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Designers of Contemporary Textiles

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Introduction

The design and manufacture of textiles is one of the world's oldest industries. It caters for the fundamental human need for clothing and for protection, and fulfils a basic demand for decoration. Although textile making is an ancient activity it is not a conservative one. The very centrality of fabric in human culture has ensured it a place in the development of both technological and artistic innovation.

This thesis focuses on the work of individuals, in craft, in art and mainstream design. Creatively the work of individual designers and craftspeople do have an important role to play. They are free to be imaginative, they have fewer commercial or marketing constraints and they are prepared to take risks. Their work is important because they create sophisticated textiles that not only raise the status of textile design but also encourage interest in it as well. This thesis looks at the role that these independent textile makers have had in textile design, craft, art and fashion design. Chapter One analyses the revival of the textile artisan heritage in the French couture system. It refers to Fashion designers such as François Girband, François Lesage and couturier Christian Lacroix. Lacroix's exclusive printed textiles leads back to the revival of print in British textiles by designers such as Vivienne Westwood and Paul Smith who favoured a more craft-based approach to design. This alternative approach to textiles as an applied art is demonstrated about through design partnerships such as Body Map, English Eccentrics.

Chapter 2 examines the fusion between high technology and craft which took place in Japan. There has been a constant investment in Japan's textiles industry since World War II. And with regard to Japan's active folkcraft tradition, fashion designers such as Issey Miyake, Rei Kawakubo and Junichiro Arai are reasons why Japanese textiles has been so successful in both experimentation and development. Topics within this chapter also include new fibre technologies such as lycra, nylon, simulated silk and 3D textured fabrics.

Chapter 3 traces the development of the post-war contemporary design movement in textiles, and the alternative movements in the 1960's and 1970's and the impact that these ideas had upon it focusing on the way in which familiar design has been revived

and transformed by contemporary designers such as Timney Fowler and Nathalie du Pasquier.

Finally the thesis seeks to show a balance of design and craft, recognising that whilst the avant-garde is always important in leading the way, there is also a need for good, sober contemporary work that satisfies the mass of consumer design. The objective of this thesis is to give an account of contemporary textiles celebrated as both an artistic and service enterprise.

Weaving was the first industry to be fully mechanised, and the catalyst for the industrial revolution. Today the possibilities that have been created as a consequence of the advances in synthetics, engineering, micro-electronics and dyes have led to the development of 'intelligent fabrics', (Colchester 1993, page 6). Yet despite the technological and manufacturing advantages in textile production, the industry remains diverse in production techniques and creative in terms of the designs, styles and patterns that make up the contemporary designers' modern vocabulary.

In recent years textile design has grown in status. It is simultaneously both futuristic and traditional, reflecting the tensions of a number of different forces coming together in the market place, which in turn have led to a new generation of hybrid products. Textile design today is influenced, on the one hand by major, broad-based industrial research projects into new fibre technologies for sportswear and industrial textiles, and by the development of automation and flexible manufacturing systems, and on the other hand, by the luxury markets and their revival of elaborate, decorative, and ancient craft techniques and traditional patterns.

It needs to be understood that since 1960 the textile industry in the West has developed in an unnatural economy. Protectionism has existed for the past thirty years in the textile trade, and the last seventeen of those have been regulated by a system called the 'Multifabric Arrangement' (McDowell, 1992, page 50). This is a system of trade tariffs and export quotas complex enough to protect the Western textile and clothing Industries from market disruption, dumping or tactical undercutting from the low-wage developing countries. This agreement has had the effect of blocking a significant number of imports from advanced developing countries, with the consequence that Western

Textiles and Western clothing are sold at an artificially high price. It is widely believed that without the support of this system the textile industry, in the west would be unable to continue at its current level.

In the 1960s and 1970s textile manufacture was, perhaps, more affected than any other industry in the West by the idea of mass production, most typified by the photographs of endless chains of cars lined up on the Fiat production lines of the late 1950s. Industrialists, particularly in France, America and Britain, became somewhat mesmerised by the idea that engorging vast yards of cloth, at speed, would provide a lasting solution to the problem of overseas competition. The specialised skills and character of the smaller family-run businesses were lost, as they went under or were amalgamated into large, unwieldy, featureless conglomerates, as textile products became standardised and dull.

This process of amalgamation and consolidation was not an even one across all Western nations - it was especially prominent in Britain and the USA. In both countries, but in particular in Britain, the manufacturing and retail industries regardless of what was made or sold became dominated by a few very large companies. The reason why the crafts revival, and later, the street style movements were so striking in Britain was that they were part of a general mood of resistance of this mono-culture which combined with a search for smaller, more individual options whether it be in textiles, old clothing or design generally.

The early 1980s saw the rapid rise of a new ideology across the field of design under the general umbrella of post-modernism, the idea of pluralism, individuality and decoration was exploited in everything from product design and furnishings to architecture. In textiles, particularly in the young, experimental style-based design movements, the spirit of innovation, humour and rebellion led the textiles industry out of the static conservative spirit into which it had sunk during the 1970s. Then in the late 1980s, it started adopting craft techniques. Change in design in the 1980s, was not, simply a response to a 'natural perennial' demand for new styles. The boom in information technology accelerated the flow of visual information around the world to such an extent that fashion itself became accelerated with it. Also more importantly, it

democratised information. The public became more aware of fashion and their was no longer any need for design theorists to foretell what was to happen in the future. In both design and architecture, there had been an assumption among professionals that they knew best about what looked good and what was good. Yet, it was realised, after decades of designers and architects preaching that this or that style was 'correct' both aesthetically and often morally, it was seen that both in clothing and dress, people still selected what they liked and ignored the rest. Designers especially, and architects to an extent, stopped trying to work to existing ideology but, like food manufacturers, started experimenting with new 'lines' to see what might be palatable. The boom in the availability of style choices coincided with a change of attitude by the industry; it was realised that specialisation, not just atomisation, was the answer to overseas competition. And because there were few other sources to draw from, the industry began to recognise the potential of craft and the independent designer - maker as a means of increased sophistication in their products.

In the 1970s, Japan and, to a lesser extent, Europe and America, sensing the danger of being undercut by rapidly developing countries - South Korea, for example - embarked on an extensive research programme to develop new technology-rich products which would over-come the shortcomings of the first generation of synthetics, diversify markets and be difficult to imitate. Both manufactured and art or craft textiles have been affected by the new interest in fibre technologies. The presence of synthetics to engineering, and even in the case of vascular grafts and ligament repair to our bodies, is becoming increasingly important. Non corrosive, lighter and stronger than metal, second and third generation synthetics, highly prized for their lightness and strength, are now used to build space, air and marine craft, they are even woven into fabrics which can withstand bullets and extremes of heat and cold. They are used in earthworks, in bridges and in roofs or they are extruded at high speed into non-woven fabrics for uses as diverse as car-battery linings and babies' disposable nappies. The hype surrounding fibres which have made the natural fibre industry consider ways to bring out the qualities of its products. The industry has started to pour more design resources into yarn-spinning techniques to maximise for example, the natural springiness of silk. This is an example of the way in which artificial materials are bringing about a change, not only in the way that we see but also in the way we use and perceive natural materials.

Yarn spinners are now considering ways in which they can maximise or better express natural fibres, performance qualities.

Computerised weaving provides the space in which the full creative potential of these new inventions can be explored and tested - fast. Just as the arrival (1930) and mechanisation (1950) of screen printing changed attitudes towards the established methods, so the advent of computer automated jacquard looms has transformed woven fabrics. The results are fascinating because computerisation, synthetic textiles and now a new generation of natural fibre production methods mean that the textile industry can make use of ideas developed by artists, designer - maker and craftspeople. Indeed the very fact of flexibility means that choice - diverse ranges of designs and fabrics - becomes a market necessity. The small, individual crafts - based artist or designer has therefore been given a new sense of purpose through the development of new technology.

Chapter 1

Textiles in Fashion

In 1986, the French Fashion designer François Girband, celebrated for his fifteen attempts of re-styling a pair of blue jeans, used an Egyptian cotton jacket to summarise neatly the predicament faced by the fashion and textile designers at that time. (Fig. 1).

Egyptian cotton had once been renowned for its softness but with the advent of synthetics this had been forgotten. In the jacquard pattern of the jacket, Girband wove a cartoon that bluntly indicated the value of the jacket to the consumer. 'Feel this jacket' is written in large letters on its sleeve and various images showed cotton being harvested in Egypt, Egyptian hieroglyphs, people feeling the jacket on display and admiring it at home. The message behind Girband's cartoon: that the consumer had to some extent lost contact with the goods he bought, playfully reiterated the concerns expressed by William Morris a century before - that the industrialisation of textile production has led to a decline in standards expressed in the lack of authenticity of the product.

Girband's anxieties were shared by many. In 1987 Micheline Alland, the director of the exhibition mounted at La Villette, in Paris entitled 'La Mode: Une Industrie de Pointe', expressed similar concerns. Today she said, 'we impose a colour fabric and design standard on the consumer who no longer has any idea of what fabric is about. He buys a grey suit or a red dress, and that's it' (McDowell, 1992, page 112). In France it was realised that the restructuring of the textile industry during the late 1970s had, by the mid 1980s, all but obliterated specialist production. The French textile industry had become a manufacturer of commodities and as such was made vulnerable by overseas imports. French conservationists in particular woke up to the fact that the 'big is beautiful' approach to industrial production was placing their cultural heritage in peril.

In 1988, the conservative Parisians' concern for the loss of their patronage prompted a vast exhibition called 'De Main de Maitre' held at the Grand Palais on the use of

Figure 1



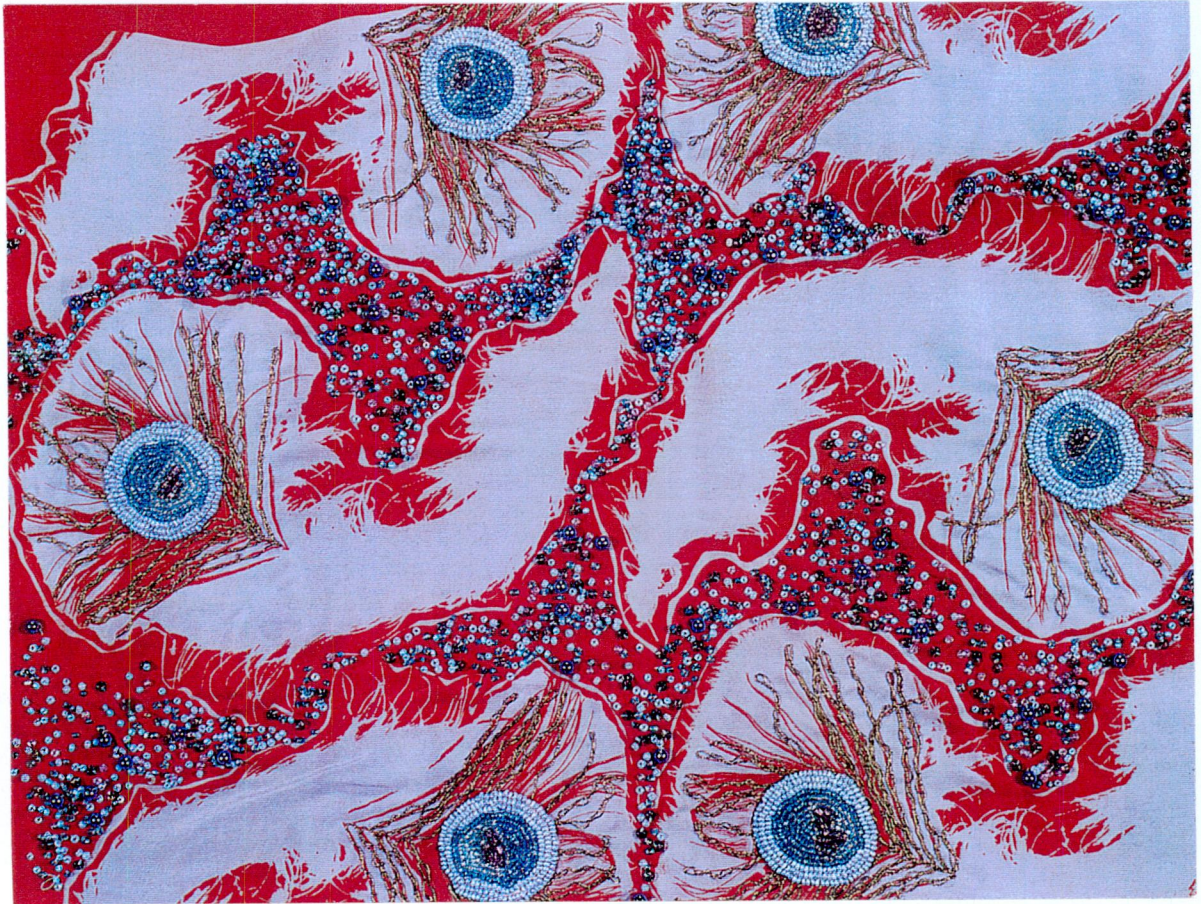
traditional craft methods to create luxury products. For the next three years the luxury market was extensively promoted as the bastion of France's artisan heritage. Financial investment and a flurry of attention revived the flagging interest in the haute couture system, and for the first time the doors of its suppliers opened to the public. This exposed to new scrutiny, 'les petites mains' (as the hundreds of anonymous artisans behind the great names of the Parisian couturiers were habitually called) were suddenly heaped with awards for their years of devoted service.

The embroideries of the master parurier Francois Lesage, director of Lesage S.A., were, for example, particularly admired and sought after by the thousand or so women in the world that could afford them, since they represented the pinnacle of exclusivity hand embellished fabrics for hand-made clothes (Fig 2).

Lesage remains the leading supplier of embellishment to Parisian couturiers. Each season he provides them with a palette of materials, patterns and embroidery styles which he hopes will anticipate the mood for their collections. After lengthy discussions with Lesage the couturiers present their sketches which Lesage and his team of embellishers must then translate.

Lesage's skill resides in his capacity to provide innovation each season within a restricted and conservative idiom. He embellishes fabrics using constantly new and enticing combinations of materials: raffia, semi-precious stones and leather one season, cockerel feathers and beetle wings at the next. Such materials, taken from Lesage's stocks underneath his workshops, are like the skills that went into assembling them, unique, and therefore all the more valuable. They are also what makes his work a 'heritage craft' essentially disarticulated from industrial production. Lesage's atelier, filled with seamstresses from the age of fourteen working at wooden work benches, was described in *Le Figaro*, as a haven of pre-Revolutionary France.

Figure 2



By 1987 Lesage's embroideries had come to be seen as the hallmark of exclusivity, a metaphor for the society of the dynasty era, desiring conspicuous consumption. Lesage knowingly manipulated this need in his creations for couturiers who reached out directly to the booming art market. Yves Saint Laurent dressed his models as status symbols in sequined copies of Baroques, Picassos, and Van Gogh's *Irises* which had just been sold for a record price in London earlier in 1984; Karl Lagerfeld, working for Chanel, dressed his leading model Ines de la Fressange in a bodice that copied a Ming vase made of thousands of seed pearls. What confirmed Lesage's embroidery as an object of status was the amount of time - "often hundreds of hours - lavished on each piece; time thrown into relief, as it were, by the accelerating pace of the world outside" (Lacroix, 1992, page 89).

In the couturier Christian Lacroix's first independent collection in 1987, his fabric assistant Sylvie Skinazi provided an interesting, rapid alternative to this time-consuming method of creating art fabrics for fashion. Using a relatively new technique called heat-transfer printing developed by the Swiss chemical company Giba Geigy, Skinazi was able to create large painterly prints (Fig 3). By converting pigment and solvent onto cloth, this technique gave an exceptionally high-fidelity print, recording the full gestural vitality of Skinazi's designs. Describing these painting-dresses in an interview, Lacroix took care to lay special emphasis on the most important point, the fact that each transfer could only work once. A relevant consideration in view of the fact that his dresses cost as much as a luxury car.

Figure 3



Figure 4



British Fashion Textiles

Carolyn Corben's roughly made, satirical embroideries are characteristic of the subversive art-based textile designs that emerged from Britain in the 1980s, as the country clambered its way out of its recession (Fig 4). The stagnation of the economy during the late 1970s that had had such a deadening effect on architecture, fashion and design also dealt a body blow to the ailing British textile industry. It had been the first textile industry in the world to undergo mechanisation, but now it was collapsing from a lack of modern management, sufficient capital investment in new machinery and poor understanding of the value of good design. Not all companies were so inept, but many of the stronger ones grouped together in ever larger conglomerates in an attempt to protect themselves from cheaper imports from developing countries. This resulted in an inevitable loss of individuality and character amongst the independent design companies. One of the consequences of the textile industry's weaknesses was a failure of nerve. Instead of attempting to open new markets or revive moribund ones with good new design, it tamely allowed the retailers - often a conservative group - to dictate style. And what the retailers demanded were large orders of trivial, blank fabrics. In Britain, perhaps uniquely, the retail world in all categories of consumer products - including food, clothing and furnishing fabrics - is dominated by a few very large companies with shops and stores in every city and town. This means that the retailers are very powerful and are able to dictate to manufacturers.

Yet, against this background of uniformity and compliance in design, Britain witnessed the explosion of punk, which revolutionised music, fashion and design. It was successfully marketed by Malcolm McLaren (manager of the Sex Pistols), and Vivienne Westwood from their shop, *Seditionaires* in World's End, Chelsea (Fig 5). These early 1980s graduate fashion students from London art colleges became street - style celebrities overnight. They had no money and no business experience, so however much credibility they had in the 'street', they had none in the corporate board rooms. Unable to muster sufficiently large orders from the textile manufacturers, who were geared up to supply the retailers, they were forced to rely on their own resources. They turned to friends working in textiles for imaginative designs. For the surplus of textile students that issued from Britain's thirty-odd textile courses each year, the possibility of forging

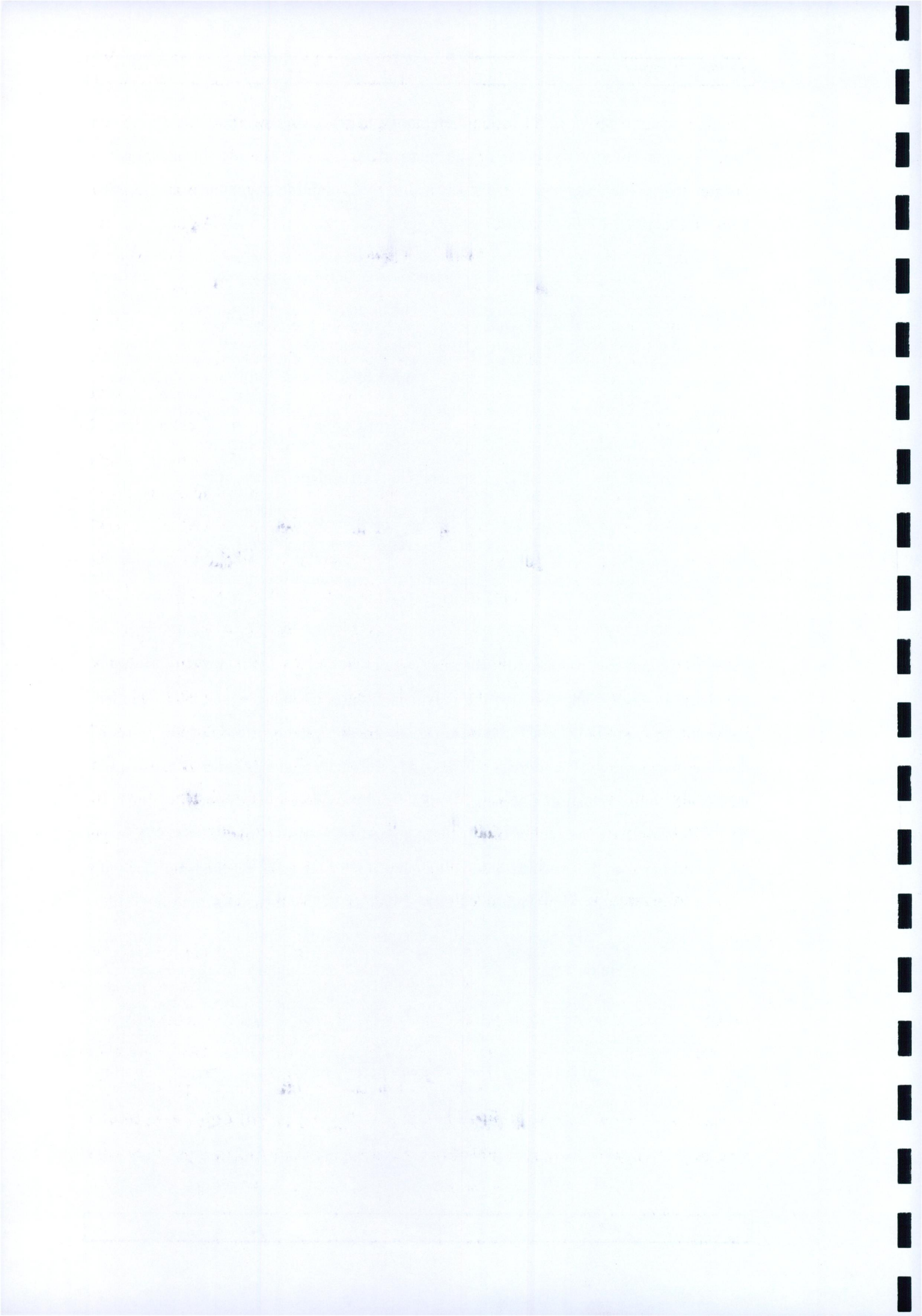
Figure 5



such partnerships provided a tempting alternative to producing standardised designs on paper for the conservative taste of the mass market. New studios for independent fashion and textile designers were established in the crumbling warehouses and disused Victorian factories of East London.

Much of the strength of street-style fashion was derived from such collaborations between fashion and textile designers. Compared to the rest of the fashion design industry which was separate from textile production in terms of both time and space, these young fashion designers enjoyed a unique relationship with their counter parts. The only approximate equivalent was the interaction between the Continental suppliers and the Parisian and Milanese couturiers, but even this was totally different in approach. The British fashion and textile designers matched independence for independence. Their designs were conceived together so that they went well together, manifesting similar intentions and, above all, equal irreverence towards the accepted canons of high fashion. The fashion designers 'radical' experiments in cut were matched by the textile designers 'muscular' prints.

Many of the patterns produced by students were crudely designed and roughly printed, but these qualities complemented the prevalent fashion aesthetic which was intended, above all, to read dramatically at a distance, on the pop promo or the fashion pages of the style magazines. "The more subtle designs exhibited a tendency towards self-parody that tapped into the nation's sense of humour and provided a good record of the 'no-future' generation's first contact with the commercial world" (Colchester, 1991, page 34). Working with the going fashion partnership Body Map (who hit the headlines with their graduation show from Middlesex Polytechnic in 1985), their contemporary, Hilde Simth, made painstakingly, by hand, oversize two-tone simulations of computer graphics. Both Helen Lipman, working for the fashion company English Eccentrics, and the young print-design partnership Hodge and Sellers made mock of the nascent craze for designer clothing with print designs made from famous people's signatures and the reverse side of couturiers labels - "a wry parody of the growing trend of sporting a designers or couturiers label as a means of acquiring status" (McDowell, 1992, page 151).



Encouraged by the success of their peers, subsequent generations of students followed suit. The confusion of contradictory styles and looks that resulted from this influx of independent talent in textile design was artfully marketed by the menswear designer Paul Smith, who had a collection of strong patterns made into a fashionable look. As the decade wore on, the increasingly large numbers of designers who had set up on their own, not only in textiles and fashion, but also in graphics, furniture and interiors, began to shift towards a more craft-based approach. Despite the fact, however, that these designers made most of their work themselves and that much of it was conceived as a 'one-off', never intended for mass production they most vehemently rejected the label 'craftspeople'. 'Craft' in their eyes was a word that carried a stigma, fatally associated with the cloying concerns of the early 1970s, back-to-naturalists. The designers ideas were quite different, inspired by urban style culture. They were less than concerned with the display of virtuoso techniques, as their designs were conceived to be used rather than displayed in a gallery. In search of an alternative aesthetic to the pristine cleanliness of high tech design, experiments were conducted using recycling techniques for creating surface patina and depth. The layered print emerged as a decorative fabric equivalent to the distressed, oxidised, surfaces, favoured by British 'one-off' furniture makers such as Ron Arad and Tom Dixon. Working for Katherine Hamnett and John Galliano, the London based Venezuelan designer Luiven Sanchez embroidered amorphous, amoebic shapes over camouflaged prints of 1970s pin-ups (Fig 6). The rigorously craft-based West Surrey college of Art produced several generations of students, notably Joanna Gordon and Victoria Richards, who repetitively screen-printed and bleached their fabrics to create dense, painterly prints with shifting, surfaces and depths- 'distressed' versions of conventional English chintzes (Fig 7, 8).

For many of these designers who set up on their own, securing adequate backing for their esoteric designs presented a problem. Of the few textile designers who did manage to put their business on a firm financial footing, Georgina Van Etzdorf was the only one to establish a substantial overseas market for her finely crafted designs. Working within the more conventional British idiom of romantic naturalism, her painstakingly constructed patterns such as *Fritillary* (1985) and *Tempest* (1990) which each took a year to perfect, were more accessible to overseas buyers from America and Italy who felt that their finesse offered value for money. By the end of the 1980s this approach to

quality was an attitude that the British fashion designers, educated by several years of exposure to the fashion market, had come to share(Fig 9).

Figure 6



Figure 7



Figure 8

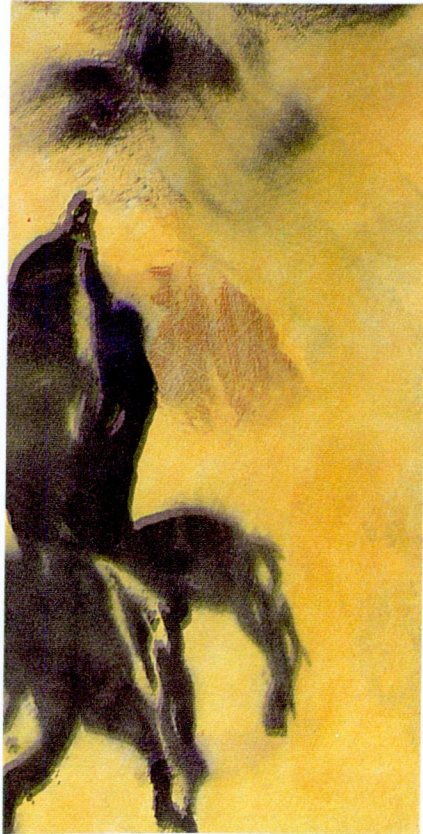


Figure 9



Chapter 2

Japanese textile technology

Japan has exerted a strong and enduring influence on Western ceramics and textiles this century, one result of the standing that these crafts enjoy in Japan, where potters, dyers and weavers are held in greater esteem than their native fine artists. This traditional respect for textile craftsmen which leads the Japanese to award veteran Kimono makers with the title, 'National Living Treasure' explains the global strength of Japanese fabrics. Consistent investment since the Second World War has also given Japan the most sophisticated technological base for textile manufacture in the world. This modern industry, co-existing along side an active folk craft tradition, has put Japanese textile production in a unique position (Fig 10).

Since there is little historical precedent for interior furnishing fabrics in Japan it is the fashion designers who have provided the arena for textile development. During the first half of the 1980s designers such as Issey Miyake, Rei Kawakubo and Yoji Yamamoto made fashion an area of synthesis between digital technologies and craft (Fig 11). In particular, Issey Miyake, whose Miyake Design Studio in Tokyo opened in 1971, pioneered a new approach to fashion with his more extravagant and expressive use of dramatic fabrics inspired by Japanese craft textiles. This cutting method, influenced by the strict geometry of the Kimono and Madeline Vionnet's innovatory use of the bias cut in 1920s and 1930s, introduced a looser way of draping fabric around the body freeing it from the constriction of French tailoring. These ideas turned Tokyo into a fashion capital and generated the interest and the financial support to initiate an extensive research programme into textile design (Fig 12).

Miyake's, Rei Kawakubo's and later, Yoji Yamamoto's patronage of textile research led to a number of innovations. In 1977 the Miyake Design Studio, in co-operation with a Japanese printers', developed laser - beam printing, which produced beautiful geometric prints of graduated colours. During the course of the 1980s Miyake's in-house designer, the master-weaver Makiko Minagaiva, endeavoured to simulate traditional hand woven fabrics gathered on visits to cart-weavers from the Japanese outback on state-of-the-art

Figure 10



Figure 11



Figure 12



computer driven looms. To do this he used random generators to create built in flows during weaving - "an interesting use of robotics to respond to the human desire for the accidental" (Cooper, 1989, page 127). Other methods were evolved to achieve similar effects. In 1986 an article published in Le Monde, described how Rei Kowakubo's knitwear designers loosened screws on sophisticated knitting machines, or left perfect lengths of machine knitted fabric to bleach in the sun for an entire summer, in order to achieve the desired surface effects. Although they looked raw, the Japanese fabrics were a strongly tactile experience.

In terms of the quality of the result these experiments were far removed from, though influenced by, the hobo look of 'post-holocaust chic', made fashionable by the British designer Vivienne Westwood in 1983. Japanese textile designers' experiments with fabric were often quite brutal - Miyake, melted high-quality synthetic fur on heated rollers - separated as they were from European trends by a gulf of technological know-how and the national tradition of respect, embodied, for example, in the refined aesthetics of the tea ceremony of Japan.

Sensing the mood of the market, the Japanese designers were quick to capitalise on it. In the West, there was a mixed reception to this new 'humility' look, which cost the same as more conservative luxury. Japanese design was expensive. One of Miyake's favourite axioms, quoted in Leonard Koren's Japanese design manual, New Fashion Japan, was "the price is part of the design" (Halborn, 1995, page 10).

Junichi Arai's remarkable genius as a weaver is an indication of just how much the West still has to learn from Japan. Arai supplied some of the most dramatic, image - building fabrics to Miyake, Kawakubo and Yamamoto in the 1980s.

Miyake prompted Arai with provocative Zen-like design briefs such as, to make a textile 'like clouds', or 'like poison' (Colchester, 1991 page 28). Arai's approach to weave design is unusual. For most weavers, design is a graphic process which is completed on paper before work starts on the loom. Arai never draws his designs but regards weaving as a three-dimensional construction, a sensual form of engineering with fibres. Indeed he is interested in the orchestration of stress, through balancing the properties of materials through structure in the same way as an engineer would be (Fig 13).

Figure 13



Expressed through cloth, Arai's own brand of engineering is an intimate, tactile and vital form of physics. All woven fabrics are tension structures of a sort, though most aim for controlled tension and stability, Arai's designs are based on destabilising fabrics and releasing rather than controlling tension. "Arai weaves loosely, with high-twist yarns to create cloth with a bouncy texture and feel which seems to spring with life" (Holborn, 1995, page 59).

The basis of Arai's palette during the mid-1980s consisted of a hundred and fifty different synthetic and natural yarns - almost entirely black and white - which were distinguished by different characteristics of twist, sheen, stability and shrinkage.

Arai's experiments with the most naturally springy fibre-wool have been both a revelation and a source of dismay to the West (Japan's woollen industry is only twelve years old). By combining wool and cotton yarns for example, which react quite differently to extreme heat, and hurling the freshly woven fabric into a heated dryer, it is distorted into sculptural relief according to the weave structure or pattern.

The Arai family has a tradition of weaving. Arai's father was a weaver and his grandfather a spinner, he grew up and now lives in the traditional Japanese craft-weaving centre of Kiryu, a small town to the north of Tokyo which specialises in high-twist yarns. This, to some extent, accounts for his thorough knowledge of his craft. During the 1980s, trading under the name of Authologie, Arai created fabrics that were the result of his experiments with a network of small family business of spinners, weavers and finishers of the Kiryu district. What has made him outstanding as a designer is his use and understanding of contemporary manufacturing technologies. This has led to some substantial innovations. Kiryu has always specialised in Jacquard weaving, and Arai pioneered the idea of creating with the aid of a computer far more complex Jacquard punch-cards than the traditional ones. This idea has a neat, circular logic to it - the Jacquard loom, with its system of punched cards, was after all the forerunner of the computer. It is also an interesting example of the way in which "the intangible - electronic data processing - can be used to heighten our awareness of the tangible" (Miyake, 1985, page 98). Arai has pioneered a technique, called combination

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Jacquard which allows yarns of various thickness' to be woven into textural pattern - an idea which has now been adopted by designers from all over the world.

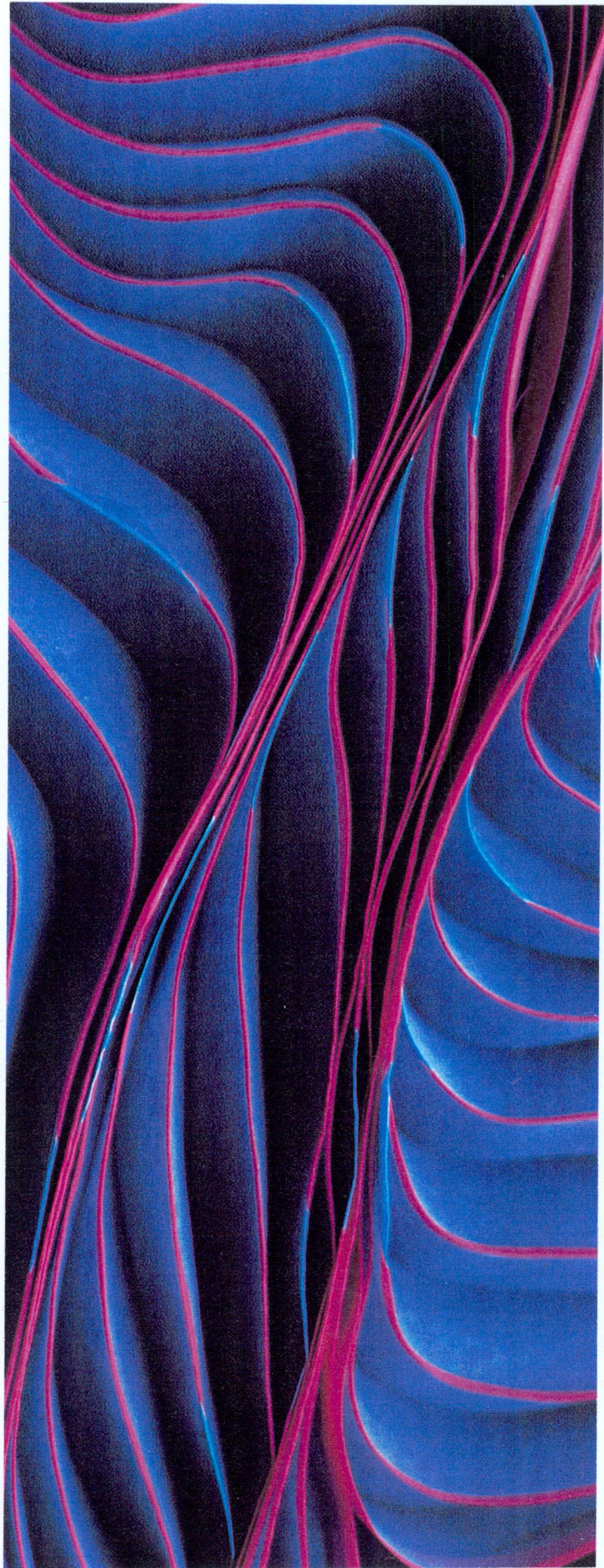
Towards the end of the 1980s and the beginning of the 1990s, the fashion market has become increasingly fragmented, reflecting the plurality of cultures in the West. As a result, high fashion designers of womenswear no longer impose a consensus of opinion as to whether hemlines are to be low or high and jeans broad or narrow; where there once was an agreed strategy, concerning the lines, looks and colours of the season, there now exists a fractured market of designers, each attempting to establish their independent mark. It is generally agreed that the frenetic succession of different looks during the 1970s and 1980s finished by saturating the consumer in terms of cut. When, by the end of the 1980s, changes in fashion had become so accelerated that shapes only remained 'in' for a matter of weeks this method of stimulating consumption stopped working. Style no longer had time to accrue social value and so people lost interest. In the aftermath of this, fashion has turned its attention to its materials for inspiration and innovation.

Fabrics have responded by becoming more prominent and have started to assert themselves dimensionally on the fashion silhouette. Taking their inspiration from traditional craft techniques of pleating and smocking, and the effects achieved by Japanese Shibom resist dyeing processes, designers have begun to explore surface relief. Research into finely crafted surfaces indicates a shift from the individualist art-based expressionist prints of the 1980s towards a more observant, skill oriented approach. Designers are less concerned with imposing an image (their mark) on fabric, than exploring the behaviour of the cloth itself.

Relief effects can change the role of print from that of applying pattern on a surface to describing form. By screen printing strips across a length of fabric for example, British designer Bridget Bailey brings out the spines of her steam-pleated organzas in contrasting colours - a simple but effective method of highlighting the fluidity with which these pleated fabrics move (Fig 14). Another British designer, Nigel Atkinson who supplies Romeo Gigli, Issey Miyake and Marling Sitbon as well as interior and costume designers, has gone a step further, using industrial printing processes of his own devising to create form. A series of corrugated lines printed in rubber paste along a

stretch of fabric creates pleats, swirling aqueous rubber print gives a fabric a stiffer texture, like creased paper, in each case the fabrics behaviour is adopted by the pattern he prints. Atkinson has also developed a technique for baking fabrics at high

Figure 14



temperatures, which moulds them into a permanent shape - another industrial process which rapidly achieves effects it would have taken hours to create by hand. Inspired by nineteenth-century prints of fossils and plants. Atkinson explores natural textures and forms, "he moulds his fabric into deep relief, velvets are furrowed with spiralling crevices, or are transformed into a downy lilac landscape of whipped peaks" (Cooper, 1989, page 61). Atkinson's work is sensual, perhaps even pretty, and is favoured by the most romantic of the Italian fashion designers, Romeo Gigli. That said, it offers an altogether more forceful view of nature than the often blank, diluted and stylised florals one tends to associate with textile prints (Fig 15).

Perhaps the stunning photography of modern wildlife documentaries has revitalised our vision of animals and plants by bringing a rawer form of nature into the domestic environment. The growing concern over the future of the planet would seem to have made designers re-evaluate nature as a source of inspiration. The bold, semi-abstract prints of the French textile artist and designer Patrick Pinon provide a clear, harrowing articulation of nature in peril.

The work of the British artist and designer Alida Efstration takes a more decorative and celebratory approach towards the natural world. She weaves fine metallic filaments into striped iridescent lame which can then be teased into delicate undulating forms with her fingers. Efstration uses these metal meshes to make shimmering one-off clothes, hats and sculptural objects. Like Atkinson, Efstration does not treat the natural world figuratively but analyses its surface. Her sculptural work suggests close-up impressions of microscopic marine life (Fig 16).

The work of American D'Arcie Beytebiere conveys a similar impression of the world being pulled into focus, as a finer, more detailed observation is, brought to bear upon it. Beytebiere is a craftswoman and her approach a combination of bleaching and Japanese Shiboti is labour intensive.

Figure 15

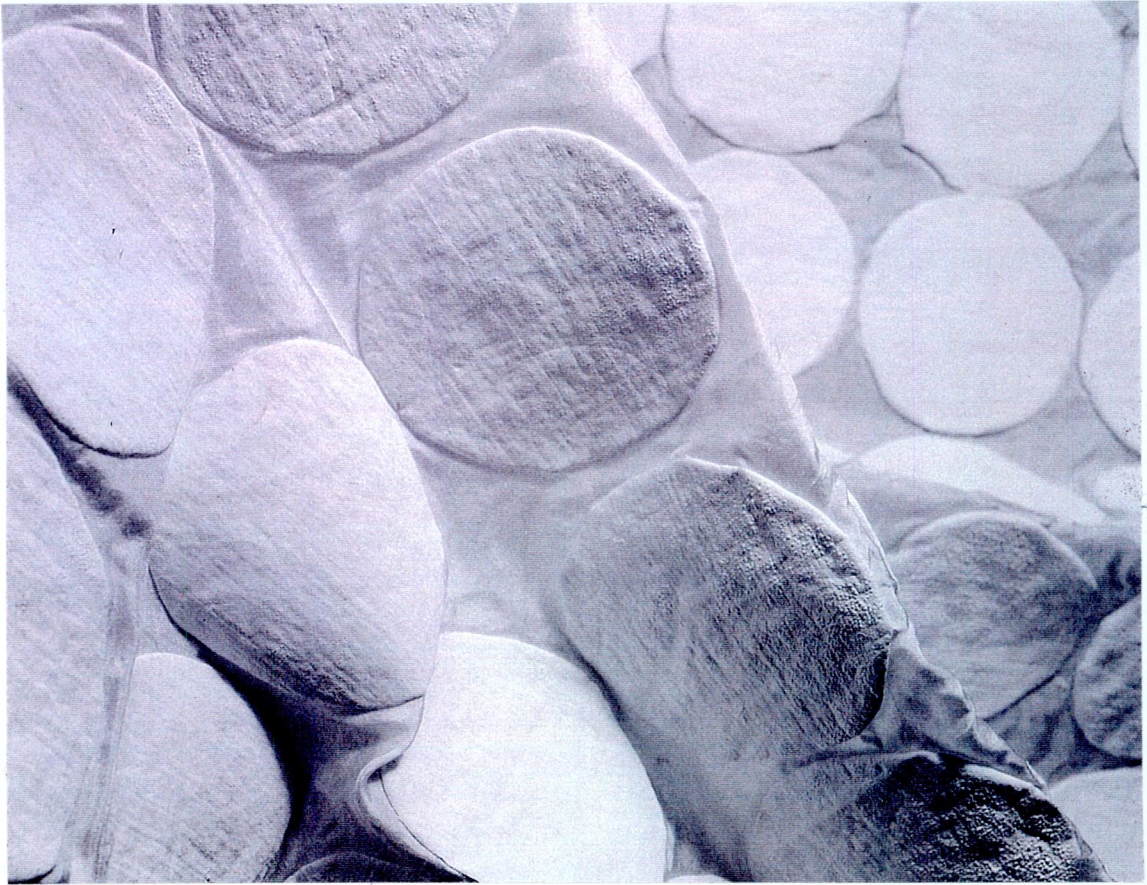


Figure 16



The textiles featured in this thesis are the work of independent fabric designers who, in the fiercely competitive world of fashion, enjoy at best a very precarious position. One much-discussed reason for this is what has become known as the 'rip-off' factor. As the British fashion designer Georgina Godley points out, "the rag trade is notorious for confusing innovation with changes in style. New ideas are devalued by superficial imitations appearing in the shops a couple of months later" (McDowell, 1992, page 85).

A more insidious problem exists in the delicate balance of power between fashion and fabric designers. Today, many top fashion designers have begun to adopt the Italian system of working with a team of in-house designers and commissioning state-of-the-art suppliers to manufacture fabrics to their specifications. The computerisation of the textile industry has succeeded in making manufacture sufficiently flexible to supply short lengths of fabrics to fashion designers on demand.

The industry is now divided into three tiers: companies with lengthy cycles of production which they concentrate on equally lengthy programmes of research; middle-of-the-range companies with faster cycles capable of supplying large quantities of fabrics to the mass market; and small specialised companies capable of responding to the spasmodic eruptions of the 'avant-garde'.

Once industry is capable of a quick response, the alternatives for craft production are reduced, and the space for the independent textile designer becomes restricted. As the Japanese textile designers have shown, the possibility of an industry produced 'one-off' is now a reality, and the division between industrial design and couture has become blurred.

Clearly this eats into the territory of the independent designer who must now offer a product that is increasingly remarkable something that the fashion designer still couldn't get anywhere else. However, in a market where it has become more and more important for fashion designers to establish a strong individual identity, textile designers must provide fabrics that are both interesting and commercial. Today remarkable fabrics are commissioned by fashion designers to boost their own name rather than that of their suppliers. The flexibility of the industry has put fashion designers in such a position of power that they are free to choose.

The highly successful print-design partnership Hodge and Sellers, which has launched a number of products, including Nigel Atkinson, on a successful career, provides evidence that it is possible to negotiate these problems and still create interesting work. It is highly adept at slipping into the idiom of different fashion designers. The partnership comprises a good combination of skills - Hodge's approach to print is graphic, Seller is more textural. In a celebrated design for Azzedine Alaïa, they applied Seller's research into finely and textured rubber laminates, creating a clever, modern rethink of lace.

The Danish-French print/weave partnership Tastemain and Risberg provides a good example of another market in which rather more thoughtful design can greatly enhance the product. They operate a craft-based design studio in Paris and specialise in using their broad knowledge of design skills to revitalise the production of specific fabrics. Despite the 'peacock revolution' of the early 1980s which was supposed to revive the male wardrobe, men's shirts remain a sensitive area in textile design. In an inspired move Tastemain and Riisberg supplied intelligent weave-designs to the top-quality French shirt manufacturer Jean Passot, which looked acceptably conventional at a distance, but proved rather more intriguing when seen close up. Needless to say, their designs revitalised Passot's production, and within three seasons had substantially increased its profit.

New fibre technologies present the most advanced and uncompromisingly modern aspect to textile production today. After a decade in which the more conservative and hierarchical codes of dress were re-established, the growing popularity of sportswear, leisurewear or activewear marks a welcome return to a more democratic attitude to dress. The current fashion interest in technology rich textiles, originally designed to meet the performance demands of professional sportswear market, presents fibre manufacturers with new opportunities for research. In terms of fabric design, fibre engineering signals the most exciting prospect for the future presenting the possibility of a fusion between craft, history and new technology.

Many of these new textile technologies are, in fact, quite old what is recent is their inception on the fashion, leisurewear and activewear markets. Lycra had been present in swimsuits and women's underwear since its invention in the 1960s, but it was not until

the British fashion partnership Body Map removed the protective crotch padding from cycling shorts and put them on the catwalk that Lycra made its debut on the fashion market. Lycra introduced to ordinary clothing the qualities of mobility, functionality and comfort that the urban fitness craze of the 1970s had made fashionable. Used in combination with natural fibres; it modernised traditional fabrics, suddenly chiffon could stretch and no longer required ironing. Moreover, for designers of ready-to-wear clothing, Lycra presented an easy solution to some of the problems of industrial tailoring and created. Lycra's success has been so remarkable - Du Pont de Nemours of America are still failing to satisfy demand - that other manufacturers of technology rich textiles have been encouraged to follow suit.

“For protection from the wet, the current Cadillac of the performance fabric market is Gore-tex, the miracle material that protects the feet of the street-smart Timberland boot wearers” (Cooper, 1989, page 78). The Gore-tex microporous membrane, manufactured by the American company W.L. Gore, is an expanded version of PTFE, properly called Polytetrafluoroethylene, derived from the same petrochemical products by a similar technique as Teflon. It was originally designed for the NASA Space Programme, and was later developed to withstand Arctic conditions, and to prevent the passage of bacteria in surgeons gowns, but can now be found on the fashion market. Gore-tex is totally windproof and waterproof but allows the passage of water vapour. What makes the Gore-tex membrane interesting in terms of fashion is that it can be laminated to almost any material including Lycra without losing its performance qualities.

Nylon was launched in 1940 and was marketed as a wonderfibre. During the 1950s and into the 1960s nylon shirts, socks and sheets were prompted because of their ‘easy-care’ characteristics - no ironing needed. Unfortunately feet and armpits clad in nylon sweated horribly and nylon sheets were unpleasant to sleep on - you slithered and sweated and even itched. Nylon was passé by 1970 although ICI resolved the problem of comfort, having successfully introduced a double-layered sports fabric called Aquator incorporating their nylon microfibre Tactel, which draws sweat from the body and disperses it on the outer layer of the fabric for speedy, evaporation, keeping the layer next to the skin dry and therefore comfortable at all times.

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In Japan, the current world leader in new textile technology, producers are confident that they have successfully simulated the look and feel of silk and are now experimenting with imitating its sound. A leading Japanese fibre manufacturer, Teijin, has developed a fibre that simulates not only the feel but the rustle of wild tussah silk, whilst another major Japanese synthetics company, Toyobo, has developed a new polymer partly derived from milk, whose molecular structure is actually similar to that of silk.

Heat and light-sensitive dyes are, perhaps the most new-age entity to have come from the sportswear market. A technique called 'microencapsulation' creates micron sized bubbles that attach themselves along the length of a fibre. These can be filled with bactericides, jasmine essence or heat-reactive liquid crystals, which create the possibility of clothes, that not only adapt to the temperature of the environment, but also change colour as the wearer passes from sunlight into shadow. Heat reactive dyes are particularly effective in swimsuits, which change colour as they dry in the sun.

New micro-finishes, created by micro-powders, crimping or combining polyester fibres with widely different shrinkage rates, are described vaguely, as being dryer than apricot, or softer than washed silk, peach stain, or even angel skin or Italian invention.

Developing such sophisticated, technology-rich fibres is an expensive and time-consuming operation. Its true purpose is to produce competitive products. Another reason for the decline of the synthetics industry in the West in the early 1970s was that the developing countries created synthetics' industries themselves, thereby devaluing Western products. It managed to recover by specialising in new markets, notably Geotextiles which specialised in polyester fabrics used as foundations in earthworks and textiles for specific engineering technologies.

The heavy investment in new fibre technology for the sportswear market had implications for designers. Fibre manufacturers are keen to use design as a means of communicating the value of their products. In Japan, fibre manufacturers now commission spinners, weavers and textile designers to experiment with their products. This research based attitude to design demands increasing finesse from textile designers who must achieve a delicate balance between the conflicting demands of performance, comfort, feel and look.

The work of the Japanese-based British designer, Rosemary Moore, is representative of the future potential created by the fusion between history, craft and new technology. As a graduate student at the Royal College of Art, Moore patented her invention of a crinkle-knit Lycra, made famous by the swimwear 'Liza Bruce'. Moore's new composite fabrics, manufactured under licence in Japan, are exotic, hybrid creations that combine texture, performance and pattern. As with Arai's fabrics, Moore's designs rely on playing off yarns with different degrees of elasticity against one another; state of the art synthetics are combined with natural fibres and knitted into patterns taken from Ancient Greek Masks.

Not all textile design using new technology, need rely on weaving such intricate structures with yarn. The Dutch milliner and theatrical designer, Maria Blisse, has made design experiments in an area of current extensive research - nonwovens. Blisse's 'flexicap' designed for Issey Miyake in 1988 was a heat moulded envelope of neoprene rubber with a single incision in it, which enabled it to be worn in a variety of ways. Blisse has created equally lucid designs for the company ISO. Made from closed-cell foam polyamides, Blisse's designs use processes such as vacuum moulding and lamination to create geometrically formed ultralight costumes reminiscent of those used by the German artist and Bauhaus tutor Osca Schlemmer for the Triadic Ballet in 1926 and 1927.

Chapter 3

Contemporary Prints

Since the Second World War, prints have been the most popular form of furnishing fabric. Screen printing, in particular, introduced to the West in the 1930s and mechanised during the 1950s and 1960s, did much to change attitudes towards both furnishing fabrics and their manufacture. Printed fabrics do not wear as well as woven designs, but since they are cheaper to replace consumers soon warmed to the idea of changing the appearance of their home interiors every year or so rather than once every decade. Furnishing fabrics became susceptible to the rapid changes in fashion and design.

From the industrialists point of view, screen printing was an easy way out. Compared with the expense of setting up a roller, or even a loom, screen printing was cheap and offered a quick and flexible method of bestowing vast yardages of standard mass-produced cotton in the latest style of the moment.

Fabric printing holds an ambiguous place in the history of modernist design. Along with other methods of embellishing fabrics, such as embroidery, printing was excluded from the Bauhaus curriculum. The development of the contemporary print was greatly influenced by another school of modernist thought, however, which was central to the art and design movement in the USSR, the Netherlands and Germany at the beginning of the century. Combined with the lack of ornament in the houses and buildings created by modernist architects, meant that from the 1930s onwards contemporary art came to exert a stronger influence on fabric printing than ever before.

Screen printing lent itself most accommodatingly to the task of applying art to fabric. If an artist's print could be reproduced on paper, then why not on cloth? In 1946 the experimental Czech printers, Zide and Lida Ascher, hit upon the idea of commissioning celebrated artists of the time - including Henri Matisse and Henry Moore - to create designs which they then editioned on silk and sold as scarves.

In the 1950s the linear graphics characteristic of the work of Paul Klee, Joan Miro and Alexander Calder inspired a new movement in furnishing fabric design. During the 1960s and 1970s fabric design reflected the rapid succession of movements in art - abstract expressionism, Op and the Pop Art - before finally looking to folk art for inspiration (Fig 17).

In 1957, the British print designer Lucienne Day was celebrated for her award-winning upholstery fabric 'Calyx', which was first shown at the Festival of Britain in 1951. Day expressed her belief that the influence of abstract painting had inspired an entirely new style of furnishing fabric design, which had finally broken away from floral themes to focus exclusively on modern art. The idea of textile design as an applied art flourished in the mid 1980s when roughness started to be valued as an aesthetic by both artists and designers. The gestural, roughly sketched patterns by designers such as The Cloth in London, and Dorian Modernini in Milan, are examples of this approach (Fig 18).

It was in Scandinavia, however that this art-based approach fostered a lasting contemporary style in fabric design. Before the 1930s, Finland and Sweden had relied on important print design, largely from France, but the advent of screen printing prompted designers from both these countries to experiment with print for the first time. The result was brilliant colours and dynamism of their designs which reflected this new medium. At the Italian design Triennales of 1950 the fresh, brightly coloured Scandinavian prints together with the stripped, pine furniture of the 'contemporary' look were warmly received by people eager to forget the past and drabness of wartime products.

One peculiarity of textile design in the 1980s was that, despite the boom in design of domestic products the interior decoration market did not complement it. A crisis in confidence in the future, combined with an increase in demand for luxury meant that the major trend in interior decoration was retrospection. Luxury became associated with the past. From the mid 1980s onwards - particularly in America, France, Italy and Britain - the style of furnishing fabric responded to the mounting interest in conservation and restoration with wide scale revival of eighteenth and nineteenth century prints.

Figure 17

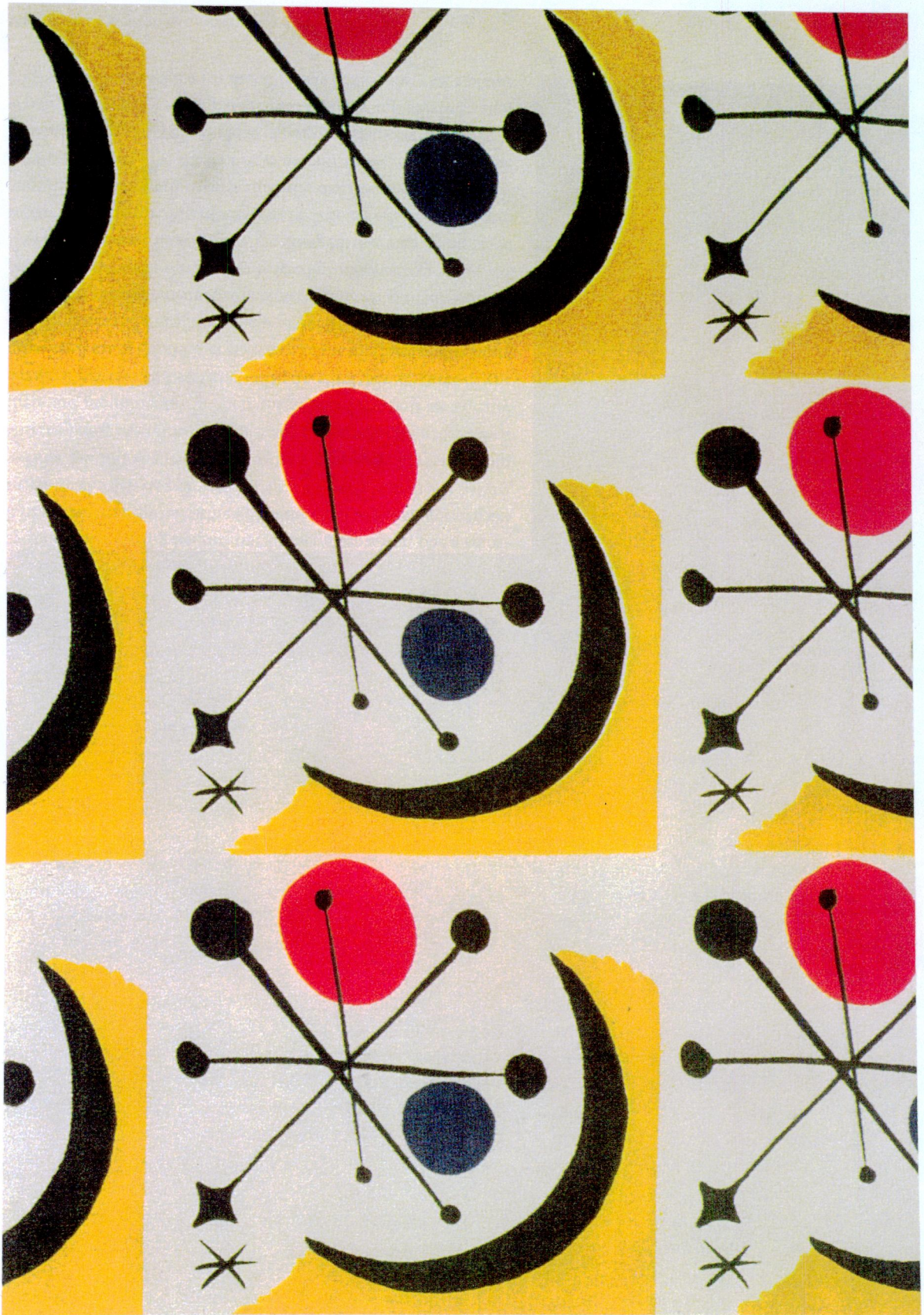


Figure 18



The old furnishing fabric houses, such as Brunshwig and Fils (USA), Berger (France), Rubelli (Italy), and G.P. and J. Baker (UK), which had survived at low ebb since the 1960s, responded with alacrity to the growing demand for archive prints. Even the new companies who achieved success at this time, such as Ted Tyler in New York, and the Designers Guild, and Osbourne of Little in London, took much of their inspiration from the archive. “This mood of retrospection was expressed in 1987 when Bernard Neville, the then head tutor of textiles at the Royal College of Art, admitted in a magazine interview that there was not a single piece of contemporary fabric in his home” (Calloway, 1994, page 137).

Despite the general move towards retrospection, certain designers in the 1980s began to quote from tradition with a view to creating a decorative idiom that was relevant to the present. During the early 1980s companies such as Timney & Fowler (UK) reflected the renewed interest in classical motifs in monochrome prints taken from enlarged and distorted engravings of classical motifs. The French design group Robert le Heros also achieved considerable success with their painterly re-workings of French baroque and High Renaissance patterns (Fig 19).

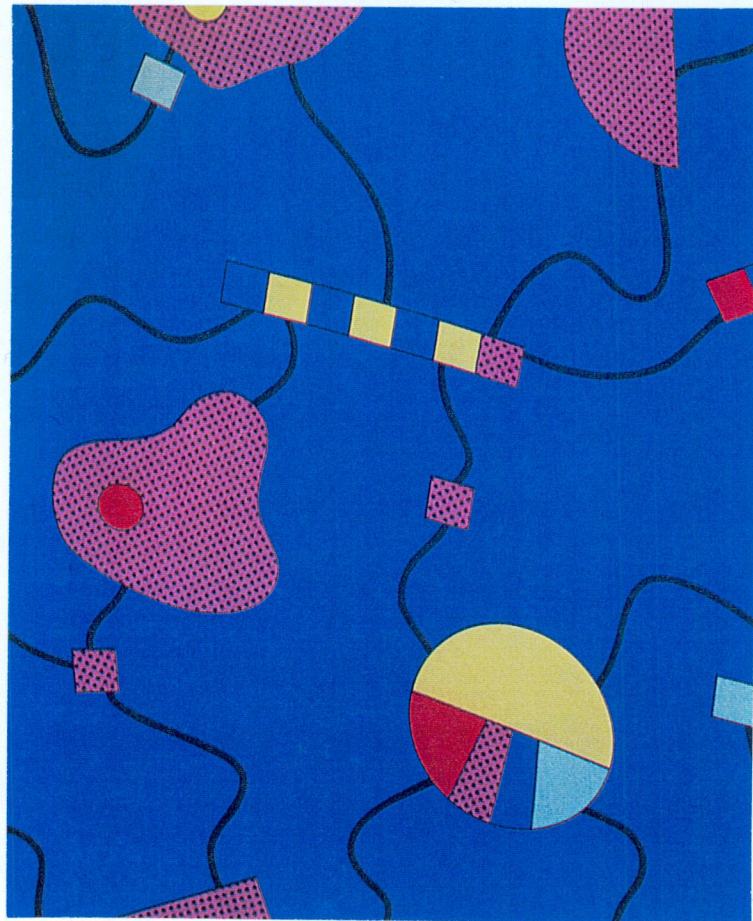
Textiles, as with all other aspects of cultural production, reflect something of the attitudes and sometimes beliefs of the societies that produce them. George Sowden’s (UK) and Nathalie du Pasquier’s (France) designs from the mid 1980s are of enduring interest, because they signal how electronic media can allow fragments of the graphic environment to be combined into a contemporary style. Du Pasquier’s approach to pattern was the visual equivalent of a ‘remix’ in music. She used her computer to synthesise and layer decorative signs, symbols and surface patterns from urban, ethnic, historic and high and low cultures. Her designs for Esprit, Lorenz and the carpet manufacturer Palmissano in the mid 1980s registered surface patterns from disparate sources, such as cartoon imagery, graffiti, 1950s laminates, architecture, Persian carpets and Navajo blankets, which she fused into luminous psychedelic patterns.

Figure 19



Du Pasquier's work was alert to the evocative potential of pattern. Her work remains one of the high points of the many attempts during the late 1980s to piece together a new idiom by a process of collage that exploited unlikely conjunctions to create meaning. Her designs for Palmissano stressed the tensions inherent in her pluralist approach to design, where floral and architectural motifs strain against one another (Fig 20).

Figure 20



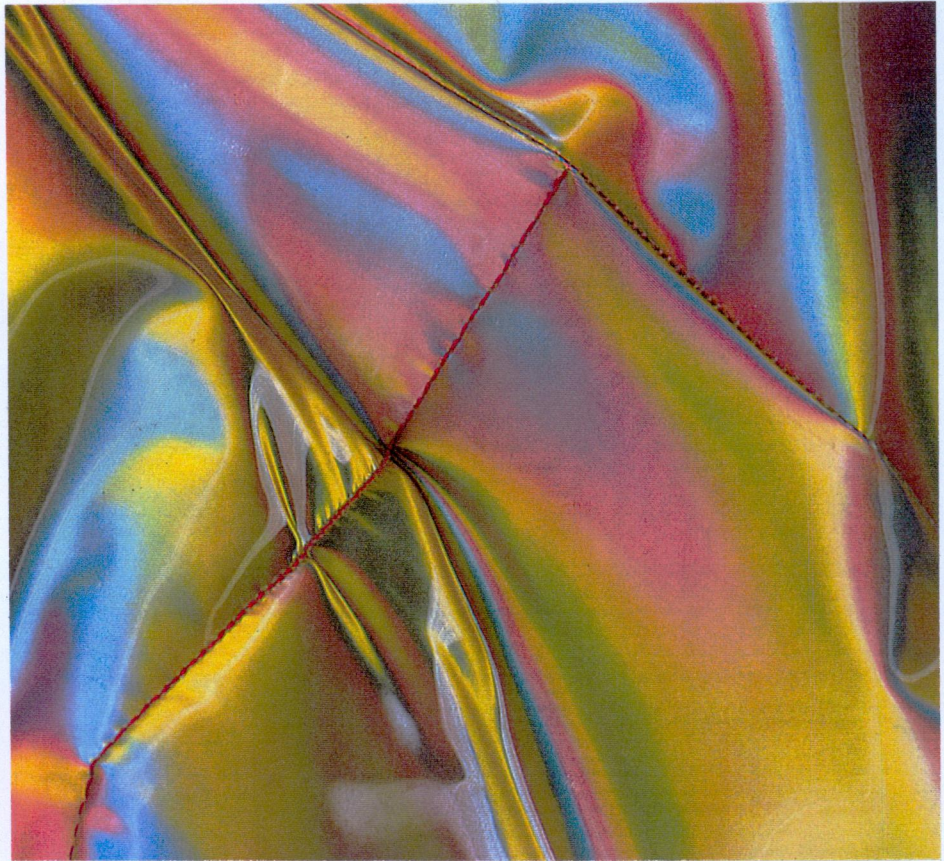
Conclusion

Translucence and iridescence are among the more modern concerns of aesthetics, that express contemporary techniques now being explored by textile designers. They offer a means of 'dematerialising' materials into a play of light, reflection and transparency. Metallic pigments, light-sensitive dyes, the vacuum-bonding of metals onto yarn or cloth, highly reflective polyester slit films and printed lacquers can all create fabrics that are sensitive in light frequency. The decorative manipulation of light upon, or through the bavric surface, was the theme of an exhibition at the Cooper-Hewitt Museum in 1990 called 'colour, light, surface'. The exhibition curator Milton Sunday, pointed out that fabric designers have started to explore simultaneously this area of research. A

The Scottish designer, Stephen French, explores new applications for technical effects. He created a series of fabrics that change colour as the viewer moves around the room. His Lenticular Screen Upholstery fabric was made from an offset lithoprinted fabric, which when laminated with a fine plastic film embossed with lenses, refracts different areas of pattern as the viewers position changes. This technique is borrowed from 3-D animation postcards, which have Kitsch images of saints raising their arms and eyes to heaven as you wiggle the card backwards and forwards. French has also explored the optical effects of working with holograms on curved surfaces (Fig 21).

The recent developments in 'devore' techniques, which are now more suitable for large-scale production, have given a new lease of life to the lace curtain. Devore a word derived from the French verb meaning 'to devour' is a chemical preparation which can be printed and then baked at high temperature to burn out patterns from a length of cloth, thereby creating a modern, cheaper and more adaptable alternative to lace. Junichi Arai's design 'Melting Off', uses a variation of this technique to etch a swirling pattern in a titanium-bonded fabric, that recreates both the translucence and play of light upon the surface of running water. Germany and Switzerland currently lead the rest of Europe in terms of technically innovatory fabrics for the interior market. In Switzerland, companies such as Creation Baumann, Christian Fischloacher and Zumsteg are some of the most technologically advanced in Europe. Creation Baumann is celebrated for supplying precise fabric solutions to the contract market.

Figure 21



The Baumann factory is a precise and economic mechanism for textile production, offering a vision of the factory for the future. The modernist building houses facilities for yarn spinning, weaving, dyeing and printing, as well as design studios. The factory is also energy efficient, with the hot water used for dyeing, heating the building before being piped to a refining plant.

The designs by the experimental Japanese firm Nuno, are an illustration of the way in which the technologies of CAD, linked to a CAM system, can be used in an innovatory way. Nuno is both a shop, as well as a group of skilled designers, managed by the enterprising designer Reikeo Sudo. Junichi Arai joined Reikeo Sudo in 1987, when he decided to transfer the focus of his attention from fashion to furnishing fabrics. Both Arai and Sudo in combination with Jacquard, have applied their pioneering experiments to create furnishing fabrics which achieve the sensuality of hand-crafted genre. Arai work is as much inspired by Peruvian textiles, as by new manufacturing technologies. Nuno's fabrics on the other hand, provide one of the most significant pointers yet towards the future, the fusion of history, craft, diverse cultural influences and new digital technologies, indicate that design has become the true successor of the traditional crafts (Fig 22).

Figure 22



Bibliography

- Calloway, Stephen Baroque, Baroque, Phaidon Press Ltd, 1994.
- Colchester, Chloé The new textiles trends and traditions, London: Thames and Hudson 1991.
- Cooper, Helen and
Vulker, Sudy Textiles, Fashioning the Futures, MacMillian: 1989.
- Holborn, Mark Issey Miyake, Germany Taschen, 1995.
- Lacroix, Christian Pieces of a pattern, London: Thames and Hudson, 1992.
- McDowell, Colin Dressed to Kill: Butler and Tanner Ltd., 1992.
- Miyake, Issey East meets West, Issey Miyake, Tokyo: Heibonsha, 1978.
- Miyake, Issey Issey Miyake bodyworks, Tokyo: Shogakukan, 1983.
- Miyake, Issey Issey Miyake & Miyake Design Studio, Tokyo: Obunsha, 1985.
- Penn, Iring Issey Miyake, New York, Callaway Editions, 1988
- Schoeser, Mary Textile design England 20th century, London: Design Council 1984.

Articles and Magazines

- Connoisseur V. 217 November 1987, pages 160-164
- Crafts No. 75, July/August 1985, pages 40 - 41
- Crafts No. 84, Jan/Feb 1987, pages 44-45
- Crafts No. 88, September/October 1987, pages 32-35
- Crafts No. 101, Nov/December 1989, pages 26-29
- Crafts No. 124, September/October 1993, pages 50-51
- Design No 438, June 1985, page 11
- Design No 486, June 1989, pages 44 - 46
- Fibrearts Volume 15, January/February 1989, page 68
- Fibrearts Volume 17, December 1990, page 24
- Fibrearts Volume 19, Summer 1992, page 55
- ID Volume 38, September/October 1991, page 57
- RIBA Journal 100, April 1993, page 41