Between Digital & Physical

Some thoughts on digital printmaking.

Paul Coldwell
Professor, University of the Arts London
p·coldwell@chelsea·arts·ac·uk

The Physical

In the early 1950's the American sculptor David Smith, as preparation for a lecture, listed a series of questions to students to test their dedication to being artists. It is a document of its time, in terms of the demand for a total heroic commitment to art, which characterised the attitude of that generation of American artists. This position is delivered as a credo in the very first question.

Do you make art your life, that which always comes first and occupies every moment, the last problem before sleep and the first waking vision?[i]
Whilst this question provides a valuable insight into understanding the New York School of artists and their desire to break through to a new form of art, as *to start from scratch, to paint as if painting never existed before*,[ii] as Barnet Newman declared, it also demands, by implication a physical engagement with practice. Developing these ideas, Smith goes on to propose the following questions

Do you polish up the work beyond its bare aesthetic elements?
Do you add ingratiating elements beyond the raw aesthetic basis?
Are you afraid of rawness, for rawness and harshness are basic forms of U.S. nature, and origins are both raw and vulgar at their time of creation?[iii]

While I would question the attribution of *rawness and harshness* as being specific to the USA (throughout the world the majority of people seem to have to struggle against these forces) there is something in these questions that seem particularly relevant to the negotiation involved between the artist and the computer when making a digital print.

These questions of Smith's touch on concerns that I have felt since I first started using the computer in 1994. These concerns are; to what degree can one retain an impulsive fluidity when working on screen? What is the relationship between the onscreen image and the final print? How to keep the functions of the computer within control so that it is the artist's imagination and willpower that drives through the image to completion, rather than depending on functions to take over the aesthetic decision making? Finally, how to make the final image specific in terms of scale and materiality?

In the excellent book *Evocative Objects* edited by Sherry Turkle[iv], a series of essays read as testimonies to the complexity of our relationship to the objects that surround us. As an artist whose work is centred on ideas of still life,[v] these essays had a particular resonance for me. One particular essay *The Archive* by Susan Yee describes the physical and indeed ceremonial act of viewing a particular large drawn plan by le Corbusier for his un-built *Palace of the Soviets* in the archive at La Foundation le Corbusier in Paris. In this beautifully written essay she articulates the emotional response to viewing this large architectural drawing and the importance of having to travel to a specific place to view it. (I have often considered that this anticipation of a pleasure and the journey involved in seeing something tied to place). She writes about the almost ceremonial unrolling of the drawing before viewing, of the extraneous marks which evidence it's history and use and of seeing the drawing as a total experience of the senses in time and place.

At the end of her visit she was told that the drawing had now been digitalized and could be viewed on the website, meaning that she could now view it at any time, anywhere and for as long as she wished.

…that day with the Curator was the first time I began to think about the transition from physical to digital. The evocative object, the le Corbusier drawing in both its physical and digital form, made me wonder how automatic it had been for the Curator to put the emotion of the archive out of my mind, how easy it was to trade the value of touch and physicality for the powers of digitalization.[vi]

Within printmaking, an activity central to my practice as an artist, there can be an equivalent premise that an image can move from analog to digital without change or loss. This is compounded by the fact that increasingly we are viewing artworks on screen, in a digital state, minimizing the difference between media, and focusing on image over the physical object. The digital print is both a tool for reproduction as well as a medium for specific art production. (This ambiguity is not unique to the digital, as can be seen in previous technologies where for example a reproduction of an image from Ed Ruscha's books e.g., *Twenty Six Gasoline Stations* uses the same technology of the photo-litho as both its formal language but also the language through which it is reproduced). Is the issue for artists the difference between something made and fixed within its own language and that of translation or reproduction?

For Susan Yee, what is made evident is the loss of physical experience that she feels, as the object, in this case the manuscript, moves from actuality to a digitalized image. Whilst it would be foolish not to accept the benefits of making the image available online, it is equally foolish to think that the experiences are equivalent. The digitalized document presents on one level all the factual data, but on an emotional level, the manuscript is cleansed. If artworks, within their conception, address their audience in a particular and varied way, why is it that there can be an emotional charge when viewing an actual artwork as apposed to a catalog reproduction?

The Digital

Despite the richness of painterly effects within software programs, the artist James Faure-Walker reminds us that

The digital is different in a fundamental sense; it is in a different category. Even if it is a perfect simulation, it is still a simulation.[vii]

The idea of layering, which underscores most graphic packages, is a virtual one. When the image is outputted through inkjet, the image is flattened. There is no differentiation across the surface, no greater deposits of ink where layering has occurred, and no build up of surface. It is, as Faure-Walker says, a simulation.

Artists go forward and backwards in history to find ways of working and to find models that help them understand contemporary issues.

Why, when you have tasted the digital, would you want to go back to old world ways? Well perhaps you preferred the real thing after all and you wanted to figure out how to incorporate the new and the old, a combination that somehow makes something interesting out of the difference.[viii]

For me, it has been useful to look to the decorative arts as a means of understanding the digital. The technique of mosaic is one way of picturing this digital surface. The mosaic image is made up of small ceramic blocks, each unit placed side by side. There is no *on top* or *behind* as was possible for example in oil painting. Each element has a single value, a designated colour, tone, hue, its meaning only understandable through its reading alongside all the myriad of other units.

Flat, flat, flat; stone, stone, stone. Yet after you stare for a while, it works into a lion's head. And, just when you're enjoying looking at it as a lion's head, and you want to see it as an image, it flattens out again into stones, stones, stones; floor, floor, floor. And it's that tension between the distribution of marks on a flat surface and what it becomes, and then it returns to the tension between the artificiality and the reality.[ix]

The solitary ceramic unit is transformed, as one steps back and sees the relationship of the single unit to the whole picture. The meaning of each unit is dependent on its place and its planary relationship with its neighbours, as with the pixel across the surface of the screen, each pixel accorded a value, side by side with its neighbors, each equal in value. In my prints I work with this flat space and engage with this digital two-dimensional environment. But there is another issue for me that return to those questions of David Smith:

Do you polish up the work beyond its bare aesthetic elements?
Do you add ingratiating elements beyond the raw aesthetic basis?[x]

It is so easy on the computer to relax and let functions take over. Never before have artists worked with a technology that allows for so much change with so little physical investment. The risk taking, which Smith alludes to, was based on technologies that could only go forward and where gesture was tied to time, materiality and the physical characteristics of the artist. How is it possible to drive a work forward to a conclusion when at every stage there is an infinite number of possibilities that carry no risk and when all stages can be saved, all decisions retraced?

Case Study *Untitled-Jim*

Digital technology has played an increasingly important role in my printmaking practice both in terms of works completely resolved and printed digitally, and works where the digital has allowed a revisiting of more traditional print technologies. Much of my work has extensively used the half tone dot as a matrix across the surface to bring together the languages of photography and drawing. I had become interested in the half tone dot both as a device across the surface and as a screen through which to look through. In traditional print processes, the way a photograph could be translated into a printed image was through half tone and whilst in early times, the dot could only be generally modified, i.e. either increasing or decreasing the overall quantity of dots. Using the computer, however, I was able to modify each individual dot if necessary and consequently treat the photograph with as much fluidity as if it were a drawing. Of course this focused my attention on what was happening across the surface, a fact that was heightened by continually zooming in and out throughout the making of the image. I also found the structure of the half tone dot could be used as a structure to hold a drawing, pinning it to the grid, which helped prevent my drawing from slipping into what I would consider to be expressive pretensions.
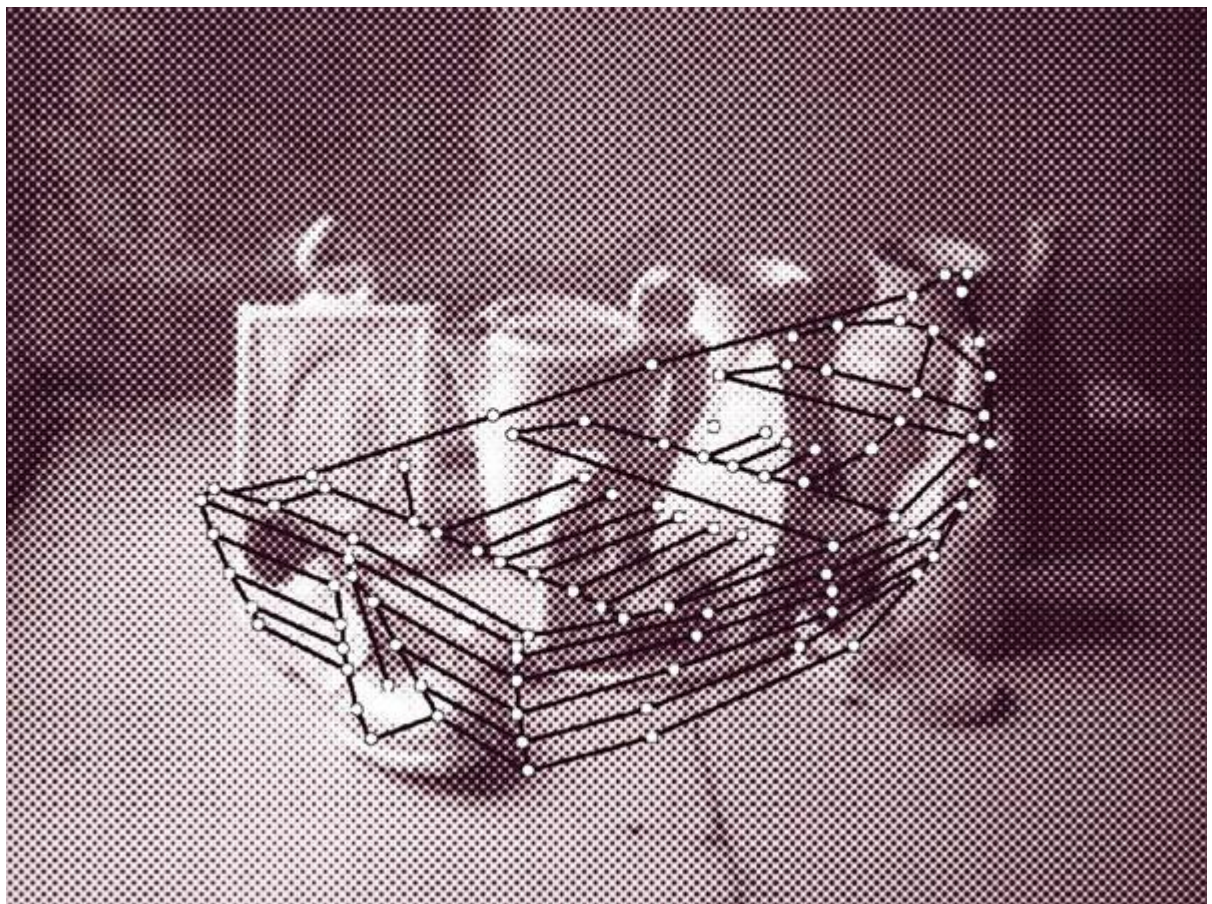

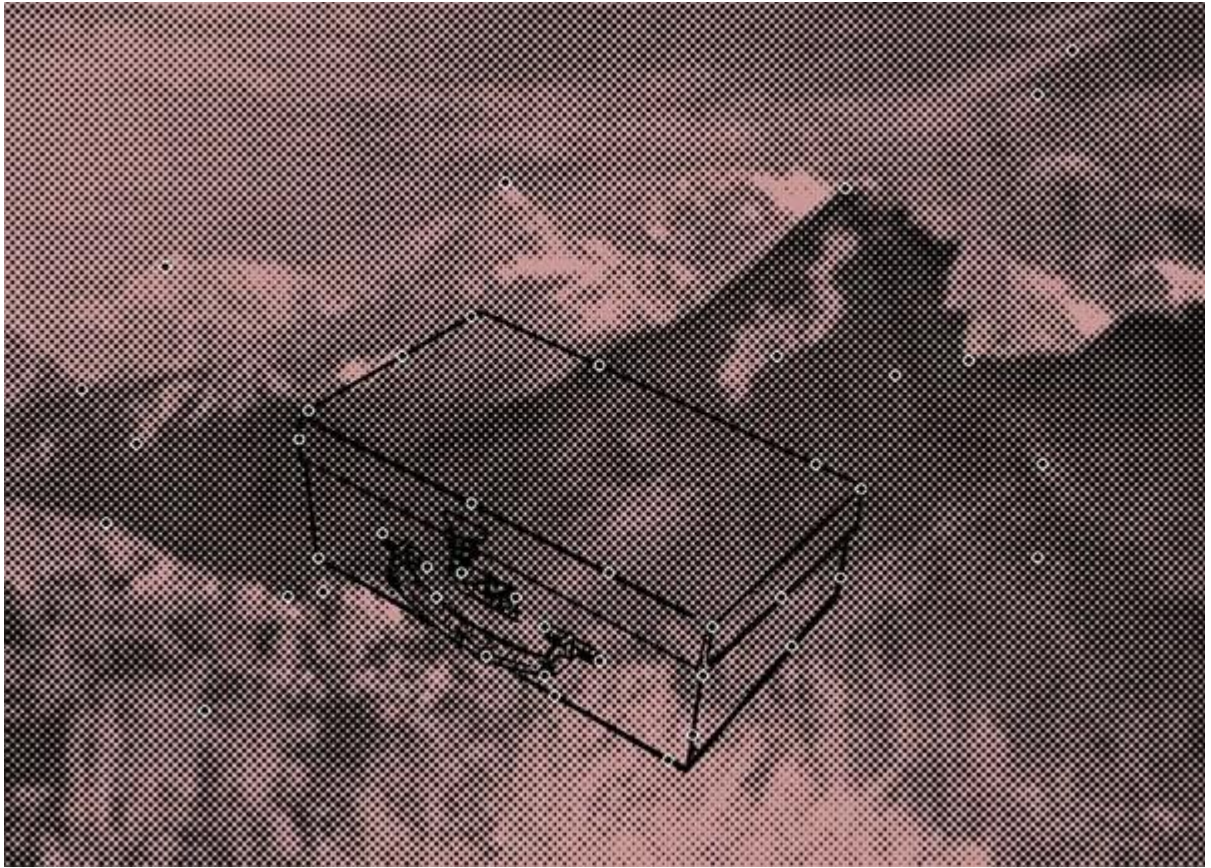Fig 1 *Constellations-Boat* 2004 54 x 62 cms Inkjet.

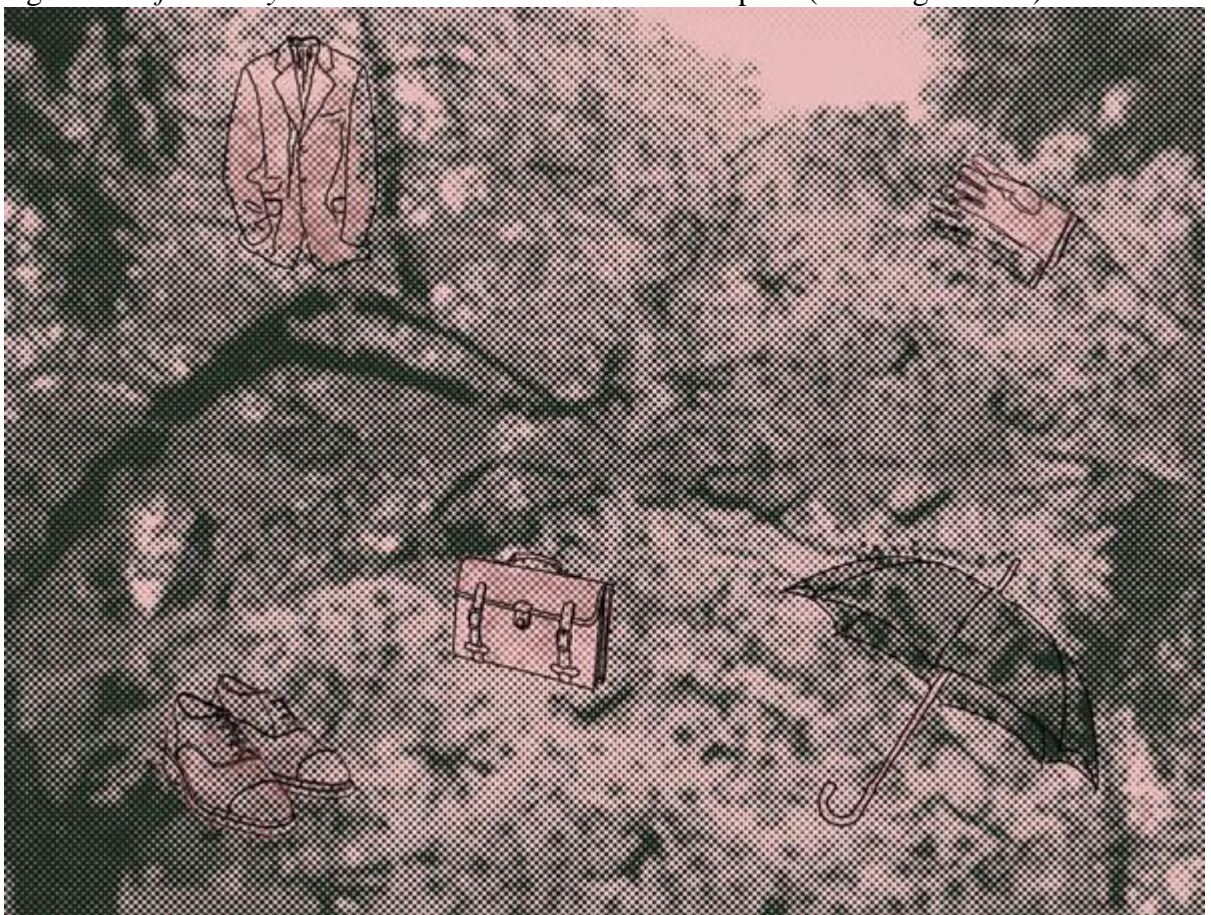Fig 2 *Sites of Memory- Suitcase* 2007 65 x 75 cms Screenprint (from digital files)

Fig 3 *Man & Nature-Jacket 2008* 65 x 90 cms Inkjet

I want to consider one print *Untitled-Jim* that I have recently made as part of a body of work for an exhibition at Kettle's Yard, at the University of Cambridge, UK and as a contribution to an AHRC funded research Project, *The Personalised Surface within Fine Art Digital Printmaking*.

In 2007 I was invited by the Director of Kettle's Yard to make a body of new work to be installed alongside their permanent collection. The resulting work formed the basis for a solo exhibition**;** *I called while you were out* in September 2008[xi]. Kettle's Yard [xii] was founded by Jim Ede and is a house which both preserves his collection of modernist art including Ben Nicholson, Brancusi and Gaudier- Brzesca alongside found and gathered objects which propose how art and life could be brought together to form an aesthetic unity. Working with the collection and knowing that the work would be displayed alongside the artworks and artefacts highlighted for me the need to consider each piece of work as a physical entity. Digital technology would have to share space with older technologies including casting, painting, drawing and lithography.

Throughout the research for this project, I had a photograph of Jim Ede in my studio alongside other photographs and drawings and it seemed fitting that it should feature at some point in one of the resulting prints. Towards the end of the project I began to explore ways of using this photograph.
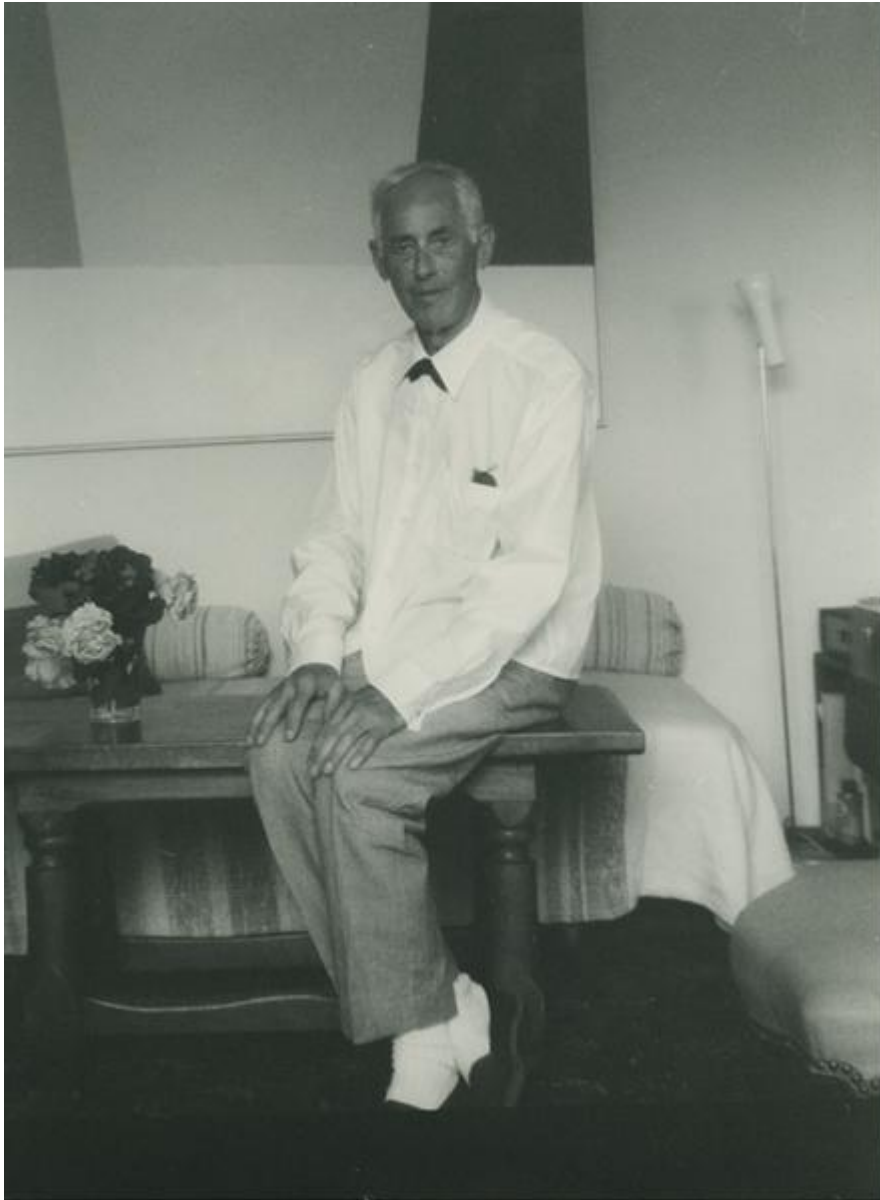
Fig 4 Photograph of Jim Ede reproduced with kind permission of Kettle's Yard.

Working digitally I have become increasingly aware that, once imported, all elements, whether from a drawn or photographic source, become equally malleable. The photograph is freed from its specific chemical fixitivity while the drawing no longer carries a legacy of time and gesture. Both languages previously separated by chemistry, materiality and time, are brought together, into a *digital soup* where time can go backwards as well as forward and that the image is no longer tied to precise physical dimensions or characteristics.

With digital you can go forward and backwards which is like being in a permanent present, re-entering the history of a piece and going forward which hasn't been possible with other printmaking processes. Peter Kennard [xiii]

For the artist this is both wonderful and problematic. In this new print I wanted to continue to work with the languages of photography and drawing, whilst dispensing

with the half tone dot and develop a print more focused within the language of drawing and line.

I began by considering the whole photograph of Ede as the starting point but quickly it became the silhouette of the figure that held my interest.

Fig 5 Digital Tracing

I was interested in suggesting that the drawing of the figure was a trace, a kind of semi permeable membrane through which elements could pass through. Having dispensed with the other detail of the photograph, I wanted something that would function as an overall texture, a landscape onto which I could lay the figure. I found this in another photograph, incongruously, one that I had taken of a shrub at the side of a dirt track.

Fig 6 Reference photograph

What attracted me was it's linear quality, suggesting an almost molecular structure that I felt could provide a framework or skeleton to build my image around. I felt that this found structure could serve to replace the more mechanical half tone from my previous work.

From the outset I began to attribute the image a specific size and dimensions. I printed out, actual size, the image so that whilst I was developing the image on screen, I was physically registering it as a printed image with an exact size. It is particularly important for me to establish an actual size since my work plays on the way an image is read and the manner in which elements can be hidden within the surface. Without a real sense of size, decision making for me becomes completely arbitrary.

The photograph was immediately changed from colour to grey scale, emphasizing its graphic quality and further extraneous detail reduced by increasing light and contrast. I intentionally avoided the all other stylistic functions.
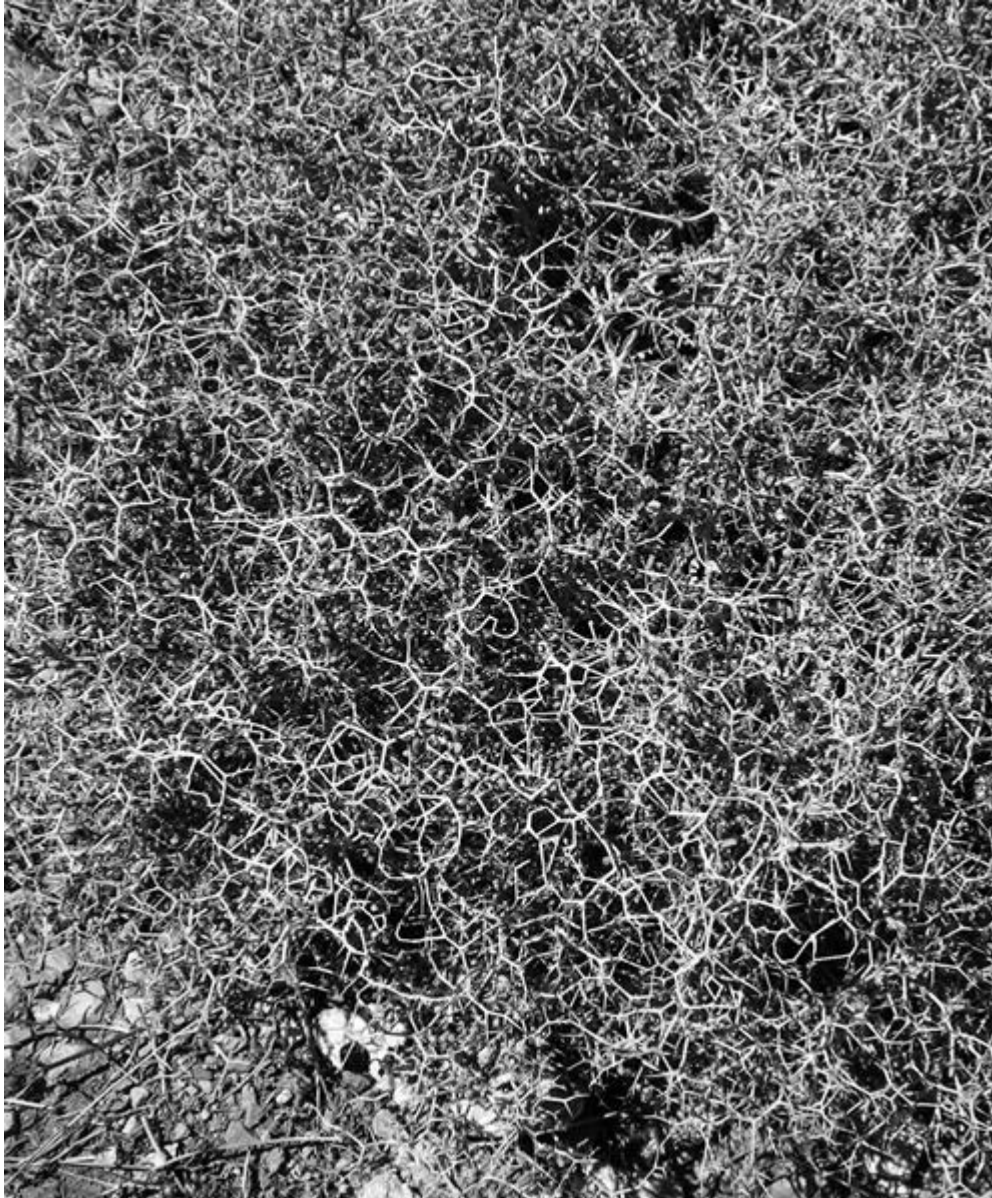
Fig 7 Photograph grey scale & cropped

I wanted the photograph to provide an abstract structure onto which I could weave the other elements. On top of the photograph I added drawn elements, the tracing of the figure of Jim Ede and a number of still life elements that one might associate with a figure, evidence of a life and work; a suitcase, a paperclip, a fountain pen, glasses.
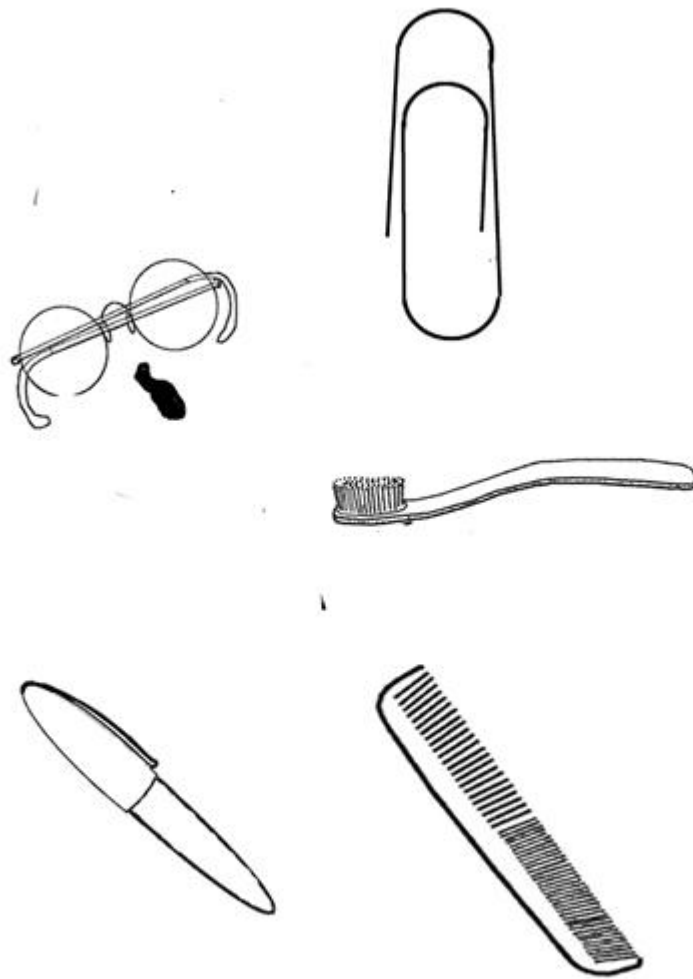
Fig 8 Still life objects- drawn in Photoshop

The process that followed was of gradually positioning the drawn elements, working in layers, one layer for each, and drawing over the original photograph to mesh the still life elements into the surface as a whole. This really becomes the essence of the work, using the flatness of the digital surface to create a web of lines that hold all the elements in place considering each element side by side. As the image developed, I drew more over the image, freely interpreting the structure of the surface, concealing the photographic with the calligraphic.

I wanted to hide the elements in the work, but not in a way to obscure them through overlay, but to graphically hide them as a memory, like those drawing puzzles where the child has to find pictures concealed within the picture. In this way I hope to engage the viewer in an active exploration of the surface. My intention is that the viewer oscillates between viewing the overall picture, and having to disregard the overall image in order to search out the hidden elements. This echoes the way in which the work was made through zooming in and out to retain an idea of the images full context. I hope to engender a dynamic relationship with the viewer where they

feel a real sense of discovery. Throughout the whole process, the image was proofed actual size and tested.
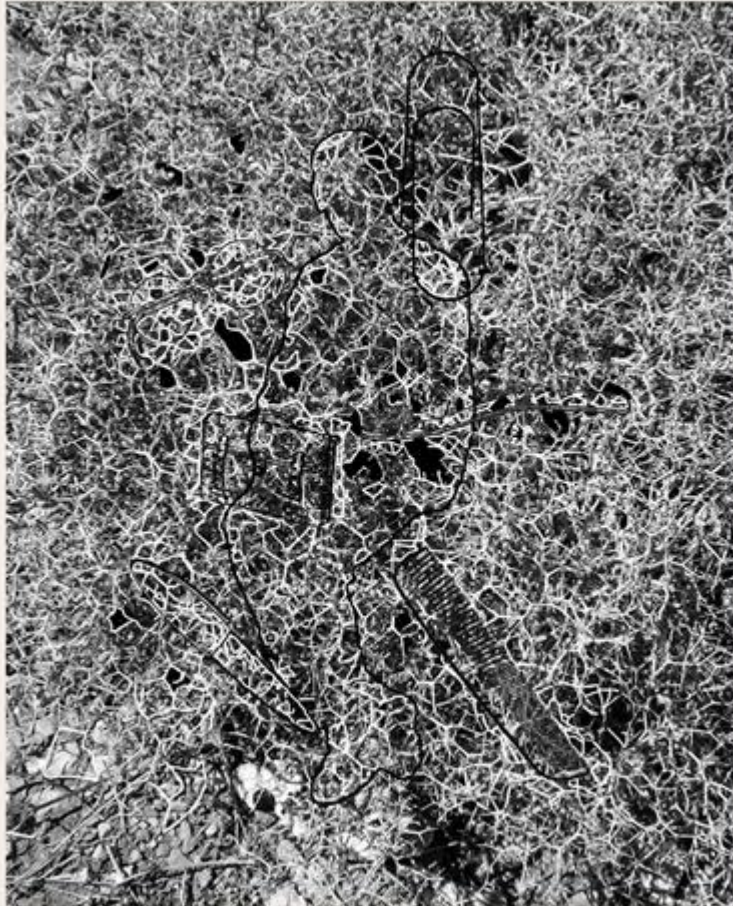The final print was further proofed using a variety of papers and profiles.

Fig 9 Final image *Untitled-Jim* 2008 40 x 30 cms Inkjet

In the finishing of the work, I once again return to Smith's questions.

Do you polish up the work beyond its bare aesthetic elements?
Do you add ingratiating elements beyond the raw aesthetic basis?[xiv]

I hope that the image just works, in that it is completed at the point when my intentions are made clear, without further embellishment. In the end, it is the image as a physical object that enters the world. Richard Hamilton, one of the pioneers of digital printmaking and an artist who has been alive to the potential of technologies in the production of artworks, succinctly endorses this priority.

In accordance with my practice of setting no limits on subject matter, nor stylistic languages of expression, I see no virtue in circumscribing the technical means of realization. The image will always be more important than the rationale of its execution' [xv]

Paul Coldwell is an artist and Professor of fine art at the University of the Arts London and Visiting Professor at the University of Northampton, UK. He is project leader for FADE-Fine Art Digital Environment (www.FadeResearch.com) and with Dr Barbara Rauch, leading on an AHRC funded research project, The personalised surface within fine art digital printmaking (www.FadeResearch.com/DigitalSurface).

All images with exception of fig 4, © P.Coldwell

i David Smith undated typescript in, Market,J, ed.,1986, *David Smith: Sculptures and Drawings* Munich, Prestel-Verlag. p 158

ii Barnet Newman quoted in Foster,H, Krauss,H,Bois,Y-A, Buchloch, B, ed,. 2004 *Art since 1900*. London, Thames & Hudson, p.349

iii see i

iv Turkle,S*,* ed, 2007,*Evocative objects; things we think with* Cambridge Massachusetts.and London, MIT Press.

v *He emphasizes the 'anti-operatic' scale of his art: the analogy he makes is with a one-to-one conversation. His intelligence as an artist overlaps with areas of interest at Kettle's Yard – the life arrested in still life – while not coinciding too neatly with them.* Ian Hunt in Coldwell,P,. 2008, *I called while you were out*, Cambridge, Kettles Yard

vi. Yee,S,. in; Turkle,S, ed, 2007,Evocative objects; things we think with Cambridge Massachusetts.and London, MIT Press p.33

vii Walker, J,F,. 2006, *Painting the digital river* Upper Saddle River, Prentice Hall p15

viii Walker, J,F,. 2006, *Painting the digital river* Upper Saddle River, Prentice Hall p17

ix Close.C,.2007,*Family and Others*, London, White Cube,p39

x see i

xi There is a 76 page fully illustrated catalogue to accompany this exhibition with essays by Paul Coldwell and the critic Ian Hunt. The catalogue is available from Kettles Yard www.kettlesyard.co.uk

xii For further details of kettles yard and Jim Ede's writings I would recommend, *A way of Life,* Jim Ede, published by Cambridge University Press

xiii Peter Kennard in conversation with the author. A full transcript can be found on www.FadeResearch.com/DigitalSurface

xiv see i

xv Hamilton,R,.1998,*New technology and printmaking*, London, Alan Cristea Gallery,p 7