributable to Innsbruck (pp. 240-247).
- 3. Italian glassmakers are recorded in Antwerp; a Sarah Vincx of Antwerp, for example, is known to have married in succession two such Italian artisans, an Ambrosio Mongarda in 1584 and a Philippe Gridofi in 1598 (see *Three Great Centuries* 1958, pp. 72–73, no. 67).
- 4. See Rückert 1982, vol. 1, p. 80, no. 130, pl. 31, color pl. 4.
- 5. Schönherr 1900, p. 420; and Egg 1962, p. 21.
- Jahrbuch der kunsthistorischen Sammlungen in Wien 11, pt. 2: Quellen zur Geschichte der kaiserlichen Haussammlungen und der Kunstbestrebungen des allerdurchlauchtigsten Erzhauses, record nos. 6324 and 6327; and Egg 1962, p. 22.
- A document of January 10, 1577, for example, records the importation of a variety of glassmaking materials from Italy, including bronze molds. See Egg 1962, p. 49.
- 8. J. Siebmacher, Die Wappen des bayerischen Adels, Nürnberg II 1, pt. 1 (Nuremberg, 1857), p. 121, pl. 149.
- 9. J. G. Biedermann, Geschlechtsregister des hochadelichen Patriciats zu Nürnberg (Bayreuth, 1748; reprint Neustadt an der Aisch, 1982). This information was kindly provided by Ottfried Neubecker, Wiesbaden/Stuttgart.
- 10. Anna Harsdörfer died in 1560; it is conceivable that the glass could have been made at any time up until this date. The obvious Muranese influence is better explained by the presence of glassmakers from Murano in Wolfgang Vitl's *Glashütte* at the earlier suggested date.



Façon de Venise, possibly the Glashütte of Wolfgang Vitl (1534–1540) Austria (Hall) Circa 1536–1540

Free-blown colorless (slightly purplish-gray) glass with applied decoration, gilding, and coldpainted decoration HEIGHT (with lid): 19 cm ( $7\frac{1}{2}$  in.) HEIGHT (without lid): 14.2 cm ( $5\frac{9}{16}$  in.) MAX. DIAMETER: 8.5 cm ( $3\frac{9}{16}$  in.)

84.DK.548.1-.2

The glass is marked with a few large, embedded impurities. The waisted cylindrical body is square shouldered, with a short, vertical neck and a sharply everted, gilded lip into which the sleeved lip cover fits. Attached to the convex bottom is a hollow-stem pedestal foot with flanged lip folded under and painted gold. The conical cover has a vertical lip and an applied and cushioned finial of twisted glass. Painted in cold paints and gold, the cover is decorated in a linear, curvilinear, and dot pattern. The body of the vessel is decorated with a gold banding on the lip, a circle-and-dot pattern on the shoulder, and a repeat of the linear, curvilinear, and dot pattern on the upper portion of the body. On the lower portion of the body is a pattern of alternating vertical spikes and floral and linear motifs. A gold band at the joining of the foot is painted with a linear and curvilinear design. One side displays two coats of arms emblazoned; the opposite side displays a roundel of gold and a guilloche border with a haloed Agnus Dei holding the bannered cross (fig. 36a).

This vessel, highly unusual in form, is essentially a covered and footed *albarello*, a type of waisted, cylindrical drug jar commonly made of maiolica. It apparently formed part of a service or suite. A matching covered vessel is now in a private collection in London (fig. 36d), and a beaker with identical decoration is in the Musée de l'Oeuvre de Nôtre-Dame, Strasbourg. The arms are those of the bishopric of Freising and the *Pfalzgräfen bei Rhein*, members of the house of Wittelsbach.<sup>1</sup> On the reverse side, the Agnus Dei alludes to the sacerdotal responsibilities of the bishops. The arms can be identified with one of three brothers who succeeded one another as the *Pfalzgraf bei Rhein* and bishop of Freising.



36A Alternate view.

Rudbrecht the Younger from Amberg was bishop from 1495 to 1498, Philipp from 1499 to 1541, and Heinrich III from 1541 to 1551.<sup>2</sup> Only Philipp, however, was consecrated, and it was probably during his tenure that this and the suite of glass vessels to which it belongs was made.

The slightly purplish-gray cast of the glass and the gold and cold-painted decoration correspond to early glass thought to have been produced at Hall. Furthermore, elements of the decoration—the rope border surmounting a flame-and-ray pattern on the upper portion of the foot, as well as the leaf-and-tendril motif alternating with vertical ribs on the lower section of the body (figs. 36b–c)—relate the Getty vessel more specifically to two nearly identical ewers, now in the Bayerisches Nationalmuseum, Munich. The first of these bears the arms of Duke Wilhelm IV or Ludwig x of Bavaria (fig. 36e);<sup>3</sup> the second bears the arms of Duke Ernst





36B Detail of lower section of body.



36c Detail of foot.



36D Covered vessel. Austrian (Hall), circa 1536–1540. London, Collection of Mrs. H. C. Newgas.



36E Ewer. Austrian (Hall), circa 1535–1538. H: 31.5 cm (12% in.). Munich, Bayerisches Nationalmuseum, G 515.

of Bavaria (1500–1560),<sup>4</sup> the son of Duke Albrecht IV, who, in the course of his varied and somewhat eccentric career, served as canon in Cologne, Würzburg, Eichstätt, and Mainz; administrative prince-bishop of Passau; administrator of the archbishopric of Salzburg; and rector of the University of Ingolstadt. The same arms, with minor variations, appear on a cold-painted and reverse-foil-engraved plate of extraordinary quality, dated 1536, also in the Bayerisches Nationalmuseum, Munich.<sup>5</sup>

An inventory of Duke Ernst's effects compiled after his death refers to "Ain gute Anzal weiss finedische geschmelzte glaser, als kanten flaschen Puckaln Schalen. Unnd andre trinkgläser mit gold Beyerischen und andern wappen auch darauf allerley farben geschmelzt" ("A fair number of white Venetian enameled glasses, such as pots, bottles, goblets, cups, and other drinking glasses with Bavarian and other coats of arms in gold and polychrome enameling").6 The three vessels in Munich are presumed to have been among these glasses.7 The similarity of decoration suggests that the ewers were produced in or around 1536, the year the plate was made, probably in the workshop of Wolfgang Vitl. An Innsbruck record of 1538 refers to a Paul Dax who specialized in "die geschmeltz arbait im glaswerch" ("enamelwork in glass") and was, in another document of the same year, associated with Wolfgang Vitl.8 Although, in the context of the record, this appears to refer to stained-glass painting, other

documents establish Dax as a man of versatile skills,<sup>9</sup> and the possibility that he was also active as a decorator of cold-painted glass cannot be ruled out.<sup>10</sup>

The painting of the Museum's glass draws from the same decorative vocabulary as the Munich ewers but is somewhat reductive and less refined; the patterns of the leaf and tendril are abbreviated as well as reversed, and the dividing verticals at the lower portion of the body-pattern molded and gilded in the Munich examples-are merely painted on. The overall decorative scheme is also at some variance; the bodies of the Munich ewers are divided by applied bands into horizontal zones, each with its own variation of flower-andtendril pattern, while the foot is treated quite separately. In the present vessel, these zones are defined by the repetition of the flame-and-ray motif on the foot, on the shoulder of the vessel, and again on the lid, the insistency of which is leavened by contrasting the intervening decorative elements. The similarities are sufficient, however, to argue that the Getty Pokal and its companion piece in London were indeed produced in the Vitl workshop but decorated by a different hand than that of the Munich pieces. The correspondence in date of the coat of arms and the dated plate with comparable decoration further supports the attribution of the Getty Pokal to the Vitl workshop.

#### Arms

On one side of the central zone of the vessel, canted toward each other, in cold paint below a bishop's miter, *two escutcheons, dexter, or a Moor's head in profile proper crowned and sinister, quarterly one and four sable a lion or crowned gules and two and three lozengy argent and azure.* 

## MARKS AND INSCRIPTIONS None.

#### PROVENANCE

Ruth and Leopold Blumka, New York.

#### Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

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*Three Great Centuries* 1958, no. 59, pp. 68–69; "Acquisitions/ 1984," *GettyMusJ* 13 (1985), p. 251, no. 219; "Recent Important Acquisitions" 1986, p. 107, no. 30; Bremer-David et al. 1993, p. 263, no. 462.

#### CONDITION

The gold is worn away all over. The lip has one small chip. There are losses to the cold paint.

- The heraldic information was kindly provided by Ottfried Neubecker. See J. Siebmacher, Grosses Wappenbuch 8: Die Wappen der Bistümer und Klöster (Nuremberg, 1881; reprint Neustadt an der Aisch, 1976), p. 38, pl. 66; and idem, Grosses und allgemeines Wappenbuch: Erzherzöge und Herzöge (Nuremberg, 1856–1949), pl. 4.
- H. Grote, Stammtafeln (Leipzig, 1887; reprint Wiesbaden, 1983), pp. 76 and 472; and J. Siebmacher, Die Wappen der Bistümer und Klöster 8 (reprint Neustadt an der Aisch, 1976), p. 47, nos. 47, 48.
- 3. Rückert 1982, vol. 1, p. 81, no. 132, pl. 32, color pl. 5.
- 4. Inv. G 517; see Rückert 1982, vol. 1, pp. 80-81, no. 131, pl. 32, fig. 3.
- 5. Inv. G 551; see Rückert 1982, vol. 1, p. 80, no. 130, pl. 31, color pl. 5.
- 6. Rückert 1982, vol. 1, p. 80, no. 130.
- 7. Ibid. Rückert suggests that the reference to Murano glass was merely the untutored opinion of the compiler.
- 8. Zedinek 1927, pp. 99-100.
- For example, in 1555, Paul Dax, as court painter, along with Paul Miller, painted a facade with the arms of Ferdinand I, Austria and the Tirol. See J. Felmayer, ed., Österreiche Kunsttopographie 38: Die profanen Kunstdenkmäler der Stadt Innsbruck 1, Die Kunstdenkmäler der Stadt Innsbruck (Vienna, 1972), pp. 308–309.
- 10. Rückert 1982, vol. 1, pp. 80–81, nos. 130–131, attributes the Munich plate and, tentatively, the two ewers to Dax.



*Façon de Venise*, possibly the *Glashütte* of Wolfgang Vitl (active 1534–1540) or of Sebastian Höchstetter (active 1540–1569) Austria (Hall) 1535–1555

Free- and mold-blown colorless (purplish-gray) glass with gilding HEIGHT: 18.9 cm ( $7\frac{1}{16}$  in.) DIAMETER (at lip): 12.5 cm ( $4\frac{1}{8}$  in.)

#### 84.DK.542

The vessel is made of relatively thin glass marked with minute bubbles and embedded impurities. The flaring funnel bowl is molded in an overall pattern of ten ribs, each pair of which has been pincered together at midpoint to create a series of five wavy "X" marks.<sup>1</sup> The bowl rests on a molded, doublecushioned, oblate knop connected to a hollow trumpet foot with flanged rim folded under. There are traces of gold on the knop; on the base is a small smooth pontil mark.

Funnel-shaped goblets connected by a single, ringcushioned knop to a flared, hollow trumpet foot with an upwardly turned flange—of which numerous and varied examples survive—figured prominently in the early Hall production, both under Vitl and his successor, Sebastian Höchstetter. The form appears to derive from a Venetian type of the later fifteenth or early sixteenth century. Although glasses from Murano that could have served as models were apparenty imported at an early date, immigrant craftsmen would have been capable of producing a variety of vessels.<sup>2</sup>

An early Northern interpretation of this type is depicted—with a knop of exaggerated proportions—in a fresco in the *Trinkstube* (drinking parlor) at Bruneck (fig. 37a) that has been dated 1526;<sup>3</sup> the band of abstracted floral decoration around the lip calls to mind the applied gold decoration characteristic of later Tirolean glasses. The decoration of the Bruneck example appears in a similar form on the knop of a fragmentary goblet, now in Prague. A goblet of the same form, with the arms of Cardinal Matthäus Lang, Archbishop of Salzburg, is an immediate prototype for the Museum's glass (fig. 37b);<sup>4</sup> it dates to 1536-1540; a nearly identical example, in a private collection, is dated to the first half of the sixteenth century.<sup>5</sup> A later date in the case of the present glass is suggested by the pattern-molded knop, a characteristic usually associated with Hall production under the tenure of Sebastian Höchstetter. A similar goblet with a patternmolded knop and smooth vessel wall bears the enameled arms of Michael Ludwig of Freiburg and is dated 1566.<sup>6</sup> Excavations as far afield as Southampton have produced glasses of this type, establishing the existence of a considerable export trade and—in light of the archaeological context—at a date in the first half of the century.<sup>7</sup> In the Museum's example, the diamond pattern of the knop plays against the unusually abstracted ovoid pattern of the vessel body.<sup>8</sup> The extensively applied gold decoration (which survives only in traces on this and most other examples) may allude to forms of metalwork.

#### Arms

None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), pp. 249–250, no. 212; Bremer-David et al. 1993, p. 264, no. 463.

#### Condition

This goblet may have originally included a cover that is now missing. There are some minor surface scratches, and there is cloudy residue on the lower half of the bowl.





- 37A Drinking parlor fresco (detail). Bruneck, Austria, 1526.
  From E. Egg, "Die Glashütten zu Hall und Innsbruck im 16. Jahrhundert," *Tiroler Wirtschaftsstudien* 15 (Innsbruck, 1962), pl. 6.
- 37в Armorial goblet. Austrian (Hall), circa 1536–1540. Vienna, Österreichisches Museum für angewandte Kunst, GL 662.

- For an explanation of this process, see Henkes 1994, pp. 141-144.
- 2. An enameled glass inscribed with Italian verse, long in the possession of the Counts of Künigl at Ehrenburg Castle near Bruneck, dates to the late fifteenth century and is convincingly said to be an early Venetian import. This glass is now in Innsbruck, Tiroler Landesmuseum Ferdinandeum, inv. GL 101. See Egg 1962, p. 16, and pl. 2, fig. 3.
- 3. Egg 1962, pp. 13, 17, 26, 38, and pl. 6, fig. 11. Without compelling reason, Egg asserts that the type is Venetian.
- 4. See Egg 1962, pp. 25, 28, and pl. 111, fig. 5.
- 5. E. Baumgartner, Verre de Venise: Trésors inédits, exh. cat. (Musée Ariana, Geneva, 1995), no. 179.
- 6. Nuremberg, Germanisches Nationalmuseum, inv. GL 149. See von Saldern 1965, p. 41, fig. 19.
- R. J. Charleston, "The Glass," in C. Platt et al., Excavations in Medieval Southampton, 1953–1969, vol. 2, The Finds (Leicester, 1975), p. 207, note 32; p. 220, fig. 223, no. 1525; excavated at Quilter's Vault, pit B4. For further examples of Hall glass, see p. 220, fig. 223, no. 1527; and p. 222, fig. 224, no. 1554.
- A nearly identical glass is in the Kunstgewerbemuseum of Cologne, inv. F 33. See Klesse and Reineking-von Bock 1973, p. 153, no. 302.





Façon de Venise, possibly the Glashütte of Sebastian Höchstetter (active 1540–1569) Austria (Hall) 1540–1560

Free- and mold-blown colorless (purplish-gray) glass with gilding HEIGHT: 17.6 cm ( $6^{15}/_{16}$  in.) DIAMETER (at lip): 13.3 cm ( $5^{1/4}$  in.)

84.dk.543

Made of light, thin glass marked with some impurities and numerous small and several large bubbles, this vessel consists of a flaring funnel bowl molded in an all-over pattern of circular depressions resting on a double-cushioned diamondpattern molded knop with traces of gold attached to a hollow trumpet foot with flanged rim folded under. There is a large defect in the foot formed of residual glass. The small projecting pontil mark is tinged with metallic residue.

Like no. 37, this goblet is of a vessel type introduced to Hall production under Wolfgang Vitl and then continued by his successor, Sebastian Höchstetter. The nubbed diamond pattern is common to numerous surviving examples. Compared to no. 37, the body of this goblet tapers more precipitously to a narrow end and the foot rises higher, placing the larger knop closer to the vessel's midpoint (in terms of height). The resulting impression is of a stem intervening between the foot and the body, altering proportions somewhat and compromising overall balance. To judge from the unusually broad mouth, the cover (with which these vessels were often fitted; see fig. 38a) must have approached ungainly proportions.<sup>1</sup>

The molded surface decoration of this glass emulates a Northern pattern-molded vessel, such as the so-called *Warzenbecher* (wart beakers). In an effort to establish an export market, the Hall *Glashütte* increasingly catered to Germanic taste. Fragments of Hall glasses with similarly pattern-molded vessel walls have been excavated in Southampton, suggesting that Höchstetter may have had more farreaching market ambitions.<sup>2</sup>

Arms None.



38A Covered goblet. Austrian (Hall), sixteenth century. H: 30.9 cm (12½ in.). London, The British Museum, S.560.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ*, 13 (1985), p. 250, no. 213; Bremer-David et al. 1993, p. 264, no. 464.

#### Condition

The condition of the vessel is excellent. The rim of the foot shows some wear.

- An order placed by Archduke Ferdinand II with the Hall *Glashütte* under Sebastian Höchstetter specifies over a dozen different types of table glasses, all but one of which came with covers. See Egg 1962, p. 37.
- R. Charleston, "The Glass," in *Excavations in Medieval Southampton*, vol. 2, *The Finds*, p. 207, note 32, fig. 224; p. 222, no. 1554. Another example of a contemporary Hall goblet is decorated with applied prunts (Vienna, Museum für angewandte Kunst, inv. F 163), common in *Waldgläser* but unusual in Tirolean production, which sought to compete with Murano *cristallo*.





Façon de Venise, possibly the Glashütte of Sebastian Höchstetter (active 1540–1569) Austria (Hall) 1540–1560

Free- and mold-blown colorless (purplish-gray) glass with gilding and cold-painted and applied decoration HEIGHT: 25.4 cm (10 in.) DIAMETER (at lip): 16.3 cm (6<sup>7</sup>/<sub>16</sub> in.)

84.dk.544

This thin, clear glass with a purplish tinge is marked with a few embedded impurities and numerous minute bubbles. The flaring funnel bowl ends in a slightly everted lip. The entire body surface is molded in a pattern of drop-shaped protrusions. Traces of gold and of white and green cold paint are evident on the surfaces. Milled glass thread with traces of gold leaf is attached to the base of the bowl, which is joined to a merese and then to a hollow stem with a double-cushioned hollow and flattened knop. The attached flat, circular foot has a flanged rim turned under. On the bottom is a sharp, projecting pontil mark.

Like the two preceding goblets, this goblet is a type introduced to Hall production under Vitl and continued by his successor, Höchstetter. However, the general form of this vessel, particularly the tubular terminus of the vessel body decorated with the applied and milled glass trail and joined to a hollow stemmed foot, harks back to the goblets of colored glass with enameled-and-gilt scale patterns that are typical of Murano production in the late fifteenth and early sixteenth centuries. The flat foot and the hollow stemworked to simulate a cushioned, though somewhat compressed, knop-are forms that appear in *filigrana* glasses of the mid-sixteenth century.<sup>1</sup> As noted in no. 35, the patternmolded vessel wall intermingles Germanic with cisalpine decorative fashion. The traces of gold paint, which are too residual to make it possible to "read" the design, raise a question as to what degree all these glasses were so decorated.

Arms None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

Exhibitions None.

#### BIBLIOGRAPHY

Possibly E. Barrington Haynes, *Glass through the Ages*, revised ed. (Harmondsworth, 1948), pl. 16c, where an uncredited glass is reproduced that is identical to, possibly the same as, the Getty piece; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 250, no. 216; Bremer-David et al. 1993, p. 264, no. 465.

#### CONDITION

This vessel may have included a cover that is now missing. There is a small chip in the lip. The foot is abraded.

#### Notes

1. For a very similar treatment of the stem, see Tait 1979, p. 70, no. 94.





Façon de Venise, possibly the Glashütte of Sebastian Höchstetter (active 1540–1569) Austria (Hall) 1550–1560

Free- and mold-blown colorless (purplish-gray) glass with gilt applied decoration HEIGHT: 38.3 cm (15 in.) DIAMETER (at lip): 16.2 cm (6<sup>3</sup>/<sub>8</sub> in.)

#### 84.DK.545

This relatively thin glass is marked with numerous minute bubbles and some embedded impurities. The tall trumpet bowl flares out to a wide mouth that is attached directly to a hollow knop; the knop is embellished with gold and is in a raised diamond and "pigeon eye" pattern that is, in turn, attached to a depressed trumpet foot with flanged rim folded under. At the spreading out of the flare is an encircling double band of trailing above and below three staggered raspberry prunts (fig. 40a). The entire motif is repeated below. On the bottom is a slightly inset pontil mark with sharp edges.

The attenuated proportions of this funnel-shaped glass (or Trichterpokal) may have been influenced by Muranese or Murano-influenced glasses with flared or trumpet mouths.1 Unlike the Venetian analogues, the lip of this glass was clearly fashioned for drinking. Both the volume of the vessel and the applied raspberry prunts and trailed glass decoration are, however, entirely in the Germanic taste. In effect, this glass is a version of a Passglas. The hollow, diamond-pattern knop and the manganese cast of the glass are typical of Hall manufacture. The more Germanic style of vessel may correspond to Sebastian Höchstetter's later tenure, when the Hall Glashütte became increasingly geared to its export markets in southern Germany, particularly Ulm, Kempten, Augsburg, and Nuremberg.<sup>2</sup> This trade was substantially in window glass, but glass vessels were an important part of the production as well. A single order placed by Archduke Ferdinand 11 in 1558 amounted to 325 drinking vessels of various shapes and sizes.3 While the descriptions of glass in this document generally cannot be identified with extant examples, certain types, such as the "bairische doppelglas, bedeckht" ("covered Bavarian double-glass"), suggest a clear effort to satisfy the



40A Detail of prunts.

south German market. The body walls of Hall glasses produced under Sebastian Höchstetter were usually pattern molded, unless the walls were intended to bear an enameled coat of arms.<sup>4</sup>

Arms None.

Marks and inscriptions None.

#### Provenance

Hans Wilzcek, Burg Kreuzenstein, Austria; Ruth and Leopold Blumka, New York.

Exhibitions None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 250, no. 217; "Recent Important Acquisitions" 1986, p. 106, no. 27; Bremer-David et al. 1993, p. 265, no. 466.

#### Condition

The vessel was probably originally fitted with a cover, now missing. There are traces of gold around the hollow knop and in one of the prunts.

- 1. For a late-sixteenth-century example with a prominent hollow knop, see Rückert 1982, vol. 1, p. 54, no. 45, pl. 11.
- 2. See Egg 1962, p. 33.
- 3. Ibid., p. 37.
- 4. An interesting exception is a goblet in the von Strasser Collection, Vienna, on which the arms are painted on the foot, leaving the body wall completely undecorated (Strasser and Spiegl 1989, pp. 166–167, no. 8).





Façon de Venise, possibly the Glashütte of Sebastian Höchstetter (active 1540–1569) Austria (Hall) 1550–1554

Free-blown colorless (slightly gray) glass with diamond-point engraving, gilding, and enamel decoration HEIGHT (with lid): 37 cm (14% in.) HEIGHT (without lid): 28.5 cm (11% in.) DIAMETER (at lip): 12.4 cm (4% in.)

84.DK.515.1-.2

This thick-walled, conical footed vessel is marked with numerous minute bubbles and some embedded impurities. Below the lip of the beaker is a decorative band comprised of a double row of white enameled dots arranged to form a continuous series of triangles, followed by a wide band of applied gold leaf incised with a scale pattern, in each element of which is a blue enamel dot forming overall a series of diagonal rows and, finally, another row of dots repeating the triangular arrangement. The vessel rests on an applied, flared pedestal foot, flanged and folded under. The flattened bottom of the vessel bears a flush but creviced pontil mark. The underside edge of the foot is abraded. The vessel wall, slightly above center, is emblazoned with an enameled coat of arms that is repeated on the opposite side (fig. 41a). The remaining undecorated surface has been diamond-point engraved with numerous names, initials, and dates. The cover-of a slightly green-tinged glass, marked with numerous small bubbles and embedded impurities-is unengraved and, other than for traces of gilding, undecorated. The partially molded knop also has traces of gilding, in this case rather copper-colored.

This outsized covered beaker, of relatively simple enamel and gilded decoration, gains considerable interest from the numerous names and dates engraved in diamond point across its surface, expanding its function as a welcome glass to a sort of guestbook for distinguished visitors. The coats of arms, rendered in enamel on both sides of the vessel, are those of Trapp family forebears who had been established in the Tirol since the fifteenth century.<sup>1</sup> As the arms were elaborated in 1555 to incorporate the inherited arms and



41A Detail of coat of arms.



41B-C Details of engraved inscription.



helms of the Counts von Matsch, a terminus ante quem for the vessel—rarely possible with Tirolean Renaissance glass is established.<sup>2</sup>

The names and personal devices engraved on the vessel date from 1559 to 1629, although the isolated date 1734 appears as well. Among the more notable inscriptions are: Ferdinandus (fig. 41b), Ferdinand II, archduke of Tirol, the uncle of Maximilian I, who died in 1595; and 15 Militemus 94 16. Novembris Maximilianus ("November 16, 1594; Maximilian, who served in the military") (fig. 41c), referring to Archduke Maximilian, the nephew and successor of Ferdinand, who in that year had campaigned with the Deutschordensritter against the Turks and besieged the Turkish stronghold at Petrinie in Croatia. Other inscriptions, in chronological order, include: 1559 with the unidentified device of the letter B under a crown; 1564 Ul. v. Pranckh, probably Ulrich von Pranckh, son of Eustachius von Pranckh and Barbara Pfannauer, a Styrian noble family; 1573 Ferdinand Rüdt von Khollenburg, who married Esther Sturgkh in 1579; V.V.V. Wolff Mager von Fuchstatt, the son of Erasmus Mager and Veronica von Lind, married in 1574 to Elizabeth Paradeiser and builder of Schloss Mageregg near Klagenfurt; 1577 Frantz Formentini; 1584 . . . von Rottall d. Elter; 1584 . . . von Stadl der Elter; 1584 . . . Westernach O T, probably the Deutschordensritter Eustach von Westernach, who was frequently in the service of Maximilian; 1584 G.V.B. Andre Herr von Auersperg und Herr zu Schennbergk, a formidable soldier, known as the "Christian Achilles" and "terrorizer of the Turks," who was the victor at Sisak and died in 1595; 1585 C.M.S. Reinprecht Herr von Scherffenwerg, son of Ulrich von Scherffenberg and Johanna von Polheim, who died in 1596; 15 V 87 EAP Bernhard Graf zu Ortenburg, grandson of the notorious Gabriel von Salamanca; 1587 Caspar von Gleysbach; 15 S 94 W V V V Wilhelm von Oppersdorff, Wilhelm von Oppersdorff (1554-1594), who was Freiherr von Aich und Friedstein and who in 1594 was in the entourage of Archduke Maximilian, by which time he had been a member of the royal household of the king of Poland and participated in the rout at Pitschen; 1599 Hans Frh. Stadl auf Radkherspurg; and 1629 Caspar von Lamberg G. H. V. T.<sup>3</sup>

The fact that many of the engraved names are not Tirolean raises the question of the provenance of the glass. The Trapp family originated in Steiermark, and a collateral branch of the family is purported to have been living in Südsteiermark during the sixteenth century.<sup>4</sup> This accords with the Gleichenberg Castle provenance, as the Trautmannsdorf family also originated in Steiermark and then established itself in the Tirol,<sup>5</sup> but a connection between the two families has not been established.

While several other diamond-point engraved welcome glasses have survived, all postdate the Museum's example. A glass formerly in Burg Kreuzenstein, Austria, is inscribed Carolus Fuchs anno 1674 den 5 Februari ausgesoffen, Ferdinand Carolus Fuchs 1674 5 Februari ausgesoffen ("On February 5, 1674, Ferdinand Carolus Fuchs [written twice] was drunk") and Andreas Carolus Fuchs anno 1716.<sup>6</sup> Another in the Veste Riegersburg in Steiermark bears the inscription anno 1635



41D Mounted covered beaker. German, before 1574. Corning, New York, The Corning Museum of Glass, 50.3.1.

den 6 April hat sich das Sauff angehebt und Ale Tag ein Rausch geben bis auf den 26. dtto ("On April 6, 1635, the drinking began, and every day [afterward] there was drunkenness until the twenty-sixth");7 if such excessive use of these glasses for the consumption of alcohol was customary, it is not difficult to understand why so few of these glasses have survived. An inscription on a glass at one time in Petronell Castle, Austria, states that on April 13, 1613, King Matthias and Queen Anna had auss diesem alten Petronellischen Willkhumb . . . getrunken ("drank from this old Petronellian welcome glass").8 A mounted beaker engraved with names and dates from 1574 to 1706 is in the Corning Museum of Glass (fig. 41d);<sup>9</sup> one in the form of a Pokal with dates from 1586 to 1590 is in the Kunstgewerbemuseum, Berlin;10 and a covered Pokal in the Stift Klosterneuburg, Vienna, with numerous inscriptions, is dated to circa 1550.11

The conical form of the vessel—somewhat irregular in profile and gently flared toward the mouth—and the flared, slightly depressed, hollow foot with an outwardly folded and flattened rim and the slightly gray cast of the glass itself, all indicate Tirolean manufacture. This glass is one of a group of such vessels that are decorated with the enameled arms of south German and Austrian families, in particular those of Augsburg and the Tirol. In the belief that fired enamel was not produced in Hall or Innsbruck, scholars have argued about the origins of these pieces, generally looking to Murano or southern Germany.<sup>12</sup> Only recently have scholars reevaluated the evidence and come to the conclusion that this group of glasses with fired enameled arms was most probably produced in Tirolean glasshouses.<sup>13</sup> Typically, the decoration of these glasses consists of an ornamental band in the Venetian style just below the lip of the vessel—composed, generally, of two single rows of white dots bordering a central section of gilded decoration usually engraved in a fish-scale pattern and arrangements of colored enamel dots—as well as a substantial cobalt-blue glass trail, often gilded, around the join between the body and the foot.<sup>14</sup>

Dated examples range from the 1540s well into the seventeenth century, with the majority falling between 1550 and 1590. Among the examples that can be included in this group are a Stangenglas dated 1554 with the arms of Joachim von Ortenburg and Ursula von Fugger-Kirchberg of Augsburg, whose family interests in the Tirol were, in part, looked after by the Höchstetters;15 one dated 1556 and emblazoned with the arms of Johannes III, Count of Ortenburg and Euphemia Countess of Spaur, whose families originated in Kärnten and Tirol, respectively; 16 one with the arms of David Hörmann or Hermann-who was involved with Fugger interests in the Tirol and who loaned money to Ferdinand 11-and his wife, Susanne Paller, both of Augsburg, who married in 1570;17 one with the arms of the cardinal Christoph von Madrutz, Bishop of Trient, who died in 1578;18 and another dated 1580 and emblazoned with the arms of Susanna Klamerin, born Klainhansin or Kleinhans, member of a Tirolean family involved with the Habsburgs since the time of Maximilian 1.19

In 1558, Ferdinand II, then residing in Prague, ordered from the Höchstetter glasshouse in Hall a "schon geschmelzt glesern trinkgeschirr" ("nicely enameled glass drinking set");<sup>20</sup> the Museum's welcome beaker appears to be the same as the one itemized as "ein willkom, bedeckht" ("a covered welcome glass") priced at one *Gulden*.<sup>21</sup> This vessel, which Ferdinand II himself signed, provides further evidence of early enameled glass production in Hall.

#### Arms

On the center of the vessel wall and repeated on the opposite side, in enamel, argent a fesse dancetty gules; crest on a helm argent a coronet or and a panache of peacock's plumes argent and gules.

#### MARKS AND INSCRIPTIONS

Over the vessel wall the names or initials of various individuals and dates, engraved in diamond point.

#### Provenance

Count von Trautmannstorff, Gleichenberg Castle near Graz, Austria; E. and A. Silberman, Vienna; Oscar Bondy, Vienna (acquired in 1932); Ruth and Leopold Blumka, New York.

#### Exhibitions

The Secular Spirit: Life and Art at the End of the Middle Ages, The Metropolitan Museum of Art, The Cloisters, New York, 1975.

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Dr. O. G. Trapp, "Die Geschichte eines Trappisches Willkommglas," *Der Schlern* 40 (1966), pp. 120–122; *The Secular Spirit* 1975, p. 277, no. 279; Rückert 1982, vol. 1, p. 79; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 250, no. 214; "Recent Important Acquisitions" 1986, p. 104, no. 21; Bremer-David et al. 1993, p. 265, no. 467; *Masterpieces* 1997, p. 13, no. 6.

#### CONDITION

The surface of the vessel is abraded in areas. The enameled arms are slightly darkened by pitting and surface accretion. The gilding on the lip and the cover knop are substantially worn. The foot is quite worn.

- This family has nothing to do with the Trapp family—first ennobled in the nineteenth century—that has become well known through the musical play and subsequent film *The Sound* of Music. See T. de Renesse, Dictionnaire des figures héraldiques 5 (Brussels, 1900), p. 286; J. Siebmacher, Wappenbuch 4, pt. 1 (Nuremberg, 1857; reprint Neustadt an der Aisch, 1962), vol. 28, p. 17, pl. 20; E. H. Kneschke, Neues allgemeines Deutsches Adels-Lexicon 9 (1859–1870; reprint New York, 1973), p. 253–254. Heraldic information was kindly provided by Ottfried Neudecker.
- 2. Trapp 1966, p. 120, note 4.
- 3. Ibid., pp. 121–122.
- 4. Ibid., p. 122.
- 5. In a letter to a Mr. Neuberg, dated June 28, 1932, Oscar Bondy states that the sellers (E. and A. Silberman) had informed him that the glass came from the Count von Trautmannstorff of Gleichenberg Castle near Graz (Steiermark). See also O. Titan von Hefner, J. Siebmacher's grosses und allgemeines Wappenbuch 4, pt. I, Grafschaft Tirol (Nuremberg, 1857), pp. 16–17.
- 6. See Walcher-Molthein 1926, fig. 43.
- 7. Trapp 1966, p. 122.
- 8. Von Strausser and Spiegl 1989, p. 156 and fig. 1c; see also no. 34 in the present volume.
- 9. The Corning Museum of Glass, Corning, New York, inv. 50.3.1.
- 10. Dreier 1989, no. 25.
- 11. Strasser and Spiegl 1989, p. 9, fig. 1.
- 12. Robert Schmidt believed that those glasses dating prior to 1550 were Muranese, while those after were probably south German ([1911], pp. 282ff., and [1922], pp. 175ff.). Ludwig F. Fuchs argues a south German origin for all these armorial glasses ([1937/1938], pp. 219ff.). Axel von Saldern attributed all the glasses to southern Germany, which he took to include the "central western part of the Hapsburg Empire" ([1965], p. 39).
- 13. Klesse and von Saldern 1978, p. 309, no. 262; and Rückert 1982, vol. 1, p. 79.
- 14. For references to many examples in this group, see von Saldern 1965, p. 44, note 101; and Rückert 1982, p. 84, no. 140, pl. 35, color pl. 7.
- Hamburg, Museum f
  ür Kunst und Gewerbe, inv. 1920.154 (von Saldern 1995, no. 42, p. 108, color pl. 41).
- 16. Munich, Bayerisches Nationalmuseum, inv. G 115 (Rückert 1982, vol. 1, pp. 82–83, no. 136, pl. 34, color pl. 7).
- Hannover, Kestner-Museum, inv. 1928,254 (C. Mosel, Bildkataloge des Kestner-Museums Hannover II: Die Glas-Sammlung [Hanover, 1957], p. 48, no. 11; Egg 1962, p. 86, no. 18, and pl. 32, fig. 73).
- Vienna, Museum f
  ür angewandte Kunst, inv. no. F 158 (Egg 1962, p. 86, no. 17, and pl. 31, fig. 72).
- Zurich, Fritz Biemann Collection (Klesse and von Saldern 1978, p. 309, no. 262).
- 20. Egg 1962, p. 38.
- 21. Ibid., p. 37.

## Stemmed Covered Filigrana Cup

Façon de Venise, Germany; or Italy (Murano); the mounts, Germany (Augsburg) Late sixteenth or early seventeenth century; the mounts, 1615–1625

Free- and mold-blown colorless glass with opaque white (*lattimo*) canes and silver-gilt mounts

HEIGHT (with lid): 21.1 cm ( $8\frac{5}{16}$  in.) HEIGHT (without lid): 14. 5 cm ( $5\frac{11}{16}$  in.) DIAMETER (at lip): 5.8 cm ( $2\frac{14}{16}$  in.)

84.DK.514.1-2

The vessel is made of *vetro a retorti* and *vetro a fili* with a number of embedded impurities, and it is fitted with silver-gilt mounts. The contoured body expands considerably at the center, rising to a short, vertical walled neck above and pinching in below, then bulging out again into a smaller cushion base. An attached hollow stem in the shape of a bulbous ovoid knop connects the body to a compressed and cushioned trumpet foot. A tooled silver-gilt mount, scalloped along the inner edge, encircles the foot. Just below the knop is a silver-gilt ring. Above the knop, supporting the bowl, is a silver-gilt mount decorated with cast appliqués and three scroll supports resting on the shoulder of the knop (fig. 42a). The broad lip mount is decorated with a cast pattern and a lower edge of pendentive frets. The vessel has a conical cover with a hollow, spherical finial. The cover is fitted with a silver-gilt mount, worked similarly to the lip mount. The cover is hinged and has a vertical lip that sleeves into the lip mount of the vessel. The finial is surmounted by a silver-gilt female figure holding a shield on each arm (fig. 42b), both shields are engraved with heraldic devices. The shield on her right is emblazoned with an arcing fish; that on her left, *per pale a fish and two addorsed fish.*<sup>1</sup> There is a slight pontil mark.

The closest comparable example to the Getty vessel is a similarly formed and mounted piece in the Lehman Collection of the Metropolitan Museum of Art, New York, where it is described as Venetian (fig. 42d).<sup>2</sup> However, fine quality *vetro a filigrana* glasses were also made in the North, where skilled craftsmen, often Italian, were, by the second half of the sixteenth century, active in such centers as Kassel in Germany and Antwerp in the Netherlands.<sup>3</sup>The fact that the mounts of this vessel appear integral to and contemporary with the vessel further suggets Northern manufacture, perhaps in Augsburg. The precise localization of the Getty glass must, nonetheless, remain an open question (see also no. 44).

The lip of the cover bears the maker's mark of Mattäus Wallbaum (fig. 42c), who was born in Kiel in 1554, moved to Augsburg in 1578, became a master in 1590, and died there on January 10, 1632.<sup>4</sup> Wallbaum fabricated elaborate mounts



42A Detail of mount above the knop.





42B Detail of finial.



42C Detail of lip with maker's mark and punch mark.



42D Covered goblet. Probably Venetian, mid-sixteenth century. Mounts: probably Augsburg, circa 1550–1600. New York, The Metropolitan Museum of Art, 1975.1.1212a–b, The Robert Lehman Collection.

for a variety of objects, including house altars, writing boxes, jewelry cases, reliquaries, osculatories, ostensories, and clocks, but he seems to have made mounts for very few glass vessels.<sup>5</sup> To the right of the maker's mark appears to be the punchmark for the city of Augsburg for the years 1615–1625 (fig. 42c), which would seem to indicate either that it was mounted decades after it was made or that vessels of this type continued to be made well into the seventeenth century.<sup>6</sup> A vessel of similar shape but with a vertical rather than a spiral *a retorti* pattern, now in the British Museum, London (fig. 42e), gives an impression of the appearance of this vessel unmounted.

Arms None.

#### MARKS AND INSCRIPTIONS

On the edge of the lip mount, stamped, a pinecone for the city of Augsburg and a tree on a mount, the maker's mark of Mattäus Wallbaum.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.



42E Standing cup and cover. Venetian, mid-sixteenth century.
 H: 24.5 cm (9<sup>5</sup>/<sub>8</sub> in.). London, The British Museum, S.643.

#### BIBLIOGRAPHY

Three Great Centuries 1958, pp. 76-77, no. 73; "Acquisitions/ 1984," GettyMusJ 13 (1985), p. 246, no. 190; "Recent Important Acquisitions" 1986, p. 102-103, no. 15; Lanmon 1993, no. 54, fig. 9; Bremer-David et al. 1993, p. 219, no. 384; Masterpieces 1997, p. 32, no. 23.

#### Condition

There are four slight blowing faults in the glass.

- 1. Jörg Rasmussen suggested one of the shields might represent the arms of the Muffel or Imhof families (private conversation, 1985).
- 2. Lanmon 1993, pp. 174-177, no. 63.
- 3. For other, comparable examples that have been called "Venetian or *façon de Venise*," see Dreier 1989, nos. 46-49; Ritsema van Eck and Zijlstra-Zweens 1993, nos. 75-82, 85; and Theuerkauff-Liederwald 1994, nos. 174-177, 191, leaving open the question of localization. See also no. 44.
- M. Rosenberg, Der Goldschmiede Merzeichen (Frankfurt, 1922), vol. 1, pp. 64–67, no. 428; and H. Seling, Die Kunst der Augsburger Goldschmiede 1529–1868, vol. 3 (Munich, 1980), pp. 111–113, no. 1060.
- 5. Another covered beaker in *vetro a reticello*, also with mounts by Mathäus Wallbaum, is in the Dettmers Collection, Bremen. See von Saldern 1968, p. 30, no. 68.
- 6. Seling 1980, p. 19, similar to nos. 42, 42 supp., 43, and 44.



Façon de Venise, Austria (Innsbruck) 1570–1591

Colorless (grayish-brown) glass with diamondpoint engraving, gilding (including silver), and cold-painted decoration HEIGHT: 16 cm ( $6\frac{5}{16}$  in.) DIAMETER (at lip): 40.4 cm ( $15^{15}/_{16}$  in.)

84.DK.653

This unusually large bowl is made of clear, remarkably thin glass. The rim is folded under and the bowl is supported by a slightly green attached foot ring. The surface decoration, from the rim to the foot, consists of engraved swags and palmettes shaded in parallel lines, rope banding, a banded pattern of gold and green separated by now-corroded silver verticals, rope banding, and double arcading with pendant palmettes supported by columns with oblique fluting and volute capitals. Under the arcades, suspended by sashes, are swags of foliage and pearlike fruit in green and gold cold paint upon which red, black, and white goldfinches perch (fig. 43a). Below are a rope banding and a bar-and-lozenge band in cold paint, followed by swags and palmettes pointing downward. A few traces of gilding and silver remain on the rim. On the bottom are traces of red and green paint under gilding in the form of a bird and palmettes against a green background. The painting on the wall of the vessel is applied to the outer surface in one layer so that it can be read from either side. The vessel wall is uneven, with several depressions and bulges due to the sagging of the large bowl while it was annealing.

The Getty diamond-point-engraved and cold-painted bowl is the largest and best preserved of only four recorded examples. One (fig. 43b)—now in Glasgow—is engraved with the same arcaded, though somewhat simplified, design; the palmette frieze below the lip is rendered in gold rather than diamond point, and the coldpainted decoration—surviving only in traces—is executed in a more limited palette.<sup>1</sup> Another example in the Victoria and Albert Museum (fig. 43c), attributed to Hall or Innsbruck and dated 1570–1600, is of quite a different shape—deeper, with an everted lip extended to a narrow lip—and is decorated with diamond-



43A Detail of engraved arcades with cold painting.

point-engraved vertical straps of palmette motif alternating with cold paint, now largely lost.<sup>2</sup> The third example is in a private collection in Geneva.<sup>3</sup>

There is evidence that in 1549 the Muranese craftsman Vincenzo di Angelo dal Gallo was given the exclusive privilege to practice the art of diamond-point engraving on glass, a skill he had developed some fifteen years earlier. The use of this engraved decoration spread rapidly in the North, almost exclusively by means of immigrant Muranese or Muranesetrained craftsmen.<sup>4</sup> Johannes Mathesius records in his 1562 Sarepta sermon that "Demand allerley laubwerck und schöne Züg" ("diamond-engraved foliate decoration and beautiful strokes") was being executed at Spessart.5 The technique had been introduced to both Hall and Innsbruck by around 1570 under the auspices of Archduke Ferdinand 11.6 The origin of these bowls is difficult to establish, as many of the decorative motifs, such as the palmette frieze, appear to have been used in both Hall and Innsbruck. An inventory compiled upon Ferdinand II's death in 1596 itemizes several large and small glasses with "vergoltem Zugwerk" ("gilt-engraved decoration") that were in the Paradeisstube of the Hofburg at Innsbruck.7 Further connecting the Museum's bowl with the royal glasshouse at Innsbruck is a vase-shaped covered goblet, perhaps the same type of vessel listed in the 1558 order placed by Ferdinand 11 as "wie Pirn, alle bedeckt" ("pear-shaped glasses with lids").<sup>8</sup> The goblet is engraved in the identical column-and-swag pattern, with the double-headed eagle of Austria depicted in gold within every other arcade (fig. 43d).9




43B Bowl. Austrian (Innsbruck), circa 1570-1590. Diam: 36 cm (14⅓ in.). Glasgow Museums: Art Gallery and Museum, Kelvingrove, 1894-185b.



43C Bowl. Austrian (Hall or Innsbruck), 1570–1600. Diam: 32.7 cm (12% in.). London, The Victoria and Albert Museum, C.600–1922.

The same type of engraved decoration is found on three other vessels also produced in Innsbruck.<sup>10</sup> The painted birds appear to be a unique motif.

Arms None.

MARKS AND INSCRIPTIONS None.

# PROVENANCE

Magdelene Sharpe Erskine, Dunimarle Castle, Culross, Fife, Scotland (sold, Sotheby's, London, June 26, 1978, lot 26); [David, Inc., Vaduz].

EXHIBITIONS None.

#### BIBLIOGRAPHY

B. J. R. Blench, letter to the editor, *JGS* 26 (1984), pp. 155–157; "Acquisitions/1984," *GettyMusJ*13 (1985), p. 250, no.215;



43D Goblet. Austrian (probably Innsbruck), 1570–1591.
Diam: 35.8 cm (14<sup>1</sup>/<sub>2</sub> in.). Munich, Bayerisches Nationalmuseum, G 516.

"Recent Important Acquisitions" 1986, p. 107, no. 29; Bremer-David et al. 1993, p. 266, no. 468.

# Condition

The gold is very worn, leaving only traces of the decoration. Much of the cold paint has worn off, rendering some of the decoration difficult to decipher. There is considerable wear on the bottom of the foot ring.

- 1. See B. J. R. Blench, letter the to editor, *JGS* 26 (1984), pp. 155–157, figs. 2–3, 5.
- 2. See Egg 1962, fig. 52.
- 3. Baumgartner 1995, no. 184.
- 4. Three Great Centuries 1958, p. 23; and Egg 1962, p. 55.
- Sarepta oder Bergpostill, fifteenth sermon (Nuremberg, 1562),
   p. 277v; also published separately in *Die Predigt vom Glasmachen* (Munich, 1927), p. 27v. See above, introduction to chapter 1, note 11.
- 6. Schmidt 1922, p. 121; and Egg 1962, pp. 55-57.
- 7. Egg 1962, p. 51.
- 8. Ibid., p. 37.
- 9. See Rückert 1982, vol. 1, p. 87, no. 147, pl. 39.
- Victoria and Albert Museum, London, inv. 1836–1855, 690–1884, and 5326–1901.



Façon de Venise, Germany; or Italy (Murano); the mounts, Germany (Augsburg) 1550–1600; the mounts, circa 1685

Free- and mold-blown colorless glass with opaque white (*lattimo*) canes, applied decoration, and silver-gilt mounts HEIGHT (with lid): 30.5 cm (12 in.)HEIGHT (without lid):  $24.2 \text{ cm} (9^{\frac{1}{2}} \text{ in.})$ DIAMETER (at base): 10.1 cm (4 in.)

84.DK.513.1-.2

The body of this tall, cylindrical vessel, made of *vetro a reticello*, tapers only slightly toward the base, where it is attached to a pedestal foot of the same diameter. The lip of the vessel is fitted with a silver-gilt mount, cast and chased with geometric fretwork and incised with an inscription (fig. 44a). A linked silver-gilt mount of addorsed scrolls and acorns is fitted around the joining of the foot (fig. 44b). A mount with a scalloped inner edge is attached to the rim of the foot. The vessel is fitted with a silver-gilt cover with repoussé decoration consisting of pomegranates within linked baroque framings and three cast and applied lion's-head masks (fig. 44d). The whole is surmounted by a finial in the form of Judith holding a sword in one hand and the head of Holofernes in the other (fig. 44c). There is a moderately spiked kick with a slightly recessed rough, sharp, concave pontil mark.

Although the fine quality of the *vetro a reticello* is consistent with Muranese production, suggesting that the vessel was exported and mounted later, the form is unmistakably Germanic. Given that many Venetians were working in German glasshouses by the second half of the sixteenth century, it is possible that this fine example was produced by talented craftsmen, possibly Venetians, north of the Alps. Similar *vetro a retorti Stangengläser* attributed to "Venice or *façon de Venise*" are in the collections of the Veste Coburg<sup>1</sup> and the Metropolitan Museum of Art, New York.<sup>2</sup> A *vetro a reticello Stangenglas* with a gilt-bronze mount replacing what was probably a broken foot is in the Österreiches Museum für angewandte Kunst, Vienna, where it is identified as Venetian.<sup>3</sup> Precise localization of the Getty piece must remain an open question (see also no. 42). The lip of the vessel bears the maker's mark of Martin Bair (fig. 44e), who was born in Augsburg around 1676, applied for his *Meisterrecht* in 1698, was married in 1699 and again in 1709, and died in 1732.<sup>4</sup> The few recorded pieces that bear his mark are all household objects, such as drinking vessels and hand mirrors. Also on the lip and to the right of the maker's mark is the Augsburg punch mark similar to that for the year 1685, making this one of Bair's youthful works.<sup>5</sup>

Arms None.

# MARKS AND INSCRIPTIONS

On the lip mount, engraved, SEI WILLKUMEN MEIN HAUS— SEZ AN UND TRINK AUS—TRAG FRID NIT HINAUS ("Welcome to my house—put me to your lips and drink me dry—don't take contentment away") (see fig. 44a). On the brim of the cover, stamped, a pinecone for the city of Augsburg and the monogram *MB*, the maker's mark of Martin Bair (Augsburg, circa 1676–1734).

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 246, no. 193; Bremer-David et al. 1993, p. 220, no. 382.

#### Condition

Below the lip mount are a vertical and two diagonal cracks. In the foot there are two cracks: a diagonal one that runs about halfway around the base and another, shorter one.

- 1. Theuerkauff-Liederwald 1994, p. 175, no. 164.
- Lanmon 1993, pp. 156–158, no. 57, including a listing of thirteen comparable examples of which six are reproduced.
- 3. Schlosser et al. 1951, pl. 41.
- 4. Seling 1980, pp. 287–288, no. 1921.
- 5. Ibid., p. 22, similar to no. 136.





44A Detail of lip mount with inscription.



44B Detail of mount at joining of foot.



44c Detail of finial.



44D Detail of lid.



44E Detail of lip with maker's mark and punch mark.



*Façon de Venise*, possibly France 1550–1600

Free-blown dichroic (Prussian blue to smoky brown) glass with pewter mounts HEIGHT: 33.5 cm ( $13\frac{3}{16}$  in.) WIDTH: 22.8 cm ( $8\frac{7}{8}$  in.)

84.dk.519

This flask is made of dichroic glass, opaque with surface light, translucent with back light. Its gourd-shaped body of compressed depth with a short, narrow neck rests on a pewter trumpet foot decorated in an overall pattern of chased strapwork (fig. 45a). Vertical pewter bandings on the obverse, reverse, and sides of the vessel are attached to an encircling band at the base of the neck, all decorated in chased strapwork. Side bands rise to the mount encircling the mouth (fig. 45b), similarly decorated on the lower band and fitted with a threaded flat cap. Cast and chased salamanders with elongated tails and necks attached to side bands rise up to the base of the stopper mount (fig. 45c).

Dichroic or dichromatic glass is so called because it displays two different colors: one appears when light shines through the object and the other appears when light is reflected off the object. This property is sometimes achieved by adding small quantities of colloidal gold or silver to the glass batch.<sup>1</sup> Dichroic glass was first produced by Roman glassmakers in the fourth century A.D., with the Lycurgus Cup at the British Museum being the most famous example.<sup>2</sup> Ancient dichroic glass changes from a dull to a brighter color in transmitted light, whereas later, and rarer, Venetian and façon de Venise dichroic glass most often changes from almost opaque blue to a reddish or smoky-brown color.<sup>3</sup> Ancient and later dichroic glass was likely prized for its resemblance to natural stones, both in its coloration and luminescence. The mutability of its colors must also have been a source of amazement.

Although of uncertain origin, the pilgrim-flask form of this piece is thought to be characteristically French.<sup>4</sup> Moreover, the mounts on this flask display the type of shallow interlace patterning that is associated with the designs of François



45A Detail of foot.



45B Side view.





45c Detail of neck with salamander decoration.



45D Pilgrim flask. French, fifteenth century. H: 32 cm (12% in.). Paris, Musée du Louvre, MR 2404. © Photo R.M.N.

Briot (circa 1550–circa 1616), a Mannerist metalworker from Lorraine who frequently worked in pewter.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 253, no. 229; "Recent Important Acquisitions" 1986, p. 103, no. 18.

#### CONDITION

Some minor scratches and imperfections in the glass are evident. There is some minor damage to the mount. The mount may have been reattached to the base; there is recent solder on the underside of the base. The stopper is missing.

#### Notes

- 1. Through treatment of the resulting glass matrix with heat and reducing agents, tiny crystals of the metals can be caused to grow in the glass, resulting in the light-scattering effect of dichroic vessels. See R. H. Brill, "The Chemistry of the Lycurgus Cup," in *Proceedings of the Seventh International Congress on Glass, Comtes Rendus* II (Brussels, 1965), Section B (paper no. 223), p. 5.
- 2. See Tait 1991, pp. 92–93, pls. 116–117.
- 3. The so-called Fairfax Cup in the Victoria and Albert Museum, London, is the earliest example of this later Venetian type; see Barovier Mentasti 1982b, pp. 82–83, no. 72.
- 4. Honey 1946, p. 68.
- In the Victoria and Albert Museum, London, inv. 5700-1859. This piece is described but not illustrated in Honey 1946, p. 68.
- 6. See Bellanger 1988, p. 376; and in Ennès 1982, pp. 18-19.
- See U. Arnold, Museum Grünes Gewölbe, Dresden (Munich, 1986), pp. 20-21.
- 8. Tait 1979, pp. 106–108, no. 172.

# Supporting localization of this flask to France, two similarly mounted and shaped pilgrim flasks—one of dichroic glass and the other of opaque blue glass—display elements that strongly suggest French manufacture: the mounts of

the dichroic piece include a medallion of Limoges enamel,<sup>5</sup> and those of the opaque blue flask include a French enamel plaque (fig. 45d).<sup>6</sup> A similar flask dated around 1600 and identified as Venetian with south German mounts is in the collection of the Grünes Gewölbe, Dresden.<sup>7</sup> Another similar flask, of opal glass with pewter mounts and a bust medallion, is in the British Museum, London, where it is identified as Italian, possibly from the second half of the sixteenth century.<sup>8</sup>

# Arms None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

# EXHIBITIONS None.



*Façon de Venise*, probably the Netherlands 1550–1625

Free-blown colorless (slightly gray) glass with opaque white (*lattimo*) canes HEIGHT: 13.9 cm ( $5\frac{7}{16}$  in.) DIAMETER (at lip): 10.1 cm (4 in.)

84.dk.658

Made of *vetro a fili*, this cylindrical beaker flares out slightly at the mouth. The broad, parallel canes of *lattimo* run vertically. The thick foot ring of colorless glass is trailed on. There is a slight kick and a pontil mark with a jagged edge.

Typical of Netherlandish production are vessels of refined but forthright profiles, with decoration clearly dependent on Muranese models and techniques. Excavations in Delft and elsewhere have established for the first time that a considerable glass industry was operative throughout the Netherlands in the sixteenth and seventeenth centuries and that a wide variety of glass vessels was produced; one example is identical to this glass except that every fifth vertical *lattimo* thread substitutes *vetro a reticello* for the *vetro a fili*.<sup>1</sup> Another example, also with vertical *vetro a fili*, is attributed to the Netherlands and dated to the first quarter of the seventeenth century.<sup>2</sup> Fragments of related glasses have been excavated at Vredenburg Castle in Utrecht, built by Charles v and others in the Postelstraat, 's-Hertogenbosch,<sup>3</sup> and the Waterlooplein excavation, Amsterdam.

This form of vessel was executed in a variety of techniques, including *vetro a reticello* and spiraling *vetro a fili*, sometimes inserting a blue or other colored cane at regular intervals and otherwise articulating the vessel walls with pattern molding or applied molded raspberry prunts or animal heads.<sup>4</sup> The Museum's example, a third smaller than most glasses of this shape, achieves refinement through its absolute simplicity. Arms None.

MARKS AND INSCRIPTIONS None.

PROVENANCE [David, Inc., Vaduz].

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 255, no. 244; Bremer-David et al. 1993, p. 278, no. 485.

#### Condition

There is considerable abrasion on the foot. Otherwise the beaker is in excellent condition.

- 1. Theuerkauff-Liederwald 1985, p. 247, fig. 5. For another example, see Chambon 1955, pl. XVII, no. 54.
- 2. Henkes 1994, p. 146, no. 33.4.
- E. M. Stern and P. C. Ritsema van Eck in Kloek et al. 1986, p. 290, no. 291.
- 4. See, for example, Tait 1979, p. 41, fig. 33; p. 67, fig. 85; no. 123, pl. 12; or Tait 1991, p. 171, figs. 217–218.





Façon de Venise, possibly southern Netherlands 1560–1625

Free- and mold-blown colorless (slightly yellowish-brown) glass HEIGHT: 21.8 cm (8% in.)DIAMETER (at lip): 14 cm (5% in.)

84.dk.549

The glass of this vessel displays numerous minute bubbles and impurities. It has a broad bowl of very thin glass with sharply sloping walls. The convex bottom is patterned with a series of vertical molded ribs, and numerous fine threads of colorless glass are trailed around the center section. The bowl is attached to a hollow stem with a small, hollow-ribbed, oblate-molded knop and a large, hollow-shouldered knop below, with two molded lion's-head masks alternating with a swag-and-star pattern. This in turn is attached to a flat, circular foot with the rim folded up.

This extremely thin-walled goblet belongs to a relatively large group of vessels, all of which share the identical moldblown, elongated knop with lion's-head masks between festoons surmounted with gadroons (fig. 47a). Greater height is required for compositional balance in vessels of this type; the stem is therefore lengthened by the addition of a moldblown, ribbed, oblate knop. The stem usually attaches to the bowl and the foot with mereses, and the mold-blown elements are usually gilded.

Акмs None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

### EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.



47A Goblet. Netherlandish, second half of the sixteenth century. Amsterdam, Rijksmuseum, N.M. 10754-32.

# BIBLIOGRAPHY

*Three Great Centuries* 1958, pp. 104–105, no. 115; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 256, no. 248; Bremer-David et al. 1993, p. 276, no. 481.

# Condition

There is some wear on the base of the foot. Otherwise the piece is in excellent condition.





Façon de Venise, the Netherlands Late sixteenth or early seventeenth century

Free-blown colorless (slightly green) glass with gilding and applied decoration HEIGHT: 21.4 cm ( $8\frac{7}{16}$  in.) DIAMETER (at lip): 14.1 cm ( $5\frac{9}{16}$  in.)

84.dk.564

This tall, cylindrical beaker flares slightly at the mouth. The entire surface is textured with fissures. Around the lip are traces of gilding. Three molded and applied lion's-head masks with traces of gilding alternating with small, applied prunts twisted in a snail-shell form are attached equidistantly around the middle of the body. A thick foot ring is trailed on and milled. There is a slight kick with rectangular projecting pontil mark.

This example of ice-glass was made by plunging a parison (or partly inflated gather of glass) into cold water so that the outer surface would shatter while the inner surface remained slightly molten; the whole was then reheated and worked. The entire process could be repeated several times until the vessel was shaped to its final form. As the vessel expanded with blowing, the shattered fragments separated, creating small rough projections. An alternative and less risky method, exemplified by the Museum's situla (no. 28), was to roll the hot vessel over a marver covered with glass sherds that were then separated by continued blowing.

Comparable examples have been excavated in at least three different sites in the Netherlands.<sup>1</sup>

Акмs None.

MARKS AND INSCRIPTIONS None.

PROVENANCE Rainer Zietz, London; Ruth Blumka, New York.

EXHIBITIONS None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 252, no. 225; Ritsema van Eck and Zijlstra-Zweens 1993, no. 104 (note); Bremer-David et al. 1993, pp. 276–277, no. 482.

# Condition

The base of the foot is heavily worn. A crack approximately 11 cm  $(4\frac{3}{8}$  in.) long in the central zone runs through one of the prunts.

#### Notes

1. See Dreier 1989, no. 58; and Ritsema van Eck 1995, nos. 104–108.





*Façon de Venise*, possibly the Netherlands Late sixteenth or early seventeenth century

Free- and mold-blown light cobalt-blue glass HEIGHT: 21.8 cm (8% in.) DIAMETER (at lip): 12.9 cm ( $5^{\frac{1}{16}}$  in.)

84.dk.517

This vessel is made of very thin, translucent glass with innumerable minute bubbles and embedded impurities. It has a large, conical bowl with a wide mouth and tapered convex base attached by a merese to a hollow stem with a cushioned and attenuated ovoid knop, which is reeded and twisted. The whole rests on an attached flat circular foot with the rim folded up. The body of the vessel is molded in an overall raised honeycomb pattern. There is a slightly protruding rough pontil mark.

The raised lozenge pattern can be found on glasses from Murano of the second half of the fifteenth century.<sup>1</sup> A similar type of decoration—called "nipt diamond waies," a term used by the English glassmaker George Ravenscroft in a 1677 advertisement for his lead glass—was made by pincering together semimolten molded ribs at regular intervals, creating a diamond pattern.

Fifteenth-century Venetian examples seem to have been exported, and several are found in the Netherlands. A covered violet goblet, identified as Venetian but probably Netherlandish and dating to about 1600, is close in both form and pattern (fig. 49a).<sup>2</sup> This violet glass, in turn, compares closely in design and profile to the so-called Malplaquet Glass, which, by tradition, seems also to be of Netherlandish production.<sup>3</sup> A sixteenth-century violet goblet with "nipt-diamond waies" was formerly in the Lanna Collection, Prague,<sup>4</sup> and another violet, lozenge-patterned example, probably dating to the eighteenth or nineteenth century and identified as Venetian or *façon de Venise*, is in the Corning Museum of Glass.<sup>5</sup> Other goblets of similar form and decoration are described as Netherlandish *à la façon de Venise* of the early seventeenth century.<sup>6</sup>

Акмs None.

MARKS AND INSCRIPTIONS None.



49A Covered goblet. Venetian or Netherlandish, late sixteenth century. H: 31.7 cm (12½ in.). London, The British Museum, MLA S.740.

#### PROVENANCE

Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

# EXHIBITIONS

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

# BIBLIOGRAPHY

*Three Great Centuries* 1958, pp. 102–103, no. 112; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 238; Bremer-David et al. 1993, p. 277, no. 483.

# CONDITION

There is some slight wear on the base of the foot. Otherwise the piece is in excellent condition.

- 1. See Dorigato 1986, p. 10.
- 2. See Tait 1979, p. 111, no. 182.
- 3. R. J. Charleston, "Three Glasses of Welcome," Annales du 5<sup>e</sup> Congrès de l'Association pour l'Histoire du Verre, Prague, 1970 (Liège, 1972), pp. 217–224, fig. 3; this glass is of patternmolded ice-glass.
- 4. Sammlung des Freiherren Adalbert von Lanna, pt. 2, sale cat., Rudolph Lepke, Berlin, March 21–28, 1911, lot 728.
- 5. Inv. 54.3.125; Three Great Centuries 1958, pp. 102–103, no. 113.
- 6. Henkes 1994, pp. 211–215.





Façon de Venise, the Netherlands or Germany Late sixteenth or early seventeenth century

Free-blown colorless (slightly pink) glass with diamond-point engraving HEIGHT: 31.5 cm ( $12\frac{3}{8}$  in.) DIAMETER (at lip): 5.8 cm ( $2\frac{1}{4}$  in.)

84.dk.516

Made of extremely thin glass with some bubbles and embedded impurities, this tall conical flute is attached by a merese to a hollow stem of striated and twisted glass worked into a knot pattern over an annular knop (fig. 50a). This, in turn, is attached to a flat circular foot with its rim folded under. The bowl is diamond-point engraved with tendrils, leaves, and bunches of grapes against an overall trellis pattern. This arbor is populated with birds, a peacock, dragonflies, and other insects (figs. 50b-c). There is a slight pontil mark.

The Museum's flute is one of the very few recorded glasses distinguished by their unusual reeded and twisted



50A Detail of knop.



50B-C Details of engraved decoration.







50D Flute glass. Possibly German, late sixteenth century. H: 31 cm (12¼ in.). Kassel, Staatliche Museen, Hessisches Landesmuseum, Glas 147.



50E "Serpent-stemmed glass." Probably Netherlandish, first half of the seventeenth century. Rotterdam, Museum Boymansvan Beuningen, F10.096.



50F Flute glass. Netherlandish, seventeenth century. Cambridge, Fitzwilliam Museum, C.129.1912.



506 Wineglass. Venetian, seventeenth century. H: 14.7 cm (5% in.). London, The British Museum, S.452.



- 50H Left: Flute glass. Venetian, mid-seventeenth century. Private collection.
- 501 Below: Goblet. Façon de Venise, mid-seventeenth century. Private collection.



openwork knops. Another vessel (fig. 50d)-identical but without the engraved decoration-has long been associated with an inventory entry that describes it as a Trinckpfeife (drinking pipe or flute); an old parchment notation was also thought to have described this glass as "das erste Glass so in Cassel von Christallinen-Arbeit gemacht. Actum den 22 Juny Anno 1583" ("the first glass made by the soda-glass works in Kassel, June 22, 1583").1 This association, however, is evidently erroneous, occasioned by a confusion over reversed references; the first glass "uff venedische Ahrt" ("in the Venetian manner") produced at the Kassel glasshouse was apparently a covered goblet in *filigrana* glass.<sup>2</sup> This well-documented glasshouse, which was established at the instigation of Count Wilhelm IV of Hesse, was operated by Muranese glassblowers largely recruited from the Netherlands, and it produced a variety of glasses in the Venetian style for a period of less than two years to satisfy the demands of a largely aristocratic clientele.<sup>3</sup>

The only glass of known provenance with the same type of stem, although the knotted element is somewhat larger, was excavated in Rotterdam and is probably of Netherlandish fabrication (fig. 50e).<sup>4</sup> Because numerous glass masters from Murano had been established in the Netherlands since the middle of the sixteenth century and were subsequently recruited by other glasshouses, including the one at Kassel, the origins of individual examples are difficult to determine. The same may be said of several examples with similar stems, including one in the Kasseler Landesmuseum; a nearly identical flute at the Fitzwilliam Museum, Cambridge (fig. 50f);<sup>5</sup> a wineglass in the British Museum (fig. 50g); and a flute and goblet exhibited in 1991 at the Nieuwe Kerk, Amsterdam (figs. 50h-i).6 A similar flute with openwork stem was presumably owned by the painter Gerrit Willemsz. Heda, as it appears in at least two of his still lifes (fig. 50j).7 The skillful diamond-point engraving on the Museum's flute, which merges the free meanders of the grapevine with the strong symmetry of the trellis, appears on vessels of apparent Netherlandish origin.8 Given the mobility of artists, however, this fact does not establish the origins of the glass conclusively; diamond-point engraving, which may well have originated in Murano, is, for example, a technique mentioned in the Kassel inventories.9

Arms None.

MARKS AND INSCRIPTIONS None.



50J GERRIT WILLEMSZ. HEDA (Netherlandish, circa 1620–1702). Still Life with Ham (detail), mid-seventeenth century. Washington, D.C., The National Gallery of Art, 1985.16.1, Gift of John S. Thacher. The flute glass in the background has an openwork knop similar to the one on the Museum's glass.

### Provenance

Karl Ruhmann, Vienna; A. Vecht, Amsterdam; Ruth and Leopold Blumka, New York.

# Exhibitions

None.

# BIBLIOGRAPHY

I. Schlosser, Das altes Glas: Ein Handbuch für Sammler und Liebhaber (Brunswick, 1956), p. 210, pl. 161; "Acquisitions/ 1984," GettyMusJ 13 (1985), p. 255, no. 245; "Recent Important Acquisitions" 1986, p. 108, no. 34; Bremer-David et al. 1993, p. 277, no. 484.

# CONDITION

At the base of the vessel body, in the center, is a running crack approximately 5 cm (2 in.) in length. The base of the foot is abraded.

- 1. Killing 1927, p. 155.
- 2. See F.-A. Dreier, *Glaskunst in Hessen-Kassel* (Kassel, 1969), n.p. (fourth page of third section).
- 3. Killing 1927, pp. 74, 76–78.
- 4. See Henkes 1994, p. 220, no. 48.1.
- 5. See J. D. Bourriau et al., *Glass at the Fitzwilliam Museum* (Cambridge, 1978), p. 71, no. 154.
- 6. F. Laméris and K. Laméris, Venetiaans en Facon de Venise Glas, 1500-1700, exh. cat. (Amsterdam, 1991), pp. 70-71 and 120-121, nos. 39 and 117.
- See A. K. Wheelock, Jr., Dutch Paintings of the Seventeenth Century, National Gallery of Art, Washington, D.C. (New York and Oxford, 1995), pp. 96–98, reproduced on p. 97 and fig. 1.
- Examples of Netherlandish flutes with similar trellis-patterned engraving include one in the Rijksmuseum, Amsterdam, attributed to Willem Mooleyser of Rotterdam (circa 1640–1700); see Ritsema van Eck 1995, no. 38.
- 9. See Killing 1927, p. 23.



*Façon de Venise*, possibly Spain Seventeenth or eighteenth century

Free-blown amber glass with opaque white (*lattimo*) threads and applied decoration DIAMETER (at terminus): 6.1 cm (2% in.) LENGTH (along the piece): 57.3 cm (22% in.)

84. дк. 565. 1-. 2

This horn is made of clear, heavy glass with combed and marvered *lattimo* threads. The long and gently curved horn tapers to a mouthpiece at one end and an unflared trumpet at the other. The trumpet end is decorated with several trailed circuits of a *lattimo* thread. A contemporaneous leather case accompanies the horn, although, because of distortion to the leather, the horn no longer fits into its case.

The shape of glass horns derives from actual animal horns that were used as drinking vessels (probably as far back as prehistoric times) and that were themselves the basis for the ancient rhytons of the first century A.D. Glass horns were used for drinking as early as the third century in Germany and from the sixth century in Italy.<sup>1</sup>

Originally an ancient technique, combed *lattimo* thread decoration reappears on late-sixteenth- and early-seventeenth-century Venetian glass and, subsequently, on *façon de Venise* glass from many centers.<sup>2</sup> The rather roughly executed combed-thread decoration on colored glass is common in Spain,<sup>3</sup> as is the dark color of the glass.<sup>4</sup>

Similarly shaped glass horns, although often of clear glass and with applied decoration, were produced in the Netherlands,<sup>5</sup> and other examples are attributed to Venice,<sup>6</sup> France,<sup>7</sup> and Germany.<sup>8</sup>

It is unclear whether the Getty example was used as a drinking vessel or as a musical instrument. The 1597 inventory of Philip II mentions "deux cornets de voirre avec leur custode de cuir noir" ("two glass horns with their leather cases"), using the word for a musical horn ("cornet") rather than that for an animal's horn.<sup>9</sup> Musical instruments bells as well as horns—were occasionally made of glass, although these fragile objects were probably used more for ornament than for actually producing sounds.<sup>10</sup> According to one source, musical horns in glass were produced in



51A Detail of lattimo threads.

fifteenth- and sixteenth-century France for sale at pilgrimage sites, where, accompanied by leather carrying-cases, they would have been hung around a pilgrim's neck or waist.<sup>11</sup>

Given the small aperture at the tip (rather than the mouthpiece-like opening of this example), the majority of such horns must have been intended as drinking vessels. An example in the British Museum was certainly used for drinking, since its mount is inscribed  $QVI \times TIENT \times Y \times BOIT \times A \times 1599 \times$  ("He who holds [this will] drink [from it], the year 1599").<sup>12</sup> In addition, an eighteenth-century inventory of Het Loo identifies a "drinking glass in the form of Saint Hubert's horn."<sup>13</sup> The catalogue of the Ernesto Wolf Collection, São Paolo, includes a *Trinkhorn Scherzgefäss* (drinking horn joke glass).<sup>14</sup>

Arмs None.

MARKS AND INSCRIPTIONS None.



PROVENANCE Ruth Blumka, New York.

Exhibitions None.

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"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 252, no. 228; Bremer-David et al. 1993, p. 222, no. 389.

#### CONDITION

There are two chips in the lip of the bell and several tiny surface scratches. The leather case is stiff, and the interior fabric is mostly missing, as are the ties that served to bind the two halves. The case has lost its shape over time.

- For example, a Frankish glass drinking horn of the fifth century A.D. with trailed decoration, in the British Museum, London (Slade Bequest MLA 73, 5-2, 212); see also Ritsema van Eck and Zijlstra-Zweens 1993, p. 206, no. 330.
- See, for example, Schmidt 1922, fig. 68; Tait 1979, pp. 83-84, nos. 125-133; Dorigato 1986, p. 35; and Ritsema van Eck 1995, p. 50, no. 59.
- See Theuerkauff-Liederwald 1994, p. 111, no. 51; pp. 381–382, no. 411; pp. 388–389, nos. 420, 423; and Frothingham 1963, figs. 23A, 23B, 38B, 65B.

- See O. E. Mikhailova, Spanish Glass in the Hermitage (St. Petersburg, 1970), esp. nos. 75–76, 78, 104–111, 124, 134, 138–139, 144; and C. Cerutti and A. Dorigato, Il vetro dal Rinascimento al Novecento (Novara, 1992), pp. 38–39.
- See Chambon 1955, p. 314, no. 43. See also F. Hudwig, "Cristalleyne Drinkhoorns," *Oud Holland* 43 (1926), pp. 273–276; and Ritsema van Eck and Zijlstra-Zweens 1993, pp. 206–207, nos. 330–333; and pp. 208–209, nos. 334–337, which may or may not have been used as drinking vessels.
- 6. Klesse and Mayr 1987, no. 16; and Lanmon 1993, pp. 152–155, no. 56, where other examples from various centers are listed.
- 7. Bellanger 1988, p. 316, bottom of page.
- 8. Klesse and Reineking-von Bock 1973, nos. 254–255.
- 9. Bellanger 1988, p. 316.
- 10. See, for example, glass trumpets that are, apparently, functioning musical instruments, in Bellanger 1988, p. 309.
- 11. Ibid., p. 316.
- 12. D. B. Harden et al., *Masterpieces of Glass* (London, 1968), p. 141, no. 184.
- 13. Inventarissen van de inboedels in de verblijven van de Oranjes en daarmede gelijk te stellen stukken 2 (The Hague, 1974–1976),
  p. 620; as cited in Ritsema van Eck and Zijlstra-Zweens 1993,
  p. 206, no. 330.
- 14. Klesse and Mayr 1987, no. 16; this example is decorated with *lattimo* canes (filigree glass) and includes its own fitted leather case.



# CHAPTER 4

# Central and Northern European Enameled and Engraved Glass

ohemian glassmakers practiced both enamel decoration and diamond-point engraving on glass at relatively early dates. Glass with enamel decoration was being produced by the mid-sixteenth century at Chřibská in northern Bohemian glasshouses that were in operation as early as 1414,<sup>1</sup> and the technique of diamondpoint engraving reached Bohemia soon after it originated in Murano around the same time. In general, though, the glass industry in Bohemia, in large part because of Bohemia's relative geographic isolation, developed somewhat more slowly than in the rest of central Europe.

By the early sixteenth century, however, expanding trade created new local and export markets and induced the Bohemian glass industry to meet its growing domestic demands as well as to establish foreign markets. Bohemian glassmakers realized that, to compete successfully, the quality of their glass had to meet the highest international standard, namely, glass of Italian quality. In 1557, Vilém von Rožmberk permitted two Italian craftsmen to establish a glasshouse on his southern Bohemian estate;<sup>2</sup> the introduction of this imported competition compelled domestic producers to raise the quality of their glass and to accommodate a taste for the Venetian style by combining it with local stylistic traditions.

By the second half of the sixteenth century, the Bohemian glass industry had sufficiently raised its standards of production to penetrate foreign markets with commercial window glass and mirrors as well as glass vessels.<sup>3</sup> The successful entry of the Bohemian glass industry in the international market is evidenced, for example, by the fact that as early as the 1570s, the Tirolean glass manufacturer Sebastian Höchstetter complained on several occasions about the incursion of Bohemian and Franconian goods.<sup>4</sup>

While all essential ingredients for glassmaking were abundant in Bohemia, in order to compete successfully with Venetian and Venetian-style glass, certain ingredients, particularly fine-quality ash, had to be imported. Bohemian glasshouses consequently imported ash from Genoa—the closest source—even though it required long and arduous overland transportation that added considerably to the expense. Furthermore, these shipments were vulnerable to seizure by the glass manufacturers in Hall, Innsbruck, and Vienna, who, by the latter part of the sixteenth century, were beginning to feel the effects of Bohemia's increasingly successful competition in the export market. Economic survival rested on the elimination of certain defects in Bohemian glass—defects that are evident in the Getty hunt goblet (see no. 53)—and that were clearly enumerated in 1586 by the bishop of Olomouc, who ordered a shipment of *façon de Venise* glass, emphasizing that it must be "very clear, without sand, defects, striae, and bubbles;"<sup>5</sup> thus Bohemian glassmakers were impelled to learn methods of decoloration that did not require the addition of imported ash.

A goblet (see no. 33), a beaker (see no. 55), and two tall, cylindrical glasses (see nos. 56-57)—called *Stangengläser*—in the Museum's collection belong to a large group of similar vessels that have coats of arms of south German, Austrian, and Bohemian familes. The origin of these vessels has been long disputed. Robert Schmidt argued that examples with dates in the first half of the sixteenth century were from Murano, while many later ones might be Northern.<sup>6</sup> Ludwig Fuchs argued strenuously that all *Stangengläser* with Germanic arms were Northern and attempted to establish groupings by regional origin.<sup>7</sup> Axel von Saldern conceded that many examples dating after the middle of the sixteenth century were probably south German, a geographical term that he used in the broader sense to include the Habsburgian lands of Austria and Bohemia.<sup>8</sup>

The earliest of these glasses include one dated 1527 that bears arms tentatively identified as those of Michael Fürsich. Once doubted, the date on this piece has been accepted in the more recent literature.<sup>9</sup> Another example of this early group is undated but is usually placed between 1530 and 1540 and bears the arms of the Nuremburg families of Hölzel and Hirschvogel.<sup>10</sup> These glasses are very different from Muranese examples of similar date made for the Northern export market. Such Muranese vessels include the footed goblet with the arms of Bohemia-Hungary that was made for Matthias Corvinus around 1480–1490<sup>11</sup> and a pair of cups with handles dating to the early sixteenth century with the arms of the Austrian families von Stortzing, Söll von Aichberg, Reich von Reichenstein, and von Rost.<sup>12</sup> In comparison to these and even less magnificent pieces, the decoration of the Northern examples is less opulent and less ambitious, the arms essentially being the only ornamentation.

Later *Stangengläser* from the middle of the sixteenth into the early seventeenth century retain the same character. *Stangengläser* with dates in the 1540s and 1550s—such as one with the arms of Goder von Kriestorf, dated 1541,<sup>13</sup> or another with the arms of Joachim von Ortenburg and and his wife, Ursula von Fugger-Kirchberg, dated 1554<sup>14</sup>—are decorated equally simply. The lip decoration consists of a row of white dots and a rather unevenly painted enamel line on each side of the central band, while the decoration on the rest of the vessel consists of a coat of arms embellished with a few restrained flourishes of scrollwork. This same formula, restrained and simple, endured well into the seventeenth century and contrasts dramatically with the florid, extravagant decoration of some Muranese heraldic vessels.

The form of the Stangenglas is essentially a Northern one; there does not seem to be a single example of this form of vessel that bears an Italian coat of arms or that can be ascribed with certainty to an Italian glasshouse. Indeed, there is little to suggest that after the first decade or two of the sixteenth century-the very point at which Germanic enameled vessels began to appear in numbers-enamel work of any sort was made in Murano specifically for export. The often-cited example of the covered beaker with the arms of Alfonso II, Duke of Ferrara and Modena, and his wife, Barbara, which must be dated 1565-1572, would appear to be a rare exception. The 1603 Stangenglas with the Italianized inscription Roccho Grasl<sup>15</sup> is extremely close to another with the trademark of Michael Merz surrounded by a wreath, which Rainer Rückert convincingly ascribes to the Tirol.<sup>16</sup> These vessels probably have far more to do with Italian craftsmen working in the North than with enamel production in Italy.

Glasshouses are documented in Vienna by 1486,<sup>17</sup> in Hall by 1536, in Bohemia by 1557, in Innsbruck by 1570, and in Bavaria no later than 1584. In 1548, Augustin Hirschvogel received payment in Vienna for painting heraldic vessels, and another Nuremberg painter, Albrecht Glockenthon, is recorded in 1553 as having enameled two glass vessels with the coats of arms of Augsburg merchants.<sup>18</sup> By 1562, Johannes Mathesius's observation had already appeared in print: "etliche haben an die weisse gleser garben allerley bildwerck unn Spruche im kulhofen brennen lassen/wie man auch grosser Herrn contrafactur unnd wappen auff scheiber memalet" ("some have had all kinds of images and sayings burnt into the white [i.e., clear] glass in the cooling oven, just as one paints images and coats of arms of great gentlemen on [window] panes").<sup>19</sup> The clear distinction made in a 1571 inventory of Heronymus Imhoff between "Geschmelzt schaln unnd Gleszer" ("enameled cups and glasses") and "desgleichen venedische gleser" ("likewise enameled Venetian glasses") suggests that one could readily differentiate between the two. <sup>20</sup> The question in the end is not whether these enameled glasses were made in the North but whether extant examples can be ascribed more specifically to regional and local workshops.

By the turn of the seventeenth century, a new type of glass embellishment was being developed by Caspar Lehmann (1570-1622) and others in Munich and Prague; it later moved to Nuremberg.<sup>21</sup> Lehmann adapted for use on glass vessels and plaques the rotating grinding-wheel normally employed for lapidary cutting. His Tiefschnitt or "low relief" intaglio engraving involved grinding the decoration below the surface of the glass. The ground surface could then be polished or left matte. By the second half of the century, new formulas for glass that included chalk and lead were being developed in Bohemia and England; the result was glass vessels that were thicker and more highly refractive. These new types of glass made possible the technique of Hochschnitt or "high relief" engraving. Like cameo cutting, this process involved cutting away around a given design, leaving that design in relief. It became popular and was widely practiced in Bohemia, Silesia, and Germany, where a new type of potash-lime glass was well suited to this sculptural glass decoration (see no. 68). By this time the influence of Venetian styles was waning for a variety of reasons, one being that thin Venetian soda glass was unsuitable for relief engraving.

Diamond-point engraving of decoration on glass vessels was a technique that enjoyed considerable currency during the late sixteenth and seventeenth centuries, particularly throughout central Europe, in the Netherlands, and in Italy. Dutch glass decorators had excelled in diamond-point engraving since the turn of the seventeenth century (see no. 50); techniques such as calligraphic wheel-engraving (see no. 67) and pictorial stippeling became Dutch specialities. Dutch exponents of these practices normally embellished vessels with engraving alone. In central Europe, however, the engraving of linear patterns in diamond point usually appeared through the gilded zones of enameled vessels. The direct engraving of the glass surface, whether in combination with enameled decoration (see no. 34) or as the sole decorative scheme, is far less frequently encountered. The four Museum glasses from the latter category are exceptional examples of the diamond-point engraver's art (see nos. 61-64), and those that combine the more usual arcading and vegetal decoration with complex figural programs (nos. 61-62) are of great rarity.

Very little is known of the tools employed: a tool for scoring flat glass to "cut" pieces out of a sheet was in use by the middle of the sixteenth century; such a hard metal point at first may have been used for engraving until diamondpoint styluses were developed.<sup>22</sup> In Murano, the technique has traditionally been said to have originated with one Vincenzo di Angelo dal Gallo, although we know only that he was active already in 1534 and, in 1549, the Venetian senate granted him the privilege to practice diamond-point engraving.<sup>23</sup> The establishment of the glasshouses at Hall and Innsbruck was effected largely through the expertise of immigrant Muranese craftsmen who, no doubt, were responsible for the introduction of the diamond-point engraving that, along with cold paint, typifies the decorative scheme of the glass vessels produced there during the sixteenth century.<sup>24</sup>

In Bohemia, diamond-point engraving was employed on its own as well as in combination with both cold paint and, less frequently, vitrified enamels, most of which date to the last decades of the sixteenth and opening decades of the seventeenth century.25 Whether glasshouse artisans engraved designs freehand or relied on model books is uncertain; there are isolated instances of prints by Jost Amman, for example, being used as designs.26 An inventory from the princely Rosenberg glasshouse at Wilhelmsberg covering the years 1608 to 1614 documents the extensive production of gerissenen Schalen (incised vessels) and gerissenen Glasel (incised glasses) in southern Bohemia. Diamond-point engraving was employed in Germany-as well as in the Netherlands-throughout this period, but it is difficult to associate particular examples with specific glasshouses, as most were in production for relatively short periods of time. The "crystal-glass" manufactory (Chrystalinglashütte) in Kassel (see no. 50), for example, operated only from 1583 to 1584. In the southern Schwarzwald region a number of glasshouses were in operation in the general vicinity of the monastery of Saint Blasien during the second quarter of the sixteenth century (see no. 63), while others in southern and southwestern Germany endured through the second half of the century.<sup>27</sup>

- V. Kutač, "570 Years' Existence of the Glassworks at Chřibská," GR 39, no. 4 (1984), pp. 2-4.
- F. Mareš, *České sklo* (Prague, 1893), pp. 23, 164; and Hetteš 1963, p. 41, note 7.
- 3. Hetteš 1963, p. 40.
- H. Heimer, "Die Glashütte zu Hall und die Augsburger Kaufsmannsfamilie der Höchstetter," Ph.D. diss. (Munich University, 1959), p. 103; and Egg 1962, pp. 73-75.
- 5. Hetteš 1963, p. 41.
- 6. Schmidt 1922, pp. 175ff.
- 7. Fuchs 1937/1938, passim.
- 8. Von Saldern 1965, p. 39.
- Frankfurt, Museum für Kunsthandwerk, inv. no. 6763;
   von Saldern 1965, p. 37, fig. 12; and Ohms 1980, p. 133, no. 300.
- Stockholm, National Museum, inv. no. CXV 2030. See von Saldern 1965, p. 36, fig. 13.
- 11. Wrocław, Stadtmuseum. See Gasparetto 1958, fig. 30.
- Frankfurt, Museum für Kunsthandwerk, inv. no. 6774; and London, British Museum, inv. no. 1868 S. 861. For an example of one of these, see Tait 1979, pp. 40, 41, and fig. 36.
- 13. See Fuchs 1937/1938, pp. 223-224, fig. 3.
- 14. Hamburg, Museum für Kunst und Kunstgewerbe, inv.
  no. 1920.154 (see von Saldern 1995, p. 108, no. 42, and color pl. on p. 41).
- 15. London, Victoria and Albert Museum, 1844-1855.
- Munich, Bayerisches Nationalmuseum, inv. no. 68/48; Rückert 1982, vol. 1, p. 90, no. 155, pl. 7.19; Zedinek 1927, p. 237.
- 17. Zedinek 1927, p. 237.
- 18. Ibid., p. 245.
- Johannes Mathesius, Sarepta oder Bergpostill, sampt der Jochimsthalischen kurtzen Chroniken, fifteenth sermon (Nuremberg, 1562), p. 274.
- 20. See Rückert 1982, vol. 2, pp. 179–180.
- 21. Imhoff Archive, fascicule 41, no. b. See von Saldern 1965, p. 38, note 80.
- 22. Strasser and Spiegl 1989, p. 9.
- 23. Gasparetto 1958, note on p. 95.
- 24. Diamond-point engraving in combination with cold painting seems to have been prevalent in the glasshouses of Silesia, Hall and Innsbruck, and southern Bohemia. A *Humpen* with finely engraved personifications of the Virtues with a lily of the valley border in vitrified enamel, dated 1607, appears to be exceptional and a key piece in Silesian/northern Bohemian production; see Klesse and Mayr 1987, no. 39.
- 25. A Humpen dated 1582 and now in the Castle of Buchlow in Bohemia is engraved with an image of a dancing couple that derives from a design by Jost Amman. See J. Vávra, 5000 Years of Glassmaking (Prague, 1954), p. 54, nos. 132, 134.
- The inventory was first published by F. Mareš in České sklo (1893).
- 27. See Strasser and Spiegl 1989, pp. 16-17.



Central Germany or Bohemia Second half of the sixteenth century

Free- and mold-blown light cobalt-blue glass with gold leaf and enamel decoration HEIGHT: 20.5 cm  $(8\frac{1}{16} \text{ in.})$ DIAMETER (at lip): 7.8 cm  $(3\frac{1}{16} \text{ in.})$ 

84. рк. 550

Made of thin glass with a large, elliptical bubble and embedded impurities, the conical bowl of this goblet tapers to a point at the base and is worked in a hexagonal section at the upper portion (having been draped over an insertion form). The attached stem has a hollow, mold-blown, ovoid knop with two amorphous lion's-head masks and is supported by a compressed trumpet foot with the rim folded under. There is a band of gilding at the lip followed by two rows of white dots. Below, on alternate facets, is a gilded diamond shape with white enamel dots and C-curves. Below a row of white dots is a double row with traces of gilding between.

A variety of glasses worked to a hexagonal section, preserved in numerous collections, have been attributed variously to Murano or to Northern glassmakers working in the Italian manner; variations of the prominent geometric decorative motif repeated in this example are commonly found in enameled glasses ascribed to Germany or Bohemia. In fact, both the slender shape and stylized foliate decoration have much in common with Bohemian glass fragments showing Venetian influence and found in Prague dating to the sixteenth and seventeenth centuries.<sup>1</sup> A number of fragments of goblets that show similarities to the Getty goblet—namely the hollow, mold-blown knops with tapered lower ends joined to the body and to the foot by rather heavy mereses—were excavated between 1959 and 1968 at the site of a patrician's home in the center of Sopron (Ödenburg) in Hungary.<sup>2</sup> Arms None.

MARKS AND INSCRIPTIONS None.

#### PROVENANCE

Alexander von Frey, Paris; Ruth and Leopold Blumka, New York.

#### Exhibitions

Three Great Centuries of Venetian Glass, The Corning Museum of Glass, Corning, New York, 1958.

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*Three Great Centuries* 1958, pp. 102–103, no. 111; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 253, no. 233; Bremer-David et al. 1993, p. 246, no. 433; Lanmon 1993, p. 62, no. 20, note 3.

#### CONDITION

The gilding on the lip is heavily rubbed at the angles. There is considerable wear on the base of the foot.

- 1. See Hetteš 1963, fig 6: 5b, and figs. 22-24.
- I. Holl, "Glasfunde des 15.-16. Jahrhunderts aus dem Hause eines Patriziers in Sopron (Ungarn)," Zeitschrift für Archäeologie des Mittelalters 6 (1978), pp. 95–103, fig. 4.





Bohemia 1576

Free-blown colorless (purplish-brown) glass with gold leaf and enamel decoration HEIGHT: 22.5 cm (8% in.) DIAMETER (at lip): 12.2 cm ( $4^{13}/16$  in.)

84.dk.552

Made of clear glass marked with some bubbles and considerable frit and other embedded impurities, this cylindrical vessel with rounded base is attached to a hollow-stemmed pedestal foot with flanged and folded rim. There is a deep, jagged pontil mark at the flattened base of the vessel. A band of cobalt-blue glass encircles the joining of the foot. On the center of the vessel wall, in enamel, a man with an outstretched arm who is mounted on a rearing horse pursues two stags at bay; a hound follows closely behind each. The enamel decoration is executed in a palette of ocher, moss green, white, blue, yellow, and black. The ground, indicated with a line, is punctuated with tufts of grass and oversized stylized lilies of the valley. Below the lip are two bands of enamel dots, white then blue, and two diagonal rows of green dots on a gilded ground, followed by two more bands of enamel dots, white then blue.

This vessel, marked with impurities and bubbles typical of Bohemian glasses of the period, appears to be the earliest dated example of an enameled hunting glass, a type that appears in significant numbers only in the 1580s. The small group of glasses of this unusual shape includes another colorless glass that is dated 1585 and depicts the Temptation of Eve, formerly in the collection of C. Culemann, Hannover;<sup>1</sup> a somewhat more attenuated version in amethyst-colored glass, now in the Hessisches Landesmuseum, Kassel, depicts a boar hunt and is dated 1588 (fig. 53c).<sup>2</sup> A hunting scene with a hound chasing a stag-sufficiently similar to that on the Museum's goblet to suggest reliance on a common designappears on a colorless, foot-ringed goblet dated 1594, now in Prague (see no. 11, fig. 11b).3 These hounds and stags are likewise very similar to the corresponding woodcuts by Jost Amman in Georg Schallern's Thierbuch (fig. 53b); however, as this was published in 1592, the decoration of the Museum's goblet, at least, must depend on an earlier but related source.



53A Alternate view.



53B JOST AMMAN (German, 1539–1591). Woodcut illustration in Georg Schallern's *Thierbuch: sehr kunstliche und wohlgerissene Figuren* (Frankfurt, 1592). Los Angeles, Getty Research Institute for the History of Art and the Humanities, 84–B29537. Photo: Getty Research Institute Library Special Collections.



The remains of a foot-ringed goblet of identical shape, along with a large quantity of other glass fragments, were excavated in 1957 from the drain of a house at 37 Vikářská Street, facing the north side of Saint Vitus's Cathedral, Prague.<sup>4</sup> Largely on the basis of historical connections, this glass and glasses related to it have been tentatively ascribed to the Schürer glasshouse at Broumy, southeast of Prague, or Bubenec at the northern reaches of the city.<sup>5</sup> The provenance of the Museum's goblet is consistent with a southern Bohemian origin, as the principal estates of the Liechtenstein royal family were in this region.

# Arms

None.

# MARKS AND INSCRIPTIONS Below the lip, in enamel: 1576.

# PROVENANCE

Prince of Liechtenstein, Vaduz; (sold, Christie's, London, July 15, 1970, lot 247); Ruth and Leopold Blumka, New York.

# EXHIBITIONS

None.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), pp. 253–254, no. 234; "Recent Important Acquisitions" 1986, p. 105, no. 23; Bremer-David et al. 1993, p. 254, no. 448.

# CONDITION

The gilded band around the lip is very worn and survives only in traces. One large chip has been lost in the lip. There is considerable wear on the base of the foot.

# Notes

- See Die Kunst-Sammlungen aus dem Nachlasse der Herren Carl Culemann zu Hannover, sale cat., J. M. Heberle, Cologne, October 26-28, 1887, p. 16, no. 147.
- 2. See Killing 1927, pls. 34-35.
- 3. Prague, Uměleckoprůmyslové Muzeum, inv. no. 0.398.
- 4. Hetteš 1963, pp. 43 and 46, fig. 6, IId.
- 5. Ibid., p. 52. See also von Saldern 1965, pp. 165–169; and Fischer 1924, passim.



53C Hunt goblet. Bohemian, 1588. H: 25 cm (9<sup>7</sup>/<sub>4</sub> in.). Kassel, Staatliche Museen, Hessisches Landesmuseum, Lö, A23.



# Possibly northern Bohemia 1578

Free-blown colorless (brownish-green) glass with enamel and applied decoration and pewter mounts HEIGHT (with lid): 27 cm (10% in.) HEIGHT (without lid): 23.5 cm (9¼ in.) WIDTH (with handle): 16.3 cm (6% in.)

84.dk.553

Made of glass with embedded impurities and a large piece of frit in the leaf-and-tendril zone above the foot, this straightwalled vessel with an applied foot ring gently tapers from the base to the mouth. A solid glass handle is attached to the vessel wall, and trailed glass encircles the vessel at the upper joining of the handle. An unmarked pewter mount with a hinge at the lip connected to a lid fitted with a thumb-piece and surmounted with an acorn-shaped finial is attached to the handle. Above the trailing is a zone of enamel decoration consisting of stylized lily-of-the-valley blossoms, white and blue dots, and a white cusped linear decoration. The trailed glass is enameled in yellow with blue slashes. Around the center section is a scene representing Herod, enthroned under a curtained architectural enclosure, witnessing with a standing attendant the Massacre of the Innocents: four soldiers murder small children while mothers struggle. Below is a band of spatulate leaves and tendrils in yellow, red, blue, and white. The base of the vessel is marked with a large, unindented, ragged pontil mark.

Various enameled vessels with biblical scenes survive, and, although unusual, other depictions of the Massacre of the Innocents are known.<sup>1</sup> Rather than repeating standard



54A-B Alternate views.





54c Alternate view.

compositions, as in the case of hunt and *Reichsadlerhumpen*, the repertory was far more varied and executed with greater freedom. The use of a horizontal composition extending around the greater part of the vessel circumference typifies Bohemian narrative enameled glasses of the 1570s and 1580s. The abstracted leaf-and-tendril motif in the decorative zones flanking the principal scene is reminiscent of Venetian decorative motives and is further evidence that early Bohemian enameled glass tended to adapt rather than imitate the style of Murano glass. The stylistic similarities of the Museum's tankard with the production of the Schürer glasshouse at Falkenau in northern Bohemia (established by 1530)<sup>2</sup> supports a tentative attribution to northern Bohemia.

Arмs None.

### MARKS AND INSCRIPTIONS

Around the central zone of the vessel, in enamel: 1578/ KÖNIG.HERODIS.LEST.DIE/unschuldigen kindlein elendiglich todten ("King Herod has the innocent children miserably killed").

#### PROVENANCE

Hans Wilczek, Burg Kreuzenstein, Austria; Ruth and Leopold Blumka, New York.

EXHIBITIONS

None.

#### BIBLIOGRAPHY

von Saldern 1965, p. 92, fig. 114; "Acquisitions/1984," GettyMusJ 13 (1985), p. 251, no. 220; "Recent Important Acquisitions" 1986, p. 105, no. 24; Bremer-David et al. 1993, pp. 254-255, no. 449.

# Condition

The enamel of the leaf decoration is lacking in areas. The base of the foot ring is considerably abraded.

- A Humpen dated 1596, for example, is cited by E. von Czihak, Schlesische Gläser (Wrocław, 1891), p. 236, and reproduced by von Saldern 1965, p. 92, fig. 115, showing that this Humpen and the Getty tankard copy the same source. For religious representations of glasses in general, see W. Berndt, "Religiöse Darstellungen auf alten Hohlgläsern," Die christliche Kunst 30 (1933/1934), pp. 40-48.
- 2. Fischer 1924, pp. 40ff.
## Beaker with the Arms of Schiltl and Portner von Theuern

#### Southern Germany, possibly Bavaria 1586

Free-blown colorless (pinkish to purplish-brown) glass with gold leaf and enamel decoration HEIGHT: 20.4 cm (8 in.) DIAMETER (at lip): 13 cm  $(5\frac{1}{8} \text{ in.})$ 

84.DK.554

The vessel is made of thin glass with minute bubbles and impurities. The funnel bowl has a flattened bottom attached to a pedestal foot with flanged rim folded under. There is gilding at the joining of the bowl and foot. Below the lip is a decorative border consisting of a row of white dots framing a band of gold leaf incised with a fish-scale pattern, each scale centered on a blue dot. The coats of arms form the only decoration on the wall of the vessel. The pontil mark projects slightly.

Vessels of this type bearing the arms of Austrian and south German families have generally been grouped with *Stangengläser* similarly emblazoned. Unlike the *Stangenglas*, which is a distinctly Germanic type, the form of this footed conical beaker derives from a Murano prototype (see no. 16), differing primarily in the reduced tapering of the body of the vessel and the somewhat elongated proportions. While the scale of the Museum's example retains the more moderate proportions of the Italian prototype, the scale of others was increased to suit the Germanic taste. The use of cobalt-blue glass in fashioning the join, the working of the flanged rim of the foot, the brownish-gray color of the relatively heavy glass, and the smooth, thin quality of the enamel are characteristics of glass associated with south German manufacture.



55A Alternate view.



55B Alternate view showing date.



The arms that constitute the enameled decoration of this vessel are those of the Schiltl family of Amberg, a town north of Regensburg in Bavaria, and of the Portner von und zu Theuern, a village in the environs of Amberg.<sup>1</sup> Only in 1583 were the Schiltl arms enhanced to include the crowned lion holding a scimitar, which accords with the arms on the 1586 Getty glass. In the Amberg Staatsarchiv there is a document of January 29, 1590, which mentions the Sturzmeister Georg Schiltl in Amberg.<sup>2</sup> (The meaning of Sturzmeister is unclear.) In another document, dated May 1603, there is mention of a Barbara Schiltl, a widow in Amberg, who loaned one thousand Gulden to the Commissariat.3 It could be that this Barbara was the widow of the Georg Schiltl who died on May 1, 1603, but there is no document that can identify her as a member of the Portner von Theuern family. There is, however, a Martin Schiltl, a wine merchant (Weinwirt) in Regensburg, who was baptized on November 11, 1550, and was married to Maria, daughter of the Regensburg councilor Christoph Portner, on April 27, 1579.4 As the arms on the Getty glass are not alliance arms in the strict sense, the vessel could have been commissioned by this couple at a date after their marriage to celebrate some other occasion.

#### Arms

On the center section of one side, in enamel, per bend azure, a lion passant crowned or, grasping a scimitar, and per bend or, three escuthcheons azure, and gules; crest out of a coronet or, a demi-lion with the scimitar as in the shield, between two eagles' wings gules, each ensigned with a bend dexter transformed into a bar or, charged with three escutcheons azure; on the center section of the opposite side, azure, a fallow deer salient with tail, armed or; crest a demi-fallow deer salient, as in the shield.

#### MARKS AND INSCRIPTIONS

On the sides of the vessel, in enamel, 1586.

#### Provenance

Hans Wilczek, Burg Kreuzenstein, Austria; Ruth and Leopold Blumka, New York.

### EXHIBITIONS

None.

#### BIBLIOGRAPHY

A. Walcher-Molthein, "Deutschen Renaissancegläser auf Burg Kreuzenstein," *Belvedere* 9/10, no. 45 (1926), II: *Forum*, p. 57, fig. 28; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 205; "Recent Important Acquisitions" 1986, p. 105, no. 25; Bremer-David et al. 1993, p. 246, no. 434.

#### Condition

The base of the foot is abraded. The gilding is worn. There are a few losses to the enamel decoration.

- The heraldic identifications were provided by Ottfried Neudecker. See J. Siebmacher, Grosses und allgemeines Wappenbuch 4, pt. 1, no. 3, Abgestorbener bayerischer Adel I (Nuremberg, 1884), p. 85, 117; 3 (Nuremberg, 1911), pp. 16, 63.
- 2. Staatsarchiv, Oberpfalz Administrativakten no. 4871: "Bitte des Sturzmeisters Georg Schiltl in Amberg, ihm die Verrichtung des Sturzmeisteramts bei den Ämtern und Klöstern allein aufzutragen" ("Georg Schiltl in Amberg asks to be given the sole responsibility to perform the task of *Sturzmeister* for the regional administrations and monasteries").
- 3. Staatsarchiv Amberg, Oberpfalz Administrativakten no. 5861: "Frau Barbara Schiltlin, Wittibin in Amberg hat zum löblichen Commissariat 1000 Gulden geliehen, welche ihr jährlichen Walburgis mit 50 Gulden verzinst weden, vffgenommen Walburgis anno 1603" ("Frau Barbara Schiltlin, widow from Amberg, has loaned one thousand *Gulden* to the commissioner's office, on which annual interest of fifty *Gulden* will be paid to her at Walpurgis [April 30], starting on Walpurgis 1603"). This information was kindly provided by Mr. Herrmann, Achivamtmann, Staatsarchiv Amberg.
- O. Fürnrohr, "Das Patriziergeschlecht Schiltl in Regensburg," Verhandlungen des Historischen Vereins für Oberpfalz und Regensburg 97 (1956), pp. 387-388. This information was kindly provided by Dr. Laschinger of the Stadt Amberg Archives.

# Beaker with the Arms of Puchner

Probably northwestern Bohemia or Germany, possibly Saxony (Erzgebirge) 1587

Free-blown colorless (pale green) glass with gold leaf and enamel decoration HEIGHT: 31.3 cm ( $12\frac{3}{16}$  in.) DIAMETER (at base): 11.7 cm ( $4\frac{9}{16}$  in.)

84.dk.555

The vessel is made of fairly heavy glass with numerous bubbles, some quite large, and embedded impurities. The tall, cylindrical vessel is attached to a pedestal foot with flanged rim turned under. Below the lip, the decoration consists of a band of gold leaf with a single row of blue dots, followed by a row of white, then by a band of white dots arranged in a circle, each centered on a blue dot and separated by a larger red dot. This is followed by a band of white and then blue dots. The coat of arms is centered on the vessel wall with inscriptions above and below. On the reverse side is a stylized plant of green, red, yellow, blue, and white; centered on this are three implements arranged parallel to one another (fig. 56a). At the base is a slight kick with a shallow pontil mark.

This tall, cylindrical glass, or *Stangenglas*, belongs to a large group of similar vessels, all of which bear the arms of central European families.<sup>1</sup> The present example is emblazoned with the arms of Paulus Puchner (Buchner), who, as the inscription indicates, was an official of the Elector of Saxony, serving as a master of ordnance in charge of the armory in Dresden. The three iron implements on the back of the glass may be a reference to his position. His father, Georg, who came originally from Bavaria, had been ennobled by Charles v in 1556, and his own coat of arms was enhanced by Rudolf II in 1596.<sup>2</sup> His brother was an official in Wittenberg.

As the somewhat heavier and slightly greenish-tinged glass of this vessel is more associated with Saxon glass than that of the Böhmer- and Bayerischerwald, or with Austrian glasshouses, it is likely that the Puchner *Stange* was the product of a regional glasshouse. Large numbers of Saxon glassmakers, however, displaced by growing mining interests, moved into northern Bohemia in the early sixteenth century, the best known of whom, the Schürer family of Waldheim,



56A Alternate view.



founded at least seventeen glasshouses in Bohemia and Moravia. As a consequence, it is extremely difficult to distinguish glass made on the Saxon side of the Erzgebirge from that made on the Bohemian side. The lustrous, evenly applied enamel with detailed and meticulous black-line drawing is characteristic of Erzgebirge glasshouses, a regional and enduring tradition that was still flourishing with the Höfkellerei glasses of the early eighteenth century. The relatively high pedestal foot with the projecting edge defined by the width of the fold, as well as the slight barrel shape of the vessel body, are characteristics that may be associated more generally with Bohemian workshops. The high, pointed kick at the base of the body vessel and the favoring of lilies-of-thevalley and other abstracted plant forms in the decorative schema are thought to be particular to Falkenau, Kreibitz, and other glasshouses in northwestern Bohemia.3

#### Arms

On the central zone of the vessel wall, in enamel, tierced per chevron or, in chief sable a lion or, armed and langued gules and in base azure, on a mount vert a tree (beech) proper; crest lion issuant between two buffaloes' horns, couped dexter azure and or, sinister or and sable, issuant from each flame gules.

#### MARKS AND INSCRIPTIONS

On the upper and lower vessel wall, in enamel, Auff Gott mein hoffnung/Paulus Puchner Chur: S: Zeug/meister zu dresden ("In God I trust. Paulus Puchner, the Elector of Saxony's Master of Ordnance at Dresden"); around the upper vessel wall: 1587.

#### PROVENANCE

Ruth and Leopold Blumka, New York.

#### EXHIBITIONS None.

#### BIBLIOGRAPHY

Klesse and von Saldern 1978, p. 309; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 248, no. 206; "Recent Important Acquisitions Made by Public and Private Collections in the United States and Abroad," *JGs* 28 (1986), p. 106, no. 26; Bremer-David et al. 1993, p. 255, no. 451.

#### Condition

The gold of the decorative band around the lip is almost completely worn away and is seen clearly only under the enamel dots. There is some wear to the bottom of the foot.

- According to Klesse and von Saldern, this vessel belongs to a group of "so-called southern Germany armorial vesels" (1978, pp. 309-310, nos. 262-263).
- 2. J. Siebmacher, Grosses und allgemeines Wappenbuch 5, pt. 4 (Nuremberg, 1890), p. 53.
- 3. Fuchs 1937/1938, pp. 227–228. He cites as examples a Stangenglas dated 1589 with the arms of Vilém Mitrowský z Nemyšle and "Ana Getrzichowicih" (identified as Anna von Trizitezie in Fuchs), now in the Museum für Kunsthandwerk, Frankfurt (see Ohm 1980, p. 139, no. 311), and another dated 1592 with the arms of Smil Osovský of Doubravice and Kateřina of Valdšejn (identified as Catharina von Wallenstein in von Saldern 1965, p. 161), now in the Uměleckoprůmyslové Muzeum, Prague (mentioned in D. Hejdová and O. Drahotová, České sklo [reprint; Prague, 1989], no. 65).

## Beaker with the Arms of Hirt and Maier

Stangenglas

Probably southern Bohemia or the Böhmerwald 1590

Free-blown colorless (slightly greenish-purple) glass with gold leaf and enamel decoration HEIGHT: 29.3 cm ( $11\frac{9}{16}$  in.) DIAMETER (at base): 10.5 cm ( $4\frac{1}{6}$  in.)

85.DK.214

This tall, cylindrical vessel, slightly barrel shaped, has minute bubbles and embedded impurities throughout. It rests on a hollow pedestal foot with a flanged foot folded under. The decoration below the lip consists of a double row of white dots, a thin red line, and a field of staggered white dots over a band of gold, now mostly lost, followed by a repeat of the red line and two rows of white dots. Centered on the vessel wall is a heraldic device with a narrow inscribed scroll above and a wide one below. A year date is divided by the helm. Another heraldic device with similiarly configured scrolls is centered on the opposite side (fig. 57a). A continuing inscription is divided by the helm. Separating the coat of arms at both sides is a decorative motif of three gold squares, visible only in trace, joined equilaterally at a central point with a white dot at each of the outer points and between each square. The join of the foot is enameled with large dots. The bottom is marked with a shallow kick and a rough, slightly protruding pontil mark. Engraved on the lip in diamond point, possibly at a later date, are two hearts overlapping with what appear to be the letters GS (fig. 57b)

This *Stangenglas* celebrates the marriage of an agent and official of the imperial court of Braunschweig-Lüneburg and a Tirolean woman from St. Gilgen on the Wolfgangsee near Innsbruck. Whether the overlapping hearts engraved just below the lip were a contemporary addition cannot be determined. The relative height and attenuation of the vessel, the slight swelling at the center suggesting a barrel shape, the pedestal foot, the projecting edge that is the width of the fold, and the large enameled dots on the join of the foot to the vessel are characteristics that appear to be associated with the glasshouses in the Böhmerwald, in southern Bohemia, and in northwest Niederösterreich, including four in Reichenau on the Freywald south of Hohenfurt.<sup>1</sup> The Böhmerwald



57A Alternate view.



57B Detail of lip with engraved decoration.



glasshouses were established around Tachau, Waldmünchen, Eisenstein, Seewiesen, Zwiesel, Grafenau, Winterberg, Oberplan-Wallern, and Buchers.<sup>2</sup>

The heraldic *Stangengläser* from this region generally give the complete names of the owners, their origins, and their positions, usually on scrolls or banderoles.<sup>3</sup> Other glasses that Fuchs placed in this group include one with the arms of Lobkowitz von Schwamberg near Pilsen, dated 1579; another with the arms of Schmitt<sup>4</sup> von Gerlach dated 1584; one with the arms of Baltazar Neumair von Wintterberg, dated 1590; one with the arms of Hans Peterwaldský and Libussa von Waldstein, dated 1592; one with the arms of Adam Ayzinger, dated 1597; one with the arms of Vostrowský and Vranoský of Doubrovice, dated 1598; and others with earlyseventeenth-century dates.<sup>5</sup>

#### Arms

Gules, a pale argent, three rosettes gules; on the opposite side, azure, a stork argent.

#### MARKS AND INSCRIPTIONS:

On the band above the cresting, in enamel, ALLES<sup>•</sup> ALLES<sup>•</sup>MIT<sup>•</sup>GOTTES<sup>•</sup>HVLF; below the arms, HANS HIRT V WEISSENAV FVRST/BRAVNSCHWEIGISCHER VND LVNEBVRG/ ISCHER RATH VND AGENT AM KAYs/HOFF ("All, all with God's help. Hans Hirt von Weissenau, Councilman and Agent of the principalities of Braunschweig and Lüneburg at the Imperial Court"); on the opposite side above the cresting, HIE ZEITLICHS LEID BRINGT D EWIGE FREVD ("Temporal sorrow here brings eternal bliss"); and below the arms, MARIA HIRTIN VON WEISSENAU/GEBORNE MAIERIN VON SANT/GILGEN SEIN HAVSFRAV ALLES ALLES MIT GOTTES HVLF ("Maria Hirt von Weissenau, née Maier of St. Gilgen, his wife. All, all with God's help"); and just below the upper bands: Patientia Durum Frango 1590 ("Resignation is hard to shatter, 1590").

#### PROVENANCE

Viktor Schick, Prague; Hedwig Schick, Prague (sold, Sotheby's, London, May 4, 1939, lot 17); (sold, Palais Galliera, Paris, November 29–December 3, 1965, lot 151); Ruth and Leopold Blumka, New York.

#### EXHIBITIONS

None.

#### BIBLIOGRAPHY

Fuchs 1937/1938, pp. 224, 226, fig. 6; "Acquisitions/1985," *GettyMusJ* 14 (1986), p. 252, no. 215; Bremer-David et al. 1993, p. 256, no. 452.

#### Condition

The foot is abraded. There are some minor surface scratches.

- 1. Fuchs 1937/1938, p. 226.
- For an inventory of glasshouses in the Böhmer- and Bayerischewald, in the Oberpfälzerwald, and in both Oberfranken and Westböhmen, see Blau 1954, pp. 30-42.
- 3. Ibid., pp. 30-42.
- 4. Identified as Schlitter in Czechoslovakian Glass, 1350-1980, exh. cat. (The Corning Museum of Glass, Corning, New York, 1981), pp. 51 and 145, and no. 4; and as Schnitter in F. X. Jiřík, Führer durch die Glassammlung (Prague, 1933), p. 49, no. 13.
- 5. See Fuchs 1937/1938, p. 226.



#### Bohemia or central Germany 1593

Free-blown colorless (slightly purplish-brown) glass with gold leaf and enamel decoration HEIGHT: 28.9 cm (11<sup>3</sup>/<sub>6</sub> in.) DIAMETER (at base): 13.5 cm (5<sup>3</sup>/<sub>16</sub> in.)

84.dk.556

This beaker is made of clear glass marked with some embedded impurities. The thick-walled, cylindrical body rests on an attached foot ring, rather roughly joined. Below the lip are two parallel rows of enamel dots, blue then white, a broad band of zigzag rows of white, and blue dots on a gold ground with an incised scale pattern centered on green dots, followed by two more parallel bands of dots, white then blue. The wall of the vessel is decorated with a hunting panorama spiraling around its entire surface. Four hunters-one on horseback, one carrying a musket, and two carrying boar spears, one of whom blows a hunting horn-pursue a variety of game, including three stags, a boar, a doe, a fox, and several hares. The game, chased by several hounds, appears to be driven toward a large net stretched diagonally across the scene between two trees. The action is set against a green ground formed by a series of parallel strokes and punctuated with numerous trees and bushes. A turreted castle is perched on a flat projection of land toward the top of the scene. The palette consists of reddish brown, umber, Prussian blue, pale blue, sage green, yellow, pink, white, and black. An ocher band sets off the hunting scene from the base ring, which is decorated with broad dashes in white enamel. The shallow kick is marked with a broad pontil mark.

This glass belongs to a large group of *Humpen* that are all decorated with a hunting scene spiraling around the vessel wall, the composition of which varies little. The source of the design is unknown, but generically it is close to a series of hunting prints of Dietrich Meyer, Virgil Solis (figs. 58d-e), Hans Weiditz, and others, dating before the middle of the sixteenth century and all composed in a narrow, horizontal format that readily lent itself to replication around the surface of a vessel. Here, the spiraling diagonal of the net provides the scenery with spatial clarity. These outsized vessels were widely produced in Bohemia, Franconia, and Thuringia from around 1570 to well into the seventeenth century. Because there was little variation in design until the seventeenth century, it is difficult to assign early examples to a particular region. Variations in the decorative band of gold and enamel around the lip are considerable but do not provide reliable indications of origin. The zigzag lines of dots on the Museum's example are found on glasses ascribed, for other reasons, to northern Bohemia.

#### Arms

None.

MARKS AND INSCRIPTIONS Below the rim, in enamel, 1593.

#### Provenance

Hans Wilzcek, Burg Kreuzenstein, Austria; E. and A. Silberman, Vienna; Oscar Bondy, Vienna; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 235; Bremer-David et al. 1993, pp. 256–257, no. 452.

#### Condition

A 7.5 cm (3 in.) crack runs from the foot ring up the vessel wall. The base of the foot ring is abraded. Otherwise the piece is in good condition.





58A-C Alternate views.



58D VIRGIL SOLIS (German, 1514–1562). *Stag Hunt*, late fifteenth century. New York, The Metropolitan Museum of Art, 50.562.29, The Elisha Whittelsey Fund.



58E VIRGIL SOLIS. *Stag Hunt*, late fifteenth century. Munich, Staatliche Graphische Sammlung, 16276. From W. Strauss ed., *The Illustrated Bartsch* (New York, 1978), vol. 19, pt. 1, p. 172, no. 375.



Probably Bohemia or possibly central Germany 1599

Free-blown colorless (greenish-brown) glass with gold leaf and enamel decoration HEIGHT: 29.2 cm ( $11\frac{1}{2}$  in.) DIAMETER (at base): 13.8 cm ( $5\frac{3}{8}$  in.)

84.dk.558

This thick-walled, cylindrical vessel displays a few bubbles and some embedded impurities. Below the lip of the vessel are two parallel bands of small enamel dots, white then blue, above a broader band of parallel diagonal lines of red and white arranged in a zigzag pattern with parallel green dots in the interstices, all on a field of applied gold. This is followed by two more parallel bands of white and blue dots. An enameled double-headed eagle, crowned and haloed and standing with talons outstretched and wings fully spread, fills most of the vessel surface. A blue orb surmounted by a double cross is superimposed on the eagle's breast. Twelve vertical ranks of shields, conforming to the feather outlines, are emblazoned across the surface of the eagle's wings. On the shoulder of each wing sits a fire iron, or furison, in flames, representing the motto of the Golden Fleece and, so, of the Habsburg-Burgundy alliance: Ante ferit quam flamma micet ("He strikes before the flame sparks"), signifying that the duke would quell conflict even before it had "sparked." The palette consists of brownish violet, white, yellow, red, blue, green, and black. The vessel stands on an imperfectly joined applied foot ring decorated with broad dotlike strokes, alternating blue and white. The shallow kick is marked with a pronounced inverted and jagged pontil mark.

The *Reichsadler*, or Imperial Eagle, a schematic and highly idealized representation of the governmental organization of the Holy Roman Empire, was a widely produced motif in Germanic enameled vessels during the sixteenth and seventeenth centuries, examples of which survive in large numbers. Known as the *Quaterniones Imperii* (Imperial Four-Part System), this image displays the social order of the Holy Roman Empire broken down into groups, each consisting of four components. The whole, which attempted to establish a hierarchical order where there was in fact none, was a unified image in the extreme.<sup>1</sup>

While representations of the Quaterniones Imperii can be traced back to the early fourteenth century, the earliest in the form shown on Reichsadler glasses date from the late fifteenth century; for example, one can be found in a manuscript illumination from the Chronik Heinrichs van Beeck of 1472.2 A similar image is found in Johann Koelhoff's Die Cronica van der hilliger Stat va[n] Coelle[n] (Cologne, 1499), known as the Kölnische Chronik.3 The earliest Reichsadlerhumpen appear to date from the early 1570s; the earliest dated example is a Humpen in the British Museum of 1571.4 The type flourished through the seventeenth century and survived well into the eighteenth.5 The basic format of the Reichsadler was established by the 1499 woodcut illustration in the Kölnische Chronik (fig. 59d), which was also issued as a single sheet in the following year. Glass painters, however, followed the graphic versions of the sixteenth century, which added, among other details, the fire irons on the wings of the eagle; examples of these graphic versions can be found in the woodcuts of Hans Burgkmair (1510), the Master H (1511), and Nickel Nerlich (circa 1571).

Attempts to identify workshops by grouping vessels with similar sequential or orthographic variations—BEHEM, BEHEN, BEHEMN, for example—have not proved helpful, particularly in regard to the sixteenth-century examples.<sup>6</sup> The earliest *Reichsadlerhumpen*, which date from the beginning of the 1570s, have the image of the crucified Christ against the breast of the eagle. Frequently, in a typological arrangement, the Brazen Serpent is represented on the back of the glass. By about 1585, the crucified Christ was supplanted by the imperial orb.<sup>7</sup>

The *Reichsadlerhumpen* was often used as a "welcome glass" and was intended to be celebrated fraternally. A gentleman appropriately dubbing himself Blasius Multibibus ("who drinks a lot") wrote in 1616: "Man muss lustige Pursche und gute Freunde zu sich fodern, den Staub vom Römischischen Reich und anderen Sauff-Lauxen einmahl abwischen und also eine lustige Zeche und Sauff- Gelaglein erregen und anstellen" ("One must demand to be surrounded by merry young fellows and good friends, wipe the dust off the Roman Empire [beaker] and other drinking [vessels], and thus get on with merry tippling and carousals").<sup>8</sup>

Although *Reichsadlerhumpen* were widely produced in Franconia, Hesse, and southern Germany in the seventeenth century, those dating from the end of the sixteenth century are almost exclusively Bohemian.<sup>9</sup> The relatively narrow



diameter of the Museum's vessel; the thick, applied foot ring; the decoration of the lip; the quality of the enamel; and the color of the glass, all support this attribution.

Arмs None.

#### MARKS AND INSCRIPTIONS

On the vessel wall below the decorative band, in enamel: Das heÿlige Romisch Reich Mit Sampt Seinen gliedern 1599 ("The Holy Roman Empire with all its members 1599"); on the four heraldic shields along the top of the eagle's dexter wing: TRIER / COLN / MENTZ / POTESTAT ZV ROM ("Trier, Cologne, Mainz, the Holy See"); on the sinister wing: BEHEN/PFALTZ/ SACHSEN/BRANDENBVRG ("Bohemia, Palatinate, Saxony, Brandenburg"); on the banderoles attached to each feather and on the bands over the shields in six vertical ranks on the dexter wing, from left to right and top to bottom: 4 BAVRN/ COLN/REGENSPVRG/COSENITZ/SALTZBVRG/4 STETT/AVGSVRG/ METZ/ACH/LVBECK/4 SEMPERFREIEN/LVNDBVRG/WESTERVRG/ THVS-SIS/ALTWALTEN/4 BVRGGRAVEN/MAIDBVRG/NVRNBERG/ REMECK / STRANBERG / 4 MARGRAVEN / MERCHERN / BRAND-ENBVRG / MEISCHEN / BADEN / 4 SEIL / BRVANSCHWEIG / BAIRN / SCHWABEN / LVTRING ("four farmers, Cologne, Regensburg, Konstanz, Salzburg; four cities, Augsburg, Metz, Aachen, Lübeck; four freemen, Limburg, Westerburg, Thussis, Altwalden; four barons, Magdeburg, Nuremberg, Rieneck, Stromberg; four margraves, Moravia, Brandenburg, Meissen, Baden; four dukes, Braunschweig, Bavaria, Swabia, Lotharingia") and on the sinister wing: 4 VICARI / BRABAND / N. SACHSEN / WESTERBVRG / SCHLEST / 4 LANDGRAVEN / DVRING / EDELSAS/HESSEN/LEVCHTENBERG/4 GRAVEN/CLEVE/SAPHOY/ SCHWARTZBVRG / ZILLI / 4 RITTER / ANNDELAW / WEISENBACH / FRAAENBERG / STTVNDECK / 4 DORFFER / BAMBERG / VLM / HAGNAW/SLETSTAT/4 BIRG/MADABVRG/LVTZELBVRG/ROTTEN-BVRG / ALTENBVRG ("four vicars, Brabandt, Lower Saxony, Westerreich, Silesia; four landgraves, Thuringia, Alsace, Hessen, Leuchtenberg; four counts, Cleve, Savoy, Schwartzburg, Zillia; four knights, Andlau, Weissenbach, Frauenberg, Strundeck; four villages, Bamberg, Ulm, Hagenau, Schlettstadt; four castles, Magdeburg, Lützelburg, Rothenburg, Altenburg").

#### PROVENANCE

Ruth and Leopold Blumka, New York.

#### EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 254, no. 236; Bremer-David et al. 1993, p. 257, no. 454.



59A-c Alternate views.



59D Imperial Eagle. Woodcut. German, 1499. New York, The Metropolitan Museum of Art, 62.650.222, The Elisha Whittelsey Fund.

#### CONDITION

The applied gold below the lip is very worn. The foot is considerably abraded, and there are some minor surface scratches. There are also indications that some areas have been retouched with paint.

- See W. Stengel, "Das Traumbild der Reichseinheit auf altdeutschen Gläsern," Kriegsgabe für Mitglieder des Germanischen Museums (1915), pp. 38-48; and von Saldern 1965, pp. 51-68.
- 2. The manuscript is in the Historischen Archivs der Stadt Köln, no. A II 3. See *Köln 1475 des heiligen Reiches freie Stadt*, exh. cat. (Cologne, 1975), pp. 69–71, no. 88.
- L. Hain, Repertorium bibliographicum..., repr. (Milan, 1948), no. 4989.

- 4. MLA S. 836; see Tait 1991, p. 176, fig. 226, center.
- 5. For an extensive list of *Reichsadlerhumpen* and other representations of the *Quaterniones Imperii*, see Hoffmann 1982.
- 6. For example, W. Stengel, "Reichsadlergläser: Gruppierungsversuche," *Kunst und Kunsthandwerk* 19 (1916), pp. 322-338.
- Schmidt 1922, p. 165, associates this substitution with the Thirty Years War, although the change occurred nearly forty years earlier. See also W. Spiegl, "Ein unbekannter Reichsadlerhumpen von 1572," *Weltkunst* 51, no. 18 (September 1981), pp. 2540-2541.
- 8. Walcher-Molthein 1926, p. 58.
- 9. Ibid., p. 59.



Probably northern Bohemia or the Erzgebirge 1599

Free-blown cobalt-blue glass with gold leaf and enamel decoration HEIGHT: 11.4 cm ( $4\frac{1}{2}$  in.) DIAMETER (at lip): 8.6 cm ( $3\frac{3}{8}$  in.)

84.dk.557

The body of this vessel has several large bubbles and embedded impurities; it is lightly canted with a slightly flared lip and rests on an attached foot ring. Below the lip is a decorative gilded band framed by rows of white enamel dots. In the central zone of the body, a figure representing Elijah sits on a stylized green ground at a legless table with his arm lifted toward a raven that is descending with a basket in its beak. Slightly above is a star or floral shape of five white dots. The large lettering of the inscription fills the remainder of the vessel surface. The slight kick is marked with an indented pontil mark with jagged edges.

The invention of cobalt-blue glass has been credited to the master glassmaker Christopher Schürer, who, in the middle of the sixteenth century, obtained cobalt oxide from Schneeberg in order to produce ceramic pigments and colored glass.1 The Schürer family, which came from Waldheim in the Erzgebirge of Saxony, immigrated into northwestern Bohemia, where they founded or took over a number of glasshouses.<sup>2</sup> The name was recorded in the Erzgebirge in 1436 and later at Burkhardtsgrun, Crottendorf, and other places. By 1530 they had established the famous glassworks at Falkenau. They founded a glasshouse at Krombach in 1549, at Labau in 1558, at Schwanenbrucke in 1584, at Sahlenbach in 1590, at Rochlitz in 1591, and at Hoflenz in 1598. The glassworks at Falkenau were operated at the end of the sixteenth century by Christopher Schürer, who is described in a 1582 deposition concerning the purchase of a Kreibitz glasshouse, as "der kunstreiche Hüttenmeister von Falkenau" ("the ingenious overseer of the glassworks at Falkenau").3 At least one branch of the Schürer family, in recognition of the quality glass it had provided to the imperial court, was elevated by Rudolf II in an Adelsbrief of 1592 to the ranks of the nobility. Christopher's name, however, is not mentioned on



60A Alternate view.







6ов-с Alternate views.

the list of those elevated.<sup>4</sup> The Schürers are also known to have produced soda glass in the Venetian manner.<sup>5</sup>

Cobalt-colored glass beakers, in comparison to cobaltcolored glass jugs, are relatively rare, and those with biblical subjects even more so.<sup>6</sup> The subject, which appears to be unique among enameled glasses, illustrates 1 Kings 17:6: "And the ravens brought him bread and meat in the morning, and bread and meat in the evening, and he drank of the brook." Whether the reference held significance beyond the gustatory is uncertain.

Arms

None.

#### MARKS AND INSCRIPTIONS

On the wall of the vessel, in enamel, *ELIAS.IN.DER*/ WUSTEN.AN/NO. 1.5.9.9 ("Elijah in the desert, 1599").

#### Provenance

A. Vecht, Amsterdam; Lucien Sauphar, Paris; Alexander von Frey, Paris; Oscar Bondy, Vienna; Ruth and Leopold Blumka, New York.

## EXHIBITIONS None.

none.

#### BIBLIOGRAPHY

von Saldern 1965, p. 446; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 251, no. 221; Bremer-David et al. 1993, p. 257, no. 455.

#### Condition

A section of glass encompassing Elijah's left foot and the ground below it (an area of roughly 1<sup>1</sup>/<sub>2</sub> square centimeters) has been broken out and subsequently reset with some restoration. There is considerable abrasion on the foot and some wear to the gold band.

- 1. Walcher-Molthein 1926, p. 63.
- 2. For a detailed study of these glasshouses, see Fischer 1924. For the Schürer family, see von Saldern 1965, pp. 160–181; and Ritsema van Eck and Zijlstra-Zweens 1993, no. 371.
- 3. Walcher-Molthein 1926, p. 44.
- 4. Blau 1954, p. 76.
- 5. Drahotová 1970, pp. 19–20, 22.
- 6. See Klesse and von Saldern 1978, p. 315, no. 269.



Southern Bohemia 1600

Free-blown colorless (slightly brown) glass with diamond-point engraving HEIGHT: 34.5 cm ( $13\%_6$  in.) DIAMETER (at base): 10.7 cm (4% in.)

84. DK. 559

This tall, cylindrical vessel is made of clear glass with numerous bubbles (several large) and some embedded impurities. The beaker stands on an elevated hollow stem with its lip folded under and a glass trail at the joining. The diamondpoint-engraved decoration is arranged in horizontal bands of stylized palmette-and-foliate designs, guilloche, and bands of inscriptions. In the central zone, two libidinous scenes are separated by meanders of asymmetrical foliate decoration. The depressed bottom of the vessel rises in a high kick marked with a jagged pontil mark.

This is one of the finest examples of a glass diamondpoint engraved with figurative subject matter, made all the more remarkable by virtue of being one of a handful of glass vessels decorated with erotic images.<sup>1</sup> On one side, a naked woman holds aloft a sheet of music and a conductor's baton (fig. 61b). A clothed man behind her, who is grabbing her breast with his left hand, draws a large bow across her as if she were a stringed instrument.

On the other side, another naked woman stands holding the bushy tail of a fox between her legs (fig. 61c)—an allegory of the so-called *schlauer Bursche*, or sly fellow<sup>2</sup>—with a dog, his tongue hanging out, looking up at her. Rendered with great precision and delicacy, the images are nonetheless remarkable for their salaciousness. Their subjects, which may be copies of German prints, are not uncommon examples of the kind of sexual innuendo and symbolism that were popular in the North; indeed, the ivory handle of a gun in the Hessisches Landesmuseum, Darmstadt, is engraved with the same image of the fiddler "playing" the woman (fig. 61d) and may in fact be based on the same engraved source as the Getty glass.<sup>3</sup> Vessels of this type were used for the consumption of alcoholic beverages, especially beer, and the association of inebriation with carnal pleasure is a familiar one.



61A Alternate view.

#### Arms None.

#### MARKS AND INSCRIPTIONS

In the upper parallel bands, engraved, *FRISCH-AUF-JUNG-GESEL-WOL-GEMUDT-GAR-WOL/MIR-DAS-FIEDELN-THUT* ("Go to it cheerfully, young man, fiddling [making love] certainly







61B-c Details of engraved decoration.

does delight me"); over the couple, Lieb haben und nicht genissenn/Thut manchen gar sehr ver/ driessen ("To have love and not take pleasure from it can be very vexing"); flanking the couple, 1600/Ich aber/thu genissen/dass thut ganz nicht vordriessen ("1600/I do enjoy and so I am not vexed"); over the naked woman, Halte feste, es kom/men frembde geste/Frisch auff ("Let's celebrate, new guests are coming; go to it!"); and in the lower band, 1600.

#### PROVENANCE

Richard Leitner, Vienna; Oscar Bondy, Vienna (sold from his collection on June 16, 1922); Ruth and Leopold Blumka, New York.

#### Exhibitions

None.

#### BIBLIOGRAPHY

H. Zedinek, "Die Glashütte zu Hall in Tirol," Altes Kunsthandwerk 1, no. 3 (1927), pp. 98–117, pl. 89; W. Buckley, Diamond-Engraved Glasses of the Sixteenth Century, with Particular Reference to Five Attributed to Giacomo Verzelini (London, 1929), p. 16, pl. 31; E. Egg, "Die Glashütte zu Hall und Innsbruck im 16. Jahrhundert," Tiroler Wirtschaftsstudien 15 (Innsbruck, 1962), p. 80; "Acquisitions/1984," GettyMusJ 13 (1985), p. 251, no. 222; "Recent Important Acquisitions" 1986, p. 108, no. 32; Bremer-David et al. 1993, p. 258, no. 456; Masterpieces 1997, p. 38, no. 27.



61D Gun handle (detail). German, 1612. Darmstadt, Hessisches Landesmuseum, W 61:94.

#### CONDITION

There is one 2 cm  $(\frac{3}{4}$  in.) scratch just below the rim.

- Other examples include: a Venetian or façon de Venise goblet 1. (no. GL 155), a Stangenglas dated 1589 (no. GL 145; von Saldern 1965, fig. 155, and Lipp 1974, fig. 141), and a Humpen dated 1694 (no. HG. 3188; Killing 1927, pl. 14), all in the Germanisches Nationalmuseum, Nuremberg; a Bohemian mug dated 1572 in the Österreichisches Museum für Angewandte Kunst, Vienna (F. C. Lipp, Bemalte Gläser [Munich, 1974], fig. 12); a Humpen dated 1625 and formerly in the Blumka Collection, New York (von Saldern 1965, fig. 157); another Humpen formerly in the Felix Collection, Leipzig (von Saldern 1965, p. 111); a Humpen dated 1594 in the Kunstmuseum, Düsseldorf ( J. Jantzen, Deutsches Glas auf fünf Jahrhunderten [Düsseldorf, 1960], no. 45, pl. 21; and A. von Saldern, Alte Gläser [Düsseldorf, 1968], no. 27); and a Humpen dated 1594 in the Rijksmuseum, Amsterdam (Ritsema van Eck and Zijlstra-Zweens 1993, no. 370). For a brief discussion of erotic subject matter on glass, including the related theme of "the power of women over men," see von Saldern 1965, pp. 107-111.
- 2. Ibid., p. 167, no. 142.
- 3. The gun is dated 1612 and signed: ... Trampeck: Schifter zu Dietriching: Sculptor. The inscription under the figures on the gun states that the man is a "free fiddler" who "can use his bow freely."



Bohemia or Silesia 1614

Free-blown colorless (pale blue-green) glass with diamond-point engraving HEIGHT: 26.3 cm (10% in.) DIAMETER (at base): 12.3 cm (4% in.)

84.dk.560

The glass of this beaker contains one large, elliptical bubble and numerous minute bubbles, as well as some embedded impurities. The cylindrical body, slightly expanded toward the top, rests on an applied foot ring that is roughly overlapped at the join. The surface is diamond-point engraved near the lip with a band of a foliage-and-tendril pattern over a row of cusped arcading, followed by a band of a bilaterally symmetrical pattern of palmette forms and circular motifs joined with a cluster of flowers. Below, on one side of the vessel wall, is a helmed and mantled shield emblazoned with a crown encircling two crossed swords and an upright épée (fig. 62c). On the other side is a scene of two men in doublets





62A-B Alternate views.





62C-D Details of engraved decoration.



62E Kurfürstenhumpen (detail). Bohemian, 1607. Ernesto Wolf Collection, São Paolo. From B. Klesse and H. Mayr, European Glass from 1500–1800: The Ernesto Wolf Collection (Vienna, 1987), no. 38.

and breeches sparring with swords. One man holds his sword with its point resting on the ground, while the other man holds his sword in both hands preparing to lunge at his opponent (fig. 62d). Behind, a goblet sits on the ground, which is picked out with numerous small mounds and tufts of grass and several large plants. Between the scene and the shield are inverted palmette and pendentive motifs, as well as stylized delphiniums and other floral designs. Below is a decorative border of groups of flowers alternating with abstract spherical motifs, cusping, and arabesques. The bottom of the vessel rises in a slight kick. There is a jagged pontil mark.

Diamond-point-engraved glasses with satirical and moralistic vignettes, frequently spiced with lewd innuendo, are rare; two of the finest examples, formerly in the Blumka Collection, are now in the Getty Museum (see no. 61). In the past, this glass and others that share similarities in their diamond-point-engraved decoration have been attributed variously to Silesia, southern Germany, and the Tirol. <sup>1</sup> The asymmetrical foliate patterns, the spherical, berrylike elements, and the stylized arcades or hangings, however, seem to accord more with the decorative vocabulary associated with Bohemian glasshouses. Von Strasser draws attention to one motif in particular: a series of bowed arcades with a ruffled edge opening either upward of downward. He calls this motif Schabrackendekor because it resembles the saddle cloth of a horse (Schabracke).<sup>2</sup> In the engraved decoration of an elector's Humpen, for example, these swagged motifs are echoed in the reins of the royal mounts (fig. 62e). This type of decoration is found on a small number of diamond-pointengraved Stangengläser and Humpen, often in conjunction with a type of cold painting that is documented in the inventories of the Wilhelmsberg glasshouses around Gratzen in southern Bohemia.

The arms are those of a Cutlers' guild. Nearly identical arms were used by the Breslau guild in 1592.

#### Arms

Gules (?) three swords, a right one in pale, between two others of different shape, hilt and pommel or, together enfiled in a coronet or; the charges of the shield, repeated.

#### MARKS AND INSCRIPTIONS

On one side, engraved, Daniel Weger 1.6.1.4.; on the other side, Fein lang ficht dü zü mir her/ein. Und lass dein Kürschneri/ schen Laüffen sein. Mich dünckt dü/forcht dich für den streichenn. Drümb wirdt dass /glass am dich Nicht reichenn ("You've been bothering me for a long time. Stop running around like a furrier. I think you're afraid of getting hit. That's why the glass will not come within your reach").

#### Provenance

Karl Ruhmann, Vienna; Ruth and Leopold Blumka, New York.

#### Exhibitions None.

110110.

#### BIBLIOGRAPHY

I. Schlosser, *Das alte Glas: Ein Handbuch für Sammler und Liebhaber* (Brunswick, 1956), pp. 109, 111, fig. 81; Egg 1962, p. 80; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 255, no. 242; "Recent Important Acquisitions" 1986, p. 108, no. 33; Strasser and Spiegl 1989, pp. 14–15, fig. 10; Bremer-David et al. 1993, pp. 258–259, no. 457.

#### CONDITION

The bottom of the foot ring is heavily abraded.

- See for example I. Schlosser, *Das alte Glas: Ein Handbuch für* Sammler und Liebhaber (Brunswick, 1956), p. 109, who gives a south German attribution.
- 2. Strasser and Spiegl 1989, pp. 14-15.

## Goblet with the Arms of Bregenz and of Local Patricians

Southwestern Germany (Baden, probably the southern Schwarzwald) After 1621–circa 1635

Free-blown colorless (slightly grayish-brown) glass with diamond-point engraving HEIGHT: 27.4 cm (10% in.)DIAMETER (at lip): 11.6 cm (4% in.)

84.DK.551

This goblet is made of clear glass with numerous minute and some larger bubbles and embedded impurities. The cylindrical vessel is joined to an oblate knop and a hollow bell stem with a flanged rim. On the foot just below the knop, several drawn points rise from the glass surface. Below the lip is diamond-point engraved arcading with trefoil patterns in the spandrels (fig. 63e), bordered on the bottom with parallel lines. Engraved in diamond point over the rest of the surface of the bowl are three rows of shields, seven each, arranged on a diagonal. Each shield is oval within a cartouche frame. All are charged except for two that are blank; fifteen are numbered with an Arabic numeral at the side. At the bottom of the bowl is a border of parallel lines and an abstract foliate pattern.

This vessel belongs to a small group of similarly shaped goblets that are thought to have been produced in the southern Schwarzwald during the last quarter of the sixteenth and the first three decades of the seventeenth century.<sup>1</sup> One

example with the diamond-point-engraved arms of the Fürst abbot, Joachim Opser of Saint Gallen (fig. 63f),<sup>2</sup> probably dates to his tenure between 1577 and 1594, suggesting that the earlier production was more attenuated in form, with a higher trumpet foot and a taller, narrower body. An example with the stockier proportions and the more oblate knop of the Museum's glass is engraved with the arms of Waldburg-Zeil and inscribed: JOHANNES FROBENIUS/IGNATius S.R.I. Daepifer.here /hereditarius Comes in Ceyl Do min-/us in Waldburg ("Johann Froben Ignatius S.R.I. Daepifer hereditary count in Zeil, Lord in Waldburg") (fig. 63g);<sup>3</sup> as the arms of the Counts of Waldburg-Zeil were enhanced with an imperial orb with their elevation to Lord High Stewardship in 1614, a terminus ante quem for the glass is established. In an arrangement analogous to that of the Getty glass, a fragment of another glass is engraved with the arms of the monastery of Saint Blasien where the vessel was found, as well as those of donors and of abbots who reigned between 1625 and 1635.4

The earliest documentary reference to glass manufacture in the southern Schwarzwald is found in a contract of 1426 between the Benedictine abbey of Saint Peter and glassmaker Konrad Pauli, who was active in the Knobelwald (community of Hinterstrass); numerous documents of the seventeenth century link Saint Peter's Abbey with the glass trade.<sup>5</sup> In 1516, a glasshouse is first mentioned in the community of Saint Blasien; in 1579 another was operating in the neighboring Windbergtal.<sup>6</sup> Other glasshouses of the period are documented at Lengenfeld near Leibertingen (circa 1580–circa 1673), Schapbach near Rippoldsau/Zinken Seebach (circa 1590–circa 1690), Todtmoos (circa 1590– circa 1790), Wies near Kandern/Rossboden (1585 and



63A-D Details of engraved decoration.





63E Detail of engraved decoration.

after), Kappel near Neustadt in the Grünwald (1611-circa 1715), and at Habsmoos and Muchenland in the Blasiwald (1579-1684); it is to one of the numerous glasshouses in either the Grün- or Blasiwald that these goblets are generally attributed.<sup>7</sup>

Diamond-point engraving was probably introduced to the Schwarzwald by craftsmen from Hall or Innsbruck. Moreover, the shape of these goblets is reminiscent of the goblets datable to 1580–1590 attributed to Antonio Montano of Hall; in particular, they are reminiscent of diamond-point engraved goblets with gold lacquer decoration attributed to Innsbruck or Bohemia (fig. 63h).<sup>8</sup> The important glasshouse at Kappel in the Grünwald was established by Abbot Martin I of Saint Blasien through a twenty-year contract with the masters Thomas and Hans Sigwart of Steinbach and Georg Raspaler of Hall.<sup>9</sup>

The unnumbered shield in the first row is emblazoned with the arms of the city of Bregenz in the Vorarlberg end of the Bodensee, while the remaining shields bear the arms of patricians or *Bürgers* of the city.<sup>10</sup> The identified arms are: shield no. 1, Vonach or Von Ach; nos. 2, 11, and 15: Deuring; nos. 3 and 8: Oxner; no. 4: Roi or Friaul (?); no. 5: Bildstein; no. 6: Yelin von Gruonholtegg; no. 7: von Enzberg; no. 9: Futtler (?); and no. 14: Rist (?). Gallus Deuring, who served on the council and was bailiff of Bregenz, is mentioned in documents of 1605; his son, Niklas, an imperial court councilor to Ferdinand 11, was ennobled and the family arms were enhanced in 1621, and in 1630 they were entitled to use von in their name.<sup>11</sup> As the Deuring arms here are the enhanced version, their elevation provides a terminus post quem for the Museum's glass.

#### Arms

In three rows across the surface of the vessel twenty-one shields, seven per row, several blank, not all numbered, engraved in diamond point, unnumbered a patchwork of pelts, a pale ermine; 1) a swan with wings opened; 2) quarterly one and four on a mount a lion rampant holding a gem ring and two and three on a pale three bezants; 3) an ox rampant armed; 4) a pale three trees; 5) issuant from a mount vert a cross between two arms vested each holding a stone; 6) quarterly one and four, a rose and

two and three lozengy in bend sinister, on an inescutcheon gules and on a pale the lettering "SMD" in pale, sable; 7) a gem ring; 8) as 3; 9) a stag standing in profile; 10) flanking a tree a goat rampant and a man; 11) as 2; 12) as 7; 13) quarterly one and four a bendy with tree and two and three a chevron with three bezants; 14) a shield tripart the florettes; 15) as 2 and 11; 16) Forstmarke "MS"; 17) Hausmark "IGH"; 18) a crescent between three mullets; 19) blank; 20) blank.

### MARKS AND INSCRIPTIONS None.

PROVENANCE Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 256, no. 249; Bremer-David et al. 1993, p. 247, no. 435.

#### CONDITION

The foot is abraded.

- H. Siefert, "Glas," in Die Renaissance im deutschen Südwesten zwischen Reformation und Dreissigjärigem Krieg, exh. cat. (Badisches Landesmuseum, Karlsruhe/Heidelberger Schloss, 1986), vol. 2, pp. 837–839.
- 2. Ibid., p. 838, no. R 1; von Saldern 1968, no. 106.
- 3. See Siefert (note 1), p. 838, no. R 2.
- Formerly Karlsruhe, Badisches Landesmuseum. See Moser 1969, p. 42, figs. 5–6.
- 5. Kolb 1813/1816, p. 381; Moser 1969, p. 5.
- 6. Kolb 1813/1816, p. 387; Moser 1969, p. 6.
- 7. Moser 1969, pp. 5-14, 34-35.
- 8. See Egg 1962, p. 81, and pl. 30, fig. 71.
- 9. Moser 1969, p. 9.
- 10. The heraldic information was provided by Ottfried Neubecker and the Landesarchiv, Voralberg, Austria.
- See J. Siebmacher, Grosses und allgemeines Wappenbuch 4, pt. 1, no. 3, Abgestorbener bayerischer Adel III (Nuremberg, 1911), p. 168.



63F Armorial goblet. German (Schwarzwald), circa 1580. St. Gallen, Historisches Museum, 18364.



63н Goblet. Bohemian, circa 1600. H: 26.5 cm (10¾ in.). Innsbruck, Tiroler Landesmuseum Ferdinandeum, GL 83.



630 Armorial goblet. German (Schwarzwald), circa 1600. Private collection. From Die Renaissance im deutschen Südwesten zwischen Reformation und Dreissigjährigen Krieg, exh. cat. (Karlsruhe, 1986), p. 838, no. R 2.



Southern Bohemia Early seventeenth century

Free-blown colorless (pinkish-gray) glass with diamond-point engraving HEIGHT: 44.8 cm  $(17^{15/16} \text{ in.})$ DIAMETER (at lip): 12.2 cm  $(4^{13/16} \text{ in.})$ 

84.dk.659

This tall, cylindrical vessel has a brilliant, polished surface with impurities including black frit and numerous bubbles, some large, throughout, including unvitrified elements appearing as flecks of black metal. The glass is further characterized by a reamy quality. The thick foot ring is turned under. The vessel wall is divided into two equal zones separated by double-line borders and decorated with diamondpoint engraving of delicate floral sprays (fig. 64a) and edged with swag-and-guillioche borders. The four different types of flowers are generalized, but those on the two sides of the upper zone resemble pinks and aquilegia. The vessel body has a high pointed kick. A double pontil mark suggests that the iron was reattached to the vessel when the foot was attached, thus reheating the vessel and giving the glass in the immediate area a reamy quality.

Klesse believes that the engraved decoration is too free to have been executed in Hall or Innsbruck and relates it to two comparable pieces: a *Humpen* in the Berlin Kunstgewerbemuseum, Schloss Köpenick, and a blue tinted flask in the Historisches Museum, Bern.<sup>1</sup> The tendril pattern is the same as that on a plate in Munich dated 1536.<sup>2</sup> Hnikova would date this glass to around 1600, writing that diamondpoint engraving that originated in Italy and appeared in Hall and Innsbruck around 1565–1600 also flourished in Bohemia and Silesia only up to the time of the Thirty Years War.<sup>3</sup>

Arms None.

MARKS AND INSCRIPTIONS None.



64A Detail of engraved decoration.

#### Provenance

Fritz Biemann, Zurich (sold, Sotheby's, London, June 16, 1984, lot 46); [David Inc., Vaduz].

#### EXHIBITIONS

3000 Jahre Glaskunst von der Antike bis zum Jugendstil, Kunsthalle, Lucerne, 1981; Sammlung Biemann Ausstellung 500 Jahre Glaskunst, Kunstgewerbemuseum, Cologne/ Kunstgewerbemuseum, Berlin/Museum Bellerive, Zurich, 1978–1979.

#### BIBLIOGRAPHY

D. Hnikova, *Böhmisches Glas* (Bern and Stuttgart, 1974), p. 40; Klesse and von Saldern 1978, p. 15, fig. 12 and p. 118, no. 65; *3000 Jahre Glaskunst von der Antike bis zum Jugendstil*, exh. cat. (Kunsthalle, Lucerne, 1981), p. 161, no. 705; "Acquisitions/ 1984," *GettyMusJ* 13 (1985), p. 251, no. 223; Bremer-David et al. 1993, p. 259, no. 458.

#### CONDITION

There is some slight abrasion on the surface and on the foot. Otherwise the glass is in excellent condition.

- 1. Klesse and von Saldern 1978, p. 16.
- 2. Rückert 1982, vol. 1, p. 31, no. 130, pl. 31, color pl. 4.
- D. Hnikova, Böhmisches Glas (Bern and Stuttgart, 1974), pp. 40-41.





Central Germany (possibly the Fichtelgebirge) or northern Bohemia 1631

Free-blown dark cobalt-blue glass with enamel decoration HEIGHT: 7 cm (2<sup>3</sup>/<sub>4</sub> in.) DIAMETER (at lip): 10.2 cm (4 in.)

84.dk.561

This footless vessel is cup shaped, with straight walls canting slightly outward and rounded at the base. Framed by a cusped line just below the lip and just above the base, the entire surface is decorated in eight lines of text in white on red lining, each running around the entire circumference of the vessel. A vertical white line marks the beginning of the verse but not necessarily the start of the subsequent lines. A jagged pontil mark projects from the small kick.

The inscription on this whimsical tumbler refers to its ability to right itself when laid down on its side, thus encouraging constant replenishment. It instructs the user to empty its contents and lay it down; when it stands up again, it asks to be refilled and passed on. The first two tags are a variant of a doggerel verse that is frequently diamond-point engraved on certain pieces of Northern domestic glass (see no. 13); it admonishes the drinker to empty the glass, put it down, and fill it up again. The variant form here and the long inscription appear to be unique to the Museum's tumbler.

The earliest examples of inscription glasses favor short and incisive aphorisms, for example, "Gelt und Gut macht Mut" ("Money and property give courage"), which appears on a clear glass jug dated 1576, or "Sei alzeit from und furchte Got" ("Be ever pious and fear God") on a cobalt-blue goblet dated 1582.<sup>1</sup> Later examples favor lengthier sentiments, such as that on a cobalt-blue *Stangenglas* with silvergilt mounts from Kirchensittenbach that can be dated before 1593 (fig. 65a), as it is depicted in a painting of that date by Jobst Tetzel.<sup>2</sup> The inscription on the Museum's tumbler, apparently a token for a lover, extols true though illicit love. The speaker concludes with an ironic toast to "false hearts."

Glasses with enameled decoration comprised entirely of inscriptions are rare and—in part because of the early use of cobalt-blue glass—appear to be of Bohemian origin.<sup>3</sup> On



65A *Stangenglas*. German, before 1593. H: 41.7 cm (16<sup>3</sup>/<sub>8</sub> in.). Nuremberg, Germanisches Nationalmuseum, 10064a.



the other hand, in 1549 a factory in Saint Georgen in the Lutzelmain Valley on the Ochsenkopf is known to have produced cobalt-blue enamel or smalt. In this case the smalt was used primarily for the production of earthenware glazes and pigments, but it was also apparently processed by other Fichtelgebirge workshops into cobalt-blue glass.<sup>4</sup>

Both the unusual length of the inscription and the surprising frankness of its message are considered characteristic of Fichtelgebirge glasses.<sup>5</sup> The form of the Museum's tumbler also appears to have been known regionally as an *Aufsteher* (or a vessel that would not tip over), a term that appears on a 1735 price list of products made in Thuringian glasshouses.<sup>6</sup>

#### Arms

None.

#### MARKS AND INSCRIPTIONS

Around the vessel wall, painted in enamel, Drinckh mich aus undt leg mich nid[er] Steh ich auff so vil mich wider. gib mich deinen/ nechsten wider. ich lieb was wein ist obs gleich nicht mein ist. unndt mier nicht wertten khan/so hab ich gleich wol mein vreidt daran. liebt ihr mich wie ich eich nicht mehr veger ich/von eich. vil sint lieblich aber nur ihr ehr vreidt mich ich lieb eich aus hertzen/grundt. woltt godt eur maul unndt mein maul war ein mundt. ich lieb eich/noch von grundt meinnes hertzen ob ich so[llt] nicht mitt eich darff schertzn/drink allen valschen hertzen. Ich wolt sie miesten alle ehr hengen. /die mier undt eich nichts ginnen. ("Drink me dry and put me down. If I get up, then fill me up again, hand me to your neighbor. I love all wine, even if it isn't mine and isn't any use to me, I enjoy it nonetheless. If you love me as I love you, I ask no more of you. Many are lovable, but only you make me happy. I love you from the bottom of my heart, though I should not make merry with you. [I] drink to all deceivers. I wish they would all hang who begrudge me and you everything"); at the end of the inscription, 1631.

#### Provenance

Franz Ruhmann, Vienna; Hans Wilczek, Burg Kreuzenstein, Austria; Ruth and Leopold Blumka, New York.

EXHIBITIONS None.

#### BIBLIOGRAPHY

Walcher-Molthein 1926, II: Forum, p. 64, fig. 41; T. Ostertag, Das Fichtelgebirgsglas, Beiträge zur fränkischen Kunstgeschichte 2 (Erlangen, 1933), pl. 22a; von Saldern 1965, p. 149, fig. 266; "Acquisitions/1984," GettyMusJ 13 (1985), p. 255, no. 243; Bremer-David et al. 1993, p. 247, no. 436.

#### CONDITION

The base is considerably worn and abraded. The enamel of the inscription, which was applied unevenly, is worn or flaked in some spots. There are traces of paint on the inside edge.

- 1. von Saldern 1965, p. 176.
- 2. Both the painting and *Stangenglas* are in the Germanisches Nationalmuseum, Nuremberg. See G. Schiedlausky, *Essen und Trinken* (Munich, 1956), pl. 43.
- 3. von Saldern 1965, pp. 149.
- 4. Walcher-Molthein 1926, p. 63.
- 5. Ibid., p. 63.
- W. Stieda, "Åltere deutsche Kartelle," Schmollers Jahrbuch 37, no. 2 (1913), pp. 193–223, nos. 725–755; and von Saldern 1965, p. 200.



Northern Germany 1660

Free-blown colorless (slightly pinkish-gray) glass with gold leaf and enamel decoration HEIGHT: 21.5 cm (8% in.) DIAMETER (at lip): 13.1 cm (5% in.)

84.dk.562

Made of clear glass with a few embedded impurities, this cylindrical vessel with thick, slightly sloping walls rests on an applied foot ring. Below the lip is a row of large, widely spaced, alternating red and green dots on a band of gilding, followed by a row of white dots. On the vessel wall in enamel is a man in full armor, visor raised, revealing a mustached face (fig. 66a). He wears high boots and spurs and appears on a stylized green ground with a walking stick in one hand and the strap of a rectangular basket over the other. On his back is a large, barrel-like container; its strap crosses over his chest. He is accompanied by a goat whose head is turned back toward his master. Above the figure to the right is the personification of the wind cloaked in dark clouds, blowing a gale and sheets of driving rain (fig. 66b). The palette consists of blue, yellow, red, brown, white, and black. The remaining area of the vessel surface is covered with a lengthy inscription. A single large blue dot surrounded by a ring of white dots appears over the figure. Above the base is another decorative band of two parallel lines, red then blue. The foot ring is decorated with a continuous row of large white irregular dots. At the base of the spiked kick is a chipped shallow pontil mark.

This is the only recorded example of an enameled glass lampooning Jean T'Serclaes, Count of Tilly (1559–1632), a capable military leader who, in the eyes of the Protestants, became a symbol of Catholic excesses during the Thirty Years War (1618–1648).<sup>1</sup> A 1631 pamphlet entitled "Dess Tilly confect panquet" ("Tilly's banquet of assorted sweets") depicts Tilly suffering from overindulgence of "Leipziger confect" ("assorted sweets from Leipzig"), while his servant holds a portable toilet for his relief.<sup>2</sup> The inscription on the Getty glass notes that Tilly's basket is filled with more of the same "Leypsische confeckt" than he can carry. Even after Tilly's defeat at Leipzig in 1631 and his death at the Battle of Lech the following year, the pamphlets were unrelenting in their satire.

The text and imagery of the Getty vessel clearly depend on a similar pamphlet or broadsheet. As the inscription refers to the blows he suffered from the "Leypsische confekt," his disgrace, and his miserable wanderings with only an old goat as a companion, the composition must be based on a sheet that was issued in the aftermath of his defeat, perhaps in late 1631 or 1632. The highly unsympathetic Protestant point of view establishes a North German origin, perhaps Braunschweig or Niedersachsen.

#### Arms None.

#### MARKS AND INSCRIPTIONS

On the vessel wall, in enamel, Hilff Gott! wie muss sieh doch der gutte Tilly leyden/Wie kann doch mancher Geld auss seinem schimpfe schneiden / Wie zeucht er doch vorbey, wie musser sich doch bücken/Wie drückt ihn doch die Butt auf seinem alten Rücken / Der kaum geheyletist von Puffen, die kriegt/Bey Leypsischem confeckt. Der Korb fast uberwiegt/Mehr als er tragen kann. So wandert er geschwinde/Mit sich und seinem Stab in Regen, Schnee und Winde/Doch geht er nicht allein, sein alte Geyss leufst mitte/Und zettert bey ihm her mit eben leisen Tritte/Sie meckert dass sie muss mit dem zu fusse fort/Mit dem sie vor stets fuhr an inede Stell und Ort ("Oh God, what good old Tilly must suffer, how some can profit from his disgrace. How he passes by, how he has to bow. How the tub on his back must oppress him who is scarcely recovered from the flatulence caused by the assorted sweets of Leipzig. The tub is almost more than he can carry. So he hurries along with his staff in rain, snow, and wind. But he is not alone, his old goat accompanies him and yacks as she runs at his side and bleats that she has to walk, whereas she always used to go everywhere by coach"); from Tilly's mouth, O miserere mei ("Oh, take pity on me"); on the basket, Nimiae Exaction ("Too great a punishment"), on the barrel, Mea Constientia ("My conscience"); on his staff, Unicum et fragile ("Alone and weak"); from the personification of the wind, Vindicta divina/Vindicta divina ("Divine vengeance, divine vengeance"); below the lip, 1.6.6.0; on the bottom, painted in a modern hand: 3822 and 1180.


PROVENANCE Ruth and Leopold Blumka, New York.

Exhibitions None.

## none.

# BIBLIOGRAPHY

"Acquisitions/1984," *GettyMusJ* 13 (1985), p. 249, no. 209; Bremer-David et al. 1993, p. 249, no. 441.

# CONDITION

The gilding is very worn. The bottom of the foot ring is considerably worn.

# Notes

- For a brief history of the Thirty Years War, see E. A. Beller, "The Thirty Years War," in J. P. Cooper, ed., *The New Cambridge Modern History* (Cambridge, 1970), pp. 306–58. For detailed accounts, see J. V. Polišenský, *The Thirty Years War* (Berkeley, 1971) and the same author's *War and Society in Europe, 1618–1648* (Cambridge and New York, 1978). See also S. H. Steinberg, *The Thirty Years War and the Conflict for European Hegemony, 1600– 1660* (New York, 1966). For a detailed history of Tilly's career, see G. Gilardone, *Tilly, der Heilige im Harnisch* (Munich, 1932); for an exhaustive account, see O. Klopp, *Tilly im dreissigjährigen Kriege, 2* vols. (Freiburg im Breisgau, 1872).
- 2. H. Langer, The Thirty Years War (New York, 1980), p. 37, fig. 19.



66A Detail of engraved decoration.



66B Detail of engraved decoration.



Willem Jacobszoon van Heemskerk (1613–1692) Northern Netherlands (Leiden) 1675–1685

Dark green glass with diamond-point engraving HEIGHT (without stopper): 23 cm ( $9\frac{1}{16}$  in.) MAX. DIAMETER: 15 cm ( $5\frac{15}{16}$  in.)

84.dk.662

Made of heavy glass with numerous minute bubbles, this vessel has a flattened globular body and a high, narrow neck. Elaborate diamond-point engraved calligraphy decorates the body of the vessel (fig. 67a). The modern neck ring and the cork are mounted in silver gilt in a foliate-and-lappet pattern (fig. 67b).

In the second quarter of the seventeenth century, the tradition of diamond-point engraving in the northern Netherlands was championed by a small group of craftsmen and -women who excelled in decorating bottles, plates, Römer, and other glass vessels with elaborate and expansive calligraphic designs. Instruction in calligraphy was part of general education for the cultural elite, particularly women. This fact explains why calligraphic diamond-point engraving on glass was practiced largely by amateurs, especially schoolmasters who would have taught penmanship to upper-class women.<sup>1</sup> Indeed, seventeenth-century Dutch calligraphic engraving has been described as a true national dilettante art.<sup>2</sup> Prominent among the earliest of these artists, whose names are known from documents or signed examples, mostly dating from 1619 on, are Anna Roemers Visscher of Amsterdam; Anna's sister Maria Tesselschade; and the erudite Anna Maria van Schürman, for whom Huygens and Hooft provided verse.<sup>3</sup> Dating from the second half of the century are numerous examples signed by François Crama (Leiden, 1637-1718), Mathieu Petit (born Leiden-died 1721, Arnhem), and the schoolmaster Bastiaan Boer (born 1650, Besoyen—died 1713, Warmond).

Arguably the most accomplished of these amateurs was Willem Jacobszoon van Heemskerk (Leiden, 1613–1692), a cloth manufacturer. He is portrayed as a cloth-hallmaster in Jan de Baen's 1675 *Staalmeesters of Leiden* and again in 1687, at the age of seventy, by Jan van Mieris (1660–1690), in a



67A Detail of body with engraved inscription.



67B Detail of neck ring and cork mount.





67c Detail of underside with engraved inscription.

composition that was reproduced in mezzotint by Abraham Blo[0]teling (1640–1690). Evidently a man of considerable creative inclination, he was also a playwright: his tragedy Hebreeusche Heldinne (The Hebrew Heroine) was staged in Amsterdam in 1647. His literary interests are reflected in the eclectic and multilingual aphorisms, poetic sentiments, toasts, and biblical quotations that he executed in fluid lettering.<sup>4</sup> Heemskerk often engraved poetic explanations or amplifications of these phrases on the lids or the undersides of the vessels. The lettering was rendered in script but occasionally in Roman block print and was elaborated with supple and complex flourishes. The bulk of his work-found on a great variety of vessels, including wineglasses, goblets, covered goblets, beakers, plates, sugar bowls, and Römer, as well as bottles-dates from the 1670s and 1680s, the latest being dated 1691, a year before his death.<sup>5</sup>

The success of Heemskerk's diamond-point engraved glasses is due as much to his keen sense of balance in the use of surface space as it is to his calligraphic skills (fig. 67d). In addition to clear glass, Heemskerk often chose vessels of dense, dark green, purple, or blue bottle glass, which suited his work particularly well as it minimized the visual confusion of seeing through to the reversed lettering on the opposite side, a characteristic of thin, transparent glass.

Heemskerk's enthusiasm for calligraphic engraving led to a large production of vessels: a total of seventy-eight engraved glasses are signed by the artist, who fortunately chose not to sell his glass piecemeal during his lifetime. His grandson, Leonardus van Heemskerk, who died in 1771 at the age of ninety-five, left an inventory of personal effects in which nearly two hundred and fifty calligraphic glasses are itemized. These glasses are all thought to be the work of Willem, from whom they were inherited and, indeed, many can be identified with surviving examples.<sup>6</sup> Much of Leonardus's collection of glass was sold at auction in Leiden on November 2, 1771.<sup>7</sup>

The inscriptions on these vessels are largely aphoristic. Van Heemskerk was an outspoken Remonstrant, and numerous inscriptions make it clear that he was not averse to employing his art as a vehicle for theological expression.<sup>8</sup> The choice of biblical references and pithy adages, such as *Rede brengt raadt* ("Counsel brings reason"), which was engraved on a glass made for the Remonstrant clergyman and writer G. Brandt, allude to his differences with Calvinist doctrine.<sup>9</sup> Later examples increasingly reflect not only his spiritualism but his keen sense of mortality; for instance, one dated 1686 and now in the Boymans-van Beuningen Museum, Rotterdam, declares: *Des Levens lamp is maer een damp* ("The lamp of life is but a vapor"). Biblical references to salvation or earthly admonishments in anticipation of it, such as *Laet af van het quaede* ("Abandon evil"), are also typical of his late work.

Heemskerk's inscriptions are usually in Dutch or Latin; only two in Italian appear in Leonardus van Heemskerk's inventory. In one of the two instances—the lid of a covered goblet—the tag is the same as that engraved in diamond point on the Museum's bottle, whereas the body of the vessel is inscribed *Dank Godt in alles* ("Thank God in everything").<sup>10</sup> A goblet that has been associated with that cited in the inventory, now in the Boymans-van Beuningen Museum, Rotterdam, is signed and dated 1685.<sup>11</sup> Klesse believes that this piece helps establish a date for the Getty bottle.<sup>12</sup>

# Arms

None.

## MARKS AND INSCRIPTIONS

On the body of the vessel, engraved, *Pan e vin e va cantando* ("Bread and wine and merriment") (see fig. 67a); on the underside of the vessel between the foot ring and the pontil mark, engraved, *Kan't Brood en [...] Wijn niet doen? Wat Zouts kan't Mael vergoên* ("If bread and wine fail to do so, a little pinch of salt can save a meal") (fig. 67c). In the center of the pontil mark, engraved, *W. van Heemskerk* (fig. 67c)

## PROVENANCE

Mrs. D. C. Eshelby, Cumberworth (sold, Sotheby's, London, November 27, 1967, lot 47); Fritz Biemann, Zurich (sold, Sotheby's, London, June 16, 1984, lot 153); [David Inc., Vaduz].

### EXHIBITIONS

Meisterwerke der Glaskunst aus internationalem Privatbesitz, Kunstmuseum, Düsseldorf, 1968; 3000 Jahre Glaskunst von der Antike bis zum Jugendstil, Kunsthalle, Lucerne, 1981.

# BIBLIOGRAPHY

The Times (London), November 28, 1967; von Saldern 1968, pp. 46–47, no. 117; Art at Auction: The Year at Sotheby's, 1967–1968 (London, 1968), p. 416; "Recent Important



67D WILLEM JACOBZ. VAN HEEMSKERK (Netherlandish, 1613–1693). Plate, 1685. Diam: 32.3 cm (12¾ in.). Amsterdam, Rijksmuseum, BK-NM-764.

Acquisitions Made by Public and Private Collections in the United States and Abroad," *JGS* 10 (1968), p. 186, no. 35 (acquired by Fritz Biemann); F. Biemann, "Die holländischen Glaser des 17. und 18. Jahrhunderts der Sammlung Fritz Biemann, Zurich," *Alte und moderne Kunst* 12, no. 101 (November–December 1968), pp. 13–18; C. Munsey, *The Illustrated Guide to Collecting Bottles* (New York, 1970), p. 16; Klesse and von Saldern 1978, no. 75; Rütti et al. 1981, p. 166, no. 708; "Acquisitions/1984," *GettyMusJ* 13 (1985), p. 252, no. 226; "Recent Important Acquisitions Made by Public and Private Collections in the United States and Abroad," *JGS* 28 (1986), p. 108, fig. 35; F. G. A. M. Smit, *Inscriptions in Calligraphy on Glass: Uniquely Dutch Seventeenth-Century Calligraphy on Glass. A Preliminary Catalogue*, photocopy, published privately (Peterborough, England, 1989), p. 102, no. P4.

# CONDITION

There is some minor surface abrasion, as well as a circular sunspot chip below the engraved area. The foot is considerably worn. The metalwork and cork are modern replacements. The chain that originally attached the cork to the neck ring is lacking. Notes

- 1. Ritsema van Eck 1995, pp. 14–16.
- 2. A. M. Pareau, "Nederlandsche glasgraveurs en glasetsers en hun werk," *Jaarverslag can het Koninklijk Oudheidkundig Genootschap te Amsterdam* (1900), pp. 1–72. See also F. Hudig, "Diamond Engraving," in W. Buckley, *European Glass* (London, 1926), p. xxiii; and Honey 1946, p. 129.
- 3. H. E. van Gelder and B. Jansen, *Glas in Nederlandse Musea* (Antwerp, 1969), p. 43.
- F. G. A. M. Smit, Inscriptions in Calligraphy on Glass: Uniquely Dutch Seventeenth-Century Calligraphy on Glass; A Preliminary Catalogue, photocopy, published privately (Peterborough, England, 1989), p. 28.
- 5. See Ritsema van Eck 1995, pp. 15 and 469; Smit (note 4), pp. 28-34; idem, "Willem Jacobszoon van Heemskerk (1613-1692) vermaard glasgraveur," *Vormen uit Vuur* 154 (1995), pp. 2-13.
- The inventory of glasses is published in J. G. van Gelder, "Willem Jacobsz. van Heemskerk, Glasgraveur," *Oud Holland* 57 (1940), pp. 185–191.Twelve of the forty-nine itemized bottles are identified; see p. 190, notes 1–9, and p. 191, notes 1–3.
- 7. At least seventeen pieces of the artist's glass were acquired by the Koninklijke Kabinet van Zeldzaamheden in The Hague, which then passed the objects on to the Rijksmuseum in 1875. See Ritsema van Eck 1995, nos. 76–92; nos. 93–105 are objects in the Rijksmuseum attributed to van Heemskerk.
- 8. Klesse and von Saldern 1978, p. 17.
- 9. van Gelder (note 6), p. 184.
- 10. Ibid., p. 186, no. 76.
- 11. Ibid., p. 186, note 1.
- Klesse and von Saldern 1978, pp. 16-17, and pp. 134-135, no. 75.



Friedrich Winter (died 1711 or 1712) Germany (Silesia, Schaffgotsch *Glashütte*, Hermsdorf) Circa 1691–1694

Colorless glass with wheel-engraved, high-relief decoration HEIGHT (with lid): 31 cm (12<sup>3</sup>/<sub>16</sub> in.) HEIGHT (without lid): 21.9 cm (8<sup>5</sup>/<sub>8</sub> in.) DIAMETER (at lip): 9.7 cm (3<sup>13</sup>/<sub>16</sub> in.)

84.dk.568.1-.2

The body of this conical covered goblet rises from an expanded foliate base, supported by a polished cylindrical stem with a cushioned, foliate-patterned, wheel-engraved knop on a circular wheel-engraved foot. The heavy, colorless (slightly purplish-gray) glass is cut in high relief with wheel engraving in an overall foliate-and-rocaille pattern. The background areas have been polished.

On one side of the vessel, a fir tree is bordered by two banderoles bearing an engraved inscription (fig. 68d). A grotesque face supports the device while another appears below on the vessel base. On the opposite side of the bowl is a shield lozengy flanked by a cornucopia issuing forth sprays of branches. Two waterfowl—probably storks or pelicans inhabit the foliate decoration, their necks intertwined with tendrils (fig. 68e). A reduced version of the lozengy device







68A-c Alternate views.





68D Detail of inscription and device.



68E Detail of waterfowl.



68F Detail of boar.



68G Detail of bear.

appears below on the projecting base of the vessel body, flanked on one side by a boar (fig. 68f) and on the other by what appears to be a bear (fig. 68g), both emerging from the vegetal flourishes. The stem knop is decorated with vegetal forms with a similar lozengy device on one side and a grotesque face on the other. The foot is decorated with a deepcut palmette design alternating with wheel-engraved floral patterns. Remnants of black material appear to be ingrained in the cut areas of the glass. The particles are small and seem to be insoluble. They may relate somehow to the cutting process itself, although any reference to such evidence vis-àvis the cutting technique has yet to be found.

One of the foremost glass-producing areas of Silesia had been located since the Middle Ages on the northern slope of the Riesengebirge (Giant, today Krkonoše, Mountains) and in the Jelenia Góra (Hirschberg) Valley, encompassing below them the villages of Sklarzska Poreba (Schreiberhau), Sobiecin (Hermsdorf), Cieplice (Warmbrunn), and Jelenia Góra itself. The principal glassworks were located in and around the mountain town of Schreiberhau, where, by 1686, there were about one hundred active workshops operated by the Preussler family.<sup>1</sup> Wheel-engraving and polishing work was also carried out in Schreiberhau, where, between 1685 and 1693, twenty-four glass engravers were recorded, as well as in the lower towns of the Hirschberger Valley.<sup>2</sup> Belonging to the estates of the Counts of Schaffgotsch, whose local seat was the castle of Kynast located just south of Hermsdorf, the region—now in Poland—had become a possession of the Habsburgs in 1526 and was considered a dependency of the kingdom of Bohemia until it was absorbed into Prussia



68H FRIEDRICH WINTER (Silesian, died circa 1711). Goblet, circa 1690. Prague, Uměleckoprůmyslové Muzeum, 10.178/1906.

by Frederick the Great in 1742. Traditional links with the glass production of northern Bohemia, on the other side of the Riesengebirge, were further strengthened in the seventeenth century as glassworks on both sides of the mountains became bound by family ties with the Friedrichs, Preusslers, and others.

The traditional belief that Count Hans Ulrich of Schaffgotsch (died 1635) brought hardstone engravers to his estate, though not documented, enjoys general acceptance.<sup>3</sup> An official report of October 13, 1688, states that his son, Christoph Leopold of Schaffgotsch (1623–1703), received a recommendation from Friedrich Winter, a master engraver who was also the *Kastellan* (steward) of Kynast, to install a water-driven glass-engraving workshop at Hermsdorf; this facility, which was to accommodate ten to twelve engravers under Winter's direction, was completed by 1690 or 1691.<sup>4</sup> The count's esteem for Friedrich's artistic abilities is made clear in his order:

Vors ander Wihl ich durchauss nit haben, dass anderwerts, alss bey dem Winter glass geschlieffen und die kunst zue gemein gemacht werden solle. Wollet daher von nun an verbitten, dass sich keiner, wehr der auch sey, auf meinen herrschaften unterstehen solle, ohne mein vorbewusst und erlaub mehr glass zur schleiffen, viel weniger anders wohien, by unaussbleiblicher straffen. Wollet auch alsobaldt wo Ihr solche instrumenta findet, dieselbe wegnehmen lassen; dem Winter aber habe ich verlaubet, derienigen sich zu bedienen, die Ihm biss dato zu verfertigung meiner arbeit geholffen und Ihm ferner von Nöthen sein werden.<sup>5</sup>

(And also I certainly do not want glass to be cut anywhere but at Winter's workshop lest the art be made too common. I ask you, therefore, to prohibit anyone, whoever he may be, on my domains from daring to cut glass without my prior knowledge and permission, much less elsewhere, on pain of certain punishment. I also ask you to confiscate such tools immediately, wherever you find them; however, I permitted Winter to make use of those who have helped him to date and whom he will need in the future in the production of work that I have commissioned.)

There is little question that Friedrich Winter was himself skilled in hardstone engraving. A receipt in the *Kameralamt* (Bureau of Public Finance), Hermsdorf, states that the "Ehrenfeste Friedrich Winter Glasschneider und Steinschleifer zu Hermsdorf die Baukosten seines Hauses erstattet habe" ("Honorable Friedrich Winter, glass cutter and stone polisher of Hermsdorf, has been reimbursed for the cost of building his house").<sup>6</sup> Friedrich Winter, like his



681 Probably FRIEDRICH WINTER. *Goblet*, circa 1690. London, The Victoria and Albert Museum, C. 63–1954.



68J Probably FRIEDRICH WINTER. Goblet, circa 1690–1700.
H: 31.5 cm (12% in.). Munich, Bayerisches Nationalmuseum, 60/101.

brother, Martin, had mastered both intaglio and relief cutting, translating in glass a style that can be traced back to traditions of rock-crystal engraving centered in Prague and Milan. The equipment installed in Hermsdorf at the count's instigation was essentially the same as that used in hardstone cutting; the only difference was that, for glass, copper wheels enhanced with an abrasive powder were used instead of engraving wheels made of steel; these copper wheels were used in conjunction with a flux of oil and diamond dust.7 In the later seventeenth century, hardstone engravers increasingly worked in glass until it eventually became the prevalent engraving material.8 For example, engraved seals sold in Warmbrunn, long made from hardstone, were, by the eighteenth century, commonly made of glass. Evidently the count's intention was to similarly exploit the new potassiumsilicate formula for glass produced at Schreiberhau, distinguished by its clarity and brilliance, as an economical substitute for rock crystal.

A group of deep relief-cut glasses that are related by style and technique may be associated with the Hermsdorf workshop. They bear—individually or in some combination the arms of the counts of Schaffgotsch, their motto (*Aucun temps ne le change* ["Untouched by time"]), their badge (a fir tree), and often a device (which sometimes reads as a shield lozengy and at others as an abstracted pinecone). The earliest production is distinguished by heavy, brilliant, crystalline glass. This glass, which is deeply cut—often with roughly cut edges on the rise of the relief, with raised areas that are matte and background areas that are polished, and with ornament dominated by sweeping meanders of acanthus foliage clearly reveals its origins in rock-crystal engraving. A smoky amber topaz sweetmeat dish in the Ernesto Wolf Collection may well have been a product of Winter's work in the Hirschberg Valley.<sup>9</sup> It exemplifies both the aesthetic and the technique that these glasses emulated. Glasses dating from the turn of the century or later are cut less deeply, and the decoration is more systematic, integrating foliate patterns with symmetrical strapwork. The earliest Hermsdorf production is also characterized by the distinctive forms of the vessel bowls, which are either cornucopia- or bell-shaped, both types being originally fitted with knopped covers.

The bodies of the cornucopia-shaped goblets terminate in a single acanthus volute and are supported by a polished cylindrical stem with a cushioned heavy foliate knop. Examples of this type are found in the Fürst Hatzfeld Collection;<sup>10</sup> formerly in the Helfried Krug Collection;<sup>11</sup> and in Prague, with the arms of the counts of Schaffgotsch (fig. 68h).<sup>12</sup> The foliate ornament of these examples is populated with various birds and animals, including eagles, lions, foxes, wild boars, and possibly hawks. The goblets, with a broad-mouthed, bell-shaped body and a slightly flared lip, are surmounted by an unusually broad and flattened dome cover and are supported by a short stem dominated by a heavy, single- or double-foliate knop. Included in this group are examples in the Fürst Hatzfeld Collection, with the arms of Schaffgotsch;<sup>13</sup> in the Dettmers Collection, Bremen, with the mirror monogram of Count Johann Anton Schaffgotsch;14 and in London (fig. 68i) and Munich (fig. 68j).<sup>15</sup> The knops of these glasses are generally in the form of an asymmetrical acanthus volute reminiscent of the termini of the cornucopia glasses.

The Museum's example is unique among the early Hermsdorf glasses in that its shape does not conform to either characteristic types but exhibits elements of both. The stem is of the cornucopia type, but the body of the vessel is conical and does not terminate in a single arced volute; rather, the large double projection of inhabited foliage that terminates the body of the vessel seems to foreshadow this form. The tentative, rather experimental form of the vessel might indicate that it was a prototypical work from which the more coherent, organic clarity of the two characteristic forms evolved. The earliest Hermsdorf glasses lack the deep cut and dense, complex ornament of the Museum's glass.

According to one source, by 1694 the Hermsdorf workshop was no longer under the direction of Winter but had passed on to the glass polisher Christoph Richter, his two sons, and the Warmbrunn glass cutter and polisher Hans Christoph Richter.<sup>16</sup> Other records indicate that, to the contrary, Winter remained in charge of the Hermsdorf workshops until his death in 1711 or 1712; he was succeeded by the glass and stone engraver Jeremias Frister.<sup>17</sup> If we accept the attribution of the glasses discussed above to Friedrich Winter,<sup>18</sup> then they must all date between 1690-1691 and either 1694 or 1711-1712, depending on the authority cited. In either case, the Museum's glass must be dated among the earliest.

# Arms

None.

# MARKS AND INSCRIPTIONS

Aucun temps ne le change ("Untouched by time") (fig. 68d).

# Provenance

Karl Ruhmann, Vienna; Ruth and Leopold Blumka, New York.

# Exhibitions

None.

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## CONDITION

Both the goblet and cover are in excellent condition. There are a few surface scratches.

## Notes

- H. Seydel, "Beiträge zur Geschichte des Siegelstein- und Glasschnitts und der Glaserzeugung im Riesen- und Isergebirge," Schlesiens Vorzeit in Bild und Schrift 7, Jahrbuch des schlesischen Museums für Kunstgewerbe und Altertümer 7 (1919), p. 251; see also Rückert 1982, vol. 2, pp. 253, 256, no. 771.
- O. Drahotová, *Czechoslovakian Glass*, *1350-1980*, exh. cat. (The Corning Museum of Glass, Corning, New York, 1981), p. 26; Seydel (note 1), pp. 251, 260; Rückert 1982, vol. 2, pp. 253– 254, no. 768, and p. 256, no. 771.
- 3. Drahotová (note 2), p. 26.
- Seydel (note 1), pp. 252–253. See also von Saldern 1970, p. 109; and Rückert 1982, vol. 2, pp. 253–254, no. 768. For a full discussion of Winter's work, see A. von Saldern, "Schlesische Hochschnittgläser aus der Werkstatt von Friedrich Winter," in *Festschrift für Brigitte Klesse* (Berlin, 1994), pp. 89–116.
- 5. As cited in E. von Czihak, Schlesische Gläser (Breslau, 1891), p. 130.
- 6. Seydel (note 1), p. 253.
- 7. Ibid., p. 253.

- 8. O. Drahotová, "A Figural Engraved Shell of Rock Crystal in the National Museum of Warsaw and Its Relation to the Silesian Engraved Glass of the Seventeenth Century," *Studies in Glass History and Design*, Eighth International Congress on Glass (London, 1968), p. 79.
- 9. Klesse and Mayr 1987, no. 102.
- Illustrated in von Saldern 1968, p. 72, no. 194; and idem,
   "Unbekannte Gläser von Johann Wolfgang Schmidt, Friedrich Winter und Franz Gondelach," *Anzeiger des Germanischen Nationalmuseums* (Nuremburg, 1970), pp. 110, fig. 14.
- 11. Illustrated in Klesse 1965, p. 139, no. 204; and von Saldern 1970 (note 10), p. 112, fig. 19.
- Uměleckoprůmyslové Muzeum, inv. 10.178/1906. Illustrated in Drahotová 1970 (note 2), pp. 60–61, no. 19.
- 13. Illustrated in von Saldern 1970 (note 10), p. 110, fig. 13.
- 14. Illustrated in *Sechs Sammler stellen aus*, exh. cat. (Museum für Kunst und Gewerbe, Hamburg, 1961), p. 147, no. 134.
- 15. See Rückert 1982, vol. 2, pp. 253–254, no. 768, pl. 226.
- G. Lange, "Die Glasindustrie im Hirschberger Thale," Staats- und Socialwissenschaftliche Forschungen 9, no. 2 (Leipzig, 1889), pp. 25ff.; see also Rückert 1982, vol. 2, pp. 253-254, no. 768.
- 17. Seydel (note 1), p. 253; see also von Saldern 1970 (note 10), p. 113.
- 18. von Saldern 1970 (note 10), p. 113.



# Glossary

## ANNEALING

The process of slowly cooling a finished glass object in an annealing chamber, or lehr. (If a hot glass piece is cooled too quickly, it will break.)

# BATCH

The mixture of raw ingredients (usually silica, an alkaline flux, and lime) melted in a furnace to make glass. The batch can also include scrap glass to aid fusion and metallic oxides to act as colorants.

# BERKEMEYER (GERMAN), BERKEMEIER (DUTCH)

A type of drinking vessel with a prunted cylindrical body and funnelshaped top that was common in Germany and the Netherlands in the sixteenth and seventeenth centuries.

## CANE

A thin stick or rod of colored glass. Monochrome canes, usually white, create the filigree patterns of *vetro a filigrana*. Variously colored canes bundled and fused into a single cane and then cut in cross-section create the spiral or rosette patterns of mosaic or *millefiori* glass.

#### Crizzling

An instability in the glass mixture (usually too much alkali or not enough stabilizer) that causes the glass to be attacked by atmospheric moisture. A process of deterioration results that produces a network of fine cracks on the glass surface.

#### ENAMEL

The vitreous paint used in glass decoration. Pulverized glass is colored with metallic oxides and suspended in an oily medium, producing a fluid pigment that can then be applied to the surface of a glass object. The object is fired in a low-temperature furnace, causing the medium to burn away and the pigments to melt onto the surface of the piece.

## FAÇON DE VENISE (FRENCH)

Literally, "[in the] Venetian style." This term appears to have been coined in the mid-sixteenth century and refers to Venetian-style glass that was produced outside of Venice itself. Glass à la façon de Venise was popular throughout Europe in the sixteenth and seventeenth centuries.

# Detail of no. 27.

#### FLUX

A substance—such as the alkaline soda or potash—that facilitates the fusion of silica for glass. When added to enamel colors, the flux lowers the melting point of the enamels to below that of the glass body to which they are applied. As a result, the colors affix themselves to the vessel before it can become deformed by the heat.

#### FOOT RING

A circular base made by applying a single strand of glass around the underside of an already-formed vessel body.

## Frit

The substance produced by heating but not melting the silica and flux of the glass mixture that is then cooled and pulverized. This fritting process makes the resulting material more stable and homogenous and thus easier to melt into glass.

#### GADROONING

Convex fluting applied as a decorative pattern to metalwork and other decorative arts.

## GATHER

A mass of molten glass attached to the end of a blowpipe, pontil, or gathering iron.

#### Gilding

The process of decorating a piece of glass with gold in the form of gold leaf, gold paint, or gold dust. Certain techniques allow the gold to be fired onto the piece to secure attachment. Unfired gilding can easily wear away with handling.

# GLASHÜTTE (PL. GLASHÜTTEN) (GERMAN)

Literally, "glasshouse," the term used for a Germanic glass workshop or glass manufactory.

#### Guilloche

A decorative pattern of continuous braiding whose open intervals usually include rosettes or other circular designs.

#### HUMPEN (GERMAN)

A Germanic schooner or broad cylindrical beaker, often enameled, used in the sixteenth and seventeenth centuries primarily for the consumption of beer.

# KICK

The concavity on the underside of a vessel formed by pushing the pontil into the still-soft base. The kick helps the object stand

vertically and without wobbling; it may also help to reduce the interior volume, strengthen the base, and shorten the annealing time of the vessel.

# Knop

A variously shaped swelling on the stem of a vessel. This ornamental element, which may also serve to strengthen the glass, can be useful when one is holding a vessel by its stem.

# KRAUTSTRUNK (PL. KRAUTSTRÜNKE) (GERMAN)

A vessel resembling a "cabbage stalk." This prunted cylindrical or barrel-shaped beaker with a canted lip and pincered foot ring was a precursor of the *Römer*.

# KUTTROLF

A bottle or flask whose neck, often divided into several tubes, generally curves to one side. The form was produced by German glassmakers from the late Middle Ages and by Venetian and Venetian-style glassmakers in the sixteenth and seventeenth centuries. The *Kuttrolf* was used for drinking and possibly for carrying and sprinkling liquids. Its name may derive from the Latin *gutta*, for "drop." Also called an *Angster* from the Latin for "narrow" (*angustus*).

# LATTIMO (ITALIAN)

From the Italian for milk (*latte*), a type of opaque white glass used to make porcelain-like white-bodied glassware, filigree glass canes, and trailed thread. Its milky quality is obtained by adding tin oxide or bone ash to the batch.

# MAIGELEIN (GERMAN)

German fifteenth- and sixteenth-century drinking vessel in the shape of a small, low bowl, frequently cross-ribbed with a high kick. The meaning of the name is not known.

# MARVER

The flat surface used in glass manufacturing. It was originally made of stone or marble (hence the term's derivation from the French for marble, *marbre*); later it was made of iron. Hot glass attached to the blowpipe or pontil can be smoothed or shaped on the marver and can also pick up decorative canes or bits of glass placed on it.

## Merese

A small glass disk—essentially a flattened knop—on the stem of a vessel, used to give strength to the stem and to decoratively separate various elements, such as bowl from stem, knop from stem, or stem from foot.

NUPPENBECHER (GERMAN), NOPPENBEKER (DUTCH) A northern European beaker first made in the late Middle Ages and decorated with an applied textured surface, or "nap," consisting of nublike prunts.

## PARISON, PARAISON (FRENCH)

From the French *paraître* (to appear), used of an object that is in the process of appearing or taking shape. It signifies the partially inflated gather at the end of a blowpipe.

# POKAL (GERMAN)

A ceremonial goblet, often covered, popular from the seventeenth century in the German-speaking lands of central Europe.

# PONTIL, PUNTY

The solid metal rod used by glassmakers to gather molten glass from the furnace or to hold an object during manufacture; the object is attached to the pontil by means of a small, hot gob of glass attached to its tip. An irregular pontil mark is frequently left on the underside of a vessel when the rod is cracked off.

## Prunt

A blob of glass applied to a vessel and occasionally worked with tools for decoration. Prunts are frequently attached to the area by which the object is intended to be held.

# Reamy

The quality whereby glass appears irregular and streaked due to a nonhomogenous mixture that includes molten glass of different hardnesses having different points of refraction.

# RÖMER (GERMAN), ROEMER (DUTCH)

A type of drinking vessel similar to the *Berkemeyer* but with a spherical top.

# Schaffhausen (German)

A term referring to vessels found in the area of the All Saints. Cloister in the Schaffhausen region of Switzerland bordering western Germany.

# Scheuer (pl. Scheueren) (German)

Originally made of wood but imitated in silver and glass, a fifteenthand sixteenth-century German mazer or drinking vessel with a cylindrical neck, bulbous body, and small handle at one side.

# STANGENGLAS (PL. STANGENGLÄSER) (GERMAN)

Called a "pole glass" because of its tall, narrow, cylindrical shape, often with a pedestal foot. It was used in the North, primarily for drinking beer.

## THREADING

The process of attaching or embedding strands or filaments of glass to the surface of a piece for decoration.

# TRAILING

The process of laying or winding softened strands of glass on a piece to help form or decorate the object. These strands are pulled out from a hot gather of glass.

## Имво

A rounded swelling or projection. Its name possibly derives from the same root as the Latin for navel (*umbilicus*).

## VETRO A FILI (ITALIAN)

A type of *vetro a filigrana* called "glass with threads." It displays parallel bands of white or colored glass threads.

# VETRO A FILIGRANA (ITALIAN)

Glass decorated with filigree or thread-grained patterns. It was first developed in sixteenth-century Venice based on ancient prototypes and subsequently spread throughout Europe. It is characterized by patterns of white and colored glass canes that are embedded in clear glass to create stripes or interlace patterns.

# VETRO A RETICELLO (ITALIAN)

A type of *vetro a filigrana* called "glass with a little net." It displays white glass canes in a grid pattern containing a small bubble in each open space.

# VETRO A RETORTI (ITALIAN)

A type of *vetro a filigrana* called "glass with twists." It displays white or colored glass canes in twisted, braidlike patterns.

## WALDGLAS (PL. WALDGLÄSER) (GERMAN)

Literally "forest glass," so-called because it was produced in forest glasshouses, mainly north of the Alps, in the late Middle Ages. In these glasshouses, potash from wood, fern, and bracken ash was used as a flux. The distinctive greenish or brownish color of this glass derives from iron impurities of the sand used for the silica ingredient in the glassmaking formula.

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