



GLASS IN THE NORTH



*The Association for the
History of Glass Limited*

PROGRAMME & BOOK OF ABSTRACTS

Event in Memory of Jennifer Price: 21-22 MAY 2022



VINDOLANDA ROMAN FORT & MUSEUM



JARROW HALL ANGLO-SAXON FARM & BEDE
MUSEUM

AHG Study Days: Glass In the North

Programme

DAY 1 – Saturday 21st May: Vindolanda

10:30 – 10:45

Registration

Keynote

10:45 – 11:30

Sally Cottam

A Lasting Legacy: Jennifer Price and the Glass of Northern Britain

11:30 – 11:45

Break

Session 1

11:45 – 12:05

Tatiana Ivleva

An exploration into glass bangle and glass working crafts in Roman frontier zone of Britain

12:05 – 12:25

Francesca Gherardi

A multianalytical study of Roman glass from cremation deposits at Birdoswald Fort on Hadrian's Wall, UK

12:25 – 13:30

Lunch

Session 2

13:30 – 13:50

Thomas J. Derrick

Consuming unguentaria in North-eastern England under the Romans

13:50 – 14:10

Barbara Birley

Glass objects from Vindolanda

14:10 – 14:45

Handling session: Vindolanda glass

14:45 – 15:00

Break

15:00 – 16:00

Site Tour

16:00 – 16:15

Break

16:15 – 17:30

Museum

17:30

Leave site

DAY 2 – Sunday 22nd May: Jarrow Hall

Keynote

10:30 – 11:00

Chloe Duckworth

When Worlds Collide - Experiment, Science and Art in Ancient and Historical Glass Studies

Session 1

11:00 – 11:20

Victoria Lucas

Recycle! Everyone's Doing It: Early Medieval glass recycling in England: continuity, change, and rethinking production models.

11:20 – 11:40

Helen Spencer

Window Glass in medieval and post-medieval Scotland – trade, innovation, and industry

11:40 – 11:55

Break

11:55 – 12:30

Handling session: Corbridge glass

12:30 – 13:30

Lunch

Session 2

13:30 – 13:50

Ayako Tani

Vessels of Memory: The production of glass ships in bottles in Sunderland between the 1970s and 1990s

13:50 – 14:10

Oliver Gunning

Migration, Mobility, and Glassmaking in Northeast England: 1600-1800

14:10 – 14:25

Break

14:25 – 14:50

Handling session: Jarrow window glass

14:50 – 15:10

Film Screening

Riikka Haapasaari

Me and You in Between

15:10 – 15:20

Break

15:20 – 16:00

Round Table

16:10

Leave Site

19:30

Conference dinner at 'El Torero' Newcastle, Milburn House, Side, Newcastle upon Tyne NE1 1PR

Abstracts

DAY 1

Keynote Lecture:

A Lasting Legacy: Jennifer Price and the Glass of Northern Britain

Sally Cottam, King's College, London

sallycottam@gmail.com



Jennifer Price was one of the most influential and productive glass scholars of her generation and her work had a particularly profound effect on our understanding of glass in northern Britain. An adoptive citizen of North Yorkshire, Jenny spent half her life in Yorkshire and Durham, and was closely engaged with the archaeology of the region. She published dozens of reports and articles on northern glass, analysing assemblages from major towns, forts, villas and small rural settlements. This review of her work on sites in northern Britain, at a meeting held in her memory, will illustrate the breadth of her research, presenting some of the extraordinary glass about which she wrote and demonstrating the continuing importance of her scholarship.

An exploration into glass bangle and glass working crafts in Roman frontier zone of Britain

Tatiana Ivleva, Leiden University

Tatiana.ivleva@newcastle.ac.uk

The paper explores the glass working crafts in the northern British frontier zone. Specifically, it focuses on the largely underexplored topic, namely the existence, organisation, and operation of glass bangle workshops.

First, the paper provides an updated survey of glass working and glass making activities in the region in order to put discussion on the glass bangle craft organisation into the broader regional context. This contributes to the discussion on the existence of multiple glass working industries in the region in the Roman period, where the usual focus tends to be on the metal craft technologies. Second, the paper discusses the organisation of a glass bangle craft itself. It addresses the potential locations where glass bangles could have been manufactured, connection between the glass bangle making with glass recycling and glass colouring industries, and the potential connection between this and other crafts in the region producing glass objects.

The paper argues for the existence of distinct and dispersed workshops located mostly in the rural areas with some clustering around military installations and in urban areas, with the addition of a large proportion of itinerant artisans. It seems that the various activities associated with glass working and production of glass objects have been separated. Each step, i.e., collection of glass for recycling, production and supply of cullet, glass colouring, and production of distinct types of objects, might have been performed by various people and artisans. It is highly unlikely, or at least till the late second century AD, that there existed permanent, supra-regional structures with a focus on glass vessel and jewellery production, located nearby military installations with knowledge and expertise of other glass working crafts.

A multianalytical study of Roman glass from cremation deposits at Birdoswald Fort on Hadrian's Wall, UK

Francesca Gherardi, Investigative Science, Historic England, Fort Cumberland Laboratories, Portsmouth, Hampshire P04 9LD, UK

francesca.gherardi@HistoricEngland.org.uk

Fragments of glass vessels and glass beads were recovered from the cremation deposits of the Roman military cemetery associated with the fort at Birdoswald, on Hadrian's Wall (UK), as they were commonly used during cremation rituals. X-ray fluorescence spectroscopy and scanning electron microscopy were used to investigate the raw materials, colorants and opacifiers employed to produce the glass assemblage. Most of the large fragments are transparent with a blue-green colour, with a composition typical of recycled glass. The smaller fragments are from beads, and colourants and opacifiers characteristic of Roman glass were added in this glass formulation, including cobalt-based compounds (blue glass), copper alloys (green glass), white calcium antimonate, and yellow lead antimonate. The fragments affected by heat exhibit extreme depletion of sodium on the surface due to the exposure to high temperatures during the cremation process, followed by surface weathering in a burial environment. Based on the chemical composition of the bulk of the samples, a model of high temperature viscosity of glass was applied to estimate the cremation temperature in the pyre and gain further information about funerary rituals and cremation technology in Roman Britain.

Consuming unguentaria in North-eastern England under the Romans

Thomas J. Derrick, Honorary Visiting Fellow, University of Leicester, School of Archaeology and Ancient History

tjd14@leicester.ac.uk

Unguentaria, sometimes termed perfume bottles or toilet bottles, are small glass vessels made of blown glass that are common finds at Roman settlements and burials throughout the Roman world. After the invention of glassblowing in the late first-century B.C.E., and through the globalizing effects of Roman imperialism and trade, blown glass became widespread. Vessel glass (as opposed to glass objects) was not common in Britain prior to the Claudian invasion but was widespread by the Flavian period. Unguentaria are amongst the vessel types in the earliest Romano-British glass assemblages.

The principal points of analysis in this paper are contextualized glass assemblages from Roman period sites from North Yorkshire to Northumberland, and all counties between. A comparison between north-eastern glass assemblages and south-eastern ones underpinned the main work of my doctoral thesis but given the theme of this event I will be, unsurprisingly, paying closer attention to the North. In my study, unguentaria were at their most common between the Flavian period and approximately 125 C.E. - which was a period of flux between Roman campaigning in northern England and Scotland and the eventual consolidation around the Stanegate frontier, and then Hadrian's Wall. Of particular interest to me is the diverse social stratification of this part of the Roman world, and the interplay between military communities, non-military newcomers to the province, and local populations. I finish by trying to tie the unguentaria into this dynamic social, artefactual, and sensory environment.

Glass objects from Vindolanda

Barbara Birley, Vindolanda Trust

barbarabirley@vindolanda.com

Glass, although fragile, survives well on the northern frontier and the ongoing excavations are adding to the glass assemblage every year. From beads to vessels, join the Trust's Curator, Barbara Birley as she looks at different parts of the collection and discusses the use and function, as well as the archaeological stories behind some of the best glass objects from the site.

DAY 2

Keynote Lecture:

When Worlds Collide - Experiment, Science and Art in Ancient and Historical Glass Studies

Chloë N. Duckworth, Newcastle University

c.duckworth@ncl.ac.uk



Sometimes we do things the wrong way around. Because I am an academic, and academics deal in texts, I first found myself learning about glassmaking by reading about, rather than doing it. Then, like many of us who study ancient and historical glasses, I tried to replicate glass ... based, once again, on texts. Multidimensional thinking, play, experiment, time to expand, social interaction, apprenticeship, flexibility, adaptation ... all of these things that were so much a part of glass production in the past are casually written out of our peer-reviewed outputs. Today I shall present some of the recent work of my research group, PEGG, based at Newcastle University, and our attempts to move before disciplinary boundaries.

‘Recycle! Everybody’s Doing It’: Early medieval glass recycling in England: continuity, change, and rethinking production models.

Victoria Alice Louise Lucas, Newcastle University

v.a.l.lucas2@ncl.ac.uk

The 7th century CE is a key period of transition in the distribution and circulation of raw glass to Northern Europe and to Early Medieval England in particular. Although recycling was already a well-established and embedded practice in clear evidence from the late Roman period, changes in the availability of raw glass between the late 7th and 8th centuries CE resulted in a system that became entirely reliant on recycled glass as the primary raw material in the production of glass objects, in particular vessel glass.

Using a combination of chemical analyses of Early Medieval window and vessel glass and a program of experimental recycling designed to examine the effects of recycling on the chemistry and workability of glass this paper will present evidence that by the 7th century recycling was fully incorporated into the system of secondary glass production and that throughout the 8th and 9th centuries as raw glass disappeared total reliance on recycled material became the norm. The mutability of glass both physically and conceptually allowed cullet to go from an additional additive to glass production systems to the primary driver and method of production.

This work proposes a revised glass production model, building upon and critiquing the simplistic view of two stage “primary and secondary” production, that embeds glassworking within a complex but organised system of recycling practices, cullet selection, collection, and redistribution, as well as acknowledging the likelihood for complexity in the form of smaller scale production that functions on a more ad-hoc and opportunistic scale. The importance of contextualisation of chemical data here is emphasised to ensure that models of recycling reflect the economic and social landscape in which they were operating rather than being imposed upon them.

Window Glass in medieval and post-medieval Scotland – trade, innovation, and industry.

Helen Spencer, Society of Antiquaries of Scotland

helen@socantscot.org

This paper will cover recent research on the use of window glass in Scotland from the 13th to the 18th centuries. New scientific research has shed light on where window glass used in ecclesiastic and monastic Scottish buildings was made and how it was imported to Scotland in the medieval period. In the 13th and 14th centuries most of the glass was likely made in the north-west regions of France (Normandy) and imported into Scotland with a few specialist colours made elsewhere. However, by the end of the 14th and into the 16th centuries much of the 'white' glass was likely made in eastern France/Flanders regions to a high-lime low alkali recipe with coloured glass still originating from Normandy. At the start of the 17th century window glass started to be manufactured in Scotland from raw materials for the first time and the technologies and recipes used in Scotland will be explored. Recent excavations and subsequent analysis of glass waste from 17th and 18th century furnace sites in Scotland have shed new light on the development of the glass making industry in Scotland.

‘Vessels of Memory’: The production of glass ships in bottles in Sunderland between the 1970s and 1990s

Ayako Tani, Sunderland University

info@ayakotani.com

This paper will discuss the production of glass ships in bottles in the Sunderland area between the 1970s and the 1990s. This phenomenon was a response to a decline in heavy industry and scientific glassblowing during this period. Prior to this, Sunderland had been one of the most prominent UK centres of scientific glassblowing, partly due to the presence of the James A. Jobling Limited Pyrex factory and a strong demand for apparatus from the chemical and coal mining industries. Finding themselves redundant from Jobling Limited, skilled scientific glassblowers began to set up their own decorative glass businesses from the mid-1970s onwards. Specifically, the production of glass ships in bottles became commercially successful.

Although this is a significant episode in glass history, bridging the period of industrial manufacturing and today’s studio glass art movement, it has been subject to little academic attention. My research has aimed to raise awareness of this largely neglected chapter in the socio-economic history of the North East. Faced with a paucity of historical information, my study has taken an art-archaeological approach, where I have undertaken a typological analysis of numerous examples of glass ships in bottles, identifying regional variations and styles. This has been complemented by the collection of the oral histories of those involved in the industry. Scientific glassblowing is recognised as an endangered material practice. As a glass artist and educator, I have acquired the skills to make glass ships in bottles in an attempt to preserve this tacit knowledge into the future.

<https://www.ayakotani.com>

<http://www.vesselsofmemory.com>

Migration, Mobility, and Glassmaking in Northeast England: 1600-1800

Oliver Gunning, [Northumbria University](#)

Oliver.gunning@northumbria.ac.uk

Often environmental attributes and elite academic science are credited with causing Britain's Industrial Revolution. Recent revisionist histories of science present different perspectives, understanding that industrial progress had roots in the embodied skills of highly mobile workers. Glassmaking conforms to this revisionist perspective. The role of immigrants in the glass industry of early modern Britain is well known, with European glass artisans seen as playing an integral part in developing British glassmaking techniques. However, studies are often presented in binary perspectives, with the migrant presented as a tool of British entrepreneurialism, with no real understanding of the migrant's motive or agency.

By combining methodologies from Migration Studies, Science and Technology Studies, and Glass Studies, this paper will look to identify the mechanisms underpinning the success and failure of both the integration of the migrant and the adaptation of their skills in Northeast England. The development of glassmaking will be shown to be rooted in the mobility and flexibility of national and international skilled labour forces. To achieve this, case studies will be examined from the Glassworks at Hartley, South Shields, and Closegate.

Oliver Gunning is a PhD student at Northumbria University. He is part of the UKRI project "Migration, Adaptation, and Innovation, 1500-1800" (<https://www.migration-innovation.org/about>), which offers the first globally comparative study of skilled migration that covers the origins of industrialisation and modern economic growth. His thesis "Migration, Mobility, and Innovation: Migrant Glass Labour in Britain 1674-1800" presents a migrant centred analysis of British glassmakers that aims to help better understand the role of migrants in industrialisation.