

From a Rare Luxury to Everyday Ware? Glass Vessels in Medieval and Early Modern Northern European Towns

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Bohemian glass; glass beakers; material culture; trade routes; waldglass

Until the 1970s it was believed that during the thirteenth and fourteenth centuries in Scandinavia and even in central Europe glass only rarely was used for any other purpose than making windows for churches (cfr. Harden 1975). This older research was based on written sources and intact items in museum collections (Rademacher 1962, 9–21, 91). For example, in Finland the earliest known written reference to glass vessels dates from as late as 1549. New and more careful archaeological excavations have revolutionized this common view of glass use, first in central and western Europe (Baumgartner/Krueger 1988) and now also in the northern regions.

Luxury from the Mediterranean World (ca. 1100–1300)

A great deal of the glass finds in northern Europe dating from the eleventh through the thirteenth centuries were imported over very long distances from the Mediterranean world. For instance, in Trondheim in Norway, Lund in medieval Denmark, and Sigtuna in Sweden there are gilded and enamelled shards of blue metal from vessels made in Byzantium during the eleventh and twelfth centuries (Henricson 1993; Roslund 1997). Unfortunately, very little is known about Byzantine glass production which declined after the crusaders conquered Constantinople in 1204.

The crusaders also came into contact with important production areas of Islamic glass when they arrived in Syria and Egypt. Glass produced there was usually fairly thick but colourless and richly decorated with gilding and enamelling. All around Europe, shards of Is-

lamic glass objects have only been discovered in the vicinity of houses which once belonged to the most affluent men of the society. During the thirteenth and fourteenth centuries some vessels found their way into Scandinavia as well. In addition to the almost intact beakers of Helsingborg in Scania and Visby in Gotland, fragments of several glasses have been found in monasteries and high medieval towns in Sweden (Lamm 1941). There is also one shard of an Islamic enamelled beaker – broken in the fourteenth century – from Turku.

The eastern glass making tradition spread during the thirteenth century to northern Italy where the island of Murano in Venice started to develop into a leading glass producer. Fine enameled beakers made of colorless glass were typical of this early production. There were multicoloured paintings on their sides, which for instance depicted, saints and animals. These beakers – previously designated as Syro-Frankish – dating from the late thirteenth and early fourteenth centuries, have been found in castles, monasteries and richest town quarters. The largest number is from Germany, where they were imported by German merchants from the other side of the Alps. The largest single ensemble of finds, however, comes from Tartu (Mäesalu 1999). Fragments of these early Venetian beakers have also been discovered in several other northern European towns.

In the Middle Ages, glass vessels were often decorated with glass prunts. Judging from the finds recovered so far, the earliest prunted glasses imported to Northern Europe were turquoise beakers of so called “Schaffhausen type”. So far, fragments of only a couple of this kind of beakers made of soda glass have been

	Turku	Ulvila -1550	Helsinki 1550-	Stockholm	Uppsala	Kalmar	Lödöse -1473	Lund	Roskilde	Bergen	Trondheim	Tartu	Lübeck (Dumitrache 1990)	East Prussia (Golebiewski 1993)	Netherlands (Henkes 1994)	
1100-1300/1350																
Vessels decorated with threads	-	?	-	?	-	-	X	X	X	-	-	-	?	X	X	?
Byzantine vessels	-	-	-	-	-	-	-	X	-	-	X	-	-	-	-	-
Islamic vessels	X	-	-	X	-	-	X	?	-	-	-	-	X	-	-	X
Venetian enameled beakers	X	-	-	X	-	-	X	X	-	-	-	X	X	-	-	X
Lead glass vessels	X	-	-	X	-	-	X	X	-	-	-	-	?	-	-	X
Schaffhausen beakers	X	-	-	X	-	-	-	-	-	-	-	-	?	-	-	X
Colourless ribbed beakers	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-
Stemmed wine glasses	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-	X
1300/1350-1450/1475																
Fadernippenbecher	X	X	-	X	X	X	X	X	-	X	-	X	X	X	X	X
Bohemian printed beakers	X	X	-	X	X	X	X	X	-	X	-	X	X	X	X	-
"Baltic beakers"	X	X	-	X	X	X	-	X	-	-	-	X	X	X	-	-
Beakers with applied threads	X	X	-	X	-	-	?	-	-	-	-	X	-	X	-	-
1425/1450-1500/1550																
Krautstrünke	X	X	X	X	X	X	X	X	-	X	X	X	X	?	-	X
Maigelein	X	-	-	-	X	X	-	X	-	X	X	X	X	-	-	X
Optically decorated beakers	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X
Green ribbed beakers	-	-	-	-	-	-	-	-	-	X	-	-	X	-	-	X
Keulengläser	X	?	-	X	-	X	-	X	-	X	X	X	X	X	-	X
1525/1550-1650																
Passgläser	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Römer/Berkemeyer	X	X	X	X	X	X	-	X	X	X	X	?	X	X	X	X
Enamelled humpens	X	-	X	X	X	X	-	X	-	X	X	?	X	X	X	X
Spechters	X	-	X	X	-	-	-	-	-	-	X	?	X	X	X	X
Filigree goblets	X	X	X	X	?	X	-	X	-	X	X	?	?	?	?	?
Goblets, facon de Venice	X	-	X	X	?	X	-	X	-	X	X	?	?	?	?	?
Vineglasses, facon de Venice	?	-	-	X	?	X	-	-	-	X	-	?	X	?	?	?
Iceglass vessels	-	-	-	X	?	-	-	-	-	X	-	?	?	X	X	X

Fig. 1: "Glass profiles" from twelve northern European Towns (Turku, Ulvila-Pori, Helsinki in Finland, Stockholm, Uppsala, Kalmar, Lödöse and Lund in Sweden, Roskilde in Denmark, Bergen and Trondheim in Norway and Tartu in Estonia), Lübeck, East Prussia and the Netherlands. x = pieces of one or more items (in the case of the northern European towns X = pieces of more than five items).

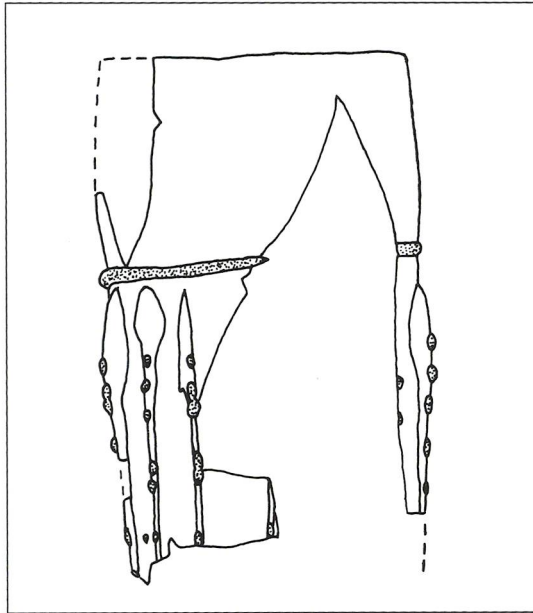


Fig. 2: A *Fadenrippenbecher* found from the site of *Aboa Vetus* – museum in Turku.

found in the cultural layers of the fourteenth-century Stockholm and Turku (Kuisma-Kursula 2000). These beakers were probably produced in the area of present-day Switzerland or southern Germany. A colourless ribbed beaker from Tartu also has the same origin. Although the finest vessels were brought from the Mediterranean region, glass was also made on the northern side of the Alps. In contrast to the Mediterranean sodaglasses, these vessels were usually made of less durable potash glass. The fragments which have been found are small, and the metal has become an opaque and crystallised substance which is only hardly identifiable as glass. Very little is known about these early twelfth- and thirteenth-century objects, which were often decorated with glass threads. Some fragments of this kind of glass tableware have been discovered in towns of southern Scandinavia including Roskilde, Lund and Lödöse, but there are not many finds from central Europe either.

In the High Middle Ages some glass vessels were made of metals that had a high lead content. In the northern Baltic area, very little of this bright yellow or vivid green lead glass has been preserved. Some small fragments have been recovered from Koroinen (in Turku), Lund and Stockholm, and in slightly greater numbers from Kalmar in Sweden (Kuisma-Kursula 2000).

Bohemian Dominance (ca. 1300–1450)

During the early fourteenth century, Bohemia became an important glass producing centre. Glasshouses continuing the same tradition were also established to the eastern and northern parts of Germany in the late Middle Ages. Glass produced in the area was distributed along rivers and other trade routes to the shores of the Baltic Sea.

In addition to Hanseatic merchants, trade in the Baltic area was controlled by the Teutonic Order in the fourteenth and early fifteenth centuries. The Order owned some Bohemian glasshouses as well (Hofrén 1961, 187). In the towns of the Baltic area, the Order distributed glass objects from Bohemia, ceramics from Saxony and wine from Moravia and the banks of Oder and the Rhine. Numerous glass fragments found in the coastal towns of the Baltic Sea reveal this trade.

Medieval glass has usually been considered to be thick, green *Waldglas*, but the vessels blown in Bohemia or in the area of eastern Germany were made of thin and almost colourless glass, often decorated with blue glass threads. Many glass beakers belonging to the Bohemian tradition are surprisingly common not only in Lübeck and the southern coast of the Baltic Sea but also in Estonia, Finland and the eastern coast of Sweden. In western Scandinavia, which was almost completely outside the Order's trading area, only few fragments of these vessels are known.

Some of the most popular glasses on the tables of Baltic burghers were of the *Fadenrippenbecher* type, that is, beakers with applied glass threads. These articles blown from colourless glass were decorated with applied vertical ribs and blue trails encircling the vessel. In addition to the normal type, a slender and tall model was used in Turku and Tartu (Dorpat).

In all of Europe, only one *Fadenrippenbecher* has been preserved intact from the Middle Ages – it was found in the nineteenth century in the church of Rehna in northern Germany. That is why these beakers were regarded as very rare for a long time. Our view has changed with numerous new finds. Only in Finland have archaeologists found pieces of more than twenty *Fadenrippenbecher*. At the same time, scholars have changed their dating to an earlier time. When the beaker of Rehna



Fig. 3: Fadenrippenbecher finds in Europe.

was made into a reliquary and sealed in 1456, *Fadenrippenbecher* were already falling out of use. They had been made from the late thirteenth century onwards, first in Bohemia, and later also in northern Germany. The beakers spread to coastal towns of the Baltic region in the fourteenth and early fifteenth centuries, but were rarely taken west of the Sound. The largest amounts of *Fadenrippenbecher* fragments have been found in Bohemia, Göttingen, Lübeck, Tartu and Turku (Haggrén 1997). In Turku there are fragments of at least twelve beakers merely from the excavations of Aboa Vetus museum.

In addition to *Fadenrippenbechern*, a tall Bohemian pruned beaker called *Stangenglas*, was popular in the Baltic region. During the late fourteenth and the fifteenth centuries, these beakers were commonly used in the eastern parts of Germany, from Bohemia to

Mecklenburg and East Prussia, as well as in the whole Baltic region (Dumitrache 1990; Golebiewski 1993; Hejdova et al 1983; Möller 1995; Schäfer 1995a,b). *Stangengläser*, which were decorated not only with prunts but also with blue glass trail encircling the mouth, were favoured in the north. The best known glass of this kind is a nearly intact beaker found from Kalmar, Sweden (Hofrén 1961).

The beakers decorated with a horizontal wavy trail and often also a blue glass thread encircling the mouth could be called "Baltic beakers." The fragments of these beakers are only known from Tartu, Turku, Ulvila (in Finland), Stockholm, Lübeck and Elblag (Elbing). Beakers with a mouth opening outwards and a blue glass trail decoration were also typical of the Baltic area, especially of its eastern regions. Even these beakers, which date from the late fourteenth and early fifteenth centuries, are

hardly known anywhere else. The northern finding sites and the type of glass used in both of these beakers indicate that the vessels have same origin as the *Fadenrippenbecher* (Kuisma-Kursula 2000).

In western Scandinavia the use of glass still remained scarce in the fourteenth century. The use was not common in many parts of western Europe either, including the British Isles and the Netherlands (Henkes 1994; Keys 1998). It is worth mentioning one type of western glass vessel which was used at the end of the thirteenth and in the fourteenth centuries: the very elegant wine glass imitating the Gothic style. These glasses had a wide foot, a very tall and slender stem as well as a bowl usually decorated with vertical ribs. Most of these beakers were produced in western Germany, northern France or the Netherlands. Some occasional wine glasses of this type arrived also in Scandinavia. There are two finds from Sweden, one from Lödöse and another one from Lund.

Mass Produced *Waldglas* (ca. 1450–1550)

During the fourteenth century, glass vessels were available only for the wealthiest circles in central Europe. When the manufacture of green *Waldglas* increased in the fifteenth century and almost went into “mass production” in many forested mountainous regions in Germany, more and more people could afford to buy glass. Beakers produced in the Spessart, Hessen, the Thuringian Forest, and the Rhineland spread even to the tables of peasants and ordinary town dwellers in central Europe.

At the same time, in the Baltic region the use of glass seems to have gone back. The reason was probably the decline of the Teutonic Order, which started after its serious defeat in the 1410 battle of Tannenberg against the Poles and the Lithuanians. Unstable conditions also impeded the trade carried on by the members of the Hansa in the eastern parts of Germany. On the basis of archaeological finds it seems that not many west German beakers were imported to the towns of the Baltic region either. In western Scandinavia the use of glass vessels increased on the other hand. Different glasses were imported especially to Norway from the Rhineland and the Netherlands.

The *Krautstrunk*, also called cabbage-stalk beaker, developed from the pruned beaker of “Schaffhausen type”. It was used mainly for drinking white wine and was a popular glass until the early 16th century. The *Krautstrunk* were manufactured particularly in the Rhine area.

The mass production of glass begun at the end of the Middle Ages. *Krautstrünke* were manufactured in large quantities, but we can talk about proper en masse production in connection with optically decorated beakers. With the a help of a mold, it was quick and inexpensive to manufacture large quantities of glasses which had a surface enlivened with a pattern showing against light. The simplest optically decorated glasses were the small *Maigelein*, which were wide green cups about three to five centimetres in height and probably meant for drinking wine. A master glass blower with his apprentices could easily produce as many as several hundreds of them in one day. There are also many archaeological finds of *Maigelein*, especially from the western parts of Germany. The areas of north Trondheim and Bergen in particular are rich in *Maigelein* and *Krautstrunk* finds, but there are much less of them from the Baltic region.

Other medieval optically decorated beakers, such as *Kreuzrippenbecher*, which were main-

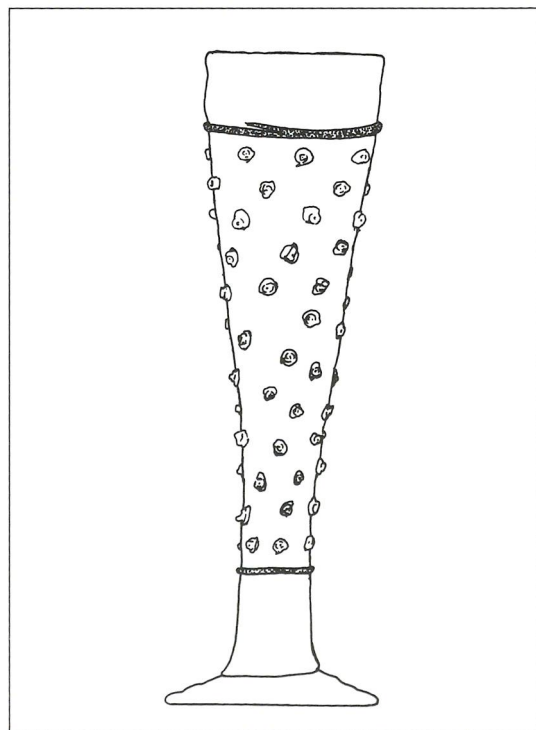


Fig. 4: A Bohemian beaker.

ly green, but some times blue or violet, resembled silver beakers in their shape. These beakers were mainly produced in southern and western Germany, but they did not become common in the Baltic market until the sixteenth century.

Green ribbed beakers were produced during Late Middle Ages in western Europe (Baumgartner/Krueger 1988, 299–304). Due to trading routes, these simple western beakers rarely spread to the north, but an unusual exception is made by a fragment of a ribbed beaker discovered in Bergen.

The production of *Stangenglas* continued until the second half of the fifteenth century. Innovation was connected to this production. One of these was a club-shaped beaker, or *Keulenglas*, usually made of green glass. It was popular in the manufacturing areas of central and northern Germany. In the Nordic countries they were used especially in Norway and Denmark, where they are even depicted in wall paintings in several churches.

The Renaissance – Increasing Uniform and Elegance (ca. 1550–1650)

The Renaissance brought along great changes to the designs of glass vessels and the use of glass. The production of own glasses for different drinks began, and in contrary to the previous centuries, with increasing frequency each drinker was given his own beaker, or even several, instead of a common drinking vessel for the whole party. A noteworthy competitor for green *Waldglas* appeared – the exquisite *facon de Venice* glass tableware gained ground in banquet tables.

Glass making based on the *Waldglas* tradition also spread towards the north. Glasshouses were erected in Holstein and Mecklenburg, and from the 1550s onwards also in Denmark and Sweden in Scandinavia. At the same time, imports of glass beakers to northern European towns continued from Germany and the Netherlands. The *Waldglas* vessels most typical of the Renaissance were descended from the beaker shapes of the Late Middle Ages. The model of the *Passglas* was based on tall beer beakers, such as the *Keulenglas*. The *Berkemeyer* and early *Römer* type had developed from the *Krautstrunk*.

The *Passgläser* used in the North were usually octagonal green beakers which were decorated with two to four rows of glass trails. *Passgläser* became common between the 1530s and 1550s and remained popular in all of northern Europe until the second half of the seventeenth century. *Passgläser* were made in northern Germany, the Netherlands, and even in southern Scandinavia. Glass of the *Berkemeyer* and *Römer* variety were produced especially in the Rhineland and the Netherlands. From sixteenth and seventeenth century paintings we can see that *Berkemeyer* and *Römer* glasses were meant for white wine and *Passgläser* especially for beer (Prohaska-Gross 1992). However, from Finland we know that these large beer glasses were also used for spirits! (Haggrén 1999b, 47).

Already in the excavations of 1908, dozens of *Römer* bases were found on the site of the wine cellar of Bergen, which was in use from the end of the Middle Ages to the seventeenth century. Although shards of *Römer* glass have been found all over northern Europe, they are much rarer than fragments of *Passgläser*. Shards of *Passgläser* are commonly discovered in excavations also in the countryside, whilst the prunts of *Römer* are not.

In Venice the decoration and designs of glass had become richer during the fifteenth century, and this development continued in the following century. At the same time Venetian glass started to gain ground in the markets of eastern and central Europe, and soon also in the Nordic countries. Tempted by the possibilities in West and North, many Italian glass blowers left their homes and started making glass especially in Antwerp in Flanders, but also in many other towns in western and central Europe.

Facon de Venice wine glasses were of thin and colourless glass which was called “*crystallo*”. They rapidly became common after the middle of the sixteenth century in all of western Europe. Besides ordinary wine-glasses the Venetian glass blowers in Italy and in western Europe made exclusive items such as winged goblets and filigree glass vessels. The trade of Netherlandish glasshouses reached as far as the Nordic countries, which is shown, for instance, by the fact that a ship arrived from Rotterdam to Stockholm on 27 May 1576, carrying a significant supply of “*crystallo*” glasses (Haggrén 1999b, 44). No wonder that archae-

ologists found pieces of these Venetian, or more often *facon de Venice* glasses, from the soil of Nordic towns on many occasions.

From Rare Luxury to usual Banquet Table Ware

Glass vessels were very rare in northern Europe during the twelfth and thirteenth centuries. The single fragments discovered in towns from this period do not give proof of actual trade connections, but rather reveal occasional contacts with places as far as Byzantium and the Islamic world. In the late thirteenth and the fourteenth centuries, glass vessels were still luxury items everywhere north of the Alps. It is obvious that only the richest people owned glass beakers. For instance, in Tartu and in Lübeck it has been discovered that early medieval finds are concentrated at the plots situated in the very centre, where for example councillors lived (Mäesalu 1999, 81–82; Dumitrache 1990, 22; cfr Felgenhauer-Schmiedt 1993, 71–72).

The use of glass became more common in the Baltic region towards the end of the fourteenth century. Glasses produced in Bohemia and in other parts of east-central Europe spread to the towns of northern Europe. Although *Stangengläser* and *Fadenrippenbecher* were available mainly just for noble men or affluent burghers, so many of their fragments have been discovered for instance in Kalmar, Tartu and Turku, that one can no longer talk about single luxury objects but of more common vessels of the festive table, instead. Some of these beakers were taken to the inland, for example to the manor of Jutikkala in Häme (Sw. Tavastland) in Finland (Haggrén/Hakanpää/Mikkola 2002).

Late medieval “mass production” of *Waldglas* does not appear in the archaeological material of Tartu, Turku, Stockholm, or of Stralsund, Danzig and Elblag (cfr. Golebiewski 1993; Möller 1995). Instead, glass finds become rarer in most parts of the Baltic region. The improved hygiene of towns may be a contributing factor of this, because waste was no longer piled on yards and streets, but was taken further away. However, this explanation does not seem to be sufficient, as in western Scandinavia the course of development was different. There are numerous finds of late medieval

beakers, for example, from Bergen. The scarcity is explained by trade connections: imports of glass from eastern central Europe diminished, whilst from the west it instead increased. Western *Waldglas* was clearly imported to Norway in greater amounts than to the Baltic.

During the Renaissance, use of glass increased rapidly everywhere in western, central and northern Europe. Glass vessels came also into the hands of poorer townspeople. For instance, even ordinary seamen brought *Waldglas* vessels from Lübeck to Stockholm already in the middle of the sixteenth century. At the same time the range of vessels became more varied, and with table manners improving, people increasingly started to use different vessels for different drinks.

New results of research have shown, that throughout the Middle Ages, northern Europe belonged to the widespread uniform culture of Europe as far as glass vessels are concerned. However, differences in the “glass profiles” between the towns in the Baltic region and western Scandinavia were distinct. In the Baltic region, the material culture of the towns – with regard to glass – was similar to that in eastern central Europe, especially in the German regions east of the Elbe. In western Scandinavia, the spread of the consumption of glass followed the same lines as the rest of the western Europe. This also holds true for medieval ceramics. In the west, vessels made in western Europe and the Rhineland were used in the Middle Ages. In the Baltic area, on the other hand, ceramics produced in Saxony and Lower Saxony, as well as the Rhineland (Siegburg in particular), was favoured (cfr. Gaimster 1997, 64).

During the Renaissance, material culture became more uniform with regard to both ceramics and glass vessels in all of the northern Europe. *Passgläser*, *Römerglas* and *facon de Venice* winged goblets, as well as relief ornamented ceramic jugs, were used in Helsinki, Turku, Stockholm, Lund, Bergen and Trondheim alike. During the Renaissance, glass vessels became regular items at the tables of the most of the northern European town dwellers. This article is based on a study made for “SKÅL – Fragments from the Middle Ages” – exhibition collected by the Nordic Network of Middle Age Museums. Special thanks to Aboa Vetus Museum (Turku), The Museum of Medieval Stockholm, Lödöse Museum, Bryggen

Museum in Bergen, Archbishop's Palace Museum in Trondheim, Roskilde Museum, Tartu Town Museum, Helsinki City Museum, Kulturen in Lund, Statens Historiska Museum (Stockholm), Satakunnan Museo (Pori) and Turku Provincial Museum. Concerning the different types of glasses see Baumgartner/Krueger 1988 and Henkes 1994 and single items in the exhibition catalogue Haggrén 1999a and The List of Items.

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