

Masterclass  
with



David  
Binns

Images: Layton Thompson



Image: Liz McBurney

## Ceramicist *David Binns* shares the techniques and processes he uses to make and glaze one of his distinctive carved vessel forms

**M**y life in clay spans almost 40 years, as a maker, teacher and researcher. Last year I retired from my teaching post at the University of Central Lancashire, where I ran the MA Ceramics programme and supervised a number of PhD students.

Clay was, however, not my first choice. In fact, following my first experience with the material on my foundation course, I chose to avoid all further ceramics classes.

As a child I was always making things in wood and my career aspiration was to be an architect. However, as it gradually dawned on me that architects did not actually make things by hand, my focus turned back towards wood and a place on the Wood, Metal, Ceramics course at Manchester Polytechnic.

Although we initially studied all material disciplines, my focus remained cabinetmaking. Then over time, I started developing an interest in clay, enjoying both throwing and the raku process. A chance introduction to Japanese gardens and traditional wooden architecture sparked an interest in Japanese design and aesthetics, which has remained a significant guiding force within my creative practice.

Interviewing master raku maker David Roberts for my thesis changed the direction of my life. He offered me the opportunity to work with him in his studio and this led me to re-evaluate my career, so late into my degree I swung to majoring in ceramics. While working with David, in 1983, another chance situation led to a teaching position at the College of Art in Wrexham, North Wales.

Gaining a lecturing post in 1991 at the University of Central Lancashire led to more formalised involvement in research. Through this research I developed a unique material made by fusing together crushed recycled glass, ceramic and mineral waste. While making large sculptural forms from the new material, I began to realise its architectural and commercial possibilities. Collaboration with PhD student Dr Alasdair Bremner led us to establish ALUSID, a university spin-out company that makes a range

of architectural surfacing products from recycled waste, manifesting in numerous prestigious projects. I remain a consultant for the company.

As my work with aggregates and recycled waste now had a new life through ALUSID, I increasingly felt the urge to return to clay and explore new ideas. It was time to make glazed pots. Having taught glaze theory for nearly 40 years, I was able to apply some of that knowledge to my own work and my new carved vessel forms emerged.

I am naturally drawn to working clay in a firm leatherhard state, probably because I can get crisp cuts and edges as one might working with wood. Almost subconsciously, the tools I use are chisels and other sharp-bladed woodworking tools. There is no doubt that my previous experiences of working in wood hugely informs my ceramic practice.

From the outset, I decided to limit my repertoire of glazes, relying on my knowledge of clay bodies and aggregate additions to create variations in colour and texture. I now use a single glaze, altered only through adding various oxides and opacifiers.

My making process combines elements of control and chance. While controlling the tool that slices and forms the clay, the blade often cuts in unexpected ways, creating tears and textures I had not foreseen. The way my glaze chooses to melt and run is also partly chance.

My work alludes to qualities I admire within the natural environment, but I am not consciously intending to imitate nature. Having a strong emotional regard for the Japanese aesthetic principles of *Shibui*, *Shizen* and *Fukinsei*, I hope my work conveys aspects of these values: unobtrusive quiet beauty, a harmonious relationship with nature, spontaneity and an appreciation of asymmetry and irregularity.

In a world that seems to be increasingly fast-paced and challenging, I feel the ever-increasing need to focus on quiet, contemplative work. 

For more details visit [davidbinnsceramics.com](http://davidbinnsceramics.com); [alusid.co.uk](http://alusid.co.uk)



**1** Crisp edges and contrasting tears are an integral aspect of my work, so the textural quality of clay is important to me. I am also interested in how the clay body can dramatically affect a glaze. Rather than having a large repertoire of glaze formulas, I change the body in order to vary the textural appearance and colour of the glaze. My preferred base clays are Valentine's Smooth Textured Stoneware and Grogged Porcelain. However, I often 'play' with the body, blending the clays or adapting it through additions of various granular materials (aggregates) – applying my knowledge from previous work.



**3** After creating a sandwich of clay and granular material, I spiral wedge it to fully integrate the aggregate into the body. If I am mixing two clays together, I again sandwich alternating layers of clay then spiral wedge until they are fully blended.



**2** I wedge all clay prior to forming. If I decide to make a piece with a more textural effect, I add different types and amounts of aggregates including granular feldspar, molochite, cordite and chamotte or fireclay grogs. I am particularly excited by granular feldspar, as it melts at high temperatures. As the molten grains ooze out of the body, they flux the glaze further in tiny rivulets of molten feldspar, dramatically altering the appearance of the fired surface. I add it to the base clay by building up a sandwich of clay and granular material, slightly dampening the grit, so as not to dry out the body too much.



**4** The added granular material dramatically effects the texture of the clay.



**5** Having prepared my clay body, I decide on the size and proportions of the piece I wish to make. I keep a sketchbook of ideas and will usually make a series of quick drawings prior to starting the making process. The solid lump of plastic clay is knocked and batted into the desired shape or 'blank'.



**6** Once the clay blank has been formed, I select a wooden block insert that will be used to form the interior space of the piece. I have lots of blocks in different sizes and proportions made from softwood and varying sizes of plywood. Each insert is labelled with its length, which allows me to control how deep the opening will be.



**7** The selected wooden insert is positioned on the pre-formed blank of plastic clay. In this particular case, I am using four sections of wood taped together, which will produce a larger opening. I aim to form an opening that in some way corresponds in scale and proportion.



**8** I then gradually push the wooden insert down to create a vessel form. As the wood is pushed in deeper, the clay bulges out, due to displacement. At this point it is important to keep control of the shape and proportions of the clay blank. In order to judge the depth of the opening, I use the known length of the piece of wood. I usually aim to leave a base thickness of around 3–4cm.



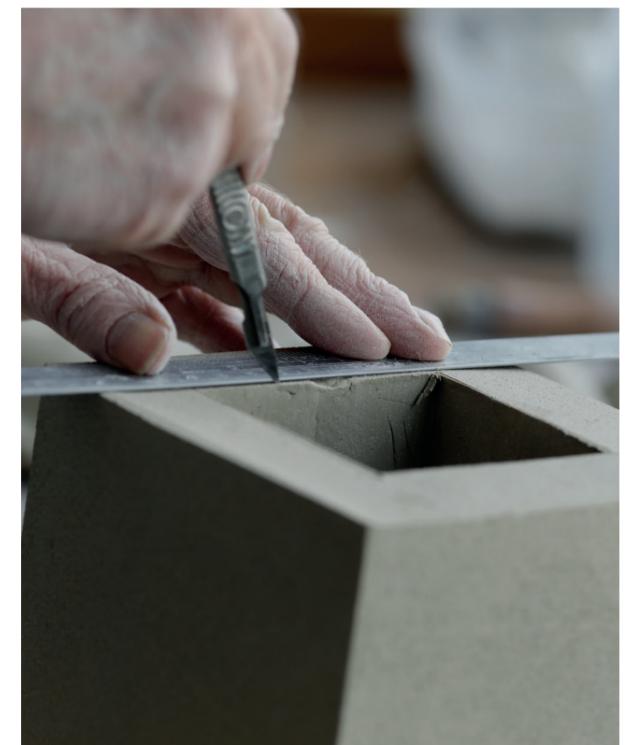
**9** When the wooden insert has been pushed to the desired depth, I flip the piece on its side and start bating the clay back into a controlled shape. I gradually work the displaced clay up and along the wooden insert to increase the height, continually rotating the clay blank to get an even distribution. I also lay some strips of wood under the insert to help control the thickness of the walls. The whole thing is then set aside to slowly dry.



**10** Once the clay blank has dried to a point it can hold its shape, I withdraw the wooden insert. In order to achieve the crispness of cut I require, I allow the clay to dry to a firm leatherhard state, making small test cuts to monitor the dryness. As with many clay processes, the correct moisture content is critical. I am often asked if my forms are slab-built. The reason I have developed this particular 'seamless' method is that when I carve into the clay, I want to avoid revealing any evidence of joins. My aim is that they appear to have been hewn from a solid mass of material, akin to stone carving.



**11** Once the clay has reached the desired dryness, I begin the shaping process. The first stage involves shaving a slice off each side in order to square off faces and corners. The tool I have found best suited for this process is a blade from a woodworking planer. As these large cuts often require significant force using an extremely sharp blade, considerable care is required at this stage.



**12** After the clay blank is trued up, I focus on tidying up the interior of the vessel. Using a fine scalpel, I score a line around the opening. This gives me a guideline to cut back to.



**13** Using a sharp woodworking chisel and the scalpel line as a cutting guide, I pare back each of the interior walls, carefully working my way around each side to produce an interior with crisp sides and edges.



**15** It continually amuses me that my chosen clay tools are those that are normally found on the cabinetmaker's bench. It appears that my love of wood, and earlier career aspirations to be a cabinetmaker, clearly inform my ceramics practice.



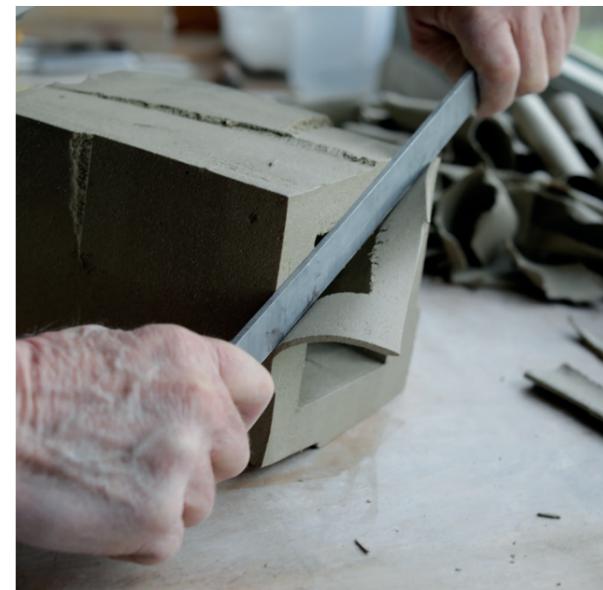
**14** Once the leatherhard blank of clay is trued up, the real creative part of the process begins. I carve and slice each face in turn, using a variety of sharp blades and chisels.



**16** Cuts that will appear vertical require the blank to be laid on its side. In most cases, I stop cutting part way across each face, then tip the blade to tear off the slice of clay. This creates both shadowed facets in each face and contrasting areas of torn texture. During firing, these facets create shallow shelved areas that hold or channel the molten glaze, creating effects similar to where water gathers and drips down a rock face.



**17** Intuition and chance play a big part in my forming process. Although I am essentially in control of the carving and slicing, there is a strong element of chance in how the blade responds to the clay and the clay to the blade. Where each cut is made and how deep the cut will be, is also very intuitive. So while planned to an extent, I can never be sure how successful and balanced the piece will feel until completion.



**19** The final stage of the shaping process involves cutting the rim of the form. This is crucial as the top surface is most apparent to the viewer. Again, chance plays a big part in how successful this is. I need to be incredibly careful how I handle the form throughout the carving stage as the slightest knock will be apparent, spoiling the visual crispness of the cut corners.



**18** Once the sides of the piece have been carved, I work on the base. I like to create shallow angled undercuts that help to create the illusion of the piece almost floating. The carving and slicing process I have developed may possibly be classed as *Kurinuki* – the Japanese term for a hand-forming process that involves carving a shaped solid block of clay. *Kurinuki* is, however, usually associated with making Yunomi (tea bowls).



**20** Each completed piece is then stamped with my mark.



**21** The finished piece prior to slow drying and a very slow bisque-firing. Acknowledging the Japanese aesthetic principal of *Fukinsei* – the appreciation of irregularity and asymmetry – helps me better understand and evaluate each piece.



**22** A shot of me carving a piece made from grogged porcelain. While porcelain pieces involve the exact same stages of production, the clay has very different textural characteristics. Again, the process demands a very specific moisture content of the clay. Using porcelain also dramatically effects the quality of the glaze, producing a much brighter and 'cleaner' colour response.



**23** Glaze application is a critical aspect of my practice, as the thickness of application dramatically affects the colour and texture. Therefore, the viscosity and density of my glaze needs to be controlled carefully. I mainly use just one base glaze, altered through varying additions of colouring oxide and opacifier. The application thickness, together with the firing cycle and varying the clay body, create the variations of colour and texture in my work. Smaller pieces are usually dipped using glazing tongues.



**24** Larger forms are glazed by spraying. I pour the glaze into the inside first, clean off any drips, then spray over the exterior. As I usually require a thick application of glaze, I build it up in layers, allowing each layer to dry before applying the next. Spraying each piece standing on a board of screws prevents a build-up of glaze around the base of the form.



**25** As my glazes are applied thickly and I fire to a very high temperature (cone 10 – around 1310°C), my glazes often run. To prevent the work gluing itself to the kiln batt, I give all my shelves a thick coat of batt wash and wad every piece prior to placing it in the kiln. My wadding mix is 1/1/1 ratio of alumina hydrate, kaolin and plain flour.



See David at work in the CR Masterclass series on YouTube.com