

David Edwick

New tools Old skills

David Edwick is a traditional stonemason who could see the impact computers were having on the industry. So he went back to college to learn about the technology.

Photo David Williams

Like a lot of traditional stonemasons, David Edwick was wary of computers. But he could see they were having an impact on the industry and he wanted to find out more about them. So he went back to college.

He is glad he did. Computers have opened up new design possibilities for the public art commissions he would like to make a bigger part of his business. They make it possible to create designs that would just take too long to lay out by hand (and would, therefore, be too expensive). They also open up the possibility of taking some of the drudgery out of stock removal.

Rather than drawing on paper, making clay maquettes and transferring the design into stone using a pointing instrument, David designs with 3D software and is building himself a RepRap 3D printer from a kit to make the maquettes in polylactic acid for client approval. Polylactic acid is a thermally stable, environmentally friendly



SunEggApple in West Park, a new mental health hospital in Darlington, was carved by David Edwick in Tadcaster limestone. The lead artist was poet Bill Herbert.

plastic made from plants.

David would like to go the whole hog and have a robot to rough out the work, although he says he would still want to finish it by hand because he believes the final refinements of design can only take place as the stone is worked.

It was to learn how to use 3D design software that David returned to college in Newcastle, the nearest university to his home in Hexham, to take a Masters in Fine Art. He wanted to learn to use AutoCAD to become an interface

between architects and the finished stonework, as well as improving his design service for public art.

"I started out burying my head in the past," says David. "I was scared of what technology could do. When I was a teenager I saw a film called *The War Game*, which turned me against technology for a long time.

"But I always had this interest in geometry, which I think goes back to



David Edwick is building his own 3D printer that will be able to build maquettes in plastic in a fraction of the time he can make them in clay. David sees computers as the next generation of tools for the architectural stone sculptor. On the left of the picture is the pointing instrument that David uses to take the dimensions of clay maquettes for carving into stone.

David Edwick



my grandfather telling me about the world going round the sun when I was a child. I like the power a computer gives me to explore complex geometry.

"From an artist's point of view you can use it as a tool for exploring possibilities. You can experiment with endless alternatives in this enormous design space, which you just wouldn't do on paper because it takes too long. I approach it as an artist and it's a very playful approach.

"I do think there is a role for a traditional stone carver with computer skills in optimising the use of technology for making architectural ornamentation.

"An architect thinks only of form, so someone who bridges the gap between that and the finished work at a feasible rate might be quite a useful person to have around."

A manifestation of his approach can be seen on a Miller Homes development called The Meadows at Framwellgate Moor, near Durham, pictured above. David worked with Standcliffe Stone in Derbyshire and Tom Robinson of Robinson Landscape Design on the public realm element.

Between them, the landscape architect and the mason created a design that articulates this particular spot on earth by reference to the centre of the galaxy, while at the same time fulfilling the planners' requirement for an area with a play value, particularly for under-fives.

The reference to the universe reflects the strong astronomy department at Durham University.

The elliptical wall marks out the apparent path of the centre of the galaxy as our planet

spins on its axis, as seen from the tip of the conical seat in the centre of the photograph (above), partly hidden by the gongs that were played during the opening ceremony.

Nearby, another sculpture points to the pole star with a mesostic by Belfast poet and novelist Carolyn Jess-Cooke cut into it spelling out 'Polaris'.

The smallest, Pearl-like star is a stitch so integral to the celestial tapestry that, without it, our galaxy would fall into a pile of threads

David laid out the letters using Illustrator software and output them as a stencil for transferring on to the stone, then cut them by hand. The stone was sawn by Standcliffe using DXF files supplied by David.

And all the calculations were checked by an astrophysicist for accuracy.

In the same project is a poem, also by Carolyn Jess-Cooke, in 150mm high letters cut in Stanton Moor sandstone and set into the walls around the development. David found it was easier to adjust the line breaks manually in order for the inscription to make sense before cutting the letters into the panels.

The commission for the work came through a Newcastle arts agency called Grit & Pearl, whose representatives had picked up one of David's brochures during

It might be a playground to the children but it is also an accurate astronomical device mapping the apparent path of the centre of the universe created by the turn of the Earth.

his MA exhibition in 2005.

David says he enjoyed studying for his Masters and is still experimenting with "mind bending" non-Euclidean geometry where parallel lines can meet. It also expanded his appreciation of conceptual art. "One tends to cling voraciously to what you can hold and feel and touch but the best conceptual art helps you to loosen up."

It might seem a long way from his stonemasonry training at South Dorset Technical College and his early years with MV Sheppard in Bristol and CWO in Chichester, but his years producing masonry and carving on buildings such as Chichester Cathedral, Christchurch Priory, St Paul's Cathedral and particularly the Houses of Parliament have left him with an intimate knowledge and deep understanding of stone and how to work it. He knows what can successfully be achieved in stone and what cannot.

His main education in carving came when he joined the Department of Ancient Monuments & Historic Buildings (which later became English Heritage). He already knew by then that it was carving that really interested him. "It's what I love and what I always think of as my core discipline. It requires skills that take time to acquire."

He started working for the Department of Ancient Monuments & Historic Buildings in a shack made of scaffolding and corrugated iron in a workshop near the

Royal Horticultural Society in Horseferry Road, London.

He was the most junior member of a team of seven who were replacing statues of kings and queens on the Houses of Parliament. To begin with he was constantly supervised by a more experienced mason who watched over him and helped him improve his work. He recognises now how privileged he was to have received that level of support and tuition.

"We had a rolling programme to make new statues for the buttresses, three or four each year," he told NSS.

"The Anston limestone used to build Parliament had been a bad choice for London's atmosphere and, worse still, the statues had been face-bedded to achieve the life-size height of the statue in one block.

"Some held fully relieved war swords suspended over the heads of MPs going in and out of the building by a few square inches of decaying stone.

"We copied the statues in Clipsham, carving them from three on-bed blocks stacked and held together by hidden stainless steel pins.

"We installed them, ready assembled, working from a small scaffolding tower. A ring set in the back of the sculpture was hooked over a pin in the niche to hold them in place. We had to push them backward on rollers and then tilt them to engage the pin and eye.

"On one occasion my foreman had some concerns about the top stone from which the head of a statue was carved. He pointed out that the King had a slender neck and the stone looked a bit soft.

"Tilting the statue forward to hook the ring over the pin I must have let my arm slide up to the statue's neck. There was a slight pop and the head landed on the scaffolding... unfortunately it didn't stop there. It bounced and fell 50 feet through

the glass roof of the Lords' bicycle rack, smashing almost to powder.

"No-one was hurt, but I had the fright of my life and I'm sure it aged my foreman a year or two.

"We did put a new head on... eventually!" David says he was surprised by how unobtrusive some of the Victorian carving on Parliament was at higher levels, where it was not delicate detail that was needed but exaggerated and deeply undercut stone, creating shadows that allow the work to be appreciated from the ground.

"One of the joys of working on the Houses of Parliament was meeting the maintenance staff," says David. "They showed me many less-known places, such as the flag loft and the clock mechanism of Big Ben."

The masons carried out research with John and Nicola Ashurst, both highly respected authorities on conservation and the authors of several books and papers on the conservation of stone that are essential reading for students of the subject. They carried out trials using Brethane, a consolidant developed by BRE, and various European products.

"My first foreman at the Department of Ancient Monuments & Historic Buildings was Fred Wills. He was a kind and patient man. His first question used to be: 'Where does the nose come?' It is not half way up the face as one might expect but near the bottom – especially if you want it to look right from 100 feet below.

"I once foolishly damaged one of the stones for a plinth to support the bronze statue of Lord Asquith in the Members' lobby. It was Fred Wills who made sure I had the skills to make an invisible repair.

"It took me a long time, constantly sharpening tools and minutely trimming the squared hole and the inset piece so that the joint

was feeler-gauge tight, then making a perfectly matched mortar to hide it completely.

"It was his pointing machine that I inherited eventually." It is the pointing machine in the photograph on the previous pages. "On Fred's retirement Neil Simmons took over – he was a very fine carver. It was a visit by Neil to CWO while I was working there that inspired me to become a carver in the first place."

Eventually David felt he should be moving into management and took a job as a project manager with Stonewest when it was still Stonewest Cox. But he found he missed working with the tools and decided it was not for him.

By now he was married and he and his wife did not want to bring up children in London. They had enjoyed holidays in the North of England and in 1989 decided to move there. David's wife went to work for the Northumberland Wildlife Trust and David opened a masonry workshop of his own. He worked on a freelance basis for other masonry companies in the area and gained some work directly with property owners, particularly carrying out restoration work and making fireplaces.

He gained an early commission for public art to carve an otter sculpture for Internet, a company that was sponsoring work conserving otters on the rivers Tyne and

Tyne. The company wanted them in Westmorland green slate. Carving the stone came as a shock to David as he was used to carving soft limestone. He bought a set of granite-cutting tools for the job. Other carving commissions continued to arrive over the years and in 2005

David decided to take a year out to study fine art and learn how to use computer design software.



David Edwick in his workshop in Hexham with a garden sculpture he made several years ago in the foreground and his current project behind.