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Creative Journeys: Inspiration and Influence in Contemporary Craft

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Stephen Bottomley

Creative Journeys

Work 1987-2007



#2 Neckpiece, *Drape series*, 2007
Silver and acrylic
Ø410 mm

Model Alison Counsel
Photos Stephen Bottomley ©

Right. The main entrance to the Palazzo Fortuny, (formerly Palazzo Pesaro-Orfei), December 2007

Below. The inner courtyard. Nov 2004



Photos Stephen Bottomley ©

















A—GRATE. B—BRASS BLOCK. C—BLOCK OF WOOD. D—CAKES OF SILVER. E—HAMMER.
 F—BLOCK OF WOOD CHANNELLED IN THE MIDDLE. G—BOWL FULL OF HOLES.
 H—BLOCK OF WOOD FASTENED TO AN IRON IMPLEMENT. I—FIR-WOOD. K—IRON BAR.
 L—IMPLEMENT WITH A HOLLOW END. THE IMPLEMENT WHICH HAS A CIRCULAR END IS
 SHOWN IN THE NEXT PICTURE. M—IMPLEMENT, THE EXTREMITY OF WHICH IS BENT
 UPWARDS. N—IMPLEMENT IN THE SHAPE OF TONGS.

Early use of computing

I first used a computer for creative work in 1989. I used it to create designs for site specific jewellery using the same pixels selected from scanned black and white photographs I had taken of Michelangelo's sculptures ('slave' & 'David') in the V&A plaster rooms.

The software used was *Deluxpaint* and *Digi View Gold* on an Amiga 500.



1989

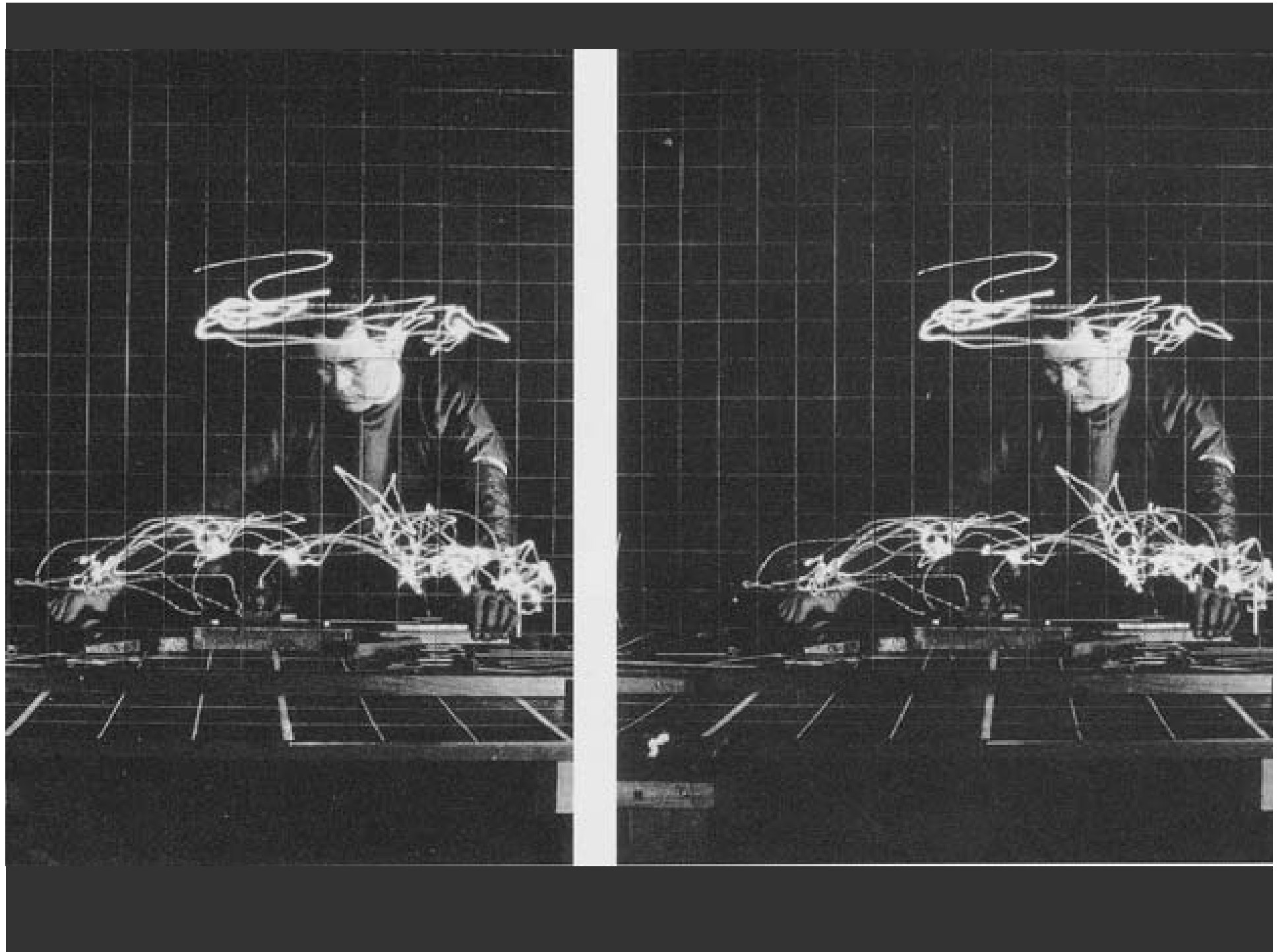


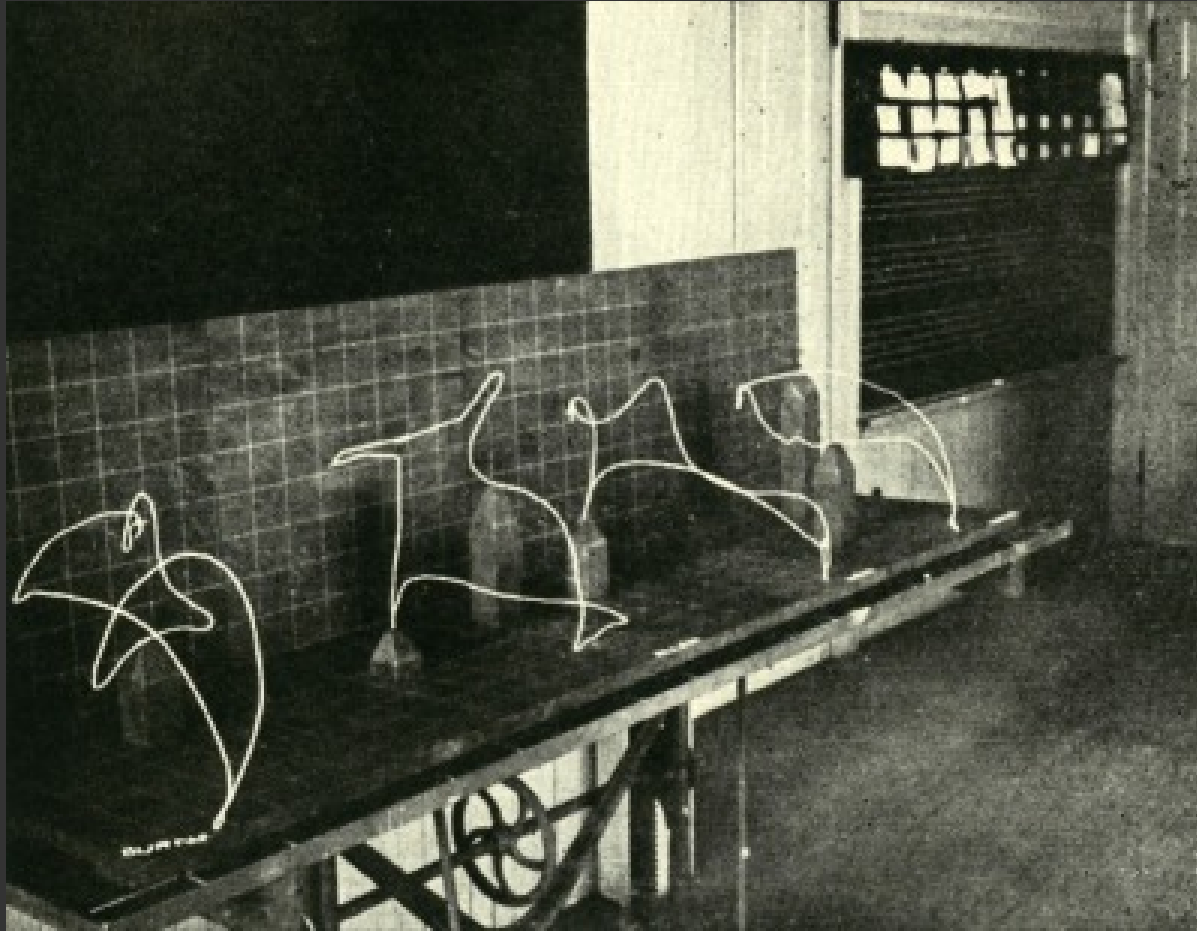
Above: 1989 Digital images from photographs of Michelangelo's 'Slave'

Left: Detail 'David', from the V&A plaster gallery with Neckpiece, 1989.

Photos Stephen Bottomley ©

Computers and Working Creatively in Three Dimensions - S. Bottomley & J. Marshall. Page from on line exhibition www.axisartists.org.uk 2002. Curator Anne Marie Shillito





3D motion models by Frank Gilbreth (1918)



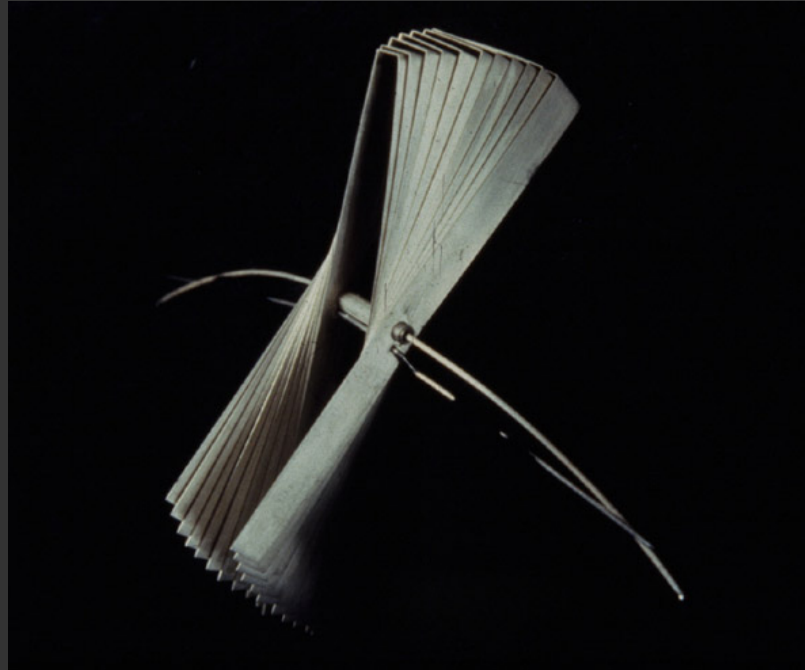
Ebbett, Lunch on a sky scraper 1932, Empire State, New York



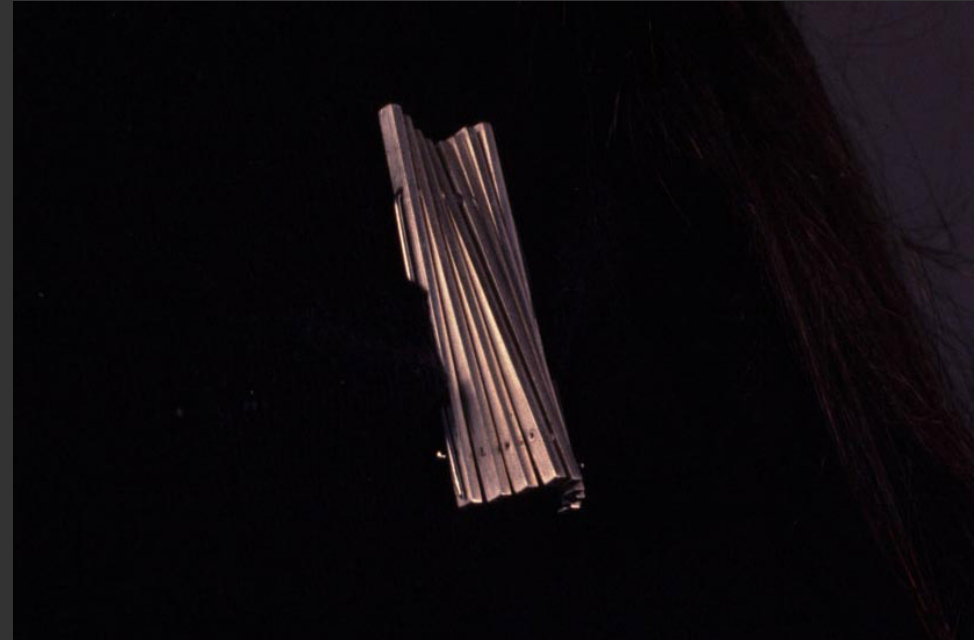
Earcage, 1987 Nickel silver & Stainless Steel



Sprung Arm piece, 1988, Stainless Steel, silver & rubber



Fan brooch, 1988, Silver & Stainless steel



Rectangular Fan brooch, Silver & Stainless Steel, 1988



Helix bangle, 1990, Silver & gold leaf on mesh

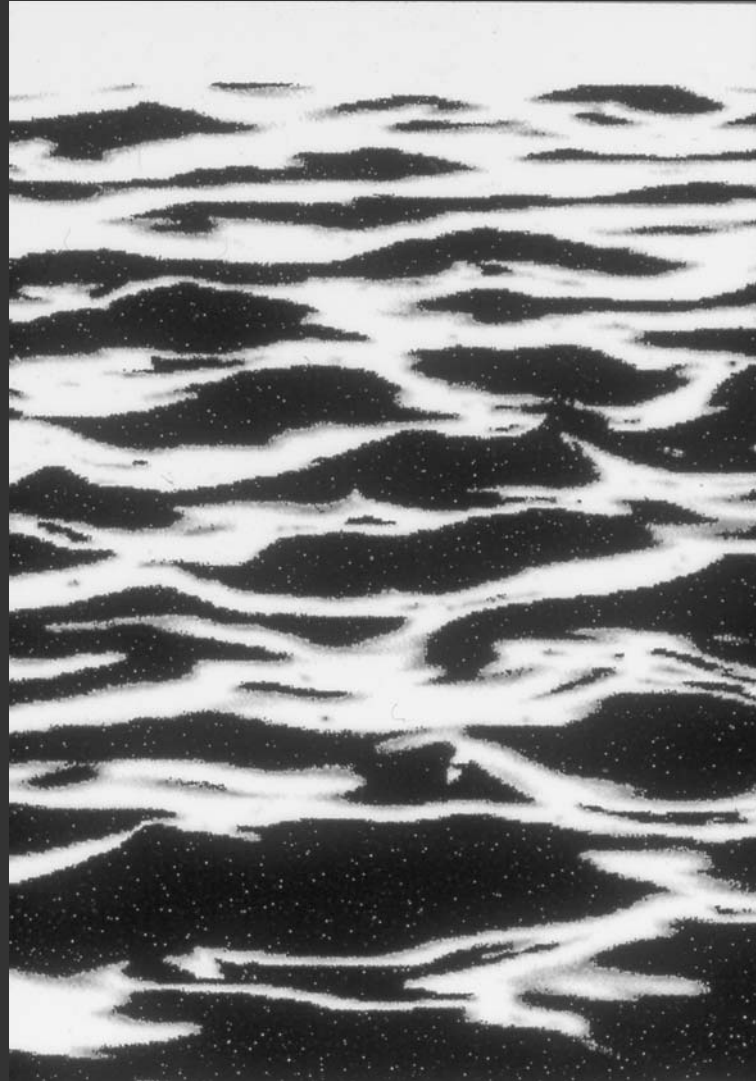


Enclosing Earrings, 1990, Silver & gold leaf on mesh

1994-6

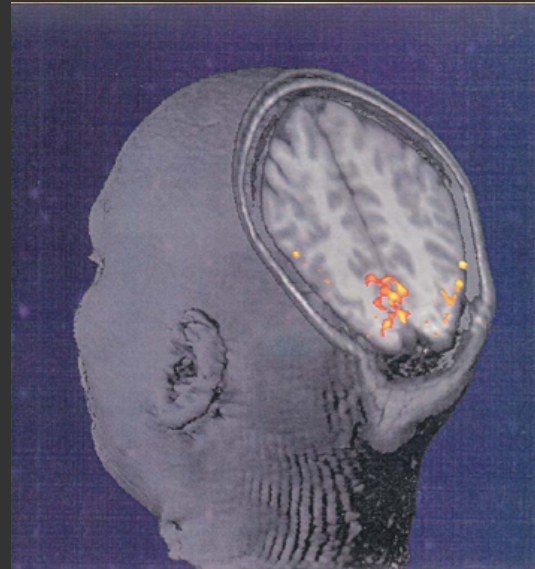
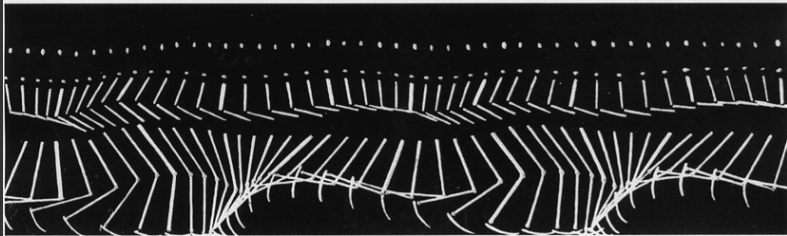
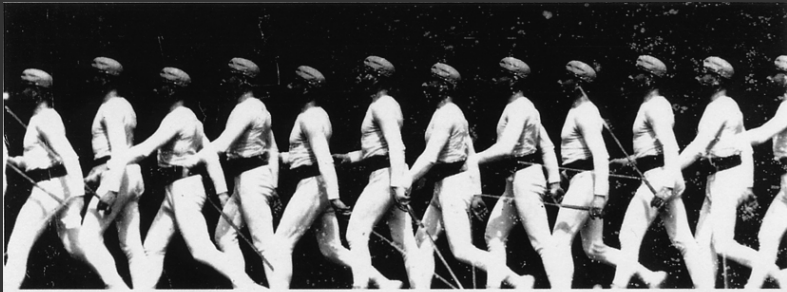
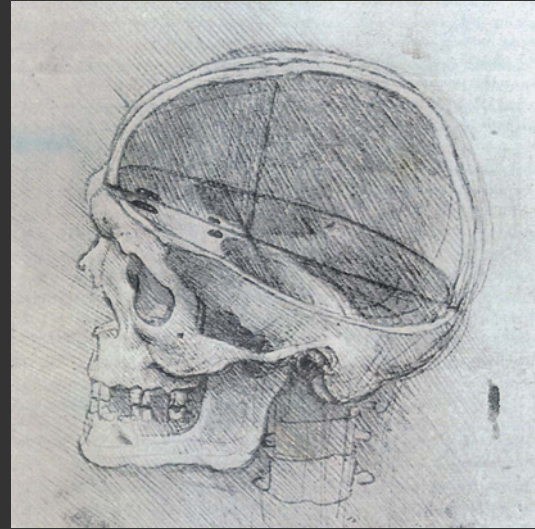
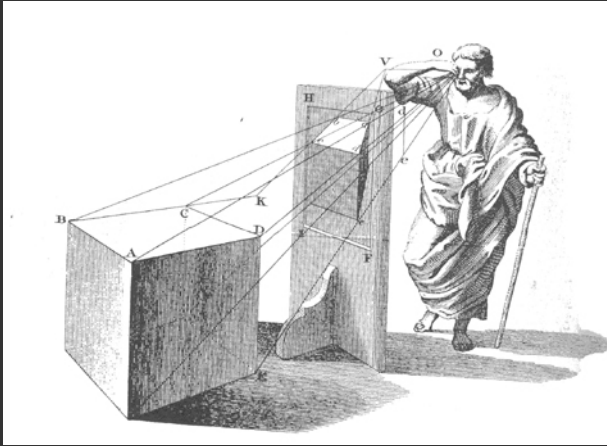


Cog Bangles, Earrings & rings
1994-96
Gold Electro-plated Nickel Silver
and silver

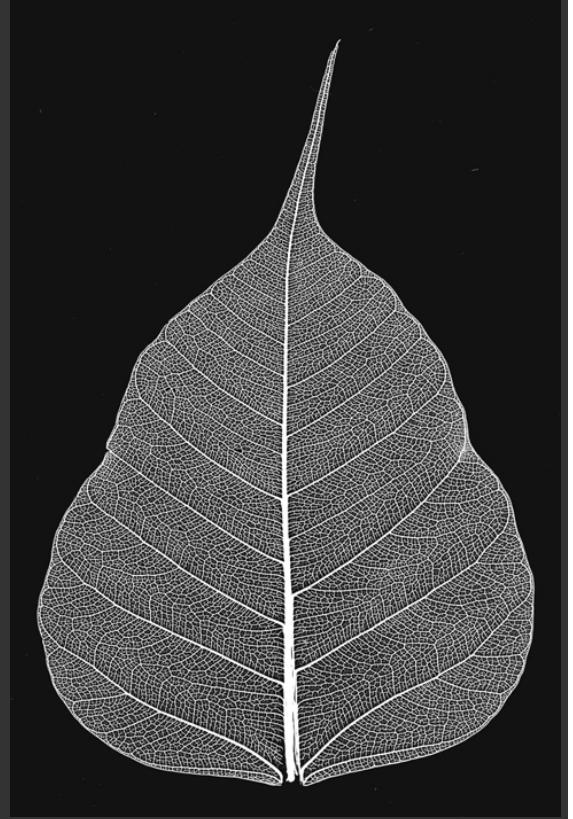
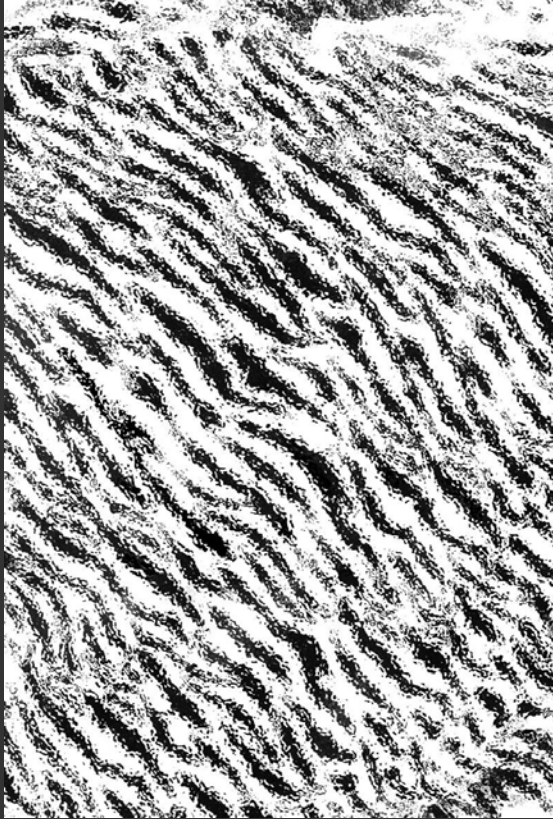


"The real voyages of discovery consist not in seeking new landscapes
but in having new eyes"

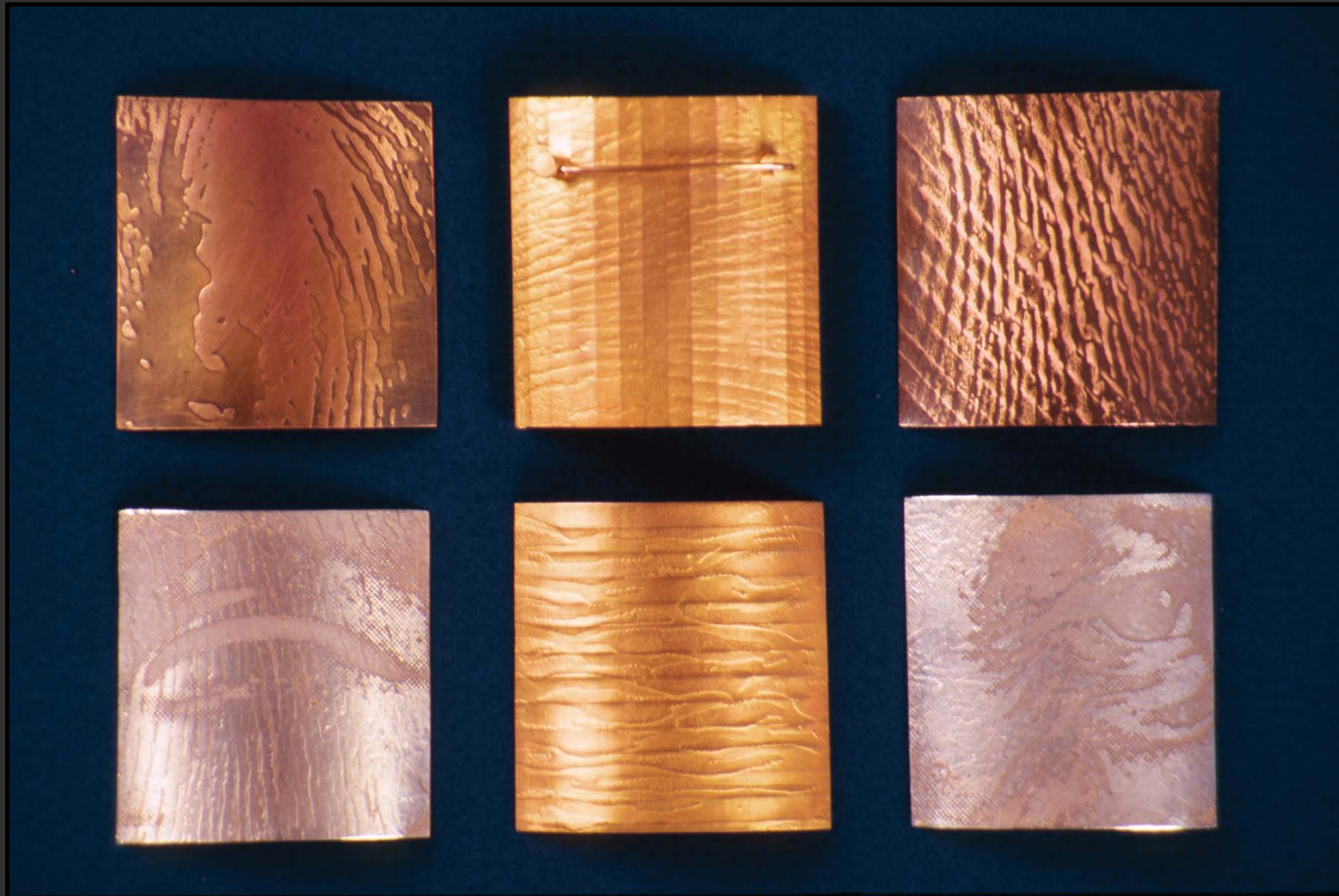
M.Proust







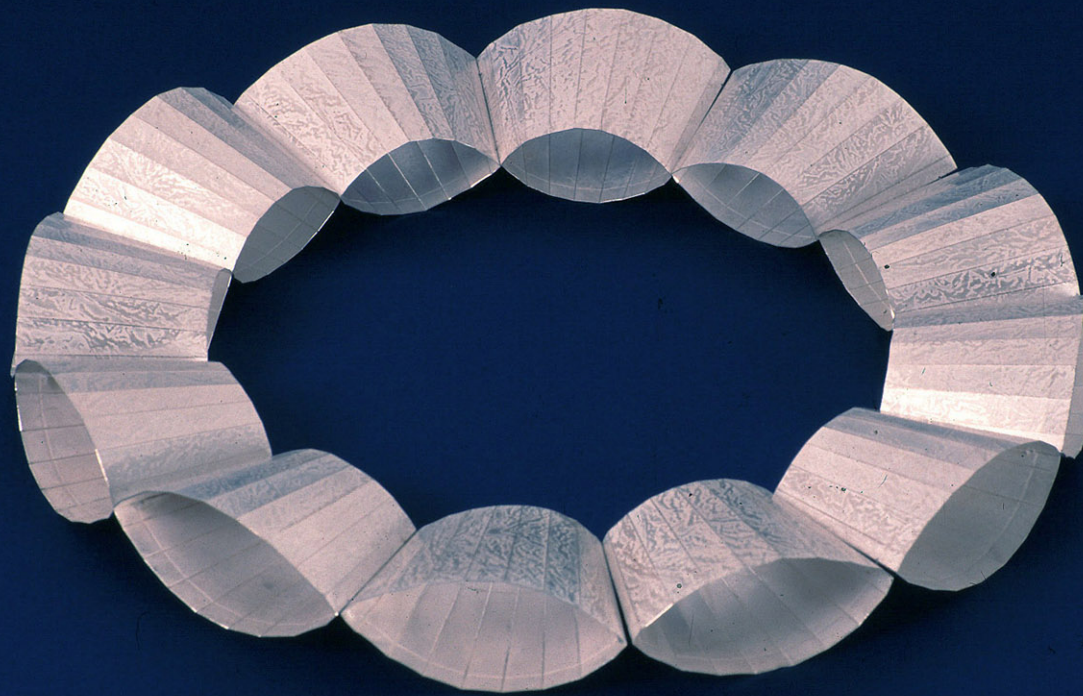
1998



Frame Brooch (with interchangeable panels), 1998 40x 40mm 18K Gold & Silver

South East Arts Crafts Collection
Hove Museum & Art Gallery





Ruff Necklace, 1998
Sterling silver

(right) Details of the electron microscope image of lead oxide with a section of the Necklace (*bottom right*).





Silk Ruff 1998
Sterling Silver & 18ct Red Gold
180mm Diameter



Ripple Ruff Necklace 1999
Sterling Silver , Stainless Steel, Gold and Pearls
145mm Diameter



Corrugated Ruff Necklace 2000
Sterling Silver & Rubber
140mm Diameter



Ruff Bangle 1998
18ct Italian Red Gold & Japanese black pearls
70 mm Diameter
CAD applied photo-etched surface of water ripples



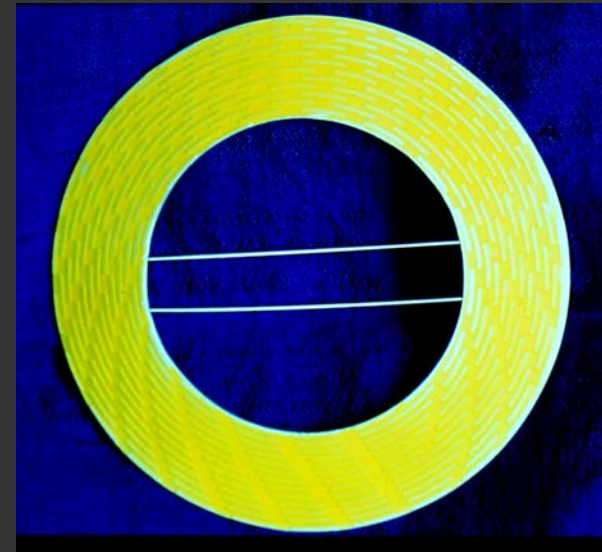
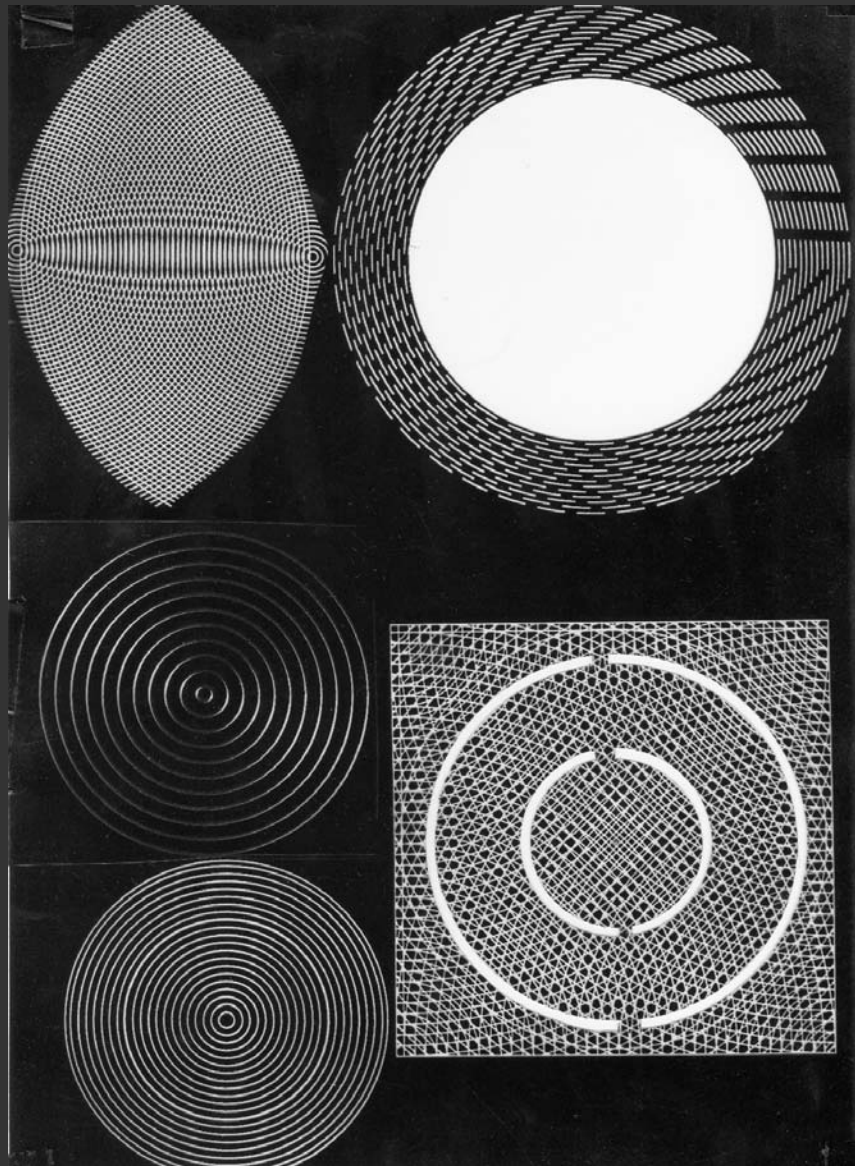
Fingerprints brooches 1998
Silver and Oxidised silver
6 – 10 mm H



Yo-yo of Fate 1999

Enamel, Thread, Precious White & Yellow Metal
40mm Diameter

1996 – 1999 MA (Design) UoB



Yellow brooch, 1999
Silver and enamel
70mm Diameter

Photo tools, ink on acetate

"In today's world, for the first time in human history, the fleeting and transient, the throwaway and ever novel, and the virtual or mediated predominate over what is lasting, substantial, and 'real' or 'true'."

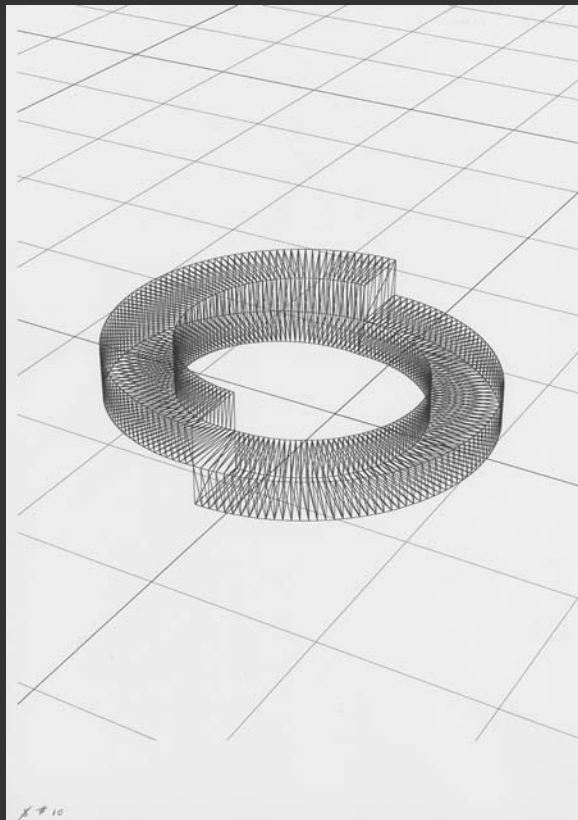


Photo Frank Thurston ©

Ellen Dissanayake, 1999

'Hands and Minds' Peter Dormer lecture series, Royal College of Art.



Orbit Ring, 2001, S.Bottomley

CAD drawing and cast silver ring
from rapid prototyped model

The inspiration for this project was '2001, a space odyssey', the classic film produced and directed by Stanley Kubrick with the co-written screen play by Arthur C Clarke.

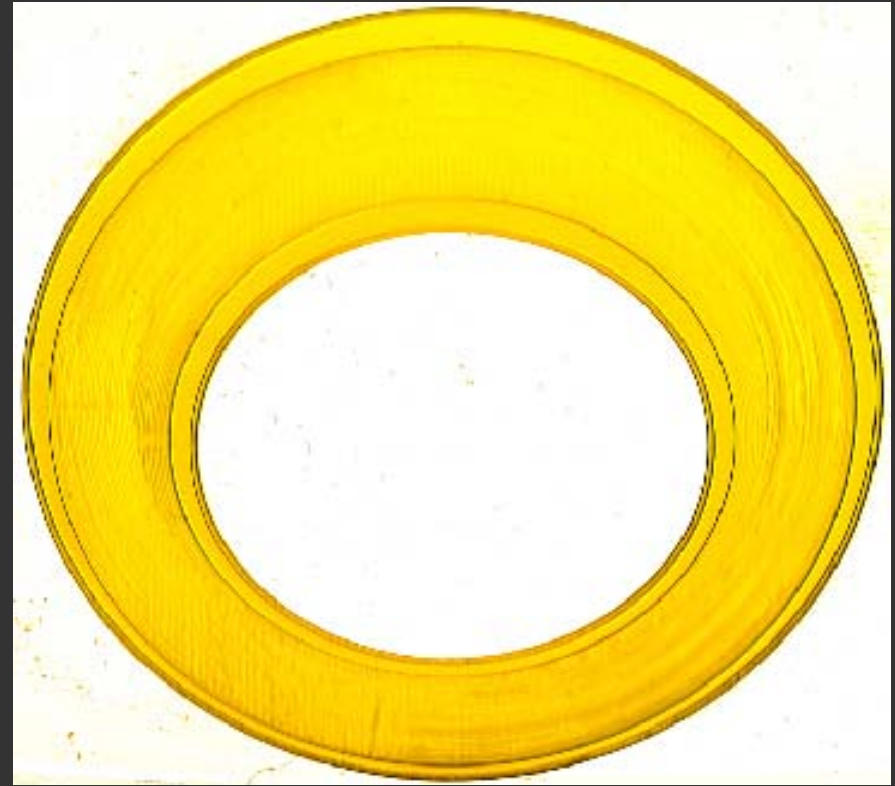
The choice to use the computer to both model and fabricate this object was in keeping with the scientific 'high tech' feel of the film. (HAL, the Jupiter missions controlling computer, was after all IBM's name with all the letters displaced by one character)



2001 Bangles. Tinted Polyurathene, rubber and Aluminium



2001 Medal Bronze 66 mm Diameter CAD/CAM
(The British Museum Medal & Coin Collection)



Profile of halo from the early Renaissance painting by Giotto of St Francis

RCA Project 4: Halo

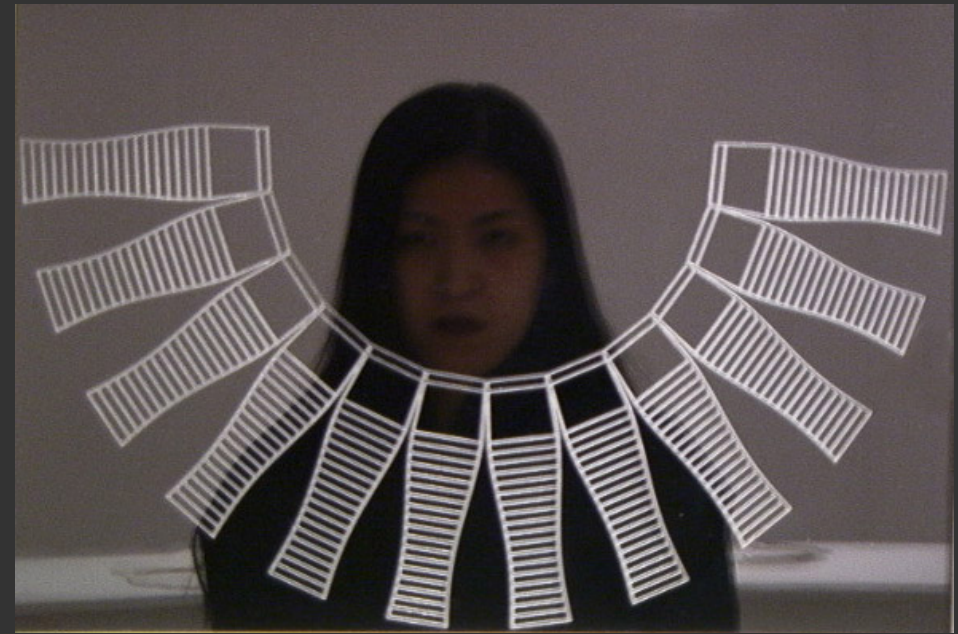
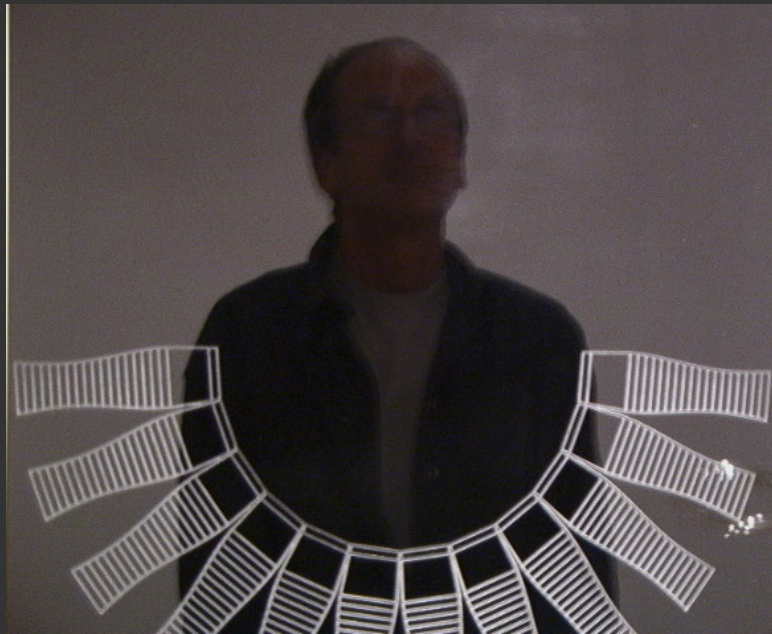
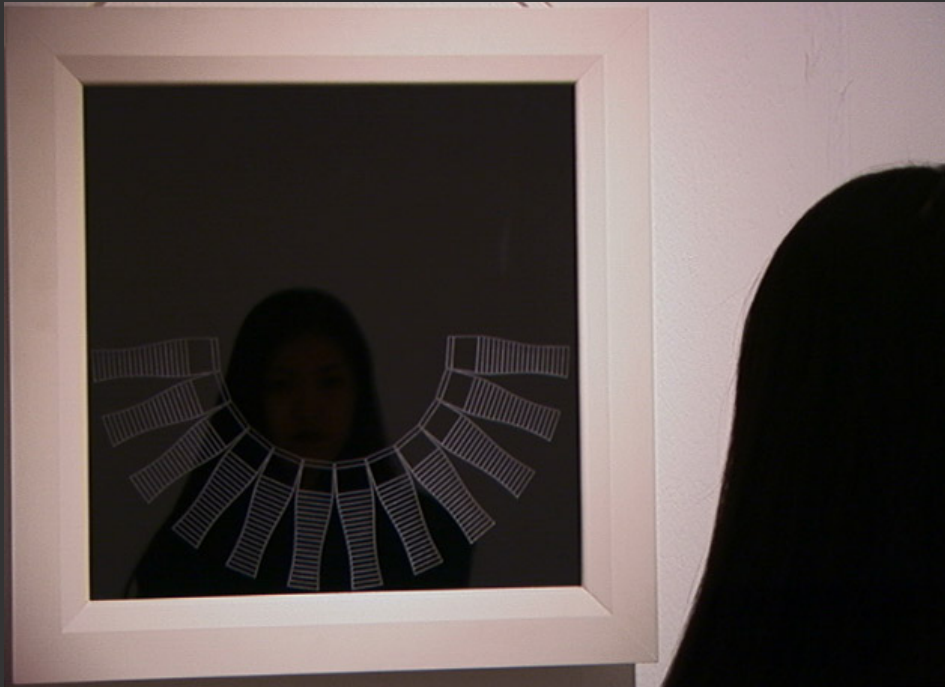
A Halo is a virtual piece of jewellery, seen but not tangible, and this combination is evocative of the digital design process.

I wanted to combine the digitally developed photo etching techniques I had previously developed within my MA research with the possibilities offered by current CAD/CAM research. Working from the 2D digital information scanned from the Giotto painting I was able to complete the Halo, increase the perspective and then use the new 2D Halo information to machine an accurate negative depression in a sheet of perspex and create a digital design to be etched photographically on silver. It is important not to become blind to the integration of other simpler existing tools and technology in working practice and not to become exclusively obsessed with one modern technology.

This was a useful piece in which to mix techniques. Although the piece could be made without digital technology, the application of CAD/CAM was appropriate at certain stages to facilitate the accurate design and development of the idea.



Top: Final montage of photo-etched silver halo and digital CNC work



2004-2007

Craft practice is undergoing a revolution. Hybrid practices are blurring creative boundaries - not just between art, craft and design - but between craft, performance and film. New technologies enable makers to integrate digital and hand processes ¹

(Press, 2004)

An argument is often made that working with tools capable of such precise repetition leads to the creation of objects that are rendered sterile due to their unnatural perfection. Is this at odds with the philosophy of a craft discipline that strives for perfection through a precision of making?

It seems the potential CAD/CAM holds to achieve perfection is not only a factor in the choice to use it - but also in the mistrust it engenders ²

(Bottomley, 2004)

1. Press, Mike 2004, 'Challenging Crafts', conference introduction Gray's School of Art, <http://www.challengingcraft.org> , ISBN 1-90108583X
2. Bottomley, Stephen & Goodwin, David, *Something Old –Something New, the marriage of digital craft,* Challenging Craft' Conference, Gray's School of Art, Aberdeen

2004

February 2004
First visit to Museo Fortuny
Tour & meeting with museum
Director Silvio Fuso

November 2004
Working visit to Museo Fortuny
Work with textile collection curators,
Archive &
Digital photography



Over a three-year period, Bottomley has conceived and made work which falls into three clear groups, each based around specific materials or processes and all linked to the patterned textiles of the Spanish designer-maker Mariano Fortuny⁴

4. Coatts, M, *Tech-tile*, Catalogue introduction, Musei Civici Veneziani and Sheffield Hallam University, 2007



Photos Stephen Bottomley ©

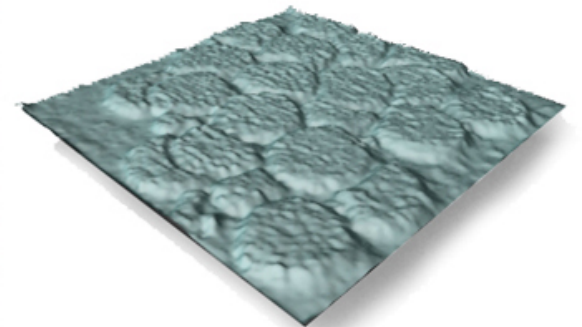
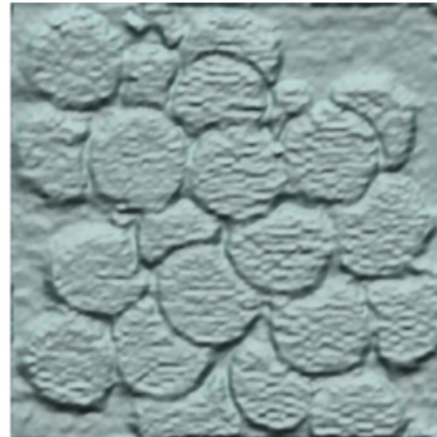
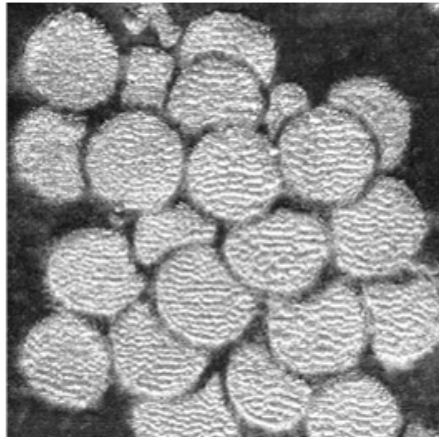
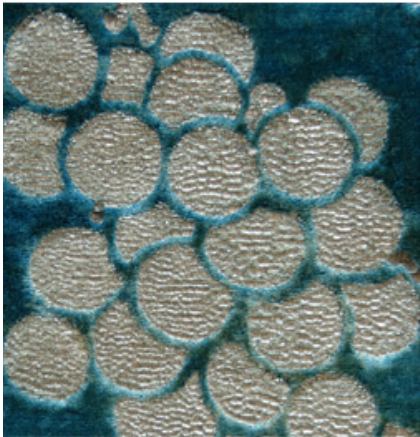
2005



Research with scanners and
reverse engineering work at
Sheffield Hallam
Tool making & photo etching tests



Computer-aided technologies, digital 3D scanning, rapid-prototyping, reverse-engineering, photo-etching and laser-cutting is applied to transfer texture and form from textile to metal and plastic, building geometric motifs with computer aided design and manufacture, (CAD/CAM), as wearable contemporary jewels



Digital images and techniques such as 'displacement mapping' provided a visual 'user friendly' interface link between the textile and computer aided design

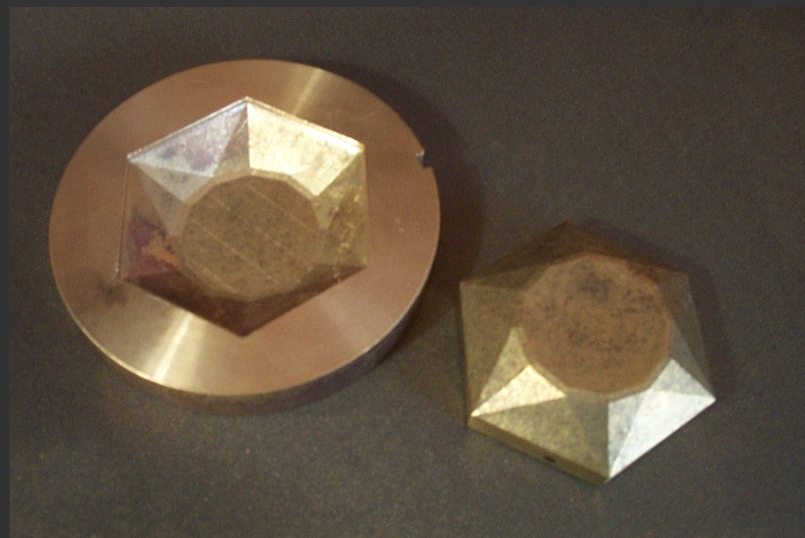
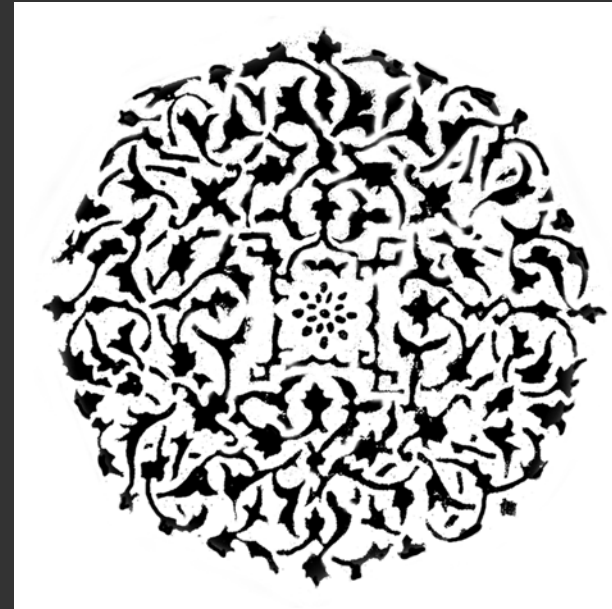
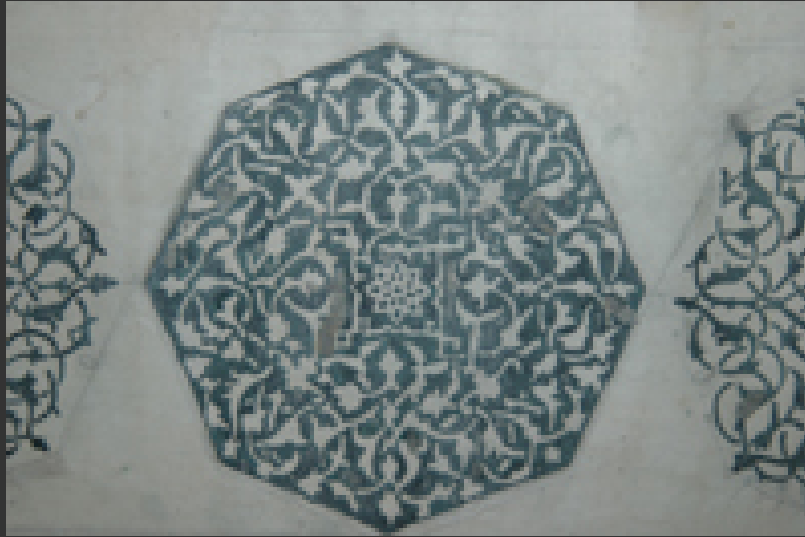


Euclid pendant, 2006
Silver and crocheted cotton
cord
Height 64mm x 24mm x
22mm
1 of 2

I had been inspired by Fortuny's design process and printing techniques, which included discovering examples of his use of photography and the patented bichromatic process for printing with a photosensitive gelatine materials

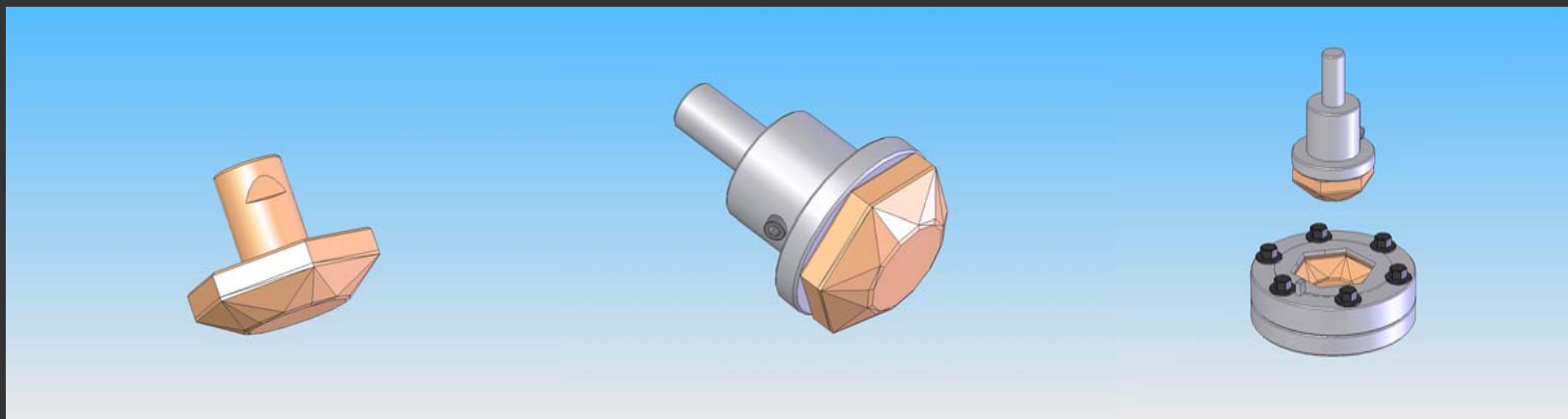
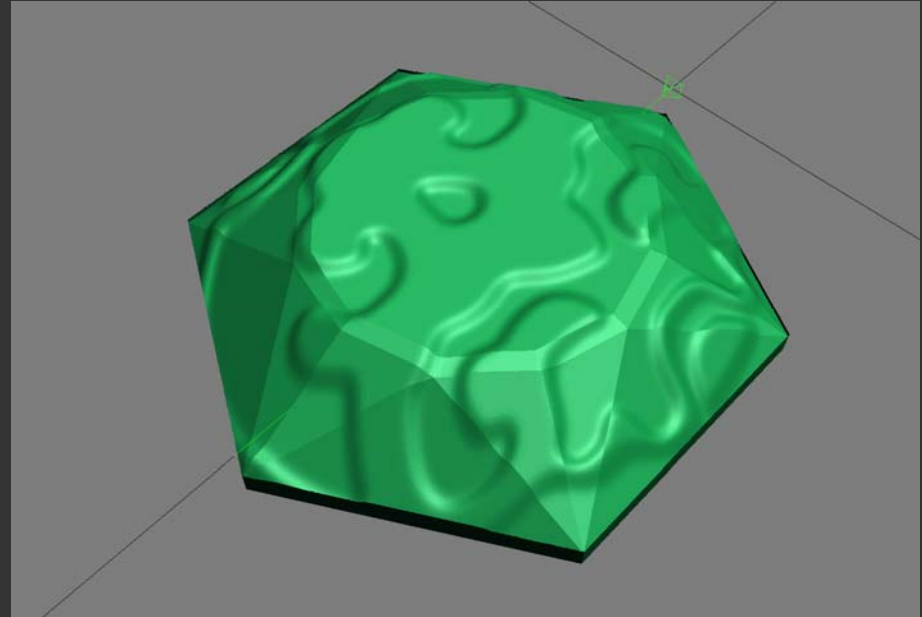
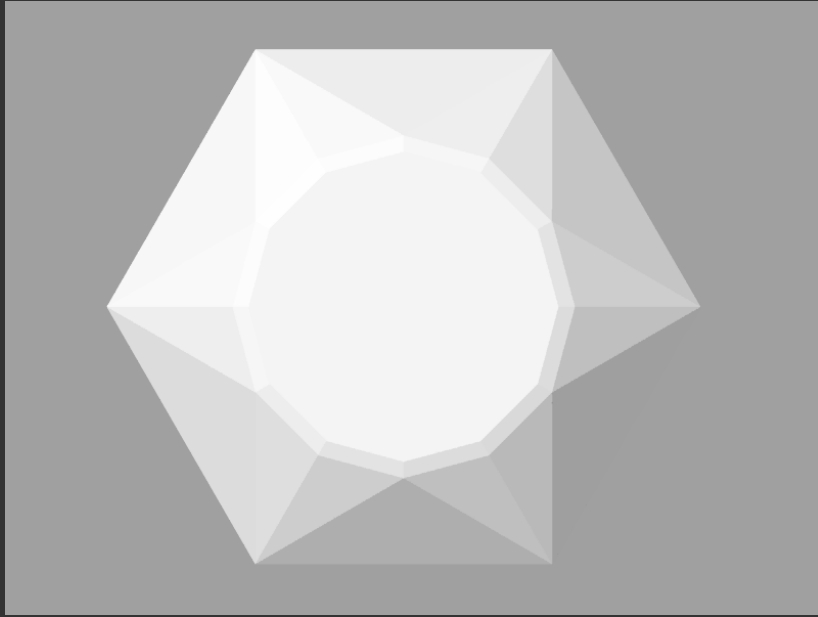
Photos Stephen Bottomley ©





Re-working Fortuny's own mono-chrome print *Matrici* as filigree designs for photo-etching

Photos Stephen Bottomley ©



Reverse-engineered geometric gem structures for press forming photo-etched silver sheets



Matrice de Stampa, early 20th
Century Fortuny, stencil, gelatin



Photo-etching artwork, 2006



Etched silver and enamel, 2007



Etched silver and enamel
pendant, 2007

Matrici transformative process

2006

June 2006 first visit to
Enamel research centre
UWE Bristol



October 2006

'Matrici' enamelling
Enamel research centre
UWE Bristol



Enamelled filigree silver *Matrici* pods, University of the West of England enamel research centre



Enamelled and slumped silver test pieces

A by-product of his research has been a heightened awareness of the visual and tactile properties of textiles

Photos Stephen Bottomley ©





Matrici neckpieces
Silver & enamel
2006

Photos Stephen Bottomley ©



Matrici pendant, 2006
Silver and enamel
1 of 3
70mm Ø x 20mm depth
Photo: Charles Colquhoun
Model Katie Hill



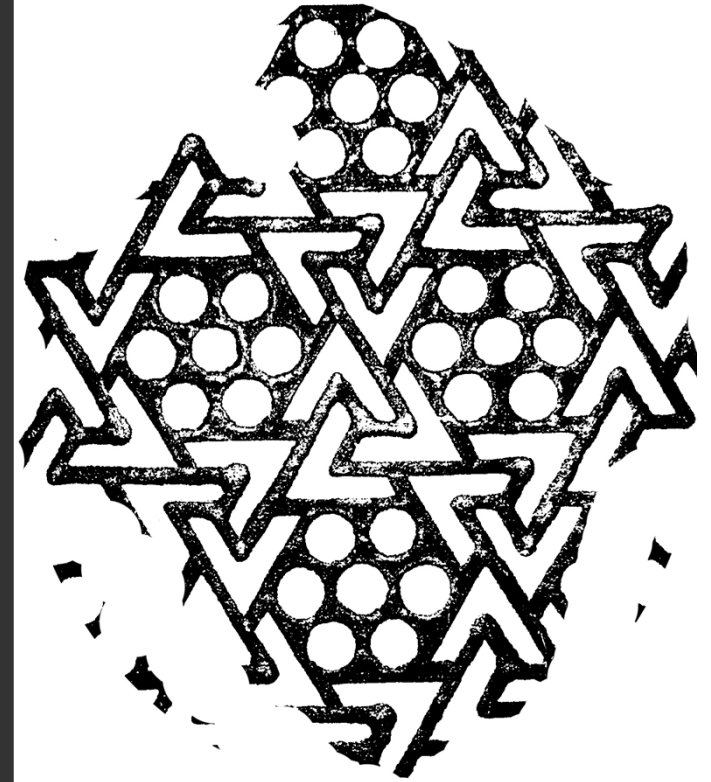
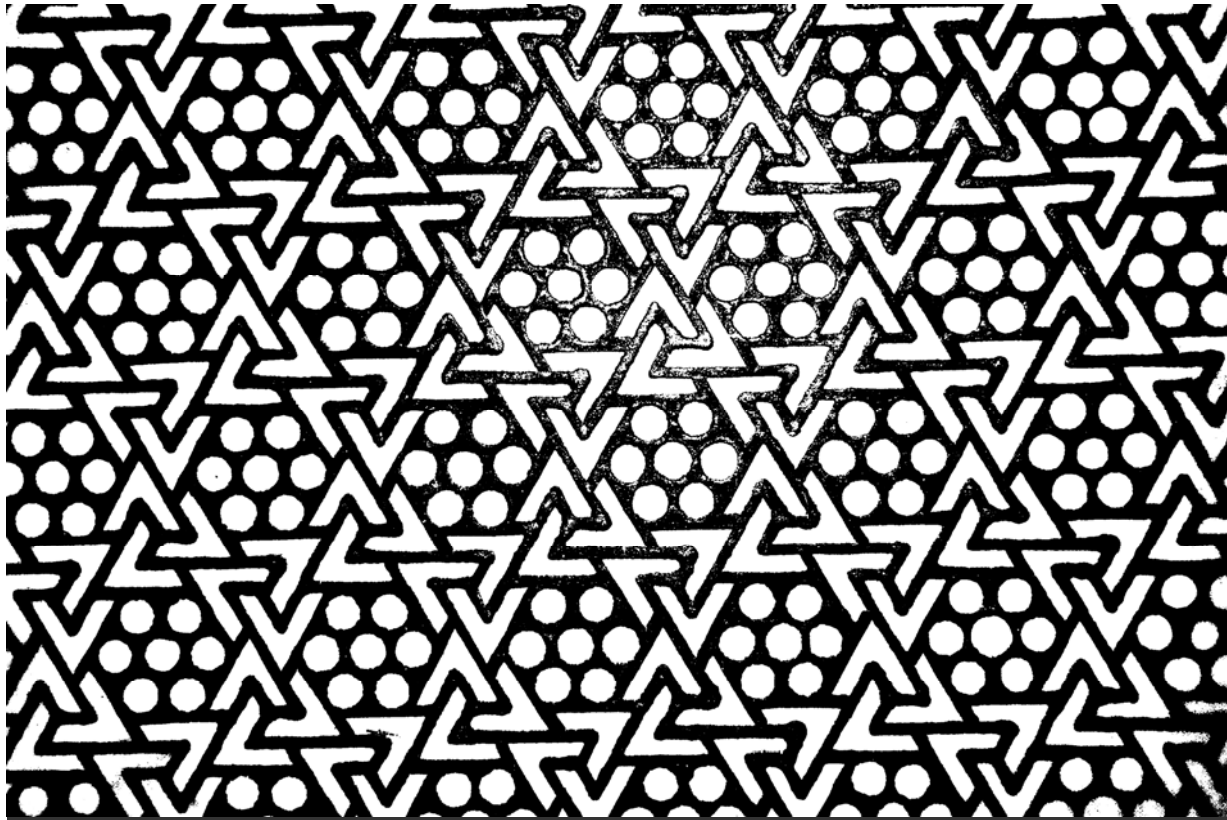
2007



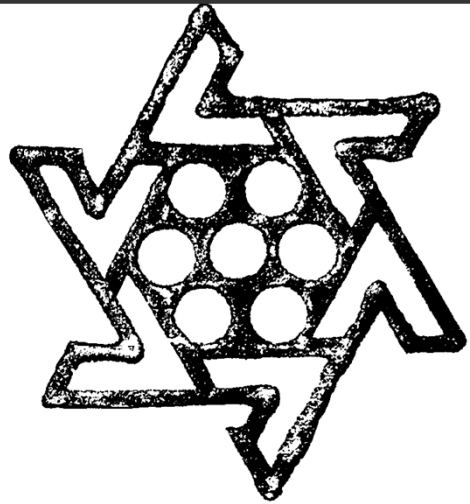
laser colouring- Manchester University
collaborative Titanium 'Tech-tile' bangle
jewellery work

Laser cutting & Electro-forming -Sheffield
Perspex and silver 'Drape' neck pieces
Laser cutting -Lincoln, coated steel for
enamelled 'Star' brooches and neck
pieces. Neck pieces developed for 3rd
visit to enamel at UWE Bristol





Tessellated geometric patterns from the Fortuny archive, Palazzo Fortuny



Isolating the pattern for conversion into a digital CNC path and creating the laser cut-path



The preservation of the asymmetry of Fortuny's patterns in the finished jewellery is particularly effective and clever. The effect of the small imperfections on the metal (purposely achieved by Fortuny in his fabrics as a result of great experimentation) permeates it with an almost undetectable sensation that eliminates the possibility of a trivial relation between materials and drawing⁵

5. Fuso, Sylvio, *A contemporary tradition*, Tech-tile, Musei Civici Veneziani & Sheffield Hallam University, 2007



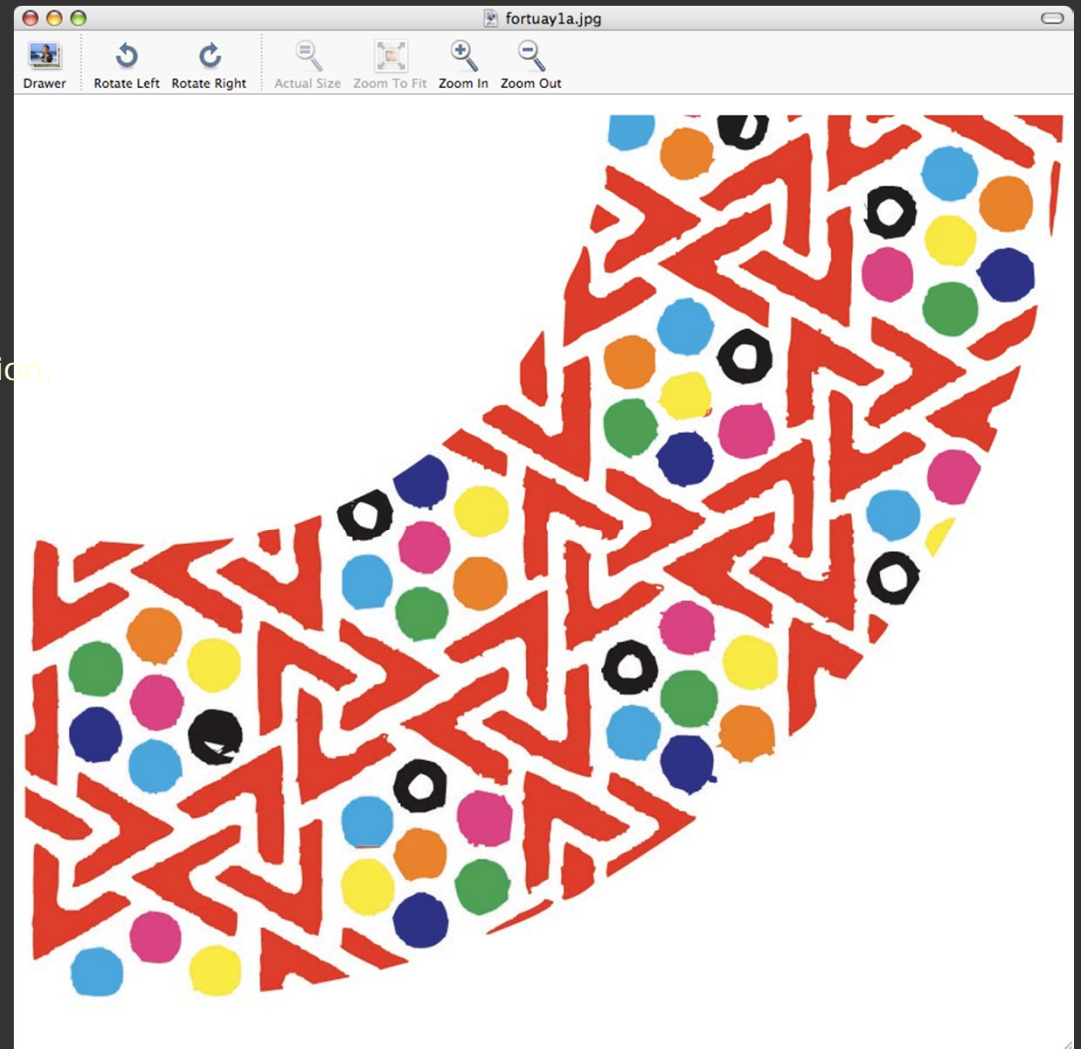
Kalsang Shoba, Walking with Scientists exhibition,
Manchester Museum, 2007

Collaborative work involving the
titanium colouring techniques
researched by Sarah O'Hana and
Kalsang Shoba at the University
of Manchester School of
Mechanical Aerospace and Civil
Engineering

Photos Stephen Bottomley ©

Tech-tile bangle artwork for laser-colouring titanium,
2007

Photo: Kalsang Shoba



Tech-tile bangle

Titanium

135mm Ø



It in blue, browns and gold captures a hand-
ity and bears a close relationship to the
nal source





Drape series necklace
models 2007
Laser cut acrylic

Photos Stephen Bottomley ©



#1 Neckpiece *Drape series, 2007*
Silver and acrylic
Ø425mm

Model Alison Counsel
Photos Stephen Bottomley ©



#3 Neckpiece

Drape series, 2007

Silver, gold and acrylic

One-off piece

Ø 299mm

Photo SEB

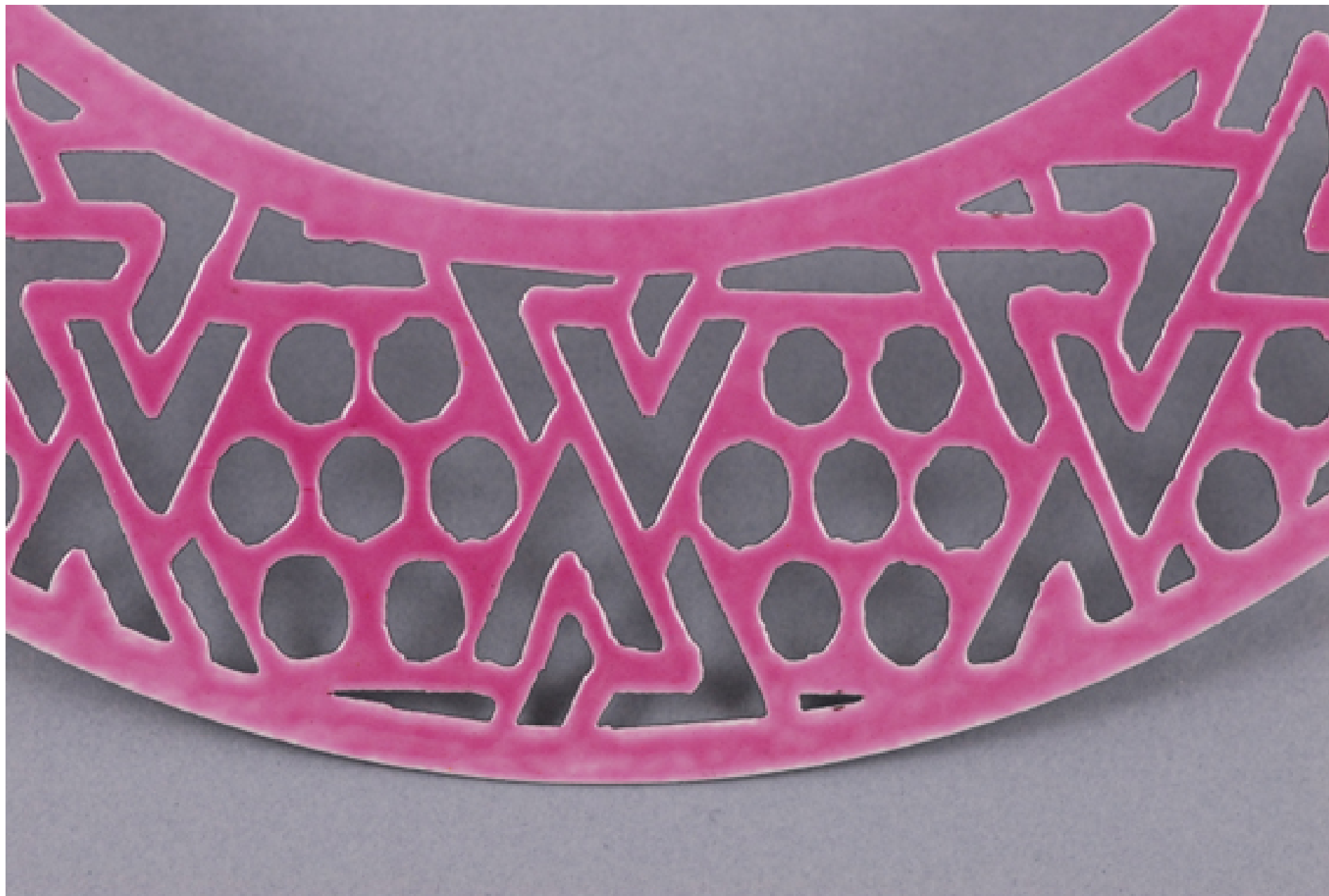
Model Alison Counsel



Yellow Oval necklace *Drape series, 2007*

Steel and enamel
330 x 265

Photos Stephen Bottomley ©



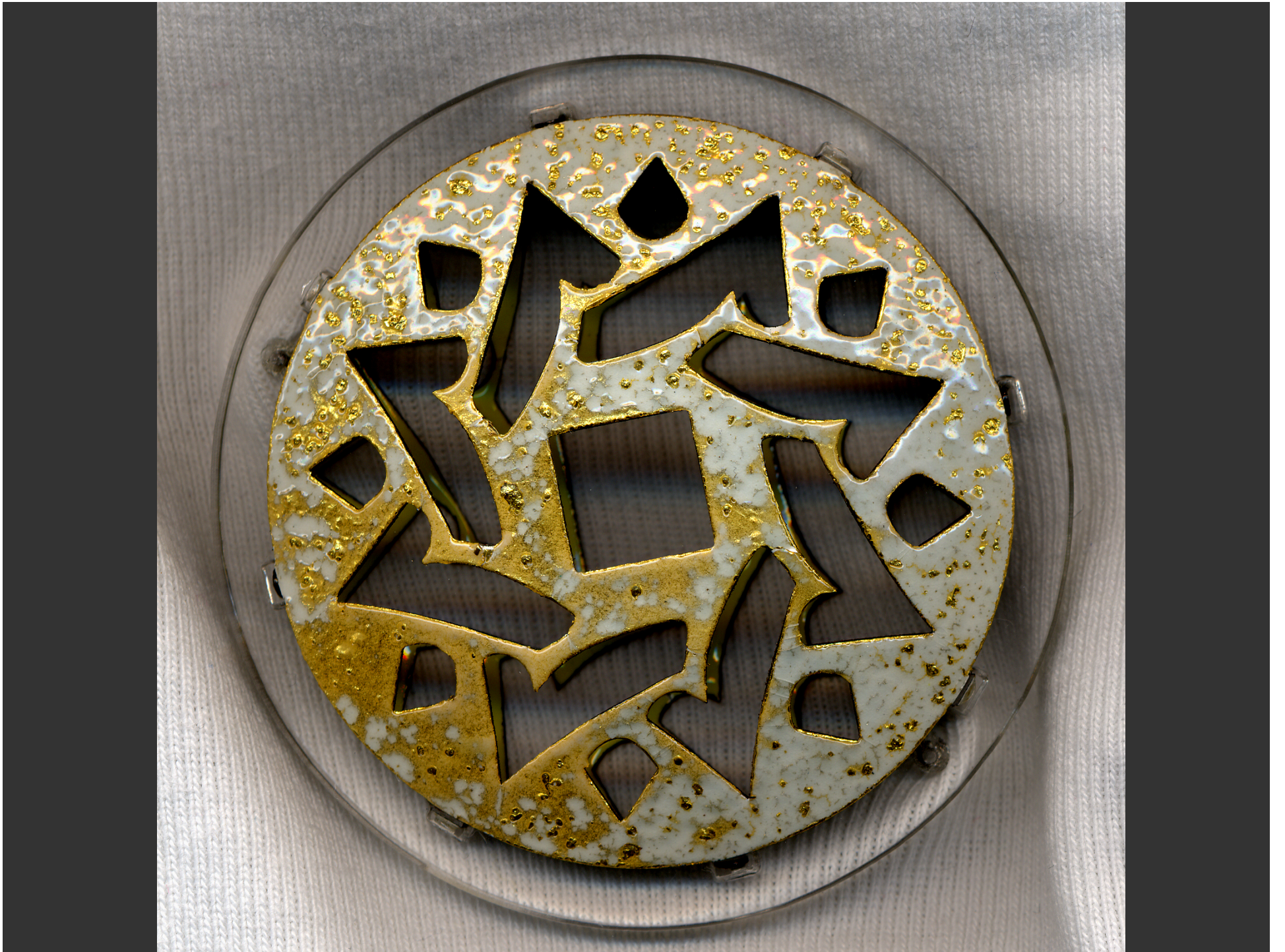
Hot pink neckpiece (*detail*),
Drape series, 2007
Steel and enamel
330 x 265

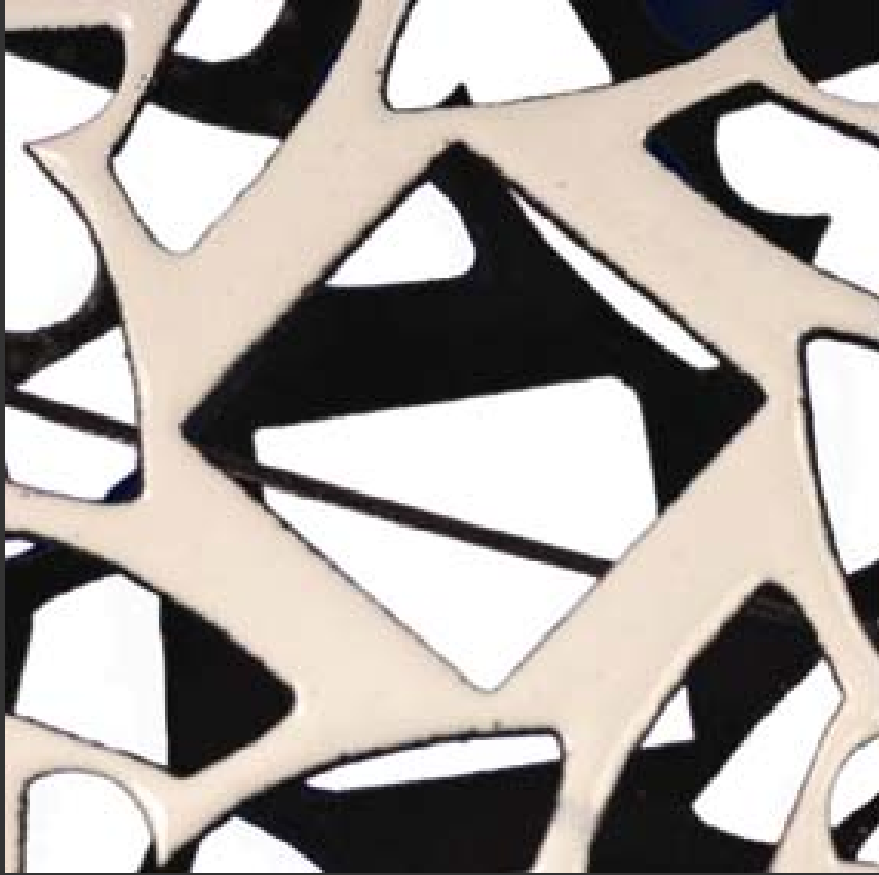


Star necklace, 2007

Steel, acrylic and enamel

Beads \varnothing 60mm x 15mm depth

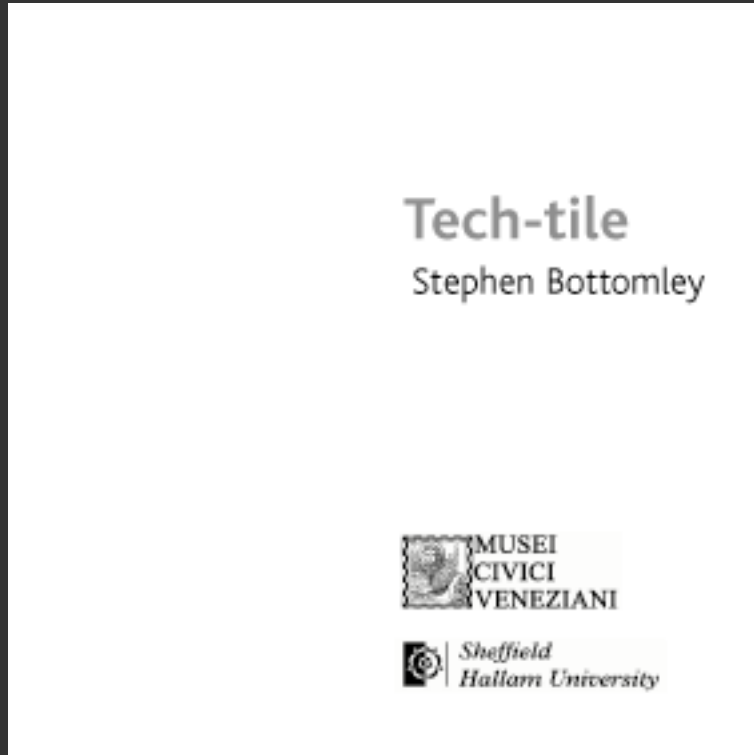




Right. Fortuny's study at the Palazzo Fortuny
Nov 2004

Below: Tech-tile Catalogue, 2007

2004-2007



Over the past six years Bottomley has championed the principle of sensitising the aesthetics of CAD by reflection on hand-process, embracing computers as a tool for creative freedom, rather than perfection³

3. Bottomley, Stephen, *Tech-tile: new work by Stephen Bottomley from the textiles and patterns of the Fortuny Museum, Venice*. Paper for CREATE Conference, 'Managing Colour in Digital Processes & the Arts', Bristol School of Art Media and Design, University of Western England, 2007

Acknowledgements

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Nick Dulake, Design Futures
Jim Grainger, City College Manchester
David English, Micrometric Ltd

Catalogue

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Jeremy Brook, Graphic Ideas
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Maria Cristina Bergesio – Historian
Charles Colquhoun – Photography
Katie Hill and Alison Counsel – models

Enamelling

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Titanium

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