CREATIVITY IN FASHION

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ABSTRACT

Fashion consumption, ever contradictory in nature, requires product to achieve, among a variety of facets, both quality and value for money, individuality as well as brand identity. Hines (2002) draws attention to the relationship between manufacturers and retailers and, in particular, information sharing. With increasing complaints of new collections on the shopfloor being 'unimpressive' or 'unattractive', the issue of creativity as part of a strategic response by companies must be examined, in particular in the relationship between buying and designing new fashion items. This paper will examine the process of design as practiced by fashion designers and aims to offer insights and highlight issues that should be considered when examining how 'designerly thinking' might be incorporated at the strategic level of management.

Key words: creative thinking, fashion designer, strategic management.

Introduction

Creativity is a very emotive issue in fashion and fashion designers themselves cannot agree what it is, or, indeed, if there can be too much of it as a recent article voicing the opinion of two well-known designers demonstrated (Wood 2002). Inappropriate or dull designs were blamed as major causes of the troubles for Marks and Spencer and Laura Ashley and it is the same complaint for the lack of sales this season for William Baird Group's brands Windsmoor, Planet and Precis Petite, where lack of trend spotting was raised as an issue (Anderson, 2002).

Part of the problem is the role of the designer in many UK high street stores. Fashion designers are increasingly finding that their ability to spot trends and be derivative of market leaders, rather than innovate has become a key part of their work (Carter 2002). At the same the lack of trend spotting does have its problems (as at William Baird, Anderson, 2002). It appears, therefore, that the problem is not that designers are trend spotting and adapting but that, as lead times decrease and the practice of changing product ranges every few weeks rather than every season is adopted by most levels of the fashion market in the UK, newness is no longer a competitive advantage in fashion retailing. Advantage is gained by understanding the increasingly fragmenting target markets, ensuring that the right amount of newness/adaptation is on the shopfloor so as not to scare or bore the customer (Butler, 2002). Information has become key, specially sharing it between manufacturers and retailers (Kilduff 2002, Hines, 2002, Birnbaum, 2002). Access to

trend information for the fashion consumer has become easy. This prompted one retail consultant to surmise that retailers could no longer remain ahead of the customer in terms of trends but would have make design an integral part of the buying process, take risks and allow designers to create trends and design appropriately (Binns in Carter, 2002,).

The question then is one of how to use designers effectively. Designers are increasingly viewed having an important roles in defining how companies use information, how production information is documented and communicated (Lawson 1990, French 1994, Vossoughi 1998). This is not a new concept but appears to still need tackling in the fashion industry, particularly the large high street retailers. Building on Porter's (1985) value chain concept, it has been noted that design management creates value at three different levels: management of design activities, integration of the design function into all the business processes and integration of the design methods and decisions to the design vision within the company mission and strategy (Cooper and Press 1995, de Mazota 1998). The upturn in the Finnish fashion firm Marimekko Oy's fortunes when the designer was given a more strategic role (Ainamo 1998) illustrates that strategic design management requires "a thorough knowledge of the activity of design… an understanding of design thinking in terms of its cognitive structure." (Borja de Mazota in Bruce and Jevnaker, 1998, p. 248). This understanding might create opportunities for incorporating "designerly thinking" and design decisions into organizational strategy.

1   Background

Puccio (1997) described 12 reasons for the scientific study of creativity, among them contribution to effective leadership and discovering new and better ways of solving problems, the effective use of human resources and the rapid growth of competition in business and industry.

Matlin (2002) has observed that of all the various approaches to the study of creativity, two have been particularly significant:

- Divergent production: emphasizes the importance of divergent thinking style and measures creativity in terms of the number of variety of responses made to a given problem or test (Guilford, 1967, Finke, 1992, Mayer 1999). Divergent thinking is still considered an important aspect of creativity.

- Investment theory of creativity: sees creativity as a complex combination of attributes and maintains that five attributes are essential: intelligence, knowledge, motivation, encouraging environment, appropriate thinking styles and appropriate personality. This approach is attractive to researchers interested in the social element, such as business, design, engineering etc. as there is a strong emphasis on factors within and outside of the person, such as motivation, the working environment (Sternberg and Lubart, 1995, Amabile, 1990). Researchers in design, notably architecture, engineering and computation have been drawn to this approach as the interests are in how the designer thinks and effort has been directed towards computer software that aids or mimics the decision making process (Lloyd and Scott, 1994).

Scientific study of creativity in fashion is sparse. More often than not there are glimpses into well-known fashion designers' sources of inspiration through anecdotal evidence contained in biographical accounts (Jouve and Demornex, 1989; Palais Galleria, 1991, McDowell 1997) or reportage in style (Wood, 2002). The study of creativity in fashion conducted to date have included an examination into the environment that designers may work within (Greenberg 1994) and of communications in working studios to help create computer languages or software to either aid communication between designers (le Pechoux et al, 2001)

or between designers and their technical team members (Eckert, 2000, 2002).

2 Creativity is a form of problem solving and fashion design is a problem

Creativity has been regarded as a type of problem solving (Matlin, 2002). Work in computers helped to bring cognitive psychology to a heightened level of examination in the 1950's and 1960's (Evans in French and Coleman 1995). "Computers are general purpose information processing systems… Once you equate thinking with information processing, then the task of the modern cognitive psychologist is clear: understanding thought is the problem of discovering the software of the human brain" (Evans in French and Coleman 1995, p. 60). According to Ömer Akin (1989), the study of design problems arises out of Simon's (1944) work in decision making and Newell et al's (1957) work in 'heuristics'. Problem-solving theories with regard to design problems date from the end of the nineteenth century (Rowe 1991).

Psychologists have distinguished between different types of mental processes involved in problem solving. Deterministic mental processes at no stage call for choices to be made (e.g. numbers used to multiply with determine the outcome of long multiplication). Design problems require mental processes that involve choice and freedom of will (Johnson-Laird in Sternberg 1988). Characteristics of design problems are that they are constrained, difficult to define and are interrelated with the solution.

Constraints on the design problem are two-fold: problem-orientated (external) and related to the problem itself, they are imposed by the clients, the user, legislation, etc. as well as autonomous or independent (internal) and are imposed by the designer (Simon 1970, 1973, Lawson 1990). These constraints serve the functions of ensuring that a design solution meets the requirements of the problem, whether practical, or symbolic. *Design problems are difficult to define* and have been classified according to the level of definition. The "well-defined" (Newell, Shaw and Simon 1967), or "tame" (Rittel 1972) problems are those where goals are already prescribed and apparent (Rowe, 1991), e.g., algebraic equations with two unknown values, crossword puzzles, chess moves, space-planning problems in architecture. Rowe (1991) described the "ill-defined" problems as the typical architecture problem. Newell, Shaw and Simon (1967) and Bazjanac (1974) (in Rowe 1991) described it as where the solution is an unknown quantity and a lot of time is spent in clarifying the problem with the client. Reflecting on this, Lawson felt that it suggested that "... design involves finding and identifying problems as much as solving them." (Lawson, p.136, 1994). Lawson (1990) reasoned that the very difficulty of stating the problem implied many solutions to the same problem, i.e. the *interrelated state of the design problem and solution*. The final type of problem is also ill-defined but so much so that they defy full definition and further questions about the problem can always be asked leading to "continual reformulation" (Rowe 1991, p.41). These problems have no stopping rule, there are no right or wrong solutions and they are called "wicked problems" (Churchman 1967, Rittel 1972, Bazjanac 1974 in Rowe 1991).

As the products of fashion design are consumer items, they are a means of constructing and communicating identity. Fashion sign values do not have any meaning in the form itself, only in relation to each other (Baudrillard 1981, Wilson 1987 and Davis 1994). The fashion design problem (*what to design*) appears to be as much about the intended consumer as it is about the product (*the design solution*) itself, implying that the fashion design problem and solution are interrelated. It would also appear that the intended consumer (part of the design problem) defies full definition because of the constant changes in society, styles and tastes. Fashion social

psychologists and marketers have been increasingly using personal identity construction and generating and communication of sign values to understand consumer-buying behavior (Williams 1981, Engel et. al, 1990, Kotler and Armstrong, 1990, Kaiser et al, 1995). It appears to be appropriate to understand the fashion design problem as a "wicked one" (Churchman 1967, Rittel 1972, Bazjanac 1974 in Rowe 1991).

2 What are fashion designers supposed to do?

Ginny Frings described the fashion designer as creating fashion ideas and supervising pattern-making and sample making (Frings 1991). The UK Fashion Report described the fashion designer as being "…involved in creative and individual collections …characterized by high value, low volume sales and mainly small-scale enterprise" where "the names had attained a certain cachet" and were regarded as "inspiring trends and refreshing the look on the high street" (EMAP, p.435, 1997). In contrast, Pamela Stecker reasoned that any definition of the modern fashion designer is dependent on the designer's experience, the company, the type of garments produced and the constraints upon the design (Stecker 1996). Norman Potter (1989), noting the difficulties attached to defining the term 'designer', described the skills required of a designer as:

i. The ability to exhaustively establish and agree a best course of action,
ii. To provide instructions,
iii. To be able to work as a team member and
iv. To be particularly able to analyze and gather information relating to the design 'problem'.

In short the fashion designer must be a market researcher of visual and qualitative data, an analyst of the collected data, an interpreter of meanings and a negotiator in an expansive decision-making process. It has been recognized that the designer must know their customer needs and wants (Lawson 1994, Cooper and Press 1995), understand market statistics as well as the social, cultural, economic and political environment (Frings 1991, Carr and Pomeroy 1992, Atkinson in Easey 1995 and Stecker 1996). The amount of research and analysis of many similar areas often results in different fashion houses producing collections with similar underlying themes, even though the work was conducted separately and in secrecy (Carr and Pomeroy 1992). The fashion designer is also an analyst (Potter, 1989) making predictions for trends and moods and acting as a conduit for expressing current moods (Sheila Atkinson in Easey, 1995). Carr and Pomeroy elaborated on the role of the fashion designer within the industry suggesting that they take part with internationally renowned, trend-setting designers, the media, retail buyers and the consumers in a "…large marketing system which acts as a pluralist decision-making process" (Carr and Pomeroy, p.27, 1992).

3 Method

Multiple case studies following Yin (1989) and Miles and Huberman (1994) were conducted with five companies to compare the design processes of several designers working across different market levels in the women's wear clothing industry (Sinha, 2000). Cases were sampled on market segmentation features that differentiated them. Company information came from company and marketing reports and literature (Key British Enterprises 1996, KeyNote 1997, EMAP 1997, Drew 1992). All case study companies were located in London except Company A, which was located near Nottingham. Data was gathered through taped interviews, current relevant literature, office memos, field notes and photographs or photocopies of activities and work in progress through a collection, e.g., moodboards, conceptual designs and designs (toiles, etc.). Interviews took place at intervals of three or four weeks over the

preparation of a collection or range for a season between 1996-1998.

The designers gave their own account of their activities, significant issues/phases and their sequence of occurrence were identified and described, flowcharts and validated by the designer. From the validated flowcharts, case study reports and interviews, information about the design processes was categorized to facilitate IDEF$_0$ modeling (Wu, 1994, Aziz, 1989 and McConnelly, 1993). The IDEF$_0$ charts were compared in conjunction with the case study interviews and literature review for: process structure, differences and similarities between the activities, time scales for phases, decision points in the process, stages of the process that the designer was actively involved in. Events, activities and issues important to all the processes were identified to distinguish variables in the design processes and then compared to identify how they varied across market levels. These variables have not been tested for their predictive validity or significance.

4 The case study companies

The companies are briefly described below and table 1 displays the comparison:

Company A employed approximately 90 designers and deployed them to various brands that they owned. The designers interviewed designed products solely for their host variety retailer that had the largest share of women's wear market in the UK at the time. The designers were organized into teams that dealt with products in the manner similar to that which the retailer organized their own designers and selectors. The team interviewed were responsible for ladies' shirts, trousers and casual separates.

Company B had recently been acquired to be part of a conglomerate. They employed five designers at the head office were responsible for specific product areas. The designer interviewed was a coats and outerwear designer. Company B was a manufacturer as well as retailer.

Company C also manufactured as well retailed and employed about ten designers. They were well known for their mid-priced, eveningwear and special occasion wear. They divided their brands according to the types of customers who bought the label: the original label, a label for the younger, more fashion conscious customer, another label for the large sizes and a fourth label dedicated to dressing the mother of the bride. The designer interviewed designed for the original brand label and described her target customer as being 30 plus. The number of retail outlets varied as they sold through concessions in department stores as well as through independent retailers.

Company D employed one designer and retailed through 4 concessions in a specialist high street multiple retailer as well as through warehouses. Their target customer was aged between 15-29 for whom following fashion was very important.

Company E was owned by the designer and retailed through the design studio and specialist independent retailers frequented by customers interested in new and directional designers. The designer did not envisage a customer age range and had three accounts at famous retailers in London.

5 What does the fashion designer do within a company?

From the case studies, it was noted that as market share increased company size increased and that the designers' activities and, in particular, their level of involvement in sample making varied across differing market levels and company size; as the companies became larger, the designer became less manually involved with the sample-making process and more involved in gathered and analyzing market and trend information and applying these conclusions

to update classic styles. Differences in the synthesis, selection and manufacturing phases were due to the differences in market share and mode of distribution and, although the designer's activities and decision-making varied according to market segmentation, these could be placed into the

Table 1: comparison of the case study companies

comparison of case study companies					
company	**A**	**B**	**C**	**D**	**E**
company age(years)	87	61	52	6	5
total employees	70,000	40000 (1467 in company B of the conglomerate)	210	25-30	3
group interviewed	T54, casual shirts	Coats and outerwear designer	FU evening wear and special occassionwear	stretch seperates designer	designer
retailer type	variety	specialist multiple	specialist independents & department store	specialist multiples and others	specialist independents
distribution method	retailer	own retail & concessions	agents and own concessions	concessions & wholesalers/ retailers	retailers
no. of UK retail outlets	280 (host retailer)	238	about 80	4-20	1-3
retail price range	15-50	65-199	45-500	14-40	60-800
market share (@)	4%	1%	up to 1.4%	0.02%	less than or equal to 0.0225%
consumer age	30+	30-40	30+	15-29	25+
consumer spending power	medium	medium/high	medium/high	low/medium	very high
consumer needs	fit, comfort, durability, appropriateness	new fashions appropriately toned down	the right"look", reliance on certain brands	fashion details, latest trends, fashionability	individuality

(row label: market segmentation factors)

same five phases indicating a generic process. The necessary differences in the fashion design processes make suggesting a "best practice" or prescriptive fashion design process impracticable. The comparison between the processes is displayed in figure 1.

6.1   Research and Analysis Phase:

The type and amount of research conducted was linked to the type of consumers in the market share. All the companies were involved in collecting and analyzing information about current and forthcoming trends in color, fabric and styling and sales figures for the season just finished. Designers A, B, C and D were responsible for collecting and analyzing the design trends information (design audit) while the business functions were responsible for analyzing the sales figures and assessing the organizational resources (business audit). All companies also analyzed their resources, in terms of finances available, current machinery and equipment and skills within the organization, this was usually done through a "sales" or "production" function of the company. Designer E owned the company and was therefore responsible for *all*

research activities. The 'confirmational' strategy outlined the basics of the range (core product areas) to be produced for the season for all the companies and provided a framework for the designers for concept development (also termed 'the brief' by Company A). All case study companies, regardless of their market positioning, went through a process of outlining the proportions of new (but risky) to "repeat" (but previously successful) designs for their new ranges for the season through an analysis of their sales figures. The flow of stages within this phase was similar for all companies, except Company A, whose close relationship with their supplier involved the buyers prior to the 'confirmational' strategy to share ideas about the new ranges, to propose a strategy to the retailer and receive an 'individual supplier's' brief from them.

6.2   Synthesis Phase

All companies produced samples of the designs that were to be considered for manufacture. Styles were only manufactured or bought after viewing as samples. This phase was distinguishable from the previous phase at company A but became less distinct as the companies became smaller. The role of making in all of the fashion companies fell to the pattern cutter and the sample machinist, the fashion designer took on a managerial role. This phase was extended for companies C, D and E who distributed through retailers not part of their company. They modified their samples for manufacturing purposes at this stage so that selectors could view the samples exactly as they would receive them. Company A engaged in supplying according to their retailer's specifications and Company B retailed through their own stores made 'conceptual' samples, which were modified according to specifications after selection for manufacture.

6.3   Selection Phase

All the companies prepared their garments for showing to a group of selectors

and resulted in the specification of style numbers, their colors, sizes and numbers of, to be manufactured. This phase was extended for companies B and A because of the process of making design modifications as required. The selectors from Company A's clients had conducted their own extensive research and analysis, produced their own color charts and specified colors and any modifications to the patterns used for each selected sample from the supplier. Company E and Company C had modified their samples for manufacturing processes during the synthesis phase and did not readily undertake further modifications. Company D separated their samples into those for the wholesale buyers and those for their concessions. At the same time, because they undertook to provide a new range every month, the designer providing an amended or new range every four weeks after the first range of the season had been shown. Only samples selected by the wholesalers were modified after selection.

6.4   Manufacturing Phase

This phase was concerned with the production of selected samples according to the order specifications. This phase was shorter for Company E and Company D as they produced in small quantities in comparison with the other companies, manufactured on site and provided fewer sizes and so did not go through a factory sampling stage. Companies B, C, and A manufactured away from their studios and headquarters and so undertook a factory sampling stage for production quality. Company A, because of their access to factories and the large production quantities required, undertook an extra route trialling process to ensure smooth production and delivery of the garments.

6.5   Distribution Phase

Manufactured samples were delivered to the appropriate retail outlets for selling to the public. All companies collected their wholesale figures over the season.

Availability of retail figures, which provided the most direct information about consumer buying and success of the design, varied. Company B retailed through it's own sites and so all retail figures were available to them. The strength of their relationship with their buyer gave Company A access to all retail figures concerning their products. Company C and Company D owned their concession sites and so were able to track their designs' success for a large proportion of their production but those sold through wholesalers and agents and independent retailers were harder to obtain. The updated range at company D concession sites relied on the retail figures from within the season as well as previous seasons. Companies C, D and E relied on their relationship with the retailers as to how specific their feedback was. For company E, sometimes the only feedback from a retailer was if they bought from him again.

7 What 'designerly thinking' in fashion may be used strategically?

The design activities in the case studies demonstrated that 'designerly thinking' requires a balance between rational (problem-solving) thought which is attentive to the demands of the external world and imaginative thinking which is attentive to the demands of the inner needs that could be quite unrelated to the outside world (Lawson 1990). These activities may be useful in strategic management.

7.1 Kaleidoscope thinking: Pattern assemblage

The case study designers engaged in gathering evidence about their target customer and possible trends in the market. From the case studies it was clear that the designers' understanding of the consumer needs and wants, interpretation of this into desirable designs and their ability to communicate this to the relevant people efficiently in the sample making process were crucial to company's success in terms of design confirming the literature review

about the definition and role of the fashion designer as market and trends researcher, analyst and team leader in the sample making process.

All designers recorded and categorized their research either as simple magazine 'tears' and swatches of fabrics pinned to convenient spaces on the wall or moodboards or reports (complexity depended on how large a presentation would be required of the designer). This categorization has been referred to a source of inspiration and a common language of design (Eckert 2000). This language of design, according to Eckert (2000) and Le Pechoux et al (2002) is a possible source of problems in communication as it is a language understood by designers or persons historically involved with them but not necessarily by an outsider. This way of thinking is also kaleidoscopic as patterns are assembled and reassembled from a multitude of data. This type of thinking has been noted to be essential for the entrepreneurs or 'change-masters' who want to improve business (Kanter, 1999).

7.2 Communication of vision

Communication of the analysis was most evident at company A, which had the largest market share and who perceived their core customer as requiring comfort and durability in their clothing, was notable for the amount of analysis of competitive comparative information for all the product areas that they supplied to their client retailers. Indeed a large part of the analysis was a deduction of "gaps" in the market that could be filled by their clients. This was communicated to their clients through presentations and meetings.

Drawing as a communication tool became increasingly important as the size of the company grew and the number of people involved in sample making increased. Drawing as an aid in designing, ("interactive imagery" Goldschmidt 1994), was observed at Company B and Company C where the designers recorded their first thoughts in loose, fluid forms which became more

clearly defined and less loose and fluid as the design process progressed towards manufacture. Indeed designers at Company B and Company C stated that they kept back drawings that were not used for a given season as possible ideas for the future, a policy recommended to engineering designers by McGowan et al (1998). It was extremely difficult to locate any sketches that might be termed "interactive imagery" at company A. The design manager at Company A described the sample development as a series of discussions with the relevant selectors and 'sketch and swatch boards'. A "process of elimination" decided possible fabrics for mainly the basic shapes, which were previously successful garments which had been constructed using clients' pattern blocks that suppliers were required to use. Company A, thus, searched for ways of introducing new styling details into a classic shape without looking old-fashioned after three or four seasons.

The significance of communication as a necessary component of creating environments where innovations flourished (Kanter 1999) was made clear by the case of company C. Designer C had commented throughout the case study about the difficulties of designing through the indecision over new fabrics, as this hampered (sometimes terminated) the process of sample making for new styles. Lack of communication, she felt, had led to high levels of stress within the organization and a high turnover of technical staff (pattern cutters mainly). This loss of tacit knowledge about samples created difficulties for her as she not only had to go through the process of how a style had been made with a new pattern cutter but she also had to constantly build new relationships with skilled staff on whom she relied. All the designers acknowledged that they were judged on the samples made of their designs, not the designs on paper.

7.3 Knowledge

Designer E perceived his customer as requiring individuality and stated that he avoided much of the styling research, preferring to source fabrics, gardening and interiors' magazines for color and texture inspirations. This suggests that intuition is perhaps being a strong element of the designer's thinking. Intuition has been linked to a way of decision making that is different to the rational decision making process and has been regarded as being worthy of serious study since the 1980's (Agor, 1999, Murnighan and Mower, 2002). Intuition has been linked to knowledge built up over a number of years, which has been highlighted as one of the essential facets to the investment theory of creativity as outlined in section 2.

Knowledge and expertise while an important element has been regarded as a double- edged sword. Prior knowledge or experience and heavy periods of concentration upon an area of special interest have been noted to be important factors in creative thinking (Simon 1981, Walberg, 1989, Weisberg 1989, Malim 1994). That is, creative ideas do not always occur through a "eureka" type of inspiration. The Open University described past sales figures as 'experience' of customer reaction to the garment designs (Open University book 6,1992). Rational decision making using experience gained from sales figures results in the outlining the proportions of new (but risky) to "repeat" (but previously successful) designs for their new ranges for the season, allowing for a degree of 'feel safe' but can lead to complaints about mass manufacturers playing too safe with clothing items that have sold well (Kingswell, 1998).

7.4 Switching between divergent and convergent thinking

Designers moved from an convergent style of thinking to a more divergent one throughout the creative phase of the process in research and analysis to producing as many different ideas as possible within the limits of the brief and ratio of new/repeat either by drawing/sketching and sample making. This switching ability has been noted to be an important faculty in creative

problem solving and creative leadership (Rickards, 1997).

7.5   Visual and spatial imaging

The process of sample making was vital because it enabled the following:

(i)   Visual appearance of the design could be assessed for suitability of the fabric, color and style.

(ii)   The look of the design was viewed as it would look like when bought.

(iii)   The appropriate amount of fabric for the appropriate price point could be assessed.

(iv)   Quality control tests for the fabric and manufacture possible on the sample.

(v)   Further sizes could be graded from the sample.

All the companies produced about two or three times as many samples required for approval for buying and, or, manufacturing. The method in which the samples were made depended on their sales record. A style that had previously sold well and was being repeated for the coming season would be made up in more versions than a new style that had previously not been shown. The designers interviewed stated that although this was expensive in terms of finance, time and fabric, this was normal practice and may be regarded as reasonable when considering the psychological aspects of buying, whether retail or industrial (Easey, 1995). How fashion buyers select ranges for their ranges should be of concern to retailers trying to stave off complaints of designs being shocking or boring by customers.

7.6   Autonomy

Ekvall's (1991) study on creative climate found that freedom to take initiatives and independent work, humorous mood, insightful listening to problems that could be aired openly without fear of reprisal and acceptance of failures within work were among some of the important ingredients necessary for creativity in the workplace. Greenburg (1994) described autonomy as

being one of the five core characteristics of motivating work and that its relationship with creativity as being critical. In line with Fahr and Scott (1983), Greenberg (1994) described autonomy as freedom of choice in selecting problems or projects on which to work, freedom from overzealous supervision, the privilege of setting one's own deadlines and variations from traditional organizational constraints such as punching time clocks or accounting for absences. Greenberg 's study was, as stated earlier, with students and so did not examine the variables of interdependence or independent work, which would exist in the business environment.

The case study designers indicated during the interviews how their design decisions (repeats, color, fabric and new styles) were made and were asked to score them arbitrarily on a scale of 1-5 according to how influential to the company they felt their design recommendations to be. A score of 5 indicated that they felt their decision was extremely influential and a sense of autonomy prevailed in freedom to take the initiative. A score of 1 indicated that the decision was specified for the designer. The results are displayed in table 2.

It was noted that the designers felt that their influence increased as the size of the project increased and more finance was required to fund the sampling process. As expected, the designer E ranked the highest, as he was the company director as well as designer. Designer E had gained success through peer review is evidenced through being awarded the New Generation Designer Award 1993 and profiled in magazines with wide circulation numbers (Armstrong, 1995, and Marie Claire, 1993). Designers A and C (where the company employee numbers were about 70,000 and 210 respectively) ranked lowest among the case studies for their influence in the decision making process, indicating that the steering role of the designer is not merely a factor of the company size.

Table 2: design decisions taken by the designer

scale	colour	fabric	style	conceptual range	manufacturing range	total score
5	E	E	E	E		E=21
4			B, D			B=16
3	B	A, B, D		B	W	D=12
2	C, D	C	A, C	A, C, D		C=9
1	A				A, C, D, E	A=8

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Although all the case study companies had gained commercial success, company A, in particular had been successful for a number of years through their very strong relationship with their clients. However, since 1995, they have had some fluctuations in their fortunes, culminating in an operating loss for 1999, which was partly blamed on "a material reduction in sales" to their clients. While the design management at company A was a text-book example of good design management (Cooper and Press, 1995) in that it allowed for improved relationships with the clients and between team members, the loss of sales to their clients suggests that it may still not have been appropriate for the designers. At company C, the designer described her feelings of frustration as she felt that she had to constantly argue to maintain small details of her designs and that the management constantly changed their

ideas about the range as the season progressed towards the fashion show. Although this may be due to interviewee bias, the interviews revealed a lack of understanding of the role of the designer in the company. The somewhat stressful working environment and the quick turnover of pattern cutters in the designer's team seemed to be indicative of this lack of understanding. This would appear to be an area of concern because all the designers interviewed tended to rely to some degree on the pattern cutters skills, specially their tacit knowledge about patterns they had originally cut for which the designer was now amending. There appeared to be a lack of designer involvement in both the thorough examination of the company's strategy and degree of autonomy in concept selection, even though there were the weekly meetings with the design manager or head designer to discuss progress. As noted earlier in this section the designer's degree of autonomy influences the quality of work produced.

Conclusions: implications for incorporating 'designerly thinking' into strategy

This paper has sought to highlight issues regarding creativity in fashion with particular emphasis on the role of designers and 'designerly' thinking at strategic levels in an organization. A comparison of the case study design processes has identified that designers adopted a number of approaches to 'designerly thinking':

- kaleidoscopic thinking (pattern assemblage through categorizing visual images),

- communication of vision in a visual manner
- knowledge (about one's own knowledge), using intuition to guide decision-making
- switching between divergent and convergent thinking in the process
- visual and spatial imaging during sample making
- seeking autonomy during the creative decision-making process

The Design Council report 'Design In Britain 2000' noted that the top-performing companies regard design as a valuable strategic tool. The Design Council's report emphasized the importance of placing design at the heart of strategy and embracing creativity and innovation for success, but this has to be managed. The most recent available research from the Center for Economic Forecasting, London Business School showed that the value of design to the UK economy was some £12 billion, with 300,000 people employed in the field. As economic success becomes increasingly dependent upon the creative use of information, the importance of design as a business process has never been greater. Understanding design thinking might create opportunities for design in corporate strategy planning. As designers attempt to understand and express our post-modern society to create desirable consumer products, strategic decision-makers may find that understanding the skills and knowledge of designers may help effective decision-making. From the comparison of the fashion design processes, the expert skills and knowledge that a fashion designer brings to the business may be described as:

- the ability to recognize new trends
- the ability to source relevant manufacturers of fabrics and trimmings
- the ability to analyze and interpret new trends
- a knowledge of market requirements for production
- presentation skills for new ideas
- time-management skills
- team leadership qualities

- communication skills; verbal and non-verbal (e.g. image making and sketching)
- ability to contribute to sales revenue
- self confidence

Competitive advantage is gained by ensuring an appropriate creative vision and strategy for an appropriate mix of newness/adaptation both in new product development and in the retail buying process. Creative thinking is using the information available to solve a problem, draw conclusions or make a decision (Matlin 2002). Perhaps lessons might be learnt from those fashion organizations that have placed the fashion designer at a strategic and high profile level, such as Roberto Menichetti the design director at Burberry when it achieved the 110% increase in their profits following the revamp of their image and design (Arlidge 2000).

The comparison of the case study fashion design processes identified attributes of the design process that helped the participating companies compete in the marketplace. The attributes may be categorized as sub-processes; the means with which to achieve the sub-process (the variables/issues of the design process with respect to their marketplace) are listed in table 3 and may be surmised to be areas where creative (designerly) thinking should be applied with respect to the fashion design process.

Table 3: attributes of the fashion design process

sub-process	variable/issue
understanding of consumer requirements	efforts into market trends access to retail figures analysis of market trends
innovation skills	size of individual designer's project "steering role" of the designer scope of the designer's project prior knowledge about team members
design skills	brief formulation designer' s expert knowledge and skills design process organisation time taken for all samples to be prepared for selection
speed of manufacture	flexibility of production ease of access to manufacturing locations use of CAD/CIM number of quality checks number of sizes in garments offered level of standardisation of garments
method of distribution	relationships with retailers relationships with fabric suppliers access to/feedback about retail figures
promotional activities	internal (internal magazines, fashion shows and events) external (magazine features or editorials, advertisments, shop window displays, P.R. assistance)

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