



# Batik Notes

## Dye Colour to Digital Colour

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Photography by Mike Hodson

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# Design Notes 1 : Mark, Line, Texture

## Marks in Space

**Ways of interpreting the environment:** Wax resist is essentially a studio-based activity. To work from any subject matter outside the studio, necessitates the collection of visual information on location, to work from later. The information is to remind us of what we saw; and ideally should spark off ideas which we can develop through creative exploration in the studio. A variety of different ways of recording information from the environment might be necessary — detailed drawings, rapid scribble sketches, colour jottings, written notes and possibly photographs.

**Limitations of the medium:** It is when we transfer this information on to cloth using wax and dye that the complications begin. Even making a simple mark in wax on cloth involves thinking differently. A pencil mark can be any colour, but a mark in wax can only be the colour of the underlying cloth. Colour is achieved indirectly. You have to tint the cloth, then draw with wax to get a coloured mark. You have to think carefully how to begin, as once a wax mark is placed on the cloth, it remains there until the piece is finished.

What is important in making images, particularly if they are based on the environment, is the management of space, and one important factor in achieving this is through colour relationships — especially contrast of saturation and of luminosity. However, as soon as liquid dye is painted or poured on the cloth, it begins to spread, diluting the colour, so reducing saturation, which affects contrast.

There is also the time factor. After dye is applied, it takes around 24 hours to dry, cure and fix the dye permanently in the cloth. After melting off of wax and washing off of dye there are often changes to colour and tone. A colour might be paler, stronger, brighter or darker than that which was intended.

It is interesting how the limitations of a medium can force change of direction. You start to ask 'why' something doesn't work? Why do devices designed by painters, such as linear perspective, seem to



have little relevance when working with dye on cloth? In exploring alternatives, it becomes possible to break free from conventional ways of working — to celebrate the unique visual qualities of dye on cloth, and find alternative ways of creating space, patterns of movement and texture on the surface.

**Technical note:** 'Monksdale' has around 40 layers of dye in thin washes, with wax marks laid down as each colour layer is added. The delicate white marks were drawn first with wax, and represent light reflection from surfaces, or floating debris, rather than objects. The darkest, and strongest colours are left to the last and were built up by a sequence of dyeing, drying, then adding another layer of dye.





*Monksdale, 1984, 29cm x 37cm*



## The Separation of Line from Colour

Wax and dye working side by side, separate elements, but each dependent on the other.



*Burnt Carmine, 1987 19cm x 27cm*

In '**Burnt Carmine**', and '**Green Gold**', marks and lines are drawn in wax with a fine canting and protect the white cloth. These lines will stay white. By overlaying these with a wash of colour — and allowing this to dry, the next set of wax marks will pick up the underlying tint. This is repeated again and again. In this way, layer over layer of fine lines are drawn, and between them, layers of dye colour until sufficient depth of colour is reached. To tackle the darkest, strongest colours, wax protects the whole area, except for the channels in the wax where cloth is exposed. Liquid dye seeps between, resulting in the darker lines of the branches and trunks of trees.

**Technical note:** Pencil crayons are brilliant for recording colours while on location. However, interpretation of these coloured lines into wax and dye on cloth is tricky.

A pencil line is a positive line of colour, whereas a line drawn in wax leaves a negative mark. Colour is added separately - after the wax drawn mark is made.

The result is a visual texture of overlaid lines.

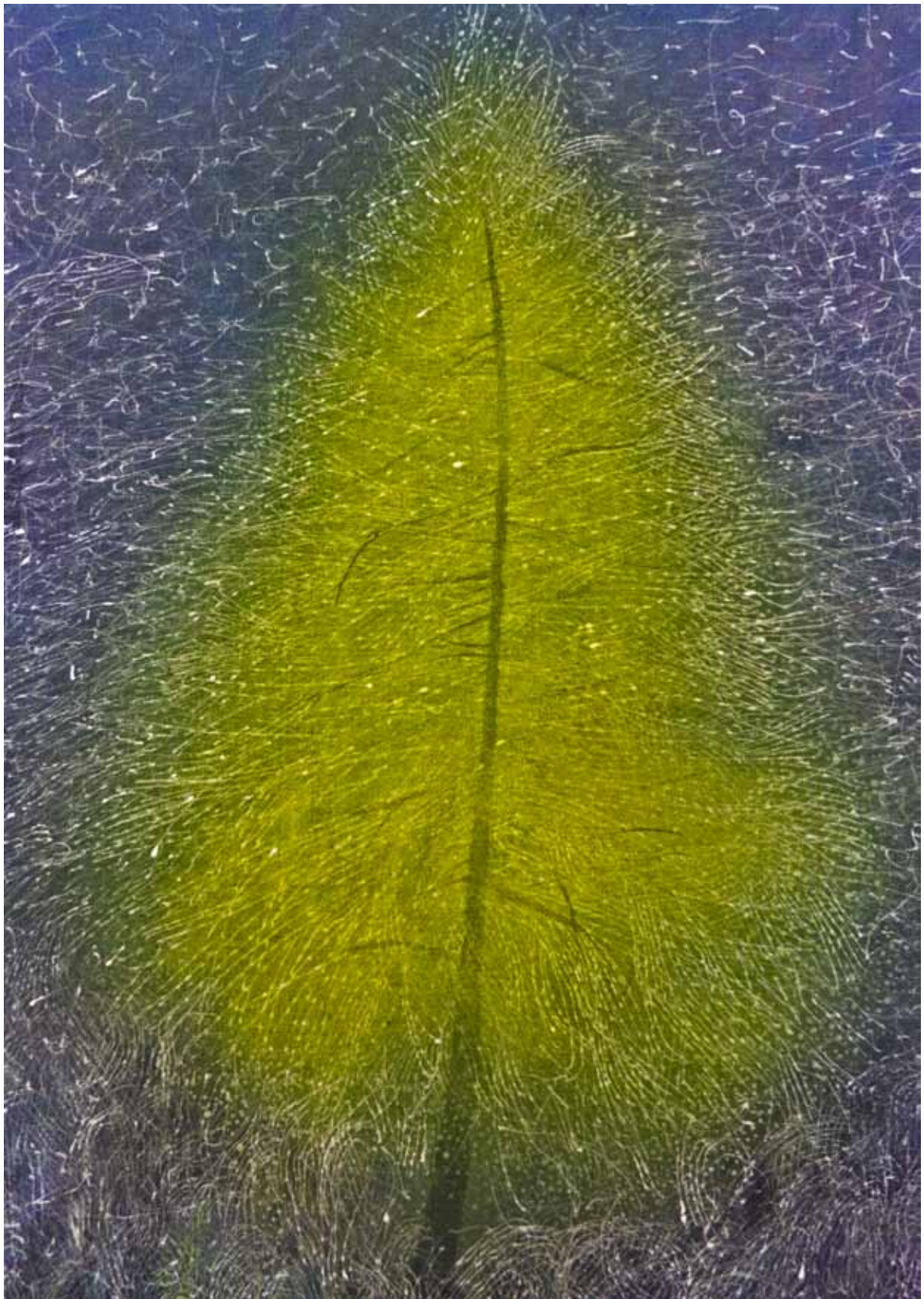


*Sketch for 'Burnt Carmine'*



*Sketch for 'Green Gold'*

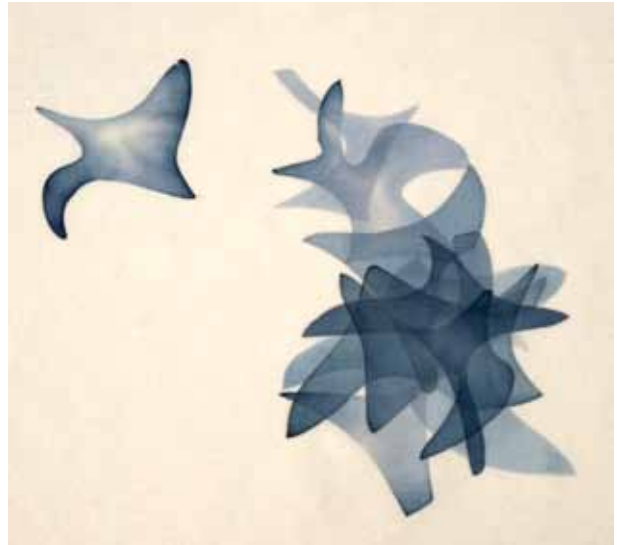




*Green Gold, 1987* 19cm x 27cm

## Visualising Movement

Visualising movement on what is a static 2d surface can be challenging. Movement implies direction and energy along a line. The line, however, need not be seen, but be an underlying directional path or grid. We might place elements along it, around it, or in opposition to it.



*In this sample (above), again, the eye follows the trail of shapes as they rise upwards.*

*Below (Debris, 1987) explores the detritus which floats around in the air. The movement is fast and swirling. The impression is of a constantly shifting heap.*



## Re-thinking the border

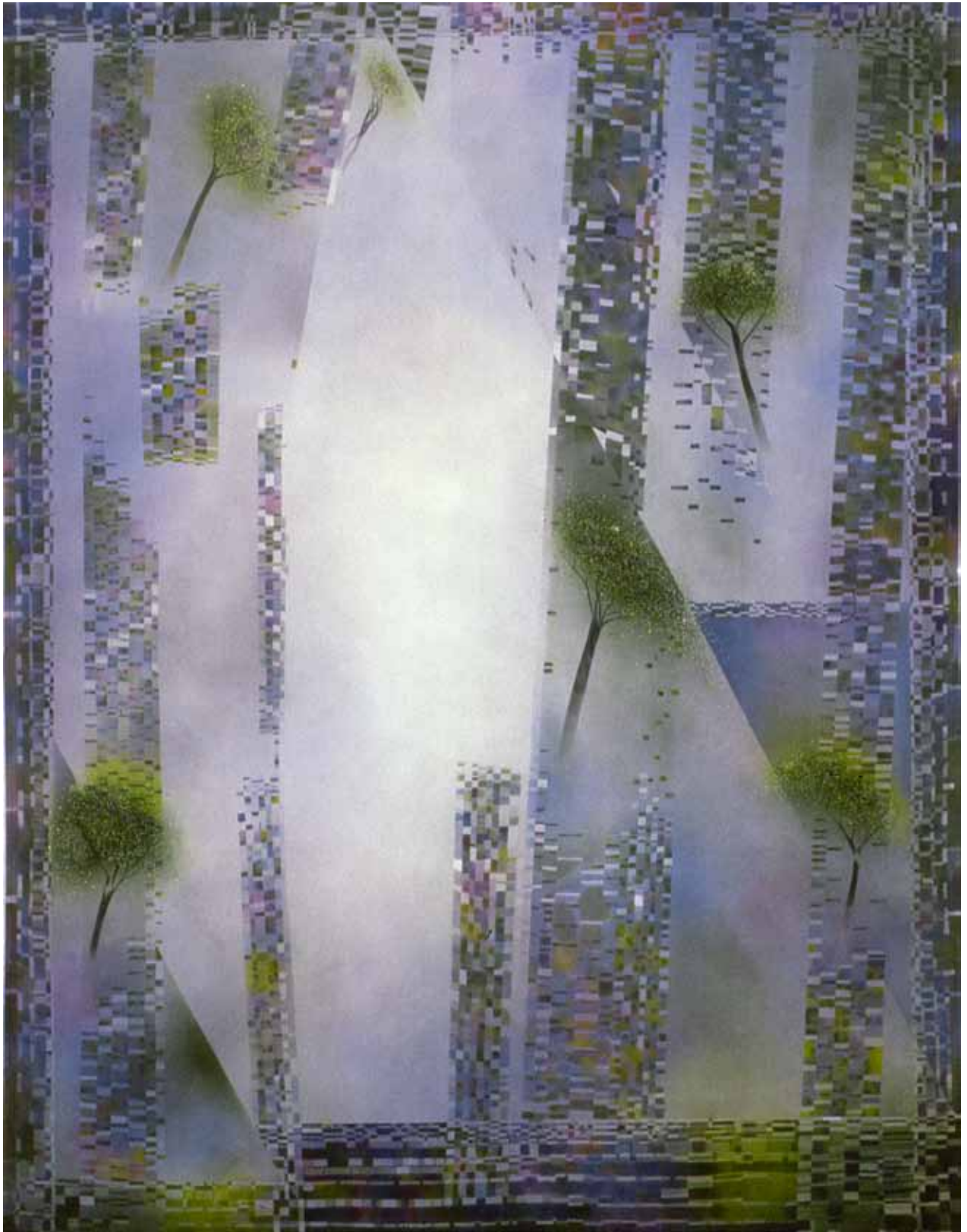
In an unframed textile hanging, a border is often added as a device to surround and limit an image. It can play a role similar to that of a mount and frame — a transitional space which separates image from wall. (Whether it is necessary, is a subjective decision). A border takes the eye around the image — we perceive it to lie on the surface, in front of the design.

A border needs to relate to the image. By extracting and re-ordering elements from the image, ideas can be explored around symmetry and repetition of pattern.

In '**Mountain Rain**', (right) the pattern of movement was re-organised in the design of the border. However, in places, the border has been deliberately allowed to disintegrate and gradually invade the image.

*In '**Mountain Rain**', (right) the square shapes are used to suggest a pattern of gently falling rain. Note the underlying directional paths which accentuate the sense of falling. The viewer's eye follows the linear pattern, even where it has disintegrated.*





*Mountain Rain*, 1983      140cm x 182cm

## Line : Shape : Rhythm

### The Opaque and the Transparent

Although liquid dye colour is essentially transparent, it can be manipulated to imply a shape which is either opaque, or transparent.



Sample, Scarf design

27cm x 18cm

Both implied solid and transparent shapes are clearly seen in the sample below.

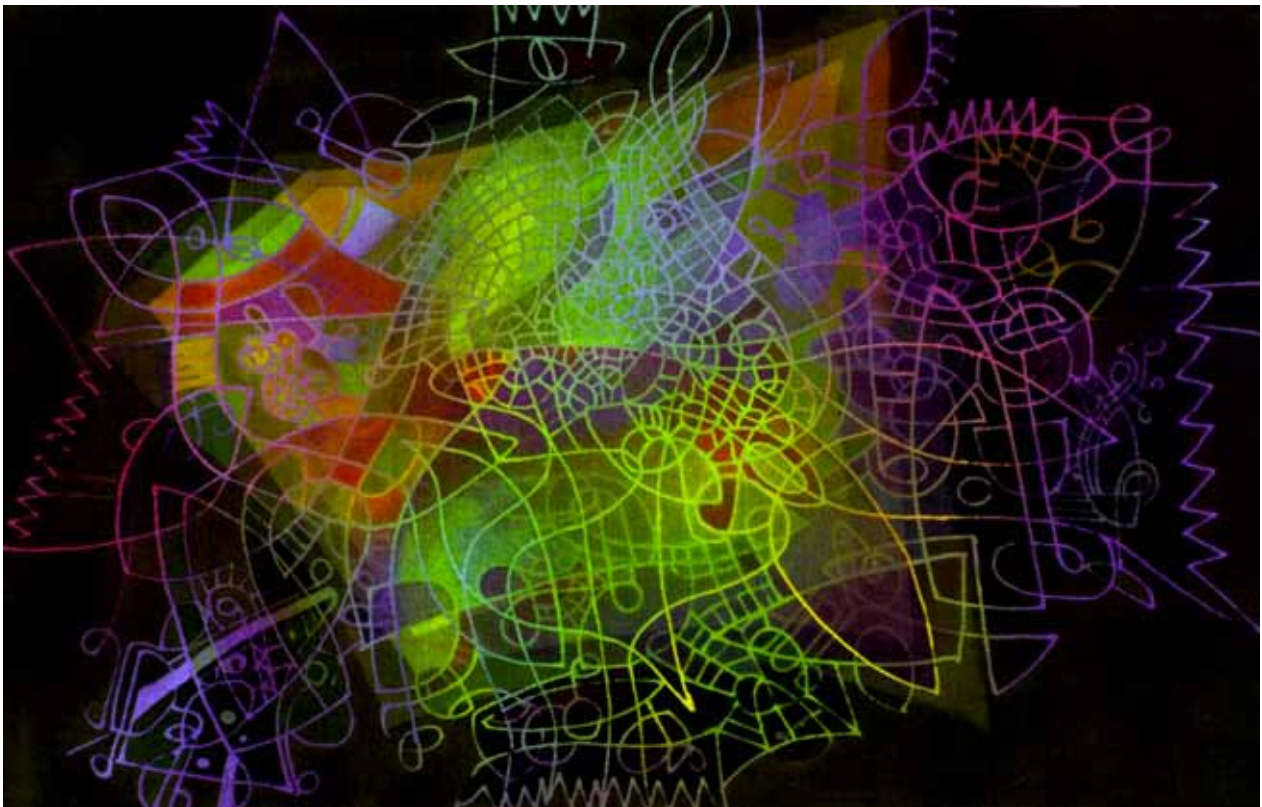
2



1. Detail

A shape which has been formed by a wax line, will seem to be opaque, flat and solid when filled with a contrasting tone or colour (1). When the dye is allowed to flow over the wax line, (2) and through the shape into the background there is implied transparency.

61



Transparency, 1990's





Here, both cloth and dye are transparent, echoed by a perceptual translucency in the pattern.

*A wrap made around 1990*



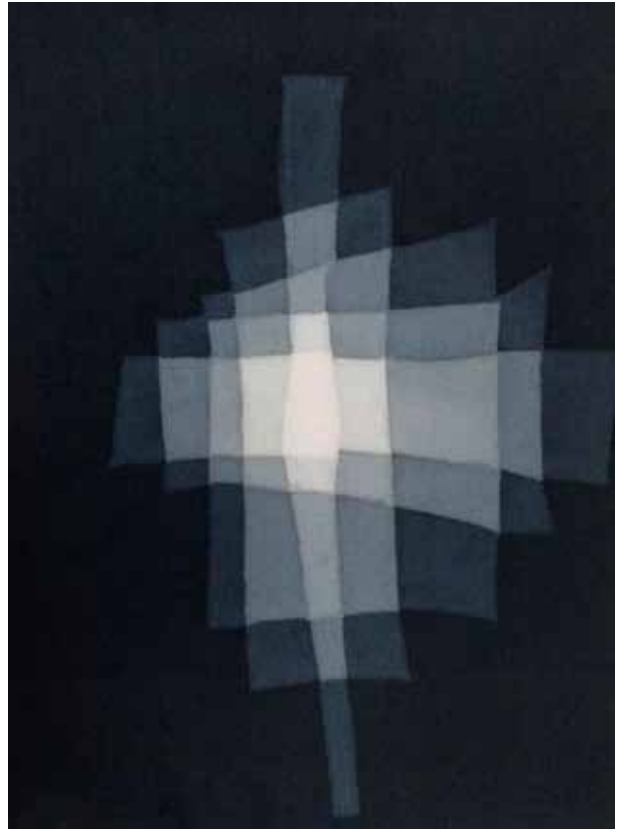
## Space in layers

### Ambiguity and Order

There are two very distinct working methods when using wax resist techniques to create a multi-layered image. Each results in astonishingly different spatial characteristics.

In both of these sets of examples, the principle of light-dark contrast is used, (strong, sharp, clearly defined shapes appear close to us, while softer more muted shapes fade into the background colour). In both we can sense the spatial dynamics between the different layers. However, although in Method 2, (page 75) we sense the different receding layers through the transparent colour, we are confused as to their exact position in space, compared to method 1.

*In **method 1**, (addition method), alternate layers of wax and thin washes of dye are added one over the other, and accumulate until the piece is complete. The result, perceptually, is one of spacial depth which can be clearly seen in ordered layers.*



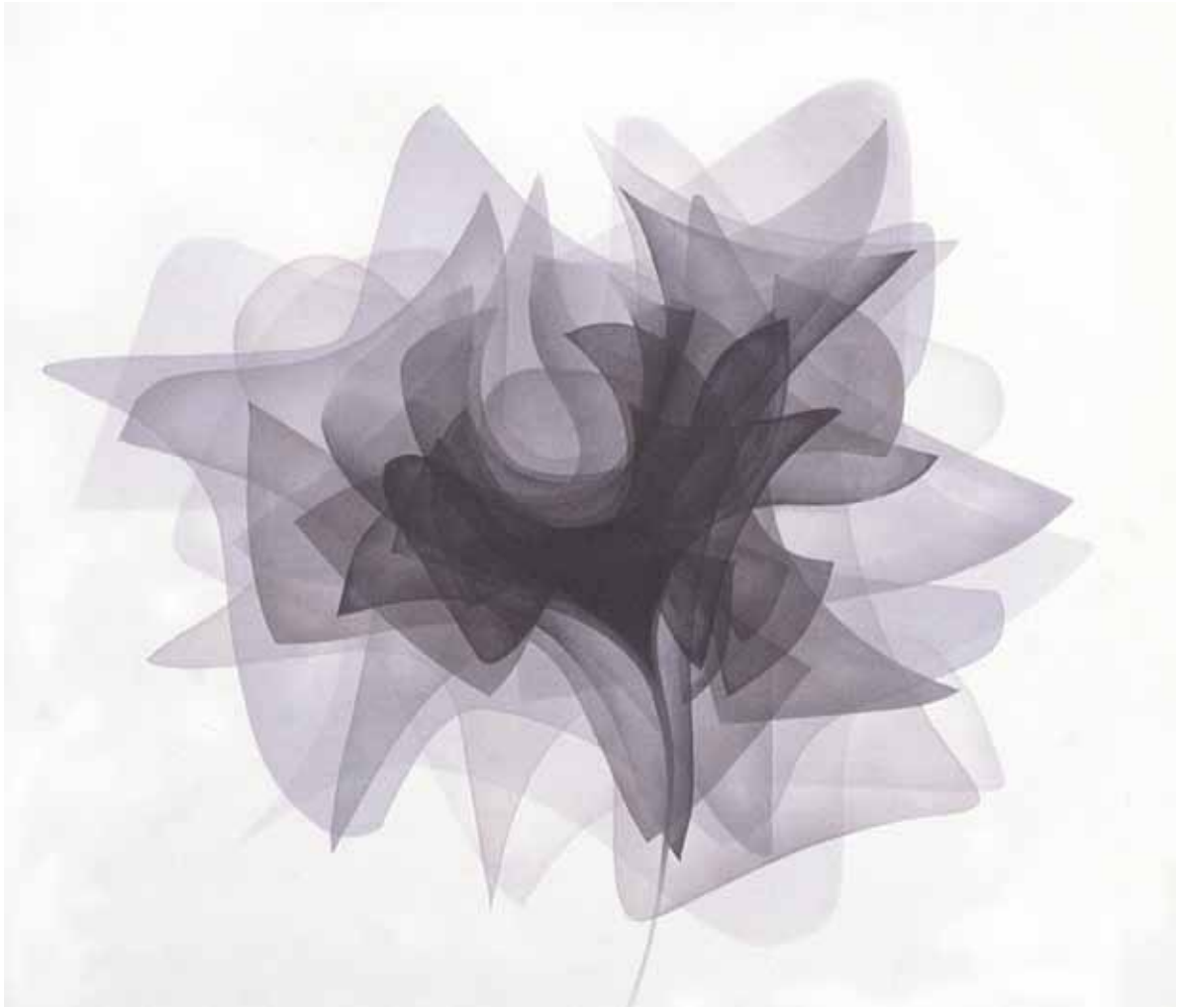
*Spatial sample, 1995*

15cm x 17cm



*Sample, 1995*

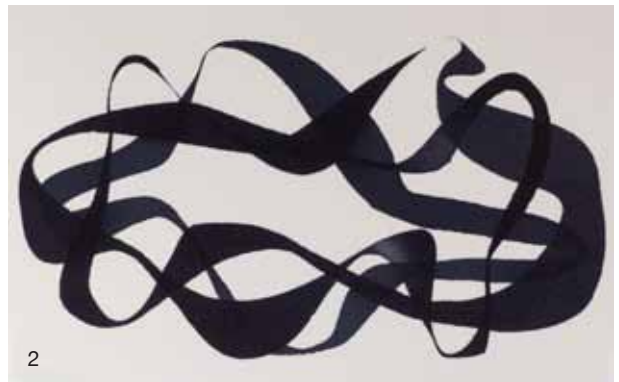
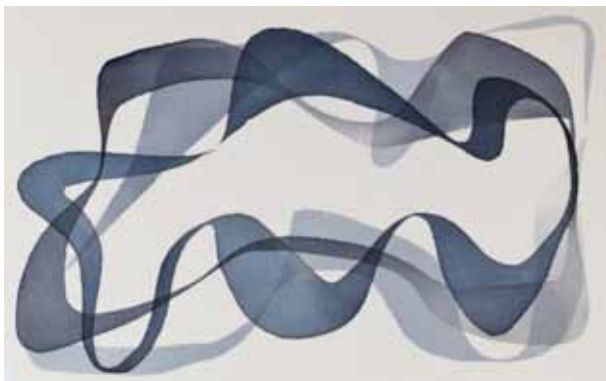




'Earthstar', 1994      Approx 70cm square

In **method 2**, (overlay method) the wax and dye are washed out after each layer is added, then the cloth is dried and the process is repeated. Perceptually, we can see spatial differentiations, but which layer is in front, and which behind is impossible to guess.

1



**Technical note:**

These two forms have three overlaid 'lines'.

**No 1** the dye has been diluted before being overlaid

**No 2** has dye painted full strength. What is interesting is that in the first one, the painted lines seem to occupy three layers of space while in the second the lines merge into one, all on the same spatial plane, and seem closer to the surface.



## Ambiguous Space

### Method 2

In this method, wax is removed from the cloth after each application of wax/dye.

In 'Waterfall', dye was limited to one colour, with water used to help spread the colour and concentrate it around the edge. In effect, this diluted the dye which increased its transparency. As only five layers were used, the transparent colour clearly shows the separate layers which occupy the space, but not the order in which they were painted.

One disadvantage is that very thorough washing is needed to free the cloth from the wax residue, which would prevent the fibre from accepting the next and subsequent dye layers. Then the piece needs to be dried naturally, and stretched un-ironed to prevent the fibres from closing as this can cause them to be resistant to the next dye application.

This method may not be suitable for all designs. There are problems associated with large pieces, of washing, and re-stretching the fabric; of getting threads correctly re-aligned. (Manipulating the dyed cloth often forces lines and edges out of position, creating oddly distorted shapes in the design.)





**1:** The first shape was isolated with hot wax.



**2:** Applying dye within the isolated shape. When the dye has dried and cured the wax was melted off by washing thoroughly. After drying, the silk was re-stretched over the frame.



**3: The second layer is formed.**

A second shape is isolated with hot wax, overlaying the first shape. (The first layer of dye can be seen as an underlying pale blue stroke of colour).



**4:** Painting the dye within the second shape, which overlaps the first layer. Once wax is washed out and the silk dried, it will be difficult to identify which layer is above, and which below.



**a.** sample before melting off the wax

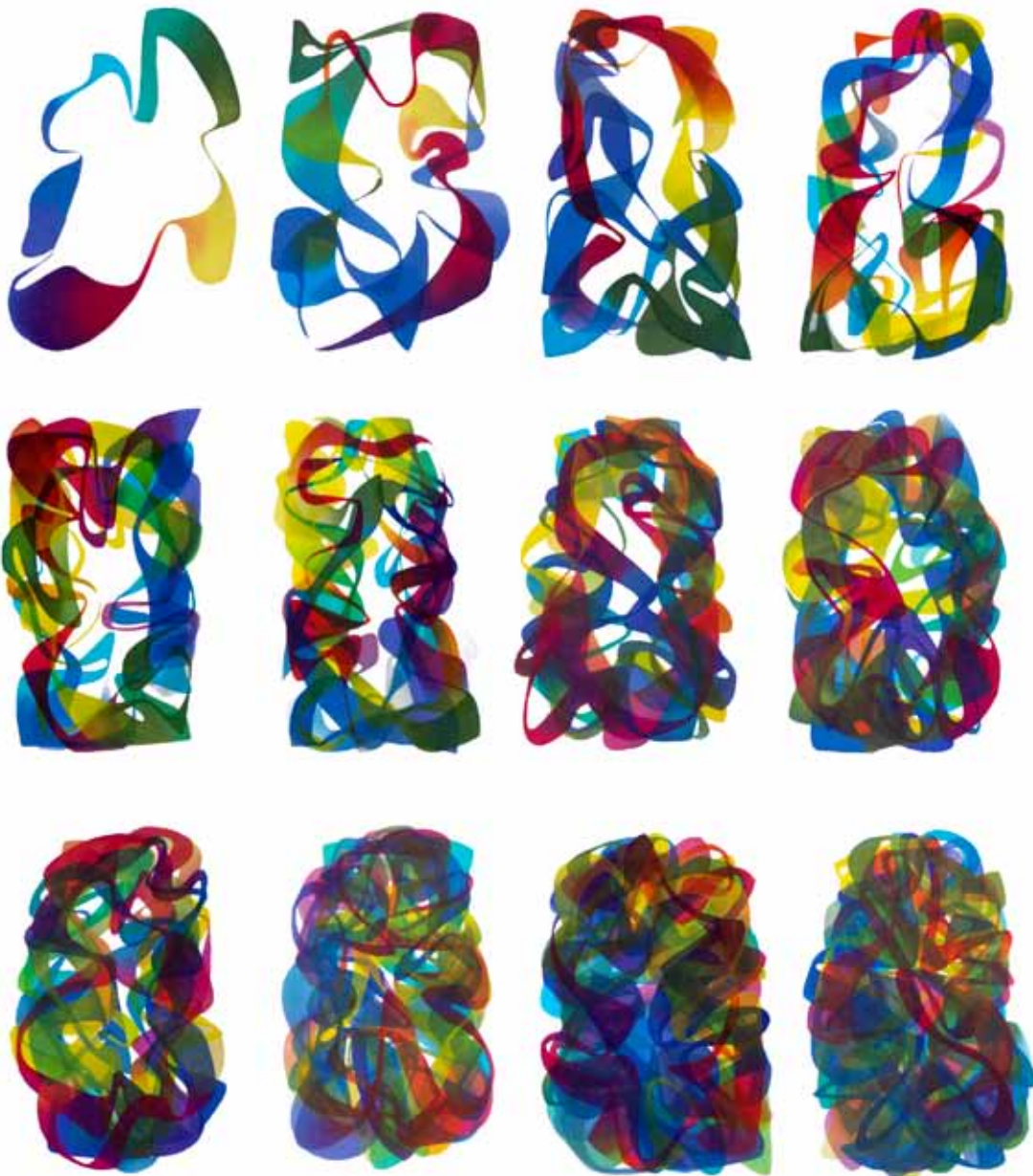
**b.** first layer dyed and washed out

**c.** Second layer applied and washed out

## Design Notes 4 : Deconstructing the Process

To analyse the complexity of a layered image, I made a series of visual sequences. These posed questions about the subjective decisions we make in the process of making an image — at what point should we arrest the process — when is a piece finished? How many layers of dye is it possible to add before colours become muddy — and do dyes ever become muddy? The transition from one stage to another is mapped, as each image is changed in sequence, by the addition of another layer of dye. For 'Chaos', and 'Black Flame', the overlay method of dyeing was used, while for the 'Lightshapes' series, the addition method of dyeing.

*(For explanation of both methods, see pages 74 - 81)*



*Chaos Sequence 1990 - 1995*



## Visual Sequence

**Chaos sequence** is made on 12 pieces of silk crepe de chine. The separate images were made in 1990. it took until 1995 to solve the problem of how to make a sequence made of silk into a book. In the end, I placed each in a plastic sleeve, and attached them in a fan format. This allows the viewer to take out each silk image to examine it. The fan leaves can be separated and the images viewed as a group.

*Size: each 16cm x 22.5cm*



**Technical note:** What appears to be a simple scribble line of colour, in reality took many days of wax drawing, hand painting of dye, curing, then drying.

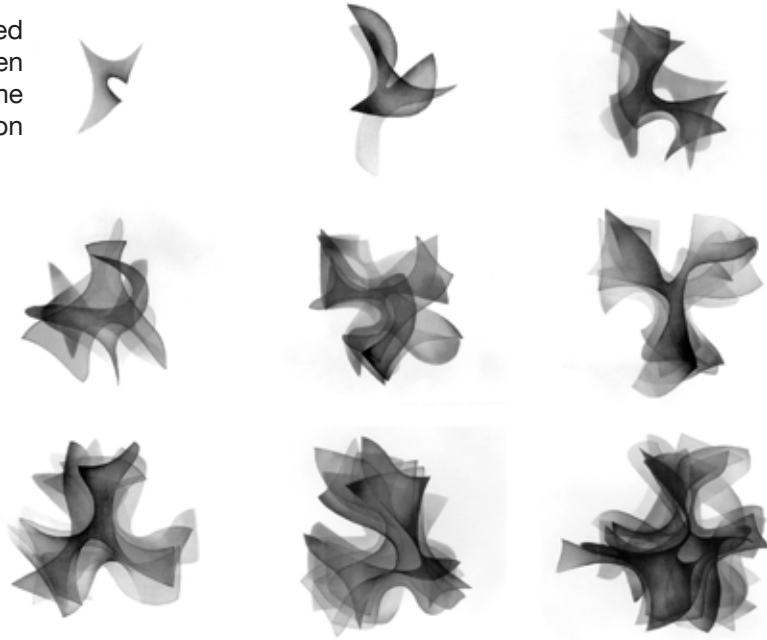
The colour can be overlaid many times, quite randomly, yet still retain its clarity and brightness. However, the images are restless and the sense of space unsettling.

## Black Flame Sequence : 1995

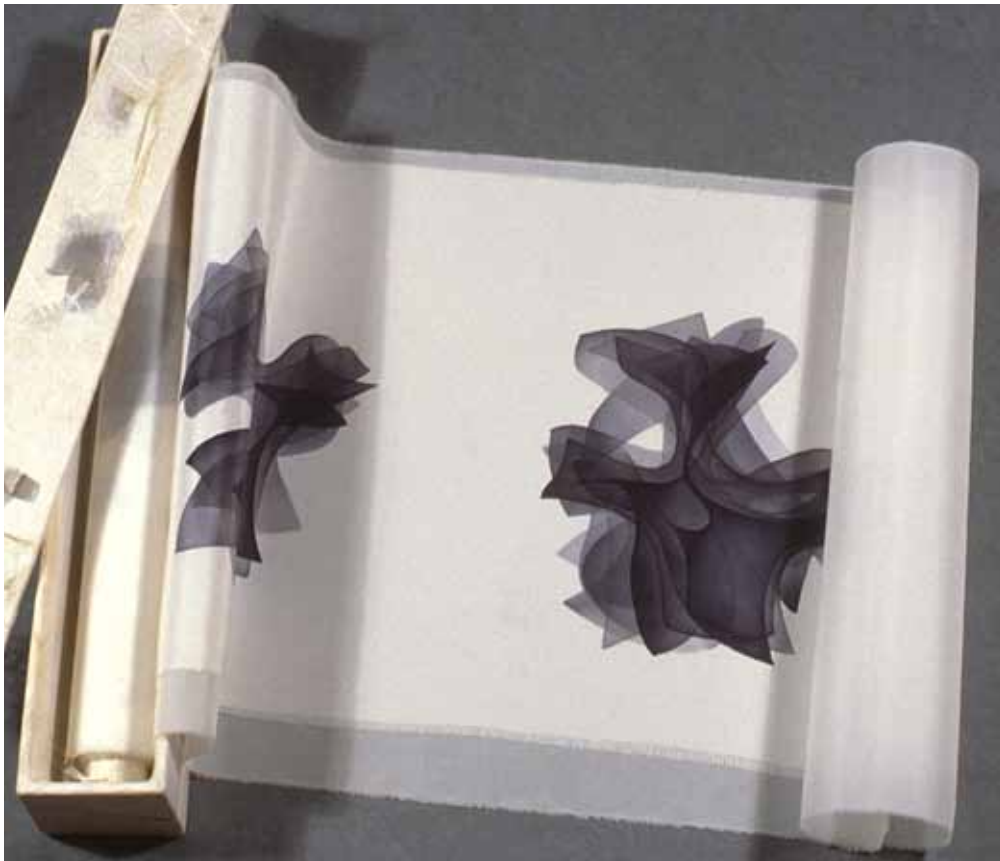
A sequence of nine layers. Kenactive black dye was diluted and overlaid, with wax removed after each layer.

**Scroll format:** The motifs are painted on to a long silk strip, which has been wrapped in an outer layer of silk. The box both provides a storage solution and also a support for display.

*Size, 130cm x 23cm*



The scroll format is an ideal book format for silk as rolling is less stressful to the fibres than folding.





## The Visual Book

A visual book takes art from off the wall, to become an intimate personal exhibition, where the sense of touch is added to that of sight. A book can show more than simply one finished image. It can explain an idea more fully. Here it is being used to show the transition between each stage of making an image. However, books serve another purpose. They are folded or rolled, and often placed in boxes. When protected in a book or box dye colour never fades — the fibre is protected from polluting agents, while colour relationships remain as originally conceived.



*Light Shapes-Blue, 2001 23cm x 130cm*

*In 'Light shapes-Blue' the density of white wax marks of the top layer decreases as the scroll is unrolled. The underlayer is a visual sequence of 9 images.*

**Technical note:** The **Light Shapes** series of scrolls use the addition method of dyeing (page 74) where the wax is used in alternate layers with dye, and only washed out once at the end of the process.



## Part Two

### Dye Colour, Screen Colour, Resist Print

#### Why Digital Imagery

#### Visualising Ideas

When I first encountered a computer paint programme I was astonished at the colour saturation I could achieve on screen. In my early experiments I also realised that here was a process with which ideas could be quickly visualised. Instead of designing one 'finished' piece, numerous alternative samples could be produced.

**Resist Printing:** Instead of replacing my involvement with dye and wax, digital imagery became part of the process. It added a new vitality to my exploration of colour and space. I could incorporate dyed cloth within collage substrates and use wax on the surface to resist the print.

However, there were issues around dull prints and the longevity of the inks which had to be overcome, before this mixed media work could be shown.

**The Visual Sequence:** Mapping the creative changes in making an artwork had become embedded within my ideas. Working digitally added something new to this. Computer imaging allows a continual fragmentation and deconstruction of the image file, allowing it to evolve into a sequence of linked visuals. The visual sequence itself can become a separate objective, as a book, or group of mounted images.



## Mapping the Changing Image



### 1999 : River Dreams Sequence

A visual sequence tracks the creative changes you might make when working on a digital image. As layers are added, changed, or deleted, the intriguing question once again arises — at what point is an artwork finished? The answer is of course that in working digitally, you can make myriad variations, then save not only the original, but each of the subsequent images both on computer, and by printing them out.

*Laminated collage of silk and layered abaca tissue, with hand applied wax marks to resist the print*



*River dreams sequence*

1999



### The Printing Surface

Any substrate, whether fabric or paper, which you wish to print on, must be able to be fed through a printer.

Laminated collage as substrate: Thin oriental long fibred tissues, such as Repair-tissue, Abaca, tea bag paper, and decorative oriental wrapping papers can be strengthened by pasting several sheets together on a smooth surface, and removed when dry. They can be made even stronger if a layer of cloth is included within the layers. Fabrics such as muslin, scrim, and silk can be backed with the same tissue. Creating textured collages by inserting paper shapes, threads, yarns, scraps of patterned fabrics, texts and scraps of recycled drawings is a further step. These substrates can be made in advance, stored and printed at a later date. Some will be able to be directly placed in the printer; other, thinner, more fragile substrates will need a card backing as a support.

Detail : This highly textured surface, has been ink-jet printed with only a black line drawing, which has allowed the texture of the paper to visually dominate.

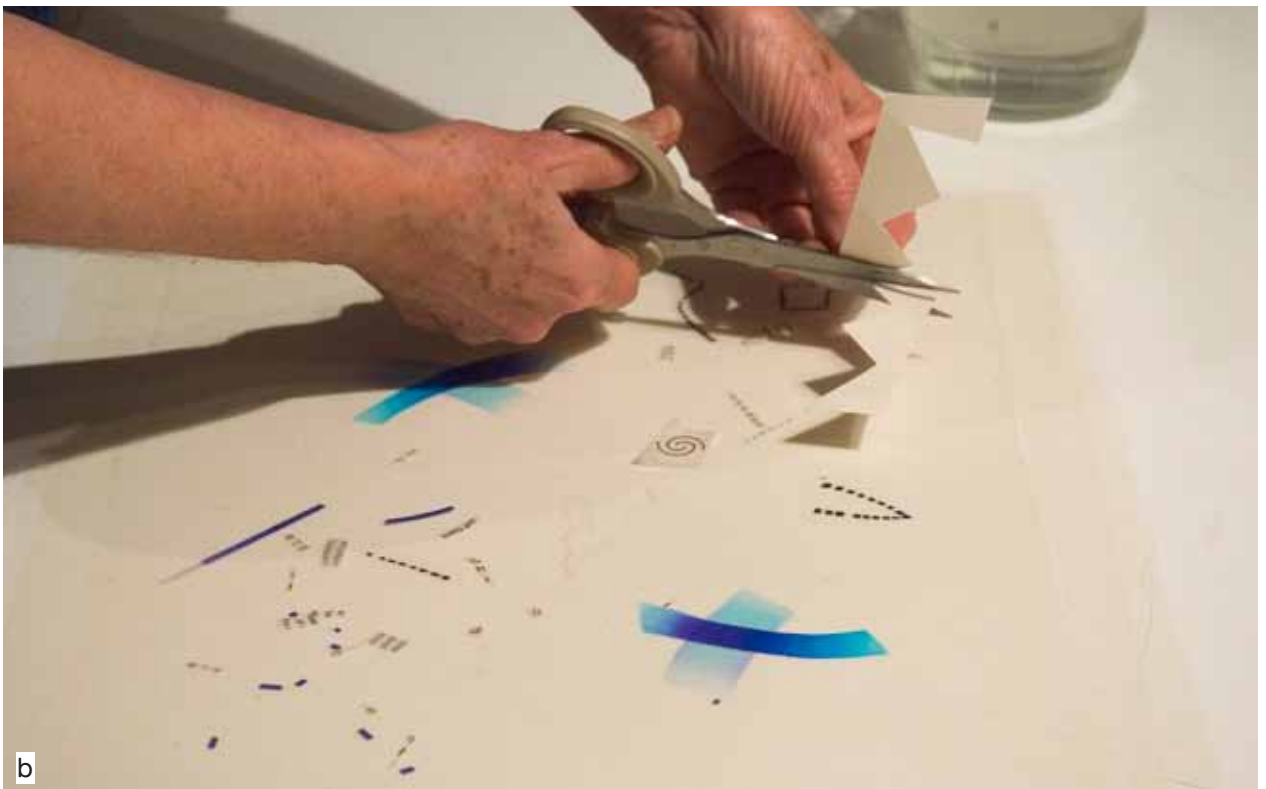


## Forming a laminated textured collage



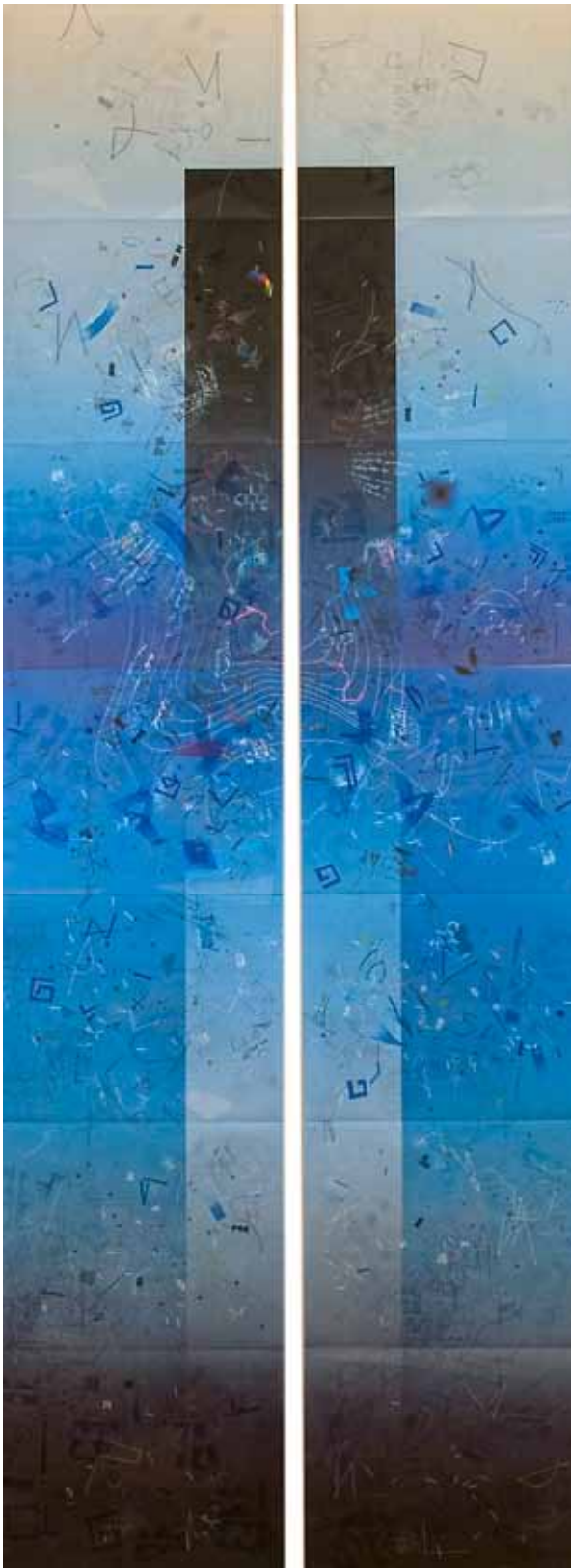
a

*Two or three layers of thin long fibred tissue are pasted directly on to a plastic surface with methyl cellulose adhesive. (a) The scraps of pattern, thread, recycled papers and silk laid on top (b)*



b

## Managing Complexity



*Shadows Blue, 2007* 218cm x 90cm

As an image is printed over collage the result might be a perfect fusion of colour, texture and mark.....or a chaotic jumble of pattern. In 'Shadows Blue', the colour is limited to various shades of blue. Dyed shapes embedded within the collage are also blue. The underlying organisation is very simple.

Combining collage with ink jet printing of a digital image uses several different parallel processes.

**The digital image:** Working on computer screen to produce a virtual collage of marks, shapes, colours and textures.

**Preparing a substrate for printing:** Making a tactile collage with embedded marks, shapes colours and textures.

**Screen to Print:** The image will go through several changes with colours tweaked before the design is finalised. Often, several samples need to be printed by inkjet on to appropriate paper, (One with a similar colour profile to the final collage). This could involve actually making several sheets of paper. These can be untextured, but of the same material. They must be pre-sized for a realistic colour match.

**The collage:** This has to be assembled; the marks, colours, patterns embedded with the digital image in mind and, once dry, with any resist marks added.



*This detail illustrates the interaction of actual surface and suggested texture. A computer-drawn embossed line is placed near the raised surface of an embedded thread. The virtual embossed line has been given a 'dropped shadow' to add to the illusion.*





## The Interaction of Dye colour with Digital Colour

**Visual Integrity:** The materials, marks, and colours should have an overall visual integrity.

An interesting thing about computer imaging technology, is that, rather than speeding up the process of making a piece of art, it adds more complexity. With each separate process, from digital image to final inkjet print, there are more elements to consider. More marks and colours to interact, creating more tensions in the image.

When making a print on collage, consider:

1. How the 'suggested' marks and textures made on computer interact with the actual surface texture of the substrate. Do they complement each other or is the result chaotic.
2. What are the spatial possibilities of combining different colorants — dye, pencil, wax and pigment printing.
4. The element of chance through adding resist elements of wax or stitch, applied to the surface before printing.

The tensions between all these diverse elements can result in a highly complex fusion of image, pattern and surface.