

Association for the History of Glass

Study Day

Glass in Architecture and Construction

in the Ancient and Historical Worlds

Nunn Hall, Institute of Education, Bedford Way, London

Friday, May 16th, 2025

Abstracts

Temples, bling and gilded wood - the early use of glass inlays during the 18th Dynasty in Egypt.

Katja Broschat (LEIZA Mainz)

The world of the pharaohs was a colourful one. From the first dynasty (around 3,000) it was enlivened with pigments, various coloured stones and metals, textiles, and so-called Egyptian faience. The introduction of glass to Egypt around 1500 B.C. extended the range of decorative materials available to craftsmen, and the new, man-made, colourful and shiny product was highly valued and its production kept strictly secret. The presentation introduces the use of glass inlays in the decoration of architecture, jewellery and gilded wooden constructions, with a special look at the objects from the tomb of Tutankhamun.

Glass walls at Nuzi? A critical reassessment.

Andrew Shortland (Cranfield University)

Yorgan Tepe, near Kirkuk in modern Iraq, is a tell site that was extensively excavated in the late 1920s by Harvard University in combination with other US institutions. The emphasis of the work was on a Late Bronze Age destruction layer representing a Hurrian city called "Nuzi". Nuzi was a provincial town with the palaces, temples, workshops and urban buildings that might be expected. Finds of glazed ceramics and especially glass beads were relatively common on the site, especially in high status areas. Much of these vitreous materials were interpreted as decorative wall features, which are the focus here. However, the 1920s excavation had a number of "period features" that affect our understanding of Nuzi to this day. These include excavation strategy, reporting, dating and its interpretation. Added to this is some early analysis of the glass, which further confuses the picture. This paper attempts to determine what can be said about Nuzi and how this fits into the story of glass in the Late Bronze Age and its architectural use on the site.

Putting together the pieces – window glass in Roman Britain and the wider Empire.

Denise Allen (Independent researcher)

Glazed windows were first used in buildings during the early Roman Empire and were quickly adopted as a means of letting in light whilst keeping out cold. They were particularly useful in bath-houses, but their benefits were soon felt in domestic architecture too, especially in chilly Britannia. Most Roman sites produce some fragments, but with no upstanding architecture here we can only imagine their original settings by looking at sites with better preservation in other provinces. This talk will outline the different types of Roman window glass, and how and when they may have been used.

The early coloured Glass Windows of Jarrow and Monkwearmouth, UK

Victoria Lucas (UCL Institute of Archaeology)

Early medieval window glass is known from an increasing number of archaeological sites in Britain but arguably the most well-known is from the twin monastic sites of Monkwearmouth and Jarrow, Northumbria. Rosemary Cramp's excavations of the sites revealed some 2000 fragments of glass, underpinning Bede's account of the founding of the monastery by Benedict Biscop in 674 and the importation of glaziers from Gaul. Where did the glass come from and how were the colours made? Compositional analyses, discussed here, emphasise the role of Roman recycled glass in the glazing of the buildings, although some contemporary glass seems also to have been used.

Fifth-Century CE Wall Mosaics from Aphrodisias: Evidence for a Wall Mosaic Habit in Late Antiquity

Tim Penn (Reading)

This paper presents evidence for late fifth-century CE wall mosaics from Aphrodisias, provincial capital of Caria, in western Asia Minor. The mosaics formed part of the decoration of an upper-story gallery belonging to one or more luxurious private residences located alongside the Tetracylon Street, the city's main north-south avenue. They are therefore a rare example of Late Antique wall mosaics from a domestic context. We present the context in which the mosaic fragments were found, the motifs that can still be recognised, and some of the technical characteristics of these mosaics. Combined with other elements of decoration found in association with the mosaic fragments, we offer a reconstruction of the decorative program of the gallery. We then broaden our view to trace wall mosaics elsewhere at Aphrodisias and discuss waste attesting to glass tessera production. We argue that a wall mosaic workshop or workshops were active at Aphrodisias in the late fifth and early sixth century CE, when the city's monuments and residences were undergoing renovations in the wake of an earthquake. We examine the possibility of a wall mosaic habit that was much more widespread than previously thought, extending beyond the ecclesiastical contexts with which it is conventionally associated.

The origins of early Islamic mosaic tesserae – where has all the glass come from?

Nadine Schibille, IRAMAT-CEB, CNRS

Medieval mosaics are often considered a primarily Byzantine art form, to the extent that it is assumed that the glass tesserae used in some of the most important early Islamic mosques, such as Medina, Damascus and Cordoba came from Byzantium. This is a fallacy, not least because primary production of glass in the first millennium CE was located in Syria-Palestine and Egypt, and no other major primary production centre is known north of Syria, with the possible exception of a specific high boron glass type from Asia Minor. Knowing where the glass for the mosaic tesserae came from in the early Islamic period encourages reflections on the organisation of glass trade, the location of mosaic workshops, and the logistics of monumental building campaigns. This contribution discusses the compositional evidence from the Umayyad Mosques in Damascus and in Cordoba and contemporary materials from nearby palaces to address the question of the origin of the glass and its implications.

Medieval window glass in Scotland

Helen Spencer (Society of Antiquaries of Scotland)

While medieval window glass survives in many churches and cathedrals across Europe, there is no in-situ stained glass in Scottish buildings remaining from before the early 16th Century. Therefore, evidence for stained glass from this period is primarily from the archaeological record or from documentary evidence. This talk will summarise recent research into medieval window glass in Scotland, including the results of scientific studies which can tell us more about where the glass was manufactured and imported from during this period.

A pXRF survey of 12th century glass from Canterbury Cathedral

Agnese Benzonelli (Cambridge)

In a series of campaigns we have analysed some 2000 pieces of 12th-early 13th century glass in Canterbury Cathedral using a simple hand-held X-ray analyser. Access was provided in the Canterbury Conservation studios or *in situ*, using scaffolding to reach the glass. Selected well-measured elements reveal at least four sources of glass in this period. Glass from several sources could be used in the same window and the source of glass used appears to have depended at least in part upon colour. One group matches well the glass used in St Denis, France, while another shows features which may suggest an origin in the Rhineland. Although the account of Theophilus, writing early in the twelfth century, is widely interpreted to indicate that flesh-coloured glass produced by heating a standard batch for a prolonged period, in some cases manganese was deliberately added to colour the glass.

Late Medieval Stained Glass From Dubrovnik Cathedral

Ana Franjic (KU Leuven)

The paper discusses the origins of the glass used to construct stained glass windows in the Cathedral of the Assumption of the Blessed Virgin Mary in Dubrovnik, Croatia, in the fourteenth-

fifteenth centuries. While glassmaking in the Mediterranean region was based upon the use of soda-rich plant ashes, the majority of the Dubrovnik glass was made using potassium-rich ash, in the northern “forest” glassmaking tradition. The composition indicates that the forest glass is likely to have originated in Central Europe, probably Germany or Bohemia. It contains instances of the sophisticated technique of “flashing”, with thin red layers overlying colourless glass and purple comprised of red overlying blue. Several soda-based glasses are consistent with an origin in Venice. They comprise turquoise and purple colours, which were more difficult to attain in the conditions used to melt northern forest glass. The results offer insights into technological skills and craftsmanship, as well as the intricate trade networks of the time, situating Dubrovnik Republic within the broader European and Mediterranean artistic and technological traditions.

Early sixteenth-century stained glass in England: St Mary’s Church, Fairford, Glos.

Ian Freestone (UCL)

The stained glass of St Mary’s church, Fairford, represents the most complete scheme of medieval glazing in Britain. The identity of the glazier who made the window is unknown although it has been suggested on the grounds of style and quality that the Fairford glass may have been associated with the workshop of Barnard Flower, the Netherlander who was Glazier to King Henry VII. Thanks to the kind cooperation of Barley Studios, who conserved the windows, we were able to sample the glass from Fairford for analysis. Here we discuss the technology and origins of the glass and its relationship to glass from contemporary assemblages from elsewhere, including Beeleigh Abbey in Essex and Zutphen, Netherlands.