

To celebrate the opening of a new museum to house the Stourbridge Glass Collection, in the UN International Year of Glass, *Graham Fisher* explains the local history of the medium

Raise a glass



Left: Art Nouveau vase, designed by Frederick Carder, made by Stevens & Williams, Brierley Hill, c1901

Human knowledge of glass probably dates back to observations of natural events such as volcanic activity, which creates obsidian, also known as volcanic glass, or lightning strikes hitting sand and fusing it into fulgurite. Man-made glass dates back millennia, at least to the Sumerian civilisation in Mesopotamia (now southern Iraq). Yet, while the exact origins of glassmaking are somewhat nebulous, the 400-year history of glassmaking – and particularly the development of expertise in lead crystal and cameo glass in the West Midlands area of Stourbridge – can be documented with more accuracy.

The discovery of glassblowing around 50BC is attributed to the Romans, probably in Phoenicia (now Lebanon). They found that objects could be formed by gathering molten glass on the end of a hollow pipe and inflating it. By about 50AD glassblowers were blowing glass into moulds to create a greater range of designs.

When the Romans retreated from Britain around 400AD glassblowing in the country declined and its industry moved eastwards across Europe, notably to Venice and the island

of Murano. Roman glassworks tended to be located on the outskirts of cities close to water supplies, helping mitigate fire hazards.

Glassmaking re-emerged in England in the 1560s when glassmakers from Lorraine in northeastern France came to London and the Weald of Sussex. Notable Lorraine families who settled here included the Tyzacks, Henzeys and Titterys. The earliest official record of the occupation of 'glassmaker' in the Stourbridge area is for Paul Tyzack, whose son John was baptised on 26 April 1612 at St Mary's Church, Kingswinford, four miles to the north. The immigrants' language became assimilated, and many contemporary glassmaking terms have European origins: marver, for example, a (usually metal) slab on which a 'gather' of molten glass from the kiln is rolled in readiness for blowing; punty (or puntil), a solid metal rod used to hold an object being worked after it is removed from the blowpipe; cullet, chunks of waste glass suitable for remelting, and lehr, a slow-cooling annealing oven for relieving internal stresses that would cause fractures.

Over the next 50 years they migrated and set up forest glasshouses where there were plentiful supplies of wood for fuel and bracken that acted as a flux in reducing the melting point of the silica (usually sand or ground quartz pebbles) to produce window glass and bottles. Between 1670 to 1710 this community was bolstered by the arrival of from 40,000 to 50,000 Huguenots, some of whom were glassmakers, seeking refuge from political oppression in France.

In 1615, acting on advice that his navy may be compromised by a shortage of trees to construct ships – although it may also have been a ploy for dispersing foreigners – King James I of England banned the burning of trees for fuel. Concern for the nation's stock of timber had emerged in the early 16th century. The wood shortage was seen as a national problem, but there were regional differences in supply and demand such as in the Wealds and around London where glasshouses and iron mills operated at close quarters.

The glassmakers were thus obliged to move elsewhere. The Black Country and surrounding area had all they needed: readily accessible coal



Above: Ravenscroft clear glass, crizzled jug, contemporary hinged silver cover, c1675, from the Eila Grahame collection; right: unknown maker, blown-and-cut wine glass, c1850



for fuel to melt the sand, which was abundant, limestone as the flux and fireclay with which to make heat-resistant crucibles.

The influx of newcomers led to a sharp rise in glassmaking in the region. By the 19th century, considered by many to be the 'Golden Age' of Stourbridge Glass, some of the finest glass in the world was being made here, which in turn drew artisans from all across Europe.

The repeal of taxes (salt in 1825, leading to an upsurge in cruet sets, glass in 1845 and windows in 1851) allowed for cost-effective use of thicker glass that could take a deeper 'cut' (be more heavily carved or engraved) and Stourbridge became a world leader in high-quality hand-crafted lead crystal. The percentage of lead oxide added to the mix (a process patented by glassmaker George Ravenscroft in 1674) dictated whether the product be declared 'crystal', 'lead crystal' or 'full lead crystal'. It is the lead that gives the glass its 'ping' when flicked with a finger.

In the 19th century Stourbridge became one of the principal centres for the manufacture of cameo glass, an incredibly skilful technique that involves a (usually) lighter layer of glass laid over a (usually) darker base layer. The outer layer is then carved or etched away to reveal lighter images on the darker base. There may be multiple layers of glass.

The Roman Portland Vase is arguably one of the most enigmatic pieces of cameo ever made. It is a bi-handled, two-layered circular piece, 25cm high and with a maximum circumference of 56cm. It comprises a deep blue, almost black, underlayer with an opaque white overlayer that is carved with figures and accompanied by a base disc showing a figure in a cap, possibly Paris, the mythological Greek prince. When the vase was smashed in an act of drunken vandalism whilst on display at the British Museum in 1845 (it was later restored by British Museum craftsman John Doubleday) its destruction kindled an interest in cameo glass. Stourbridge responded by reviving the skills and subsequently manufactured several replicas of the Roman original.

Although the term Stourbridge Glass is technically a misnomer, since very little glass was made in the town (the glassworks being

situated around the periphery), Stourbridge was the focal point for business and so the name 'Stourbridge Glass' became the accepted term.

The opening of the Stourbridge Canal in 1779 had enabled more efficient distribution of materials in and finished goods out, and the heyday of Stourbridge Glass extended well into the 20th century before a combination of competition, lack of innovation, increasing costs and changing fashions led to its decline. Despite a bleak period as the new millennium approached, the area clung to its roots. The biggest single influence in its recent renaissance has been the 'studio glass' movement in which glassmakers use the medium to produce individualistic pieces of art. The movement originated in the USA but since the mid-1960s Stourbridge has attracted practitioners from around the world. The craft has also changed dramatically from when glassmaking would be strictly demarcated between working 'hot' (furnace) and 'cold' (cutting, engraving etc) and with separate roles for men and women.

The Stourbridge Glass Collection is one of the finest holdings of glass from between the 17th and 20th centuries and amounts to in excess of 10,000 pieces, highlighting the various factories located in the area, accompanied by a comprehensive body of archive material, glassmaking equipment and other artefacts. Its provenance is comparable with the collections at the Victoria & Albert Museum in London and Corning Museum of Glass in the US. From 1980 it was displayed at Broadfield House Glass Museum in Kingswinford, under the governance of Dudley Metropolitan Borough Council (MBC) until the council made the decision in 2009 that it should close. Although it continued until September 2015, out of this concern over the continuing integrity of the collection arose the British Glass Foundation (BGF).

In addition to being an umbrella organisation for the wider UK glass industry, from modest



beginnings the BGF has been a key body in the coalition of partners and funders, including Dudley MBC, and the site owners Complex Development Projects, that has worked to establish the Stourbridge Glass Museum – the new home for the important collection.

The location chosen for the new museum is the former Stuart Crystal factory in Wordsley, which closed in 2001. The renovated building also now houses a hot studio. While the focus will be on the collection, the broader scope of the museum is to celebrate the area's wider glass heritage and enthuse future glassmakers. Works from the collection will be shown in rotation, along with specific displays including the 2012 Portland

Vase replica and pieces from the Eila Grahame collection (a bequest of 136 glass objects that were acquired for Dudley Museums Service with Art Fund support in 2017).

A large proportion of the displays will be dedicated to 17th-century glass. These will tell the story of the dramatic changes in glassmaking during this period, including the establishment of major glass centres around Stourbridge. There will also be an emphasis placed on contemporary designers plus interactive displays as well as a comprehensive programme of educational and outreach resources. In August the museum will be playing an integral role in the biannual International Festival of Glass, a celebration of all aspects of glassmaking from around the world, a showcase for the British Glass Biennale and the beginning of the next chapter in the proud history of Stourbridge Glass.

● Stourbridge Glass Museum, opening 9 April. stourbridgeglassmuseum.org.uk, free with National Art Pass

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Right: recreation of the Portland Vase, 2012, featuring carving by Terri Colledge; below: Stevens & Williams, rock-crystal-style vase, c1897; below, right: Ruth Dresman, sand-blasted bowl, c2000



Left: men working in the old Stourbridge Crystal Glass Works, c1930s-40s; above: unknown maker, vase with narcissus decoration, c1885



MEN WORKING: COURTESY STOURBRIDGE GLASS MUSEUM AND BRITISH GLASS FOUNDATION

ALL IMAGES: COURTESY STOURBRIDGE GLASS MUSEUM AND BRITISH GLASS FOUNDATION



Left: Vic Bamforth, *From Hull to the Isle of Wight*, 2021; facing page: glass from Bamforth's Sommercalmo collection; right: Terri Colledge, *Chameleon Vase*, 2012

Innovating through a new lens

Skye Sherwin asks four glass artists with connections to the Stourbridge area what working with the medium means to them

Vic Bamforth

What was your journey into becoming a glass artist?

I began working with the medium later in life when I enrolled on an evening class with my brother, in 2000. My formative years were spent travelling. From first stepping into the glassblowing studio and touching the glass I knew there was something different about it. I thought this could be addictive, but in a healthy, positive and life-changing way. The heat, the clanking of metal, the glow from the glory hole and the furnace: it's very seductive stuff.

Do you work in a particular technique or area of expertise?

I call it painted graal. The original traditional Swedish graal technique involved building up successive

different colours of glass and then cutting through them to reveal the colours underneath. That would then be covered with clear glass from the furnace. Abstract designs, patterns and simple pictures were sandwiched between the layers of glass. When I was studying at the International Glass Centre in Stourbridge, I discovered a box of paints from California. Playing with them is how my work evolved into what it is today: a visual narrative involving real stories.

A lot of your inspiration seems to come from everyday life...

One of my early series of works looked at the packaging from tinned fish, such as tuna and pilchards. Another pivotal piece was about the women chainmakers' strike of 1910, which took place in this area, the Black Country.

Your work also includes more abstract forms, such as the series Sommercalmo and Tricolorial. They are made using an Italian technique called incalmo, which involves bringing two separate forms together while they are hot. Traditionally, incalmo works are precisely executed with symmetry. I wanted to take that idea and create a more fluid sculptural form that spoke of what hot glass is like while you're working with it.

Is there a work that you are most proud of making?

That would be a private commission for the mother of a friend, which celebrated the life of her dear departed husband. To know that you can touch somebody with an inanimate object that resonates so much – it was a real journey for me. vicbamforthglass.com

Terri Colledge

You work as a glass engraver. What was your pathway into that particular skill?

I was working at Okra Glass, a local glass studio, where I was initially enamel-painting on glass. Richard Golding, the studio's co-founder, suggested that I look at the works in the cameo room in [what was then] Broadfield House Glass Museum. Cameo is glass that has been engraved through different coloured layers. Most of the museum pieces had a white opal overlay, which had been carved through. The thinner that layer is, the more colour underneath shows through, which is how the effect of shading is achieved. You have to be very skilled because of the co-efficiency of the glass cooling with a dark colour



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underneath and light opal colour on top. I thought it was wonderful. The studio had a setup with a dentist's drill to use to make the engraving. It went from there.

What work are you most proud of?

It has to be the [2012] replica of the Portland Vase, the 2,000-year-old Roman glass in the British Museum, which is very dark blue with a white overlay and figures on it. How the Romans did it is astounding. Despite much discussion, nobody knows for sure how it was made. Years ago, they would have used hand tools such as sharpened metal. There was more lead in the paint then so it probably made it slightly softer. I use a dentist's drill with water and air to get very fine detail. They still take a long time to do. Most pieces take many months.

Nature is a big motif in much of your work.

The natural world is my inspiration. The folds in the flowers, the centres, the stamens, the leaves – it lends itself very well to it.

What is the significance of the opening of the new Stourbridge Glass Museum to you?

It's something to be so proud of, your heritage, where you come from, what's been done before and now. Dudley and Stourbridge need that. terrillcolledgeglass.com

Helen Slater Stokes

What is your area of expertise and how did that develop?

I specialise in kiln-formed glassmaking, so that's 'warm glass' processes – as opposed to blown



glass, which is a 'hot glass' process, and 'cold glass' processes such as polishing and engraving. Within these cast pieces of glass there are these other worlds, which became the premise of my early work. These captured bubbles and colour streams reminded me of my childhood fascination with those chemical 'Crystal Gardens' science kits, where watery crystal worlds are grown in jam jars. This is where my interest developed in the space within glass and how virtual spaces could be created there.

The rural landscape has been a major subject for you. What does working in glass bring to the genre?

I love walking my dog across the fields or through forests. This is my best creative thinking time. Trees are markers within the landscape and, hopefully, they remain a constant within a place, even if the use of the land changes. My landscape-based works discuss our ability to attach emotional associations to places, spaces from our childhood, or environments that have personal resonance.

I redraw the places as I remember them, reimagine the space, and capture this within the glass.

What works are you most proud of?

In 2021, I completed a PhD at the Royal College of Art, researching the 'Optical perception of Image in Glass'. I developed original kiln-formed glassmaking processes that enabled me to fabricate lenticular glass lenses. These, in combination with optical digital-image processes, allowed me to create new, almost holographic imagery that sits within the glass. The works investigate space using more abstract minimal forms and reflect more recent pandemic-based associations with space, such as proximity, movement, sequencing, control and instability.

What do you love most about what you do?

I love opening the kiln to see what has happened in the firing. It could take anything from as little as three days to as much as three weeks to see exactly how the piece has worked out. That never gets boring. helenslaterglass.com

Chris Day

What is your area of expertise and how did that develop?

I'm a plumbing and heating engineer who also now makes glass and talks about racism. Those are my ingredients. My work is a hybrid of sculpture and the crafts of glassblowing and ceramics. I've used materials from my other job too: electrical wire and copper from plumbing, for example. Each piece is an experiment, and I don't want

to control glass or perfect a technique. I like to let the material do what it wants to do. It's been a short rocket-ship ride for me: two years since my work was first spotted in Stourbridge. Now it's in six major museums.

What works are you most proud of?

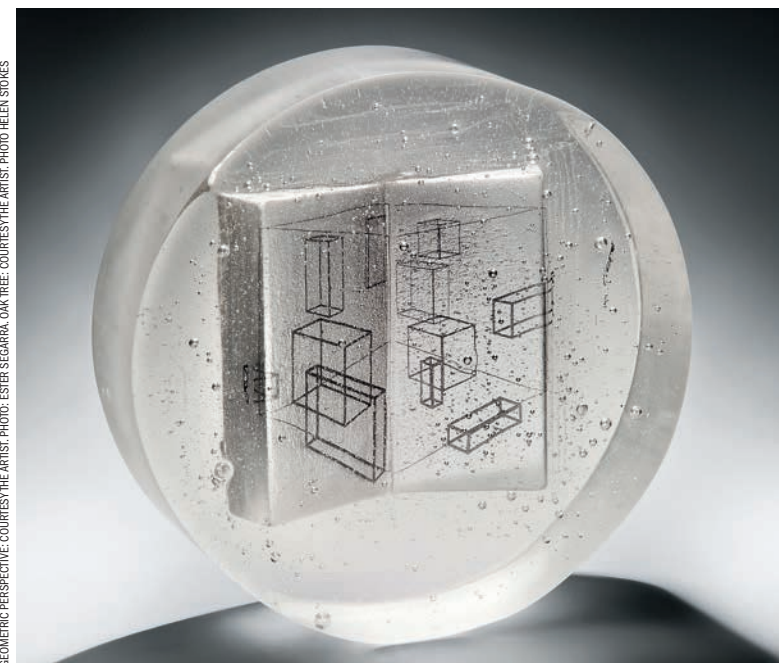
I'm most emotional about *Emmett Till*, which was acquired by the V&A in 2021. My work addressing racism came out of blowing glass into copper structures and seeing the tension the material was under. At the same time, I was reading about lynching and the history of slavery. It was the tension, not just of being strung up or burned, but of how society dealt with these issues – the rioting and the Civil Rights movement. Till [who, aged 14, was lynched in Mississippi in 1955, after being accused of offending a white woman] is a very important figure to me. The work is a way of dealing with my own tensions too, being mixed race and growing up without my father. My work has made me confident to talk about these things, and that's what I'm proud of.

What do you love most about what you do?

Having a dialogue. The glass is 50 per cent of my art, the other half is having the conversation that comes out of it.

What are you most looking forward to with the new Stourbridge Glass Museum?

I'm hoping that it will bring in the things that I didn't know, to show the contemporary side to what glass is and to change people's mindsets. chrisdayglass.com



Left: Helen Slater Stokes, *Geometric Perspective*, 2019; above: *Oak Tree*, 2020; right: Chris Day, *Emmett Till*, 2019; facing page: *Impostor Syndrome*, 2020



DAY: BOTH IMAGES COURTESY VESSEL GALLERY