

Reviews on

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Lectures: **ICOM Glass Annual Meeting
online, 2021**





Ribbed calcedonio pitcher, Venice, late 15th century, 36.2 × 14.2 × 12.9 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1992-23), photo: author. 9. Ultrathin, flexible glass, SCHOTT AG, Mainz, Germany (<http://www.schott.com>).

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for museums
and collections of glass

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FOR MUSEUMS AND COLLECTIONS OF GLASS
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Maria Helena Matos (1972, 1959, 1960). Photo: Jorge Soares. Archive of the Glass Museum—Marinha Grande City Council Private collection of Pedro Moura Carvalho.

FOREWORD

I am Ruriko Tsuchida. I was elected the Chair of ICOM GLASS in December 2022. First of all, I would like to express my deepest thanks to all those who have always helped and supported me. In particular, I would like to thank Teresa Medici, our former Chair, for her great contribution as Chair, for always being fair and supporting us. I am very proud to send you a message on the tenth issue of *Reviews on Glass*, the official publication of ICOM Glass International Committee.

I have been a member of GLASS for the last 10 years. The first time I attended an annual meeting was in Milan 2016 and I have been a board member for the last three years. I still have a lot to learn about the ICOM organization, but I am excited to learn, develop, and excel in my new position.

I love all GLASS members so much; we are curious, active, and progressive. When we met face-to-face in Prague last summer, I once again was reminded how we all are very motivated, passionate, and devoted to glass. We are the smallest group among the International Committees, but we are very engaged and have built a great network. I hope to continue to strengthen this network, growing our committee, but also leveraging these connections for joint exhibitions, symposia, and conferences, energizing the glass community around the world. As a result, I hope GLASS and glass itself become more significant.

As you know, I live in Toyama, far away from the center of ICOM, so I am often reliant on hybrid formats to attend conferences held in Europe and the US. In such cases that I cannot attend in person, I will join online and ask other board members to attend in person. I am always grateful for everyone's help.

I am excited to make the most of the next three years and the many opportunities that will be presented to GLASS. I am looking forward to working with everyone and thankful for your on-going support and ideas.

My special thanks go to Paloma Pastor and Amy McHugh for editing and putting together this issue, and to Anne-Lauré Carré for taking care of the membership list. Let's make GLASS even more exciting!

Ruriko TSUCHIDA

Director, Toyama Glass Art Museum, Japan



Alabaster glasses from the Schachtenbach glassworks were highly valued in aristocratic and bourgeois households throughout Europe. Photo S. Bauer

LECTURES

The ICOM Glass Annual Meeting 2021 was planned to take place in Southern Germany from 2 to 9 May 2021. Sven Hauschke the director of the Kunstsammlungen der Veste Coburg offered to host this exciting meeting. Due to the COVID 19 pandemic, The ICOM Glass board decided to cancel the meeting in Germany and to hold it online on 6 and 7 May 2021. The theme of the meeting was “The end of glass production-The beginning of museums? De industrialization and museums in glass production areas”.

What will happen to glass museums in industrial areas, considering that production sites are shifting?

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Museums are live institutions that reflect changes in society. We looked at museums established in traditional glass regions and present our reflections, specifically about the Marinha Grande, Portugal, and Flanders (Belgium, southern Low Countries, and northern France) region where the ICOM Glass Annual Meeting 2017, organised by MusVerre, Sars-Poteries was held. For a long time, this was where important hollow glass

industries were located, producing food packaging (jars and bottles), glassware, wine glasses, and other utilities for local use and export. Currently, China and India have become major producers of such products and export to the world at reduced prices. As a result of this recent economic venue shift, promoted because of globalization, these industries have shrunk, and the cities where they were located have

looked for new means of survival. How have the museums that remain in the area adapted their social function to address this new context, maintaining their industrial heritage that was so significant for the local community?

The Brazilian geographer Milton Santos considers that technology is one of the most important forces that moves a society over time, and we can

infer that heavily industrialised cities such as these constantly transform the lives of the people that live there (Santos, 2017). The hollow glass industry, especially of refined tableware, combines the actions of people who blow and manipulate glass with specific machinery such as conveyor belts and annealing furnaces for serial production. Local workers dedicated their lives to production in these industries, they formed the families that live in the vicinity of the factories, and developed techniques of hand-finishing that are characteristic of the region.

The museums' actions have contributed to giving new meaning to local culture, in the sense that they promote historiographical records narrating the history of the glass industry through the exhibition of glass objects. They maintain educational centers that aim to explain manufacturing techniques, in addition to seeking connections with art. They do this by providing contemporary artists with opportunities to create using glass in their artworks. In such places where the majority of the population is made up of workers from the old industries and their family members, contemporary art exhibited in the local museums may be seen as a humanizing link that maintains community ties. Helping to reduce flight to the big cities

and bringing in new visitors is a means of preventing the territory from becoming a non-place, in the conceptual framework of the French anthropologist Marc Augé. As he put it, "If a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, historical, or concerned with identity will be a non-place." (Augé, 1995, p. 77-78). In other words, old places, when promoted to "places of memory" contribute to prevent the emptying of identity, relationships, and history. From what we could observe traveling around the Flanders region and also in Marinha Grande, art has been the link that humanizes and prevents the constitution of a territory separated from its original symbology, a place without an owner, a non-place.

Marinha Grande

The Glass Museum of Marinha Grande, Portugal, brings together collections that testify to Portuguese industrial, handmade, and artistic glassware activities, from the mid-eighteenth century to the present. In addition to the permanent exhibition set up since 1998 in a neoclassical style building, a new area was opened in 2013 dedicated to contemporary glass with regular exhibitions aiming to integrate several artists who create artworks in glass, (Almeida, 2020) such as the exhibition *Glass and Light* (Figure 1). In this way, the museum looks for ways to divulge and exhibit the works of local master glassmakers, while keeping alive the glass tradition that is characteristic of the region. The exhibition *Novas*



Figure 1. *GLASS AND LIGHT* Exhibit at NAC – Contemporary Art Center of the Glass Museum of Marinha Grande, Portugal 2017. Photo: Regina Lara.

Mestrias: Colegio dos Mestres Vidreiros in 2008, is an example. With 11 glass Masters participating, it aimed to demonstrate several glass techniques of the Masters with an approach of tradition and contemporary. In the same year, *Olhares sobre o vidro* exhibited a collection pieces produced on Marinha Grande factories by Virgilio Guerra Marques, a designer. In 2019, *Pop&TuttiFrutti-Portuguese glass in the 60's & 70's* presented glass pieces from the collection of Pedro Moura Carvalho: "This exhibition reflects the collector's taste and is a small sample of 60s and 70s Portuguese glass production" (Carvalho, 2019, p. 43). Works from famous Portuguese designers, such as

Maria Helena Matos (Figure 2) were part of this exhibition. *Glass in Marinha Grande-Stories from IVIMA* in 2022 presents pieces from the Industrial Glass Company of Marinha Grande (IVIMA) (Figure 3).

In 2001 Catarina Carvalho, who was the museum director at the time, organized an artistic glass exhibition called "Contemporâneos I – Vidro Artístico Contemporâneo Português". This event was held regularly every two years until 2013. The purpose was to present new works that were being developed by Portuguese artists. The glassblower Alfredo Poeriras' studio is located near the museum – a strategic location, since visitors can walk



Figure 2. *Maria Helena Matos* (1972, 1959, 1960). Photo: Jorge Soares. Archive of the Glass Museum–Marinha Grande City Council Private collection of Pedro Moura Carvalho.



Figure 3. *Glass in Marinha Grande-Stories from IVIMA*. Photo: Archive of the Glass Museum–Marinha Grande City Council.

through the studio where they see demonstrations of glass blowing, and then go on to visit the glass museum. The museum also organizes educational activities with children and young people with alternative programs, in order to promote interest in glass. Several lampworking (blowtorch) demonstrations are also held in the museum space, where visitors can enjoy watching a glassblower creating small pieces.

Currently, despite the difficulties experienced by the industry, this region still seeks to develop and improve new skills in glass crafting, namely associated with education and exhibition spaces. Created in 2000, CRISFORM (Professional Training Center for the Glassworks Sector) is a public institution that promotes various vocational training opportunities in glassmaking with competent teachers and experienced technicians, aimed towards lovers of this artform. Waging on the value of specialized training, the enterprise invested in workshops supervised by established artists, but it was forced to close in 2011 due to economic conditions (Almeida, 2011). CENCAL (Professional Training Center for the Ceramic Industry), located in Caldas da Rainha, the Portuguese ceramic industry region, with Marinha Grande where it continues activities with glass, as well as partnerships not

only with the industry, but with several universities. Every year, groups of students (undergraduate and graduate level) participate in short course of blown glass, as complementary formation (Almeida, Silva, 2021).

Flanders – Belgium, southern Low Countries and northern France

In 2017, given the opportunity afforded by the ICOM Glass Annual Meeting, we visited museums in the region in cities with a recent history of industrial production of hollow glass and that currently housed contemporary art exhibitions. We began at *MusVerre* in Sars Potiers and toured the region visiting the *Écomusée du Verre* in Trelon, the *Musée du Verre-Charleroi* in Marcinelle, the *Val Saint Lambert crystal factory* in Seraing, *GlazenHuis - the Flemish Centre for Contemporary Glass Art* in Lommel, *Le Grand Curtius* of decorative and religious art museum in Liège, as well as Lothar Knauf's private collection in Embourg. Although all of these venues promote training and formative activities and programmes to visitors, the *MusVerre* and the *Glazen Huis* stand out as the most active in contemporary art.

What impressed us most in the exhibits we visited in this region was their curatorial quality, hosting works by internationally

acclaimed artists that included sculptures and site-specific installations. The works especially showcased the plastic properties of glass, revealed in the characteristically rounded limits of the shapes and different surface textures, as well as explored transparency, translucency, and opacity in variations of brightness and polishing. We noticed that the appreciation of this visuality in artistic works holds on to a repertoire of beautiful images associated with specific technical knowledge of glass matter.

Analysing the curatorship of the exhibitions of the museums we visited enabled us to visualize a panorama of the places where the culture of artistic glass has developed with greater expression, given that it is a demanding art in terms of the manufacturing process of the works. The building of the museum collections has always counted on acquisition or donation of private collectors. Because they regularly purchase artworks of the most varied origins over a period of many years, inspired by a particular taste, or taking advantage of the fluctuation of the art market, private collectors are important agents in the art market and in the constitution of museums, according to the French historian Anne Cauquelin (2005). When we arrived at



Figure 4. *Capteur*, Vladimir Zbynovsky, 2006, in the Glass Museum Musverre , Sars-Poteries, France. Photo: Regina Lara.

MusVerre, the curator Anne Valantum introduced us to the newly opened exhibit “Une Passion Partagée: la Collection Gigi & Marcel Burg” (Figure 4) that celebrates the donation of a precious collection belonging to this couple of collectors that are passionate about glass.

In the same region where we visited these newer museums dedicated to contemporary art, the older ones tell the story of glassmaking through their collections, with permanent exhibitions on the origin of early glassware and the presence of

glass in art, architecture, and design. There is no shortage of works by famous French Art Nouveau artists and designers, such as Emile Gallé and the Daum brothers, or Art Deco artists, including René Lalique, with his sculpture, vases, perfume bottles, and jewelry. The simultaneous and recent presence of museums that value contemporary art in glass reveals the improvement of artistic solutions in the use of techniques for handling vitreous matter and the exploration of visual characteristics that relate to

glass and light, transparency, translucency, and opacity. As our visit came to a close, we realized that the experience had revealed something more, beyond the artistic cartography of contemporary glass, in a region that has reinvented itself, offering a panoramic view of glass artists from all over the world. By attracting artists and visitors, the museums have become agents for transforming the life of the region, as they seek for a way to value their culture through art, preserving values, and above all, the local identity.



Figure 5. MusVerre – Facebook on 10/7/2017. Available on <https://fr-fr.facebook.com/musverre/> Access on 6/9/2022

generated a number of specialised workers. As this industrial activity declined, local museums began promoting cultural actions to mediate this change by inviting artists interested in learning traditional crafts, using technology, and developing artistic research to maintain and promote a local culture and identity. The ICOMGlass (International Committee for Museums and Collections of Glass) has contributed to promoting these cultural initiatives, as well as facilitating information exchange among glass specialists of different nationalities, promoting the study and research of local museum collections.

Concluding remarks

In production areas in which large glass industries have been

installed, technology needed for handling glass that is greatly supported by hand blowing was enhanced, which in turn

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On Soviet-era glass collections

Olga Ivlieva

Museum-Estate
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formation and their role today

After the largest glass factories were shut down or transformed into small private enterprises, collections of factory samples acquired special importance in preserving the memory of the glass industry development in our country. In this short message, I will try to present briefly the history of their formation and preservation in the 20th and 21st century in Russia.

Among the largest regional centers of glassmaking, which are important to the present day, are the oldest enterprises which include Dyatkovsky Crystal Plant in the Bryansk region, Gus Crystal Plant in the Vladimir region, and the “Krasny gigant” plant in the Penza region. All



Figure 1. Wine set “Wheat”, 1940 Design: G. Egorov Gus Crystal Plant, Gus-Khrustalny, USSR Colourless and coloured glass, overlaying, staining, cutting, engraving Inv.N CT 5884-5891. The Kuskovo Memorial Estate collection



Figure 2. Skier's cup, 1940 Design: A. Lipskaya State Institute of Glass, Moscow, USSR Colourless glass, cutting, engraving Inv. N CT 3702. The Kuskovo Memorial Estate collection

were founded in the 18th century. By the beginning of the previous century, the collections of these enterprises were rich of glass items, both of their own production and of other factories. They were called museums of samples. These collections were formed by the families of the founders, who brought interesting glass objects produced by foreign and

domestic masters to their plants for presenting manufacturing techniques and fashionable "styles". There were also items demonstrating the success of the enterprise – reference samples, unique glass pieces, items that won awards or were noted at fairs, exhibitions, etc. After the revolution, these museums of samples were saved from ruin by the Decree of the Council of People's Commissars on the Protection of Valuables of December 1918. The Decree ordered to take all necessary measures to register and protect scientific museums, collections, offices, laboratories, etc. and transfer them to the appropriate institutions.¹ Plant glass collections were not affected by this Decree, so they did not receive the status of state museums and remained part of the enterprises.

Along with the oldest glass factories, in the late 1930s, the State Institute of Glass acquired special significance for the glass industry as a whole. As an independent scientific institution, it was founded in 1930² and was a leading research center, whose employees were engaged in all production processes: from the

study of sand deposits, chemical compositions, equipment creation, to the approval of new aesthetic criteria for products. Under the State Institute of Glass, in 1932, an experimental factory was organized, and in 1940, a museum of samples was established by collecting the latest products of Soviet factories and experimental glass items of the Institute's employees, as well as modern foreign productions examples of interest to the Russian Soviet Federative Socialist Republic (RSFSR) glass enterprises. This collection was not very extensive, but it reflected current trends and topics in which the Institute was involved. All work in the museum was carried out by the art laboratory employees, thanks to their efforts, the collection was systematized, presented at exhibitions, classes were held on it, and lectures were given. They also helped to organize the work in the aforementioned factory museums, understanding the importance of having reference examples for the plants masters.³

Another collection without which it would be impossible to form

1 *Dekrety Sovetskoy vlasti* [Decrees of Soviet government] (1968). Moscow. Vol.4. p.146

2 Previously, it was a division of other scientific organizations: since 1918 - a department of the Testing Glass-Ceramic Station, transformed into the State Experimental Institute of Silicates, since 1926 - a department of the State Institute of Silicates and Stone Building Materials

3 Russian State Archive, Samara. Ф. P-223, оп. 4-6, д.57. *Godovoj otchet Gosudarstvennogo instituta stekla za 1940* [Annual report of the State Institute of Glass for 1940]

an idea of the RSFSR glass production is the Museum of samples under the Leningrad Art Glass Plant, which occupied a leading position in producing of art glass during the Soviet period. The factory was established in 1940 on the basis of former mirror factory,⁴ and in 1950 the factory museum was established under it.

From the first years of Soviet power and almost until the end of the 20th century, all factory museums (of various industries) continued to be part of state enterprises and did not belong to the sphere of culture. They were assigned to a special type of museums, called departmental, and functioned as one of the departments of the enterprise. The administration provided them with a premises, purchased the necessary equipment, and maintained them. Their main tasks included documenting specific branches of science, technology, and production through achievements in this area. The main goal of museums at glass enterprises was to store and collect samples of new products, unique author's works that could represent a high level of craftsmanship and wide variety.

Because the factory collections were not related to cultural institutions, their items did not belong to the USSR Museum Fund and were not subject to the Instructions for Accounting and Storage of Museum Values. Moreover, according to the Instructions of 1948, pieces of decorative and applied art of factory production were not subject to registration at all and did not imply acceptance into the all-Union museum fund. Of course, some glassworks ended up in museums, but in most cases, they were unique author's works made on an event, a significant date, for an exhibition, etc, or it was a skillful souvenir production, created in small series. Only after the resolution "On the Museum Fund of the USSR" of 1965, were the factories obliged to systematically allocate and transfer product samples and different models showing technical progress and the achievements of communist building to museums free of charge.

In connection with the above, in the second half of the 20th century, factory collections developed and approved their own criteria for selection, items

storage, and forms of documents.⁵ Before entering the museum, a new model had to pass technological control. If it was considered satisfactory, the sample was submitted for approval to artistic council of plant. Then, it was presented to the Art Council of the Ministry of Industry of Building Materials of the RSFSR. If approved, the item was put into production and simultaneously a copy or an author's sample was transferred to the museum and registered.⁶ The registration of items differed from the generally accepted process of art museums,⁷ having a simplified form. There were only a few columns in the inventory books of such museums: "name", "movement of the sample" (where write-off or transfer to another institution was noted) and "price". In some museums there was also an item number. At the same time, there was no description of the object, preservation, size, and provenance included. Usually, factory museums received samples of manufactured products by enterprise. Today, therefore, these are the unique collections that demonstrate the development of the factories, reflecting its creative credo,

4 This mirror factory was built in 1912 and it had modern electrical equipment.

5 At each enterprise, these rules could be slightly different, but in general they had similar principles.

6 Such a sequence developed in the 1950s-1960s, as factory exemplaries were formed.

7 Brief instruction on the procedure for accounting, registration and maintenance of art monuments dated 02 Mar. 1949; Instructions for the accounting and storage of museum valuables in art museums of the system of the Committee for Arts under the Council of Ministers of the USSR dated 21 Nov. 1950



Figure 3. Vase, around the end of 1930s Glass plant “Krasny gigant”, Nikolsk, USSR. Colourless and coloured glass, overlaying, cutting, engraving, etching Inv. N CT 3516. The Kuskovo Memorial Estate collection

priority trends, working methods used, author’s styles, and the glass industry. It is through the examples of these collections that we can talk about the development of certain trends in mass production and aesthetic preferences of that time.

In 1983, the Gus Crystal Plant became one of the first houses to transfer its factory collection to the State Museum⁸ for storage. The collection was formed over several centuries. Also by

transferring the collection, the pieces assumed the status pieces of the USSR museum fund.

After the collapse of the Soviet Union and the closure or reorganization of enterprises, many departmental museums sought to come under the control of the Ministry of Culture and change their status, because this ensured the preservation of their collections. Unfortunately, not all museums succeeded in this – some were disbanded and their fate is unknown, others were only partially included in the collections of large museums. The museum of samples of the Dyatkovsky Crystal Plant was extracted into an autonomous cultural institution “Museum of Dyatkovo Crystal”.⁹ The collection of the “Krasny gigant” glass plant acquired the status of the Penza Regional Art Gallery subsidiary in Nikolsk and named as the Museum of Glass and Crystal.¹⁰ Like the museum in Gus, these collections are located close to the factories and are some of the largest glass collections in Russia. The enterprises, former giants of the glass industry, have become small private businesses, and only the museums preserve the memory of the scale of their activities and achievements. Museums also act as centers for the study and popularization of

information about regional glassmaking, accumulating knowledge about it. They are also exhibition spaces for contemporary glass artists, continuing to support the region’s image as a glass center.

Moreover, with the active participation of the museum in Nikolsk and several small glass enterprises based on the “Krasny gigant” plant, the annual International Glass Symposium is held, organized by the former artist of the enterprise Alexander Fokin. The museum provides exhibition halls for created works. Some of them replenish its collection. The uniqueness of the Symposium lies in the fact that it involves both famous artists and very young, novice masters – students of specialized training at art and industrial academies, who are given the opportunity to work together with outstanding authors. The participants create items not only for display in exhibition halls, but also monumental objects for installation on the streets of the town. As its inhabitants call – the crystal heart of Russia, demonstrating the original genius of this place even after the closure of the enterprise.

Another fabulous active center for the preservation and study of the

⁸ The Maltsovs’ Museum of Crystal, a branch of State Vladimir Suzdal Museum Reserve. <https://vladmuseum.ru/ru/geografiya-muzeya/gus-khrustalnyy/muzey-khrustalya-imeni-maltsovykh/>

⁹ <http://музейхрустала.рф/>

¹⁰ <http://penza.gallery/o-muzee/filialy/nikolskij-muzej.html>

heritage of glass art is the Art Glass Museum in St. Petersburg.¹¹ It was created in 1999 based on the collection of the Leningrad Art Glass Plant and is currently a subdivision of the Central Park of Culture and Leisure. Now the museum is a unifying place and an active exhibition platform for contemporary glass artists and researchers, where conferences are held annually, publications are issued, and exhibitions are held including the annual exhibition-action "Glass in a landscape park," where works are presented in the space of nature. This is an active exchange of experiences, and a great way to engage the public. Moreover, not so long ago, inspired by the success of the actions and the public's interest in glassmaking, a workshop was established at the museum (with the participation of students and teachers of the Art and Industry Academy in St. Petersburg), where you can not only watch the work of experienced craftsmen, but also try to create a work of art.

Thus, museums now play an important social role. They ensure the continuity of traditions, support interest in glassmaking, and help revive this complex art form. It is important to note, that it is in the collections that arose in the factories, the entire range of

products manufactured in the Soviet era is most widely represented: not only unique author's samples, but also samples of serial and mass products, which are practically absent in art museums.

It is mentioned above about the Museum of the State Institute of Glass plant. Unlike other enterprises that successfully developed until the early 1990s and replenished their collections, the Institute's museum was closed in the summer of 1941. At the same time, most of it – about 250 pieces – was transferred to the Kuskovo Museum.¹² Having existed for only 1 year, this collection still deserves special attention. The presented items were the best samples both in artistic and quality of production, and many of them were created in a single copy. They were in tune with the time, demonstrated a complete rejection of pre-revolutionary forms and an update in the assortment. This museum fully represents all the styles that the factories of the RSFSR mastered. And it is the collection, that represents an extremely short but very fruitful period of restoration of the glass industry in our country. Today it became a core of Kuskovo modern glass collection and its crown jewel.

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¹¹ <https://elagipark.org/to-do/muzey-khudozhestvennogo-stekla/>

¹² Act No. 14 of July 15, 1941, according to the order of the head of the Main Directorate of the glass industry (Glavsteklo) of the People's Commissariat of Light Industry of the USSR

Electoral glass in Mannheim in the 18th century, a search for traces

Eva-Maria Günther

Reiss-Engelhorn-Museen, Mannheim, Germany

The Reiss-Engelhorn-Museen (REM) in Mannheim, Germany, has established themselves in recent years as an internationally operating complex of museums, an outstanding venue for exhibitions, and an important centre of research. The museum world is subject to constant change too and adopting new ideas: Digitalization, diversity, accessibility, and social participation are as pertinent to museums as provenance research and the reappraisal of collections from colonies. The REM is actively tackling the tasks and challenges awaiting the treasures of our cultural heritage, thus making an important socio-political contribution. The special construct of the REM's museum

group, with its diverse collections and research institutions, provides unique conditions for this.

The roots of the collections' holdings date back the day of the electors Carl Philipp (1661-1742) and Carl Theodor (1724-1799). They laid the foundation for the painting gallery, the drawing and print collection, the cabinet of natural curiosities, the numismatic collection, the antiquities collection, the cabinet of scientific curiosities, and the treasure chamber. In 1731, Elector Carl Philipp had paintings and art objects from his Düsseldorf collection brought to Mannheim Palace. Under Carl Theodor, the art collection was

expanded to such an extent that Mannheim became a European centre of art and culture. Carl Theodor also made a name for himself as a collector, and the antiquarium with casts of the Laocoon group and other antique sculptures, the picture gallery, the coin, medal and natural history cabinets, and above all the library were received with general admiration. During his time in Mannheim, he expanded the book collection to 100,000 volumes and opened the library to the public three days a week. He initially resided in Mannheim. After the death of his only legitimate son in 1761, he regulated the Wittelsbach succession, which had already been fixed in writing, in various house contracts with the



Reiss-Engelhorn-Museen Mannheim - credit: © Reiss-Engelhorn-Museen Mannheim, photo: Jean Christen

childless Max III Joseph of Bavaria. In 1771 they designated Munich as their residence, where Carl Theodor moved with his court in 1778. In 1794, however, the transfer of a large part of the electoral collection to Munich threatened the city with the loss of its prominent cultural position in Europe.

The collections that remained in Mannheim formed the cornerstone of the REM's collections. The art and cultural history collections of the Reiss-Engelhorn-Museen can be

characterized as a mirror of the development of art and cultural history over four centuries, but also of the eventful history of the city of Mannheim from its foundation in 1607 to the present day. The polarity of the confessions is manifested in the religious expressions of art. Art and cultural history holdings with high-ranking exhibits document the great electoral heyday of the 18th century up to the commitment of the 19th century borne by civic interest. The extensive collections of theatre and music history as well

as the antiquities collection also document princely and civic interest.

Contemporaries describe Elector Carl Theodor of the Palatinate as very intelligent and open-minded. He was interested in natural sciences and history and loved literature, music, and theatre. To bring prosperity to his country, Carl Theodor established new manufactories, forerunners of the factories that could produce goods on a large scale. Under the Elector, numerous manufactories were founded,



Glass bottles and bottle fragments – credit: © Reiss-Engelhorn-Museen Mannheim, photo: Department Of Archeology

e.g. for the production of silk or for faience. He promoted the production of porcelain in the nearby town of Frankenthal, which he also used to decorate his courtly table with. The Reiss-Engelhorn-Museen has the largest collection of this porcelain.

Numerous excavations in the city of Mannheim also yield glass fragments. The various fragments include many different types of glass production: simple utility glass, window glass, and more elaborately designed drinking glasses. Unfortunately, it has not been possible to identify

splendid hollow glasses among them. In addition, there are glass transport containers, like bottles or containers for storage (medicine bottles) and table decoration, like jugs. Overall, these are mainly utilitarian wares. While the production of porcelain in the time of Carl Theodor in the Frankenthal manufactory or in Zweibrücken is well documented, there is not a lot of information available on glass production and their products. It is time to ask the question, where did the glass come from?

The production of glass was extremely energy intensive. In the pre-industrial Electoral Palatinate, such amounts of energy could only be provided by exploiting the nearby forests. Glassworks were therefore established in areas with larger forests. Furthermore, the glass production found some of its raw materials directly there. In those rural landscapes, not only wood or charcoal was available for the melting process of quartz sand, but also potash. Potash is another name for potassium carbonate, which remained after the complete combustion of wood. Potash was added as a flux or catalyst when melting quartz from the 17th century onwards. This lowered the temperature at which quartz became liquid and could be processed. The wood from the forests thus always provided the decisive reason to settle with

glass production in often remote areas. Settlements often grew up around the glassworks and developed into rural villages. The former forest glassworks themselves have mostly not survived, but field names in the area around Mannheim and Heidelberg such as “Glashütter Berg, Glashütter Tal, Glaskopf (all Village of Ziegelhausen nearby Heidelberg), Hüttenberg, Pottaschenloch” (a forest name near the glassworks in Ziegelhausen) still refer to former production sites. We note that not only little information has been preserved about the glassworks, but the sources on their production are also sparse. Most of the glass is likely to have been simple utility glass and transport and storage containers, produced within the short periods of time when the glassworks had enough wood and were working. The sources on the quality of the glass and its appearance are very sparse and often remain vague.

There is, however, one exception: from the detailed individual examination of a glassworks that has been handed down, numerous insights into glass production in the Electoral Palatinate in the 18th century can be gained.

Seidenbuch Glassworks

If you drive the winding road in the Schlierbach valley/Odenwald (a low mountain range in the



Glass finds from excavations in the city of Mannheim, Germany - credit: © Reiss-Engelhorn-Museen Mannheim, photo: Department Of Archeology

German states of Hesse, Bavaria and Baden-Württemberg) you will find the village of Seidenbuch between forests full of tall beech trees and large boulders. Seidenbuch is one of the youngest villages around. It was founded in 1782 around a glassworks. High technology is hardly to be found in Seidenbuch in the Odenwald region today. In the 18th century, however, it could not be overlooked. A large glassworks stood there, to which the name of today's Glashütte district still references. The district of Lindenfels, which includes Seidenbuch, belonged to the Wittelsbachers (Count Palatine Ludwig II) from 1277 to 1803 (bought by the Margraves of

Baden), who used the manorial beech forest as a source of money. After many losses during the 30 Years' War, the tree population recovered strongly in the middle of the 18th century and was “ready for harvest” around 1780. The electoral couple spent a lot of money every year on their lavish court. It is said to have been eleven percent of the state revenue from all parts of the country. The government of the Electorate of Palatinate, which was always in need of money, was eager to make good use of the wood and thus exploited the rich source of money. Two regional manufacturers applied for its use. One of them was the Mannheim court cellar master

Franz Friederich, who offered to build a glassworks in Seidenbuch. His competitor wanted to use the forest to produce charcoal to run an armoury. With a glass furnace, the Electoral Palatinate trade and domestic industry established a new branch.¹ The wood from the state forests could also have been sold to the glassworks, which in turn would have generated further income for the elector to fill his state treasury. A specially convened commission proposed to the Elector that the contract be concluded. Two weeks later, on 15 February 1782, Carl Theodor signed the privilege in Munich that allowed the establishment of a glassworks. This comprised:

- 30 years the right to establish a glassworks in Seidenbuch and in the Kappwald.
- All types of glass (green, black, white) were to be produced.
- The necessary raw materials such as ash, sand, black common salt, chalk, potash, saltpetre, sandstone... should be taken from the country as far as this is possible
- All raw materials that must be sourced from abroad should pass through duty free.
- Likewise, glassware to be delivered abroad shall



Portrait of Carl Theodor, painting by Anna Dorothea Therbusch, oil on canvas, 1763 – credit: © Reiss-Engelhorn-Museen Mannheim, photo: Jean Christen (this tif. Is to large, I send it seperatly)

- be allowed to pass through the frontiers without duties
- Similarly, the free import of all foodstuffs and consumer goods required by the workers shall be permitted, and the serving of beer, brandy and wine shall also be free.
- Should the glassworks be able to supply the whole of the Electoral Palatinate, then the import of foreign glassware will be subject to

¹ Beucamp-Markowsky, Barbara: Frankenthaler Porzellan, Bd. 1–3, München 2008/2010; Kessler-Slotka, Elisabeth: Zweibrücker Porzellan 1767–1775, Saarbrücken 1990.

increased duties.

- The factory owner, company and workers of the glassworks are placed under the sole jurisdiction of the Electoral Palatinate Factory Commission in matters concerning the glassworks.
- The document was not countersigned and confirmed in Mannheim until 11 months later (20.1.1783) by the government there.

The smelter was thus built in accordance with official practice. Since the Renaissance, the permission of the landlord had to be obtained in order to operate a glassworks in Germany. Once permission was granted, the glassworks had to pay the lord an annual hut rent and pay for glass deliveries. A separate forestry fee was paid for the consumption of wood.

Production – let us now turn to the tangible products of the glassworks: Besides green glass, white glass was produced in Seidenbuch, together about 1,000 quintals per year. In 1798 Friedrich was able to report that he still had 1,000 cases of table and window glass in stock at his smelter. There was a complaint that he was not supplying the country and the Mannheim, so the Glaziers' Guild wanted imports from the Black Forest in Baden to be free. As early as 1784, inspections revealed that the glass was of high quality and

competitive, except that the goods were blown too thinly. There were two types of window glass, the larger 18 inches long and the smaller 14 inches. There were also green bouteilles (forest glass), medicinal glasses. This means that only green and white glass was produced in Seidenbuch, no crystal or mirror glass. The production was limited to mass-produced goods/ commercial glass that promised the highest profit. Sooner than expected, the glass production had to give up after only 13 years due to a lack of wood.

In the Reis-Engelhorn-Museum's collection there is a large stock of broken glass with seals, but also bottles bearing applied seals (glass marks) with the monogram CT for Elector Carl Theodor. In this case, the bottles could have come from one of the glassworks that worked under CT (in the Odenwald for a short time). Or does the monogram of the elector indicate bottles for use in the electoral court, i.e. they are court cellar vessels with a ruler's monogram? The custom of having wine filled in bottles with one's own coat of arms or seal added to the splendour of any court table. This is known in England in the 17th century, and later also on the continent. Does the sealed, flail-shaped bottle with the initials CT under the electoral hat really date to the time of Elector Carl Theodor during his Mannheim residence before 1777, or was it made

afterwards, for instance in Seidenbuch-Glashütte?

But there are also finds that can be directly attributed to the products of the glassworks: A (schnapps) bottle has been preserved in private ownership, engraved with the saying "Gott allein die Ehr" and the year 1784.

Conclusions: What did the search for traces reveal?

Fine glass and utility glass had to be imported mainly into the Electoral Palatinate. But there were also numerous glassworks in the former Electoral Palatinate. They usually worked for a shorter period than planned, mainly due to a lack of wood, high raw material costs, e.g. increased wood prices, but wars also put an end to them. Originating as so-called forest glassworks, they did not produce long enough to see the beginning of industrialisation. The traditional production methods no longer met the new requirements and wood firing had become too expensive. Whereas the location in the deep forests used to be an advantage, it now hindered the access of the new means of transport (railway). In addition, the available raw materials were often hardly suitable for producing top quality. Purer and cheaper glass came onto the market from Bohemia at an early stage.

The Glass Study Centre's Archives

Marzia Scalon

Fondazione Giorgio Cini, Venice



The actual access to the Glass Study Centre in the Library Manica Lunga; Fondazione Giorgio Cini, Venice, Photo Matteo De Fina

In the contemporary cultural panorama, museums, archives and other institutions have launched massive programs to digitize their collections. As a result a vast multiplicity of paintings, engravings, drawings, photographs are available in the

so-called 'infosphere'. In this availability, an increasingly wider part of this number of sources opens up many new possibilities of exploration and fruition.

The following review will present a general portrait of the main

activities and the collections owned by the Glass Study Centre of the Fondazione Giorgio Cini, highlighting the major role that digital archives can play in preserving the history of the art of glassmaking. It will also focus on important aspects related to the working processes and best practice adopted within our Foundation.

THE GLASS STUDY CENTRE: ACTIVITIES AND COLLECTIONS

As far as the Fondazione Cini is concerned, our 'journey' began in 2012, when we decided to create the project LE STANZE DEL VETRO in collaboration with Pentagram Stiftung and thus to start the establishment of a **Glass Study Centre** with the purpose of gathering and preserving the historical glassworks' archives still present in Venice. Since then the Centre has transformed itself into a vital and dynamic cultural hub which

owns extensive collections of great historic and artistic relevance.

It also organizes international study days and symposia. The first one was a 'round table' dedicated to the architect Carlo Scarpa, followed by a series of successful conferences, which explored the overall work and research of relevant figures and designers who collaborated with the glass firm Venini, from Giacomo Cappellin, Tomaso Buzzi, Vittorio Zecchin, Napoleone Martinuzzi, Fulvio Bianconi, Toni Zuccheri, Thomas Stearns, etc.

Additional seminars entirely dedicated to specific topics or to important glass collections and movements have also been organized in parallel: *Glass from Finland in the Bischofberger Collection*, *The Glass of the Architects, Venice and American Studio Glass*, *The Glass Ark*. *Animals in the Pierre Rosenberg Collection*, *Ettore Sottsass: The Glass*, to name just a few.

In addition to these initiatives, the Glass Study Centre has been offering a large number of scholarships with the purpose of studying the art of 20th and 21st century Venetian glassmaking.

Among these, several implied a semi-annual residential stay on the Island of San Giorgio. The residency is open to Italian and



Examples of drawings of the Glass Study Centre, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



View of the exhibition *Ettore Sottsass: The Glass*, at Le Stanze Del Vetro; photo Enrico Fiorese

non-Italian graduates, Ph.D. students or post-doctoral fellows proposing a research topic concerning the archives preserved within the Glass Study

Centre. During the research period, all the scholarship's holders are guests on the campus 'Vittore Branca', which is an ideal place for

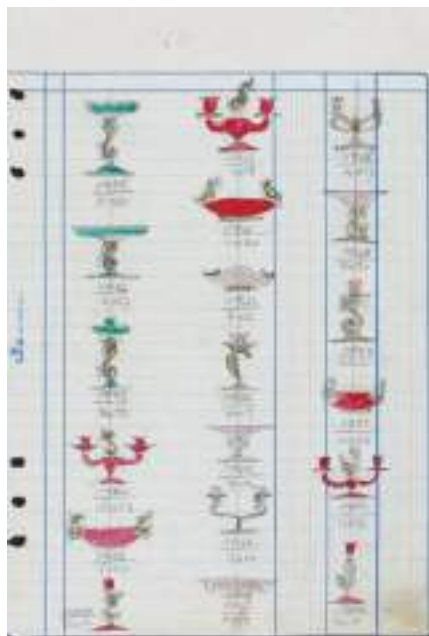
interdisciplinary dialogue with the scientific community of the whole Cini Foundation. The residential awarded scholarships so far encompassed different topics, from the 'sommerso' technique and the use of filigree evolution, to the reconstruction of the 'reverse engineering' process applied to Peter Shire's artworks through the analysis of his drawings, just to quote some of them.

From the very beginning of the project, the creation of a specialized library was started, gradually enriching its catalogue to over 2000 publications. Parallel to the research activities' programs, the Centre is also particularly active and participates to "collateral events", festivals and exhibitions in collaboration with important Italian and foreign institutions. The Centre is currently expanding its archival space into a larger hall on the ground floor of the Cini Foundation.

With more than 200.000 original drawings, sketches and executive projects, accompanied by extraordinary sets of period photographs, complemented by commercial correspondences, company registers and rare showroom catalogues, the Glass Study Centre has become so far **The General Archive of Venetian Glass** and is the only archive in Italy devoted exclusively to glassmaking art and glass design.



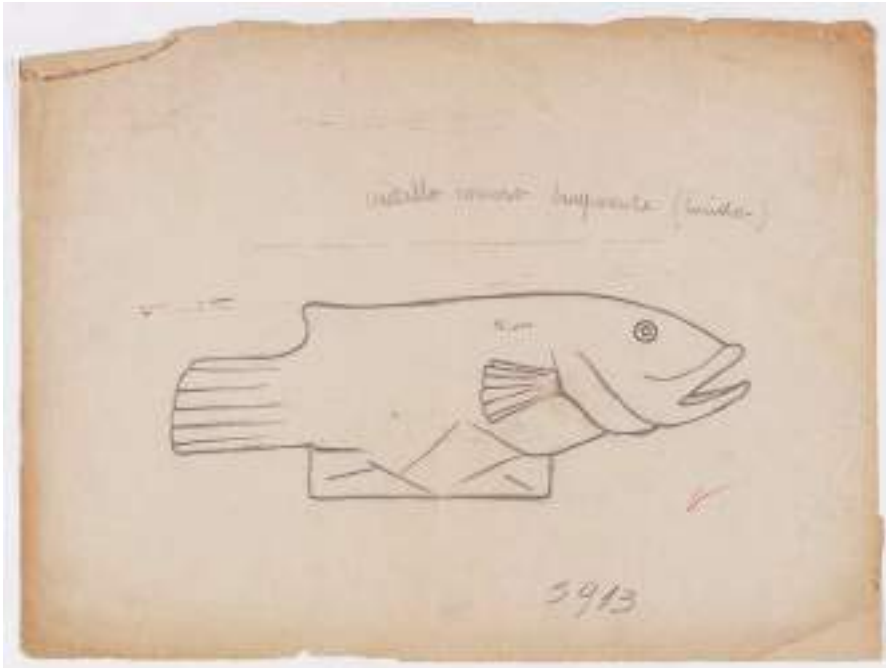
Drawing of two models executed using the 'sommerso' technique, Seguso Vetri d'Arte Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Example of a showroom catalogue's page, Seguso Vetri d'Arte Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Drawing of model 13711, pen and watercolour on paper, Seguso Vetri d'Arte Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Drawing of model 3913, exhibited at the XXI Biennale d'Arte di Venezia in 1938, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice

Obviously, the institution's goal is not only that of preventing historically important materials from degradation, but also sharing its own heritage with the general audience, interested visitors and researchers, both in presence and on-line.

The Centre operates under the supervision of glass experts and historians and the richness of the archive reflects their commitment. Beginning with Professor Luca Massimo Barbero, Director of the Institute of Art History; Marie Rose Kahane and David Landau, the founding figures of the scientific board, whose first donations inaugurated the drawings' collection. Further special

mentions should go to the other members of the Advisory Committee, that is Rosa Barovier Mentasti, Marino Barovier, Jean-Luc Olivié, Valerio Terraroli, and Giorgio Vigna, who constantly provide crucial vision and scientific support to move the Glass Study Centre and its initiatives forward.

At the beginning of our project, we all shared the goal to save the history of 20th century glass by preserving the documents. Then, a different perspective was seen, that is the need to have a 'democratic', accessible and consultable digital collection made available for all those interested, from the general public to scholars, schools and

universities. So, within a couple of years, the idea of digitizing and mapping our materials became very clear and we started on a path towards a proper **Digital Archive of Venetian Glass**.

In this sense our Foundation has a long tradition behind: since its opening -in the Fifties- the Fondazione Cini carries in its DNA the intent to promote, study and share its cultural heritage, and these values are still considered the vibrant part of the Institute of Art History.

Sharing knowledge and providing educational opportunities have always been central aspects of our institutional history and according to this premise, the digitalization centre ARCHiVe (**A**nalysis and **R**ecording of **C**ultural **H**eritage in **V**enice) was created. Its mission is to support the digital campaigns of most of the Fondazione Cini's documentary heritage and to offer new technologies and services to all its research institutes. The opening of this laboratory was crucial to step forward into an advanced international and technological frame.

Certainly, those of the Glass Study Centre, were among the first experimental digitalization campaigns of the Fondazione. From the very beginning, this new development in

digitalization led us to analyze the overall structure of our collections and to review some aspects of the archival practice in order to be newly applied to the augmented technological context. We also got acquainted with the idea that digital archives are bearers of great knowledge, not only of data and information. For this reason, they are worthy of becoming particularly authoritative actors of the present cultural field.

We also reconsidered several internal practical and operative positions in order to adapt to the new emerging concepts, which are now guiding our theoretical ideals and the archive's best practice. Obviously we pay attention to the relevant educational and social role of the archives.

Regarding the typologies of sources and documents donated to the Study Centre, materials so far include both those of illustrious Murano glass manufacturers and of contemporary artists and glass masters. Through letters, albums and production catalogues and, above all, through photographs, drawings and graphic documents, visitors can enjoy an overview of the multiplicity of models and creations that indelibly represent the history of glassmaking art.

Murano works were actually unique: glassworks such as

Seguso Vetri d'Arte, Venini, Antonio Salviati, Pauly & C. – C.V.M, M.V.M. Cappellin & C., Aureliano Toso, Carlo Moretti e Giovanni Moretti, Artisti Barovier, to name just a few, managed to develop a proper design and formal language assuming a leading role worldwide.

The main graphic *corpus* of the collections is also accompanied by extraordinary vintage photo albums complemented by company registers and above all, some rare exemplars of the already mentioned "showroom catalogues" – whose miniatures entirely drawn by hand – give evidence of the legendary production line of the Seguso Vetri d'Arte.

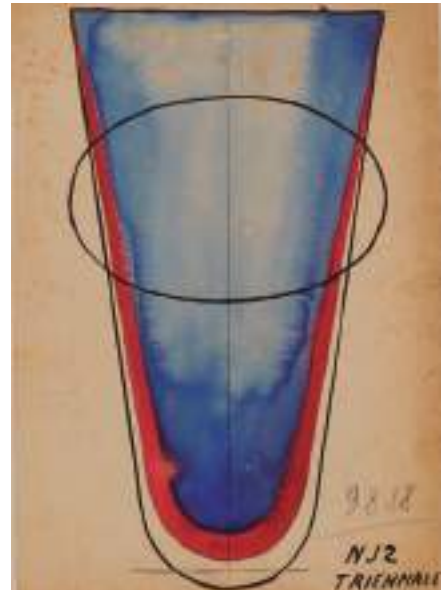
Among the preserved materials there are also those representing artworks exhibited at the Biennale d'Arte of Venice, at the Fondazione Bevilacqua La Masa as well as at the Triennale of Milan and finally those which won prestigious awards such as *Compasso d'Oro*.

Complementary to these 'hidden treasures' are important materials of internationally renowned glass designers, architects and artists such as Carlo Scarpa, Peter Shire, Emmanuel Babled, Ginny Ruffner, Fulvio Bianconi, Vinicio Vianello and many others of course.

In recent times the entire archive of the Venetian 'maestro'



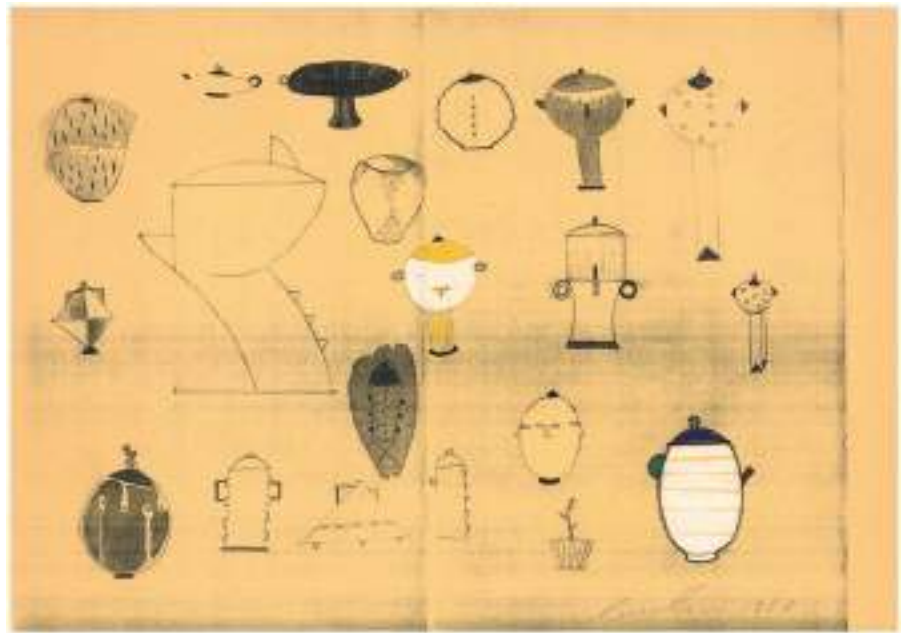
Dino Martens, drawing of a marine star exhibited at the X Triennale of Milan in 1954, pencil and pastels on paper, Aureliano Toso, Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Drawing of *Vase Blu Rubino*, model 9818, awarded with *Compasso d'Oro* in 1954, water colour, pencil, china on cardboard, Seguso Vetri d'Arte Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Dino Martens, drawing of a marine plant with fishes, exhibited at the X Triennale of Milan in 1954, pencil and pastels on paper, Aureliano Toso Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Cristiano Bianchin, *Schizzi per vasi in vetro soffiato*, 1988, pencil and pastels on paper; Cristiano Bianchin Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice

Pino Signoretto has been entrusted to the Centre and part of the records of the contemporary artists Cristiano Bianchin, Silvano Rubino, Giorgio Vigna.

There are also several ‘minor’ sets of papers, including drawings and heterogeneous materials regarding *Barovier Seguso & Ferro*, *Cattellan Murano*, *Angelo Barovier*, *Anzolo Fuga*, *Guido Balsamo Stella*, *Successori Andrea Rioda*, *Luigi Scarpa Croce*, and many others.

Finally, a multimedia archive has been established, including about 25.000 ‘native digital’ documents: recordings of symposia, experts’ and artists’ interviews and – above all – the digital archive of the historic



Silvano Rubino, *Il titolo che non si può dare*, 2012, pencil and pastels on paper, Silvano Rubino Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice



Giorgio Vigna, Inedito (Fiore), 2016, pencil and watercolour, Giorgio Vigna Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice

Venetian firm Venini, enriched by the documentary films directed by Gianluigi Calderone. These videos were created to accompany each exhibit realized at Le Stanze del Vetro.

ANALOGIC AND DIGITAL ARCHIVES

Among the first archives to enter the Glass Study Centre's collections ten years ago was the Seguso Vetri d'Arte, which output covers a chronological ark dating back from 1937 to 1973. This vast and rich archive deeply represents Murano's output and its radical experimentation. In fact, this treasure speaks loudly about the island's commitment to innovation.

For glassmaking scholars, younger students and the general public, the archives preserved by the Glass Study Centre represent the exact likeness of extremely prolific moments of creativity which deserve to be enhanced with different critical methods and should be improved by using new interdisciplinary approaches.

This large amount of graphic and photographic works consisting of 22,053 drawings, 26,181 photos and more than 30 production catalogues, soon confirmed the urgency and need of mapping and matching the units into a digital archival structure. Moreover, the acquisition of the Seguso archive demonstrated the Centre's dedication and attitude towards the digital strategies blooming at that time. Since the donation of this first archive, the notion of archiving and cataloguing has improved rapidly within the Institute of Art history of the Fondazione Giorgio Cini.

Since the beginning of our work with the first archives entrusted to the Centre, our understanding of what constitutes the representative Murano's production has largely expanded. This awareness was in part due to the new digitalization process' emerging requests between the laboratory staff and the research team. Originally conceived as an instrument to set-up our on-line

catalogue – merely supposed to accomplish with specific researches – the process soon began to be considered from a different perspective. Digital archives in fact proved to have an 'independent life'. They are able to stimulate numerous interrelations and connections within the scientific community of researchers and scholars, thus confirming their crucial role in reconstructing the history of Venice and Murano.

Also, many new team-working related issues and several underestimated methodological aspects emerged when starting the path of 'institutionalization' of the Seguso archive. First of all, digitalization has 'forced' us to review backgrounds and hierarchies, providing access to the equipment and a critical engagement of a wider group of colleagues, instead of relying only on the Centre's team.

Furthermore, our new working practices have certainly dismantled some aspects and old reminiscences of the archival science, deriving from an utilitarian perspective which was based on the concept of the archive's neutrality, thus dismissing the old positivistic idea of an ideal 'distance' between the archivists and the materials.

Moreover, we assumed that an archive document conceived as an 'image format' never

produces a perfect double mirror of the original analogic one, and its enrichment or deprivation derives from its fluid association with a 'circle' of coherent materials and from its inclusion in a network of relationships with other sources.

Considered that many of our activities have an educational and didactic purpose and that the Centre provides scientific and iconographic support for various exhibitions, as well as research projects and publications, one of the most important aims is the broader pre-understanding of the context of origin, production, and sedimentation of the data sets. In this perspective, the role of the archivist in meta-dating and in defining the archival structures is a dynamic one, in which a curatorship must be applied and a critical approach has to be brought out.

However, the philosophy of the Glass Study Centre proposes that no single history or defining canon can adequately account for 'absolute' developments of glassmaking art in Venice. Likewise, no single collection or grouping can provide a comprehensive overview. So, rather than offering an encyclopaedic survey – many gaps remain in fact to be filled and many masters and figures are still to be represented – our approach is to offer and to form

'general lines' and series, families and constellations of works and references around names, dates and companies. This will new appreciations and critical reappraisals.

The Centre's team is currently focusing on new arising technical issues: innovative solutions such as scripts to be launched, up-dated strategies for the management and access to large sets of resources, augmented reality and computer vision application, depending on specific research programs based on aspects like colour, style, technique.

These developments would e.g. enable to document and recreate the artistic contexts and the evolution of a certain glasswork, or to study production trends in glassmaking art and to explore different *entrepreneurial* outcomes or possible intents.

Further improvements would also allow us to match our data with those of other glass design open-databases, discovering how a certain technique or a form had an impact on Murano's creativity in different times.

TECHNOLOGIES

As far as the technical aspects are concerned, the digitalization of this vast deposit of projects has been achieved using a table which recovers the drawings' flatness by creating the vacuum underneath the support's surface. Above this table, two digital cameras are installed, sliding along a track on the ceiling, and acquiring 'panoramic' images of drawings even up to four meters long such as glass chandeliers which are models drawn in scale 1 to 1.

In parallel, the digitalization of the photographic part of the



View of a room in the laboratory ARCHiVe, Fondazione Giorgio Cini, Venice

archive was created using a high-speed scanner called “Replica”, that is a circular

rotating table – whose diameter is 2 meters – controlled by a high speed precision motor

which allows the uninterrupted acquisition of one image every four seconds.



View of the rotating scanner Replica, in the laboratory ARCHiVe, Fondazione Giorgio Cini, Venice

CONCLUSIONS

The Glass Study Centre has a very particular specificity, as it is in fact a place of research and study, an archive, an exhibition ‘incubator’, a library, but above all a space for a direct encounter with the analog and digital archives kept in it. It is extremely difficult to evaluate the scale of Murano’s artistic output and the consequent influences and relationships, but at least there is a living place where the history and memory of the ‘Glass Island’ continue to live through the progressive reconstruction of its identity.

My speech on the occasion of the *ICOM Glass Annual Meeting On Line, 2021* ended with a sentence pronounced by Nicolas Serota already in 2009: «The future of museums may be rooted in the buildings they occupy but it will address audiences across the world – a place where people across the world will have a conversation. Those institutions, which take up this notion fastest and furthest will be the ones which have the authority in the future».

It is a thought to which I still subscribe.



Photograph of the period representing two vases of Vinicio Vianello in front of the Island of San Giorgio Maggiore in Venice; Vinicio Vianello Archive, Centro Studi del Vetro, Institute of Art History, Giorgio Cini Foundation, Venice

Insights into the glass history of the Bavarian Forest

Sven Bauer M.A.

Curator Glasmuseum Frauenau, Germany

If you want to explore the beginnings of glass production in the Bavarian Forest, you have to go back to the Middle Ages. It was the time when the region, which at that time was a dense jungle, was settled. However, the area was not completely undeveloped, as it led a number of paths from the Danube through the forests and over the mountains to Bohemia. The routes served as trade routes. One of the most important commodities was the salt, the white gold, which was brought to Bohemia from the salt deposits of the Eastern Alps (Reichenhall, Berchtesgaden, Hallein). Glass was also of great importance.

The development of the inner Bavarian Forest falls in the period from the 11th to the 13th century.



Alabaster glasses from the Schachtenbach glassworks were highly valued in aristocratic and bourgeois households throughout Europe. Photo S. Bauer

The rural settlements, however, constituted only a relatively small part of the newly developed area. Glass production was suitable for the use of the vast forests, because the main raw materials of wood and quartz were available in large quantities. One of the oldest glassworks locations is “Glashütt” near St. Englmar in the district of Straubing-Bogen. From the middle of the 13th century there was a glass oven. Window glass for the monasteries and rosary beads are said to have been made here.

In the early days of the glass history of the Bavarian Forest, there were only a few glassworks.

From the 15th century onwards, the number increased. The geographer Philipp Apian (1531-1589) gave the first overview of the glassworks of the region in the 16th century. He recorded 10 glassworks for the Bavarian Forest.

But how can one even imagine such an early glassworks? An illustration from “The Journeys of Sir John Mandeville” gives a good impression of this. It shows a Bohemian glassworks of the 15th century and can also be seen in the Glass Museum at a media station. They were still small production units, but all

the activities in the glassworks were combined.

In the Glasmuseum Frauenau you can see archaeological finds from Regensburg, a sales place for glass from the Bavarian Forest. They give an insight into the glass production of the Middle Ages. Nuppen-studded and thread-spun glasses, butt slices, flat glass, and rosary beads were created in the waldglashütten.

Archaeological investigations into the glassworks of the Bayerwald are only available in one case. In the 1980s, the remains of the



Set of liqueur glasses, 1950s, Glashütte Eisch, Frauenau. Photo S. Bauer



Glasses from the Historicism period, around 1890, Krystallglasfabrik Theresienthal near Zwiesel. Photo S. Bauer

glassworks on the Lusen were uncovered. It was built in 1607 by Thomas Kaiser on the slope of the Lusen at an altitude of about 900 m. The glassworks consisted of a 7.10 x 2.40 m main oven and six auxiliary furnaces. In the Forest Museum Zwiesel you can see finds and photos of the excavation. A reconstruction drawing of the hut complex was also made for the museum.

Glass production in the Bavarian Forest flourished during the Baroque period. In addition to a number of important glass lord families, the Poschinger are to be highlighted. The family started making glass in 1568

and has been based in Frauenau since 1605. The Poschinger glass factory held its own on the market for a long time with its specialization in custom-made products, but stopped production in Frauenau at the end of 2021. Under the company name “Von Poschinger Glass Projects” the company is still active in the field of glass.

Decisive upheavals occurred in the age of industrialization. The effects were also felt in the Bavarian Forest. A number of glassworks were no longer producing in time and had to close. But a new upswing was not long in coming. Some unprofitable glassworks were

taken over by new and successful operators and new glassworks were founded in other places.

The area around Zwiesel and Frauenau developed into a glass centre in the 19th century. The glass factories in Frauenau and Oberzwieselau, run by various branches of the Poschinger family, adapted to the new era and produced successfully. The glassworks master Georg Christoph Abele from the neighboring Bohemian Forest founded the Mirror Glass Factory Ludwigsthal in 1827.

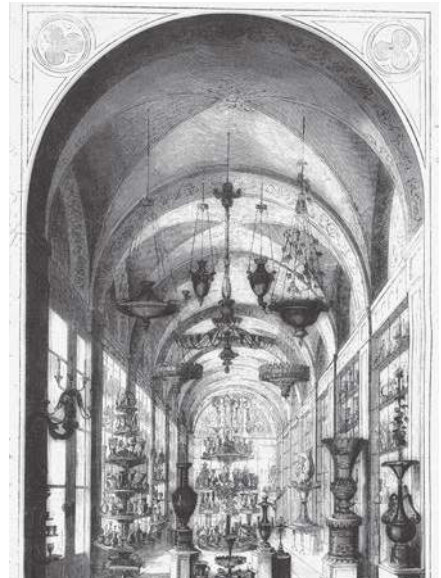
The Glashütte Schachtenbach lasted only a few decades. But



The medieval glassworks were small production units, from: The Voyages of Sir John Mandeville.



Lidded box and vase, alabaster glass, portrait painting, Glashütte Schachtenbach, around 1860. Photo S. Bauer



The Steigerwald glass bazaar in Munich, in: Illustrierte Zeitung, Leipzig 1853, Bavarian State Library



Krystallglasfabrik Theresienthal, around 1860.



Lidded box with the dedication "Erinnerung an Schachtenbach". Photo S. Bauer



Reconstruction drawing of the glassworks on the Lusen, that was built in 1607, Waldmuseum Zwiesel.



The first employees of the glass processing company Eisch, later Glashütte Eisch, around 1949. Photo Glashütte Eisch



The Eisch family's glass processing business becomes a glassworks. Photo Glashütte Eisch



Kristallglasfabrik Theresienthal, um 1920.

her name is almost legendary. The hut tenants Joseph Schmid and Sohn (1829-1844) and especially Wilhelm Steigerwald (from 1845) raised the production to a level that brought the factory worldwide prestige. The glass was distributed in the glass shops of the Steigerwald family, primarily in the „Glas-Bazar“ at Munich’s Odeonsplatz. The illustration gives a nice insight into the range of Schachtenbach glasses. The Schachtenbach glasses also have a special place in the Glasmuseum Frauenau.

The Krystallglasfabrik Theresienthal near Zwiesel was

an important new foundation that still works today. Franz Steigerwald, a glass merchant born in Prague and based in Würzburg, built the factory in 1836 at the request of King Ludwig I. His brother Wilhelm became technical director. Within a short time, they put glass production at an outstanding level. The fine glassware was sold in an exclusive shop in Munich, very close to Odeonsplatz. In 1861 Michael von Poschinger von Oberfrauenau bought the glassworks. Under the management of the Poschinger “Theresienthal” experienced a rise again. The glass factory remained in the hands of Poschinger until 1973.



Kommerzienrat Isidor Gistl
(1868 - 1950)



When it opened in 1925, Kristallglasfabrik Gistl in Frauenau was one of the most modern glassworks in Europe.

Economic problems led to the cessation of production in 2001. With the support of the BMW-affiliated Eberhard von Kuenheim Foundation and others, the factory was restarted in 2004. Max Freiherr von Schnurbein has been at the helm of the crystal glass manufacturer since 2006. Then as now, the nobility and the beautiful and rich around the world drink from glasses of Theresienthal.

Zwiesel Kristallglas AG, also a company with a long and eventful tradition, is known worldwide for drinking glass series. One of the most important was probably from 1961. The economic miracle of the 1950s brought an enormous demand for drinking glasses. To meet the high demand, the company worked on the fully automatic chalice glass

production. In 1961, the company was the world's first success. Today, "Zwiesel Kristallglas AG" is regarded as the world market leader in the field of upscale drinking glasses.

In Frauenau, besides the glass manufacturer Poschinger, there is also the Glashütte Eisch and the original crystal glass factory Gistl. Isidor Gistl was the tenant of the Poschinger-Glashütte in Frauenau since 1906. In 1923-25, during a great economic crisis, he built one of the most modern crystal glass factories in Europe with several hundred jobs. The successful era of Isidor Gistl ended in 1950 with the surprising death of the company's chief executive. His widow and sole heiress Pauline Gistl continued the business. The factory is now part of the Austrian group Riedel Glas.

However, the glass factory has been closed since 2018.

The glass business of the Eisch family is a new foundation of the post-war period. In 1946, Valentin Eisch opened his own glass finishing workshop. The business flourished, but receiving raw glass was not easy. That is why the family built their own glassworks. The first glass oven was put into operation as early as 1952. The glassworks quickly became too small and a new building was planned. The first glass melt started there in February 1957. The glass shapes and decorations came mainly from Valentin Eisch and his sons Erwin, Erich, and Alfons. The Glashütte Eisch is still completely family-owned and is managed by the siblings Julia Eisch and Eberhard Eisch in the third generation.

Holmegaard Work

The creation of an industrial heritage site

Joachim Allouche

Museumsinspektør Nyere tid, Denmark



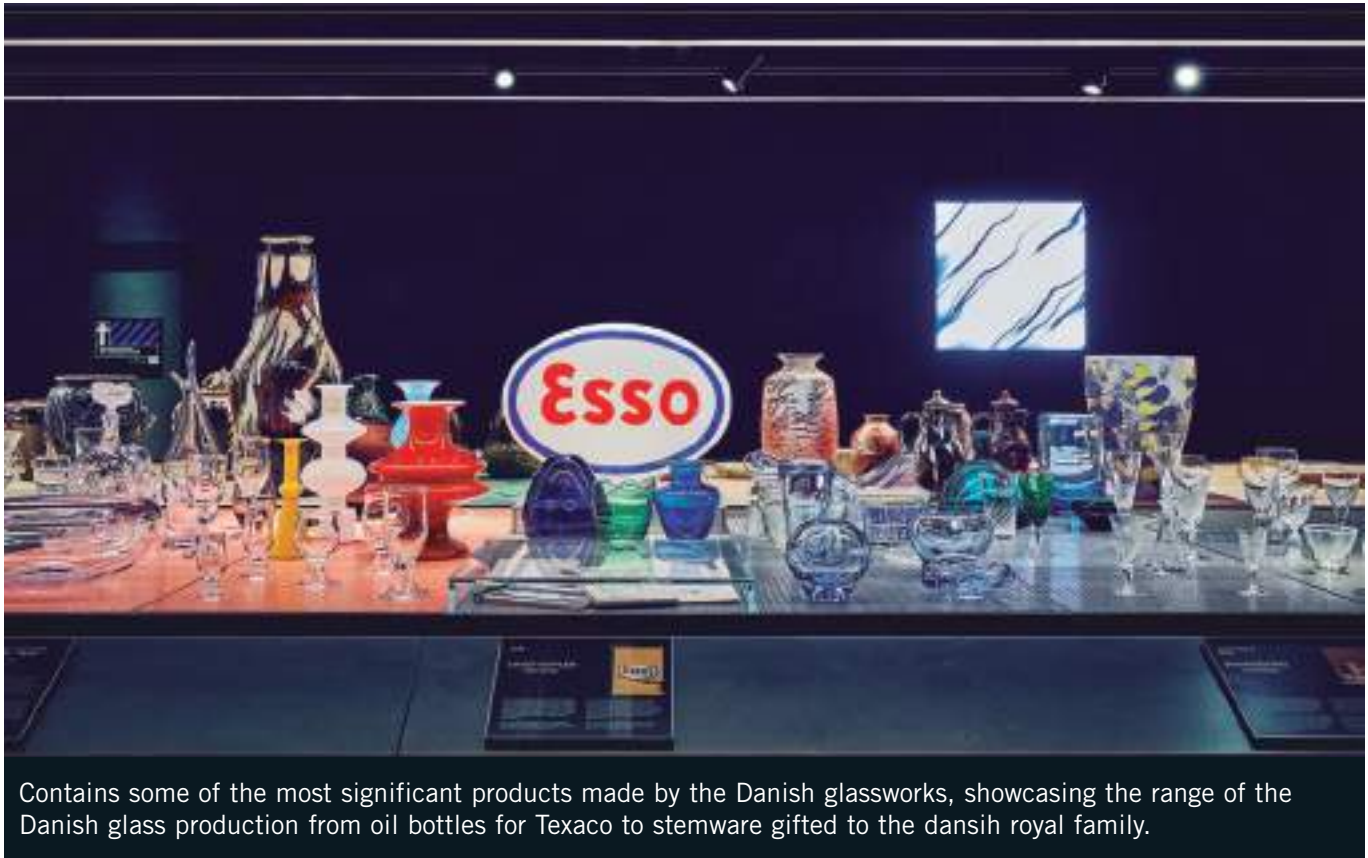
The open glass collection contains over 42,000 glass from the Danish glassworks prototype collections displayed in open storage.

Introduction

In 2020 – twelve years after the last glass had been blown at Holmegaard Glasswork, the museum Holmegaard Work opened.

The museum defines itself as *Denmark's hot spot for crafts and tradition, that conveys the past as an inspiration to the future based on Denmark's largest glass collection, the old glasswork that houses the museum and a living glass workshop.*

Behind this statement lies a goal of maintaining an industry that has been hit by the closure of the last Danish Glasswork. But how can a museum help a local area and a national industry?



Contains some of the most significant products made by the Danish glassworks, showcasing the range of the Danish glass production from oil bottles for Texaco to stemware gifted to the Danish royal family.

In this article I will show how the creation of Holmegaard Works can be understood as a memorialization process where different actors, circumstances and material heritage together define what the museum could do for the local area and country that has lost its glass industry.

The rise and fall of the Danish utility and art-glass production

The modern Danish glass industry started in 1825 with the creation of Holmegaard

Glasswork near Holmegaard bog, with the intent of using the peat as fuel. From 1830 Holmegaard Glasswork started making utility glass.¹

The next couple of years more Danish glassworks were created all around the country, to meet the demand for bottles for beer and soft drinks in Denmark.²

In 1925 the first Danish designed glass was made by Niels Orla Juul at Holmegaard Glasswork,³ followed by Jacob

Eiler Bang and later Per Lütken and others which were all based at Holmegaard Glasswork.⁴

From the 1930s onwards the Danish Glasswork began a period of closure and concentration culminating with the merger of Kastrup Glasswork and Holmegaard Glasswork into Kastrup-Holmegaard Glassworks in 1965.

In 1978 Kastrup Glasswork closed and the company changed its name to Holmegaard Glasswork.

1 (Buchwald & Schlüter, 1975)

2 (Holmer, Koivisto, Outzen, & Bruun, 2020)

3 (Kock, 2020)

4 (Bruun & Outzen, 2020) (Buchwald & Schlüter, 1975)



Glassblowers at Holmegaard Works working together on a big showpiece doing Holmegaard Glassworks glass festival.

In 1996 Fyens Glasswork closed leaving Holmegaard Glasswork as the last glasswork in Denmark.

From the 1990s Holmegaard began outsourcing its production in reaction to global competition, marking a slow decline for industrially produced glass in Denmark.

In 2006 the brand Holmegaard Glasswork was sold to Rosendahl Design. In 2008 Holmegaard Glasswork closed as the last glasswork in Denmark leaving

the last glassworkers without a job, a local community without its defining factory, and the Danish glass industry without any industry.⁵

Memorializing an Industry

The closure of Holmegaard Glassworks and the later creation of Holmegaard work can be understood in a broader context of the general decline of the West European industry near populated areas and the following challenge dealing with the industrial heritage.

As Ralph Richter discusses in his article *Industrial Heritage in Urban Imaginaries and City Images*, dealing with the industrial past can happen in radically different ways from ignoring it like they have done in Glasgow to using it actively to brand an area as it has been done in Dortmund.⁶

Even when there has been a decision to use the industrial heritage the results and stated goals can be rather different: One common goal has been to help the local economy by making it into a Tourist attraction.

While this approach may have great economic benefits, it comes with a risk of losing some history. In his article David Coyle shows how the heritage attraction Belfast Titanic ignores Belfast and the shipyard's history of sectarian violence and discrimination to create a more appealing attraction for tourists.

Apart from economic gains, industrial heritage has been used to create or maintain an identity as it has been done in the Ruhr-area,⁷ creating an area known for its livability and vibrant culture.

Heritage can also be used to unite locals around social issues. Bella Dick shows how miners in Castleford used their industrial

⁵ (Outzen, 2014)

⁶ (Richter, 2017)

⁷ (Wicke, Berger, & Golombek, 2018)

heritage in opposition to the authorized heritage discourse, to organize the area around social concerns.⁸

The above cases can all be understood as a memorialization process. A memorialization process can be defined as a process where different actors (citizens, companies, public institutions etc.) use, remember and forget aspects of their history in order to define it as their cultural heritage.⁹

While the actors certainly have a lot of influence on what ends up as cultural heritage the memorialization process does not happen in a vacuum, as Beverly Butler argues in her article *Heritage and the Present Past*, that the actors that define heritage are themselves formed by their history which affects the way that they interact with history.¹⁰

Finally, the material heritage itself has a role to play as Anna Storm and Krister Olson demonstrate in their article about the mining pit in Malmberget, the fact that the pit still contained usable resource, and was dangerous to be near to limited the use of the industrial heritage.¹¹

In the following text I will show how the creation of Holmegaard Works can be understood as a memorialization process where people, context, and materiality played an active role.

From Holmegaard Glaswork to Holmegaard Works

The idea about working with Holmegaard Glasswork's heritage came from the company, which since the start of the 20th century had worked with its heritage through the writing of the company's history,¹² creation of a glass collection, and the opening of the glasswork for the public.¹³

By 2006 public visits and sales in the attached shop had become such a big business, in comparison to the general production of utility and art glass, that the investor group Holmegaard Entertainment bought the glasswork and made it into an experience center called Holmegaard the living glasswork.¹⁴

At the same time the Holmegaard brand was sold to Rosendahl together with Holmegaard's glass collection

containing more than 47,000 glass.

This early context is important for the creation of Holmegaard Glasswork. The many early years where the company had worked with its own heritage created a solid foundation for looking at Holmegaard Glasswork as heritage.

With the creation of the entertainment center, parts of the glasswork were already visitor friendly areas. While that interfered with the authenticity of the building, it made the creation of a museum much more cost efficient.

The next important piece of context was the timing of the closure: Næstved Municipality had long been working with the idea of branding itself as the city of craft and art with the help of the local museum. The main focus was on another Næstved factory, Kähler Ceramics, which had closed in the 1970s leaving the municipality with a great collection of ceramics which it had bought to help the bankrupt business.

When the municipality received the glass collection from

8 (Dicks, 2020)

9 (Berger, 2020)

10 (Butler, 2013, s. 472)

11 (Storm & Olsson, 2012)

12 (Bang, 1999) (Jensen, 1950)

13 (Outzen, 2014)

14 (Outzen, 2014)



Studio manager Bjørn Friberg at work. In two years Friberg has managed to make Holmegaard Works studio into a vibrant and economically viable business working with Danish designers, artists, architects and companies.

Rosendahl in 2010, there were plans to build a new museum in the center of Næstved to display the collection.¹⁵

In 2011 all that changed, after a failed attempt to reestablish the privately-owned entertainment park, Holmegaard glasswork closed for good.

By 2011 Denmark was going through the global financial crisis, which took its toll on the local community surrounding

Holmegaard Glasswork. Therefore the closure of the glasswork hit extra hard and left politicians looking for a way to create job opportunities in the area.

Furthermore, the loss of Holmegaard Glasswork represented a loss of identity in the local area, which had already taken a hit when the municipality of Holmegaard had been absorbed into the municipality of Næstved, downgrading the area of

Holmegaard from an administrative and political center, to the outskirts of a big city.

The then chairman for the Culture and Democracy committee in Næstved Municipality, Linda Frederiksen, described it as, “The absorption into Næstved municipality and the loss of the glasswork had destroyed the area’s feeling of identity. By building Holmegaard Work, the municipality could

¹⁵ (Hansen, 2010)

give something back to the outskirts of the municipality without compromising the planned administrative centralization.”¹⁶

Furthermore, the closure left a big building mass close to a residential area empty. It would have been difficult to convert it into anything else than a museum and if left alone it would become a slum.

Therefore it was decided to make the museum in Holmegaard Glasswork.

Actors

While the circumstances were ripe for the creation of Holmegaard Works, it is clear that it would not have happened without the actors that created it.

The first actor was the municipality and the local museum. As explained before, the municipality had a long-term political goal of rebranding the city and with the closure there was an immediate need to create something for the locals. The municipality worked with Næstved City Museum, which had a tradition of working within the city center. By 2017 the Museum became part of Museum Southeast Denmark, a large regional museum that had

a tradition of working with more of a national outlook.

The two actors created the first prospect together, framing the idea about Holmegaard Work as an experience center that would convey knowledge about craft, esthetics, and heritage to visitors, educational institutions, and the industry.

The experience center would have workshops where visitors and professionals could work with glass and pottery, an exhibition about industrial heritage and design history, and a room for changing exhibitions.¹⁷

The project received funding from Næstved Municipality but needed more.

In 2018 Realdania agreed to fund the project. Furthermore, the project received financial support from Rosendahl Design which owned the Holmegaard brandt.

Together with some smaller donations, the amount from Realdania and the support from Rosendahl were considered sufficient to start the project.

In 2020 museum opened. The museum contained an entry exhibition about Holmegaard Glasswork’s production history,

a glass workshop, two workshop areas, a large exhibition about Kähler and Holmegaard Glasswork’s design history, two opened storage spaces for the glass and ceramic collections, a small exhibition about creativity, a large room for changing exhibitions, and a conference room.

The different actors’ ways of looking at the heritage is evident in the museum’s final form.

The exhibitions and the final architecture of the museum have kept the remaining industrial buildings and machines when it did not pose a direct hazard to humans and museum objects. This is especially true in the entry exhibition where the main oven and robots have been kept in place, untouched except for light installation highlighting the furnaces and machines.

The work to maintain the built heritage was made possible by the foundation Real Dania. As a foundation dedicated to maintain the built heritage in Denmark, they had a higher interest than any other foundation in maintaining the industrial character of the glasswork.

The focus on design materialized in the workshop can on the other hand be seen as the common interest of the museum,

¹⁶ Interview with Linda Frederiksen, 2020

¹⁷ (Museum Sydøstdanmark og Næstved Kommune, 2015)



The bag of Holmegaard Glassworks largest furnace, doing when the glasswork was turned into the museum Holmegaard Work, great care was taken to maintain as much of the old machinery as possible.

Næstved Municipality, and Rosendahl, who each sponsored part of the glass workshop.

The same cooperation can be seen in the main exhibition. The Museum Southeast Denmark wanted an exhibition that put an emphasis on Holmegaard Glasswork as a national institution. Therefore, design was an important theme instead of craft. This message fits with Næstved Municipality's history

as a city about craft and art still alive, because the design exhibition and collection are updated with glass and ceramics from today.

A point that also suited Rosendahl's brand story about coming from a long craftsmanship tradition.¹⁸

Finally, the last actor were the locals. They played a role in motivating their locally elected

politicians to create the museum. But their work goes beyond that. The local community has helped maintain the glasswork's history by telling their stories to the curators and helping register the glass collection, a task that would not be possible without them. Furthermore, they have shown up in great numbers to help create events, which has ensured the museum reach further than funding otherwise would dictate.

¹⁸ Rosendahl's branding as a company can be seen on their website where they present Holmegaard as something that has 200 years history behind it.



The old one pot ovens, many of the exposition rooms at Holmegaard Works still contain traces from the glass production.

The Material heritage

This leads to the final way to understand how Holmegaard Work ended up looking the way it does today – the material heritage. There were two categories of material heritage that ended up having a significant role in the creation of Holmegaard Work: The glass collection and the glasswork. The glass collection containing around 45,000 glass prototypes made by Holmegaard Glaswork and to a lesser extent other

Danish glassworks was given to Næstved Municipality in 2010. This collection inspired the creation of Holmegaard Works, as the municipality needed somewhere to store the collection, and given its impressive size wanted to show it to the public. This is also why the museum has open storage, which was also impacted by the fact that glass is robust against dust and changing temperatures.

The collection also had an important influence on the

museum's perspective. The collections focus on design-prototypes instead of glassmaking tools made the creation of an exposition about products and design the most obvious choice, and also inspired the museum to define itself as a museum about design glass design instead of for example workers in the glass industry. This is also true for the Kähler collection, which given its size and importance ensured that Holmegaard Work did not just become a glass museum, but a

general museum about arts and crafts.

All in all, the glass collection appeals to a broader national audience that tells a general story about glass production in Denmark.

At the same time, glasswork and the surrounding machines and big ovens ensure that Holmegaard Glasswork is not forgotten at Holmegaard Work.

Holmegaard Work today and tomorrow

The actors, context, and material heritage created a museum that uses Holmegaard glasswork's and other Danish glassworks' heritage to maintain Danish glass industry relevancy in today's world. It also tells the story of the national Danish glass industry from a design perspective and helps the local population maintain the identity as being the place where Danish glass design came from.

In 2022 Holmegaard Work received the Meyvaert Museum Prize for Environment Sustainability, for the exact reasons mentioned above.

There are still a lot of stories to be told about Holmegaard Glasswork. At this point the museum is trying to utilize the surrounding bog and company town to create a more local history.

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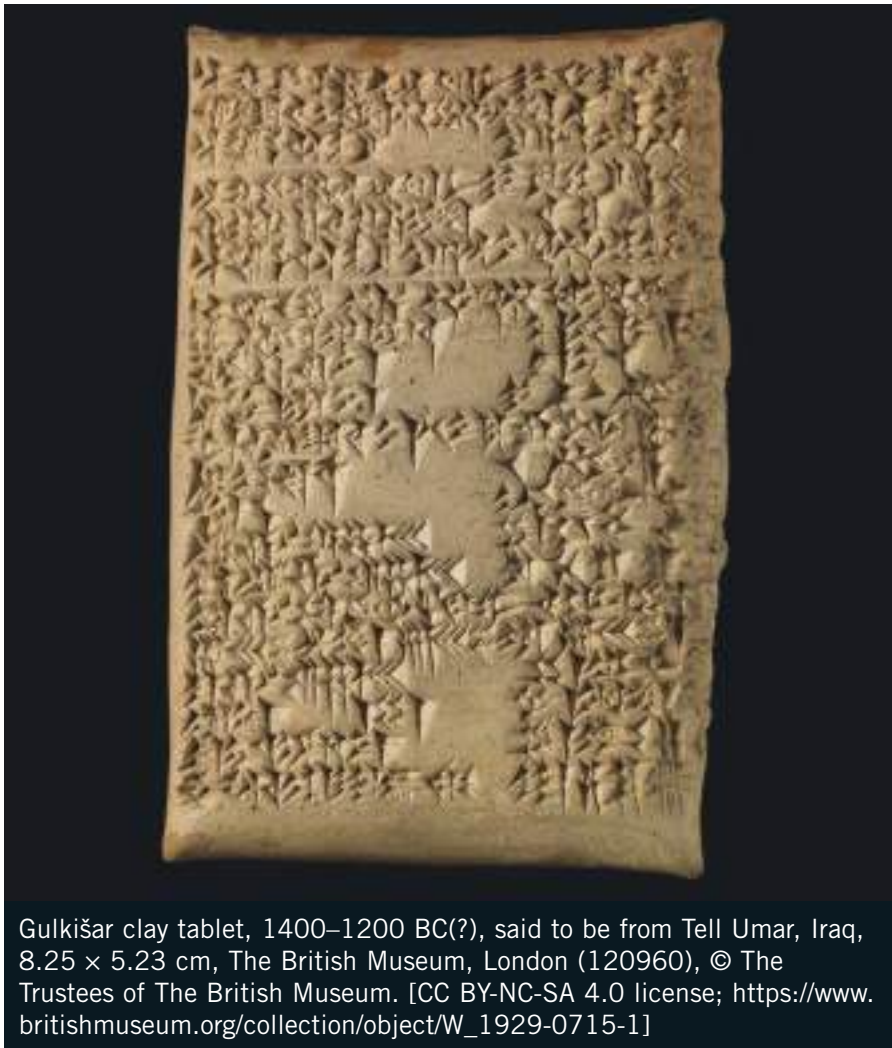
Glass: A Story of Meaning

Presented at the opening conference of the International Year of Glass 2022 in the Palace of Nations, Geneva, on 10 February 2022

Dedo von Kerssenbrock-Krosigk
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Colour, transparency and fragility are such obvious properties of glass that it hardly seems necessary to point them out. Yet it is these very characteristics which have repeatedly given glass its significance throughout the course of history, a range of meaning and importance that is barely known today. When we look at glass, we are looking at a material with a rich legacy – an amazing story which has been unfolding for 3500 years and which will continue to surprise us in times to come.

The art of glassmaking is relatively young, compared to ceramics and metalworking, but nevertheless amazingly old from today's perspective. It was introduced as a craft at a time and in regions that had long established and developed a culture of writing. How exciting it would therefore be to read a detailed witness's report on the advent of glass, but alas, written sources are very rare. Looking back and trying to find out what glass meant to people of different times and cultures requires hunting for little side remarks in the extant texts – and, of course, looking at the glass objects themselves.



Given that glass is a material that requires its ingredients to be mixed and heated – much like cooking – it may not come as a surprise that among the oldest traces of glassmaking known to us today are glass recipes. The best-preserved clay tablet with such a recipe for a red glass is today in the British

Museum.¹ Glassmaking recipes were collected, and saved for long periods of time. They were kept, among other places, at the famous library of king Assurbanipal (668–627 BC) in Niniveh. Some recipes are introduced with the rituals to be performed when a new glass furnace was built: The choosing

of a propitious day for the setting of the foundations, the sacrifice of a sheep on the day the “metal” was placed in the kiln, the strict rule that only “clean” persons may approach the structure, to name but a few.² Around 3,500 years later, in May 2019, I visited the Poschinger glassworks in Frauenau in the Bavarian Forest, and learned that just a month earlier, a new furnace had been put into operation. It is crowned with a cross made of glass and concrete, and on the day when the keystone was set, the local priest came and gave it his blessing. An abridged version of the history of glass: Then as now, furnaces are built, and glass molten at high temperatures. Despite science, and despite incredible recent developments in glass technology, there remains the keen awareness of a certain transcendental character to glassmaking; a kind of magic, as it were. A material that comes into being under such propitious circumstances cannot be without meaning. There is no meaningless glass, and it is my impression that earlier generations knew that very well. In order to trace what glass meant at different moments of its history, I shall look at three

1 It refers to the mid-16th century BC, “the year after Gulkišar became king” but that claim has been disputed: Peter R.G. Mooney, *Ancient Mesopotamian Materials and Industries: The Archaeological Evidence*, Oxford 1994, p. 212; Adolf L. Oppenheim (ed.), *Glass and glassmaking in Ancient Mesopotamia. An edition of the Cuneiform Texts which contain instructions for glassmakers; with a catalogue of surviving objects*, Corning 1970, reprinted 1988, pp. 59–65.

2 Oppenheim 1970 (note 1), pp. 32–33. As Oppenheim points out, these rituals were “in no way atypical or extraordinary” (p. 33). Materials and their production then had a sacred connotation that now we can hardly fathom anymore.



Furnace at the Poschinger glasshouse in Frauenau, Bavarian Forest, Germany, May 2019, photo: author.

key properties to which, I believe, we can still relate today: colour, fragility, and transparency.

Colour

Today we are oversaturated with colour. It is everywhere, bright and permanent. In earlier times, durable colours were a precious rarity, and best achieved in glass or glazings. Colour was not arbitrary. In China, the choice of colours followed specific rules and represented a deeper meaning, which was based on the five elements (*wuxing*) taught by Daoism. No surprise, then,

that the glassworks founded at the Palace workshops in Beijing somewhat before 1700 excelled in the making of coloured glass.

In more ancient times, colour was considered a significant feature of materials, but the nature of this significance is difficult to explore. It seems that old languages such as Sumerian, Akkadian, and Egyptian had no abstract word for colour in the way we do today.³ In Egypt, the colour of the sky was described with the words for lapis lazuli and turquoise.⁴ But lapis lazuli had to travel some 4,000 km on trade routes from Afghanistan

until it reached the Nile.⁵ These efforts were surely not taken just for the sake of exotic “accessories”. As Mesopotamian epics show, stones were linked to the gods, they were described as personalities, including even a male or female gender, and they possessed an active energy.⁶ Ancient Egyptian sources give reason to believe that minerals were not only considered to have been created



Mallet-shaped blue vase, Beijing, China, Qianlong period (1736–1795), 20.2 × 10.5 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1987-30), photo: author.

3 Zainab Bahrani, *Mesopotamia. Ancient Art and Architecture*, London 2017, p. 42; Shiyanthi Thavapalan, *Stones from the Mountain, Stones from the Kiln: Colour in the Glass Texts from Ancient Mesopotamia*, in: Shiyanthi Thavapalan and David A. Warburton (eds.), *The Value of Colour: Material and Economic Aspects in the Ancient World*, Berlin 2019, pp. 177–195, here p. 182.

4 Chloë N. Duckworth, *Imitation, Artificiality and Creation. The Colour and Perception of the Earliest Glass in New Kingdom Egypt*, in: *Cambridge Archaeological Journal*, 22, 2012, no. 3, pp. 309–327, here p. 315.

5 Laurent Bavay, *Matière première et commerce à longue distance. Le lapis-lazuli et l’Égypte prédynastique*, in: *Archéo-Nil*, 1997, no. 7, pp. 79–100.

6 Bahrani 2017 (note 3), p. 42.

by the gods, but that they formed an integral part of the gods – they were consubstantial to the divine.⁷

Against such a background, the advent of glass – the beginnings of a substantial production around 1500 BC – must have been seen as an outstanding achievement. The tomb of Pharaoh Amenhotep II of about 1400 BC contained 76 glass vessels, many of them with the pharaoh's cartouche. The largest vessel, an opaque white amphora with coloured decoration, which survived in fragments, had a monumental original height of approximately 40 cm.⁸ There is no other glass of this size known until about 1,300 years later.⁹ The predominantly blue glass vessels of this period are often much taller than the later production of core-formed cosmetic bottles, and more importantly, larger in size than items made of lapis lazuli could ever have been. Particularly impressive in this respect are the two famous glass head rests, each with the cartouche of Tutankhamun. Early glass

apparently was understood in Egypt not merely as a technical innovation, and definitely not as a cheap “ersatz” for the natural model, but possibly as a testimony of the pharaoh's own power of creation – a proof of his god-like nature.¹⁰

In glass, as in precious stones, material and colour form a perfect union. Both evolve simultaneously before your eyes, when watching the process of glassmaking: the raw materials look grey and dirty, the melt glows in different hues from red to white, and the final product has the lustre and intense colour of a precious stone. The ancient view of colour as an intrinsic feature of material was spot on.¹¹ Even more fascinating are objects that change colour in different light conditions. The most famous glass of this kind is the Lycurgus Cup in The British Museum: it looks opaque green in reflected light, but turns bright purple red when seen in transmitted light. This outstanding vessel, which was presumably made in the 4th century, represents the Roman

sense of the ambivalent at its best.

From the Middle Ages until the Age of Enlightenment, the process of glassmaking was of tremendous interest to the alchemists. They observed that metals, or their salts, could leave their “metalness” behind and transform into glass and its bright, mostly transparent colours. This transformation was interpreted as a process of perfection: the metal was liberated from its dark and decaying body, and its inner “self”, its immutable and powerful “quintessence” or “soul” set free. The colour of glass revealed a metal's soul so vividly that glass served as visible proof of alchemical theories of matter. The “extraction” of colour from glass, however, never worked. In our context it may suffice to say that until well into the 18th century, a piece of glass was a window to the perfect world lost with the fall of Adam. Such awe, I am sure, still resonates at least a little with glassmakers and technologists today.

7 Sydney Aufrère, L'univers minéral dans la pensée égyptienne. *Essai de synthèse et perspectives*, in: Archéo-Nil, 1997, no. 7, pp. 113–144, here pp. 117 and 123; see also Dedo von Kerssenbrock-Krosigk, *The Meaning of Glass. Case Studies from Mesopotamia to Rome*, in: West 86th: A Journal of Decorative Arts, Design History, and Material Culture, 26, 2019, no. 1, pp. 38–60, here pp. 44–45.

8 Georges Daressy, *Catalogue général des antiquités égyptiennes du Musée du Caire. N° 24001-24990 Fouilles de la Vallée des Rois (1898-1899) Fasc. 1*, Kairo 1902, p. 202, no. 24804, pl. 44; Birgit Nolte, *Die Glasgefäße im alten Ägypten* (Münchener Ägyptologische Studien 14), Berlin: Bruno Hessling 1968, p. 54, no. 2, plate II,2.

9 Hellenistic amphora from Olbia (h. 59.6 cm), which is composed of two main parts that are mounted together with a metal band. – Gertrud Platz-Horster, *Die Berliner Glasamphora aus Olbia*, in: Journal of Glass Studies, 37, 1995, pp. 35–49.

10 Kerssenbrock-Krosigk 2019 (note 7), pp. 48–49.

11 Cf. Duckworth 2012 (note 4), p. 322.



Gold ruby glass beaker, Northern Bohemia, about 1700–1720, D. 12.6 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1940-134), photo: author.

Fragility

At the beginning, colour was the most important feature of glass. Its brittleness only became proverbial after the introduction of the blowpipe in the early Roman empire. Roman glass often is very

thin, and an ideal material for refined ambiguity. Drinking vessels that resembled a section of the weapon of Hercules, his club, became popular in the 1st century AD. A brittle material was chosen to represent the utmost symbol of strength and power.¹² The Roman

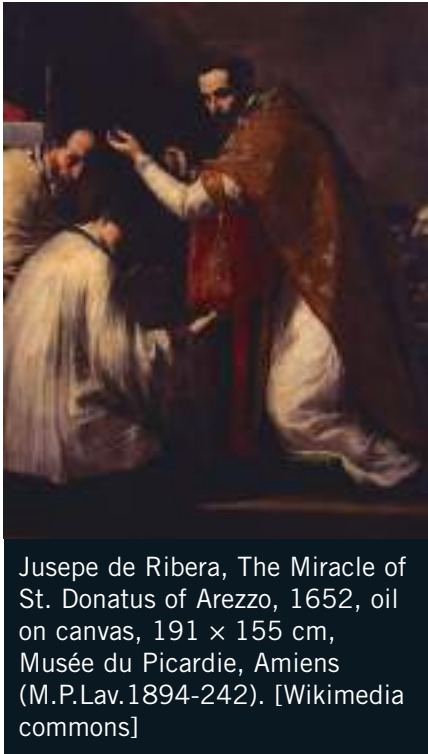


Mold-blown beaker, Roman Empire, first century A.D., H. 20.7 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1966-329), photo: author.

mythological hero himself was not only known for his twelve labours, but equally for his frequent and helpless inebriety. The glass beaker thus expresses an unequivocal warning: You can easily shatter this glass to pieces, but its content might smite you if you consume too much of it.

The paradox of strength and fragility of glass was also felt in the Middle Ages. Glass became a metaphor for human fate. In one of his sermons, Augustine of Hippo asks if we are not more fragile than if we were made of glass, “because glass, despite being fragile, can be kept for a

¹² Kerssenbrock-Krosigk 2019 (note 7), pp. 54–56.



Jusepe de Ribera, *The Miracle of St. Donatus of Arezzo*, 1652, oil on canvas, 191 × 155 cm, Musée du Picardie, Amiens (M.P.Lav.1894-242). [Wikimedia commons]

long time, if well preserved ... The great fragility is its protection over many years.”¹³ Nevertheless, if a glass is broken, no attempt at mending will fully recover it – unless through a miracle, performed by a Saint such as the fourth-century bishop Donatus of Arezzo.¹⁴ When celebrating the Holy Communion, pagans came into the church and broke the glass chalice. The Saint collected the shards and fixed the vessel with his prayers. Although the glass was still missing one piece,

miraculously the wine was not spilled. This is the church’s great promise, the breaking can be healed. But Saints can also act in the opposite direction, following the example of Benedict of Nursia who shattered a glass of poison by blessing it with the sign of the cross.

While glass was much admired in the European Middle Ages, its fragility made it a questionable



St Benedict and the Poisoned Wine, miniature on vellum from the “Mettener Regel”, Metten, 1414, p. 17v, 35 × 25 cm (folio size), Bayerische Staatsbibliothek, Munich (CI m 8201 d). [<https://www.digitale-sammlungen.de/en/view/bsb00040563?page=38>]



Ribbed calcedonio pitcher, Venice, late 15th century, 36.2 × 14.2 × 12.9 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1992-23), photo: author.

material for making gifts.¹⁵ In around 900, Salomo III, bishop of Constance and abbot of Saint Gall, is said to have hosted a dinner for two of his adversaries, Alemannic counts, and when they departed he gave them “two eminently precious little glass dishes” as a gift. The counts suspected the bishop of alluding

¹³ *Sancti Aurelii Augustini Opera*, sermo 17, section VII (“Nonne fragiliores sumus, quam si vitrei essemus? Vitrum enim etsi fragile est, tamen servatum diu durat: et invenis calices ab avis et proavis, in quibus bibunt nepotes et pronepotes. Tanta fragilitas custodita est per annos. Nos autem homines...”).

¹⁴ Gregory I (pope 590–604), *Dialogues*, L.1, c. 7. See Francesca Dell’Acqua, *Between nature and artifice. ‘Transparent streams of new liquid’*, in: *Res: Anthropology and aesthetics*, 53/54, 2008, pp. 93–103, here p. 95.

¹⁵ Cf. Dedo von Kerssenbrock-Krosigk, *Friends of Glass*, in: Kateřina Tomková and Natalie Venclová (eds.), *Krajinou archeologie, krajinou skla. Studie věnované PhDr. Evě Černé* (Through the Landscape of Archaeology, Landscape of Glass. Studies dedicated to PhDr. Eva Černá), Prague and Most 2020, pp. 213–216.

to their own fragile character. They therefore refused them and dropped the dishes to the floor.¹⁶ The term “amicus vitreus,” a glassy or made-of-glass friend, became proverbial for several hundred years for the type of acquaintance who easily takes offense.

600 years later, in 1483, Frederick III probably knew nothing of this peculiar category of friendship, but must have felt nevertheless that an object made of glass was not a fitting gift for the emperor of the Holy Roman Empire. When the Doge and Senate of Venice presented him with an elaborate glass vase, it slipped out of his hands and he remarked that a vessel made of silver or gold could have been repaired much more easily.¹⁷ This reminds one of a visit about a year ago by Angela Merkel to the Carl-Zeiss-Stiftung in Stuttgart, where she was proudly shown a new, thin, and extremely bendable glass material made by Schott. She folded it until it snapped – and expressed her satisfaction that it was glass after all.¹⁸



Ultrathin, flexible glass, SCHOTT AG, Mainz, Germany (<http://www.schott.com>).

Breaking glass intentionally has a rich history. It forms part of the Jewish wedding ceremony when bride and groom crush a drinking glass with their feet. The tradition goes back to an event told in the Talmud and was meant to add a contrast to pure rejoicing.¹⁹ By the 14th century, it became a reminder of the destruction of the Temple in Jerusalem. As everyone is happy at a wedding, or pretends to be, the ritual reminds the guest that sorrow continues to

exist. This, however, seems not to have been the motivation for the guests at the wedding of Margherita Farnese and Vincenzo Gonzaga in Mantua, Italy, in 1581. Apparently, all the workshops of Murano had contributed to the sparkling display of Venetian crystal at this sumptuous feast. But when the gentlemen had emptied their glasses, they smashed them on the floor “as a sign of great cheerfulness.”²⁰ The chronicler

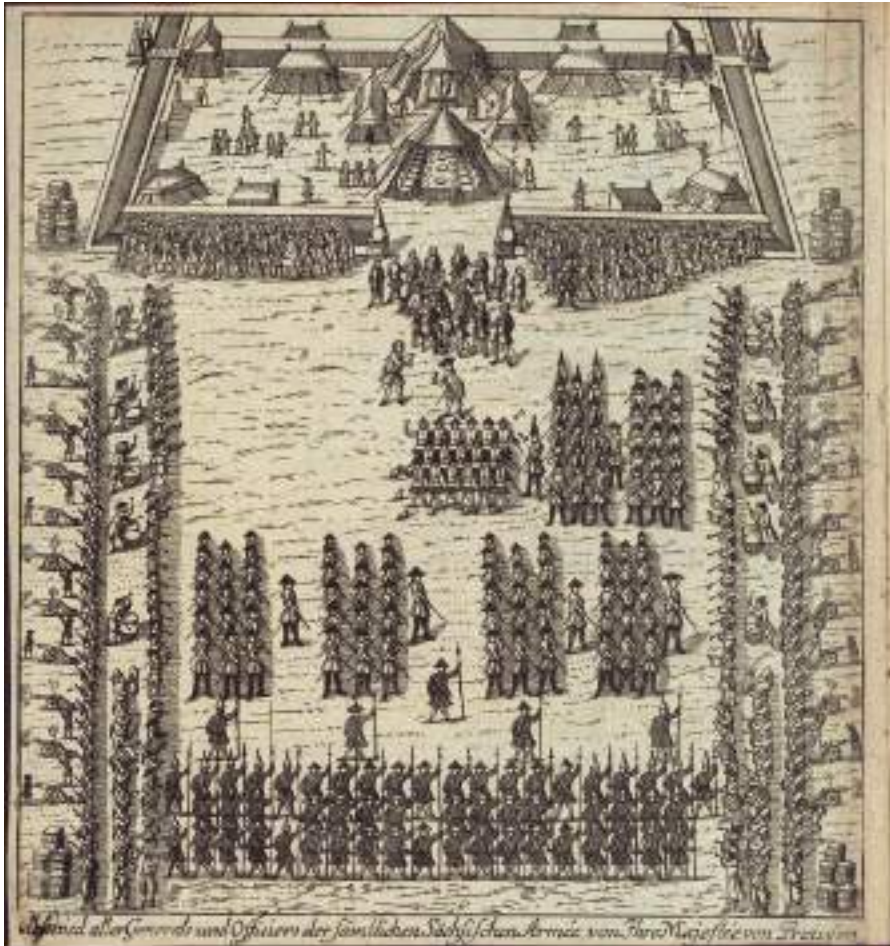
16 Ekkehard IV, *Casuum S. Galli continuatio*, about 1000–1057; original ms lost, oldest and most important copy about 1200 in the library of the abbey of St. Gall (cod. 615; cf. www.geschichtsquellen.de/repOpus_02065.html).

17 Felix Faber, *Fratris Felicis Fabri evagatorium in Terrae Sanctae, Arabiae et Aegypti peregrinationem*, ed. Konrad Dieterich Haßler, 3 vols., Stuttgart 1843–1849, vol. 3, pp. 395–396.

18 Bernd Freytag, *Heimwerker, Physiker – und systemrelevant. Milliarden Fläschchen für den Impfstoffhersteller: Frank Heinrich ist ein Glücksfall für den Glashersteller Schott...*, in: Frankfurter Allgemeine Zeitung, 26 January 2021, p. 20.

19 Talmud, Ein Yaakov, Berakhot 5. Cf. Anita Diamant, *Breaking the Glass at a Jewish Wedding. Why the Jewish wedding ceremony ends with a famous bang*, in: Anita Diamant, *Jewish Wedding Now*, Southern Pines, CO: Scribner, 2017 (<https://www.myjewishlearning.com/article/breaking-the-glass-at-a-jewish-wedding>)

20 Vincenzo Cervio and Fusoritto da Narni, *Il Trinciante*, Venice (1593), p. 47.



The Electors of Brandenburg and Saxony at a military camp in 1730, in: Johann Christian Trömer, *Des rechte deutsch Françoiss Adieu aus große Campement...*, 1730, frontispiece (kindly provided by Ralf Giermann, Moritzburg castle).

does not report the reaction of the hosts. Another spontaneous incident, which was equally out of control, happened 160 years later, in about 1740, in

Rheinsberg castle near Berlin: A Royal princess broke a glass, and as if that was a signal, all drinking glasses flew across the hall, “and all crystal, porcelain,

bowls, mirrors and vases were shattered into thousand pieces.”²¹ There are more reports of such acts of vandalism especially at the 18th-century Prussian court, but the habit seems generally to have been much older and rather international. In late medieval Bordeaux, breaking wine glasses became officially prohibited under penalty, which obviously means that this habit was a popular pastime.²² Glass becomes deprived of its value, completely and unequivocally, when it is broken. It is this characteristic that makes glass so attractive for the wealthy, as it serves as a means of distinction. Only the rich can afford to invest in a material that threatens to become worthless at any time.²³

We cannot leave the aspect of the fragility of glass without touching on a strange phenomenon in the 15th to 17th centuries, when people with a melancholic disposition became obsessed with the idea of being made of glass. Some were concerned about parts of their body and would, as an example, refuse to sit down, for fearing

21 Jakob Friedrich Baron von Bielfeld, *Lettres familières et autres de Monsieur le Baron de Bielfeld*, Den Haag 1763, p. 86.

22 Sophie Lagabrielle, *Clientèles traditionnelle et nouvelle pour le verre*, in: Sophie Lagabrielle (ed.), *Le verre. Un moyen âge inventif*, Paris: Musée Cluny, 2017, pp. 174–179, here p. 174.

23 Raphael Holinshead and William Harrison, *The First and second volumes of Chronicles, comprising 1 The description and historie of England...* London 1577, book III, chapter 1; edition 1587, book II, chapter 6. Cf. Helmut Hundsbichler, *Nahrung*, in: Harry Kühnel (ed.), *Alltag im Spätmittelalter* (= Edition Kaleidoskop), Graz 1986, pp. 196–231, here p. 214; and Corine Maitte, *Façon de Venise. Determining the value of glass in Early Modern Europe*, in: Bert de Munck und Dries Lyna (eds.), *Concepts of Value in European Material Culture, 1500–1900* (= The History of Retailing and Consumption), Farnham 2015, pp. 209–237, here p. 232.

their buttocks might shatter. Others suffered the delusion of being completely glassy and shunned any company. King

Charles VI of France (1368-1422) took on that belief at least temporarily and forbade others to touch him.²⁴



Charles VI bedridden and his physician, miniature on vellum from Jean Froissart, *Chroniques sire Jehan Froissart*, 15th century, fol. 164r, Bibliothèque nationale de France, Paris (Français 2646).

Transparency

While fragility may seem a questionable distinction, the benefits of transparency remain undisputed. The first attempts at making a translucent glass can be traced back to ancient Egypt, and about 1,000 years later, glassmakers in Phoenicia, in Iran, and other Middle Eastern places worked on glass compositions that were not only transparent, but also decolourized.²⁵ In about 435 BC, the Greek sculptor Phidias made use of such glass for the eyes of his monumental statue of Zeus in Olympia.²⁶ The glass window is a Roman invention, as is the use of glass for storage containers and bottles for everyday use. Glass spectacles seem to have been invented around 1286 in or near Pisa.²⁷ Today, the use of smartphones and computers seems unthinkable without ultrathin, resistant glass displays. Such day-to-day use of transparent glass is extremely practical, but not necessarily imbued with meaning.

²⁴ Gill Speak, 'El licenciado Vidriera' and the Glass Men of Early Modern Europe, in: *The Modern Language Review* 85, 1990, no. 4, pp. 850–865; ibidem, *An odd kind of melancholy. Reflections on the glass delusion in Europe (1440-1680)*, in: *History of Psychiatry* 1, 1990, no. 2, pp. 191–206.

²⁵ Birgit Schlick-Nolte and Rainer Werthmann, *Glass vessels from the burial of Nesikhons*, in: *Journal of Glass Studies*, 45, 2003, pp. 11–34, here p. 12.

²⁶ E. Marianne Stern, *Glass and rock crystal: a multifaceted relationship*, in: *Journal of Roman Archaeology*, 10, 1997, pp. 192–206, here p. 194.

²⁷ Vincent Ilardi, *Renaissance Vision from Spectacles to Telescopes* (= *Memoirs of the American Philosophical Society Held at Philadelphia For Promoting Useful Knowledge*, 259), Philadelphia 2007, pp. 4–6.



Bowl, Iran, late 5th/early 4th c. BC, Kunstpalast, Düsseldorf, Glasmuseum Hentrich (P 1973-12), photo: Studio Fuis.

Transparency, however, became a powerful symbol in the wider context of culture of the Middle Ages. The value of “white” glass is expressed in a Jewish rule according to which all mourners, rich and poor, should be served drinks in coloured glasses, so as not to shame the poor.²⁸ Transparent, clear glass resonated with Islamic ideas about the hierarchy of clarity. According to Ibn al-Haytham (b. 965), rock crystal came after water and the clearest matter of all, the celestial body.²⁹ Archaeological excavations of the ninth-century palace of Caliph Harun al-Rashid in Raqqa, Syria, brought to light aqua-coloured, transparent glass tiles for a floor that originally may have measured about 90 m².³⁰

At the time when the Caliph and his court were walking on clear and shining glass floors like on water, glassmaking in Europe was in a comparatively miserable state. Glass nevertheless attracted attention, as we have seen, and more so towards the 13th and 14th centuries. It becomes apparent in the subtle and manifold attributes of glass that are used in contemporaneous encyclopaedic texts, such as *lucidum*, *dilucidum*, *perlucidum*, *translucidum*, *lucens*, *luminosum*, and *splendidum*.³¹ The transparency of glass became a religious metaphor in the Christian church. An 8th-century theologian known to scholars under the name “Pseudo-



Jan van Eyck, The Annunciation, 1434/1436, oil on canvas transferred from panel, 90.2 × 34.1 cm, National Gallery of Art, Washington, Andrew W. Mellon Collection (1937.1.39). [public domain]

28 Talmud, Mo'ed Katan 27a:2; St John Simpson, *Observations on Sasanian cut glass*, in: Annette Hagedorn and Avinoam Shalem (eds.): *Facts and artefacts. Art in the Islamic world. Festschrift für Jens Kröger*, Leiden and Boston: Brill, 2007, p. 66.

29 Avinoam Shalem, *Fountains of Light. The meaning of medieval Islamic rock crystal lamps*, in: Muqarnas, 11, 1994, pp. 1–11.

30 Markus Ritter, *Aquatic glass floors in early Islam and a unique bottle in Tehran*, in: *Journal of Glass Studies* 62, 2020, pp. 273–281.

31 Michel Pastoureau, *Le verre médiéval. Lumière, matière, couleur*, in: Sophie Lagabrielle (ed.), *Le verre. Un moyen âge inventif*, Paris 2017, pp. 11–15.



Jan Fišar, "Pietà", 1991, 56,5 x 60 x 30 cm, Kunstpalast, Düsseldorf, Glasmuseum Hentrich, Frauke Thole Collection (LP 2016-27), photo: Studio Fuis.

Athanasius" compared the mystery of the virginity of Mary to a house with a glass window:³² "when the sun is rising its rays are penetrating the glass and they are getting into the whole house and are lighting it up." The window remaining unhurt by the passing light thus becomes a symbol for the virgin Mary's integrity, as is beautifully expressed in Van Eyck's masterpiece (fig. 13). Having shown a Van Eyck painting that marks the beginning of an important chapter, I might as well conclude with its end, with a major work by the Czech sculptor Jan Fišar (fig. 14). It is quite abstract and nevertheless represents a pietá, Mary mourning her dead son Jesus. The possibilities in glass seem endless, not only the material itself carries meaning, but its design adds infinitely more.

We jumped back and forth through the first 3000 years or so of the story of glass, but we have, nevertheless, barely scratched the surface. Glass has always been fascinating; the contributions to the UN year of glass 2022 show that it still is and continues to be highly intriguing.

³² Pseudo-Athanasius, *Quaestiones aliae*, *Patrologia Graeca* 28:773-796, ed. J.-P. Migne, Paris 1887, col. 790, translation: Pavlos D. Vasileiadis, Thessaloniki 2019. Cf. Francesca Dell'Acqua, *Between nature and artifice. 'Transparent streams of new liquid'*, in: *Res: Anthropology and aesthetics*, 53/54, 2008, pp. 93-103, here p. 101.



News

Corning Museum of Glass, 2023

Exhibitions

Fire and Vine: The Story of Glass and Wine (through September 2023)

Reused Restored Rethought: Glass After the 1972 Chemung River Flood (through May 2023)

Rakow Commission (Opens: March 2023)

Dig Deeper: Discovering an Ancient Glass Workshop (Opens: May 13, 2023)

Carder Steuben (Opens: June 10, 2023)

61st Annual Seminar on Glass (October 19-20, 2023)

Disclosure (OPENS: November 11, 2023)

www.cmog.org

Museum of Glass and Jewellery in Jablonec nad Nisou, Czech Republic

International Triennial of Glass and Jewellery JABLONEC 2023

The project of the International Triennial of Glass and Jewellery is organized by the museum once every 3 years and focuses on the presentation of the best that has appeared in glass and jewellery in recent years, not only on the Czech market, but also in the field of art and design.

In 1998, this extraordinary exhibition project continued

the tradition of international jewellery and glass exhibitions, which were held regularly from the 1960s until 1989, with great public interest. With the exception of the museum's reconstruction period, it was held in a three-year cycle, and in 2023 will take place for the ninth time. As part of the "Triennial 2023" project, 4 thematic exhibitions will be held, where approx. 60 Czech and foreign companies, studios and artists will be presented, an international jewellery symposium and an international symposium on Christmas decorations. It will also include an educational program for the public and schools, presenting glass as a sustainable, ecological packaging material. June 16, 2023-April 7, 2024

Exhibitions

Trens. Design. Production

Presentation of the production collections of selected glass and jewellery companies that operate on the Czech market and brought interesting news in 2020-2022.

June 16 – November 12, 2023

Journey to the Stars

PTÁČKOVÁ / PROKOP /

JUNGVIRT – Studio glass of artists under 35 years of age.

June 16 – November 12, 2023

Material: Glass-packaging

Packaging glass produced in the Czech Republic.

June 16 – November 12, 2023

Computer & Jewellery

Jewellery exhibition and results of the jewellery symposium on the given topic.

December 7, 2023 – April 7, 2024

Realted Projects

Educational program MATERIAL : GLASS – PACKAGING

A program with an emphasis on environmental protection for schools and the public, following the exhibition of the same name.

June 16 – August 31, 2023 for public, September 1 – November 12, 2023 for schools

International Symposium

Computer & Jewellery

A creative symposium of contemporary designer jewellery using computer components and costume jewellery semi-finished products.

June 17 - 27, 2023

International Symposium of Glass Christmas Ornaments

A creative symposium at which the approached artists will create a new collection of Christmas ornaments in cooperation with manufacturers.

October 2023 – April 2024



Annual Conference of the FA V for Glass History and Design of the DGG

Call for papers

Dr. Verena Wasmuth. Kustodin für Leuchter und Beleuchtungskörper
Stiftung Preußische Schlösser und Gärten Berlin-Brandenburg
Abteilung Schlösser und Sammlungen, Postdam
<https://www.spsg.de>

Museo del Vetro, Murano, Italy

Exhibition:

“Shattering Beauty”. Simon Berger

The exhibition Simon Berger: Shattering Beauty, organised in collaboration with Berengo Studio at the Museo del Vetro, contains a series of new portraits by the artist in glass, presenting his pioneering technique to the Venetian lagoon for the very first time. In his hyper realistic portraits Berger recreates the lines of the human face by breaking the material. In a mesmerising process he refers to as “morphogenesis,” he re-situates the medium as an animated “canvas,” using sculptural tools such as a hammer to physically work at its surface to “etch” and “draw” haunting human faces. Reinforced safety glass, which holds at its core a crucial layer of plastic, ensures that the

material, though broken, stays in place. This highly controlled sculptural technique originates from the artist’s classical training in carpentry, and is a moving example of how many artists are now translating techniques from other mediums into the world of glass. Berger’s unique technique of deliberate “shattering,” contradicts years of teaching, whereby broken glass has been seen as wasted or ruined. On the contrary, he instead turns the material’s so-called weakness into its most vital asset. Its ability to break becomes reframed as its ability to change, to be altered, and to be recast as something new.

28 January-7 May, 2023

<https://museovetro.visitmuve.it/en/mostre-en/mostre-in-corso-en/exhibition-shattering-beauty/2023/01/19989/exhibition-shattering-beauty/>

Venice Glass Week, Venezia, Italy

The Venice Glass Week is an international festival founded in 2017 to celebrate, support and promote the art of glassmaking. Following the great success of this special initiative, The Venice Glass Week will return for its seventh edition from 9th to 17th September 2023.

<https://theveniceglassweek.com/en/>

AFAV Conference, 2023

Vous trouverez en pièce jointe l’appel à communication destiné aux prochaines rencontres de l’AFAV qui se tiendront à Douai (Nord), du 23 au 25 juin 2023. Merci de m’envoyer vos propositions de communication ou de poster avant le 15 février. Les délais sont très courts en raison de la date des rencontres, décalée en juin afin de profiter de l’exposition « Les dessous du verre » qui vient d’ouvrir au musée-parc Arkeos et qui se termine le 2 juillet 2023.
23-25 Jun, 2023

<https://glass.mini.icom.museum/wp-content/uploads/sites/12/2023/01/APPEL-a-COMMUNICATION.pdf>

Shanghai museum of Glass

My Flower Doesn’t Have a Name Yet

https://glass.mini.icom.museum/wp-content/uploads/sites/12/2023/01/Press-Release_Shanghai-Museum-of-Glass.pdf
3 December 2022- 9 April 2023

7 Glass Wonders

<https://glass.mini.icom.museum/es/7-glass-wonders-iyog/>

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