

Case Study 1 - Stephen Bottomley

My research interests lie between 'past traditions' and 'present thinking' in the contemporary studio practice of jewellery and silversmithing. I am inspired by work and ideas that extend the boundaries of our subject, especially those that evolve through shared knowledge and emerging technologies to successfully transfer the significant values and understanding of craft to design in the 21st century.
Stephen Bottomley

For over a decade Stephen Bottomley has created work that demonstrates an engagement with new and emerging digital technologies and the possibilities these technologies bring to the traditional practices of jewellery making. Since graduating from the Royal College of Art in 2001 he has divided his time between teaching and studio practice. In 2008, after four years as course Leader of Metalwork & Jewellery at Sheffield Hallam University he moved to Scotland to take up the post of Award Leader for Jewellery and Silversmithing at Edinburgh College of Art.

Bottomley employs digital design processes such as scanning and the digital manipulation of photographic imagery to develop work that frequently explores pattern, ornament and low relief. Using technologies including rapid-prototyping, reverse engineering, photoetching and laser cutting the resultant designs are realized in a variety of materials; these range from precious metals to industrial materials such as plastics and titanium. In order to avoid what Bottomley describes as the 'mechanical perfection' that can result from the use of these new technologies he also includes traditional jewellery techniques in the production of his work to bring about a 'fine balance between *old/new* and *past/present* that juxtaposes digital precision with notions of flawed handicraft'.

Bottomley's output is not predicated on a defined technical repertoire, instead he utilizes whatever materials and processes are deemed to be most appropriate to the realization of a particular project. Whilst he would probably not describe himself as an enameller in the sense of many of the practitioners included in this case study series (i.e. those whose practice concentrates predominantly on the use of enamel) his practice is pertinent to this project due to his recent use of enamel in combination with digital technology in the realization of a defined body of work.

It was whilst studying for his degree at West Surrey College of Art and Design in the late 1980s that Stephen Bottomley was first introduced to the use of traditional fine enamel techniques in a workshop taught by Jane Short. Latterly he came back to the technique, both in his teaching and his own work as a 'lively way to introduce colour and life to metal' and since the late 1990s enamel has made a regular appearance in his practice.

In 2004 Bottomley was invited to make a new body of work in response to the textile collection held by the Fortuny Museum in Venice. Bottomley recognized in Fortuny's forward looking approach to the integration of the (then) new technologies and traditional techniques a connection to his own practice. Working from drawings and pattern designs found in the Museum's archive Bottomley developed a new body of jewellery that was exhibited at the Museum in 2008 under the title Tech-tile.



Matrici Necklace, photoetched silver and enamel 2008
Photograph: John K. McGregor

Work for this show featured a number of pieces created using a variety of materials and CAD CAM processes such as laser cutting, electroforming and photoetching. Significantly for the project Innovation in Enamel, Tech-tile included a group of pieces representing Bottomley's first sustained exploration of enamel.

Working with the Enamel Research department at UWE, Bristol, Bottomley developed two distinct strands of enamel work for Tech-tile. Of these strands the first, *Matrici*, featured necklaces and pendants and more closely reference traditional jewellery forms. The pieces were created by photoetching a delicate pierced pattern based on a motif found in the Fortuny archive. The pierced layers of silver were subsequently formed into hollow beads then enamel was applied to create a mottled and eroded softly coloured surface reminiscent of patterns of Fortuny's silk velvet fabrics. The second strand of enamelled work includes larger and more graphic work. For these pieces Bottomley had a pattern - again digitally developed from a design found in the archive - laser cut into pre-enamelled sheet steel. For these large neckpieces, which he calls *Drape*, Bottomley employed a palette of bright, jewel-like enamels that 'soften the austerity of the computer-controlled laser cut metal and [...] bring it vividly to life' He combined transparent enamels with the use of rich gold foils that serves to mimic the surface of the silk velvet. In order to introduce a gentle body-conforming curve to some of these large neckpieces a method was developed where the piece was pressed between two curved metal surfaces whilst still red-hot from the kiln.



Yellow Drape Neckpiece, Laser-cut steel and enamel
Photograph: John K. McGregor

Stephen Bottomley's personal interest in enamel has been reflected in his teaching practice, as is demonstrated by an increase in the number of Edinburgh College of Art jewellery students who include enamel in their final show. He actively encourages this engagement with the material through a programme of visiting enamel artist and close links with the Enamel Research department at UWE. Although Bottomley is clearly an advocate for enamel he is pragmatic in his view that in the context of a three-year degree course it will never be possible to 'teach student all the skills they may possibly wish to apply within a craft subject' but instead believe in sowing the seeds that will encourage students to 'invest the extensive time, energy and passion' necessary in the pursuit of their chosen approach.

Bottomley's use of enamel can be characterized as a traditional practice (one of the 'past traditions' referred to in the opening quote) that he employs in juxtaposition with the high-tech aspects of the design and manufacturing process. However recent engagement with enamel seems to have led him to reappraise the potential of the material, as he says, 'research working with digital design and vitreous enamel has led me to appreciate the broad artistic and industrial uses of enamel and challenge the narrow conventions still applied within much of [enamels] use within contemporary jewellery'.

In the light of this comment it will be very interesting to see if in future he takes an approach to enamel that more closely mirrors his enthusiasm for innovation and his engagement with new digital technologies.



Stephen Bottomley working on *Matrici*
at the Enamel Research department,
UWE, Bristol
photograph: Elizabeth Turrell