

PURPOSIVE PATTERN RECOGNITION

**A STUDY OF THE DESIGNER AS A SELECTOR, ADAPTER
AND MAKER OF PATTERNS**

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ABSTRACT:

This study examines how designers select visual sources, and select, adapt, and use particular visual inputs when they create design for specific needs in the graphic communication domain. Types of selection and adaptation, the processes of selecting visual sources and the processes of selecting and adapting visual inputs, and the choices made within the processes are described and identified. The visual inputs to the contents of designs for particular projects are identified. The relationships between the selection and adaptation of visual inputs and the needs for the projects are examined and identified.

A combined approach of literature survey, pilot study, 'interviews with designers', mini-case studies, and direct observation was adopted to carry out this research. For the 'interviews with designers' forty designers from design consultancies and organisations which use and produce design in the UK were interviewed. For the mini-case studies twelve design projects were examined by a combination of interviews, literature, and observation. A discussion of fifteen published interviews with the 'Masters' of design is included.

Major findings include:

- 1) The designers' visual sources varied. Classifying visual sources was useful for understanding the natures and types of visual sources. But it did not explain how designers created the designs for particular needs.
- 2) The designers selected visual inputs from their visual sources. Visual inputs may be described as visual patterns. Visual patterns varied. Each visual pattern consisted of parts. The variety of visual sources and visual patterns was an essential component for the selection.
- 3) Identifying the need for a project involved constructing perceptual and conceptual interpretation of the context and nature of a project and its requirements. The conceptual interpretation is described in this study as the need pattern (NP).
- 4) It was found that 'purposive pattern recognition' (PPR) is the key activity in the selection and adaptation of visual patterns. PPR is a mental and purposive activity. While selecting visual patterns, the designers kept comparing the NP of a project with a visual pattern until a fit between the two was achieved. These processes can be considered to involve PPR.
- 5) The selection and adaptation of visual patterns continued during the various stages of the design idea. Achieving a desired fit involved various adaptation processes and the use of various tools and techniques.
- 6) The visual pattern of a design idea was transformed into a design pattern by means of producing visual marks on a drawing surface. Generating a design pattern involved exploring various design possibilities. These possibilities can be considered as patterns of competing design hypotheses (PCDH). The quality of visual patterns was an essential factor during the selection and adaptation.
- 7) Describing design as a pattern in terms of selection and adaptation provided the study with a substantial knowledge about the nature of design, and the designers' activities.

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AUTHOR DECLARATIONS

During the period of registered study in which this dissertation was prepared the author has not been registered for any other academic award or qualification.

The material included in this dissertation has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.

The programme of advanced study of which this dissertation is part has consisted of:

1. Research Design and Methods course
2. Attendance at Research Colloquia
3. Attendance at relevant research conferences in the UK

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CHAPTER 1

GRAPHIC COMMUNICATION

1.0 Introduction

This chapter consists of eight sections. The first section gives a brief explanation of this research, the area under investigation, the research problem, the need for the study, and the purpose of this research. In the second section, a general idea of design, communication, and graphic communication is given. The third section discusses the designer as a problem solver. Section four discusses the selection and the need. Section five discusses the concept of 'pattern'. Section six gives an overview of visual perception, sensory systems, visual patterns, and pattern recognition (PR) theories. Section seven discusses the designers' visual sources. The final section is summary and conclusions. Quotations and figures are given whenever necessary.

1.1 The research

1.1.1 The area for investigation

This study initially started as an investigation of visual sources in the 'information design' area with the idea of investigating practising information-designers, and it turned out to be an investigation in the graphic communication domain with the emphasis on the designer as a user, maker, and matcher of patterns. The factors that led to these changes are discussed in the methodology chapter in section (2.2). The term 'pattern' in this study stands for any conceptual interpretation of something (visual idea, visual information, need pattern, design pattern) that consists of various interrelated parts. This is discussed in section (1.5).

1.1.2 The research problem and the need for the study

The process of finding out about design and what designers do started by conducting literature surveys. It was found that many theses and design studies discuss aspects and issues related to graphic communication, the role of the designer, and the designers' activities. However, the author of this thesis has not come across any study which comprehensively investigated the designers' visual sources, or the designer as a selector, adapter, maker, and matcher of patterns.

In view of the wide boundaries of the graphic communication domain a large number of theses and design studies from various related academic disciplines (information design, graphic design, communication design, art and design history, communication studies, art and design education, design management, and semiotics) was surveyed. It was found that some studies discuss visual sources used for specific

books, manuscripts, illustrations, prints, advertisements, art therapy, etc., (Danvers, 1987; Dye, 1989; Green, 1981; Hitchman, 1986; Farrer, 1984; Fuller, 1984; Miller, 1986; Nicks, 1989; Welchman, 1991; Williams, 1987; Wright, 1986). One study investigated the illustrators' reference material (Murray, 1989). Ian Murray (1989) discusses reference material selected and used by contemporary illustrators including himself and painters from the past. It was found that his study can be further elaborated. Murray's study focuses on the importance of visual material, how much illustrators rely on their reference material, and the types of visual materials. Murray did not discuss visual information in terms of visual pattern, or the illustrator as a pattern maker. Another MA thesis by Helen Nicks (1989), "A personal investigation into portrait photography", investigated formal portrait photography on location, and explored the interactivity between the subject and the photographer, and investigated the ways images are manipulated to suit the requirements of specific conditions. Nicks' study was not available. Another study by Paul J. Nini (1995) investigated "How graphic designers gather and analyse information: A survey of the field". Nini did not discuss visual sources or visual patterns. But his findings reveal important management issues related to the role of the designers and to the clients, the designers' activities, and the design process.

Many academic studies discuss issues related to design, design activities, semiotics, visual representation of information, the designers' responsibilities, design methods, the use of symbols in communication design, words and images in communication design (Tufte, 1990; 1983; Baker, 1988; Smith, 1986; Tyler, 1992; Grant and Fox, 1992; Sless, 1986; Kinross, 1986; Lloyd and Scott, 1994; Frascara, 1988; Margolin, 1988). It is important to mention here that many studies in psychology discuss the concept of 'visual pattern' in terms of how the human mind handles information and construes patterns (Reed, 1996; Gross, 1996; Medin and Ross, 1996, Bruce and Green, 1990; Roth and Bruce, 1995). Design studies either do not focus on the 'pattern' concept or they refer to it in a narrow sense such as a design motif of some sort that can be copied and replicated by the use of technical means (i.e. textile patterns, geometrical patterns, decorative patterns, etc). E. H. Gombrich (1979) in his book, "The sense of order" and Robert H. Mckim (1972) in his book, "Experiences in visual thinking", discuss the concept of 'pattern' in relation to visual thinking and to design and drawings. Mckim (1972) talks about 'pattern matching' and 'pattern seeking' for enhancing drawing, visual thinking, and creative thinking. The 'matching' activity is related to matching visual information while drawing with the object or thing drawn or thought about.

There is a gap in existing knowledge. The designers' visual sources and the

processes of selecting and adapting visual sources and visual patterns are little understood. The concept 'visual pattern' is not discussed in relation to what designers do. Additionally, there is a gap in existing information about the types and nature of visual sources that would be involved in the various stages of the design process. Additionally, there is also little knowledge of the relationship between the visual sources, visual patterns, the design, and the needs for the projects. The processes of selecting, adapting, and using visual sources and visual patterns were seen to require investigation.

1.1.3 The purpose of the research

The purpose of this research is to enhance understanding of the nature of design and the design activity in the graphic communication domain in terms of processes of selecting, adapting, and using visual sources and visual patterns. Investigating design in terms of processes of selection and adaptation for particular needs and requirements could assist at the following levels: 1) understanding the nature of design and the design activity, 2) the possibility of contribution to design thinking, 3) clarifying some of the ambiguity associated with the nature of design and what designers do. The purpose was achieved by examining the designers' activities and visual sources in a number of British design consultancies and organisations which produce and use graphic communication designs.

1.1.4 The methodology

The methods and techniques used for this qualitative investigation are discussed in Chapter Two. The grounded research method was adopted for collecting and analysing the raw data of the various stages of this investigation. The major methods used were 'interviews with designers', mini-case studies (the term mini-case study is explained in chapter two; in section: 2.8.3.1), direct observations and semi-structured interviews. Prior to deciding on the research methods for this study, various methods were considered. The use of questionnaires was initially considered but was discarded because of the well established disadvantages of questionnaires. The research was conducted in two major phases over a period of three years.

1.2 Design

1.2.1 What is design

Design has a multitude of definitions each of which reflects aspects of different concerns and circumstances. The Oxford Concise Dictionary lists over twenty definitions. Scholars from various design fields attempt to develop their own definitions. Some individual design studies give more than one description of design.

Robert Blaich (1988, p. 9) states that if one asked fifty people what design is, one might get fifty different definitions for design. He illustrates his point by providing various definitions of the term 'industrial design' by people from different cultures. Maria Brunelli (1992, p. 2) states that Ughanwa and Baker compiled twenty-nine definitions of design. She states that although these definitions appear to convey a similar meaning, they suggest the complexity of the design concept and the difficulty of standardising its definition. The following design definitions are selected to illuminate the nature of design:

- **According to the Dictionary of Ideas, the word 'design' means:**
the conceptual and practical working out of the appearance of the artifact, with special reference to its effective functioning and to its aesthetic quality. The term derives from the Italian disegno which in Renaissance art theory meant the essential idea of a work of art and the expression of that idea through drawing. (p. 145).
- **According to The New Encyclopaedia Britannica (1979):**
... Design in the sense of pattern for making a product has become a synonym for work in the applied arts, and a designer is one who practises them. Design in the fine arts is often considered to be the creative process per se, while in engineering, on the contrary, it may mean a concise record of the embodiment of appropriate concepts and experiences. In architecture and product design the artistic and engineering aspects of design tend to merge ... architect, craftsman, graphic or industrial designer cannot design according to formulae
- **According to Sir William Barlow (1988):**
In some circles 'design' is regarded (quite properly) as an art-based activity with an emphasis upon the visual aspects of product design. Elsewhere, design is regarded as an engineering-based activity concerned perhaps with the correct application of sophisticated components to complex systems, (p. 86).
- **Tom Peters (1995), in his article "Design Is...", gives 142 specific examples to define design. His point is to convey how valuable design is in establishing the corporate voice. Some of the examples he gives are:**
14. A visceral understanding that design is a/the primary way to differentiate a product or service. 21. An attitude about life. 22. An understanding that all the senses were created equal. 23. Part of the everyday vocabulary throughout the organisation, in the training department as well as in engineering and research. 24. Parsimony in everything. 26. A 20-year-old sweatshirt that you love. 28. The smell of a new baseball. 30. The fact that you sometimes buy books for the cover and wine for the label. 33. Things you can sense but not see. 85. The guts to lead. 86. The guts to change. 99. Great brochures. 138. About relationships (i.e., with a product or service). (pp. 29-33).
- **Philip Sargent (1994) states:**
It could be that the only thing common to all design is the intention to produce something useful. That does not mean that design theory and methodology research ends, it means that it is unending. (p. 400).
- **Min Yan (1992) states:**
Design is a goal-directed activity that involves the making of decisions. (p. 87).
- **According to Rachel Cooper and Mike Press (1995):**

Design lies between the worlds of culture and commerce, between passion and profit. Design is indeed a passion for things, offering methods that enable them to come into being. (p. 4).

- **According to Jill Grant and Frank Fox (1992):**

Design in its many forms has become part of the communication apparatus of a society based on consumption and planned obsolescence. (pp. 80-81).

- **The following design definitions are quoted from ‘Design Methods’ by John Chris Jones (1992 , 2ed: pp. 3-4):**

A goal-directed problem-solving activity (Archer,1965)

Decision making, in the face of uncertainty, with high penalties for error (Asimow,1962)

Stimulating what we want to make (or do) before we make (or do) it as many times as may be necessary to feel confident in the final result (Booker, 1964)

The optimum solution to the sum of the true needs of a particular set of circumstances (Matchett,1968)

The imaginative jump from present facts to future possibilities (Page,1966)

A creative activity - it involves bringing into being something new and useful that has not existed previously (Reswick,1965) .

- **According to John Paul van Der Lem (1984), two levels of design can be established:**

A. A loose term conferred on activities which although intellectual are not controlled in external sense. B. A specific term concerned with activities subject to control by others and which are therefore not ambivalent in phrasing but are specific. (p. 27).

- **Richard Buchanan (1989) states:**

Design is an art of thought directed to practical action through the persuasiveness of objects and, therefore, design involves the vivid expression of competing ideas about social life. (p. 94).

- **Reza Beheshti (1993) states:**

Design is not a problem solving activity, but rather is a solution-oriented process. (p. 86).

- **According to C. Thomas Mitchell (1993):**

Contemporary design movements, whatever their ideological differences, can all be seen as reactions (or reactions to reactions) to the process of industrialisation. (p. 5).

- **Cooper and Press (1995) state:**

... design should also aspire to a passion for the people who use these things, for their quality of life and their aspirations: a passion for betterment. (p. 4).

- **Buchanan (1989) states:**

Design is what all forms of production for use have in common. It provides the intelligence, the thought or idea - of course, one meaning of the term design is a thought or plan - that organises all levels of production, whether in graphic design, engineering and industrial design, architecture, or the largest integrated systems found in urban planning. (p. 108).

- **Eric Schneider (1992) states that Peter Gorb’s (1983) definition of design “design is the planning process for artifacts” is precise. He explains:**

This clarifies design as being concerned with the whole process, from conception to final production. It also emphasises the management role in relation to design activities, and provides a basis for evaluating design in relation to objectives, whilst presenting design as an interdisciplinary activity, not just exclusively the realm of professional designers. (p. 15).

- **Guy Julier (1993) states:**

Design, then, is not only a process but it is also a vehicle of ideology and a means of expressing national, institutional or corporate aspirations, a point underlined in the 1980s by the importance given to it in many countries. (p.13).

- **Mark Oakley(1990) states:**

A frequent reason for using design is to help turn an invention into a successful innovation - or to extend the usefulness of an existing innovation. (P. 8)

- **Many scholars discuss designs and design imageries in terms of meanings and culture. Gunnar Swanson (1994) states:**

Design should be about meaning and how meaning can be created. Design should be about the relationship of form and communication. It is one of the field where science and literature meet. It can shine a light on hidden corners of sociology and history. (p. 59).

- **Cheryl Buckley (1989) states that the dominant codes of design are both aesthetic and social. She states:**

Design, then, is a collective process; its meaning can only be determined by an examination of the interaction of individuals, groups, and organisations within specific societal structures. (p. 11).

- **Design as a business: design consultancy, design team, client**

The concept designer has been in existence in the English language since the seventeenth century. The emergence of the design consultancy is a 20th-century phenomenon. The design practice by independent designers has a longer history. Historically, craft preceded art and design. During the Middle Ages in Europe, art and design had not yet emerged as separate professions (Walker, 1989, p. 38). Catherine McDermott (1992) states:

The emergence of designers working from their own offices, in the manner of other professionals like accountants or solicitors, to provide design consultancy services, started in the USA during the 1920s. (pp. 79-80).

Cooper and Press (1995) state:

The 1980s has been described as the 'design decade'... Design consultancies raced each other for a listing on the stock market and expanded into Europe and North America. (P. 1).

Julier(1993) states that the 1980s witnessed growth of the design business. He explains:

A design consultancy numbering over 400, as public limited company (which incorporated not just interior, graphic or product designers, but also marketing specialists, product managers, and public relation experts) was established. Such a development has emphasised the inter-disciplinary nature of design. (p. 13).

John A. Walker (1989) states:

In the twentieth century design has often been the result of a team effort rather than an individual achievement. (p. 54).

The concept 'design team' is discussed by many scholars (Walker, 1989; Julier, 1993; Jones, 1995; Nini, 1995, and others)). Nini (1995, p.3) states that graphic design consultancies employ or interact with the following professionals: 1) product designers, 2) interior designers, 3) architectural designers, 4) writers/editors, 5) photographers/illustrators, 6) others.

The concept client is discussed by many scholars. The client is the one who commissions the work, pays the bills, and takes the final decisions (Alastair Campbell, 1993, p. 8). The client initiates the design brief. As designers work in a team, so often does the client (Lawson, 1997, 3rd edit. p. 282-283). Nini (1995, p. 4) states that the majority of the designers he investigated indicated that the client determines their involvement with a project, while a smaller percentage indicate that they negotiate their involvement with the client. He states that with long term clients the designers had greater input in determining their involvement.

- **The importance of design**

Before discussing design for communication purposes it is necessary to discuss the importance of design in general. Brunelli (1992) states that the importance of design had been recognised by the UK government through its support of the Funded Consultancy Scheme which was established by the Department of Trade and Industry and the Design Council. She explains:

The aim of the project being to encourage the use of design consultants in all areas of UK manufacturing industry in order to improve the competitiveness of products in the market place. It provided a determined budget to small medium sized firms to employ professional design consultants for the design of new or improved products, packaging, graphics, and technical literature. (pp. 3- 4).

Oakley (1990) states that design in the 1980s emerged as a key weapon in the fight for commercial and industrial survival. He explains:

Companies which had already updated manufacturing methods, labour relations, product distribution and customer service now began to realise that it was the design of their products that could determine whether they would prosper or not. (P. viii).

Oakley (1990, pp. 3-4) states that the competitive pressure creates an increasing emphasis on design, and that design is an indispensable part of any business. The importance of design in satisfying human needs and demands and in improving the quality of life has been emphasised by many scholars. Vivian Walsh, Robin Roy, Margaret Bruce and Stephen Potter (1992) state:

Technological innovation, design, improved competitiveness and economic growth are not ends in themselves. They are the means to achieve better standards of living, reduced unemployment and greater environmental conservation, and thereby to improve the quality of life. (pp. 245-246).

Cooper and Press (1995) state:

... design, in its interaction between industry and society, provides a means for organisations not only to accrue profits but also to manifest the social responsibilities increasingly demanded by the public. (p. 3).

Blaich (1988) states:

The product is the most important statement a company can make about its image. It is the image. (p. 12).

Several studies on design management point out that design plays an essential role in competitive markets (Zainuddin,1992). Many scholars emphasis the importance of what designers do. Buchanan (1989) states:

Designers have directly influenced the actions of individuals and communities, changed attitudes and values, and shaped society in surprisingly fundamental ways. (p. 93).

Beheshti (1993) states:

... In designing we aim to transform the existing world situation to a new world situation. (p. 86).

Design in its widest sense covers a large range of human activities with a wide range of purposes. Within these, communication is one such purpose and is discussed in the next section (1.2.2). The particular forms of communication that are the concern of graphic communication designers are discussed in section (1.2.3).

1.2.2 Communication

This investigation started with the following question, 'what do designers actually do in relation to the selection, adaptation, and use of visual sources?'. Before explaining what designers do, it is necessary to discuss the context within which this 'doing' takes place. Various design consultancies and organisations in the UK produce designs for communication purposes. Design consultancies employ and commission designers. The types of the design consultancies vary in many respects. Lists of graphic consultancies obtained from The Chartered Society of Designers show that many design consultancies are specialised in more than one design discipline. Some of these disciplines are: prints, annual reports, literature design, information design, signs, logos, packaging, corporate identity, corporate publications, environmental campaigns, fundraising projects, exhibition, retail, multi-media, video, graphics for industrial and architectural design, environmental reports, interior design, etc. Each of the above design disciplines can be considered to involve some kind of communication. Many scholars give their own definitions of communication. John Fiske (1990) states:

Communication is one of those human activities that everyone recognises but few can define satisfactorily. Communication is talking to one another, it is television, it is spreading information, it is our hair style, it is literary criticism: the list is endless. This is one of the problems facing academics: can we properly apply the term 'a subject of study' to something as diverse and -multi-faceted as human

communication actually is? (p. 1).

Buchanan (1989) states:

If one idea could be found central in design studies, it most likely would be communication. Directly or indirectly, this idea and its related themes have animated more discussions of design theory and practice than any other. (p. 91).

Fiske (1990, pp. 1-2) assumes the following: 1) communication is amenable to study, but in order to study it comprehensively a number of disciplinary approaches is required. 2) All communication involves signs and codes. 3) Signs and codes are transmitted or made available to others by the practice of social relationships. 4) The study of communication involves the study of culture with which it is integrated. Fiske (1990) explains:

Underlying these assumptions is a general definition of communication as 'social interaction through messages'. (p. 2).

According to Robert N. Bostrom (1988, p. 3), there are many different kinds of communication. He states that researchers have pointed out three basic types: 1) interpersonal, 2) mediated, 3) mass communication. He explains:

Each form is distinguished by the manner in which the messages are delivered and by the number of receivers involved. (p. 3).

According to Fiske (1990), there are two main schools in the study of communication. Fiske refers to the first school as the 'process' school concerned with the messages, and refers to the second school as the 'the science of signs and meaning' (semiotics). He states that both schools are concerned with codes. He explains:

the process school sees them as the means of encoding and decoding, whereas semiotics sees them as systems of meaning. (p. 4).

Fiske (1990) explains how each of these schools sees communication:

The first sees communication as transmission of messages. It is concerned with how senders and receivers encode and decode, with how transmitters use the channels and media of communication. It is concerned with matters like efficiency and accuracy. It sees communication as a process by which one person affects the behaviour or state of mind of another. If the effect is different from or smaller than that which was intended, this school tends to talk in terms of communication failure, and to look to the stages in the process to find out where the failure occurred... The second school sees communication as the production and exchange of meanings. It is concerned with how messages, or texts, interact with people in order to produce meanings; that is, it is concerned with the role of texts in our culture. It uses terms like signification, and does not consider misunderstandings to be necessarily evidence of communication failure - they may result from cultural differences between sender and receiver. For this school, the study of communication is the study of text and culture. The main method of study is semiotics (the science of signs and meanings, (p. 2).

In fact there could be three divisions of communication: 1) simple messages, 2) persuasion, 3) semiotics. A different way of dividing the study of communication into two is to say that some are more concerned with the sender as persuader, and others with the receiver as reader of messages (semiotics). Example of the

persuasion/rhetoric school is given by Buchanan (1989). He states:

Communication is usually considered to be the way a speaker discovers arguments and presents them in suitable words and gestures to persuade an audience. The goal is to induce in the audience some belief about the past (as in legal rhetoric), the present (as in ceremonial rhetoric), or the future (as in deliberative or political rhetoric). The speaker seeks to provide the audience with the reasons for adopting a new attitude or taking a new course of action. In this sense, rhetoric is an art of shaping society, changing the course of individuals and communities, and setting patterns for new action. (pp. 92-93).

Ann Tyler (1992, p.21-22) argues that considerations about the target audience are integral components of the process of visual communication. She states that the role of the designer is to persuade the audience. Persuading the audience to act involves the use of existing beliefs. She states that the communication goals of the design are: “to induce action”, “to educate”, and “to create an experience”. She says:

In an attempt to persuade, the designer develops an argument within the two-dimensional space that defines and represents an audience experience. The argument becomes a promise: if one attends A, one will feel B; if one goes to C, one will see D; if one uses E, one will become F. (p. 23).

1.2.3 Graphic Communication

This study investigates the designers' activities in the graphic communication domain. Obviously the graphic communication field involves communication. The term 'graphic communication' in this study stands for the types of design that are produced for communication purposes in both information design and graphic design areas. The use of the term 'graphic communication' excludes other types of design such as industrial, interior, engineering, or architectural design that can be considered to communicate information, ideas, or feelings beside other purposes. Scholars distinguish between graphic design and information design. However, from various academic discussions it can be concluded that both types of design involve types of graphic communication. Robin Kinross (1989) explains what 'information design' is about and points out the main difference between information design and graphic design. He says:

'Information design' has emerged within recent years as a distinct area of practice and investigation, bringing together - among principal participants - graphic and typographic designers, text writers and editors, computer engineers, psychologists, and linguistics scientists. Risking oversimplification, one might say that the information design movement (though *movement* may be too strong a term for it) has been concerned about discovering what is effective graphic and typographic communication. It has been concerned with needs of the users rather than with the expressive possibilities present in design tasks. This is its difference with graphic design as usually practised and taught. (p. 131).

Alan and Isabella Livingston (1992) explain the term 'graphic design', they say:

Generic term for the activity of combining typography, illustration, photography and printing for purposes of persuasion, information or instruction. William Addison Dwiggins first used the term 'graphic designer' in 1922, although it did not achieve widespread usage until after the Second World War. (p. 90).

Jorge Frascara (1988) states that 'graphic design' is the activity that organises visual communication in society. He explains:

The need for communicative efficiency is a response to the main reason for the existence of any piece of graphic design: someone has something to communicate to someone else. (p. 20).

Graphic communications are seen in different contexts and for different purposes.

Jeremy Foster (1994) states:

Graphic information symbols are seen in many contexts: in buildings, packaging, maps, and guidebooks, instructional manuals. (p. 183).

- **Diverse interpretations of design**

Many scholars acknowledge the diversity and complexity of the interrelated issues and circumstances that involve graphic communication. Many explanations about what involves design in general and the design activity reflect various levels of complexity and ambiguity of both design and the design activity. Oakley (1990) discusses designing in general. He states:

So, designing is a more extensive, more complex activity than may be commonly supposed and certainly should not be viewed as a black box that produces outputs in response to specific inputs. (p. 9).

John Walker and Sarah Chaplin (1997) discuss style, form and analysis, they state:

Some theorists claim that content determines form, and that form changes over time as a result of social changes. (Technological developments also facilitate formal innovation.) Others argue for a unity or harmony of form and content. (p. 136).

Steven Heller and Seymour Chwast (1988) state:

As mass communication, commercial art is often a synthesis of other arts and technologies, de-mystified and made accessible to a broad audience. (p. 9).

Victor Papanek (1988) states:

Whatever definitions may come to mind, basically designers, planners, or architects work best as synthesists. (p.17).

- **Design as a combination of semiotics and persuasion methods**

Many scholars discuss design as a creative process that involves semiotics and persuasion. Hanno H. J. Ehses (1989, p. 187) states that if designers were aware of the underlying system of concept formation, the creative process of finding appropriate design solutions to visual problems could be more accessible. He states that designers tend to use the concept formation intuitively. He suggest the use of an operational model of concept formation by adapting 'contemporary semiotic and rhetoric theory. He claims that his model is often identified with the creative process.

He says:

Semiotics, the doctrine of signs, explains the principles that underlie the structure of signs and their utilisation within messages, and rhetoric, the art of persuasion, suggests ways to construct appropriate messages. (p. 187).

- **Design involves more than semiotics**

Roger Smith (1986) states:

That the image has a semiotic dimension is incontestable, but it has other aspects which cannot be easily contained within that frame of reference. In so far as the image is a designed media - artifact reflecting objects and events in the real world and conditioned in its reception by the psychological / cultural background of the receiver, it moves beyond the semiotician's grasp. (p. 205).

Terry Genin (1986) indicates that visual images of various forms within the taxonomy of the image are coming under the ideological investigations of semiologists. Genin states that an earlier study by Monaco shows that semiology can be just one of many ways of addressing an image.

- **Design and academic discussions**

Many scholars discuss various aspects of what designers do. Many scholars' explanations address 'design' either as an outcome (noun), an accumulation of processes and activities (verb), or as both. Certain research arguments emphasize the social dimension and function of design: 1) rhetoric, 2) semiotics, 3) aesthetic quality. Other explanations focus on design as synthesis, structures and visual components. Other studies discuss design in terms of visual perception. The various types of explanations overlap in many respects. Synthetical activities involve selecting visual styles and combining visual components in a design framework. They touch aspects related to the following: 1) choices of taste, 2) choices of visual style, 3) types of visual components, 4) semiotic, 5) messages, 6) rhetoric, 7) aesthetic, 8) design concepts, 9) the clients, 10) the design brief, 11) the need for the project, 12) design solution, 13) alternative solutions, 14) the target audience, 15) the communication objectives, 16) design planning and management, 17) competition.

Also, studies which discuss the 'making processes' talk about some of the following: 1) unity, 2) balance, 3) rhythm, 4) types of visual components, 5) relationship between the visual components of a design, 6) visual techniques. Some design studies especially the ones that focus on the history of design discuss the development of design and its visual contents through various periods of time, and the influences of art and design movements upon graphic communication domain. The various explanations do not suggest any type of taxonomy of visual sources.

Various types of designers' activities are discussed and can be categorised according to the following: 1) conceptual activities including thinking processes, problem solving, decision making, design ideas, conclusions. 2) practical activities including searching, gathering, selecting, analysing, problem solving activities, doing and making, evaluating, feedback and producing. These activities involve: 1) creativity and imagination, 2) visual perception, 3) processing information, 4) skills, craftsmanship, tools, and methods of production (traditional and modern). Many scholars discuss the design activities according to stages and processes. Nini (1995,

pp.4-7) focuses on the following stages: 1) project initiation and design process, 2) activities prior to form making, 3) activities during form making. Sargent (1994, p. 397) defines different types of design activity. He states that some of these aspects are dispensable and other might be essential for any activity socially accepted as typifying 'design'. These activities are:

- Search • Exploration of emergent information • Decision making • Matching and disposition • Negotiations concerning trade -offs • Optimisation • Planning • Logical deduction • Solving sets of equations • Teamwork • Constraint management • Production systems (people and computer) • Linguistic transformation • Problem solving Use or construction of idioms. (pp. 396-397).

In pursuing their activities, designers deal with various issues related to their projects. According to Gerald Nadler and Shozo Hibino (1994, p.59), individuals have different ways of understanding reality: 1) they rely on specific empirical data-sensation types; 2) they rely on internal data-intuitive types; 3) they rely on logical thinking; 4) they rely on feeling. Medin and Ross (1997) consider a problem to have four aspects: goal, given, means of transforming conditions, and obstacles. They explain:

The goal is some state of knowledge toward which the problem solving is directed and for which at least some criterion can be applied to assess whether the problem has been solved. (p. 438).

Stephen K. Reed (1996, 4th edit. pp. 401-402) states that recent work by cognitive scientists suggests that the creative achievement can be extraordinary because of the effect it produces, rather than because of the way in which it was brought about. He states that he has mixed feelings about the view that creativity is often simply good problem solving. He advocates the notion of 'myth of genius'. According to various scholars, design involves creative activities (Bevlin,1989; Jones,1995; Reswick,1965; Lumsdaine and Lumsdaine,1995). Some scholars focus on certain processes and issues. Simon Jones (1995) states:

There is a creative slant to thinking. Design consultants often think about the same issues as management consultants, but produce more imaginative solutions which enable companies to leap ahead. (pp. 82-83).

What designers do covers a large range of design activities with a wide range of purposes. Within these, problem solving is one such activity and is discussed in the next section (1.3).

1.3 The designer as a creative problem solver

Bryan Lawson (1997) discusses design strategies in architectural design and focuses on how three groups of students tried to meet the same design brief. He states that the 'heuristic' strategy is commonly used by designers. He explains:

A rough idea is quickly developed for the most significant elements of the solution which then can be checked by more precise methods and adjusted as necessary. Such rules as those relating to depth and span clearly cover the critical aspect of the

problem of sizing a joist. However, in more complex design situations it is by no means so easy to decide what is critical. Indeed what is important or critical is likely to be a matter of opinion. (p. 189).

Lawson (1997, p. 194) states that good design often seems to have only a very few major dominating ideas which can be reduced to only one main idea most often called the 'concept'. Lawson (1997, p. 204) states that some designers only shift attention when they come to a dead end, while others seem to deal with several ideas in parallel.

1.3.1 Creativity and problem solving

'Creativity' is discussed in various design and cognition studies in relation to the following: 1) creative thinking in problem solving activity including analysing and synthesising the elements of the problem, 2) creativity in decision making, 3) creative activities in making the solutions, 4) creative thinking which leads to innovation. Edward Lumsdaine and Monika Lumsdaine (1995) describe creativity:

Creativity is playing with imagination and possibilities, leading to new and meaningful connections and outcomes while interacting with ideas, people, and the environment. (p. 14).

Reed (1996, 4th edit.) discusses creativity in relation to problem solving activities. He states that the fact that some people are better than others in solving problems does not mean that these people are creative. He indicates that creative problem solvers are simply better than good problem solvers. Reed explains:

Creativity implies that the solutions are not simply correct but are both novel and useful. (p. 400).

Lumsdaine and Lumsdaine(1995) discuss the 'creative problem solving' in terms of: 1) detection,2) exploration, 3) divergent-thinking, 4) evaluation, 5) convergent thinking, 6) implementation. They explain:

Creative problem solving has five distinct steps that correspond with different, distinct mindsets or thinking modes. Creative problem solving is a sequence of successive phases of divergent thinking followed by convergent thinking. As detectives, we collect as much information about a problem area as possible, then analyse the data and condense it to its major causes or factors. As explorers, we brainstorm the context of the problem and related issues, then converge our thinking to a problem definition statement expressed as a positive goal. As divergent- thinking artist, we use brainstorming to get many 'wild and crazy' ideas. Divergent thinking is at first continued in the engineer's mindsets, as ideas are elaborated. But soon the focus shifts to idea synthesis and convergence to better and more practical solutions. As judges, we use divergent thinking to explore criteria and make constructive improvements to the final ideas in order to overcome flaws. This is followed by convergent thinking which results in decision making and selecting the best idea for implementation. Implementation is itself is a new problem that requires creative problem solving. Thus, as producers, we are again involved in alternate periods of divergent and convergent thinking. Creative problem solving is thorough and takes time. The quality of ideas improves if the mind is given enough time to incubate and think through the problem. (pp. 17-18).

1.3.2 The designer as a decision maker

Papanek (1988, p. 4) divides the designers' approaches to designing into two

groups: 1) rationalising design by developing rules, taxonomies, classifications, and procedural design systems. 2) following feelings, sensation, revelation, and intuition. He states that both groups neglect important new insights that are developed in other domains. Papanek describes the effect of the rational approach:

Their approach stands for reason, logic, and intellect, but such a method leads to reductionism and frequently results in sterility and the sort of high-tech functionalism that disregards human psychic needs at the expense of clarity. (p. 4).

Papanek describes the other group of designers:

Their substituting sentimental passion for responses to human needs. (p. 4).

Papanek asserts that if designers want to improve the quality of modern life they must follow two guidelines. He says:

... first they must reverse their current hierarchy of values and give less, ... Second, designers must turn to a new set of experts... the 'new' experts will be found in the genius of the past. The field must look back in humility to study not what is the latest in Los Angeles or Milano, but what is oldest in Boston or Siena. (p. 13).

Beheshti (1993) indicates that the design activity begins by analysing and identifying the design problem, or illuminating the characteristics of the intended outcome. He explains:

Arguably, at each step of the design activity, the designer has to determine the type and number of criteria for making decisions and setting boundaries for each course of action. (pp. 86-87).

Gombrich (1996) states:

Interpretation on the part of the image maker must always be matched by the interpretation of the viewer. No image tells its own story. (p. 48).

1.3.3 The designers as collectors of information

Many design scholars state that searching, gathering, and analysing information are essential for problem solving activities (Lumsdaine & Lumsdaine: 1995, Bevin: 1989, Jones:1992, Swann:1990, Reed: 1996, and others). For the purpose of this study it is important to see how designers gather and select their visual sources and use them. Various studies mention the fact that designers gather information and select visual styles, but these studies do not discuss what are the types of the information and how designers select them. Nini (1995) has investigated how 302 graphic designers gather and analyse information, but he did not specify the types of information or mention visual sources. His findings were: 'Initiating a project': 1) Acceptance of client's brief was 23% (70 designers). 2) Open-ended problem inquiry was 56.6% (171 designers). 3) Tightly- direct inquiry was 19.8% (61 designers). He adds that 87.5% (264 designers) gathered information related to a client's brief, and 12.5% (38 designers) did not. He explains that 68% of design organisations attempted to analyse design efforts that a client has attempted in the past, and 31.5%

did not. He also explains that 70.2% design organisations typically engaged in efforts to identify areas where design efforts can be more effectively used, and 29.8% (90 design organisations) did not. Nini (1995) concludes:

In-house design departments appear to have their own unique problems in the areas of information gathering and analysis... Most graphic designers have no system in place to measure the effect of their work on an intended audience. Professional recognition currently consists of peer-approval through a variety of publications and juries competitions, where emphasis is almost exclusively on the development of sophisticated graphic form. (pp. 8-9).

1.4 Selection and the need

Various concepts such as solving a problem, responding to a design brief, being creative, etc., can be synthesised into the concept of responding to a need. Designers in most cases are responding to someone else's 'need', and they have to select visual material that will meet the need. The need is a necessity or a desire for achieving some sorts of purposes. It involves various types of human interests, communication activities, services, and products. Nadler and Hibino (1994) discuss the concept of purpose:

Most people tend to think of purposes in monolithic terms. We go to the store 'to buy bread.' We give money to charities 'to help the poor.' We do aerobic exercises 'to improve our health.' We buy lottery ticket 'to win money.' Yet a little introspection will show that these ostensibly simple, straightforward purposes have more complex motivations and results... In all these instances apparently simple purposes are only the germ of broader purposes. (pp. 128-129).

Identifying the need and the requirements for a project involve various processes of gathering, discussing, comparing and analysing various types of information. Also, it involves managing information. In addition, it involves the use of various methods some of which are visual such as mode boards, and the use of objects. Lawson (1997, pp. 52-54) states that various design fields were thought to be different in terms of the difficulty of the problems they present. He asserts that there is no way of deciding beyond doubt when a design problem has been solved. He indicates that design problems are often not apparent and they need to be found. The psychologist Richard E. Mayer (1983) states:

The supposed advantage of concretizing a difficult abstract problem is that it enables the problem solver to represent it quickly in familiar terms. (p. 70).

According to Nadler and Hibino (1994), problems have two primary aspects:

1) substantive, 2) values. They explain:

The substantive aspect includes all conditions (the who, what, where, and when) of the specific situation you wish to change. The substantive problem of the loading dock is to load trucks or to deliver the company's product to the customers... The value aspect of the problem encompasses the desires, aspirations, and needs that have made the substantive aspect a matter of concern. They motivate the desire to work on a problem. Without values, there would be no dissatisfaction and, thus, no problems. Values revolve around the desires of humans to better the world and themselves. (p. 137).

The present study focuses mainly on the processes of making with a specific reference to the selection, adaptation, and use of visual sources and visual patterns. This means that semiotics, rhetoric, aesthetic quality including taste and styles are not under investigation except in relation to the selection and adaptation. Designing is making decisions about design. For investigating the selection it is important to know the need for the messages, persuasion, etc. Scholars refer to the need as the 'design problem', mention the need itself, or explain what the project is about. Also, many scholars refer to the processes of identifying and satisfying the need as a 'problem solving activity' that involves the various activities that designers do when they produce a project. Or they refer to it as a 'creative problem solving'. Marjorie E. Bevin (1989) states:

The creation of a design is a matter of problem solving, consisting of five stages: definition, creativity, analysis, production, and clarification. (p. 42).

The relationship between the need and the design is discussed by various scholars.

- Swanson (1994) states:

Design, in practice, exists primarily in response to an eternally generated need or situation. (p. 59).

- Jones (1995: p.82) states that establishing objectives is the starting point for creating effective design. According to Cooper and Press (1995):

... design brings together the needs of consumers and the objectives of the firm in creating products and services which perform appropriately, express a commitment to quality, have positive aesthetic qualities and can be produced efficiently. It is clearly an interdisciplinary activity of some complexity. (pp. 2 - 3).

- Oakley (1990) states:

In designing products, specific skills required include the ability to understand users' needs, wants, tastes and priorities; the ability to select the right materials and manufacturing processes, the ability to create products which fully meet aesthetic, ergonomic, quality and economic expectations; and the ability to produce drawings and explanations which communicate the final design solution to others working in the enterprise or outside. (p. 10).

After the research had been started, it was realised that the various concepts of need can be called a 'need pattern' (NP).

1.4.1 Constraints of the need

Various studies in design and in psychology discuss constraints of the problem or need when discussing the problem solving activities. According to scholars, problem solving involves constraints. Many design studies discuss constraints in terms of conditions, limitations or criteria. The importance of considering the constraints of a particular need/problem is emphasised by many scholars from various studies. Jones (1992) states:

To assume that constraints are always independent of decisions is to remove freedom of choice and to claim that the future is knowable and unchangeable... (p.103).

Schneider (1992) states:

that design must be understood in a context which provides both challenges and constraints...that for design to work effectively requires an appropriate set of conditions. (p. 19).

Types of constraints are discussed by a number of scholars. Both Lawson (1997, 3rd edit.) and Holt (1990) talk about external and internal constraints. Knut Holt (1990, p. 195) argues that there are two types of constraints: internal constraints and external constraints. He says:

... internal constraints in terms of time as well as human, physical and financial resources, and external constraints such as laws and regulations. (p. 195).

Joachim Günther, Eckart Frankenberger, and Peter Auer (1996) identify the product characteristics which designers concentrate on during the problem solving activities for industrial engineering projects. The discussion is based on an engineering design case study in Germany:

This category class identifies those properties of the design object which the designers are dealing with. It consists of the categories ... of geometry, materials, positions, linkages, function, kinetics, forces and stress, production, assembly, safety, ergonomics, design, maintenance, and cost. (p. 119).

Lawson (1997, p. 92) points out two types of constraints: 1) internal constraints, 2) external constraints. He states that the former is usually expressed by the client, and the latter has to do with the methods of production.

1.5 Pattern

Discussing the 'pattern' concept in this chapter has to do with the fact that this concept emerged from the raw data of this investigation, and was one of the reasons for making some changes in the initial topic and aims of this research. As mentioned in section (1.1.4), the nature of this research is a qualitative one. This research adopted the grounded theory approach, and started without preconceived hypothesis. According to the grounded theory approach conceptual interpretations should emerge from and be substantiated in the raw data. The emergence of 'visual pattern' concept as well as realising (from the qualitative findings) the designer as a pattern maker required investigating both the 'pattern' concept and the 'visual pattern' concept in academic studies. It was found that the 'pattern' concept is discussed or mentioned in various ways by various scholars from various fields of knowledge. The concept 'pattern' is mentioned by many scholars. English dictionaries show that the word 'pattern' means various things (QUOTATION: 1.1).

- According to The New Shorter Oxford English Dictionary the word pattern means diverse meanings: "Pattern / n & v * n. 1. a repeated decorative design on wallpaper, cloth, a carpet, etc. 2. a regular or logical form, order, or arrangement of parts (behaviour pattern: the pattern of one's daily life). 3. a model or design, e.g. of a garment, form which copies can be made. 4. an example of excellence: an ideal; a model (a pattern of elegance). 5. a wooden or metal figure from which a mould is made for a casting. 6. a sample of (cloth, wallpaper, etc.). 7. the marks made by shots, bombs, etc. on a target area. 8. a random combination of shapes or colours."
- According to Collins English Dictionary and Thesaurus, the word 'pattern' has the following meanings: "1. arrangement, decoration, decorative design, design, device, figure, motif, ornament. 2. arrangement, method, order, orderliness, plan, sequence, system. 3. kind, shape, sort style, type, variety. 4. design, diagram, guide, instructions, original, plan, stencil, template. 5. archetype, criterion, cynosure, example, exemplar, guide, model, norm, original, paradigm, paragon, prototype, sample, specimen, standard. -v. 6. copy, emulate, follow, form, imitate, model, mould, order, shape, style, decorate, design, trim."
- According to A Short Etymological Dictionary of Modern English Origins, the origin of the word 'pattern', "of French 'patron', gained in C14 the secondary sense 'a model', which reached English in late ME and became, in English, pattern (esp in dress making). Whence- after F patroner, (late C14 onwards), to reproduce from a model or pattern to patter."
- According to Chambers Twentieth Century Dictionary, pattern' means: "a person or thing to be copied, a model: a design as guide with help of which something is to be made, ..., a particular disposition of forms and colours, .. to match."

QUOTATION 1.1: MEANING OF THE WORD 'PATTERN' ACCORDING TO SOME ENGLISH DICTIONARIES

From the days of Plato to the present day various descriptions have been given to objects of the world. Each description can show a different type of observation. Some scholars explain what is a pattern (QUOTATION: 1.2).

- **Gombrich.E.H.** (1984) states that the term 'pattern' lost its original meaning. However, he uses the term pattern in his discussion of sense and order which focuses on decorative design. He says: "There remains that jack-of-all-trades, the term 'pattern', which I shall use quite frequently though not with a very good conscience... It has also become a jargon term for a type of precedent and has therefore lost any precise connotation it may have once had... Luckily it is a mistake to think that what cannot be defined cannot be discussed." (p. x).
- **de Bono,E.** (1970) identifies what is a pattern: "In practice a pattern is any repeatable concept, idea, thought, image. A pattern may also, refer to a repeatable sequence in time of such concepts of ideas. A pattern may also refer to an arrangement of other patterns which together make up an approach to a problem, a point of a view, a way of looking at things. There is no limit to the size of a pattern. The only requirements are that a pattern should be repeatable, recognisable, usable." (p. 51).
- **Gombrich.E.H.** (1984) states: "The cosmological speculations in Plato's Timaeus about the ultimate constituents of the world start from the proposition that no void exists. The world as we knew it is a pattern of closely packed atom-like solids..." (p. 67).
- **de Bono,E.** (1970) identifies the meaning of pattern: "By pattern is meant the arrangement of information on the memory surface that is mind. A pattern is a repeatable sequence of neural activity. There is no need to define it any more rigidly." (p. 51).
- **de Bono, E.** (1993) explains pattern in terms of 'centring': "We can always recognise the 'pure' or 'ideal' image that underlies any particular example. For instance we might see a garden chair, an office chair, an armchair, etc. but will always be aware of the chair. Centring also means that in abstract matters we will always go to the pure or classic example. What we now end up with is Plato's 'ideals'. He maintained that such ideals must pre-exist in order for us to recognise things. The simple behaviour of a self-organising system shows how much ideals are formed by the system." (p. 48).
- **Reed, S.** (1996) explains: "Consider the following explanation of how we recognise patterns. Our LTM (Long term memory) contains descriptions of many kinds of patterns. When we see or hear a pattern, we form a description of it and compare the description against the description stored in our LTM. We are able to recognise the pattern if its description closely matches one of the descriptions sorted in LTM. Although this is a plausible explanation, it is rather vague." (p. 20).
- **Mintzberg,H.** (1987) states: "Patterns, like beauty, are in the mind of the beholder, ..." (p. 67).

QUOTATION 1.2: VARIOUS ACADEMIC VIEWS OF WHAT IS A PATTERN

Also, it was found that the 'visual pattern' concept is discussed in various studies on visual perception, visual thinking, and cognition. In addition, there are a number of theories on 'pattern recognition' (PR) that discuss visual patterns. Patterns vary in their types, nature, and structures. Life is full of various types of

patterns. Patterns can be discussed in various ways, and that depends on what type of pattern one is discussing. Also, each type of pattern has particular characteristics. For example, fashion patterns are different from music patterns; the pattern of a tree is different from the pattern of a forest, etc. The concept 'pattern' as stands in this study is explained and discussed in the conclusion Chapter (6).

1.6 An overview of visual perception, sensory systems, and pattern recognition (PR)

Understanding the mechanisms of perception and sensory systems in relation to recognising visual patterns has been the focus of various scientific studies. There are various types of disagreements between psychologists regarding some theories on visual perception. In addition, there is a massive amount of literature and theories on perception and sensory systems. For the purpose of this study, a brief outline of the major issues that relate to how the human mind construes patterns is given. Vicki Bruce and Patrick Green (1990, p. 1) identify perception as the ability to detect structures and events in the surroundings of one's own environment. According to Richard Gross (1996):

In a sense, pattern (or object) recognition is the central problem of perception and is almost synonymous with perception itself. (p. 227).

According to Michael W. Eysenck (1988):

One of the most important aspects of visual perception is pattern recognition, which involves assigning meaning to visual input by identifying the objects in the visual field. (p. 38).

Bruce and Green (1990) state:

Visual perception reveals a solid, mobile and meaningful world. It seemed that perception must therefore involve processes that go beyond the information present in the image. (p. 74).

Michael W. Eysenck and Mark T. Keane (1990) state:

The term perception refers to the means by which information acquired from the environment via the sense organs is transformed into experience of objects, events, sounds, tastes, etc. (p. 43).

Reed (1996, p.20) states that a large part of the literature on pattern recognition (PR) is concerned with alternative ways of describing patterns. Gross (1996) identifies pattern recognition:

Process of recognising, identifying and categorising objects. Almost synonymous with 'perception'. (p. 233).

- **Recognising complex information**

Bruce and Green (1990) discuss the kinds of internal representations that allow for the recognition of complex configurations, and the kinds of processes that operate on the retinal image to allow access to these internal representations. They

explain face recognition:

There is good evidence that face learning in the infant is guided by some innate specifications of what faces look like, in the same way as young birds possess an innate representation of the visual properties of hens.(p. 360).

1.6.1 Patterns obtained from sensory systems & perception processes

Past and recent psychological studies reveal essential information about how the human mind handles information. Scholars state that there are two different and interrelated systems involved in how the human mind construes patterns of the world. These two systems are sensory and perception processes. According to Gross (1996):

If we compare what we experience (namely, a world of objects that remain stable and constant) with what our sense organs receive in the form of physical stimulation (an almost continuous state of flux), it is almost as if there are two entirely different worlds involved: the one we are consciously aware of is a world of 'things' and people (perception) and the one we are not aware of is a world of sense data (sensation). (p. 182).

Gross (1996) explains the interrelation between perception and sensation. He states that sensation involves physical process, and that perception involves psychological processes. He adds that sensation is necessary for perception because it provides raw materials from which conscious awareness of the world is constructed. He describes the characteristics of sensory systems (QUOTATION:1.3).

Gross,R.(1996) explains the characteristics of sensory systems:
"However we classify them, sensory systems (or modalities) have certain characteristics in common: ... they each respond to particular forms of energy or information. - They each have a *sense organ* (or accessory structure), which is first 'point of entry' for the information that will be processed by the system (the sense organ, as it were, 'catches' the information). - They each have sense receptors (or transducers), specialised cells which are sensitive to particular kinds of energy and which then convert it into electrical nerve impulses, the only form in which this physical energy can be dealt with by the brain. - They each involve a specialised part of the brain which interprets the messages received from the sense receptors and (usually) results in conscious awareness of an object, a person, a word, a taste, etc. (i.e. we perceive). - A certain minimum stimulation of the sense receptors is necessary before any sensory experience will occur; this is known as the *absolute threshold*. In practice, instead of finding a single intensity value below which people never detect the stimulus and above which they always detect it, a range of values is found and the absolute threshold is taken to be the value at which the stimulus is detected 50% of the time."(pp185-186)

QUOTATION 1.3: A DESCRIPTION OF THE CHARACTERISTICS OF SENSORY SYSTEMS

Human senses are classified in various ways. According to Gross (1996):

The senses have been classified in several ways. For example, Sherrington (1906) identified three kinds of receptors: 1) exteroceptors (which tell us about the external environment); 2) interoceptors (which tell us about the internal environment); 3) proprioceptors (which deal with the position of our body in space and its movement through space). (p. 184).

Gross (1996, p.189) states that Exteroception includes the five 'traditional' senses of sight, hearing, smell, taste, and touch. He claims that each of the senses involves a specialised part of the brain which interprets the messages provided by the senses. Understanding how the sensory systems provide the human mind with information is essential for understanding complex processes and forms of patterns. Some of the psychological studies focus on the physiology of the sense organs and explain that the sensory systems and processes provide the human mind with sense data. Other studies

explain more complex processes about how the sensory systems provide information.

Bruce and Green (1990) state:

Sensitivity to diffusing chemicals and to mechanical energy gives an animal considerable perceptual abilities but leaves it unable to obtain information rapidly about either its inanimate world or about silent animals at a distance from itself...

The form of energy that can provide these kinds of information is light, and consequently most animals have some ability to perceive their surroundings through vision. (pp. 1-2).

The physical, psychological and cognitive conditions of the individual who receives the information play a part in how the individual perceives the information. Gross (1996, p.186) explains that the 'absolute thresholds' vary from individual to individual, and that each threshold varies for the same individual at different times, depending on the following: 1) physical state, 2) motivation, 3) physical conditions of presentation and so on. Rose (1995) states:

For example, mind could be interpreted first as containing systems that ask who or what, where, when, how come, why, and do so what? Visual, auditory, and other mechanisms would then be subservient to the first three of these, memory the third, reasoning the fourth, forward planning and imagination the fifth, and emotion the last. What I wish to emphasise is that many styles of portrait are possible. The choice between them depends on the portrait's context and the purpose of composing it. Yet it is still the same subject. (p. 47).

The patterns which are recognised by the human mind involve more explanations than what the patterns are themselves. Walsh and Kulikowski (1995, p. 276) state that colour perception cannot be explained entirely by the physics of colour, nor by adaptation, nor in term of memory. They add that information about colours is analysed in many different areas of the brain rather than just one central colour area. Gross (1996) explains how the neurological studies view PR. One of these studies focuses on parallel (non serial) processing (QUOTATION:1.4).

"The components are four kinds of demons:

1. *Image demons*, who simply copy the pattern, much as the retina records visual patterns.
2. *Feature demons*, who analyse the information from the image demons in terms of combinations of features.
3. *Cognitive demons*, who are specialised for particular letters and will 'scream' according to how much the input from the feature demons matches their special letters.
4. *A decision demon*, who chooses the 'loudest scream' and hence, the name of the letter."(Gross, 1996. p231)

QUOTATION 1.4: NON SERIAL PROCESSING OF INFORMATION

Also, patterns can be provided by other senses besides vision. Gross (1995, p.195) states that hearing sounds involves detecting changes in air pressure as they occur at the ear. An explanation of how touch provides information is given by Bruce and Green (1990). They state:

Pressure on the skin and mechanical forces on the limbs can provide information about the environment in immediate contact with the animal, while sound can provide information about more distant animals but not usually about distant inanimate structures. (p. 1).

1.6.2 Patterns from too much data: reduction versus simplification

According to Collins English Dictionary and Thesaurus, the meaning of simplify:

1) to make less complicated or easier. 2) to reduce (an equation, fraction, etc.) to its simplest form. Simplification is a noun.

According to the same dictionary the synonymous verbs to simplify are: abridge, decipher, disentangle, facilitate, make intelligible, reduce to essentials, streamline.

According to the Concise Oxford Dictionary the word 'reduce' has several meanings.

Some of these meanings are:

v. 1 tr. & intr. make or become smaller or less. 3 tr. convert to another (esp. simpler) from (reduced it to a powder). 5 tr. bring or simplify or adapt by classification or analysis (the dispute may be reduced to three issues). 15 tr. make (a negative or print) less dense.

The meaning of reduction according to the Oxford dictionary, is:

n. 1 the act or an instance of reducing; the process of being reduced. 2 an amount by which prices etc. are reduced. 3 a reduced copy of a picture etc. 4 an arrangement of an orchestral score for piano etc.

For the purpose of this study it is important to distinguish between the term 'reduction' of information and 'simplification' of information. Reduction of information is known by psychological studies as a function of sensory system.

Reduction means less information. Gross (1996) explains:

Each sensory system is sensitive to a particular form of physical energy, but each also acts as a data reduction system. (p. 197).

The reduction which is provided by the sensory systems is related to the focus of attention of the human mind against an overload of data, and involves processing particular sense data from a wider range of data and intentional types of simplification. The simplification of too much data involves intentional reduction of information. Also, it involves coding the particular information in an intelligible form which may or may not involve reduction of information. According to Philip Meggs (1993):

The prehistoric artist developed a tendency toward simplification and stylisation. Figures became increasingly abbreviated and were expressed with a minimum number of lines. By the late Paleolithic period, some petroglyphs and pictographs had been reduced to the point of almost resembling letters. (p. 6).

1.6.3 Patterns from incomplete information

Patterns can be formed from incomplete information. A number of researchers state theoretical explanations of how the human mind interprets and forms patterns from incomplete information (Begbie,1969; Bruce and Green,1990; Payne;1993, Gregory et al,1995; Gross,1996). According to Gross (1996):

Just as it is necessary to select from all the available sensory stimulation which surrounds us (in order to prevent 'sensory overload'), so it is often necessary to supplement it, because the total information that we might need could be missing (not directly available to the senses). This is what Gregory means by 'going beyond the immediately given evidence of the senses (i.e. inferences). (p.203).

Gross (1996) claims that the ability of the human mind to deal with incomplete information has to do with “perceptual constancy”. He states the following examples:

We often view objects from angles such that their ‘true’ shape and size are not reflected in the retinal image they project; for example, rectangular doors often project trapezoid-shaped images, round cups often project elliptical-shaped images and people of normal size often project very small images, and yet we usually perceive them as rectangular, round and normal-sized, respectively. These are examples of shape and size constancy, the ability to perceive objects as we know them to be despite changes in the sensory stimulation which they produce. (p. 203).

According to Douglas L. Medin and Brian H. Ross (1996):

To get an idea of the complexity of visual information processing, one has only to examine any one step in detail. For example, the detection of edges seems to be straightforward, but it is considerably more difficult than one might first imagine. Edges are defined by differences in brightness between regions, but these differences are not guaranteed to be sharp but rather may fade more or less continuously... In short, the perceptual system has to use the right-sized scale to analyze scenes. (p. 117).

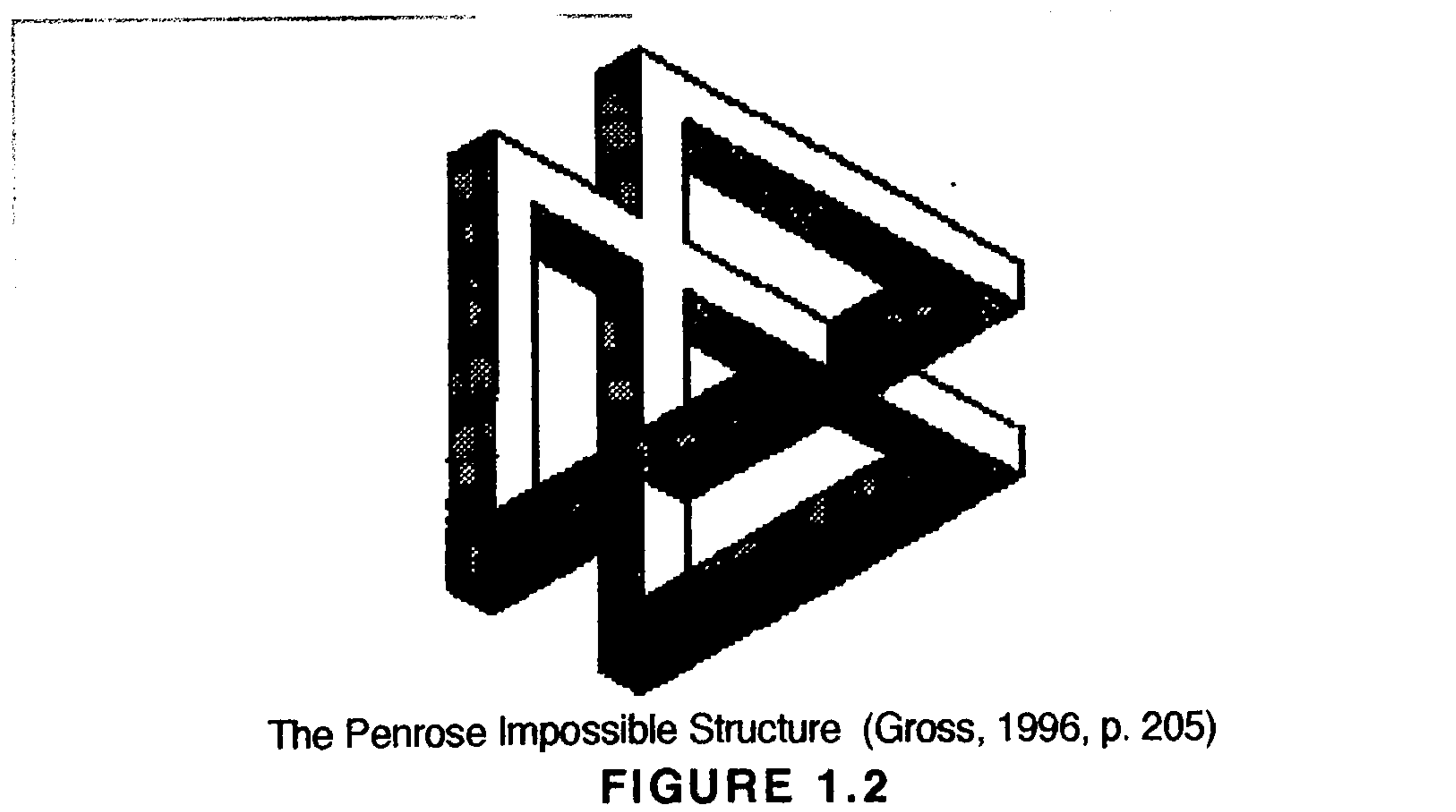
Gross (1996, p.204) explains that shape and size constancy do not always work. He indicates that when people move their head around they produce a constantly changing pattern of retinal images. He called this phenomenon location constancy. Bruce and Green (1990, p.79) state that the visual input of an image represents ‘intensity values’ over a huge array of different locations, and it starts as a ‘raw prime sketch’ then it develops to a ‘full primal sketch’. They explain that the array of intensity value is created by the way in which light is reflected by the physical structures which the observer is viewing. These structures are related to shapes, surfaces, and objects of the image, and to the orientation and distances of these structures from the observer. In addition, the early visual processing creates from the image a description of these structures. They indicate that the first representation is rather a messy representation and it is called ‘the raw primal sketch’. Then this representation develops to a ‘full primal sketch’ through further applications which focus on larger structures-boundaries and regions of the image. Gross (1996) states:

So visual information from the retinal image is often sketchy and incomplete ... In order to make sense of the various sensory inputs to the retina, the visual system must draw on all kinds of evidence, including distance cues, information from other senses and expectations based on past experience. (p. 204).

The concepts of direct and indirect perception are discussed by many psychologists in various ways. James J. Gibson (1986) states that a direct perception is different from that of an indirect perception. He states that seeing from a picture is mediated, while seeing the actual environment is direct perception and is not mediated by retinal information from ambient array of light. He calls the process of direct perception “Pick up”. He explains that direct perception involves exploratory activity of looking around and getting around. Gross (1996, p.204) states that illusion operates by formulating a perceptual hypothesis, a ‘best guess’ which is then tested against

sensory inputs. An example of a pattern that is not physically present in the retina is the Kanizsa triangle (FIGURE: 1.1). Gross (1996, p.204-206) states that this triangle is an example of going beyond the information given, and that the perceived image is not present in the stimulus and hence the retinal image. Richard Gregory (1995, p. 24) classifies this triangle under cognitive-fiction ambiguity. Psychologists state that in the case of illusion people can see the object in more than one way, and that there is no one-to-one correspondence between sensation and perception (Begbie: 1969; Bruce and Green,1990; Gross, 1995). Gregory (1995, p. 24) states that there are three types of illusion: 1)Physical ambiguities. 2) Physiological ambiguities. 3) Cognitive ambiguities. Each of these categories includes the following sub categories: 1) Distortion; 2) Paradoxes; 3) Fictions. G. Hugu Begbie (1969) discusses the impossible structure by Clarence Penrose (FIGURE: 1.2):

It is also possible to construct figures that have an inherent inconsistency so that a single interpretation is not possible and yet the possible interpretations do not square with each other. (p. 206).



Gregory (1995, p.24) classifies this structure under types of cognitive ambiguities - Paradoxes. Learning experiences, memory storage, ecology and the physical and mental state of the individual have particular impact upon how the human mind processes information. Besides the physical sources of visual information there are other sources of visual information: memory, imagination, visual thinking, mental

images, and dreams.

1.6.4 Theories of Pattern Recognition

Each of the PR theories failed, somehow, to explain particular aspects of the mind's activity in processing information (Gross: 1996). PR theories discuss visual patterns according to the ability of the human mind in handling information and recognising patterns. In psychological studies, PR theories mainly suggest ways of how the patterns become recognisable. For example, they attempt to explain what makes a 'T' a 'T' (Gross, 1996, p. 227). PR explains how the human mind recognises objects, or things. Psychologists point out that each of the PR theories failed some how to explain pattern recognition, and each of them has some problem concerning recognising patterns. Gross (1996, p.227) states that the problem of pattern recognition can be illustrated by all the different ways in which a particular stimulus might be presented. Five major theories are discussed by psychologists. These theories are: 1) Template Matching Hypothesis (TMH), 2) Prototype Theories, 3) Feature Detection Theories, 4) Structural Theories, 5) Gestalt.

- **Template Matching Hypothesis (TMH):**

Reed (1996) defines (TMH):

An unanalysed pattern that is matched against alternative patterns by using the degree of overlap as a measure of similarity. (p. 20).

Gross (1996) indicates:

The template matching hypothesis has to assume a separate template for each individual object or pattern, which is neurologically impossible. (p. 233).

Gross (1996) explains TMH:

As with all theories of PR, the template- matching hypothesis (TMH) sees PR as the comparison of information which has just stimulated the sense organs (retained in sensory memory) with the relatively permanent information acquired during our lifetime, i.e. a match is made between the incoming sensory information and something in our long-term stores. But what exactly is this something? (p. 228).

Gross (1996) explains how the template -matching hypothesis works and points out its failure to explain all the processes of human PR in short time. He says:

According to the TMH, the memory system stores a large number of constructs or internal representations (*templates*) and we compare incoming stimulus information with these miniature copies of previously presented patterns or objects. But if there is an unlimited number of ways of presenting the letter T, for example, it follows that there would have to be an unlimited number of separate templates, each corresponding to a specific visual input. To be able to store that many templates, our cerebrum would be so bulky that we would need a wheelbarrow to cart it around. Clearly, this is neurologically impossible but even if it were possible, it would require an enormously time-consuming search (Solso, 1995. p. 228).

Reed (1996) discusses the problems of TMH:

There are a number of problems with using the degree of overlap as a measure of

pattern recognition. First, the comparison requires that the template be in the same position and the same orientation, and be the same size. Thus the position, orientation, and size of the templates would have to be continuously adjusted to correspond to the position, orientation, and size of each pattern you wanted to recognise. A second problem is the great variability of patterns... Third, a template theory does not reveal how two patterns differ. (pp. 21-22).

Bruce and Green (1990, p.181) state that template matching schemes also fail to account for the facts of animal discrimination. Gross (1996, p. 228) states that TMH is not a valid explanation for most of human PR, because this theory does not match the fact that people recognise unfamiliar shapes and forms so quickly. He explains:

But if we have to compare an incoming stimulus with a miniature copy of it, how do we ever recognise even slightly unfamiliar patterns - we would need to have come across the 'new' pattern before in order to have a template for it. This, of course, is nonsense! (p. 228).

- **Prototype Theories**

Gross (1996) compares template-matching hypothesis with the prototype theories. Also, he explains the prototype theories. He says:

Instead of proposing that what we store is a template for each individual pattern, we could suggest a smaller number of prototypes, 'abstract forms representing the basic elements of a set of stimuli' (Eysenck, 1984). Whereas template theories treat each stimulus as a separate entity, prototype theories maintain that similarities between related stimuli play an important part in PR, whereby each stimulus is a member of a category of stimuli and shares certain basic properties with other members of the category. (p. 229).

Gross (1996, p.229) states that the prototype theories are not satisfactory. He states that they do not explain how pattern recognition is affected by context, and by the stimulus itself. Eysenck and Keane (1990) state:

One of the obvious advantages of prototype theories over template theories is that the information stored in long-term memory consists of a manageable number of prototypes rather than a virtually infinite number of templates. (p. 45).

- **Feature Detection Theories:**

Reed (1996, p.24) explains that Feature Theories explain patterns in terms of their parts. Gross (1996) explains the Feature Detection Theories:

By far the most researched and influential theories of PR maintain that each stimulus pattern can be thought of as a configuration of elementary features. Letters of the alphabet, for example, are composed of combinations of about 12 basic features (including straight vertical lines, horizontals and closed curves). For example, an A may be analysed into two diagonals (/ \), one horizontal (—), a pointed head (^) and an open bottom (∧). The evidence for this is of two main kinds: behavioural and neurological. (p. 229).

Reed (1996, pp. 24-25) states that emphasising the distinctive features is useful for the following: 1) to enable children to learn and remember distinctive features, 2) to enable children to make less errors during training sessions, 3) useful for face recognition by recognising a pattern in one face and its absence in the other face. Reed (1996) states:

Feature theories allow us to describe a pattern by listing its parts. For example, we might describe a friend as having long blond hair, a short nose, and bushy eyebrows. (p. 24).

Eysenck and Keane (1990, p47) state that the difficulties that faced prototype and template theories led to the development of feature theories. Gross (1996) states that several writers pointed out particular problems related to the feature detection theories. Major problems related to Feature theories are: 1) do not take sufficient account of the context (Gross:1996, p231), 2) different features can produce the same patterns (Gross:1996, p231), 3) features are themselves like mini-templates (Bruce and Green, 1990. p. 184), 4) 'feature-list ' descriptions fail to capture overall structural relations which are captured by more global templates (Bruce and Green: 1990, p. 184).

- **Structural Theories:**

Reed (1996) defines Structural Theories:

Theories that specify how the features of a pattern are joined to other features of the pattern. (p. 29).

Reed (1996) explains how Structural theories has developed:

Structural theories build upon feature theories. Before we can specify the relation among feature, we have to specify the features. A structural theory allows for specification of how the features fit together. For example, the letter H consists of two vertical lines and a horizontal line. But we could make many different patterns from two vertical lines and a horizontal line. What is required is a precise specification of how the line should be joined together- the letter H consists of two vertical lines connected at their midpoints by a horizontal line. (pp. 29-30).

Bruce and Green (1990) argue that structural descriptions do not constitute a theory of pattern recognition, but they provide right representation that help to construct a theory. They define a structural description:

A structural description consists of a set of propositions (which are symbolic, but not linguistic, though we describe them by words), about a particular configuration. (p. 185).

- **Gestalt notion**

Gross (1996, p. 222) states that the Gestalt notion of pattern recognition does not apply to all situations because it does not take into consideration factors such as the sizes of the local and global features, the viewing conditions and the nature of the observer's task which are all likely to play a part in determining the role played by individual features in pattern recognition. Psychological studies discuss how parts and wholes are recognised. Gross (1996) states:

Some theorists (e.g. Palmer, 1975) have suggested that under most circumstances, the interpretation of parts and wholes takes place in a top-down and bottom-up direction simultaneously, such as the recognition of parts of a face with and without context. (p. 222).

1.6.5 Memory

The role of memory in pattern recognition is widely discussed by scholars.

According to Gross (1996):

Since the 'cognitive revolution' in the 1950s, memory has become an integral topic within the information-processing approach, central to which is the computer analogy... The respectability that memory has regained since the decline of behaviourism can be seen most clearly perhaps in the study of mental imagery. (p. 277).

Eysenck (1988) states:

There are two main sources of information that can be used in the attempts to perceive the external world accurately (1) currently available sensory information; and (2) relevant past knowledge and experiences stored in the brain. There has been much controversy over the relative importance of these two factors. (pp. 27-28).

Bruce and Green (1990) state:

Memories are content addressable- a fragment of a known pattern as input will lead to the restoration of the whole pattern of activity, without any process of search... Memory is not a set of explicit traces stored at identifiable addresses, but, particularly in distributed memory models, is more a set of potentialities of the entire network. (p. 387).

According to Medin and Ross (1996):

Memory is assumed to consist of a large number of interconnected feature sets called images. (p. 220).

Bruce and Green (1990) explain how memory works:

Given one cue, one 'memory' will be retrieved, given some other cue, a quite different memory will be retrieved from the same set of connections between the same set of units. (p. 387).

According to Meggs (1993), there is an evidence of high level of observation and memory in many prehistoric drawings. He says:

In an engraved reindeer antler found in the cave of Lorthet in southern France... the scratched drawings of deer and salmon are remarkably accurate. Even more fascinating, however, are two diamond-shaped forms with interior marks, which imply an early symbol-making ability. (pp. 5-6).

Reed (1996) states:

Current theories of recognition memory emphasise that there are two components of recognition, one based on judging the familiarity of the item and one based on recalling information about the item. (p. 129).

Gross (1996, p. 98) states that memory refers to three distinguishable but interrelated processes: 1) registration (or reception); 2) storage; 3) retrieval.

Gross (1996) explains the three processes:

Registration can be thought of as a necessary condition for storage to take place but ... it is not a sufficient condition, i.e. not everything which registers on the sense receptors is stored. Similarly, storage can be seen as a necessary, but not a sufficient, condition for retrieval, i.e. you can only recover information which has been stored (you cannot remember something you do not know) but the fact that you know it is no guarantee that you will remember it on any particular occasion. This is the crucial distinction between availability (whether or not the information has been stored) and accessibility (whether or not it can be retrieved), which is especially

relevant to theories of forgetting. (p. 27).

1.6.6 Imagination

Imagination is an essential power which plays a part in handling information, and in producing new forms of information. The meaning of imagination according to Collins English Dictionary and Thesaurus is:

n. 1. the faculty or action of producing ideas, esp. mental images of what is not present or has not been experienced. 2. mental creative ability. 3. the ability to deal resourcefully with unexpected or unusual problems, circumstances, etc.

The imagination phenomenon has been discussed by many scholars from various fields of study. Richard Kearney (1988, p.87) states that with Plato the notion of imagination receives its first philosophical formulation. He indicates that the theme of imagination is considered as “a distinctly human mode of existence”. According to Anthony Kenny (1989):

By ‘imagination’ there are many things which we can mean. Let us begin by considering the imagination in the sense simply of the ability to call up mental images; an ability which you can exercise now simply by shutting your eyes and imagining what the White House looks like, or by sitting in silence and reciting the Lord’s Prayer or a nursery rhyme to yourself. (p. 113).

Peter Mckellar (1967) states:

When some one starts to think or to imagine, his subject matter is not confined to what is perceptually present to him. He may also respond to what the psychologists Clark Hull has called ‘the not here and not now’. He may, for instance, recollect, and for many people recollection depends heavily on mental imagery. (p. 19).

Kearney (1988) identifies the meaning of imagination. He says:

In summary, one can identify four meanings of the term imagination. 1) The ability to evoke absent objects which exist elsewhere, without confusing these absent objects with things present here and now. 2) The construction and/or use of material forms and figures such as painting, statues, photographs etc. to represent real things in some ‘unreal’ way. 3) The fictional projection of non-existent things as in dreamer or literary narratives. 4) The capacity of human consciousness to become fascinated by illusions, confusing what is real with what is unreal. (p. 16).

To which list others might add, 5) the capacity to think of things that do not exist and never have done, but Kearney does not like this type of creative imagination. Karl Garrison and Albert J. Kingston (1968) state:

Creative imagination begins to show up early in infancy and, with encouragement, continues to manifest itself throughout a lifetime. (p. 89).

1.6.7 Mental images

Mental images are forms of imagination and visual thinking. They may involve a particular understanding of reality, or present unreal forms of imagery. The relationship between memory, imagination, visual thinking and mental images are discussed by many scholars (Whorf,1956; Garrison, 1968; Arnheim, 1970; Kearney,1988; Kenny, 1989). The boundaries between these mental activities overlap. Rudolf Arnheim (1970) discusses mental image as a form of visual thinking.

He says:

When the inner counterpart of the percept is not applied to any external image but stands on its own ... Thinking, in particular, can deal with objects and events only if they are available to the mind in some fashion. In direct perception, they can be seen, sometimes even handled. Otherwise they are represented indirectly by what is remembered and known about them. (p. 98) .

Mckellar (1967, p. 22) states that the relation of imagery to imagination is not a simple one. Arnheim (1984) states:

Visual imagination is a universal gift of the human mind, a gift that in the average person demonstrates itself at an early age. (p. 142).

Crooks (1986) has investigated 'Thinking in images'. He states:

It is argued that while it may not be the case that images are the basic elements of thought, they may still be cognitively significant. (Abstract of the thesis)

Reed (1996) discusses the relationship between creativity and mental images in inventing products or theories. He states:

Einstein reported that his thought experiments relied on imagery. Imagining the consequences of travelling at the speed of light helped him formulate his special theory of relativity. Fraday claimed to have visualised force lines from electronic and magnetic fields, leading to the modern theory of electromagnetic fields. Kekule reported that his discovery of the molecular structure of benzene occurred after he imagined a snake coiled in a circle. (p. 404).

Sally Beardsley (1994) states:

Designers with their ability to visualise and to relate abstract goals to everyday life, often serve as catalysts for common understanding. (p. 53).

1.7 An overview of visual sources used by designers

Due to the lack of literature on visual sources in the graphic communication studies, examples of visual sources from other design areas, history and art education are given. The following quotations show various examples of visual sources and visual information:

- design work and human body as visual sources for designers

S. Baker (1988) points out that designers reinforce and reproduce stereotypes which centre on the depiction of the human body. Victor Margolin (1988) states that the contributions of some known designers to design imagery became stereotypes.

Margolin indicates:

such stereotypes became worn out conventions through overexposure and eventually turned into political cliches as they were used repeatedly well into the 1930s. (p. 60).

- Design books as sources of visual sources for designers

Pauline Allett (1973) provides evidence that printed books which contained images were used as design sources for embroidery as early as the seventeenth century. Allett explains:

Although the direct use of such sources was not widespread, the use of

intermediaries and second hand copies appeared to be popular, Herbals, natural histories, emblem books and pattern books were the principal sources for design. (from Abstract of the thesis).

- Sources of 'Polemical prints of the English revolution'

Tamsyn Marry Williams (1987) has investigated the polemical prints of the English Revolution 1640-1660. Williams states that political events between 1640 and 1660 inspired the publication of hundreds of tracts and a small number of these publications carried pictures. Williams (1987) finds out:

In their concern to express ideas, products of prints aimed for simplicity and clarity. In many prints such detail was identified... To get prints across designers used whichever conventions suited their aim. They experimented with new visual vocabulary, from the way in which blocks were cut and printed to chosen motifs. (p. 208).

Williams (1987) states:

In some cases an image was used repeatedly for an object or an event and so became a signifier in itself. (p. 208).

- Design styles and pictures as visual sources

Heller and Chwast (1988) state:

...the advertising, posters, packaging, and typefaces of a period, as well as its illustrations and cartoons, are equally, if not more, indicative of the society in which they were produced. (p. 9).

In fact, a vernacular graphic style usually indicates popular acceptance of visual philosophies that were once inaccessible, avant - garde, or elitist. (p. 9).

- Art movements as visual sources for designers

Some scholars discuss the art movements and design and show various influences (Meggs,1989; Heller and Chwast, 1988; Lippard,1966; and others). Meggs (1989) indicates that the influence of art movements on the designers can be seen in how designers used fragments of information, pictographs and stylisation of human figure and objects, the use of Gutenberg's invention of movable type, and photographs. He claims that art movements had impact upon graphic language, and designers started to depict the essence of the object and not its outwards appearance. He says:

Cubism and futurism; Dada and Surrealism; de Stijl, Supermatism, and Constructivism- directly impacted upon the graphic language of form and visual communications in this century... the Cubists invented forms that were signs rather than representations of the subject matter. The essence of an object and its basic characteristics, rather than its outward appearance, were depicted. (pp. 273-275).

- Art and design movements, and historic styles as visual sources

Heller and Chwast (1988. p. 10) state that certain design styles such as 'Art Nouveau' were developed for aesthetic reasons. Other were motivated by 'Dada', some were influenced by Swiss International, industry, national styles, Constructivism, Expressionism, Surrealism, and historical styles.

- Reality as a source for photographs

Genin (1988, pp. 39-40) states that there is evidence that the development of the production methods and techniques contributed significantly to the revolutions of ideas in the 14th and the 15th century. Genin states that the image production in the 19th century was industrialised, and photographs became popular and were the common way of representing reality.

- Reference materials used by illustrators

Murray (1989, pp. 22-23) divides reference material into three types: 1) 'inspirational' such as things or objects that are visually pleasing, 2) 'factual' and it had to do with 'mechanics' of the object, 3) 'stylistic' and it had to do with "information of purely aesthetic nature". Murray explains the stylistic type:

often used for specific look especially when the illustrator needs to convey a period feel. (p. 23).

From the previous discussion, it can be concluded that identifying art styles or a new technology as influences on design does not help with the problem of why designers select one influence rather than another alternative influence.

1.8 Summary and conclusion

Various scholars adopt various approaches when they discuss what designers do. Some of these approaches can be considered positivistic, normative, or both. Some of the scholars make statements about what designers do, did or will do, and they assert alleged facts about this doing. Others make normative statements about what designers ought to do. They depend on judgments about what is good or bad about what designers do. In passing their judgments cultural, philosophical, psychological, technological, and practical issues come to play parts in their discussions.

Indications of certain uses of visual sources such as printed books, photographs, prints, existing designs, existing symbols and signs did not give a clear idea of how these visual sources were selected in the first place. Knowing the use of certain visual sources without explaining how the selection took place, and what were the other visual alternatives at the time of the selection, explains only one part of the design activity and the other parts remain ambiguous and subject to speculation. Design literature suggests various methodological proposals for enhancing the quality of design. Advancing the design activity for producing effective design requires considering and understanding the nature of its very components.

Various studies reveal that the human mind deals with information inputs in terms of patterns. The major characteristics of patterns are: 1) they can be constructed from incomplete information, 2) they allow the simplification of too much data. Patterns vary in their nature, characteristics, properties, qualities, and their

parts. The processes of construing and constructing visual patterns involve complex processes. These processes involve perceptual, cognitive, and conceptual activities. Direct sensation alone cannot explain how the human mind construes visual patterns. According to scholars, perception goes beyond the information presented to the senses. In addition, recognising visual patterns involve ecological, physiological, and psychological factors beside the contextual factors of visual patterns. Sources of visual patterns varied. Visual thinking, imagination, memory, and actual objects are sources of visual patterns.

The findings of the literature survey showed that the terms 'pattern', 'pattern recognition', and 'visual patterns' were used in various studies to explain how the human mind handles information. Theories on pattern recognition (PR) are mainly concerned with the concept of recognition based on the functions of sensory systems, perception, and cognitive processes. It was found that some of the existing theories of PR were not very useful for the present purpose, because they failed to explain the following: 1) complex and new information; 2) the context of information. However, some of the existing theories of recognition were found useful for explaining the nature of patterns. But the theoretical context within which these theories were discussed is different from the context of this present study. In addition, 'pattern' and 'visual pattern' require further explanation in relation to what designers do.

From observing the various explanations of communications studies, it can be considered that there is a suggested pattern that neither of the two schools of communication ('rhetoric', 'semiotics') addresses. Graphic communication does not quite fit either of the two (or fits both, or in between). This study does not attempt to explain the design in terms of its meaning or persuasion. It investigates design in terms of selection and adaptation processes. 'Meaning' or 'persuasion' or both are considered in this study as one of other potential alternatives and are subject to selection. The importance of the role of the designers in creating design for communication purposes is recognised, but little is known about the design activity in terms of selection, adaptation and use of visual sources and visual patterns.

In particular, how designers select from the huge array of alternative visual sources is little understood. There is, therefore, a need for a specific study of how designers select and adapt visual sources and visual patterns. It would appear that a good way for doing this is to investigate actual designers in real life. The major questions therefore are: 1) what are the designers' visual sources and visual patterns, 2) how do the designers select, adapt, and use visual sources and visual pattern for specific purposes, 3) what considerations are involved in the making of a choice by a designer.

The rest of this thesis is concerned with such a study. Its major conclusion is

that designers have a mental state that can be called a pattern of need (NP). Possible visual patterns are compared with this pattern of need until there is a mental 'click' which is described as purposive pattern recognition (PPR). The 'fit' between need and visual sources undergoes further adaptation before the final design is reached for a specific project.

CHAPTER 2

RESEARCH METHODOLOGY

2.1 Original aims

The original aims of this study as approved by the DMU Research Degrees Committee were:

1. To identify and classify the visual sources of information in the contents of visual imagery in chosen information design case studies.
2. To identify the processes the designers adopted when selecting visual sources and the choices made within the processes.
3. To identify the effect of the choices the information designer makes when selecting visual sources upon the contents of visual imagery and upon the communication objectives.
4. To devise an effective system for designers that would help them to select appropriate imagery for communicating information.

2.2 Changes

This study started as an investigation in the 'information design' area with the idea of investigating practising information designers and their visual sources, and turned out to be an investigation in the graphic communication area with emphasis on the designer as a selector, adapter, and user of visual sources and visual patterns. Various factors led to these changes:

(1) The concept of 'information designers' turned out to be 'fragile'. Attendance at a conference of the Information Design Association did not clarify the problem of finding practising information designers to study. Designers who called themselves information designers were mainly designers who preferred this title. Drawing a line between who was and was not an information designer was considered to require research by itself. Findings from the early stages of this investigation showed that designers from various design consultancies in the UK who do not call themselves 'information designers' do designs that are categorised by various scholars as 'information design'. One study suggests that graphic designers deal with information and should be regarded and should pursue their activities as information designers.

Gui Bonsiepe (1993) suggests:

If we want to re-invent and re-construct graphic design, we have first of all to create linguistic distinctions capable of grasping a new reality that otherwise would not be understood if we remain bound to standard terminology... The term 'graphic design' and its corresponding term 'graphic designer' have strong ties with a particular technology, i.e. printing. Therefore, graphic design runs the risk of not covering new phenomena that result from technological innovations, particularly computers and

computerization. As new concepts arise such as: • audiovisual • multimedia • information management, they reveal the limitations of the traditional concept of 'graphic design... (p. 47).

Despite the attractiveness of the above view, the fact remained that many design consultants did not regard themselves as information designers.

(2) A group of people who did call themselves information designers was identified but they turned out to be reluctant to respond to letters or to requests to be interviewed.

(3) The early parts of the research (i.e. forty-one interviews, start of mini-case studies, and some observation) showed that examining visual sources was much less rewarding than examining the selection processes.

(4) The early parts of the research produced a new concept: 'purposive pattern recognition' (PPR). This discovery led to a redesign of the study and an exploration of the interdisciplinary literature on pattern recognition (PR). The aims and title were then changed.

- **New aims**

1. To identify factors of importance in the selection and adaptation of visual patterns.
2. To discover a new way of describing what designers do when they select visual patterns to fit projects' needs.
3. To add to understanding of the use of visual materials in design.

2.3 The research methods and processes

This research started with no hypothesis, but ended with a new theoretical system for looking at what designers do. Before making any decision about the topic of this study, it was necessary to discover existing studies and find out gaps in knowledge related to the area of the research. The literature survey provided insights into areas that require further investigation and problematic issues related to design. Brian Allison (1997) states:

The literature of the subject fields an important source of research topics. The text books and research journals for any subject describe what is already known about the subject and, therefore, can also indicate the gaps in knowledge. (p. 4).

A wide range of literature was searched. It was found that no particular study has investigated the full range of visual sources used in design. Two MA theses discussed visual references: Ian Murray (1989) and Helen Nicks (1989). Nicks discusses visual references in relation to photography. The present author was not

able to get access to Nicks' thesis. Murray (1989) discusses reference material by looking at a number of contemporary illustrators' ways of selecting and using visual references including himself and painters from the past. Murray creates a storage system of reference material. He points out the importance of having a storage of visual reference for saving the illustrators' time and effort when they create their illustrations. Murray's thesis includes rich information that can be reinterpreted. It was found that Murray's explanation of the selection activity can be further elaborated by looking at the relationship between the selection and adaptation processes. In addition, the illustrators' explanations (in Murray's study) can be reinterpreted. Also, various concepts such as the concepts of 'reference', 'concept of no reference', 'inspiration', 'meaning', 'memory' and 'style' are found to require further investigation in the context of what designers do. Furthermore, Murray concludes that the illustrators' reliance on reference material decreases with experience. This conclusion raises questions about the nature of visual sources. Also, he concludes:

I have now gained enough experience to realise when I need to use reference material and when I do not. (p. 66).

Paul Nini (1995) investigated sources of information but he did not discuss visual sources or visual patterns. Kenneth J. Hiebert (1998) discusses graphic design sources. His book was published at the final stage of writing this thesis. However, some of his views are discussed in chapter one and some in the conclusion chapter (6).

- **The research question**

The research question of this investigation is: 'How do designers select, adapt and use their visual sources and visual patterns when they create specific designs for particular needs in graphic communication mini-case studies?' Before making decisions about the method for studying the topic of this research, research methods and techniques were carefully reviewed. According to Robert K. Yin (1994. 2nd edit.) there are three conditions that determine the use of particular research strategy. He states that the three conditions consist of the following:

(a) the type of research question posed, (b) the extent of control an investigator has over actual behavioural events, and (c) the degree of focus on contemporary as opposed to historical events. (p. 4).

It is sometimes possible to exert control over behaviour to the extent that experimental research becomes possible. Such research has been used in industrial design. H. Christiaans and J. van Andel (1993), for example, attempted to study student designers' methods of approach in an artificial setting (control group and experimental group). For looking at 'real' designers (as opposed to students) experimental methods would not be accepted by busy professional designers. Other forms of quantitative research (questionnaires, etc.) were rejected for their well

known deficiencies. An initial attempt to use postal questionnaires was tried but only four responses were achieved (See Section: 2.3.6). It was therefore, decided to use qualitative research. Anselm Strauss and Juliet Corbin (1990) describe qualitative research:

any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. It can refer to research about persons' lives, stories, behaviour, but also about organisational functioning, social movements, or interactional relationships. (p. 17).

- **Research methods and techniques for data collection**

The use of more than one method for data collection is suggested by many scholars. Louis Cohen and Lawrence Manion (1994, pp. 233-234) point out that the problem of 'exclusive reliance in one method' may bias or distort the researcher's picture of the particular slice of reality. They state that the data generated should not be artifacts of one specific method of collection. Yin (1994, pp. 78-79) states that data collection for case studies can rely on many sources of evidence. He discusses six important ones: 1) documentation, 2) archival records, 3) interviews, 4) direct observation, 5) participant - observation, 6) physical artifacts. Yin states that the various sources of evidence are highly complementary, and that no single source has a complete advantage over all the others. According to Strauss and Corbin (1990) qualitative techniques used for gathering data are:

These include observations and interviews, but might also include documents, books, videotapes, and even data that have been quantified for other purposes such as census data. (p.18).

The major research processes for this investigation were: 1) Initial exploration of the area; 2) 'Interviews with designers'; 3) Mini-case studies; 4) The Masters of design; 5) Direct observation sessions; 6) Other methods.

2.3.1 Initial exploration to the area of the study

After investigating gaps in knowledge, an initial exploration of the activities of practising designers was needed. This involved approaching designers and starting up the pilot study. Conducting the pilot study was necessary for getting a general picture. During this stage, a range of academic literature was surveyed with the following aims: a) To increase awareness of design issues, and the use of design terms; b) To understand problematic design issues; c) To be able to communicate with designers effectively; d) To increase critical thinking.

- **The pilot study**

Eighteen design consultants from different design consultancies in Leicester were approached by letters and telephone, then they were interviewed. A mixture of semi-structured and unstructured questions were used at this stage for getting a

general picture about the area of the study and getting ideas about which topics to include (Eileen Kane, 1984, p. 64; Judith Bell, 1987, pp. 94-95). The findings of the pilot study are not discussed in the thesis. However, it is worth mentioning here that the pilot study proved to be a very useful research method in terms of getting a feel about the area under study and a general picture of its topics. Also, the pilot study was a good training experience in terms of developing skills for formulating and asking questions and adjusting to the interview settings.

2.3.2 Interviews with designers

- **The methodology**

In order to carry out this part of the study a combined approach of literature study and interviews was adopted. The literature survey aimed to verify, explain, compare, and explore overt and covert aspects of what designers do when they create designs for specific needs. In addition, the literature survey covered each technique and method of analysis used throughout this investigation. A variety of published books, periodical studies and journals, Ph.D theses, MA theses, design publications, references to research methods and techniques were reviewed. Regarding the use of literature, Anselm Strauss and Juliet Corbin (1990) state:

You can use all types of literature judged as relevant, but must guard against becoming a captive of any of them. (p. 56).

The interview survey is considered as a 'conversation with a purpose' (Seymour Sudman and Norman M. Bradburn, 1982, p. 4). According to Cohen and Manion (1994, p. 271), interview methods involve the gathering of data through direct verbal interaction between individuals. Cannell and Kahn as quoted by Cohen and Manion (1994) define the interview as:

a two-person conversation initiated by the interviewer for specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, or explanation. (p. 271).

According to Cohen and Manion (1994, p. 272), the interview method may serve the following purposes: 1) For gathering information with direct bearing on the research aims; 2) For testing a hypothesis, or proposing new ones, or as an explanatory device to help identify variables and relationships; 3) For validating other methods, or following up unexpected results, or for investigating the motivations of the respondents and their reasons for responding as they do. Cohen and Manion (1994) explain the interview as a specific research tool. They say:

Interviews in this sense range from the formal interview in which set questions are asked and the answers recorded on a standardised schedule; through less formal interviews in which the interviewer is free to modify the sequence of questions, change the wording, explain them or add to them; to the completely informal interview where the interviewer may have a number of key issues which she raises in conversational style instead of having a set questionnaire. Beyond this point is located the non- directive interview in which the interviewer takes on a subordinate

role. (p. 271).

- **Selecting and interviewing the designers**

The processes of locating and contacting designers for the 'interview with designers' were not straightforward, and they involved six steps (TABLE: 2.1). As a result, a number of designers from design consultancies and organisations which produce or use design in the UK agreed to participate and to be interviewed.

Sources	Letters Sent out	Responses Acceptance	Number of Interviewees
1) Members of The Information Design Association	5	0	
2) Information designers in the UK	3	0	
3) Environmental / Fundraising sectors	25	2 Acceptances	3
4) Designers from Abroad	50	0	
5) Press establishments in the UK	1	1 acceptance	4
6) Design consultancies (Members of csd)	150	31 acceptances	34

TABLE 2.1: PROCESSES OF SELECTING DESIGNERS

Forty designers and one director of publication from various design consultancies and organisations which produce or use design in the UK were approached and interviewed. One of the design consultancies was in Milton Keynes and another one was in West Hill in Devon. The rest of the design consultancies and organisations were in London. The names and addresses of the design consultancies were obtained from the Chartered Society of Designers (csd) in London, and were listed under 'Graphic Consultancies'. Letters were sent to art/creative directors. The letters explained the topic and purpose of the thesis and the importance of the interviews and each letter was accompanied by a covering letter about the nature of the research. Examples of the letters exchanged between the researcher of this study and the various consultancies and organisations are in APPENDIX (I). Interview schedules are in APPENDIX (II). Names and job title of the interviewees are in chapter three (TABLE: 3.1).

At the beginning of each interview, a brief explanation about the nature and topic of the research was given so that the interviewees were able to get a general idea about the subject and feel at ease. Each interviewee was given a printed copy of the interview questions. The cover of each copy included demographic information (APPENDIX: III). All the interviews were tape-recorded in full after obtaining verbal permission from the interviewees. Just before starting each interview the researcher tape-recorded the names, dates, and other details. The raw data of the interviews were then transcribed. Copies of transcriptions were sent to the interviewees so that they were able to correct, modify, or add information if they wanted. Some of the corrected copies were sent back by mail to the researcher of this study, and the rest were collected by the researcher from the design consultancies. Examples of the designers' letters regarding the corrections are in APPENDIX (IV).

Tape-recording procedure proved to be an excellent technique because of the

following: 1) getting the exact words within the context they were said and used, 2) avoiding any type of misunderstanding of words or expressions said by the interviewees, 3) bringing back the feel of how things were said while having ample time to reflect and contemplate on the responses, 4) avoiding any bias that may occur by the use of other methods of recording data such as taking notes, 5) the researcher had the opportunity during the interview to concentrate on what was said without worrying about taking notes, 6) concepts and subtle variations were able to be detected from the actual text, 7) relationships could be checked many times by referring to the actual text of each interview, 8) the respondents were able to correct or modify their own exact words when the interviews were transcribed and sent to them.

- **The interview questions for the 'Interviews with designers'**

The semi-structured interview questions approach was adopted so that the researcher was able to ask further questions (when it was appropriate) about issues raised by the designers, or explain or rephrase questions when it was necessary. The interview questions were used for the following: 1) For gathering information that have direct bearing on the research aims; 2) As a device to help identify variables and relationships; 3) As a device for opening up relevant topics; 4) For following and investigating unexpected results. Deciding the use of semi-structured questions for the interviews had to do with the fact that this type of question has advantages of the characteristics of both structured questions and unstructured questions. In other words, it allowed focusing on specific issues while allowing for relevant topics to be discussed. Judith Bell (1987) states that the research will come somewhere between the completely structured and the completely unstructured interviews. She explains:

Freedom to allow the respondent to talk about what is of central significance to him or her rather than to the interviewer is clearly important, but some loose structure to ensure all topics which are considered crucial to the study are covered does eliminate some of the problems of entirely unstructured interviews. (p. 94).

Bell (1987, p. 94) indicates that there are several types of interviews. These types are: 1) completely structured interviews, 2) completely unstructured interviews, 3) guided or focused interviews. Bell explains:

Where specific information is required, it is generally wise to establish some sort of structure or you may end with a huge amount of information, no time to exploit it and still without the information you need. (p. 95).

Structured types of interview questions were reviewed and disregarded primarily in order to avoid the danger of preconceived notions that any structured form might indicate or employ. Also, unstructured interviews were discarded because they are known for the tremendous amount of time they require for analysis. In addition, there was a consideration that unstructured interviews might consume the allocated time for the interview without covering the needed information. The

interview questions for the 'interviews with designers' are in APPENDIX (V).

The following elements were taken into consideration during the process of designing the list of interview questions: 1) The language and the structure of each question; 2) The aim of each question; 3) The nature of the questions such as addressing personal point of view, professional or organisational behaviours; 4) The order of the questions so that a cohesive and systematic body of information can be obtained. Sudman and Bradburn (1982) explain the importance of the wording:

The importance of the precise wording of questions can be illustrated by a well-known example. Two priests, a Dominican and a Jesuit, are discussing whether it is a sin to smoke and pray at the same time. After failing to reach a conclusion, each goes off to consult his respective superior. The next week they meet again. The Dominican says "Well, what did your superior say?" The Jesuit responds "He said it was all right." "That's funny," the Dominican replies, "my superior said it was a sin." Jesuit: "What did you ask him?" Reply: "I asked him if it was all right to smoke while praying." "Oh," says the Jesuit, "I asked my superior if it was all right to pray while smoking. (p. 1).

Sudman and Bradburn (1982) explain the importance of the questions in making the interview achieve its intended aims. They say:

The ability of the interviewer to make contact with the respondent and to secure cooperation is undoubtedly important in achieving the interview. In addition, however, the questionnaire, as the central focus of the "conversation," plays a major role in making the experience enjoyable and in motivating the respondent to try to provide the information asked for. (p. 5).

- **Analysis and problems related to lack of evidence**

The findings of the 'interviews with designers' could not reveal specific insights at first. But findings showed that something very important was happening; it was hard to put a finger on it because it was so transparent. These difficulties have been dealt with during the research process as tools for developing critical thinking and they have helped a hypothesis to emerge without any preconception. Such problems are known to some researchers. Nicholas P. G. Cox (1992) states:

'Configurational' approaches look for structure, and find it; the present thesis looks for understanding; it finds structures of a sort, but it also finds them shot through with pathologies and problems. (p. 80).

This stage of the research encountered some problems. The problems had to do with the initial review of the raw data of the interviews and the initial findings. Most designers mentioned various visual sources, and most of the designers also stated that 'the visual source could be anything and everything'. Classifying everything and anything was a real problem. At the same time the raw data showed that when this 'anything' or 'everything' was put within a certain design context it was possible to be understood. But because the raw data of the 'interviews with designers' had some loose ends, the need for specific examples, direct observation, and visual evidence was very necessary. Otherwise, the link between the various concepts would be subject to

immature assumptions. This stage of the study experienced further development and had a bearing on the changes that took place regarding the aims and topic of this study.

The link between the visual sources and the types of visual information required visual evidence. The designers during the interviews did not show examples of their visual sources and how they used them. From the designers' explanations, the sources of 'visual information' varied tremendously and overlapped. Additionally, both visual sources and visual information were complex and diverse. In addition, various indications of the relation between 'visual source' and 'visual information' emerged but there was no visual evidence to support any kind of hypothesis without the risk of making hasty assumptions. The only way of finding visual evidence was by starting the mini-case studies and direct observation sessions. At the early stages of the mini-case studies and observation sessions, the link between the visual source and visual information was substantiated and the concept of purposive pattern recognition (PPR) emerged.

- **New concepts and the need for modifications**

The 'interviews with designers' started at first as an exploratory study and focused on the designers' visual sources and the selection and adaptation processes. Various concepts emerged. Most importantly, beside the concept of 'visual source' another concept related to the selection and adaptation emerged. This concept was 'visual pattern'. Most designers stated that they selected visual information from memory, thought process, imagination, books, magazines, photographs, etc. From the various explanations given by the designers, the concept 'visual information' can be interpreted as 'visual pattern'. Subsequently, literature on 'visual information' and 'visual pattern' was surveyed and many interdisciplinary studies were reviewed. It was found that many studies in psychology describe how the human mind handles and recognises visual information in terms of 'visual patterns'. Also, it was found that there are a number of theories of 'visual pattern recognition' (PR) that explain how the human mind recognises visual patterns and the characteristics of visual patterns. However, the contexts and focus of the (PR) theories were found different from the context of this study. But various studies on cognition processes and perception were found useful for this study especially concerning the nature and sources of visual patterns. A brief discussion of the outcome of the literature survey regarding visual pattern, the concept of pattern, and cognition and perception processes is given in chapter one.

- **Re-analysing the raw data of the 'interviews with designers'**

When the findings of the observation sessions and early mini-case studies showed that designers selected visual information from their visual sources, and the

concept of purposive pattern recognition (PPR) emerged, the raw data of the forty-one interviews were reviewed and analysed carefully again. The PPR concept was substantiated in the raw data. Subsequently, these interviews were considered as part of the main body of this study. Re-analysing the raw data of the 'interviews with designers' after having started the mini-case studies was slightly unconventional. However, the findings from the qualitative analysis showed that important things were happening, and all that was needed was additional information. In addition, the need for reanalysing the raw data after moving to another stage of the research process can be considered to reveal the peculiar nature of doing research and also the interactive relationship between the various parts of the research process.

i. The aims of the 'interviews with designers' : First analysis

The aims of the interviews were: 1) To provide a better understanding of the types and nature of the designers' visual sources; 2) To explore new insights and unexpected patterns that relate to the nature and the uses of the visual sources and visual information; 3) To explore hidden insights and patterns which might relate directly or indirectly to how designers select, adapt and use particular visual sources and visual information for their specific communication objectives; 4) To explore what designers do when they create designs; 5) To explore the components of the selection and adaptation processes; 6) To explore the relationships between the various components and processes.

ii. The aims of the 'interviews with designers' : Second analysis

Beside the above aims, the aims of the second review and analysis of the 'interviews with designers' were: 1) To find out and substantiate the link between visual sources and visual information; 2) To explain the concept 'visual information'; 3) To examine the possibility of reinterpreting certain concepts and the relationship between underlying principles after having covered certain gaps in information; 4) To substantiate the concept of purposive pattern recognition and related concepts in the raw data and to explain them within a theoretical system. The findings of the 'interviews with designers' are discussed in chapter three of this study : 'Processes of gathering and selecting visual sources'.

• Findings of the 'interviews with designers' as a research method

The interview method proved to have many advantages and some disadvantages. The advantages were related to the following: 1) The interactive nature of the interview helped the researcher to explain any question immediately when the informants did not quite understand the question; 2) The researcher was able to ask the informants to explain particular statements in more detail; 3) The researcher was

able to address the same question in a different way when the informant's answer was 'yes' or 'no', so that more information was obtained; 4) The researcher was able to observe the design environment where the designers pursued their activities, and the types of design equipment used.

The disadvantages of the interview during this part of the research had to do with the general nature of the interview questions. The limitation of the interview technique had to do with the amount of time allocated for each interview. The other limitation of the interview technique regarding whether the given information represents actual reality was tackled by the use of direct observation and by comparing the various responses given by designers.

2.3.2.1 The conceptual breakthrough

In order to explain how the conceptual breakthrough took place, it is important to mention here particular findings from the 'interviews with designers'. These major findings were: 1) the designers' visual sources were diverse and complex, 2) each visual source was subject to a variety of potential uses, so that there were various shifts between the visual source and how it was used for various projects and by various designers, 3) there was no match between how the designers selected the visual sources and how they used them when they created their designs, 4) visual sources can be classified under general categories for describing the designers' resources, 5) the selection processes were concerned with the visual contents of the visual sources, and not with the sources themselves, 6) the raw data of the 'interviews with designers' included many statements which showed that designers were concerned with selecting visual patterns rather than selecting the visual sources themselves. However, there were certain instances when the selection of visual sources themselves was essential for the needs. In such instances the visual sources can be considered to contain certain visual patterns that were desired for the particular needs.

The purposive pattern recognition (PPR) phenomenon and its theoretical context focus on 'how the designers select, adapt, and use particular visual patterns when they create their specific designs. Further literature survey and reading were required at the stage when the phenomenon of PPR was recognised. The existing literature on the pattern concept and pattern recognition (PR) was examined and is in Chapters One and Six.

- **Purposive pattern recognition (PPR)**

The word 'pattern' is not restricted to the narrow sense of a textile pattern, a geometrical pattern, a shape, or a template. The concept 'pattern' in this study stands for any conceptual interpretation of something that consists of various interrelated parts. The purposive pattern recognition (PPR) is a phenomenon that emerged at the

early mini-case studies and observation sessions of this investigation. Subsequently the raw data of the interviews with designers was re-examined and relationships (between the emerged concepts of the qualitative analysis) were established. PPR is considered to be a useful way of looking at how designers select, adapt, and use visual patterns when they create designs for their projects. PPR is considered a mental and purposive activity that manifests itself in a series of actions and processes to reach a specific goal. It can be considered that the selection part of the mind recognises a particular visual pattern (VP) as being wanted for a particular need pattern (NP). The designer compares the need pattern (NP) with patterns of competing design hypothesis (PCDH) until there is a fit between the visual pattern and the need pattern. The PPR concept involves the following major components: 1) need pattern (NP), 2) visual pattern (VP), 3) competing visual patterns, 4) design idea, 5) design pattern (DP), 6) patterns of competing design hypotheses (PCDH). In addition, PPR can be considered to involve the following major processes: 1) selection, 2) adaptation, 3) evaluation and feedback, 4) comparison. The fit that PPR represents is not based on a visual resemblance between the visual pattern and the need pattern. Instead, the fit means that the selected visual pattern seems to work for the intended need, satisfying its requirements, and producing a mental state like a 'click' or small scale 'eureka'. PPR differs from simple pattern recognition (PR) in that it offers a guide as to what to do next, i.e. it is purposive or goal oriented.

2.3.3 The mini-case studies

The term 'mini-case study' is used instead of 'case-study' in order to specify the actual dimension of this study. This term is used because: 1) this research focused on the designers' activities and their specific design projects only, 2) it did not investigate the other parties and issues that were involved in the projects other than what the designers mentioned or supplied during the interviews. However, the mini-case study can still be considered to involve the same characteristics of the case study as a methodological approach and as a strategy. This is because each mini-case study was a way of finding out more about what designers do through a very detailed analysis. John Langrish (1993) states:

'Case study' in its second sense is a research method, a way of finding out more about some aspect of reality through a very detailed analysis. (p. 357).

Case studies are examples of something. The mini-case studies involved examples of design projects so that one project was the focus rather than one designer or one organisation. Langrish (1993) states that cases are examples. He says:

Case studies have to start with an answer to the question: examples of what? This determines what is looked for. (p. 362).

The case study approach was used as the main research method for this investigation. The decision to use cases was made at the beginning of this research and after carefully reviewing a range of literature. The research question of this investigation (Section:2.3) suggests the need to use case studies as a research method for this investigation. Langrish (1993) states that it is possible to support three general aims of research by case studies:

1) “ To develop ‘labels’ for use in a classification scheme (taxonomy).” He explains:

Putting words to things that people have been vaguely aware of helps communication, teaching etc. and gives the power of prediction via assignment to a particular class, having several things in common. (p. 360).

2) “To look for principles underlying the taxonomy.” Langrish explains:

Darwin could not raise the question of the origin of species until the species had been identified. That can be seen as a general principle. There are also specific principles like the circulation of the blood, only discovered when people started looking at what is really going on inside things. (p. 360).

3) “To understand movement through time.” Langrish explains:

Anything that involves humans from animal breeding via artificial selection to designing a new product also involves the possibility of teleological causation- the desired end is the cause. One of the most fascinating aspects of case studies is trying to find out just how much human beings are actually controlling what is happening. (p. 360).

Yin (1994) states:

‘how’ and ‘why’ questions are more explanatory and likely to lead to the use of case studies, histories, and experiments as the preferred research strategies. This is because such questions deal with operational links needing to be traced over time, rather than mere frequencies or incidence. (p. 6).

Yin (1994, p. 13) describes the case study as a research strategy. He says that the case study is a comprehensive research strategy and it is more than a data collection tactic or a design feature alone. Yin (1994, p. 13) states that case study as an inquiry copes with situations that involve various variables, relies on multiple sources of evidence and benefits from prior development of theoretical propositions to guide data collection and analysis. According to Yin (1994) a case study is:

an empirical inquiry that investigate a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.(p.13).

- **The aims of the ‘Mini-Case studies’ of this investigation**

The aims of the mini- case studies were : 1)To identify how designers select, adapt, and use visual sources and visual patterns for particular needs; 2) To identify the designers’ sources of information; 3) To identify the needs for specific projects and their constraints; 4) To identify the relationships between the various design activities during the design process and how the visual sources and visual patterns are selected and used; 5) To fill the gaps in the information found within the ‘interviews

with designers'; 6) To examine and substantiate the purposive pattern recognition and related concepts.

- **Selecting designers and projects for the mini-case studies**

Selecting practising designers and projects for this study was not based on selecting samples. Each mini-case study was considered as an example of a design project. Yin (1994) states that case studies are similar to individual experiments. He explains:

A fatal flaw in doing case studies is to conceive of statistical generalisation at the method of generalising the results of the case. This is because cases are not 'sampling units' and should not be chosen for this reason. Rather, individual case studies are to be selected as a laboratory investigator selects the topic of a new experiment. Multiple cases, in this sense, should be considered like multiple experiments (or multiple surveys). (p. 31).

The selection was an opportunistic one, based on those designers who were prepared to give more time to the study.

- **Research techniques used for the mini-case study**

The interview technique was adopted to carry out the mini-case studies. Twenty-three interviews for the mini-case studies were carried out with art/creative directors who were interviewed for the 'interviews with designers'. All the interviewees were contacted first by letters, then by phone calls. Some art directors apologised because of unavailability of time. Others said that they offered what they could during the first interview (interviews with designers). Other designers were willing to participate again. The designers who participated in the mini-case studies showed interests in the investigation and were willing to offer information.

The interview procedures used for the mini-case studies were similar to that of the 'interviews with designers'. At the beginning of each interview the interviewee was given a written statement about the topic and the problem under investigation as a reminder, and a written copy of the interview questions. Then the researcher briefed the interviewees verbally about the topic and the purpose of the interview. Each interviewee was assured that the raw data of the interview would be used strictly for academic purposes. The interviewees were assured that they would receive a written copy of the actual text of their interviews so that nothing would be used without their approval. All the interviews were tape-recorded in full. On one occasion, one interviewee was reluctant to be recorded, but agreed under the condition of receiving an edited copy of the text of the interview. This required taking out information which expressed sensitive issues. After the interviews were conducted and transcribed all the interviewees were sent two copies of the actual text of their interviews (one for them to keep and one to send back to the researcher), so that all were able to modify

the transcripts if they wanted. The majority of the designers sent back the transcripts with some corrections. Others gave their approval without making changes. The amount of time allocated for each interview was one hour. Fifty percent of the interviews took around ninety minutes. The other fifty percent took one hour. There were two exceptions; one interview took three hours, and another one took two hours.

The twenty-three mini-case studies were all considered, but only twelve of them are discussed in this study. Five mini-cases were disregarded because the designers did not offer any visual materials and did not give enough information. The other six mini-cases were analysed but were not included in the study, because of the limited size of this thesis. The relatively high number of mini-case studies was due to the need to collect a diversity of evidence about the phenomenon under study, so as to refute the accusation that says qualitative research tends to have a selective focus on cases and examples.

- **The interview questions for the mini-case studies**

There were twenty-five questions (APPENDIX: VI). A combination of focused, semi-structured, structured, and open ended interview questions were used for each interview. The interview questions for the mini-case studies were derived mainly from the findings of the 'interviews with designers', and from issues raised by the designers and by academic design studies. Yin (1994) states:

One insight into asking good questions is to understand that research is about questions and not necessarily about answers. (p. 56).

- **Methods for selecting the projects for the mini-case studies**

Each of the twenty three mini-case studies focused on a specific design project which was selected by a particular art/creative director, and according to his/her consent to be used in the thesis. Also the art/creative directors were asked to choose their projects with consideration of the following: (a) to feel comfortable to talk about and explain the project and its design process; (b) to have enough information about the historic background of the project; (c) to provide sketches and drawings of the design concepts; (d) to provide copies of the visual sources selected for the design; (e) to provide copies of the final designs.(f) to provide any related visual materials if it is possible; (g) to be able to discuss the design brief and the client's business without reservation.

- **Methods for discussing the mini-case studies in the thesis**

Twelve mini-case studies were selected by the present researcher from the twenty-three mini-cases. The selection of the twelve mini-cases out of the twenty-three mini-cases had to do with the following: 1) some designers did not cover enough details of the elements, processes, and activities that involved the project they

discussed (six mini-cases), 2) some projects were similar in many respects to other projects (five projects) and could therefore be left out whilst maintaining a diversity of projects.

The twelve mini-cases were divided into four groups by the researcher. Each group shared some kind of similarity in terms of design disciplines. The first group consisted of five mini-case studies each of which focused on a 3D project. The second group consisted of three mini-case studies each of which focused on a corporate identity project. The third group consisted of two mini-case studies, each of which focused on a corporate publication project. Group four of the mini-case studies consisted of two cases each of which focused on a project for a fund-raising organisation. Each mini-case study investigates how the designers selected, adapted, and used their visual sources and visual patterns when they created their design for a certain project. The mini-case studies are discussed in Chapter Four of this study.

- **The advantages of the case study as a research method**

The mini-case study approach had great advantages. The mini-case studies provided detailed information, and filled gaps that the stage 'interviews with designers' did not cover. The use of multi- mini-case studies provided diversity of evidence. The major advantages of the mini-case studies were: 1) provided detailed information about the phenomenon under study, 2) provided a link between concepts, factors, and principles, 3) provided a comprehensive picture of the subject under study, 4) represented discrepancies and different opinions of the interviewees, 5) allowed for theoretical interpretation to emerge, 6) allowed reinterpretation of the findings of the 'interviews with designers', 7) provided a learning experience.

During the early mini-case studies the concept of 'purposive pattern recognition' (PPR) had emerged. Yin (1994) explains how researchers can develop potential theories by the use of case studies. He says:

Under these circumstances, the method of generalisation is 'analytical generalisation,' in which a previously developed theory is used as a template with which to compare the empirical results of the case study. If two or more cases are shown to support the same theory, replication may be claimed. The empirical results may be considered yet more potent if two or more cases support the same theory but do not support an equally plausible, rival theory. (p.31).

2.3.4 Masters of designs: Published interviews

Published interviews with designers who were nominated in 1993 as the Masters and Grand Masters of Design were analysed. The names of the designers are in TABLES (5.1, and 5.2). A postal questionnaire was sent to the designers, but no reply was received. Permission for using the interviews was taken from the managing editor of the magazine. The published interviews with 'Masters' of design provided another source of evidence. They were analysed according to the qualitative methods of the

grounded theory approach. Findings relating to these interviews are discussed in Chapter Five of this study: Purposive pattern recognition and the Masters of design. In hindsight, this was one study too many, but at the time it seemed a good idea to compare US 'Masters' with UK designers.

2.3.5 Direct observation

Direct observation is a research method advocated by many writers. There are certain disadvantages associated with direct observation such as selective attention, bias, the intention of the researcher, and the nature of observation. Bell (1993, p. 109) states that observation is a 'highly skilled activity'. She indicates that the direct observation method is more reliable than what people say in many instances. Bell explains:

It can be particularly useful to discover whether people do what they say they do, or behave in the way they claim they behave. (p. 109).

Heisenberg as quoted by Rise Axelrod and Charles Cooper (1987) states:

What we observe is not nature itself, but nature exposed to our method of questioning. (p. 230).

Direct observation was used as a complementary research approach. The direct observation sessions focused on how designers selected, adapted, and used visual sources and visual patterns when they created particular designs for specific needs. Findings from direct observations supported the findings of the 'interviews with designers' and the mini-case studies, and revealed subtle details of how designers worked. Since the projects that were observed were not the projects that are discussed in the mini-case studies, it was found useful to discuss the findings of the direct observation in the appendices (APPENDIX: VII).

- **Findings related to direct observation as a research method**

Direct observation was like holding, touching, and feeling the research problem. It was there before the eyes of the researcher. It offered the researcher an opportunity to watch how and when designers tried various possibilities, how they tried to make things work, and when they changed their mind during different stages of the process. Observation showed that what designers said they do matched what they did in real design settings. Also, the observation sessions included designers who were not interviewed for this study. Therefore, these designers did not try to prove to the researcher anything they had said before.

2.3.6 Other methods

- **Documents**

Data collection involved the following: 1) visual sources, 2) a number of actual

design briefs and proposals, 3) particular private design publications that reflected the opinions of the design consultancies, 4) publications produced by design consultancies, 5) various technical information, 6) published materials for specific purposes such as corporate brochures of the design consultancies, 7) historic backgrounds of particular design projects.

- **Postal questionnaires and interviews for investigating particular design terms**

A list of focused questions was designed for both interviews and postal questionnaires. This list of questions aimed to establish a sound understanding of the use of particular design disciplines, design terms, and design expressions as they are used by professionals. The postal questionnaires were sent to twenty-five designers and professional in the field of communication in the UK, USA, Belgium, and the Netherlands. Only four responses were received. The findings are discussed in APPENDIX (VIII).

2.4 Analysis

The open coding approach of the grounded theory method of Strauss and Corbin was adopted. According to Strauss and Corbin (1990):

Grounded theory is a qualitative research approach that was collaboratively developed by Glaser and Strauss. Its systematic techniques and procedures of analysis enable the researcher to develop a substantive theory that meets the criteria for doing 'good' science: significance, theory - observation compatibility, generalisability, reproducibility, precision, rigour, and verification. While the procedures are designed to give the analytic process precision and rigour, creativity is also an important element. (p. 31).

Analysing qualitative data according to a detailed application of grounded theory involves the following: 1) open coding, 2) techniques for enhancing theoretical sensitivity, 3) axial coding, 4) selective coding, 5) process of linking action interaction to form a series, 6) conditional matrix, 7) theoretical sampling. These procedures involve the following adjunct procedures: 1) memos, 2) diagrams. According to Strauss and Corbin (1990, p. 198), memos and diagrams start at the beginning of a research and continue until the final writing. Open coding is described as the process of sorting data by breaking down, examining, comparing, conceptualising, and categorising. Codes serve to summarise, synthesise, and sort observations made out of the data. Coding is considered a gradual building up of categories (Alan Bryman and Robert G. Burgess, 1994, p.5). According to Barney Glaser (1978, p. 58), coding is constantly stimulating of ideas.

The intricate details of the Strauss and Corbin method of analysis are difficult to put into practice, but the basic approach of generating a theory or hypothesis rather than testing a pre-existing theory proved successful. The research started with no

hypothesis but ended up with a new theoretical system for looking at what designers do. This new theory is firmly grounded in the results of the research.

The raw data was analysed line by line and each sentence was coded. Then emergent categories were 'saturated'. Various concepts emerged from breaking down the raw data. But the axial coding procedures took a long time and encountered many difficulties. At the beginning many attempts were made but they failed to encompass all the concepts that emerged from the open coding. Findings showed that due to the amount of time a grounded theory might take to emerge from the raw data there are some possibilities for misconception to occur. At the initial analysis processes all concepts seemed important for various reasons. This problem was overcome by reviewing the raw data repeatedly and by learning processes and experience. Each concept was regarded according to its role within the particular context within which it played a part and its relationship with other concepts. Identifying the dimension of each concept helped in realising core concepts from subordinate ones without optimising the characteristics of any concept at the expense of another. Most importantly, the relevance of each concept to the topic of this inquiry was the critical factor in realising the role of each concept in the selection and adaptation processes. Analysing the raw data required careful examination and considering alternative explanations. Developing skills for analysis involved learning through processes of conjecture and refutation.

Findings showed that the raw data were interwoven together so that breaking down the raw data needed to take into consideration the links between the activities under study, and the numbers of exceptions appearing in various contexts. Analysis showed that parts of the answers of particular questions were answered under other questions. This problem was solved by moving these parts where they belonged. In addition, most of the designers' responses covered information about issues that were not addressed directly by the interview questions. Such responses revealed subtle variations of concepts and relationships between concepts.

2.5 Synthesis

To substantiate the evidence of purposive pattern recognition a decision had to be made regarding the presentation of the findings. Findings showed that purposive pattern recognition was an essential part of the various design activities throughout the design process. Therefore, the findings are presented according to how particular visual sources and visual information were initiated throughout the information processing approaches and the design activities. This approach enabled the researcher to present the findings and their focus within a theoretical framework, and without isolating them from their actual context. The use of excerpts from the designers'

statements explained the concepts of the theoretical system, and provided open opportunities for future studies to interpret the data for related research purposes.

The categories of the theoretical system explained the components and processes of the selection. The synthesis processes involved the following: 1) identifying the contexts within which concepts and their subgroups appeared, 2) pointing out the different variations of a concept and its properties within each context, 3) classifying each subgroup of concepts into a larger concept, 4) establishing a framework that represented the relationship between the major concepts, 5) matching theoretical concepts with data, 6) revising and developing the theoretical proposition, 5) examining the evidence. These processes involved comparison processes, and considering differences, similarities, and exceptions.

Synthesising the results obtained from the raw data of each method of data collection involved specifications related to the nature of the method and the contexts of the raw data. The research findings were used to present an accurate narrative description of the phenomenon studied. Interviewees' words, descriptions, illustrations, quotations from the designers' documents and private publications, and the researcher interpretations were woven together in order to accomplish that. The description process consisted of organising the data according to themes which were partly originated from the summary of words taken directly from the data, and partly originated from the theoretical proposition (PPR and its framework system) that emerged from the study. The conclusions and the suggestion for further studies are discussed in chapter six.

2.6 Validity

Validity means 'truthfulness'. The question is can readers of this thesis believe the findings and conclusions. For some forms of research, there is also the requirement of replication, but this is not applicable to the type of research used here. The individual findings cannot be replicated, but the overall conclusion that Purposive Pattern Recognition represents a useful new way of discussing and describing design activity can be tested by further research. In order to deal with the problems of establishing the validity of the raw data, findings, and the theoretical interpretation of this study, the following approaches were adopted: 1) establishing a chain of evidence by collecting data from various sources (Yin, 1993), 2) having the drafts of the mini-case studies reviewed by the designers, 3) interviews tape-recorded in full in order to avoid the possibility of bias and selective attention; 4) concepts substantiated and grounded in the raw data, 5) testing the purposive pattern recognition (PPR) concept. A report that explains what PPR stands for in this investigation and the theoretical framework of this concept was written and sent to the designers. The

majority of the designers gave feedback in written forms (APPENDIX: IX).

Yin (1994, p. 35) suggests that tactics for tackling problems of internal validity are difficult to identify. He suggests that the analytic tactic of 'pattern-matching' is one way of addressing internal validity, and to related analytic tactics: 'explanation-building' and 'time-series analysis'. According to Yin (1994, pp. 35-37), external validity has to do with the generalising of the findings of a study. He states that analysts fall into the trap of trying to select a 'representative' case or set of cases. He explains that the problem lies in the very notion of generalising other case studies. He says:

Instead, an analyst should try to generalise findings to 'theory'. (Note that the scientist does not attempt to select 'representative' experiments.) (See Box 7, p. 37)

McNeill (1990, p. 14) states that any method that involves a solitary researcher in a situation that cannot be repeated such as much participant observation research, is always in danger of being considered unreliable. McNeill explains reliability

If a method of collecting evidence is reliable, it means that anybody else using this method, or the same person using it at another time, would come up with the same results. (p. 14).

Bell (1993) states:

Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions. (p. 64).

Obviously, the issue of reliability in the sense of replication does not apply to this study because 'interviews with designers', mini-case studies, and direct observations in this research are not conditioned experiments where the researcher sets out certain procedures and measures to make sure that these procedures and measures are applied to each experiment, and then induces certain results.

2.7 The limitations of this research

The limitations of this study include the following:

- (1) The large number of interviews and interview questions provided the researcher with a considerable amount of raw data which made the analysis rather complicated. However, the research has generated many insights which may not have been discovered if fewer interview questions had been asked and a smaller number had been studied.
- (2) Systematic observations of the designers during the various stages of their design activities was not possible because of the confidentiality of the projects. Therefore, the researcher depended most of the time upon the designers' explanations of what they did. Also, during the observation sessions, knowing what went on in the designers' minds during their design activities was not always possible because the researcher could not interrupt the designers all the time by asking questions about

each single activity.

(3) It was not possible to keep long term contact with some of the designers because they either left to work in other countries or quit their jobs and moved to other design consultancies.

(4) The enthusiasm of the researcher led her to pursue different lines of research. Although multi-methods are a good thing, it became impossible to provide all the results within the confines of one PhD thesis. Some of the results have been reported briefly in Appendices. Some have been left out all together (e.g. the initial interviews, and half of the mini-case studies).

The author believes that the selection of results presented in the main body of the thesis represent a significant advance in knowledge worthy of a PhD.

CHAPTER THREE

PROCESSES OF GATHERING AND SELECTING
VISUAL SOURCES

3.0 Introduction

This chapter describes the findings from a study of thirty-two design consultancies and organisations who were approached in this stage of the study ('interviews with designers'). As discussed in chapter two, the research described in this chapter started as an exploratory study (See Section: 2.3.2). However, the findings of this stage of the research turned out to have an importance in their own right as well as being a prelude to further study. It is hoped that this chapter can be seen as making a contribution to knowledge about how designers gather and select their visual sources.

Forty designers and a director of publication were interviewed (TABLE:3.1). Various findings were extracted from the raw data. Since the study was concerned with the selection of visual sources it was felt a reasonable decision to concentrate on the selection processes and their components. The results are not presented as a question by question analysis. Instead, they are presented according to the categories that emerged from the qualitative analysis of the raw data of the interviews and the documents which were provided by the designers. Nevertheless, particular questions addressing specific issues are discussed, because these issues were found later to be of crucial importance to the processes of selecting visual sources. In addition, at an early stage of this part of the study some of the interview questions were found to be clouding the issues under investigation, but they were kept in order to maintain the same systematic approach, and facilitate the comparison between the designers during the analysis processes.

Numerical evaluations were discarded because they were not able to represent realistic conclusions. Terms such as 'most', 'some', and 'majority' were considered to be more appropriate to represent the actual complexity and diversity of the findings. The term 'most' used in the analysis is a representation of opinions stated by more than 75%, while the term 'majority' represents more than 50%, and finally the term 'some' expresses responses less than 50%. The final section (3.11) concludes that the concept of purposive pattern recognition (PPR) had emerged from the study giving a new direction to the overall research project. TABLES, QUOTATIONS, DIAGRAMS, and FIGURES are given to illustrate crucial findings.

No.	Interviewees	Job Title	Design Consultancies
1	Mater Al-Ahmadi	Publication director	Saudi Marketing and Research
2	Peter Barrow	Creative Director	Barrow Parkhill Associates Ltd
3	Jenny Brend	Art Director	GDO Gilbert Doyle
4	Mike Bromfield	Art Director	BHB
5	Tim Brennan	Senior Designer	Butler Cornfield Dedman
6	Finn Butler	Head of Graphics	Design Research Unit
7	Paul Butler	Art Director	Butler Cornfield Dedman
8	David Caines	Art Director	Friends of The Earth
9	Ian Cockborn	Creative Director	Tango Design
10	Clive Colledge	Art Director	The Merchant Group
11	Iain Crockart	Project Director	CDT
12	Marian Dalley	Creative Director	Design Bridge
13	Paul Davies	Art Director	Ziggurat
14	Shawn Dew	Head of Design	The Partner
15	Richard	Senior Designer	The Partner
16	Jon Ellery	Creative Director	Pile Probert Kelly
17	Ged Equi	Senior Designer	Interbrand International
18	Deborah Ford	Accounts Manger	Holmes & Marchant Group
19	Iain Hunderson	Creative Director	Basten Greenhill
20	John Harvey	Art director	Burnett Associates
21	Stuart Jeal	Art Director	Wagstaffs
22	Mahmoud Kahil	Art Director	Saudi Marketing and Research
23	Barry Lowenhoff	Art Director	Moor Lowenhoff
24	David Mecwy	Creative Director	Crabtree Hall Plan Creatif
25	Adel Nouman	Design Manager	Saudi Marketing and Research
26	Ali Osman	Senior Designer	Saudi Marketing and Research
27	Alex Quero	Art Director	4i Design Limited
28	Simon Pandary	Senior Designer	Ziggurat
29	Sue Pile	Art Director	Pile Probert Kelly
30	Chandra Prince	Senior Designer	Mercury Design
31	William Redfern	Senior Designer	Wickham Design
32	Elaine Searle	Art Director	Mercury Design
33	Simon Shaw	Art Director	CGI London
34	David Spencer	Art Director	Edward Briscoe Design Ltd
35	Adrian Talbot	Senior Designer	Intro
36	Greg Vallance	Creative Director	Dragon International
37	Tony Watts	Creative Director	Siebert Head Ltd
38	Stewart Webber	Art Director	Sears Davies
39	Petter Widdup	Art Director	Sampson Tyrell
40	Valerie Wickes	Art Director	Wickham
41	Bell Wickham	Art Director	Din Associates Ltd

TABLE 3.1: NAMES AND JOB TITLES OF THE INTERVIEWEES

3.1 The interview questions

The interview questions for the 'interviews with designers' are in APPENDIX (V).

3.2 Sources of visual information

The designers' sources of visual information covered vast areas of human resources, interests and activities. The designers described various visual sources, and various approaches for gathering and selecting them. Both the visual sources and the processes and approaches for gathering and selecting them varied and overlapped, and sometimes complemented each other. Most of the visual sources were not separated by clean cut boundaries. Also, the majority of the designers claimed that it was difficult to describe their visual sources, because visual sources were broad and could be anything. Some designers indicated that their visual sources accumulated over the years of their work experience. Some designers stated that their main visual sources were the products of their memory, thinking, imagination, and discussing and exchanging ideas. Each designer described a group of visual sources. Most of these

visual sources covered general areas of information, and sometimes shared particular properties with other visual sources. Photography, illustrations, drawings, various kinds of books, various kinds of magazines, libraries, photo libraries, CD ROMs images, films, television, electronic images, art galleries, living experience, supermarkets, products, objects, things, the work of the competitors, previous design projects, previous experience, people, factories, ideas, imagination, thinking, memory, individual images of people, events, generated images, commissioned images, art directed images, found images, bought images, etc., these were some of the visual sources mentioned by the designers.

3.2.1 Diversity of sources of visual information

The designers' visual sources were diverse. There was solid evidence that the element of diversity in visual sources was crucial in providing the designers with a wide range of visual sources during the selection of visual sources. Most of the designers referred to various activities and general purposes for gathering their visual sources. Some designers mentioned particular visual sources for particular purposes, but the descriptions of the visual sources remained general and diverse. In addition, the focus and the processes of gathering visual sources varied even when the designers gathered and selected visual sources from the same or similar resources. The diversity and complexity of visual sources can be categorised into the following groups: 1) general visual sources, 2) retrieved visual sources 3) art directed visual sources, 4) found visual sources (DIAGRAM:3.1).

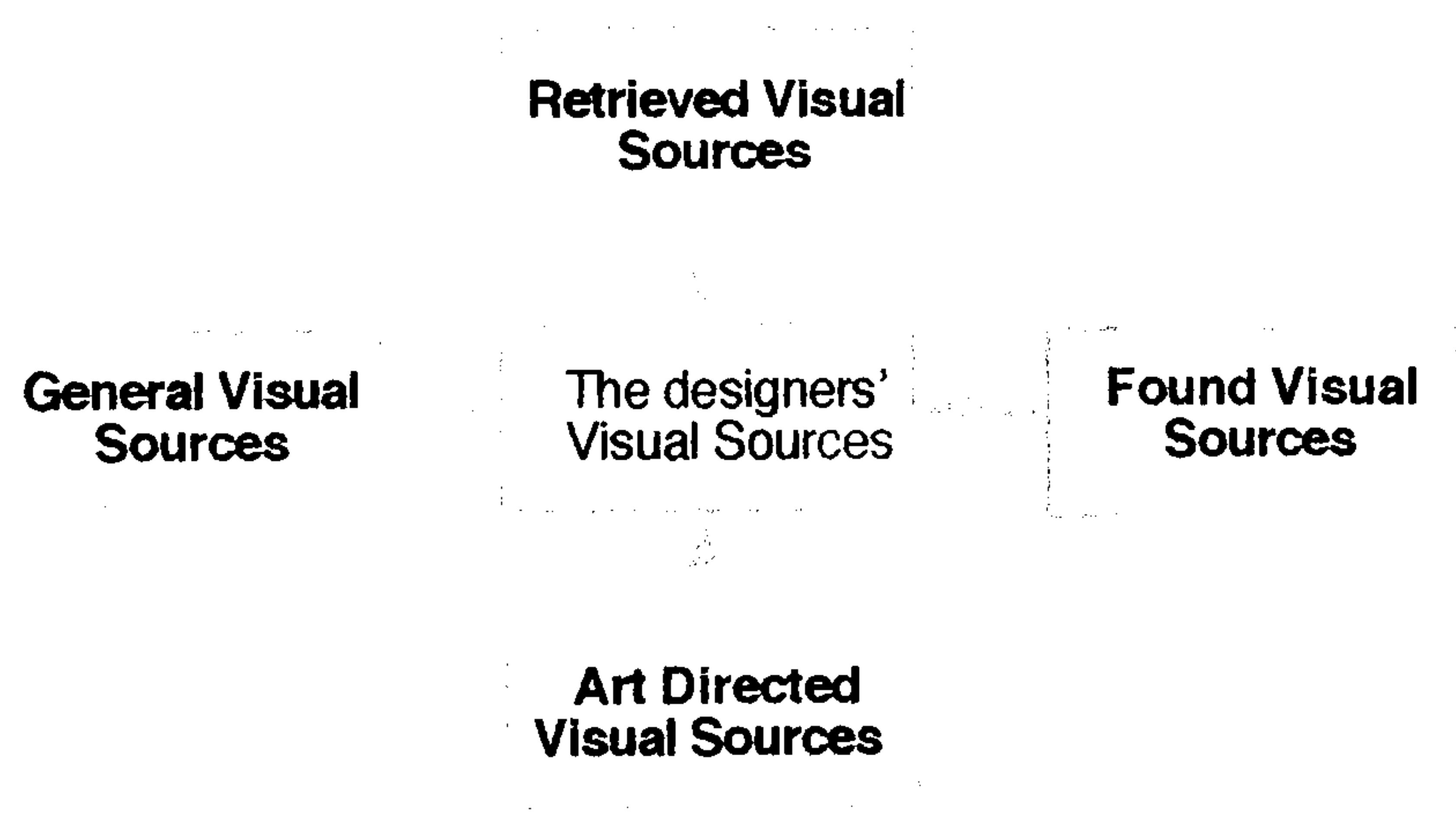


DIAGRAM 3.1: THE DESIGNERS' VISUAL SOURCES

Each of these categories included diverse visual sources, and sometimes overlapped with the other categories. More importantly, these categories were found to be useful for examining the diversity of visual sources in relation to the designers' activities.

3.2.1.1 General visual sources

Each designer mentioned several visual sources. Some of these sources were more general than others, or more abstract than others. The majority of the

designers mentioned particular sources, and they also stated that their visual sources could be “anything, and everything,” and they could be selected from “anywhere, and everywhere”. Sue Pile indicated that they gathered their visual sources “from all sorts of places.” Also, she said:

It can be anything from something that you find or you have or you obtain. A book, a picture. It could be anything.

Peter Widdup said: “From everywhere and anywhere, all sorts of places.” Adrian Talbot stated: “From everything and anything. Magazines, all forms of media.” He added: “The nature of the sources can be anything.” A particular designer stated: “The visual sources are from a creative point of view everything around you.” Paul Davies stated: “Everything and anything.” Also, he mentioned some sources:

The books we have, they could be illustrations, photographs, drawings, pack shots¹ or they could be geographical books. They could be books on specific parts of the world.

The majority of the designers considered living experience, people, shopping, exhibitions, walking in the street, looking at things and seeing things as visual sources. David Spencer stated: “It is very broad. It is a life experience really.” Greg Vallance stated:

There are many visual sources. I mean we are all our own visual sources in many respects, constantly looking at things, exhibitions, shopping in the supermarket, walking down the street.

More aspects of diversity about visual sources were pointed out by Tony Watts who included imagination as visual sources. He said:

Well visual sources come from clippings, magazines, television or books, and imagination in the head. They come from previous experiences. Also, they come from group selection to your working groups.

Marian Dalley asserted the diversity of visual sources. She said:

I think it really is like being a sponge because we see portfolios an awful lot of the time. Photographers and illustrators come in, people go to galleries and obviously cinemas and all usual kind of the media. We get a lot of magazines in-house, because we do a lot of work for abroad people often bringing things back like magazines or videos or packs etc. So there is usually quite a lot of visually stimulating material around.

Jon Ellery included reading and technology as a source of visual information. Also, he pointed out that working in London provided him with various sources of imageries and inspiration. Iain Crockart included the electronic media and the work of the competitors as part of his visual sources. He said:

Libraries, magazines, external consultancies, a bit of piracy in terms of competitors, art galleries, books, television, film, packaging, anything, Nature. You look all the time, all the time.

Iain Hunderson mentioned CD ROMs transparencies as resources. He said:

¹ pack shots: They are books on packaging which could date for example from the 1920's and 30's. In these books there are pack shots of bottles, tins, and other containers.

We have a visual library upstairs. We use photo libraries. We have got CD ROMs of transparencies that other people have taken for the same client or that we have taken for the same client. So anywhere we can get our hands on it.

William Redfern explained that he collected constantly everything that he thought visually stimulating. Also, he kept his visual collections so that he was able to refer to them when he needed. He said:

It's a question of really gathering as much as possible. I mean I dare to pick up anything that I find visually stimulating.

David Spencer said:

We constantly produce our own internal copies, gleaned from all kinds of magazines, trade and national press magazines about our clients and what they are doing in the market place and the competition to the clients in the market place.

Valerie Wickes indicated various sources. She added that she collected things including thrown away objects. Ged Equi stated:

We use a whole host of visual sources. We have books on absolutely everything. It is quite amazing what type of books you pick up over the years - cookery books, books on historic emblems and things like that.

Clive Colledge stated that his visual sources were limited to old illustrations and old typography, but he stated that he used whatever was appropriate for the project. He explained: "I use limited visual sources, and I use them to the best of my ability." Sue Pile explained:

We have a large library of images that we've perhaps originated for some jobs but not used and we have resources there.

3.2.1.2 Retrieved visual information

The majority of the designers considered their memory storage, imagination, and thought process as their main visual sources. Both Bill Wicham and Adrian Talbot discussed similar ideas. Talbot stated that thinking and communicating things to his memory storage enabled him to use them and synthesise them for particular clients' needs. He added that this ability probably made some designers better than others. He said:

As designers you are supposed to be visually aware. Hopefully we are. So you are always seeing things and committing them to memory, and responding to them.

Bill Wicham was interviewed about the work he did for Greenpeace. He discussed the role of memory as a reservoir of subconscious images. He said:

You have a very large subconscious library of images in your head and depending on how strong they are. Designers are usually people who remember things in a visual way rather than an acoustics or any other way so they have a large library of imagery in their head which they draw upon.

Tony Watts stated: "They come from imagination in your head." Mahmoud Kahil indicated that ideas, the visual and news media, and everyday life were his main visual

sources. Some designers stated that their visual sources came from imagination and the thought process about a particular design problem. They explained that they referred to various visual sources afterwards to select particular representation for their mental images. Bill Wicham stated:

I have certain things that I like to refer to but it is mainly subconscious things that you collect.

The majority of the designers explained that their visual sources were a mixture of visual ideas, images, and things they saw in the past (Alex Quero; Tony Watts; Adrian Talbot; Bill Wicham; Sue Pile; Tim Brennan; Ged Equi; Jon Ellery; Mahmoud Kahil; Paul Davies; William Redfern; Simon Pandery).

3.2.1.3 Art- directed visual sources

The majority of the art-directed visual sources were generated later at a stage after the designers decided exactly what they wanted to do, and after they had developed their design concepts. Most of the designers art directed and commissioned visual sources for their design projects. Types of art-directed visual sources are in TABLE (3.2). Elaine Searle claimed, “Occasionally by art directing. Actually commissioning photos that we want but not a lot.” William Redfern said:

It could be commissioned illustration. It could be commissioned photography. Or illustration/photomontage that we produce ourselves.

Art-Directed Visual Sources

- Illustrations
- Photography
- Digital- Photography
- Packaging Models
- Typography
- Calligraphy
- Special Digital Techniques
- Model-making

TABLE 3.2: TYPES OF ART-DIRECTED VISUAL SOURCES

Some of the art directed visual sources were generated by in-house designers, illustrators, and photographers. William Redfern stated: “Making the most of what you have rather than sourcing it from elsewhere.” Elaine Searle and Chandra Prince stated that they generated in-house illustrations to express the idea they wanted to communicate. Also, art directed visual sources were partly generated by outside illustrators, type setters, and photographers. Most of the designers stated that they commissioned visual sources such as photography, illustrations, and type faces. The majority of the designers stated that they commissioned illustrations and photography most of the time. Some designers indicated that they used commissioned photography more than they used illustrations. Some of the visual sources were art directed through a process. Some designers stated that when they commissioned visual sources they either briefed the photographers, illustrators, and the type setters, or they art

directed them by showing them particular design drawings, and illustrative or photographic visual styles. Jenny Brend explained that they commissioned and art directed photographers. She said:

If we had been using a particular group of photographers they would quite often be left to their own devices and they would know what we would be looking for. We would choose our photographers bearing in mind their particular aptitudes.

Marian Dalley stated:

Sometimes you might work quite closely with an illustrator and a photographer and you would give them a brief to come up with their own imagery and their own ideas. That would be the skill of the designers to be able to communicate what they want to that outside supplier. So that they can still have ownership of it and still feel excited about it.

Some designers stated that some of their clients had their own photographers, or they knew particular photographers that they commissioned for particular jobs. Some designers also stated that some clients preferred particular illustrators' styles and required that particular illustrators were commissioned to do the artwork of their projects.

David Caines explained that they sometimes fabricated an event, art directed and commissioned. He said:

For example we wanted some very generic pictures of some local activists for our magazines... We were not happy with any of the snap shots that people sent to us, so we just get some people and dressed them up and tell them what to do, they had all the right logos on, and they looked very smart. We used that pictures in a lot of materials. If we have not any image, or we cannot find the right image then we will construct an image within reason. But we would not make up a picture for a protester.

Tony Watts stated that they commissioned visual sources after they had highly developed their design concepts. He explained:

We commission photography, illustration, and lettering, and fancy lettering. Photography is also commissioned outside. Some people inside can do some of it. But some of the very professional things have to be done outside.

Deborah Ford said: "We often commission photographers." Shawn Dew stated: "We will take a lot of visual reference ourselves. We're photographing things ourselves." Adrian Talbot referred to the nature of the project, and explained the importance of generating visual sources for corporate identity projects. He said:

It depends on the nature of the job. If it is something that is very important then we will shoot it ourselves because obviously you don't want to design a corporate identity for someone or slap it across the front of a record sleeve and then see it the week after on something completely different.

David Spencer explained that they had a photographic studio in-house and they commissioned photography and illustrations. The commissioned visual sources for final artwork were more used by the designers than images from photo libraries. Shawn Dew stated:

We will use the library for inspiration, or perhaps for a particular kind of style or mood. We will use that to brief the photographer or illustrator. So we're creating something

new because it's very unusual to find exactly what you want that already exists. So you would rather create something new really.

3.2.1.4 Found visual sources

The found visual sources were the sources that required buying copyrights if they were to be used for specific purpose or purposes. The majority of the designers stated that they had their ownership of limited visual sources. Also, they mentioned that some of their clients had their own copyrights. In addition, the majority of the designers bought and used found images for particular projects. Sources of found images are in TABLE (3.3).

- Sources Of Found Images
- Photo Libraries
- Photo Libraries
- Photo Agencies
- News Agencies
- Private Consultancies
- The Designers' In-House found sources
- The clients' Photo Libraries
- Research consultancies
- Design And Art Museums
- CD ROMs images
- Multi Media
- Computers software
- Individual Designers Or Artists
- The Organisations/ Establishment Own Archives
(Friends of the Earth, Greenpeace, Saudi Research & Marketing)

TABLE 3.3: RESOURCES OF FOUND VISUAL SOURCES

Some designers bought copyrights from photo libraries for particular projects. Most designers used their own archives unless they needed to buy particular visual sources from particular found imagery owners. Some designers stated that they used the archives of their clients (John Harvy; Mahmoud Kahil; Adel Nouman; Ali Osman; Iain Hunderson; David Mecwy; Deborah Ford). David Mecwy stated:

Occasionally, we get involved in copyright issues where we, in some instances, are concerned to design a corporate identity, logo type, or a design which requires copyrighting. In those instances we use a copyright agent.

Alex Quero was interviewed for the work he did for Greenpeace. He explained:

If it is specific material that I know would be very difficult for me to get hold of, then I will have to get it from Greenpeace from their resources.

Some designers stated that having developed their design concepts they looked for particular visual representation of their mental images in various visual references. They explained that after they decided the visual representation of the particular image they commissioned or bought copyrights from a photo library source. Some designers stated that they did not buy found images from photo libraries unless it was necessary. Elaine Searle and Chandra Prince explained that they used the available CD ROM materials. Barry Lowenhoff indicated that they bought images from photo libraries. Mahmoud Kahil explained that at the Saudi Research and Marketing - Arab Press House, they had ownership of their sources. He stated that they also bought

copyrights from news agencies. He added that they bought copyrights for using CD ROM images. Simon Shaw stated,

So, every year it could be completely different. We work for Reuters news agency and most of their images are found imagery. So, in that case you're working with found imagery, but in the main it's complete origination of everything afresh every year.

Peter Barrow stated,

Sometimes, we use a photo library where we have a lot of photographs that are catching the culture, the ambience, or whatever of a number of different countries.

3.2.2 Examples of the designers' visual sources

Variations of the visual sources are presented in TABLES (3.4.1, 3.4.2, 3.4.3, 3.4.4). These Tables are made to show the diversity of visual sources, and they do not establish a taxonomy of visual sources.

No.	Visual Sources	Frequency Mention (40 Designers)
	Various types of visual documents	Most
	Corporate designs	Most
	Drawings generated by the audiences	Some
	Research	Most
	Written information	Majority
	Actual objects and things	Most
	Electronic images	Majority
	Victorian wood cut drawings	Some
	Humorous images	Some
	Museums	Majority
	Art galleries	Some
	Mode boards	Most
	In house library	Most
	Public libraries	Majority
	The clients' libraries	Majority
	Generating new visual material	Most
	Sourcing existing material	Most
	A mixture of sources	Most
	A variety of visual sources	Most
	All kinds of things	Majority
	Everything and anything	Majority
	Natural things	Some
	Talking /discussion	Most
	Various types of experience	Most
	Imagination	Majority
	Thought process	Most
	Ideas	Most
	From memory	Majority
	Anything	Most

TABLE 3.4.1: EXAMPLES OF THE DESIGNERS' VISUAL SOURCES

Visual Sources	Sub- category	Frequency Mention (40 Designers)
Photography	Photography annuals	Most
	Transparencies	Most
	Photos of people	Majority
	Commissioned photography	Most
	Photomontage - in house-	Most
	Photography - in house-	Majority
	Photographing in location original information	Majority
	Photographer portfolios	Most
	Digital photography	Some
	Digital photography	Majority
	Illustrations	Commissioned illustrations
Illustrations - in house-		Majority
Illustration annuals		Most
Illustrators portfolios		Most
Illustrators portfolios		Some
Use particular Illustrators		Some
Illustrative styles		Most
Found images	Photo-libraries	Most
	Photo-libraries	Most
Packaging	Packing products	Most
	Packaging models	Most
	Historical packaging	Some
	Advertising footage	Some
Books	Design books	Most
	Books on different illustration styles	Majority
	Books on packaging	Most
	Geographical books	Some
	Books on specific parts of the world	Most
	Books on different subjects	Most
	Books on cooking	Some
	Books on everything	Some
	Books on everything	Most
	Picture source books	Most
Books on particular subject matters	Most	
Magazines	Marketing and trade magazines	Most
	All types of magazines	Most
	Old magazines	Majority
	Clippings from magazines	Most
	Magazines on specific issues	Most

TABLE 3.4.2: EXAMPLES OF THE DESIGNERS' VISUAL SOURCES

Visual Sources	Sub- category	Frequency Mention (40 Designers)
Typography	Old typography	Most
	Commissioned lettering	Some
	Fancy typefaces	Most
	Fancy typefaces	Most
Advertisement	Press Advertising	Majority
	TV Advertising	Majority
	Advertisement footage	Some
CD ROM images	Logo CD ROM - layout	Most
	CD ROM transparencies	Some
		Majority

TABLE 3.4.3: EXAMPLES OF THE DESIGNERS' VISUAL SOURCES

Visual Sources	Sub- category	Frequency Mention (40 Designers)
Relevant visual sources	Anything relevant	Most
	The nature of the product	Most
	The nature of the company	Most
	The competitors' work	Majority
	Previous design work about the same project	Most
	The market place	Most
	The target audience	Most
	The subject matters	Most
	The cultural background of the target audience	Most
	The way people work and talk	Some
Visual sources for inspiration	A variety of visual sources	Majority
	Photo library sources	Most
	Design Books and Magazines	Majority
	Paintings	Most
	Historic logos	Some
	Colours	Majority
	Visual Arts	Some
	Opera	Majority
	Sculptures	Some
	All kinds of art	Some
	The surrounding environments	Majority
	Films	Most
	Videos	Majority
	The way designers work	Majority
	Photography Annuals	Majority
	Nature	Majority
	TV	Some
	Advertisements	Majority
	The Visual Media	Most
	Designers' Portfolios	Majority
Museums	Majority	
Travelling	Majority	
Regular Design & Art Publications	Most	
Previous design work : In- house	Most	
The designers' drawings pads	Majority	
Visual sources to clear the mind	Photo Library source	Majority
	Design Annuals	Some
	Art Annuals	Some
		Majority

TABLE 3.4.4: EXAMPLES OF THE DESIGNERS' VISUAL SOURCES

3.3 Processes of gathering visual sources

The processes of gathering visual sources varied. Gathering visual sources was a regular activity for most designers. Most designers mentioned various interests in the sources they collected. From the designers' explanations, it can be considered that designers collected visual sources for some of the following reasons: 1) the visual source provoked the designers' interest, 2) the visual source was a source of inspiration, or stimulated a good idea, 3) the designers needed to have visual sources as visual references on various things, styles, cultures, events, places, as documents, the work of the competitions, etc. There were no definite explanations when a particular use of a visual source stopped or started. But, there were indications that particular visual sources were gathered, kept and referred to by designers. The majority of the designers stated that they sometimes gathered visual sources for certain projects and for potential projects at the same time. From the designers' explanations, it can be considered that gathering visual sources for a project involved resources and processes related to the project (DIAGRAM:3.2).

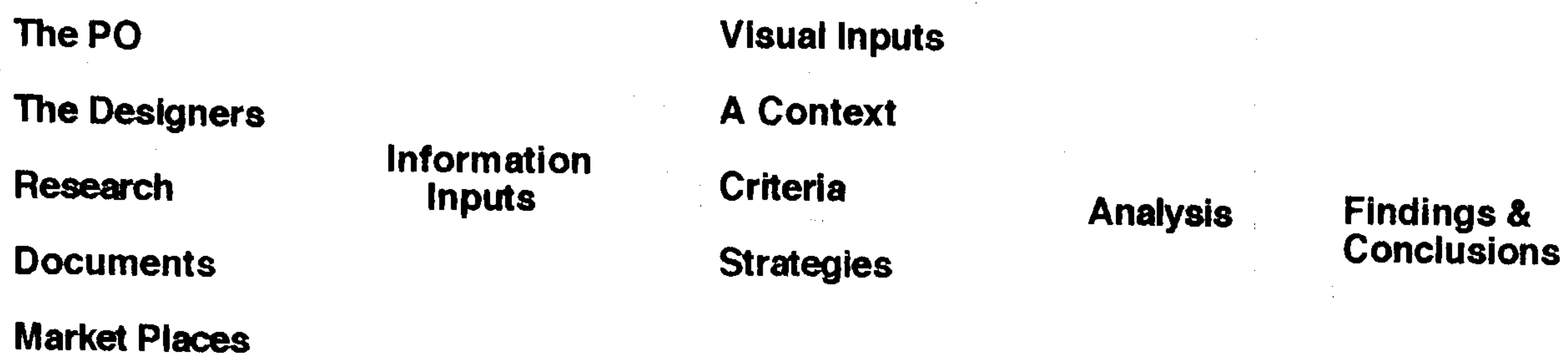


DIAGRAM 3.2: RESOURCES AND PROCESSES OF GATHERING VISUAL INFORMATION

The designers did not indicate that any of the visual sources was restricted to a particular use of any kind. But the designers described how they considered visual sources when they gathered them. Most designers considered research as a means for gathering and selecting visual sources (Marian Dalley; Greg Vallance; David Mecwy; David Spencer; Alex Quero; Ged Equi; and others). Shawn Dew stated: “We must gather them in all sorts of different ways.” She added:

If we're doing packaging we'll go out in store. So we will buy lots of packaging and bring them back here. If we're doing a corporate identity, we will go and visit factories, and offices. We get for very large projects researchers involved where they will research the subject and bring back lots of visual material for us.

Some similar approaches to collecting visual sources were mentioned by David Mecwy. He stated:

Well we use the client's archive material. We use our own archive. We have a library of visual resources. We use market research. We use photography. When we visit other locations we always take a camera and we always record every aspect of what we see. We're beginning to use video. We collect prints. We collect prints from the client and from the competition. We collect prints from any professional bodies or trade organisations that we can put the story together from.

David Spencer stated:

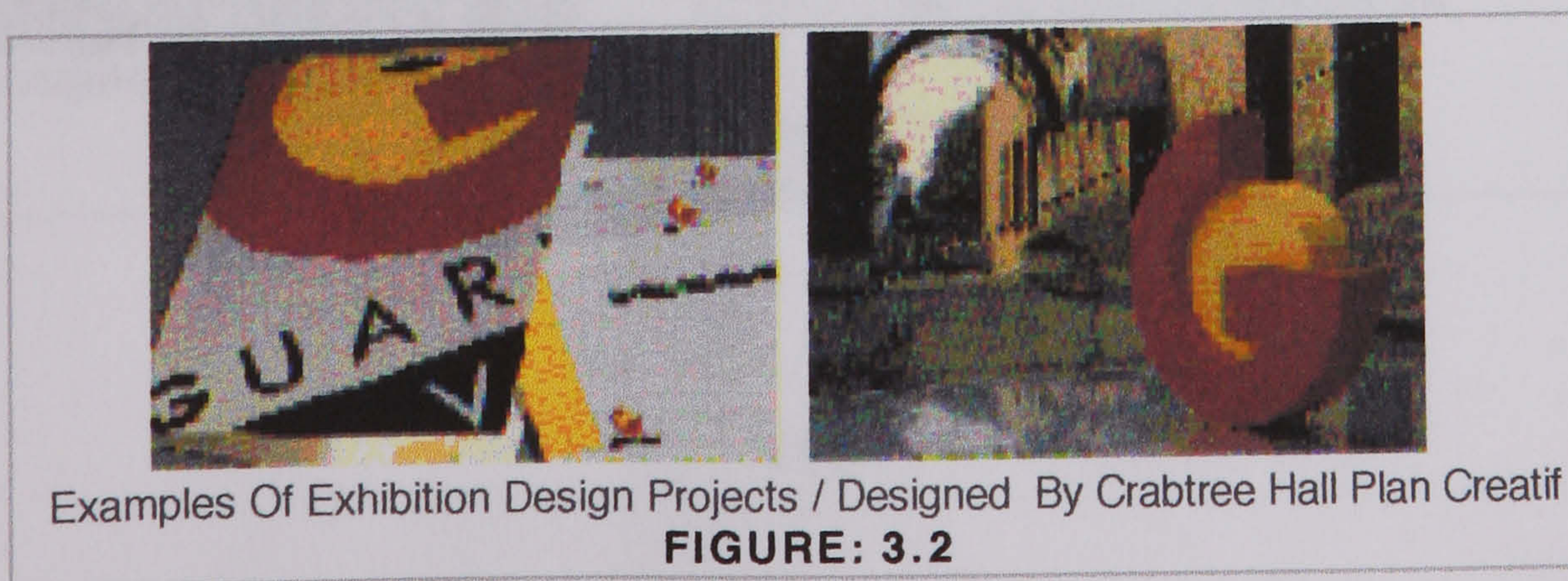
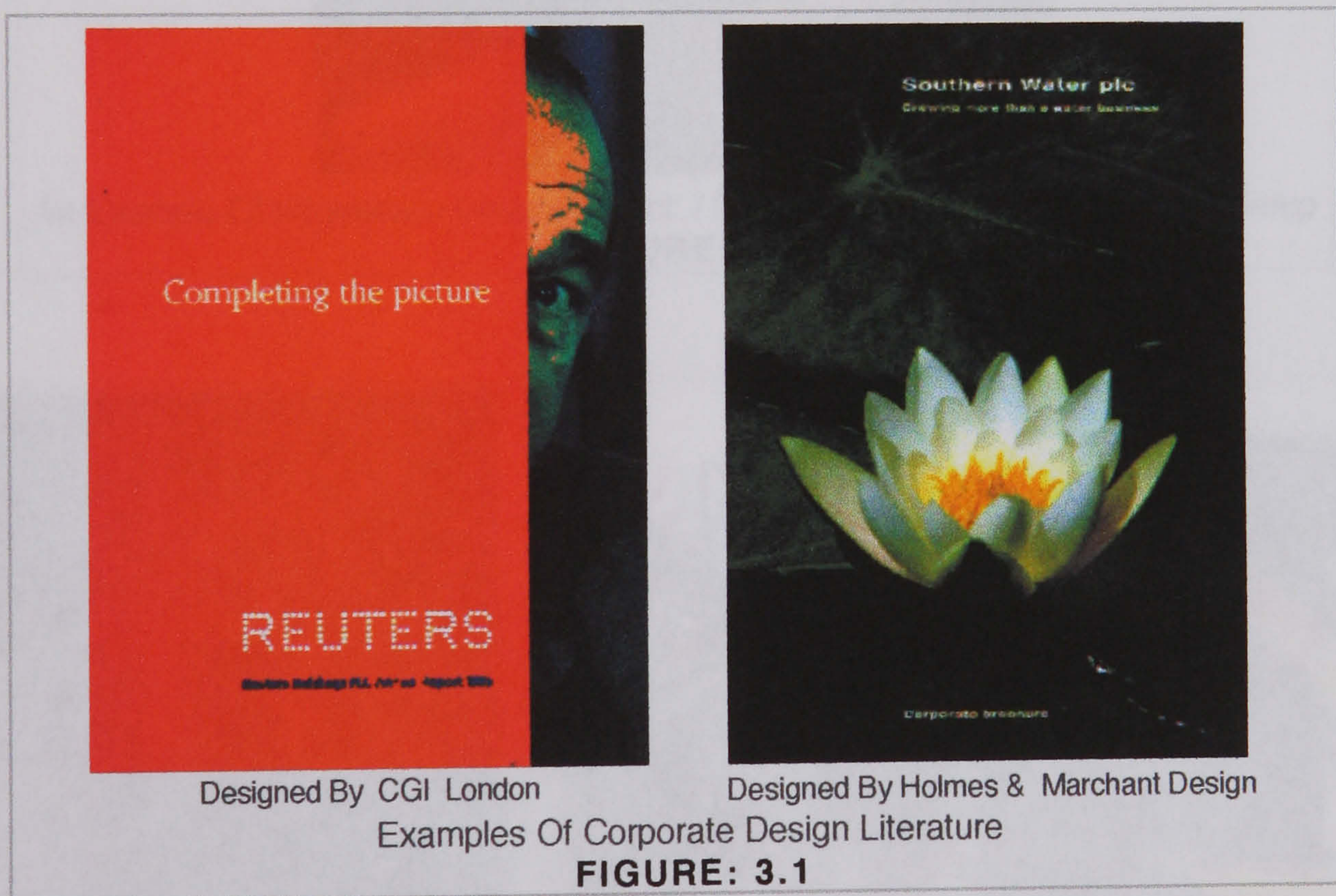
I am trying more and more to keep a general library, because I think it is important to be able to go immediately to visual sources for your competition. But if it is a new client then we will have to pull in visual resources to cover that. Usually it is the research person who does that.

3.4 Designs for projects

The nature of projects played a role in how the designers approached their visual sources. The designers created a range of designs for a range of projects. The nature of the projects and the nature of the designs varied. The nature of projects was complex and covered wide ranges of businesses, services, products, messages, news, and information oriented projects. In addition, these projects were required by people from various cultural, social, economic, political, intellectual, environmental, campaigns, media, and entertainment sectors. Some of the projects were for local, international, or foreign communities. Other projects were for both national and international sectors. Some projects belonged to more than one sector.

Various design disciplines were chosen for various projects. Each of the design consultancies specialised in particular design disciplines (See APPENDIX: II). The design disciplines were: 1) Packaging, 2) Corporate, 3) Retail, 4) Exhibitions, 5) Interiors, 6) Prints, 7) Cartoons, 8) Magazines 9) Newspapers, 10) Environmental, 11) Campaign, 12) Internet. These categories involved various sub - categories. For example, packaging design involved corporate design, creating models, photographing the models, and producing advertising footage. Corporate identity designs involved logos, signage, television icons, corporate brochures, corporate magazines and reports. Prints involved brochures, leaflets, magazines, newspapers, annual and environmental reports, posters, and adds. Exhibition and retail design involved interior and graphic design disciplines. Internet involved page designs, graphic and information design. Examples of some design projects are in FIGURES (3.1, to 3.18). The majority of the design consultancies offered various research services. Marian Dalley described the services they offered. She said:

What Design Bridge offers is not only the packaging design but also brand strategy, new product development, and marketing research if that is what the client needs. These are all skills that we have got in-house because there has been a need when you are working with branded products to handle the job in this way. It is not simply a design but it is also all the elements that feed into that. Kind of give it a context really.

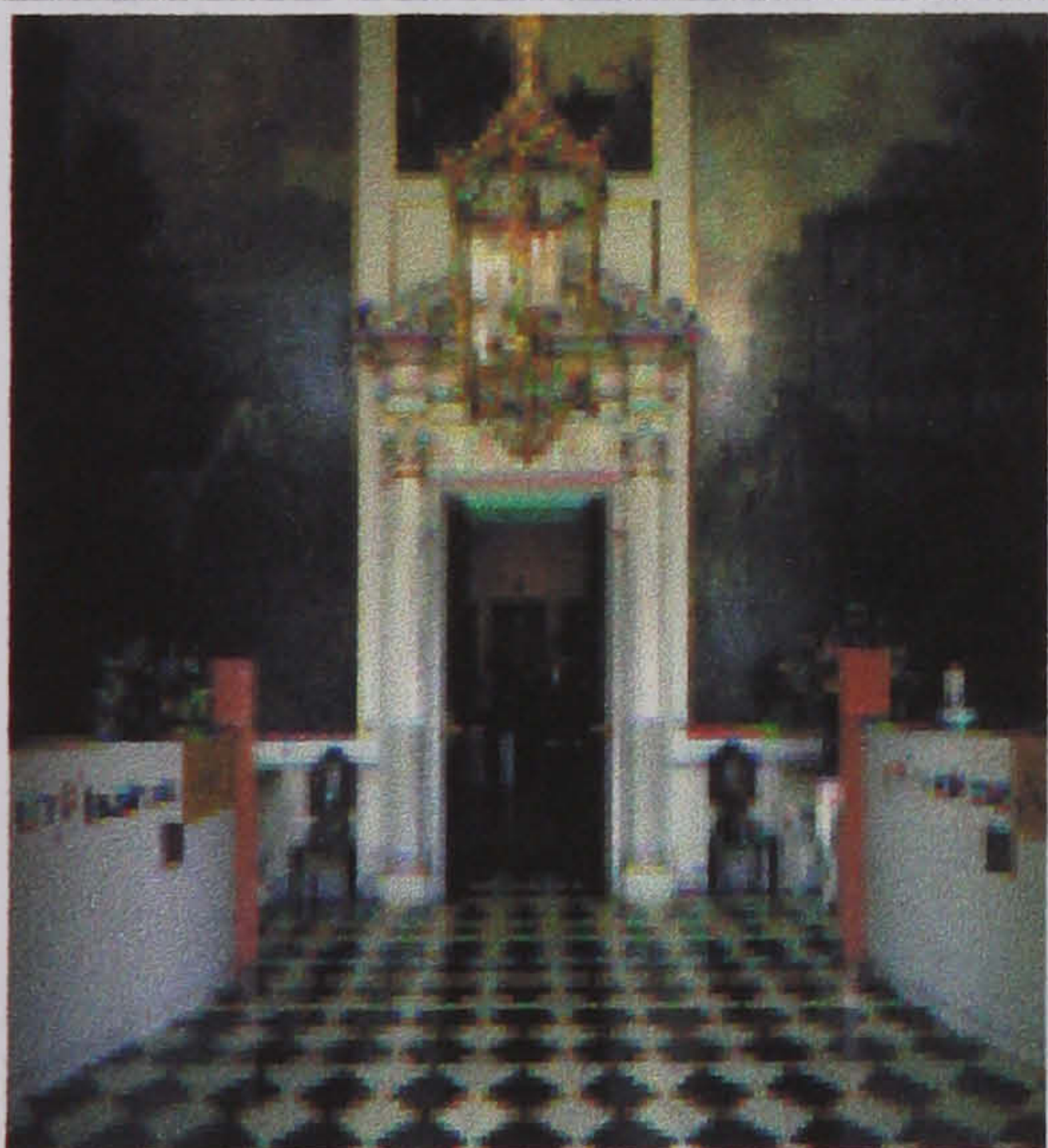




An Example Of A Fund-Raising Design Project / Designed by Design Bridge
FIGURE: 3.3



An Example Of Information Design Project / Designed By Holmes & Marchant Group
FIGURE: 3.4



Designed By Pile Probert Kelly



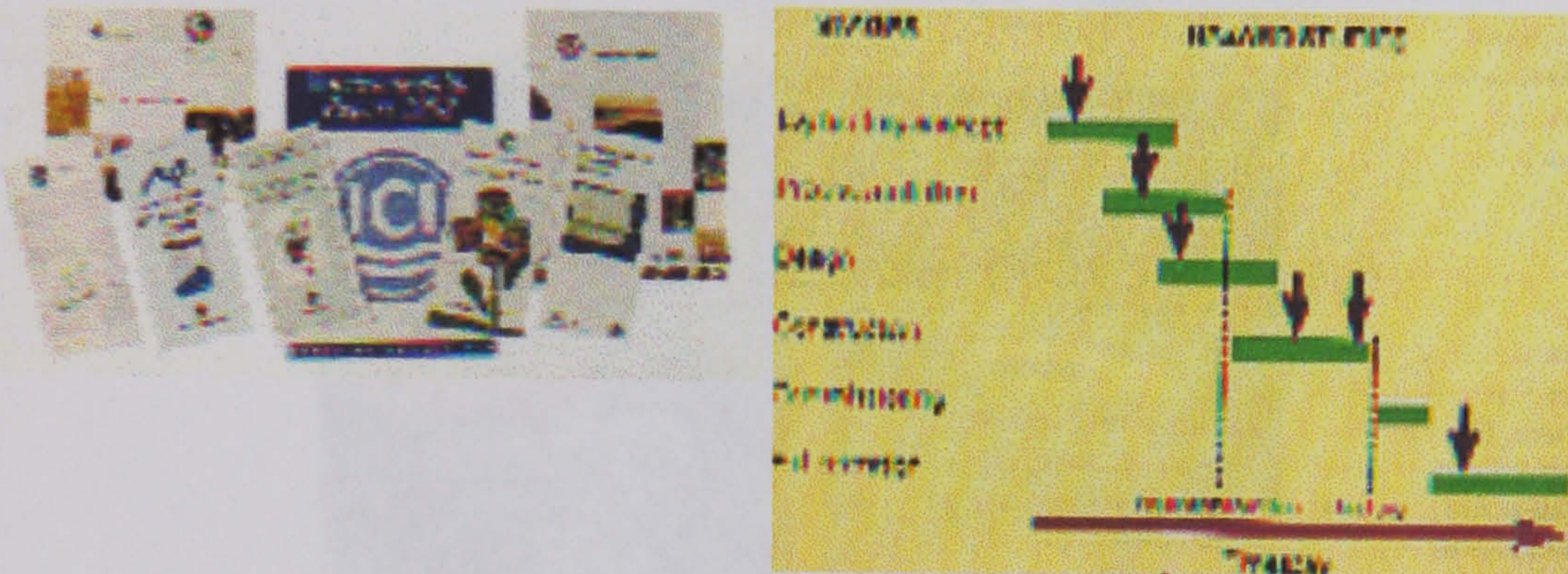
Designed By Design Research Unit

Examples Of Exhibition Design Projects
FIGURE: 3.5



Designed By Wickham for Greenpeace

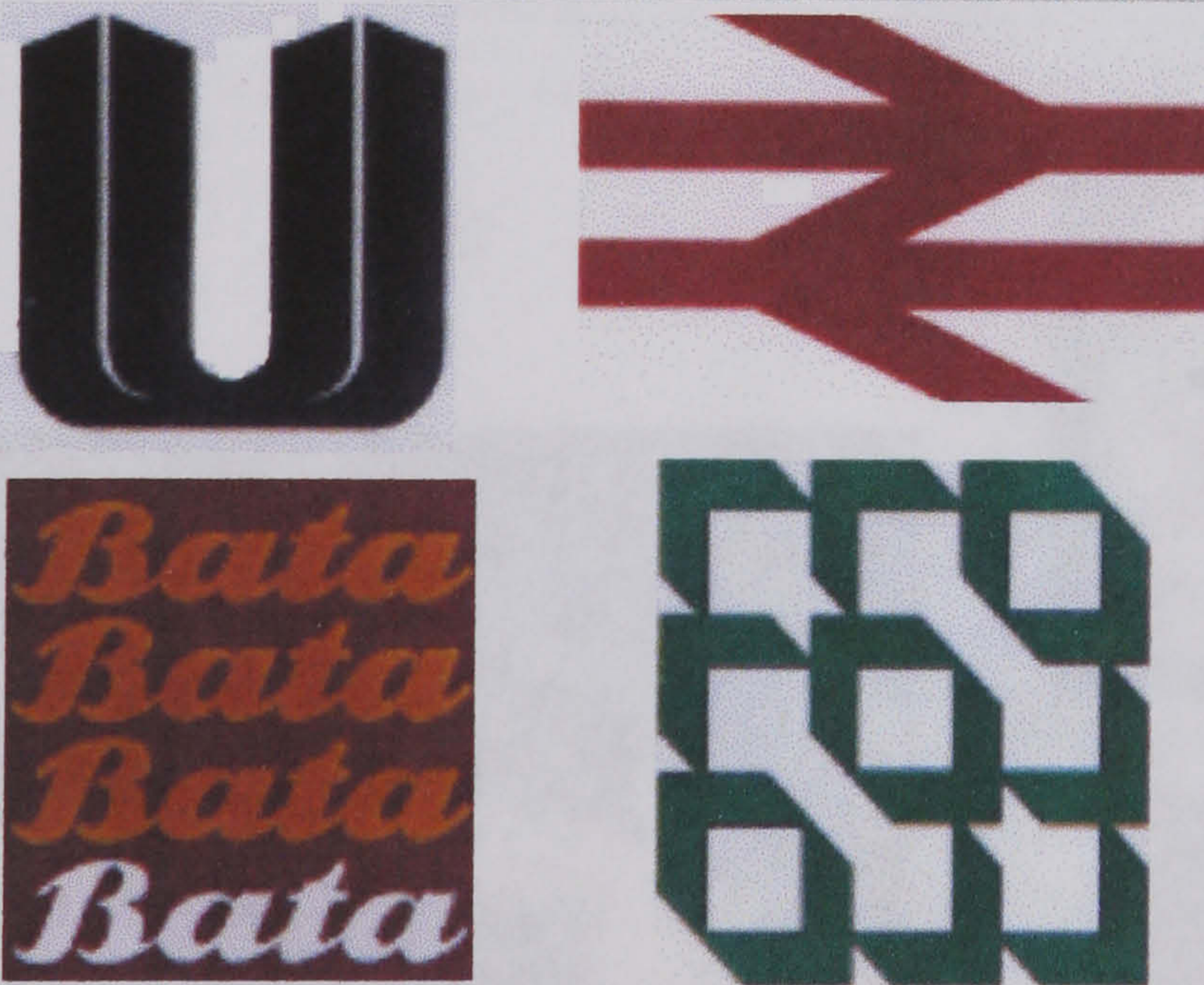
Designed By Holmes and Marchant Design



Examples Of Environmental Design Project

FIGURE: 3.6

Examples Of Logo Design Projects / Designed By Design Research Unit

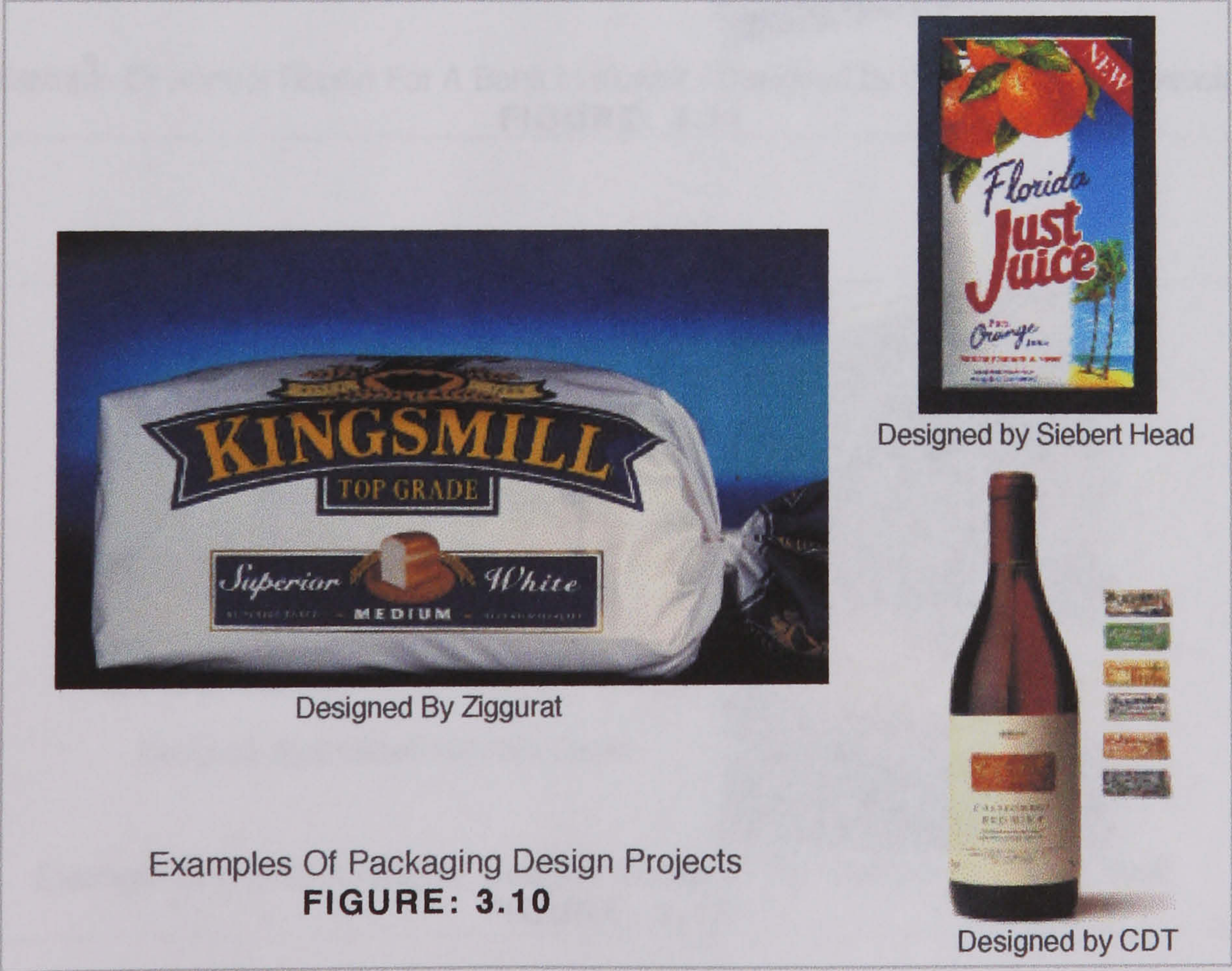
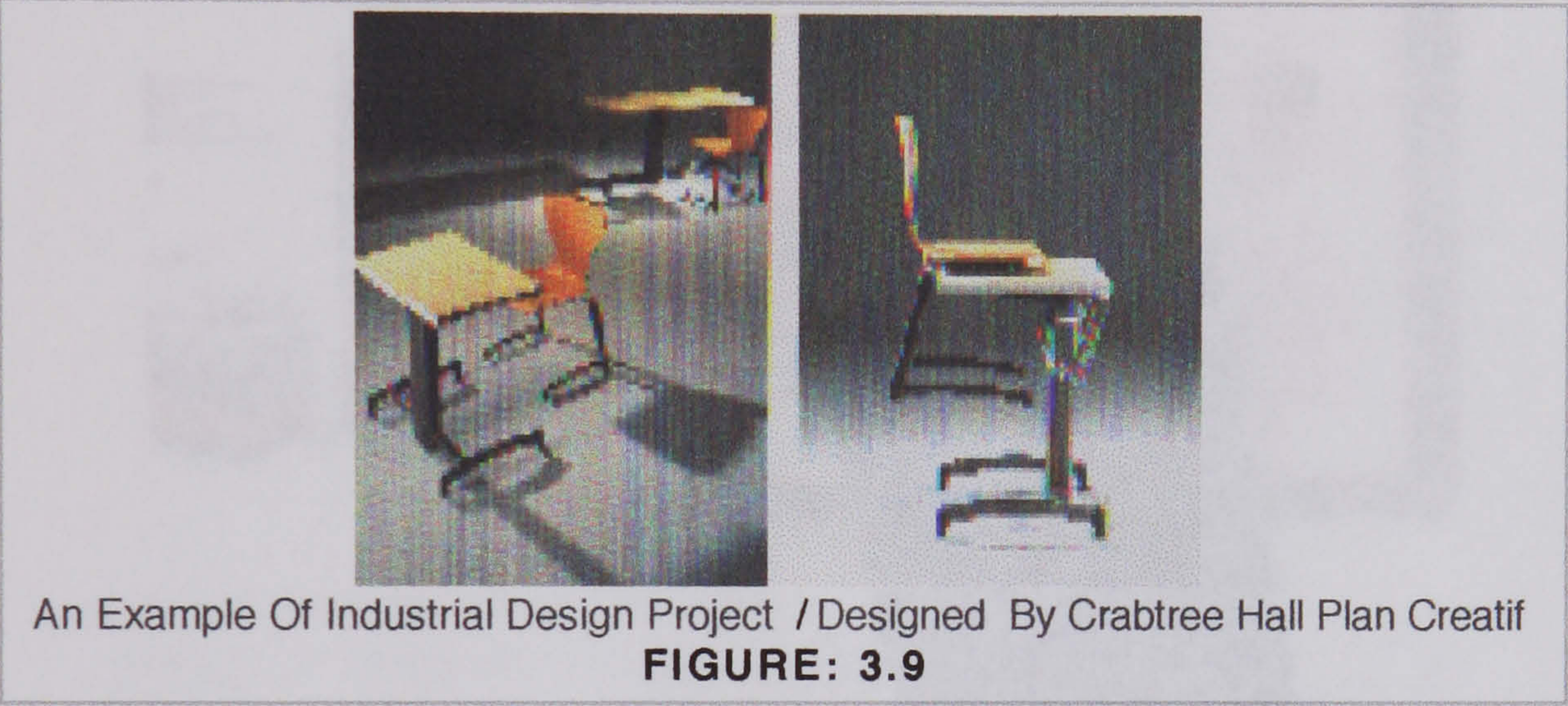
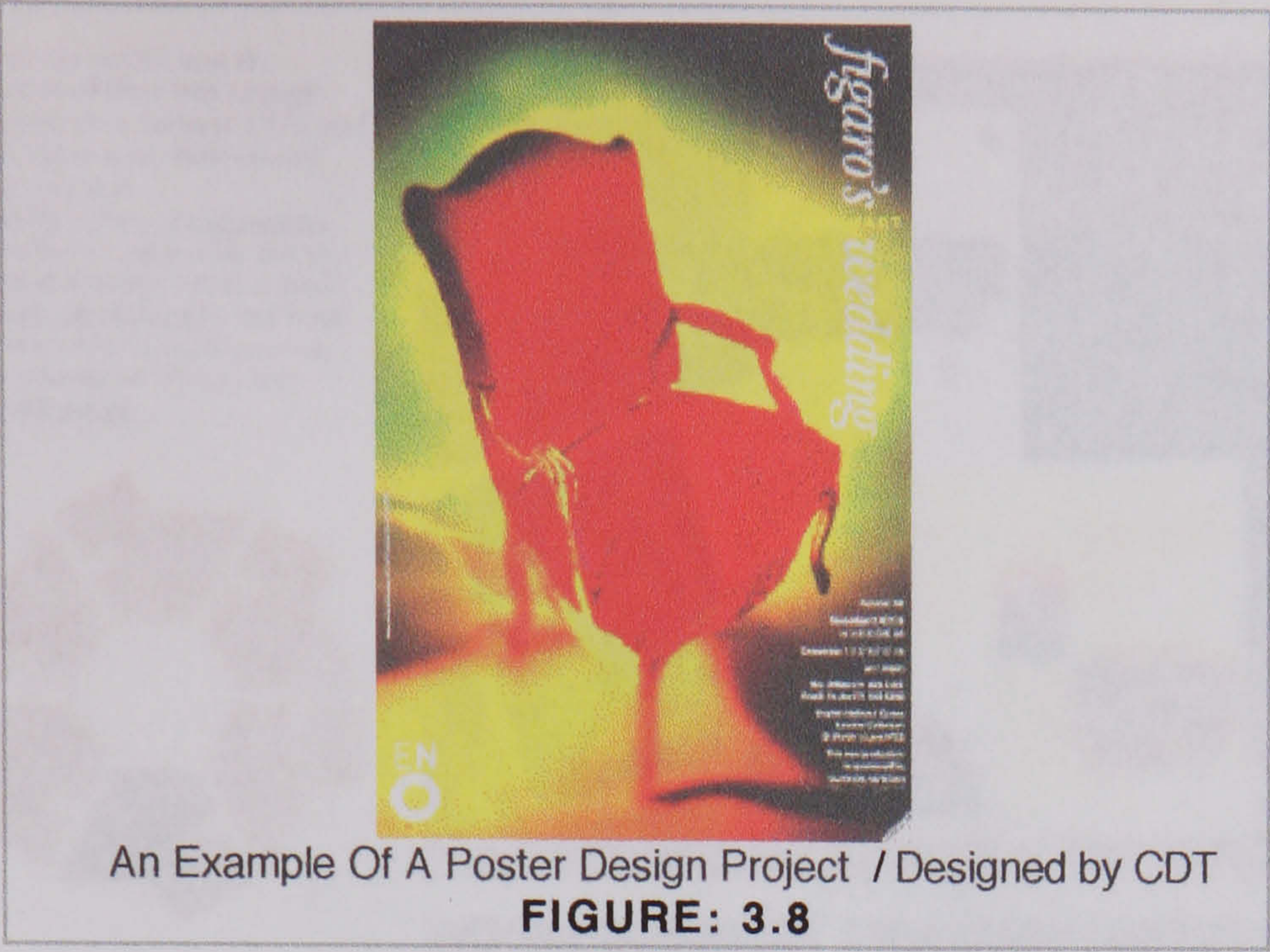


Examples Of Logo Design Projects / Designed By Design Research Unit

FIGURE: 3.7

Examples Of Packaging Design Projects

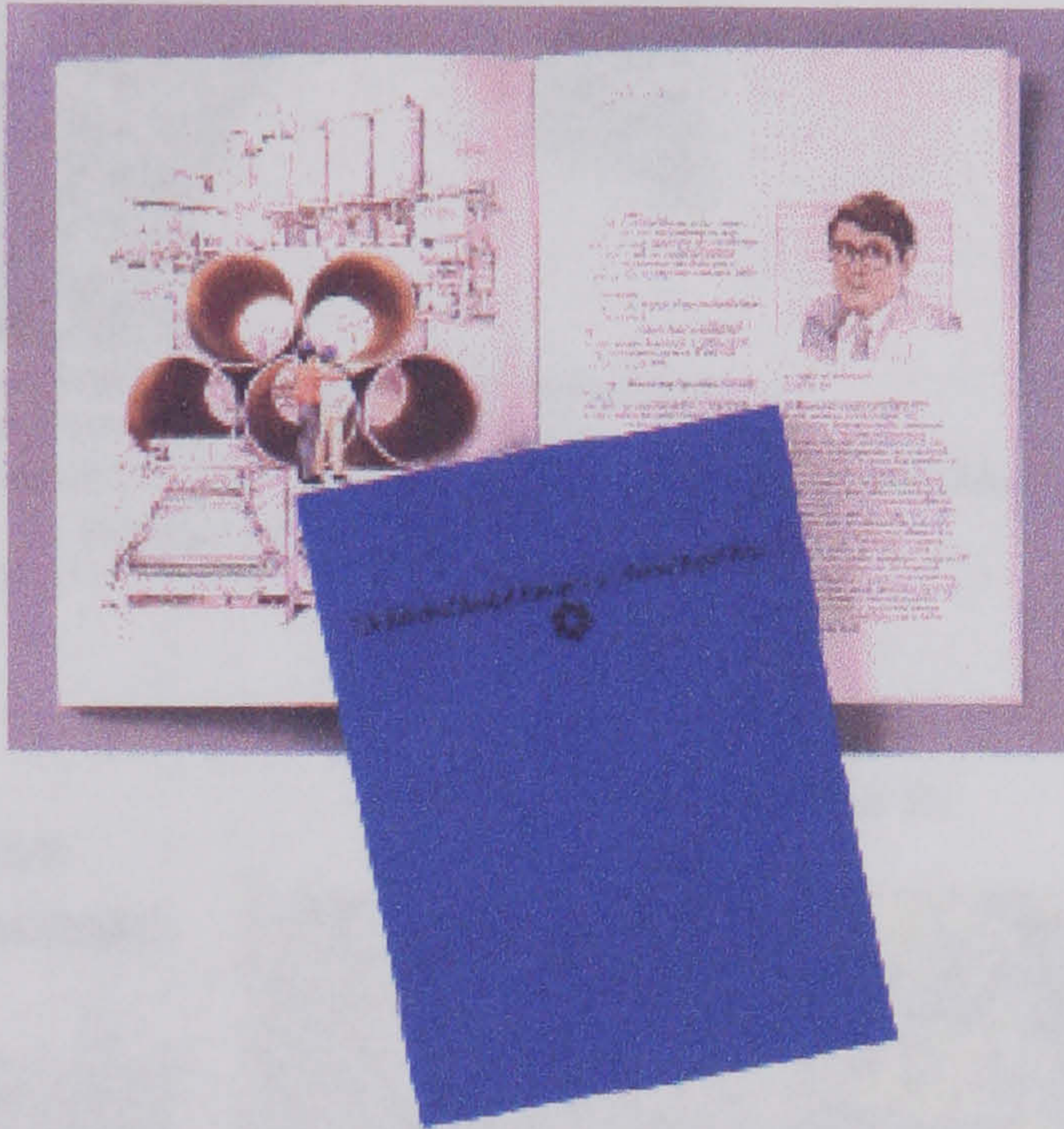
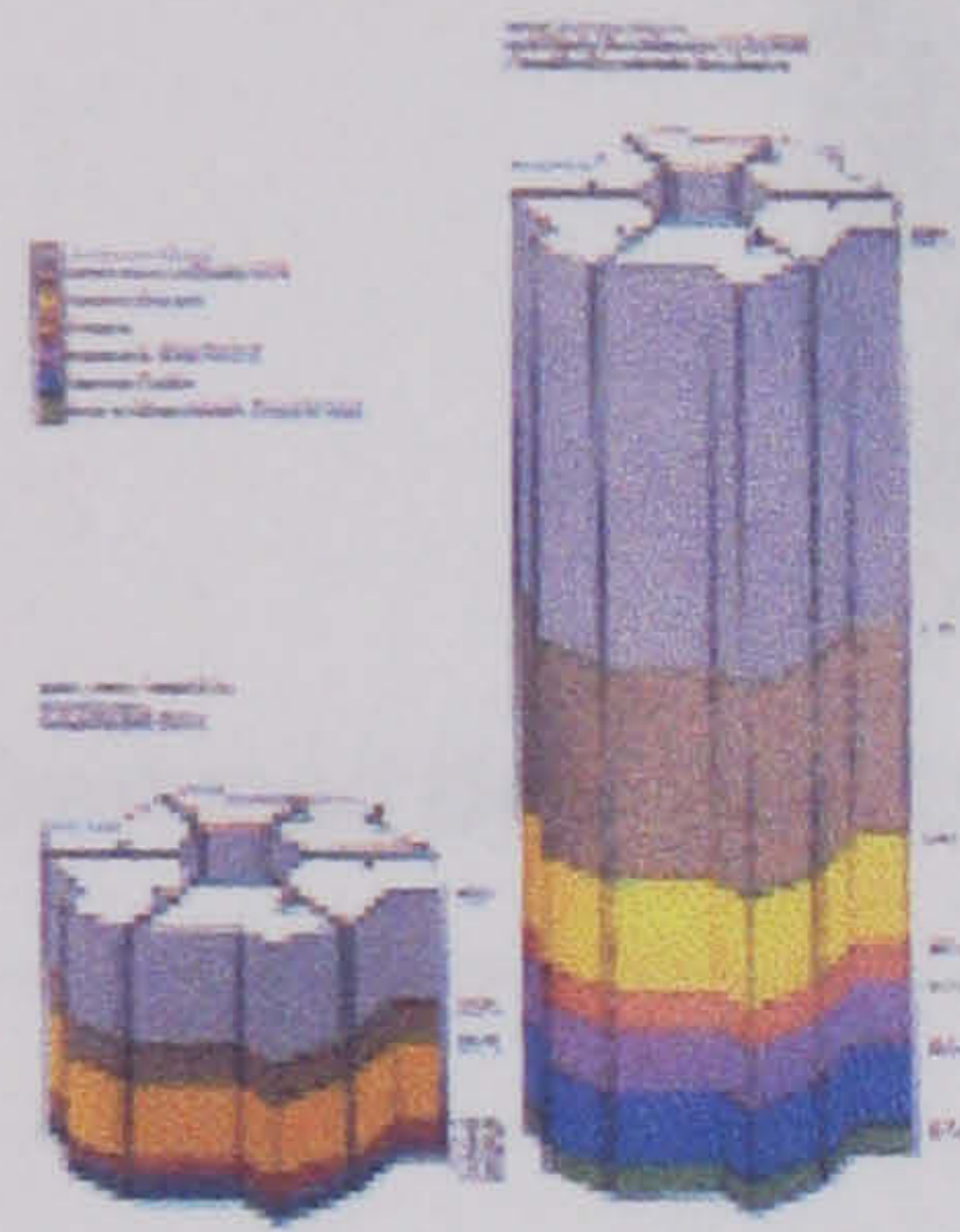
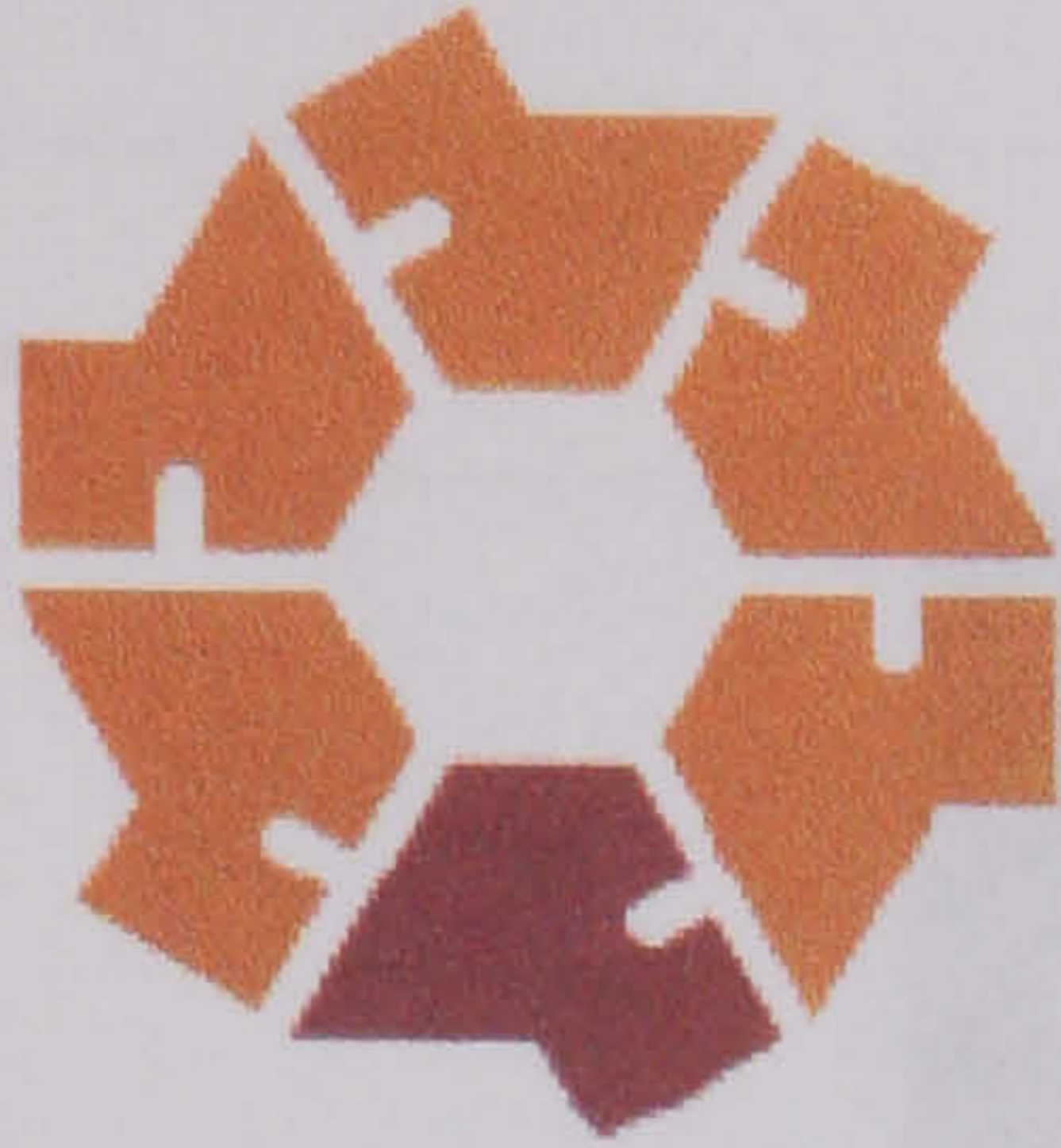
FIGURE: 3.10



Our first job for BSK was the production of their first annual report, covering the year 1978 and we have produced their annual reports ever since.

Amongst other commissions, we have been responsible for two editions of a businessmen's guide to Kuwait, published by the bank.

We also created their symbol, which is based on the outline shape of Kuwait.



An Example Of Annual Report For A Bank In Kuwait / Designed by Barrow Parkhill Associates
FIGURE: 3.11



Designed By Crabtree Hall Plan Creatif



Example Of Interior & Graphic Design / Designed By Crabtree Hall Plan Creati
FIGURE: 3.12

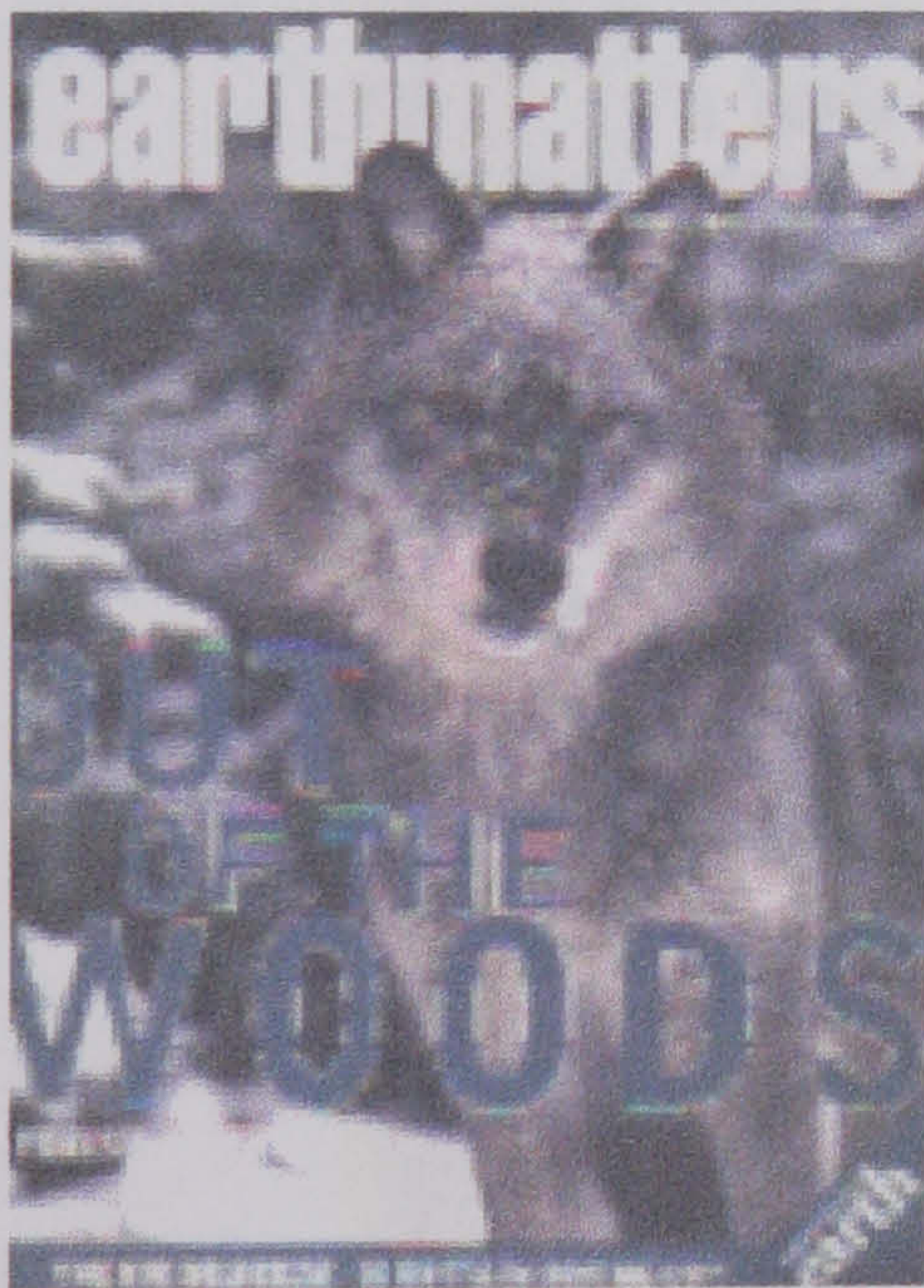


An Example Of An Application Of Corporate Design / Designed by Design Bridge
FIGURE: 3.13



An Example Of Cartoon Design
 Designed by M. Kahil for Arab Press House- Saudi Research & Marketing
FIGURE: 3.14

Designed by Friends of the Earth



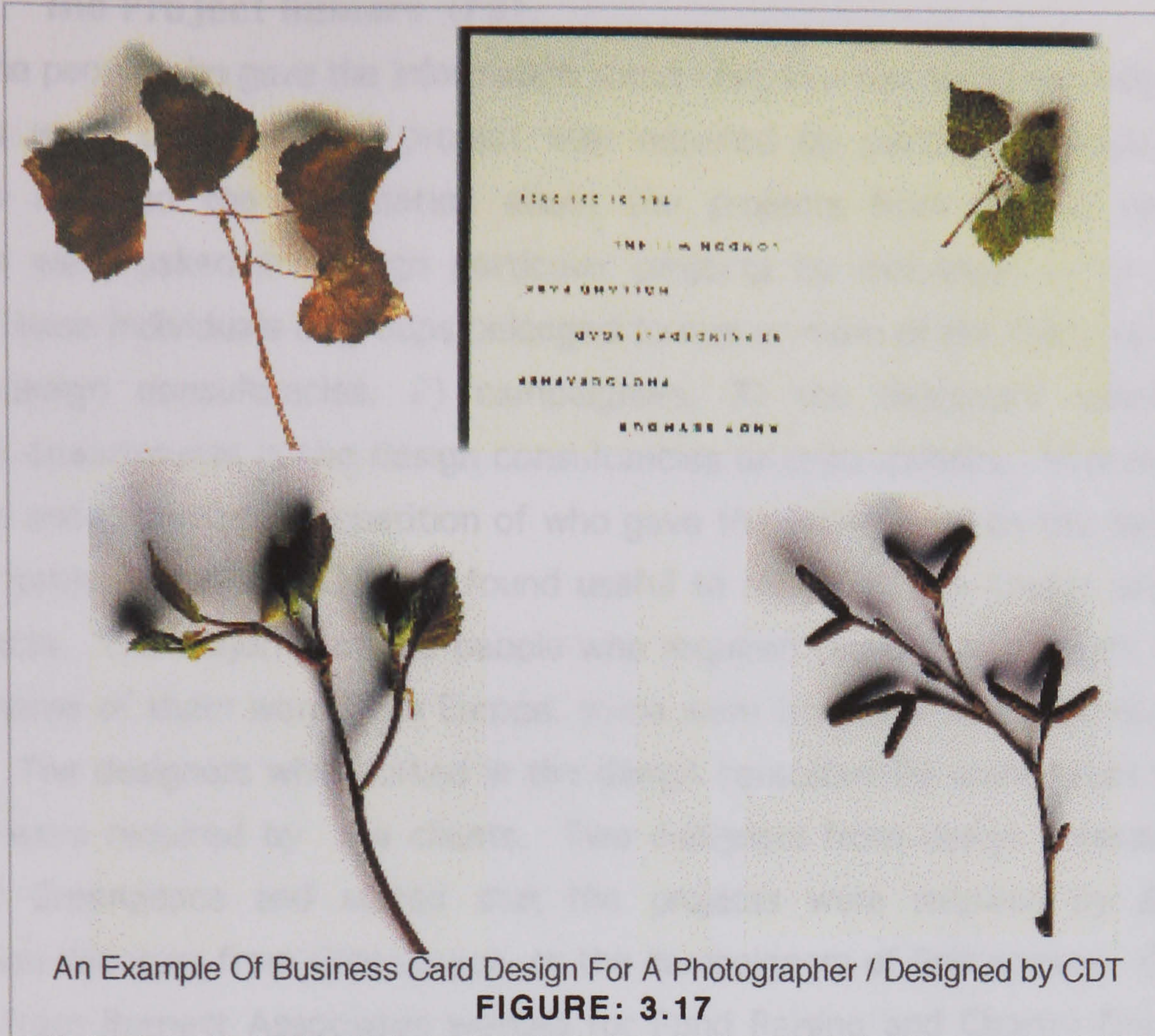
Designed by CDT for Environmental Program For TV Against Pollutions



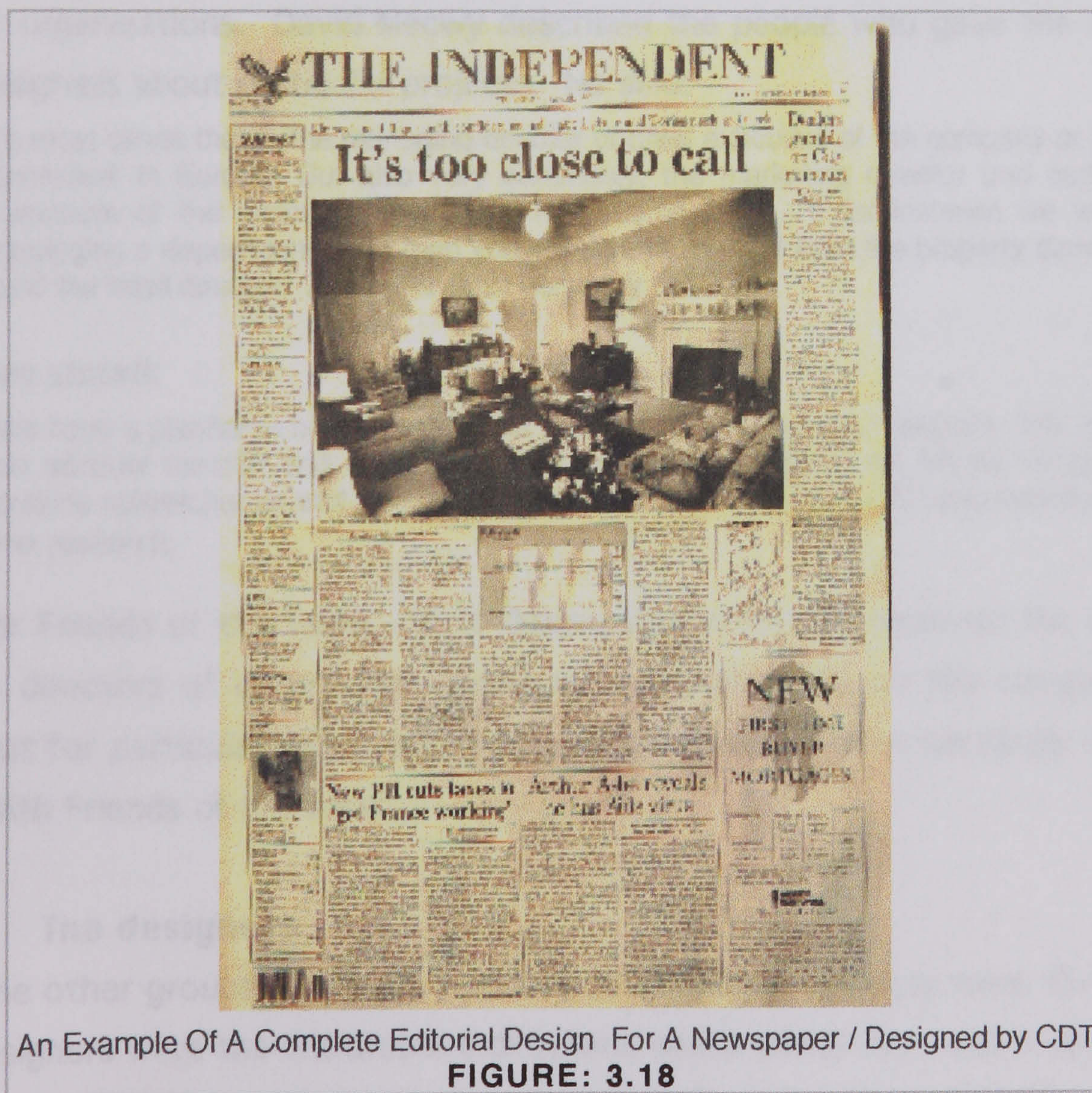
Examples Of Design For Environmental Campaigns
FIGURE: 3.15



An Example Of BICENTENARY Symbol Design / Designed by CDT
FIGURE: 3.16



An Example Of Business Card Design For A Photographer / Designed by CDT
FIGURE: 3.17



An Example Of A Complete Editorial Design For A Newspaper / Designed by CDT
FIGURE: 3.18

3.4.1 The Project Owners (PO)

The people who gave the information about what was needed to be designed to the designers were diverse. Each project was required by particular people. But the designers received the information about the projects from various people. The designers were asked to design particular projects by individual or by groups of people. These individuals or groups belonged to one or more of the following 1) clients of the design consultancies, 2) campaigners, 3) the designers' employers, 4) particular departments in the design consultancies or organisations. In order to avoid confusion and unnecessary repetition of who gave the information to the designers the concept 'project owner' (PO) was found useful to represent the people who required the projects. The majority of the people who required the design projects were from the UK, some of them were from Europe, some were from overseas, and some were a mixture. The designers who worked in the design consultancies stated that the design projects were required by the clients. Two designers from design consultancies did work for Greenpeace and stated that the projects were required by design and information directors from Greenpeace, or the campaigners of Greenpeace. One design director from Burnett Associates worked for Fund Raising and Charity Organisations and referred to the people who required the project as clients or mentioned the particular organisations. David Mecwy described the people who gave the information to the designers about particular projects. He said:

In most cases that is the managing director or chief executive of the company or the president in Europe. But also very commonly, the marketing director and certain members of the executive team who have some input. If for instance we were designing a department store then you will also have input from the property director and the retail director. All from a client company.

Paul Davies stated:

We have a planner in house as well that gets involved in strategic research. We have an account handler and obviously if it does involve research we will be using an outside researcher as well who will compile or get together a group of respondents for the research.

For Friends of the Earth, David Caines stated that he received the information from the directors of information, publication departments, or the campaigners. He added that for particular projects he received information from particular clients who worked with Friends of the Earth.

3.4.2 The designers

The other groups who were involved in particular projects were the designers. These designers were the art/creative directors, senior designers, and a selected team of designers. The team of designers was selected, sometimes, by the art/creative directors and members of the PO. In addition, they were selected according to the

skills required for the particular need, or according to who was free at the particular time. Greg Vallance indicated, “a team of designers is assigned,” According to Tony Watts, the design team was selected according to the required skills for the particular project. The majority of the designers stated that small projects were created by one designer, but the concept of such projects were explored by a team of designers. According to Marian Dalley:

Once the brief has come to Design Bridge and comes into the studio via a meeting that we call the creative directors planning meeting which is held once a week. At that meeting we decide who will actually be handling that work. Which team of designers and that how it is decided.

William Redfern stated:

Dragon has its team of five designers. I would say that two or maybe three work on a project up to its initial stage. Then one or two, or maybe just one will develop that on into its final stages. But we try to have as much influence at the beginning. We focus that with say one designer and then we'll share the load between as many as is required for the job to actually execute it.

The majority of the designers stated that they hired particular required design skills for particular projects when these skills were not available in-house. These skills were mainly concerned with visualising design concepts via the use of the computer aid systems, and type setting.

3.5 The needs for the projects

The needs for the projects were discussed in various ways by the designers. The designers explained in various ways that they designed for specific purposes and according to particular requirements. Most of the designers indicated that initially the people who required the design projects were the people who decided the need for the projects. Also, the majority of the designers indicated that they elaborated the need issue and made sure what the PO decided were the right needs for the projects. Some designers indicated that the clients were the best people to know their needs, market and target audience. Some designers claimed that most of the time the clients came with a problem and asked the designers to solve it for them. Some designers stated that both the designers and the PO decided the need for particular projects.

Most of the designers stated that they selected their visual sources according to the needs and requirements of their projects. The majority of the designers indicated that the selection of visual sources depended on the nature of the projects and the opinions of their PO. Some designers explained that the selection of visual sources for corporate identity depended on whether the PO viewed their corporate identity as an evolution from something they had before, or they wished to begin anew. The designers discussed the needs for their design projects in various ways. When the designers were asked according to what they selected their visual sources, most of the designers used expressions such as “it depends on the need for the project”, “it depends on the

need”, “it depends on the project”, “it depends on the job.”, “it depends on what the clients wants.”, “it depends on the objectives.”, “it depends on the requirements.”, “it depends on the design brief.”, “according to the brief”, “it depends on the design concept.”, “it depends on the design ideas.” ,“it depends on the messages.”, “it depends on what the organisation wants.” “it depends on the particular design problem.”

Two groups of people were mainly involved in identifying, modifying and approving the need for particular projects. The first group was the individual or the group of people who required the project (PO). The second group was the group of the designers who were involved in the design projects. Some designers stated that people from planning, management or research sections participated in deciding the strategic objectives for the projects. Sometimes, people from research consultancies were involved in giving essential information about particular projects and pointing out particular needs. Some designers who worked with advertisements agencies stated that they had to discuss what they wanted to do with people from these agencies so that they both knew the requirements and the expected outcome. According to most of the designers, the PO decided the need. David Mecwy stated, “Usually the person that most commonly defines the need is the client himself.” Some designers stated that the PO came with a problem and asked the designers to identify the need. Some designers stated that they asked their PO why they wanted, brochure, an exhibition, or a new corporate identity. According to Clive Colledge:

The first thing I want to know is the purpose of the job. It is a simple question, but usually it is very difficult to answer: why we are doing this? If it is not measurable then probably they have not thought it through well enough.... Usually what you would be doing is increasing business, and then we can look at how to do that.

Some designers indicated that each project had a design director who was able to contact any one involved in the project when it was necessary. The majority of the designers stated that for most projects they and their PO decided the needs together after gathering information and doing in depth research about everything relevant to the projects. Some designers claimed that they observed their particular clients in the market and then approached their clients and suggested the needs for particular design projects (Marian Dalley; Deborah Ford; Shawn Dew). The designers who worked for Greenpeace stated that the Greenpeace people had strong ideas about what they wanted and they decided the needs (Bell Wicham; Alex Quero). The designers from the Saudi Marketing and research stated that the directors of publications, or the deputy managers were the people who decided the need for the projects. Mahmoud Kahil explained that he decided the need for his particular cartoons according to the latest political, economic, and social events which happened in the world. He added that the other projects were briefed to him from the publication directors, then he transferred them to the design manager of his department and to the design team. In addition,

identifying the need involved sometimes travelling abroad, observing things in their actual locations and environments, reviewing and understanding related documents and procedures and related projects. Also, it included understanding the competing markets of the particular projects. (Marian Dalley; Elaine Searle, Chandra Prince; Deborah Ford; Ged Equi; David Mecwy; Clive Colledge; Peter Barrow; Peter Widdup). David Spencer explained that travelling abroad gave them a feedback about the images they used.

3.5.1 Design briefs

The forms which were used to communicate the specific information about what was needed to be designed between the PO and the designers were: 1) the design brief written or verbal or both, 2) discussion meetings. The other form was the design proposal. The design proposal was a legal document that included both the contents of the design brief and what, how, when, where and by which means the designers intended to satisfy the brief and meet the PO requirements. Also, the proposals pointed out the responsibilities of the PO, the designers and other groups if any. In addition, proposals included information about the budgets, time of originating the projects, deadlines, and date and time of first presentation. They also included contact for reviews before the first presentation. The design proposals of the design consultancies were approved by both the designers and their PO. Most designers referred to the design brief when they explained their activities. Relative frequency of how the information is given to the designers is in CHART (3.1). According to Greg Vallance: "The brief is a set of guidelines." Tony Watts explained that the design proposal was a contract between the designers and their clients. It included the final agreements between the two groups, and it included how the budgets and deadlines were allocated, and how the design requirements were to be achieved. Also, it involved technical details, and legal procedures. Some designers criticised the way the PO briefed them, but they stated that they depended on briefing meetings and discussions. Some designers explained particular problems about the design briefs. They indicated that their clients tended to brief them with the solution instead of the problem. Some designers indicated that their clients changed their minds pretty often about what they previously decided or accepted.

Most designers explained that it was their responsibility to find out the real problem or need (Peter Barrow; Shawn Dew; Clive Colledge; Marian Dalley; Ged Equi). Some designers indicated that they required written briefs from new clients. Some designers stated that, sometime, they wrote the design briefs for their clients, or they helped their clients to write the design briefs, or they rewrote the design briefs in the form of proposals (Sue Pile; Shawn Dew; John Harvey). Elaine Searle stated:

The new clients would definitely provide us with design briefs, because we wouldn't

understand their organisation well enough. Perhaps we would do it jointly.

David Mecwy explained:

We will usually have a discussion at that point with them and if necessary we will then query their view as to what we should be doing and we may discuss the brief before we finally agree, and in some instances we will rewrite the brief having had the discussion.

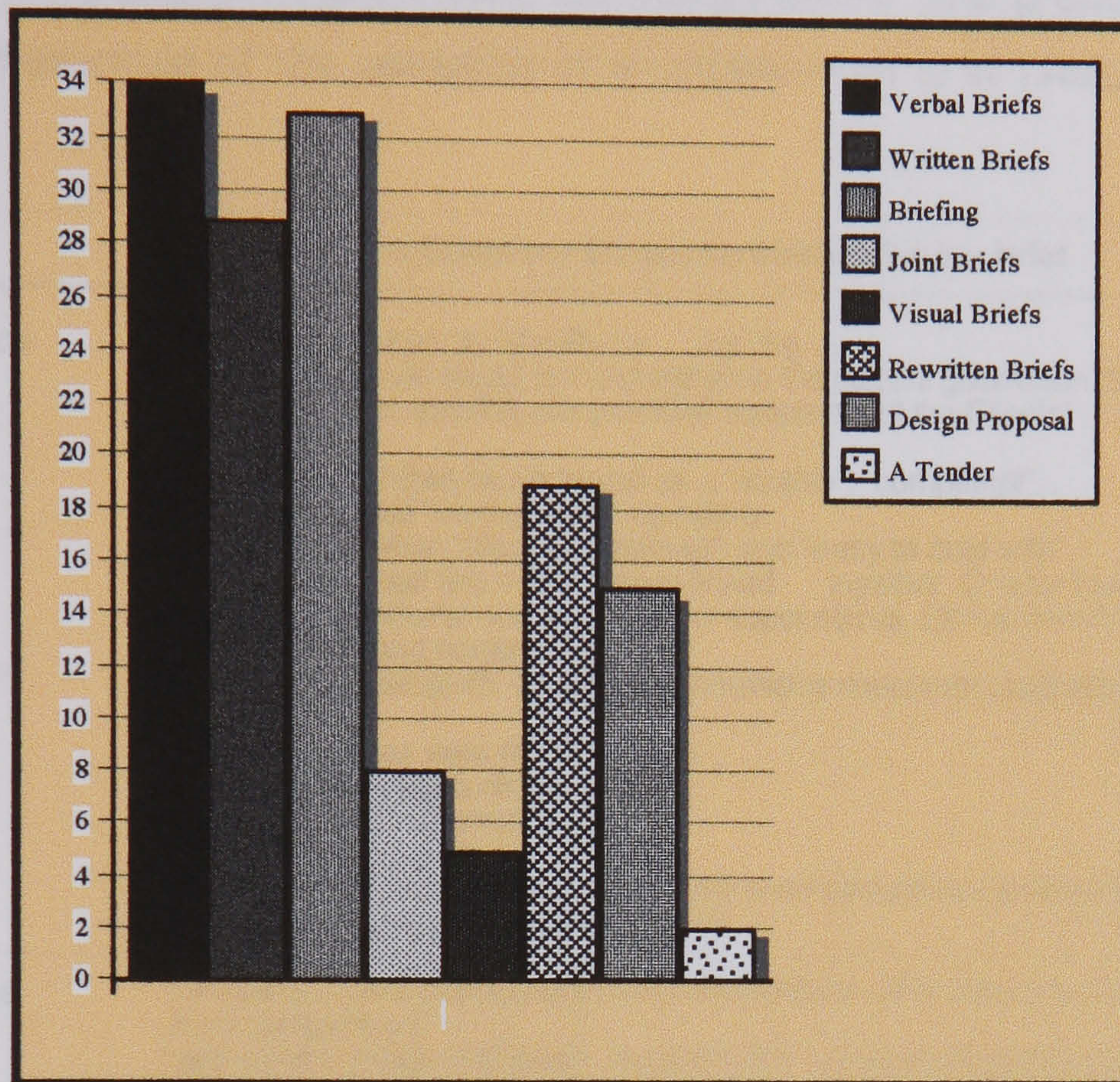


CHART 3.1: RELATIVE FREQUENCY OF BRIEFING TYPES

The majority of the designers considered that the criteria and approaches of what they had to do were established in the design briefs and discussed with the PO, and that all what they needed was to find the creative idea (Shawn Dew, 1998; David Mecwy; Simon Shaw; Ali Osman; Greg Vallance; Alex Quero; David Caines; Bill Wicham). Most of the designers explained that identifying the need and interpreting it correctly at an early stage of their activities was essential for deciding their further activities (John Harvey; Shawn Dew; Simon Shaw; Marian Dalley; Jenny Brend; Tony Watts; Iain Crockart; Sue Pile; and others). Greg Vallance stated that the first stage was the most important. He said:

Because if you don't have the information you can't design it properly and if you don't design it properly there's no point rolling it out in the first place.

Some designers stated that they briefed their design team about the projects and its requirements. Some wrote for themselves checklist of key elements, and things they had to tackle (Ged Equi; Adrian Talbot; Ian Cockborn; Stuart Jeal; Ali Osman). In addition, necessary discussions were held among the designers to clarify any uncertainty about the design brief and the projects (Greg Vallance; William Redfern; John Harvey; Deborah Ford; Adrian Talbot; Ged Equi; Adel Nouman; Marian Dalley).

Most designers stated that they referred constantly to the design brief when they generated their design ideas. Ged Equi explained:

You have always got a starting point, which is your brief. You are always going down that certain path.

3.5.1.1 Examples of design briefs and Proposals

Most of the designers stated that the design briefs and proposals were strictly confidential. An example of the contents of a written brief is in TABLE (3.5).

An Electronics Company Corporate Identity Design brief	
1	<p>Introduction</p> <ul style="list-style-type: none"> • "To develop a corporate identity for ... and the • The identity should recognise and enhance the current goodwill in the ... names amongst existing and potential customers of the Clients' company. • The company should be portrayed as a "sizable", "competent", "progressive" and "professional" company. Which nevertheless "friendly", "human", and "easy to deal with". • The Company had two brand names linked together. One for home shopping customers, and the other for super stores. Stores were to feature both brand names. • Discoveries catalogues -introducing innovative consumer products of the home shopper. • Target audiences were of three types: <ol style="list-style-type: none"> a) home - shopping customers. b) Super stores customers c) Stores customers. d) professional and technical customers base through comprehensive mailorder catalogue and buyer guide.
2	<p>Objectives</p> <ul style="list-style-type: none"> • "To create a corporate identity which differentiates (the clients' brands) b from competitors" "and makes a clear statement regarding the nature of the company and its trading divisions."
3	<p>Format</p> <ul style="list-style-type: none"> • Corporate identity was to work in a variety of formats including signs, stationary, packaging, marketing literature, catalogue, in-store point of sale materials, electronics magazine, uniforms, calling cards, and vehicles.
4	<p>Target market</p> <ul style="list-style-type: none"> • Smaller trade and technical customers (e.g. home, educational establishment, etc) • Medium and large trade customers. • Non technical customers (e.g. customers interested in gadgets and household items.
5	<p>What the customer was to feel</p> <ul style="list-style-type: none"> • The company "is a trustworthy company which can be relied upon to provide quality products, services and value for money.
6	<p>Practical and /or Legal requirements</p> <ul style="list-style-type: none"> • Identity was to be simplistic single or two colour device which is easily read. • Red and blue remain the preferred colours with red the traditional corporate colour. • The logos of each brands were used according to the divisions of the markets. • The slogan : "Electronics and beyond " was to be used for stores • The slogan: "The world of Electronics and beyond" was to be used for super stores. • The logos were to be usable on various formats and on the company's publications such as books and magazines. • The Differentiation from competitors was to be final.

TABLE 3.5: AN EXAMPLE OF A WRITTEN BRIEF FOR CORPORATE IDENTITY PROJECT

Some designers provided the researcher with some copies of design briefs and proposals. These briefs and proposals were no longer considered harmful to be discussed. But, it was suggested that the name of the clients of the projects remained

anonymous. Some designers omitted particular items of the proposal which they wished to remain confidential. An example taken from one of the design consultancies is in TABLE (3.6). The information in the Table is slightly modified so that to fit the information which was required by some of the other consultancies which used written brief guidelines (CDT, CGI, Siebert Head, Partners, Interbrand, Ziggurat, Sears Davies, Crabtree Plan Hall Creatif, Barrow Parkhill, G.O & Brend).

Points To Ponder In The Design Brief

The market:	Size and growth trends in volume and value Major brands and market shares Distribution channels and characteristics. Regional and seasonal characteristics Existing research summaries
The brand	History, sizes, variants, distribution. Sales volume by sector/segment/ geographic/ outlet Brand share- previous, current, by volume and value Packaging. Prices (recommended, actual, trade). Key brand benefits Positioning statement
The consumer	Current / target audience profiles (demographic, geo-demographic). Description of information available on company database. Current perceptions of brand /company. Rational or emotional purchase. Usage motivations. Purchase motivations.
The trade	Major customers and number of outlet. Methods of display. Attitudes of display. Attitudes of promotions in-store, and to coupons. Delivery methods.
The salesforce	Structure Numbers Sector coverage Sales cycle
Past and current strategies	Marketing Advertising Promotional Pricing
Objective (s)	Consumer Trade Salesforce/ branch staff
Budget	Amount Clarifying inclusions and exclusions
Guidelines	Creative style Tone and manner Typeface Colours Production constraints. Packaging constraints (size variation and facility for carrying promotional communications).
Timing	Required start time and duration Packaging or other lead times Salesforce or branch staff briefing. Key accounts selling dates.

TABLE 3.6: AN EXAMPLE OF THE CONTENTS OF DESIGN BRIEFS

The structure of the design briefs and proposals were diverse, but the areas involved shared particular basic similarities. Most importantly the categories of the briefs and proposals were descriptive and some of them included systematic processes. The

majority of the designers stated that their consultancies had special formats or catalogues that explained the types of information which the designers needed to know before they start their potential design projects. Some designers stated that they had special formats that included a list of questions which the PO had to answer in the design briefs.

3.5.2 Processes for identifying the need

An essential part of identifying the needs was the outcome of the processes of discussing, developing, and approving the design briefs and proposals. The other part was achieved through the following: 1) processes of graphic exploration and form making, 2) visual presentation and feedback. Identifying the needs for particular projects involved long processes. These processes were modified according to the projects and the required design disciplines. The criteria for identifying the need differed according to the requirements and objectives of the projects. Most of the designers explained that they identified the need by analysing, interpreting, and seeking effective approaches for meeting the requirements and the projects' objectives. In addition, most of the designers stated that they referred to the briefs all the time during their activities.

The designers of the design consultancies, Friends of The Earth, Greenpeace, and Saudi Research and Marketing adopted various approaches for identifying the need. Most of these approaches were controlled by the strategies and objectives of each organisation. Also, there were some similarities among these various group in respect of individual activities. In addition, processes for identifying the need for packaging, exhibition, corporate, prints, signage, and retail design projects comprised particular considerations for each design discipline.

Most designers stated that identifying the need for a particular project was not a straightforward matter. It had to go through various processes and to overcome various problems and difficulties. In addition, these processes varied and showed various aspects of diversity. During the processes of identifying the need of a project, most designers contributed to the development of the particular need. The designers explained that, sometimes, the POs knew that they had a problem, but they did not know exactly how to identify it. William Redfern stated:

The client normally comes along with an idea of what they want and usually have examples of what has either been produced before or something similar. They will bring along what they think they want and sometimes we might say that's exactly what you don't want. You really want something quite different. It just depends.

Also, some designers stated that when the PO did not recognise the actual need, the designers contributed to identifying the need for them. Some designers stated that they became more involved in helping to evaluate effective design rather than aesthetic

design. In addition, identifying the need involved reviewing and understanding related documents and procedures and related projects. Also it included understanding the competing market of the particular projects. Some of designers stated that they tried to know as much as they could about the project (Clive Colledge; Greg Vallance; Marian Dalley; Jenny Brend; William Redfern; Adrian Talbot; Alex Quero; Peter Widdup; Ged Equi; and others).

The designers applied various approaches when identifying the need. Some of these approaches were: a) asking the PO members the right questions, b) challenging the design briefs, c) making sure that the PO understood their particular need, d) carrying out personal research, e) pointing out problems that the PO was not aware of or did not consider seriously, f) suggesting more effective requirements than that which the PO considered for the particular project, g) trying to convince the PO to accept their views. Most of the designers explained that they needed to discuss the design brief with the PO to find out if they both had the same understanding of the design objectives. Clive Colledge said:

It is my responsibility to ask the questions... and usually what the person wants, is not what they are saying they want. You have to ask more questions, you have to find out what the problem is, what it is that they want to solve, and usually it is not the obvious one, and you have to keep going.

Some designers stated that in order to clarify the need, they generated design ideas and showed them to their PO so that the PO were able to be more clear about their actual need. William Redfern explained:

We sometimes have to design an idea, or put forward ideas for the client to say no that's not what I wanted but the client doesn't understand because the client isn't visually literate and understands himself or herself. So we almost have to design for the client to say no that's not what I meant in order for the client to understand what he does mean.

Paul Davies stated:

Sometimes you have to present work to the client for the client to say that it's not right and to give a clearer picture of what the client actually wants.

The outcome of identifying the need allowed designers to establish particular criteria for the processes of selecting visual sources. The designers identified the needs for particular projects from various information. Some designers stated that there were two types of information: specific and general. Specific information was the information which was included in the text of the design project. While general information was about everything related to the project. The need varied for each project. The diversity of the need was due to various factors. David Mecwy explained aspects related to the need:

Classically you have to say what is it we are attempting to use design to solve? What is the problem we're trying to solve? If we can agree what the problem is fundamentally, then one of the appropriate media to use in order to most effectively solve that problem, and at that same time given an understanding of the likely budget that the client is prepared to commit to a project what would be the most effective way

of spending the client's money.

According to some designers, most of the processes and activities for identifying the need for the projects were discussed and decided before the designers started their design drawings. The majority of the designers explained that these processes were described in the design briefs or proposals and were broke down into stages. William Redfern stated:

We always try and break every job down into stages so that we know quite how much to produce in a set amount of time, so that we don't try and do too much too soon without the approval of the client.

Some designers, who did not have detailed briefs, or who received only verbal briefs, and who did not write design proposals, stated that they identified the needs after they did their own research and discussed it with their PO. Even when the processes of identifying the need were organised systematically, the activities within these processes depended on how the designers approached these processes. The majority of the design briefs and proposal identified processes and criteria, but it was up to designers to decide where and how to start their activities. Bell Wicham stated:

Greenpeace is very good at disseminating its information. Basically their checks that they give us is fairly finalised and we are just asked to put that into a visual form really.

Most designers and especially the designers who designed packaging, prints and corporate identity tested their projects before taking them to production stage (Paul Davies; Shawn Dew; John Harvey; Tony Watts; Marian Dalley; David Caines; Ged Equi; and others) Also, some designers did not mention whether or not they tested their projects before they took them to the production stage. In addition, one designer mentioned that they did not test their projects in public before launching their projects (Alex Quero).

The processes of identifying the need involved a composite list of various procedures. The list of procedures was not applied by the majority of the designers in the same order, or included always the same activities. The outline of the various procedures can be grouped under nine categories with sub-categories (TABLES: 3.7.1, 3.7.2, 3.7.3). The expressions most, majority, and some are used to represent the frequency mention of each activity. The expression 'Visual sample' used in TABLE (3.7.1) 'Stage two' meant : A visual source that was selected for comparing criteria and key elements for further selection, or for differing images of further selection of visual sources. The designers from Saudi Research and Marketing, and from Friends of the Earth had less formal presentation sessions. Examples of how some designers divided the design process into stages are in TABLE (3.8).

- Stage one: Substantial outlines**
- Understanding, and approving the design briefs. (Most)
 - Reviewing the accompanied documents. (Most)
 - Identifying the project and its area. (Most)
 - Identifying the various types of function of the design. (Most)
 - Identifying the budget. (Most)
 - Identifying the start and deadlines of the projects. (Most)
 - Identifying and describing the design objectives and requirements. (Most)
 - Identifying the specific conditions and the potential ones. (Most)
- Stage two: Planning and research**
- Deciding strategic approaches for collecting and searching information. (Majority)
 - Conducting relevant survey to the area of the project within its local or international environment. (Most)
 - Collecting visual samples about relative areas to the project. (Most)
 - Collecting visual samples of the competitors' work. (Majority)
- Stage three: Analyses and findings**
- Analysing the given and the researched information. (Most)
 - Seeking to identify problems and opportunities from the findings. (Most)
 - Analysing the visual samples. (Majority)
 - Comparing samples against each other. (Majority)
 - Identifying point of weakness and strength of each visual sample. (Majority)
 - Identifying potential visual sources. (Most)

TABLE 3.7.1: STAGES AND PROCESSES OF IDENTIFYING THE NEED

- Stage four: Evaluation**
- Testing the findings of the field study investigations in the particular environment of the project. (Some)
 - Testing the findings of the visual samples in the particular market, or environments. (Some)
 - Testing the visual sources against the cultural perception of the target audience. (Majority)
 - Evaluating the results of the tests. (Majority)
 - Testing the final design project before production. (Most)
 - Making the necessary modifications based on evaluation. (Most)
- Stage five: Establishing criteria**
- Establishing criteria for key elements for each of the following: 1) The project, 2) The target audience, 3) The competitors. (Most)
 - Briefing the key elements of visual samples to the design team. (Most)
 - Considering the visual elements of the names of brands, signs, or the names of the clients' companies. (Most)
 - Differing image associations and target audience perceptions of colours shapes, and modes within relative markets and environments. (Most)
 - Considering the ways of differentiating visual elements of the names of brands or clients' companies from those of the competitors. (Most)
 - Considering the following criteria for the brand name, name of clients' house, or headlines: "1) legibility, 2) pronounceability, 3) memorability / retention, 4) suitability, 5) matching the brief." (Most)
- Stage six: Graphic investigation**
- Exploring wide range of design possibilities, utilising hand drawings, colour schemes, layouts, models, photomontage, collage, mixtures of drawing and clipping, computer aided design systems. (Most)
 - Searching, gathering, and selecting visual sources and variation of visual information for initial design ideas. (Most)
 - Selecting visual sources for creating mood boards. (Most)
 - Narrowing down design possibilities. (Most)
 - Selecting a number of design ideas that had higher potential. (Most)
 - Exercising all viable areas of design direction. (Majority)
 - Understanding the rationale behind the selection processes. (Majority)
 - Testing selected design possibilities in the actual market or environments. (Majority)
 - Considering necessary modifications for criteria. (Most)
 - Considering appropriate visual styles. (Most)
 - Considering possible technological and traditional techniques and devices for executing the design imagery. (Most)

TABLE 3.7.2: STAGES AND PROCESSES OF IDENTIFYING THE NEED

<p>Stage seven: First presentation</p> <ul style="list-style-type: none"> • Determining the place, date, and time of the presentation. (Majority) • Deciding the formats and means for presenting visual sources. (Most) • Considering the use of a range of visual sources for identifying uncertainty about the clients' visual preferences. (Majority) • Considering the use of a range of visual sources for identifying visual references or styles, and visual techniques. (Most) • Deciding the formats of presenting the potential design possibilities. (Majority) • Presenting the analyses approaches and findings of the investigation. (Majority) • Presenting results of tests and evaluations. (Majority) • Discussing and identifying visual relevancy of visual sources. (Most) • Discussing the key elements of the visual samples with clients during presentation for supporting the design argument. (Most) • Comparing the design possibilities with the work of the competitors during the presentation. (Majority) • Discussing potential adaptation of visual sources. (Most) • Discussing potential modifications of criteria. (Most) • Supporting the design argument with visual evidence. (Most) • Considering the need for further research if any. (Some - Sometimes) • Identifying the selected designs that showed most promise to be progressed from working to rough / layouts to more highly finished 2D imagery or 3D mockups. (Most) • Determining date and time of next presentation. (Most)
<p>Stage eight: Feedback and evaluation.</p> <ul style="list-style-type: none"> • Analysing feedback. (Most) • Considering necessary modification and changes of design possibilities, visual sources, and criteria for selection based on feedback. (Most) • Considering feedback suggestions. (Most) • Evaluating the results of feedback. (Most) • Moving to next stage. (Most)
<p>Stage nine: Design concept development:</p> <ul style="list-style-type: none"> • Implementing required changes on the selected design drawings. (Most) • Narrowing down and working on the selected design concept. (Most) • Selecting specific visual references for crafting and implementing visual information for the designs. (Most) • Preparing for next presentation. (Most)

TABLE 3.7.3: STAGES AND PROCESSES OF IDENTIFYING THE NEED

Designers	Stages Of The Design Process
Crockart	<ol style="list-style-type: none"> 1) Appointment, 2) Gathering Information 3) The design Idea 4) Development 5) Finished Artwork 6) Print Supervision
F. Butler	<ol style="list-style-type: none"> 1) Research and Draft Concept Alternatives 2) Design Development 3) Photography 4) Final Design 5) Artwork 6) Proof Stage
D. Ford	<ol style="list-style-type: none"> 1) Brief : Define aims . 2) Design: Design presentation, Design Development 3) Production: Typesetting, Photography /Illustration, Authors, Correction. 4) Print: Colour Proofing , Printing , Distribution
A. Osman	<ol style="list-style-type: none"> 1) Brief 2) Gathering Visual Sources 3) Design Idea 4) Design Approval 5) Design Development 6) Artwork 7) Print
M. Kahil	<ol style="list-style-type: none"> 1) Visual Idea 2) Drawing 3) Gathering visual Sources 4) Design Development 5) Artwork 6) Prints

TABLE 3.8: EXAMPLES OF STAGES OF THE DESIGN PROCESS

3.6 Stages of design ideas

Most designers indicated that design ideas involved various processes, and they were explored, developed, refined, and executed over various periods of time (Greg Vallance; Adrian Talbot; Ged Equi; Sue Pile; Paul Davies; Tony Watts; Alex Quero; Bell Wicham; David Caines; John Harvey; Ian Cockborn; Iain Crockart; Adel Nouman; Ali Osman; and others). The designers broke down these processes into various stages.

Most designers stated that the number of stages depended on the nature of the projects. Some designers stated that taking a photograph of something can be a stage. Iain Hunderson stated, "There can be a hundred stages." Peter Widdup stated, "It could be one it could be fifteen." Adrian Talbot stated that the whole activities were part of a continuous process. The majority of the designers explained why they broke down their job into stages. William Redfern stated:

We always try and break every job down into stages so that we know quite how much to produce in a set amount of time, so that we don't try and do too much too soon without the approval of the client.

Peter Widdup explained that breaking down the processes of design ideas into stages was important for the evaluation and refining of ideas. He said:

Sometimes if you present the idea in a too finished form a client will look at it and judge it and assume it is finished. At that point if you want to refine the design it is very difficult to do that. So I think there ought to be a minimum of two stages. One is what the idea is, and the second is then how that idea can actually be tightened up and physically drawn. So two would be a minimum.

Marian Dalley stated:

It really has to be flexible because it has to depend on the size of the project and what the demands are of the project. Some go quickly and others take a long time. Years.

The major stages of design ideas can be grouped under the following categories: 1) Graphic investigation, 2) Design concept development, 3) design concept refinement, 4) artwork stage, 5) colour separation, 6) production. Each of these stages involved various numbers of sub-stages. Most designers stated that between the various stages they showed, discussed, and evaluated their design ideas with their PO.

3.6.1 Graphic investigation and design ideas

The designers stated in various ways that they had to generate design ideas for their projects. Generating design ideas involved coming up with design ideas unless particular ideas were suggested by the POs. The term 'graphic investigation' was found useful to describe the experimental and visual nature of initial design ideas. In addition, many of the preliminary approaches, methods, and techniques were adopted for experimental reasons. In addition, the initial design ideas remained experimental throughout this stage. Actually, the processes from the stage of generating initial design ideas to the stage of image creation can be considered to involve various aspects

of graphic investigation, experimental attempts, and syntheses. But, graphic investigation activities were at their extreme during exploring initial design ideas. Some designers stated that, on rare occasions, their whole ideas were rejected by their PO, and they had to start again. The sources of design ideas varied and overlapped. These sources can be grouped under the following categories: 1) mental sources, 2) visual sources, 3) verbal sources, 4) written sources, 5) discussions, 6) documents, 7) sense data and cognitive and perceptual processes. Most designers stated that at the graphic investigation stage, initial design ideas were mainly from mental sources.

Coming up with initial design ideas involved exploring various design possibilities and producing visual marks on potential design surfaces such as; papers, illustration boards, and computer's screens. Most designers used pencils and pen markers for drawing. Some used digital tools. Most designers stated that generating design ideas was the outcome of various attempts of conjecture and refutation. Ged Equi explained:

You work on paper and you sketch a few ideas. Sometimes it is right and other times you are not quite sure. But you do not really know and that might take a day before you realise that it does not really work in the context that you need it to work in... So you have to step back from things every now and then and make sure that you are doing what you are supposed to be doing and stretching things as far as possible.

Alex Quero explained:

We explore and develop a different range of ideas. Sketching on paper. Looking at a whole range of possibilities. I will draw on my pad. I will sketch something and more sketches and follow an idea through and it's maybe just an initial response.

Diversity of design ideas can be considered to be increased every time the designers explored more ideas, introduced more thoughts, integrated thoughts together, and created more sketches. From diversity of design ideas, most designers selected some. The designers' selection at this stage was within the experimental realm and was not final because the PO had to make the final decision.

Marian Dalley stated, "Always trying to get an idea into the work." Iain Hunderson stated that without a design idea the designer had nothing. He said:

The design idea has to be the most difficult - the creative leap from the envisaged bit of the process, because without that you'd have nothing.

The design concept had various aspects each of which can be distinguished by itself as a property. The major aspect of the design concept can be described as the syntheses of visual ideas about various aspects of requirements and objectives into one composition. Three major properties about the design concept were identified. They can be described as the following: 1) a particular outcome of a competing group of ideas, 2) a process that developed over time under particular conditions to achieve particular objectives, 3) a process that required testing, evaluating and feeding back. In addition, the design concept can be described: a composition of visual ideas that

intrigued, interacted, and unified together to satisfy particular purposes, and constituted the underlying structure of a particular design.

Some designers described the design concept as a process. Alex Quero stated, "It is a process of dialogue and discussion." The majority of the designers started their design concepts by sketching ideas. Some designers stated that they spent some time thinking and writing down some ideas before they started visualising. Some designers stated that they started their ideas by selecting images, combined them together, and tried various ways to present their design concepts. Most designers stated that they narrowed down their design possibility after exploring various initial ideas. John Harvey stated:

We might come up with 50 ideas and then nail them down to 3 - work on them a bit more, then narrow it down to one.

Simon Shaw stated:

Obviously we'll try and solve that problem in say three or four very different ways. It's still the same solution. We try different solutions ranging from a safe route probably to a completely radical route.

Most designers indicated that they had to produce sound evidence to convince their PO that the design ideas were appropriate for fulfilling the needs and requirements for each project (Tony Watts; Greg Vallance; Marian Dalley; William Redfern; Finn Butler; Ged Equi; Iain Crockart; Paul Davies; Barry Lowenhoff; Peter Widdup; Peter Barrow; and others). Explanations about how some designers used their initial ideas for identifying the needs are discussed in section (3.5.2). Also, the major activities that took place during the graphic investigation stage are mentioned in section (3.5.2).

Simon Shaw stated: "We're always trying to be a little bit more adventurous with design." Ged Equi explained:

You will explore different concepts in different ways and pick different ideas to work on. But also in your own mind you always want to create something unique and creative. It is a mixture of lots of different things.

Marian Dalley explained that they tried original design ideas for relaunching existing projects. She said:

I think one is always trying to push things forward and answer the brief as well. You would want something more original about it. You would attempt to make it more of today rather than have to rely on pastiche or existing language in the market place.

The design concept was the infrastructure of the designs. Iain Hunderson claimed that design ideas were not able to be communicated before the designers started to design them. He said:

Until you have understood something no matter how complex, I don't believe that you can try and communicate it before you can start to design it.

Simon Shaw explained that the visual styles were not the design idea. He

indicated that various properties were linked together by the design idea. He said:

First and foremost I think what most of us try and do is actually try and have an idea in what we are doing to hang things on because typographies, styling colour ways, they are all fashionable things but if you have that core idea to bolt these things on to that idea is always going to be there.

Alex Quero explained that for the work they did for Greenpeace they had to synthesise negative and positive ideas in one concept. Paul Davies stated that looking at references stimulated the designers' thoughts, he said:

I just think you have to almost sit back and try and look at the idea from a very logical point of view and tackle it from a logical point of view as well. It's very easy to go off at a complete tangent and do something which is way off brief. You really have to take all these things on board and read the brief again. Look at references and then ideas will just start coming I think.

The majority of the designers stated that getting design concepts was the most important stage. Peter Widdup stated: "The concept, getting the ideas." Stewart Webber explained: "The design concept I'd say, coming up with the idea." Alex Quero stated: "The concept stage," Bell Wicham claimed: "The first - getting the right concept." William Redfern stated: "The first - getting the right concept." The majority of the designers stated that coming up with design ideas started with scribbling and sketching a number of ideas. Some designers stated that they started by thinking loud and exchanging ideas. Some preferred to think alone and discussed their thoughts later on with their design colleagues. Some designers had creative meetings and used brain storming methods, exchanged ideas or suggested a variety of visual interpretations. Some started their own search for visual sources. Some designers stated that they liked to think and write down their thoughts before they started producing visual marks. Some designers started by thinking and producing visual marks at the same time. Some designers stated that they started generating ideas by thinking and looking at visual sources. According to Bell Wicham :

I interpret the given information into visual information by a process. First of all I like to think about it before writing anything down. Then perhaps do some sketches.

Greg Vallance explained what took place during the generation of initial design ideas by a team (QUOTATION: 3.1).

"We then enter into the creative process whereby a team of designers is assigned, we then, each of them go off in their own directions for a given amount of time, try different creative solutions, as much as they can do within a given period of time. ...It's about ideas generation and it's about refinement of those ideas as well. So initially the idea generation is very broad in its scope and then we have internal critique sessions and judging sessions if you like that narrow down the routes to the ones that are most appropriate and these internal sessions include the marketing people here as well so that you know the objectives from the strategic side are being met as well as the creative objectives, until a point when we feel that we can go to a client and say, we need a work session now to have a look at where we're going, just to let you get a feel about how we're feeling about these things and then we'll make a recommendation, a small selection to say, now these are the ones we believe are worth pursuing but you need to judge in your given criteria which one best fits the bill. We've got an opinion if you want to hear it but it's for you to decide ultimately. So really those are the next steps, per se." Greg Vallance:

QUOTATION 3.9: INITIAL IDEA GENERATION STAGE

3.6.1.1 Design Options

Each design option was a design concept that addressed a particular need and met specific requirements in a different visual and strategic way. The visual differences between the design options for one project can be seen in relation to the following issues 1) the idea of each option, 2) the properties and contents of the selected visual materials, 3) the composition of the concept, 4) a suggestion of a particular technique for visual representation, 5) the potential design route, 6) the strategic criteria of the option. In addition, the positioning of a brand which involved visual and strategic consideration was involved in the design options for packaging.

The possibility of creating various design options for a particular need showed the following: 1) there were varying ways to address a particular need, 2) various visual alternatives were compared against each other for finding out which one matched best the particular need, 3) the option which was considered to fit the need best was chosen. The number of the design options ranged between one to fifty. Most designers stated that they created over thirty ideas, but they selected the best of them to show their PO. The options were presented to the PO, discussed, and one of them was chosen. The number of design options was based on two factors: 1) economic conditions, 2) the nature of the projects. According to most designers, the allocated budget and deadlines for each project played part in how many options the designers created and showed to their PO. Finn Butler stated:

It depends. I would say 3 is a good number. There may be more than that if the costs is not a real consideration.

According to most designers the number of the options was also related to the nature of the project and its design discipline. David Spencer stated:

Usually you show them 2, sometimes 3 concepts. But if new to the area; something like cigarette designing then you show 20 or 30 designs because we are dealing with such subtle areas. But usually when you are dealing with broad concept then one or two designs is usually enough.

Most designers stated that they used design options as a method for narrowing down their design focus (Stewart Webber; Simon Shaw; Alex Quero; Greg Vallance; Paul Davies; Peter Widdup; Barry Lowenhoff; Ged Equi; Ali Osman; Adel Nouman; Jenny Brend; David Mecwy; David Spencer; Jon Ellery; Iain Cockborn; Stuart Jeal). Some designers stated that they tended to show one or two options if necessary because presenting various options confused their PO. Most designers stated that sometimes they combined elements from various options and created a particular design concept that met a particular need. The majority of the designers stated that the average number of options was between three to five. Some designers stated it was between three to ten. Paul Davies stated, "We tend to show between three and ten, but it depends on the project." Some designers stated it was one to three options. Some designers

stated that for packaging designs they created thirty to fifty options. Adrian Talbot stated "It depends on the client. Again anything from 1 to 4 / 5." John Harvey stated that showing the PO many options consumed longer time and confused their PO. New project development required more options than repackaging projects. Packaging required more options than corporate identity and prints projects. Also, big projects allowed more options than small projects. Excerpts from the designers' discussions of design options are in QUOTATION (3.2).

G. Vallance	"It varies according to the type of work. If you're talking about NPD, new product development, you may put up 10, 15, 20 options. If you're talking packaging you tend to put up you know 3, 4, 6 options and when you're talking print you tend to put up 2 or 3 options, because the scale of what you have to do is that much more. You make up options for front cover designs. The corporate's sort of a mix between the two. You tend to give three or four options on the corporate side of things as well because it's a fairly hefty investment when it comes to corporate application so you can't expect them to make a decision on just one. But then there are always interpretations that go beyond just the limits of what you've already done."
J. Harvey	"We would show the client one. If we think we have 3 brilliant ones we would probably show them one and then show them the other two ideas."
D. Mecwy	"One option wherever possible because most clients would like to understand the rationale and don't want to make the choice. They want to be guided and I think you can do yourself a disservice where you produce too many directions because the client becomes confused, that's my feeling."
B. Lowenhoff	"Usually we show 3 options. We tend to try to adopt a mid distance and a far distance approach. Usually, it is our policy to cover quite a wide span of approaches. Maybe use things that they hadn't thought off that they can consider. Sometimes it is a question of putting something out of one and putting it into another route."
P. Widdup	"The number of options is limitless. The number of recommendation will be where we think logically and so the number of options could be two or three, sometimes it could be just one."
St. Webber	"It all depends on the sort of money that we have got to do the job. I probably would not go in with anything less than three different ways."
S. Dew	"Sometimes you tell a client, 'your budget can do this, but we really think you ought to spend a little bit more and do it like that.' We'll give them the option."
S. Jeal	"it is usually quite open because what you are trying to do is give a client a broad range of ideas and so it is not very specific. That is obviously the first stage and then it is obviously channelled."
G. Equi	"Obviously when you come to your first presentation you present as wide a spectrum of ideas as possible. You know in your mind that they are completely aware that they are too far but you need to sometimes stretch the client into knowing and taking something different because they have lived with their name or their brand for x amount of years and it is very difficult to get them to see it in a different way."

QUOTATION 3.2: EXAMPLES OF THE DESIGNERS' OPINIONS ABOUT DESIGN OPTIONS

3.6.2 Visual sources and design ideas

The visual sources as sources of design ideas were discussed by some designers. Also, design ideas as visual sources were considered by the majority of the designers. In addition, some designers were in the middle; both ideas and visual sources were sometimes the sources of each other. Some designers stated that they generated their design ideas from their visual sources. Paul Davies explained:

There are many thousands of books where you can select your ideas, and to get your visual sources from.

Simon Pandry pointed out:

Other times we might just see an illustration in a book and that sparks off something, an idea... Also it can be just for inspiration.

The majority of the designers claimed that first they had particular ideas in their minds and then they looked for certain visual references. Adrian Talbot stated:

To think about something and then have a clear idea before you refer to visual sources otherwise - visual sources are so instant that they are able to communicate easily and you can be easily sidetracked by visual sources. I think it is best to have a written or mental idea of what you want before resorting to visual sources.

Iain Hunderson stated that their imagination controlled their design imagery and not the tools that they used for creating them. He said:

Ultimately I think it is the imagination which controls the imagery not the way you express it hopefully.

Michael Bronfield indicated that his visual sources depended on the design concepts. Most designers explained that some visual sources were sources of inspiration, references of design styles and solutions. Ged Equi indicated:

We are constantly referring to books when we are going through the design process. We will have loads of books about absolutely nothing to do with the subject we may be doing. If we are doing an identity for the barber shop and you may be looking at an architectural book but it may have some form or some symmetry in the design which may have some source of visual reference and you could take the style or feel of something and so you are constantly looking and referring.

The majority of the designers stated that they looked at particular sources such as the clients' competitors and the designers' competitors for clearing up their minds. Some designers explained that they looked at the work of the competitors so that they did not repeat the same mistakes. Some designers stated that they looked at the competitors work to identify key elements and establish criteria for comparisons. Some designers stated that their initial visual ideas came out from their research and visual investigation (David Mecwy; Tony Watts; Shawn Dew; Marian Dalley; Ged Equi).

3.6.3 Visual ideas from verbal and written statements

The designers interpreted their written, verbal, and visual information in various ways. Most designers stated that they translated their information into visual ideas by a process. Examples of the designers' explanations are in QUOTATION (3.3).

S. Webber	"We verbalise in some way where we can. We all think pretty visually."
T. Watts	"Translating the written word into a visual source is the most difficult and that is what the creative people are best at doing."
A. Talbot	"When you are reading you go through all the usual thoughts of trying to come up with source of an idea for a logo."
D. Mecwy	"Our original initial visual ideas come from a combination of research material which we hold here, which we receive from the client and which we also subsequently go out and research ourselves."
I. Crockart	"The whole idea is that when you go back to the beginning, is when you go back to the brief you go to the narrow path, it means you don't have to go from side to side and then get it wrong. You have to get it clear. You know roughly where you go to get all this information from to get that point. You don't have to go through hundreds of thousands of different sources. you can do it pretty much as the feel and look of it - it is modern, classical, abstract, is it very neo, is it .. a laid approach. It all comes from this first brief."
A. Quero	"I read through and come with different range of ideas."

QUOTATION 3.3: VISUAL IDEAS AND VERBAL AND WRITTEN INFORMATION

3.6.4 The use of electronic systems and traditional techniques

The majority of designers used computers and computer related systems as tools for executing the final imagery. Some stated that they used computers for their presentation sessions to show the PO various possibilities. Some designers were completely against using computers at early stages. Peter Barrow explained: "We say that nobody goes to a Mac or a computer without having an idea. Computers don't give you ideas". Iain Hunderson stated that the use of computers involved both advantages and disadvantages. Ged Equi explained:

Traditional techniques we use all the time. Drawing and sketching is the most important thing for us at the design studio because we have to communicate the sort of visual ideas and graphics. I mean everyone in the studio can draw to a decent standard and maybe everyone in the studio can illustrate and visualise what they want to do whether that is with a pencil or magic markers or using crayons, or inks or stretching things on the photocopier - there is a whole host of things to do it.

Adrian Talbot stated:

I would say that we have got used to integrating the Mac into our working method and so it is just another tool. We are still open to all the old techniques as we are to the Mac.

The designers mentioned in percentage how much they used computers and other traditional techniques (TABLE: 3.9).

Designers	Traditional Techniques	Computers
Peter Barrow	95%	60-70%
Jenny Brend	20%	100%
Mike Bromfield	70%	100%
Finn Butler	30%	70%
David Caines	30%	95%
Ian Cockborn	20%	95%
Clive Colledge	40%	60%
Iain Crockart	70%	100%
Marian Dally	70%	20-99%
Paul Davies	30%	30-90%
Shawn Dew	40%	100%
Jon Ellery.	Impossible to say...	60%
Ged Equi	30%	40%
Deborah Ford	10-15%	90%
John Harvey	25-30%	90%
Iain Hunderson	Not possible to tell..	100%
Stuart Jeal	Quite heavily	80%
Mahmoud Kahil	100%	Zero
Barry Lowenhoff	40%	100%
David Mecwy	30%	30%
Ali Osman	20%	80%
Alex Quero	70%	10-95%
Simon Pandery	40%	70%
Sue Pile	30%	30-80%
Chandra Prince	40%	100%
William Redfern	30%	75%
Elaine Searle	30%	100%
Simon Shew	30%	100%
David Spencer	Very rare	95%
Adrian Talbot	40%	90%
Greg Vallance	50%	50%
Tony Watts	25%	75%
Stuart Webber	20%	80%
Peter Widdup	50%	100%
Valerie Wickes	40%	80%
Bell Wickham	10%	90%

TABLE 3.9: FREQUENCY OF THE USE OF TRADITIONAL AND MODERN TECHNIQUES

Some designers used computers and hand drawings at the same time. The majority of designers used computers for scanning images during the graphic investigation stage. The majority of the designers used computers beside other traditional tools during the design development stage. Some designers used sometimes computers for generating initial design ideas. The designers expressed various opinions about the use of modern technologies. Some of the designers' opinions are presented in QUOTATION (3.4).

I. Hunderson	"It gives the designers access to far more finished ways of visualising something. You can express your imagination more easily using those machines. ... There is the risk that because everyone uses the same tools you can get a kind of uniformity of overlook across things. But that is the problem of design and of the machine."
I. Crockart	"Never depend on it for an idea but completely depend on it purely for production. Computers are great for realising an idea. All the time for production but nothing for ideas."
G. Equi	"Nowadays, technology isn't a differentiator, everyone uses it. If you have a computer it is supposed to work, and should work and be the best. So you can't actually say that the computer is the best. You have to look a little bit deeper and they are more emotional values that you can build in the brand and give it more of a personality. That comes down to the more strategic thinking and that comes down to a brand pack form and visions of the future."

QUOTATION 3.4: THE DESIGNERS' OPINIONS ABOUT THE USE OF MODERN TECHNOLOGY

3.6.5 Methods for design exploration and visual selection

The designers adopted various methods to explore and develop their design concepts and their visual selection for their particular concepts. In other words, the various types of visual selection manifested themselves in the design concepts. Most of the methods and techniques for design exploration were related to the following: 1) drawing ideas 2) using mood boards, 3) using digital images and computers aided systems, 4) creating models, 5) photocopying images and using collage techniques, 6) creating photomontage form clippings, 7) scanning images on the computer and manipulating them. Some designers favoured a particular method, and some used various methods. Most designers used mood boards and models for the following: 1) as visual aids for identifying the visual properties, design route and visual representation of their projects, 2) as references for selecting visual information for idea generation and development.

Most importantly, the ways the designers used their particular methods showed that the designers selected particular ranges of visual information from their particular visual sources and adapted them to explore, develop, and modify their design concepts. In addition, the designers' explanations showed that the designers selected their visual information for their design concepts by processes of trial and error. Some designers stated that they started by sketching random ideas about the design problem, then they followed a particular idea or ideas through (Alex Quero; Mahmoud Kahil; Adrian Talbot; Simon Pandry; Ged Equi; Stewart Webber; Stuart Jeal; William

Redfern; Paul Davies; Tony Watts; David Spencer; Sue Pile; Jon Ellery; Barry Lowenhoff; David Mecwy). Most designers stated that they started with sketching ideas, then they referred to particular visual references to depict particular visual information about particular visual details, subject matters, forms, shapes, textures, colours, look, feeling, mood, and styles (Greg Vallance; Marian Dalley; William Redfern; Finn Butler; Simon Pandry). Alex Quero explained that they always started their design concepts by drawing sketches of their initial ideas, and then they referred to visual sources for particular details. He explained:

We use reference points for the shapes and subject matter until you have real references it is really important. Rather than what I think something looks like I want to know what it looks like not what I think it looks like.

Stewart Webber explained:

We would sketch down ideas and then we would talk and see the best way of getting that and we have got people who have been working a long time who will know where we can access the information from,... we will get the right visual material for the job.

Mahmoud Kahil explained:

I have to look at something that is needed. For instance if I need to draw an elephant I have to look at an elephant, and to see how it looks like.

Some designers used clippings from images in their drawings to explain their ideas to their clients. The majority of designers used photographs for developing their design concepts. These photographs were either taken specially for the particular projects by the designers or by the marketing researchers, or were selected from the designers' in-house references. In addition, most designers used photography for the final execution of their design imagery. But the adaptation of the photographs took place earlier in the process. Some designers referred to their photographs to interpret their design brief visually, and to decide which visual elements had to be taken into considerations when they wanted to create their design concepts. Most of the designers stated that they used the photographs only to develop ideas. Tony Watts explained:

Well we only use the photograph as an idea. We don't use it as the real thing. I mean for inspiration and then we would commission our own interpretation of the photograph. We would never use the photograph as it came.

Some designers said that they selected particular images from their references and created photomontages to explain to their PO how they visualised their projects. The majority of the designers explained that they created 3D models and photograph them to develop particular design concepts. Some designers selected particular images, scanned them on the computers by using Photoshop or Quark Express programs. Afterwards, they combined the images together, manipulated them to create the desired effects by changing the composition, the colours, or the styles. Afterwards they showed the produced image to the PO. Marian Dalley said:

If it is something that is 3D then we could photograph that and begin to manipulate that on the screen if that is the way that a particular designer works. Some designers might begin to drawing and manipulating things that way.

3.6.5.1 Mood Board Method

Based on the designers' descriptions the term mood board can be described as the following: a portable surface or surfaces that were specially designed for presenting particular images that reflected particular fashion, styles, looks, modes, ideas, relationships, emotions and feelings, subject matters, target audience, colour schemes, textures, and visual representation (illustration, and photography). In addition, some of them included 3D objects. The designers used various terms when they referred to the mood boards. Some designers called them "Image boards", some called them: "Workshops", and some used the term "mood Boards". Valerie Wickes defined the 'mood board':

It is basically a board that has on different pictures and maybe some colours and maybe textures and it is like a collage of different images and different feelings.

Most designers used mood boards as a visual aid to identify the need, criteria and requirements of the particular projects. Some designers used this method to involve their clients in making the choices of the types of visual information and the design route. William Redfern explained:

We do run workshops to ascertain, to get from the client where they think they are as a company. So the workshops are successful because they bring out key issues that we can then interpret into our design and we support that design, make it a lot easier for the clients to understand because they've generated most of the work that's gone into it. It's very successful.

The majority of the designers used this method to position the brand of a particular project within its market and to identify key issues about both the clients and the projects. Paul Davies explained:

We do mood boards to help us position the brand. We will collect some relevant images which we'll put on a board.

The majority of the designers indicated that they used the mood boards as a method for questioning and knowing exactly what the clients wanted (Peter Widdup; Greg Valance; Paul Davies; Iain Crockart; and others). This included the following: 1) how the clients visualised their projects, 2) how the clients think of their business, 3) what were the clients' visual tastes, 4) who was the target audience of the clients, 4) how the clients wanted to achieve their objectives visually. 5) what kind of visual moods the clients wanted, 6) what kinds of colours and shapes the clients preferred, 7) what kind of visual styles, techniques and visual representation the clients wanted such as illustrative, photographic, modern, classic, etc. 8) what sort of feel the clients wanted the communication objective to project. Most designers stated that they created particular mood boards for each project. William Redfern stated:

You try and suit the workshops to the individual company's needs because it's very important to involve them as a company in the visual stimulus that you present.

Some clients used this method to know more about their clients. According to David Spencer:

Quite often we use mood board. It can often help you to define who you are talking to and certainly understanding your target audience. It is very important especially if you are working in the centre of London, you are dealing with target audience that maybe outside your terms of reference, in terms of people who are working abroad.

Only one designer indicated that they used mood boards all the time before they started their design concepts in order to identify the need and the visual route (Peter Widdup). Most of the designers used mood boards when they presented their initial design concepts to their clients. These designers explained that they used mood boards alongside their design concepts, so that the clients were able to visualise the end result of the design concept. Some designers stated that they used mood boards before they started their design concepts for new clients, for big projects, and for new project development (NPD). Most of the designers stated that they selected the images for their mood boards from various visual sources. Most designers explained that they used clippings from magazines, photocopied pictures from books, photographed particular objects and products. Some designers claimed that they made models and photograph them, scanned the photographs on computers, manipulated them, then presented them in the mood boards. Most of the designers who used mood boards explained that most of the images they selected were led by the design brief. They added that some images were not related to the projects, but they presented particular modes, feelings, colour schemes, and textures. Most designers explained that they did not use the images of the mood boards in their actual projects. Some designers stated that they used some of the images for further use when the clients wanted the particular images and approved of buying the copyrights. Peter Widdup stated that each mood board of a particular workshop included a wide range of pictures and focused on a particular matter that the designers aimed to identify, solve or to satisfy. He added that the images reflected various types of modes, emotions, styles, looks, colour schemes, and images of potential target audiences, and types of communication. He explained that the designers were able to identify the needs and objectives of their clients because their clients were able to identify themselves with particular types of images.

3.7 Relevance of visual sources to projects

The relevance of visual sources to particular projects maintained wide ranges of diversity. There was not a simple equation to explain how particular visual sources were related to particular projects. Nevertheless, the designers' explanations

included particular key elements that showed how the designers decided the relevance of visual sources to their projects. The issue of relevance combined various factors. Some of these factors can be considered economic and some can be considered visual. More importantly the various issues of relevance were related specifically to the particular need and to its requirements.

3.7.1 The economic constraints of the need

The economic conditions involved the following: 1) budget, 2) deadlines including the deadlines allocated for each stage of the design processes. Budget and deadlines both involved money. Both of these elements influenced the availability of the visual source. The availability had to do sometimes with the budget and sometimes with both budget and deadlines. In addition, the economic constraints influenced the number of design options which the designers created at the design concept development stage. Most designers stated that the budget and deadlines had to do with the size and nature of the particular projects. The availability of the image was explained in relation to the PO. The majority of the designers asserted that the PO sometimes did not afford or did not want expensive images. In such cases the designers selected alternative visual sources and approaches. Iain Hunderson stated, "If you can't afford to go and take a photograph then you don't." Most of the designers stated that they had to work within these limitations when they selected their visual sources and created their design imagery for a specific need (QUOTATION:3.5).

F. Butler	"We found that time is very competitive on the fee side of things, the longer you take the more it will cost. The less likely the client is to actually commissioning the work so we always try and get the job done faster and cheaper. We try to be competitive on costs as well as producing the quality."
W. Redfern	"Personalities and time scales and budget. It's all relationship obstacles I think inevitably because they are all dependent on those relationships as to whether your client has given you enough time or enough money to do. Whether they decide it's worth what they expected to cost. Whether you can deliver it in the time and do it for the price that you said you were going to do it for. They are all limitation objects."
P. Barrow	"You cannot afford to send a photographer to 5 or 6 countries and so you will go to the photo libraries and pick out the photographs that you think have the feel of the Middle East or America. That is still cheaper than sending the photographer."
G. Vallance	"I say given period of time because there is a budget allocated to a job from the client and then from us to the design team, so that's broken down and allocated to people in terms of time. Now that time is spent in a variety of ways."
J. Harvey	"A lot of charities haven't got money. It can be much cheaper to commission illustrations than commission a whole photo shoot."
B. Wicham	"Green peace couldn't afford to go and send a photographer to go all around the world. We just had to use the ones that we had."

QUOTATION 3.5: EXAMPLES OF TYPES OF CONSTRAINTS

Also, most designers explained that budgets were justified according to what the designers had to do. Some designers claimed that sometimes they did not make profit because they thought that the projects were of particular importance for their portfolios. Some designers stated that expensive visual sources were not always necessary for their projects.

3.7.2 Considerations for visual relevance

There were major considerations related to the relevance of visual sources to the particular needs. The emphasis of these considerations varied. Also, the considerations were included in the design briefs, or discussed with the PO prior to the design exploration stage and during the first presentation of the design concepts. These considerations can be observed in relation to the following elements: 1) the nature and size of the projects including their historic background and their potential future, 2) the subject matter of the projects, 3) the target audience of the projects, 4) the communication objectives of the projects, 5) the competitors of the projects and the competing market, 6) the PO' types of interest, objectives, strategies and occupations.

Some designers stated that they looked at particular visual materials to know how other designers tackled similar needs (William Redfern; Peter Barrow; Adrian Talbot; Jon Ellery; Sue Pile; Valerie Wickes). The relevance of visual sources were based on specific surveys and was decided according to the particular needs. Most designers explained that the nature of their visual sources depended on the nature of their projects and their clients. The designers referred to various kinds of visual sources on the basis of various types of relevance (QUOTATION:3.6).

D. Spencer	"It all depends on the nature of the project. But you take in everything interpretive for the clients, TV advertising, Press advertising, the nature of the company, what the competition is doing."
P. Widdup	"They will be specific to the clients' needs. If it is a bank, if it is a motor manufacture it will be entirely different. So there is no metro source in a way. Especially if we are working with European clients we would look at all the European magazines business or whatever related."
S. Dew	"We might be going through all the relevant sector publications and using that kind of visual information."
J. Brend	"We have just done a brochure recently on a residential area, which is near a river and we needed lots of photographs of birds, therefore we went to reference libraries which specialised in birds."
J. Ellery	"Well on the creative side of things is to have an overview about what is appropriate for now, for the client and whether it is going to work."

QUOTATION 3.6: VISUAL SOURCES AND EXAMPLES OF TYPES OF RELEVANCE TO PROJECTS

3.7.2.1 The subject matter

The subject matters of the design projects varied. Based on the designers' descriptions, the subject matters can be classified under two categories: 1) tangible subject matters, 2) intangible subject matters. Both tangible and intangible subject matters were exposed to various kinds of visual interpretations. Most of the designers explained that tangible subject matters helped them to identify their projects, and were easier to identify (QUOTATION:3.7). According to most of the designers intangible subject matters were harder to define (QUOTATION: 3.8).

Both the tangible and intangible subject matters of the projects implied various types of visual information. Nevertheless, the projects which had tangible subject matters helped the designers to narrow down their search when they selected their visual information. The subject matters did not identify specifically the visual

sources but they included visual key elements that helped the designers concentrate on relevant areas based on visual links. Some subject matters had direct visual links with what they were about, and some they had not. In addition, the subject matters of some projects were relevant in some respects to each other especially when one project included sub projects. Also working in various subject matters in the same time provided some designers with feedback from one subject area to another.

P. Davies	<p>"It is quite easy to design a whisky label because you're designing for a very typical sort of area. The whisky label has probably got to look quite traditional, so that is not too difficult."</p> <p>"I think the subject matter is quite important. If it is a motor car then the subject matter probably should be illustrated or photographed so that it shows the car as a working vehicle. If it is an Aspirin that it would be good to have a symbol to look like it is relieving the agony or the pain. So the subject could help you to define the project."</p>
T. Watts	

QUOTATION 3.7: EXAMPLES OF THE DESIGNERS' OPINIONS ABOUT TANGIBLE SUBJECT MATTERS

P. Davies	<p>"When you're designing say a new toiletry product where it is a clean piece of paper and you've got to come up with say the brand name, the logo, and a visual graphic device of some sort, that's when it becomes harder."</p> <p>"Sometimes, the subject is so intangible that you are really almost creating the project as you go along. And asking the design group to use their creative minds to produce something which isn't around at the moment and doesn't exist."</p>
D. Spencer	

QUOTATION 3.8: EXAMPLES OF THE DESIGNERS' OPINIONS ABOUT INTANGIBLE SUBJECT MATTERS

Most designers stated that the subject matters of their projects were the main substance of what they designed. Iain Hunderson indicated that the subject matters were what the designers designed and communicated. Mahmoud Kahil explained, "The subject is very important for me, because sometimes this where I get my ideas." William Redfern stated that how they handled the subject matters depended on the subject matters themselves, he added: "It all depends on whether you're challenging the perception of that subject matter." The designers pointed out various issues regarding the contributes of subject matters to their designs (QUOTATION 3.9).

G. Vallance	<p>"The subject matter is the thing that you are designing. If you didn't have the subject matter you wouldn't be designing for it. So it contributes 100%."</p> <p>"I cannot change the subject matter. The subject matter is the issue so it contributes a 100% to the final thing. The final visual response to the subject matter is implicate within the subject matter."</p> <p>"In our case it is the main element. The subject matter is what the whole thing is about so it contributes 100% to the design"</p> <p>"You have to have a starting point and it needs to be information, we are normally commissioned to design something, to explain or represent a subject."</p>
A. Quero	
J. Harvey	
S. Pile	

QUOTATION 3.9: EXAMPLES OF THE RELEVANCE OF SUBJECT MATTERS TO PROJECTS

Most designers stated that the subject matter was neither an advantage or a disadvantage (Iain Hunderson; Greg Vallance; Alex Quero; William Redfern; Bell Wicham, and others). Sue Pile stated "It can be difficult or it can be easy. Normally it is advantageous as opposed to difficult." Some designers indicated that subject matters had bearing in how the designers approached their projects. William Redfern

explained,

It depends as to whether that is the key issue that the piece of work is based around. If it was a piece of literature promoting that product then the way that that is captured in imagery is absolutely key to the way that the literature would develop.

Mick Bronfield stated, "It offers direction and consistency." David Spencer stated, "Obviously it has a huge bearing on how we approach the project." Jon Ellery stated, "Well obviously different subject matters suggest different visual solutions." Adrian Talbot explained,

some subject matter obviously lends itself to good design. Other subject matter you struggle a bit with.

Some designers explained that dealing with subject matters sometimes were difficult because the clients were not visually literate. Simon Shaw explained that they tried to make ugly or boring subject matters appealing by making them looking interesting. Barry Lowenhoff stated that some subject matters were easier than other ones because some were very restrictive and technical. Adrian Talbot explained that how they used visual sources for logos and corporate identities depending on how they created visual links between the design and its subject matter. He also explained that it depended partly on how the clients reacted to the designs. Some designers stated that some subject matters were nicer to design than other ones, but each subject matter was important. Some designers stated that some subject matters were harder to deal with than others (QUOTATION:3.10).

I. Crockart	"I can remember some projects that have been so exciting that the ideas are just bursting to come and other ones that it is like 'pulling a tooth' It really hurts."
J. Brend	"If you get something that is interesting and more obvious then it makes it much easier. The most difficult things are abstract concepts which are very difficult to start off with any idea."
J. Ellery	"Obviously some subject matters are more restrictive or claustrophobic than others. Some are very tight and others very loose. Some are very corporate and others are less corporate which means that creatively some are more flexible than others."
D. Spencer	"Sometimes the subject matter is very constricting in what you can do with it and what you are being asked to do with it."

QUOTATION 3.10: EXAMPLES OF THE DESIGNERS' OPINIONS ABOUT THE COMPLEXITY OF SUBJECT MATTERS

3.7.2.2 The target audience

The target audiences of the projects were decided by the PO. According to most designers, big projects were accompanied by specific research about the target audience. Most designers stated that specific information about the target audience was included in the design briefs, and was searched and discussed by the PO and by the designers. Some designers stated that in very rare occasions they helped their clients to decide the target audience. The designers took into account various considerations about their target audiences when they selected their visual sources and created their design imagery. These considerations changed the ways the designers created their

design concepts and used their visual information. Iain Hunderson stated, "The audience changes what you do to a great extent." Most designers stated that they took into consideration the cultural background of the target audience when they created their design imagery. Ged Equi also discussed the cultural differences of the target audience and their impact on the meanings of the visual information. He stated that they addressed the target audience of the European countries in slightly different way. William Redfern stated that it was impossible for them to design something universally understood without running some risk unless they were aware of the cultural differences. Barry Lowenhoff stated that culture and traditions were important aspects when he designed for particular audiences. He explained that some cultures required conservative and expensive styles.

Some designers claimed that they designed their visual imagery according to their target audience. Finn Butler explained that they tried to understand the target audience in order to communicate their projects effectively. Stuart Webber explained that they took into consideration the information about the target audience before they started to visualise. Iain Crockart explained that a particular way of handling visual information was appropriate for particular audience but it was not appropriate for another audience. He made a comparison between children and adults.

David Caines explained that they designed according to particular criteria, made sure that the images were appropriate for their audience, and tested their designs. Alex Quero stated that they designed for the youth audience in an informal way, and they designed for campaign literature, delegates, or politicians in certain formality. John Harvey stated that they used a different visual tone of voice when they designed for different audiences. He added that they took into consideration the gender and the age of the audience when they designed. He explained that they used softer images for women than for male. Harvey added that they tested their designs to make sure that the audience was able to read and understand the designs.

William Redfern explained that the target audience and the subject matter were linked together by the perception which the clients wanted to achieved. Simon Pandry stated that different audience had different visual perception, and some visual aspects had different meanings in different countries. Some designers stated that particular projects which were associated with particular places allowed the designers to try and use visual sources and imagery from the culture and tradition of the people of these places. Greg Vallance explained that the way they addressed specific target audiences changed the image they used about the same products. He indicated that the behaviour of the target audience towards similar products but different packaging designs was not the same. He compared between the packaging designs of Stella Artois and Lager which were made from the same ingredients. He said:

The people who buy Stella Artois will never buy the one at 25p a can because they

don't want to be seen with it. Whereas the people with 25p a can know that they just want a Lager and they just want to pay as little as possible for it. The audiences totally govern the design board.

The designers gave various accounts of the links between target audiences and their use of visual sources (QUOTATION: 3.11).

A. Talbot	"You have to take into account culture. Culture does play a part. You do think about your prospective audience and the imagery. Graphically there are a lot of symbols that you can and cannot use in different parts of the world because they mean different things. That is all very important."
G. Equi	"Obviously you would have to take into account the cultural differences and the traditions. Obviously, in some countries the colours and shapes have different associations and meanings so it would be unwise for you to do something that would be confrontational in terms of colours and symbols. There are certain aspects that you need to consider. That is something that is written into the design brief."
W. Redfern	"The cultural divide has to be treated very sensitively and one image could be totally unsuitable for another country. If the initial brief was to mention that the identity worked worldwide but in specific countries, then we would have to be aware of what countries we were particularly aiming at, because I don't think you can produce something that is accepted universally worldwide without running into some trouble over colour or shape or wording unless you're made aware of it before you start."
B. Lowenhoff	"We always know the sort of audience in mind right from the beginning of the project. You're always thinking about them and how they're going to react to what you've done, whether the thing projects the right messages for that company. They are such serious documents that you have to get that bit right or you're out of business really."
I. Hunderson	"By trying to imagine their mind set and finding out what they think and therefore what will appeal to them."
I. Crockett	"It is this mental process that you go through in that you tick it off. Do not do this and do not do that. If you were designing a packaging for children pens you are not going to have an abstract and double photograph and layer and sticky tape because it is totally inappropriate. So you reject things on the way. The prospective audience has to be your prime matter. You can't deviate from that because of two things: one the project will undoubtedly fail and secondly you might not work with the client again."
G. Vallance	"Absolutely, there are many products which are called image driven products and there are many publications which are image driven and they are basically the same thing. I mean the newspapers, you take the Times and the Express and the target audiences are completely different. The layouts correspondent with the different bits but essentially they are giving the same information more or less in terms of news anyway. Packaging is much the same way."
S. Pandry	"It does change quite a lot. For example the German people have got a different idea of what is appetising than what the English people have, so you have to take those things into consideration. Even things like colour have got a different meanings in different countries so that changes the way you design as well."
P. Davies	"I'll talk about a cider project that we did. It's a French cider and it comes from Brittany, northwestern part of France so there's a very strong sort of Celtic imagery associated with that part of north western France. For instance, with Celtic imagery we can have a name like say 'Barbarian', because the Celts were effectively Barbarians, so that gives us ideas about things like shields and swords you know. So we have imagery of rustic rugged French fisherman and fishing trawlers. So that's another positioning."

QUOTATION 3.11: THE USE OF VISUAL SOURCES AND THE TARGET AUDIENCES

3.8 Visual selection¹

The designers explained in various ways that they selected their visual sources when they designed particular imagery for specific needs. Two kinds of selection were involved in what the designers did when they created their design imagery for particular needs and requirements. These two types of selection can be described under the following categories: 1) selection of visual sources, 2) selection of variation of visual information. The variations of visual information can be considered as visual inputs. Part of the designers' visual sources involved mental activities and included memory, imagination, and thought processes. This type of visual sources manifested itself through particular visual inputs, because the source was in the head of the

¹ Selection: Selection is a process that occurs when a variety of visual information is available and only particular ones are accepted to fit the particular need and its requirement.

designers. Also, the other types of visual sources included various types of visual inputs. The designers referred to both types of selection in various ways. The boundary between the two selections were overlapped. In addition, there were no particular orders of which of the two selections took place first. In addition, the relationship between the two selections was not one way approach. The selection of visual sources was necessary for the selection of visual inputs. In addition, the need for particular visual inputs was a reason for selecting particular visual sources. Most importantly, the designers stated in various ways that they selected particular things from their visual sources when they created their design imagery. Greg Vallance explained:

Certainly on packaging projects, it may well be that you need a flower on a pack of a deodorant, then you look at a flower, but you also look at pictures of flowers .

Most importantly, the designers did not adapt the visual sources they selected for their projects, but they adapted the visual inputs they selected from their visual sources. Most of the designers stated that they did not select the visual sources, but they selected from their visual sources particular visual elements and used them in combination with their ideas (Greg Vallance; Shawn Dew; Mahmoud Kahil; Valerie Wickes; Harvey; Adel Nouman; Quero;). The processes of selecting visual inputs included key elements that explained the processes of creating the design imagery. While the processes of selecting visual sources did not explain how the designers created their design imagery. Most designers explained that they selected particular visual things from their selected visual sources Paul Davies explained that the selected visual source was a means for an end, he said: "Usually it could be a finite bit of detail from an image which we use." The only exceptions were related to the designers who were asked to use particular pictures in their designs that were not art directed. These designers adapted the given pictures to meet the need (Ali Osman; Adel Nouman).

3.8.1 Processes of selecting visual sources and visual information

Verifying the processes of selecting visual sources and visual inputs was very critical because these processes involved two types of behaviours: 1) the functional behaviours of the designers which were about how the designers managed their processes of selecting their visual sources, 2) the behaviours of the designers as selectors which were involved how the designers selected and adapted the visual input. The designers justified why they adopted particular approaches. Some of these approaches had bearing on the selection processes and some had bearing on the conditions of the designers' accesses to particular visual sources. The answers to how the designers selected their variations of visual information involved two issues: 1) mental approaches for selection, 2) the selection as a process that required adaptation.

These two issues complemented each other and revealed how the designers matched their selection with the specific needs.

Based on the diversity of the designers' visual sources, and the diversity of how and when the designers recognised or stored particular visual inputs in their heads or in their libraries for potential needs, there was no specific time that indicated when the designers started their visual selection for their particular projects. However, the first manifestation of the visual selection for a particular need was seen around and during the design exploration and development stage. In addition, most designers used mode boards and models which helped the designers to create guidelines for selecting particular visual inputs, or to select from them particular visual inputs. The designers' explanations were varied between the general and the specific. In addition they presented similarities and differences. Most of the designers pursued collective approaches when they selected their varieties of visual information. These approaches included the following: 1) intuitively, 2) subconsciously, 3) following guidelines, 4) following specific recipes, 5) from a thought process about the particular design problem, 6) based on specific analysed and identified criteria for particular requirements and need, 9) based on a collective approaches, 10) accidentally, 11) the designers knew what they were looking for, 12) the designers had a feeling about the visual information. The designers expressed how they selected their visual sources and visual inputs according to how the selection occurred and according to the considerations they had when the selection took place.

Some designers asserted that they selected their visual inputs intuitively. Most designers stated that the processes of selecting visual inputs involved a combination of intuitive, and logical approaches. According to the majority of the designers logical approaches were based on various sets of criteria and visual interpretations of the needs. Intuitive approaches were based on feelings and thought processes about the particular needs and its criteria. Some designers stated that they selected according to the particular sets of criteria which they established with their PO. Most designers referred to more than one way of selection. Some designers stated that they had control over their visual selection. Some designers stated that they were aware of what they looked for. Some designers did not mention intuition, thought processes, and memory, but when they explained how they explored and developed their design concepts they indicated that thinking, visual interpretation, feelings about types of visual information, and ideas took place. Iain Hunderson indicated that the selection processes of visual sources involved largely intuitive activity. Jenny Brend stated that it was hard to explain how they selected their visual sources, and that there was not a quantitative way of describing that. She added that the selection was a process. Stuart Jeal stated, "Definitely I select and I think it is just a process." Some designers

explained that they had specific ideas about the needs and that they selected the appropriate visual inputs for those ideas (Mahmoud Kahil; Adrian Talbot; Paul Davies; Simon Pandary; Ali Osman; Greg Vallance; William Redfern). Adel Nouman stated:

You understand your project, then you select particular ingredients for your project, then you decide how much of each ingredient you need for your design. You modify colour, shape, and contents as you go along. It is similar to cooking a special meal in your kitchen.

Some designers stated that some of their selection happened accidentally while they were flicking through books or magazines or walking in the streets. Simon Pandry stated that they selected from various visual references particular styles and type faces by matching them with their designs. Tony Watts pointed out that visual sources were used for inspiration and references at the concept development stage, and that the actual visual sources they used were art directed and commissioned. Shawn Dew stated:

One of the things is actually I think you go out and you get as close to the kind of source of information as possible.

The frequency of the various types of selections based on the designers' explanations are in TABLE (3.10)

General ways of selecting visual sources & visual inputs	Frequency Mentioned (40 designers)
• Intuitively / Subconsciously/ By instinct / Spontaneously	Majority
• Knowing when something is the right sort.	Some
• Based on feeling / by inspiration.....	Majority
• It's difficult to describe.	Majority
• Knowing what one is looking for.	Majority
• Having in one's own mind what one is looking for.	Majority
• Based on a very clear and logical reason.....	Majority
• A combination of intuitive and logical reason.	Most
• Not knowing why, but it seems to have a purpose of it.	Some
• Find things that will say something to you	Some
• Synthesis of all that comes out of the mind for each job.	Majority
• Thinking about the Brief and requirements.....	Most
• Thinking about the brief and about a particular design.	Most
• According to the need / It has to be tailored to the clients needs.	Most
• Looking for the sorts of things that one has in own's mind.	Majority
• According to the brief and design concept	Most
• The designers are guided by a design.	Some
• Deciding that something is going to look in a certain way,	Majority
• Choosing the best way of reproducing that what supports the design.....	Most
• Based on the historic precedence for each type of product.	Most
• Translating the written word into a visual source.	Majority
• By trial and elimination.	Most
• Designing with specific objectives in mind.	Most
• Selecting whatever the designer thinks is useful.	Some
• Finding that precise imagery that you want to use.	Majority
• Finding the right picture to get across what the brief is.	Most
• By a process.	Most
• Accidentally, the designer finds something works well.....	Some
• Following a design idea through.	Majority
• There is no formula to it.	Some
• Depending on the design ideas	Most
• The purpose tends to suggest how it should finish up.	Majority
• In every different case there will be a different reason for selection.	Most
• According to the budget and availability of visual source	Most
• Trying various possibilities and selecting the ones that fit the need best.....	Most

TABLE 3.10: FREQUENCY OF VARIOUS TYPES OF VISUAL SELECTION

David Mecwy explained that identifying the need and deciding its criteria narrowed down the area of selection. Also, he indicated that the selection was from

diversity of visual sources and included various stages. He added that each stage involved diverse directions and required further decisions about the selection of visual inputs (QUOTATION: 3.12).

"Say we want to design a restaurant which looks like a Parisian cafe'. Then once we agree that this is a valid direction and that it fulfils the criteria that we've all defined, we might then well go out and go to libraries of different types, picture libraries, specialist archive libraries. We might then go to Paris and visit sites and record and photograph. In other words we assemble all the material which give us the raw ingredients for creating the answer. We understand and analyse from all that material what it is that makes a Paris cafe' look like a Paris cafe' and then we decide whether we're going to replicate that or whether we're going to take the spirit of it, and reinterpret it in a modern way. But we use history as a basis for moving forward." D. Mecwy

QUOTATION 3.12: EXAMPLE OF SELECTING VISUAL SOURCES AND INPUTS FOR A PARTICULAR NEED

- **Intuitive selection**

Some designers' explanations showed that the selection of visual inputs involved intuitive activities. Some of the designers' accounts of intuitive selection, are given in QUOTATION: (3.13).

I Hunderson	→	"Of course you select your visual sources. You do it largely intuitively and you choose whatever you feel is appropriate."
A. Talbot	→	"I don't know it is not specifically scientific. It is purely intuitive. You just have your own ideas that you think are right. I don't think I ever get that scientific about it, it is just that."
A. Quero	→	"I just pick up something and I don't know why but it seems to have a purpose of it."
S. Pandry	→	"It's all quite intuitive really. It's difficult to describe. You're thinking about the brief and about a particular design."
P. Widdup	→	"Instinct, you know when something is the right sort. There is no formula to it, and they will always be very different."
V. Wickes	→	"Sometimes you are not sure yourself but you know that it has some relevance. It is not always obvious."
I. Crockart	→	"It is innate behaviour for a designer to think that what they are doing and how to achieve the best for the client whatever the object is."
B. Wicham	→	"I have certain things that I like to refer to but it is mainly subconscious thing that I collect."

QUOTATION 3.13: INTUITIVE SELECTION

- **Selection based on thought process**

Most of the designers asserted that part of their selection of visual input was from thought process about the specific need (QUOTATION:3.14).

S. Webber	→	"it really comes from the people's thoughts process and then it is just a matter of where to get the visual source for that image they want,"
P. Davies	→	"It is difficult to answer. I think you have in you're own mind what you're looking for. Anything can spark off an idea and usually you can go to several books and select those images to support your idea."
P. Barrow	→	"That presupposes that we sit down and think what sort of visual treatment should I give this."

QUOTATION 3.14: SELECTION BASED ON THOUGHT PROCESS

- **Selection based on memory**

Most designers stated that some of their visual selection was from memory and imagination (QUOTATION:3.15).

B. Wicham
A. Talbot

"Something that you realise you are trying to portray into an idea and then perhaps you have seen it perhaps in a totally different context of being a way to do that - either a scribble on the road or whatever you have seen something before that has helped you do that."

"You could be coming to work on the tube or the bus and all the time you are digesting what you are seeing around you and that can be- you don't know it but you could be digesting the source of your next job. You might say I saw so and so and it looked really good and worked really well and triggered really something and that is where you start."

QUOTATION 3.15: SELECTION BASED ON MEMORY

- **Selection based on feedback**

Most designers stated that they selected visual inputs based on particular feedback from their PO and from their design team (QUOTATION:3.16).

S. Shaw
A. Talbot
D. Spencer

"Obviously within the creative presentation you would pick sort of colour, type, graphic style, pictorial content and style so most of the visual information would actually be done afresh so that you would have complete control over it."

"We talk about it a lot, because we all have different ideas and it helps. If we can have two different designers who discuss these ideas and bounce ideas off each other. We find that by discussing it better things come out of it rather than one person blindly pursuing and struggling in a corner."

"We try and create more inspiration by having creative focus meeting, discuss and analyse the pieces of work that we have done and see where we can take it."

QUOTATION 3.16: SELECTION BASED ON FEEDBACK

3.8.2 Criteria for selecting visual sources

The relationship between the processes of selecting visual sources, and the criteria for selecting visual sources were inseparable so that discussing one of them required the mention of the other. The designers were asked how they chose their visual sources for particular projects. Most of the designers stated that they selected what was appropriate for the particular needs. In addition, most designers mentioned that they worked according to the design brief and its identified criteria. The main criteria for selecting visual inputs can be seen under the following: 1) the qualities of the visual inputs, 2) the properties of the visual inputs, 3) the communicative characteristics of the visual inputs, 4) the availability of the image, 5) the relevance of visual inputs to the need for the the project. Some designers mentioned experience as a criterion for selection (Jenny Brend; Paul Davies; Ged Equi; Ali Osman; Mahmoud Kahil; William Redfern; Sue Pile; Jon Ellery; David Spencer; Tony Watts).

- **The communicative characteristics of visual inputs**

Most designers stated that they selected the visual inputs that communicated best what the projects were aimed to achieve. Iain Crockart claimed: "You choose the image that has the power and message that you want to get over." Bell Wicham stated: "For Greenpeace, it is more choosing it for the message than its composition." Most designers stated that they chose the visual inputs that helped them to get across the particular information and to communicate the message and function of the projects (Greg Vallance; Marian Dalley; David Caines; Stewert Webber; Peter Barrow; Tony

Watts; Iain Crockart; Iain Hunderson; Ali Osman; Alex Quero; Mahmoud Kahil; Adrian Talbot; and others). Some of the designers' explanations are given in QUOTATION (3.17).

J. Harvey	"If it is an appeal where we are thanking people for giving the money and showing them what has been done with that money it will be perhaps much more positive happy images. We tend to shy away from starving children, and begging hands, and big eyes and things like that we tend to focus more on the positive effects of the people giving money and we think that encourages people to give money, to show a starving child in the middle of Africa can turn a person off because it means if I give £5 that can't change that at all, but if you actually show what £5 can do in terms of changing a child's life then I can think to myself well if I give £10 I can make 2 children lives better - do you see what I mean. It is the kind of message that you are trying to put across."
S. Dew	"I think we would look at what we're trying to communicate and we would link that with the visual and say what communicates that most strongly. You would be looking for a particular image that was saying something and you would choose the one that says that most strongly for you."
A. Quero	"What happened specifically on this Chernovyl project was a broad outline of their objectives. ... There were two things we were going to do. Primarily to convey the disastrous nature of this nuclear reactor, but to also try to convey a positive outcome - a sense of hope. To try and do both is very tricky. ... This nuclear symbol turning into a windmill. It is a whole range."

QUOTATION 3.17: THE COMMUNICATIVE CHARACTERISTICS OF VISUAL INPUTS

- **The properties of visual inputs**

The properties of the visual inputs had to do with variations of visual information. These properties can be considered: 1) visually appealing, 2) emotional, 3) structural, 4) specific, 5) artistic, 6) technical, 7) informative, 8) relevant, 9) intellectual. In addition, the properties involved how the visual information was to be communicated. Also, the properties of visual inputs had to do with the size, shape, form, and visual specification of the visual details including harmony, balance, and unity. Most designers mentioned various properties. Finn Butler stated: "It might be the nature of the image." William Redfern indicated: "It is always the quality of the sources, if you know what you are looking for." Ian Cockborn claimed: "That would depend upon the aesthetics for that particular job, which is going to vary as well." Alex Quero stated: "I think it is to do with the clarity of form. Colour can come into it." Adrian Talbot claimed:

I am attracted to clean lines and less is more I suppose. It might look easier when there is less on the paper but I think it is the opposite.

Jon Ellery explained: "The intellectual quality that means it is exactly on the brief for the client." Ian Cockborn stated:

You use the most appropriate message like, the most appropriate medium in order to put the message that you have to be able to communicate in the most appropriate way. So if photograph is most appropriate then that is what you use.

3.8.3 The quality of the visual inputs

The quality of the visual source was the designers' priority when they selected their visual inputs and visual sources (QUOTATION:3.18). Most of the designers discussed the quality of their visual sources. Some designers claimed that they tried

to find unusual quality in their visual sources. Some designers stated that they tried always to have or generate original visual sources. Some designers stated that they selected unique visual sources. Most designers emphasised repeatedly the importance of the qualities of their design ideas and their design imagery. The quality of visual inputs can be considered qualitative and physical. The physical quality can be considered to be related to the production of visual marks and use of techniques and tools. Most designers stated that they were more concerned with coming up with good design ideas, and that they worried less about the final executions of the artwork of their imagery. However, they also emphasised that the quality of the final artwork had to be very good too, but they indicated that good executions did not make weak or inappropriate ideas successful.

B. Lowenhoff	"We would probably be looking for something that is better than usual. It has to be a good quality illustration/ good copy photographer. Bit better than usual."
G. Vallance	"We only choose them on the basis of the strength of the visual."
I. Crockart	"The most visually striking. Or the one that has the most power. "
B. Wicham	"The most interesting images and then the nicest photographs of that information. The best composed photographs."
T. Brennan	"If I have to choose from ten tree pictures, I would chose the most graphic. I mean the one that looks best at the end of the day. The one that looks best in your layout or whatever you're doing. The one that suits."
I. Crockart	"You get the feeling if it is a forward thinking company that wants some arresting image, arresting typography, an arresting logo."
S. Dew	"You would be looking for a particular image that was saying something and you would choose the one that says that most strongly for you. Also, how this is going to reproduce in the end might have an impact on which image you select."
I. Crockart	"Clarity of idea I suppose you could say. So that is a concern that we always have, you want it to look effortless and in a way crafted but not overly crafted. You wanted it a great idea , something that makes them stand out."
G. Equi	"Anything from a corporate brochure to the side of a train. In the back of our minds we are always trying to create something that is as unique as possible."

QUOTATION 3.18: THE QUALITY OF VISUAL INPUTS

3.8.4 Methods for selecting visual sources for particular needs

One of the major methods that most designers used during the selection and adaptation processes was the comparison technique. The designers did not use the word comparison often, but they used expressions and processes that can be interpreted as ways of comparison. The comparison activity involved making decisions about particular selection. Most of the designers made their particular visual selections with the involvement and approval of their PO. Comparison can be seen during the following processes:

- Identifying the need and its involved criteria
- Gathering relevant visual sources form diverse visual sources,
- Design exploration and concept developments processes
- Selecting particular visual sources and visual inputs for particular needs..
- Creating design options

- **Presentations and feedback**

Most of the designers stated that they tried a considerable number of various design ideas when they created their design concepts. Also, most designers stated that their selection of their variation of visual inputs was guided by their choices. Most designers indicated that they chose the best idea, and the best quality of the visual sources. Actually the comparison processes took two routes. One strategic and dependent on planning and design management. The other route was visual and considered the appropriateness of specific visual inputs to the specific need. Considerations about the competition in the market sectors involved both comparing strategic and visual suitability.

3.9 The adaptation process

The adaptation was the manifestation of particular selection. The issue of adaptation had to do with both the quality of visual input, and with what happened to the particular visual information when it was picked up from its original environment and was transferred into another environment to serve particular needs. The designers were asked how they adapted their selected visual sources to meet the need and the communication objectives of specific projects. Based on the designers' explanations there were various adaptation processes. These processes can be classified under the following: 1) integration, 2) elimination¹, 3) mutation², 4) extinction³, 5) preservation. More importantly, each process involved further selection. The adaptation processes were gradual, but in the same time they were exposed to conjecture and refutations. These processes took place during the various stages of exploring, developing and refining design ideas.

Integration, elimination, and mutation were seen in the development of various concepts. While extinction and preservation were more seen in projects that had to evolve from previous designs. Most of the designers stated that the adaptation processes took place mostly during exploring design ideas, concept development and concept refinement stage (Jenny Brend,; Greg Vallance; David Mecwy; Tony Watts; Sue Pile; Jon Ellery; Barry Lowenhoff; Ian Cockborn). Simon Shaw explained:

Well really we wouldn't adapt it because back down the line we would have already sort of take into account every sort possible conceivable consideration. We have such a tight relationship with our clients that everything is spelt out letter by letter so that there is no surprises.

Marian Dalley explained:

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1. **Elimination:** It is the process of removing, taking out, or rejecting particular properties of visual information and keeping other properties.
 2. **Mutation:** It is the process of changing the properties of the types of visual information which may affect the structure and development of the resultant visual outcome.
 3. **Extinction:** It is a process that leads to the complete disappearance of particular visual information during the adaptation process because they were unsuitable for the particular need and requirements.

We would almost reinvent them for our need. You would have to take that as an inspirational screen board and begin to construct your own interpretation of it. We would re-invent it unless we could work with that original or originator.

The majority of the designers stated that sometimes the PO asked the designers to make particular changes which necessitated further design exploration and concept development (Stewart Webber; Adrian Talbot; Ian Cockborn; Iain Crockart; Chandra Prince; Elaine Searle; Bell Wicham; Ali Osman; Adel Nouman). Also, most designers stated that after the first presentation they had to adapt particular visual inputs for their design concepts. Most of the designers stated that they picked up particular bits of information from various sources and integrated them together. Jonny Brend stated:

Well they would sometimes be cropped in a particular way, a small part used, juxtaposed with other images to create a different image.

The majority of the designers explained that the adaptation processes involved both elimination of particular elements and adding other elements (Iain Crockart; Jenny Brend; Elaine Searle; Tony Watts; Simon Pandry; Chandra Prince; Marian Dalley; Stewart Webber; Ian Cockborn; Mahmoud Kahil; Adel Nouman; David Caines; and others). Iain Crockart stated:

we maybe incorporate a bit from this photograph and a bit from that photograph and then combine them on the computer and make it something unique.

Michael Bronfield explained: "By process of design development." William Redfern stated: "It is how it fits into the design." In addition, adaptation took place during the development and refinement of the design concept until the concept was considered appropriate and was approved by the PO. Then particular artwork was art directed and commissioned. Greg Vallance indicated that the visual materials for the concept generation stage were different from that of the final execution stage, and that they developed specifically visual materials for the final stage after passing through the various feedback and critic processes. David Macwey explained that they adapted their visual sources in two ways. One by replicating existing visual sources and interpreting them in a slightly different way. Or by reinterpreting the existing visual source in a more contemporary, modern, or classic way. He explained that when they used replication they had to analyse the key aspects of their particular object or place, and to decide whether they wanted to retain the spirit and historic aspect of the visual source. Some designers indicated that they did not manipulate their visual sources because they used them only for inspiration, or to depict particular visual inputs. The adaptation processes were gradual. Most designers explained that they kept changing and modifying their design ideas and their visual inputs until they developed them to a stage where they were ready to discuss them with their PO. In QUOTATION (3.19) some of the designers' explanations are given.

D. Mecwy	"The designers look at an existing situation and they think about the key aspects of that particular thing that give it its personality. Then you say well given that we agree this is the key personality of this particular thing. How can we reinterpret that in a fresh way? It's really all about trying to retain the signals that people will recognise so that they will understand where you're coming from and they have a point of reference."
W. Redfern	"Sometimes something may have to be changed because really it is considered to be outdated or not suitable at all for the job... Whether you think something looks right or whether it's appropriate can depend on whether it's changed or not in your design and then you have to accommodate that change. Hopefully you keep the idea the same but you can adapt it."
G. Vallance	"It is different between your visual source or your visual material that you have during concept generation and that that you have for the final execution. The final execution is something that you develop specifically for that particular project or problem. But in terms of your source of material during the critic process it has many-fold."
P. Davies	"Usually it's an idea. We'll sketch out an idea and one particular part of your idea you want to find say a piece of wheat and the style of the wheat. So you will go to a set of books and you will find a piece of wheat and you will change it and adapt it to make it work within your visual, so that's how we do it."
B. Wicham	"I think gradually you sort that information out in your head until you have an idea of what you are trying to achieve. So hopefully organise the complexity of the problem."

QUOTATION 3.19: HOW DESIGNERS ADAPT THEIR VISUAL INPUTS

William Redfern stated that once they needed to change the image of a dial phone which they used in their design because was considered outdated and used an image of a touch phone instead. Peter Barrow explained that not all of their ideas were developed to designs. He said:

Quite often we will come up with ideas and suggestions that actually don't turn into anything like graphic design.

3.9.1 The time factor

Besides the economic characteristic of time, time was an important factor in how the adaptation processes progressed and developed. Time involved the various periods that the adaptation of ideas and visual inputs took to reach the desired result. Most of the designers discussed the economic side of time. But the designers' explanations showed that during these allocated periods of time the adaptation processes of visual inputs progressed in various ways until the design concept was approved and was generated for the final artwork.

3.10 Summary and conclusions

A wide range of findings emerged from the this stage of the investigation. Many findings which had a crucial bearing on the visual selection emerged. The following were some of the major findings:

- The visual selection involved two kinds of selection: selection of visual sources and selection of visual inputs (visual information). The visual sources were complex and diverse which made attempts at classifying them fail to explain how the designers created their design imagery. On the other hand the diversity of visual sources was necessary for the selection of particular visual inputs.
- The need for the project including its requirements was a crucial factor in how

the selection processes were started and developed.

- The processes of selecting visual sources were developmental (not all at once).
- Adapting visual inputs involved gradual processes.
- The exploration and development of the design idea, and the design options involved various selection and adaptation processes. Also, they involved time for adaptation.
- The quality of visual sources and visual inputs was very important during the selection and adaptation processes.
- The designers did not focus on particular projects, subsequently, there were gaps in information which prevented making links between some of the designers' activities. The diversity of visual sources and visual inputs without showing visual examples made it hard to interpret particular selection processes and the visual inputs.

3.11 Introduction to purposive pattern recognition (PPR)

Purposive pattern recognition (PPR) was a phenomenon that emerged at the third stage of this investigation during the early interviews of the mini-case studies, and the observation session. Particular concepts were found useful to explain the selection processes. These Concepts are: 1) PPR, 2) need pattern (PN), 2) visual patterns (VP), 3) design pattern (DP), 4) patterns of competing design hypothesis. Purposive pattern recognition is a purposeful activity. Most importantly, it is a key activity in the processes of selecting visual patterns. The selection part of the mind recognises a particular visual pattern as being wanted for a particular design need. The designer compares the pattern of need with patterns of competing alternatives until there is a fit between the visual patterns and the pattern of need. This phenomenon and its related concepts are discussed thoroughly in chapter 4 of this study. The word 'pattern' in this study is used to describe the following: 1) a particular form of information that constitutes a pattern such as: 1) a pattern of need. 2) pattern of an idea. 3) a pattern of a visual input. Visual patterns can be considered to describe the visual inputs. Also, the word 'pattern' refers sometimes to a visual feature or features provided by sense data and cognitive and perceptual processes. Other times, it can be provided by some sort of data. Visual patterns can be retrieved from memory. Also, they can be constructed from: 1) imagination, 2) thought processes, 3) life experience, 4) accidentally while doing or watching something. Peter Barrow stated, "You may look for examples for the sorts of things that you have in mind." Tony Watts stated:

Well I would have thought three quarters of it is vision in your head. The other part is only help activate your thinking. I think the most things are perceived in your head. That is why you are a creative person and not a bricklayer...You may get ideas from life, or books or something but you actually visually have to see it in your head and it

is hard to describe.

After the emergence of this phenomenon, a review of the raw data of the study in this chapter was made again to investigate the PPR and its related concepts. The following statements can be interpreted in terms of a match between two patterns — a pattern of need and a visual 'pattern' — resulting in selection. The feeling that accompanies this sense of match may be accompanied by a sense of knowing what to do next. In other words, the pattern recognition is goal directed or purposive. The term PPR (purposive pattern recognition) has been chosen to represent this phenomenon. The following excerpts in QUOTATIONS (3.20, 3.21, 3.22, and 3.23) are from the designers' answers to the question, "How do you select your visual sources?"

I. Hunderson	"You do it largely intuitively and you choose whatever you feel is appropriate."
P. Davies	"It's difficult to answer. I think you have in your own mind what you're looking for. So it's just a question of finding that precise imagery that you want to use."
P. Widdup	"Instinct, you know when something is the right sort. There is no formula to it, and they will always be very different. It is part of the design process I think."
T. Watts	"It is a matter of translating the written word into a visual source."
A. Quero	"It depends on what I am looking for... I will choose whatever I think will be useful to me. Sometimes it is a very clear and logical reason why you choose something and then an intangible quality about why you choose something. I just pick up something and I don't know why but it seems to have a purpose of it. A combination of the two that will make a difference in the end."
I. Crockart	"Visual people are very quick to accept or reject. You probably, subconsciously you do know why you are rejecting it. But you will reject something and accept it. You have belief that something is right or wrong."
V. Wickes	"Sometimes you will find things and they will say something to you and it may not be absolutely obvious why it has got anything to do with that project."
A. Talbot	"It is a sort of synthesis of all that lot that comes out of your mind when you are coming up to each job which has to be tailored to the clients needs."
G. Equi	"You will constantly come back to what the design brief is all about, and you need to constantly make sure you are answering the design brief. It is very difficult to explain how we do it."
T. Watts	"It is quite difficult. But I mean it is the same thing when directors make films don't they. They have to see it in their head. It is like an author writing a book. You see the story in your head. Difficult."
S. Jhel	"You get your visual prompts from something that inspires you to sort of design in a particular way. That is just the seed and then obviously the concept grows around that and so it will look vastly different from the initial prompt has come from."

QUOTATION 3.20: HOW DESIGNERS SELECTED THEIR VISUAL SOURCES AND VISUAL INPUTS

"Mostly by the time you have chosen your sources you have chosen the specific to meet that need." J. Brend
"It is the brief and the concept that drives our choice." M. Dalley
"You select the right picture to get across what the brief is." T. Watts
"You're thinking about the Brief. It's all quite intuitive really. It's difficult to describe. You're thinking about the Brief and about a particular design." S. Pandry (1996)
"In every different case you are going to have a different reason for selecting the most appropriate, the most dramatic, which one fits the need best. There is going to be a new or different reason for selecting that individual picture." I. Cockborn
"We create something for a purpose and the purpose tends to suggest how it should finish up." P. Barrow
"You're dealing with specific products and people want to see those products either working or what they look like or what the end result is." S. Shaw
"We are designing with specific objectives in mind." D. Spencer
"According to need, budget and availability." I. Hunderson

QUOTATION 3.21: THE NEED AS A REQUIREMENTS FOR SELECTION

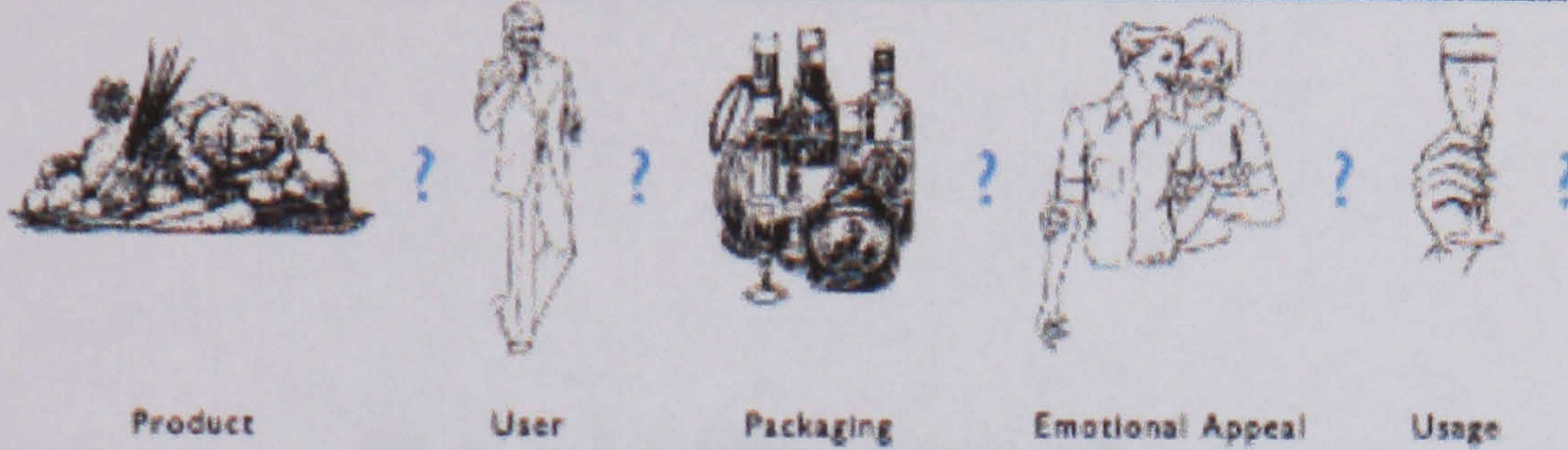
S. Pandry	“If you want something to look very fresh then you’re looking for a very fresh style.”
D. Mecwy	“There is a very clear design precedence for that particular type of product. There is no point producing a scotch whisky that looks contemporary because everyone would think that the whisky was made yesterday. It must look old and it must look like it’s got all the qualities of something that’s 150 years old... the reason in this particular design sector there is a historic precedence for what we’re about to do and we must accept that. Otherwise the customer will be confused by the design signals that we are projecting.”
S. Jeal	“Graphically you do what the client would understand and hopefully their audience can understand. And you do that through the technical side of graphic design, the communication side, the style, and the typeface, photography and illustration .”
I. Crockart	“I think a great idea is actually based on sound and principles, and sound thinking. If you come out with something that is startling and works for the client and has a long life and there is something about it. People have different aesthetics. It is purely subjective.”

QUOTATION 3.22: THE QUALITY OF VISUAL SOURCES

The PPR activity can be considered to involve a sense of what to do next. The following points can be concluded from the designers’ explanations: 1) Targeting very precisely the most fruitful areas for developing; 2) Using visual materials constantly to redefine the criteria for what the designer was doing in design terms; 3) The development of the design idea through processes of conjecture and refutation guided the designers in what to do next.

T. Watts	“You might choose more than one. It is a matter of trial and elimination. You might pick particular one and dismiss then others because it follows the brief, it matches the Brief. It becomes objective too, because you have a team of creative people and then you have a marketing team and they agree which ones fit the brief better.”
G. Vallance	“Initially the idea generation is very broad in its scope and then we narrow down the routes to the ones that are most appropriate.... the objectives from the strategic side are being met as well as the creative objectives, and you do it by research.”
D. Mecwy	“You have to use visual material constantly to redefine the criteria for what you’re doing in design terms.”
I. Cockborn	“We continue to try and analyse and justify what we are doing.”
D. Spencer	“We try and target very precisely the most fruitful areas for developing.”
B. Wicham	“We are guided by a design. So if we decide that something is going to look a certain way, then we will always choose the best way of reproducing that to support the design.”
S. Jeal	“They are basically tailored to your clients needs.”
M. Dalley	“We do work very closely in the early stages of the projects to know the kind of feel that we are after.”
T. Watts	“ It depends. The original visual source it may not be anything we have found. It may be something, an idea that we sketched roughly. It might change quite a lot. It might be the first idea that we had, that is not an idea but then it may be that the 30th idea that we had was the best. You can’t, it is difficult to predict. If the first idea is the right idea or it may feel that three months later you still haven’t found the idea.”

QUOTATION 3.23: HOW THE SELECTION OF VISUAL INPUTS WORKED



Product

User

Packaging

Emotional Appeal

Usage

Type of project: New Brand Development (NBD)

Brand name: Estanza

The client (PO) and its type of business

"Peter Eckes, Germany's biggest producer of branded fruit juices and spirits."(p16)

The design brief:

"We have this range of juices that comes in 70cl bottles and is going to cost 100% more than any regular juice on the British Market. Over to you... We also knew that the design should be stylish, definitely for adults; and we had the name, Estanza." (p16-17)

Research results:

"The research results made it clear that the heart of the brand had to be the quality of the fruit (described in tasting as pure nectar)." (p17)

Design consideration and criteria for selecting visual sources:

- 1) "We decided upon botanical illustrations to say fruit fresh from the tree."(p17)
- 2) "Allied to elegant typography, this gives the labels a sophisticated look, helping to justify the price premium."(p17)
- 3) Thinking of the 'product', 'user', 'packaging', 'emotional appeal', 'usage'.

An Example Of Design Considerations For NP

FIGURE: 3.19

3.13 Mini-case studies

In the following chapter, PPR and the related concepts are examined in twelve mini-case studies. In addition, the processes of identifying the need pattern (NP), coming up with design ideas, generating design patterns, creating design options (patterns of competing design hypothesis), and the processes of selecting and adapting visual patterns are discussed. Also, the characteristics and properties of visual patterns are examined. Furthermore, sources of visual patterns and variations of visual patterns are discussed.

CHAPTER 4

THE MINI CASE STUDIES

GROUP 1: 3D DESIGN PROJECTS

GROUP 2: CORPORATE IDENTITY - LOGOS

GROUP 3: CORPORATE PUBLICATIONS

GROUP 4: DESIGNS FOR ENVIRONMENTAL AND FUNDRAISING ORGANISATIONS

4.0 Introduction

This chapter describes twelve mini-case studies. The term 'mini-case study' is discussed in section (2.3.3). The twelve mini-case studies were divided into four groups by the researcher. Each group shared some kind of similarity. The four groups are: 1) Group One: Five 3D Design Projects. The term '3D design' is given by the researcher to the projects in this group because they occupied three dimensional space and contained inside them products other than information. The five projects involve both packaging and brand identity. 2) Group Two consists of three mini-case studies, and involve corporate identity - logos projects. 3) Group Three consists of two corporate publications projects. 4) Group Four consists of two projects involving design for environmental and fundraising organisations.

Each mini-case study focuses on one project, and investigates how the designers selected, adapted, and used their visual sources and visual patterns when they created their design imagery for a certain project. The phenomenon of purposive pattern recognition (PPR) emerged at the early stages of the mini-case studies and observation sessions of this investigation. Then the researcher reviewed again the raw data of the 'interviews with designers' and found evidence about the PPR phenomenon (See Chapter: 3). The concepts of (PPR), need pattern (NP), visual pattern (VP), design idea, design pattern (DP) and patterns of competing design hypothesis (PCDH) are examined and discussed in relation to how the designers selected, adapted, and used specific visual patterns when they created particular design imagery for specific projects.

This chapter is in fourteen sections. The first section is background to the twelve mini-cases. Sections (2) to section (13) are the twelve mini-cases. The final section is conclusions from the twelve examples. The findings are discussed according to the concepts and categories that emerged from the qualitative analysis of this investigation. Some questions and their answers are mentioned when it is necessary. Figures are given to show examples of the designs and their processes. TABLES, QUOTATIONS, and DIAGRAMS are given to illustrate processes, relationships, and findings.

4.1 Background to the twelve mini-cases

- The mini-case study approach
Choosing the case study approach as a research method was found appropriate

for examining the designers' activities (See Section: 2.3.3). The mini-cases examine in depth the processes of selecting visual sources and visual patterns, and the concepts that emerged from the qualitative analysis of the 'interviews with designers. Each mini - case study in this chapter examined a certain project, and each project was discussed by an art/creative director from a certain design consultancy in London. The interview schedules are in APPENDIX: X.

- **The interview questions**

The interview questions of the mini-case studies were twenty-five semi-structured questions (See APPENDIX: VI).

- **The methods for selecting the projects are described in the methodology chapter**

- **The content of information for each project**

Each designer provided the researcher with various visual materials. Some designers provided the actual packs they designed including the design imagery they did for advertising footage about the projects. Some designers provided copies of the design imagery. Two designers provided a full range of visual information including sketches of the visual details they explored, selected, adapted and used for the project, and the actual drawings of the final artwork stage of the project. Some designers provided both colour copies of the previous designs of their packs and colour copies of the designs they created. One designer (Adrian Shaughnessy) showed examples of the original visual sources.

4.1.1 The projects

The twelve design projects were from different design consultancies in London, and were done for different clients, and each had a history of its own. The twelve projects were selected by the designers. Each of the projects involved a set of requirements and applications. Each project was created by a team of designers. These projects were different from each other in many respects: 1) the PO, their type of business, their objectives, and their market strategies, 2) the types of the products, 4) the target audience, 5) the nature of the market place, 6) the needs and requirements for the projects and their constraints, 7) the competitive market and the competitors. In addition, these projects varied in their communication objectives, corporate strategies, corporate identity systems and programs, and their design implementations and applications. These projects were then grouped by the researcher into four groups. The projects under each group shared some kind of similarity. Profiles of the twelve projects are in (APPENDIX: XI).

The four groups are:

(1) Project studies group one: 3D projects - Packaging and Brand Identity

This group consists of five projects: 1) The “Erasure: Cowboy” music record, 2) Brand identity and repackaging for ranges of Typhoo tea, 3) Brand identity and packaging across a range of products of MURRY McDAVID: Whisky, 4) Brand identity and repackaging for SCHOLL across a range of products: Footcare, 5) Up-Grading for BUITONI FRESCO Chill Fresh Pastas.

(2) Project studies group two: Corporate Identity - Logos

This group consists of three projects: 1) Corporate identity & subsequent implementation - Colour Solutions, 2) A ‘Brand Mark’ for the Mini Car, 3) Logo and design implementation - Centrica - British Gas. The three projects were to be implemented as 2D designs as well as 3D designs.

(3) Project studies group three: Corporate Publications

This group was categorised by the researcher as corporate publication design projects. This group consists of two projects: 1) Corporate Brochure - ‘Fletcher King’, 3) Annual Report and Accounts - ‘London Electricity’.

(4) Project studies group four: Design for environmental and fundraising organisations

This group of projects consisted of two projects: 1) The 25 birthday anniversary of the Friends of The Earth Supporters: Magazine, 2) Amnesty International: Cold Mailing.

4.1.2 The designers

The designers in the twelve projects were from different design consultancies in London. Eleven of them were interviewed for the first field study of this investigation as well. One creative director was not interviewed before, but a senior designer of his consultancy was interviewed for the first field study of this investigation. Eight designers were the design directors of their design consultancies (Art/Creative directors). One designer was an art and administration director (Jenny Brend). One designer was a creative director among other creative directors in her consultancy (Marian Dalley). One designer was a senior designer and a project director (Ged Equi). One designer was a senior designer and a project director (Iain Crockart), he was from CDT design consultancy. This consultancy consisted of groups of designers that all shared the same responsibility equally and did not have a general art director. The designers’ consultancies varied in terms of the design services they offered. Also, the managements structures of the consultancies varied in terms of marketing and planning strategies and approaches.

The designers' educational and professional backgrounds varied. Most designers gave information about both educational and professional background. Some only gave information about their professional background. Most designers had a university degree in design. One designer (Adrian Shaughnessy) had no university degree, but he had many years of professional experience. The designers' profiles are given in APPENDIX: XII.

4.1.3 The designers' opinions

The designers' opinions about the following three major issues were investigated: 1) the impact of the designers' professional and educational background upon the processes of selecting and adapting visual sources and visual inputs for the design projects; 2) The meaning of the term 'visual source' from the designers' point of view; 3) The meaning of the term 'creative design' from the designers' point of view.

- **Professional and educational backgrounds**

The designers were asked if their educational and professional backgrounds had any impact upon the processes of selecting and adapting visual sources and visual inputs. The designers' answers varied. From the designers' explanations it can be considered that design skills, professional and design experience played important roles in how the designers handled their projects. Most designers stated that educational background was important for acquiring basic knowledge about design skills, but it had no immediate impact upon how they selected, adapted, and used their visual information. Peter Barrow criticised the design educational systems in universities. He stated that at design colleges they did not prepare students for solving problems of the real world, and that they left students to create their own design briefs. He mentioned that new design graduates tended not to consider the constraints of design problems. The designers explained in various ways that their professional and design experience helped them to identify the needs for the projects and know where to look for their visual sources. From the designers' explanations it can be considered that every project in a way was an experience by itself. Greg Vallance asserted that their professional experience and knowledge were very important sources of feedback. Marian Dalley stated that being exposed to various types of projects constantly helped them to get feedback from one project to another. She explained that her previous experience as a teacher helped her to run a team and to explore ideas in a much more kind of brainstorm way. She added that her design experience and teaching experience overlapped. According to Adrian Shaughnessy, the designers' skills, professional experience and knowledge of the record market helped them to gather both their information, and visual information. He added: "We do it

intuitively.” Tony Watts explained:

It's not so much what the client tells us to do but what we know as professionals that we need to do.

The designers explained that they looked at the work of the competition in terms of differentiating their designs from the work of the competitors. Greg Vallance stated that they thought of the competitors in terms of doing better designs. Marian Dalley indicated that they thought of the competition in terms of differentiating their design imagery from the competition. Adrian Shaughnessy stated that they did not want to do something similar to the work of the competition. Tony Watts stated that each design they did was compared with the work of the competitors, and competed against it.

4.1.3.1 The meaning of 'visual source'

The designers were asked what the term 'visual source' meant to them. The designers' responses varied (QUOTATIONS: 4.1, 4.2, 4.3, 4.4).

Designers	The meaning of the visual source
A. Saughassy	<p>"I suppose it's the stylistic reference for an idea. Stylistic reference point. What we like to do is to transform objects. We don't like to take things, sometimes you do really. It's the reference point. It's the starting point. The visual source as I've already said is a particular style of cinema around late 60's early 70's. If you like that's the inspiration. It's probably not in this case, if we talk about in this case, it's the inspiration. In other cases the job may mean the visual source itself. Someone may say to us: design a brochure for a company that makes computers, but what we might do is we might go that company and photograph them. We tend to use allusion and metaphor. There's so much information. People need information to be interesting. People want to be challenged by it, excited by imagery."</p>
T. Watts	<p>"Visual sources is anything that is tactile information that we can actually see or feel or take photographs of or look up in magazines or historical material that is in our library or what exists in magazines and what the idea may be. It could be anything. We can get visual sources from anywhere. It could be what you see on television or a film or it could be what you see from a famous artist, or it could be what you see from other packaging or it could be from what you see from other mediums. It could be fashion. It could be anything, good ideas from anywhere."</p>
P. Barrow	<p>"It depends, your visual sources are dependent on what you wish to portray. So if I want to portray this client as being like an 18th century grocer with a particular refined grocery I will go back and look through items of that period. Look at old grocery names, badges and shop fronts which is what we do. You go on source material for a particular era, if it's an era or a region obviously as we were dealing with Scotland we couldn't do it specifically. There will be a highland whiskey. There'll be an Isles. One from the islands so your area of, I prefer to call it research rather than source is what you want to show. If I was going to show an antique aircraft then or I had to do something with the history of the RAF then I would go and look at old planes and old airfields and old war pictures and stuff like that. Not to copy. You get it all in different ways and you build it over and put it out. That's how we do. So the source is dependent on the end result that you require."</p>
M. Dalley	<p>"There's two ways you can use visual source and kind of within the team we keep scrap books which are full of images and just found things that can act as props for our ideas and that's being constantly updated with things that we come across be they illustrated .. cards, tickets to exhibitions, things you pick up on holiday. Any old rubbish can get put in these books, so that's kind of one way. It's just a resource, it might just be a spring board on to the idea or onto searching for more visuals in that particular area ... and then the other visual source is the more focused, once you know what you're looking for...going to libraries and looking for particular images. As I say it's very kind of broad and spring board and targeted and focus."</p>
G. Vallance	<p>"It's where do we get our visual inspiration for either different elements or specific elements ...project as a whole. Visual resource tends to be the Photolibrary books. I mean we do use those an awful lot when it's necessary it tends to be on areas other than packaging but even within that you tend to just look for an area or piece of material that will help you achieve a visual effect or it has a hand in a position or it has a baby or it has something of visual reference that is pertinent to the project that you're working on. Visual sources are generally more intuitive there's not necessarily a book you can go to to find things. It's about being in supermarkets all the time. It's being in libraries all the time. It's about constantly looking. You can get a visual source from the television, it maybe the newspapers or magazines that come through your door so there's no specific set of visual source, though those set of circumstances that happen to be appropriate to a particular project that you happen to be working on."</p>

QUOTATION 4.1: THE MEANING OF 'VISUAL SOURCE'

Designers	The meaning of the visual source
Ged Equi	"Visual source is something that is an image of any sort that has been created by someone or even manmade for use in some way."
David Spencer	What visual source means to me is any reference material at all. That can be printed. It can be a painting in a museum. It can be a programme seen on television. Anything that can be creative movement or spark an idea.
Iain Crockett	Nature, a beautiful. A lot of my work comes from nature you think subconsciously from film from old printed beer bottle labels, anything and everything. It can be the colour of someone's jacket, You work all the time. You are like a sponge. You just basically absorb as much as you can and everything plays a part.

QUOTATION 4.2: THE MEANING OF VISUAL SOURCE

Designers	The Meaning Of The Term Visual Source
Jenny Brend	"I do find the word source as a source of irritation. It's a word that's used these days for all sorts of things. It means a photograph to me or an illustration or a TV image. I suppose it means an image, to me, which could mean it comes from anywhere and I think it's a much more descriptive term than visual source. Another word I cannot stand is resource."
Barry	"Anything printed.."

QUOTATION 4.3: THE MEANING OF VISUAL SOURCES

Designers	The meaning of the term visual source
David Caines	"I think it's anything that you can filter through your creative process and use as something visually in design work that you do, but more practically it could be something you see, go and photograph, a photograph from the library, something you've taken off the Internet, sketched from a sketch book, something from the television or something you've seen in a movie that influences the way the design ends up. So really it's anything that filters in through your eyes."
John Harvey	"Visual source, related to particular things or generally. Visual source is just acquiring reading magazines and acquiring different trends and being aware of what is fashionable and what is not fashionable, but then taking in the information, take the information around you poster, magazines, newspapers, taking in all those things keeping them up there, but when you embark on a project which has a particular brief to, particular goal, audience, trying to interpret the knowledge that you acquire from your visual sources, acquired appropriately and the right way so because our audience is very different to me."

QUOTATION 4.4: THE MEANING OF VISUAL SOURCES

4.1.3.2 The meaning of 'creative design'

The designers were asked what the term 'creative design' meant to them. The designers' responses are in QUOTATIONS (4.5.1, 4.5.2, 4.5.3, 4.5.4).

Designers	The meaning of the term 'Creative Design'
Jenny Brend	"Creative design means to me that any design obviously has to be there for a reason unlike fine art which is done for the artists benefit. It has to fulfil a function whether it be a package design, product design a piece of graphics whatever and creative design means to me that you've given it something more than just fulfilling its brief. It may actually impart the message look both ways before crossing the word but it's also got to be in keeping with the environment. It's also got to be interesting to look at. It could actually further the images you see around you. Or make them more pleasant, make you laugh or make you smile or give you a reason for thinking about something, may be you think that looks horrible or I never thought of doing it that way or generally raise a smile. I think that's what creative design is all about."
Barry	"I say creative design would mean innovative design idea which is relevant to the client's needs and expresses their communication needs efficiently... I don't think you can isolate something and say it was creative."

QUOTATION 4.5.1: THE MEANING OF CREATIVE DESIGN

Designers
A. Saughassy
T. Watts
P. Barrow
M. Dalley
G. Vallance

The meaning of the term 'Creative Design'	
A. Saughassy	<p>"Creative design is design that is not compromised by marketing considerations. By that I mean the obvious way to do that record would be to put the artists pictures on the front but that would be wrong for that market. It would be wrong for the type of music they make. Great design is design that challenges the perception we have to make a living so it can't deny it's market. It can't renege against the agreement that there is between the consumer. We are charged for our services therefore we have to give our clients design that is acceptable but there is two view on that one is that designers talk about solutions. We talk about strategy. We take the view that design is about aesthetics. And therefore we should concentrate on the visual pleasure of it, but because we charge for our services, because we've got rent to pay, salaries to pay we have to work within the confines of reality which is giving clients the visual material which will excite, will stimulate their audience."</p>
T. Watts	<p>"Well I think it's coming up with ... It's trying to be original without being responsible at the same time. You can't be responsible for designing something that is off brief. But on the other hand you have to be creative to make sure it's going to be distinctive,.. competition. It means you have to progress all the time. You have to stay in vogue and you always have to have an open mind for the imagery that you actually see all the time. But you're always looking. You never stop looking. You have ideas even when you're not looking for a particular project. You're interested in all areas of visual imagery. You definitely have to be interested in the arts. Also human nature, why people like what they do like."</p>
P. Barrow	<p>"Design in itself is creative. It is creating something. I never create things to suit myself or in the abstract. Before I became a designer I used to draw and paint so... I don't do that now as it seems like a bus man's holiday, if I go home and try and relax. I only react, I regard creative design as a solution to a problem. Somebody wants something sold, something communicated. Then I start to think how can we do that and obviously these days I'm a creative director. I don't individually produce. I steer, guide and suggest ideas. To me always design is not an abstract. It has to be as a result of somebody giving you a brief. The worst possible thing in the world is to be able to do what you want. That is the worst thing in the world. You have to have restraints and parameters to work to and then when I saw them within those parameters that's the exultation, that's the satisfaction. When you're trying to solve the problem it's excruciating, but it makes it worthwhile when you feel you've solved it. I find great satisfaction then in actually producing like I did with those when they come together. We did a number of different ones and a lot of skills go into it. It's very satisfying bring all these skills together."</p>
M. Dalley	<p>"Where the idea is all and the idea communicates and connects with your audience."</p>
G. Vallance	<p>"Creative design is making the challenge of a brief in a way which is innovative and new and challenging. If you can do those things in a way that conspire or combine to give the result from a design perspective then you have achieved creative design. Creative design is one of those subjective titles or descriptive that depends on ones own personal experiences as to whether you regard it as creative or not. To me it's either something that makes me smile or makes me feel good about something. It's subjective anyway quite frankly. Objectivity can only be measured by the results of how the design performs because design itself isn't necessarily an object. It cannot be put necessarily through rational objective criteria. It's much more a subjective issue."</p>

QUOTATION 4.5.2: THE MEANING OF CREATIVE DESIGN

Designers
David Caines
John Harvey

The meaning of the term 'Creative Design'	
David Caines	<p>"I think that, to me it would mean, design work where the client was happy that the personality of the designer influenced the look of the work and the work would speak on more than one level. It would have a personality. I think creative design job is one where the client is happy for the designer to use their creative ideas to make their job more exciting or more expressive."</p>
John Harvey	<p>"Creative design to me, something that is creative is something which stands out from what you normally see. To me the word creative is something that basically answers a brief but does it in the most appropriate manner. If that means that an answer to all of our briefs is simply writing a letter with an envelope then doing nothing, none of this, no pictures, nothing, if that is appropriate to the brief and the audience that is still being creative but it's relevant. So to me creative design is something that is appropriate to the audience that you are talking to. Its not just about making things look pretty, that is a very direct way of speaking, but to me ... design is getting across a message and doing it in an appropriate way."</p>

QUOTATION 4.5.3: THE MEANING OF ' CREATIVE DESIGN'

Designers	The meaning of the term 'Creative Design'
Ged Equi	<p>"The creative design must be something that is different, unique, stimulating and leaves the person who has seen that design with some sort of experience where they smile, hate, like it, whatever. It must be something to create some emotion in the person who is reading it or looking at it."</p>
David Spencer	<p>"Creative design means trying to create something which has an edge. You've done something which moved the project a little bit. The most creative part of this taking the badge and using it in merchandising, the way we adapted it, the way we signified the badge, the way we created a design which can be used on any colour combination which gave it dexterity and yet controllability, and because of that made it come alive."</p>
Iain Crockart	<p>It should be creative thinking and strategic thinking. It's how you get the end result. I think design is far more complex. The designers have to be far more intelligent. They have to realise all the things that are talked about in the market place. How these things going to be shown, and perceived. To be researched as thoroughly. Designers have to be honest, creative, thinking businessmen / designers now and they have to be a strategic thinkers. Creative design finds fulfilment the potential of the project, giving the client the maximum impact for whatever it may be. It could be a product, ... it could be anything, a brochure, raising funds for instance. You need to be creative in every department not just design. It could be what kind of thing is printed, what kind of paper it goes on, the writing of it. Designers just tend to think that you just accept the text that is given to you, that should be part of the jigsaw puzzle. So it's not just design anymore. If you asked me four years ago I would have different answer. But now totally client focused, totally making a success out of the project for the client. Design success is everything. If you sell more products, if you raise the awareness of the client, if you raise money for the client brilliant. Creative design is obviously a term I would gear to a Europe college.</p>

QUOTATION 4.5.4: THE MEANING OF 'CREATIVE DESIGN'

THE MINI-CASES

PROJECT STUDIES GROUP (1): 3D DESIGN PROJECTS

4.2 MINI-CASE STUDY (1): 'ERASURE: COWBOY' PROJECT

4.2.1 Background of 'Erasure: Cowboy' project

This design project was designed by the design consultancy 'Intro' in London, UK, and a design team of four designers was assigned to do the project. According to the creative director Mr. Adrian Shaughnessy, the title of the project was "Erasure Campaign; it is just more of a CD cover". The title of the CD cover was "Erasure: Cowboy". The target audience of the music record 'Erasure: Cowboy' was the public and specifically the fans of Erasure. The design imageries of this project were to be used for a number of applications besides the CD cover, such as posters, T shirts, and adds. Information about this project is given in APPENDIX (XI).

The "Erasure: Cowboy" music record was a new music record that was released by the Erasure pop group in London in 1997. Adrian Shaughnessy explained briefly the background of Erasure group. He said:

Erasure are a very successful pop group. They use electronic instruments. They've been going for some time. They release new record every two years or so. The title they chose for this record was Cowboy. So the record was Erasure: Cowboy... They are not conventional. There's two of them. One of them is gay. Is famously gay. So they don't fit into the sort of stereotypical pop group. They are not like 'Take That'. They are a slightly odd and muted and unusual record maker...

The designer explained the nature of this record company:

Partly because the record company and Erasure are quite different from everybody else. There's nobody really like them. This record company is unusual. They're not a typical record. They are what's called an independent.

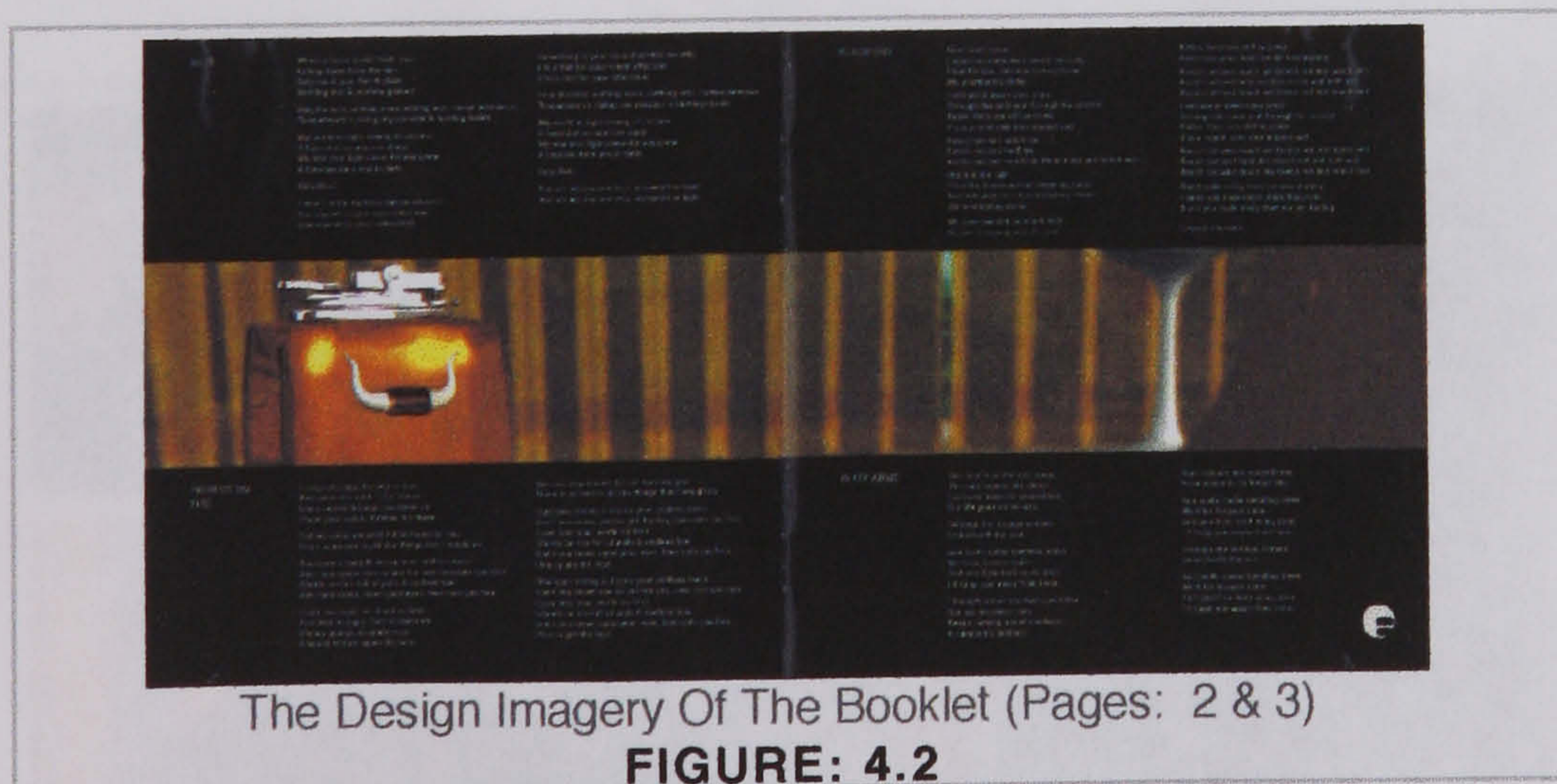
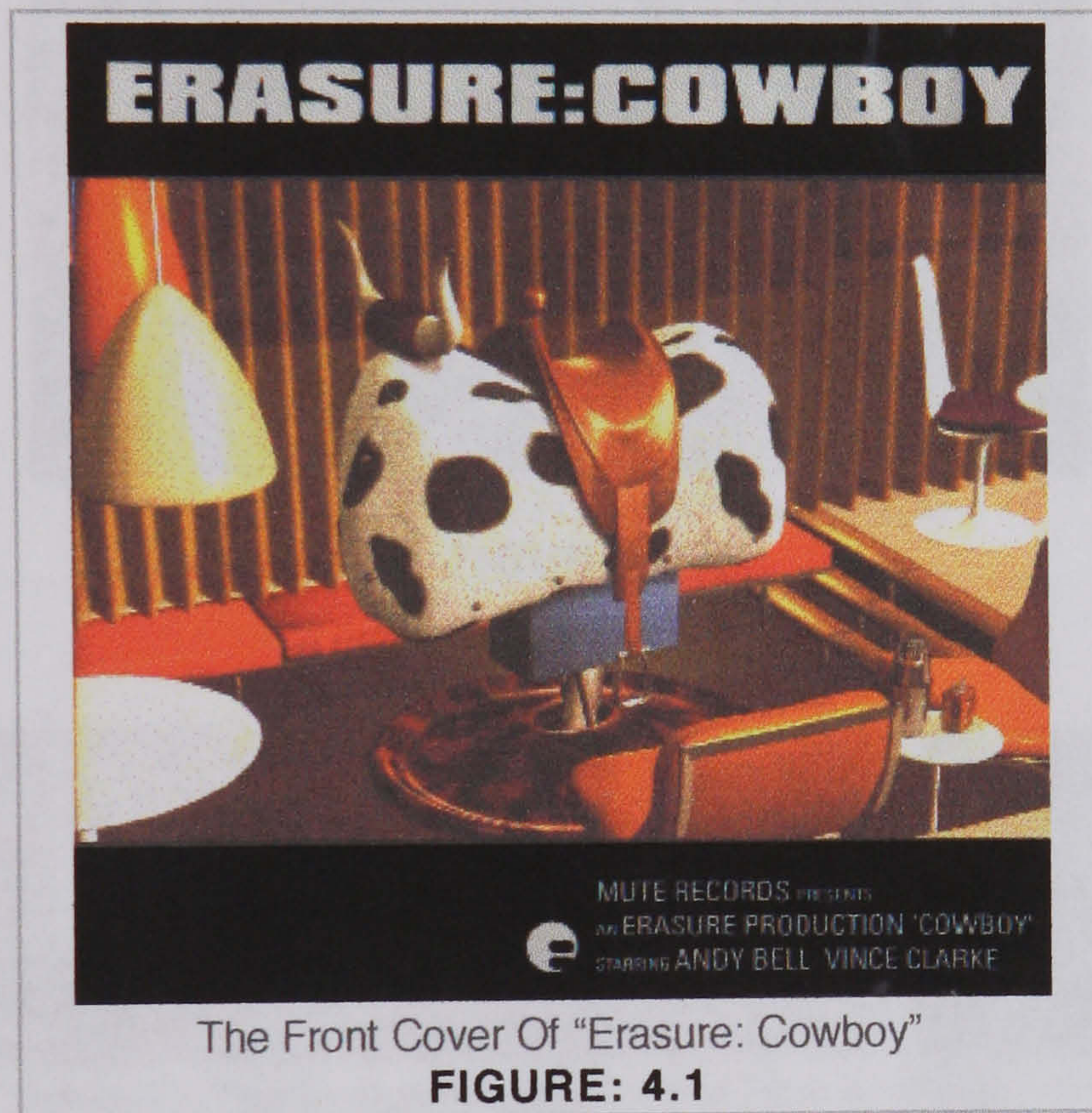
Adrian Shaughnessy discussed the market for Erasure. He said:

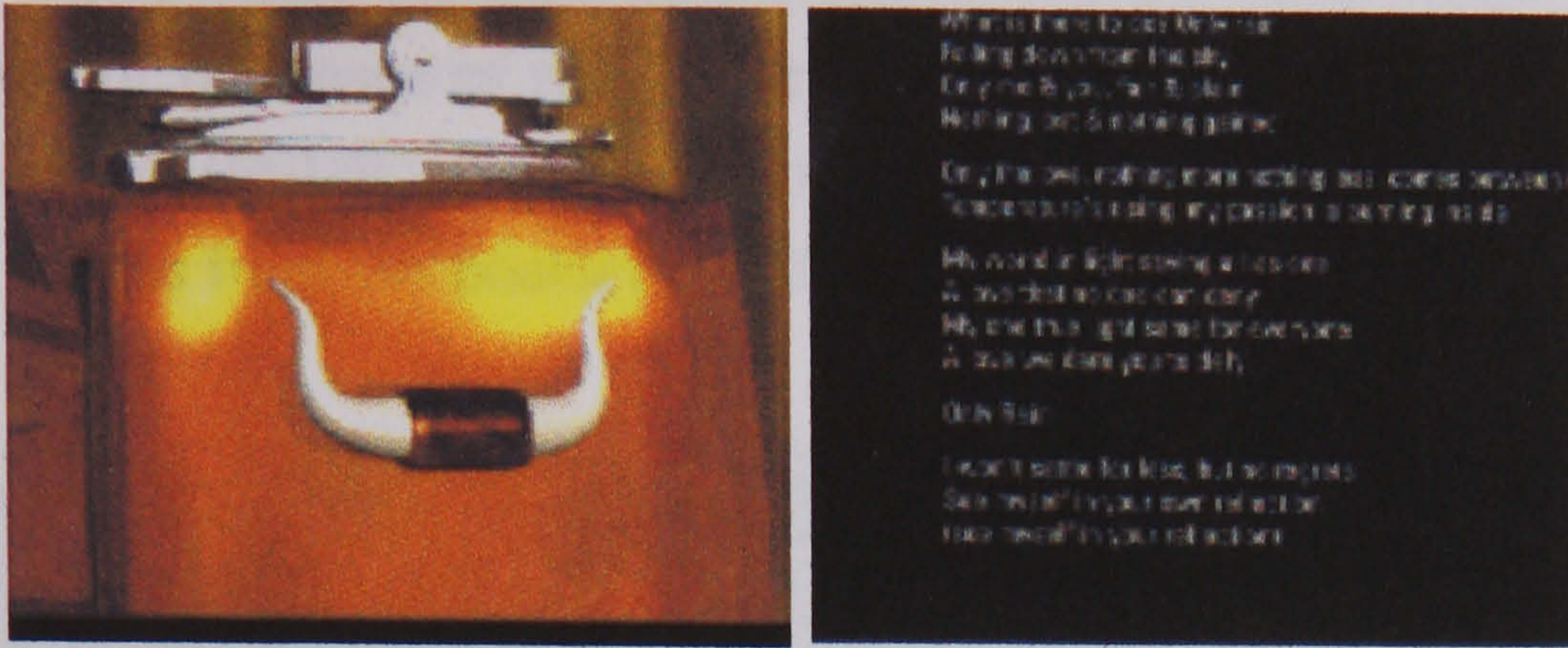
The record buying market is huge. Erasure sell all over the world. So yes it is big market. They're most popular here, but they are popular in America, and the Far East. The main market is here in England.

The designer's explanation showed the following types of varieties: 1) variety of the music records of the Erasure group, 2) variety of music records of other music groups in the record markets, 3) variety of target audiences. There were various types of differences between music records themselves, their target audiences, and their markets. The coexistence of these varieties suggested the occurrence of the following activities: 1) competition, 2) comparison, 3) selection. The designer stated that the nature of the records market was competitive.

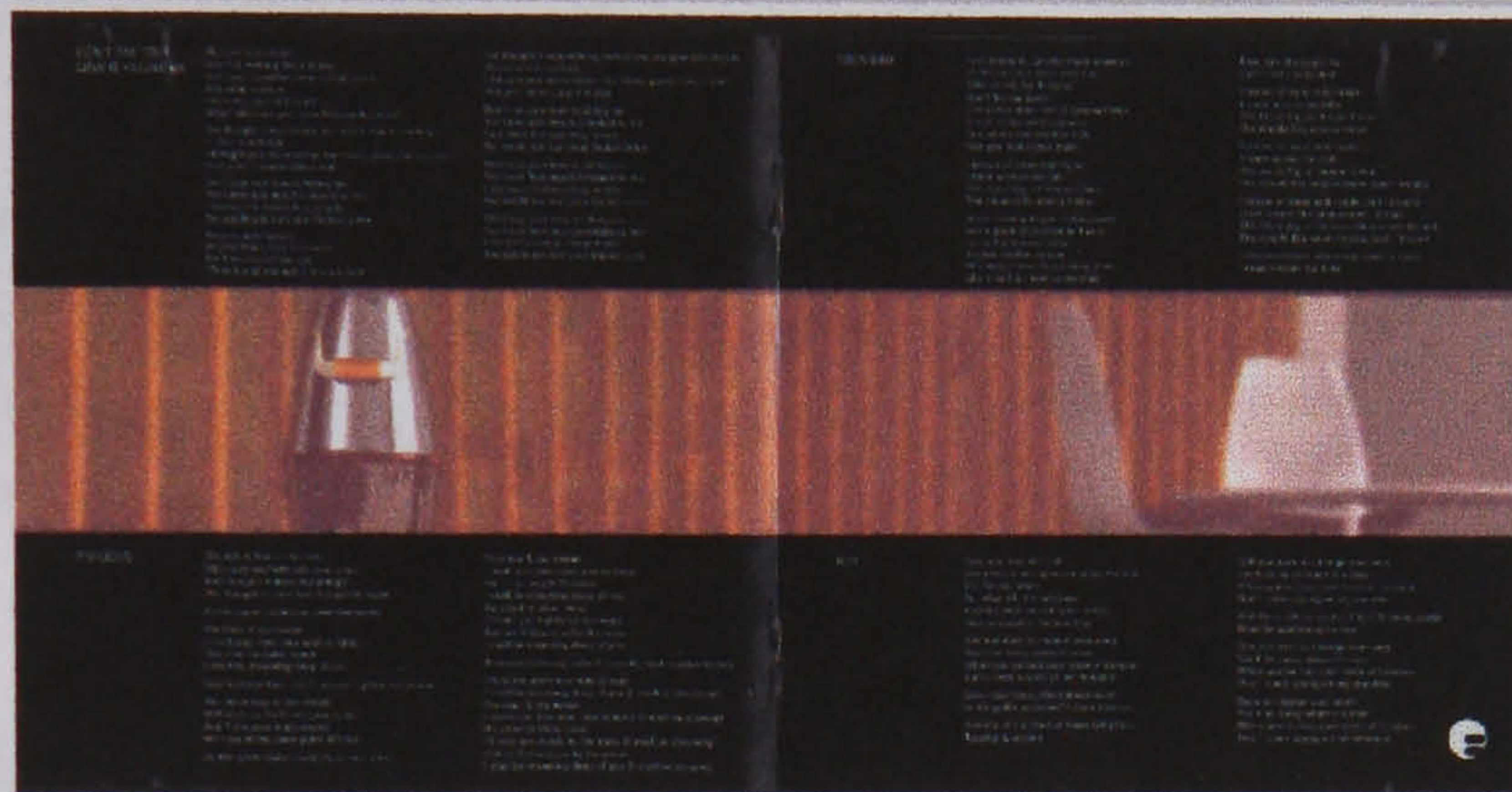
4.2.2 Design imageries and the structure of the CD sleeve

This project consisted of a booklet and a CD sleeve. The main imagery occupied the front cover of the booklet. Both the booklet and the CD sleeve included design imageries. The project consisted of six design imageries: one was on the front, three were inside the booklet, one was inside the back of the sleeve, and the last one was on the back of the sleeve. The theme of the project portrayed a bachelor pad type of setting, and focused on the image of 'bucking bronco' in the front cover (FIGURE:4.1). The imageries inside the booklet were depicted from the front imagery. Each of the inside pages included one element of the following: 1) a lighter, 2) a cocktail shaker, 3) a pair of cufflinks. (FIGURES: 4.2, 4.3, 4.4, 4.5, 4.6).





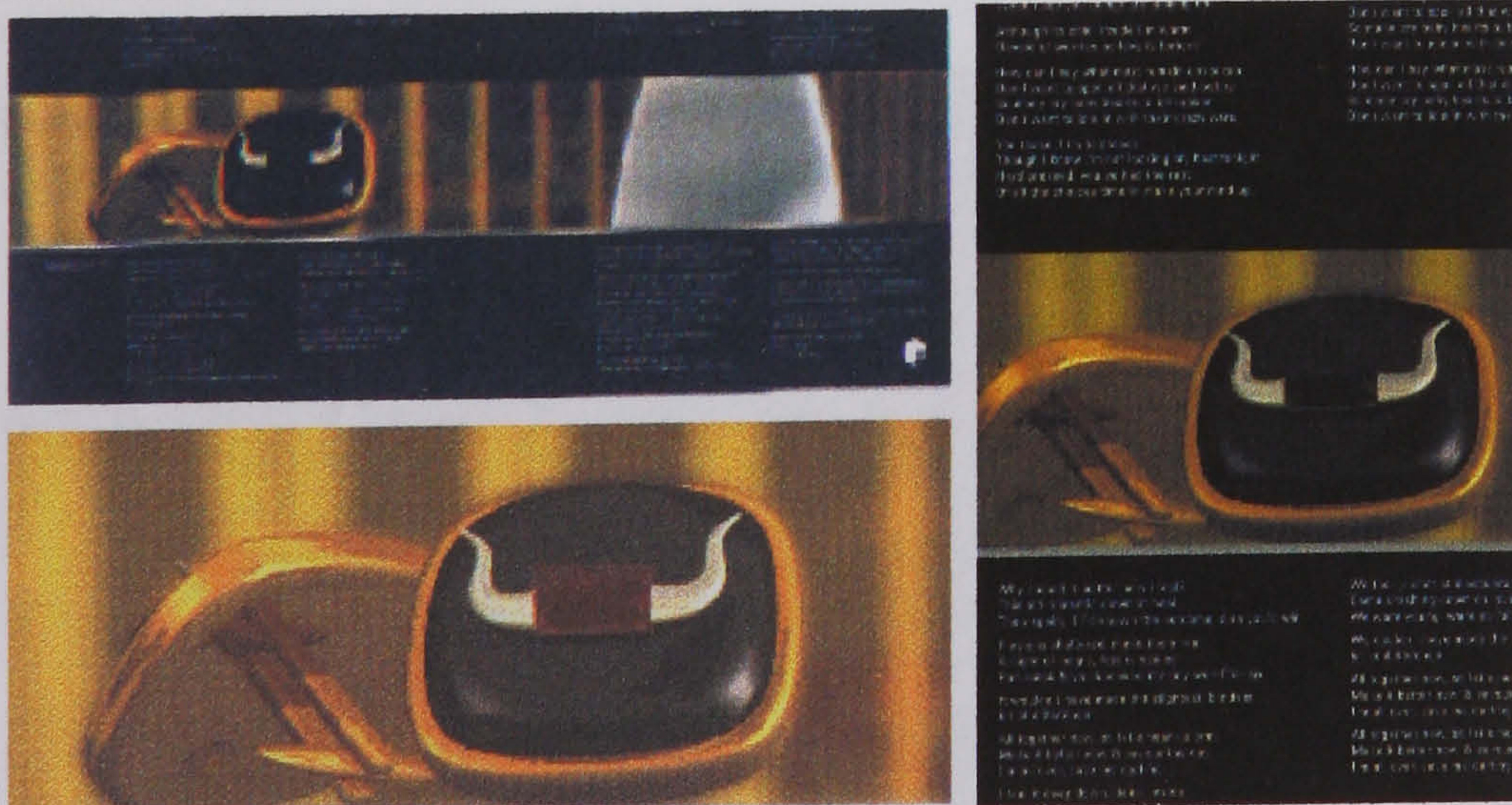
Details Of The Design Imagery Of The Booklet (Pages: 2 & 3)
FIGURE: 4.3



The Design Of The Booklet (Pages: 4 & 5)
FIGURE: 4.4



Details Of The Design Imagery Of The Booklet (Pages: 4 & 5)
FIGURE: 4.5



Details

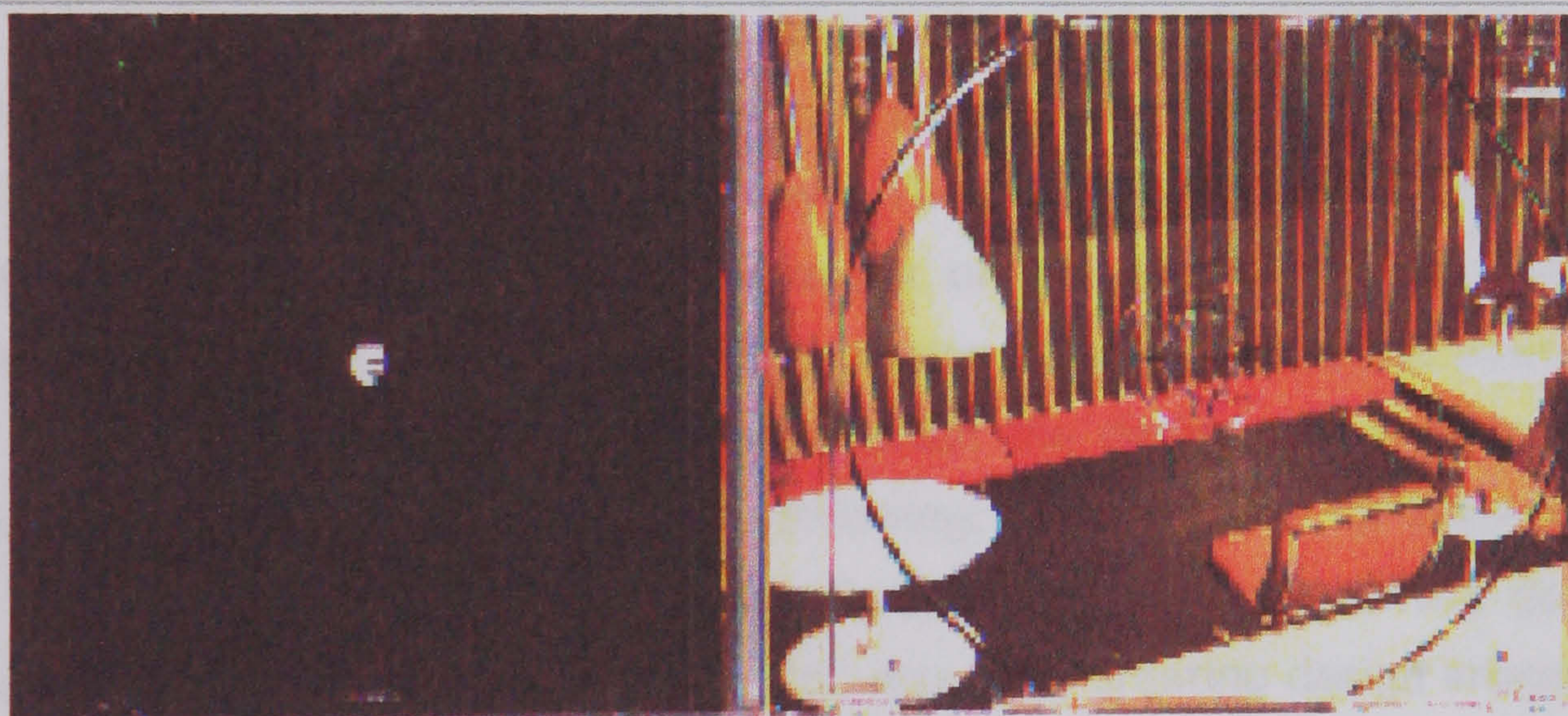
Details

The Design Imagery & Details Of The Booklet (Pages: 6 & 7)
FIGURE: 4.6

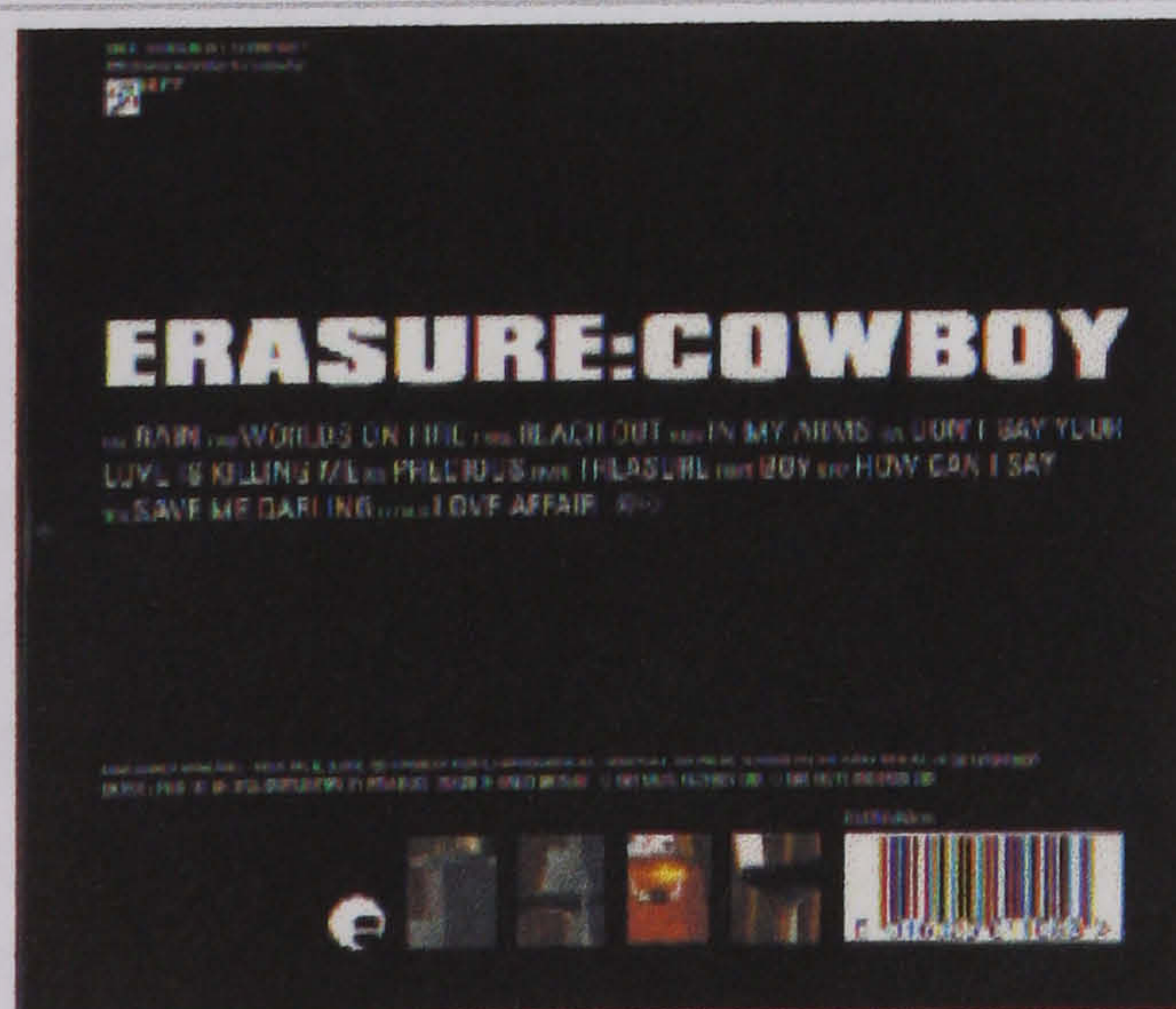
The design imagery inside the back of the sleeve was the same imagery as the front cover, but without the image of the 'bucking bronco' (FIGURE: 4.8), and it was covered by the music disc (FIGURE: 4.7). The design imagery of the back of the sleeve consisted of images from the booklet (FIGURE: 4.9).



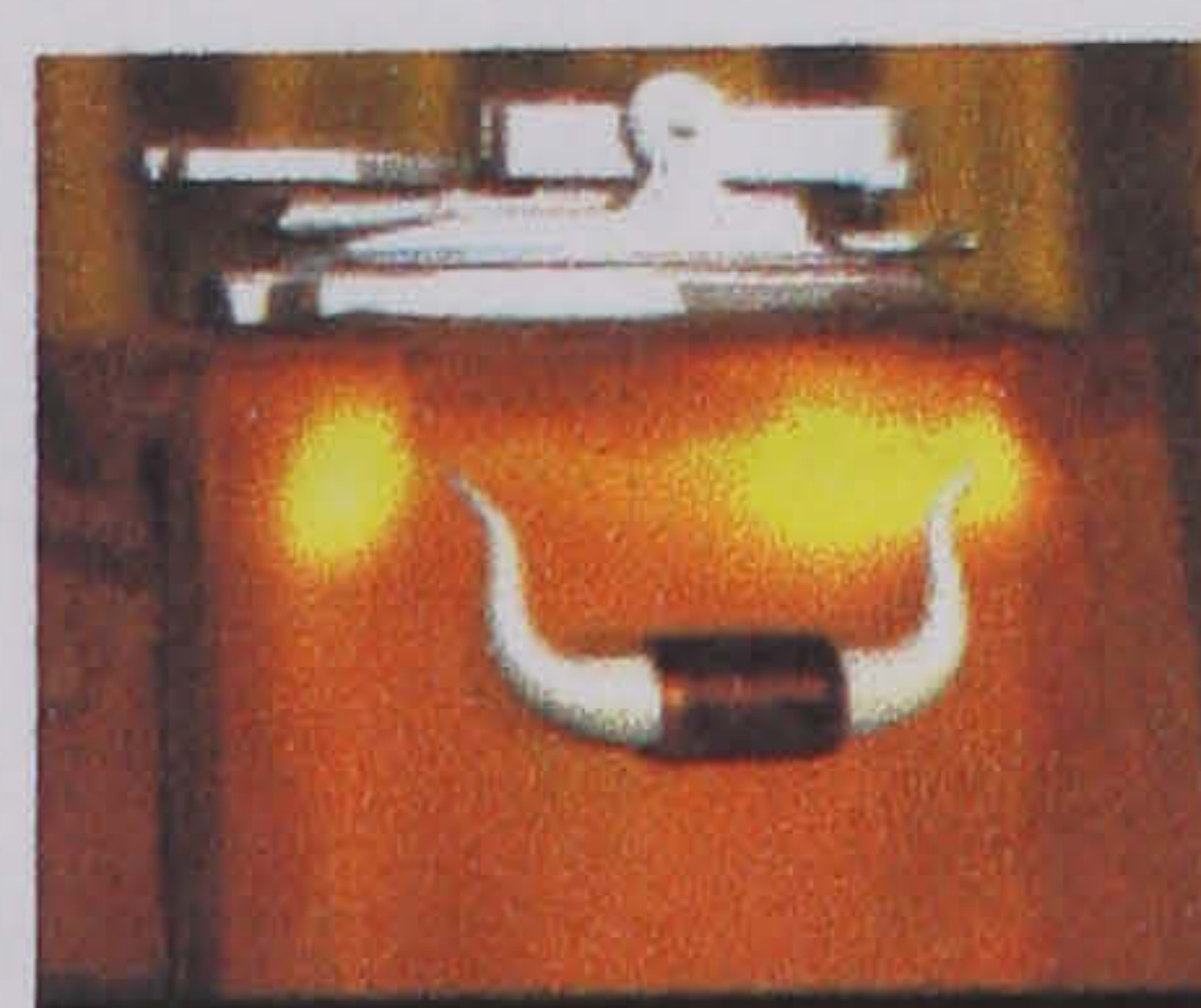
"Erasure: Cowboy": The Inside Back Of The Sleeve With The Disc
FIGURE: 4.7



"Erasure: Cowboy": The Imagery Behind The CD
FIGURE: 4.8



Details



"Erasure: Cowboy": The Flip Side Of The Sleeve
FIGURE: 4.9

The CD sleeve was made of transparent plastic and was similar in its structure to the

common standard of the CD sleeves in the record market. The front part of the sleeve had in the inside a pocket where the booklet was inserted, so that when the sleeve was to be opened people were able to take the booklet out and look at the inside information. The booklet consisted of eight pages including a front cover page and the back page. Each of the inside pages included the written words of two songs. The songs were separated by a centred narrow window shape which started at the left edge of the left page and continued across to the right edge of the right page. Each window contained design imagery. The texts and the imagery were designed as if they were film captions and credits. Also, the images were depicted in a flick way (the image in the foreground was in focus, and the image in the background was out of focus). The colour of the pages was black and the colour of the text was white. The dominant colours of the design imageries were ranges of golden orange, some ranges of brownish colours, and black. The measurements of top surface of CD sleeve were 7.50 inches width by 4.75 length. The CD cover was 4.70 inches width by 4.70 inches length.

4.2.3 Processes of identifying the need & the need pattern (NP)

The design brief of 'Erasure Cowboy' was an open brief, and the designers were free to do what they wanted as long as they were able to come up with an unusual visual interpretation of the word "Cowboy". The design brief did not include visual sources or descriptions of visual preferences of any kind. But, the design brief indicated that the use of literal visual interpretation of any kind was not desirable. The design brief included a set of requirements which the designers had to satisfy. The requirements of the project involved the following: 1) a CD cover for Erasure Cowboy record that was to be used then for the Erasure campaign, 2) coming up with an unusual visual interpretation of the word "cowboy", 3) creating design imageries that were to reflect the exotic personality of the Erasure group, 5) addressing the core audience of Erasure group in an interesting manner and meeting their expectations, 6) creating design imageries that were to be used on various applications, 7) using style and creativity as tools for addressing the audience and for achieving the communication objectives of the project, 8) using modern communication to express the modern type of music. The designers gathered information for this project from the following sources: 1) the clients, 2) the record market, 3) people from the record markets. Adrian Shaughnessy explained how they gathered information for this project. His explanation showed intuitive means based on experience in a subconscious manner. He said:

Talking to the record market. Talking to the client, and we know a lot of music business. If you were talking to a packaging designer he would know about food, and he would know supermarket shelves. We know music, we know what looks good. We know what audiences expect. So we get all our information. It is intuitive, and it's knowledge that we hold already... There was no research commissioned. It was entirely intuitive.

The need for the project involved the context of the project and the peculiarities of the POs. The need for the project was identified after the designers collected and analysed the given information. The conceptual understanding and the integration of the various information inputs can be considered to be the need pattern (NP) for the 'Erasure:Cowboy' project (QUOTATION: 4.6). Adrian Shaughnessy explained:

The design was driven by our design ideas. Also, there were other things such as the clients view, our knowledge of the market, but basically putting all that into the mix we came up with the solutions which was a design solution.

The need pattern (NP)	
1.	"They wanted initially a CD cover which could then be used for a campaign to promote the record. ... then it gets used on posters, on press adds, perhaps even as a TV commercial. It's creative imagery which can be used in a campaign." (Adrian Saughassy)
2.	"They needed imagery that would project the type of music, would speak to the audience using style as a leverage, using design as leverage, so that people could pick up a CD cover or see a poster and say that's the sort of music I like. Identify the band Erasure, so what they needed was imagery which would speak directly to the core audience."(Adrian Saughassy)
3.	"They just said come up with some illustrations, some imagery and icon that will represent the music and the elements of the brief that was most prominent was the need to portray a title cover."(Adrian Saughassy)
4.	"They said to us, find a way of expressing this title Cowboy. They'd seen other ideas, they'd had other design companies submit other ideas and the design ideas had all latched onto a literary interpretation of cowboy. So we had wild west imagery, and this set up a ... of messages that they are a modern electronic pop group. They are radio friendly. Their music is mainly for the radio. It's modern, modern communication. It's modern music. So it was wrong to saddle, to excuse the pun, with old wild west imagery."(Adrian Saughassy)

QUOTATION 4.6: THE NEED PATTERN FOR THE 'ERASURE: COWBOY' PROJECT

The processes of identifying the need involved various processes (TABLE: 4.1).

1) Receiving, discussing, analysing, and understanding the design brief;
2) Gathering various types of information
3) Identifying the need and its constraints;
4) Identifying each requirement and understanding its relationship with the other requirements;
5) Analysing the collected information and documents;
6) Formulating a conceptual understanding about the need from the outcome of these process;
7) Discussing and suggesting potential design routs;
8) Writing a design proposal;
9) Getting the clients' approval.

TABLE 4.1: PROCESSES OF IDENTIFYING THE NEED

- **The constraints of the need**

The constraints of the need patterns were: 1) visual 2) physical, 3) economic. Adrian Shaughnessy mentioned particular visual constraints when he explained the design brief. He said:

They said they didn't want cowboy images. They didn't want a guy with six guns... They also stated that they have no interest in their pictures being used on the cover. If you think about a lot of CD covers, 'George Michael', 'Simply Red', they would use an artist picture. 'Erasure', they're not interested.

The other visual constraints was related to the copyrights issue and it had economic and legal aspects. Adrian Shaughnessy explained:

This is a photograph by a wonderful old photographer called Julius Schuman ... But we couldn't get the right to the picture so we had to create in 3D our own environment and this is a specific technique.

The physical constraints can be considered to be related to the functional use of the imagery which involved the material and size of the CD sleeve. The designer did not focus on the economic constraints. He stated that the design was influenced 70% by the budget. He, also, added that they worked towards a particular deadline. However, the designer explained that they hired and art directed a professional technician to electronically produce the final artwork under their direct step by step supervision. The designer did not mention if money and time imposed some kinds of limitations or pressure. He was more concerned in how they developed their design idea and design imagery. But money and time can be still considered as limitations, because the project was done within their limits.

4.2.4 Processes of gathering and selecting visual sources

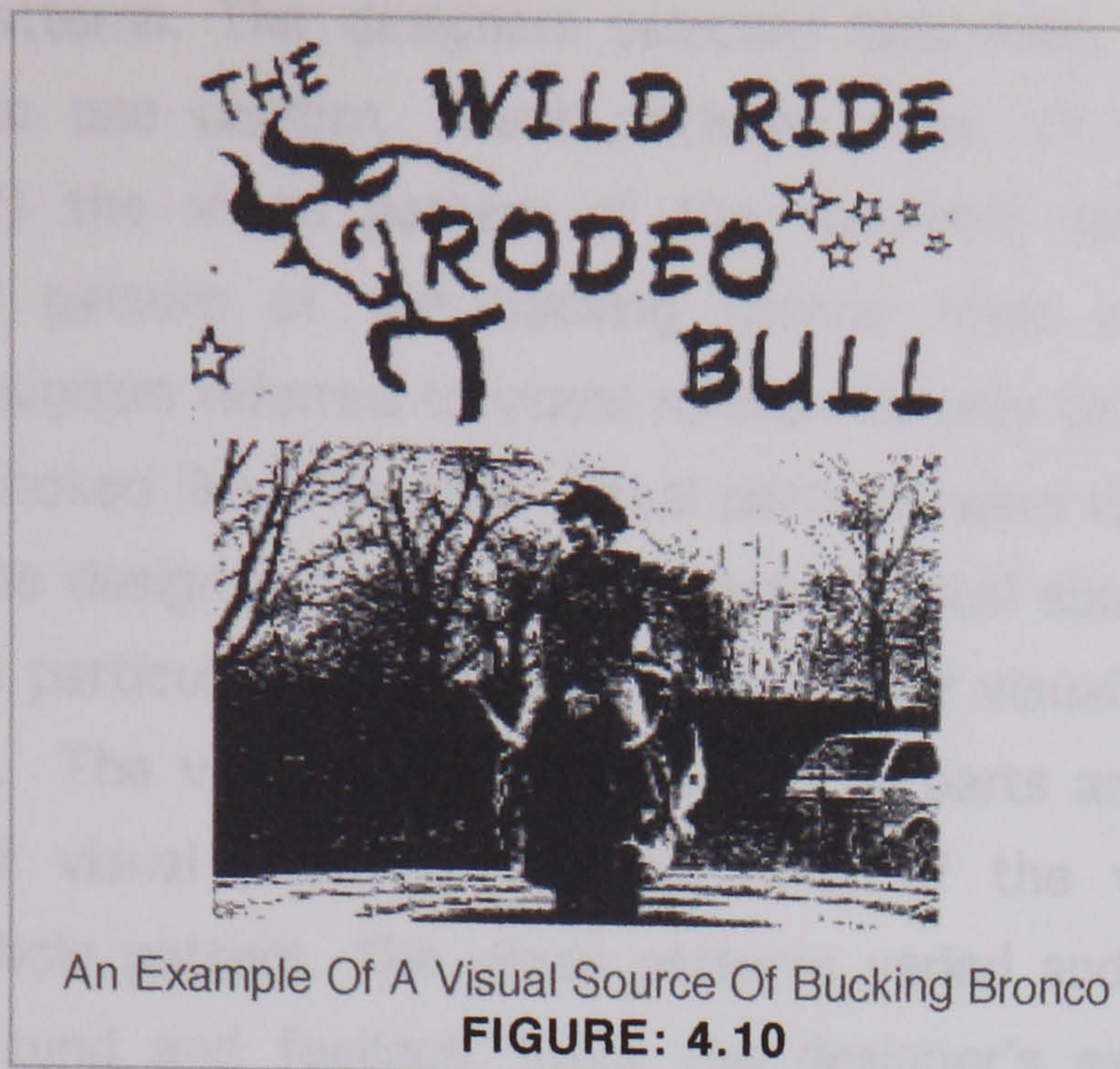
Adrian Shaughnessy stated that they searched, gathered, and selected visual sources from various places, he said: "Well, they're all over the place". The visual sources of the "Erasure Cowboy" can be classified under the following sources: 1) mental sources (the designers' visual ideas), 2) printed visual sources (books, brochures, magazine, entertainment brochures), 4) actual objects, 5) electronically generated sources by using the computer programs 'Softimage' and 'Quark Express', 6) found sources. Adrian Shaughnessy mentioned their visual sources:

We came up with the idea for a bucking bronco in this room environment and we found this shot (interior design setting) but we couldn't use it because of copyright problems. We then tried to find a similar one and we went to photo libraries for that. We couldn't find it, so then we created it. Photo libraries play a big part not in the final outcome but in the process of getting there.

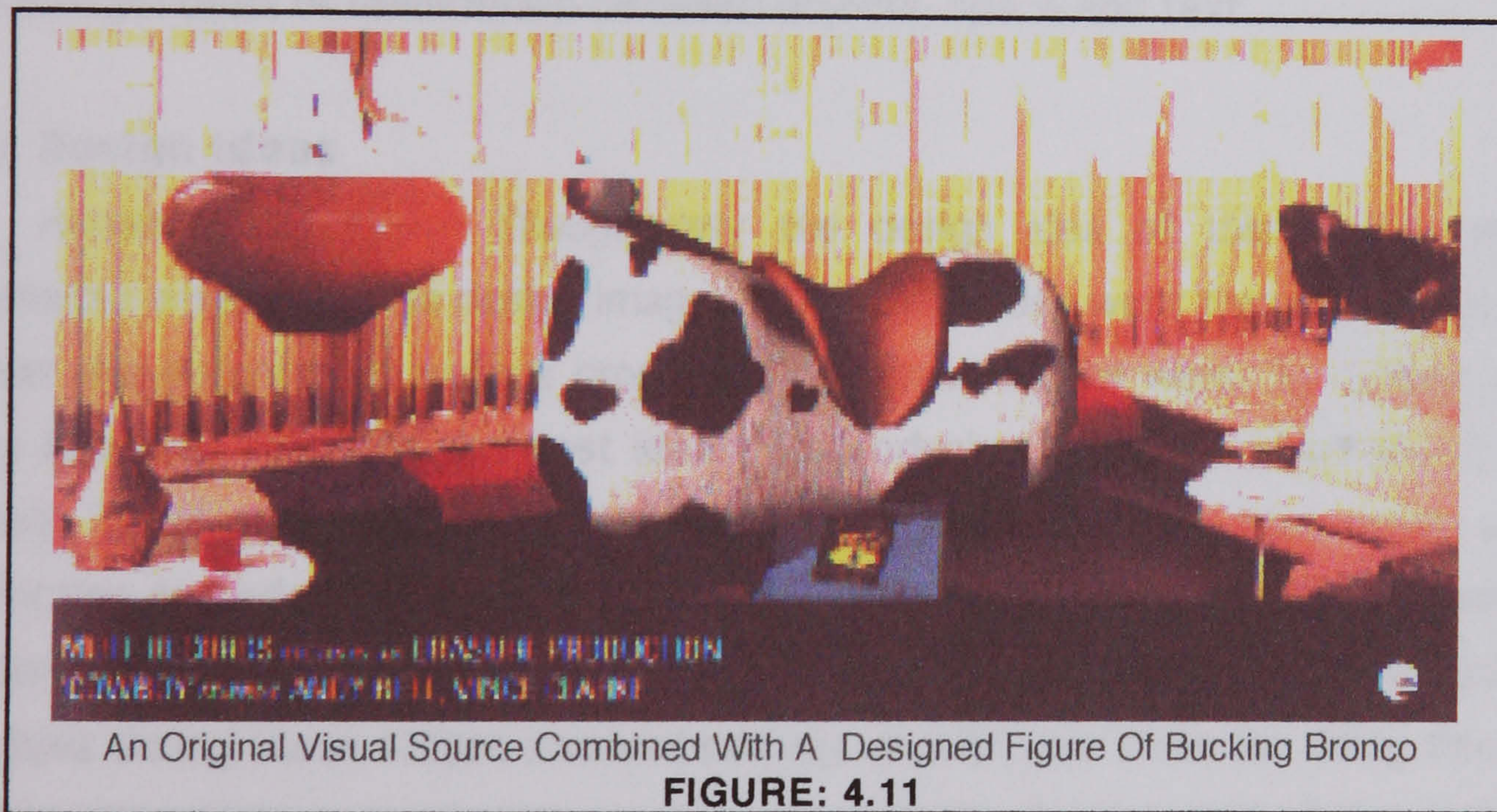
The processes of gathering visual sources started after the designers came up with the idea of 'bucking bronco' as a visual interpretation for the word 'cowboy'. The designers gathered and selected visual sources throughout the stages of their design activities. Most importantly, the visual sources were mainly design idea driven sources, because the designers came up with the ideas and the theme for their project then they started their visual search (QUOTATION: 4.7). The designer stated that they gathered images of a bucking bronco from everywhere but they did not find good images (FIGURE: 4.10). Subsequently, they generated for themselves an image of a bucking bronco.

"We sat round this table and came up with the idea of the bucking bronco. Then we had a very very difficult job. A research job. Trying to find a bucking bronco. What do they do look like, nobody knows. I said to people go and see. So we had to search around and we sent out people to search. This is what we found. These are corporate entertainment brochures. Firms hire these things out and we found these. We found these very bad pictures. We researched them. We just rang people and said how could we find the manufacturer in the UK. But in the end by using these we had to create it ourselves. So we did research which was the way of looking for it. We used books, phone calls, speaking to people, any way to gather our information." (Adrian Saughassy)

QUOTATION 4.7: HOW DESIGNERS GATHERED AND SELECTED VISUAL SOURCES



The other visual sources included actual objects and books. The designer explained that they selected a certain photograph from a book of photographs about particular types of architecture and interior design. The designer provided an experimental design copy that showed both the designed image of the bucking bronco and the actual photograph combined together in one imagery (FIGURE:4.11). The original visual source did not include both the bucking bronco image and the text.



The designer explained:

We took this photograph. We found this in a book of photographs; an art book devoted to this sort of architecture and interior design. It is taken by a wonderful old photographer called Julius Schuman who specialises in these houses, many of which don't exist anymore.

4.2.5 Visual patterns

Adrian Shaughnessy stated that they did not use the actual visual sources they selected for this project in their design imagery. He explained that they selected visual information from their visual sources. The various types of visual information can be

considered visual patterns. The designers selected two main visual patterns and integrated them into one pattern. These patterns were: 1) the visual pattern of 'bucking bronco', 2) the visual pattern of the 'bachelor setting'. The designers selected the visual pattern of the bucking bronco from visual references and imagination. The designers referred to visual references only to get ideas about what the bucking bronco looked like. The other visual patterns were related to the bachelor setting. Observing the design sketches and the actual visual sources showed that the designers construed particular visual patterns from their visual sources and did not draw similar images. The visual patterns consisted of parts and each part involved further selection of visual patterns. All the parts of the visual patterns were integrated in one whole pattern. The visual patterns varied and some of them were constructed from sound and feelings. From the designer's explanation, the visual patterns of this project can be classified under the following categories: 1) visual ideas, 2) visual patterns of specific objects, 3) visual patterns of sound of music, 4) visual patterns of certain feels and modes, 5) patterns of feel of textures, 7) patterns of bachelor pad type of setting, 6) patterns of Pop interior design, 7) visual patterns of old films, 8) visual patterns of electronic music instruments, 9) visual patterns of colours of the early 70s', 10) digital visual patterns of electronic 3D techniques, 11) visual patterns of relationship between objects, space and text.

4.2.6 Design ideas

According to Adrian Shaughnessy the design idea of this project was the fundamental essence of the design imagery. The design idea went through various stages and was the outcome of various processes. The main stages were: 1) coming up with design ideas, 2) selecting the best ideas, 3) producing various possibilities of design patterns, 3) selecting the best design patterns, 4) developing the best design options, 5) selecting and adapting visual patterns, 6) crafting design patterns, 7) artwork. The boundaries between these stages were not rigid. Solving unexpected situations or difficulties during these stages involved coming up with new ideas for doing things and selecting and adapting visual patterns. Subsequently the development of the design idea was not confined to a certain stage. Therefore, any systematic order can be considered untrue, because while the designers were crafting their design ideas new possibilities occurred, and further development took place. In spite of the fact that there were various stages, the designer discussed the project according to what they did and not according to the stages. Therefore, the information is discussed according to how these processes started and developed and not according to what happened in each stage.

4.2.7 Coming up with design ideas & graphic investigation

The processes of coming up with design ideas and graphic investigation (producing visual marks) were interactive processes, and both involved processes of selecting and adapting visual patterns. Adrian Shaughnessy stated:

We tend to get things done on paper very quickly. Someone says bucking bronco and we say yes, and someone starts to sketch it. So, it very quickly becomes reality.

Coming up with the design idea for Erasure: Cowboy involved various activities and processes (TABLE: 4.2).

<ul style="list-style-type: none">- Discussion,- Exchanging ideas,- Coming up with various interpretations of the word 'cowboy',- Selecting the bucking bronco idea as a visual interpretation of 'cowboy',- Searching for visual sources,- Brainstorming the design idea,- Exploring visual interpretations for the Erasure group and their music,- Coming up with the interpretation of a 'bachelor bedroom',- Producing initial design patterns,- Searching for visual sources and finding a better visual alternatives,- Rejecting the 'bachelor bedroom' and selecting a 'bachelor pad type of setting' instead,- Combining the two visual patterns that of the bucking bronco and that of the bachelor setting in one pattern,- Introducing other visual patterns as parts of the total visual patterns,- Producing initial design patterns as design options.- Presenting the design option to the POs- Getting feedback and approval- Starting the concept development stage
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TABLE 4.2: COMING UP WITH THE DESIGN IDEA FOR 'ERASURE COWBOY' & EXPLORING DESIGN POSSIBILITIES

The processes of coming up with design ideas were focused on satisfying the need pattern (NP) and its requirements. These processes started after the need was identified. The designers first explored the main part of the theme which was focused on coming up with an unusual visual interpretation of the word 'cowboy'. Afterwards, the designers explored and developed a theme, and focused on the design imagery as a whole.

Exploring design ideas can be classified under the following categories:

- Coming up with ideas through multi interactive thought processes:

Adrian Shaughnessy stated:

Four designers sat round this table and we talked and talked and talked and came up with ideas and out of that meeting we came up with the idea of the bucking bronco.

The designer's explanation showed that the designers selected the idea of bucking bronco as the best match for NP from patterns (ideas) of competing design hypotheses (PCDH). The first type of visual source at this stage was the designers' mental sources. Adrian Shaughnessy explained:

Being designers we tend to think visually anyway. I mean our ideas are visual. If someone said to me write a book about Erasure, I couldn't do it. But if they said come up with a visual iconography, come up with visual material that captures them then we can do it. So our ideas tend to be liberal.

Exploring an unusual visual interpretation of the word 'cowboy' involved coming up

with various visual ideas. Each visual idea can be considered a visual pattern. Also, each idea can be considered to involve an activity of pattern recognition (PR), because the designers' thoughts were focused on a thing called 'cowboy'. Essentially, the notion 'cowboy' was part of the need pattern (NP) and its context. Therefore, recognising the idea of bucking bronco, from other ideas, as a desired interpretation can be considered to be purposive pattern recognition (PPR). The processes of selecting the idea of 'bucking bronco' can show that the selection processes required the following: 1) variety of sources (the four designers) 2) variety of visual ideas (visual patterns) that had various qualities, 4) comparison between ideas, 3) purposive pattern recognition for selecting the design idea that matched the NP better (DIAGRAM:4.1).

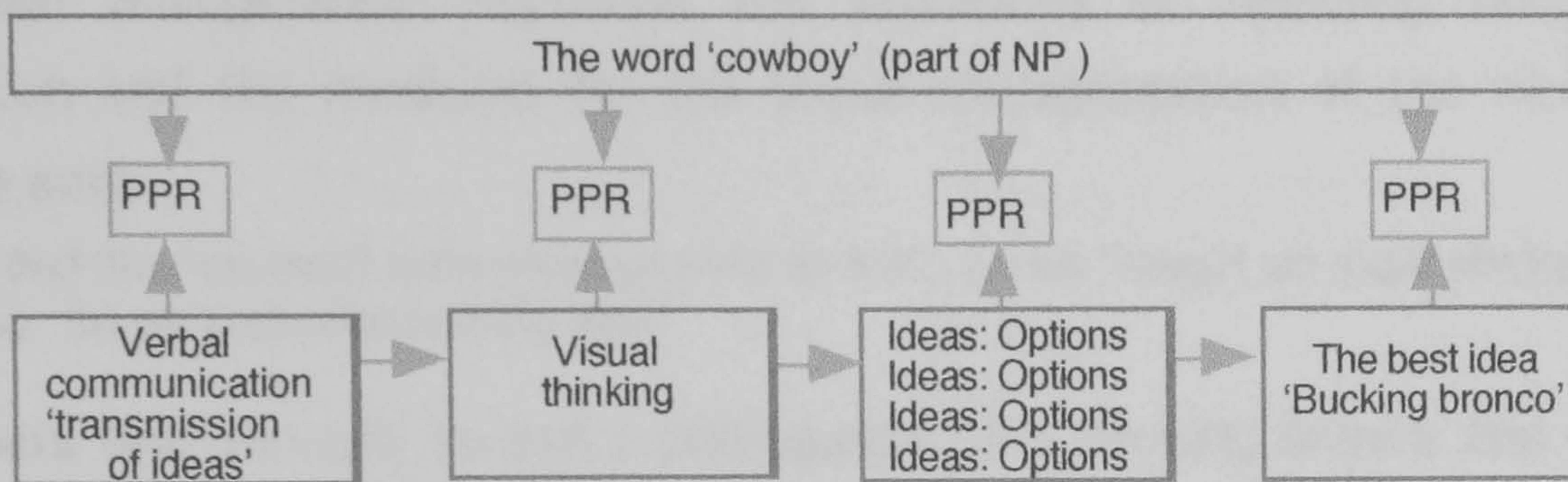


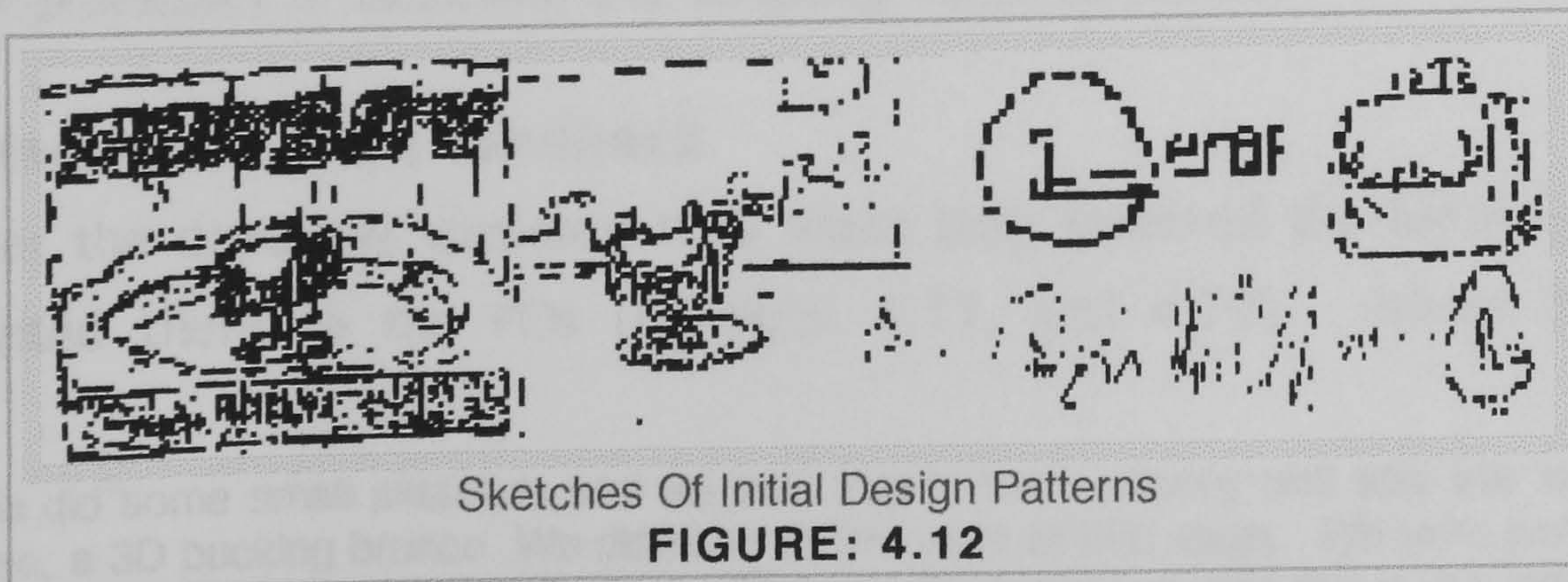
DIAGRAM 4.1: PROCESSES OF COMING UP WITH THE IDEA OF BUCKING BRONCO

- **Searching visual sources:**

The designers started searching their visual sources after they came up with the idea of bucking bronco. Then they started searching visual sources for the whole theme of their project which involved visual interpretations of the Erasure group and their type of music (See Section: 4.9). Searching visual sources was done during and between exploring design possibilities.

- **Graphic investigation and conjecture and refutation processes:**

The designers started exploring initial design ideas by producing visual marks. Adrian Shaughnessy stated. "The first stage was written with scribbles... All of us start off by drawing." Exploring design possibilities involved the following: 1) exploring potential design patterns by drawing a number of sketches, 2) selecting some design options and rejecting others. Some of the designers' initial design patterns are in FIGURE (4.12).



- **Design options and PCDH**

The designers explored the bucking bronco idea by considering various possibilities and by drawing a number of sketches. These possibilities can be considered to be patterns of competing design hypotheses (PCDH). The diversity of design options involved various qualities and properties. Also, they involved various approaches for matching visual patterns with the NP. Selecting a design option from various design options can be considered PPR, because the designers recognised a design pattern as being desirable for the NP.

- Exploring the design medium for representing the design idea:

Adrian Shaughnessy explained the processes of selecting potential design interpretation and the mediums for the visual representation of the idea of bucking bronco. He said:

At that time we didn't know whether we'd do it 3D. So we thought we might photograph one. So we brain stormed the idea.

The designers first thought to use a photograph of a bucking bronco and scan images, but they did not find good photographs of bucking bronco. Then the designers tried to find actual bucking broncos to photograph them, but they did not find good ones. Then they decided to create electronically a three dimensional image of a bucking bronco. The designers selected this option when the other options failed to meet the desired outcome. Selecting the electronic approach was due to two conditions: 1) the unavailability of good photographs and objects of bucking bronco, 2) the difficulty of buying a copyright of a certain photograph.

- Exploring and integrating the visual context of the theme:

The designers integrated the idea of bucking bronco with the idea of the bachelor setting in one pattern. In doing so, the designers tried various possibilities before reaching the desired match. In addition, the pattern of the bachelor setting changed at further stage. The initial sketches (FIGURES: 4.13, 4.14)) showed that the background setting of the bucking bronco was different from that of the following stages and from that of the final stage. This showed that the change involved new ideas and further processes of selecting and adapting visual patterns.

- **Presentation and feedback**

After the designers explored their ideas they selected the better possibilities, and presented them to the POs (FIGURES: 4.11, and 4.12). Adrian Shaughnessy explained:

We did some small sketches and we took that to the company and said this is our idea, a 3D bucking bronco. We didn't do all this work at that stage. We went back to him for a written proposal and some little hand drawings and said this is our idea do you think we can sum up, do you think we can achieve the objectives by this

approach and he said yes, that is great. On the strength of that we went to the final process.

These options were presented to the POs with the following descriptions:

1) (FIGURE: 4.13, Left)

Interior apartment- bronco machine sits in the centre of apartment, in the background we see bachelor pad wall units, mirrors, drinks cabinet etc.

2) FIGURE: (4.13, Right)

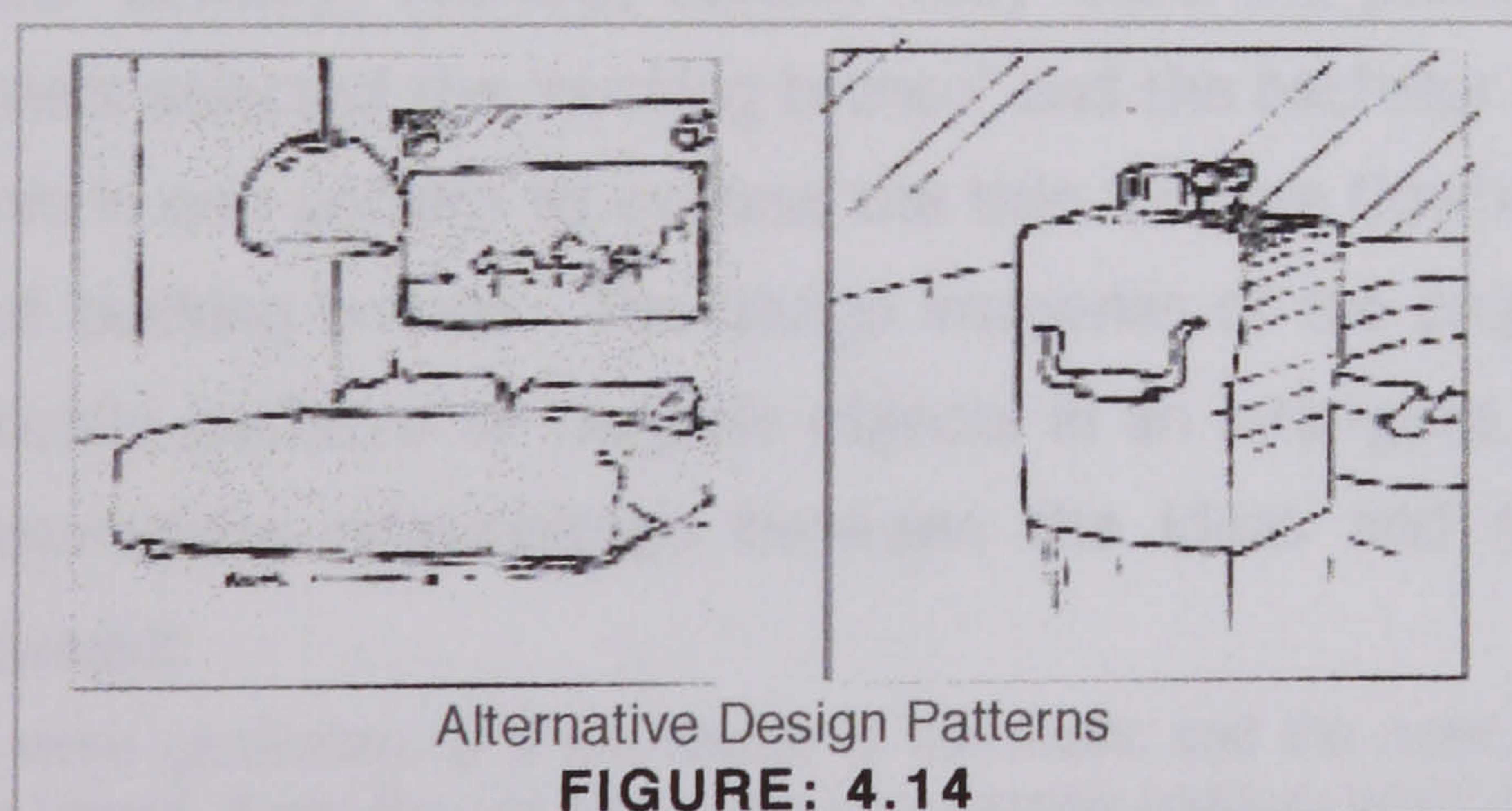
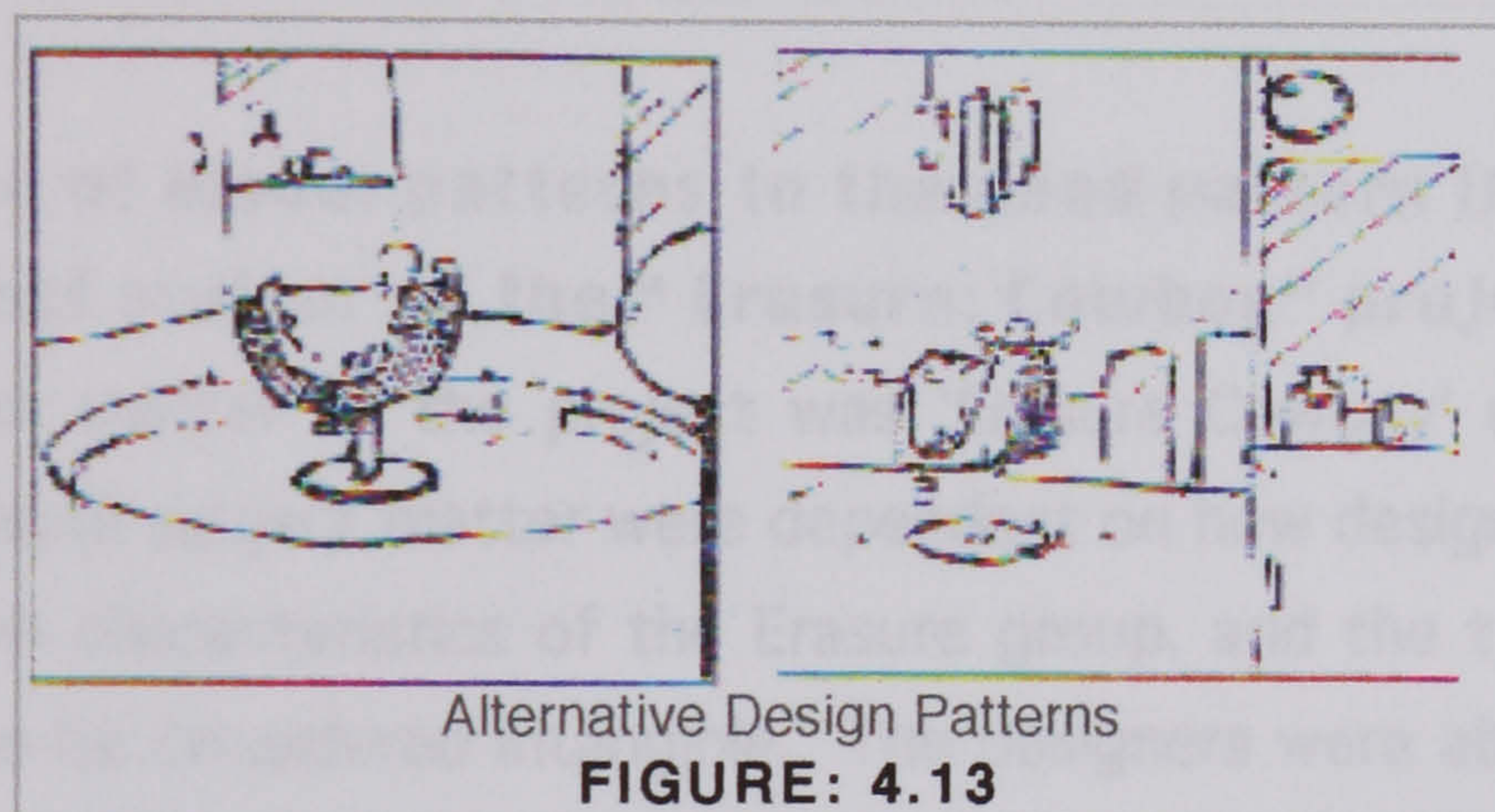
Interior apartment- bronco machine sits in front of plate glass window overlooking urban skyline.

3) (FIGURE: 4.14, Left)

Shot of bedroom with cattle painting above bed.

4) (FIGURE: 4.14, Right)

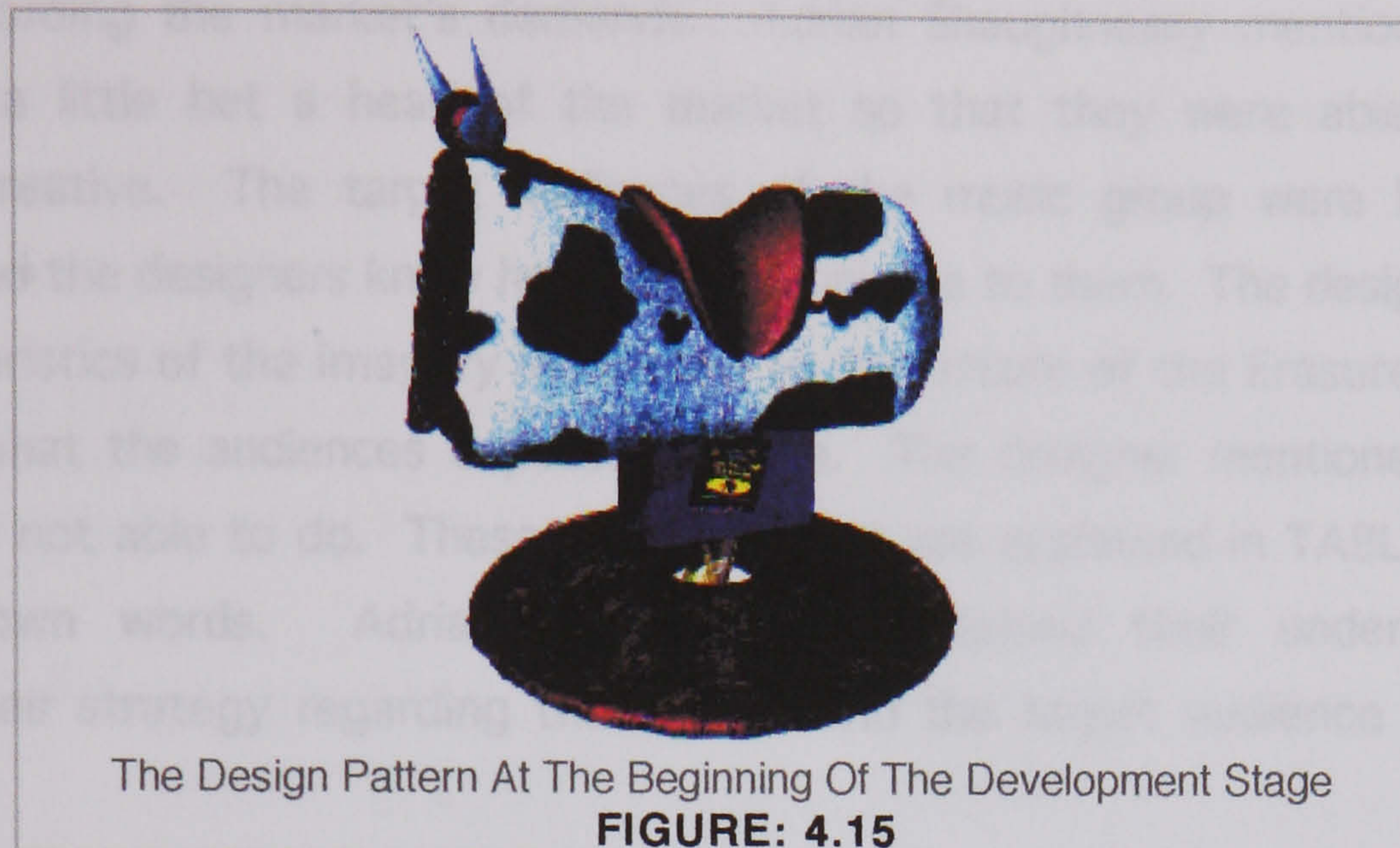
Detail of apartment featuring ashtray and oversize cigarette lighter embossed with bull's horn motif.



- **Design concept development stage**

The design concept development took place after the POs approved of the initial design idea (FIGURES: 4.11, 4.12). As the designers started developing their design patterns dramatic changes took place. These changes were accompanied by processes of selecting and adapting visual patterns, and by finding alternative ways for doing things. First the designers developed the design pattern of the 'bucking bronco' by using electronically three dimensional technique (FIGURE 4.15). The designer changed

the design pattern of the bachelor setting in FIGURES: (4.13, 4.14) and selected a photograph from the early 70's (the background image in FIGURE: 4.11). At the end of this stage the designer showed their POs the design imagery in FIGURE (4.11).



The Design Pattern At The Beginning Of The Development Stage
FIGURE: 4.15

4.2.8 Relevance of visual patterns to the need pattern (NP)

- **The subject matter of the “ Erasure: Cowboy” project**

The subject matter of the project was ‘Erasure Cowboy’ music record. The elements of the visual subject matter were dependent on how designers interpreted the word ‘cowboy’, the characteristics of the Erasure group, and the type of music. The subject matter can be considered intangible. The designers were able to come up with whatever visual interpretations that was to satisfy the NP. Also, the designers did not interpret the word ‘cowboy’ literally, neither they used the pictures of the Erasure group. The designers selected the ‘bucking bronco’ and the bachelor pad type of setting and combined them in one pattern to express the title ‘Erasure Cowboy. The main focus was on the idea of bucking bronco. The design imageries of the project can be seen as syntheses of basically patterns of tangible objects in an intangible manner. In reality there were no immediate relationships between the ideas and the music. Adrian Shaughnessy explained:

The ideas were generated by a knowledge of the music and the musicians and the ideas were forced, if you like we forced the iconography imagery which then sums up what the music is like... Previous people who were doing this project went wrong because they were literal. We were more allegorical. We alluded to it.

According to the designer, the bucking bronco became very important, he explained:

The dominant theme, the dominant icon, the iconography is the bucking bronco. So it's dead centre. It's smack in the centre. These other images are hints at this bachelor pad. This slightly bizarre, slightly racy location. (See FIGURE: 4.1)

Adrian Shaughnessy stated that doing record covers was often more expressive than doing other types of projects, and it was fun and light hearted.

- **The target audience**

The major considerations regarding the target audience were: 1) the target audiences' expectations, interests, and preferences, 2) the nature of the Erasure group and their music, 3) the demands of the record market, 4) the designers' strategy regarding the market's demands. Adrian Shaughnessy mentioned that they tried to be a little bit a head of the market so that they were able to introduce something creative. The target audiences of the music group were known to the designers, and the designers knew how to communicate to them. The designer described the characteristics of the imagery in relation to the nature of the Erasure music and in relation to what the audiences expected to see. The designer mentioned things they were able or not able to do. These considerations are explained in TABLE (4.3) in the designer's own words. Adrian Shaughnessy explained their understanding and explained their strategy regarding the market and the target audience (QUOTATION: 4.8).

Types of target audience	"The target audience in this case is Erasure fans. I think when they look at that they will see something that they will understand. So I think we gave them exactly what they wanted. I mean it's yet to be proved if the record is a flop then I'll have to change my view on that. But I think because we know the sort of people or the mindsets of the people who buy Erasure records we were able to take our imagery to give them something that they would like." (Adrian Saughassy)
The nature of the Erasure group and the audiences' expectations	"Because our knowledge of the record industry is such that we know the profile of the buyer, so we were able to come up with the imagery that we thought they would like. They like Erasure because Erasure is slightly different. Erasure has a big gay following for instance and gay iconography is different. There's a specific gay style and so all that was in our thinking." (Adrian Saughassy)
Recognising visual patterns and what designers can and cannot do	"For instance we wouldn't have used, dark sort of Joe Manic heavy metallic imagery, we wouldn't have used industrial imagery. We use bright, but airy upbeat images and that's because the people who like Erasure like this quite happy pop music which is bright. It's electronic. It's not moronic, it's quite intelligent music. We think we understand the target audiences, then we make imagery which we think they will enjoy and understand." (Adrian Saughassy)

TABLE 4.3: THE DESIGNERS' CONSIDERATIONS IN RELATION TO THE TARGET AUDIENCE

"Frequently we have to think what is acceptable to the consumer in a particular instance. In records fortunately, people's expectations when they pick up a CD is that the cover will be very expressive and creative... It's been possible to make very creative and expressive covers, and that's what the market demands. The market demands beautiful covers except in certain cases. Take the example of Take That or the Spice Girls, people just want their pictures. That's all they want because it's young kids. They just want a picture so that they can see what they're wearing. So everything is influenced by the market. What you have to do is to be a bit ahead of it. And we wouldn't be interested in doing work which was slavishly following the market because the really successful people are just one jump ahead. Not two jumps. If you're two jumps ahead then you're either avant-garde or you're into pure art or high art. But to be commercial you need to be one jump ahead." (Adrian Saughassy)

QUOTATION 4.8: DESIGN STRATEGY FOR ADDRESSING THE TARGET AUDIENCE & MARKET DEMANDS

- **The communicative characteristic of visual patterns**

The communication objectives were part of the need pattern (NP) and they were achieved by selecting and adapting certain visual patterns. The designers focused on the communicative characteristics of the patterns in order to meet the need pattern and its objectives. The designers elaborated on various clues to make the design imagery communicate the intended communication. Adrian Shaughnessy stated that the

communication objectives of the project worked on three levels (TABLE:4.4). The first level had to do with how the designers handled the bucking bronco visually. The second level had to do with the fact that the music and the design imagery were generated electronically and both gave a three dimensional feel, so both communicated one language. The third level of communication had to do with the quality and property of the design imagery in expressing the nature of the Erasure group. Adrian Shaughnessy explained that the design imagery of the project communicated indirectly to the target audience. He said:

Indirectly, because we've used metaphors and we've used allusion. We've alluded to various things. We've alluded to the cinema. We've alluded to camp sort of play boy architecture and we've alluded to cowboy 3D. So very much I'd say the imagery itself is indirect. I'd say the style is very direct.

First Level	"One works on the level that what we're going to do with this bucking bronco, It will be seen everywhere on 'T' shirts, on posters, so it becomes an icon, it becomes a word, it's a sign meaning sound, its a pneumatic. It's when you remember a sound. It has a sort of visual pneumatic. The aspect of visual icon that's remembered." (Adrian Shaughassy)
Second Level	"There's a second level to that which is the communication part which is by using this 3D technique which is a rather shiny modern technique it also reflects their music, which is mainly synthesisers and which echoes the music. They don't use traditional instruments. They use electronic instruments and this image has been generated electronically. So it's the language it's using, is the language of modern visual communication." (Adrian Shaughassy)
Third Level	"The third thing is that it's quirky. Unusual and it links all the visual communications to this project. It gives something to identify. It's a rather unusual image and they also Erasure are quite unusual... So the design is slightly hybrid, slightly art, to echo the oddness of the group" (Adrian Shaughassy)

TABLE 4.4: THE THREE LEVELS OF COMMUNICATION OF THE DESIGN IMAGERY OF ERASURE: COWBOY PROJECT

The communication objectives of the "Erasure Cowboy" project were expressed in the theme and the subject matter of the project which was not in reality the music itself. The blended intricate mixture of visual interpretations can be considered a visual pattern. In addition, recognising and selecting the particular qualities and properties of the visual patterns to express the communication objectives can be considered purposive pattern recognition (PPR). Adrian Shaughnessy explained:

It's hinting at things without saying them. Visual language has to be elusive. It has to be metaphoric. A picture of a car is not a car, but it is a representation. If we had not used psychology we'd show a cowboy. But we allude to everything that the band represents, and what the title represents and therefore dealing with the psychological element. Absolutely to the point.

Some of the visual patterns which the designers selected and integrated with the total visual pattern of the design imagery were used to enhance the communication of the design patterns by creating interest. Adrian Shaughnessy stated:

And finally the use of cinematic caption and cinematic typography just to help to create another visual layer of interest. This is a film set, therefore it is slightly unreal. A sense of unrealness I think that's how I would classify it.

4.2.9 Processes of selecting visual patterns and PPR

The designers went back and forth between searching and selecting visual sources and exploring design possibilities. Adrian Shaughnessy stated that they selected their visual sources and visual inputs intuitively. The selection processes occurred in various ways: 1) intuitively, 2) by conjecture and refutation processes, 3) from emerging criteria during design activities, 4) from thought processes, 5) during the processes of adapting and developing visual patterns, 6) from competing design hypotheses (PCDH). The processes of selecting visual sources and visual patterns continued during the various stages of the design activities. These processes can be considered to involve purposive pattern recognition (PPR). The designers first recognised the need pattern (NP) of the project, then they started selecting visual patterns. The designers recognised the visual patterns they selected as successful match with NP. Each selection activity can be considered to involve visual patterns, NP, and PPR. During the selection processes the designers referred to various types of visual sources, and they selected from these sources various visual patterns in order to construct the design pattern of each imagery. In addition, the designers selected their certain visual sources for the following reasons: 1) to select certain visual patterns, 2) for inspiration, 3) to develop their design ideas further, 4) to get knowledge of how things looked like. Adrian Shaughnessy stated:

What do they look like (bucking broncos), nobody knows, I said to people go and see. So we had to search around and we sent our people to search. This is what we found.

Comparing the bucking bronco in FIGURES (4.13, 4.9) with the bucking bronco FIGURE (4.1) can show that some details such as the yellow label which said 'Erasure Cowboy' appeared at a certain stage and disappeared at the final stage. These attempts involved conjecture and refutation processes, because when certain parts of the pattern did not work, the designers eliminated them. The occurrence and disappearance of these patterns can be considered to require purposive pattern recognition (PPR). The designers selected the photograph of the bachelor setting and combined it with the bucking bronco, but later on the designers were not able to buy the copyright of the photograph. Facing this constraint the designers were forced to find another solution, and it was then when they thought to create similar environment to that of the photograph. While the designers were creating a visual pattern similar to the visual pattern of the photograph, new patterns took place and new possibilities emerged and the designers took advantages of these various types of unpredictable development. These activities can be considered to involve purposive pattern recognition (PPR), because during each activity the designers kept trying to find ways for making things work. Also, their patterns and their thoughts about these patterns kept changing during the various activities. The designer stated that the outcome of creating similar setting turned out to be an original imagery (See FIGURE: 4.1). The

designers activities can be considered to show that the selection of visual patterns took place in various ways. The designers did not predict the outcome of their activities, but they aimed to achieve high quality. Adrian Shaughnessy explained the reaction of their POs to the final design imagery. He said:

The imagery we created shocked our client when we showed him the imagery. He wasn't expecting it. We're very happy with this. It looks how we set out to look.

The designers made sure that all the parts of their visual pattern worked together to match the NP. Some of what they did showed that the designers tried various types of associations to make the design imagery match the NP. For example, the image behind the CD disc inside the sleeve record was similar to the same image of the front cover. But, this image deliberately did not include the image of the bucking bronco, so when people were to take off the CD disc to play the music they were able to see only the image of the background setting, so that the CD disc (Cowboy) in a sense was the bucking bronco. Also, the designers selected various visual patterns and created layers of patterns within the total pattern of the imagery. The resultant pattern can be considered to be different from the original visual sources and their patterns. But comparing the patterns of some of the sources with the design pattern can show unworldly similar feelings, modes, and some essential properties.

- **The quality of visual patterns**

The designer focused on how things worked and why they worked. In addition, he mentioned the patterns that they avoided when they selected their patterns and described them as wrong and not appropriate. Also, he stated that some visual sources were of bad quality, therefore they did not use them. He mentioned expressions such as “unusual idea”, “it worked very well”. From the designer’s explanation it can be deduced that quality was essential factor for selecting visual patterns.

4.2.10 Adaptation processes and methods for adaptation

The processes of adapting visual patterns were interactive with the processes of selecting visual patterns, and were the consequence of selecting visual patterns. Every time the designers selected a visual pattern they had to adapt it to the context of the theme. This project involved various adaptation processes. These processes can be classified under the following categories: 1) imitation, 2) mutation, 3) elimination, 4) integration, 5) addition, 6) extinction. The methods which the designers adopted to carry on these processes started with the following techniques: 1) drawing sketches, 2) scanning, 3) freehand drawings on the screen, 4) generating electronically three dimensional visual patterns and design patterns, 5) integrating and rendering the design patterns electronically. Adrian Shaughnessy stated that the ways they adapted and used their visual information were left up to their instincts. He said:

The adaptation and use of visual information would be our own instincts and doing what we know. Previous people who were doing this project went wrong because they were literal. We were more allegorical.

Adrian Saughnessy explained that generating the design imagery on computer was similar to using traditional techniques. He stated that they did not scan images for the final artwork. The imagery was drawn immediately on the the screen. The designer explained how they created the design imagery on the screen (QUOTATION: 4.9). The following various activities involved adaptation: 1) combining visual patterns, 2) developing and refining the relationships between the parts of the total visual pattern, 3) using traditional and modern techniques, 4) processes of transforming visual patterns from one medium to another, 6) changing, modifying, adding, and eliminating visual patterns. These processes involved PPR and NP, because the adaptation aimed at matching the NP of the project.

"We took this picture and we scanned it and then we created in a separate programme we created the bucking bronco and then we put them together. So that was created on the computer. That was scanned and the two were brought together. Then for the final thing, because this was copyright we couldn't use that picture. We, again, using a computer programme, we redrew everything. We recreated the background so everything was created on the computer....We made it up, literally made it up. Also, it was rendered on the computer. It's a 3D computer program, so it's all done in the computer. So the designer sits down and he draws on the screen. He draws the shape, and then he asks the computer to give it three dimension and it does it. So he gets it and he can change it and he keeps changing it until he gets the shapes he wants. Then he roughly draws a saddle and he places the saddle and gets the computer to mould it. So there is no photography on this. It's all done like old fashioned drawing except it's done on the computer. There's no photographic process. The illustration was created in something called Softimage. Softimage is a very powerful 3D rendering tool. You need a very big powerful computer to run it and the illustration was created on that. The typography was created on an Apple Mac in Quark Express." Adrian Saughassy

QUOTATION 4.9: METHODS FOR ADAPTING AND GENERATING VISUAL PATTERNS

4.2.11 Purposive pattern recognition

The key activity in the processes of selecting and adapting visual patterns can be considered purposive pattern recognition (PPR). PPR can be considered to occur with every selection act. PPR can be considered to be the fit (visual pattern) that matched the need pattern. Matching the visual pattern of the design imagery with the NP involved matching the parts of the visual pattern with the parts of the NP (TABLES: 4.5, 4.6, 4.7).

Activities	PPR (The Fit)
Matching design ideas and visual patterns with NP	"Our design ideas had great influence on how we selected our visual information. Our design ideas drove our design solution. There were other things such as the clients view, our knowledge of the market, but basically putting all that into the mix we came up with the solutions which was a design solution... The ideas were used to express the nature of the music. I think that's the only answer I can give to that. The ideas were generated by a knowledge of the music and the musicians and the ideas were forced, if you like we forced the iconography imagery which then sums up what the music is like."Adrian Saughassy

TABLE 4.5: MATCHING THE VISUAL PATTERN WITH NP

Activities	PPR (The Fit)
Matching visual pattern with need pattern	"We came up with bucking bronco which says cowboy. So we took that and then we put it into a setting which was a rather odd quirky setting and this was a setting of early '70s American bachelor pad."
PPR involved knowing what was a fit and what was not.	"The obvious way to do that record would be to put the artists pictures on the front but that would be wrong for that market and for the type of music they make."Adrian Saughassy
Matching the theme pattern with the nature of Erasure group	"Because we know, we understand the system, the world, we went for this because it was quirky and it would reflect the fact that they are slightly quirky and they're not a conventional pop group who stand around posing and having pictures taken. So our own idea, our own understanding was that a quirky, an unusual, unexpected image would be right."Adrian Saughassy
Matching the pattern of the design idea of bucking bronco with "Cowboy" and with the nature of Erasure group	"We chose the bucking bronco object because it reflects the quirky nature of the band, and that was designed to express a relationship, an identification with the cowboy which is the title of the record but also to express the slightly quirky unusual nature, it's an unpredictable thing .So the imagery reflects their quirkiness." Adrian Saughassy
Matching the patterns of bachelor pad type of setting with the nature of the Erasure group	"The bachelor pad, the location it's set into is again an unusual slightly camp image which we can render in 3D comfortably. So I classify that as an attempt to express again, I keep using the word quirky, but we mustn't forget that slightly camp look."Adrian Saughassy
Matching patterns of the type of music with visual pattern of a 3D electronic technique	"The 3D suggests the texture of the music. Their music is electronic. It's electronic pop, so we used the 3D approach. So we took our visual sources and we developed them into 3D. The 3D approach gives it a sort of modern electronic look which reflects the music. And secondly we chose the bucking bronco object because it reflects the quirky nature of the band."Adrian Saughassy
Matching humour with NP	"So we created this rather bizarre cigarette lighter, cocktail shaker and cufflinks. Deliberately humorous. The idea is that it's funny and the idea is that it's a sort of film set."Adrian Saughassy

TABLE 4.6: MATCHING THE VISUAL PATTERN WITH NP

Activities	PPR (The Fit)
Matching patterns of colours with NP	"The colour is a definite attempt to recreate the colours of the early 70's American interior design. The colour is that slightly golden, slightly faded which you get when you look at magazines from that period. The actual colouring of the elements is rather dated, it's rather 70's I'd say, early 70's. It relates to certain films that were in our minds when we created them, things like Roller ball if you've ever seen that, where the interiors are this sort of strawberry fabricated very plastic imagery, artifacts, so it's definitely echoing that area."Adrian Saughassy
Matching the visual pattern of the design imagery and its parts with NP	"The idea of the composition is the central theme and the dominant theme. It is the dominant icon. The iconography is the bucking bronco. So it's dead centre It's smack in the centre. These other images are hints at this bachelor pad. This slightly bizarre, slightly racy location. There's another layer to this which is we've chosen to give it a sort of filmic approach. The title could be a film title and the way the additional information has been handled it looks rather like film credits. When you look inside the CD sleeve it's not just a front cover. It's a booklet and in the booklet we use imagery that we've taken from the main scene. and this window is recognisable as a film image if you watch letter box films on television, certain stylish films are shot like that, and the treatment of this being very sharp and the background being blurred is also filming treatment. You see that in a lot of films. There also is the set without the bucking bronco that you can drop him in. So the composition relates directly to the need to express this filmic approach and also to convey the central theme, the central dominant icon of the bucking bronco. This is looking at CD which is the most important part of the campaign. But there are posters there are booklets, there's all sorts of things so you might not be able to fit everything into that shape so we've rendered, on our illustration, we've rendered much more than you're seeing on the CD cover. We've got a lot more, poster, all sort of things, plus adds."Adrian Saughassy

TABLE 4.7: MATCHING THE VISUAL PATTERN WITH NP

PROJECT STUDIES GROUP (1): 3D DESIGN PROJECTS

4.3 MINI-CASE STUDY (2):

BRAND IDENTITY & REPACKAGING FOR RANGES OF TYPHOO TEA PRODUCTS

4.3.1 Background history of 'Typhoo' project

The Typhoo project was redesigned and developed by the design consultancy 'Siebert Head' in London, UK. General information about this project is in Appendix (XI). The Typhoo tea products and the Typhoo name were known in the market in the UK for over one hundred year. This line of teas was not specialist type, yet it was considered a quality kind of tea. It was available in most supermarkets in the UK , and was one of three main contenders in the tea market. The three contenders always competed very strongly. The competing lines of teas were: 1) Typhoo tea, 2) Tetley Tea, 3) PG Tips tea. The 'Tetley Tea' and 'PG Tips' were competitors from different manufacturers. Tony Watts described the packs of Typhoo:

Historically it's always been a red pack with a white logo with the leaves. There's been slightly different designs, and slightly different logos all the time. But always red, always green leaves and there was a picture of the foil bag. There was a sticker on here at one time, saying the tea pickers were paid fair wages in India because there's an argument politically that tea companies weren't paying the tea pickers enough money.

The products and their specifications were: 1) Typhoo - Richer, smother blend - 80 tea bags, 2) Typhoo - Decaffeinated -80 Tea bags, 3) Typhoo- QT - instant white Tea- 60 servings. The QT initials stood for Quick Tea. The designers were asked to design the "Brand name and repackaging -Typhoo packs" (FIGURE:4.16). The Typhoo tea products were less competitive during the early 90's. The designed tea packs were not launched at the same time. There were several months between launching each pack. The logo was written in the following manner: "TY.PHOO". The designer described the differences between these products (QUOTATION:4.10).

"Quick tea, with a 'Q' that comes in a jar and then there's decaffeinated also. They are all Typhoo, they belong to the same family. But they are different products. The decaf one is white, because decaffeinated means like coffee there's no caffeine. So it's a white pack. It has a red logo on it and that's distinctive. It makes it distinctive from the richer smother blend one. Also they do one called One Cup, which comes in a box and it's only used for making one cup of tea. That's the family. That's a special offer. It just says new, richer, smoother blend. That would come off after six months. When they launch a new product they usually have something to improve the product." (Tony Watts)

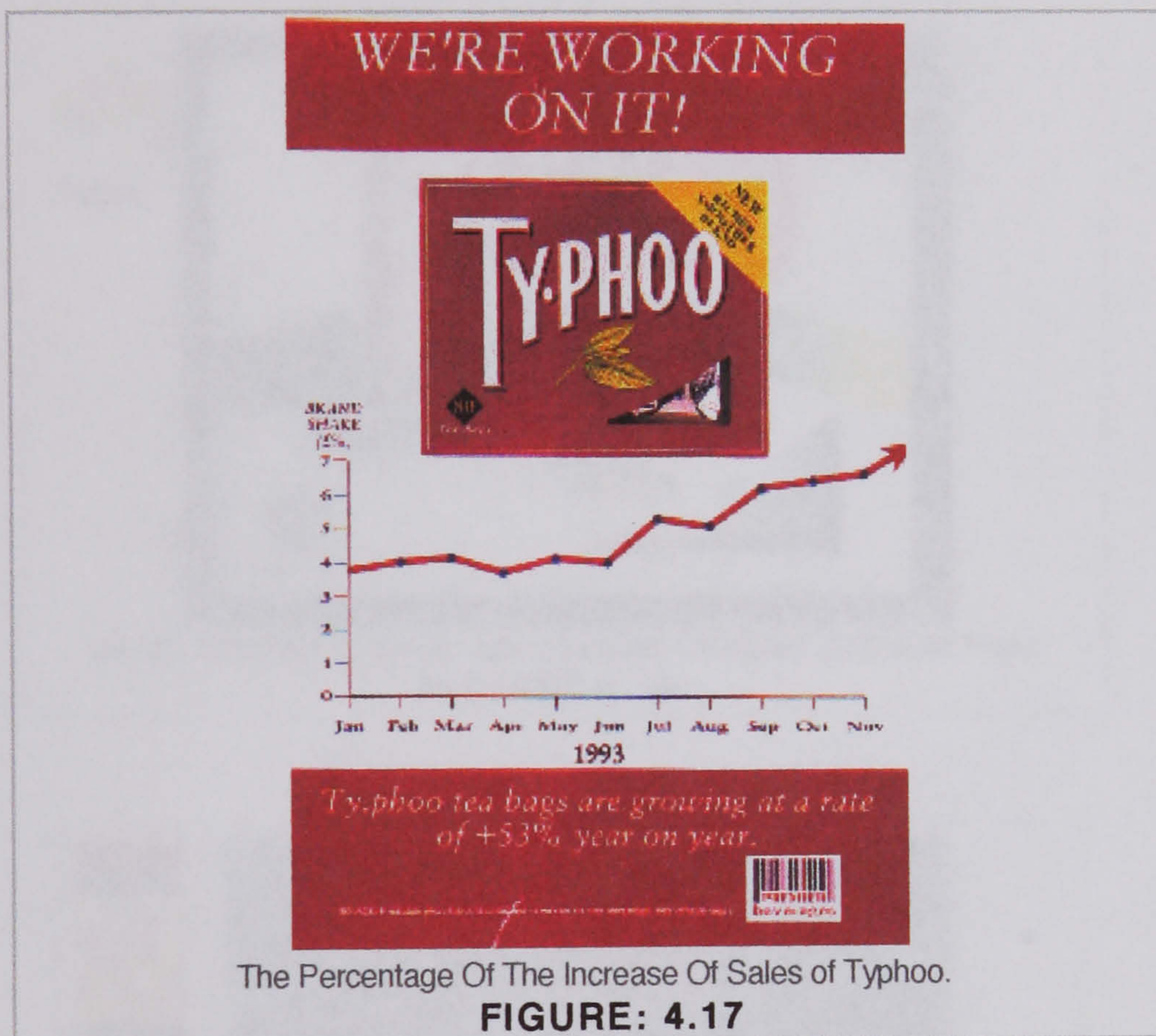
TABLE 4.10: DIFFERENCES BETWEEN THE TYPHOO TEA PRODUCTS



The Typhoo Design Products. Designed By Siebert Head

FIGURE: 4.16

The new designs for the Typhoo products improved sales of the products since they were launched to the market in 1993 (FIGURE:4.17).



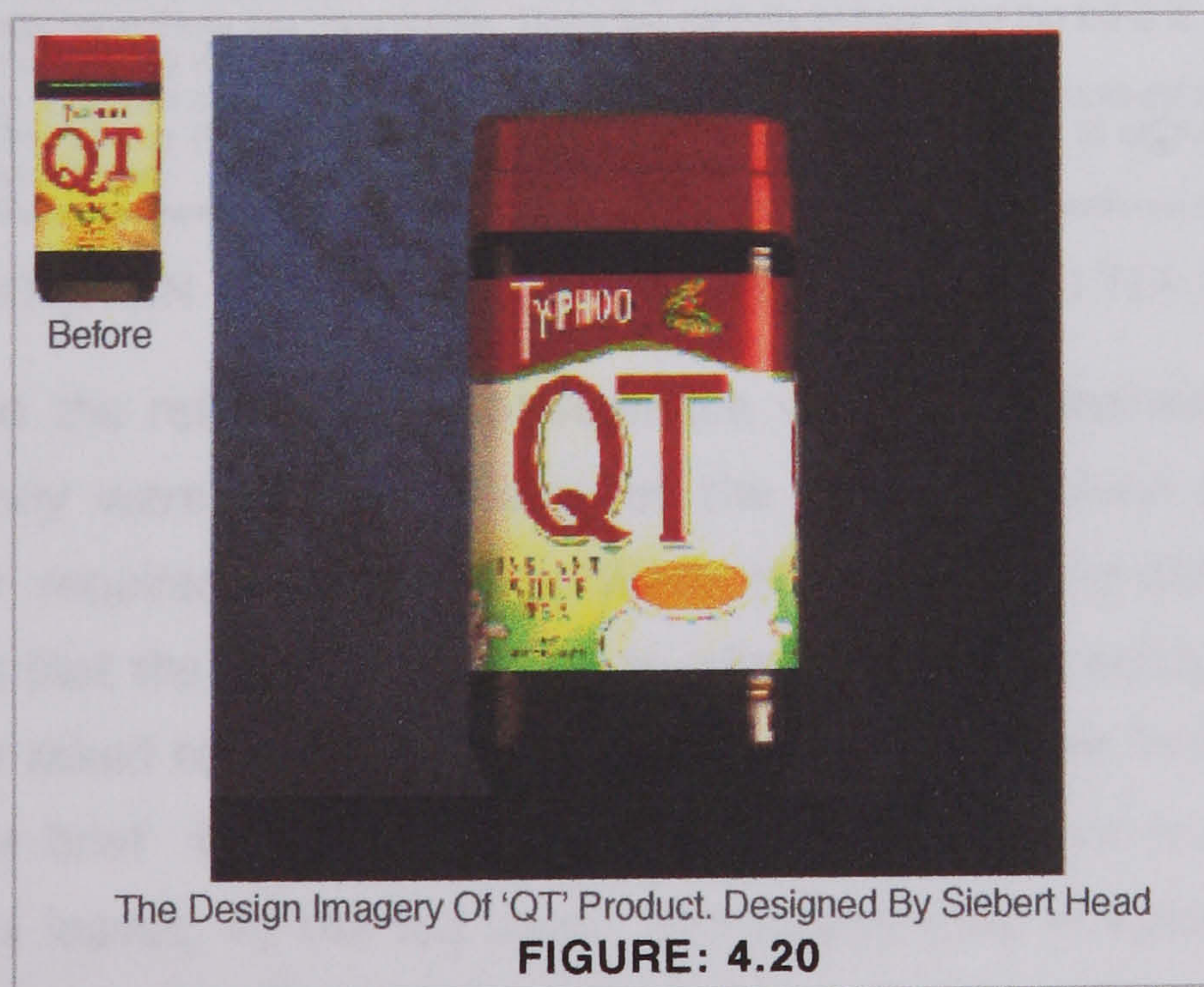
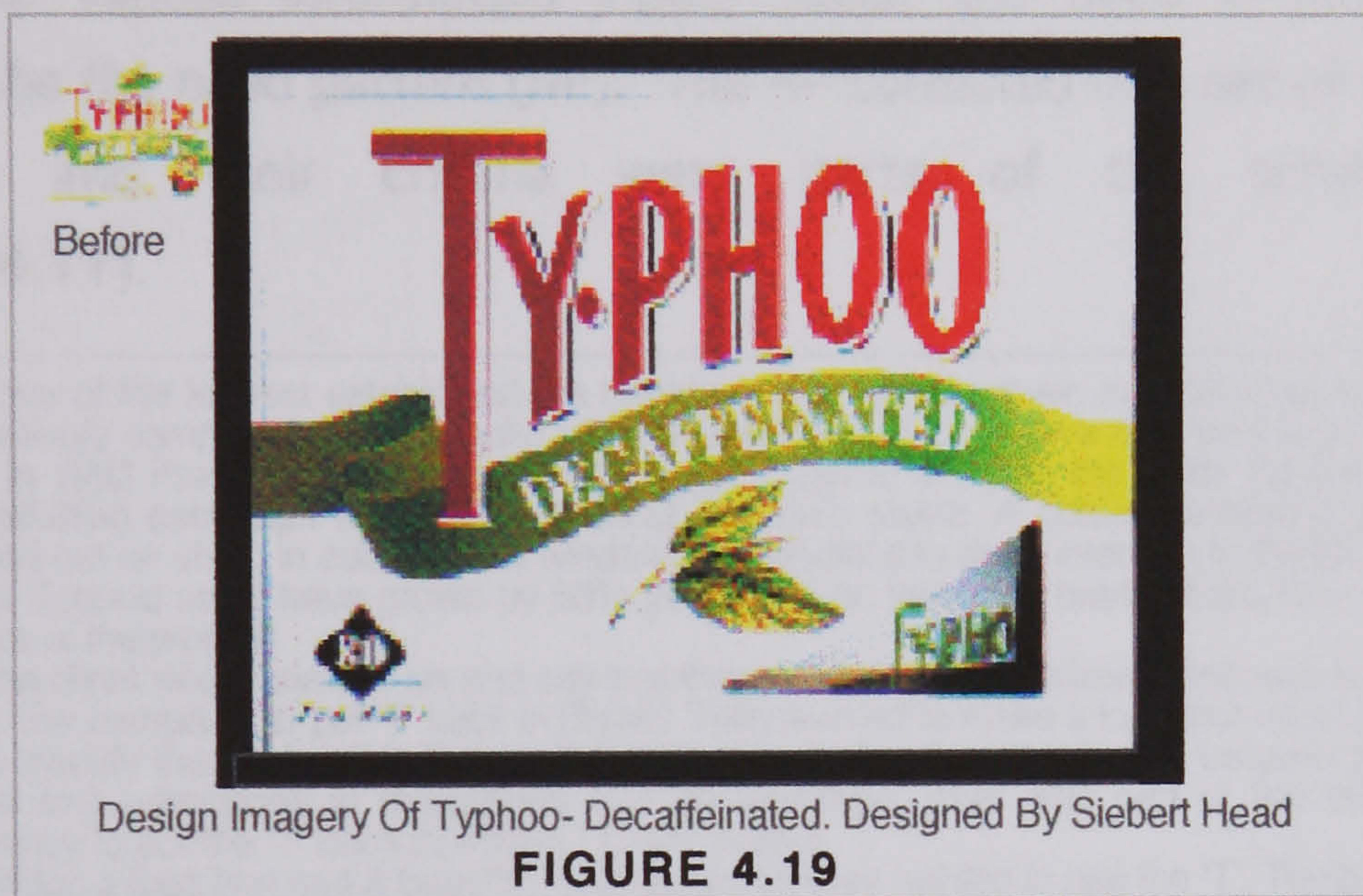
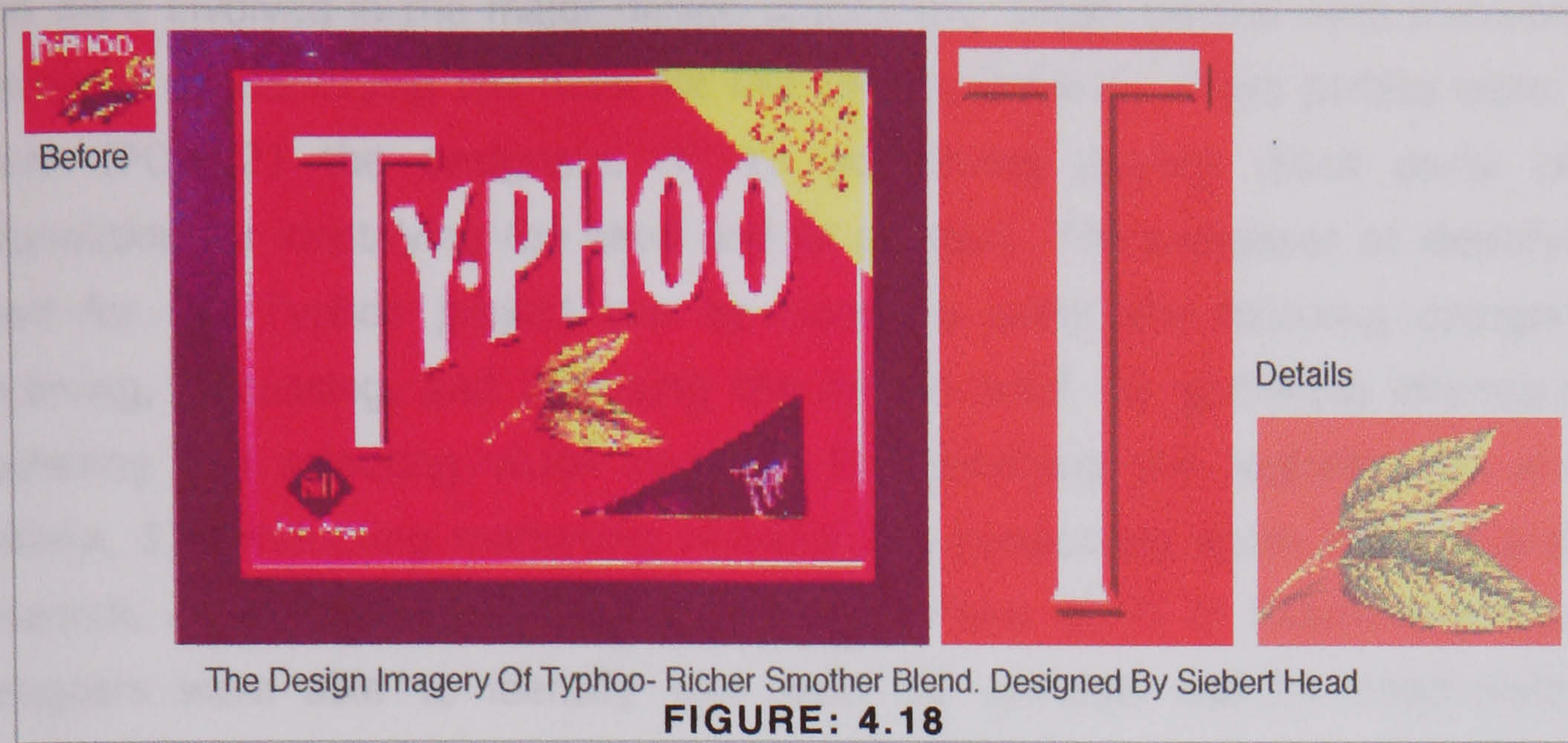
The Percentage Of The Increase Of Sales of Typhoo.

The designer stated that the Typhoo tea brand held 36% of the instant tea market. He explained the chart in FIGURE (4.17):

This shows the growth of the brand. It was number three in competition. It is a bit better now. I don't think it's still number three.

4.3.2 The design imageries of the 'Typhoo' project

The Typhoo project consisted of three products. The designers created a design imagery for each product. The designer provided a copy of each design imagery and of the previous one for each product (FIGURES: 4.18, 4.19, 4.20).



4.3.3 Processes of identifying the need and the need pattern

Tony Watts stated that they had a system which they always followed when they started their design projects. The system showed the relationship between the parties

who were involved in the major design processes. Three parties were involved in the processes of identifying the need for the Typhoo project. These parties were: 1) the client (PO), 2) the designers, 3) an advertising agency. Each party provided information for identifying the need and its context. The processes of identifying the need for the Typhoo project can be classified under the following categories: 1) receiving, discussing, and analysing the design brief, 2) gathering information, 3) gathering and selecting visual sources, 4) identifying the requirements and their criteria, 5) conducting marketing research, 6) conducting store surveys and visual research. After gathering and analysing the various types of information inputs the designers were able to identify the need, its context, and its constraints. More importantly, they constructed a conceptual understanding of the need for the project. Integrating the various information inputs about the need in one context can be considered to be the need pattern (NP). The NP consisted of a set of requirements. The requirements and their criteria were parts of the totality of the NP (QUOTATION:4.11).

- "Typhoo is one of the longest established tea brands in the UK. However, in recent years, the tea market has become increasingly competitive, and in spite of the introduction of innovative new products, Typhoo was losing market share. In 1993 Premier Beverages briefed Siebert Head to redesign the entire Typhoo range as part of an aggressive marketing campaign aimed at rebuilding Typhoo's share. A bolder, sweeping logo was devised to strengthen stand-out on shelf. In addition, the window was modified to draw attention to the foil bags. In its first year since relaunch, Typhoo sales have grown by 53% year on year, taking its brand share from 3% to 8%." (From a design brochure of the project)
- "First of all the client would come to us and say that they need to have a redesign because the advertising agency wants to put a new campaign to put 'T' back in Britain. They wanted to make a logo that could be used on television and could also identify the tea back in Britain. So we had to design it so that the 'T' became something they could use in posters and advertising in magazines and on television. That was part of the brief to work with the advertising agency to put the 'T' back in Britain." (Tony Watts)
- "So they needed a logo that had a large 'T'. In other words they wanted to use the 'T'. The big large 'T'. The best 'T' in Britain. So they came to us and told us that they needed to have a logo that was distinctive and better than the previous logo. Also to show some tea leaves. Also one of the things we wanted to show is that they have three sachets inside. That means freshness. In other words you don't open the whole box up, it's not full of loose tea inside. All the bags have three tea bags inside. Three tea sachets of bags and the foil is to show freshness. That was part of the brief." (Tony Watts)
- "We also had to do all our store survey and research to see what the competition was doing." (Tony Watts)
- "It's not number one in Britain, it's number three so it needs to work harder to obtain more sales over the competition." (Tony Watts)

QUOTATION 4.11: THE REQUIREMENTS FOR TY-PHOO TEA PROJECT

The NP involved the relationships between the various requirements and the context within which they were needed. Some of the criteria involved the quality and the property of the required designs. Tony Watts stated that the design brief had all the design elements that the designers needed to adhere to and the competition. He explained that they were asked to redesign a logo and four packs for the Typhoo tea brand. The elements of the brief focused on the following: 1) the use of the red colour, 2) the logo, 3) the tea leaves, 4) the foil bags. The design brief included information about the following: 1) the use of the design, 2) visual information and specifications, 3) the communication objectives, 4) the aims of the advertising campaign which was "to put the 'T' back in Britain.", 5) technical information, 6) the text of the written information which was to be seen on the packs, 7) visual information, 8) research

documents, 9) the client's objectives and marketing strategies. Although the processes of identifying the need started at the beginning of each project, the designers examined the criteria of the NP and their design ideas through the various stage of their processes. The designers gathered information about the Typhoo tea project from various sources. The information involved both documentary, technical, and visual sources. Tony Watts stated that they designed the previous designs of Typhoo tea brand, and that they knew the historic background of it. He mentioned the following sources: 1) the clients of the project provided the design brief for the project and research documents, 2) the previous packaging of the brand and the historic background of the project including historical documents, 3) store surveys in different markets, 4) the in-house library of the design consultancy Siebert Head. Tony Watts explained:

We designed the packs that came before this one, so we knew the history of the pack. Also, we knew the history from the research that the client provided, plus we knew we wanted to do store surveys.

- **The constraints of the need**

The need pattern of the Typhoo project involved economic and visual constraints. The economic constraints had to do with the budget and time. The budget was allocated according to the time spent in each stage, and according to the expected activities within each stage. The visual constraints had to do with maintaining the heritage and the visual personality of the brand. Tony Watts explained that the budget and time were allocated according to the design stages of the project (QUOTATION:4.12). Tony Watts explained the visual constraints of the need pattern. He stated that they did not change the white colour of the logo and the red colour of the packs. He said:

The history of the product I guess. Where it's come from is quite important. What people expect because they know the product so I would have thought that would have range we cannot make it a blue box, it had to be a red box. It had to be a white logo. It had to be a very clear logo.

"Budget - £10,000-£15,000 to design the first part of the design and then to do a second and third stage which means you might do a dozen designs in the first stage. Then you have a second stage which might be £5000-£6000 and a third stage you do research mock-ups and maybe the artwork, which means you have to do the line drawings and draw the logos up very accurately and that could be another £6000. So the budget could be anywhere from £20,000-£30,000 for a complete job, from starting at the beginning all the way to the end. That's the sort of standard price. The time is usually 4-6 weeks for the first stage, two weeks for the second stage and two weeks for the third stage, and then there might be a fourth stage of doing mock-ups for research, so you might be doing a project over a period of three months." (Tony Watts)

QUOTATION 4.12: THE ALLOCATED TIME AND BUDGET FOR THE DESIGN STAGES OF TYPHOO

4.3.4 Visual sources for 'Typhoo' project

The visual sources for this project were of the following types 1) the previous packs, 2) in-house library of the design consultancy, 3) magazines, 4) brochures, 5) store survey, 6) photographs of the stores, 6) photographs of the competitors' work, 7) taking photographs of the project brand on the shelves while doing store surveys,

8) visual thinking. Tony Watts explained:

We knew how they packed the previous one, and how it looked on the shelves in all the different markets. Some comes from historical documents, some comes from our library that we keep and the other comes from magazines, brochures or can come from store surveys where we take photographs. We take lots of photographs of the stores.

Tony Watts stated that some of their visual sources were from thought processes and imagination. Also, he stated that their visual sources were sources of inspiration and that they created something new that did not exist before. He explained that they had to maintain the previous colours of the packs and that they had to use tea leaves. He said:

We would probably start new, except we knew we used the colour red and somewhere we have to use the leaves when we use the logo. But we developed a new logo which is not like the old logo. We inspire from our visual sources, but you don't necessarily need to use all of them because you're thinking of new concept.

4.3.5 Relevance of visual patterns to the Typhoo Tea products

- **The subject matter - 'Typhoo' Project**

The subject matter of the Typhoo tea projects consisted of two elements: 1) the brand name Typhoo, 2) the subject matters of the packs. The brand name Typhoo was the subject matter of the logo. The subject matters of the three packs showed a family type of visual patterns. In the same time, the visual pattern of each pack differed according to the type of product. The same logo and the same three tea leaves were used in all the projects, but they were treated visually in different ways. Also, the foil bags were not included in all the products. In addition the size and position of the the logo and the three tea leaves varied for each project. The pack of the instant tea project was a glass jar and the design patterns were included an image of a cup of tea, the logo of the brand name Typhoo, and another logo "QT". The letter 'Q' stood for the word 'quick' and the letter 'T' stood for the word 'tea'. The subject matter of the packs can be considered both tangible and intangible, because it was about tea which is tangible and freshness which is intangible. Also, the subject matter of the logo which was the word Typhoo was treated both as tangible and intangible.

- **The target audience**

The target audience of this project was everyone that had tea for breakfast. The Typhoo tea brand was sold at all the major supermarkets, plus even little tobacconists and small shops. It was sold everywhere throughout the whole UK. Tony Watts explained that they had to emphasise the history of the brand so that the target audience was able to relate the new design to the brand name Typhoo. Tony Watts stated that recognising the behaviour of the target audiences while shopping differed from one type of product to another. He stated that a number of factors were taken into consideration when they selected their visual inputs and created the design imageries for the Typhoo products. These factors were: 1) the target audience paid different

attention to products in the market place, i.e. buying vegetables required more time than buying products such as tea, milk, or salt. 2) the target audience did not spend much time when buying tea products because tea was a basic commodity, 3) special offers made customers spend more time looking at basic commodities, 4) customers bought products that they knew or used before, 5) the supermarkets were crowded with varieties of products. The designers took these various factors into consideration when generating the design imagery of the Typhoo products. Considerations to the target audience were given according to the following:

- **The heritage of the brand**

In here you're talking about heritage; a well known brand. We have to have a well known brand that people know the heritage of, so you have to emphasise that so people can recognise it. Knowing the history of it. It's a quality product and then I would go back and buy the same product again. (Tony Watts, 1997).

- **The properties of the visual patterns**

Tony Watts stated that the visual properties of the colour of the design were easy for the target audience to recognise.

Red, white logo. I think it's a very simple choice, it's subjective. They don't spend too much time thinking about it. (Tony Watts, 1997)

- **The logo was designed to be easily recognised by the audience.**

It's being able to read it on the shelf and being able to recognise it as a tea product first of all, and to recognise that it is clearly Typhoo. Not only in its name but in its layout and colour. (Tony Watts, 1997)

- **Expressing freshness of tea products by the use of foil bags**

To emphasise it has foil bags and so on. Also to be different, distinctive from competitors. (Tony Watts, 1997).

The relationship between the communication objectives, the subject matter, the design patterns and the target audience can be interpreted as an interactive relationship, because of the following: 1) the target audience was expected to recognise the tea brand by its historic white and red colours, 2) the target audience was expected to read the logotype of the brand name clearly, 3) the target audience was expected to associate the visual patterns of the large 'T' with both the word tea and the brand Typhoo, 4) the target audience was expected to realise the freshness of the tea by seeing and touching the pattern of the foil through the physical and visual patterns of the window of the packs.

- **The communicative characteristics of the visual patterns**

The communicative characteristics of the visual patterns had to do with how the designers expressed the communication objectives of the Typhoo tea products. The communication objectives of the project included the economic objectives of the PO and

the communication objectives towards the target audience. Both types of objective overlapped and interwoven together when it came to the visual communication. Also, the economic objectives of the PO were supported by an advertising campaign which was based on using the same design imagery and its communication objectives. Tony Watts stated the communication objectives of the Typhoo project. He said:

The objective was to have a new modern contemporary logo that was dominant on the pack. In other words it was very large on the pack so that it could identify their own brand in competition, so that the logo could read on all panels very well and very clearly.

The criteria for the communication objectives involved the following:

1) the design of the logo had to stand out and to be distinctive, 2) the design had to express the freshness of the tea product, 3) the design had to express quality, 4) the logo had to be read very clearly, 4) the design had to maintain recognizable links with the heritage of the Typhoo tea. The designer explained the visual characteristic of the logotype, he said: "It stands out, quality, distinctive, honourable, defensible." Tony Watts explained how the design was intended to communicate the particular objectives:

I think directly and indirectly because it reminds people that it's a top quality tea and it's heritage of the previous pack. Also, it identifies not only with consumer market but also with the advertising so that the advertising on television works with the posters, the campaign in magazines and the red box. So you associate all that with putting the 'T' back in Britain.

4.3.6 Design ideas

The design ideas for the Typhoo project involved the following processes: 1) coming up with design idea , 2) exploring design possibilities by means of producing visual marks,3) selecting the best design possibilities, 4) presentation, evaluation and feedback sessions, 5) design concept development including experimenting with types of photography, illustration, and typography, 6) research and test of concept in the actual market, 7) design refinement, 8) artwork. The presentation, feedback and evaluation sessions took place during the major stages, and when it was necessary. The design stages and processes involved processes of selecting and adapting visual patterns. According to Tony Watts the design ideas of the Typhoo project were from various sources and focused on the need for the project. He said:

They are collective ideas historically. What came before, what the agency and the client wanted and what we thought was good design, what could stand out. To make it more modern and contemporary. You can see it in your mind what you want to do and then it's just a matter of exploring different ideas to make sure that what you can see early on is still possible and that the client will accept it.

The designer's explanation can be considered to show the following concepts and their relation to each other: 1) NP and its context, 2) visual patterns and their sources, 3) purposive pattern recognition (PPR) in terms of a fit, and in terms of a process of knowing how things worked. In addition, the designer's explanation showed

that the designers explored variety of design ideas and that they selected from them the best one that matched the NP. Also, the designer's statement "You can see it in your mind" can be interpreted as the designer recognising the fit between the design patterns, visual patterns, and the NP mentally then applying that recognition to the particular design. The key activity of these processes can be identified as PPR. Tony Watts stated that sometimes a good idea flashed out right away, and sometimes it took days or weeks. He said:

We sometimes have ideas right away. We have a round table discussion, what we should do. Maybe four designers with a marketing person. We discuss the product and then what we propose possibly to do, we have a think tank. We might have a dozen ideas put down on paper. But we might have some good ideas from the very first, or it might take weeks and weeks to come up with a good idea. And we review all those ideas as we go along.

Coming up with design ideas and generating design patterns involved the use of various methods and techniques. Also they involved applying strategic approaches. The designer explained that creative techniques had to do with the designers' design strategic approaches and their methods for collecting and verifying information inputs. Tony Watts explained creative techniques:

Research, client contact, creative circle within the consultancy to what we thought was best. You have to put the right packs into research to get the right results you want. Also, you have to know what is going on in the market in other areas not just food and tea. Something that is honourable and defensible. Something that is different, distinctive. Something that is memorable. Something that you recognise instantly.

4.3.7 Coming up with design ideas & graphic investigation

Coming up with design ideas for the Typhoo tea products focused on the following: 1) the NP for the project, its context, and its criteria, 2) properties of design ideas, 3) design options, 4) quality of design options and their design patterns, 5) the work of the competition. The processes of coming up with design ideas involved the following activities: 1) discussion and brain storming sessions, 2) visual research, 3) producing visual marks, 4) developing initial design ideas. Coming up with design ideas involved various processes of selecting and adapting visual patterns. Also, it involved processes of graphic investigation by means of producing visual marks on various types of surfaces. The transformation of design ideas from visual thoughts to visual marks can be considered to be the design patterns. Tony Watts said:

We would draw it on paper with pencil and magic markers and then we would work it on the computer.

Also, coming up with each design idea involved exploring various possibilities for each idea. Each possibility can be considered a design pattern. These various alternatives can be considered patterns of competing design hypotheses (PCDH). The designer stated that exploring design possibilities involved examining and comparing design possibilities. The concept of the pattern of need (NP), visual patterns, patterns of

competing design hypotheses (PCDH), comparison processes, and purposive pattern recognition (PPR) can be pointed out in the designer's explanation. Tony Watts explained that the designers tried at this stage about twenty design concepts in different ways, then they selected from them the best concepts for the logo and the design packs. Tony Watts explained the design possibilities:

We tried 20 different ways; tea cups of tea maybe, some with the tea leaf up here or a logo that ran across that had a different shape. So there would be lots of different developers.

The designer stated that they compared their design ideas with the work of the competitors. His explanation showed that the design patterns were compared against each other and against the work of the competitors. These comparison activities can be considered as prerequisite mechanism for purposive pattern recognition. In addition, his explanation showed that the designers had to recognise the best idea from the various ones which they explored. This particular recognition can be explained as purposive pattern recognition.

4.3.8 Visual patterns

Tony Watts stated that they selected visual information from various visual sources and adapted them to satisfy the need for the project. He stated that they used the visual sources for inspiration. Also, he stated that they maintained certain visual information from the previous packs such as colours, the tea leaves, and foil bags. These elements were treated differently in the new imagery without losing the links with the previous designs. In doing so, the designers maintained the historic elements from the past, and introduced in the same time a fresh and contemporary look to them. From the designer's explanation it can be considered that the designers' ideas and drawings were their major visual sources. Tony Watts explained the design of the logo:

In other words it's not just a typeface, it's a logo that we've developed. We've hand-drawn all of that so you can't find it in a type book. It's a logo that is new, it doesn't belong to anyone else.

The visual patterns of each design can be considered to consist of the following: 1) a total visual pattern which consisted of various parts, 2) subordinate visual patterns which were parts of the total pattern. The total pattern was selected after the designers came up with various ideas and explored various design possibilities. Each of these possibilities was a visual pattern that in its turn consisted of visual parts. Both the total visual pattern and its parts involved processes of selecting and adapting visual patterns.

4.3.9 Processes of selecting visual patterns and PPR

The processes of selecting visual patterns were started during the processes of

identifying the need for the Typhoo project, and continued throughout the concept development stage, the refinement stage, and the artwork stage. Selecting visual pattern took place in various ways: 1) intuitively, 2) by inspiration, 3) during the crafting activity, 4) according to certain criteria, 5) by conjecture and refutations including comparing design possibilities with the work of the competition, 6) by testing design possibilities in the market place and adjusting criteria. In addition, the selection was made from several options. The designer stated that the element which they implied by their visual inputs were related to the following:

The big 'T', the red is very important. Heritage of the product. Heritage is a good name because Typhoo has to do with tropical countries so Typhoo heritage is built into the name itself. It comes from an exotic country like India or something like that, so heritage is built into the name itself.

The designer stated that they first identified visual criteria for the requirements of the Typhoo project. These criteria can be classified under the following categories: 1) the quality of the visual patterns, 2) the properties of the visual patterns, and design patterns including the shapes of the packs and the layout of the written information, 3) the communicative characteristic of the visual patterns. The processes of selecting visual patterns involved various types of awareness and considerations. The designer's explanation showed that the selecting visual patterns, and how visual patterns worked better involved recognition of visual patterns as good match for NP. This recognition can be interpreted as purposive pattern recognition (PPR). The PPR involved recognising the following: 1) the quality of the visual patterns, 2) the properties of the visual patterns, 3) the visual constraints, 4) how the visual patterns were supposed to work. The visual patterns of this project can be discussed under the following categories:

- Inherited visual patterns and patterns of the subject matter

The inherited patterns were part of the subject matter. Tony Watts stated that they kept three visual elements from the previous design. These elements were the red and white colours and the green tea leaves. The green tea leaves were inherited from the previous designed packs, yet the visual patterns of the tea leaves in the new design were different from those of the previous one (See Figures: 4.16, 4.17, and 4.18).

- Mental visual patterns

Some of the visual sources were mental images. The mental images can be interpreted as visual patterns. The designer stated that they had in their own minds the design ideas and how these ideas worked. Then they examined the various ideas by producing a number of design possibilities, testing them, and seeing which one was best to meet the need in terms of match and quality. The processes of selecting a visual pattern from several option, and the sense of knowing how things worked can be considered purposive pattern recognition (PPR). The designer stated that selecting

visual inputs was partly intuitive, partly cognitive, and partly according to a set of decided criteria. Tony Watts stated that the need for the project and its context provided certain stimulus, and that these stimulus along with the designers' experience provided the designers with mental images (DIAGRAM:4.2). He said:

If I say the word 'tea' or 'cup of tea' you will image something. If I say something else, something else happens. You will see something in your mind like you have an idea and a mental image. Also, you will have a particular input from your experience and the client's, how the visual image is working with this idea.

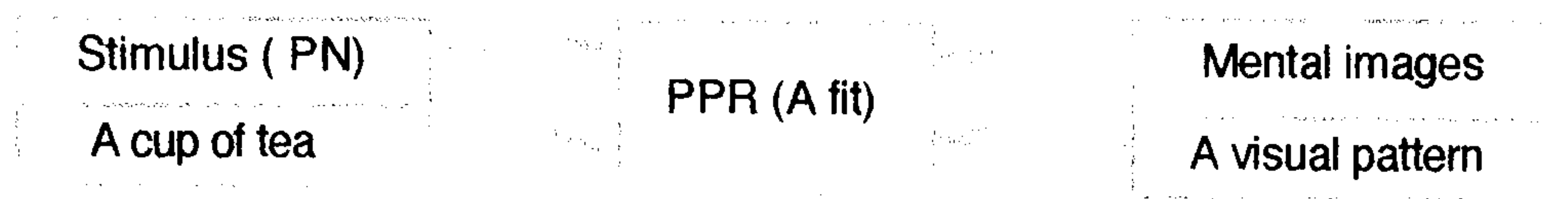


DIAGRAM 4.2: RELATIONSHIP BETWEEN MENTAL IMAGES & INFORMATION STIMULI

- Visual patterns of the brand name “Typhoo”

The letters of the word Typhoo were treated according to the phonetic sound of the word Typhoo, so it was in the LOGO Ty.Phoo. In addition, the visual form of the word Typhoo was three dimensional (See FIGURES: 4.16, 4.17, 4.18). Tony Watts explained:

That's to give it more depth to make it more 3D to make it look like it's coming away. So that it will stand out. Also it looks more quality looking.

The designers selected a particular “T” which was the main element of the logo. The need for the letter ‘T’ and the quality of the letter “T” were part of the design brief, and the focus of the advertising campaign.. According to the designer, the letter ‘T’ communicated four elements. This “T” can be explained as a visual pattern in four different ways : 1) the “T” can be recognised as the letter ‘T’ which differentiated it from other letters, 2) the “T” had a certain quality “the best ‘T’ in Britain, 3) the “T” was part of the word Typhoo, also, it was given particular visual properties that made it stand out and read clearly by itself, 4) the sound of the pattern ‘T’ matched the sound of the word ‘tea’. The designers were aware that the letter ‘T’ by being large and standing out emphasised the sound pattern of the ‘T’ which was similar to the sound pattern of the word tea. This purposive pattern recognition (PPR) matched the visual pattern of the ‘T’ with the word tea as part of the NP. The properties, size, and the quality of the ‘T’ made the ‘T’ stood out and make the logo easy to be recognised. The designers recognised these various patterns and adapted them as one pattern. Tony Watts explained:

They needed to have a logo that was distinctive and better than the previous logo... So they needed a logo that had a large T.

- Visual patterns of the physical structure of the tea packs

The visual patterns of the physical structures of the three Typhoo products varied in size and shape. Two packs were made from cardboard material, and the third

one was made of brown glass material. The packs had to be designed to include text giving information about quality, weight, etc. The layout of this text was part of the overall pattern, and was adopted to match the NP. Tony Watts explained,

You've got 160 tea bags also just to tell you how many bags are inside. As you can see on the side panel, you need to have the address. Also you need to have every pack of tea has been packed in foil bags and you have to have the weight. Then you have the bar-code on the bottom.

- **Visual patterns of the foil bags and window**

The quality “Freshness” was part of the NP. This quality can be considered intangible. The visual and physical patterns of the foil and the window were used to express freshness. The designer’s explanation showed that the designers recognised the visual patterns ‘window’, ‘foil’, and ‘three tea sachets’ as being appropriate to express one aspect of the NP ‘freshness’. In addition, selecting the ‘foil’ and the ‘window’ can be interpreted as the designers applying both the visual and the physical sensation of the patterns to express perception of the quality ‘freshness’.

- **Visual patterns of the tea green leaves**

The quality ‘freshness’ was emphasised physically by the use of foil and visually by the use of tea leaves. Tony Watts explained that they selected the visual patterns of the green tea leaves from that of the top of the tea plant to match the required quality ‘freshness’ and to match also the actual tea leaves of the products.

4.3.10 Adaptation of visual patterns

Visual patterns were adapted to give a better fit to the need pattern (NP). This, of course can be considered to involve conscious selection by the designers using both mental and physical processes. The adaptation was the consequence of the following selection processes: 1) recognising certain visual patterns as the best match for NP. 2) recognising better ways of achieving the desired results, 3) comparing visual patterns with previous designs and with those of the work of the competitors, 4) selecting the best visual patterns from competing alternatives (PCDH), 5) selecting visual patterns that worked within the overall pattern, and which matched the NP and its parts (various requirements). Adaptation involved trying various design alternatives (PCDH). Tony Watts explained how they adapted their visual patterns to the NP for the Typhoo project. He said:

We would start by developing different kinds of types of logos. We do them in pencil and magic markers first and then we would agree with the client that we would work them up on the computer. Then we would have great glossy colour prints made. We would compare those with the packs that we've designed and we pick out the best packs and then we would make up three best ones and then we can put those in against competition. So each design can compete against the competition.

PPR involved recognising how much of the old pattern was to be eliminated and how

much of new patterns to be added for achieving a good match with NP. The relationships between the selection and adaption processes were interactive (DIAGRAM:4.3).

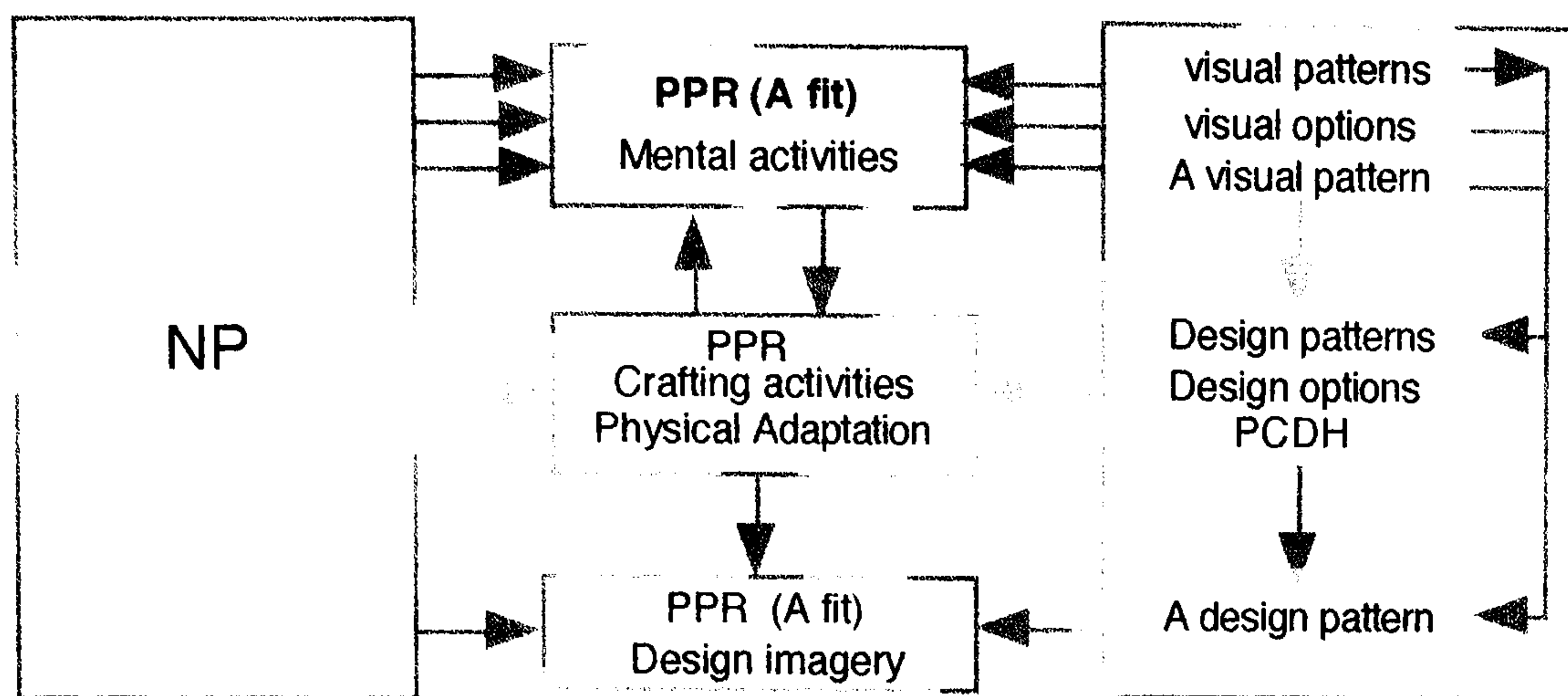


DIAGRAM 4.3: RELATIONSHIP BETWEEN SELECTING & ADAPTING VISUAL PATTERNS

The processes of adapting visual patterns can be classified under the following categories:

- Changing visual patterns through processes of addition, elimination and adjustment
- 1) Modifying the pattern 'T' by changing the size and the style (See FIGURE: 4.16).
 - 2) Adding a three dimensional form to the letters of the word Typhoo.
 - 3) Modifying the three green leaves of tea, by changing their patterns and by selecting new visual patterns for their details.
 - 4) Eliminating the photograph of the foil bag , keeping the idea of the foil bag from the previous design, and changing its visual pattern into visual and physical pattern by creating an actual window so people were able to touch and see the foil bag. This activity involved selecting the location of the window within the overall pattern of the design, and considering an accurate position within the pack.

Tony Watts explained:

There was a picture of the foil bag before and not a window that you could see through the real foil. Also you have to select how you make the cut here so it doesn't weaken the pack. So... it has to be in so far so it doesn't break across the edge. It shows just enough of the foil without disturbing the rest of the pack.

- Using illustration technique for improving quality of visual patterns

Tony Watts explained:

Well that's an illustration, you couldn't photograph it. It's easier to make the leaves just perfect, just illustrate them.

- Adapting the parts of the overall visual patterns to each other and to the totality of the overall pattern. Tony Watts stated:

Well it's important that you get the logo in the middle of the pack and that it's surrounded by the red. In other words you don't want to have too small a logo. It needs to have enough red around it to read very well. The leaves become secondary. This becomes secondary so that these items are not overpowering but ..you read Typhoo quickly. It becomes a symbol that the leaf always appears under the logo like that so when you use it on other panels, television or magazines that this is a corporate logo and the leaf always here, not here or there or there. It always appears

white on red. In newspaper it could be white on a black, but at least it's always white. If you have to do it in one colour.

4.3.11 Purposive pattern recognition (PPR)

The designer's explanation showed that the designers' criteria and consideration when selecting visual inputs focused on matching the NP for the project with the visual inputs. This matching activity can be interpreted as purposive pattern recognition (PPR). PPR can be observed in various matching activities (TABLE: 4.8).

Activities	Purposive Pattern Recognition (PPR) Fit of the visual pattern & its parts with NP & its parts
Updating the brand by maintaining visual patterns of its heritage and adding new visual patterns to give a contemporary outlook	"Visual elements, colour, is very important. The heritage of the product is very important, so that it doesn't look like a new product but a carry on of the product they've always know. But what I want to see is that it is updated slightly, slight improvement in the product. But also possibility of progressing along, not looking too old fashioned. "We know it has to be a contemporary standout. We have to take in the elements of where the pack came from. Not to change it too much, but to maintain some of the colours that people recognise. To make it more modern and more standout I guess."(Tony Watts)
visual and physical patterns for matching the intangible quality freshness	"The three leaves that are picked from the top of the tea plant. It's always the three top leaves at the top of the tea plant that are the freshest. So they only pick the top three tea leaves on each one. we knew we had to define the top of the tea leaves is very important." (Tony Watts) "All the packs have three tea sachets of bags and the foil is to show freshness. That was part of the brief. I think people think that it's fresher if it's in a foil bag. In a box you have lose bags, as you use up one bag you still have two bags that haven't been used yet. So people will buy it because they think its fresher."(Tony Watts, 1997)
Simplicity of the design idea as an appropriate fit for NP	"To make the packaging less so that it was distinctive and that the red and the white logo worked very well. A very dramatic logo that also showed the logo off very well. I think simplicity was what we were really after. A very simple design which is just a nice clean modern logo on a red background. The logo is big. It's cosmopolitan. It's very simple. It's very average. Not terribly sophisticated. Not formidable" (Tony Watts)
Having a mental image of how the consumers behaved in the supermarkets, and selecting simple visual patterns to match the focus of of their attention in relation to the kind of the products	"A mental image, if a consumer goes into the supermarket to buy tea and they're only going to spend two seconds looking because tea is not a high priority, tea is something basic like salt and milk, you don't spend much time looking at it. So when you go to the supermarket you might spend more time buying a bottle of alcohol, or vegetables to make sure it's fresh. But tea is tea. And so you may be looking at price which is part of it. The other thing you might be looking at what you brought before, what you're used to, what you like. If there's a special offer on the pack you might buy that because it's cheaper that way. So you really have to be very simple and explain the logo very clearly and not put an awful lot of things on the boxes so that people see the logo instantly when they look at hundreds of products of packs. So simplicity is probably what you're thinking about. You just need to have a nice clear definition of what the product is." (Tony Watts)
Comparing pattern of competing design hypotheses and selecting the best ones	"We would start by developing different kinds of types of logos... We would compare those with the packs that we've designed and we pick out the best packs and then we would make up three best ones and then we can put those in against competition."(Tony Watts)
Developing the brand without alienating the target audience	"Well it was to project a good stand out of an existing brand but not alienating existing consumers by changing it too much but just updating it, making it more modern."(Tony Watts)
Comparing the design with the competition	"We look at competition all the time. You always have to compare your designs with the competition."(Tony Watts)
Discarding unnecessary repetition	"Maybe had a cup of tea on before, but you don't need to put it on. Typhoo means tea so you don't need to put cups of tea on it." (Tony Watts)
Avoiding patterns used by the competitors	"Well a lot of things will come in. Well we knew we didn't want to put tea plantations or tea pickers on it like the competition ..." (Tony Watts)

TABLE 4.8: PPR AND MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (1): 3D DESIGN PROJECTS

4.4 MINI-CASE STUDY (3):

BRAND IDENTITY AND PACKAGING ACROSS A RANGE OF PRODUCTS OF MURRAY McDAVID : WHISKY

4.4.1 Historic background: 'Murray McDavid whisky' project

The Murray McDavid corporate identity and packs were designed by the design consultancy Barrow Parkhill Associates in London, UK. Mr. Peter Barrow the creative director of Barrow Parkhill Associates stated that the clients wanted to launch a new company called Murray McDavid which was the combination of two family names. Both of them were Scotch and jointly had about nine generations of experience in the distillation of whisky. Peter Barrow stated that Scotch whisky products were considered to be one of the best quality whiskies and they had target audiences in various parts of the world especially in the UK, the USA, Japan, and Europe. The major differences between the various kinds of whisky had to do with their regions, clans, ingredients, processes of distillation, method of storage, and the year of production. The designer stated that there were various clans in Scotland who were known by their whisky productions. Each one came from a particular region. The clan ancestral museum was in the Isle of Skye. The clan produced various kinds of whisky, i.e. there were thousands of Macaulay and there were thousands of McGregor. Peter Barrow stated that the products of Murray McDavid were selected from Scotch single malt whisky. The potential quantity of Murray McDavid whisky was very limited. The distillers had to sample the barrels that they had for a particular year and they had to select what they considered to be the best barrel. He added that they used to get probably around 200 or 300 bottles. Peter Barrow stated that when that amount was sold it was not to be repeated, because whisky was like wine; it went according to region and according to the age of it. He explained:

It's virtually hand selected, tasted selected whisky. This is the best of the batch. When that's gone, it's gone. So when they found three barrels then they would probably get 900 bottles. If they only found one barrel then they'd probably 200 or 300 bottles. So it's a very precise marketing operation.

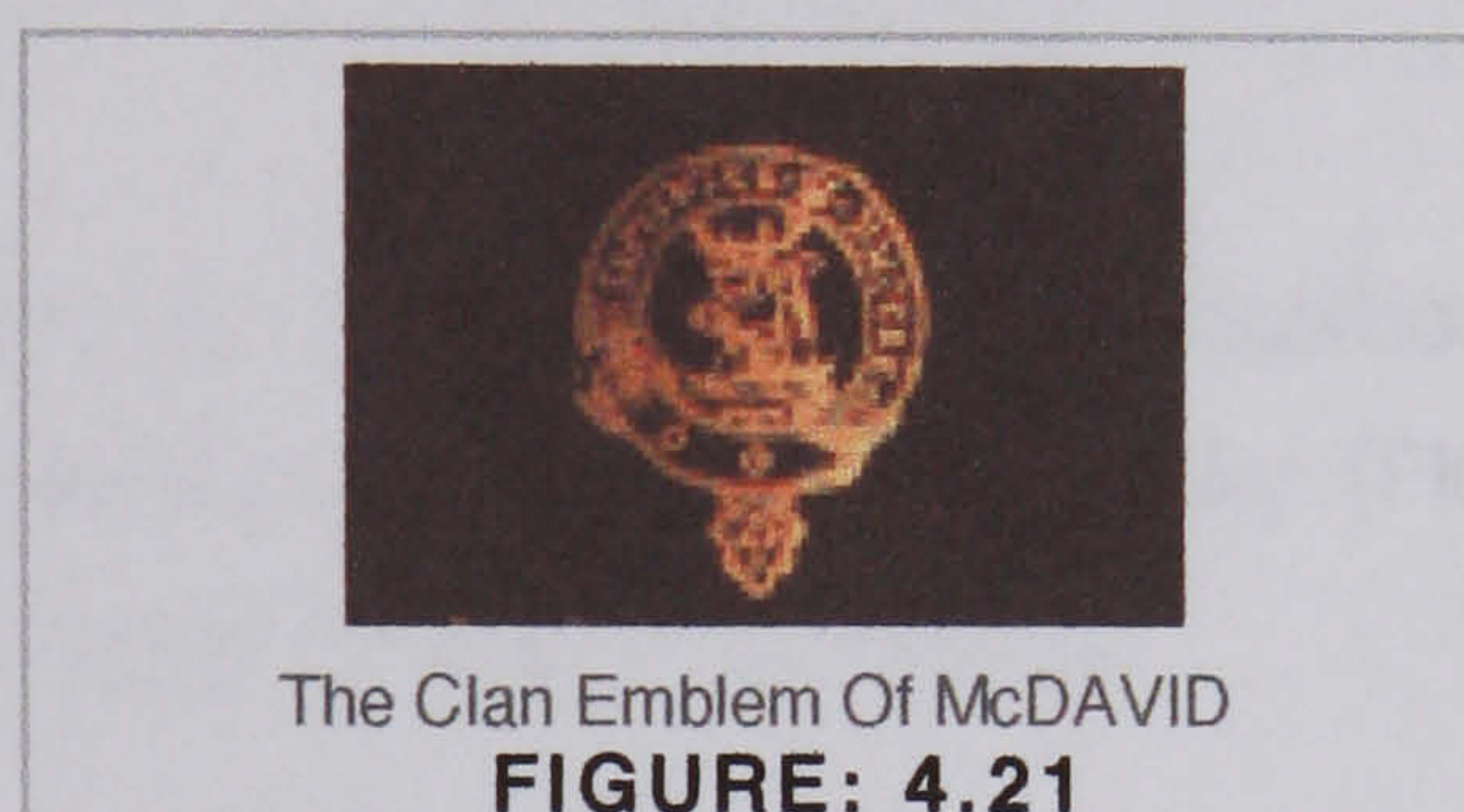
The Murray McDavid whiskies were aimed at connoisseurs. The whisky bottles were in two sizes: 1) standard size, 2) small size. Big size bottles were to be sold individually. Small size bottles were to be sold as a set. Each set consisted of six bottles. In addition, the small size production was to be sold as gifts, or as items for collectors.

These kinds of whisky were expensive. The project was to be launched at Christmas 1996, but because of some changes in the marketing strategies parts of the project were to be launched at Christmas 1997. The major markets of Murray McDavid products were in the UK, USA, and Europe. The various kinds of whisky were not new themselves. But they were rare and Murray McDavid whisky broker aimed to have precise marketing operation for these kinds of whisky.

4.4.2 Designs for the 'Murray McDavid whisky' project

According to Peter Barrow (1997), the Murray McDavid whisky project consisted of packages outer, a logotype, labels and stationary. Each design included the logo of the McDavid clan, and the logo of the company 'Murray McDavid'. The designs consisted of the following:

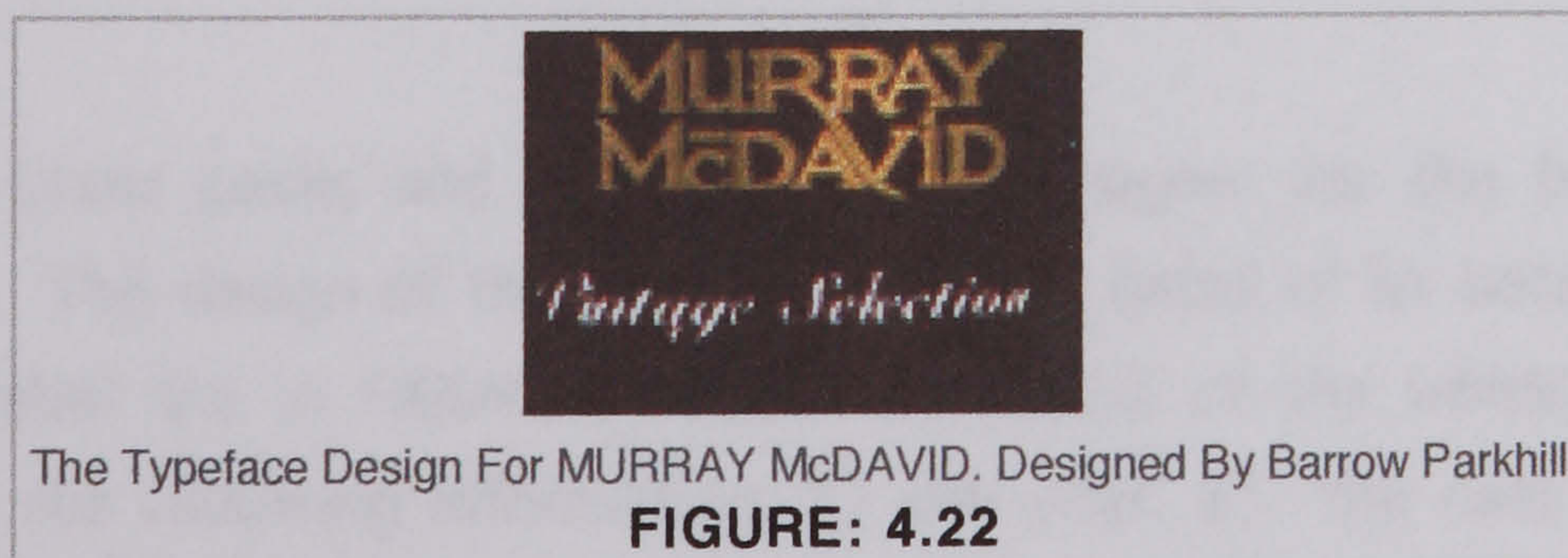
- 1) The emblem of the clan (FIGURE: 4.21).



This design was the original emblem of the clan. The designer stated that each clan had its own emblem. He explained:

That is the clan logo. We didn't design it. Each clan has a logo. The red deer is a traditional Scottish device and this belt, it's like a buckle.

- 2) The logotype design for Murray McDavid (FIGURE: 4.22). This logotype was designed by the designers and it combined the two names of the families together Murray and McDavid.



- 3) Labels for each kind of Murray McDavid whisky (FIGURE: 4.23).

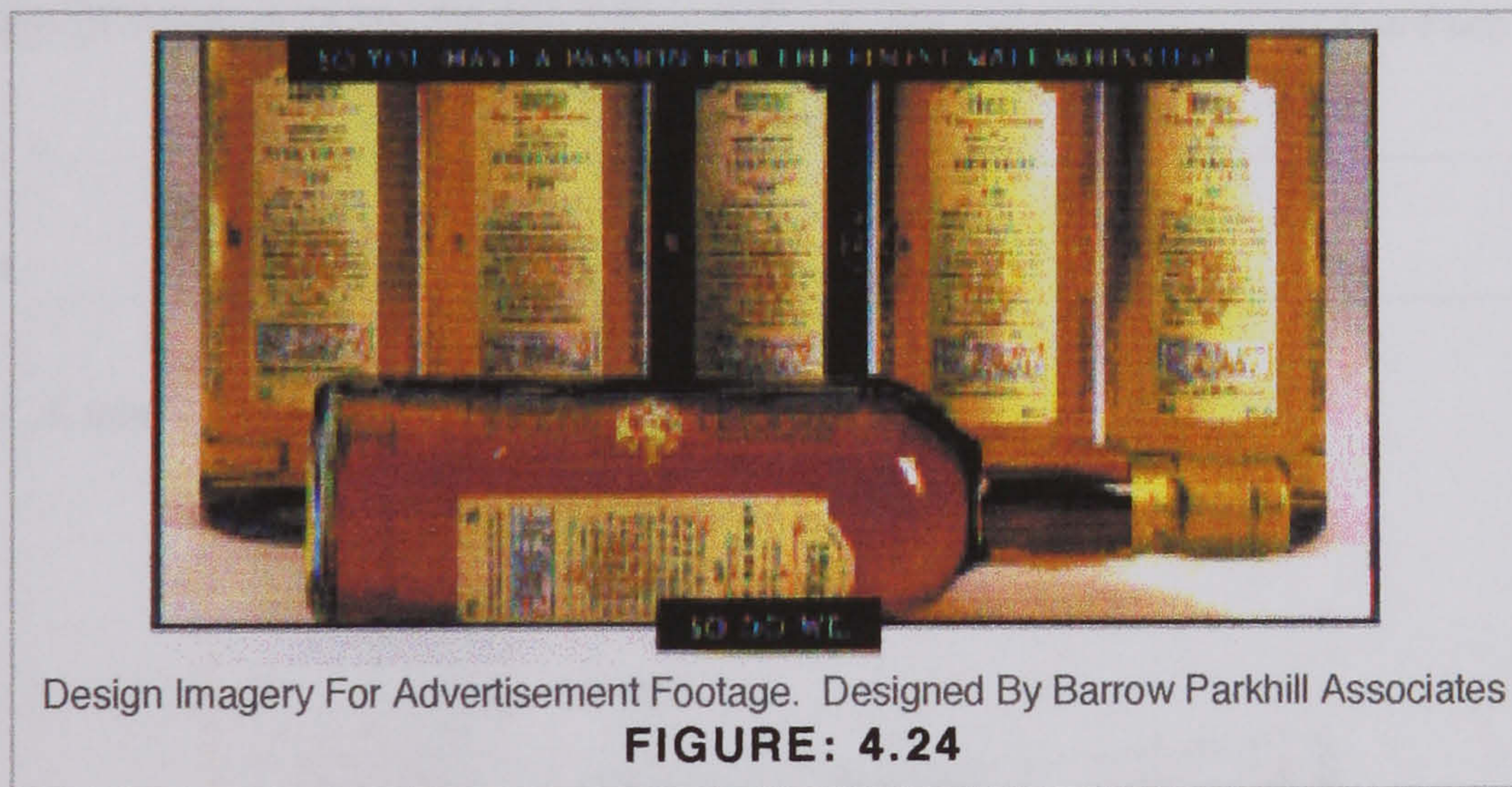
The designers created a great number of labels each of which contained information about the history of the whisky, its region, the name of the whisky, the distillery, and the year of production. Peter Barrow described the labels and their

materials:

So this talks about the distillery. Each one is different. They're on a very nice paper, textured paper. They're quite expensive. They are five colours.



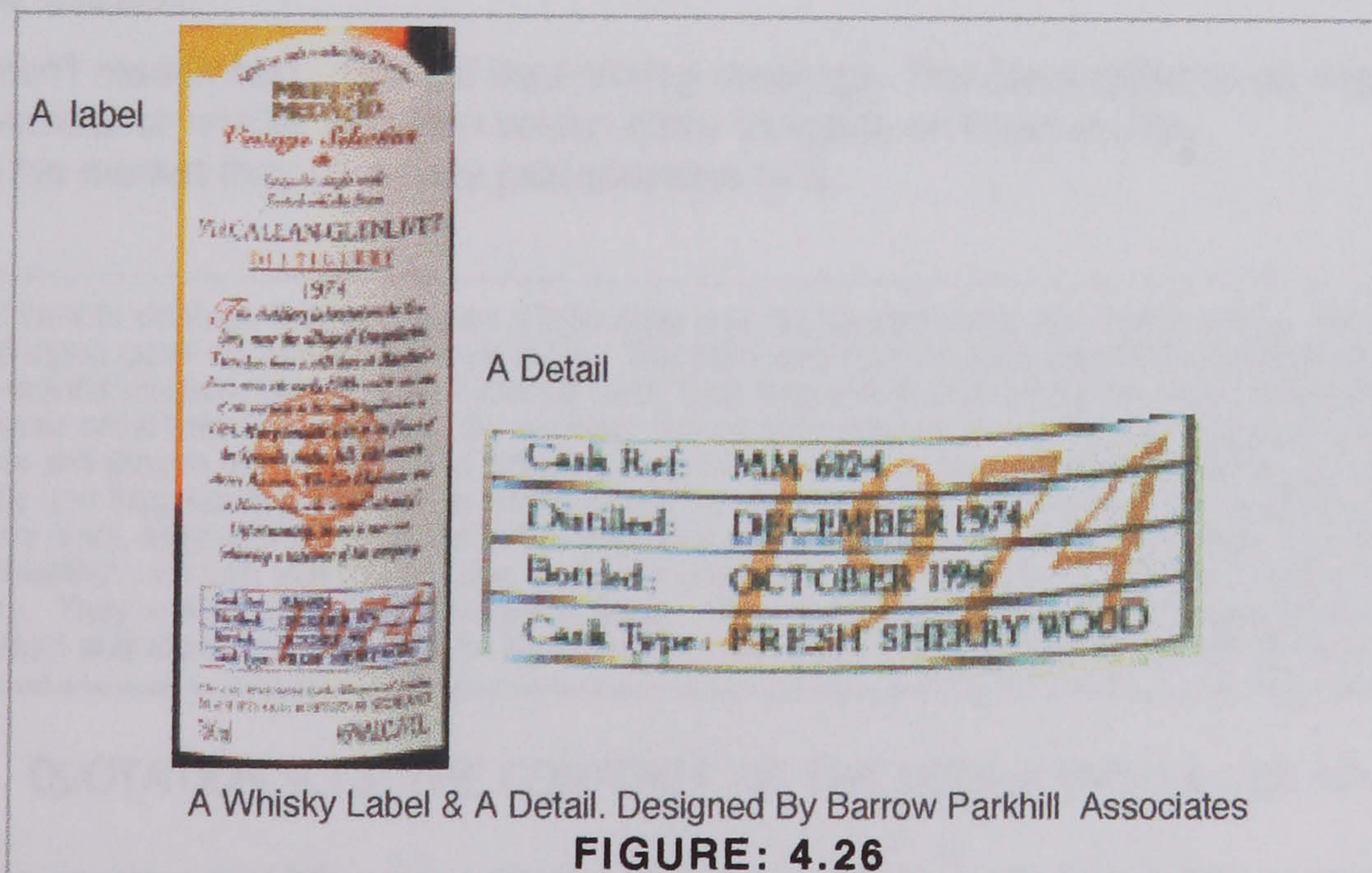
4) Designs the contents of information, the composition, and the layouts in each bottle according to ingredients and the age of whisky (FIGURE:4.23). The image in FIGURE:(4.24) was used for advertisement footage.



5) Design the outer packs and the total design imagery for the bottles of whisky (FIGURE: 4.25). The design of the outer pack with a detail of its bottom design and a detail of the label are in FIGURE (4.26). The detail of the whisky label (FIGURE: 4.26) included the following information: 1) the year, 2) the cask number, 3) the date the whisky was distilled, 4) the date it was bottled, 5) the cask type, 6) Wrapping papers. The designer stated that they designed wrapping paper by repeating the name Murray McDavid, but the designer did provide a visual sample of the design.

7) Miniatures packs for miniatures bottles. Each pack contained a set of six miniature bottles, and it had a window on showing the bottles and various types of whiskies.

The designers did not design the glass bottles, because the quantity of whisky was limited and ordering bottles specially designed for the whisky was very expensive. Therefore, both the clients and the designers decided to buy ready made bottles from the market.



4.4.3 Processes of identifying the need & the need pattern (NP)

The processes of identifying the need for the Murray McDavid whisky products involved various processes of gathering information. Identifying the need was a complex matter because of the following: 1) the marketing objectives and strategies,

2) the available quantity of the whisky , 3) the nature of the market of Murray McDavid whisky products, 4) the need and its context. Identifying the need for the Murray McDavid project was not an easy process because some of the marketing strategies changed and were decided during the design process of the project. Such factors brought with them some changes to the context of the need and its requirements, and new constraints took place. In addition, the PO knew their market and what they were doing, nevertheless, they wanted to try various design ideas before they decided how to address their need and their markets. Consequently, the designers had to change the designs of the projects many times. Peter Barrow explained that the POs were the people who decided the need. He explained:

Because you do not sit down and say I am going to design a whisky label. I mean the client is the equivalent of the patron. He's commissioned it. He's more experienced in his market than we are and he goes around and he talks to all the people who are going to sell it .

Identifying the need started with the POs approaching the designers and giving them the design brief. Understanding the context of the need and its nature and relating its various requirements to each other can be considered as the need pattern (NP) for the project. Identifying the need involved the following processes: 1) receiving the design brief, 2) frequent meetings and discussions, 3) gathering and selecting visual sources, 4) selecting visual sources and visual patterns. The design brief included a set of requirements and constraints (QUOTATION: 4.13). The designers did visual research and looked at how known whisky production establishments designed and handled their projects. The PO provided all the information about their markets. Peter Barrow stated:

It wasn't researched. We just kept having meetings. The client called in an American wholesaler or retailer who also voiced some thoughts on it and as that was his market they obviously paid attention to it.

"We had a brief to do three things. Create a logo style and create stationery and create labels. We then had to design packages outer as well as a transit outer. The brief was that the logo should be authoritative, look old; they didn't want it modern, they wanted it classic more than that and to look as if it had been a round a long time and they knew what they were doing... So we were then commissioned to do what we call a six pack. There's normally six and they're all with a lid and there's a map of Scotland and so on. What will keep on changing are these labels and they wanted them to be very informative, very discreet, not shouting off the shelf and so these are the early ones, they've been changed since then but, so we've got Murray McDavid logo, then we have the 'Vintage Selection', we can use it in Europe so we're using 'Vintage Selection' in Europe. This is the name of the distillery. They're not going to sell millions of these. They recognise that there are people who want a good quality product and are prepared to pay for it and that's what they're thinking about it." (Peter Barrow)

QUOTATION 4.13: THE CONTENTS OF THE DESIGN BRIEF & THE NP

The designers came up with some ideas for promotion strategies. Peter Barrow stated:

We came with ideas for the special whisky tasting. The bottle has a lid. The idea is that you smell it and you hold the aroma etc., and we saying why don't you sell one of these glasses with two of these bottles. So we're coming up with ideas that will hopefully turn into design work, but there are such restrictions on it.

Also the designers selected the wording: 'Vintage Selection' to be put underneath the logotype of Murray McDavid instead of the old wording 'Purveyors of fine single malt whiskies'. Responding to the market demands, the POs changed the nature of their need regarding the samples of miniature bottles. Originally the POs only produced them to be promotional items and be given to retailers as samples, and the designers had to put across the bottles that they were not for sale so that they didn't sell them. But the PO found out that there were high demands for miniature bottles of whisky in the American market. The American retailers considered them to be as collectors items, and as gifts for Christmas. The designer stated that the PO only wanted initially 400 bottles, then they order 2000 bottles. For each new order of bottles the designers had to provide labels for it. In addition, each time the POs select new kind of whisky for their market the designer had to design new labels for them. According to the designer, these bottles were sold in hundreds to collectors. The designer stated that people bought them because there were hundreds of different labels.

- **The constraints of the need**

The constraints of the Murray McDavid project were interwoven with the processes of identifying the need, and the processes of coming up with design ideas. These constraints can be grouped under the following categories: 1) economic constraints, 2) visual constraints, 3) technical constraints. These constraints overlapped and involved the following:

- **The materials used for the design project**

The economic constraints created visual and technical constraints, consequently, the designers were restricted to use available materials in the market instead of designing new materials. These materials were related to the bottles and metal caps used for the whisky products (QUOTATION:4.14).

"We weren't able to actually design the bottles for two reasons. One, time did not permit and two because of the small quantities it wasn't sufficient to have a custom made bottle. You need 50,000 or something like that to get a custom made bottle. It's very expensive. So we had to search for existing, which we did. Because of the time factor we were restricted to what was available for these metal caps and we couldn't get that, we wanted that foiled on there but we couldn't get that. Then on this design here, the same problem as with the bottles. We couldn't afford to have six different types of pack so we had create a general pack." (Peter Barrow)

QUOTATION 4.14: CONSTRAINTS RELATED TO THE MATERIALS USED FOR THE DESIGN PROJECT

- **Visual and technical constraints related to the use of labels**

These constraints involved sticking the labels on 15000 bottles of six types of whisky. Sticking labels on cylinder surfaces required high accuracy because any mistake was able to damage the whole design (QUOTATION: 4.15).

- **Visual constraints: involved the use of visual inputs including texts:**

The designers were restricted to use of the following information: 1) the clan logo of McDavid, 2) the name 'Vintage Selection', 3) the logotype of the company 'Murray McDavid, 4) the year of production, 5) a historic background about the type of whisky and the process of distillation, 6) information about Murray McDavid and Scotland.

"These are the labels of the bottles and they stick this on the cylinder so that you have 15000 of these divided by six. The problem that they're having is to work out how to stick the labels on accurately, so they can do it and then general copy on the back would be about Murray McDavid. Apparently at the moment nobody's ever done this sticking on a curved surface so we've still got some experimenting to do because what we're worried about is that if they don't stick it on absolutely right it will look terrible. So we're now looking at sticking this on. If it's got to be quality, it's got to be quality, now what they'll say is that you've made it a very accurate positioning and I can't come up with any other way of doing that so the future will remain to be seen on that." (Peter Barrow)

QUOTATION 4.15: TECHNICAL CONSTRAINTS

- Addressing different markets involved different constraints

Addressing different markets required different design considerations. The wording 'Vintage Selection' was used only for products which were sold in UK and Europe, because in America 'Vintage Selection' was used only for wine. Therefore, the labels for the American market did not include it. Then the American retailers decided to use it. These changes created economic and visual constraints because the designers had to make changes at final stages of the design project. Peter Barrow explained:

We came up with the wording 'Vintage Selection' and which led to a problem in the US because when they went to the US you're not allowed to talk about vintage selection unless it is wine. After that we had to come up with another name. After a lot of work, this didn't just happen, and they changed their mind again, and we were able to use the vintage selection for the US.

- The available quantity of the whisky and its kinds

The PO were searching for additional kinds and amounts of whisky. The kinds of whisky were rare. Also, they were produced in small amount because they were restricted to the processes of selecting of the best barrel of the season. Consequently, the marketing strategies and the designers had to work within these constraints. Peter Barrow explained:

Because it's selected, so they may only find two casks that are good enough so they'll only do two casks. That's why. When it runs out we will have to do some more of these labels because they're already searching for additional. This is what it's all about.

Also, each kind of whisky required a label that included its name, description of its distillation processes and region.

- Modifying the aims of the production of Murray McDavid whisky

Changing the aims of producing miniatures whisky bottles from samples that were not for sale to products for sale required new design considerations and new solutions. The problems they had were related to the price of the whisky, and to the

expenses of producing individual small bottles. Each bottle required the same amount of work of that of the big bottle. Peter Barrow explained:

This is a very expensive way, because for the same amount of work you can sell this quantity.

Selling individual small bottles was very expensive for the potential costumers. Therefore, the PO decided to sell them in sets, so that people were able to feel reasonable about the price, and had a variety of whisky in the same time. Peter Barrow explained:

So people sort of begrudge paying £6 or £7 for a small amount of whisky so by putting it in a box with six of them and making a gift they understand what the price is for and that's what they're now doing.

- The methods and techniques used in exploring and adapting the visual patterns of the designs required time and money

Peter Barrow stated:

We used expensive techniques. We spent a lot time on it. We got the detail right and we did a lot of things.

- Dating the whisky

The designer stated that in the UK and Europe they had to use the year of production, such as: 1974. While for the American markets they had to write the age of the whisky, such as the whisky was twenty one years old. This had to do with the different appeal and tradition of the market. Peter Barrow explained, "In America we have to say that's 21 years old."

- The designer stated that the kinds of whiskies were produced by various clans. He stated that they were not able to use all the clans logos. Peter Barrow stated:

We cannot have any identity on the six pack. So what is going to be done is it's a Murray McDavid six, hand selected whisky.

- The design project involved copy writing. The copy writer of the design consultancy (the partner of the creative designer) had to come with ideas for the wording, and the contents of information. According to the designer the PO changed the copy many times which cost money and time.

4.4.4 Gathering and selecting visual sources

During the processes of identifying the need pattern (NP) and coming up with design ideas the designers gathered and selected various visual sources and visual patterns from various resources and from various places (QUOTATION: 4.16). The designers' visual sources can be grouped under the following categories: 1) existing packs of alcohol products in various markets, 2) books about the different clans, their tartans, and their logos, 3) books on logotype design, 4) books on old labels, 5) books

on various typefaces, 6) visiting some the market place such as Selfridges and known establishments that sold spirits, 7) mental sources.

“What we did do with this before we did any work, we went up to Selfridges, who's got a wonderful whiskey and wine section. We went to various other well known establishments and looked at what was on the market. Looked at what price levels they had. We have a book, its about that thick which has all the clans, all of the different tartans and all of the different logos. We also had some books which I'd picked up earlier which contained all the old labels, all the designs for the old labels and we looked through those.” (Peter Barrow)

QUOTATION 4.16: THE DESIGNERS' VISUAL SOURCES

Peter Barrow stated that looking at the various types of logos was for clearing up their minds only. Also, he stated that looking at the various packs was for getting a feel of the market and avoiding producing similar designs. He explained:

First of all to get the feel of the market, but also to avoid producing the same sort of thing. So that's the only conscious research that we do.

From the designers explanation it can be considered that the designers selected visual patterns from their visual sources. The labels consisted of names and texts. The designers handled the wording as visual patterns that embodied information more than what they stood for as letters. The designers had to design and select certain typefaces and colours for the text they had and for the logotype they created. The only visual source the designers selected and used was the emblem of the McDavid clan because it was part of the context of the project and its original identity.

4.4.5 Design ideas

The design ideas for the Murray McDavid design project developed along with the development of the need for the project and its requirements. The design ideas were the outcome of long processes of exploring and discarding design possibilities. The focus of the design ideas was the need pattern (NP) of the Murray McDavid whisky project, and its context. The designer stated that they discussed the design ideas with their PO before starting producing visual marks. The ideas during the discussions can be considered to be a combination of thoughts, considerations, and requirements. Coming up with design ideas involved the following: 1) discussions, 2) visual research, 3) graphic investigations, 4) method and techniques for adaptations. The design ideas went through dramatic changes during the various stage of the design process. The designers explored and tried various design ideas. Some of the ideas were discarded, and some were modified because of the development of the need, and because the POs wished to try various ideas. Peter Barrow stated:

So these were absolutely totally different to what we originally worked on. It was almost a discarding exercise.

Peter Barrow stated the following: 1) quite often design was as much discarding as it was coming up with new ideas, 2) it was important to respond to the design brief and

what the POs wanted, 3) they did what the POs wanted, but they also came up with other ideas, 4) convincing the POs with what they thought to be a good idea was by showing the idea instead of discussing and describing it to the POs, so that the POs were able to judge and decide for themselves (QUOTATION: 4.17). From the designer's explanation it can be deduced that the designers selected from competing design patterns (PCDH) the one that matched the NP best by discarding the less adaptable patterns.

"Quite often design is much discarding as it is coming up with new ideas. As designers we sit and listen. Our policy in this company is that we always do what the client wants first. At the same time we also produce designs we think he should have and we show them to him together because it is arrogant for you to listen to a brief and not do what he wants and go back with something else. So we do that and we say look we do what you want but we think that it could be improved if you did this. This way, you don't have to discuss it in advance or describe it. He can then see and if he isn't going to see the difference you've had it anyway. One of the things we've learned over the years is that you cannot teach people the quality of what they're buying if they cannot perceive it. Then you're lost anyway." (Peter Barrow)

QUOTATION 4.17: THE DESIGNERS' OPINION AND STRATEGY REGARDING DESIGN IDEAS

The designer stated that having design ideas was a two way process and it involved both the designers and their PO. Peter Barrow stated:

It's totally different from how we started and it's a two way thing. It's not just us as designer. The client says things that affect what we're going to do and how we think... It is a team. You cannot tell the client what his market is and they have a lot more experience in their markets.

The design ideas for this projects involved the following processes: 1) coming up with design ideas for a set of requirements. Each requirement was a part of the NP. The design ideas for the requirements were to work as a whole within the overall pattern of the design. 2) exploring design possibilities for each requirements by means of producing visual marks, 3) combining the design ideas within one design pattern, 4) developing the design ideas as design patterns, 5) selecting the best ones as potential options, 6) feedback and evaluation sessions, 7) selecting the best design options from alternative competing design hypotheses (PCDH), 7) making necessary modifications, 8) developing design ideas, 9) refinement stage, 10) doing some final artwork, 11) starting modifying some design ideas again, 11) developing new design approaches, 12) getting approval from the POs, 13) refinement stage, 14) artwork, 15) production. The designer stated that in order to present their ideas effectively to their POs they wrote down the constraints, the design brief, and what was required to be solved so that they tackled each point. Peter Barrow stated:

We write what the limitations and what the brief was, what we had to solve, and we discuss that with them during the presentation.

4.4.6 Coming up with design ideas & graphic investigation

The designers had to come up with design ideas for the following: 1) the logotype for Murray McDavid, 2) the overall design of the labels including their contents

shapes and colours, 3) a typeface for the names of the kinds of whisky, 4) the tartans, 5) writing the age or whisky, 6) writing the year of production of the whisky, 7) applying the clan logo and the tartan on the bottles, 8) the back label of the bottles, 9) the led and seal of the bottles, 10) the outer pack of the bottles, 11) the pack for the miniatures bottles, 12) the special whisky testing bottles, 13) stationary, 14) wrapping paper, 15) the design of the bottle as a whole, 16) visual techniques and methods for adapting the various contents of the design. The designer stated that in order to explain how they come with the design ideas for the Murray McDavid whisky project, he had to go through all the processes of what the POs liked and did not like, and what was wrong for the market. Peter Barrow explained:

There's too much work to see how we started on that. Obviously, what influenced us when we produced designs had to do with what they told us, and what they didn't like, or what doesn't work or what is wrong for the market. In my opinion you have to go through that process.

The designers started exploring their design ideas by producing hand drawn visual marks. The designer asserted that hand drawing technique was better for indicating and exploring ideas. He explained:

You can indicate your thoughts by hand but you can't do it on the computer. It is either right or wrong. You you do it as if it's finished artwork and so that's our objections to digital creativity if there's such a thing. So when we thought we had some good ideas we used the computer to do them as finished artwork. I'm not anti the computer it's just that you do not use it in the creative process. It's a production tool.

The visual marks which the designers produced to express their design ideas can be considered as design patterns. The designer stated that they explored 25-30 different approaches. Most of them were done by hand and some were done on the computer. These various possibilities can be considered as patterns of competing design hypotheses (PCDH). The designers did the designs for the large bottles then they started the designs for small bottles. First of all, the designers came up with design ideas for the logo of Murray McDavid, then started coming with design ideas for the labels and for the bottle of whisky. Peter Barrow explained what they did:

Initially we did some large labels and they were very traditional and quite exciting and so forth. But gradually what transpired because clients don't always convey their feelings initially, what became important was that you did not obscure the whisky, that you could actually see the content. Because these whisky's vary much in colour and this was important to connoisseurs.

Then the ideas and the designs changed dramatically. Peter Barrow described the process as 'discarding exercise'. He explained the differences between the initial ideas and the new ideas:

They were much more lavish, much more elaborate, and they were bigger, wrapped round and they stood out off the shelf and the name was bigger and gradually it got smaller and smaller and bits were thrown away gradually. That's what took the time and a lot of that work was done.

As a consequence of the developments of the need and its context, the designers had to come up with design ideas to meet the new requirements:

So we're coming up with other ideas. We went round and we're seeing other people.

4.4.7 Visual patterns

The designer stated that they did not copy their visual sources. The only visual pattern that they copied was the clan logo (FIGURE: 4.21) because it was necessary to be the same. But the designers selected certain materials for producing this logo. These materials had visual patterns of their own. From the designer's explanation, it can be considered that the designers selected and adapted visual patterns from their visual sources. The visual patterns of the design imagery can be classified under seven categories (TABLE: 4.9).

<ul style="list-style-type: none"> • Mental visual patterns: These patterns were patterns of visual thoughts and verbal design ideas. • Physical visual patterns: These patterns were able to be touched and felt, and they were related to the materials which the designers used. Also, they involved the nature of materials, textures, and structures. • Visual patterns that projected a certain mood, feel, look, and authentic quality. Examples of these patterns were patterns of certain design styles such as Victorian style without being actual Victorian, but just to give a feel of it. Italic typefaces to provoke a feel of hand drawn typefaces, and being old. The use of tartan to get a feel of Scotland. The pale colour of the labels to give a feel of being old. • Visual patterns of the tangible aspects of the subject matter: These included the actual facts and details, the colour of the whiskies, the logo of the clan. • Visual patterns of the used materials. These included: transparent glass of the bottles, the gold foil of the clan logo, the type of paper used for the labels, the cartoon used for the outer packs, the foil materials of the wrapping papers, the actual colours of the whiskies. • Visual patterns of the relationships between the various parts of the design pattern. • Visual patterns as results of crafting activities.

TABLE 4.9: CATEGORIES OF VISUAL PATTERNS FOR MURRAY McDavid WHISKY PROJECT

4.4.8 Relevance of visual patterns to 'Murray McDavid' project

- **Subject matter**

The subject matter of the project can be considered to be of two types 1) tangible subject matter, 2) intangible subject matter. The tangible subject matter consisted of the following: 1) the name of the company Murray McDavid and their Scottish regions, their clans and their logos, 2) the kinds of the Scottish whiskies, their regions, their processes of distillations, their age, and names, and the fact that the whiskies were hand selected. The intangible subject matter had to do with the following: 1) having a Scottish feel of the tradition and regions of the whiskies, 2) having a Victorian feel to express the authenticity and heritage of Murray McDavid company, 3) having a feel of Scotland, 4) having a feel of being around, old, and quality business and products. Both types of subject matter were related to each other. In addition the relationship between them involved various considerations and processes of selecting and adapting visual patterns and materials. Also, the subject matter included information related to Murray McDavid company. Peter Barrow stated,

There is actually a label on the back of the bottles that talk specifically about Murray McDavid their selling plans and so forth.

- **Target audience**

The target audiences of Murray McDavid were in general male customers. Also, they were people who were aware of the differences between the various types of whiskies including the tastes, the distillation processes, and regions. Peter Barrow stated that they designed for the market and the area they were working in. He indicated the sort of information the POs provided about the target audience (QUOTATION: 4.18).

“A whiskey market could be very broad. But the target audience, the people within that market are what we call niche marketing. They may only sell one or two percent of the market. So we have to try and get in our minds from his description what he thinks. So he has to relate to us what types are they, what appeals to them and what they think is cheap. You can produce an expensive pack but in the eyes of somebody it is cheap and gaudy or whatever. You see lots of whiskey bottles with lots of gold foil and silver on it and stuff like that. From his description of what he feels that customer is looking for and prepared to pay, well then that obviously guides our thinking. That's essential for us. He'll have an input. Obviously you design for your target audience and a lot of that target audience was also American which we had to rely on him to convey what he thought their tastes were. When he went to sell this he took this pack and his samples and one of these bottles and his feedback to us was the American's love the packaging. They think the package's great. So we obviously interpreted what he said.”(Peter Barrow)

QUOTATION 4.18: EXAMPLE OF THE INFORMATION REQUIRED ABOUT THE TARGET AUDIENCE

The designers took into consideration various issues related to the target audience and the markets when they selected their visual patterns for the NP (TABLE: 4.10). Both the POs and the designers had to consider the price of the products. Peter Barrow stated:

We're looking at £40 the cost of this on the shelf and some of them may be even more expensive. So somebody who hasn't tasted the whisky, feels that he's buying quality. That's really the objective.

1.	Considered the nature of each market and the people's high appreciations for Scottish whiskies. This involved the contents of the written information and its theme.
2.	Provided the target audiences with all the facts and details about each type of Murry McDavid whiskies, so that customers knew what they were buying. This included the selection, adaptation and use of typefaces, and involved the following considerations: a) legibility, b) pronounceability, c) memorability /retention, d) suitability, e) matching the design brief.
3.	Emphasised the fact that each type of whisky was hand selected.
4.	Related the whisky products to their Scottish origins. 4) Used a subtle tone of voice in how they selected, adapted, and used visual patterns for addressing the various issues.
5.	Expressed the long traditional experience of Murry McDavid and their clans in the whisky industry.
6.	Made the high price of the whisky products sound reasonable by showing the quality of the whiskies.
7.	Showing the visual characteristics and quality of the whisky by the way the labels were designed on the bottles.

TABLE 4.10: CONSIDERATIONS FOR ADDRESSING TARGET AUDIENCES

Each of the considerations in TABLE (4.10) was part of the NP, and was translated into visual input by matching between each given requirement and visual patterns. The demands of the target audiences for miniatures bottles of whisky and their desired to collect traditional labels of whisky products created additional need to produce and design more miniatures bottles.

- **Communicative characteristic of the visual patterns**

The designers selected visual patterns that had certain communicative characteristics. These characteristics were related to the tangible and intangible

aspects of the subject matter as were decided by the NP. The communicative characteristics can be considered to involve the following: 1) the tone of voice not loud, 2) the properties of visual patterns , 3) the Scottish feel, 4) tradition feel, 5) the modern and old feel in the same time 6) the Victorian feel, 7) the relationship between the visual pattern and the overall pattern, 8) the communicative characteristics of the physical materials used and the visual techniques.

4.4.9 Processes of selecting visual patterns & (PPR)

The processes of selecting visual patterns took place throughout the various stages of the design ideas. It can be considered that the selection of visual patterns for the Murray McDavid project involved subconscious selection. Peter Barrow stated:

Not consciously. We don't live in a vacuum but I'm not conscious of drawing from those sources. As I say, they wanted a traditional feel, so we went and looked at various things.

From the designer's various explanations, it can be considered the selection activities occurred in the following ways: 1) subconsciously, 2) according to a set of criteria, 3) by processes of conjecture and refutations, 4) according to the POs precise wants, 5) by brainstorming activities, 6) during the crafting activities. These ways were not separated by boundaries. The designer stated that they selected the best quality of ideas, visual inputs (visual patterns), and method when they generated their design imageries. Most importantly, the designers aimed to satisfy the NP when they selected their visual patterns. It can be deduced that these processes involved purposive pattern recognition (PPR). In addition, the designer explained that there were times when their visual input worked and times when it did not. This can be considered to show that PPR can be the outcome of conjecture and refutation. In other words, PPR involved rejection of visual patterns when they did not work, or when they proved to irrelevant. In addition the selection processes involved pattern of competing design hypothesis. The designer stated that they designed for the need. The designer stated that they came up with a number of design options before they selected the right ones for the NP of their projects. Peter Barrow stated:

After a lot of work and a lot of discussion we worked through 20, 25 different logos and different colour schemes we all arrived at what we thought was the right logo.

- **Quality of visual patterns**

The designer selected the best visual patterns from a variety of alternatives. The designer asserted the importance of quality as a consideration during each selection activity. The designer used the following expressions to indicate quality: 1) the best quality, 2) successful, 3) good idea, good design 4) the best design possible, 5) appropriate, 6) match the need, 7) the best alternative, 8) the best method, 9) it worked very well, 10) the sales were phenomenal, 11) neat, 12) the right one . Also

the designer used the following expressions to indicate poor quality: 1) not good enough, 2) bad quality, 3) wrong, 4) did not work, 5) was not appropriate, 6) did not match the need, 7) messy. The following categories can show the designer's criteria for quality:

- **Measuring quality by the response of the PO**

Peter Barrow stated:

Today he phoned me to say they like what we've done. What I always bear in mind is that we may never see that project again. That's it we're moving on to something else. But this client is going to live with this... So it's essential that he is happy with it. That's not saying that you only work to your clients criteria, it's that you try and produce the best design that you can that you know that your client can live with. Obviously he's living with it because it's selling well. That helps.

- **Selecting the best visual pattern from many alternatives**

Peter Barrow stated,

We chose this tartan because it was the best looking one.

- **Measuring quality according to the percentage of sales**

Peter Barrow stated,

It's been successful. Always is the thing to me is that when the client comes back and says the sales have been phenomenal, it's been successful. That's what it's about. Ideally you've produced a beautiful aesthetic design but the real bonus is if you've produced a design that you're pleased with and that the client has finished up selling a lot of them hopefully.

- **Quality measured by the success of design project in the market**

Peter Barrow stated:

We have constraints. I feel that it stands up and hopefully it works in the market place. That's really as much as you can ask of anybody.

- **Quality as consideration for selecting the clan logo**

Since the company consisted of two different names of two different clans, it was important that the designers use the two specific logos of the two clans. But the designer stated that one of the logos was not very good quality and they decided to choose the one of the best quality. Peter Barrow explained:

If we were going to be strictly accurate there should have been two of them on there. But we felt it wasn't necessary and your audience will not know if that is the Murray or McDavid one. So we selected the best looking one.

4.4.10 Adaptation processes

The adaptation processes were the consequences of the processes of selecting visual patterns. During the adaptation processes the designers eliminated, modified, changed, joined and added visual patterns. In addition, they used various methods and techniques for adapting visual patterns. The designers adapted their visual patterns to match the NP. The adaption processes can be seen in the following matching activities:

- Combining the visual patterns of Murray and McDavid in logotype

The logo consisted of two names Murray and McDavid. The designers selected the visual pattern (typeface) for the two names and combined them together. The logo was hand made and involved the use of gold foil lettering which was outlined and inlined in green. Peter Barrow explained:

So we designed this name and we linked the two of them so that the two names were linked together and this is a gold foil lettering that is actually outlined and inlined in green. This is done by hand, these are gold rub downs.

- Adapting the logotype and the logo of the clan on the body of the bottles

Peter Barrow explained:

This originally was intended to be embossed so it's raised up, very subtle. These are very expensive.

- Reducing the size of labels to match the size of the small bottles

Peter Barrow stated:

So we were producing a range of six and so they gradually had to reduce the size of the label.

- Creating a model for the packs of the sets of small bottles before deciding their final shape

Peter Barrow stated:

We created a cardboard construction to hold them and a window. That is now as I say going to go on production and we're quite pleased with that.

- Filling the bottles with coloured water similar of the colours of whiskies to make sure that design worked as a whole.

Peter Barrow stated:

We were taking coloured water and putting in some stuff to get the colour right.

4.4.11 Purposive pattern recognition (PPR)

Purposive pattern recognition (PPR) can be seen in the various processes of selecting and adapting visual patterns. The designer's explanations included statements about when things worked and when they did not. Also, his explanation showed that when things did not work the designers tried other solutions until things worked. The nature of recognising visual patterns had no formula. Peter Barrow stated:

To ask a designer how does his thought process work! He doesn't know. It just comes. There's no formula. We all work different ways.

PPR for NP involved the following: 1) selecting design ideas, 2) selecting visual patterns, 3) selecting the best visual pattern, 4) selecting visual patterns for generating a number of options of design patterns by means of producing visual marks, 6) selecting the best design pattern from competing design hypotheses (PCDH). The concept that a visual pattern consisted of various parts was obvious in the designer's explanation. The designer explained that they selected for each part of their design

certain visual inputs and matched them with the need. The matching activities can be classified under four groups. Each group included a number of categories (TABLES: 4.11, 4.12, 4.13, 4.14). The selected visual patterns of each category matched parts of NP. In addition, some of the visual patterns matched more than one part of NP. The visual patterns of the parts of the overall pattern echoed each other, and matched the need pattern and its parts.

Activities	PPR (A Fit) Selecting visual patterns for typeface to match NP
Selecting italic typeface to capture a Victorian Feel and to match the client's desires as being a successful Victorian grocer .	"They wanted to be if you like the Masons of the whiskey world and that's what influenced us. That's why we come up with those things. Obviously you're heavily influenced by what you're client wants. If he perceives himself as the equivalent of successful Victorian grocer then you try and capture that feeling, the typefaces and so on." (Peter Barrow)
Selecting the italic type face because it had a hand feel about it like the old typefaces used by Victorian grocers to express quality of being around for long time	"Well the face was selected because it was an italic that almost had a slightly hand feel about it,... So we selected this face because it's got again a slightly old feel about it but it's legible. This is got a slightly Victorian feel about it. It isn't Victorian but it sort of suggests it and that's what we were going for. It's almost this hand feel about it. That was the reasoning for the choice of that." (Peter Barrow)
Selecting visual patterns form design ideas and combined them with the quality of the Victorian pattern to match quality and modern feel	So we had to come up with our own with what I think is modern but at the same time, quality and I hope that we've had very good feedback on it that people feel that it's quality." (Peter Barrow)
Matching visual patterns of type with the quality of type when it was reduced to small size	"We looked at old grocery labels and things like that and these very ornate things. We didn't go as far as that. Originally these things were more ornate but we said that if this is going to be this small it's got to be clean and easy to understand." (Peter Barrow)
Selecting quite tone of voice for type to match old quality	"This is good quality stuff and the label is very restrained. It doesn't shout out. It gives you the facts and it gives you all the details." (Peter Barrow)

TABLE 4.11: MATCHING PATTERNS OF TYPEFACES WITH NP

Activities	PPR (A Fit) Selecting visual patterns for logotype to match NP
Selecting visual patterns of tartan and clan logo to match the Scottish origins of the company and the whiskies	<p>"We've linked their name with the clan which they're entitled to do. This is also predominantly Anglo overseas markets so the traditional Scottish feel is important." (Peter Barrow)</p> <p>"We wanted a feeling for Scotland. There are hundreds and hundreds of different malt whiskeys on the market. You're not going to come up with something totally new about Scotland so we also felt a lot of other people had already done that. They had wonderful views of Scottish loch, and some of them have their own brands. So you couldn't copy them. So, we used the clan tartan to say Scotland and the origin of the Murry McDavid." (Peter Barrow)</p>

TABLE 4.12: MATCHING VISUAL PATTERNS OF SCOTTISH FEEL WITH NP

Activities	PPR (A Fit) Visual patterns for physical structure of the bottles and packs/ to match NP
Creating a physical window of the pack to allow seeing: 1) the colours of whiskies, 2) the labels, 3) the names of the whiskies	"It's a window box, and you can see all the bottles, so you can see whether it's a , Glenlevit or whatever. That was quite tricky because again of the quantities we couldn't put these in vacuum foiling." (Peter Barrow)
Selecting visual patterns by processes of conjuncture and refutation: matching method for executing visual patterns with giving identity to the bottles	"They wanted the name Murry McDavid as a label offset and we knew this wouldn't work. But we did it and it did work. What we did as a compromise and here is, we run the logo on the bottle. The logo is etched into the glass so it says Murray McDavid and then the clan logo is in gold foil on the bottom there. Then it's etched in on both side of the bottle. They were very proud of that, very pleased with it, so it becomes their custom bottle. That's permanent right so they can have 10,000, 15,000 bottles with that on it doesn't matter what they put in it." (Peter Barrow)
Selecting visual patterns for practical reasons	Around here we put a small label like a Glenlevit 1974, so the retailer would know and he wouldn't have to keep unwrapping the bottle. He would know what was in it." (Peter Barrow)

TABLE 4.13: MATCHING VISUAL PATTERNS OF THE PACKS & THEIR CONTENTS WITH NP

Activities	PPR (A Fit) Visual patterns for the materials and design composition and its parts to match NP
Selecting design patterns of the logotype for wrapping paper	"We produced a wrapping paper that had the names in a repeat pattern. And it had vintage selection and Murray McDavid in a repeat pattern... The patterns were repeated on a black and white foil." (Peter Barrow)
Matching the colour and material of the label with old quality	"Again parchment type feel, so once you've selected one, you've really then automatically got to keep that restrained, so that the type is still legible . The label was just this sepia parchment feel like it's been around for long time, and it's discoloured. That was really I think all of our thinking." (Peter Barrow)
Selecting the visual pattern red for matching three elements: 1) Lifting up the sombre colours of the labels. 2) be seen from a distance. 3) For giving visual accent to dark areas.	"The reason for the red line really was a practical thing and also there aren't many other colours. We thought that it might be looking a little bit sombre so on here (around the label, and around the tartan) we use this because we thought most retailers will put it on a shelf. That's the reason and it echoed the red colour around the tartan. Because if we had put the tartan directly against this it would have disappeared."
Selecting a stamp like visual pattern to match authentic quality	"It's almost like a sort of custom form and this is it's sort of guarantee. This is almost like a certificate of authenticity. Authenticity is what they wanted and the Americans love it and sold a lot." (See FIGURE:5.26). (Peter Barrow)
Selecting big size type to make it seen from a distance	"The year's important, so from a distance they can see that it's 1974, so they can work out how old it is."
Matching the colours of the back labels with overall design pattern	"The story is on the back and it's all in these colours. It all matches in

TABLE 4.14: MATCHING VISUAL PATTERNS OF MATERIALS & COMPOSITION WITH NP

PROJECT STUDIES GROUP (1): 3D DESIGN PROJECTS

4.5 MINI-CASE STUDY (4):

BRAND IDENTITY AND REPACKAGING FOR SCHOLL ACROSS RANGE OF PRODUCTS: FOOTCARE

4.5.1 Historic background of Scholl Footcare project

The Scholl footcare project was redesigned and developed by the design consultancy 'Design Bridge' in London, UK. General information about this project is in Appendix (XI). According to creative director Marian Dalley (1997), Scholl had branches in the UK, Germany, France, and Italy. The products of Scholl were distributed in the UK, Europe, and other parts of the world. Scholl was specialist in various fields related to foot problems and care. Scholl produced twenty two different products each of which had to do with footcare. The main area of business of Scholl was to manufacture and retail Footcare products. The market for Scholl was considered to be a growing market both in the UK and Europe. The target audiences for Scholl Footcare products were women who were interested in the toiletry or sports care range right through to anybody who had any foot problems including male audience. Scholl had a number of competitors who had similar labels and versions of footcare products. The main competitors were Boots and Superdrugs. The design project consisted of twenty two different packs about footcare from the same brand, and was divided into stages.

At each stage the designers had to design imageries for a certain set of products. The newly designed products were in the market at the end of 1997. The product range consisted of a number of items. The POs of Scholl aimed to be known for footcare products, therefore they had to go up against people like Boots and Superdrugs. Scholl charged a premium for their items and they needed to be able to add value through their packaging to justify the kind of additional cost of these products. In addition, Scholl products had a mixed personality and lack of identity, so when they were on the shelves in the market place it was hard to tell that they were all from the same brand. Marian Dalley stated:

They don't really hang together as a complete range. You can't really tell they're all from Scholl especially when you get into the toiletries area.

4.5.2 Processes of identifying the need & the need pattern (NP)

Identifying the need, its context, and requirements for the Scholl Footcare project started by the POs approaching the designers and briefing them about their

need (QUOTATION:4.19). The designer stated that the POs were very realistic in their expectations and their wants did not overtake their needs.

“The brief was to create a consistent graphic style, and to create a brand identity that had the authority, and that could work across the whole product range. Although we were after a product range that had a consistent style within packaging. We also had to consider that some of the packaging wouldn't be merchandised together so within any given category they had to compete with other brands in other areas. One of the key things of the project was that because they wanted to centralise the packaging, the packs very often had to work in two, or three, or four languages on the pack. So the design had to allow for that as well.” (Marian Dalley)

QUOTATION 4.19: THE NEED FOR SCHOLL FOOTCARE PROJECT (NP)

Identifying the need involved processes of gathering and analysing information. Marian Dalley stated:

From the client. From all countries. We got all the products from other countries. By visiting existing supermarkets and chemists and areas where the product was actually retailed. We got to know about that environment and the clients had done some research quite recently around the sort of Scholl identity. So we had access to that research. That was is it... going around retail venues we could pick up on the competition in those areas as well.

The designers created modes board in order to analyse the problems of the previous designs, and identifying areas that required changes or improvements. Also, they studied, analysed, and rewrote the design brief in terms of problem areas, objectives, and product range. They recognised and concluded a number of problems, and supported their analysis with photographs of the Scholl products in the market place. Identifying the need included a number of processes (TABLE: 4.15).

- 1) Receiving the design brief, and documentary information from the various branches of Scholl in the UK and Europe, and discussing them with the POs.
- 2) Assigning a team of three designers and a creative director for the project.
- 3) Discussing and analysing the design brief internally.
- 4) Gathering various types of information from various markets including travelling abroad or gathering various types of information.
- 5) Gathering and analysing the visual sources of the previous packs.
- 6) Doing visual research about how the previous packs were displayed in the market places in relation to the work of the competitors.
- 7) Analysing the findings of the visual research including the differences between the Scholl products in each market place in various countries.
- 8) Analysing the previous packs and pointing out the specific problems of their visual identity.
- 9) Categorising the Scholl footcare products under certain categories, and studying the existing problems of each category.
- 10) Rewriting the design brief and the conclusions of their analyses in a systematic order.
- 11) Having a presentation session with the POs, and evaluating the findings.
- 12) Getting feedback and approval from PO.
- 13) Gathering and selecting visual sources that had potential use for the new packs.
- 14) Starting the next stage : coming up with initial design ideas for the twenty two packs.

TABLE 4.15: PROCESSES OF IDENTIFYING THE NEED FOR THE SCHOLL FOOTCARE PROJECT

The rewritten design brief consisted of a number of categories. Each category included certain issues. These categories were written in the following systematic order: 1) Background: It included the problems of Scholl products (TABLE: 4.16). 2) Objectives: They included the marketing strategies, communication objectives, design criteria for achieving the objectives (TABLE: 4.17). 3). Product range: It included classification of the products and criteria for positioning some products (TABLE:4.18).

- Complex range
- Lack of consistency in brand presentation
- Opportunities to improve value
- Moved to centralised management (Mid-project) which enabled a single worldwide (excluding USA) design focus\
- Overcoming Scholl's internal politics - reticence for change from individual markets who had recently only redesigned their packs and/or had strong consumer loyalty
(From design document given by Marian Dalley)

TABLE 4.16: PROBLEMS OF THE SCHOLL FOOTCARE PRODUCTS

- Scholl = Footcare- Scholl have the authority and heritage to enforce this
- Improve consumer perception of Feet!
- Enhance appeal of product range - especially to the younger audience- whilst retaining core brand values
- Achieve a consistent graphic style
- Analyse all existing packs and incorporate successful thinking into design
- Improve point of sale effectiveness - the fixture was a mess!
- A design which works in one, two, and four languages"
- (From document given by Marian Dally)

TABLE 4.17: OBJECTIVES OF SCHOLL FOOTCARE PROJECT

- Toiletries:
 - Caring range
 - Anti- perspiration
 - Deodorant
 - Athlete's Foot
- Corns, Callouses & Bunions:
 - A base range to ease discomfort
 - A medical range to cure problems
- Blister:
 - Entering a new sales opportunity and broadening market
- Insoles:
 - Comfort and Odour Control
- Hidden Comforts
- Appliances
- Chiro-Care
- Each country takes a selection of any of the above, therefore they all have to make sense independently and work harmoniously as a range
- All the above designs had to work on a variety of packaging formats - tubs, tubes, bottles, pump sprays and aerosols...
- And they had to be printable across nearly all substrates- plastic and metal tubes, paper labels, metal, cans, flow-wrap and cartons...
- ... Yet the Scholl brand identifier had to work recognisably across all packs with an inbuilt flexibility to cater for differing markets needs and future range extensions
(From a design document given by Marian Dalley)

TABLE 4.18: PRODUCT RANGE OF SCHOLL FOOTCARE

The designers pointed out in the brief the criteria according to which the products supposed to work in the UK and Europe. In addition, the rewritten design brief included visual copies of the previous packs, and photographs of the previous packs in the actual market place. Also, it included information about the work of Scholl in the market place. The Scholl's products were divided into seven main categories. Some of these categories consisted of more than one products. Rewriting the design brief involved identifying and recognising the need, its requirement., and its context. The written design brief was a recognition and an elaboration of design brief which was given by the POs. This kind of recognition of the need for the project can be considered as the need pattern (NP). Marian Dalley stated that there was always a kind of criteria that came from the design brief. She explained:

It's the needs and wants of the brief. It's not that the client sort of says I want yellow. It's the brief in each case. So it's really the requirements of the brief that dictates how we approach things... There's always a kind of criteria that comes from the brief that we can judge the work against. So it's not a personal thing.

- **The constraints of the need**

The constraints of the need were: 1) economic constraints: money and time, 2) visual constraints (TABLE: 4.19).

<ol style="list-style-type: none">1. The logotype of 'Scholl' was to remain the same2. The 'yellow and the blue colours' were part of the previous identity and they had to remain as part of the new identity, but the designers had to redesign the use of these two colours in new appropriate ways.3. The visual style had to be consistent as a whole for all the different products4. The visual style had to work in various countries5. The design imagery for each product had to allow the use of various languages5. The design imagery had to emphasise both the brand identity and the nature and the actual function of each product6. The designers had to use certain materials for the packs7. The illustrations had to have not much details in order to be compatible with the printing methods on the various materials for getting good visual quality8. The shapes and sizes of the packs varied. Therefore, the designers had to work within these limitations

TABLE 4.19: VISUAL CONSTRAINTS OF NP

Marian Dalley stated:

It was because of the breadth of the range and because we we're looking at both the brand identity and then every pack we needed consistent start. We knew it was going to be a long project but the outset of the project we knew and obviously make this very clear to the client how a period, a solid period of design concept and thinking upfront. It wasn't a sort of quick in and out job it was something that as I said started in 94 and it's still going on. So a lot of time has been invested in it.

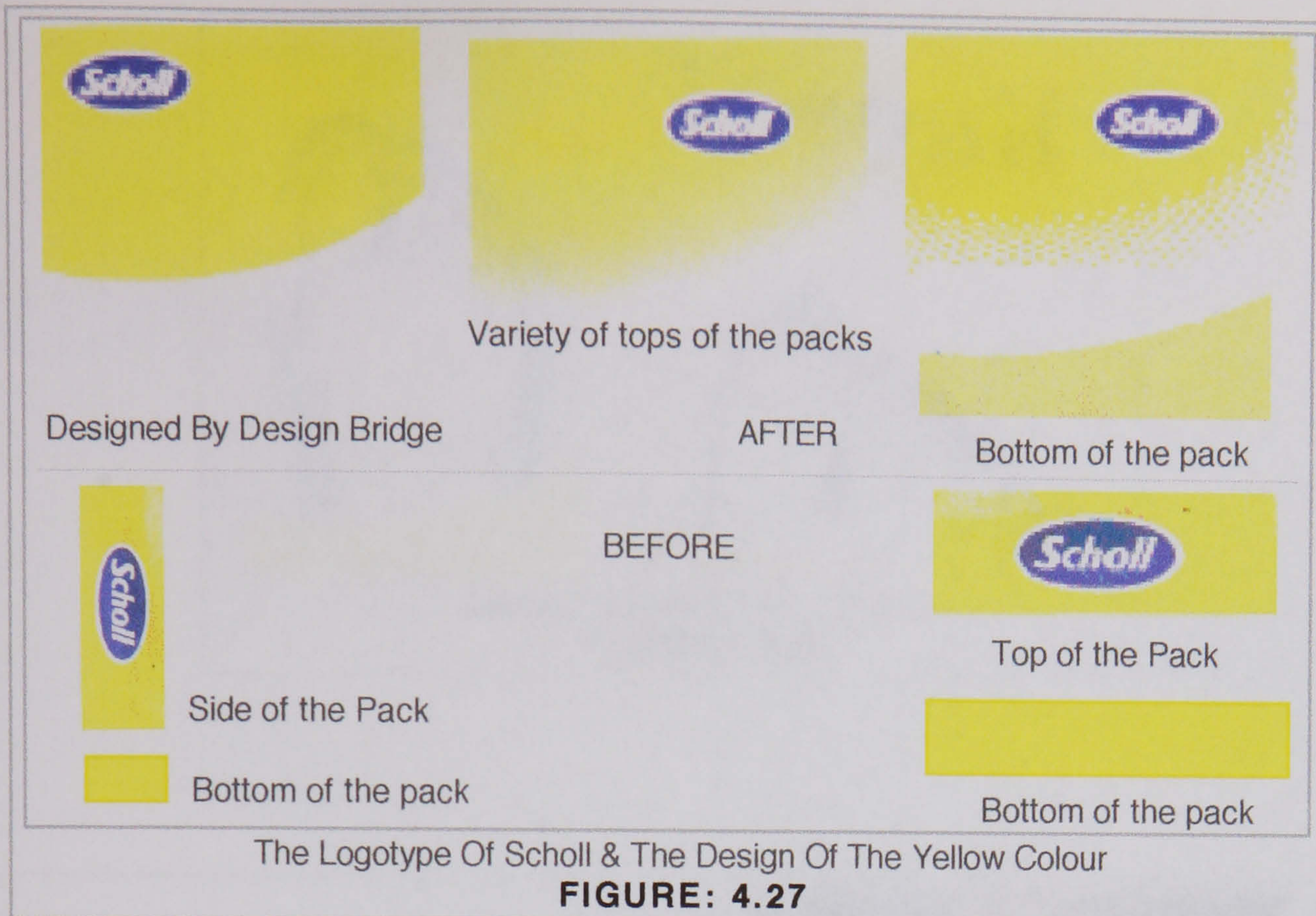
Also, Marian Dalley explained that they had to handle how much visual details according to the limitations of the printing method they supposed to use in various materials. She said:

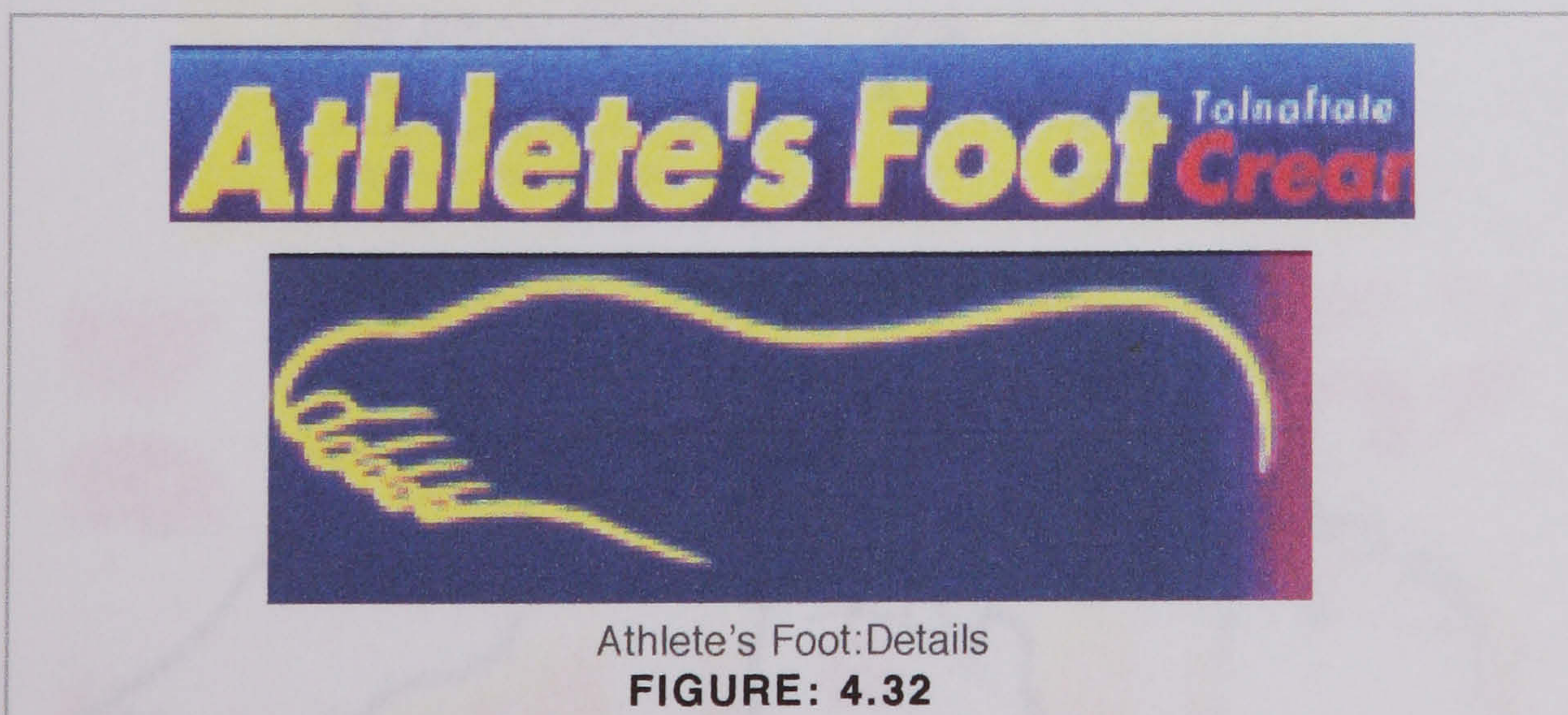
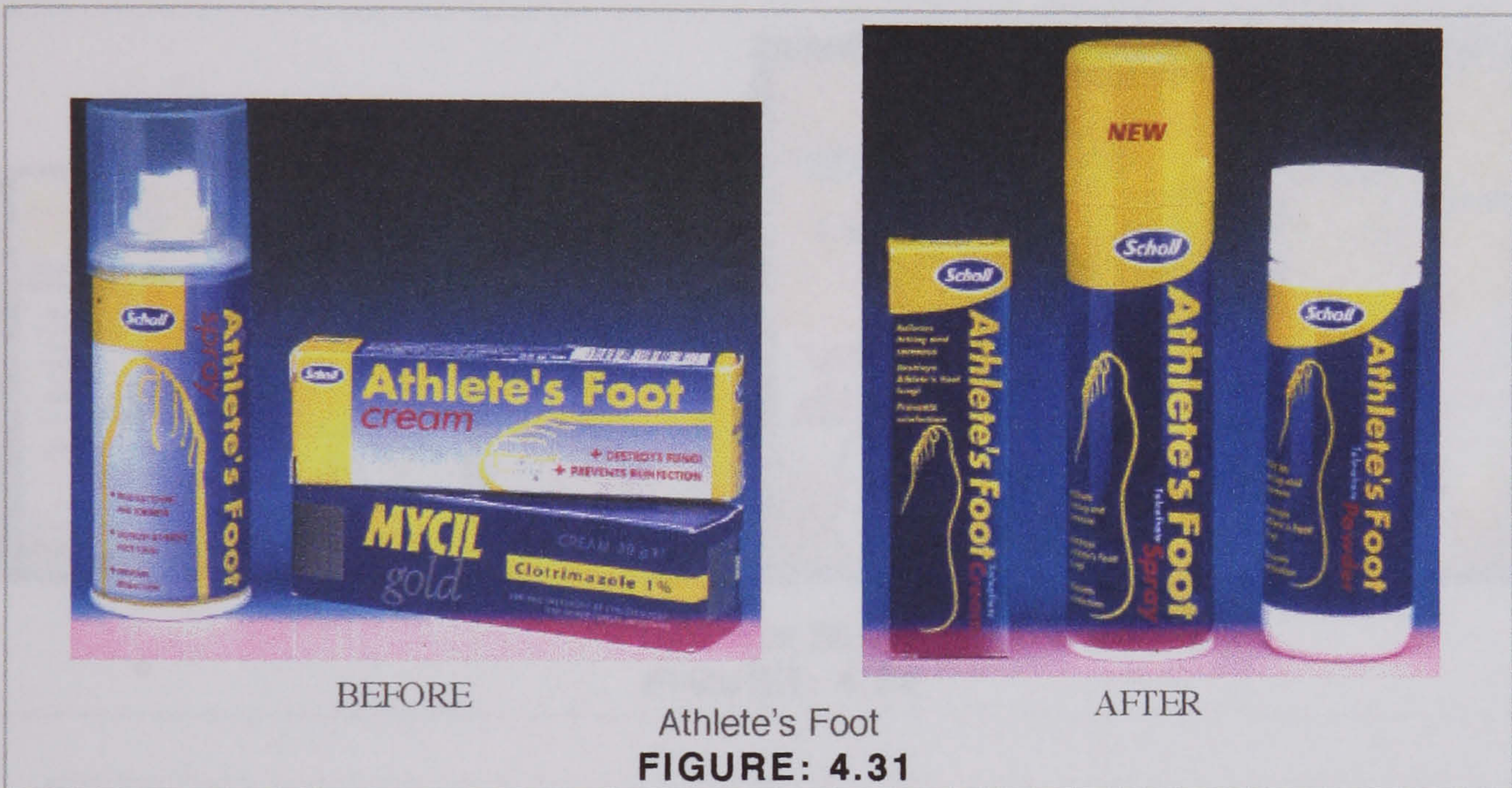
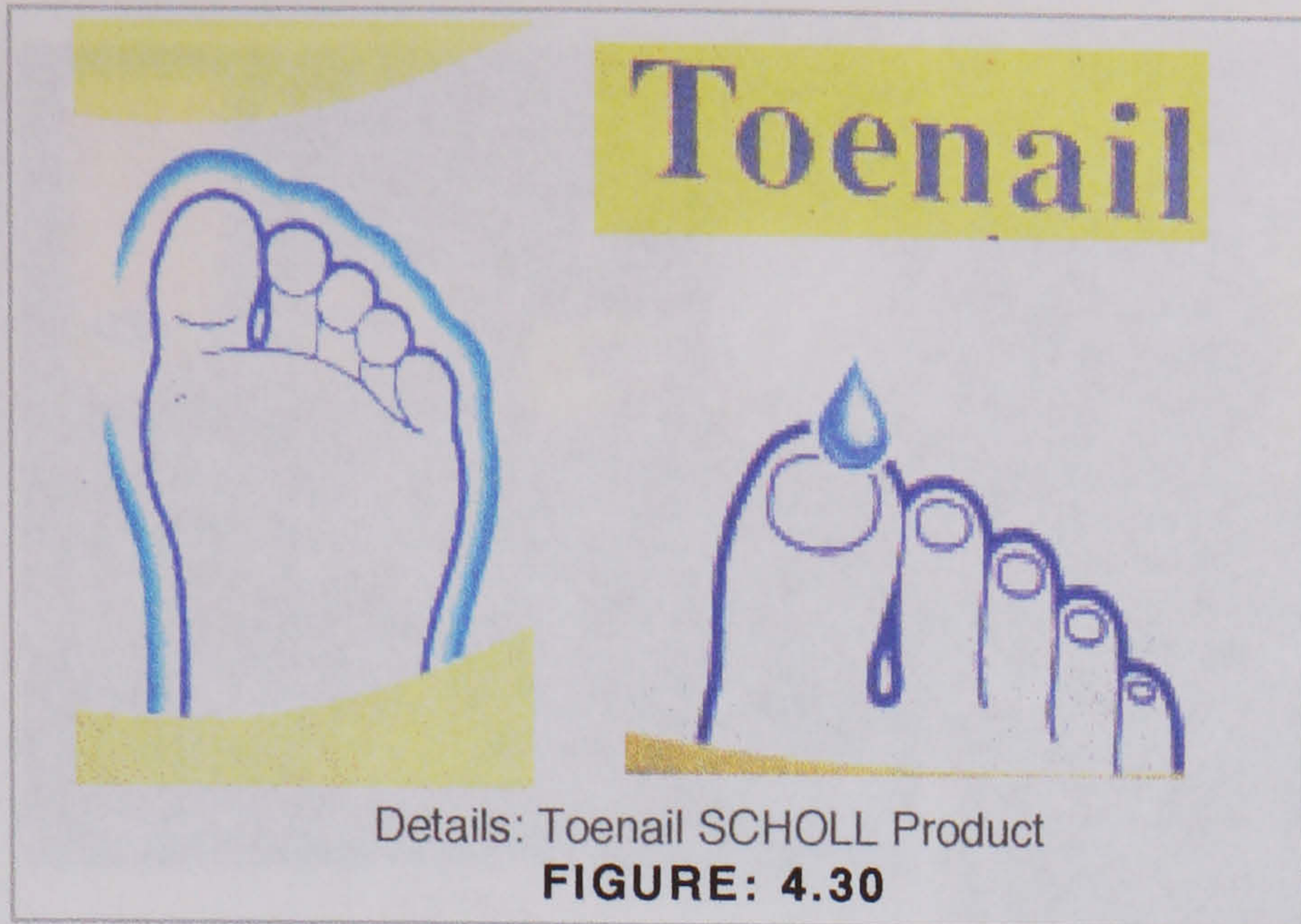
You have to be aware of the limitations of each print technique so you couldn't go off and do inappropriate solutions. You have to know the print technique upfront. We have a print consultant who very quickly on the project when you're in a stew sort of rough sketch concept stage adds an input in the first meeting to just make everybody aware of the limitations.

4.5.3 Designs for 'Scholl Footcare' projects

The Scholl Footcare project consisted of twenty two different products and required twenty two packs. Each pack had a design imagery. These imageries involved the use of the following techniques: 1) hand drawing, 2) traditional illustration style, 3) litho printing, 4) computer generated imagery, 5) air brush. Also, the designers created models for the packs. The design imagery of the packs can be seen in the following FIGURES (4.27., 4.28, 4.29, 4.30, 4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39). Some FIGURES include the designs of the previous packs and the new packs, so that the viewer can be able to see the differences between both. In addition, seeing both can be considered to be more effective for understanding what the designer did, and for comparison processes. According to the designer the design imagery of this project were of the following types: 1) robotic, 2) a linear, 3) graphic and flat. She said:

It obviously did break down into different areas because we had the more technological almost kind of robotic type imagery for the blister products. We had the very linear for the other ranges. We went to something much more graphic and flat.





BEFORE

AFTER

Odour SCHOLL product & Details
FIGURE: 4.33

Details

ODOUR Control

SHOE SPRAY

Powerful Antibacterial
 Antifungal Action
 Keeps shoes fresh and odour-free

Scholl

BEFORE

AFTER

Blister Stop
FIGURE: 4.34

Callous foam cushions

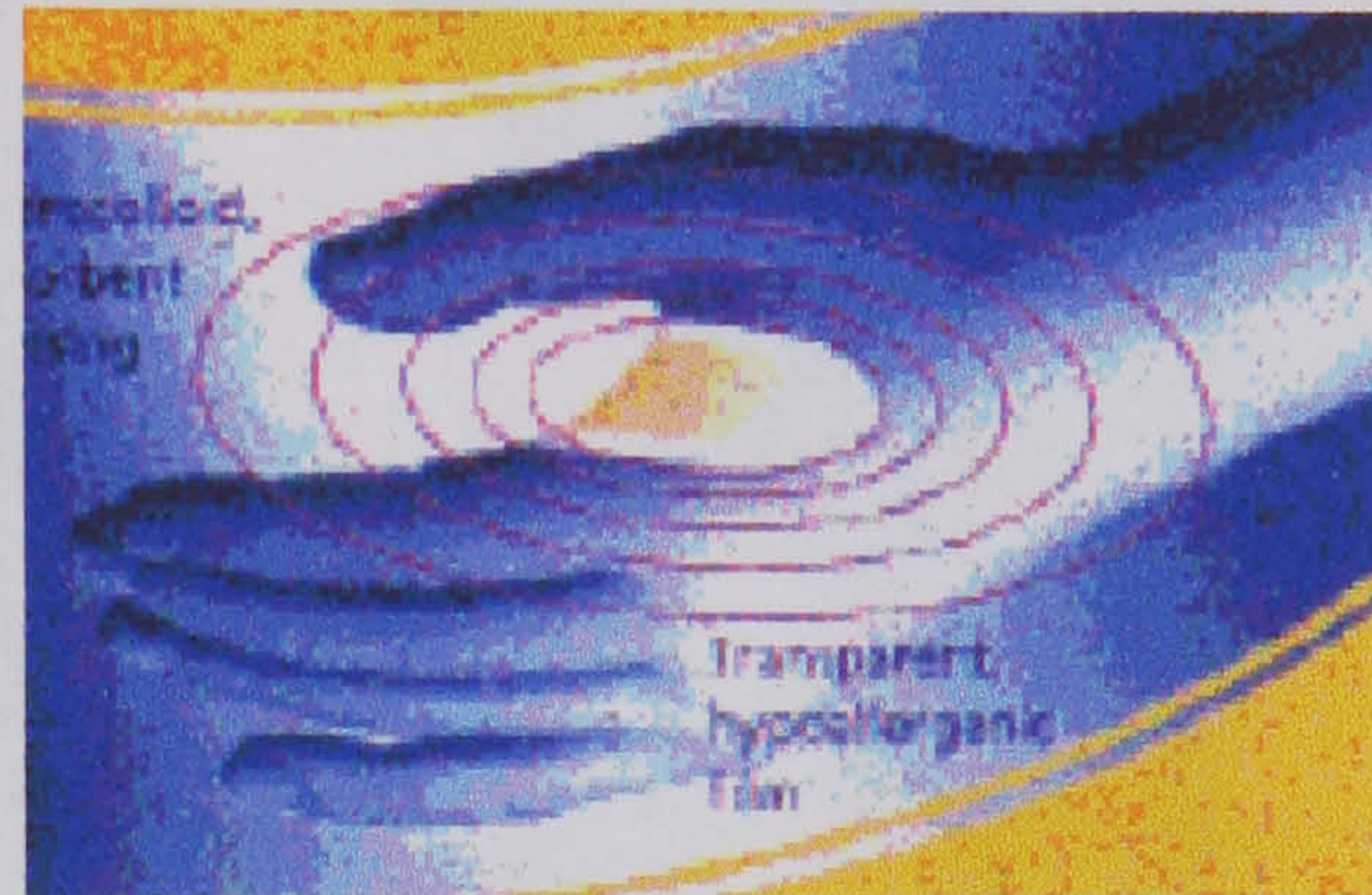
Blister stop prevention kit

Corn felt pads

Blister Stop Product: Details
FIGURE: 4.35



Blister Products
FIGURE: 4.36



Details

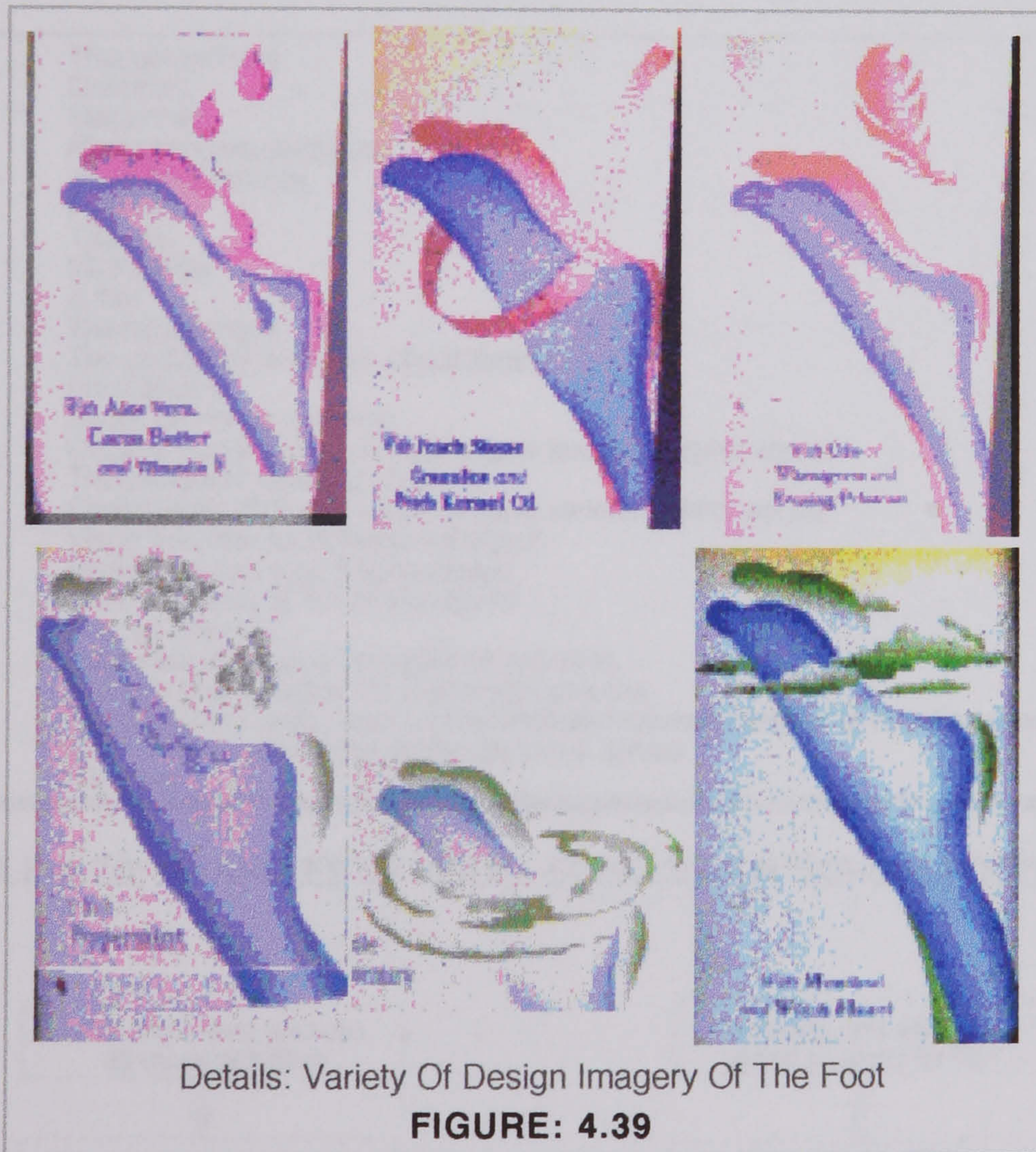


AFTER

BEFORE



A Collection Of SCHOLL'S Products
FIGURE: 4.37



4.5.4 Processes of gathering and selecting visual sources

The processes of gathering and selecting visual patterns continued throughout the various stages of the design ideas. The visual sources and the processes of

gathering and selecting them varied for Scholl Footcare project. Also, the relationships between both were interactive. The processes of gathering and selecting visual sources had to do with how the designers' approached their project. Marian Dalley stated that the visual sources came out of thoughts and design concepts, and then the designers started searching visual sources around areas related to those concepts. She said: "They really came out of concepts." Also, she stated that the designers' scrap books acted as props for their ideas. The visual sources for the Scholl Footcare project can be grouped under the following categories: 1) retrieved, 2) general, 3) found, 4) art-directed. According to the designer, the designers referred always to their scrap books. These scrap books were constantly updated and included a great variety of sources. Visual sources were used for inspiration, brainstorming, and as sources for visual details. Examples of visual sources for this project are in (TABLE: 4.20). Processes of gathering and selecting visual sources can be grouped under two categories:" 1) regular selection, 2) targeted selection. (See DIAGRAM: (4.4). The designer stated that they gathered and selected their visual sources in two ways (TABLE: 4.21). She described these two ways as: 1) broad, 2) targeted and focused. She said: "It's very kind of broad and spring board and targeted and focused."

1.	Thought process
2.	Concepts,
3.	Magazines,
4.	Photographers portfolios,
5.	Illustration annuals,
6.	Feathers,
7.	Tissues,
8.	Mite things,
9.	A foot
10.	The human body
11.	The designers' in-house visual library,
12.	Photolibrary,
13.	Books on human anatomy,
14.	Old and modern books on typography and typographic styles,
15.	The designers' drawing pads,
16.	Photographs of the Scholl products in various market places,
17.	Visual sources about functional layout,
18.	Various books on packaging design,
19.	Previous packs of Scholl's products ,
20.	Fine art sources,
21.	Pharmaceutical area for particular products,
22.	Visual sources outside art and design sources,
23.	The designers' scrap books which included diverse varieties of visual sources,
24.	Every visual sources the designers came across.
25.	Libraries

TABLE 4.20: EXAMPLES OF VISUAL SOURCES FOR 'SCHOLL FOOTCARE'

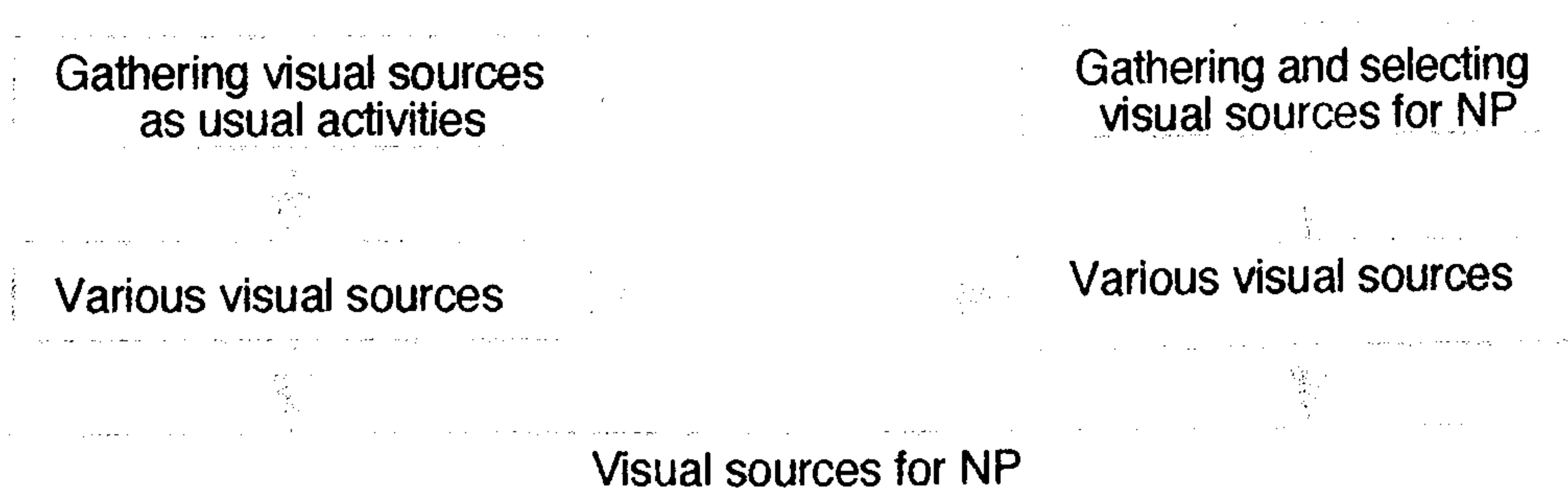


DIAGRAM 4.4: PROCESSES OF GATHERING AND SELECTING VISUAL SOURCES AND NP

<p>Step one</p> <p>Broad way of gathering and selecting visual sources</p> <p>“There's two ways you can use visual source and kind of within the team we keep scrap books which are full of images and just found things that can act as props for our ideas and that's being constantly updated with things that we come across be they illustrated images, cards, tickets to exhibitions, things you pick up on holiday. Any old things can get put in these books, so that's kind of one way. It's just a resource, it might just be a spring board on to the idea or onto searching for more visuals in that particular area.” (Marian Dalley)</p>
<p>Step two</p> <p>Broad way of gathering and selecting visual sources</p> <p>“Then the other visual source is the more focused. Once you know what you're looking for, then you start going to libraries and looking for particular images.” (Marian Dalley)</p>

TABLE 4.21: VISUAL SOURCES & SELECTION PROCESSES FOR SCHOLL PROJECT

4.5.5 Visual patterns

The designer asserted that their visual sources came out of concepts, and that visual sources were sources of ideas. The description given to design idea by the designer can be interpreted as a visual pattern. Also, her explanation showed that the designers selected visual patterns from their visual sources. She stated that they looked for visual cues that enhanced their design ideas. The design ideas were the fundamental issues, because either they were the drive for further and focused selection of visual patterns, or they were selected from visual sources. She explained:

Someone had a concept about feet, then we went and searched around that area. Also we were looking at not necessarily feet but all parts of the body.

Marian Dalley explained that they also selected visual style and rendering techniques for their images. She said:

We were looking for feet most of the time. So we're also looking at ways of rendering feet specifically because that's what we've got.

Visual sources such as books, magazines, natural things and object, libraries, etc., were used as resources of visual information. Examples of the use of visual sources as visual references and sources of visual patterns can be seen in the following quotations and under the following categories:

- Making sure the visual details were correct

Marian Dalley stated:

We also had to look for the full range and especially when we got down to the harder feet. We looked for more anatomical books to make sure that the line that was actually being used was anatomically correct.

- Selecting visual patterns for the intangible quality of the subject matter

Marian Dalley stated:

That dreaminess, that indulgence so it's the use of the more soft trigger type imagery. When we were looking for visual sources on this we did look to quite a lot of photography that sort of very soft focus and still life photography. So you're looking at full folios.

The concept of a visual pattern consisting of parts can be deduced from the designer's

explanation. The type of the selected visual patterns for Scholl Footcare project can be grouped under a set of categories (TABLE: 4.22).

- | |
|--|
| <ol style="list-style-type: none"> 1. Visual patterns related to Scholl brand identity, such as the logotype of Scholl, and the yellow and blue colours, 2. Visual patterns related to the tangible aspects of the subject matters of the products, such as foot, blister, shoes, plaster. Visual patterns of the intangible aspects of the subject matters of the products, such as: a) a feel, b) a mode, c) a visual style, d) patterns of pose and movement, 3) visual patterns of typefaces, 4. Visual patterns of symbols such as dots and lines, 5. Visual patterns of the materials of the packs |
|--|

TABLE 4.22: TYPES OF VISUAL PATTERNS

4.5.6 Design ideas

The design ideas went through various processes and various stages (TABLE: 4.23). The designer emphasised the importance of the design ideas in satisfying the need for Scholl Footcare project. The designers discussed their design ideas among each other verbally, by referring to written documents, and having mood boards of visual sources and visual patterns. The designers had to come up with twenty two design ideas for twenty two products. The design ideas worked at two levels. At one level, the design idea for each product had to match the need for the specific product and its context. At the other level, each design idea had to work as a part of the overall pattern of the brand identity of Scholl. Achieving these objectives involved management methods for distributing the work among the designers, and following up the progress of the design outcome.

- | |
|---|
| <ol style="list-style-type: none"> 1. Coming up with design ideas 2. Individual visual search 3. Selecting visual sources and visual patterns 4. Exploring design possibilities by producing visual marks 5. Internal presentation: <ul style="list-style-type: none"> - Discussing ideas - Discussing visual sources and visual patterns - Selecting best ideas - Selecting the best design route - Suggesting ways to give the ideas the same feel 6. Searching and gathering visual sources (General) 7. Selecting visual patterns (Focused) 8. Developing design ideas through further experimentation 9. Internal presentation, discussing design ideas, and selecting best ideas 10. Presenting the best design possibilities to the POs <ul style="list-style-type: none"> - Discussions - Evaluations - Suggestions and modifications - Selecting visual patterns - Selecting best ideas 11. Design concepts development stage <ul style="list-style-type: none"> - Selecting visual patterns and exploring design patterns 12. Presentation and evaluation sessions 13. Refinements of design ideas and their design patterns 14. Artwork stage 15. Production stage. |
|---|

TABLE 4.23: STAGES AND PROCESSES OF DESIGN IDEAS

The designers studied, analysed, and classified the products under various categories (See TABLE: 4.37). Each category involved a number of products, i.e. Corns, Callouses and Bunions were joined together as one category that consisted of: 1) a base range to ease discomfort, 2) a medical range to cure problems.

4.5.7 Coming up with design ideas & generating design patterns

Coming up with design ideas and exploring design possibilities for the NP for Scholl can be considered to involve two parallel phases. Both consisted of interactive processes (TABLES: 4.24, 4.25).

Activities	The design platform Preparation, considerations, and activities
Assigning a design team for the project	"There was a team of four designers myself and three others." (Marian Dalley)
Studying, analysing, managing the project, and distributing areas of the project among the design team	"So we initially we had to categorise all the products. We analysed all the products in all the different markets and they do look very different. .. After analysing the range and knowing the extent of the job, we then separated out the various sectors that we were looking at, and different designers just began to do some work in each area. Someone took odour control, somebody took toiletry, someone else took athlete's foot, someone else took corns and calluses area." (Marian Dalley)
Design team, feedback and constraints of NP	That motivational going on and learning coming from each other is something that's kind of feed through the whole way of working really. and running the team on a budget."(Marian Dalley)
Linking the areas of the project by focused and broad approaches	So creating a kind of working environment where the designer could look both closely at particular area but then quite broadly at the whole range." (Marian Dalley)
Understanding NP and generating effective designs	"Because of wanting to approach it with a kind of clear understanding and clear thinking so that you could actually justify and really maximise the work . " (Marian Dalley)

TABLE 4.24: FIRST PHASE OF EXPLORING DESIGN POSSIBILITIES

Activities & techniques	Coming up with design ideas and exploring design possibilities
The techniques used for exploring design ideas	"Sketching is just pens and pads and just sketch books with coloured pencils. Just drawing things up." (Marian Dalley)
Design ideas and the role of drawing techniques at the initial stage	"Although everybody in this studio can draw, obviously some people are much better at drawing than others. So you have to be very careful to look for concepts rather than oh that's visioned better than other ones. So you have to kind of see through the drawing skills to what's the core of the idea." (Marian Dalley)
Coming up with design ideas and feedback for the corporate identity	"We just did a sort of initial week's work of exploring that area and then we all brought our ideas together and looked at that and began to see the possibilities. The learning that everyone had had on that area, and then we all just worked together." (Marian Dalley)
Selecting the strongest design idea for handling the yellow colour in the brand identity	"The issue of the brand identity got solved very quickly. There was a very strong feel that that was very strong route, and that was probably a page you know an A3 page of sketches of my pad. That just jumped out as being the one that had exactly the right ones on it. By the time we came to working on the packs we already resolved the corporate issue which was the issue of how much yellow we could have and you could translate this yellow in different ways, it's just then when we came up to do the pack design." (Marian Dalley, 1997) (See FIGURE: 5.27.A)
Working on one area a time	"We then just concentrated on each area. " (Marian Dalley)
Design options and exploring design pattern possibilities	"The work that goes through is the tip of the iceberg compared to the stack of work that's linked up to that... we probably did four options as initial ideas for every single sector. That was looked at by the client, commented on the European managers before we then went on to the next stage of getting into the design development." (Marian Dalley)

TABLE 4.25: SECOND PHASE OF EXPLORING DESIGN POSSIBILITIES

Coming up with design ideas for Scholl Footcare project involved thinking of design ideas, and exploring and generating design patterns by the means of producing visual marks on several types of surfaces. The thinking and crafting activities were interactive. Also, they fed to each other. In addition, they involved processes of selecting visual patterns. The designer considered that working as a design team was fruitful (TABLE: 4.26).

Benefits from working as a design team	
1.	Understanding the whole ranges of Scholl's products in a broad sense and as one family,
2.	Focusing on each area of the project while having in mind the other areas and concerns,
3.	Getting feedback by learning from each other findings and experience,
4.	Maximising the design possibilities and approaches before selecting the best design ideas.

TABLE 4.26: BENEFITS OF WORKING AS A DESIGN TEAM

4.5.8 Relevance of visual patterns to the need pattern (NP)

Scholl Footcare project

- **Subject matter**

The subject matter of the Scholl Footcare project can be considered to be of two kinds: 1) tangible, 2) intangible, 3) names of the products, and informative texts about the ingredients and functions of the products. The tangible aspects of the subject matter had to do with : 1) foot, 2) blister, 3) shoe, 4) plaster, 5) the medical aspects of some products. The intangible subject matter had to do with the intangible qualities of the brand and each of its products: 1) ease discomfort, 2) cure problems, 3) reflect hidden comforts.

- **The target audience**

According to the designer, the target audience was not aware of the variety of products that Scholl offered. The consistent design quality of the new designs made the audience realised the quantity and quality of the range of products that Scholl produced. The target audience was at the core of the designers' considerations when they selected and adapted visual patterns, and when they created the design imageries. These considerations were related to the following issues: 1) representing the Scholl brand identity as an authority in footcare industry, 2) assuring the audience that the products provided caring and effective treatment, 3) the nature of market of Scholl and its growth, 4) understanding the various visual appeals in the various markets of Scholl. 5) differentiating Scholl's products from those of the competitors, 6) reflecting the nature of the products according to their types without alienating them from the overall pattern of the brand identity.

- **The communicative characteristics of visual patterns**

The communicative characteristics of the Scholl Footcare project had to do with the following issues: 1) the brand identity, 2) hierarchy of communication of Scholl's products, 3) types of subject matters. Examples of the communicative characteristics of visual patterns can be seen in the following: 1) a softer feel for the yellow, 2) soft trigger type imagery, 3) symbols, 4) a relaxed foot, 5) functional symbols, 6) an overall feel of the brand identity, 7) shape, movement, and pose of the foot, 8) anatomy of the foot, 9) shoes, 10) blister. The various patterns were used to

communicate: 1) authority, 2) medical aspects, 3) refreshing aspects. Marian Dalley explained:

You're trying to be descriptive about what the benefit of the product is... It was quite important to have some key thing to stimulate some ideas as to what that symbol should be.

Also, visual patterns were selected to communicate the caring feeling to the audience.

Marian Dalley explained:

Obviously by using the illustration we are trying to connect with the audience. So we're trying to connect with the sort of caring feeling and visibly affective. This is informing me exactly where I position this plaster. I think that here in the project we're moving into a more kind of abstract area than the more representational and information design illustration because that's what these are really. It's more kind of functional symbols.

4.5.9 Process of selecting visual patterns & (PPR)

The designer stated that they selected their visual inputs to satisfy the need and requirements for the project. She asserted that the need for the project had 100% impact upon their selection of visual inputs. The processes of selecting visual patterns continued during the various stages of the design ideas, and occurred in various ways: 1) intuitively, 2) by interpreting visually the intangible qualities of the products and their function, 3) the designers knew what they were looking for, 4) by learning processes from feedback, 5) by exploring and maximising design possibilities, 6) From experience. The designers selected visual patterns to satisfy the NP. The designer's explanation showed that the designers recognised and selected visual patterns from various alternatives for satisfying the NP for the Scholl Footcare project. Recognising certain visual patterns from various alternatives can be considered as PPR. PPR involved matching visual patterns with NP. First the designers recognised certain design ideas as fits for the products. Each design idea consisted of a visual pattern that had certain parts. Each part was a pattern and required selection of visual patterns and involved PPR (DIAGRAM: 4.5).

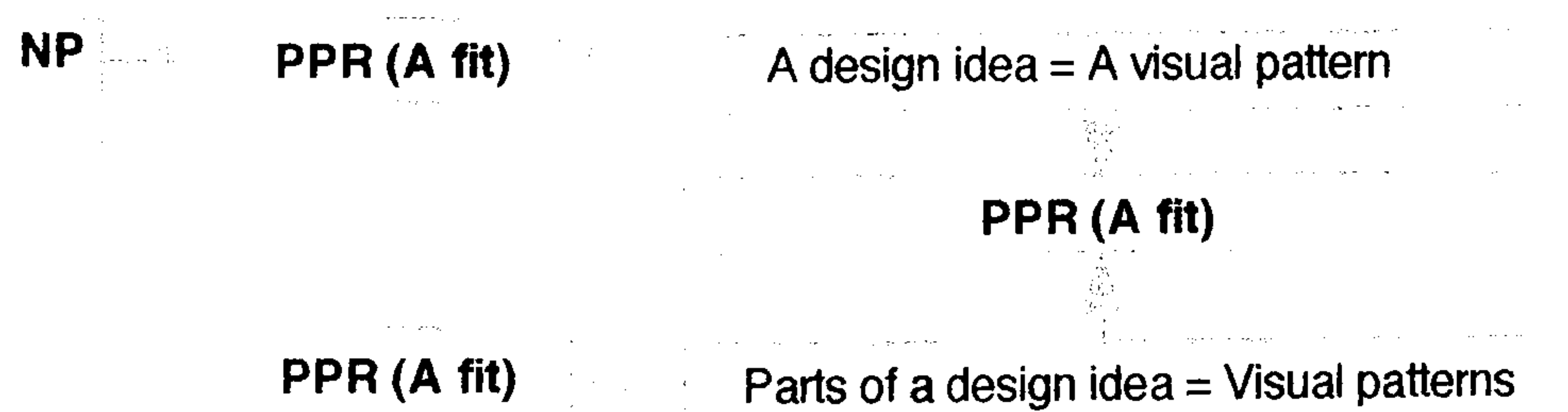


DIAGRAM 4.5: SELECTING A DESIGN IDEA FOR NP

The designer stated that they explored four design options for each product. Each of these options can be considered as a design pattern. These various possibilities can be considered as patterns of competing design hypotheses (PCDH). The designers selected from these possibilities the best design options. The designers solved the

problem of the brand identity by recognising an overall visual pattern and its parts for matching the NP for Scholl Footcare products. The designers recognised a visual pattern for matching the NP and context for each product. The visual pattern of each product was part of the overall pattern of the corporate identity of Scholl Footcare brand. The overall visual pattern of the brand identity as well as the overall visual pattern for each product consisted of various parts each of which was a visual pattern and was the outcome of various selection processes (DIAGRAM:4.6).

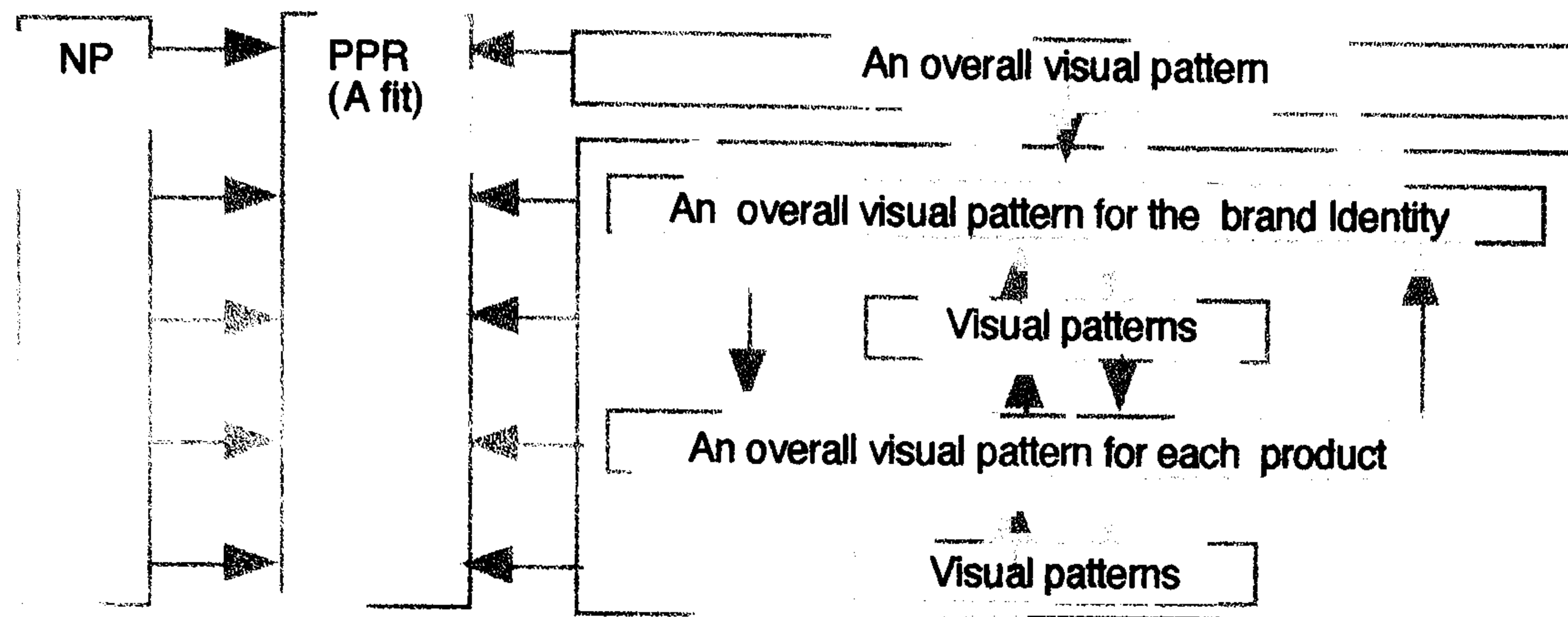


DIAGRAM 4.6: RELATIONSHIP: PPR, VISUAL PATTERNS AND THE NP FOR SCHOLL PROJECT

The quality of the design ideas and the visual inputs were crucial criterion in selecting visual patterns. The designer discussed quality in relation to the design ideas, the visual inputs, the use production tools and methods. The designer used the following expressions: 1) “best idea”, 2) “distinctive quality”, 3) “appropriate”, 4, “maximise the work”, 5) “the best fit”, 6) “high quality”, 7) “best techniques”, 8) “good idea”.

- Consideration for selecting visual patterns

The processes of selecting visual patterns involved various considerations. These considerations can be grouped under a set of categories (TABLES:4.27, 4.28).

Activities	Considerations
Selecting visual patterns to match the design brief	“Obviously it depends on which area you're designing for and all of these are very critical to our brief definitely. I think one is often looking for something very distinctive. So that the brand stands apart from everything else.” (Marian Dalley)
Differentiating Scholl Footcare products from the work of the competitors	“Choices are definitely influenced by the client's competitors because you don't want something to look the same. You want you're own client in that particular area to be able to own that illustration. The illustration can become part of the brand...The work of the competitors certainly affected the selection of the visual source because obviously one is looking for something more distinctive. In a way you end up looking up and comparing product with product. So that's how it would manifest itself.” (Marian Dalley)

TABLE 4.27: CONSIDERATIONS FOR SELECTING VISUAL PATTERNS / SCHOLL FOOTCARE

Activities	Considerations
Selecting visual patterns of subject matters for the packs to communicate to the audience the actual products	"In terms of displaying products, I would say that the nature of the product was important, because looking at the previous packs you couldn't see much of the actual products. That's very confusing as consumer so trying to make that communication very clear in showing a bit more of the product was quite important. The same thing with the shoes. They used to sell them completely covered. You could never see the shoe. You had to take them out of the box and making the product visible I'd say was another high concern where it's necessary." (Marian Dalley)
An overall pattern for all the products	" knowing that you had something that could work across a range not just for one. It's very important." (Marian Dalley)
Direct communication	"We've always set out for it to be very direct communication because there's not much space in the pack for building any sort of secondary layers of information. We've had to communicate it very upfront and very functional." (Marian Dalley, 1997)
Identifying Scholl in its products	"It was establishing what the hierarchy of communication was which is going to be Scholl." (Marian Dalley)

TABLE 4.28: CONSIDERATIONS FOR SELECTING VISUAL PATTERNS / SCHOLL FOOTCARE

4.5.10 Adaptation of visual patterns

Adapting visual patterns to NP for Scholl project involved PPR and involved visual and technical aspects: 1) transforming visual patterns into design patterns. 2) adapting the parts of the visual pattern to each other within the totality of the overall pattern to match the NP, 3) adapting the visual pattern for each product to the size, form, and material of each type of packs, 3) selecting certain visual techniques and tools for achieving the desired results. The designers adapted the visual patterns to NP while having in mind knowledge and considerations about the potential visual outcome resultant from using certain methods and tools (TABLE: 4.29). Major adaptation processes, techniques, and methods are in TABLE (4.30) .

Activities	Considerations
Transforming visual patterns to design patterns	Transforming the visual patterns into design patterns involved producing visual marks and adapting the various parts of the design pattern to each other by combining and adjusting the parts into each other within the total pattern.
Knowing the limitations of the printing method	The printing methods were chosen according to the types of materials used for the packs. On the other hand, these printing methods had limitations in producing visual details. Such limitations were part of the constraints of NP since the materials of the packs and the printing methods were decided by the need and its context. The designers knew ahead of their design activities the limitations of the printing techniques and methods on the following materials and surfaces: 1) plastic, 2) metal tubes, 3) paper labels, 4) metal cans, 5) flow-wrap, 6) cartons. The designer stated that too much visual details were considered incompatible with the printing method used for metal surfaces. Marian Dalley stated, "The technology in printing definitely influenced the design choices."
Using air-brush technique	The use of air-brush technique allowed the designers to show the light colours of the background of each design through the illustration of each design.
The use of the Mac computers	The use of the computer allowed the designers to combine the various parts of the design pattern into one pattern, e.i. combining the name, text, and the illustration of each product together as one overall pattern
The use of models of the packs	The use of models allowed the designers to adapt the visual pattern and its parts to the form and size of the packs.

TABLE 4.29: CONSIDERATIONS FOR ADAPTATION

Activities	Adaptation processes, techniques and methods
Establishing a relationship between the structural aspects of the visual patterns, their design patterns, and the physical patterns of the packs	"Obviously we had a rough visual. Then we created an overall area which was wrapped around the can. Then we began to work within that visual area to get all our elements kind of against the hierarchy. So they're all communicating at the level they're supposed to be. Knowing that there's a brand identity to try and get over and then there's the actual product name, the communication in the illustration.. and the product benefits but its a kind of balancing act. We would try it with maybe different weighting, different typefaces and then it would be wrapped around, constantly run over the print and wrapped around the can to make sure it's actually working." (Marian Dalley)
Adjusting the actual visual pattern of the foot to look attractive by changing its visual pattern to fit NP	It could have looked odd and you could draw a realistic foot but find when you crop it in the way we've cropped it, it's just completely wrong, so you have to go back in and make adjustments in order to create something that looks attractive and doesn't look like a defunct foot." (Marian Dalley)
Considering the printing method in relation to the right amount of details for each illustration in order to get neat patterns	"The cloud and the feather had to be sympathetic with that print process. So we have to be careful in how much detail we can put in. As the whole thing could just end up a mess that we just fill in. So we have to be quite clear in the shapes that we described.." (Marian Dalley)
Using Air- brush technique for allowing the light colour of the background to show through the illustration	We wanted the colour to come through. We wanted the lightness to come through. So we had to be very critical, and we briefed the illustrator as well to just give us the right amount of detail. The fine illustrations were air brushed in this case. This was line work drawn by the illustrator." (Marian Dalley)
Using CAD computer program for visualising the physical structures of the packs	"Using CAD has definitely improved the situation hugely. We do use CAD when we design structure, it means that you can actually visualise or create your environments or individual packs and make it much more understandable. You just bring it to life." (Marian Dalley)
Doing the illustration and the name and text of each product separately and then combined them together on the screen for getting best results	"It's actually two illustrations brought together. I think technically it would be quite difficult for an illustrator to do that so yes we're quite used to a repro stage. You know combining and crating the final image. I'd say we're highly aware of it. The elements were all brought together on the Mac basically having got a master drawing of the foot, of the shoe, that was then streamlined and created digitally." (Marian Dalley)

TABLE 4.30: MAJOR ADAPTION PROCESSES

4.5.11 Purposive pattern recognition (PPR)

Purposive pattern recognition can be considered to describe the various selection and adaptation activities of visual patterns for Scholl Footcare project. Also, PPR involved processes of learning from doing. In addition, PPR involved considering the amounts of details they needed for their project. PPR as a fit for NP can be seen in various matching activities (TABLES: 4.31, 4.32, 4.33).

Activities	PPR (A fit) Visual patterns for the brand identity of Scholl
Balancing the visual pattern of the brand identity of Scholl by selecting the right tone and shape of the yellow colour for the brand	"The equity of the brand are the blue line of the Scholl lozenge and the yellow background. That was a given and already stated in the guidelines. What we could do was balance that. We kind of work with different areas of yellow or different ways of treating the yellow." (Marian Dalley) * Three design options of the yellow colour were selected and each of which was considered as a fit for a group of products (See FIGURE:5.27.A).
Balancing the visual pattern of the yellow colour with the brand name to achieve legibility	"So something like the toiletries would have been put with other toiletry moisturising products so it had to have a balance of the harness of the yellow. They had to be toned down and appropriate. We had to read the brand identity." (Marian Dalley)
Selecting consistent graphic quality for the brand so that to make the range of the products recognisable as one brand	Selecting a consistent graphic quality for matching the big range of products The consumer would say that I didn't realise Scholl actually did so much. So the consistent graphic quality would make them realise that it's a big range and that Scholl were definitely the footcare because they had product ranges that went across that area." (Marian Dalley)

TABLE 4.31: PPR FOR MATCHING SCHOLL BRAND IDENTITY

Activities	PPR (A fit) Visual patterns for various aspects of NP
Selecting visual patterns to match both tangible and intangible aspects of each product	"If you look in the pack, each foot has something different. For people moisturising, there's a feather, there are kind of drops, liquid going on the foot. Exfoliating has a ribbon that kind of goes around the foot as if it's smoothing the foot down. So it's quite strong bit of language and very few colours. Only two colours could be used for that illustration." (Marian Dalley)
Selecting hard edge imagery for hard products and softer feel for lighter products	"So we had a hard edge for a harder products. We had this non-digitised approach for things like the odour control and the sports area and then the softer feel for the yellow when we were in the more caring area of the kind of lighter deodorants or toiletry areas." (Marian Dalley)
Recognising how the characteristics of visual patterns worked in various markets for matching NP	"For instance some of the German toiletries products were very hard. They looked like medical products rather than moisturising or toiletries. The French market was quite used to having soft imagery around footcare.... So it's a good job that we knew that because we could link some of the deodorants with the toiletries products and keep it very separate from odour control or athlete's foot product. So in that instance they could introduce a new product into that area with appropriate foot caring deodorant whilst they had just been used to hard efficacious effect." (Marian Dalley)
Selecting harder feel of visual patterns for products that addressed male audience	"So hence the whole visual look of this becomes harder and there's a kind of simplicity about the whole pack design." (Marian Dalley)
Selecting visual patterns to match products and appeal to the target audience	"The idea of the relaxed foot, laying, indulgence using surreal imagery in the 'odour control' area the idea is to again appeal to the target audience, and it was to clearly communicate what the product actually does." (Marian Dalley)
Using illustrative visual patterns for explaining the use of the product	"In the corns and calluses it was a much more medical area. It was a very functional visual language that helps to communicate what the product does and how effectively it does it. Blister - is to make the product look much more technological and actually show it in situ on the foot. You just put the plaster to show exactly where you can place it on your foot or on your hand." (Marian Dalley)
Using patterns of dots, and lines for indicating affected parts of the foot	You know you see lines and dots and symbols to draw the attention of focus." (Marian Dalley)
Matching unstructured arrangement of typefaces, text, and illustrations on the packs with the following: 1) the aspect 'authority', 2) to enhance slower reading,	"There is a panel on the left hand side which says what it's for. For example, this is Scholl softening lotion for dry feet and then there's a bit of text tells you about the product benefits and ingredients. You're picking up initially visual cues of the illustration and with the typography creating something a little bit unstructured. We've got the logo to one side the type kind of seems to drift from left to right, sort of much slower reading of the pack that says something like corns and calluses, so to say we have authority in this market. The title of each product was much straighter. We just re-enforced that underlying communication." (Marian Dalley)

TABLE 4.32: PPR FOR MEDICAL ASPECTS OF THE PRODUCTS

Activities	PPR (A fit) Selecting visual patterns for subject matters
Recognising the relaxed pose of the foot as a design idea for matching the caring aspects of NP	"For instance in the moisturising area, when we began to think about concepts and we went to magazines. We were thinking what's a really relaxed pose to be in. You used to lie on your stomach with your feet up. And that's exactly the image we were after." (Marian Dalley)
Matching visual patterns with 'caring' and 'comfort'	"Things like the feathers, tissues, clouds and sort of mite things, that came directly from the concept." (Marian Dalley)
Balancing the functional aspects of typefaces with emotional aspects of images	"Started with the image in terms of using the image a more like an emotional trigger because the typography was functional but very strong logic to it." (Marian Dalley)
Selecting visual patterns of surreal quality to communicate feels of relaxation and dreaminess to indicate the caring quality and effective treatment for affected parts of the foot	"The image had to work very hard to communicate the caring because they were giving sort of nuances of that, you have to had images to communicate what we're trying to say in those images the feet especially... To communicate the idea basically. With the foot in that inverted position just to sell something about being relaxed and that image of the clouds around the foot or feather adds that sort of surreal quality so it's much more relaxation and you know a little bit indulgence for your feet. You're working with a common language if you like, feathers and things soft, and all that, the feet and the cloud being relaxing. Indicating ideas of medication for the affected part of the foot." (Marian Dalley)

TABLE 4.33: PPR FOR MATCHING SUBJECT MATTERS

PROJECT STUDIES GROUP (1): 3D DESIGN PROJECTS

4.6 MINI-CASE STUDY (5):

UP-GRADING: BUITONI FRESCO CHILL FRESH PASTAS

4.6.1 Background of Buitoni Fresco Chill Fresh Pastas project

This project was designed by the design consultancy 'Dragon International' in London. It involved repackaging designs for an existing brand: 'Buitoni Fresco'. According to the creative director Mr. Greg Vallance (1997), the title of the project was "Buitoni Fresco Chill Fresh Pastas". This project involved upgrading the design the packs for chilled fresh food pastas products, and creating designs for a new product of pasta. The project started October 1995 and finished towards the end of that year. The new design was launched to the market at February 1996. The budget of the project was a mid range fee. General information about this project is in APPENDIX (XI). According Greg Vallance, the client of 'Buitoni Fresco Chill Fresh Pastas' project was an Italian called 'Nestle Italia'. 'Nestle Italia' specialised mainly in pastas, and was located in Italy. 'Buitoni Fresco' was an established brand and it was on sale throughout most of the world and predominantly Europe. The market of the 'Chill Fresh Pastas' was a big market, and it was evolving more quickly in Europe than it was in the UK. The project basically involved an upgrading generally of the whole of the Buitoni Fresco range of chill fresh pastas. The quality of both the previous packs of the pastas products and the products required improvement. Also, the project involved introducing a new kind of pasta to the market. The client (PO) upgraded the quality of the pasta products, developed a new shape of pasta, and asked the designers to develop the packaging to match the upgrading quality of the product and to design the packaging for the new product.

The project started with slightly different objectives. The results of the marketing research showed that upgrading the quality of the pasta products to super quality level was found hard to achieve. Therefore, the PO decided instead to develop ranges of sauces and spreads that go with the pasta. Chill fresh food was considered a growing segment within supermarkets. The chilled fresh pastas food products were not frozen and were not dried. They were already prepared meals, and all they require was putting the pastas into boiling water and adding optional sauces. There was an element of making part of it, so the consumer was able to contribute to the recipe, but there was a convenience aspect as well. The project consisted of three pasta products,

and one sauce product. The name of the pasta products were: 1) I Fagottini, 2) Prosciutto Crudo, 3) Strozzapreti Freschi. The sauce products were: 1) Salsa Verde, 2) Salsa Verde- I Secondi Piatti. The main objectives of the project were: 1) to increase sale of the 'Buitoni Fresco Chill Fresh Pastas' products, 2) to use designs to communicate the high quality of the brand and its products. The consumers of this project were housewives, and people who required good quality food without having to go to the trouble of making it completely.

4.6.2 Designs for the project

The 'Buitoni Fresco' project involved the following: 1) the design of the banners and name of each range of pasta, 2) illustrations for each type of pasta product, 3) information about the ingredients, 4) designs for the sauce product. FIGURES (4.40, 4.41, 4.42, 4.43, 4.44) are the design imagery of the products.





4.6.3 Processes of identifying the need for 'Buitoni Fresco'

The designers and the PO investigated the nature of the project and its need. The marketing strategies and the objectives of the PO regarding the high quality of the food products were the prim focus of both the designers and the PO. From the various information inputs both parties established criteria for the need and requirements. The designer stated that the focus of the project was very specific. From the designer's explanation, the conceptual outcome of the processes of studying and analysing the need and its context can be considered as a need pattern (NP). The designer stated that establishing criteria about the food category developed gradually as they were investigating and analysing the elements which were involved in the project. Identifying the need for 'Buitoni Fresco Chill Fresh Pastas' was the outcome of a long process. Greg Vallance (1997) explained:

It was quite a long process because the project itself started as something different and the final outcome only became clear a bit later on in the project.

The need, its context, and its objectives changed a bit during the processes of identifying the need. The changes had to do with developing new ranges of sauces and spreads instead of the initial objective which was concerned with developing super quality ranges of pasta. The designers were given information about the project, the target audience, and the competitors. The main elements of the design brief were: 1) redesigning the existing packs in order to communicate the quality of the ingredients and the quality of 'Buitoni Fresco' brand, 2) re-establishing Buitoni as a high quality product, 3) use designs to increase sales of the products. The designer stated that the client's want and need were the same.

The designer stated that the focus of the designers and the PO was on how to address the need and identifying a category for the food products. The processes of identifying the need involved gathering, searching, and discussing various kinds of information. The designers gathered information from the following sources: 1) the client (PO), 2) the market place in the UK and in three European countries: Italy, France, and Germany, 3) from marketing research documents, 4) from personal search, 5) from general sources including supermarkets, 6) from the work of the competition, 7) from 'life' as the designer stated. Greg Vallance explained:

The client supplied quite a bit of information, but we also found out really. This is specifically a packaging design project so I mean that's quite important to note. Looking at competitors, visiting supermarkets.

- **The constraints of the need**

From the designer's explanation, time and budget were not constraints for this project. Both parties were more concerned with developing the right solution for the need. Greg Vallance explained:

Budgets were agreed by both parties. The timings were not necessarily an issue. It was more a question of getting it right than trying to squeeze it into a particular time

frame.

The main constraints for this project were related to the fact that the designers had to redesign the packs for existing products and for an existing brand. The designers had to keep some kind of links between the previous designs and the new ones. The designers utilised the existing logotype of 'Buitoni Fresco' brand, and select certain visual elements from the previous designs of the packs to create visual links so that the consumers were able to recognise and related the products to the same brand. Subject matters of the products were specified as food products, but how they were handled was not predetermined. In addition, the illustrations had to be done by an Italian illustrator in order to depict the feature of the Italian illustrations, and subsequently to give an authentic feel about the products. Greg Vallance explained:

The illustrations for example were done by an Italian artist because Italians tend to like things done by Italians. They recognise things that are not done by an Italian and knowingly they will recognise that. So that had to be a feature that had to be authentic even in the field of the illustration.

4.6.4 Gathering and selecting visual sources

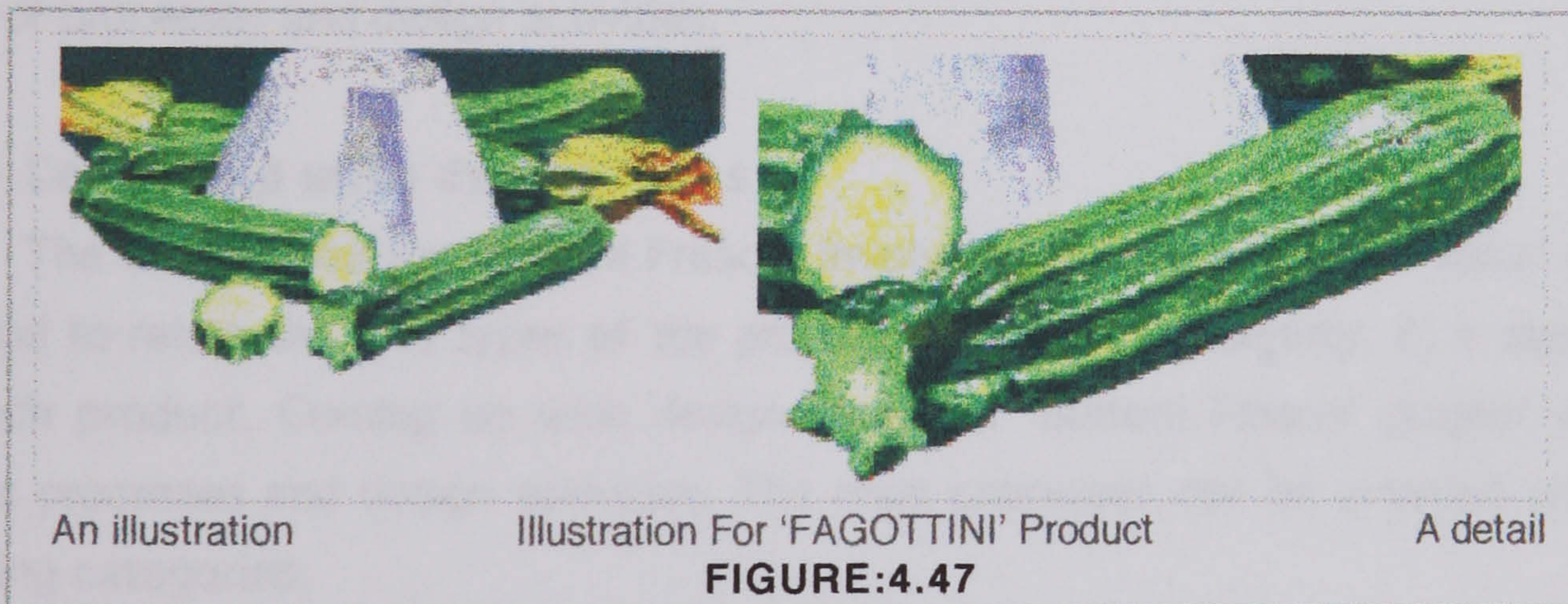
Greg Vallance stated that there was not a rational way of classifying visual sources, because everything around him was a source of visual information. The designer explained that they selected, adapted, and used certain types of visual information from various visual sources for the 'Buitoni Fresco' project. According to the designer most part of gathering and selecting visual sources and visual information took place intuitively. Most importantly, the designer stated that they selected visual information and not visual sources for their project. The designers gathered various visual sources as references of information. They looked at various visual sources for comparison reasons, and for establishing their own visual criteria for the project. The resources of visual information varied (QUOTATION: 4.20).

"Through the same channels. Through the supermarkets. All of the stuff we did was about involving an existing design so it wasn't totally new materials necessarily but it was about looking at the use of illustration and who we would use for that. That type of thing really. We looked at packaging in three European countries really, Italy, France and Germany and of course the UK as well."

QUOTATION 4.20: RESOURCES OF VISUAL SOURCES

The designer stated that the visual sources they referred to in particular for this project besides the previous packs were: 1) natural visual sources, 2) manmade objects, 3) invented objects, 4) action and behaviour, 5) hand drawings, 6) illustrations, 7) mental sources such as the designers' ideas, knowledge, and experience, 8) the work of the competition, 9) existing packaging projects in the UK and Europe, 10) supermarkets. The designers' visual sources can be classified under the following categories: 1) general visual sources, 2) retrieved visual sources, 3) art-directed visual sources. An Italian illustrator was commissioned, and art-

directed to do the illustrations. Examples of some illustrations for the pasta products are in FIGURES: (4.45, 4.46, 4.47).



4.6.5 Visual patterns

Greg Vallance stated that they selected visual information and feels from life, from seeing things, from ideas, and from experience. He added that they did not use a certain visual source in particular, and that they were highly influenced by their design ideas. The designer's explanation of the various types of visual information can be interpreted as visual patterns. The visual patterns for 'Buitoni Fresco' project varied and can be classified under the following categories: 1) visual patterns of the specific visual ingredients of the subject matter of the food products (certain kinds of vegetables, meats, and sauces), 2) patterns of design ideas, 3) patterns of relationships between the various elements of the design imagery, 4) patterns of

certain feels (freshness, authenticity, celebration, quality of food, appetite appeal), 5) patterns of typefaces, 6) patterns of the material of the packs (clear plastic) and the size and shapes of the packs, 8) patterns of colours.

4.6.6 Design ideas

Greg Vallance stated that they were highly influenced by their own personal ideas when they selected the visual information and created their designs. He said: "Personal ideas were the only ones that had any influence highly." From the designer's explanation, it can be considered that the design idea for each product consisted of a visual pattern that in its turn consisted of various visual parts. Each visual part can be considered a visual pattern that worked within the totality of the visual pattern of the design idea for each product. Greg Vallance stated:

You've got the combination of all the elements which come together to give you your art work.

The design ideas went through various stages and involved various processes of selecting and adapting visual patterns. The major stages can be grouped under the following categories: 1) coming up with initial design ideas, 2) developing design ideas, 3) crafting design ideas, 4) artwork stage. Between each of these major stages there was a presentation session that involved feedback and evaluation of the design ideas. In addition, each of these stages consisted of sub-stages that involved various types of processes and design activities.

4.6.7 Coming up with design ideas

The design idea for 'Buitoni Fresco' involved the following: 1) a visual uniform that had to relate the four types of the products to the same identity, 2) a design idea for each product. Coming up with design ideas for 'Buitoni Fresco' project involved various processes and design activities, The main processes can be grouped under the following categories:

- Deciding criteria for the design idea

When the designers were to establish the criteria for the design ideas, they had to considered the visual links between the existing designs of the packs and the new ones. Greg Vallance stated that the starting point from a visual perspective was very specific. The designers focused on an upgrading the packaging and the brand identity in a way that reflected the new positioning of the products. The designers decided that the brand should be a celebration of Italian food rather than a commodity type of food. Greg Vallance explained:

The basic thing of this is that we decided that this brand should be a joyful celebration of Italian food rather than something that looks like a commodity that is being sold at a promotional price.

- The pattern of the design idea and its relevance to the project

Greg Vallance explained:

It was uplifting, upgrading everything to the point that even where the banner now is much happier. It was a happy joyful celebration of Italian food and that was the basic design idea.

The designer stated that they identified certain visual cues in relation to the food category such as a feel of celebration, freshness, and good quality food. Greg Vallance explained:

Well I think that you draw from experience when it comes to starting off projects and relating that visual information because you have to stay within the category or its pointless doing things which are not relevant to the category.

- Selecting visual patterns from the previous designs of the packs

The designers selected the 'banner' and the 'green plate' from the previous designs as the visual links with the brand identity of the product, and decided to develop them as part of their design ideas.

- Exploring design ideas and graphic investigation

Coming up with design ideas and exploring design possibilities started by producing rough sketches on drawing pads. The sketches of the design ideas can be considered as initial design patterns. Greg Vallance explained:

You start off with pencil sketches. When those pencil sketches have been done, you pick the best routes and then start working them up more comprehensively through the computer or whatever renderings. There was several different initial concepts going.

- Constructing the pattern of the design idea as a design pattern and a fit for NP by a process

The designers started with a very broad exploration activities that continued over a period of time. The design patterns were the outcome of a process of doing, exploring, and acquiring knowledge. Greg Vallance explained:

There are rough sketches that were built up and built up and built up so a great deal of depth comes after a period of time

The designer indicated that there was very little similarity between the initial design ideas and the final ones. He explained that the nearer they were to the solution the more the process became reserved in relation to decision making. He stated, that they did not force their initial designs to fit the need. Instead they tried bringing their design ideas to fit the need by a process, and by trying various possibilities. Greg Vallance explained:

We started off with projects that bore very little resemblance to the existing one, but felt that it was part of the same family. Then as we got nearer and nearer towards the solution there tended to be more and more conservative in terms of the decision making. So what happened was that you ended up trying things that were further away and bring them in rather than just do a little bit and then try and push out.

- **Design options: Pattern of competing design hypotheses (PCDH)**

The design patterns developed over a period of time, and through processes of selecting best solutions, feedback, and evaluation sessions. The designers created various possibilities, and selected from them the best ones as potential design options. Then they showed these options to the PO. The PO in his turn selected certain ones. As mentioned in Section (4.2.5.1) some of the objectives of the project changed during the design process, subsequently, the designers and the PO had to evaluate, design options in relation to the new development of the need. The designer stated that the design options were tested and researched before they developed them further. Greg Vallance explained,

Because the project evolved over a period of time we started with a very broad based creative exploration which through a period of internal selection and client work sessions we reduced down to four routes. The four routes were first of all put into research when the project was changed a little, but really it's the same sort of process and creative technique that we go through.

Some examples of the design options which the designers developed are in FIGURES (4.48, 4.49, 4.50, 4.51).



The design option (Top/ Left) from each FIGURE was selected by the PO and the designers. Greg Vallance stated that there were slight differences between some of the design options. He said:

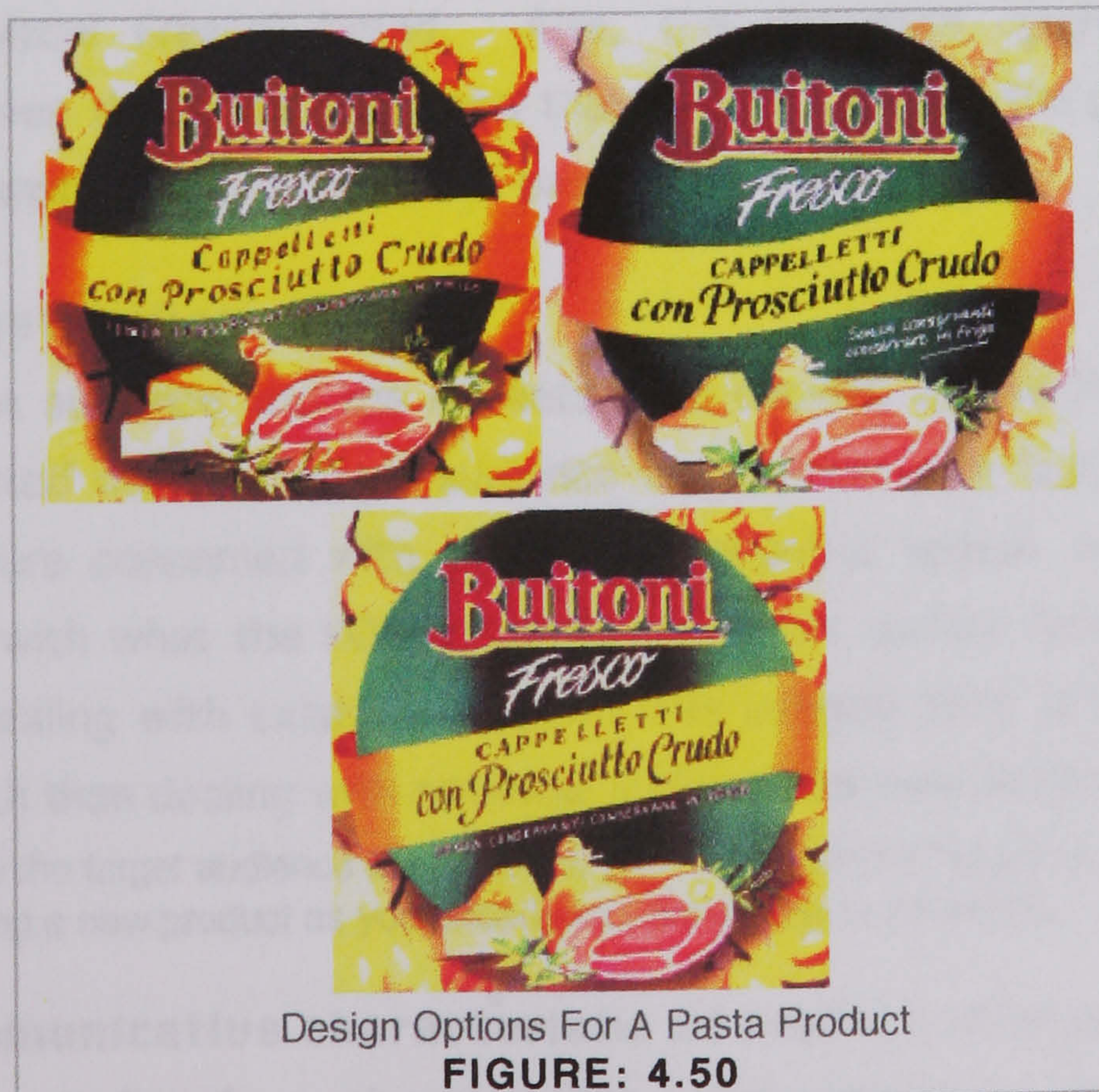
As you can see the beginnings of the family feel. These two are the same degree of emphasis but just a different way of writing the sub-copy as well.

Greg Vallance explained that they had a research unit in their design consultancy. He stated that they studied the design options and found out what was right and what was not working. The results of the research showed the visual elements that they can keep

and the ones they needed to change. He stated:

We do have a propriety technique in evaluating existing packs to find out what's right with them or what's wrong with them and it's something that we have named and basically it talks about the source of things within an existing pack format which are worthwhile keeping we keep them, which are not worthwhile keeping and in fact are destructive elements and you rid yourself of them and it's about what you need to borrow or take from other areas visually to make your pack work. Those are really basic principles that we applied.

Generating design options for each product and selecting from them the best design possibilities can be considered as patterns of competing design hypotheses (PCDH).





4.6.8 Relevance of visual patterns to the project

- **The subject matter**

The subject matters of the products of 'Buitoni Fresco' project can be considered tangible because the designers were dealing with specific type of foods that had specific visual characteristics. Greg Vallance explained: "This is where the ingredients are very specific." Yet the way the designers selected their visual patterns and adapted them to each other had to do with their design ideas. According to the designer, the way the designers selected visual information was intuitive, from experience and knowledge of what they were looking for. The other elements of the subject matter were: 1) the name of the food products, 2) the ingredients, 3) the logotype of 'Buitoni Fresco' brand. Also, the designers considered the visual relationship between the actual pasta and their designs because the packs of the pasta products were transparent and the actual pasta was shown.

- **The target audience**

The target audience and the markets were decided by the PO at earlier stage. The designer stated that the target audience was familiar with 'Buitoni Fresco' brand. The designers were concerned with creating an appetite appeal, and addressing the target audience with what the PO considered as "super quality foods". Greg Vallance indicated that dealing with existing audience was integral part, but it was easier for them to deal with than dealing with potential audience for new product. He said:

Obviously the target audience is an integral part but it wasn't a big part as it would be say starting a new product as you already had something in existence.

- **The communicative characteristic of visual patterns**

From the designer's explanation, the communicative characteristic of the

visual patterns for 'Buitoni Fresco' project can be grouped under the following: 1) the type of food by showing the specific details of the vegetables, 2) a feel of appetite appeal, 3) quality of good foods, 4) freshness of food, 5) the green colour for the background of the design imagery to give a feel of depth and quality, 6) the movement of the banner to give a feel of action, 7) to stand against the competitors in the market place, 8) authenticity of the brand. Greg Vallance stated:

It's how that pack communicates off the shelf. The appetite appeal and the quality of the product had to communicate off the shelf... You've got things like situation in store, how you would impact visually, how you stood out from the shelf, how it would perform in different types of packaging.

Greg Vallance explained what the expression 'feel' meant to a combination of spontaneous reaction and tempering that with experience. The designer stated that they communicated the message of the project directly in terms of the types of product, and communicated the authentic quality of the brand indirectly. He said:

Directly because we had a starting point and it's fairly apparent the upgrading of each of the elements. The indirect message was that Buitoni were getting their act together really and this was a manifestation of that message.

4.6.9 Processes of selecting visual patterns

According to the designer, selecting visual patterns was intuitive, and based on experience and knowledge of the need and its context. Greg Vallance explained:

The whole thing is based on intuition and knowledge and experience. In this case because the job to be done is relatively clear, so you draw upon your personal experiences. A lot of work with packaging design is less quantifiable in terms of why things are done. A lot more of it is based on experience and knowledge rather than necessarily taking data and then putting it into a visual image. It's not you do things because you know that they have certain applications. It wasn't a question of why you did them (the images) it was just the way they needed to be done.

The designer stated that the contents of the data and the researched documents they gathered, studied and analysed for this project were interpreted within the totality of the need and requirements and not in isolation. He explained that various factors were taken into considerations and played part in general, but they were not the answer for the need (QUOTATION:4.21). Greg Vallance stated that the selection, adaptation, and use of visual information was one movement. He said:

The selection of the visual information, the adaptation and then the usage. Those aren't three different elements. They are all one movement.

Greg Vallance stated that the quality of visual elements was the overriding principle when generating and evaluating their design imagery. He added that at each stage if the visual elements did not show better quality, they were rejected (QUOTATION: 4.22). Selecting visual patterns took place in various ways. These ways can be classified under certain categories (TABLE: 4.34).

"It's much more intuitive and the process part tends to be in the research of it or in the execution and roll out programme. The creative part is far more intuitive. Obviously there's the target audience, the client's wish list, what the brief is all come into play. but obviously the client's considered these things the target audience, the competitors before the brief has come out. It's not as if he's going to come to you and say I think I need some pack designs doing here. So there's a lot of this that has already been predetermined before we even get to it. So it's even less tangible what influence that has on us. The tangibility is something that is not quantifiable in this way. ...I don't think I could be ever so arrogant to say that something doesn't influence the way things are done. It's important for me to say that there is a way to quantify things. But what I'm trying to say is that how you feel that morning is as much an influence in terms of how that design work is done as my competitors, as designers. When we're sitting down working on the project and we have done before and we say OK what do we need to do? These things may well be called into question but whether they are actually answered in isolation is a different question altogether. It's actually taking them where they didn't exist as individual choices before. ... The market situation is an important factor, I would say it's not necessarily the answers at the end. It's the questions in the first place. It's an intuitive on-going one. It's not one where you step back and think of independently." (Greg Vallance)

QUOTATION 4.21: THE NATURE OF THE SELECTION ACTIVITIES

Greg Vallance stated that the selection and adaption and use of visual information were part of one process and were not broken into separate processes. He added that breaking them down into separate processes was not how the actual design activities and processes took place in reality. Greg Vallance stated:

We certainly wouldn't split up these things... It's not how we go through the process... It's not natural to break it down in this way.

"The aspect of quality is the one overriding principle that we use to apply in terms of judgment against everything that we did. The green background, the new shape of banner, the typography, and the illustration each was an addition of quality. So at each stage if it didn't look better quality than the previous one it was rejected. So the classification is that it has to have a high quality level... You have to remember that this is a client within the food category so it's a relatively restricted quality application but really it's within the context of the previous pack. It was reinvigorating life and it was being able to achieve a depth and feel. It's a feel more than anything that signify the quality level. Quality is the principle of this particular brand. The food itself is undoubtedly at the core of it. People will buy something once and if it tastes awful they won't buy it again. So it doesn't matter, you can make it look very beautiful but if it doesn't perform afterwards, what we were doing was matching a very very good quality product with a graphic visual which represented it accurately." (Greg Vallance)

QUOTATION 4.22: QUALITY : A PRINCIPLE FOR EVALUATION VISUAL PATTERNS

intuitively	"It's not rationale.. It is intuitive." (Greg Vallance)
Not a cause and effect approach	" It isn't something you can say we did that because of A, B and C, because D didn't work.." (Greg Vallance)
According to established criteria	"You have to stay within the category. I think that's the only and the main method of selection criteria in your brain if it's appropriate to the category. Food category.
From experience and knowledge	"The whole thing is based on intuition and knowledge and experience."(Greg Vallance)
From design skills	"I would say that design skills are very much part of the process and they would influence the choices." (Greg Vallance)
From knowing the quality of visual patterns	"The quality food category. I mean you can't get much more specific than that if you've have a quality pasta category then everything would look the same." (Greg Vallance)
By a process of doing and by a process of conjecture and refutation	"You can begin to see some things here. This is design detailing very specifically. At this particular point the concept of the banner has been upwards has already been established but then it became different ways of looking at how the typography may be used. Do you use the product title. Do you think the title has to work with an ingredient possibly within the banner, or you put the ingredients outside next to the actual ingredients." (Greg Vallance)
From thought process about visual cues	"You think about the visual cues of lettering, illustrations, and colours." (Greg Vallance)

TABLE 4.34: WAYS OF SELECTING VISUAL PATTERNS

4.6.10 Adaptation

According to the designer, the processes of selecting, adapting and using visual

information were not separated. From the designer's explanation, it can be considered that the less adaptable visual patterns were discarded. According to the designer, the adaptation processes involved the use of the following design techniques and tools: 1) visualising, 2) hand drawings, 2) illustrations, 3) air-brush, 4) lithography, 5) lettering, 6) typesetting. Adapting visual patterns involved the following processes: 1) combining visual patterns, 2) adding visual patterns, 3) changing visual patterns, 4) adjusting visual patterns, 4) rejecting visual patterns. Greg Vallance stated:

So there are endless degree and variety of ways of combining the visual hierarchy and really the one that was arrived at was felt to be the best combination... which is a new shape, a new pasta type together with quite a bold support copy of what the ingredients are inside of there as well.

Adapting visual patterns involved taking into consideration the heritage of the brand identity and the visual heritage of the packs. The designers were restricted to maintain some visual links with the previous designs of the packs, so that the audience was not to be alienated. The designer stated that they had to combined the brand name, the product name, the illustration and the visual uniform together. He explained that for having very fine visual details they had to start from large pieces of artwork and then reduced them to the required size of the pack. From the designer's explanation, it can be considered that there were tree types of adaptation: 1) adaptation as a consequence of the selection activities, 2) technical adaptation, 3) adaptation to certain visual constraints.

4.6.11 Purposive pattern recognition (PPR)

From the designer's explanation, it can be considered that the processes of selecting and adapting visual patterns for the NP of 'Buitoni Fresco' project involved purposive pattern recognition (PPR) as a fit and as a matching activity (TABLES: 4.35, 4.36).

Activities	Purposive pattern recognition (PPR) for matching visual patterns with need pattern (NP)
Starting from the context of the project	"From the very beginning, it started of life as a quite different project " (Greg Vallance)
Matching design patterns with NP	"The biggest influence in how this project was put together was really the starting point of where they were and their mental end point where they felt they should be. Really it's about matching those expectations with the design work. We had the starting point for an existing situation that is the degree of influence really." (Greg Vallance:)
Recognising the previous situation of the products for selecting visual patterns and matching NP	"t's impossible to do this type of project without looking at the existing design because you're talking about a significant leap from where they were, so if you didn't know where they were you might not make the leap." (Greg Vallance)
Recognising value and quality cues of the products and matching them with visual patterns	"It was just looking really at food values and quality cues and really what was the best ways of expressing those."(Greg Vallance)
Selecting visual patterns and matching them with NP by conjecture and refutation	"Do you do the name of the product as a hand-written note and then you could have more emphasis on the ingredients? Or on the holding shape of the pasta, or do you put more on the shape of the pasta and less on the ingredients? So there's very many different ways you have to look at it." (Greg Vallance)

TABLE 4.35: PPR FOR MATCHING VISUAL PATTERNS WITH NP

Activities	Purposive pattern recognition (PPR) for matching visual patterns with need pattern (NP)
Matching the gourmet range of foods with visual patterns by recognising visual cues of the relevant visual patterns and by considering their visual quality	<p>“We developed a series of super quality designs for pasta which potentially could set Buitoni as a much more gourmet range of foods and so the designs began trying to aim at super quality level so you think about the visual cues of the lettering of the script, of the way the illustrations are drawn, the colours that are utilised and really that’s where you start from.” (Greg Vallance)</p>
Considering the work of the competition for achieving a competitive quality	<p>“The competitors had a big influence because some of them were very good quality competitors. ... The competitors do influence you because you try and make it look better than the competitors” (Greg Vallance)</p>
Recognising the best quality visual patterns of the previous packs and selecting them to maintain links with the brand and match NP	<p>“The visual impact of the existing design is made up of what we call positive grand equities which belong to Buitoni as a brand. We upheld the ones that we felt worked best. Therefore the point of recognition from a new product launch from the old one was one that was sufficient to realise that it was obviously part of the same family or at least something to do with it. That was the only psychological aspect and again other than the quality of the ingredients pieces.” (Greg Vallance)</p>
Matching the selected visual patterns from the previous packs with NP by changing its communicative characteristics	<p>“The banner that’s on the pack was very sad, it was like a mouth that turned downwards and then the final design that came out was far more a celebration of food so you see on there how close it is in the first place but at the same time you see how it’s been revitalised.” (Greg Vallance: 1997)</p>
Selecting illustration technique to match the quality of the appetite appeal	<p>“The illustrations far more appetising, because it is best represented the level of quality and appetite appeal that we needed. The Italians believe they have a different way of looking at food.” (Greg Vallance)</p>
Avoiding photography for matching the natural ingredients of products	<p>“But photography would not have been appropriate on this. So photographs may well have made it seem a bit more industrial. “ (Greg Vallance)</p>
Matching the design pattern with the patterns of actual ingredients	<p>“This is a window. This is printed on clear plastic and so it’s a tray of product or when you put that over the top obviously the gluing lines are around the edges and then the bits that are not printed on you see through. You will see the product.” (Greg Vallance)</p>
Matching the deep green colour with quality of food and the brand	<p>“There is a vignette in the background of the green which gives it a greater depth and greater quality feel. ... The whole thing just has a high level of quality appetite feel about it.” (Greg Vallance)</p>
Matching patterns of lettering with appetites appeal of the food	<p>“The typography is far more subtle and appropriate for this quality level of food.” (Greg Vallance)</p>

TABLE 4.36: PPR FOR MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (2): CORPORATE IDENTITY PROJECTS

4.7 MINI-CASE STUDY (6):

CORPORATE IDENTITY & SUBSEQUENT IMPLEMENTATION: COLOUR SOLUTIONS PROJECT

4.7.1 Background history of 'Colour Solutions' project

This design project was explored, developed and designed by the international design consultancy Interbrand in its London branch in the UK. 'Interbrand' had thirteen branches in several big cities in various parts of the world. The title of the project was "Colour Solutions". General information about this project is given in APPENDIX (XI). The project started in May 1996. The deadline for its first sets of requirements was in the beginning of 1997. According to the senior designer Mr. Ged Equi (1997) who was the project director of this project, 'Colour Solutions' was a corporate identity project that involved producing a logo, and a new identity system for Colour Solutions Ltd in London. The identity system involved a future plan for further business developments, and was designed to be a dynamic system that involved subsequent implementations. Ged Equi stated that this project was a consecutive project. He explained that they had to design the first sets of designs, then some new designs were to be created based on the following: 1) further sets of requirements, 2) the future development of the need, 3) changing the images that were used after a period of time to keep the design of the items interesting for the target audience, 4) the emergence of new items.

The target audiences of 'Colour Solutions' were predominantly designers, print buyers, and account handlers for advertising media businesses. The budget for this project was reasonable because the PO had a long business relationship with the design consultancy, and because the design consultancy was one of the regular customers of 'Colour Solutions Ltd'. Ged Equi said: "So we did this a little bit cheaper than we normally would for this type of job." According to Ged Equi, the business area of the PO was a pre-press reproduction company. Colour Solutions Ltd was involved in producing films and digital photography for designers and advertising people before the designs went to print. It was known for its high quality design facilities, professional design services, and design materials. But their previous corporate identity was not working well because it was outdated and uninteresting so it did not match the quality of their products. Ged Equi stated:

They are always professional because they're dealing with print items. The items that come out through Colour Solutions have to look stylish and well printed and

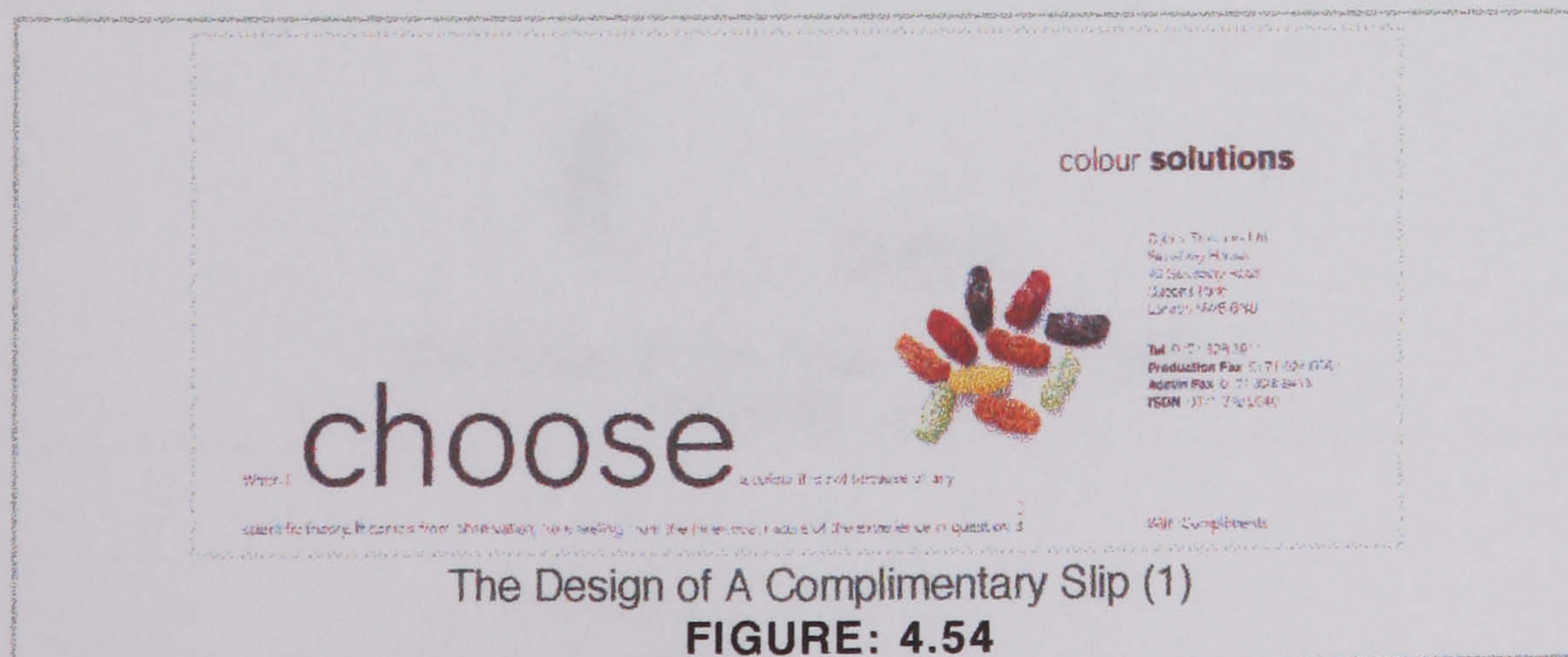
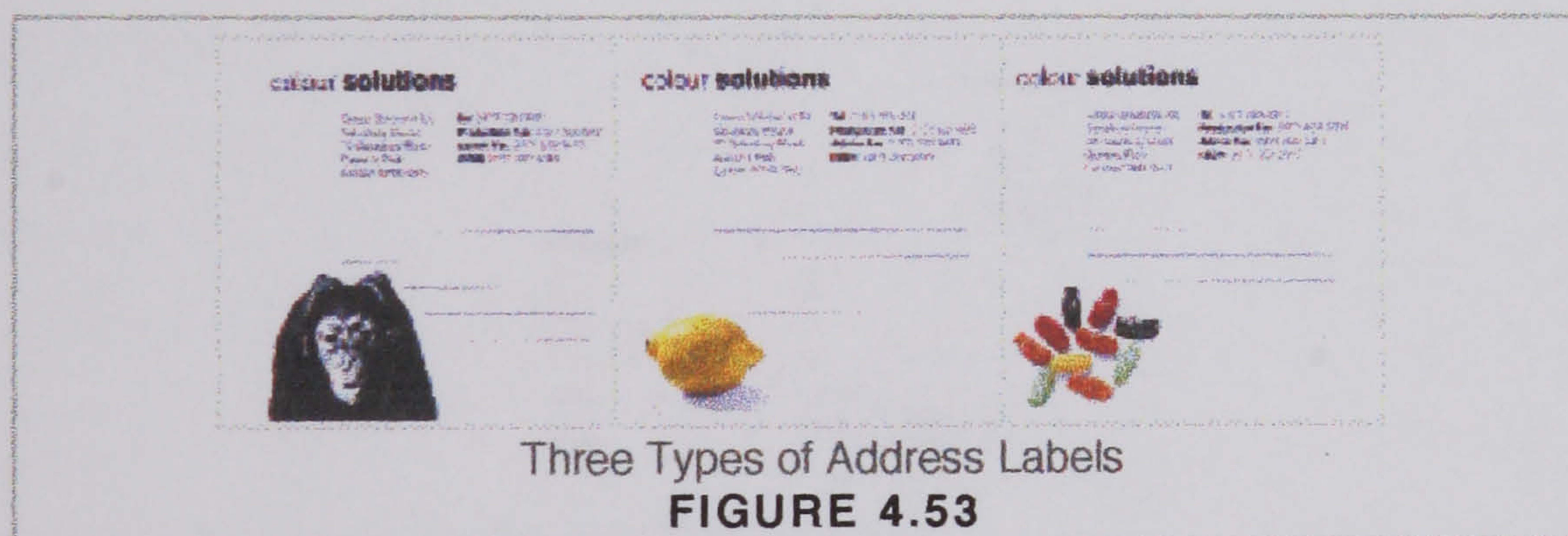
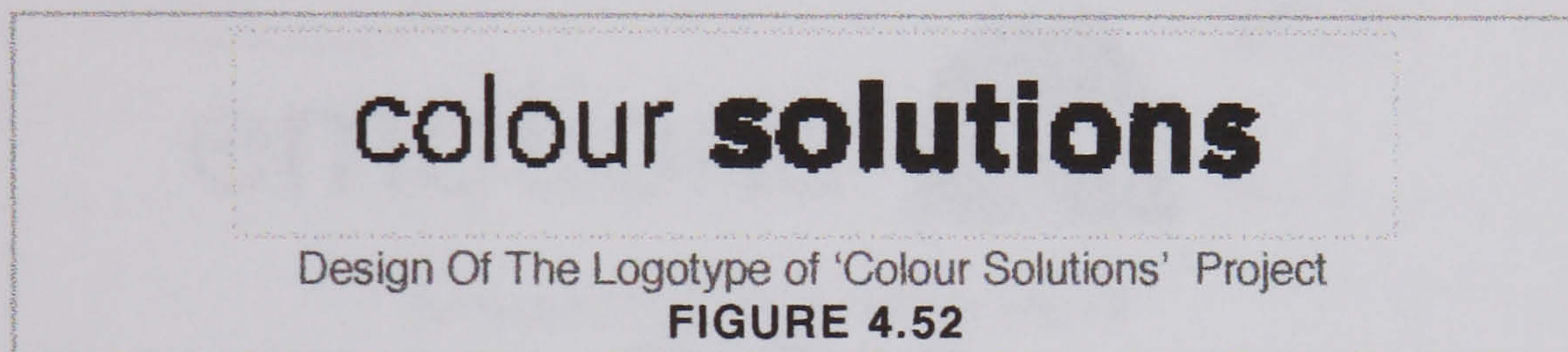
sophisticated and everything that shows that they've got the competence and quality to produce a high quality piece of work for you.

He explained that the PO planned to increase their potential target audiences:

It's a market that's going to expand in the next sort of five or ten years. it's a very specialised business. It's not like a high street shop. It's for a range of people. If you are in the design business you can use Colour Solutions.


4.7.2 Designs for 'Colour Solutions' project

The design project consisted of designs and implementations of the following items: 1) Logotype (FIGURE: 4.52), 2) Address labels: three types (FIGURE: 4.53), 3) Complimentary slips: three types (FIGURE: 4.54, 4.55, 4.56), 4) Letterheads: three types, 4) Facsimile cover sheet (FIGURE: 4.57), 5) Business cards: three types, 7) Job Bag labels (90mm x 28mm), 8) DL Envelope, Purchases order, Tranny sticker, Computer disk, Mouse mats, Syquest labels, Presentation covers, Tubes, Cromalin stickers (FIGURE: 4.58), Company van, Golf balls, Umbrellas.



colour solutions

Colour Solutions Ltd
Salisbury House
70 Salisbury Road
Queens Park
London W8 5NL
Tel: 0171 358 2911
Production Fax: 0171 358 2907
Admin Fax: 0171 358 2912
ISDN: 0171 358 2946

Colour without **f**  **orm** is a new colour of a body


With Compliments

The Design Of A Complimentary Slip (2)
FIGURE: 4.55

colour solutions

Colour Solutions Ltd
Salisbury House
70 Salisbury Road
Queens Park
London W8 5NL
Tel: 0171 358 2911
Production Fax: 0171 358 2907
Admin Fax: 0171 358 2912
ISDN: 0171 358 2946

Colour: no features
follow the changes of the

emotions 

With Compliments

A Design Of A Complimentary Slip (3)
FIGURE: 4.56

colour solutions

Colour Solutions Ltd
Salisbury House
70 Salisbury Road
Queens Park
London W8 5NL
Tel: 0171 358 2911
Production Fax: 0171 358 2907
Admin Fax: 0171 358 2912
ISDN: 0171 358 2946

Facsimile


To: _____
From: _____
Subject: _____
Date: _____

Facsimile

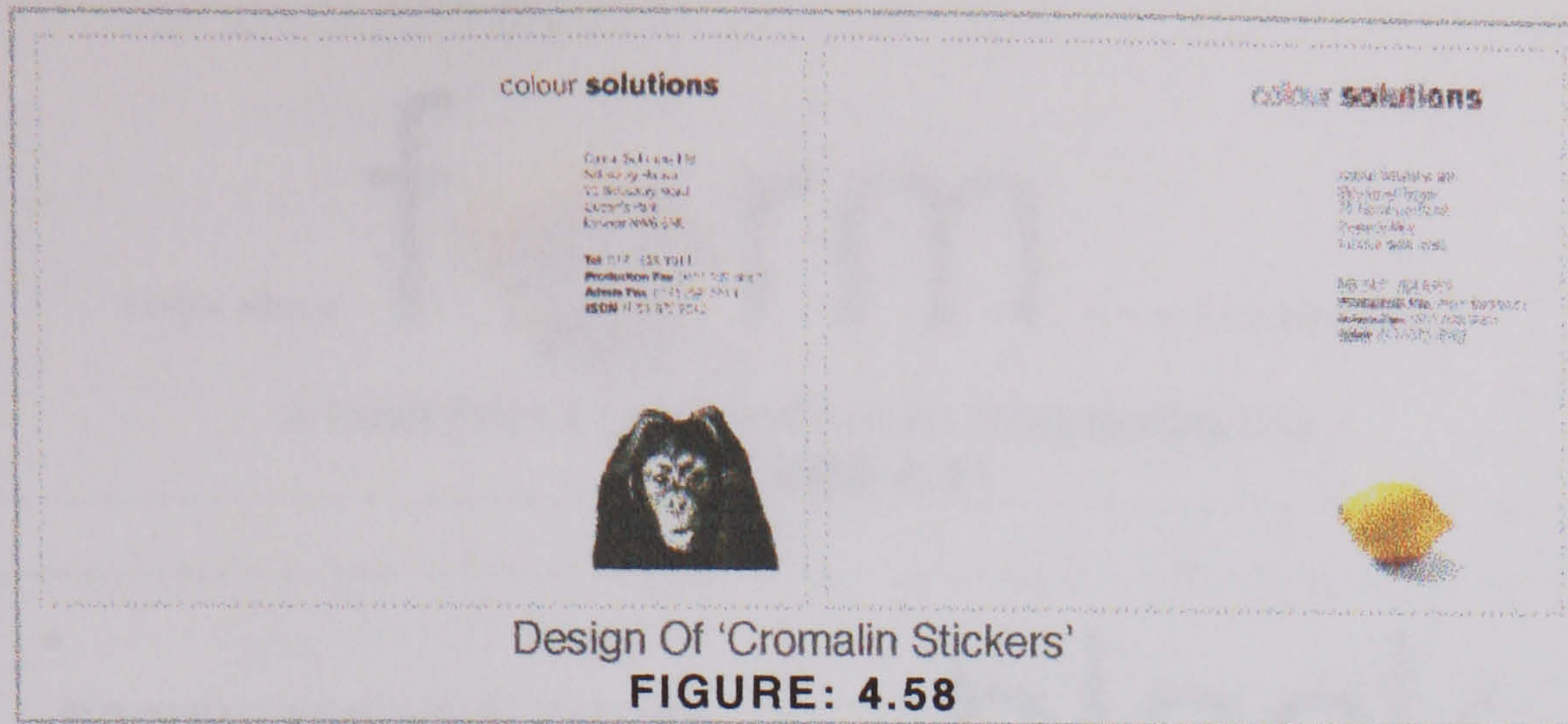
To: _____
From: _____
Subject: _____
Date: _____

Facsimile

To: _____
From: _____
Subject: _____
Date: _____

 **black**

The Design Of The 'Facsimile Cover Sheet'
FIGURE: 4.57



The designs of these items were part of an identity system that the designers explored and generated. The identity system was planned to be fluid and accept changes of visual inputs, and to be applied for further applications. The 'Colour Solutions' design project consisted of written and visual information. The designs of the various stationary items contained: 1) the new 'Colour Solutions' logo, 2) images, 3) information related to their particular uses. The stationary items included the following design elements and information: 1) Each item included a typographic logo of the name 'Colour Solutions'. A plain Roman style was selected for the word Colour, and a bold style was selected for the word Solutions. The chosen typeface was Quartz. 2) Each item included the address of the company, telephone and fax numbers. 3) Each design included an image. 4) Each design of the letterheads and the facsimile cover sheet included a quote that had the word 'colour' in it. Each quote was taken from a statement by a famous artist. 4) From each quote, a specific word was enlarged so that it complemented the image. Details of the design imagery of the various items are in FIGURES: 4.59, 4.60, 4.61, and 4.62.

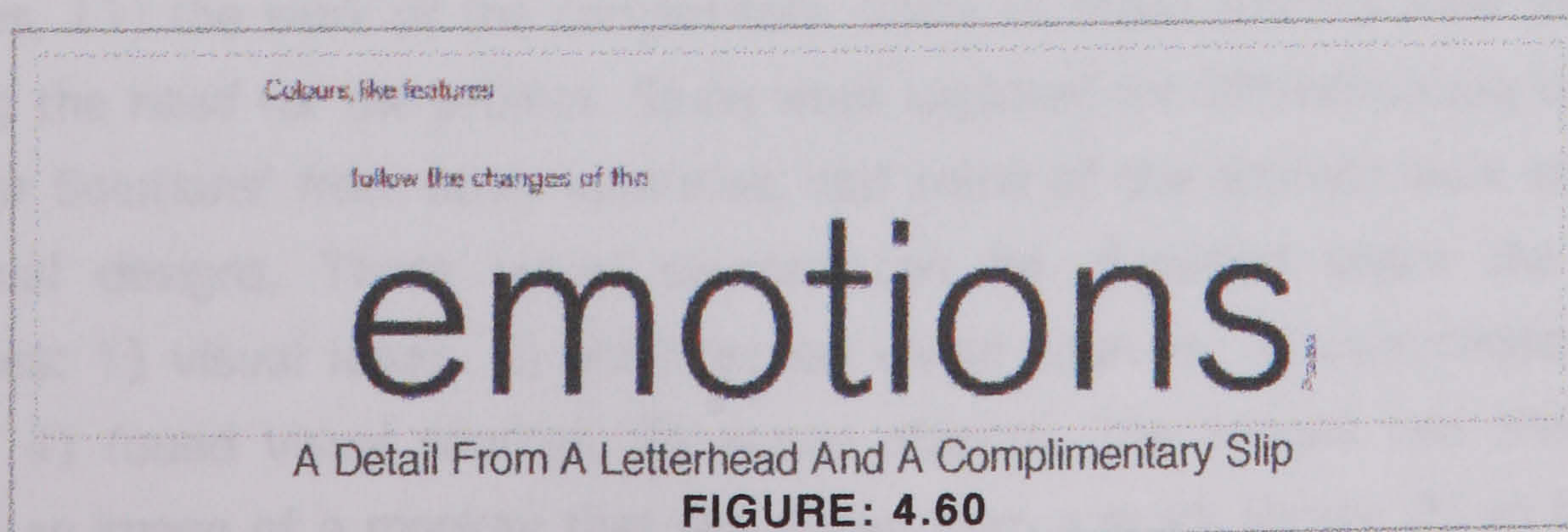
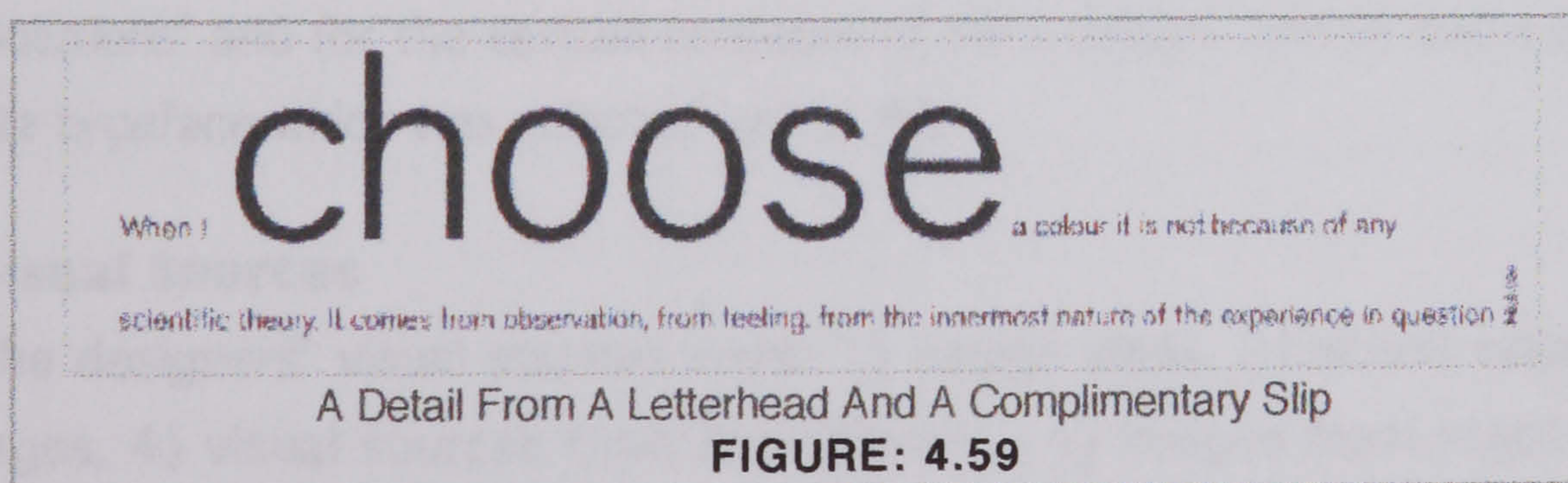




FIGURE 4.61

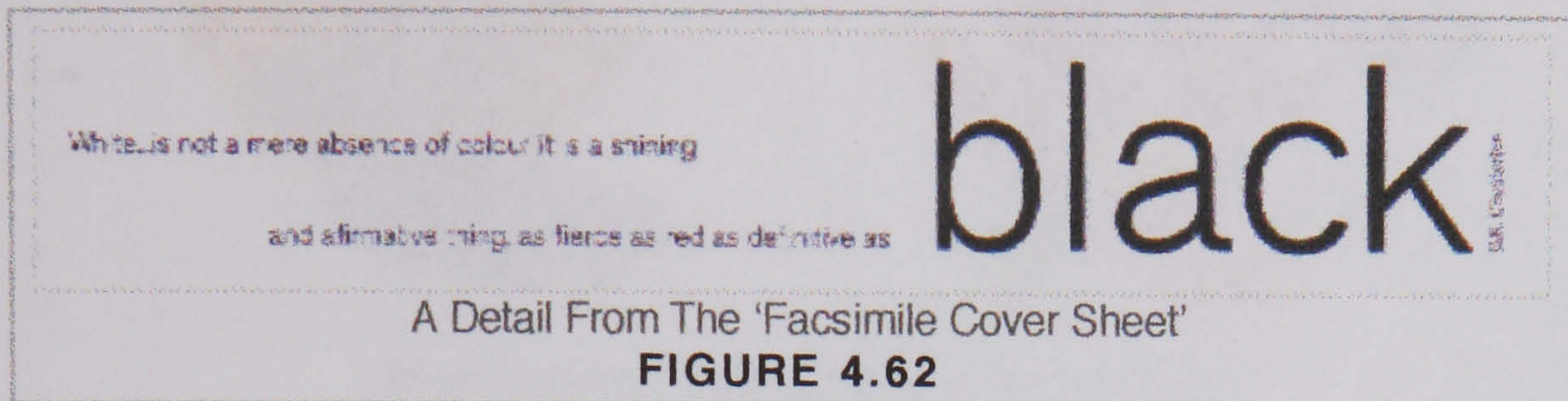


FIGURE 4.62

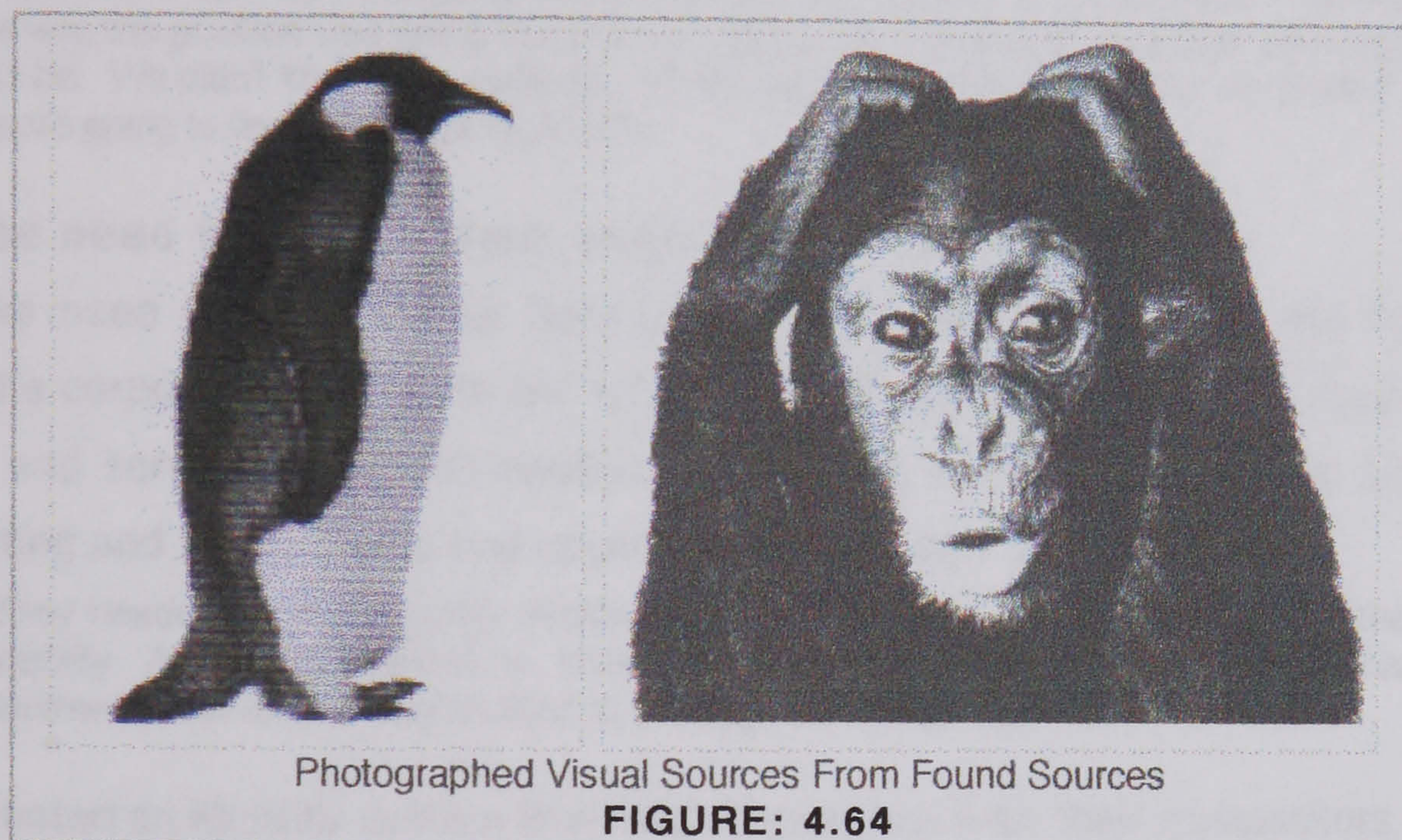
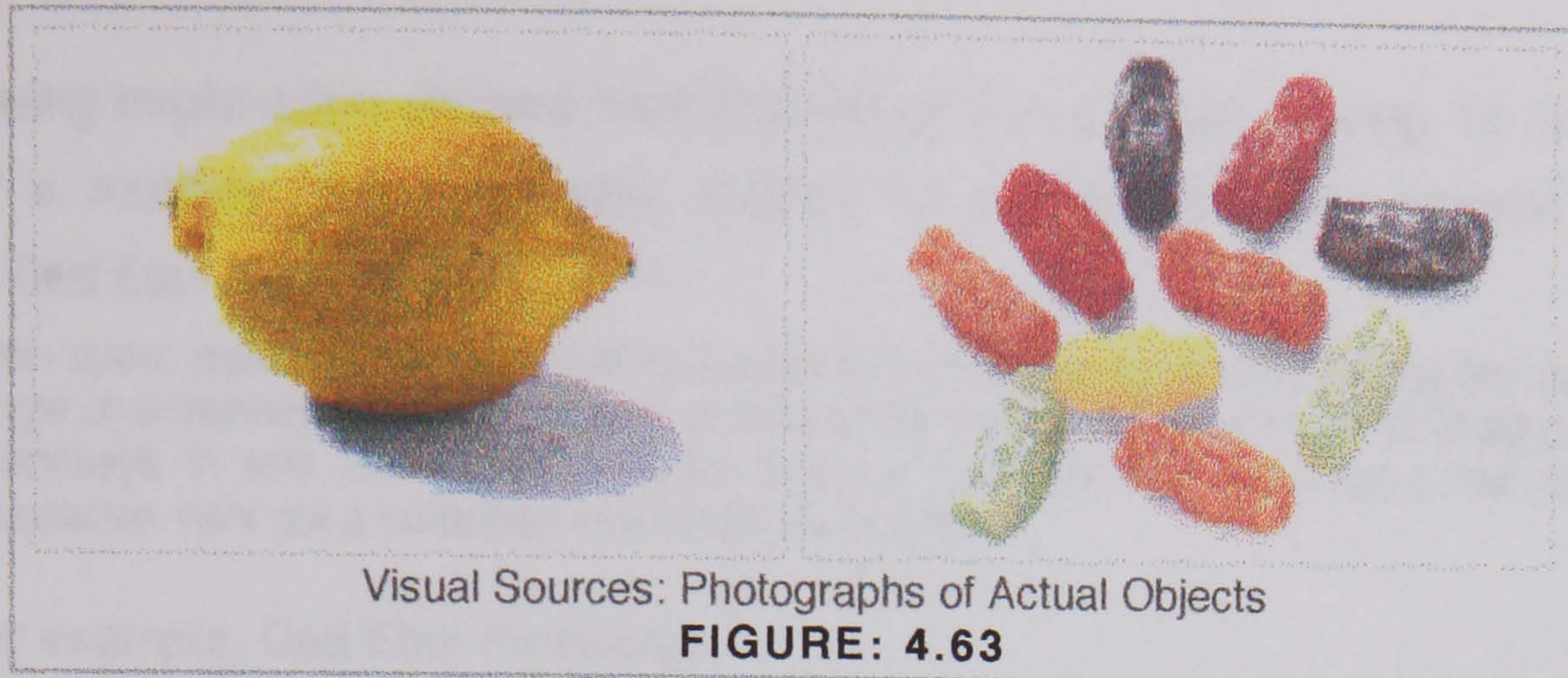
4.7.3 Gathering and selecting visual sources

The designers started gathering and selecting visual sources after they received the design brief. The processes of gathering and selecting visual sources for 'Colour Solutions' project involved two stages. The first stage took place during the processes of identifying the criteria for the potential identity system. The second stage took place when the designers started exploring design ideas and producing visual marks for the identity. During both stages the designers searched, investigated, gathered, and selected various visual sources. After the criteria for the identity system was established, the designers started selecting images from their visual ideas and their sketches. Then the designers referred to various visual sources and selected from them the images that matched their visual ideas and sketches. In addition, the designers initially selected four different typefaces as design options for the logo 'Colour Solutions' and for the textual contents of each design. One of these options was the Quartz typeface which was selected by the PO.

- **Visual Sources**

The designers' visual sources were: 1) design ideas, 2) actual objects, 3) CD ROM images, 4) visual sources from Photolibrary, 4) images from stock library, 4) press publications' designs, 7) design publications, 8) adverts, 9) identity logos, 10) typefaces, 11) the work of the competitors. Some of these sources were explored for clarifying the need for the project. Some were explored for differentiating the identity of 'Colour Solutions' from other identities, and some of the sources were selected for the actual designs. These visual sources can be classified under the following categories: 1) visual ideas, 2) art-directed visual sources, 3) commissioned visual sources, 4) found visual sources, 5) actual objects. The images and their sources were: 1) an image of a monkey that was taken from a stock library, 2) an image of a

penguin that was selected from a Photolibary source, 3) actual jelly babies which were bought from the market and then digitally photographed, 4) a lemon which was digitally photographed. Examples of the designers' visual sources are in FIGURES: (4.63, 4.64).



4.7.4 Visual patterns

According to Ged Equi, the designers selected images, photographs and objects from various resources. He explained that they selected the images they wanted from the photographs, and photographed the actual objects they wanted. He stated that the sources of the images had not any impact on the designers' visual selection. He said:

They don't have anything to do with why we selected these images. It didn't influence the choice, no.

The designer referred to the visual source as an image of something. The images were first selected from the designers' visual ideas and sketches, then the designers selected images from visual sources to match their ideas. The designer did not use the term visual pattern, but the designer's description of the images can be interpreted as saying these images were visual patterns. Ged Equi explained how they selected their images:

These were initially designed on paper and we decided that we were going to do them and they were sketched out. The monkey image was taken from a stock library. The jelly babies image we bought them. Then the photography was shot digitally. The company 'Colour Solutions' actually have digital photographic studios so they shot digitally the jelly babies and lemon in their studio. I did the art direction for the photography. We could not shoot a penguin in the studio so we went to a Photolibrary to get the image of the penguin.

The following explanation showed that the designers were not looking for just an image of a monkey, but they were looking for a specific visual pattern of a monkey. Ged Equi explained:

We spent quite a lot of time getting researchers from photo libraries to find the right type of a monkey with the right type of a smile so we probably had about 40 images of monkeys in and just looked through them and thought right we'll have that one because he's got a surprised expression on his face.

In another example, Ged Equi explained:

We knew what they were going to look like when we started to design them. We knew where the position was going to be on the page. We knew what size they were going to be. We didn't know how many jelly babies were going to be there but we knew they were going to be on the right hand side.

4.7.5 The need for the 'Colour Solutions' project

The need for the "Colour Solutions" project was initiated by the PO. The PO wanted the corporate identity to reflect the high professional quality of their products, facilities, and services. The PO needed a corporate system that can be applied onto their existing and future items and applications. Ged Equi stated:

They needed us to physically design their actual identity, and their system for their identity. Also, they wanted to implement that onto a basic range of stationary elements, and also to start looking at packaging and signage.

The PO wanted an identity system that was to compete with their competitors. Ged Equi explained:

Colour Solutions are a London company. They are competing with some of the people who are well known in the printing business, and who are based in Soho and places like that .

The PO wanted an identity system that had similar vibrant visual quality and properties to that of the businesses' identities in Soho in London. Ged Equi explained:

The people of Colour Solutions Ltd are in Queens Park which is NW6. One of the phrases the clients said was that they wanted to bring Soho to Queens Park: 'We want to have the colour and the style and the vibrancy of the Soho environment in our little part of the world.' This is one of the reasons why some of these are quite colourful images, and which it's a fun end result.

- **Criteria for the need**

The need for 'Colour Solution' project can be considered to involve two subtle issues: 1) identifying the problems of the previous corporate identity that necessitated the need for change, 2) creating a new identity system. Both phases were interwoven, but both involved different processes, methods, and approaches. The first phase of the

need was diagnosed as existing problems. The second phase of the need was focused on establishing a new system that was to be able to recover the previous problems, and to be able to satisfy the objectives and the future plans of the PO. In other words, the second phase of the need involved the factors that necessitated the need in the first place, but it included introducing a new system and establishing criteria for it. The new system then required to be translated into designs. In other words, it became the need pattern (NP) of the 'Colour Solutions' corporate identity. It can be deduced that the designers developed the need pattern (NP) of this project. The designers identified the problems of the previous identity, and established visual criteria for the new identity by searching visual sources and comparing existing identities in the market place with that of 'Colour Solutions'. After the designers established criteria for the new system, they started searching and selecting visual sources and visual patterns for meeting the new identity system and its criteria. These processes were decided and progressed by the designers, and the outcome was agreed upon with the PO. The PO initiated the need but they left it up to the designers to decide how to go about it. Ged Equi stated:

They didn't really explain exactly what they wanted. They just said that you know our company, here's a general background of what we've done, this is what we're going to do in the future. Go away and give us what you think we should do, how we should be branded for the future. So we were free to do whatever we wanted. We were telling them what they should do. They didn't have any real involvement in the process.

- **Processes of identifying the need and the need pattern**

The processes for identifying the need and requirements can be considered to involve 1) pointing out problems, 2) identifying previous criteria and exploring potential criteria, 3) establishing general criteria for the new identity system including visual criteria, management plans for the identity, and business criteria. These tasks involved: 1) gathering information, 2) searching and gathering visual sources, 3) analysing the various types of information, 4) establishing criteria for the identity system, the use of visual patterns, and the design contents, 5) graphic investigation for exploring ideas for potential identity system, 6) suggesting a concept that encompassed all the features of the corporate identity and its system.

Identifying the need started by gathering information of all types: verbal, written, and visual. The designers gathered information about the 'Colour Solutions' project from the following sources: 1) the PO, 2) from their own long business experience with the PO who was a design supplier for this design consultancy. The design brief was a verbal brief, Ged Equi explained:

We never actually had a fully comprehensive written brief because we've worked with this company for such a long time that everyone knew everything about the company at the time. And everyone knew that their old identity didn't work and it was uninteresting.

The briefing discussion included the following elements: 1) a background information on the company, 2) the objectives of the company including its future plans, 3) the requirements of the projects, 4) the tone of voice that the designs were to adapt for the design., 5) the communication objectives, 6) the target audience, 7) the work of the competitors, 8) the need for an identity system. Ged Equi explained:

The person who gave us all the information on Colour Solutions was the managing director who came and sat with us in this boardroom, and gave a two hour presentation about who colour solutions are and what they're going to do in the future for the next five and ten years and about how much money they're going to put into new technology etc etc. That was the background information from Colour Solution and also through our on-going relationship with them using them as suppliers over the last few years.

Both the designers and their PO did not need to do any marketing research for the project. Ged Equi stated:

They didn't do any marketing research to tell them that they should change their identity. It was just they knew it was time for change so there wasn't any research in to. We didn't do any research either.

4.7.5.1 Methods and approaches for identifying the need

The designers used various methods, techniques, and approaches for identifying and establishing criteria for the need. Then they absorbed the criteria into the need. Establishing a conceptual understanding by absorbing the criteria into the need can be considered as constructing a need pattern (NP) for the project. The methods and techniques which the designers used can be grouped under the following categories:

- **Brainstorming method**

The designers used the brainstorming, and discussion methods for identifying the visual and management criteria for the new identity system. Ged Equi stated:

We set up a design team of four designers who did a number of brainstorming sessions with and without the client and with designers in the studio.

- **mood board method**

The mood boards were used: 1) as a method for comparing the identity of 'Colour Solutions' with the work of the competitors, 2) for finding ways for differentiating the 'Colour Solutions' identity from the competitors. Ged Equi explained:

We did research into the competitors for colour solutions. We did a visual audit for people to look at how close colour solutions were to their competitors and to see how we could differentiate them.

The visual sources of the mood boards included: 1) different adverts, 2) different press designs, 3) various design publications, 4) various logos related to the same business area of the 'Colour Solution Ltd', 5) the previous logo of 'Colour Solutions'. Ged Equi explained:

We used those as the basis of trying to differentiate the identity for this particular project.

- **Comparison techniques**

The designers adopted the comparison technique when they analysed the visual sources and the previous corporate identity of 'Colour Solutions'. The comparison techniques were for: 1) pointing out the problems of the previous identity, 2) establishing criteria for the new one, 3) differentiating 'Colour Solutions' from other identities. Ged Equi explained why they used the comparison technique, "We wanted to stay away from what the competitors were doing."

- **Graphic investigation**

The designers used graphic investigation as a means for exploring and generating the new identity system, and for exploring design routes. These activities involved thinking of potential implementation plan for implementing the identity system. The other roles of the graphic investigation were related to: 1) exploring potential design possibilities, 2) producing design options, 3) writing down a design proposal, 4) getting approval from the PO.

- **The constraints of the need**

From the designer's explanation, the constraints of the need were related to the following" 1) copyrights of some of the images, 2) copyrights of the quotes (QUOTATION: 4.23). The designer did not discuss the economic conditions as constrains. Both the PO and the designers had mutual understanding of the range of costs for this project. In addition, the deadlines were planed in advance. From the designer's explanation, it can be deduced that the designers worked within the restrictions of the set of visual criteria which the designers established.

"When I choose a colour it is not because of any scientific theory. It comes from observation, from feeling, from the innermost nature of the experience in question." (Henri Matisse: 1869-1954)
"Colour without form is a soul without a body." (Andre Derain: 1880-1954)
"Colours like features follow the changes of the emotions." (Pablo Picasso: 1881-1973)
"White is not a mere absence of colour it is a shining and affirmative thing as fierce as red as definitive as black." (Gilbert Keith Chesterton: 1874-1936)

QUOTATION 4.23: THE QUOTES FOR 'COLOUR SOLUTIONS' PROJECTS

4.7.6 **Design idea: The concept of the identity system**

The designers explored various possibilities and aspects for generating the identity system. Out of these processes, the designers were able to create a specific concept. According to Ged Equi the concept for the new 'Colour Solutions' identity was based on the use of a series of quotes (QUOTATION: 4.23), and based on the idea of colour. He explained:

We envisaged that the system be a fluid one with a variety of different letterheads, for example, each one with a different quote and illustration. The quotes themselves might also change over time. The basic elements of the identity, on the other hand, were very simple, clean and professional. The overall concept could be applied to

other key identity carriers - packaging, signage, etc.

The new identity system consisted of the considerations and the criteria that the system was to satisfy. Ged Equi explained the new identity system (QUOTATION:4.24).

- The new system was a branded visual style, based on the concept of colour and using a variety of quotations and illustrations across all identity applications.
- The quotes themselves did not constitute the new Colour Solutions identity. They were important identity elements but needed illustrations, the Colour Solutions name and careful layout to really work as an identity.
- The quotes should change frequently and evolve over time. In this way colour Solutions will benefit from a fluid, dynamic identity that makes a considerable visual impact.
- All quotes refer to the nature of colour. Ideally they include the word 'colour' in the quotation. The quotes should not refer, specifically, to the image or illustration selected to accompany them.
- Wherever possible, the quotes refer to or have some connection to the application area concerned (e.g. the quote for fax cover sheets is about Black & White).
- All quotes must be attributed to an author. The impact of the system would be impaired if we were to make up our own quotes.
- A large number of quotes were sourced early on to allow for frequent changes and rotation. Quotes should be changed often enough that customers and other audiences do not become bored.
- Preferably, the quotes should be reasonably short.
- The system requires careful ongoing management if it is to work effectively and have maximum impact.
- The Colour Solution name must be clearly separated from the quotes at all times." (Ged Equi)

QUOTATION 4.24: CONSIDERATIONS & CRITERIA FOR THE IDENTITY SYSTEM

• Implementation plan

Ged Equi stated that their agreed proposal for developing the new 'Colour Solutions' identity covered the development of the system and its application to key stationary items and one or two corporate signs. Ged Equi stated that in order to get to this point, and to take implementation and management of the new identity further, they suggested certain implementation plan (QUOTATION: 4.25).

- | | |
|----------|---|
| Phase 1: | Prepare templates of priority stationary items (letterhead, business card, complement slip, fax cover sheet). |
| Phase 2: | Audit of identity carrying items- where should the identity appear, what are the most important items, how frequently should the quotes change, etc? Source quotes and images, investigate copyright. Prepare an implementation plan. |
| Phase 3: | Apply the system to other items (packaging, literature, office interiors). |
| Phase 4: | Management of the new identity. Involving design of bespoke items (perhaps business cards). Sourcing of quotes and images and controlling their use." (Ged Equi) |

QUOTATION 4.25: IMPLEMENTATION PLAN FOR THE NEW IDENTITY SYSTEM

4.7.7 Coming up with design ideas and graphic investigation

The graphic investigation had two phases. The first phase involved exploring the new identity system. The second phase involved exploring design ideas for the new system. The graphic investigation for exploring design ideas involved the following processes: 1) brain storming sessions for coming up with design ideas, 2) exploring various design ideas and design routes by producing visual marks on papers, 3) selecting visual sources and visual patterns, 4) discussing and comparing the design routes that the designers explored, 5) selecting the best design routes and design ideas, 6) scanning the pencil sketches of the design ideas on the computer, 7) presenting to the PO the potential design ideas. Exploring design ideas by producing visual marks can be considered design patterns.

- **Design Options and PCDH**

The designers created and showed the PO various design options, and specific ones were selected. Creating various design possibilities for NP can be considered as patterns of competing design hypotheses (PCDH). Ged Equi stated that four designers were assigned to work on this project. He explained that the designers explored their own interpretations on 'Colour Solutions', "We went away each putting our own interpretation to the Colour Solutions identity." He explained that the designers came up with four design options, and discussed them internally, then they presented them to the PO. He explained the processes of exploring and developing design possibilities:

We obviously did brainstorming sessions to think of initial concepts for the design briefs. Each of the designers went away and did sketches of the individual routes, and then we visualised each of the routes, and then discussed them with an internal group of Interbrand. Then we presented four concepts to the client. The favoured route was this quartz which we further developed and then went to artwork.

The PO did not give guidelines to the designers for the design ideas and the visual patterns. Ged Equi stated that they were given freedom to explore themselves what they were to do as long as they answered the need. The designers used hand drawing techniques, papers and pencils for exploring their ideas. They sketched out all the things they wanted to do. Then they transformed their drawings onto the computer, positioned the typography, and printed out coloured visuals. Then, the designers showed the initial drawings to the PO. Ged Equi explained how he explored ideas to link the quotes with visual patterns:

I just did an A4 list of quotes and then just sat down for a couple of hours and thought what image could go with that quote. Then wrote down. Then went to find the quote whether that was in a stock library book or actually scanning things in from a sweet package or something.

- **Design concept development**

After the PO selected the typographic design options and approved four design ideas, the designers started developing these ideas. During this stage the designers searched for and selected the right images for their design ideas. Ged Equi explained:

At that stage we put each of the four concepts onto letterhead, compliment slip and business card using the Macintosh computer and then after we selected with the client the design route and then went away and spent a little bit of time selecting the right quotes with the right images and then spent most of the time finding the right images for ... we knew what the images were going to be but we just had to find the right type of image.

4.7.8 Relevance of visual patterns to the NP

- **Subject matter**

The subject matter of 'Colour Solutions' project can be considered mainly as intangible subject matter. The tangible elements were related to the name of the company 'Colour Solutions' and to the specific information that the designers had to use on the stationary applications. The relationship between the visual patterns and the

subject matter of the project had intangible qualities. The designer classified the visual patterns of the project:

I classify them as being dynamic, stimulating, as humour, exciting, interesting, different for the market place, clean, well printed because that's what they do proper printing and trustworthy, open, sophisticated, that's about it.

- **Target audience**

The following excerpts showed how the designers thought of the target audience when they selected the visual patterns for 'Colour Solutions':

- **Creating constant interest in the items of 'Colour Solutions'.**

So when people have these letters sent to them, or when they see envelopes with these ideas printed on them, they won't necessarily see the same one.

- **The PO were able to choose the type of the stationary item they want when they communicate to their audience based on the visual patterns of the items.**

There are four different business cards, so the people from Colour Solutions can choose which business card to give to which client. In the next month or so they will have another four so gradually and gradually it would become much more flexible and a fun system.

- **The designers chose high quality because they knew as designers themselves that the potential target audiences from the designers were to be critical in their views.**

Well because we knew the target audience will be critical of this type of work because it's obviously been designed by someone so whenever I receive a letterhead I always look at it to see whether it's designed well in the first place.

- **The communicative characteristic of the visual patterns**

Matching the communicative characteristics of the visual patterns with NP varied (TABLE: 4.37).

Activities	Matching communicative characteristics of visual patterns with NP
To communicate humour	"I don't know if I can explain this. They saw the sort of joke, the pun, the humour in there." (Ged Equi)
The images were meant to be interesting	"So in a way it's people different interpretations of these quotes and images which is the most interesting thing." (Ged Equi)
The visual patterns were meant to be understood intuitively, to be open to various interpretations, and to stimulate a person to smile.	"It has to do with visual perception, intuition and lateral thought. I wanted them to smile when they saw especially the monkey one. Most people sort of smile and think it's quite humours." (Ged Equi)
Unusual images in letterhead	"Also, I wanted the audience to be interested and stimulated by seeing an unusual image on letterhead." (Ged Equi)
To communicate high quality designs to the target audience	"All this work is aimed at designers and people in the sort of media industry so we do need something here that looks clean and different and stylish." (Ged Equi)
The designer explained that the designs succeeded in communicating the characteristics of the identity system.	"I think that we've succeed in communicating and showing an identity which is fluid, dynamic and can become useful for a long time." (Ged Equi)

TABLE 4.37: MATCHING THE COMMUNICATIVE CHARACTERISTICS OF VISUAL PATTERNS WITH NP

The designer stated that the communication of the images was not direct, and it depended on stimulating the target audiences' curiosity :

The communication of these isn't direct because you can interpret it in any way that you want. they're meant to be a little bit ordinary, a lit bit strange, a little bit weird, because that's the way to gain people's attention. To get people to look and to read thing if things are different and placed in a different context, so that some person might say: 'Why they got jelly babies on there?' But to me that's fine at least they're looking at the thing and not throwing it in the bin.

4.7.9 Processes of selecting visual patterns

Selecting visual patterns for the 'Colour Solutions' project involved various types of selection (TABLE:4.38).

Categories	Types of selecting visual patterns
Intuitive selection	You can call it interpretation. I would just call it a feel or intuition really." (Ged Equi)
Selection based on thought processes and design ideas	"I thought jelly babies would be apt so why not use it. So there's no real science behind why I chose it, it just really happened. It was just my interpretation of that quote. Someone else might have decided to use smarties or something else for that." (Ged Equi)
Selection based on the designers' knowledge of what they wanted	"We knew what the images were going to be, but we just had to find the right type of image." (Ged Equi)
Selection based on conjecture and refutation	"You're initial thought might not be in the end result." (Ged Equi)
Selection provoked by satisfying the economic constraints of the NP	"The clients did not tell us what to do. But you obviously want to make the job as good as possible." (Ged Equi)

TABLE 4.38: TYPES OF SELECTION

The processes of selecting visual patterns can be considered to involved purposive pattern recognition (PPR). According to the designer, they first came up with design ideas and explored them by producing initial drawings. Then they searched and selected visual images that matched their ideas. The main visual source can be considered to be the designers' thought process. The designers gathered many pictures of monkeys and penguins, and photographed lemons and jelly babies. Then they selected from them the images that matched what they wanted, and what they were looking for. The designer stated that the design ideas influenced the way he selected his visual images:

I cannot separate the two. I think the design idea has to affect the actual selection, what you finally select.

The designer stated that he selected images to match the need and requirements for the project. The designer explained that they selected the images that had the quality and the properties they needed for their project. From the designer's explanation, the following selection processes took place: 1) the designers thought of particular design ideas (visual patterns) as appropriate for the need (NP), 2) then they sketched out these visual patterns, 3) then they searched visual sources and selected from them visual patterns similar to that of their thoughts, 4) then they selected images and photographed actual things (lemon, jelly babies). Ged Equi explained how they selected

their visual inputs (visual patterns) (QUOTATION: 4.26). The processes of selecting visual patterns was accompanied by processes of selecting quotes (See quotes in QUOTATION:4.23. p.257). Ged Equi explained:

I sourced quotes and colour. I got one of the researchers to find me 50 or 60 quotes and then I chose the most interesting quotes.

"We sketched what we wanted on each of these designs. Then we said for instance we want a monkey so we spent a couple of hours looking through a stock library book or a CD-ROM to find the right type of monkey. Then for this one which is the jelly babies we went out and brought a packet of jelly babies and put them on the scanner and the computer and scanned the jelly babies in. To set them on the flat bed scanner, it's quite a low resolution and then positioned them on the sketch to show them to the clients. But then we photographed them digitally to get them exactly as we wanted them. The lemon, the initial concept was sketched out but then we found an image of a lemon in a CD-ROM catalogue which we then placed on to this visual and the same for the penguin." (Ged Equi)

QUOTATION 4.26: SELECTING VISUAL PATTERNS AS A PROCESS

The designer stated that with each quote they selected an image. He explained that there was not any relationship between the quote and the image. Also, he explained that the selected image was just his interpretation of the quote. Also, the designer stated that the selection processes involved selecting typefaces:

Both together. They were designed both together. I don't think one works without the other especially in this instance.

- **The quality of visual patterns**

The designer asserted that the quality of the visual patterns was a very important consideration when the designers selected the visual patterns for matching the NP. The designer explained the criteria they considered for the quality of the images. His explanation included the following expressions about the quality: 1) appropriate images, 2) the right image, 3) professional quality, 4) high quality, 5) unique, 6) good, 7) easy to understand, 8) can be understood intuitively, 9) open to interpretations, 10, different than what people expect to see, 11) the most realistic medium, 12) unusual, 13) stimulating, 14) readable, 15) stylish, 16) funny, 17) clean images, 18) sophisticated, 19) startling, 20) adapting images in order to look better.

4.7.11 Adaptation

Adapting visual patterns was a manifestation of the selecting visual patterns. The visual patterns went through the following selection and adaptation processes: 1) from ideas, 2) to sketches, 3) to actual objects or and photographs, 4) to images, 5) to design patterns. The visual thoughts were transferred into pencil sketches. Then they were scanned onto the computer, combined with typographic elements, and printed out as computer visuals. During these processes exterior selection of visual sources took place. From the visual sources specific visual patterns were selected. These visual patterns were similar to the visual thoughts. The monkey and penguin were translated from transparencies to digital photographs. The lemon was taken first

from an actual lemon, then was replaced by a found image which was digitally photographed latter on. The jelly babies were photographed digitally from actual ones. These patterns were cut out of their original environment , and placed in a particular position within the design format. The shadows of the lemon and jelly babies were changed to a black colour before the printing process for avoiding any visual distraction between the image and its shadow (normal shadows include colours). The designer stated that the background of the monkey and penguin were deleted. The processes of adaptations can be considered to involve how the visual patterns were tailored to the need pattern.

4.7.12 Purposive pattern Recognition (PPR)

Selecting and matching visual patterns with NP for ‘Colour Solutions’ project can be considered to involve purposive pattern recognition (PPR). From the designer’s explanation, it can be concluded that the designers recognised certain visual patterns (PPR) as an appropriate fit for the NP. From the designer’s explanation it can be considered that each visual pattern consisted of visual parts. Each of these parts can be considered a visual pattern. The designer’s explanation showed that the designers matched each part of the design idea with various aspects of the need. The various visual elements of the design idea can be considered to be as parts of one whole pattern. So that even when the designers matched aspects of the design idea with aspects of the need, they did not handle them separately. In other words, the designers knew the various aspects of both the design idea and the NP, but they did not break them down into separate ideas and separate needs. Matching visual patterns with NP involved PPR for matching aspects from both (TABLES: 4.39.1, 4.39.2).

Activities	PPR for matching visual patterns with NP
Matching the variety of the need’s applications to a variety of visual patterns	“We knew it was going to have to be implemented onto a variety of stationary elements so that’s why we used a variety of different images and a variety of different quotes (See TABLE:6.5). The media it was displayed on helped us to create the identity.” (Ged Equi)
Matching the idea and quote about colour with the word ‘colour’ of the name of the company.	“These images, these designs were chosen to compliment the design idea of each of these items. Each of these items has a quote about colour.” (Ged Equi)
Matching quotes about choices of colours with ‘Colour Solutions’ type of work	“The 15 quotes were most relevant to Colour Solutions and had something to do with choice of colour, or just something that was a little bit quirky or different.” (Ged Equi)
Matching the dynamic feature of the identity system with variety of visual patterns.	“We designed them to show the client that there are 15 version of these letterheads because the idea is that this is a flexible system and its updated every four or five months and these four in front of us were the first four to come out and these will be upgraded with the new ideas in the next month or so.” (Ged Equi)
Matching flexibility of the identity system with the potential future of the need of the PO.	“The good thing about having a flexible system like this is that we can give them more designs in the next month or so. We can print them as and when they need them.” (Ged Equi)

TABLE 4.39.1: PPR FOR MATCHING VISUAL PATTERNS WITH NP

Activities	PPR for matching visual patterns with NP
Matching the feature of a stationary item with a visual pattern	"For example, we chose for the fax the penguin because it was black and white, because the fax is the same black and white. So the image was chosen because it was going to be on a fax headed sheet. There is a reason for this one but not for the other one." (Ged Equi)
Matching emotions with visual patterns	"The first image talks about colours like features follow the changes of the emotions, quote by Picasso. I chose the monkey with his hands on his head. I thought monkeys are very similar to humans and the emotions are similar. It seemed quite funny and apt, there's a little bit of humour in there." (Ged Equi)
Differentiating 'Colour Solution' from the work of the competitors by using digital photography as a medium	"We did specifically chose to use images and therefore photography on these because not many of colour solutions' competitors uses photography at all especially not in this way so we thought it would be good to do this." (Ged Equi)
Matching photography with the type of business area of the PO	"Photography was chosen because it seemed to be the most realistic medium. If we had chosen an illustration of a monkey I think people would have tried to read more into why it was done as an illustration rather than it was a monkey. We specifically used photographs because we thought that photographs are obviously very realistic." (Ged Equi)
Matching the need for apt recognition of the identity with an apt medium	"Also, I think the immediacy of photography was very apt. There are also sort of quite strange images to have on letterheads and compliments so hopefully that makes them unique.. Also, they're easy to read ." (Ged Equi)
Provoking the target audiences' interests by the use of images and quotes	"People can create their own interpretations of those images and why they were chosen with those quotes. " (Ged Equi)
Matching the technology of image production with the PO's use of technology	"Also the client has technology which is digital photography and they didn't say design an identity where we could use digital photography. But it just happened that we could shoot some of these things digitally. It was very good that we could do that. Because if one of the sales people from Colour Solutions will go out and try and sell this, can say: 'Oh by the way we shot this in our digital studio and is the best thing since sliced bread'. So it sort of happened, not by accident but it was quite good that it happened... We took the type of business into consideration because they have the technology available specifically the digital photography." (Ged Equi)
Matching the identity system with the background of the PO's business	"I wouldn't have designed that in that sort of way if I hadn't had the background that I've got." (Ged Equi)

TABLE 4.39.2: PPR FOR MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (2): CORPORATE IDENTITY PROJECTS

4.8 MINI-CASE STUDY (7):

A BRAND MARK: THE MINI CAR

4.8.1 Background of 'A Brand Mark for the Mini Car' project

This project was designed by the design consultancy Edward Briscoe Design Ltd in London. A design team and planning people from the design consultancy worked on this project. The title of the project was 'A brand Mark for the Mini Car'. The project started in October 1995 and it was in the market within a year from that date. The target audience of this project was a very wide international audience. General information about this project is in APPENDIX (XI). According to the art director Mr. David Spencer (1997), the clients (POs) of this project was 'Rover Group'. The main business area of the PO was manufacturing automobiles. The Mini Car had several different owners. The POs wanted a brand mark to be designed for the Mini Car which never had a mark brand before. The brand mark was to be used on the car and off the car on ranges of merchandising products. It was used as a badge, and it was the fulcrum of a whole Mini brand programme. Three different design groups were involved in this project. The design consultancy 'Edward Briscoe Design' had to develop the brand mark. Another design group was to create an environment for the Mini Car in terms of the high street where the Mini car was to be sold. The third design group was to look at merchandising and select the merchandising which had Mininess as its very essence. The Mini Car was a British car that first appeared in the market in 1959. It was created by Sir Alec Issigonis who was an artist, a designer, and an engineer. According to the brochure of the Mini Car 'It's the image of you', the Mini car was considered to be:

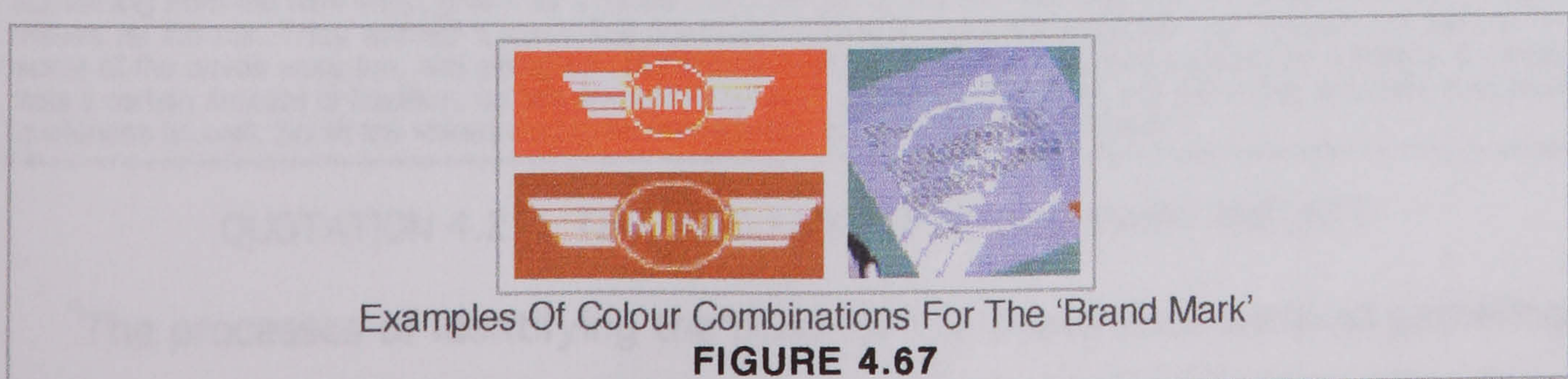
boldly different from any other car on the road and packed with daring innovations. Other motor manufacturers were quick to copy the ideas; but they've never been able to copy the style. (p. 3).

The Mini Car was considered an individualistic, and a popular car. David Spencer stated that the Mini Car was considered an unusual car in Britain. It had a great deal of respect in Germany because people were able to use it for racing. It was regarded in France as a fashion accessory. The other practical value about the car had to do with its small size so it was easy to park in busy streets. The event for which the design project took place was related to the development of the brand new Mini. The new Mini was still the original, but the latest Mini had major new safety features. Also, it offered the

audience more style choices from the sporty to the classic. From the classically luxurious to the visionary stylish. Its customers were able to choose the materials for the seats, the colour of the car, and to add certain accessories if they liked. David Spencer explained that the Mini Car enjoyed a wide range of audience in various parts of the world especially the UK, France, Germany and Japan. The budget for this project was fairly high because the PO wanted the design approach to be totally comprehensible and correct for the product. The competitors of the Mini Car were automobile manufacturing companies.

4.8.2 The design of the Brand Mark for the Mini Car

The design of the brand mark (FIGURE:4.65) was to be applied as the following: 1) as a 3D design (FIGURE: 4.66), 2) as 2D design to be printed in various materials, 3) embossed, or stitched on various merchandising products. The design of the brand mark consisted of a combination of two colours that was to be changed when it was required to any other combination of two colours for various applications (FIGURE: 4.67). The brand mark was used on various merchandising products (FIGURE: 4.68).





Examples Of The Use Of The 'Brand Mark' On Various Applications
FIGURE: 4.68

4.8.3 Processes of identifying the need and the need pattern

According to David Spencer, the client briefed the designers with the need and the requirements for the 'Brand Mark' (QUOTATION: 4.27). The client demonstrated to the designers certain sets of historic, traditional, emotional, stylish values and qualities of the Mini car that the 'Brand Mark' had to embody. The values were required to be immediately apparent. The PO provided the designers with various types of documents including visual materials and marketing information. Understanding the need for the project involved understanding the following: 1) the values that the Mini Car had in terms of its design, visual attribute, and function, 2) its unique shape in comparison with other cars, 3) its place within the people's cultural trends both when the Mini Car became popular and in the present.

"It was basically creating a brand mark for a car which had never had a brand. What we had to do was create a brand mark for it which could be translated and used not just on the car but off the car into merchandising because they wanted to use the brand independent of the car to get the ethos of the brand across into other products. To create a mark which could be developed away from the car, so it could stand alone by itself. You could buy something from the Mini shop, give it as a present and people would see that object as inherently having the same values as the car. They wanted a mark that summed up certain core values of the car. Excitement, innovation, some of the words were fun, and escapism. But then married with that; the fact that the car had a history. So there was a certain amount of tradition, certain amount of inherent Britishness in there, and there was a certain amount of quirkiness as well. So all the values had to be immediately apparent." (David Spencer)

QUOTATION 4.27: THE NEED FOR THE 'BRAND MARK' PROJECT

The processes of identifying the need for the Brand Mark involved gathering and analysing various types of information. The designers gathered information from the

following sources: 1) the PO. 2) historic documents about the Mini Car and other types of cars, 3) marketing research, 4) visual research, 5) the market place, 6) the work of the competitors, 7) car clubs, 8) car magazines, 9) books, 10) museums. David Spencer stated that they also talked to people who worked for Rover, and asked them about their perception of what Rover was. He stated:

It was very interesting, everybody has a different perception of Mini and it really goes to show when our association with the car was. That might of been for some people 30 years ago. For other people it might have been one or two years.

David Spencer stated that they gathered and analysed various types of information before they identified the need. He stated that they developed the design brief further during the processes of analysing the various types of information. The analyses aimed at identifying the values which the mark had to represent. Identifying the values involved exploring in visual terms certain values that the car considered to have. The designers explored the values by trying various ideas and comparing them with their analyses and findings. In a way the designers can be considered that they broke down their visual information to very subtle details so that they were able to see the differences between how these values were addressed visually in various periods of time. Trying ideas for discovering the subtlety of the values involved producing visual marks and searching and selecting visual sources and visual information. By comparing findings from their visual research with initial design ideas; the designers were able to identify and develop the set of values further into a more comprehensive state (TABLE: 4.40). The designers studied the functional aspects of the Mini Car and its visual structure in terms of quality. The conceptual out come of the processes of identifying the need can be considered as the need pattern (NP) for the project.

During the analyses processes the designers created mode boards for comparing and identifying the various sets of values. David Spencer explained:

We created some mode boards that helped with various positioning and helped the designers understanding of precisely what was required.

Categories	Criteria For The Values Of The Need
Core values of the car	1) excitement, 2) innovation, 3) fun, 4) escapism, 5) history, 6) contemporary value." (David Spencer)
Traditional values	"1) inherent Britishness , 2) inherent tradition of the Mini Car." (David Spencer)
Emotional values:	"1) the mark had to look like as jewel, 2) it had to look like as if it had been on the car for years, 3) it had to have very traditional look, 4) it had to have a certain amount of peculiarity."(David Spencer)
Functional values	"1) the mark had to work on the car, 2) it had to be capable of being translated onto different materials, and by different methods such as printing, stitching, and stamping." (David Spencer)

TABLE 4.40: THE VALUES OF NP AND THEIR CRITERIA

Also, from the mood boards the designers were able to select certain visual information. At the end of these processes the designers were able to identify the need. The designer stated that these processes took long time because it was hard for them to marrying historic values with modern values, and excitements, fun and escapism all in one idea. Therefore the designers had to experiment and see visually how these various values can be represented together in one design idea. From the designer's explanation the following can be deduced: 1) the designers thought of the need as a need pattern (NP) that consisted of various parts (values) that had to work together as one whole, 2) the relationship between the design idea and the need pattern (NP) was a matching activity which involved purposive pattern recognition (PPR), 3) the design idea was a whole pattern that consisted of various visual parts.

- **The constraints of the need**

David Spencer did not regarded time and budget as constraints for this project. He stated that for this particular project they were given plenty of time and fairly high budget to search visual sources, to identify the need, and to develop their design ideas. He indicated that the PO was concerned in reaching a comprehensive and correct design solution for the project. Although money and time were not considered as constraints, it can be considered that the need for the project was achieved by certain amount of time and money. The main constraints were related to the subject matter and to the communication objectives of the project. From the designer's explanation, it can be considered that the constraints were related to the following: 1) the type of car, 2) the subject matter, 3) the need itself including the 'Brand Mark' and the various types of values that it had to represent within one design idea, 4) creating a design mark that can be translated onto different materials, and by the use of several methods, 5) the 'Brand Mark' consisted of two colours, 6) the flexibility which the 'Brand Mark' had to posse when it was to be produced by the use of any two colours combinations. In other words the brand mark had to maintain its visual identity when it was to be used in various products, and when different colour combinations were to be used.

From the designer's explanation, it can be considered that the designers created some of the constraints by considering up certain criteria for interpreting the values that the brand mark had to represent and by adhering to the abiding criteria when they started exploring their design ideas further. The other issues related to the constraints had to do with two issues: 1) The copyrights of some of the visual sources. David Spencer stated that the first thing they did was to see a copyright expert for identity issues, and get a clear idea about how they can get certain visual sources. 2) The work of the competitors. The designers had to differentiate their design from the work of the competitors, and at the same time they had to compete with the competitor in producing a distinctive and an authentic design.

4.8.4 Gathering and selecting visual sources

The designer stated that they gathered and selected visual sources for this project partly through research. The visual sources varied in their types and contents. Selecting visual sources was very important for this project. The visual sources included relevant information about the Mini Car. David Spencer stated that the visual sources they selected were a part of a learning curve for them. He said:

We gathered all this information together. It was very useful as a part of a learning curve for us. It was very useful in terms of questioning the brief and refining the brief. It was important in terms of looking at the kinds of material that was pertinent to the car.

The processes of gathering and selecting visual sources started during the processes of identifying the need and its context. The visual sources for the 'Brand Mark' covered wide ranges of visual sources. Some of these sources were investigated for identifying the criteria for the need, and some were investigated for exploring design ideas. These sources were: 1) a wide range of cast marks, 2) similar symbols that had been revised when the car was first created and the car was first designed, 3) similar marks for other cars, 4) the designs of the 60's, 70', and 80's 5) the street culture that was around at the time when the car started to become popular in terms of the rise of the youth culture, 6) icons of that time, 7) symbols, 8) fashion at the time, 9) paintings at the time, 10) people and the things they were doing, 10) products which the designers felt were similar to the Mini, 11) contemporary classic designs, 12) London transport buses, 13) taxis, 14) Oxford Street, 15) Coca Cola, 16) Levi jeans, 17) books, 18) newspaper of the 50's, 60's, and 70's, 19) museums, 20) car clubs and magazines, 21) photographs of old cars. David Spencer stated that they gathered their visual sources mainly through research, and through looking at books and visual documents. He said:

Looking at books which were contemporary for the launch of the car. Gaining information from clubs which were very keen on the Mini and had a lot of historical references, such as design books and newspapers at the time. So we got an immense amount of material as the basic source. We visited museums. Nearly all the marks that were produced for the Rover Group went back to the past, many had common themes which were important to the project.

The visual sources for this project can be grouped under the following categories: 1) Retrieved sources such as personal ideas and imagination, 2) Found visual sources and they were from Photo libraries, Photoshop, Libraries, Museums, collections, CD Rom, historic documents, social institutions, design work, 3) General sources and were outdoor sources, natural things and objects, peoples' behaviours, words and their meaning, the media, political sources, fine art and design sources, the work of the competition.

4.8.5 Visual patterns

David Spencer stated that their visual sources were used as visual references. He also stated that some visual sources were sources of inspirations and ideas, and some sources were sources of visual information. He said: "Some visual information obviously became very important for us." The designers' visual sources included mental images. The designer stated that they analysed their visual sources in order to establish a visual perception about the values of the 'Brand Mark'. From the designer's explanation, it can be considered that the designers selected certain visual patterns from their visual sources. Also, it can be considered that selecting visual sources for this project was a necessary requirement for selecting visual patterns. The historic side of the NP in regard to the history of Mini Car and the historic development of mark designs and badges required investigation. Also, understanding the visual culture of the past and the present time required having awareness. Such awareness was not possible to be achieved without searching and selecting relevant information.

4.8.6 Design ideas

The designer stated that most of their design ideas were from imagination. From the designer's explanation it can be considered that the design idea was a visual pattern that consisted of various visual parts. Each part was a visual pattern which worked within the totality of the pattern of the design idea. After the designers identified the values that the 'Brand Mark' had to represent, they had a variety of choices for interpreting each value. The stages of the design idea of this project can be classified under the following categories: 1) searching visual sources for getting a feel about the various possible interpretation of the values, 2) coming up with design ideas about the values, 2) exploring various design possibilities, 3) selecting visual patterns from these possibilities and adapting them to each other for creating better design options, 4) creating design options, 5) selecting the best design option, 6) developing the design option further, 8) crafting the design option, 7) final artwork. Between these stages the designers had feedback and evaluation sessions with and without the PO. Selecting and adapting visual patterns continued during and between these processes.

4.8.7 Coming up with design ideas and graphic exploration

The design idea started as a visual perception. Then the designers explored the design idea by producing visual marks on design surfaces such as drawing pads and computer screens. The visual marks can be considered design patterns. The visual pattern of the design idea for the 'Brand Mark' started taking initial shape and developing during the processes of identifying the need. At the very initial stage the

designers produced 2D designs. At further stage the designers explored and created 3D drawings on computer screens for moulding the design of the mark. David Spencer explained:

We used various computer techniques. Then we used a lot of 3D drawing techniques as well to try mould that and make it look more realistic when actually placed on a facsimile car electronically.

Coming up with the design idea for the 'Brand Mark' for the Mini Car involved various processes. These processes can be grouped under the following: 1) searching and selecting visual sources and visual patterns for inspiring design ideas, 2) graphic investigation for each of the values that the 'Brand Mark' had to represent, 3) exploring various design ideas by producing hand drawing visual marks for initial ideas and thoughts, 4) visual search for developing the visual patterns of the design ideas and for making the necessary changes, 5) exploring design ideas further, 6) producing various design options, 7) narrowing down the options, 8) selecting the best design idea, 9) getting the approval from the PO. During these processes the designers selected various visual sources and visual patterns, and received various types of feedback from various sources. Also, during these processes the designers kept analysing, comparing, and evaluating their design ideas, their design patterns, and their design alternatives. At the end of the initial stage of exploring and selecting a design idea the designers created two models of badges.

- **Design options as PCDH**

Design options were created during the processes of exploring the design idea. Some of the design options were considered inappropriate because they did not represent all the values that the NP required. David Spencer indicated that they came up with various design ideas, but every time they came with an idea an element of the criteria was missing. The designers explored various ideas until they were able to meet the criteria for Need. During these processes the designers selected visual elements (visual patterns) from their design ideas and from their visual sources and combined them together in order to meet the need and its criteria. The variety of design options which the designers created can be considered as pattern of competing design hypotheses (PCDH).

4.8.8 Relevance of visual patterns to the 'Brand Mark'

- **The subject matter**

The subject matter of the project was relevant to the Mini Car, but it was not the Mini Car itself. In other words, the car as a visual object was not part of the design imagery of the project. The subject matter in a sense can be considered intangible because it was about the qualities and values of the car. Qualities and values can be

considered to allow for various types of visual interpretations. The name of the car 'Mini' was part of the subject matter. The subject matter of this project can be considered to be related to the communication objectives of the NP.

- **The target audience**

The target audience varied in age, gender, social status, and nationality. David Spencer stated that young audience liked the car because of its heroic and unusual style. Old audiences liked the car because it reminded them of their youth, and it was a customised car. The market of the car was an international market. The PO's marketing strategy focused on the UK, Germany, France, and Japan as their immediate target markets. Other parts of the world were not excluded. David Spencer stated that they thought greatly about the target audience when they designed the mark. He stated that they thought about the audience in terms of giving him quality, and evoking the experience of driving the car and enjoying its qualities.

- **The communicative characteristic of the visual patterns**

The communicative characteristic of the visual patterns can be considered to be very essential for the 'Brand Mark' project. The communicative characteristics of visual pattern of the design had to do with the following: 1) it had to attract the attention of potential audience, 2) it had to evoke all the exciting and pleasant values of the Mini car itself, 3) it had to be appropriate, 4), it had to give an authentic feel about the brand mark. The designer stated that the design of the mark communicated its values both directly and indirectly to the target audience. He said:

I think you can split it in two. I think through the badge on the car it probably has an indirect link. With the mark away from the car, I think it has communicated the message directly because if some one wants to busy something with the Mini mark on it they have to be proud to show that.

4.8.9 Processes of selecting visual patterns

The processes of selecting visual patterns involved purposive pattern recognition (PPR) the designers recognised and selected the visual patterns for the 'Brand Mark' by the following ways: 1) intuitively, 2) by processes of conjecture and refutation, 3) according to a set of criteria, 4) by comparison, 5) by knowing what one was looking for, 6) by inspiration, 7) by discovery, 8) during their exploring and crafting activities, 9) from experience. These processes overlapped. Sometimes the selection was intuitive, or provoked by looking at a visual source. Sometimes, the designers knew what they wanted. Other times what the designer wanted did not work and they had to try other visual patterns. David Spencer explained:

Sure we develop the ideas, it's a starting point. But sometimes a design idea does not develop. Sometimes an idea does develop. I do not think one idea goes all the way through to the final thing. Sometimes ideas don't go anywhere, it's difficult to give a definite answer.

David Spencer stated that he recognised what to do from his design experience. He said:

My design background makes me recognise which elements I need to take away, and which elements are important. Maybe a younger designer would get the balance wrong. As a designer I think it is left to experience.

4.8.10 Adaptation

The adaption processes can be considered to involve the following: 1) addition, 2) elimination, 3) adjustment, 4) combining, 5) mutation. Adapting visual patterns for the 'Brand Mark' for the Mini Car project can be considered to be of two kinds: 1) adaptation related to the selection, 2) adaptation in terms of adjustment to various use of materials. From the designer's explanation, it can be considered that both types of adaptation overlapped sometimes. The design pattern of the 'Brand Mark' had to possess certain flexibility to work on its original environment on the Mini Car, and to work on various merchandising products. Using the 'Brand Mark' on various merchandising products can be considered to involve technical adaptability because the design itself was to remain the same except that it had to accept the changes of colours without changing the identity of its visual pattern. Adaptation can be considered to be related to the flexibility of the visual patterns of the various values to each other within the total pattern of the design. From the designer's various explanations, it can be considered that adaption was a manifestation of the selecting visual patterns. Less adaptable visual patterns were discarded during the selection processes. Adapting visual patterns involved using various techniques, methods, tools, and materials. The designers used the following techniques and tools: 1) computer techniques, 2) 3D drawing techniques, hand drawing techniques both on drawing pads and on computers' screens. They also photographed, photocopied, and scanned images.

4.8.11 Purposive pattern recognition (PPR)

From the designer's explanation it can be considered that matching visual patterns with NP involved PPR. The designer stated that they selected their visual information and developed the design idea according to certain criteria (TABLE:4.41). From the designer's various explanations it can be considered that the processes of selecting and adapting visual patterns involved PPR. PPR for this project involved discarding visual patterns and a sense of what to do next.

Activities	PPR for matching visual patterns with NP
Thinking of the NP when selecting visual patterns and creating design patterns	"All the time we're trying to answer the brief." (David Spencer)
Solving the visual differences between the various values that the 'Brand Mark' had to represent by creating a visual balance	David Spencer explained that at the beginning when they tried to implied the various values of the Brand Mark in its design they faced the following problems: 1) there was a conflict between the visual information of some of the values, 2) when they focused on heritage the other values such as 'fun' and 'escapism' were missing from the design. He stated that they solved this problem by creating a balance between these values.
Selecting the visual pattern of the 'round circle' for matching NP	"It became obvious that the round boss as we call it, that round circle is very important because the car was round." David Spencer: 1997) (See FIGURE: 6.15)
Selecting the visual pattern of the 'wings' for matching the historic side of NP	"The wings were very important. They have historical context and background." (David Spencer)
Recognising visual patterns at early stage as having potential for matching NP	"Those two elements (circle, wings) fairly early on in the project looked like they were going to play an important role, and that came very much from visual information that we received."
Recognising visual patterns (circle, wings) as potential for matching NP required exploration and involved further innovative processes	"But in terms of trying to take the project further , and trying to create a mark a logotype that had not been used before, took design skills trying to be a little bit more innovative. Trying to look at a value of the work rather than just be stuck in pure heritage." (David Spencer)
Associating the design pattern with the Mini Car in the absence of the car itself	"The car was the mark and there was no real mark on the car because the car said everything. But take the car away you've got to come up with something that says everything about the car without just putting a picture of the car on a T shirt. Because there is a possibility that the car might change and become an entirely different model but they might still use the same name." (David Spencer)
Recognising certain visual sources as appropriate sources of visual patterns for matching NP	"Well for example, we wanted the whole thing to be a little more coming from the past but fun loving. We looked at the visual material of record albums of the time and fashion and things like that. Some of the lettering and colours that were used at the time. We wanted a feel of the 60's we looked at motorbike badges, American car badges that kind of things." (David Spencer)
Considering the quality when selecting and matching visual patterns with NP	"It had to be absolutely look right. It had to be appropriate." (David Spencer)

TABLE 4.41: PPR FOR MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (2): CORPORATE IDENTITY PROJECTS

4.9 MINI-CASE STUDY (8):

LOGO AND DESIGN IMPLEMENTATION: CENTRICA

4.9.1 Background history of “Centrica” project

This project was designed by the design consultancy ‘CDT Design’ in London. A design team from the design consultancy worked on this project. The title of the project was ‘Centrica’. The project involved corporate identity - logo and implementations. The designer discussed only the logo. The project started in December 1996 and was still going on at the time of the interview. General information about this project is in APPENDIX (XI). According to the project director Mr. Iain Crockart (1997), the client of this project was British Gas-‘Centrica plc’. ‘Centrica plc’ was previously part of British Gas and was previously referred to as ‘British Gas Energy’. ‘Centrica plc’ was a UK based company, and the other part of the company was a European company. Since the privatisation in 1986, there was a developing competition in the supply of gas in the UK. Both the commercial market as well as the domestic market opened to competition. The demerger was considered as an effective means in response to these changes. In 6 February 1996, British Gas announced its intention to pursue a demerger to create two separately listed companies. The demerger became effective in February 1997. The new names of the demerged companies were: ‘BG plc’ for British Gas, and ‘Centrica plc’ for the separate publicly listed company which was to be created by the demerger. The other new company ‘BG plc’ was concerned with exploration, and other business activities. ‘BG plc’ was to use the British Gas name outside the UK. Whilst ‘Centrica’ was to use the British Gas name for all Centrica’s business activities in the UK.

The business activities of ‘Centrica plc’ were: 1) Gas sales and trading, 2) Gas production (Morecambe), 3) Services, 4) Retail (Energy Centres), 5) Creating a major provider of gas and energy-related products and services to homes and businesses in the UK. The designer stated that since many new competitive companies were to be available in the market, people in general had many choices from where to buy and sell Energy and Energy-related products. So the people from British Gas wanted to prepare themselves into that sort of company where people can buy gas, electricity, hydropower, wind power, etc., from them. British Gas required a separate corporate identity program for each of the new companies. The client (PO) approached

and selected 'CDT Design' as a fore for the project and gave them options to select one of the required projects. CDT Design chose the 'Centrica' project because it was the largest identity in terms of the size of the client. The name 'Centrica' was created by the design and research consultancy 'Interbrand' in London before the designers received the brief. The project was a logo for 'Centrica plc'. The logo was not to be used at the present time onto vans or in high streets. It was to be used for stationery items, internal signage and external signage for the headquarters. The budget of this project was reasonable. The designer stated that they had a budget for each stage of the project which was agreed with the PO. The target audience of this project was mainly the city of London, and then everybody else. The company had not particular competitors at that stage.

4.9.2 Designs for the 'Centrica' project

The design of the logo consisted of the word 'Centrica' and the 'flame'. The design of the logo of 'Centrica' can be considered more of a logotype because it did not include images other than the letters of the word 'Centrica'. As is shown in FIGURE (4.69) the flame was part of the word itself (the red orange dot of the letter 'i'). The colour of the logotype was vibrant blue and red. Also, the design of the logo was to be printed in single colour on black (negative logo) and black on white (positive logo) (FIGURES: 4.70, 4.71). The logotype was to be enlarged and reduced to different sizes according to its potential usage.



The Logotype Design For 'Centrica'

FIGURE: 4.69



A Single Colour For The Logotype Of 'Centrica'- Negative Logo

FIGURE: 4.70



A Single Colour For the Logotype Of 'Centrica' - Positive Logo

FIGURE: 4.71

4.9.3 Processes of identifying the need and the need pattern

The PO briefed the designers with the need and requirements for the project, and provided them with information about the project and about the objectives of the 'Centrica plc' company, its markets, target audience, and communication objectives. Iain Crockart explained the contents of the design brief (QUOTATION:4.28).

"Client wanted a distinctive logo that had values. It should impart energy. It should be positive, modern and dynamic. It should be a simple mark that can be applied rigorously to any piece of material and the excitement happens around it. It has attention to detail, good typography, good use of colour, must work in all media from the smallest black and white advert to the TV screen." (Iain Crockart.)

QUOTATION 4.28: THE NEED PATTERN (NP) FOR 'CENTRICA' PROJECT

Iain Crockart stated that the need for the project was clear from the very beginning, and that there was not a necessity for rewriting the design brief as they used to do for other projects. He stated that it was very important for them to have a sound design brief and to discuss it with the client (PO). Also, he stated that they established restrictions in a form of criteria for the values and elements that they were to address in the design and approved them with the PO. The designer explained that they focused on the values that the logotype had to represent. From the designer's explanation, it can be considered that those restrictions became part of the need. The conceptual understanding of the need and its context including the restrictions can be considered as the need pattern (NP) for the 'Centrica' project. The designer stated that 'Centrica' was supposed to have a new logo, in the same time the logo was considered an updating of the previous logo of British Gas.

- **Constraints of the need**

From the designer's explanation it can be considered that the designers did this design project within the limits of certain amount of time and money. The PO select the blue colour for the logotype to keep a link with the previous logo of British Gas. The designers were able to select the intensity of the blue colour. The designer stated that it was important for them to set restrictions for themselves, he said: "When you do something like this you set yourself restrictions." He stated that the restrictions helped them to know what they were able to do and what they were not. Also they helped them avoiding wasting time and effort. The constraints which the designers created were visual and were related to the following: 1) simplicity of the visual mark of the logotype, 2) the values that the logotype had to represent were to be considered in visual terms and according to certain criteria, 3) the word 'Energy' which had to do with the nature of the client's 'business' was to be addressed visually. In addition to these restrictions, it can be considered that the letters of the word 'Centrica' had to be readable and represent the letters themselves. In other words, the letters: c, e, n, t, r, i and 'a' had to be read as 'c', 'e', 'n', 't', 'r', 'i', and 'a'. Also the visual constraints

can be considered to relate to the complexity of the alphabet and the need for uniformity, legibility, and harmony of the typography.

4.9.4 Gathering and selecting visual sources

Gathering and selecting visual sources continued during the various stages of the project. The designers gathered and selected visual sources for the 'Centrica' project for establishing visual criteria, and differentiating the logotype of 'Centrica' from existing logo types in the market. The designer stated that they commissioned a research consultancy to gather for them all the existing logos. The designers created mood boards from their visual sources as a means for comparing and analysing visual sources. The designers' visual sources included logo types of various companies both in the past and the present. The designer stated that comparing the various logo types with each other was very important for them, because they wanted to make sure to avoid doing a similar logotype to existing ones. Also, they wanted to avoid the weakness of some existing logos such as the lack of sound visual communication. The designers gathered and selected visual sources from the following sources: 1) the British Gas, 2) the logos of other existing companies, 3) typefaces resources, 4) colour schemes, 5) books, 5) magazines, 6) newspapers, 7) personal ideas, 8) photographs of the sea, 9) photographs of flames, 10) natural things. The designers' visual sources can be grouped under the following categories: 1) retrieved visual sources including imagination, and ideas, 2) art-directed visual sources, 3) general visual sources. The designer stated that they used their visual sources and visual information only as references. The designer stated that they did not select consciously visual information from existing logos. He said:

We do not consciously use any other element from a logo type ever. You have to try to be unique always. You use it as a basis for what not to do, and what to avoid.

4.9.5 Visual patterns

From the designer's explanation, the prime source of visual information was the designers' own thoughts and design ideas. The other main sources were typefaces and colour schemes. From the designer's explanation it can be considered that the visual pattern of the design idea consisted of various parts. Each part can be considered a visual pattern. Regarding the nature of the logotype projects which involved alphabet letters, it can be considered that part of the visual information was given which was the word 'Centrica'. In other words, the designers knew from the very beginning that they had to deal with the letters: 'c', 'e', 'n', 't', 'r', 'i', 'c' and 'a'. These letters had visual forms that distinguished them from other letters of the alphabet. Each letter regardless of how the designers handled its parts was recognised for what it was. i.e. the letter 'c' was recognised as a 'c', and the same for each letter.

In addition, the designer stated that they did not use existing typefaces, and that the letters were explored and developed by the designers from their own thoughts and knowledge. The designer stated that they did not just use the letters to represent the word 'Centrica', but they gave each letter certain visual characteristics and value by selecting certain visual information for the construction and rhythm of the parts of the letter forms. The designer stated that they referred to certain visual sources for the 'flame' and the 'blue colour', but they selected only certain visual aspects. From the designer's explanation, it can be considered that the designers selected visual patterns from their visual sources.

4.9.6 Design ideas

According to the designer, the design ideas were the outcome of the following processes: 1) thought processes, 2) discussions, 3) investigating and analysing existing logotype, 4) establishing criteria, 5) drawing sketches, 6) exploring various options. The designer stated that the design idea was the basic source of their design. The design idea focused on the following issues: 1) the components and parts of letter forms of the word 'Centrica', 2) the 'flame' as a representation of gas energy, 3) the blue as a link with the previous logo of British Gas, 3) the quality which all the above elements were to embody. The designer mentioned the qualities that the design idea and subsequently the logotype had to represent. He said:

It should impart energy. It should say positive, modern and dynamic, and it required attention to typographic details.

The stages of the design idea were: 1) coming up with design ideas, and exploring design possibilities by producing visual marks and using both black and white colour versions, and colour versions, 2) narrowing down design ideas, 4) selecting the best design options, 4) developing a number of design options, 6) selecting the best design option, 7) commissioned and art-directed an outside designer for the final artwork. Between these stages the designers had presentation and evaluation sessions with the PO. During these sessions, the designers selected further visual patterns and made various changes including discarding certain visual patterns.

4.9.7 Coming up with design ideas and graphic investigation

Coming up with design ideas involved processes of selecting visual sources and visual patterns, and adapting visual patterns. The designer stated that they used global references when they explored their design ideas. Coming up with design ideas involved producing visual marks on design drawing surfaces such as drawing pads, and computer screens. Producing visual marks for visualising design ideas can be considered as design patterns. The initial design patterns were hand drawn, then they

were transferred onto the computer' screen. First, the designers created black and white designs, then they worked with colour. The designers transferred their hand drawn design patterns onto the computer screens by using scanning and photocopying techniques. The designers explored and developed their design ideas and design patterns at this stage by analysing visual sources, and establishing visual criteria for the logotype. Analysing the logotype involved looking at the various constructions of the word or words of the existing logotype. First, the designers explored various design options, then they narrowed down the design options and develop them further. Then the designers presented the best design options and the mood boards they created to show the PO their thinking. Iain Crockart explained:

We did a presentation where we showed a new set of logo in its competition such as all the energy related companies. We put them on a board and put a Centrica logo in the middle of them, and it was to point out that most of the logos were highly complex and a little too fussy, perhaps leaning towards one type of power. So we made sure we weren't designing anything that was similar to another.

The designer stated that the initial design ideas were different from the final design. Iain Crockart stated, "It took various stages of redrawing to get to this final design." Exploring design ideas had to do with exploring design possibilities for the construction of the letter forms of the word 'Centrica', and exploring visual possibilities for expressing the word 'Energy' without using the word itself. The major components of the letterform were considered to be: 1) Baseline, 2) Capline, 3) Meanline, 4) x-height. The parts of the letterforms were considered to be: 1) Apex, 2) Arm, 3) Ascender, 4) Bowl, 5) Counter, 6) Crossbar, 7) Descender, 8) Ear, 9) Eye, 10) Fillet, 11) Hairline, 12) Leg, 13) Link, 14) Loop, 15) Serifs, 16) Shoulder, 17) Spine, 18) Spur, 19) Stem, 20) Stroke, 21) Tail, 22) Terminal. Some of these parts did not apply for the letters of the word 'Centrica'. The designers did not use 'Serifs for the letters, and they created a slightly italic letterforms. Also, the designers chose lowercase for the letters of the word 'Centrica'. These decisions were made after the designers explored various possibilities of uppercase and lowercase letterforms.

The designers explored various design possibilities for the following: (1) 'Counter': The negative space that was partially enclosed by the letterform of the 'c', (2) 'Eye': The enclosed part of the lowercase 'e', (3) 'Crossbar': The horizontal stroke connecting two sides of the letterform of the letter 'e' and the bisecting of the main stroke of the letter 't', (4) 'Stem': the major vertical stroke of the letter 'i' and the letter 't'. Also, exploring ideas involved the thickness and density of the 'stem' of the 'i', and 'arm' and the of the 't' and the crossbar of the letter. (5) 'Ascender: The stroke on the lowercase of the letter 't' that was to rise above the meanline. (6) 'Terminal': The end of the ant stroke that did not terminate with a serif.

According to the designer, the designers tried various design options for the

followings: 1) various types of curved lines for the letters,.2) spacing between the letters, 3) lowercase and uppercase letterforms, 4) thickness of the letterforms, 5) the 'flame'. Iain Crockart explained:

The flame was completely redrawn. Every character was adjusted. All the counters were enlarged or reduced, and then the final artwork was done through external type designer.

After the designers approved their initial design patterns with the PO, they developed, and crafted their design patterns. Then for the final artwork they art-directed a professional type designer. Iain Crockart explained, and made the necessary changes.

- **Design options as PCDH**

The designer stated that they explored twenty five design ideas for the logotype of 'Centrica'. These design ideas were alternative design options and they can be considered as patterns of competing design hypotheses (PCDH). Iain Crockart explained some of the various design options which they explored (QUOTATION: 4.29).

"There were about 25 ideas for the logo presented to the client initially in black and white only and they ranged from things that used global references. One set used a flame within the design as part of the letters. We had enlarged seas, we had seas that had curves under them to sort of give the idea of caring. We had joining letters. We had ones with caps so the T became a capital T and the upper bar of the T became a button. So there were many different ideas all within the same framework though. The values were the same. This one (FIGURE: 6.19) matched all the values. Some matched many of them. Some matched fewer of them. But really it took 25 logos to make sure we were on the right track. First black and white and then colour and then it was whittled down to say two for the presentations." (Iain Crockart:)

QUOTATION 4.29: PATTERNS OF COMPETING DESIGN HYPOTHESES

4.9.8 Relevance of visual patterns to the 'Centrica' project

- **The subject matter**

The subject matter of the 'Centrica' project can be considered to involve tangible and intangible aspects. The tangible aspects were related to the word 'centrica' and its individual letters. The intangible aspects were related to the following: 1) the values that the logotype had to represent and which had to do with the type of constructions of the letterform of each letter, and their type of uniformity and balance, 2) the visual interpretation of the word 'Energy'.

- **The target audience**

The designer stated that they thought of the target audience all the time during the various stages of the design idea. The blue colour was used as a visual link with the previous logotype of British Gas, so that the audience was able to relate the two companies to each other. Also, the use of the red colour was visual representation of the flame so target audience was able to associate it with energy. The readability and clarity of the visual pattern of the logotype were important considerations for addressing the target audience.

- **Communicative characteristic of the visual patterns**

The designer stated that the characteristics of the visual information were selected subconsciously, and had to do with the following aspects: 1) uniqueness, 2) authenticity, 3) simplicity, 4) clarity, 5) strong sound logotype, 6) a feel of trustworthy, 7) impart energy, 7) to give a modern feel, 8) to be dynamic. Iain Crockart stated that the communicative characteristic of the logo were part of the chain of the communication objective of the company. He stated that it was to be foolish to assume that the logo alone can communicate all the objectives of the company. From the designer's explanation, it can be considered that the communicative characteristics of the visual patterns had to present all the values that the NP implied.

4.9.9 Processes of selecting visual patterns

From the designer's explanation, it can be considered that selecting visual patterns involved purposive pattern recognition (PPR). PPR explained how designers selected their visual patterns, and the processes of matching visual patterns with NP. The processes of selecting visual patterns continued during the various stages of design ideas. The designer explained how they selected their visual information for 'Centrica' project. His explanation showed that the selection occurred in various ways: 1) intuitively, 2) by a feeling, 3) from a thought process, 4) by trial and errors, 5) by experience and knowledge, 6) according to established criteria, 7) the designers knew what they were looking for, 8) by avoiding any similarity with exiting logos, 9) by referring to the design brief. The designers stated that they recognised when things worked and when they did not. One of the prime consideration was the quality of visual patterns and design patterns. The designer stated that they selected the right visual information that served the need best. He also indicated that they selected the best design option. In addition, during the processes of conjecture and refutation, the designers kept the visual patterns that worked and discarded the visual patterns that failed to answer the need. The following excerpts explained how the designer selected visual information, and they can be interpreted as PPR : 1) "Possibly subconsciously, I mean you're still experiencing it in your head." 2) "I felt that serifs could not work for expressing a dynamic and powerful logo." 3) "You set yourself restrictions and you work within their boundary.", 4) "We tried various design ideas, but every time some values were missing, and we had to retry again.", 6) " It involved the ideas and design thinking behind it."

4.9.10 Adaptation

From the designer's explanation, it can be considered that adapting visual patterns involved PPR. Adapting visual patterns occurred during the various stages of

exploring and creating the design idea , and the design options. Adaption of visual patterns can be considered to be the manifestation of selecting visual patterns. Adapting visual patterns for 'Centrica' involved the following processes: 1) addition, 2) combining, 3) changes and adjustment, 4) elimination. These processes can be seen during the processes of handling individual letters of the word 'Centrica' as well as when handling the total pattern of the word 'centrica'. Also, they involved the processes of adapting the blue colour, and the flame. Iain Crockart explained:

Initially it was all sketches. We set them. You can do all the basic and all the letter spacing, you can adjust things slightly. But the final logo must go to a proper type designer who uses a Mac to do that.

Adaptation involved transferring visual patterns from thoughts and visual sources into design patterns producing sketches on drawing surfaces such as the drawing pads and computer screens. Also, adaption involved implementing the design pattern of the logo on stationary, manuals, and signage. According to the designer, many visual patterns were considered not right for the need. The visual patterns that were rejected during the processes of conjecture and refutation can be considered less adaptable. Adapting visual patterns for 'Centrica' can be considered to involve major and minor adaptation . Major adaptation can be considered to be related to the changes of the total design pattern. Minor adaptation can be considered to be related to changes in a part or parts of the design pattern without changing much of the total design. However, both major and minor adaptation overlapped, and fed to each other. Also, adapting visual patterns can be considered to involve technical adaptation. Technical adaptation had to do with the use of the tools and materials. The designers had to consider how the use of tools and materials was to affect the design patterns, and to make sure that it did not change the design pattern. Adaptation, also involved enlarging and reducing the design patterns for various uses and for various applications. According to the designer, the use of computer helped the designers to find out quickly when the design required further adjustment. Iain Crockart explained:

It's very easy now to do things on the Mac. So it doesn't take long for an idea, a sketch to become something in black and white, tones, or colour on the screen. It's a very quick way of seeing if something works.

4.9.11 Purposive pattern recognition (PPR)

PPR can be considered to involve selecting and matching visual patterns with NP. The designer explained that they matched their visual information with the need for the project. Iain Crockart stated:

The selection of visual information was based on the initial design brief. It had to be energetic, forward thinking, and positive, all those values. So what we had to do was to match the perception of what the company wanted to achieve which was sort of tactile, easy to deal with, warm, comfortable, memorable, non threatening design.

PPR can be observed during the following processes: 1) exploring the design ideas , 2)

establishing relevance of visual patterns to the subject matter and values that the subject matter of NP had to represent, 3) creating design options (PCDH), 4) selecting the best design option, 5) recognising the best quality. The matching activities can be considered to involve various types of considerations and adaptation and both can be considered to involve PPR (TABLES: 4.42, 4.43).

Activities	PPR For Considerations When Selecting Visual Patterns For NP
Getting a sound design brief from the PO	"It is most important to get a very good sound brief before you start any work because you waste weeks if you do not." (Iain Crockart:)
Setting restrictions and work within their boundary	"When you do something like this you set yourself restrictions. So what you do is you set yourself a series of restrictions which you work within and those are very important because rather than going off to the four corners of the world you actually keep yourself within a boundary and be creative within the very restrictions that you and the client have set yourself. It means you get a much clearer design route. You do not spend much time straying away from the path. (Iain Crockart:)"
Avoiding any similarity with existing logos	"There is no sense in designing a logo type that is remotely similar to another one because it will fail. This principle is a safeguard." (Iain Crockart: 1997)
Creating timeless logo and not exciting one	"What happens is that you can update the excitement but you can't update the logo, so the logo you try and create, you create a simple, a timeless logo, nothing too tricky." (Iain Crockart:)"
Updating an existing identity involved knowing what was worth keeping and what was not	"When you recreate an identity for a client you need to be very keen to know which is of value worth keeping and what was not worth keeping." (Iain Crockart:)"
Looking at the work of the competition for awareness and not as a reference	"Client's competitor influences you in a kind of self-conscious way, so just don't do it. It's not a source you refer to. You just go right OK, make sure you don't do it." (Iain Crockart:)"
Considering the design trends in the market place for awareness	"The market situation influenced the design choices quite a lot because there's been many more energy companies created and new logos on the market so in terms of influencing quite a lot because we just have to be aware again of what was out there." (Iain Crockart:)"
Considering simplicity as an appropriate criterion for creating a timeless logo and for applying it on various materials	"We believe that the logo itself should be a simple mark that can be applied rigorously to any piece of material, and the excitement happens around it. You can update the excitement but you can't update the logo. So you create a timeless logo" (Iain Crockart:)"
Considering the characteristics of visual patterns in relation to the various materials and uses	"Nothing too tricky. It has attention to detail, good typography, good use of colour, must work in all media from the smallest black and white advert to the TV screen." (Iain Crockart:)"

TABLE 4.42: CONSIDERATION FOR MATCHING VISUAL PATTERNS WITH NP

Activities	PPR For Matching Visual Patterns With NP
Matching the dynamic and powerful aspect of NP with supreme and chunky typefaces	"To have an energetic powerful dynamic logo type, we started looking at sort of the most supreme and chunky typefaces." (Iain Crockart:)"
Recognising visual patterns that work for NP and the ones that do not	"There are very few that would work that had good characters all the way along or reasonable characters or could be redrawn. So you looked at the palette and the typefaces." (Iain Crockart:)"
Recognising Sansarif typeface as a right choice for powerful and dynamic aspects of NP	"To have an energetic powerful dynamic logo type, I felt you could not do that with a serif typeface. We started looking at sort of the most heady, chunky typeface." (Iain Crockart:)"
Selecting the blue colour to keep the link with the previous identity	"You may have a selection of colours but because they're in a band, you decided you want to keep it blue, you're updating it, you're keeping it." (Iain Crockart:)"

TABLE 4.43: PPR FOR MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (3): CORPORATE PUBLICATIONS

4.10 MINI-CASE STUDY (9):

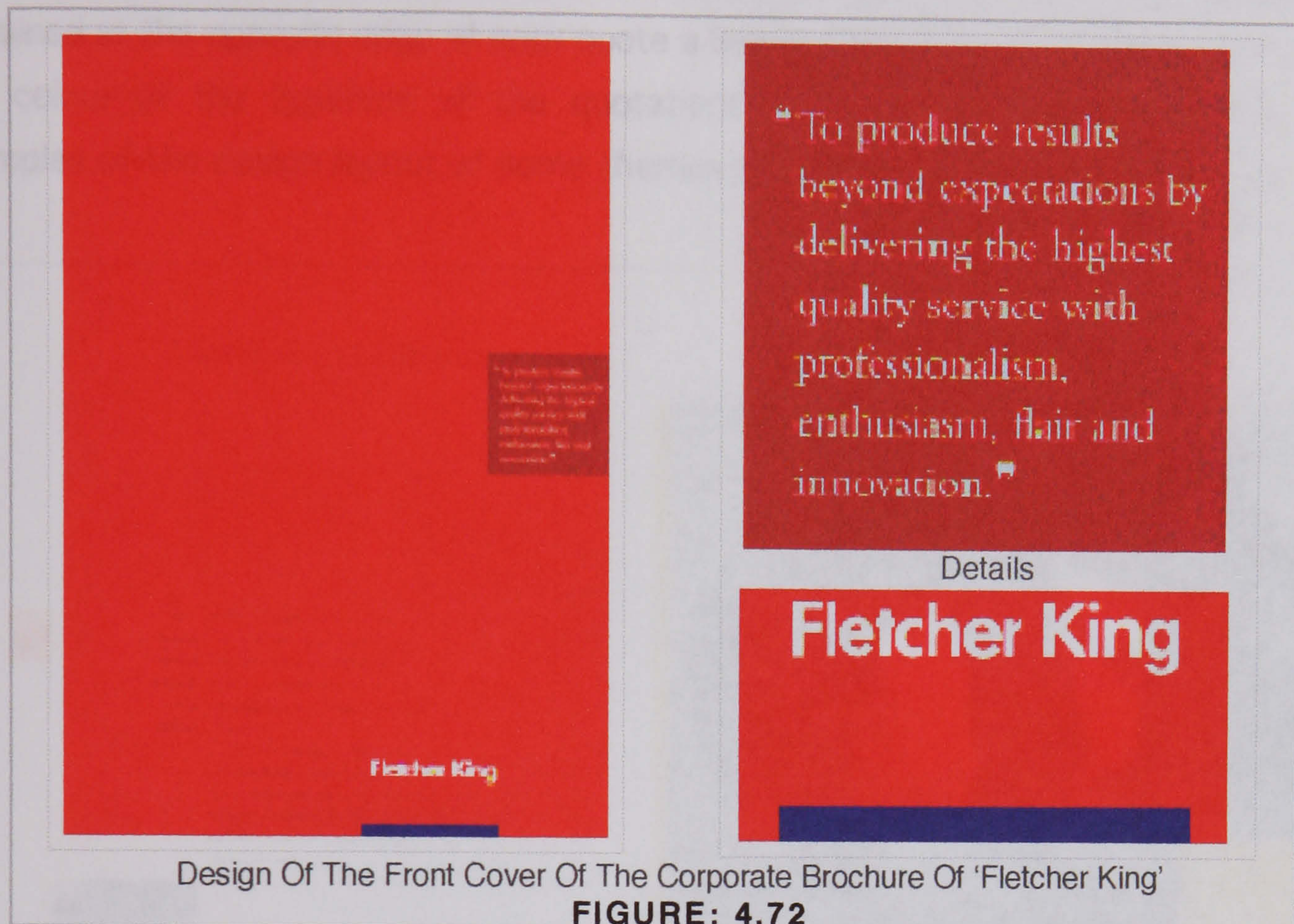
CORPORATE BROCHURE: 'FLETCHER KING'

4.10.1 Background history of the 'Fletcher King Corporate Brochure' project

This design project was explored, developed and designed by 'GDO' Gilbert Doyle Oakmont Ltd in London. The title of the project was a corporate brochure for Fletcher King. General information about this project is given in APPENDIX (XI). The target audiences were developers, financiers, and the owners. The project started in November 1995 and it was finally printed in October 1996. The budget of the project was reasonable. According to the art director and administration manager Jenny Brend (1997) the client (PO) of this project was 'Fletcher King'. The main area of the client's business activity was property development and surveyors. Fletcher King was a big British company that had branches in England, Europe, and Northern America. Fletcher King offered a complete range of services for every type of commercial property. These services involved the following: 1) Building surveying; 2) Development management; 3) Facilities management; 4) Fund management; 5) Property management; 6) Construction management; 7) Mechanical and electrical services; 8) Project co-ordination; 9) Planning; 10) Evaluation. The designer stated that the corporate brochures were considered very important for the businesses of companies such as 'Fletcher King'. The objectives of the corporate brochure were: 1) to give an idea about the company, 2) to bring future work, 3) to be given to potential customers, 4) to show the competitors that 'Fletcher King' was a competitive force in the market. Jenny Brend stated that the design consultancy did about three brochures for 'Fletcher King' over the past fifteen years. She stated that last one was done few years ago. She added that this brochure was quite important because the previous one was out of date. Also, the previous brochure included information that was no longer relevant, because the clients made certain changes. 'Fletcher King' managed to survive the recession, and they were anxious to be seen again as a force to be reckoned with. The designer stated that the clients needed a corporate brochure to put over the facts about the structure of their company and their field of expertise.

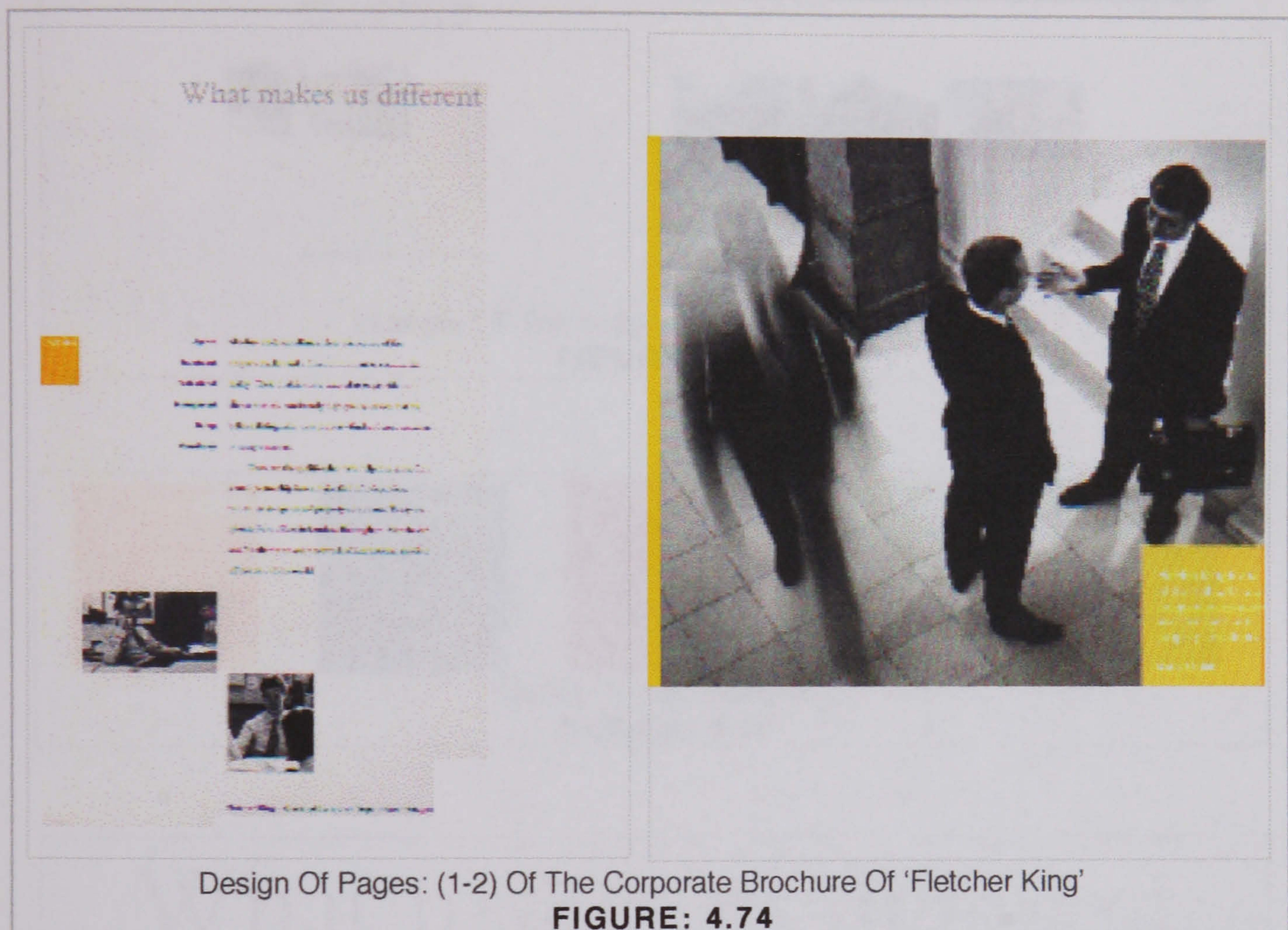
4.10.2 Designs for the 'Fletcher King Brochure'

The designs for the corporate brochure for 'Fletcher King' consisted of the following: 1) Front cover of the brochure (FIGURE: 4.72); 2) Back cover of the brochure (FIGURE: 4.73); 3) The inside pages of the brochure.

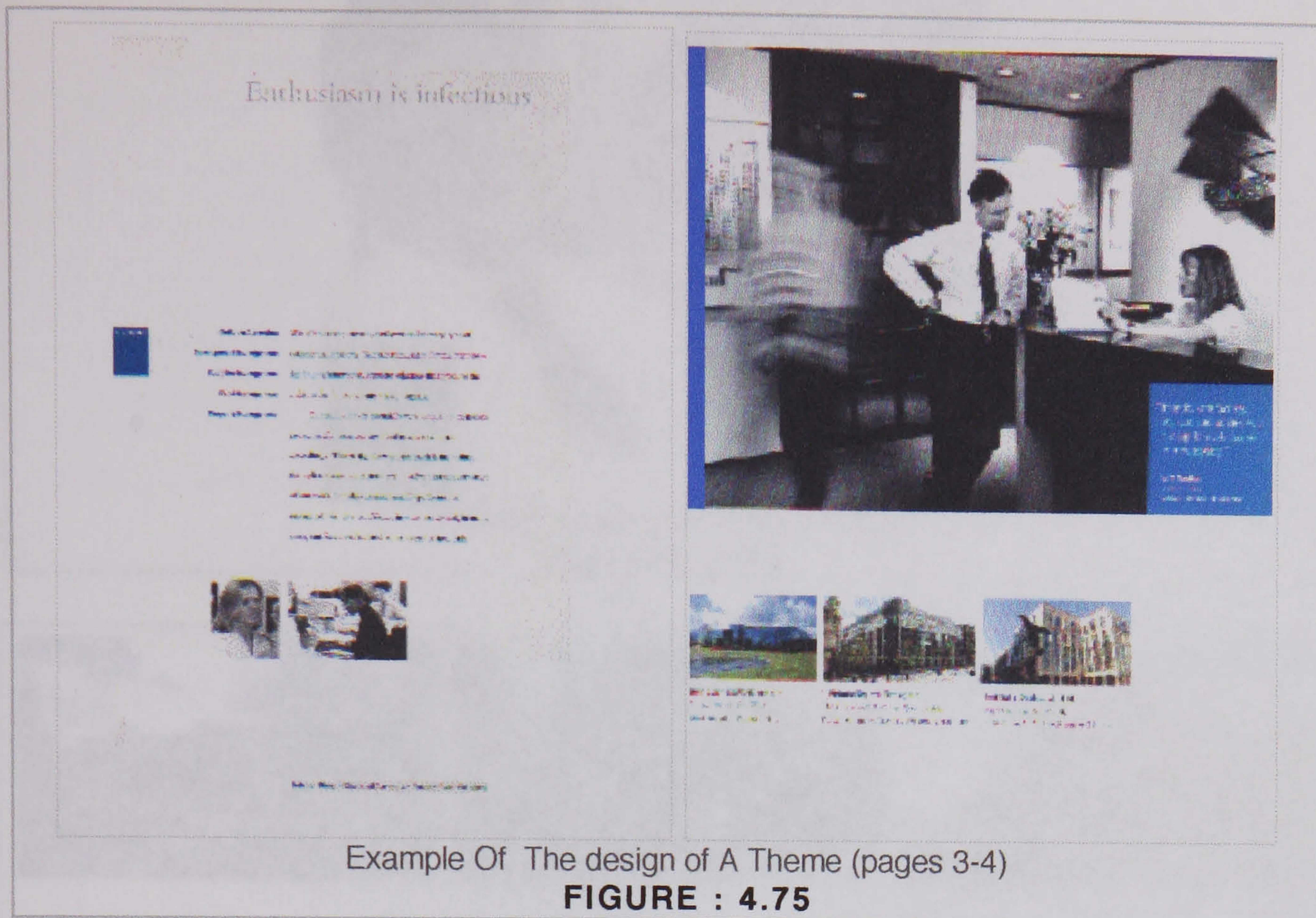


The brochure consisted of five themes related to the business activities and objectives of 'Fletcher King' company, and included the following: 1) Headlines; 2) Keywords of Key objectives for each theme; 3) A text for each theme; 4) Page numbers, 5) Quotations, 6) Black and white photographs; 7) Colour photographs; 8) Colour squares; 9) Colour bands. The measurements of each page of the brochure was 22cm width x 30.50 cm length. The back cover of the brochure had a pocket from the inside

attached to it, so that the users were able to use it as a folder for putting any additional prints, papers, documents, etc. Each theme was accompanied by a complementary 'quotation' from statements of some of Fletcher King's clients. Each theme was given a colour key. Each theme was accompanied by a large black and white photograph and contained one 'quotation' on a coloured square background. Each large photograph contained at the opposite edge of each quote a band of the same key colour of the theme. The colour of the typeface of the quotations was white, and the style was plain. Examples of the design layout of some themes are in FIGURES: (4.74, 4.75).



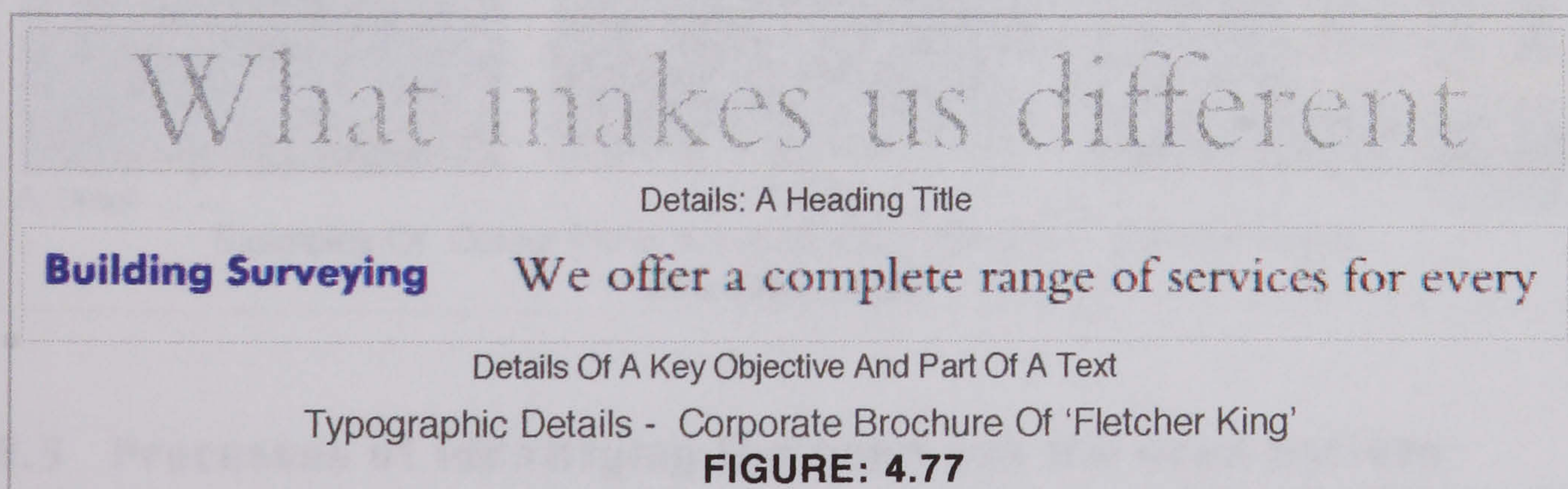
The designers numbered only the pages where each theme started. The page numbers were written as words, i.e. Page One. The word 'page' was written with a plain style. The words of the numbers were written in bold style. The colour of both words were white against a coloured square background (1.50 cm x 1.50 cm) (See FIGURE: 4.76). The squares of the page numbers were placed above the centre of the vertical margin of the page near the opening edge. The colour of the headline of each theme was light grey, the text was dark grey. The key objectives of each theme were written in blue colour (FIGURE: 4.77). The typeface for the headlines and the key objectives was 'Guild'. The typeface for the text was 'Caslon'. Each quotation was placed within a coloured square (5 cm x 5 cm). The colours of the squares varied (FIGURE: 4.78). A detail of black and white photo with a quote is in FIGURE (4.79). Examples of colour photos are in FIGURE (4.80).



Example Of The design of A Theme (pages 3-4)
FIGURE : 4.75



Details Of Page Numbers
FIGURE: 4.76



Details Of A Key Objective And Part Of A Text
 Typographic Details - Corporate Brochure Of 'Fletcher King'
FIGURE: 4.77



Colours Of The Backgrounds Of The Quotations'
FIGURE: 4.78

the PO wanted the company 'Fletcher King' to represent. She explained:

They wanted a new image of the company. They wanted mainly to produce something that looked different and would stand out and be a thing that people would want to keep and be reminded of the company.

- | |
|---|
| <ol style="list-style-type: none"> 1) Receiving and analysing the design brief; 2) Meeting with the PO and discussing the design brief; 3) Gathering various types of information (visual, documents, and written information) about the project; 4) Analysing the contents of information in relation to the recent development of the company; 5) Discussing and exchanging ideas 6) Selecting visual sources; 7) Comparing the previous brochures of the company with the new need and requirements; 8) Constructing a conceptual understanding of the need and requirements for the project; 9) Establishing visual criteria for the corporate brochure. |
|---|

TABLE 4.44: PROCESSES OF IDENTIFYING THE NEED- 'FLETCHER KING' PROJECT

The PO discussed the materials of the brochure. The designer stated that the client's suggestions were part of the need and were not considered to be inferior to the project. The design brief focused on major elements (TABLE:4.45).

- | |
|--|
| <ol style="list-style-type: none"> 1) Creating an interesting and innovative design; 2) The brochure to be a prestigious document; 3) To reflect the company's ethos; 4) To tell a straightforward information about the company; 5) To differentiate 'Fletcher King' company from competitive companies; 5) To photograph people from the company during their working activities; 6) To use photographs of the projects which 'Fletcher King' involved with; 7) To differentiate the brochure of the company from other existing brochures; 8) To make the brochure stand out; 9) To make the brochure attractive; 10) To remind the audiences about the company; 11) To make the audiences want to keep the brochure. |
|--|

TABLE 4.45: THE ELEMENTS OF THE BRIEF FOR 'FLETCHER KING' PROJECT

From the designer's explanation, it can be considered that identifying the need involved considering and analysing the context and objectives of the project in relation to the visual perception which the PO thought of regarding the image of the company. The conceptual understanding of the need and its requirements can be considered as the need pattern (NP) for the project. The designer explained that the corporate brochure was the image of the company and its people. Therefore, it was very important to satisfy the client's conceptual understanding of their image as a company. The designer stated that the client wanted the corporate brochure to look different from the previous corporate brochure and less sophisticated. The previous brochure portrayed the directors of the company within very formal settings and gave a very sophisticated image of the company. The requirements for the new corporate brochure aimed at less sophisticated settings by focussing on the following: 1) professionalism, 2) informal working environments, 3) friendly atmosphere, 4) effective modes of communications, 5) busy and successful company. Jenny Brend explained:

Working with the fact that they wanted something to show their professionalism and to make it a bit different from the previous brochures. It makes you want to turn over and look at it.

The outcome of identifying the need and its requirements involved a conceptual understanding of how the need was to be addressed and involved selection of visual

sources and information. The PO recommended the use of photographs for portraying the working environment of the company, and the modes of communication between the directors, employees, and customers within that environment. The idea of using photography and commissioning a photographer was approved. The subject matter and the communicative characteristics of the visual sources were identified by the PO. Jenny Brend explained that the client identified certain visual sources and aspects, but the rest was left to the designers to decide. The PO provided the designers with various types of information about the company and the project (TABLE: 4.46). The designers gathered information for this project mainly from the client. Also, they looked at the previous corporate brochures of 'Fletcher King' to understand the changes that took place in the client's business. In addition, the designers gathered corporate information about similar companies and examined existing corporate brochures in order to differentiate the image of the company from the images of other companies. The project did not involve marketing research.

- | |
|--|
| <ol style="list-style-type: none"> 1) Information about the recent development of the company's strategies and objectives; 2) Information about the need and requirements; 3) Descriptions of the major visual sources (the people of the company); 4) Descriptions of visual moods of communication; 5) Photos of the major 'development projects' of the 'Fletcher King' company. |
|--|

TABLE 4.46: TYPES OF INFORMATION PROVIDED BY THE PO TO THE DESIGNERS

- **Constraints of the need**

The constraints of the need for 'Fletcher King Corporate Brochure' involved the following: 1) economic, 2) visual, 3) textual. Some of the constraints were decided by the PO, some by the designers and the PO, and some by the designers and were approved by the PO.

(1) **Budget**

The designer stated that the budget for the project was decided at the outset of the project. She stated that the budget served the need for the project. She explained that if the budget was bigger they could have created sophisticated photographs for 'the development building projects' of the company. She asserted that showing the building projects in a sophisticated manner was not the purpose of the brochure.

(2) **Time**

The time schedule was decided later on after the designers and the PO discussed and decided the content of each theme, and the resources and nature of the photographs that were to be taken. From the designer's explanation it can be considered that the various processes of selecting and adapting visual inputs developed through a certain period of time.

(4) **Visual constraints**

The visual constraints were related to the following: 1) the use of photography as a medium for producing the images, 2) the use of the existing logotype of the

company, 3) the use of the corporate colours of the company (blue and red), 4) the modes of visual communication of the black and white photographs, 5) the subject matters of the photographs.

(5) Constraints related to the manuscript of the brochure

The manuscript was created by the copy writer of the design consultancy. The restrictions of the manuscript of the brochure involved the following: 1) the manuscript of the brochure had to address certain issues by themes, 2) each theme had to address certain topic, 3) each theme was accompanied by a set of key objectives. Subsequently, the designers had to address specifically these issues without involving other issues.

4.10.4 Processes of gathering and selecting visual sources

The processes of selecting visual sources for the ‘Fletcher King’ project took place during the processes of identifying the need. These sources were: 1) the directors of the company during their business meetings, 2) the employees of the company during their working activities, 3) some of the ‘developmental building projects’ which were done by the company (Some of these photos were used in the previous brochure of the company). The other visual sources varied and were selected during the processes of coming up with the design idea and exploring design possibilities. Some of the visual sources were selected by the PO, some were gathered and selected from the customers of ‘Fletcher King’, and some were gathered and selected by the designers. Jenny Brend explained:

Some of the photography was commissioned by us on behalf of the client. They specifically wanted certain people to be photographed hence key members of the company. Photographs like this which are straight reportage shots were sent by the company or the owners of the buildings. .. We had various visual materials.

Some of the visual sources mentioned by the designer are in TABLE (4.47).

1)	The directors of the company during their business meetings;
2)	The working environment within the company;
3)	The people of the company with the customers
4)	Personal idea and imaginations;
5)	Existing brochures of the company and of other companies;
6)	Colour photographs of the projects of the company;
7)	Existing design projects;
8)	Outdoor sources;
9)	Photographs of busy market scenes;
10)	Photographs of social institutions;
11)	Existing corporate photos;
12)	The media;
13)	Newspapers;
14)	Magazines;
15)	Typefaces;
16)	Geometrical elements such as squares and bands,
17)	Colours.

TABLE 4.47: TYPES OF VISUAL SOURCES FOR ‘FLETCHER KING’ PROJECT

From the designer’s explanation it can be considered that the designers used their visual sources as references and as sources of visual information. The visual

sources for this project can be grouped under the following categories: 1) retrieved visual sources, 2) art-directed visual sources, 3) found visual sources, 4) general visual sources.

4.10.5 Visual patterns

From the designer's explanation it can be considered that the processes of selecting visual sources started after the designers and the PO selected certain visual patterns. The designer explained that they discussed at the briefing stage the use of photographs, the major aspects of the visual contents that the photographs had to include, and the types of visual modes of communication. These visual aspects were decided before the following activities took place: 1) coming up with the design idea, 2) commissioning and art-directing the photographs. The designers and the PO envisioned the contents of the photographs and the modes of communication mentally. Constructing a mental image about the corporate brochure and its visual contents can be considered as constructing a visual pattern. The mental visual patterns at the initial stage can be considered to be vague notions because specific details were not explored and decided yet. The designer mentioned that imagination, visual aspects derived from words and meanings, actions and behaviours also were sources of visual information. The designer stated that the black and white photographs portrayed the people of the company in action, and in relation to the themes of the brochure and not in terms of the personal identity of each individual.

According to the designer, the movement of people was an important visual element for showing actions and communication activities. The visual context of the photographs focused on the individuals during their activities and showed informal and professional modes of communication between the directors and the employees and the customers. Such aspects were the focus of the context of the photographs and can be considered as visual patterns. Also, the designer selected specific colours and geometrical visual patterns such as squares and bands (rectangles) as visual key elements for each theme, and for relating the layout of each theme to the total layout of the brochure. The designers selected the visual patterns of the existing corporate identity "Blue" and "Red". From the designer's explanation it can be considered that the various types of visual inputs were visual patterns. These visual patterns can be considered as the following types (See TABLE: 4.48). From the designer's explanation, it can be deduced that the visual pattern consisted of individual visual patterns that were part of the overall visual pattern of the design. Jenny Brend explained:

To make each spread work as a unit ... Each page is different but they are linked together by the use of similar sorts of photographs. Colour banding and boxes containing a quotation. So given that you've got that link and a grid system which is quite loose but it is there and these colour boxes link the cover and the page numbers and gives it a continuity. Every page is different and yet they have a visual relationship to each other by the use of colours and quotations.

- | |
|--|
| <ol style="list-style-type: none"> 1) Visual patterns of movements; 2) Visual patterns the represented feel; moods; and styles; 3) Visual patterns of the existing corporate identity of the company (Blue & Red); 4) Visual patterns of the subject matter of the photographs including the moods of communication; 5) Visual patterns of typefaces including the patterns of the letters and words; 6) Visual patterns of the geometrical shapes; 7) visual patterns of the layout of the brochure (8) The visual structure and relationships between the various visual patterns of the brochure; 8) Visual patterns of colours including the corporate colours of the company. |
|--|

TABLE 4.48: TYPES OF VISUAL PATTERNS FOR 'FLETCHER KING' PROJECT

4.10.6 The design idea

From the designer's explanation it can be considered that the design idea started as a visual pattern that was conceived mentally, then it was transformed into a design through various processes. The designer stated that the design idea was the answer to the need and requirements for the project. Jenny Brend explained:

Given a brief like this, I mean as a designer you have an idea and you have to follow it through. Therefore it does influence the whole project, otherwise if it's passed on to everyone else, and everyone has a go you end up with a complete mishmash. It needs to be under control from somebody and therefore the design ideas have to be quite strongly thoughtful.

Jenny Brend explained the design idea:

The design idea was to firmly re-establish the 'Fletcher King' in the market as hard working, lively, interesting groups amongst many other similar groups. And that ... they have always had a slightly different view of things which is why using black and white photographs as opposed to colour. A lot of people's corporate brochures have very glossy colour ones. Some are slightly different which might make people look at them a bit differently and approach them on a project.

The design for this project consisted of both visual and written contexts. The two contexts fed to each other. In other words, the relationship between both contexts involved more concerns than matters related to the layout of the contents. From the designer's explanation it can be considered that the relationship between the two contexts was a relationship between parts of an overall pattern. The design idea for this project went through the following stages: 1) coming up with a design idea, 2) exploring the design idea, 3) developing the design idea, 4) commissioning and art-directing the photographs, 5) final artwork.

From the designer's explanation it can be considered that during the processes of identifying the need the designers established visual criteria for the visual inputs. During these processes the designers selected various visual patterns. Between the various stages of the design idea the designers and the PO had feedback and evaluation sessions during which further suggestions, modifications, and selection of visual patterns took place.

4.10.7 Coming up with the design idea & graphic investigation

Coming up with the design idea for this project started building up before the designers began their graphic investigation. The designer asserted that the specific

choices they made at the briefing stage helped them to shape a design idea for the project. Coming up with the design idea involved: 1) thinking processes, 2) discussions, 3) gathering and selecting visual sources and visual patterns including art-directed visual patterns, 4) exploring design possibilities. The designer stated that they first explored the type of photography that they wanted. She said:

We suggested a black and white photography so that it had a newspaper feel, and therefore the first thing we did having approval about the basic idea. The next thing was to actually commission a photographer to actually take some photographs. So a lot of it came out of the photography.

- **Graphic investigation**

Exploring the initial design idea involved producing visual marks on drawing surfaces. Producing visual marks for expressing the design idea can be considered as a design pattern. Exploring the design pattern involved exploring various possibilities, and involved processes of selecting and adapting visual patterns. The designer stated that they started exploring the design idea by producing sketches on drawing pads and by using magic markers. At this stage the designers did not use images or the actual manuscript. Exploring the design idea involved the following steps:

(1) Exploring the style and feel of the black and white photographs: The designer stated that the use of black and white photographs were very strongly instilled at the beginning of the project. After the designers did rough drawings and explored initial design possibilities, they started working on a layout pad and exploring the kinds of modes, style and feels of the photographs. Jenny Brend explained:

This is what we wanted a kind of newspaper feel, a mundane feel. Slightly more up to the minute rather than lots of glossy photographs.

(2) Exploring design possibilities for the corporate colours: The designer explained that they explored design possibilities for the corporate colours of the company. She stated that they did the initial drawings on a layout pad with magic markers. She said:

The idea of using these coloured bands was worked on initially on a layout pad with magic markers and it developed all the way through.

(3) The layouts of the pages: The designer explained that after they they explored design possibilities for the corporate colours, and after they decided the feel and style of the black photographs they started exploring design possibilities for the layout of the pages. Jenny Brend explained:

Each layout was slightly different... Then it went to our computer and we did some page layouts in principle to show a typical spread without having any copy at that stage and then progress from that.

- **Patterns of competing design hypotheses (PCDH)**

The designer stated that one design idea was explored. Exploring the design idea involved exploring various design possibilities of that idea. These possibilities were

related to the following: 1) the design and the use of the red and blue colours of the of Fletcher King's corporate identity, 2) the design and layout of the pages including: a) the general composition of the brochure, b) the design and layout of the photographs and the manuscript, 3) selecting the best photographs and pictures for the brochure from other alternative photographs and pictures, 4) the designs and types of the typefaces. The various design alternatives can be considered as patterns of competing design hypotheses (PCDH).

- **Design development and feedback**

The designer stated that after they approved the initial design idea with the PO they scanned the initial designs and starting working on the computers. The designers developed the layout of each page on the computers without using the actual photographs or the text , and got approval from the PO. After that, the designers introduced the actual manuscripts and photos to the layouts and combined them with the other visual elements: the colour codes and shape, page numbers, and the complementary quotes. Developing the relationships between the various design parts of the design pattern took place at this stage. This stage involved further selection and adaptation of visual patterns.

4.10.8 Relevance of visual patterns to NP

- **Subject matter**

The subject matter of the corporate brochure was the 'Fletcher King' company, its personality, its working environment including its modes of communication and atmosphere, its people, customers, and its projects. The visual patterns of subject matter were of two types: 1) Tangible and they were patterns of actual people, activities, and projects. 2) Intangible and they were graphic patterns that were selected and used as visual codes and key elements. Jenny Brend stated that the brochure explained the 'Fletcher King' company, and the black and white photographs were the people of the company.

- **Target audience**

The designer stated that addressing the target audience was essential for this project. She explained that it was important to create something that provoked the attention of the customers and the potential audiences. She explained that the design brief included that the brochure was to remind the customers of the company, attract their attentions, and show them what this company was able to offer. She said:

Obviously you've got to aim at the right people. ... The developers would be interested, and maybe take notice of something that looks a bit different. Given that there are so many different ones to chose from, it might be just enough to make them look at this one as opposed to someone else's.

The designer explained that after deciding the types of images they wanted to use, selecting and adapting the specific visual information was not influenced by the target audience and it was down to creativity.

- **Communicative characteristic of visual patterns**

The designer stated that the message of the project focused on communicating the image and the personality of the company. According to the designer the human aspects were important aspects of the company's image. She explained that the design communicated the message of the corporate brochure directly and indirectly. The use of black and white photography was indirect message. The direct message was achieved by how the people of the company communicated with each other and with their customers. The designer stated that the project was a timeless project and was not associated with a specific event. On the other hand the PO wanted to show that they survived the recession. Subsequently a brighter and a breezy look was selected to give this impression. Jenny Brend explained:

To put over information about the company and also for its visual impact to give an image of the kind of company it is. ...The recession has had a very bad effect on a lot of property companies. This kind of document was supposed to look breezy and bright, but not overly glossy and so on. So the situation of the company I'd say had about 80% impact on the selection and adaptation of visual information.

The communicative characteristics of the visual patterns involved the modes, feels, and human aspects. Some of the communicative characteristics had to do with: 1) the manageability of the typefaces, 2) the design of themes of the brochure, 3) the layouts of the pages and their relationships with each other. The use of certain ways of presenting the number of the pages, giving each theme a key colour, distinguishing the head titles, the key objectives, and the manuscript involved both communicative and technical aspects. The communicative characteristics involved the following: 1) informal atmosphere, 2) slightly unusual company in comparison with similar companies, 3) friendly working environment, 4) busy and hard working environment, 5) successful company.

4.10.9 Processes of selecting visual patterns and PPR

From the designer's explanation it can be considered that the designers selected and adapted visual patterns to match the NP for the project. From the designer's explanation it can be considered that the selection and adaptation of visual patterns involved purposive pattern recognition (PPR). Jenny Brend said:

There's a very straight forward sort of brief and you have to therefore answer it. Because I think it's important whatever you decide more or less to follow the brief through. This was a corporate brochure, therefore, if the images weren't what the client wanted then the project will have failed if the client didn't want them. So it was important to match the image of his company, the one that we were projecting.

The processes of selecting visual patterns started at the briefing stage during the processes of identifying the need. From the designer's explanation it can be considered that the selection of visual patterns occurred in the following ways: 1) by discussing and exchanging ideas, 2) according to established criteria, 3) from experience, 4) the designers knew what they were looking for, 5) from thought processes, 6) by experimentations, 7) by comparison with other alternatives, 8) as the outcome of chains of processes. The designer mentioned that the selection and adaptation of visual sources were not influenced by design skills, and that they involved rather experience and creativity. The designer stated that the first attempts at taking photographs failed and they had to commission and art-direct another photographer for taking the photographs.

- **Quality of visual patterns**

The designer stated that they selected the images and typefaces that fit the need for the project better. She stated that inappropriate photos were discarded and new ones were art-directed and commissioned. The following were some of the expressions used by the designer when she described the quality of the visual inputs: "good idea", "a bit different type of images", "good photo", "good prints", "unusual", "interesting", "legible", "appropriate", "reflect the image of the company", "showed that the people of the company were successful", "The clients liked the work", "informal and friendly modes of communication", "mundane".

4.10.10 Adaptation

Adaptation of visual patterns was the consequence of selecting visual patterns. The processes of adapting and selecting visual patterns were interactive. After each process of selection there was a process of adaptation, and after various adaptation processes there were processes of selection until the designers achieved the desired fit. Adaptation of the visual pattern for matching the NP involved transforming the visual pattern into a design pattern. Matching the visual pattern with the NP for the 'Fletcher King' project involved the following types of adaptations: 1) transformation, 2) addition, 3) combining, 4) adjustment, 5) modifying, 6) extinction. Some of the adaptation processes involved the development of visual patterns and some involved technical adaptation. Processes that involved the development of the visual pattern were related to the following: 1) transforming the visual pattern into a design pattern by producing visual marks, 2) further selection of visual patterns, 3) the relationships between the visual patterns within the total visual pattern of the design. Technical adaptation. Technical adaptation involved: 1) adapting the materials used for the brochure, such as the type and nature of the paper, the use of ink, 2) the use of techniques, tools, and printing methods, 3) adapting the visual patterns and the

physical materials used for the the brochure to each other. Jenny Brend explained that artwork was done on computers. She explained that black and white prints were used as originals rather than giving negatives for getting a better idea to the printer. The adaptation processes involved processes of conjecture and refutation. Some of these processes were related to the use of new technologies. Jenny Brend explained:

Everything was designed on the computer. Print technology is changing and moving on. Every time you do a different job it's changing.

The designer stated that scanning the images was not successful and gave poor quality . Therefore, the original photos were given to the printer. She explained that they had also a problem with printing the photos, and they had to ask the photographer to print the photographs on different type of paper and to use much harder grainier prints.

4.10.11 Purposive Pattern Recognition (PPR)

The designer explained that the various parts of the design were parts of an overall whole. The designer's explanation showed that the designers' criteria and considerations when selecting visual inputs focused on matching the NP for the project with the visual inputs. This matching activity can be interpreted as purposive pattern recognition (PPR). PPR can be observed in various matching activities (TABLES: 4.49, 4.50).

Activities	PPR As A Fit For Matching NP & Its Parts
Recognising the relationship between the visual pattern and its parts for matching NP	"Given a project of this size, obviously as a designer you have strong ideas about how design and photography and typography could be utilised together to promote the right effect. " (Jenny Brend:)
Selecting legible and nice typefaces for matching various parts of NP	"As a designer you obviously have strong ideas about how typography should fit together. Well a corporate type face is guild, so guild is a fairly strong typeface. We 've used guild in small areas here which where you need small type which comes up better as a sansarif typeface and a little headings here." (Jenny Brend:)
Selecting colour codes for each them for giving each theme a visual code for matching NP and further use in future publication.	But in the text we wanted a more classical typeface and I believe we used Caslon which is a nice face when it's used large as well as a very readable text face."(Jenny Brend:)
Selecting complementary 'quotes' for communicating positive opinions about the company	"The idea of using a band of colour there. It was decided to use bands on each spread. Make each spread different. And here we're talking about agency investment, all the various branches here, agency, investment, professional management consultancy. That's one spread so you've got a colour that relates to it. It's colour coded if you like. Here you're talking about surveying, development, management, slightly more diffuse and here you've got blue. And here we've got management, surveying, audit and so on, another colour, so the various things that they do have been grouped into sections and each section has been colour coded. It uses the code as a visual code. Except that should they decided to do new publications that relate to something you've got a colour. You could utilise it if you wanted to. It would be a starting point." (Jenny Brend:) "
Selecting pictures of the projects of the company for matching visual patterns with NP	"These are quotes from some of their clients, kind of complimentary quotes from clients and so we've used that box as a kind of I suppose soap box if you like, explain what people think about them."(Jenny Brend:) "
Knowing how to match the photographs with the total design pattern for matching NP and its parts	"We then got large prints, masked them down and made them fit in as we wanted them to fit in." (Jenny Brend:)

TABLE 4.49: PPR AS A FIT FOR MATCHING A VISUAL PATTERN WITH NP

Activities	PPR As A Fit For Matching NP & Its Parts
Selecting visual patterns of a day in the company for matching NP	"This is a much more lively record and there are more reportage shots of a day in the life of the company. They're just simply record shots. They're not meant to look creative." (Jenny Brend:)
Recognising the relationship between the parts of the visual pattern	"Having seen what the photographer came back with some things would immediately suggest a certain page layout or a colour way or something and therefore it was developed around what we actually around what the photographer came up with something like that was quite interesting.." (Jenny Brend:)
Selecting visual patterns for matching the personality of the company	"By being black and white and showing a more informal set-up it does imply a more down to earth informal atmosphere. It may pass over to people that they are a slightly unusual company because this is a very traditional sort of market and rather than have photographs of them wearing extraordinary clothes and looking totally different, by just showing something like this which is not something that similar brochures would necessarily do, it's set them apart a little." (Jenny Brend:)
Art-directing photography for matching visual patterns with NP	"We wanted this kind of movement, this kind of feeling of reportage and we also knew which people we wanted to photograph and not just have them sitting there but have them in the work situation. So we gave him a fairly tight brief but it was up to him to make something of it." (Jenny Brend:)
Selecting large prints for matching NP	"We could have used the small prints but having something like that was nice to have over a large page. We then got large prints, masked them down and made them fit in as we wanted them to fit in.... So it's very much a question of working with photography." (Jenny Brend:)
Selecting people in actions and movements for matching NP	"I think showing an informal atmosphere implying that there's talk goes on, and if there's a lot of talk goes on in the company it implies that you could talk to them if you were a client and therefore you might get what you want and that you, he says here, good results, good communication during projects. Good people. They get things done. That's the impression that they wanted to give. A young dynamic workforce." (Jenny Brend:)
Selecting female employees for matching NP	"Also a lot of female, not necessarily behind reception desk. You know doing executive thing. People seem to want that as well. I mean they just accept that some people are female and some people aren't and that whatever they do you don't necessarily find that in some areas of business." (Jenny Brend:)
Selecting people while talking or walking for matching the busy and successful business environment	"The images here of movement are people who just happen to be passing in the corridor and talking to someone. Again someone's just rushed out of an office here. Giving the impression that things are busy, that they're successful. They are a more informal company and therefore maybe subliminally this came out by using something like movement. Well the black and white shots were taken of actual existing work force doing their job that they are paid to do in the company that we are promoting and therefore they have to be seen to be doing things." (Jenny Brend:)
Selecting informal meeting setting for matching NP	"Here it's a meeting. That they don't hang around have expensive lunches. That they are hard workers and that they get things done. It's slightly more informal way of doing things. People are standing, people are leaning forward." (Jenny Brend:)
Selecting People dressing informal for matching the hard working company	"They're wearing shirtsleeves and he's got a patterned tie on. He's not a city banker. Again no jacket. It's a more informal approach which is what's come across. I think it was the whole ethos of the company.." Jenny Brend:)
Differentiating between photographs that represented people and activities from photos of projects	"These colour shots here are simply straight forward not even reportage, they're simply record shots of buildings and places that they have worked on. So they serve no further purpose a bit like stamps just like seal of approval. The colour photographs are simply showing you some of the properties they have managed or done deals with over the past year and they have managed these things for various companies and they've explained these things.
Realising the importance of the visual impacts of corporate brochures	"So by separating out colour things as things that actually happened as kind of static things, but these are live, these are moving around. The same thing here. Work was done in the past. so all the colour things relate to projects that they work." Jenny Brend:
Realising the survival of the company during the recession as an important element of the image of the company	"This is a document that lives or breathes by its visual impact it would be very important to choose images that were of interest." (Jenny Brend:)
Selecting large prints for emphasising the characteristics of photography	"We chose to use things in that particular way because it gave the impression of hard working kind of busy firm that they have been through some hard times in the recession. They didn't want to look too opulent as if they were wasting money. They wanted to look as though there were a hard working company who had a lot of skill still. A lot of professionalism and they were used to dealing with the rough as well as the smooth. So this was seen to be a kind of grittier approach after the excessive of the 80s'." (Jenny Brend:)

TABLE 4.50: PPR FOR MATCHING VISUAL PATTERNS WITH NP

PROJECT STUDIES GROUP (3): CORPORATE PUBLICATIONS

4.11 MINI-CASE STUDY (10):

ANNUAL REPORT & ACCOUNTS – LONDON ELECTRICITY

4.11.1 Background of 'London Electricity' project

This design project was explored, developed and designed by 'Moor Lowenhoff' design consultancy in London. General information about this project is given in APPENDIX (XI). According to Mr. Barry Lowenhoff (1997) the art director of 'Moor Lowenhoff' design consultancy, the project consisted of two items: 'Annual Report and Accounts 1995/96 for London Electricity', and 'Annual review and summary accounts'. The target audiences of the project were: 1) the city analysts in London, 2) institutional share holders, 3) private share holders who were the end users, 4) consumers. The project started from January 1996 to July 1996. The budget of the project was very high. According to Barry Lowenhoff, the name of the company was 'London Electricity' and it was located in London South. The clients (POs) were electricity suppliers. They supplied electricity to London and to other consumers in the south. Also they had various sorts of education and environment initiatives, and quality services initiatives. The market of 'London Electricity' was big, sophisticated, and complicated market. Making the market simple was one of the objectives of the company. Various changes related to the nature and objectives of the company took place. According to the company 'Annual Review Summary Accounts 1995/96' :

London Electricity is changing. The Company is now embarking on the next stage in its development from a publicly owned company into a dynamic private sector business. Change is not an option but a necessity. From April 1998 we face an additional challenge. The intense competition for commercial customers, which started over two years ago, will be extended to the residential market as well. We now positioning ourselves to take advantage of the opportunities which these developments present. (From the front cover of the booklet)

The designer stated that the annual report was an important document for 'London Electricity' because it gave information about the policies, services and financial objectives of the company, and it informed about the role of the company in the community including the social and environmental concerns, projects and achievements.

4.11.2 Designs: 'London Electricity - Annual Report And Accounts'

The designs for both items: the 'Annual reports and accounts 1995/96' and the 'Annual review and summary accounts 1995/96' included the following: 1) types of illustrations, 2) types of photography, 3) charts, 4) typefaces for head titles, text, and numbers. Most of the design imageries were repeated in both items. The colour photographs were used in the annual review in large sizes, and were used in the annual report in black and white and in smaller size. Also, the annual review included more images than the annual report. The designs of the annual report and the annual review had to do with their structures and contents. Both items addressed certain topics (See TABLES: 4.51, 4.52).

1)	Financial Highlights (p1)
2)	Capital performance (p2)
3)	Chairman's statement (p3)
4)	Chief Executive's statement (p5)
5)	Operating and financial review (p18)
6)	Report of the Remuneration Committee (p22)
7)	Board of Directors (p26)
8)	Directors' report (p28)
9)	Corporate governance (p31)
9)	Directors' responsibilities (p32)
10)	Reports of the auditors (p33)
11)	Statement of accounting policies (p34)
12)	Group cash flow statement (p38)
13)	Statement of total recognised gains and losses (p39)
14)	Notes to accounts (p40)
15)	Current cost information (p27)
16)	Operating results (p60)
17)	Balance sheet, cash flow and capital expenditure (p61)
18)	Other information (p62)
19)	Unit sales and customers (p63)
20)	Shareholder information (p64)

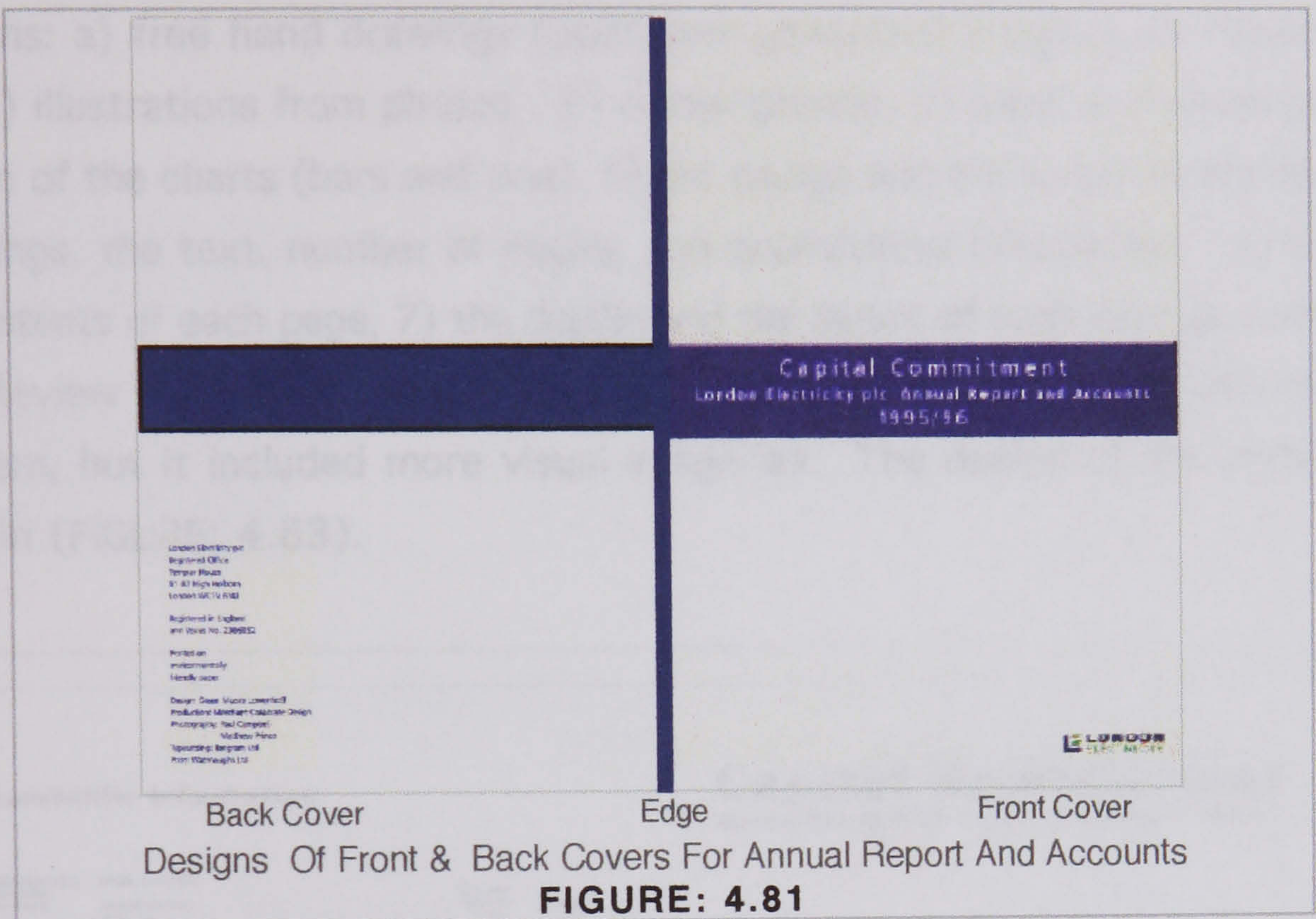
TABLE 4.51: TABLE OF CONTENTS - ANNUAL REPORT AND ACCOUNTS

1)	Finance highlights (p1)
2)	Chairman's statement (p3)
3)	Chief executive's review (p5)
4)	Report of the Remuneration Committee (p10)
5)	Board of directors (p14)
6)	Summary directors' report (p15)
7)	Group profit and loss account (p16)
8)	Balance sheet (17)
9)	Statement of the auditors (17)
10)	Shareholder information (18)

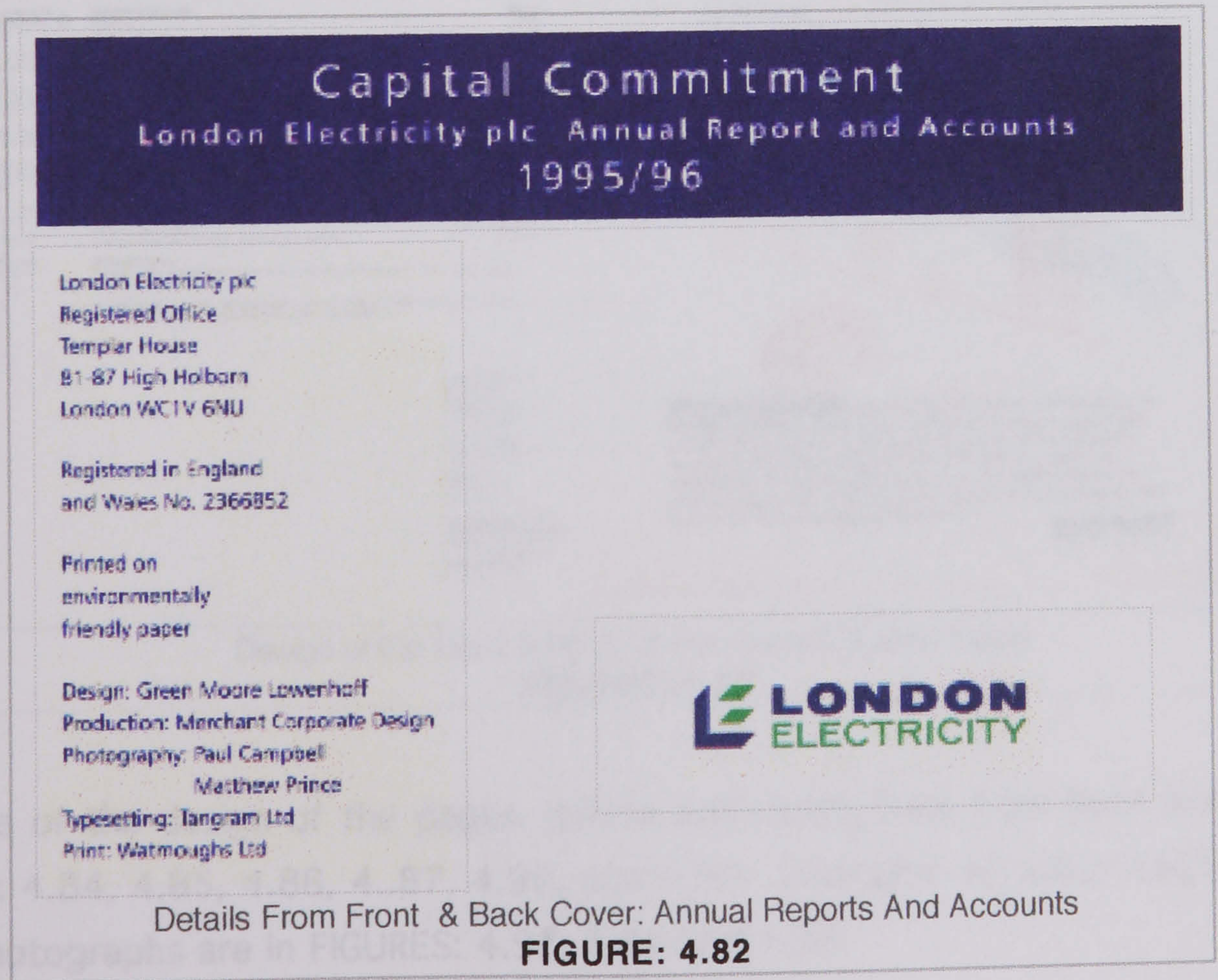
TABLE 4.52: TABLE OF CONTENTS - ANNUAL REVIEW AND SUMMARY ACCOUNTS

The designs consisted of the following for the 'Annual report and accounts 1995/96': 1) a front and a back covers (FIGURES: 4.81,4.82), 2) a page of contents, 3) sixty four pages. The shapes of both items were rectangular. The measurements of the annual report were: 21cm width by 29.50cm length. The measurements of the annual review were: 23cm width by 29.77 cm length. The colour of the cover of the annual report was white, and was divided horizontal in the middle by a horizontal Cerulean blue band (3.50cm vertical length by 21cm horizontal width). On the blue band was written the title of the item in white typeface: 'Capital Commitment- London Electricity plc Annual Report And Accounts 1995/96'. At the bottom of the left side of

the cover was the logotype of the company. The cover of the annual review was white and included decorative illustrations, a written statement, and the logotype of the company. The paper of the annual report was white for most pages, except the front six pages were light soft yellow colour from one side and white from the other. Only one page was coloured on both sides. The light yellow pages included soft coloured illustrations underneath the contents of the page (text, or text and photos). The colour of the paper of the annual review item was white.

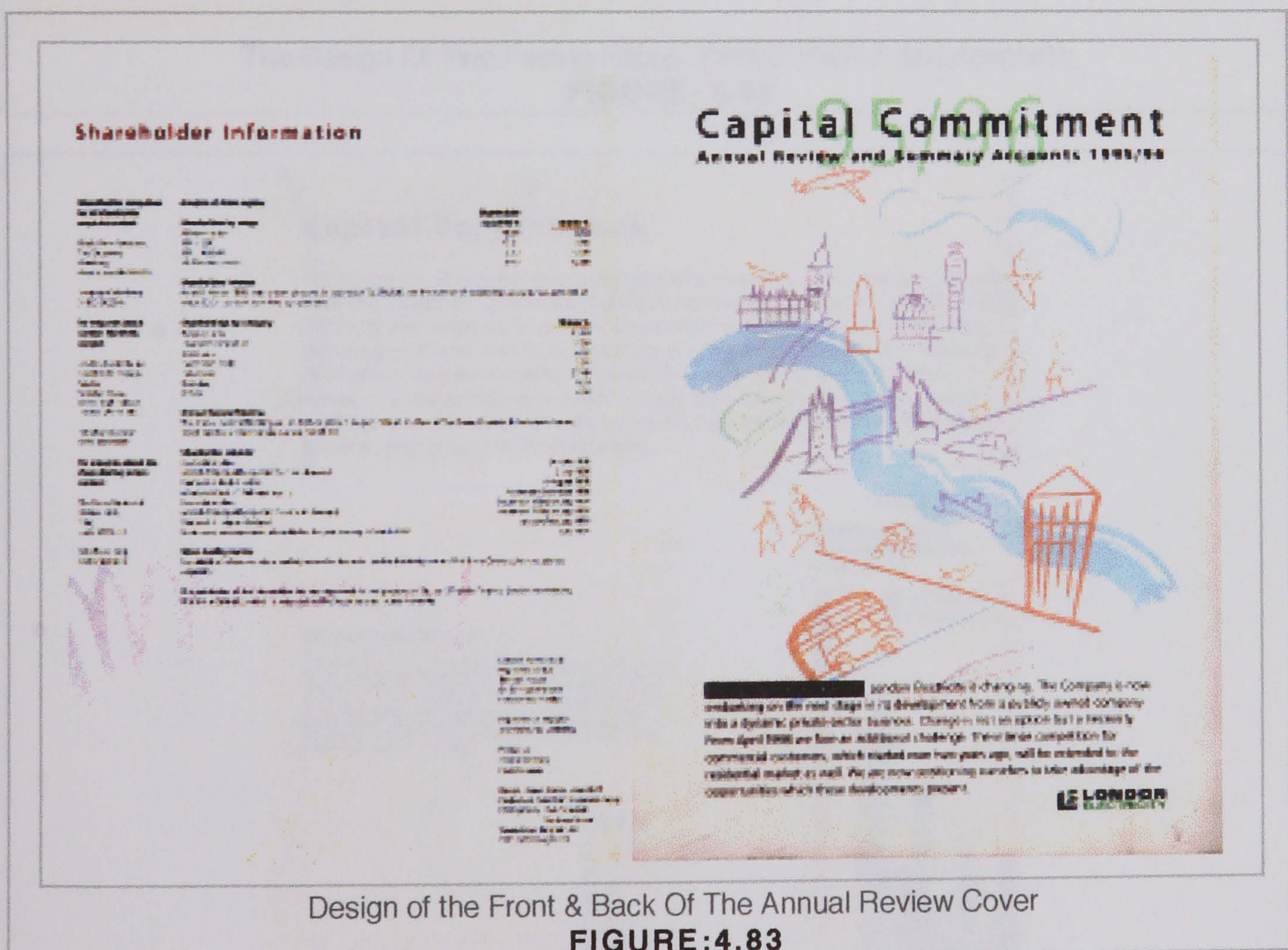


Designs Of Front & Back Covers For Annual Report And Accounts
FIGURE: 4.81



Details From Front & Back Cover: Annual Reports And Accounts
FIGURE: 4.82

In the annual review, some topics were accompanied by design imageries. The topic 'Financial highlights 1996' occupied one page, and was accompanied by three charts. The topic 'Capital performance' in page '2' was accompanied by a chart, and illustration underneath the text. The chairman's statement occupied page '3' and '4; and was accompanied by a photo illustration of the chairman. Chief executive's statement occupied pages '7' to '17' of the annual report and was accompanied by a photo illustration of the chief executive, freehand illustrations, black and white photos. The designs of both items involved the following: 1) three types of illustrations: a) free hand drawings (computer generated images), b) drawings from photos, c) illustrations from photos, 2) colour photos, 3) black and white photos, 4) the design of the charts (bars and pies), 5) the design and the layout of the head titles, sub-headings, the text, number of pages, and quantitative information, 6) the design of the contents of each page, 7) the design and the layout of each item as a whole. The 'Annual Review and summary accounts' item shared some similarity with the annual report item, but it included more visual imageries. The design of the annual review cover is in (FIGURE: 4.83).



Design of the Front & Back Of The Annual Review Cover
FIGURE: 4.83

Examples of the design of the pages, details and illustrations from both items are in FIGURES: 4.84, 4.85, 4.86, 4.87, 4.98, and 4.90. Examples of colour and black and white photographs are in FIGURES: 4.91, 4.92 and 4.93.

London is important to London Electricity and London Electricity is important to London. We believe we have a responsibility to be involved in the wider issues that affect London. Education, youth and the environment are our main priorities.

Capital People



Provenance Children's Welfare Trust is a charity providing residential care for 100 children in London. It is a registered charity and a company limited by guarantee. The charity is a subsidiary of London Electricity. It provides residential care for children in London.



London Hand is a charity providing residential care for children in London. It is a registered charity and a company limited by guarantee. The charity is a subsidiary of London Electricity. It provides residential care for children in London.



South & South is a charity providing residential care for children in London. It is a registered charity and a company limited by guarantee. The charity is a subsidiary of London Electricity. It provides residential care for children in London.



Employee involvement is a key feature of London Electricity. It is a registered charity and a company limited by guarantee. The charity is a subsidiary of London Electricity. It provides residential care for children in London.

Chief Executive's Statement

Through our Electricity in Education Activity Service we support projects which bring the science and technology aspects of the national curriculum to life. London Electricity staff also visit schools, giving talks on the generation and use of electricity and encouraging children to use it safely and efficiently. Over the last two years our funding has increased from £100,000 to £150,000. In promoting the understanding, training and practical application of skills in our 100 primary and secondary schools nationwide.

Through educational activities, Learning Through Electricity, has provided thousands of hours of extra-curricular and extra-curricular in the home. London Electricity is making a major contribution to improving educational opportunities in London.

As a member of London Electricity, London Electricity is also active in the promotion of the capital as an international business and financial centre. For the last two years we have been active in the promotion of the capital as an international business and financial centre. For the last two years we have been active in the promotion of the capital as an international business and financial centre.

Environment, Health and Safety One of our main priorities is the health and safety of our employees. We ensure that as a major player in the energy industry we have a high level of safety standards. We have a strong safety record and have received the highest safety awards in the industry.

Our goal is to ensure that Environment, Health and Safety form a central part of our business management. It is a key part of our business management strategy. We have a strong safety record and have received the highest safety awards in the industry.

Environmental Impact Statement

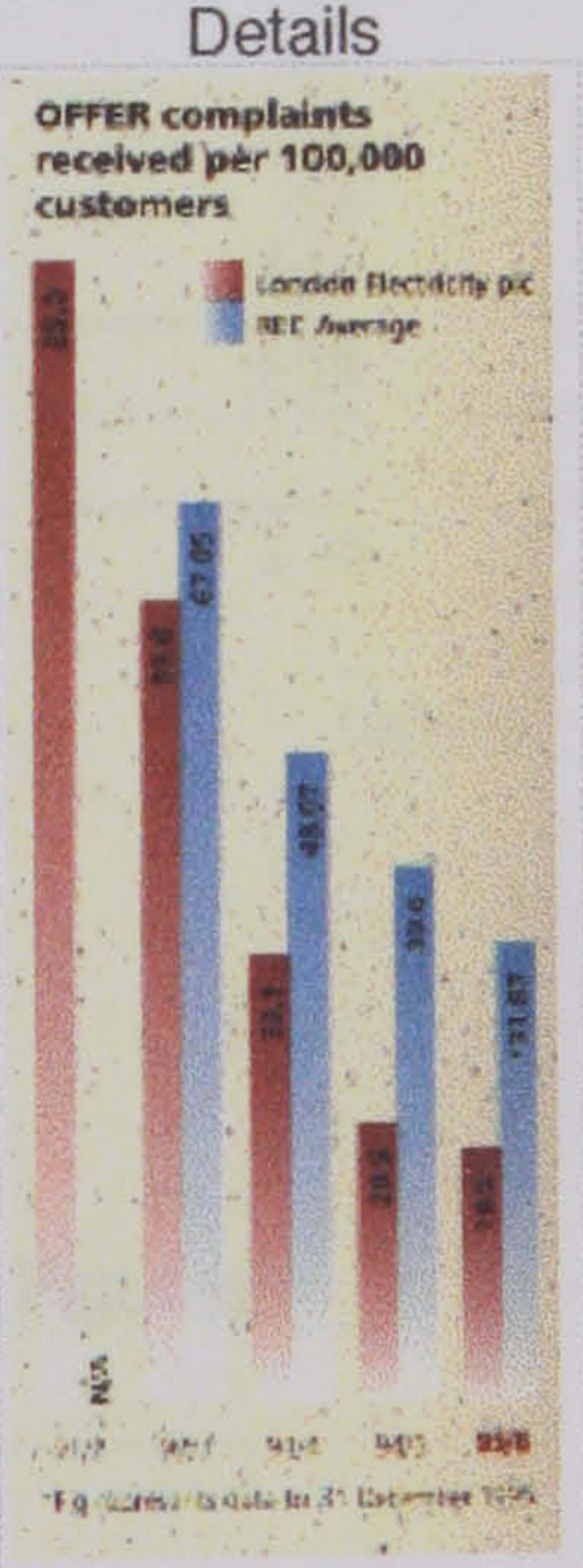
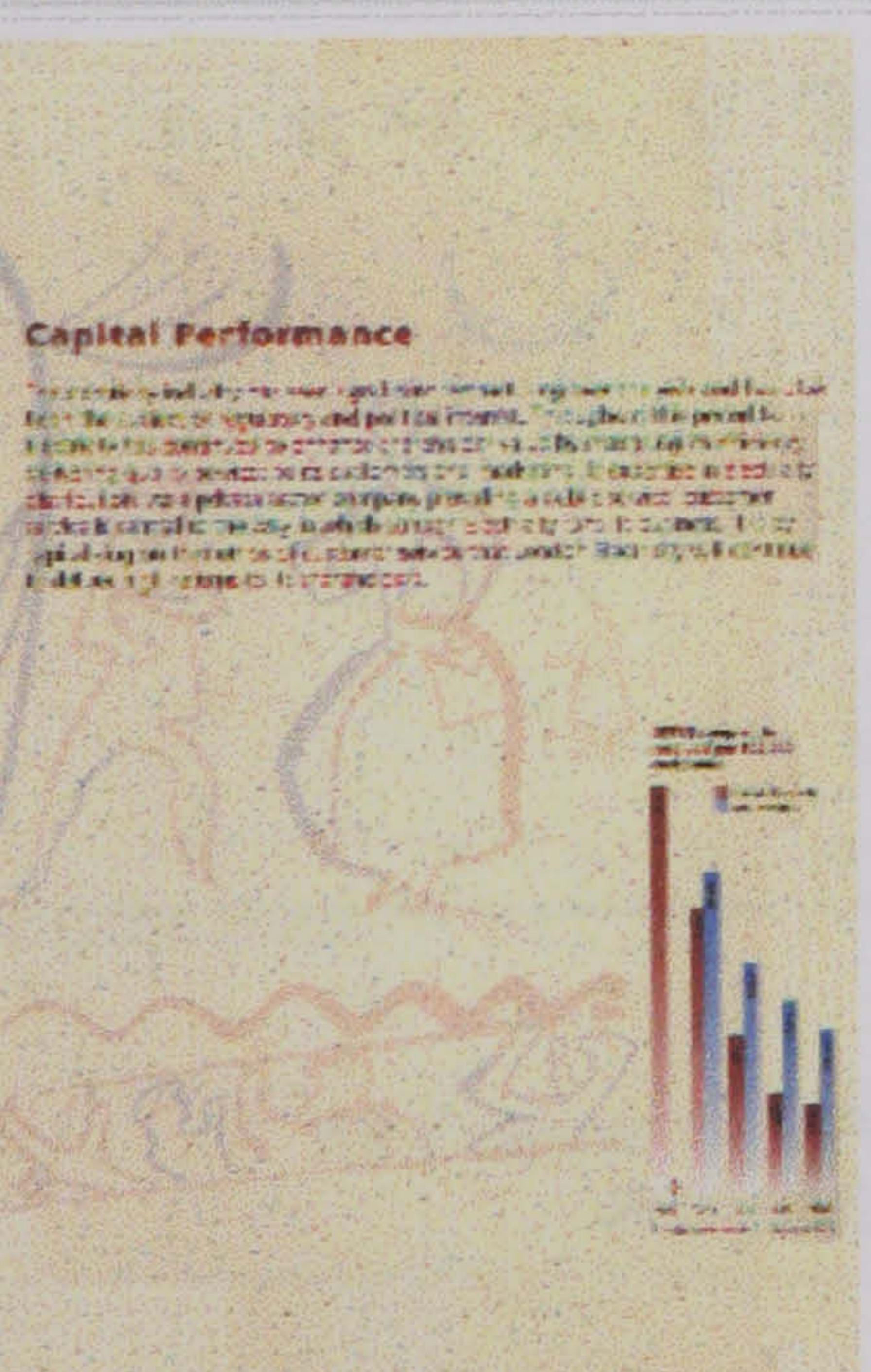


The 1996 Environmental Impact Statement shows a significant reduction in CO2 emissions.

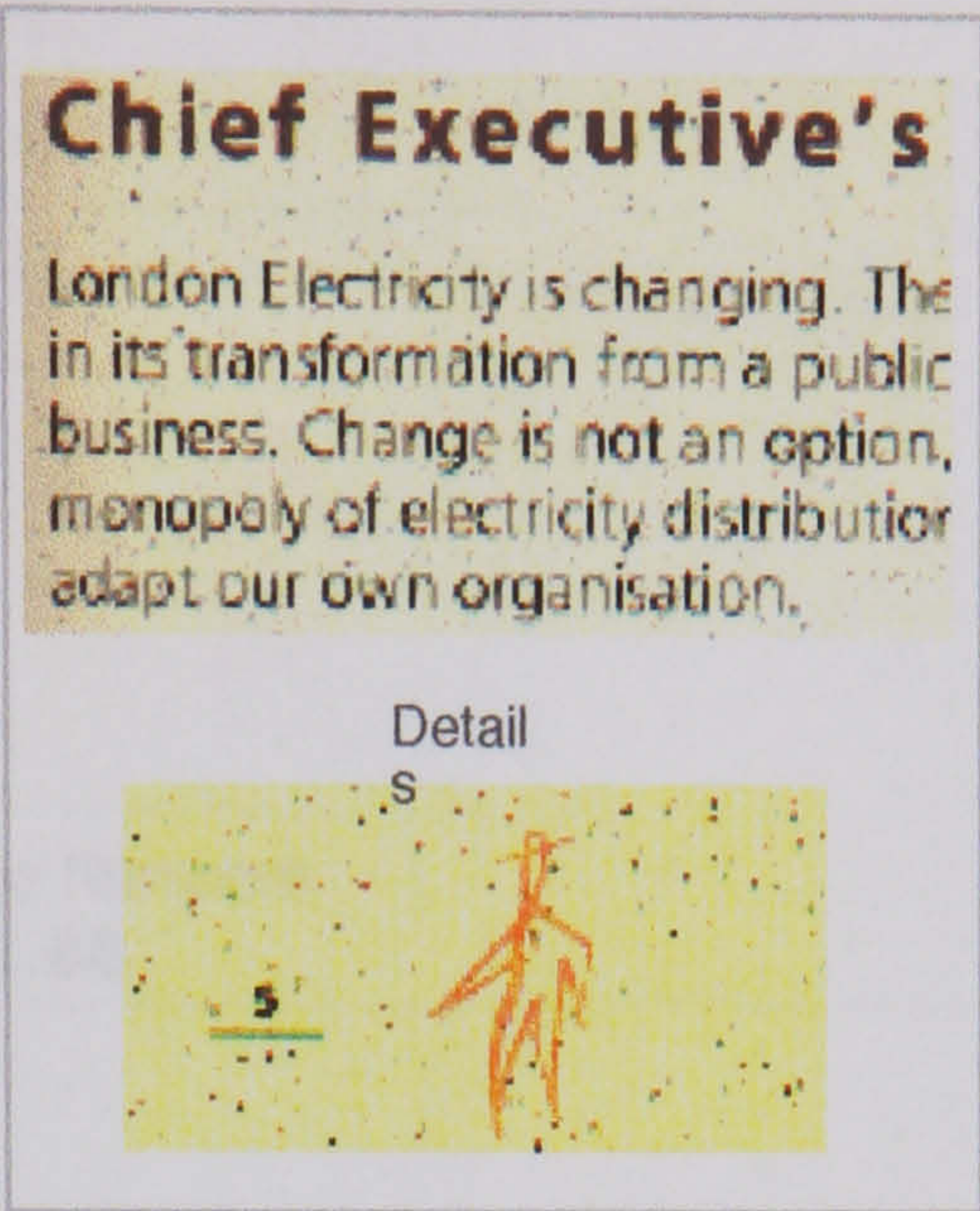
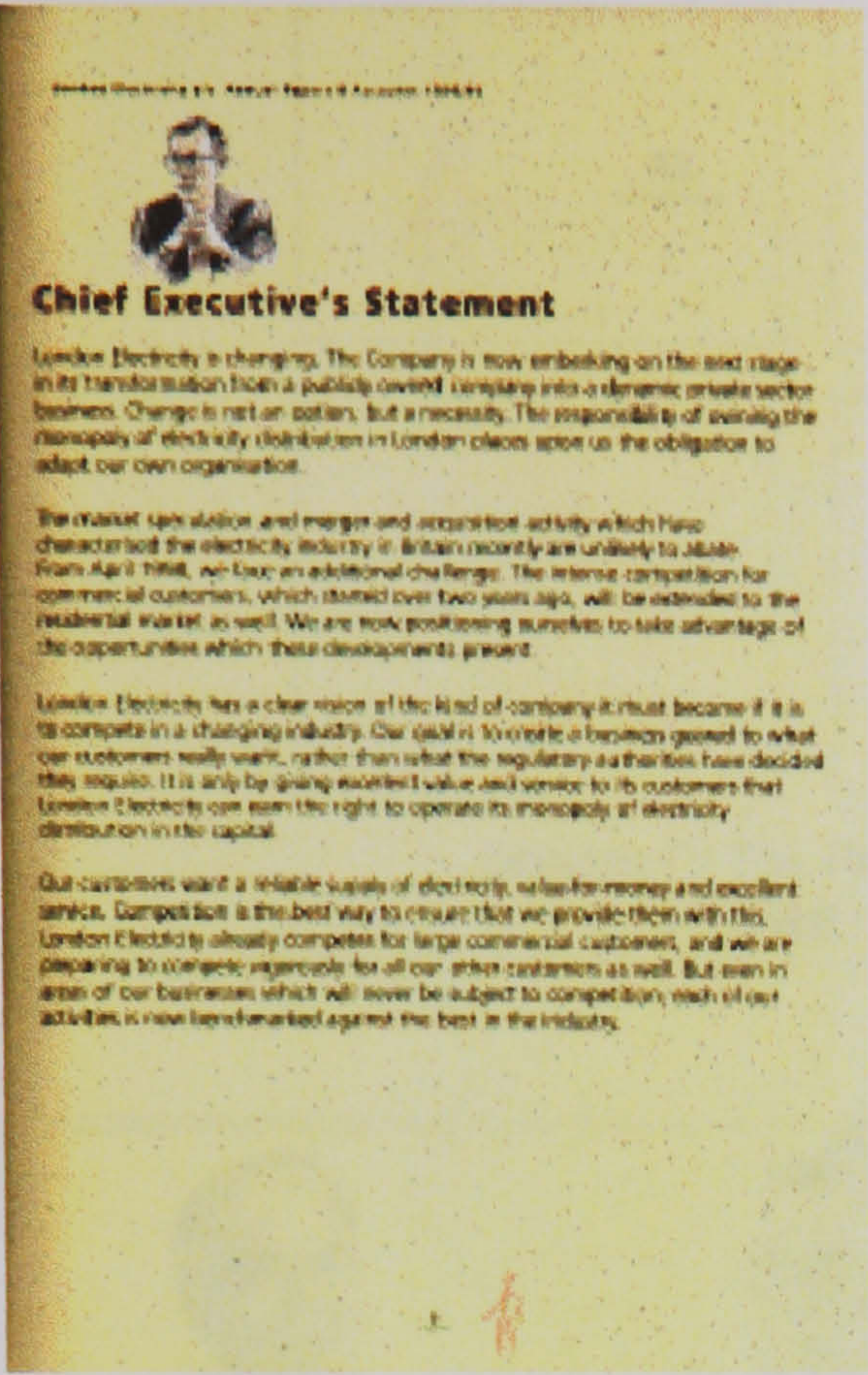
The Design Of Two Facing Pages: Annual Report And Accounts **FIGURE: 4.84**

Capital Performance

The electricity industry has seen significant restructuring over the year and has often been the subject of regulatory and political interest. Throughout this period London Electricity has continued to enhance shareholder value by increasing its efficiency, delivering quality services to its customers and marketing its expertise in electricity distribution. As a private sector company providing a public service, customer service is central to the way in which London Electricity runs its business. It is by capitalising on that ethos of customer service that London Electricity will continue to deliver high returns to its shareholders.



Example Of Tree Hand drawings, Text & A Chart In One Pattern **FIGURE: 4.85**



An Example of A Page With Illustration
FIGURE: 4.86

London Electricity plc Annual Report & Accounts 1995/96

Report of the Remuneration Committee

SHARE OPTION SCHEMES

Share option scheme
 Details of the share option scheme during the year. Other than the grant to Mr M. J. Jones of 100,000 shares on 3 April 1995, no share options were granted during the year to directors. The Company does not presently intend to make any further grants of share options in the foreseeable future under the existing share option scheme.

Share purchase scheme
 The Company operates a Save As You Earn (SAYE) scheme which allows participating employees the opportunity to buy shares in London Electricity. There are currently 272 members of staff in this scheme.

PENSIONS
 London Electricity operates a pension of up to two thirds of base salary on a defined contribution basis, or defined salary pension plan, in which the employer's contribution is a fixed sum of four times basic salary. Contributions by the employer are based on the amount of basic salary.

SERVICE CONTRACTS
 All of the executive directors have service contracts with a notice period of 12 months. However, in the event of a change of control the notice period is extended to an initial period of 24 months effective from the date of change of control, and any such extension period is subject to 12 months' notice. The terms of the contracts for such executive directors are reasonable and in the interests of the Company. Details are reported in the company's annual accounts and contracts are also available to the public under the Freedom of Information Act.

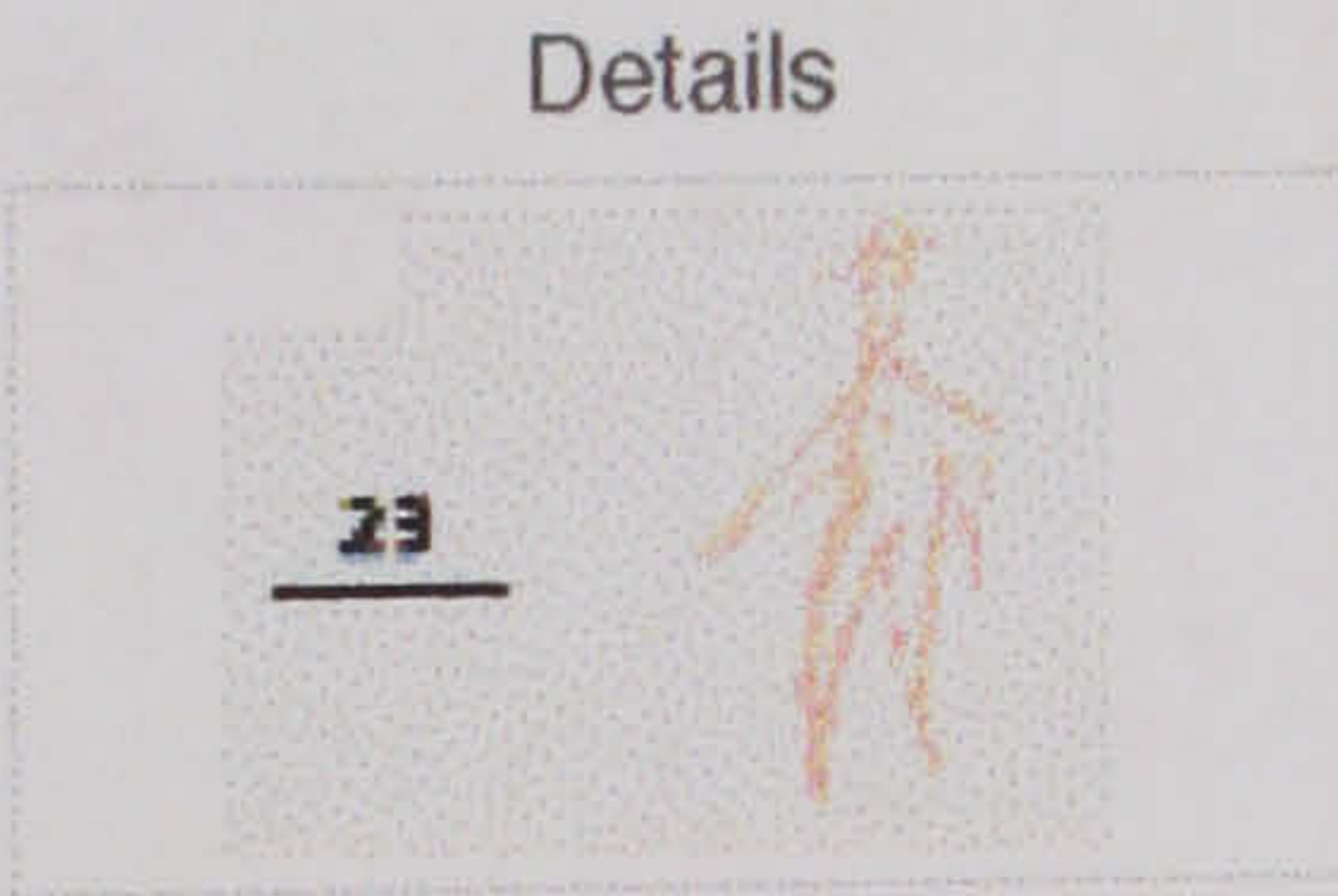
REMUNERATION POLICY FOR NON-EXECUTIVE DIRECTORS
 The remuneration for non-executive directors consists of fees for their services in connection with board and board committee meetings and other advisory or additional services such as chairing the vessel at a special ceremony or acting as a director. Fees are paid quarterly for the benefit of the company. They do not have service contracts, are not eligible to participate in the company's share purchase scheme, and do not participate in any of the Company's share option or other remuneration schemes.

DIRECTORS' EMOLUMENTS
 Salaries and fees

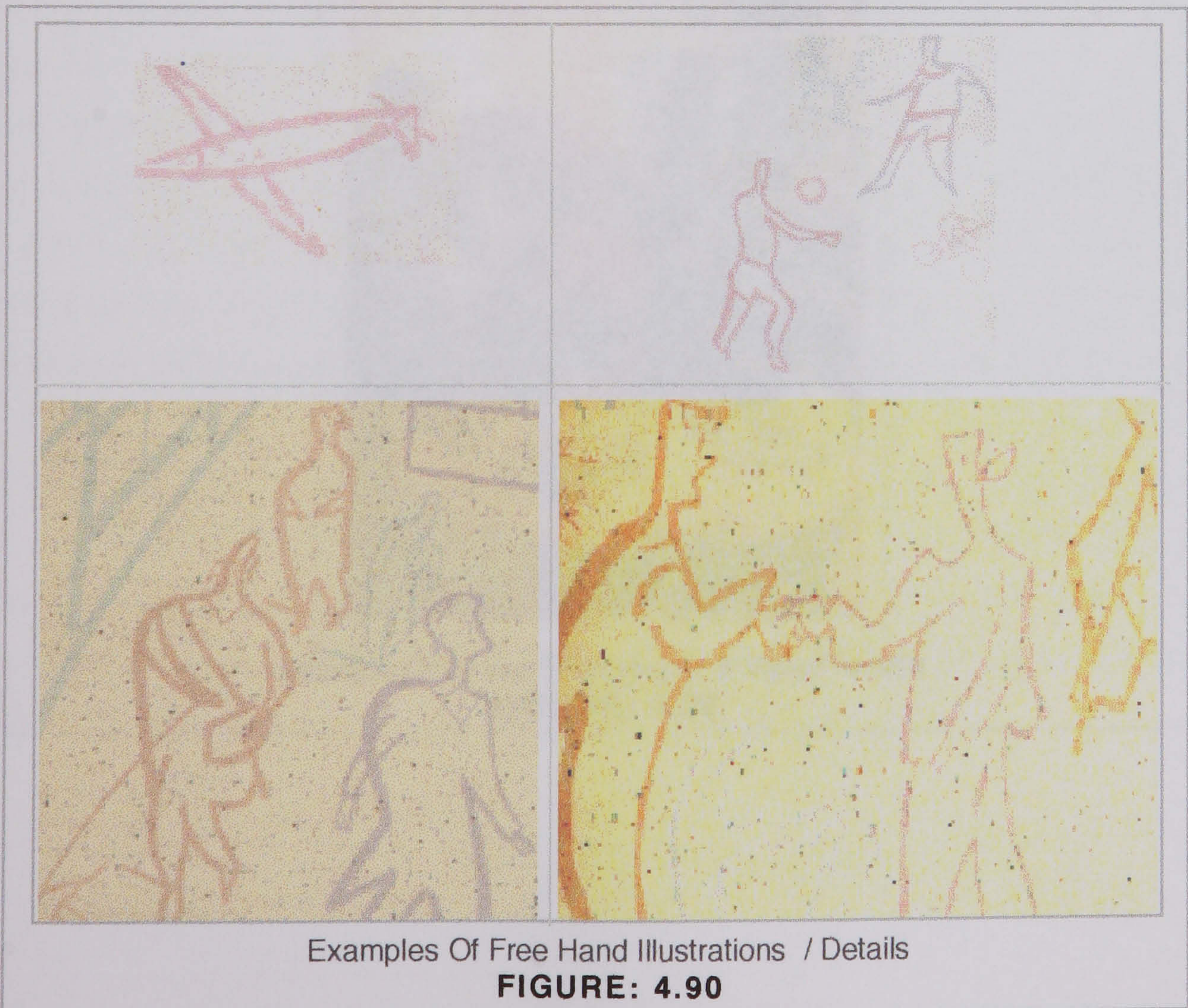
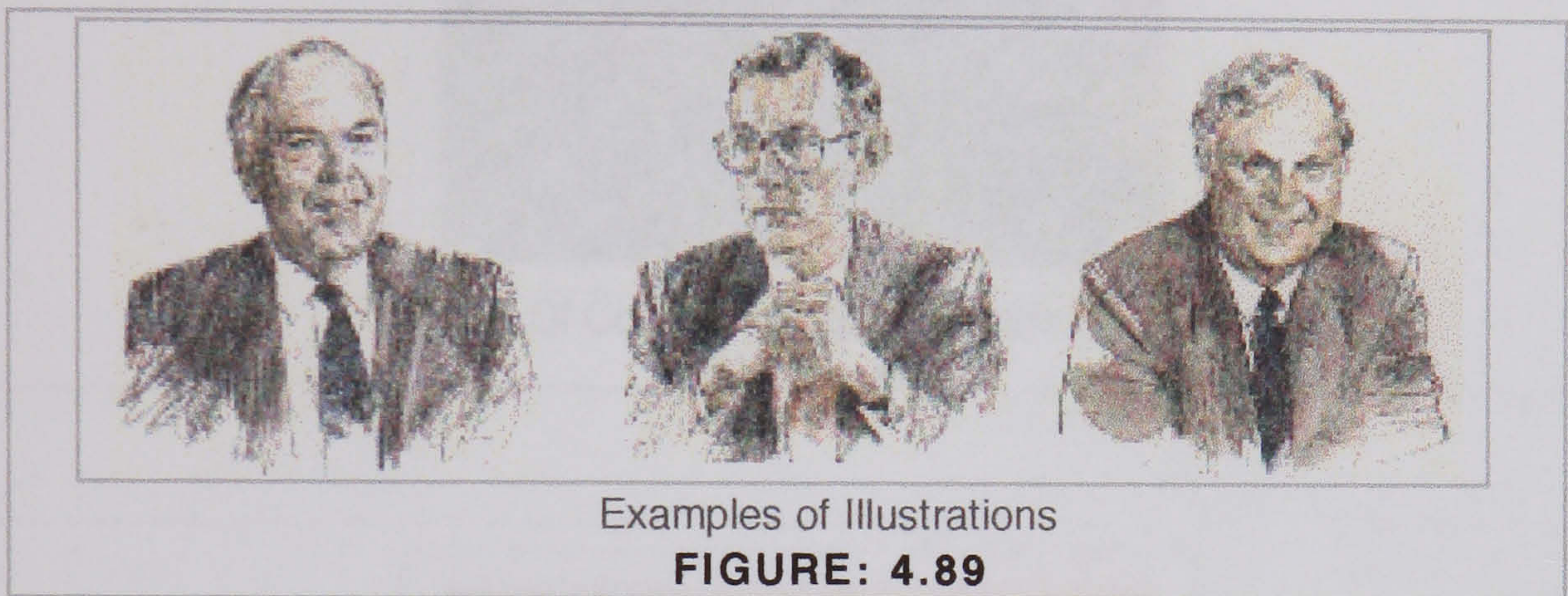
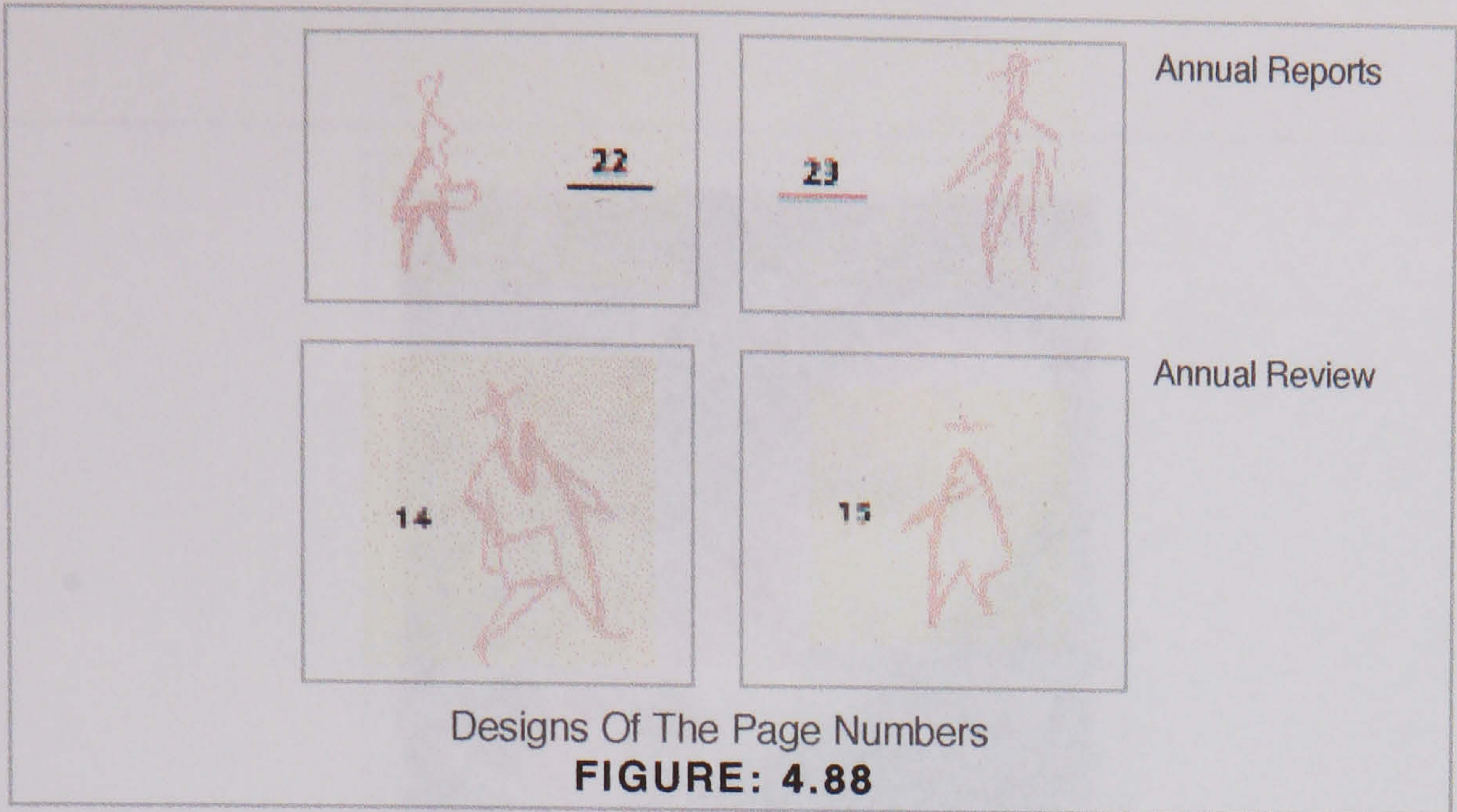
	Salary £000	Bonus £000	Pensions £000	Benefits £000	1995/96 Total £000	1994/95 Total £000	Notes
Chairman							
Mr B. J. Jones	100	-	-	-	100	100	(1)
Mr J. W. Jones	100	-	-	-	100	100	
Executive directors							
Mr J. Kenney	137	12	50	12	211	-	(2)
Mr J. Kenney	123	1	27	12	163	161	
Mr J. Kenney	95	10	42	12	163	-	
Mr J. Kenney	62	15	28	15	120	151	
Mr J. Kenney	98	10	43	12	163	-	
Mr J. Kenney	59	5	26	10	100	152	
Mr J. Kenney	127	14	54	7	202	-	
Mr J. Kenney	122	22	52	10	206	206	
Mr J. Kenney	94	20	40	5	159	-	(3)
Mr J. Kenney	161	21	75	10	267	254	
Total 1995/96	955	86	238	48	1,327	907	
Total 1994/95	519	84	276	52	931	1,002	
Non-executive directors							
Mr J. Kenney	6	-	-	-	6	-	(4)
Mr J. Kenney	21	-	-	-	21	21	
Mr J. Kenney	21	-	-	-	21	21	
Mr J. Kenney	-	-	-	-	-	6	(5)
Mr J. Kenney	-	-	-	-	-	6	(6)
Mr J. Kenney	48	-	-	-	48	54	
Total	703	86	238	48	1,055	1,178	

The figures for directors' reduced share options are the contributions paid by the Company for the guidance provided to the Institute of Actuaries on a share option scheme created in 1994/95.

Salary £000	Bonus £000
100	-
100	-
137	12
123	1
99	10
92	15
98	10
89	15
127	14
122	22
94	20
161	31
555	66
510	84



An Example Of A Page With Figures
FIGURE: 4.87

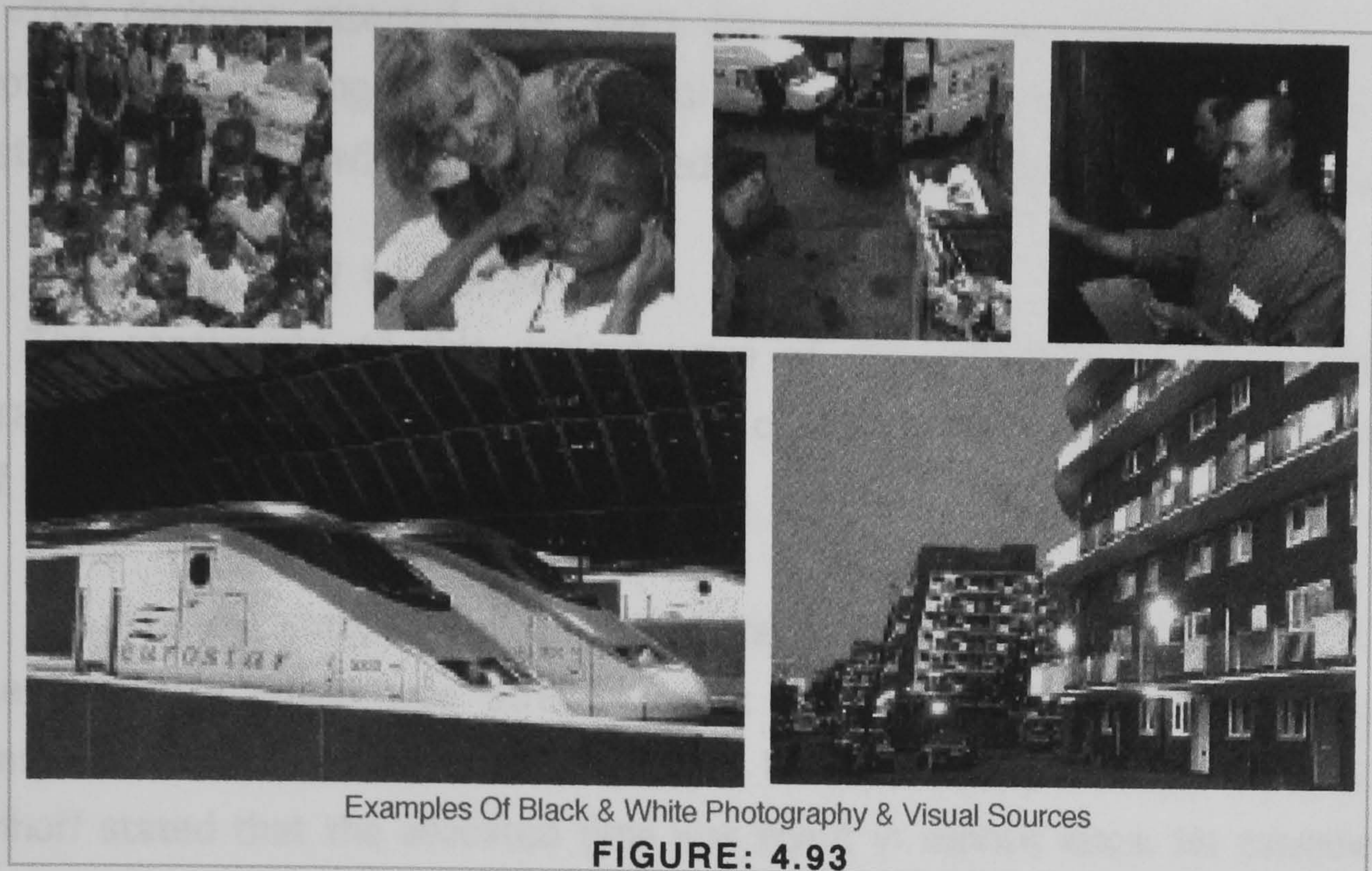




Example Of Colour Photography & Visual Source
FIGURE: 4.91



Example Of Colour Photography & Visual Source
FIGURE: 4.92



4.11.3 Processes of identifying the need & the need pattern

The processes of identifying the need for this project were straightforward. The PO briefed the designers with the needs and requirements for the project Barry Lowenhoff stated that they had a long business relationship with the clients, and that they were aware of the nature of the company and its business. He stated that they needed to know the new ramifications and objectives of the company. He indicated that the design briefs for annual reports were similar in general, and that the new elements of the design brief were not significantly new to them. The designers gathered various types of information about the project from the PO. The PO gave the designer a design brief, the contents of information of the annual reports and annual review items, the necessary documents, and some visual sources. The designer explained that the clients wanted to enhance their existing image rather than changing and developing a new image. He explained that the clients (POs) were after a vehicle to enable them to show to their private share holders the activities and good they were doing the community. The requirements were: 1) one lace statuary and accounts item for the city (annual report), 2) a summary accounts for the private share holders. The annual review and summary account was driven by the consumer's need, and what the consumer expected to see in terms of environment and quality of service etc. The designer explained the content of the design brief QUOTATION:4.30).

Well there was the design brief. On the one hand the budget and timetable were very fixed. They wanted to achieve a more enhanced image. They needed two things. One was the statutory obligations and to produce all sorts of information. The other thing was to assure their customers and share holders that they were performing up to expectations and that their share values were going to be going. up and their share holders were investing wisely. That was their key need." (Barry Lowenhoff:)

QUOTATION 4.30: THE NP FOR THE ANNUAL REPORT AND ANNUAL REVIEW

The designer asserted that both the designers and the clients reached a conceptual understanding of the need for the project. Constructing a conceptual understanding of the need can be considered as the need pattern (NP) for the project.

- **Constraints of the need**

The constraints of this project were of the following types: 1) economic constraints both time and money, 2) visual constraints, 3) textual constraints, 4) a set of visual criteria.

(1) Time

The designer stated that because of the nature of the project they had a very precise timetable which was stretched out over six months. He stated that in comparison with other projects this project had the luxury of all that time. Barry Lowenhoff stated that the allocated time was spent in various ways. He explained that various activities took place simultaneously. These activities were related to the following: 1) copyright, 2) commissioning and art-directing illustrators and photographers, 3) gathering photos and taking photos. Barry Lowenhoff explained:

Many elements run side by side so that on the one hand you may have copyrighting being looked at by someone, and you've got photography and illustration. They run at slightly different speed, because you know where you have to make a presentation to the board but the amount of time was something of a luxury in this case. It afforded us the opportunity to just concentrate on what was going to be an effective design without being concerned about whether we could execute the design in the way we wanted to. So time related influences didn't really influence us at all.

(2) Budget

The budget of this project was very high. But in spite of that the budget imposed certain restrictions, and subsequently the designers had to adapt the use of some of their materials according to the allocated budget. The designer stated that some of the photos were not of good quality, but they had to use them. Also the designer stated that they wanted to use different paper but they were not able to because of the cost implications. The designer stated that because the project was big they assigned a design team for the job because it covered the economic side of the work.

(3) Visual constraints

The designers had to use: 1) the same logotype of the company, 2) the pictures of the board of directors, 3) photographs related to the companies activities and projects within the community, 4) charts for explaining financial profits, transactions, etc.

(4) Textual and figurative contents

The contents of the annual report and the annual review were decided by the PO and were to be represented without changes.

(5) The designers came up with a set of visual criteria and agreed upon it with the PO. The set of the visual criteria became a set of visual restrictions that the designers

had to abide with.

4.11.4 Processes of gathering and selecting visual sources

The processes of gathering and selecting visual sources started after the designers received and discussed the design brief. These processes continued during the various stages of the design idea. Some of the visual sources were decided initially by the POs, and some were suggested by the designers. Other visual sources were gathered and selected by the designers as visual references for specific visual information, and for general knowledge. The designers gathered and selected visual sources in various ways: 1) from the PO, 2) by coming up with design ideas, 3) by exploring design ideas, 4) by visual research, 5) by talking to photographers and illustrators. The designer stated that they investigated various types of illustration, photography, computer generated images, typefaces, various types of charts, various types of paper, and various colours. The designer stated that they searched and looked at ranges of visual sources. The visual sources included the following: 1) general visual sources, 2) art-directed visual sources, 3) found visual sources, 4) retrieved visual sources. Examples of the designers' visual sources and frequent uses are in (TABLE:4.53). From the designer's explanation it can be considered that the designers selected visual sources and selected visual patterns from their visual sources.

Type of sources of visual information	Frequency
1) Imagination.....	Very high
2) Words and meaning	High
3) Typefaces.....	Very high
4) Design ideas.....	Very high
5) Action and behaviour.....	Medium
6) People	Very high
7) Illustrations.....	Very high
8) Photographs.....	Very high
9) Computer generated images.....	Very high
10) Photo-Libraries	Medium
11) In-house visual library.	Very high
12) Design projects and work.....	High
13) Media and TV.....	Very low
14) Newspaper.....	Very low
15) Magazines.....	Medium
16) Personal ideas.....	Very high
17) Human made Objects	High
18) Visual techniques	Very high

TABLE 4.53: TYPES OF VISUAL SOURCES FOR 'LONDON ELECTRICITY'

4.11.5 Visual patterns

The visual patterns for this project can be considered to involve two layers of visual patterns: one had to do with the visual style and technique, and the other had to do with the subject matters. The two types of visual patterns overlapped and each was selected from different visual sources. Also, both types of visual patterns were parts of an overall pattern. The designer stated that they selected certain illustrative styles, photography, typefaces, charts, layouts, and type of papers for this project.

- Illustrations: The designer stated that the illustrations in both the annual

report and the annual review items were art-directed and commissioned by the design consultancy, and that outside illustrators created these illustrations. The designer stated that there were two types of illustrations: 1) photo illustration (FIGURE: 4.89), 2) decorative illustrations (FIGURE:4.90). The visual sources of photo illustrations were photographs of the board directors of the company, and the visual sources of these photographs were the directors of the company (specific people). The visual sources of the decorative illustrations were selected from imagination, actions, words, images of domestic areas, streets, peoples, buildings, cars, trains etc. Barry Lowenhoff stated:

The illustration had been derived from words and conversations from the client about what the brief was. So there would be in a way distillation of words and meaning, and an interpretation of that in that sense.

Two decorative illustrations that represented a male figure and a female figure were used individually with page numbers (FIGURE:4.88). The decorative illustrations were produced by using free hand drawing technique and were generated by a certain computer program. The photo illustrations were related to the story line of the annual report, while the decorative illustrations were created and used to provoke moods of communication. Barry Lowenhoff said:

These photo illustrations are specific... this is decorative illustration because it's not a specific illustration for the story. It's really just there to help evoke a mood. There was not any agenda to those illustrations. They were just gentle kind of mood setters. These illustrations which came in a series like that would hit off several visual elements... domestic areas, the city, the community...

- **Photography:** The designer stated that the photos were art-directed and commissioned by the design consultancy. Some of the photos were black and white, and some were colour photographs. Outside photographers were asked to photograph specific institutional projects, social and environmental activities, people at home. Each of the photographs focused on a certain subject matter. Some of the photos were from the PO's photo- archives.
- **Charts:** Two types of chart were selected: 1) bars, 2) pies. These charts were created by using computers.

4.11.6 The design idea

The development of the design idea from a vague idea into an articulated idea was expressed by the designer. Also, the concept of a design idea that consisted of various visual parts was expressed by the designer. The designer stated that the design idea was part of their understanding of the need for the project, and it depended upon their creativity. He explained that before visualising the design idea and worrying about how it looked like one had to make sure that the thinking was right for the need and

requirements. From the designer's explanation it can be considered that the design idea was a visual pattern that consisted of subordinate visual patterns, and started as a mental image. Barry Lowenhoff explained:

First I had a mental image in my mind. Almost with any project when you walk away from a brief or a briefing meeting where you've had a discussion with the client you come away thinking yeah that could be a good idea. You could do that, you could do this... that would be good fun. The design idea got to be relevant. Again you can do that from your mind without the visuals. Very often the thinking has to be right before you start worrying about what the design idea looks like. So one has to understand what's being asked and then start to think of ideas which exploit that. Then you go back and start to draw the ideas out.

Barry Lowenhoff stated that the design idea worked in a context, and started very loose. He indicated that the design idea was the solution to the need. He explained that the design idea influenced layers of choices. He said:

I think it is usually in context. Your design idea would have influenced the design choice in terms of layers

The concept of a vague initial design idea was expressed by the designer. He stated:

I think in a way you do the visuals first then you start to worry about how it looks like. In a second stage you incorporate your visual elements and develop the idea further.

The designer explained the design idea:

The idea initially to introduce a variety of different illustrating styles so that it would appeal to different audiences and make the information more exciting so it had some cartoons and it had some very heavy black and white illustrations some grey and white .. It was designed to make the document look interesting and active and feel like it had a lot to say. So the design was trying to satisfy our interpretation of the client's needs and what we felt they expected.

The design ideas went through various stages. Each stage involved various processes. The major stages were: 1) coming up with design ideas, 2) developing design options, 3) selecting the best design options, 4) developing design ideas further, 5) commissioning out side illustrators and photographers and art-directing them, 6) developing the design and layout of the text, 7) artwork stage during which the text, photographs, illustrations and charts were combined together according to the design layout. Between these stages the designers and the PO had a number of presentation sessions during which the designers received feedback and approval from the PO. The designer explained that the clients participated in developing the design idea by suggesting certain changes. He stated that the clients knew what they needed, and how to visualise it, and how to be interpreted. The designer stated that the design brief did not specify the use of illustrations, and that the idea of using illustrations was the designers' idea. Barry Lowenhoff indicated:

I think the illustrations confirmed what the clients wanted. We wanted them to go down this route. We convinced them in so much as we produced something that they didn't start the brief by saying we want illustrations. We want this and this and this. We explored what we thought they were talking about, what we thought they wanted and they agreed to produce. They liked it very much.

4.11.7 Coming up with design ideas and graphic investigation

Coming up with design ideas for this project involved visual research and gathering and selecting visual sources and visual patterns. The designer stated that coming with the design idea for this project involved the following processes: 1) thinking, 2) drawing sketches and exploring design possibilities and selecting visual information, 3) presenting and discussing the design ideas among the designers, 4) selecting the best design ideas, 5) developing the best design options, 6) presenting design ideas to the PO and getting feedback and approval. The designer explained how they started and explored the design idea:

We had small drawings. We each went away and spent two or three days thinking of ideas and putting them on paper and then after that we had a meeting and we each sort of showed our ideas and we selected from that good ideas. Then we went away and developed those ideas and they were done in a very flexible way in-house. That was the technique we would normally chose in terms of developing a high profile project... It would be through quite a sort of three four process of allowing ideas to come to the surface, then having meetings to see what was put down and perhaps cross reference ideas.

The designer stated that they started exploring design ideas by producing rough sketches on drawing pads. Visualising the design idea by producing visual marks on drawing surfaces can be considered as a design pattern. The designer explained that working on drawing pads enabled the designers to deal with design and design issues. Looking at visual references while drawing helped the designers to visualise their design ideas. Barry Lowenhoff stated:

The initial design sometimes is done on a piece of paper, sometimes it's done by using computers. Usually when you're designing on the pad it's easy to deal with design and design issues. Those are the sort of design questions that one has in mind. You may look through a book as well and see a photographer or illustrator or a typographic style you would like to use. So you sort of visualise your idea.

- **Design options and (PCDH)**

The designer stated that they created a number of design options and selected from them the best options. The design options can be considered as patterns of competing design hypotheses (PCDH). Barry Lowenhoff said:

We did three or four potential routes. So in amongst that there would be elements or routes that would have been a bit more experimental.

From the designer's explanation, it can be considered that the designers created several design options for the following reasons: 1) to follow up ideas that they thought were good, 2) to try various alternative to see which one worked better, 3) to offer the clients choices between safe design routes and adventurous design routes, 4) to convince the clients that certain design options were better than others by showing them various alternatives. From the designer's explanation it can be considered that creating alternative design options helped the designers to argue their point of view and to convince the clients to select the option that was best for the need. The designer

explained:

There is maybe an illustration that you really want to use or an idea that you really like to take on, but the client may be scared of going down that route because it may be a little bit too much. But we know in context and from everyday experience over the years that the client needs courage to go down our preferred route. Often one notices that clients are very nervous about being adventurous, and in our heart of hearts we know that a design may look interesting... We know that they may just want to play safe and go down a route that is a little less adventurous.

- **Feedback**

The designer stated that the clients gave them feedback at the various stages of the design idea. He explained that they made various changes based on the clients' suggestions, and that these suggestions were appropriate for the project.

4.11.8 Relevance of visual patterns

- **Subject matter**

The subject matter of the annual report and the annual review items varied and were similar in many respects to each other. From the designer's explanation it can be considered that the subject matter was related to the text and to its various topics. Each topic focused on certain subject matter that was part of the total subject matter of the whole item. According to the designer most the subject matters of the design imageries were realistic and related directly to the need and context of the project. He stated that the decorative illustrations were suggested by the designers to provoke interesting moods, and did not have direct links with the requirements, but they were found to answer the need for the project. He stated that these subject matters were derived from imagination and from various images about the city.

- **Target audience**

Understanding the target audience was part of understanding the design brief. The designer stated the design of both items intended to provoke the interests of the target audience and provide them with information about 'London Electricity'. He stated that the photos were informative and showed the audience the various services, social and environmental activities and projects that the company was undertaking. He explained that annual reports could be boring, therefore, the designers made sure to create an interesting and exciting design. The designer that the designers created various types of design imagery to appeal to the variety of audiences of this project.

- **Communicative characteristics of visual patterns**

The designer stated that some of the design imageries of this project communicated the moods of the project directly and some communicated the moods indirectly. He stated that the free hand drawing illustrations were indirect, while the photography and the photo illustrations were direct:

I think directly and indirect. The photography would be very direct and very unambiguous. The freehand illustrations would be indirect. I think one of the beauty's of illustration is that it can be used in a much more subtle way.

From the designer's explanation it can be considered that the communicative characteristics of the visual patterns were related to the following : 1) the variety of subject matter of both the photographs and the illustrations, 2) the variety of visual moods and styles, 3) the communication aspects of the contents of the images, 4) the accessibility of the typefaces, 5) the friendliness of the free hand drawings as being soft and pleasant characters, 7) the size of the document. The designer stated that the size of the document was slightly unusual and created additional interests for the audiences.

4.11.9 Processes of selecting visual patterns

The processes of selecting visual patterns took place during the various stages of the design idea. The designer stated that the selection occurred in the following ways: 1) intuitively, 2) subconsciously, 3) from experience, 3) from thought processes, 4) according to established criteria, 5) by knowing what he was looking for, 6) by processes of conjecture and refutations, 7) by not taking for granted that the visual input was good for the need, 8) by making rational decisions, 9) from previous knowledge about what involved annual reports projects. These various types of selection can be observed the designer's explanation (QUOTATION: 4.31).

"It was really an intuitive thing. It wasn't necessary that we sort of consciously thought how are we are going to approach. I think I would have despite being experienced I would have liked to have been open minded about what one could do... The selection of the visual source would be more intuitive so I think I would say to myself I don't want to use that in this way because it's to trendy and I would use this in that way because it's good fun but it's good quality so not formal but ... my experience would have allowed me to have made those sorts of choices... and judgments as to what was the best route to take.. I think it was really a question of what judgments are made within there and my judgment would have been impaired if I wasn't experienced. I think it was enhanced through experience... We didn't sort of take for granted that the styles we were using would be good for the project. In a way when you're doing something it is experimental I suppose... A lot of it came out of understanding of communication needs, came through experience and knowledge of what works and what doesn't work really and how appropriate or not it was to the client in this case." (Barry Lowenhoff:)

QUOTATION 4.31: TYPES OF SELECTION

The designer stated that selecting the best idea involved processes of conjecture and refutations. The designer stated that they selected visual inputs to satisfy the need and requirements for the project. He stated:

I think it was through the degree of understanding the brief and understanding who the target audiences were. So having worked on annual reports before I had a number of preconceived ideas to what one might expect the nature of the inputs would be. In a way the client was able to say we want to push that, we want to push that area. So it was really through discussing and interpreting ideas I suppose.

- **Quality**

According to the designer, the designer selected the best design idea from various alternatives. The designer stated that they make sure to use appropriate visual styles, and appropriate moods of communication. The designer stated that quality of the

photos, illustrations, the charts, and the layout was very important. The following were some of the expressions the designer used when he described the quality of visual inputs: 1) good design idea, 2) adventurous design route, 3) appropriate design, 4) exciting, dynamic, and colourful illustrations, 5) soft illustrations, 6) gentle moods, 7) informative design, 8) different from existing annual reports, 9) different use of illustrations and layout.

4.11.10 Adaptation of visual patterns

From the designer's explanation it can be considered that the designer adapted the visual patterns to match the need and requirements. From the designer's explanation it can be considered that the processes of selecting and adapting visual patterns were interactive. After each selection processes the designers adapted the visual inputs to match the NP. The designer stated that they first had mental ideas then they selected visual inputs from various sources and combined them together to create the design idea. The designer indicated that transforming the design idea into design involved various processes. The adaptation involved the following processes: 1) addition, 2) combining, 3) adjustment, 4) manipulating, 5) changes, 6) extinction. Some of these processes occurred during the actual development of the design idea, and some were the results of technical adaptation. The designer stated that some visual elements changed very much during the various stages of the design idea, and some developed without major changes. The designer explained that the designers were able to imagine what the end design could look like if it went in a certain route. His explanation can be interpreted that the designers were aware of the differences between design ideas, and that recognising a design idea involved recognition of how it developed. He said:

From a designer position really it is easy for us designers to imagine what the end product is going to look like if it went down a certain route.

The designer stated that the changes they did were done upon the client's request. He explained that they changed the decorative illustrations by making them softer. He explained:

These decorative illustrations were stronger and we had to make them softer because especially here we've got text. That was a real input from them and they were quite active about the content of these illustrations and they would check how these looked so yes there was quite a bit of inter play with the client.

The designer stated that they adapted weak photographs that they were obliged to use by reducing them to small sizes. The designer stated that the use of the modern technology did not have any influence on this project because the use of the technology was not a condition. He stated that they scanned the images and transferred them onto the computer, but the designers were able to do the same job by the conventional

technique. The designers created the designs of both items on an A3 drawing boards then reduced them to the appropriate size. The designer stated that by doing so the designers had much better chances of doing good design.

4.11.11 Purposive pattern recognition (PPR)

From the designer's explanation, it can be considered that the processes of selecting and adapting visual patterns involved purposive pattern recognition (PPR). PPR can be considered to involve recognition of what worked and what did not work when selecting visual patterns for NP. Barry Lowenhoff stated:

I think there's many design choices. I think you know that some combinations work well and some don't. So you know that the visual inputs and the design of the page would be part of affecting the final design.

The designer explained that they recognised poor qualities as well as good qualities of visual inputs. He said that they enhanced the quality of the visual inputs sometimes by discarding weak pictures, and some time by adapting weak pictures to match the need. Matching visual patterns with NP can be considered to involve experimentation and processes of conjecture and refutations. The designer explained how they matched the visual inputs they selected with the need for the project (TABLE:4.54).

Activities	PPR As A Fit For Selecting Visual Patterns And Matching NP And Its Parts
Selecting visual patterns for matching the topics of the Annual items	"The use of the visual source was part of the brief. We had topic areas. It was not such an easy one to argue about." (Barry Lowenhoff:)
Selecting a design idea then recognising the relationship between the visual pattern and its parts and selecting visual patterns accordingly	"The design idea was achieved first and then it did affect the way we treated the visual sources." (Barry Lowenhoff:)
Selecting patterns of visual; style to match NP	"We select a style that communicates the need." (Barry Lowenhoff:)
Developing the visual patterns for matching NP	"The way you develop the actual illustrations I think it depends very much on how you want to answer the brief for the client." (Barry Lowenhoff:)
Understanding the NP and matching it with appropriate visual patterns	"We felt that it was a balancing act between the flavours and moods... It is like dressing to go out and if you expect to go out to a smart restaurant you put on a certain set of clothes. If you were going out for a good time you wear something else." (Barry Lowenhoff:)
Balancing quite areas of the annual report with the use of big photographs	"The whole document is quite ... then in here we knew that big photocopies of that would be very appealing to any user."
Creating interesting moods by using illustration underneath the text	"It is unusual to put illustrations behind typefaces so I think it's quite easy to look and see little small colour pictures. It creates exciting moods." (Barry Lowenhoff:)
Using different types of illustration for creating interesting visual moods	"I think we don't want to be literal. By using a different illustration styles we were able do different things and create interesting moods." (Barry Lowenhoff:)
Selecting unconventional visual patterns to match NP	"I think this was mainly because the client said they wanted to produce something that was very different and different to what they produced in the past. I think as a client they were interested in producing something that was very exciting and looked like there was a new wave." (Barry Lowenhoff:)

TABLE 4.54: PPR AS A MATCHING ACTIVITY OF A VISUAL PATTERN WITH NP

**PROJECT STUDIES GROUP (4):
DESIGNS FOR FUNDRAISING ORGANISATIONS**

**4.12 MINI-CASE STUDY (11):
THE 25TH BIRTHDAY ANNIVERSARY OF THE FRIENDS OF THE EARTH
SUPPORTERS' MAGAZINE PROJECT**

4.12.1 The background of the 'Supporters' magazine'

According to the art director of the design section of the Friends of The Earth branch in London Mr. David Caines the title of this project was The 25th birthday anniversary of the Friends of the Earth supporters' magazine. General information about this project is in APPENDIX (XI). The clients of this project were :1) An external environmental campaigner; 2) The director of Friends of The Earth; 3) The management team of the UK branch of the organisation. The business area of the clients was an environmental campaigning organisation. Friends of the Earth is a fundraising organisation for environmental campaigns. The main objectives of the campaigns were: 1) to campaign for protecting the environment in various places in the world, 2) to create awareness among the people about environmental issues such as the various types of pollutions, excessive use of energy, anti environmental behaviours, etc. 3) to raise money for carrying out environmental campaigns. Projects of Friends of The Earth varied according to their campaigns and day to day environmental concerns. Fundraising helped the organisation to campaign. David Caines explained:

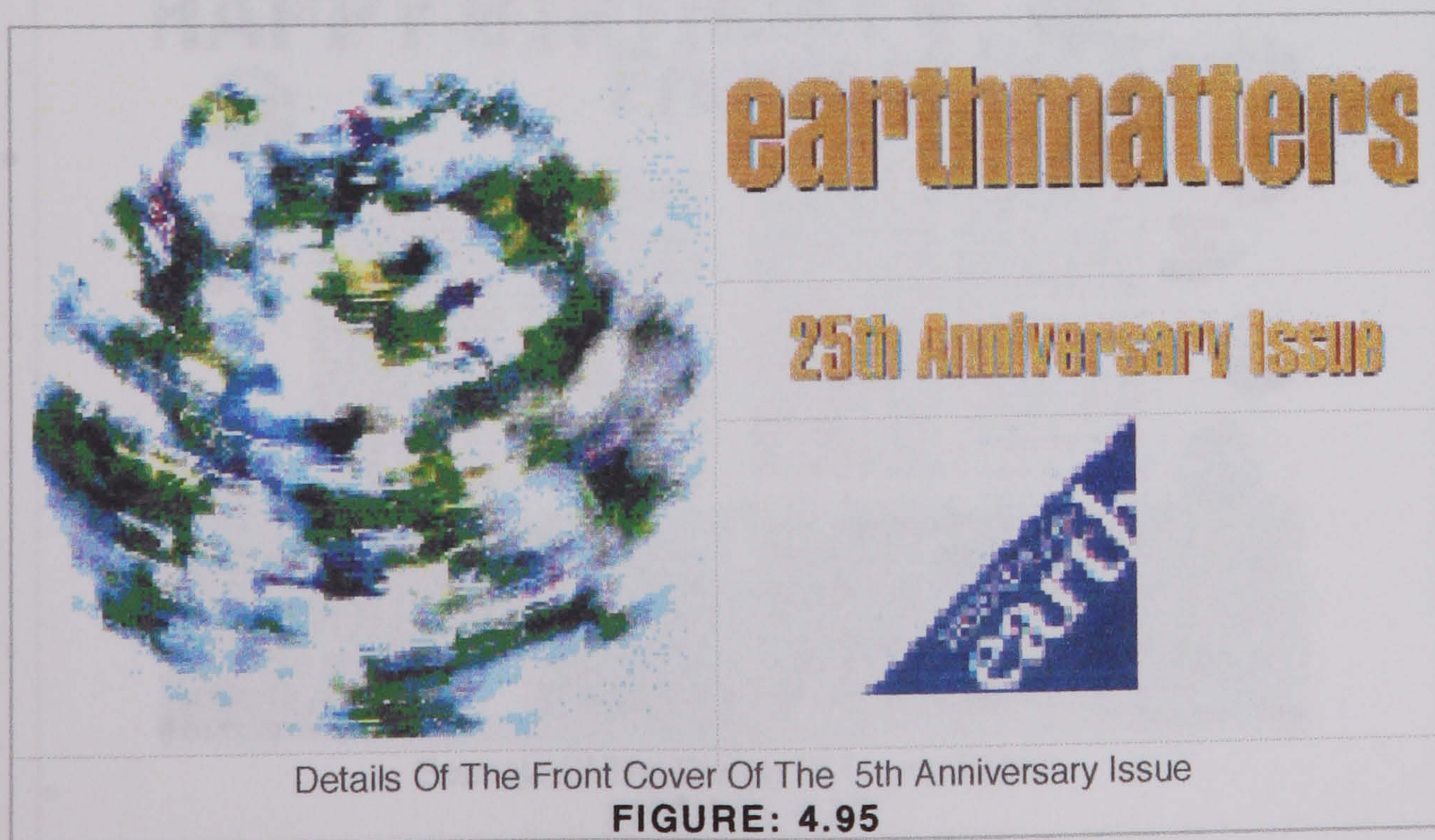
Basically this is all about money. The money for Friends of the Earth comes from the supporters. So if you say thank you then keep your supporters happy and then they renew their membership at the end of the year, and then you got money to campaign for another year.

The designer stated that this celebration issue of the magazine included historic campaigns that took place before the designer himself joined the organisation. The designer stated that the target audiences were known supporters and members. The focus of the project was on the campaigns that took place during 1995. The main campaigns were: 1) campaigns against the importing of Mahogany hardwood, 2) a campaign to encourage people to use their cars less. The event of the project was the 25th anniversary of Friends of The Earth. The anniversary supporters' magazine was a special issue, but the magazine itself was established a long time ago, and this issue was number 30. David Caines stated that for any important project, or generic materials that was done by Friends of The Earth the director of Friends of The Earth

was ultimately the client, and that person was the one who commissioned the project and had the ultimate vote on the job. This project was a unique project and it was not a regular magazine. David Caines stated that anniversary events were fairly sort of unique in that they were special occasions.

4.12.2 Designs for 'The anniversary of the supporters' Magazine'

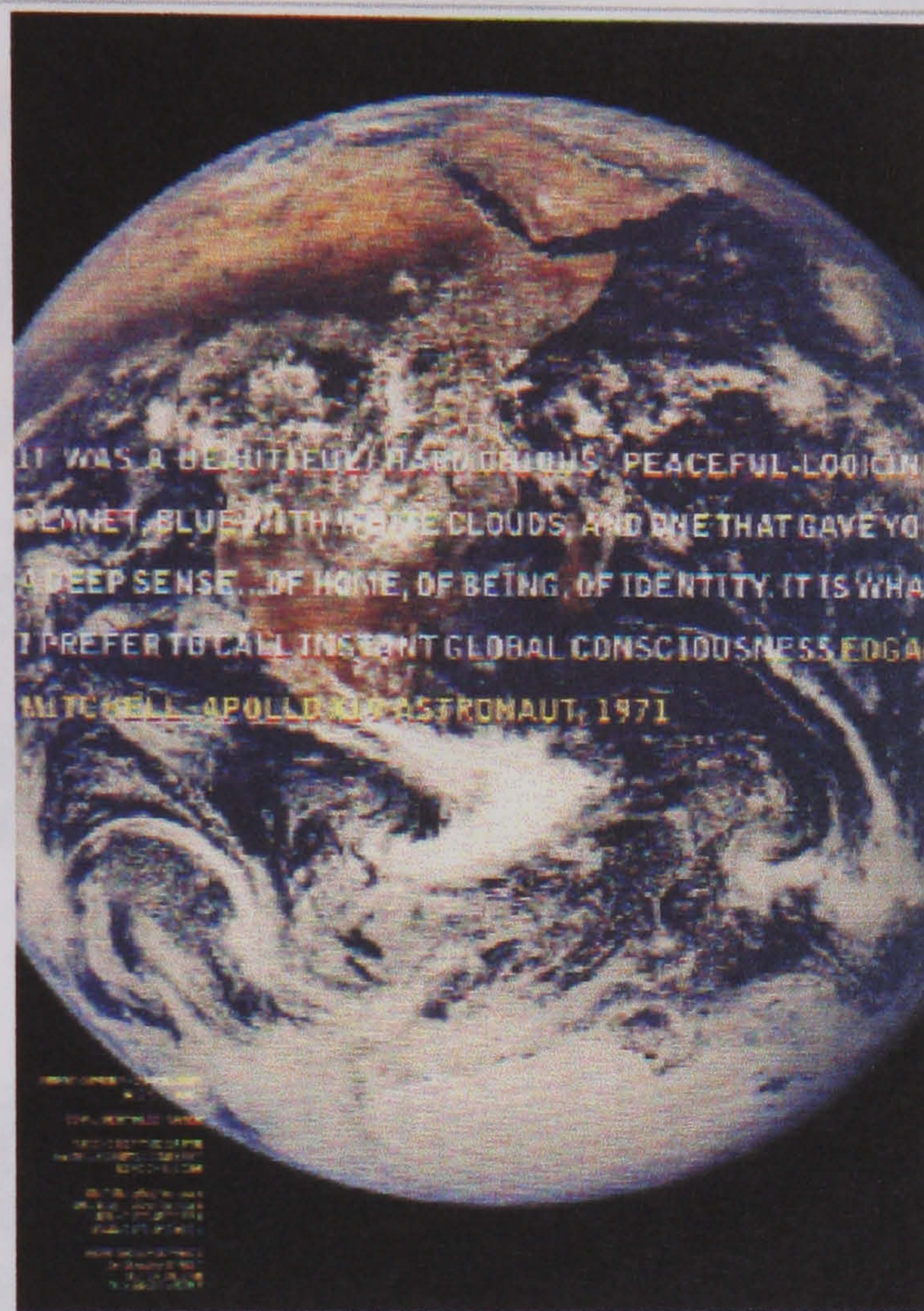
The anniversary issue of supporters' magazine consisted of the following: 1) full colour front cover (FIGURE: 4.94). Details of the front cover are in FIGURE: 4:95, 2) back cover (FIGURE: 4.96), 3) An example of the design of the pages is in FIGURE: 4.97. Examples of the campaigns emblems are in FIGURE: 4.98. Examples of the colour photographs are in FIGURE: 4:99. A detail of a colour photograph is in FIGURE: 100. The measurement of the magazine was A4.



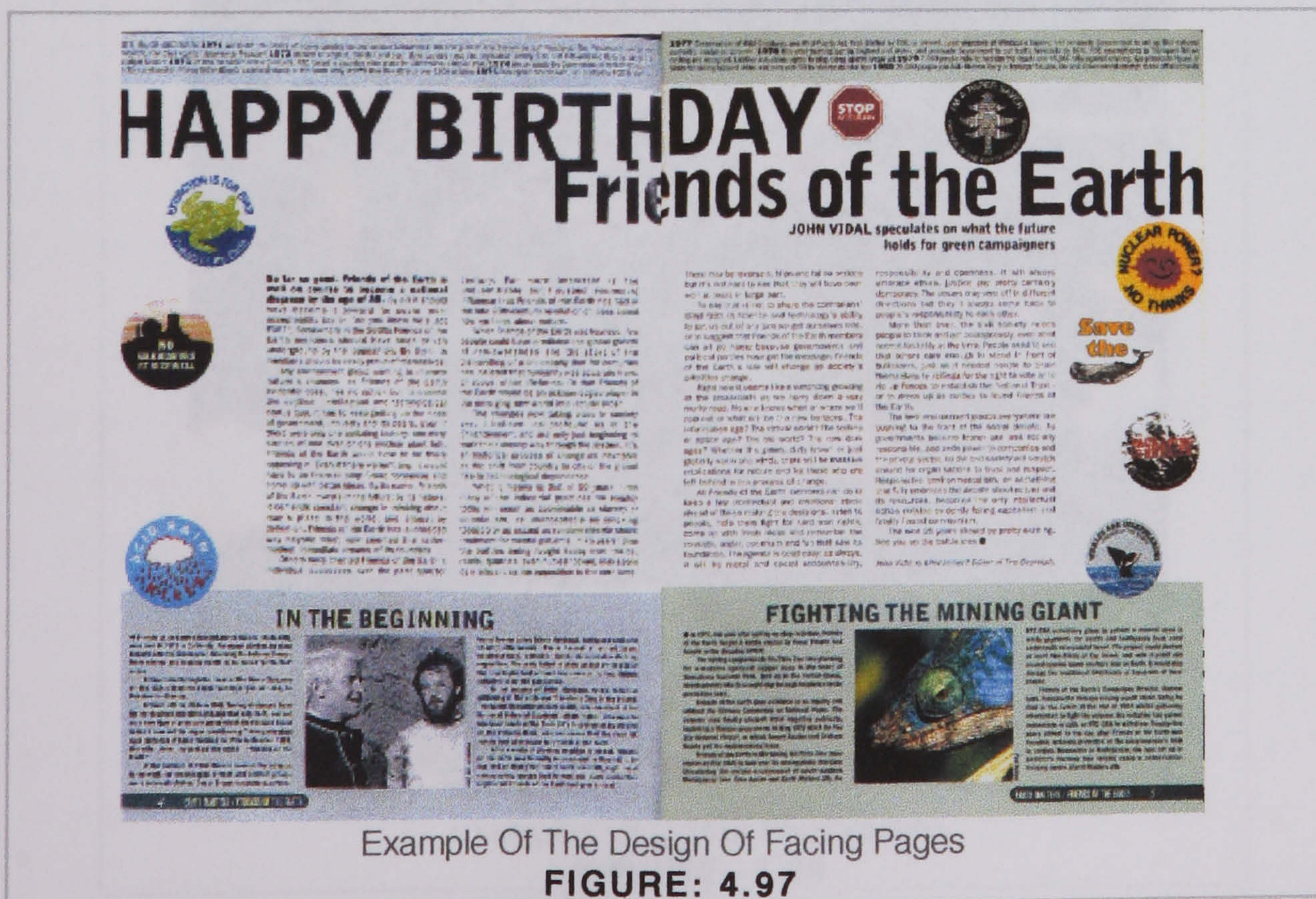
The designer explained how the photographer created the image on the front cover

(FIGURE: 4.94). He said:

I wanted to know what this was and he said that it was a wooden ball covered entirely in wild flowers that was then spun and photographed. He does a lot of things on the computer for these images afterwards and everybody was very pleased with the cover.



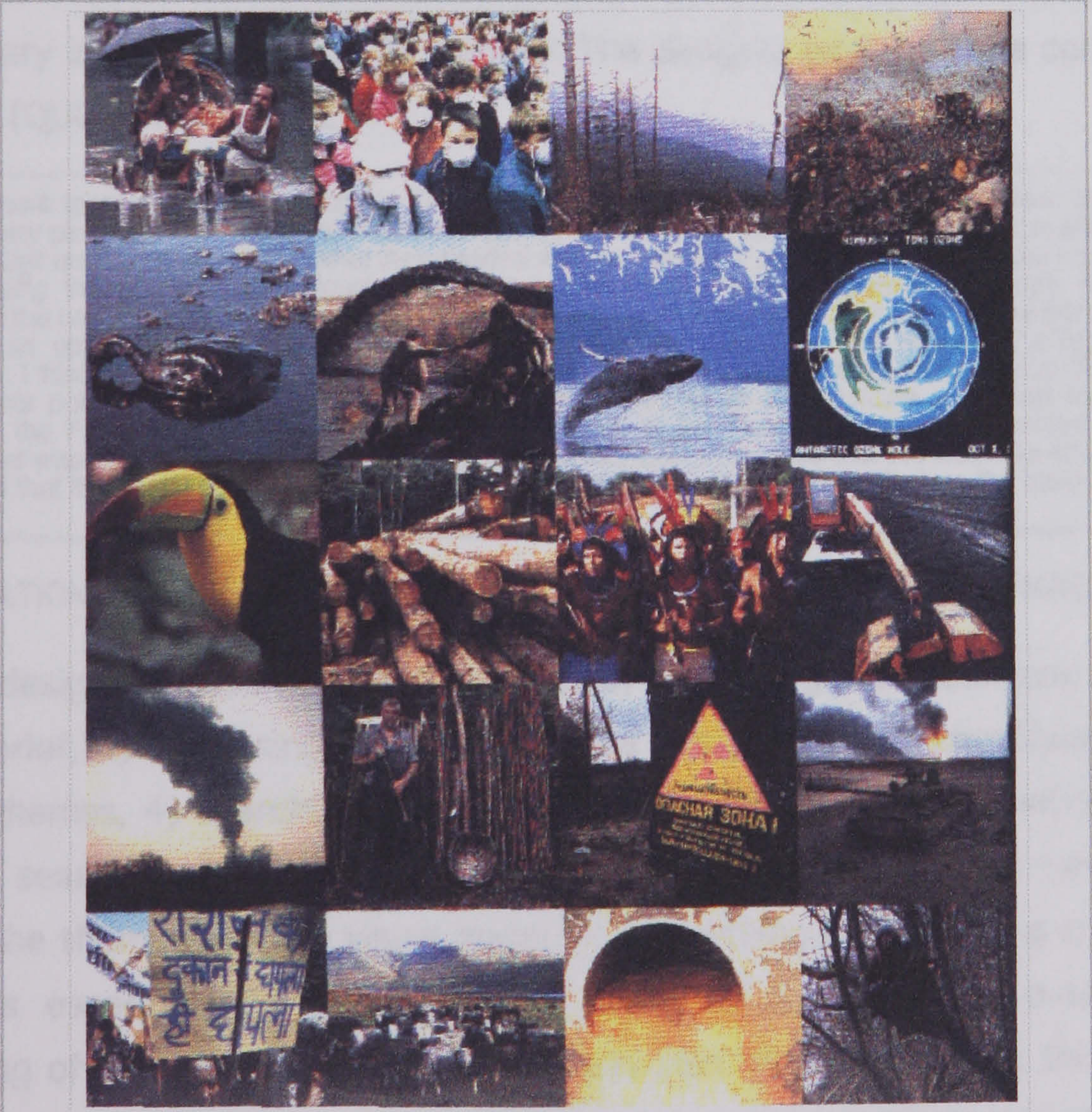
Design of the Backside Of The Cover Of The 25th Anniversary Issue
FIGURE: 4.96



Example Of The Design Of Facing Pages
FIGURE: 4.97



Examples Of The Emblems Of Campaigns
FIGURE: 4.98



Examples Of Colour Photographs
FIGURE: 4.99



A Detail Of A Colour Photograph
FIGURE: 4.100

4.12.3 Processes of identifying the need and the need pattern

According to David Caines the processes of identifying the need started by receiving a basic design brief from the director of the organisation and the editor of the magazine. David Caines stated that the design brief was pretty open for him because he worked for a long time with the organisation and he did some of the regular issues of this magazine before. But he asserted that there were certain requirements related to the anniversary issue that he had to identify. The designer explained the content of the design brief (QUOTATION: 4.32).

“The management team of the Friends of the Earth wanted an expanded version of the supporters' magazine, very colourful and very pictorially led which would summarise and celebrate the campaigning work that the organisation had done over the last quarter of a century. What they needed was something to promote the organisations birthday and by doing that raising the profile of the organisation in their supporters' minds, to encourage people to renew their membership of the organisation , and to use the anniversary as an excuse to raise the visual profile of their materials and to take it as an opportunity to redesign and introduce a more dynamic style and make the things look more contemporary... I think the clients expressed need was that they wanted something to say thank You to their supporters. From the clients point of view the communication objectives were to re-communicate or refresh their supporters perceptions of the Friends of the Earths work, to make Friends of the Earth seem like an important and dynamic organisation that was doing important work ,and to try and communicate some idea that this work had been going on for some time and that there was some integrity to the work because they had been doing it since the early 70s. ” (David Caines)

QUOTATION 4.32: ELEMENTS OF THE DESIGN BRIEF FOR SUPPORTERS' MAGAZINE

The designer stated that the processes of identifying the need were: 1) receiving the design brief, 2) discussing and analysing the design brief, 3) identifying the major topics and themes, 4) searching and gathering various types of information about the project, 5) searching and gathering visual sources. Identifying the need involved identifying the themes and the visual materials. Searching and selecting specific visual sources was essential for identifying the need. In other words, establishing an understanding of the types of visual sources was part of understanding the need. The nature of this project involved written and visual materials. Both the designer and the editor of the magazine discussed the design brief and started looking for visual sources for the cover, the celebrity people, and the themes. The designer stated that they had to

select photographs of the most important campaigns during the last twenty five years. David Caines stated that in order to identify the need he had to read and know detailed information about the old campaign stories, and the old supporters' magazines. He indicated that the director of the organisation explained to him the importance of those particular campaigns especially campaigns from the 1970s, and why they were important and worked well. Also, identifying the need involved identifying the following: 1) the various contents of the magazine, 2) the flat plan of the magazine, 3) who was going to be interviewed, 4) which books were going to be reviewed. One of the elements of the design brief required that the design had to involve many old photographs as well as new ones because it was an historical artifact as well.

The conceptual interpretation of the need was achieved by understanding the types of visual and written materials required for the magazine and understanding the importance and context of the information. Understanding the various elements and materials and their relationships to each other as a one whole can be considered as the need pattern (NP) for this project.

- **Processes of gathering information**

Processes of gathering information involved visual and written materials, and started during the processes of identifying the need and continued during the various processes of the design. The materials covered information about the founder of the Friends Of The Earth, the celebrity people, and a history of twenty five years of campaigning. Due to the nature of the project and the nature of the organisation gathering information involved internal and external sources. The internal sources were: 1) the directors of the organisations, 2) the editorial staff, 3) the in-house archives, 4) the publications of the organisations, 4) information about the supporters. The external sources were: 1) the campaigners, 2) the supporters network, 3) environmental issues in general, 2) general information. The designer and his team received the articles gradually, read and understood them.

- **The constraints**

The constraints of this project were of the following types: 1) economic, 2) visual, 3) textual.

Economic constraints were related to time and money. The designer stated that time was a very important element. Time as a constraint involved the following: 1) creating and producing the design in a period of three weeks, 2) the magazine had to be mailed by certain times and it had to be produced within the anniversary year. The image on the front cover was donated from a Freelance fashion photographer. The designer stated that other than that time had not enormous influence upon the project. He explained that they mailed the magazine to the supporters after they did the press

release work.

Visual constraints were related to the following: 1) copyrights, 2) visual criteria. The copyright issues were economic as well as visual constraints. As visual constraints they involved the following: 1) copyrights of the artistic photograph used on the cover, 2) copyrights of the photographs of the organisation, 3) copyrights of the photographs of the planet. Friends of the Earth had copyright of its own visual materials including photographs, illustrations, emblems, and drawings. The organisation was given copyrights for specific photographs of the planet from NASA. The designers had to use the Friends of The Earth logotype. The designers established visual criteria and worked within its boundaries in order to give the magazine a feel of unity. The other visual constraints were related to the requirements concerning the use of photographs of the historic campaigns, and previous work. The designer explained:

Half of what went in the magazine is predetermined because of the historical nature of the content, and because we had to show images of the previous work.

Textual constraints were related to the stories and articles of the magazine. The organisation had copyrights of the literature of the stories of its campaigns. The designers had to use only the articles that were given to them by the editorial staff. The literature of the articles addressed specific themes and was approved by the director of the organisation who was one of the PO in the case of this project.

4.12.4 Gathering and selecting visual Sources

The designer stated that he started searching and gathering visual sources before he came up with the design idea. The search was carried out by many members of the organisation. These processes started during the processes of identifying the need. The resources of visual sources were: 1) Friends of The Earth photo library and archives, 2) the campaigners, 3) the supporters of the organisation, 4) NASA, 5) photo agencies, 6) freelance illustrators, 7) known photographers. The visual sources for this project can be considered to be of the following types: 1) general visual sources, 2) found visual sources, 3) art- directed visual sources, 4) retrieved visual sources. The visual sources involved the following: 1) photographs of old and new environmental campaigns, 2) photographs of celebrity people who worked for the environmental campaigns of the organisation, 3) emblems of the various environmental campaigns, 4) visual documents of specific events, 5) photos of the planet, 6) general visual sources such as books, magazines, publications, the environment, paintings, etc., 7) art and design work, 8) commissioned illustrations, 9) commissioned photographs, 10) art-directed illustrations, 11) art-directed photographs, 12) computer generated images, 13) imagination, 14) ideas, 15)

feelings, 16) modes, 17) styles. These visual sources were used in various ways: 1) for the actual use in the design, 2) for inspiration, 3) for acquiring visual knowledge about the themes and subject matters, 4) for comparison reasons, 5) as visual alternatives.

The designer stated that 80% of the visual sources of this project were photographs. The others were illustrations, silk screen, and computer generated images. The designer stated that some of the photos were selected by the PO such as photos of certain people, and the other visual sources were selected by the designer. The image for the front cover (FIGURE: 4.94) was created and photographed by a known fashion photographer called Nick Knight. David Caines described the image of the front cover(FIGURE: 4.94). He said:

The cover I would say is an abstract image which has particular reference to earth spinning in space. It is a manmade object, I think it has got flowers on it and it is a studio photograph and it was a colour print that we had from Nick.

The designer stated that they searched, gathered, and selected their visual sources in various ways (QUOTATION: 4.33). The designer explained that they selected specific photographs from a variety of photographs for the magazine after they considered the possibility of each photo. Having a variety of photographs and comparing between them for the selection to take place can be considered as having competing alternatives. Typefaces were from type sources and from the author of the project.

“Several ways. The main biggest thing we did was a huge archival draw through all the Photo library here going back to 1971 and trying to identify all those pictures and finding ones that were suitable. Also we looked at clothing and merchandising that had been produced since the early 70s and we actually wrote to a lot of the supporters who had been long term supporters and asked them to send us whatever they had from the early 70s and I think we ended up using a motif of these badges that came in from people going right back to the early 70s. Then we also did the standard picture research where we would phone agencies and ask for images. We commissioned illustrators for the illustrations. For the cover we contacted Nick Knight (who is quite a famous fashion photographer) and he was interested in working with us and he selected certain images that he felt would work for us and we choose images from him. We contacted NASA to get a picture of the planet... Because I am interested in art and I don't think it is very healthy to go and look at other similar media to the ones you are working on because you are just recycling other peoples ideas and it just becomes one huge... there is no sense of freshness for a thing like that. I would rather get ideas from fine art. Collect a lot of old packaging and toys and signage; I am interested in those things as well. I take photographs as well. I have some in this one. I am a great believer that if in doubt you should go out and do it yourself - don't just keep looking at other things around you.” (David Caines)

QUOTATION 4.33: PROCESSES OF SELECTING VISUAL SOURCES

Selecting visual sources continued during the various processes of exploring, developing, and creating design ideas. From the designer' explanation it can be seen that the designers selected both visual sources and visual patterns. The designer stated that they searched and gathered visual sources based on the themes and subject matters. Then they selected from these sources the ones that had certain feelings.

4.12.5 Visual patterns

From the designer's explanations it can be considered that the designer selected visual patterns from various visual sources and adapted them to fit the NP of the project (QUOTATION: 4.34). From the designer's explanation, it can be considered that

the photographs included certain visual patterns that were required for the project.

"We had to use pictures of these tribes of people in this issue whose timber is being cut and they live in Sweden and particularly they keep their traditions and their livelihood is under threat, but the way that is used on the contents pages of these images of timber dropped on, that sort of thing for me comes out of looking at other magazines and other designers work and it kind of filters through and when I am doing the magazine I am consciously wanting to incorporate elements like this - it is nothing to do with friends of the Earth or Green Peace. It is the way of my own design and agenda and that comes from looking at other peoples work. Or painting or the signs on the walls. I mean not necessarily only designs. ... I think in this spread which is a double page spread of pictures I tried to have a feel of an inspirational, uplifting, and celebratory feel. I think also there is a feeling of authority about the magazine which is quite important and which is fairly inevitable because of the important subject matters covered. But this is informed by the layout of the magazine; it is quite punchy and authoritative. Hopefully as well I think there maybe a feeling of unity but of a participatory feel in the magazine in as much as that people might feel part of it. I think it has an element of that." (David Caines)

QUOTATION 4.34: VISUAL PATTERNS FOR THE SUPPORTERS MAGAZINE

The designer explained that the various visual patterns and textual elements worked as one design. He stated that he was concerned with creating harmony and unity between the various elements. The designer explained that working on a magazine involved more than one idea and the various ideas worked all together. From the designer's explanation it can be considered that the various visual patterns were parts of an overall pattern.

4.12.6 The design idea

The designer stated that he preferred, after receiving the design brief and identify the need, to search and gather visual sources before coming up with the design idea. The designer explained that the design ideas came out of the photos they selected. He explained the design idea (See QUOTATION: 4. 35).

"The basic idea was that the magazine should have a feel to it which was sort of modern and celebratory and also incorporate this archival element without the magazine looking like it was printed in 1971 which was something that I was a bit concerned about because the photos were so dreadful from the archive. Apart from the house style of the magazine which was fairly set a lot of the feel of the magazine and the design concept had to come out of the images which we had sourced, and I have already mentioned how we worked on the cover first and then we got these images from Nick Knight and once we had picked his image then the idea, we came up with the idea of the globe on the back with the quote from an astronaut from 1971 on the back - then we - apart from the things that I have mentioned about breaking up the magazine - the real concept was just to have a subliminal sort of circular motif running through out the magazine, and the colour scheme was quite fresh - it was pale blues and greens. Apart from that it was just strengthening the already established style of the magazine." (David Caines)

QUOTATION 4.35: THE DESIGN IDEA FOR THE MAGAZINE

The designer stated that after receiving and understanding the design brief he did the following: 1) Working out some rough ideas in his mind about how to take the job forward. 2) Sourcing his images by searching and gathering the photographs which were related to the subject matter. 3) Coming up with initial design ideas. 4) Exploring various design possibilities, 5) Selecting the best possibility. 6) Having initial presentation with the POs for knowing their responses, and knowing the necessary corrections and amendments. 7) Developing the design idea while taking into consideration the POs' suggestions and wishes. 8) Having second presentation with the POs. 9) Artwork stage. 10) sending the design to the printer. The designer stated that starting the artwork stage depended on if the clients were happy with the outcome of

the development stage.

4.12.7 Coming up with design idea and graphic investigation

Coming up with the design idea for this project involved coming up with a number of design ideas for various parts of the magazine and joining them in one design idea. The processes of coming up with design ideas involved thinking and processes of searching and selecting visual sources and visual patterns. Coming up with the design idea involved exploring various design possibilities by producing visual marks on drawing surfaces. Visual marks can be considered as a design pattern. The designer transferred the initial drawing of the spread (the layout of two facing pages) onto the computer, and started selecting and introducing typefaces and images to the initial design. The designer stated that they art-directed photographs and illustrations. Working on the computer involved making series of printouts and mock-ups of the magazines for seeing how the design looked. The most important stage was the initial thought process, and adapting types of images to each other. He explained:

The most important stage and probably the longest stage is probably the initial thought process and the initial time spent marrying images in type or whatever, basically that's where you find out whether your idea was a good idea and there is an initial feeling that it is going well, it is going badly, this was a good idea, this was a bad idea. I can develop this, this is exciting, you know this isn't happening, it's boring. So the initial sort of thought process and design work processes are definitely the most important.

The designer mentioned some of the design possibilities he thought of for the front cover. He said:

The ideas were something like leaves, trees, flowers, sky - although sky would be too empty for a front cover. So for him to select this image for us did fit; it was perfect. But those would be the sorts of ideas that I would have but then a lot of the ideas would come when you have your images there and that is the exciting thing that you are working with other people's ideas as well.

- **Design options and (PCDH)**

The designer explored various design possibilities then selected the best design idea. These various possibilities can be considered as patterns of competing design hypotheses (PCDH). The designer stated that selecting the best possibility involved selection and adaptation of visual elements until a good result was achieved.

- **Evaluation and feedback**

The designer stated that he received formal feedback during the presentation sessions. He stated that he received some feedback during the various stages from the other designers who worked with him on this project, and from a few people who worked with him and who usually had creative responses.

4.12.8 Relevance of visual pattern to the need pattern (NP)

- **Subject matter**

The subject matter of the magazine involved the various environmental campaigns that took place during the last twenty five years and the supporters contributions to make a success of the campaigns. The subject matter involved visual and textual information. The subject matters of the both types of information were related to each other. The designer stated that some of the issues that the magazine represented were complicated and some were simple. In general the issues were about climate change, sea level rising, different aspects of destruction, deterioration of the species, pollution, recycling, etc. They addressed these environmental problems with a sense that there was an improvement, and positive issues as well. Some of subject matters of the magazine were indicated by the designer (See QUOTATION: 4.36).

“It is difficult to say because This about 25 years of campaigning. Also, there is a lot in here which the supporters don't know which is about how things were founded by this American guy in California and the people who started Friends of the Earth and the problems that they were particularly concerned about at the time, and he was particularly concerned with this area in the wilderness in America that was being destroyed for logging and some of the early campaigns that were discussed and which were very simple and effective. The first campaign that they did was that they wanted cycling to be introduced in this country , and they took 1000s of bottles and they just dumped them on the doorstep of Scheweeps - the soft drink manufacturer's doorstep - to highlight the problem of throwing away glass. And there is a lot of other stories about the campaigns. And there are stories about 'The save the rain forest' campaign and 'Save the whale' campaign. All these kinds of things. It is all in there.” (David Caines)

QUOTATION 4. 36: SOME TYPES OF SUBJECT MATTERS

- **Target audience**

The designer stated that the images and design of the magazine had to give the audiences enough information about the various campaigns of the organisation and the positive results. Twelve pages were about the supporters' contributions and effective help.

- **Communicative characteristics of visual patterns**

The designer stated that the design communicated the messages of the project directly. It communicated the environmental problems and in the same time communicated positive messages. David Caines said:

I think the problems can be seen as big and small but one of the things that we are trying to do is to make people feel empowered so that is quite positive. I think positive is something which hopefully comes out of every picture. We want things to be there, things to remind people why it is important to fight and what is worth saving. I think in a way it is pretty much all of these things.

The communicative characteristics of the visual patterns involved the following: 1) authentic, 2) authority, 3) interesting, 4) fresh, 5) contemporary, 6) relevant to the subject matter, 7) inspirational, 8) positive, 9) clear, 10) legible.

4.12.9 Processes of selecting visual patterns

The processes of selecting visual patterns occurred in various ways: 1) from a

thought process, 2) subconsciously, 3) from specific sources and according to established categories, 4) by processes of conjecture and refutation, 5) from experience, 6) from feedback, 7) from comparing possibilities, 8) from visual awareness, 9) from doing things. The designer stated that design experience was subconscious thing for him, he stated, "These thing are fairly subconscious. " David Caines explained how he worked (See QUOTATION: 4.37).

"It is very difficult to verbalise these things. I don't think that the way I work is that I wake up one morning and have an idea. The magazine is a difficult thing because the magazine evolves ,because you don't get the magazine all in one go. You get a bit here and a bit there and it probably changes. As you get fed you start to accumulate different images. With magazine work it is very important that you work with some fairly established house styles so you don't loose your way and the idea is becoming too diverse too early on. And the way that the idea comes through is from working and working and re-working things. So I am not somebody who wakes up in the morning and has some dream about how it is going to look. Because so much relies upon the images especially as it is an environmental theme of the work. What I tend to do is work on features and then go home and then when I go to bed at night I think and I see what is wrong with it more than coming up with a new idea. I don't find it easy to talk about these things" (David Caines)

QUOTATION 4.37: HOW THE DESIGNER WORKED

- **The quality**

The designer stated that the quality of the photos, illustration, typefaces, and relationships between these various elements were very important when he selected the visual elements and design the magazine. He used expressions such as appropriate image, good idea, better idea, better image, etc.

4.12.10 Adaptation

Adapting visual patterns for matching NP involved the following processes: 1) addition, 2) combining, 3) adjustment, 4) change, 5) elimination, 6) extinction. Adapting visual patterns involved PPR. The designer stated that he recognised when things did not work. According to the designer, the adaptation of the visual elements involved processes of conjecture and refutation, and was the results of long processes. The designer mentioned the creative tools that he needed to use beside the basic graphic skills. These tools were: 1) visual awareness; 2) typographic awareness; 3) studio training and studio skills; 4) a feel for how to communicate; 5) sketching and taking photographs; 5) using computer skills. David Caines explained how he adapted the image on the front cover (FIGURE: 4. 94) see QUOTATION (4.38).

"The image was suppose to be viewed this way up, but the format just didn't work for the magazine cover. So obviously to accommodate the format of the cover and the type it had to be altered and it would not have worked. That is why I struggled and struggled to use the rose and I thought this is not going to work and I am not going to let me change it because he was very willing to let us do that. I was very loathed to because his prints are so beautiful but the only thing that I did was - this project format - I had to on the computer to rubber stamping which is a way of duplicating sections of the background - you can extent the background and in effect this doesn't exist it is fake - because it has to work this way and he was fine about that it was not a problem. Apart from that I wouldn't dare to do anything to it. (David Caines)

QUOTATION 4.38: ADAPTING THE IMAGE ON THE FRONT COVER

4.12.11 Purposive pattern recognition (PPR)

Selecting and adapting visual patterns for the NP of the project involved

purposive pattern recognition (PPR). PPR as a fit and as a matching activities can be observed in the designers' explanations (TABLES: 4.55, 4.56, and 4.57). This mini-case concludes with the following tables which are based on the designer's explanation of how he selected visual inputs to satisfy the need for the project.

Activities	Adapting visual patterns for Matching NP
realising that literal visual patterns were not able to sum up the 25 years in one image for matching NP	"The brief for the magazine was quite specific - there was no image from the last 25 years that could sum it up and would go on the cover. So we knew that we were looking for something unusual so by asking Nick to do his selection I knew that he would be a fresh eye and that might be something there." (David Caines)
Selecting a variety of visual patterns for creating interests and revealing information, and avoiding monotony	"So a page of text and then a big pause here which is like a map of pictures and is quite a visual challenge. People would read this page like they would the text, and then this was a very long loads of words about how great Friends of the Earth were and 12 pages of it. And these little badges run over the page and this strip - it has a time line over the top - you can take the magazine in different ways. You can have this time line which is 25 years of campaigning you can do that, and if you want to read a feature you can do that. If you want to read these mini features you can do that and if you want to look at the badges you can do that. Then in the middle there is a pull out section and across the back there is children's pages which is very different. I think that it is important to get as much variety into 40 pages as possible, because it only comes out 4 times a year and you get a lots of lovely pictures of the environment and that is the challenge because I get given masses and masses of text to fit in." (David Caines)
Having a 'feel' of what was needed	"When I selected the images I had ideas only in as much as the certain feel that I was looking for that was quite specific which is this kind of abstract, and something that is not specific and something is beautiful in its own right." (David Caines)

TABLE 4.55: PPR FOR MATCHING NP

Activities	PPR As A Fit For Matching NP
Selecting more abstract images for matching NP	"With this relaunch addition, I think I tend to go much more towards abstract and elemental imagery as opposed to a child holding a bowl or something like that." (David Caines)
Selecting visual patterns from whatever source if they were appropriate for matching NP	"Especially for a birthday issue I think the main thing I did was - if you are commissioning work or you are getting photographs given to you then there may not be immediately appropriate. My editor - very strange - going to this top fashion photographer to get an image for Friends of the Earth. But if there is a consistent quality to their work that you admire then I think what you get from them ultimately that is going to rub off on the magazine." (David Caines)
Selecting visual sources involved art direction, knowing the right sources, and making the magazine working for matching NP	"It is much more about art direction, and choosing the right people and picking the right images, and making the magazine work as a whole." (David Caines)
Emphasising the circular patterns for creating unity and relationships between the various patterns of the design for matching NP	"I think this kind of image works very nicely with this on the back, and then with some of these much more specific visual images there is this circular motif going through the whole magazine, which was intentional, from the cover right the way through to the back. I wanted to use this all along and he said try the rose. But I think as soon as we agreed that we were going to use this then the whole thing came together a lot more and we had those badges all the way through as well. I like to think that there is a subliminal message in the magazine about wholesome and unity and all that sort of thing. But it is all very subtle and under the surface." (David Caines)
Elaborating on the relationships between the images, text and space for creating harmony between them all for matching NP	"I think the way I think about this kind of magazine is when I am designing the spreads which is how I conceive of the magazine in spreads it is always a balance between presentation of information which is basically what the magazine is about, and the use of space and images. I think how a magazine talks to you is really about how those 3 things harmonise." (David Caines)
Enforcing house-style imagery for differentiating the design from the work of similar organisation for matching NP	"I personally think it is much more important to keep reinforcing your own house style, and I think it is important not to duplicate what other groups are doing visually. It would be a terrible shame if we did something with a picture on the front and Green peace did something with the same picture on the front. I don't think that that is likely to happen because we have a fairly sort of idiosyncrastic approach to the stuff that we do at the Friends of the Earth." (David Caines)

TABLE 4.56: PPR FOR MATCHING NP

Activities	PPR As A Fit For Matching NP
The NP influenced the selection of visual pattern	"The nature of the project highly effect the selection of visual sources. Quite a lot really. It is all very concrete things the subject matter. The history of an organisation , and the visual interpretation." (David Caines: 1997)
Selecting visual patterns of the subject matters of the issues and making them look original for matching NP	"It is very important that we show what we are talking about in an appropriate way and that might be if it is a subject that people might be really fed up with like talking about cars or acid rain or something that they have been hearing about for the last 15 years. And it may be showing those in a very original way, and repacking it. Not showing the images that you would have thought. If it is a new campaign about Timber consumption in the Northern Woods and then it would be show exactly what it is. Show the animals that are in danger and show what the problem is, and reflect that very accurately. " (David Caines: 1997)
Visual awareness as a key activity when selecting visual patterns for NP	"I could say that the visual awareness is quite key in the sort of images that represent war for example if somebody painted it, and they had a sort of sensibility towards a certain kind of image that might influence the selection of the photograph or something like that which both of those things something that I do. However, I think that there is fairly subconscious awareness and because this is a fairly rushed job I am much more mechanical and I am much more use to it. " (David Caines: 1997)
Selecting appropriate way for presenting subject matter involved selecting appropriate visual patterns and design patterns	"The main thing there is some decision to be taken about what is the appropriate way to represent a subject, and after that it is a design problem." (David Caines: 1997)
The NP of the project influenced the types and variety of visual pattern	"The anniversary one influenced the selection enormously, because of the amount of the anniversary pictures we had to put in." (David Caines: 1997)
Breaking down long text into chunks of information for avoiding monotony and for attracting the readers	"I think it is very presumptuous to presume that our readers have such lives that they are going to spend half an hour reading the editorial and the content page. So I thought I would use Nicks photo as an underground map and just say like tube line and just use it as a big blue visual pause, just to break up the magazine in big chunks." (David Caines)
Maintaining the same style of the magazine for matching NP	"The magazine has a fairly fixed style for its features , and there are obviously a style that I have developed and I am happy to work with that style." (David Caines)
Recognising appropriate visual patterns by experience for matching NP	" I suppose in as much as I have been designing this magazine for a long time and I have a lot of experience of the sort of images that work in the magazine." (David Caines)
Selecting inspiring visual patterns for matching NP	"The client really wanted was something very inspiring for the supporters and that definitely influence the way that I used the photographs." (David Caines)
Fitting the visual patterns with the structure of the design layout for matching NP	" If I have got an idea of how a spread is going to work it is pretty important that I get the right visual for it." (David Caines)
Giving a contemporary feel to the photos for matching the perception of the audience	"I think to try and repackage the imagery related to the environmental issues which tend to be grounded around the early 80's and to try and repackage them in a way that people who saw lots of modern visual imagery all around them. So that it fits in with all of that. Sort of contemporary feel." (David Caines)
Breaking down long texts by using a lot of visual patterns for keeping the readers interested	"What tends to happen with this magazine because it is generated internally within a large organisation, the editorial people tends to think of the magazine as 40 pages that they can fill up with writing. Paretically even with things like the content page. Right from the minute you open the magazine you have this density of text which is very off putting and the content pages used to be like that and you would have the name of everything in the magazine and then about 20 words, and I thought it would be much better to start putting in this big visual pauses and all the content pages is like an underground map of where you would like to go in the magazine just like on the tube. I don't think it needs to be anything else in there. "(David Caines)
Selecting inspiring images and avoiding shocking images for matching NP	"We tend to go for more inspiring or beautiful images than shocking." (David Caines)
Selecting types of visual patterns for matching NP	"It is the type of images that we use which is really targeted towards them." (David Caines)

TABLE 4.57: PPR FOR MATCHING NP

PROJECT STUDIES GROUP (4):

DESIGNS FOR FUNDRAISING ORGANISATIONS

4.13 MINI-CASE STUDY (12):

'COLD MAILING' FOR AMNESTY INTERNATIONAL

4.13.1 The historic background of 'Cold Mailing' PROJECT

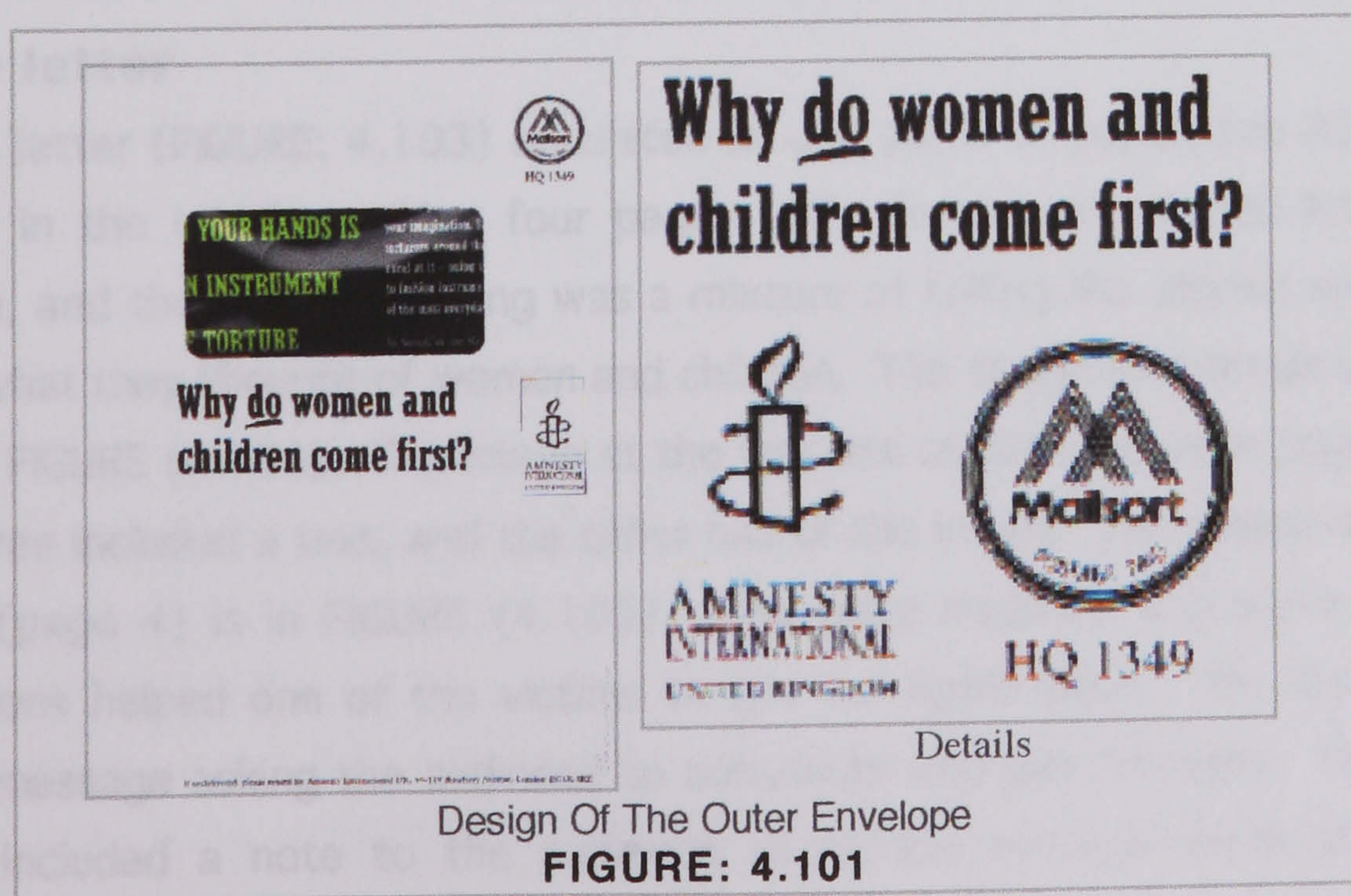
This project was carried out by 'Burnett Associates' in London UK, a design consultancy specialising in 'Charity' and 'Fundraising' design projects. According to the art director of Burnett Associates, Mr. John Harvey (1997), the title of the project was 'Why do women and children come first?' and it was a 'Cold Mailing' project. The client of this project was 'Amnesty international'. Amnesty International is a charity that campaigns for human rights. The major objectives of Amnesty were to bring justice to injustice around the world. It was concerned with the rights of people who were being tortured, or put in prisons because of their ethnic origin, sex, colour, social conditions, language or religion. This project started in September 1995 and finished in March 1996. The budget of the project was small. The target audience for this project was 'cold donors' who never gave money to Amnesty as a charity organisation.

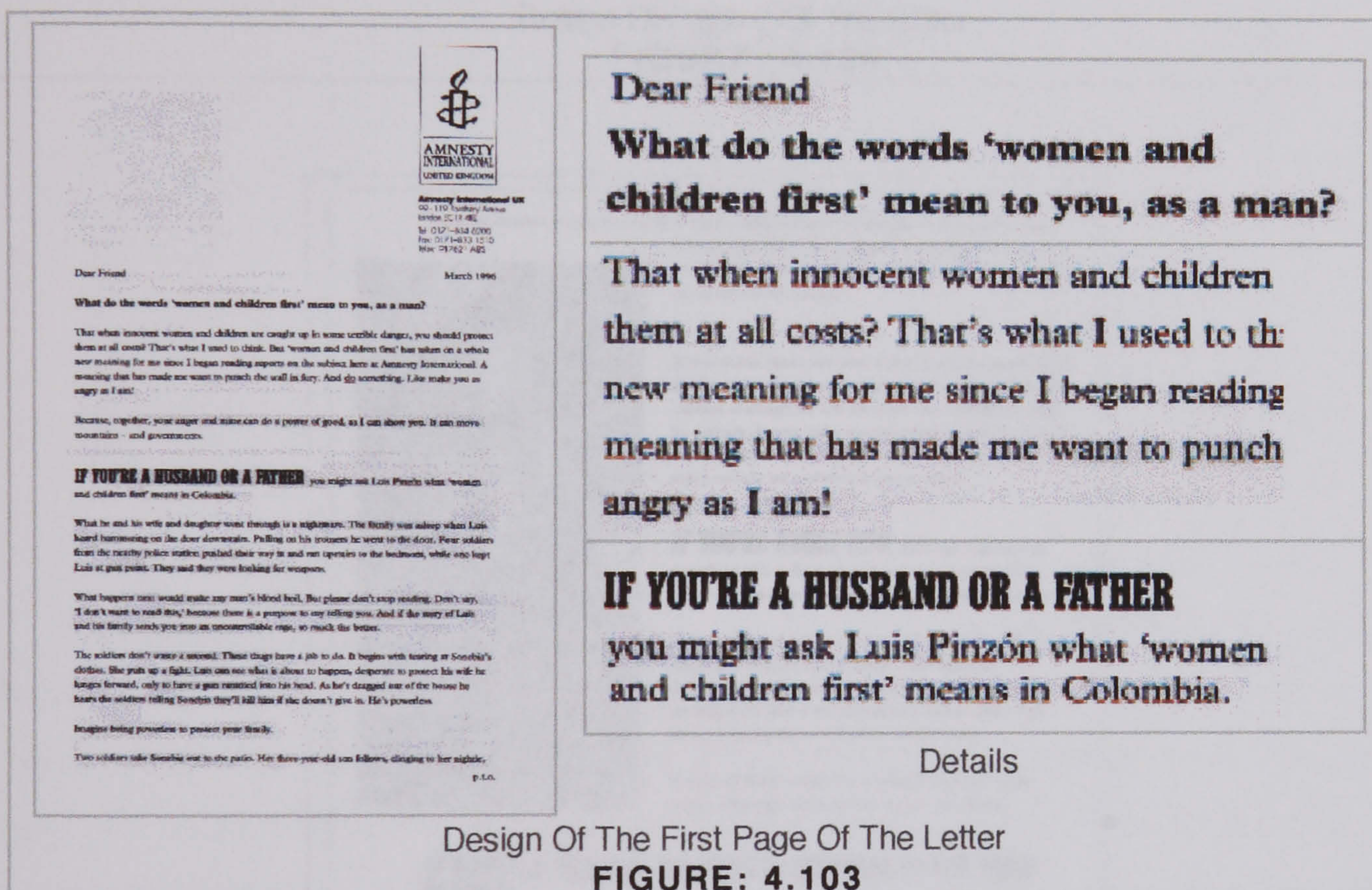
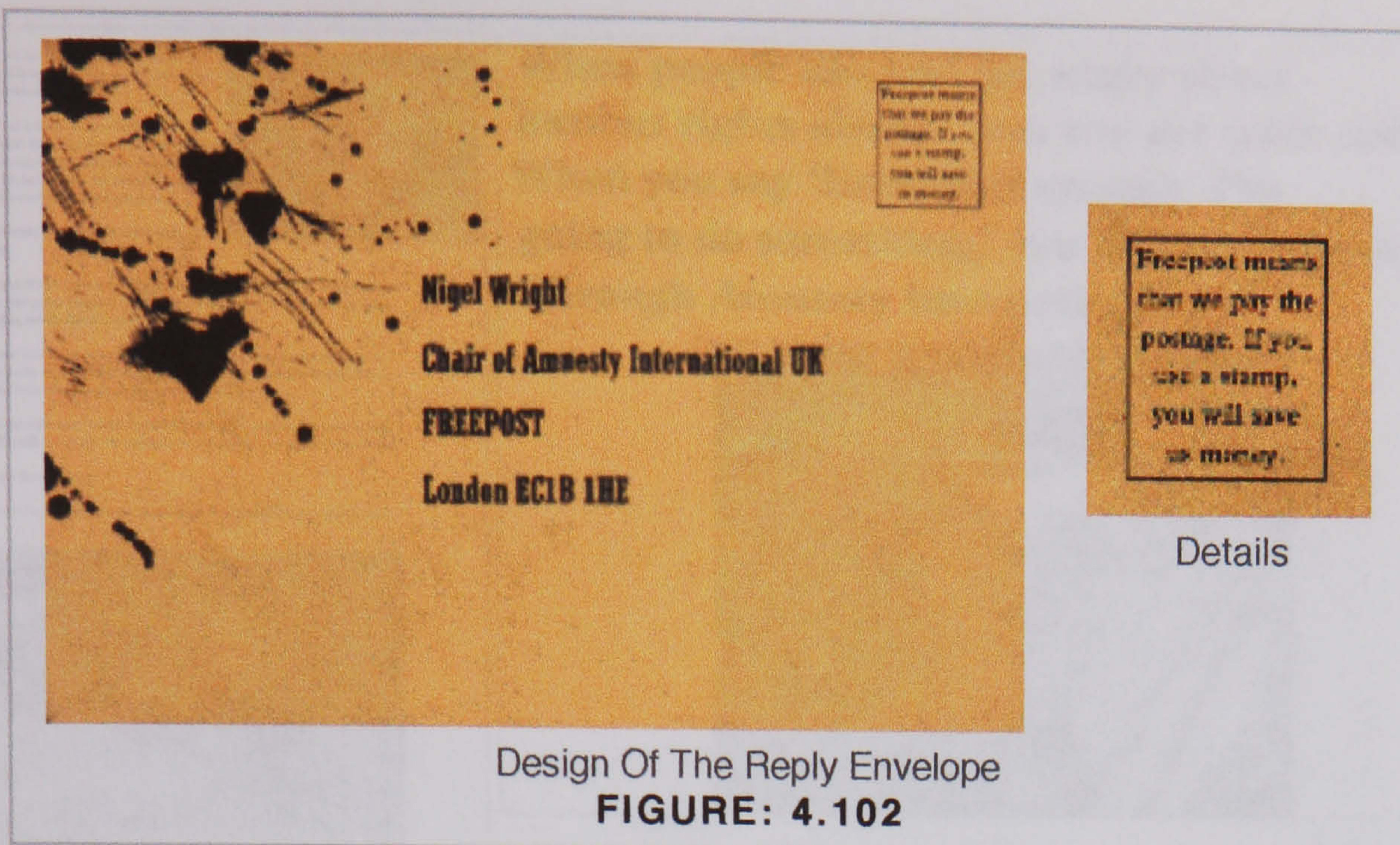
According to John Harvey, cold mailing was direct mailing, sending a large number of letters to the public asking for some kind of support for serious human issues. This technique was widely used by charity organisations around the world for fundraising. Such kinds of projects asked the target audience to become a donor, a member, or both. Donors were people who actively supported charity organisations through their financial contributions, and believed in the issues the campaigns were addressing. Donors were of two types: 1) warm donors, 2) cold donors. Both warm and cold mailing projects included letters, reply form, outer envelope, reply envelope. Each envelope and the inside materials was called a pack, or a package. Direct mail was considered an effective method for fundraising. Fundraising campaigns varied in their concerns and required planning and adopting certain strategies and approaches for gathering information and for sending out. Also, they involved working with various sectors in the society for carrying on their work. Designing information for such projects involved: 1) written and visual text, 2) names and addresses of the target audiences, 3) names and addresses of the members and supporters of the organisations, 4) documents both visual and written.

This cold mailing project went basically to people who were not members of Amnesty International, and who did not know about its campaigns. According to John Harvey, raising funds by 'cold mailing' was very difficult because it was sent to people who did not want to know about it. A warm mailing was sent to people that were members of the organisation, or had given money to the organisation. Also it was sent to people who had empathy with human rights. According to the designer this cold mailing project 'Why do women and children come first' won two gold awards for fundraising in 1996. This project focused on eight factual stories about women, children, and husbands who had been tortured by some soldiers in the following countries and cities from around the world: 1) Colombia, 2) Croatia, 3) Seoul / Korea, 4) Guatemala, 5) Indonesia, 7) Sudan, 8) South Korea. The main aims of the project were to raise money to support the tortured people and to change conditions of injustice around the world by campaigns. The direct aim of the project was to get donations for helping the victims, supporting the campaigns financially, and getting people to join Amnesty .

4.13.2 The designs for the 'Cold Mailing' project

The designs for this project involved the following elements: 1) an outer envelope (FIGURE: 4.101) , 2) a reply envelope (FIGURE:4.102), 3) a letter (FIGURE: 4.103), 4) a reply form. (FIGURE: 4.106) The outer envelope (FIGURE: 4.101) was a white vertical envelope. Its measurements were: 23cm length by 16.3cm width. It had a window at the top. Its front included the following: a) mailsort logo, b) the logo type of Amnesty International, c) the title of the project 'Why do women and children come first?', d) a note saying that in case the package was not deliver to be returned back to Amnesty.

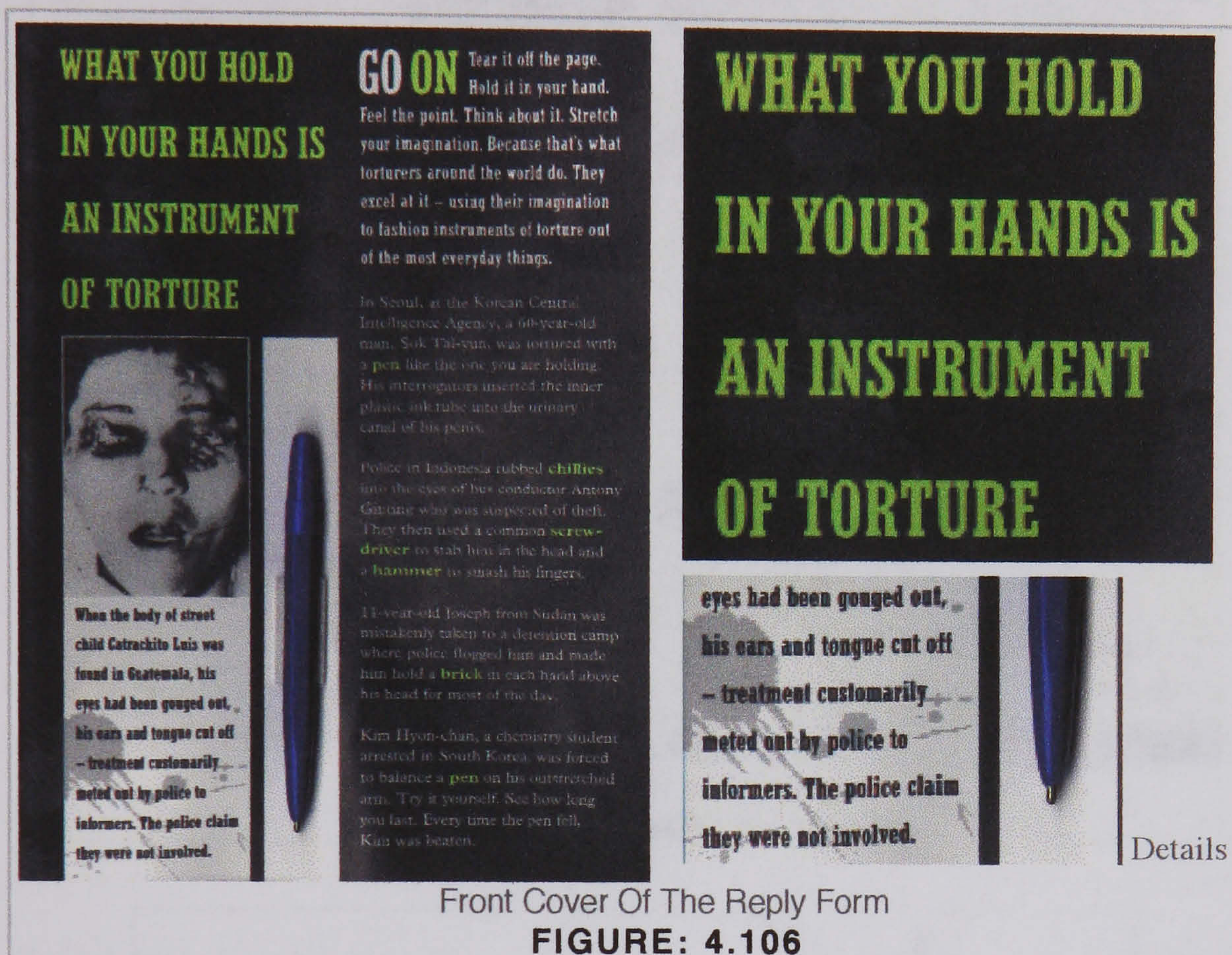




- **The letter**

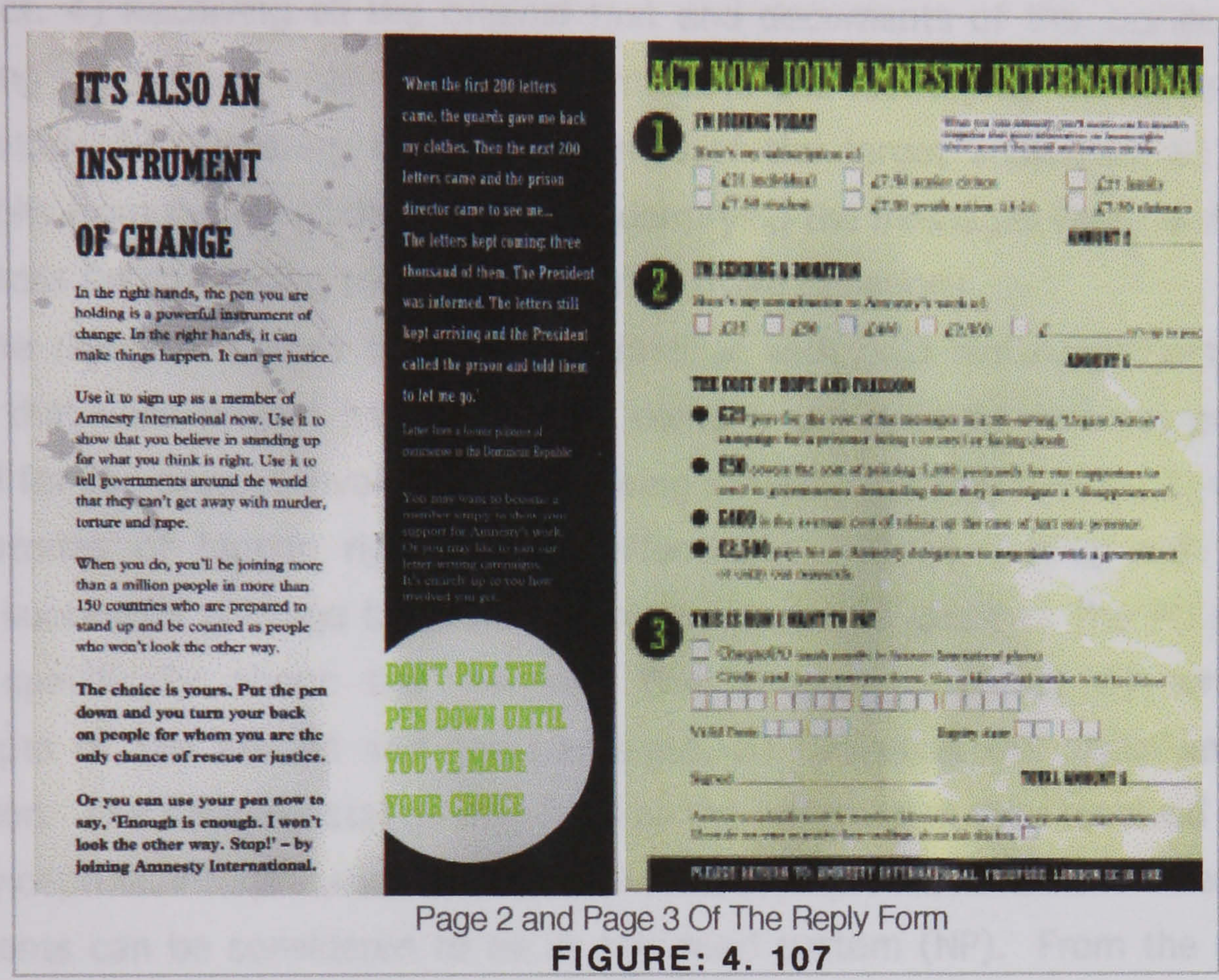
The letter (FIGURE: 4.103) consisted of one piece of paper (size A3 to A4) and was folded in the middle making four pages. The letter was divided into chunks of information, and the style of writing was a mixture of telling the stories and asking the audiences what they thought of women and children. The design and details of the second page are in FIGURE (4.104). The image at the top was centred between page 2 and page 3. Page three included a text, and the other half of the image. The design of the back of the letter (page 4) is in FIGURE (4.105). The page included a positive story about how donations helped one of the victims to get her rights back. The rest of the text included a message asking the audience to contribute and join Amnesty. The bottom of the letter included a note to the audience about the average costs of carrying on research about human rights abuse.

headline (a message) on the left side of the page was written in green typeface. A black and white photo of a tortured child was placed against a white rectangular background. Below the photo of the child, the story of the child was written in black and bold typeface. Underneath the text of the story there was grey splatters of ink that faintly appeared underneath the text. An actual pen was attached to the page by glue against a white vertical rectangular shape .

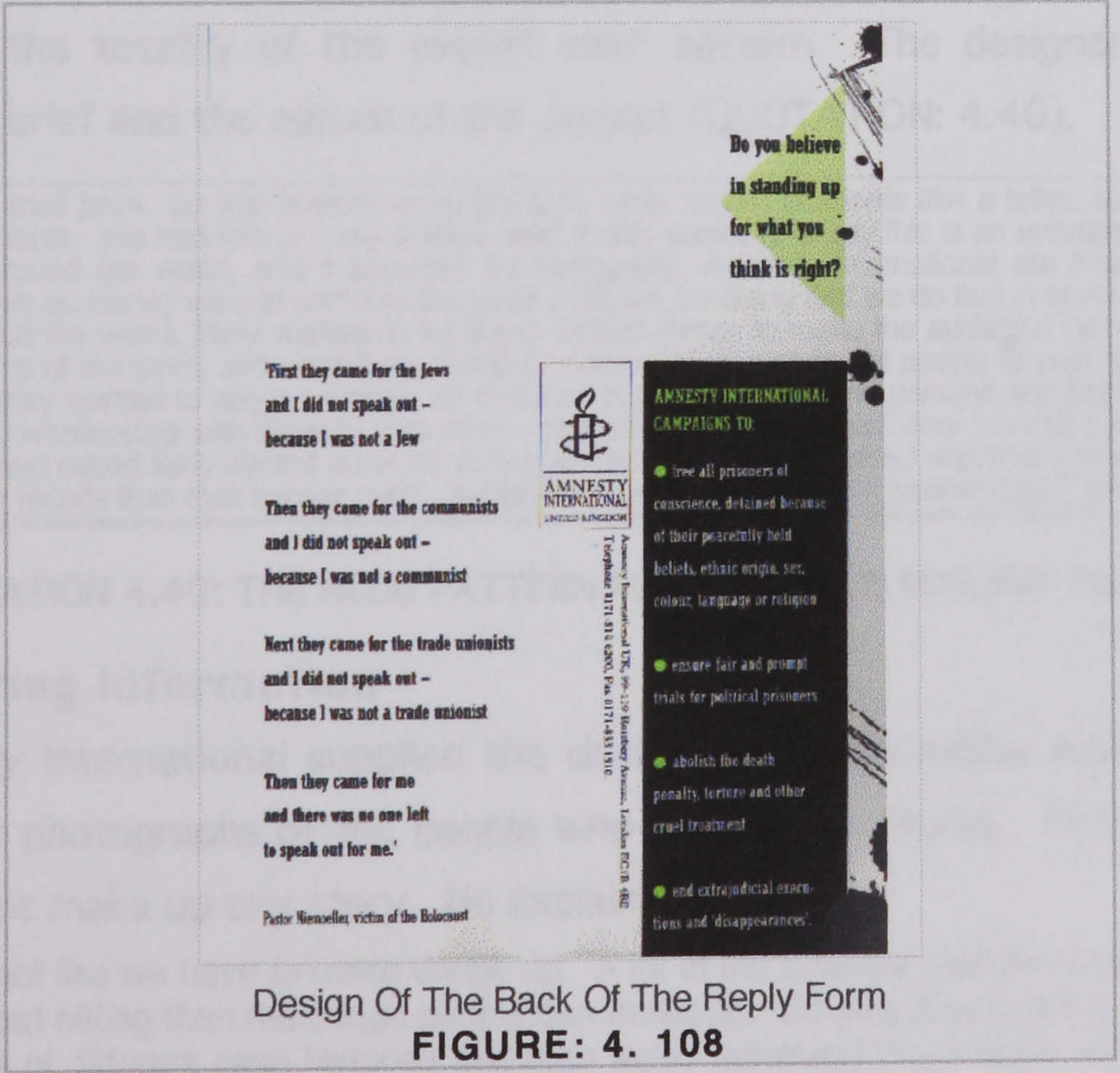


The second page (FIGURE: 4.107, in the left side) included two types of information: On the left side of the page, the text asked the audiences to sign the form and send donations. The right side of the page included a text about how the donation changed the victims' life. : 1) the colour of the page was white. 2) the headline of the messages was written in a bold black typeface. 3) Underneath the headline and the text a grey pattern of the splatters of ink appeared on the white background. 4) the text on the left side was written in a plain black typeface. At the bottom of the text another message talking about making choices was written in a bold black typeface. On the right side of the page the text of a positive story was placed against a black rectangular background. The text was written in a bold white typeface, and a short part of it was written in a plain and small typeface. At the bottom of the black rectangular background included a large section of a white circle. On the circle another message was written on green typeface. The white background of the left side continued to the circle through the straight edge of the section of the circle. The third page of the reply form (FIGURE: 4.107) included the reply format. The last page (FIGURE: 4.108) included a message, and the famous poem of a German pastor (QUOTATION: 4.39) talking about injustice. The right side of the page the aims of Amnesty International

were written in bold white and green typefaces against a black background. The logo of Amnesty was placed in the middle between the poem and the list of aims. The address of Amnesty was written below the logo. The size point of the typeface of the whole text varied.



Page 2 and Page 3 Of The Reply Form
FIGURE: 4. 107



Design Of The Back Of The Reply Form
FIGURE: 4. 108

“first they came for the Jews and I did not speak out because I was not a Jew, then they came for the communists and I did not speak out because I was not a communist, next they came for the trade unionists and I did not speak out because I was not a trade unionist, next they came for me and there was no one left to speak out for me.”

QUOTATION 4.39: THE POEM

4.13.3 Processes of identifying the need and the need pattern

Identifying the need involved the following processes: 1) Receiving, discussing and analysing the design brief. 2) Identifying the elements required for the project: an outer envelope, a reply envelope, a letter, an reply form. 3) Identifying the context of the project. 4) Receiving all the original text and documents of the stories from the PO, reading the stories, analysing the information, and identifying the subject matter of each story. 5) Gathering the list of names of the target audiences, 6) Receiving photographs from the PO of the victims. 7) Identifying the messages that the PO wanted to put across for convincing the 'cold donors' to make donations.

The designer stated that he was familiar with cold mailing projects, but he asserted that each project had a different context and involved different procedures. The need for the project involved the following issues: 1) raising money, 2) telling the factual stories of human rights abuse effectively, 3) competing with the PO's previous successful package by producing more successful quality. The PO suggested nothing specifically about the design. This project involved: 1) writing the manuscripts of the stories and the messages, 2) designing the visual and written information. The designer stated that from all the information they received they built up a conceptual interpretation. The conceptual interpretation of the need and its requirements can be considered to be as the need pattern (NP). From the designer's explanation, it can be considered that the NP consisted of various parts each of which worked within the totality of the overall need pattern. The designer explained the element of the brief and the nature of the project (QUOTATION: 4.40).

"Ultimately it was a mail pack. So that means we're going to have certain elements like a letter, outer envelop, a reply envelop and a reply form. We had lots of case studies. Well it was basically to say this is an example of the kind of thing that is happening around the world, and it shouldn't be happening. Amnesty International are there to try and stop it happening. If you give us money we can continue the good work we are doing and we do that in several ways. So different stories all from around the world. They wanted to tell these factual stories to make the audience respond. Amnesty had a target to meet in terms of the funds and what they ultimately needed to do was to get people to give money. That was the main concern. Also they wanted to acquire names, so that they could go back to the persons and thank them, and try and build up an on going relationship with them to give money regularly... Amnesty had what we call a banker pack which is already being used and raised fairly decent sums of money and what the client wanted was that something different which had to achieve better results than their banker pack. So basically we had to beat their banker pack." John Harvey)

QUOTATION 4.40: THE NEED PATTERN FOR THE 'COLD MAILING' PROJECT

- **Gathering information**

Amnesty International supplied the designer and the editor with the stories of torture and the photographs of the people who had been tortured. The designer stated that they did not make up any story. He explained:

So it's not like we have to make things up. A lot of the time the real life things are far more hard hitting than the things people can make up. So they presented us as I say with lots of different case histories and then we've narrowed those down and chosen a few case histories.

Various departments from the design consultancy were involved in this project. The design and the editorial staff worked closely with each other for developing a mutual understanding of the need and of how they were going to address it. People from the

management department followed up the project, made contacts with the client and other professional people when it was necessary, and planned the budget. The media department collected and bought lists of names and addresses of cold audiences from special organisations. John Harvey explained:

For a cold audience we buy lists from organisations. We do that in several ways. It is done by our media department.

- **Constraints**

The constraints of this project were: 1) economic, 2) textual, 3) visual. Economic constraints had to do with budget and time. Time constraints involved allocating time for each activity and finishing up the project in specific date. The designer stated that they selected the materials of the design within the limitations of the low budget. He stated that they were able to use only two colours beside white for cost reasons. Other materials such as pens (See FIGURE: 4.106) were suggested by the design idea. Supplying a pen for each reply form was considered to be expensive, but the designer was able to balance the cost of the total materials with the cost of the pens and the cost of buying lists of names of the cold donors. He stated that they had to find the cheapest way of producing the whole package. He explained:

We had to find the cheapest way of producing the whole pack because this pen sticking out made it that much more expensive. So we had to keep these quite low budget but still make them powerful.

Visual constraints were related to the following: 1) the use of the actual photographs of the victims, 2) the use of the existing logos of Amnesty International and mailsort. The designer stated that images and texts for such types of projects were necessary and it was not possible to use images alone. He explained:

On the majority of the direct mail packs that we do words and images complement each other. I think this works in that sense. This is different from graphic design where images can communicate without words. It's very rare you will get an image which doesn't need any words at all and just sums up everything. We always put a caption and make it work.

Textual constraints had to do with telling the stories without changing their actual context. The designer stated that the manuscript was long but they did not cut it down fearing that the impact of the stories and messages became less powerful.

4.13.4 Processes of gathering and selecting visual sources

The processes of gathering and selecting visual sources started during the processes of identifying the need. John Harvey stated that he selected from the photos that he was given the best ones, and the less violent ones. He used other visual information to help illustrate parts of the story. He explained:

They supply the appropriate images. Because of the nature of the subject it's not something you can say let's go out and photograph this and photograph that. They sent us a selection of images and we select from them these photos. What I also did was use something graphically throughout the design to illustrate part of the story .

The designer stated that the other visual sources he used were acquired from various sources. His knowledge about design trends and styles, fashion, and what was going on in the various types of media was something that he acquired all the time. He used his acquired knowledge in an appropriate way for the design brief, the audience and the messages of the project. The audience was different to him. He had to make the use of his visual knowledge appropriate for the audience. He said:

Visual source is just acquiring by reading, acquiring different trends and being aware of what is fashionable and what is not fashionable. But then taking in the information around you, posters, magazines, newspapers, etc. Taking in all those things and keeping them in your mind. But when you embark on a project which has a particular brief, a particular goal, audience, you are trying to interpret the knowledge that you acquire from your visual sources, acquired appropriately and the right way so because our audience is very different to me.

According to the designer the visual sources were of the following types: 1) photographs of actual victims, 2) acquired visual awareness , 3) visual sources derived from words and their meaning, 4) visual sources derived from actions and behaviours, 5) drawings, 6) typefaces, 7) media and TV, 8) Newspapers, 9) reading.

4.13.5 Visual patterns

The actual photographs were used as they were. The designer only enhanced the contrast of the photos. The designer explained that he selected the photos which had certain dramatic and emotional feel, the ones that were less horrifying and were not violent except for one image. The whole parts of the design had to work together as one unit. He asserted that all the parts of the design complemented each other to satisfy the need for the project. From the designer's explanation it can be considered that the designer selected visual patterns from his visual sources, and selected certain photos because of their visual patterns. These various visual patterns can be considered as parts of the total pattern of the design. The visual patterns were of the following types: 1) the dramatic visual contexts of the photos, 2) visual and physical pattern of the pen, 3) patterns of the typefaces, 4) geometrical patterns, 5) patterns of colour, 6) patterns of bold typefaces, 7) patterns of highlighted words, 8) patterns of the relationships between the text and the photos, 9) a pattern of the splatters of ink, 10) a dramatic feel. The black splatters of ink were left to the audience to interpret. The designer stated that these patterns might be interpreted as blood or ink.

4.13.6 The design idea

This design project involved two design ideas that complemented each other: one was for the letter, and the other was for the reply form. Both design ideas involved visual and textual information. The textual information included the text of the stories and the text of the messages. From the designer's explanation it can be considered that

the design idea was a visual pattern that consisted of several parts. Each part was a visual pattern that worked within the totality of the overall pattern of the idea. The first part of the following quotation explained that the designer and the editor worked closely together and came up with the design idea. The rest of the quotation can be interpreted as talking about a pattern. John Harvey explained:

It was basically getting together with the copywriter from the outset and coming up with the concept and the idea and making sure that visually and literally the words and the way it looked all hung together and you can only do that when you work with the copywriter from the outset and you work together rather than they go off and write it and they give it to me and I try and make it look like something. You have to do it together. If I am setting here I might say why we do not put this here or there. So I will make suggestions. We try and make copywriter and art direction as important and complement each other as much as we can.

The design idea went through the following stages: 1) coming up with the design idea, 2) exploring design ideas through graphic investigation, 3) selecting the best design idea, 4) testing some design ideas, 5) developing the design idea, 6) artwork, 7) testing the design, 8) production. Between some of these processes the designer and the editor presented the design ideas to the PO and had feedback and evaluation sessions. Also, the designer and the editor have internal feedback and evaluation sessions with members of the design consultancy.

4.13.7 Coming up with design idea and graphic and textual investigation

Coming up with the design idea and investigating textual and design possibilities involved the following processes and methods:

- **working as team**

Coming up with the design idea for this project required that the designer and the editor work together. The designer stated that he had to observe and understand why the text was to be written in certain way, and how it was divided into chunks of information. He also stated that although he did not write the text, he still had to art - direct it. The search started by processes of conjecture and refutation until the pattern of the idea emerged. Understanding how the pattern emerged involved understanding the various stages of searching and selecting the visual patterns. Selecting the design idea went through the following stages:

- **Selecting the most powerful stories**

The designer and the editor read thoroughly the stories and analysed them. Coming with the design idea started by breaking down the stories into categories. They selected the strongest stories for this project and discarded the rest. Then they started thinking about the best way of representing the selected stories both visually and as a text. Some of the stories were about women who were raped by soldiers, and some

were about children and some men tortured by the use of everyday instruments.

- **Selecting textual patterns for the 'letter'**

The textual patterns were related to the text of the stories and the text of the messages. The designer and the editor after discussing various possibilities decided to use the rape stories for the 'letter', and the torture stories for the reply form. Both the editor and the designer started thinking about effective ways for telling these stories to the target audiences. The stories were very distressing and reading them provoked feelings of anger. John Harvey stated that they started thinking of the audiences' reactions to these stories, and found out that the man's reaction was protective, and the woman's reaction was emotional. They decided to assert the feeling of anger in the text. He explained:

The whole project is based on women and children. So if you're a woman that means something different to you, it means your mother, your grandmother. A man as a father is far more protective but a woman's involvement is far more emotional.

The designer stated that at this stage they thought of an unusual way of addressing the target audiences. He explained that they had long lists of names of the audiences both women and men. They classified the audiences according to gender, and decided to write two types of letters: one for men, and one for women. The designer stated that they asked a woman copywriter to write the woman's letter, and the editor (a man) wrote the man's letter. This process involved writing up the text of the stories and the text of the messages. The context of each message was the same, but only the style of writing was different. The text of the letter was broken down into chunks of information. Both letters were tested by sending them out to a number of audiences of both genders. The results of this text showed that there was a difference between how men and women reacted, and the letters were considered successful. He explained:

Now one thing that we did on this pack which was quite unusual for us. We had a list of names: a list of men and a list of women. We got a female to write the woman's letter and a male to write the man's letter because they talk in very different ways and the tone of voice is different. So we did what you call a gender tested mailing packs.

- **Selecting visual patterns for the letter**

Some of the pictures were a bit harrowing. The designer stated that he selected two photos that were dramatic but not horrifying for the rape stories (See FIGURE: 4.104) and a positive photo (FIGURE: 4.105) for the positive story at the end of the letter.

- **Selecting visual and textual pattern for the reply form**

The reply form included the stories of torture by using instruments. The people were tortured by the use of the following instruments: 1) pens, 2) chillies, 3) screw-driver, 4) hammer, 5) brick. The designer stated that one of the stories stood

out as very powerful. This story was about a child in Guatemala whose eyes had been gouged out by a pen (FIGURE: 4.106). He explained:

This particular case history stood out and the idea of a pen. That is when we started thinking about why don't we use a pen in the pack and it's a cheap simple thing and people use them everyday of the week to just illustrate how they are used when they are not in the right hands.

The designer stated that while reading that story the idea of a 'pen' emerged. The designer stated that they considered the other instruments of torture, but they thought that they the idea of the 'pen' was a good one. He explained that they thought to use an actual pen as a part of the design of each reply form. On the front page of the reply form (See FIGURE: 4.106) the message was: "What you hold in your hands is an instrument of torture". The designer stated that the audience was able to see the picture of the child and feel in his hand the weapon of torture. In the second page (See FIGURE: 4.107) the message was: "It's also an instrument of change". The designer stated how the idea of using the pen worked (See QUOTATION: 4.41).

"If you see what you hold in your hands is an instrument of torture and here we say, here tear it off the page hold it in your hands, feel the point, think about it, stretch your imagination because that is what people do around the world who torture, and we talk about here, how people use everyday things to torture people. That is a good coincidence. In the right hands the pen you are holding is a powerful instrument of change and in the right hand it can make things happen. It can get justice. Use it to sign up as a member of Amnesty now so you know I'm joining today, here is my subscription. I'll send a donation and this will demonstrate how much things can do and what they do. That is how you want to pay. On the back, this is where you have the lady's name and address which is then visible through the window. That is a really visual and innovative way to present the whole problem just by using a pen. Presenting how it's used negatively and presenting how it's used positively." (John Harvey)

QUOTATION 4.41: THE DESIGN IDEA FOR THE 'COLD MAILING' PROJECT

- **Graphic investigation and exploring design possibilities**

The processes of exploring design possibilities involved processes selecting and adapting visual sources. The designer stated that they first came up with the design idea then he started exploring design possibilities by producing initial drawings. Each drawing can be considered as a design pattern. The designer explained that he tried the following: 1) various ways for exploring the design idea, 2) various ways for making certain parts of the text standing out, 3) various ways of using colours before he selected green and black. The designer created a spread for the design layout, then he transferred the design onto the computer, and started developing the design idea.

- **Design options and (PCDH)**

The designer stated that they explored the design idea in various ways until they achieved an appropriate solution. The variety of options which the designer had before he selected the best one can be considered as patterns of competing design hypotheses (PCDH). John Harvey stated that they showed the PO only one design option. He said:

We normally only show the clients one option. If we tell them we have lots of ideas and we think three are as good as each other and we cannot decide then we show the client. But ultimately that usually confuses the issue and the client can't make up their mind or they start taking a bit of that a bit of that and it doesn't become focused.

4.13.8 Relevance of visual patterns to the NP

- **The subject matter**

According to the designer the subject matter of this project was factual, and was based on women and children. The subject matter of each story can be considered tangible. The subject matter of the photographs was about the actual victims, and complemented the text so that the audience was able to see the atrocity that the text was describing. The other type of subject matter had to do with the reply form for making donations. The designer used the actual 'pen' in the design for two subject matters: torture and making change. The project involved four subject matters and were related to the following: 1) raped women and children, 2) tortured children and men, 3) a positive story, 4) the messages for making donations including the objectives of Amnesty International.

- **The target audience**

The prime consideration for this project was the target audience. The design package was sent to 20, 000 cold donors in the UK. The potential reactions of the audiences to this type of stories were taken into considerations. The audiences were essential for the project in two ways: 1) As readers that had to understand the stories, read them thoroughly, and to react to them. 2) As receivers and potential donors. The audiences of this project were male and female. The designer stated that they had various information about the audiences such as their age, professions, economic situation, and interests in the safety of children and women. The audience in general were not youth, some of them were teachers, retired people from various professional backgrounds, and people who were known for supporting charities.

The designer stated that they had to consider what was appropriate for the range of audiences when they designed and wrote the text. He stated that the reply form included categories for contribution ranged from £1 to £2500 so that the audiences were able to choose whatever appropriate for them. He added that they took into consideration the sensitive nature of the issues that they addressed without offending the audiences. According to the designer, cold mailing required attracting the potential audience by creating an interesting and effective design and messages. The following elements were taken into consideration in relation to the target audience: 1) considering that the audiences did not know much about the subject matters and giving them enough information, 2) considering the age of the audience, and selecting the appropriate size of typefaces, 3) selecting the right tone of voice when addressing the audience, 4) creating logical order when organising the information, 5) using powerful words for provoking the audiences to react and give money to support the campaign. The designer explained:

Because they are cold donors we have to give them as much information and make it

that bit more powerful and assume that they don't know anything. Whereas if its an audience that know the charity you can make general elements that would have to go in anyway but anything additional to that would be up to us when we actually create the idea and get together. So there is a certain formula of elements that go on in every direct mail pack. There's different ways of interpreting that and different things to add .

- **Communicative characteristics of the the visual patterns**

The communicative characteristic of the design had to do with the visual and written information, and involved the following: 1) the dramatic feel of the photos, 2) the emphases of asking what 'women and children' meant to the reader , 3) the use of powerful words, 4) the use of the actual pen as part of the design in each design pack, 5) the use of black and green colours for giving dramatic feelings, and for making parts of the text stand out, 6) the legibility of the typeface, 7) the use of a bold typeface for pointing out important parts of the text, 8) emphasising the feelings of anger, 9) the layout and the relationship between the various design elements had to create a visual map for the readers be logical, 10) the use of graphic visual elements such as arrows, circles, etc., for attracting the readers' attention to important issues, 11) breaking down the text into chunks of information to ease readability, to avoid monotony. The designer and the editor enforced the aspects of the negative use of the pen and confronted with the positive uses of the pen to serve the aims of the design. By using the actual pen in the design the designer reinforced the following communicative characteristic of the pen: 1) the pen was an instrument for torture, 2) the pen was a positive instrument for writing and making change, 3) the pen was a writing tool for signing the reply form. The designer stated that they addressed the reader all the time. He stated that the design communicated the messages and objectives of the project directly and indirectly to the audiences. John Harvey stated:

Directly because if you just looked at this pattern (splatters of ink) and just looked at the images you would get this kind of feeling of what is going on. Indirectly because they would only ever work with the back up of the words. We did not select violent images.

4.13.9 Processes of selecting visual patterns

The processes of selecting visual patterns continued throughout the various stages of the design process. The selection occurred in the following ways: 1) according to a general established criteria, 2) by processes of conjecture and refutation, 3) from experience, 4) the designer knew what he was looking for, 5) by knowing what was right for the need, 6) by a process, 7) by acquired knowledge, 8) by feeling what was appropriate. The designer mentioned subconscious knowledge as a reservoir of visual knowledge. The designer stated that they selected the pen, the photographs, the colours, the geometric elements, the typeface, the words of the text, and the relationship between these various elements to serve the purpose of the project. From

the designer's explanation it can be considered that these processes involved purposive pattern recognition (PPR). The designer stated:

Basically the pack generally has worked and served the purpose we intended it to do and that was to get people to join. Whatever we do is based on the appropriateness for the client, because it's a charity and they're doing specific things... When you design you design for a purpose. Whether that is based on the words, images, I think it's the whole thing, everything. I think it's worked both directly and indirectly. We went through lots of different ways of doing it. I tried a lot of ways. In the end we came up with just a simple solution.

The designer stated that he knew what was right for the project, subject, and the audience. He said:

Before I did it, I knew how I wanted it to look like. I knew what I did and didn't want and that was I didn't want a pack that was a big picture on the envelope, harrowing picture on the envelope, lots of disturbing images. I mean we had some really awful pictures which we could have put in but they would have distracted rather than complemented what we were saying.

From the designer's explanation, knowing what was right for the project can be considered as recognising a fit between the visual pattern and the NP. Recognising the right design idea can be considered a step within a chain of processes each of which required further exploration, recognition and selection of visual patterns.

- **Quality**

The designer stated that they selected the most powerful stories, the most powerful words, and the best design idea for this project. The designer used the following expressions to describe the quality of the design: 'most powerful', 'strong words', 'dramatic photos', 'appropriate', 'not over designed', 'factual', 'logical', 'simple', 'clear', 'tangible', 'positive', etc. The designer indicated that the design won two awards and was a success. He stated that many people gave money and joined Amnesty international. He explained that after the success of this project the PO wanted to adapt the same design for warm donors. The designer indicated that successful designs were replicated for a wider distribution among other audiences. He explained:

This pack actually has been the most successful pack I ever seen ever done, and what happened because it was so successful, they adapted it for a warm audience, to people who knew about Amnesty, which happened if things are successful. It's won two awards, this is why I'm showing it you to. That is the Amnesty pack there. So we won a gold for fund raising.

4.13.10 Adaptation

The adaptation involved visual, textual, and physical adaptation, and it involved processes of selecting visual patterns. From the designer's explanation it can be considered that the adaptation of visual patterns involved PPR. The adaptation involved the following processes: 1) addition, 2) adjustment, 3) modifying, 4) combining, 5) change, 6) elimination, 7) extinction. These processes involved processes of

conjunction and refutation, and involved various consideration for matching NP. The designer stated that he adapted the photos and the text so that both fit with each other. The designer explained that he had to art-direct the written text. He broke down the text into parts visually by pulling out certain part of the text, and choosing a bold typeface for these parts. In so doing the designer was able to make certain parts stand out and attract the readers' attention. The use of the 'pen' as an actual physical object had to be adapted to the design.

The physical adaptation was related to the use of the following materials and methods: 1) the papers used for the letters, the reply forms, and the envelopes, 2) the thickness of papers, 3) folding the papers, 4) attaching the pens to the reply forms, 5) the use of colours. The use of these materials and methods involved working within the economic constraints, physical constraints, and ways of handling both. The designer stated that the modern technology he used had no significant impact upon the design idea, and that he was able to do the design by using conventional techniques. The adaptation involved the development and the fit of the various parts of the design pattern to each other (See TABLE: 4.58). From the designer's explanation it can be considered that the adaptation processes involved PPR.

Activities	Adaptation Processes For Matching NP
Adapting the various parts of the design pattern to each other for matching NP	"It was getting the images, breaking the case studies down to the pen and then basically putting all those things together and trying to make it cohesive and make it logical. This is a very simple thing to do but we had to set the text, pull out the bits that were relevant to the reader and attach some of the pictures. So it all had to be laid out and fitted properly ... and then we had to glue the pen on there... We had lots of text and not many images. The images we did were very strong and we tried to keep a balance between the whole message." (John Harvey)
Adapting the physical materials of the design to fit each other for matching NP	"What we did was we did really rough for the format of this, bits of paper and just how they're folded, how they enter the envelope, the leading edge. We worked out lots of formats and what we had to do at the same time because of the budget was get costs, how much was a pen, how much were 20,000 pens, how can they be stuck, how thick is this paper going to be. So we had costs because we had a very low budget which meant we had to do all that with the paper and the pen and it had to cover a certain amount of money. I sort that out and then I would put the elements onto the Macintosh, lay it out and get the copy and design it and take it right up to art work. ... We had to get all that in there but do it cheaply so we had to look at different ways of attaching the pen, folding the letter and the forms, because it has to have what we call a leading edge down the side to go into an envelope because if it doesn't go along our machines, and if it drops in that way it will get caught and stuff like that. It needs a machine where it can just go in like the envelope. So this had to fold right. We had to get the information on there. We had to get, the order had to read right. Again all the information here had to go in, which is quite a lot of words and images."(John Harvey)
Adapting the various parts of the design pattern to each other by various processes for matching NP	"How did I design it. On the cover we had certain amount of copy to go on which we couldn't really cut because it meant the stories became less powerful and .. we had the image and the pen and the case study and what we wanted something that looked readable without lots of copy on there but basically it all had to read in a logical order so you know this had to read first and then you go up there and read down there and then you read that. So that means it almost had to stand out best on the page and doing that with a pen it's very easy to pull the pen off and almost not read that, so that is one of the reasons.." (John Harvey)

TABLE 4.58: ADAPTATION PROCESSES FOR MATCHING NP

4.13.11 Purposive pattern recognition (PPR)

Selecting and adapting visual patterns for matching NP can be considered to involve purposive pattern recognition (PPR). The designer explained how he selected the visual and design patterns to match the need and the various considerations he took into accounts when he selected his visual patterns (TABLES: 4.59, 4.60).

Activities	PPR As A Fit For Matching NP
Selecting black and white photos for matching NP	"I just kept the image black and white because it's just much starker, dramatic, and it's just simpler and also you get as much contrast."
Avoiding making the photos nicer for matching NP	"It just wouldn't work to try and make it look nicer , because you can't make it look nicer."(John Harvey)
Selecting emotional images for matching NP	"There's only actually one that shows any kind of physical violence . The others are dramatic and emotional images. That could be somebody asleep (FIGURE: 5.107), but when you put that with the words and you realise what it is that is when you think oh how sad or this is not right so they are emotional images.." (John Harvey)
Selecting a positive story and a positive photo for matching NP	"So she's been helped by Amnesty. So you're presenting the problem through the letter and you're illustrating the solution in the fact that they do actually work and it is a success."(John Harvey)
Selecting the idea of the pen for matching various parts of NP	"Using the actual pen as part of the design for enforcing the issue and bring it to life. It is important to keep the pen there because while they've got that in their hand they can do sign the reply form, that was another thing we had to think about." (John Harvey)
Selecting a small number of photos for matching NP	"Without the pictures, just reading this you conjure up images in your head anyway, and you don't need to be distracted anymore than that because the words are so powerful you conjure up things and visually you don't need to enhance it as much." (John Harvey)
Selecting a small number of images for drawing peoples' attention to the actual issues	"because people normally go straight to an image and if that works without a caption you've lost something and you've lost another chance to try and explain your problem. " (John Harvey)
Selecting splatters of ink as visual patterns to give dramatic feelings and bring the various contextual and visual elements together for matching NP	"I wanted to do was add something extra to the images and if you see just really faintly, there's like a splatters type thing which we've got on the envelope. The idea of that without sounding to contrived, I wanted something that could be blood, it could be anything, the idea was that it was ink and just so you got a combination, when we're talking about the pen and that kind of thing, it's just a little visual thing. It just made a bit more kind of dramatic in a way. I thought about that deeply. It's just a visual element that just helps hang it all together. " (John Harvey)
Realising that the photos have to complement the text , and using appropriate size of the photos for keeping the readers' attention focused on the text	"The image of the child is a distressing image I didn't want to blow it up big. I just want to have it as a kind of gratuitous image because it had just to complement the text." (John Harvey)
Selecting clear visual patterns for communicating the subject and messages of the text for matching NP	"So my main concern was to try and get across to people without having written the pack, just try and communicate the message we were trying to put across in the most clear possible way and I knew that once we'd done that, there was no way that anybody could not respond." (John Harvey)
Selecting colours that stood out for matching visual and economic parts of NP	"I used black, white, and green everywhere because it was cheap and I wanted that because it stood out." (John Harvey)
Selecting the visual patterns of colour that worked with other for matching NP	"The reason we went for green was that it works on white and it worked nicely as a tint, whereas yellow on white didn't work very well and orange didn't work very well. It's not a client colour. It wasn't their colour. So we said what do you think, they liked it and you know we can highlight different bits like that. It's almost you know highlighter pen." (John Harvey)
Deciding the priority of addressing the issues of the abuse of human rights then addressing the messages for changing them	" Again with the format what we wanted to do was have the pen on the front and open up to the image but because there was a certain amount to say we had to do it all in one go on the cover and then keep this simple
Selecting parts of the text and distinguishing them from the rest by using bold and colour typefaces	"So all I've done here is highlight the everyday things, hand, , screwdriver, hammer, brick, pen again talking about the first story and just highlighting those everyday instruments. Obviously showing the pen as well." (John Harvey)
Selecting appropriated design patterns that looked nice without changing the distressing nature of the subject	"As a designer try and keep things fresh , looking nice and nicely designed but without interrupting the message and making it over designed and people just don't feel it's appropriate for them particularly we're going to a very specific audience." (John Harvey)

TABLE 4.59: PPR FOR MATCHING VISUAL PATTERNS WITH NP

Activities	PPR As A Fit For Matching NP
Selecting clear, simple design patterns for matching NP	"I knew that I just wanted something clear and didn't look to over designed because it just wasn't suitable for the project. I wanted something that obviously at the end of the day made people feel it was easy to respond." (John Harvey)
Considering that the perceived cost should be low because the project was for charity	"Something that still as a pack looked nice, and the perceived cost would be low and that was difficult because we had the pen in there."(John Harvey)
Selecting visual and textual patterns for creating interests and making donation.	"So the message we're putting across is simple and we wanted people to feel that this is so easy just to do and send and I'm going to do a lot of good rather than make it like a big long form and have to fill it in because people don't do that and these people if you remember aren't expecting a mailing from Amnesty because they are cold donors. So you have to grab their attention right up to the end even when you're asking for money."(John Harvey)
Giving enough information to the readers for matching NP	"Because we're asking people to give money you have to give a certain amount of information." (John Harvey)
Realising that the written words were important for matching NP	"So I knew that the written word was very important."
Bringing out parts of the text by using a bold typeface for matching NP	"What we try and do is basically if people look at this and don't want to read all the way through, because they think its to much and they don't have time, will pull bits out. You can glance at this and probably read the caption and read that caption and so on."
Selecting tuned down visual patterns for mating NP	"It's better to keep the other elements almost toned down because the message you're saying is enough, ."(John Harvey)
Selecting photos that matched the theme of the text for getting the messages across and Matching NP	"They're images that enhance the text and the theme. So they're all images of women or children basically and that is what we had to make sure we got across when we were selecting images and taking certain ones out . It's very subtly done. That is why I chose the image I chose. All I did was try and enhance it but not go to extreme."(John Harvey)
Avoiding to make the photos look nicer because the issues which the project addressing were not nice	"To make that kind of image a duo tone or a green tint because of the image, it just wouldn't work to try and make it look nicer , because you can't make it look nicer." (John Harvey)
Avoiding the selection and use of horrifying picture for matching NP.	"We didn't want to put them off and have really awful horrible pictures because it wouldn't have been right or appropriate for the audience. You need to have a balance."(John Harvey)
Creating a balance between the use of visual patterns and he text or satisfying NP	"I wanted something that as I said complimented the text and was intriguing and got people to open up." (John Harvey)
Testing the design package for matching NP	"We made sure when it went through the post that the envelop did not get all creased because of the pen, just things like that. " (John Harvey)
Selecting the most powerful stories for matching NP	"So we looked through the case studies and we chose what we felt were the strongest case studies to base the pack on." (John Harvey)
Selecting strong textual contexts for matching NP	Because we were going to an audience that didn't know about the issues, a cold audience it had to be very powerful, have lots of impact and really want the people to give money." (John Harvey)
Balancing the negative nature of the stories with the positive results of helping the victims	"We do that in presenting the problem but by also giving a solution so we may show a success story rather than just a problem so people see that they are doing things and how they're doing. The main communication objective is to get people to send the money." (John Harvey)
Selecting strong words for the first page without using photos for focusing the readers' attention on the actual issues.	"We deliberately put no image on the cover but the copy is very hard hitting, you can't but help not read it and carry on and then we go on, you probably read, you probably don't stay angry, we want to get people worked up about this injustice." (John Harvey)
Selecting clear and readable visual patterns of the text for matching NP	"My ultimate goal was to get people to respond and the way of getting there was to make it as easy as possible for them to intake the information. So my aim on this was to make the written word as clear and logical as possible... I knew that the written word was very strong." (John Harvey)

TABLE 4.60: PPR FOR MATCHING VISUAL PATTERNS WITH NP

It can be concluded from this 'mini-case' that selecting and adapting visual patterns for the NP of the project involved PPR.

4.14 Summary and conclusions of the twelve mini-case studies

The twelve examples of mini-case studies in this chapter investigated how the designers selected, adapted and used visual sources and visual patterns when they created certain designs for specific needs. The concepts purposive pattern recognition (PPR), need pattern (NP), design idea, visual pattern (VP), design pattern (DP), and patterns of competing design hypotheses (PCDH) were examined in relation to the selection and adaptation processes. Visual sources as well as visual patterns were investigated within the context of what the designers did when created the designs for certain projects. The diversity of these examples in terms of selection, adaptation, and use of visual patterns involved the nature and context of each project, and it also involved the following: 1) the diversity of the designers' visual sources, 2) the diversity of the designers' visual patterns, 3) the alternative design options ('patterns of competing design hypotheses' PCDH) which the designers created, 4) the overall visual pattern and its parts (subordinate visual patterns), 5) the relationships between the visual pattern and the need pattern, 3) alternative ways of establishing criteria for the need and for matching the need visually, 4) alternative ways of 'doing', 5) processes of conjecture and refutation, 6) methods, approaches, and techniques, 7) the use of tools and materials.

- **The designers**

The twelve designers were from different design consultancies and organisations in London. Each design consultancy specialised in certain design disciplines and offered certain services to their clients. For each project a team of designers was assigned for the certain project. The number of the designers within the design team varied from one consultancy to another.

- **Diversity of projects**

The twelve projects discussed in this chapter varied. The diversity had to do with the nature, context, and objectives of each project. The subject matter, the target audience, and the communication objectives of each project varied. Eight projects were originally British (Erasure, Typhoo, Murry McDavid, Colour Solution, Brand Mark for the Mini-car, Centrica, Fletcher Kings, London Electricity,). One project: 'Scholl' was British and European (France, Germany, and Italy), and one project was Italian (Buitoni Fresco). The projects for fundraising (Cold mailing for Amnesty International, and 20th Anniversary of Friends of the Earth) addressed the British community, but the contexts of the projects were of international nature.

- **The design discipline and the projects**

Each of the twelve examples required a certain design discipline (packaging,

corporate identity, corporate publication, direct mail, magazine). Each of the design disciplines involved specific technical methods and technical considerations in terms of the use of material for the designs.

- **Visual sources and visual patterns**

The designers explained what a 'visual source' meant to them (QUOTATIONS: 4.1, 4.2, 4.3, 4.4). From the designers' explanations the following can be concluded: 1) the designers gathered and selected various visual sources, 2) the visual inputs selected by the designers can be interpreted as visual patterns, 3) the designers referred to visual sources but they selected and adapted visual patterns, 4) the visual patterns were of various natures. Visual patterns were of the following nature: 1) specific in terms of information, 2) had fuzzy edges such as feelings, modes, and ideas. The designers gathered their visual sources in various ways. The designers' visual sources can be classified under the following categories: 1) general visual sources, 2) retrieved visual sources, 3) art-directed visual sources, 4) found visual sources.

- **The need and the need pattern (NP)**

Identifying the need involved searching, gathering, analysing, and interpreting various types of information inputs including visual information. The designers gathered their information from the following sources: 1) the PO, 2) the market place, 3) research. Most projects involved marketing research. The designers did their own personal research for their projects. The designers collected information from the market place, from the work of the competitors, and from foreign markets. The designers used analyses and comparisons techniques (mood-boards when they established criteria for the need and its requirements).

Identifying the needs for the projects focused on understanding the context of each project, and identifying the elements involved. The conceptual outcome of understanding and identifying the need can be interpreted as the need pattern (NP). The processes of identifying the need started by the POs briefing the designers with the contexts of the projects and their needs. The design brief was the first information inputs that explained the need and objectives of the projects. The design brief for each project varied in their contents and structures. The design briefs were rewritten in terms of requirements and criteria, and included the budget, deadlines, and technical information. The designers helped the PO in identifying and developing the needs for their projects. But the initial needs were decided by the POs. Some designers tested their criteria for the need by comparing it with what was happening in the market place including the work of the competition. Others tested their designs before starting the production

- **The constraints of the need**

The constraints of the needs varied in terms of the specific characteristics. Economic constraints (time and budget) were specified for each project. Some projects had a luxury of time, and some were restricted to specific deadlines. Budget was not a direct constraint for many projects, but it was a direct constraint for fundraising projects. The need for each project involved visual constraints. Some of the visual constraints were related to maintaining links with the visual heritage of the projects, the subject matters, and communication objectives. Most designers stated that they established a set of visual criteria for matching the visual inputs with the needs.

- **Design ideas**

The designers explained what a creative design meant to them (QUOTATIONS: 4.5.1, 4.5.2, 4.5.3, 4.5.4). From the designers' explanations, design ideas can be interpreted as visual patterns. Exploring design ideas involved producing visual marks on drawing surfaces. The visual marks can be interpreted as design patterns.

- **Coming up with design ideas and producing visual marks**

Coming up with design ideas involved processes of searching, gathering, and selecting visual sources, and processes of selecting and adapting visual patterns. From the designers' explanation, it can be considered that coming up with design ideas involved recognising feelings and visual clues during the processes of identifying the need. The designers approaches for coming up with design ideas varied. Developing design ideas involved: 1) discussions, 2) thinking and writing notes, 3) brainstorming, 4) producing visual marks on various surfaces and by the use of traditional and modern tools, 4) trying various possibilities, 5) selecting and adapting visual patterns, 6) comparing ideas, 7) referring to the design brief constantly, 8) processes of conjecture and refutation. Some designers stated that they wrote notes for themselves that included key elements about criteria and visual clues.

- **Patterns of competing design hypotheses (PCDH)**

The designers created a number of design options for each project by the following: 1) explored various design possibilities, 2) selected the better possibilities, 3) explored and developed their best possibilities further, 4) narrowed down their possibilities into a small number of design options by selecting the best ones, 5) presenting the best design possibilities to the PO. The various design options for each project can be considered patterns of competing design hypotheses (PCDH). The design patterns were competing in terms of quality and relevance to the NP of each project.

- **Processes of selecting and adapting visual patterns and PPR**

From the twelve mini-cases, the following can be concluded: 1) PPR was a key activity in selecting and adapting visual patterns for the twelve projects; 2) The processes of selecting and adapting visual patterns continued during the various stages of the design ideas; 3) The variation of visual patterns was an important source of alternative visual patterns, 4) Sometimes, the designers selected certain visual patterns during the processes of identifying the need.

The selection of visual patterns occurred in the following ways: 1) intuitively or subconsciously, 2) from a thought process, 3) the designers knew what they were looking for, 4) the designers had a feeling about what was appropriate, 6) by processes of conjecture and refutation, 7) by a process of doing, 8) from previous experience, 7) during processes of exploring, developing, and crafting design ideas, 6) accidentally, 7) spontaneously, 8) by establishing criteria, Recognising visual patterns in one or more of the above ways of selecting visual patterns can be interpreted as purposive pattern recognition.

Quality of visual patterns was a major consideration when the designers selected and adapted their visual patterns. Matching visual patterns with NP can be considered to involve PPR. PPR was a fit and it was a process of matching. The designers either they recognised certain visual patterns as a good match for NP, or they recognised visual patterns during a process of trial and error. PPR can be considered to involve a sense of direction of what to do next, and it involved recognising when things worked and when they did not. Discarding certain visual patterns was part of the selection activities. Relevance of visual patterns to the projects had to do with the following: 1) subject matters, 2) target audience, 3) the communicative characteristic of visual patterns and the communication objectives of the projects. Adaptation of visual patterns involved the following processes: 1) addition, 2) combining, 3) adjustment, 4) mutation, 5) elimination, 6) integration, 7) extinction. These processes involved PPR in terms of recognising visual pattern, and in how visual patterns were adapted to match NP.

It can be concluded from the twelve examples that purposive pattern recognition (PPR) was a key activity in the selection and adaptation of visual patterns during the various stages of these processes. Also, it can be concluded that explaining what designers did in terms of adaptation and selection provided important information about the nature of design and how and why patterns were selected.

4.15 Masters of design and purposive pattern recognition

In the following chapter, PPR and the related concepts are examined in fifteen published interviews with the 'Masters' of design.

CHAPTER 5

MASTERS OF DESIGN
AND
PURPOSIVE PATTERN RECOGNITION (PPR)

5.0 Introduction

This chapter discusses the PPR and its related concepts in the processes of selecting visual patterns for seventy five design projects. The raw data about these design projects and their designers were extracted from a long design article called “Meet The Masters”. This article was found in an American publication, ‘How - The Bottomline Design Magazine’ (issue: January/February 1993, Volume VIII. 1.pp. 43-103), during the literature survey. The article revealed important information about how fifteen world wide known designers designed specific projects. It was found that discussing these particular designers, their projects, and their design processes was useful in exploring, examining and substantiating the phenomenon of PPR and its related concepts in a wider range of design projects. In addition, the discussion provides insights to how various designers worked. Most importantly, it provides diversity of examples. The diversity of the published examples gave an opportunity to examine the PPR and its related concepts in various design contexts. The article was based on interviews with fourteen top designers (one of the designers was dead)¹, and carried out by an experienced interviewer. In any interview, there is always the possibility that the interviewer will hear what they hope to hear, i.e. interviewer bias is always a possibility. It follows that using the results of someone else’s interviews may be a more reliable method than reliance on the results of one possibly biased interviewer. The fifteen designers were chosen as the most influential designers of their time by the readers.

5.1 Background of the article

- Reasons for choosing the topic of the influential designers:

The issue of investigating the most influential designers in the global community was explained by the associate editor Neil Burns. According to Neil Burns:

The reason is that after countless encounters with readers / designers, the same question always reared its head- ‘Who do you think is influential in today’s global design community?’ And thus the issue was born. (p. 43).

Neil Burns explained how they give the titles of masters and grand masters to the designers. He said:

1. Marilyn Hoffner , an executive secretary and a founder of Cooper Union's Herb Lubalin Study Centre For Design and Typography, was interviewed and discussed the work of Herb Lubalin who died in 1981.

The masters and grand master of design - fairly omnipotent titles for anyone. After all, what does one do and how does one qualify for such a title? That was our question exactly when we decided to tackle this issue. The solution: Let the readers decide. (P. 43).

- The method for nomination:

According to Neil Burns :

The process was as democratic as possible- a write - in ballot vote. Ballots were included in the May/June and July/ August issues and readers had until August 1 to send their nominations. (p. 43).

Neil Burns explained how the readers were asked to nominate the designers:

They were asked to nominate 12 designers working today who they thought were leaders in the design field. Each nomination counted for one vote. Although many other designers made the Masters list, we had 12 clear winners- there were no ties. (P. 43).

Neil Burns added:

Readers were also asked to nominate a Grand Master- the person they thought to be the most influential designer of all time (living or dead). (p. 43).

Neil Burns explained that they had a three-way tie, “so we profiled all three.” Fifteen designers were selected, twelve of them were awarded the title masters of design, and three were awarded the title the grand masters.

- Aims and method for investigating the ‘Masters’.

The original raw data were collected by interviews, and they were edited by the interviewer Pat Knapp who worked as freelance writer for the publication. Neil Burns explained how they covered these masters. He said: “We wanted something other than the usual biographical story along with art we’d all seen before.”(P. 43). He explained the method they adopted for their investigation:

We decided to have the nominees select five pieces of work that were representative of their career, published or not- five pieces that would tell their story, their trek, their development as designers. Then we assigned 15 interviews to ‘How’ veteran writer Pat Knapp, so each designer’s story would be treated consistently throughout the issue. (p. 43).

Neil Burns added:

We also asked each to do a self portrait (no small undertaking given the time crunch these people operate under) or suggest a favourite existing image, or name an illustrator/ photographer to create new likeness. (p. 43).

Neil Burns stated that the response from the designers was incredible:

The artwork was sent promptly, interviews were set up, and portraits were created. (p. 43).

5.2 The designers

The fifteen designers who were selected were living in the United States of

America. Twelve of the designers were men, and three of them were women. Fourteen of the designers were alive. Twelve of the designers were selected as “Masters of Design”. Three of the fifteen designers were selected as “Grand Masters”. Herb Lubalin, one of the grand masters, died in 1981, and one of his associates (Marilyn Hoffner) discussed his work. The designers’ work ranged across the design spectrum. The fifteen designers produced various design projects, and showed diverse design interests and concerns. In addition, they had different professional experiences. The names of the designers and profiles about their educational background are in TABLES (5.1, 5.2).

The Masters of Design	Educational Background
Charles Anderson	Studied design and illustration at the Minneapolis Collage of Art and Design.
Neville Brody	Studied graphics at the London Collage of Printing (LCP).
Joe Duffy	Studied painting, sculpture and printmaking at the Minneapolis School of Art.
April Greiman	BFA from the Kansas City Art Institute. She followed training course at Basel School in Switzerland
Kit Hinrichs	Graduated from the Art Centre of Collage of Design in 1963
Tibor Kalman	Studied journalism at NYU
McRay Magleby	Studied graphic design at University of Utah
Jennifer Morla	BFA from Massachusetts College of Art in Boston, in 1977
Woody Pirtle	Studied fine art and architecture at the University of Arkansas
Rick Valicenti	Received BFA from Bowling Green State University. MA and an MFA in photography from the University of Iowa
Michael Vanderbyl	Graduated from The California college of Arts and Crafts in 1968
Fred Woodward	Memphis State University / Design

TABLE 5.1: THE MASTERS OF DESIGN: NAMES & EDUCATIONAL BACKGROUND

The Grand Masters	Educational Background
Milton Glaser	A Pushpin Founder and pioneer of the new breed of conceptual design that emerged in the '50s. (No educational background was mentioned)
Herb Lubalin	Entered the Cooper Union for the Advancement of Art & Science in 1935.
Paul Rand	Studied at Pratt Institute, Parsons School of Design and the Art Students League

TABLE 5.2: THE GRAND MASTERS: NAMES & EDUCATIONAL BACKGROUND

5.3. Criteria for selecting the design projects

The designers explained why they selected the particular projects they discussed from a wide variety of their designs (QUOTATION: 5.1). Some designers stated why they selected each project. The designers focused on their learning experiences and intuitive approaches to design.

The Designers	Reasons For Selecting The Projects
C.. Anderson	"I chose a variety of work, a variety of approaches and also a variety of clients to show a cross-sampling of the work we're doing." (p46)
N. Brody	"I tried to choose [pieces] that indicated the main directions I felt had been involved in my work the past 12 or 15 years. It has nothing to do with different areas like posters or record covers, but rather it's about the design philosophy I was dealing with."(p51)
J. Duffy	Most [samples here] are good representations of how we work- they're collaborative efforts. I really enjoyed these projects and think they are successful ... as much because of the collaboration involved as anything else. In the end, the overall campaign is better because a group of people has contributed ideas and talents."(p55)
A. Greiman	"These show the range of what we've done- from video images to computers, print work to three-dimensional and motion."(p59)
K. Hinrichs	"In selecting these pieces, I looked for things that were classics in that they had been given a lot of exposure, and then those pieces that were the best, the most unusual and the freshest. Hopefully the best and the freshest."(p62)
T Kalman	"These [pieces] are pretty chronological. I was trying to show where we've come from and what the progress has been." (p66)
Magleby	"I was trying to show some diversity and also some kind of chronology, but I only went back as far as 1981. I think I've done my best work in the last 10 years. Before that, I was still learning a lot."(p70)
J. Morla	"My samples show diversity in terms of approaches and solutions to problems. And they show a variety of styles, from hand-lettering to illustration. I choose the poster format because it allows for a fluid comparison."(p74)
W. Pirtle	"I picked pieces that seemed to be significant throughout the course of my career, or things that came to my mind as the 'first cut' of my work."(p78)
R. Valicenti	"In making my selections, I wanted to remember the moment that gave me the best feeling. What I've tried to do is get back to the attitudes that inspired me to get into the creative field in the first place - the intuitive attitudes, the ones that give you the answer when you're trying to decide whether it's right and when to stop." (p82)
M. Vanderbyl	"I chose these to represent things that maybe weren't breakthroughs in the world of design, but were breakthroughs for me personally." (p86)
F. Woodward	"I have no idea [why I chose these pieces]. I wish I'd been braver and [shown] something really early that was bad." (p90)
M. Glaser	"These slides don't necessarily represent my so-called 'best' work, but rather sort of typical work I did at various stages with a variety of people. ... The way you enter the world very often is through the medium of other people. Sometimes those relationships seem arbitrary and accidental, and other times they're sought. But the main issue is that, very often, the most significant work you do enters the world by virtue of somebody else's participation. That's what I wanted to show." (p94)
M. Hoffner	"Herb broke a lot of barriers in terms of making ads more visual than copy-driven."
P. Rand	"I picked these because they were the simplest things that would register most quickly." (P103)

QUOTATION 5.1: THE DESIGNERS' CRITERIA FOR SELECTING DESIGN PROJECTS

5.4 The designers' general criteria for approaching design projects

The designers' approaches and the thoughts behind them can be considered general criteria for design approaches and those can be stated as:

- 1) Staying interested in various visual patterns and their visual sources
- 2) Every project is a learning process
- 3) Combining the creative aspects with the business aspects
- 4) Find new stimulating approaches and technology
- 5) Collecting enough information, open doors, and breaking down barriers.
- 6) Design does not only involve aesthetics. Design is a responsibility that involves questioning and evaluating the particular communication. Also, it is influenced

by and influences society .

- 7) Smart design is based on a strong conceptual platform, and stylistic execution appropriate to the message.
- 8) Design is an artistic process that involve meaning and it is not just extension of business.
- 9) Graphic designers can cross over more than they think they can
- 10) Get excited about original photographs and illustrations and do them justice.
- 11) Open the possibilities for every job even when you did similar jobs before.
- 12) The designer can clarify, objectify, and help with the process of communication.
- 13) The expectations of the clients may reduce the role of the designer to merely a business service.
- 14) Using advanced typographic technology to change the spacing between letters and the form of letters does not destroy legibility; it changes reading habits.
- 15) Design involves intuitive activities.
- 16) Design experiments enhance intuitive activities for forthcoming projects
- 17) Design involves thinking and experiments.
- 18) Design involves the various traditional and technological skills.
- 19) Design involves the use of various tools and techniques
- 20) Designers are supposed to know of the design production processes.
- 21) Designers are supposed to push the boundaries of design ideas and approaches.
- 22) Graphic designers can extended their design practice to interior, industrial, and architectural design.
- 23) Design requires a collaborative team of people.

Each designer explained his/her design philosophy and design approaches (QUOTATIONS: 5.2 & 5.3).

Grand Masters	Views about design
M. Glaser	"I think the most difficult thing today is that client expectations are very low indeed, or at least very much lowered from what they used to be. The expectation now is that the designer acts more as a marketing service than as someone who can clarify, objectify and help with the process of communication. When you get reduced to that kind of a service role, it's very hard to maintain interest." (p93)
H. Lubalin	"We've been conditioned to read the way Gutenberg set his type, and for 500 years, people have been reading widely spaced far apart. Even with advances in typesetters still maintain the pattern. We read words, not characters, and pushing letters closer or tightening space between lines doesn't destroy legibility; it merely changes reading habits." (97)
P. Rand	"When you design, you do things intuitively. Either it comes to you or it doesn't. Your work is you, it's part of your experience. It's the distillation of your experience." (p101)

QUOTATION 5.2: THE GRAND MASTERS' OF DESIGN VIEWS ABOUT DESIGN

Masters Of Design	Views about design
C. Anderson	"I try to stay interested in a lot of different things, keep my eyes open to everything around me. That includes everyday stuff in life - a bad billboard peeling off in an alley, type, that has been [photocopied] so many times it's really screwed up. And I also like experimental stuff- experimenting with colours, different compositions and type arrangements." (p45)
N. Brody	"I still believe that each project I work on has to be more creative than the last one. As a studio, we're still constantly trying to push ourselves. ... I'm still learning. At my studio, we've always taken the attitude that we're still at art school, and every project we work on is a learning experience." (p49)
J. Duffy	"What I've tried to do is combine the creative aspects of design with the business aspects of design, therefore providing my clients with something that not only looks good, but affects the bottom line. That is always the challenge. You want to create something that you're proud of, and you also want it to work well in the marketplace. So striking a balance without compromising the integrity of your design is critical." (p53)
A. Greiman	"I'm easily bored. I need to be stimulated, and I need to learn every day. Design is not a linear process. You can't count on the fact that just because you did it that way yesterday, it's going to work for you today. That's why using new technology is so great..." (p57)
K. Hinrichs	"You have to gather enough information, but once that information is there, it's the opening of doors and the breaking down of barriers to where you don't reject anything- you accept everything. It sounds very mystical, doesn't it?" (p61)
T. Kalman	"To me, the future of typography is not so much for the printed page, but for the screen. It's interesting to design a poster or a piece where the type sits still; but it's a hundred times more interesting to design something where the type moves in front of you." (p65)
M. Magleby	"I think I've done my best work in the last 10 years. Before that, I was still learning a lot." (p70)
J. Morla	"Design doesn't exist in an aesthetic vacuum. Design is influenced by and influences contemporary society, and we as designers need to realise the power we possess and use it responsibly. The truest form of waste management is questioning and evaluating the necessity for any piece of print communication." (p73)
R. Valicenti	"Design is an artistic process, not just an extension of business. I just want to do some things that are meaningful. I would like words 'courage' and 'commitment' to be aligned with me. I don't have the answers, I just have the pursuit."(p81)
W. Pirtle	"I would hope that I'd be remembered for design that's smart and that's always based on a strong conceptual platform, with a stylistic execution appropriate to the message." (p77)
F. Woodward	"I rely so much on when that [outstanding] illustration or photograph comes in. That's what keeps me excited about being a designer. I feel challenged by [the artist's] great efforts, and there's an obligation on my part to do them justice." (p89)
M. Vanderbyl	"To me, the two-dimensional surface is very interesting to work on, but if that's all I had to do I probably wouldn't like being a designer for this long ... I'm a real proponent that graphic designers come to and solve more problems than almost any other designers- We get much more design 'exercise'." (p85)

QUOTATION 5.3: THE MASTERS' OF DESIGN VIEWS ABOUT DESIGN

Some designers emphasised further aspects of their design approaches (QUOTATION: 5.4).

Designers	Specific Criteria For Design
M. Vanderbyl	"To me, the important thing about being a designer is to evolve, to test and retest. The minute you stop searching you die." (p86)
Woody Pirtle	"In many cases good design is not only a visual thing, but it's married with a copy message, so that when the copy and the image are put together they become this seamless form of communication." (p79)
Fred Woodward	"Good design gets down to the power of the image and what we bring to it typographically and structurally," (p91)
Rick Valicenti	"I am personally committed to making all my extra energy go toward propaganda that's good for human life.

QUOTATION 5.4: EXAMPLES OF PERSONAL CRITERIA FOR DESIGN

5.5 The project owner (PO)

The project owners (POs) varied. In addition, a few designers were owners of some projects, or partners with outside clients. Sometimes, the designers mentioned the names and positions of the project owners, and, sometimes, referred to them by the names of the institutions. Sometimes the designers focused only on their design ideas and how they achieved the objectives they were looking for without mentioning anything about the PO. Other designers mentioned the opinions of their PO about what was needed.

According to most designers, the PO initiated the needs for the projects. The majority of the designers stated that the PO explained and discussed the needs and requirements for some of the projects. Most designers stated that the PO gave approval of the design concepts. The majority of the designers indicated that the PO gave them feedback during the design process. Some designers stated that the PO suggested how particular visual inputs to be handled. Some designers stated that the PO participated in evaluating the design concepts. Some designers stated that the PO suggested changes of the design concept or some of its aspects. Some designers indicated that the PO pushed the designers positively towards new design horizons. Most designers stated that they received positive feedback from their PO. Most designers stated that the PO showed appreciation of the designs, and established long business relationships with them based on the success of the projects.

5.6 Diversity of projects

Seventy-seven projects were discussed. Each project was given a title. The types of project varied across the spectrum of human interests and activities. The design projects varied in their nature, their design disciplines and their objectives. The projects covered wide ranges of businesses, services, products, and artistic, intellectual, educational, political, environmental, and commercial issues. In addition, the diversity of the projects can be related to the following factors: 1) the area of business of the PO, 2) the needs and requirements for the projects, 3) the types of design disciplines which were required for the projects, 4) the types of media through which the projects were delivered and communicated.

5.6.1 Designs for projects

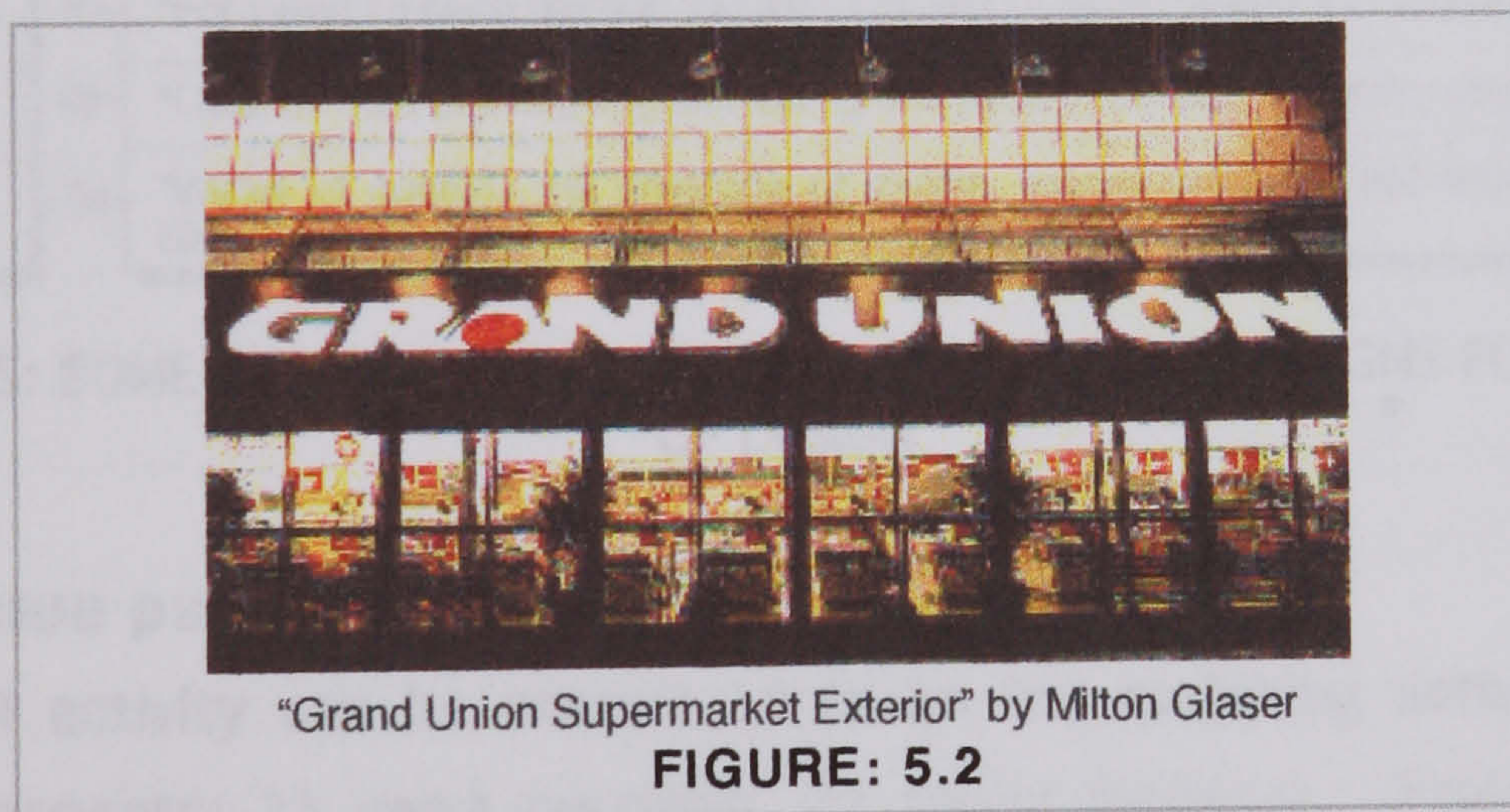
The design disciplines varied. Some projects involved one discipline, and some involved a number of disciplines. For example, some projects involved a variety of designs such as corporate identity, packaging, and prints. The design disciplines of the projects can be grouped under the following categories: 1) packaging design, 2) brochures and catalogues, 3) book designs, 4) book cover designs, 5) magazine

designs, 6) magazine cover designs, 7) designs for music records, 8) posters, 9) ads , 10) billboard posters, 11) corporate identity programs, 12) exhibitions, 13) interiors, 14) industrials, 15) architectures, 16) video, 17) product design, 18) broadcast design, 19) videos, 20) films, 21) textile design, 22) fabric design, 23) combined design disciplines. Some of the projects can be considered to involve design disciplines that are not two dimensional design. Examples of projects from other design disciplines can be seen in the work of the following designers:

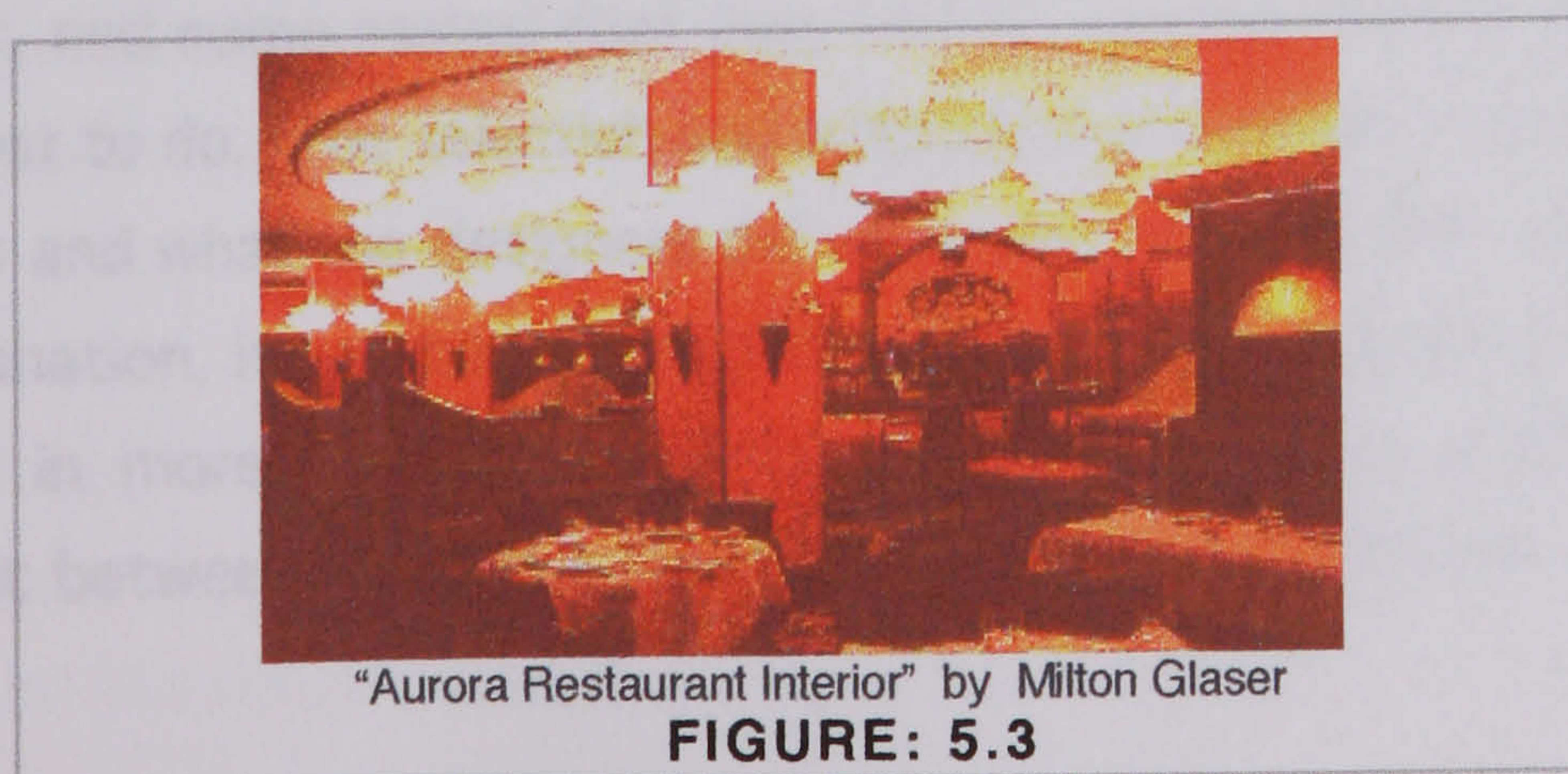
- The project “Cambridge Chair, Hickory Business Furniture” by Michael Vanderbyl (FIGURE: 5.1).



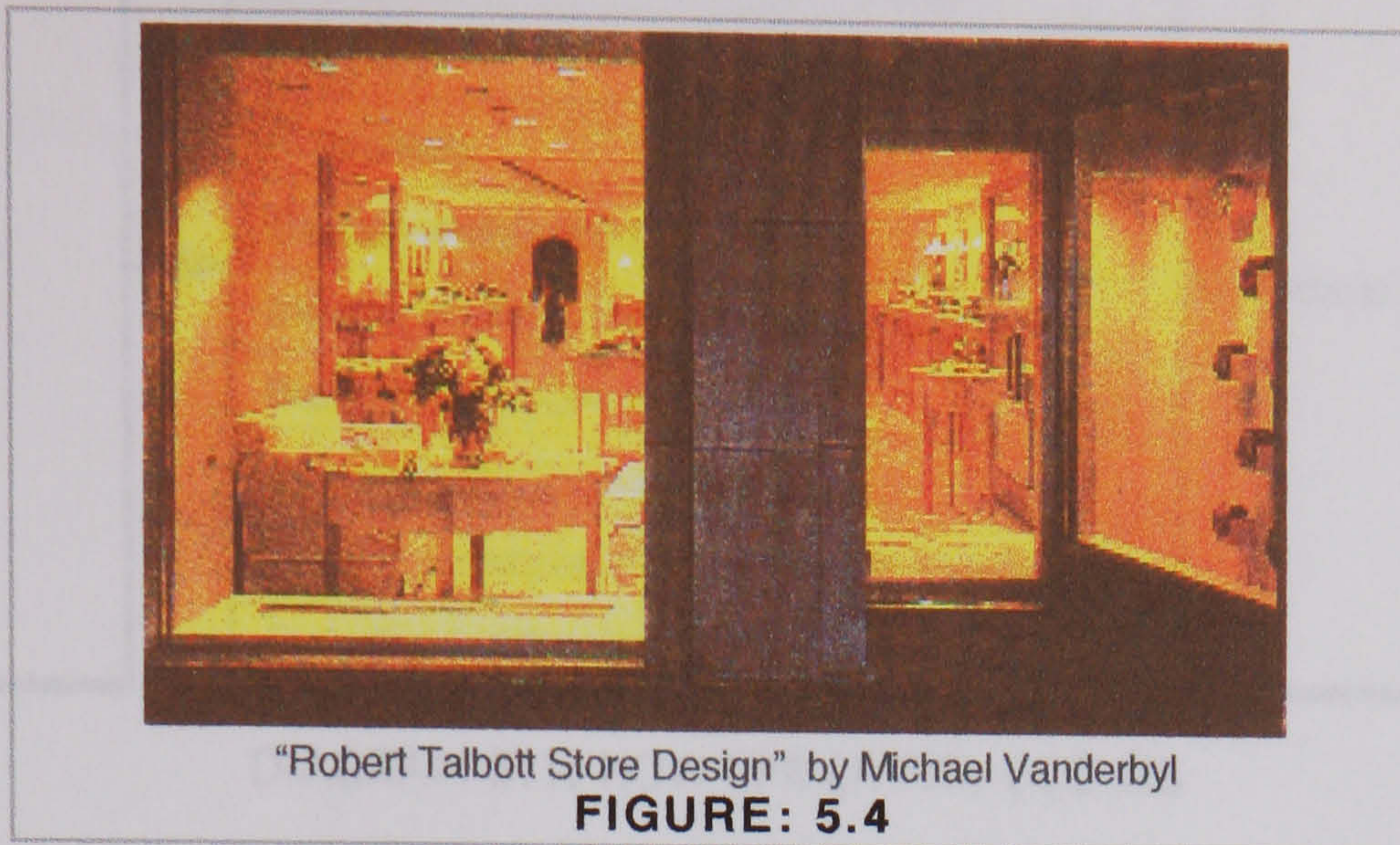
- The project “Grand Union Supermarket Exterior” by Milton Glaser (FIGURE: 5.2). Milton Glaser stated that this project was the beginning of twelve or thirteen years of designing supermarkets.



- “Aurora Restaurant Interior” by Milton Glaser (FIGURE: 5.3).



- “Robert Talbott Store Design” by Michael Vanderbyl (Figure: 5.4).



- Charles Anderson started creating industrial design objects.
- Jennifer Morla worked in broadcast design, furniture and fixture design video and film, store interiors, and product and packaging design.
- April Greiman produced interior and architectural designs beside graphic design. These designers expressed various opinions about extending their design practice to other fields of design (QUOTATION: 5.5).

M. Vanderbyl	→	“This was the first chair I designed and, ironically it also won an Institute of business Designers Product Design Award the year it came out.” (p86),
M. Glaser	→	“I was thrilled. It was a great opportunity to do an elegant room and to design lighting fixtures- we did everything for it. Basically it was a way of venturing into spaces and three dimensional things, which we’ve done in adjunct to two dimensional work.”(p95)
M. Vanderbyl	→	“For years I’d been blurring the lines between graphic design and architecture.”(87)
C. Anderson	→	“I like the idea of designing something that people buy and use every day.” (p45)
J. Morla	→	“We’re all pushing the envelope of design, solving problems not limited to the two-dimensional definition.” (p73)

QUOTATION 5.5: SOME DESIGNERS’ OPINIONS ABOUT CREATING DESIGNS FOR OTHER FIELDS OF DESIGN

5.7 Purposive pattern recognition (PPR)

The PPR activity can be considered to be the matching activity between the following components: 1) need patterns, 2) visual patterns. From the designers’ explanations, it can be deduced that the designers selected visual patterns that fit the needs for their projects. Some designers stated that they knew (sometimes) what they were looking for, and some stated that they had to explore various possibilities before they decided what to do. The selection and adaptation processes overlapped. PPR can be observed in how and what the designers did when they created their designs. From the designers’ explanation, it can be deduced that the purposive pattern recognition (PPR) can take place in more than one way (DIAGRAM: 5.1). Two examples of intuitive selection and fit between NP and a visual pattern and its parts are in Diagrams: 5.2, 5.3.

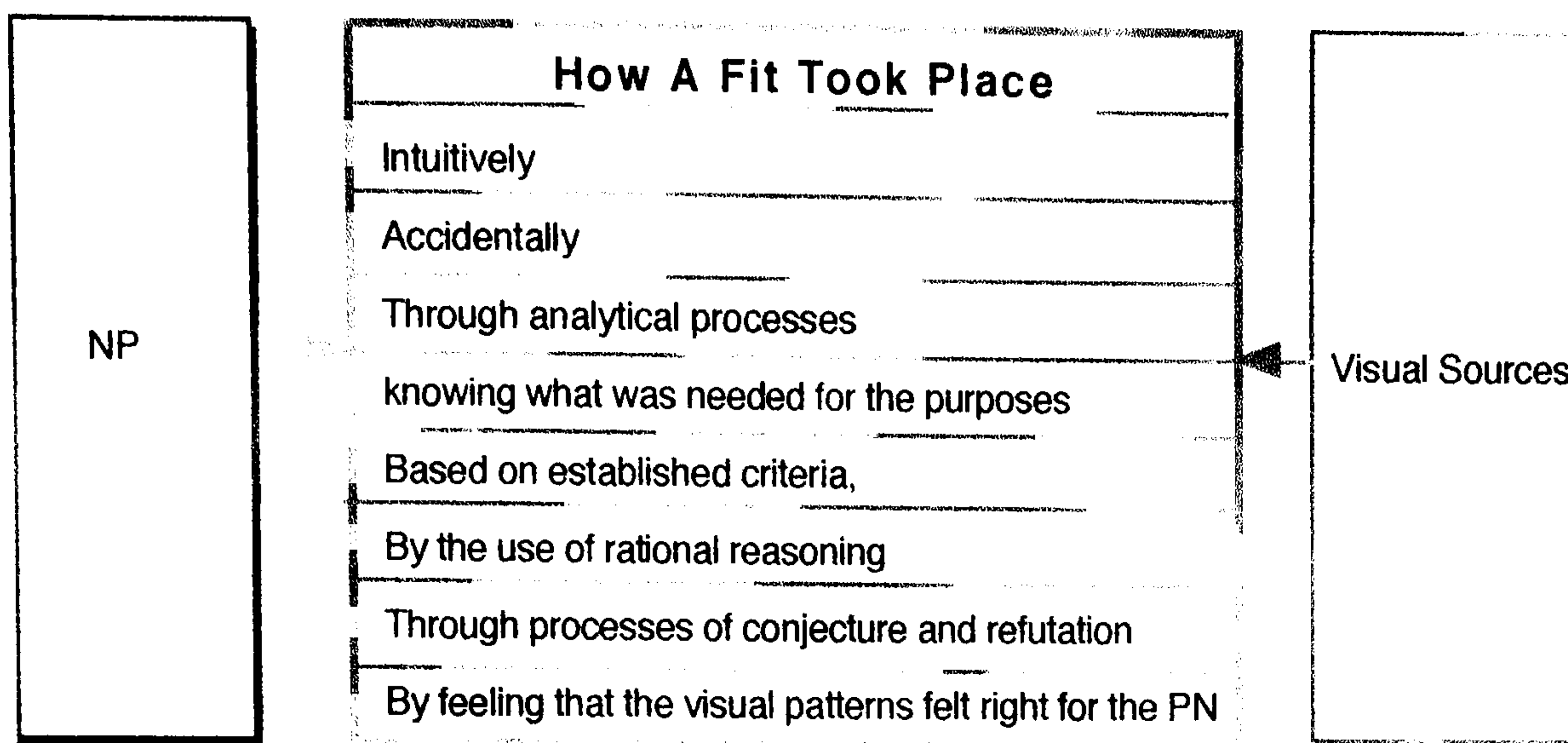


DIAGRAM 5.1: HOW PPR (A FIT) OCCURS

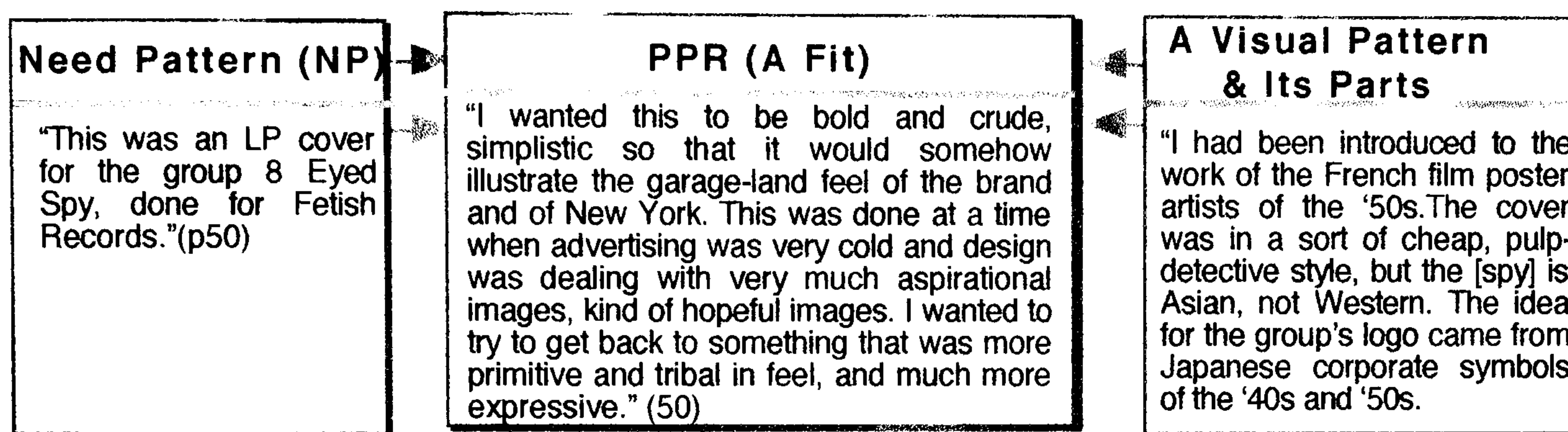


DIAGRAM 5.2: AN EXAMPLE OF INTUITIVE SELECTION OF VISUAL PATTERNS AND PPR

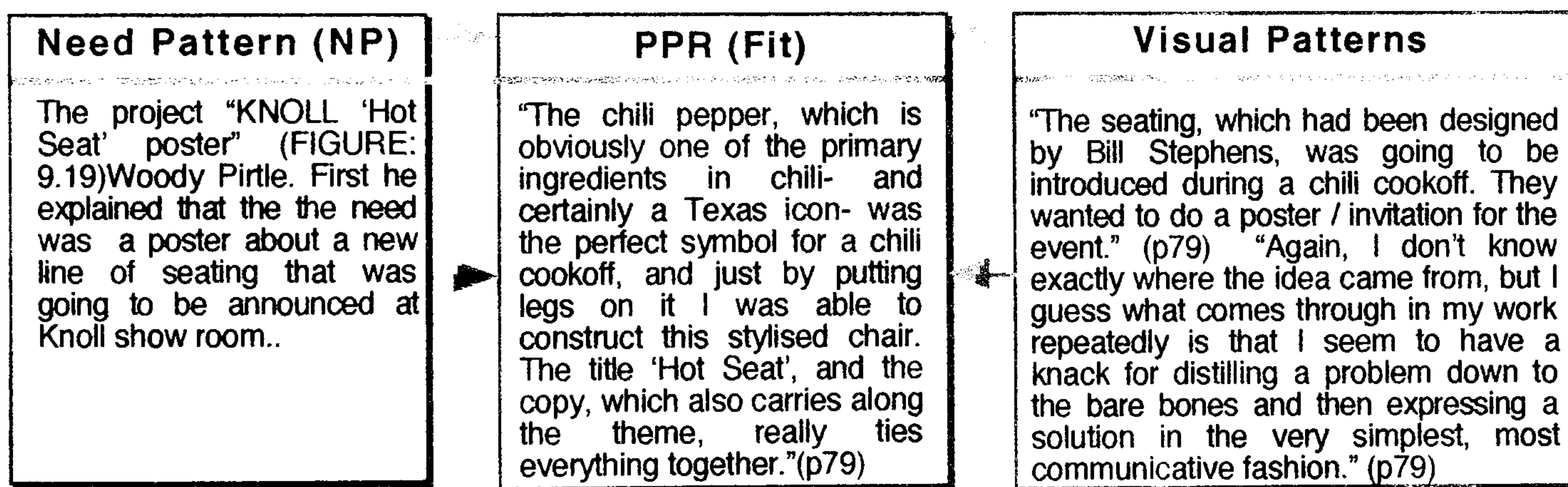
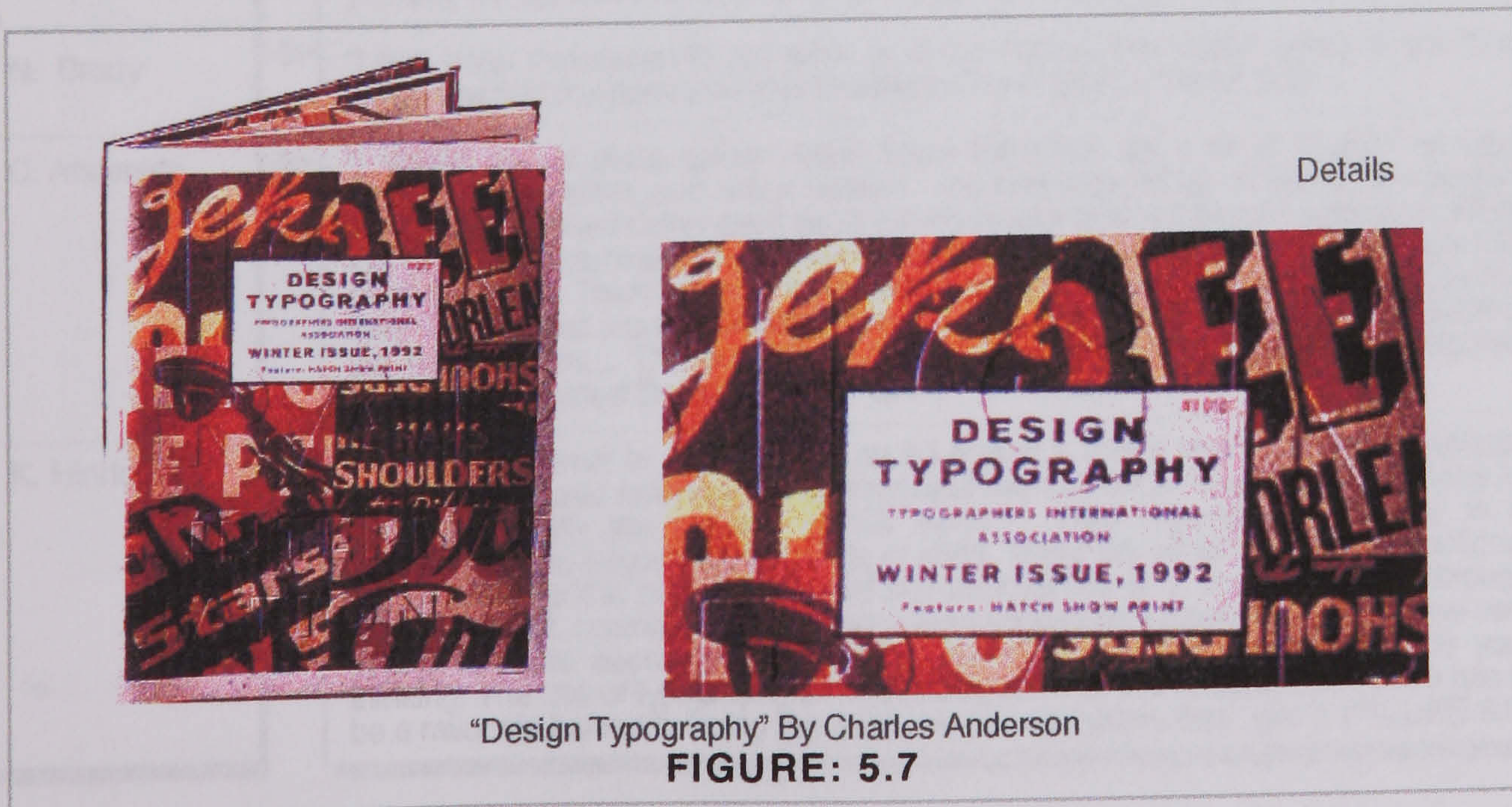
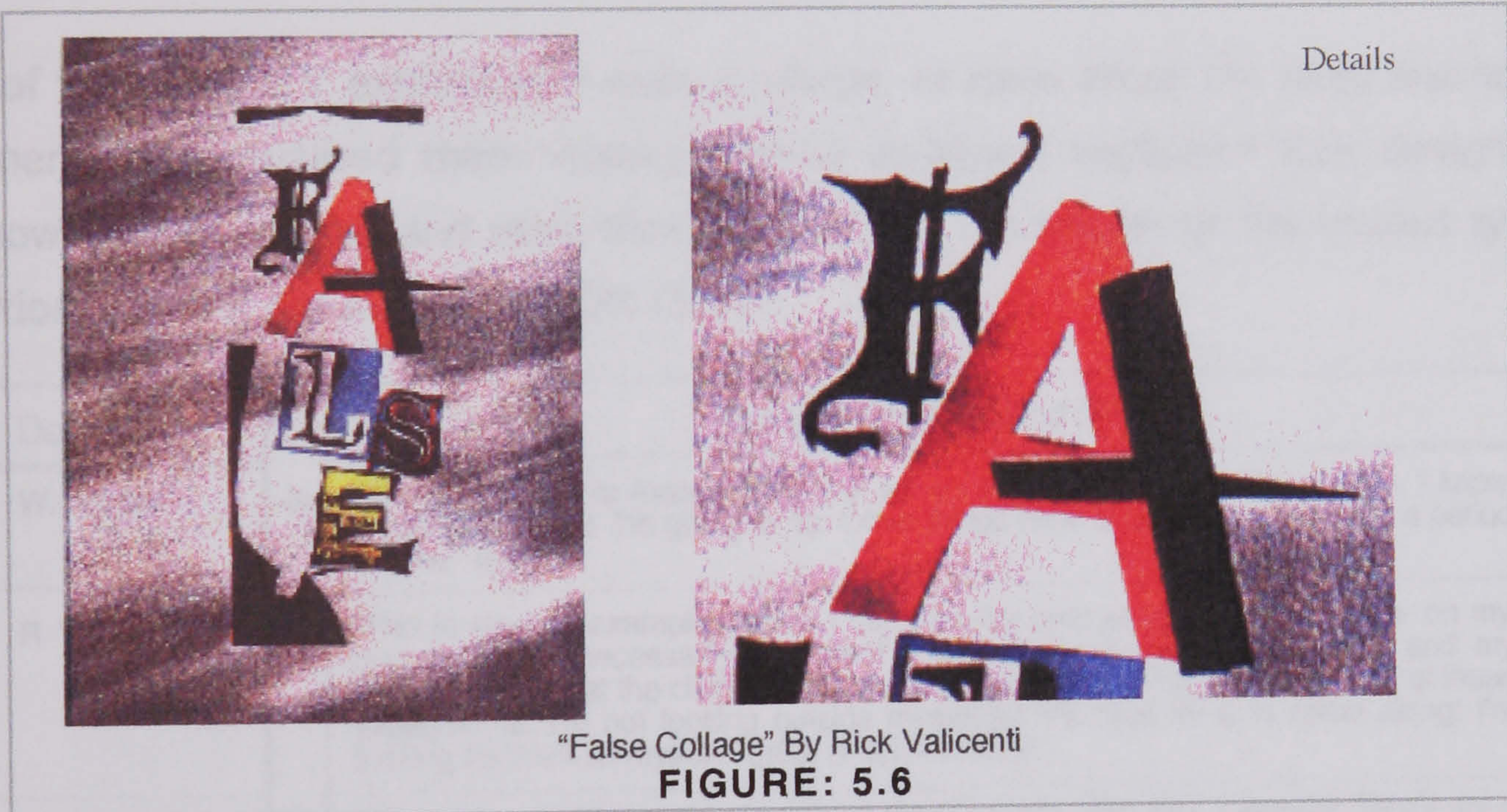
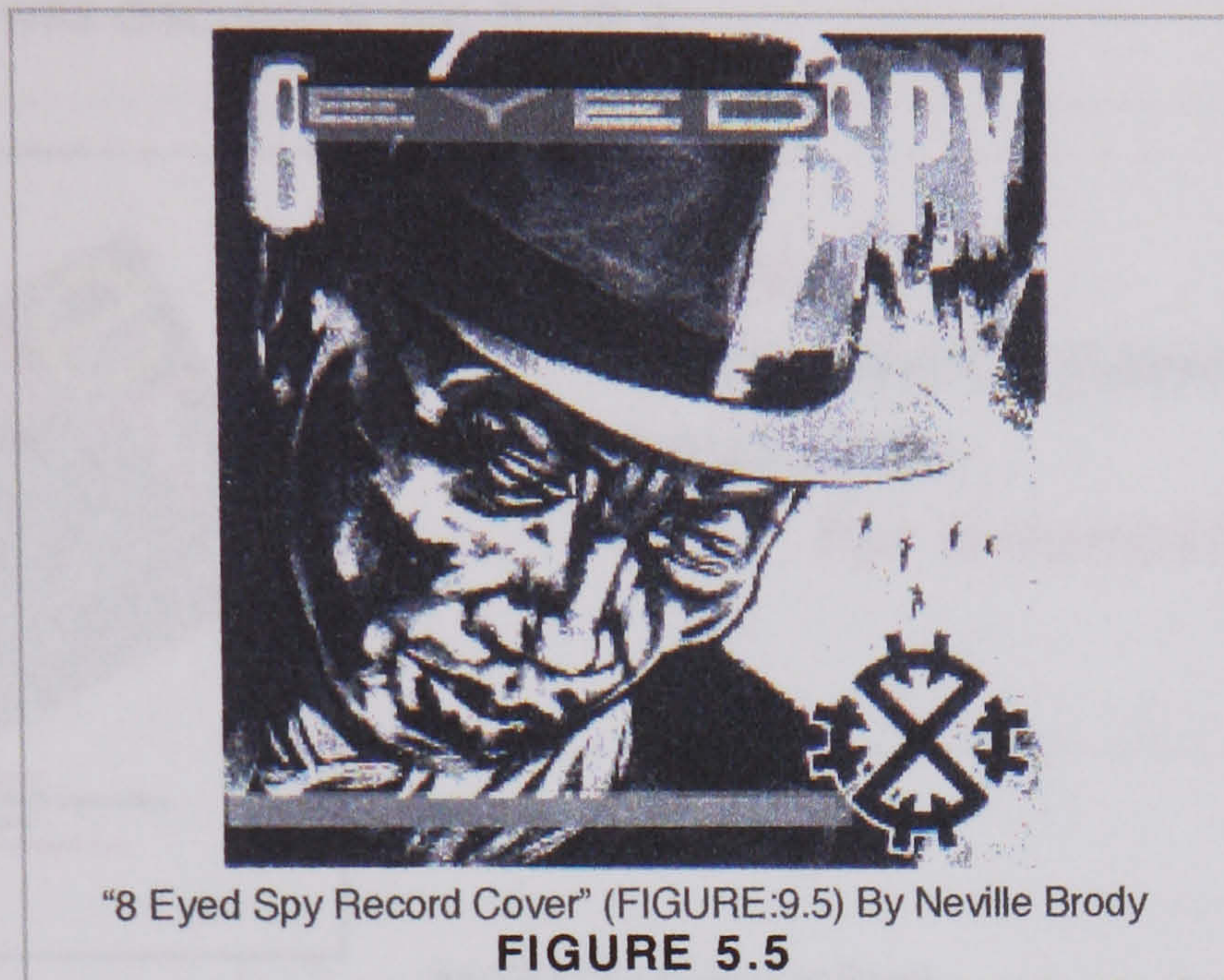


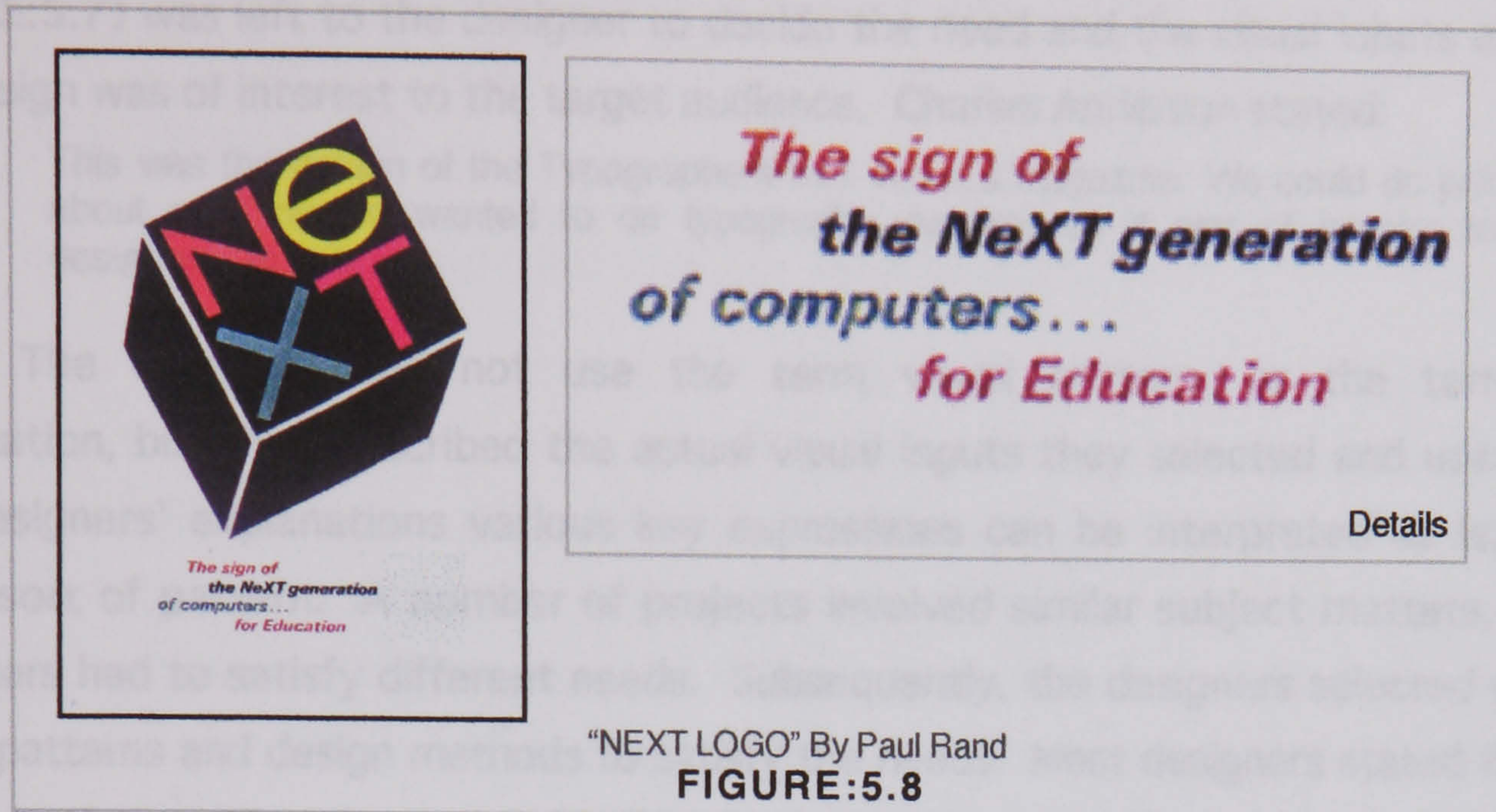
DIAGRAM 5.3: AN EXAMPLE OF INTUITIVE SELECTION OF VISUAL PATTERNS AND PPR

Most designers indicated that, sometimes, they recognised the design solutions for the needs immediately, and sometime over process of analysing the needs. Some designers stated that they knew what they were looking for. Some designers established criteria for their projects. For the project "8 Eyed Spy Record Cover" (FIGURE:5.5), Neville Brody stated that he was inspired by his visual sources. Rick Valicenti explained the project "False Collage" (FIGURE: 5.6). He explained how he found the solution for the need of his projects in general. Woody Pirtle stated that for some projects he was able to realise immediately what he was going to do, and for other projects he realised that over a period of time. Charles Anderson described six projects. His explanation showed that for each project the matching between the need patterns (NP) and the visual patterns took different courses of activities, and involved

different processes of recognition. Charles Anderson stated that he recognised the design ideas and the need accidentally while he was searching for visual sources for the project “Design Typography” (FIGURE: 5.7).



Paul Rand explained the project "NEXT LOGO" (FIGURE:5.8). This project was for a computer company. He stated that he did about eight sketches before he went to the briefing meeting with his client. He explained how the design idea came to his mind while the director was discussing the project.



Most of the designers' explanations were a mixture of ideas about the need and how the designers conceptualised them visually. Some designers explained their design ideas and how they generated and used their visual inputs. Examples of the various types of selection and PPR are in QUOTATION (5.6).

Designers	Types of Selection and PPR
W. Pirtle	"It's very difficult to explain how one solves a problem. With certain things, I know immediately what I'm going to do. Other things have to sort of gestate over a period of time." (p 78)
R. Valicenti	"This is another example of how I carry on my own personal experiments- on my own time, not necessarily my client's- and my vision starts to stretch and my perception of what the client's solution should be is never the same because of those experiments. I'm not looking outside myself for the next thing to come along; I'm looking for it within myself." (p83) (FIGURE: 9.6)
P. Rand	"As he was standing there describing this computer- this box- I thought, 'That's not a bad idea.' So I did a cube. ... For some reason I've had more reactions and printed publicity on this one than any thing." (p103), (FIGURE:9.49)
N. Brody	"I had been introduced to the work of of the French film poster artists of the '50s, which inspired the contrast I was looking for here" (p50), (TABLE:9.7)
C. Anderson	"I visited an old place called Hatch Show Print that did a lot of Grand Ole Opry country and western, and circus posters - the kind slapped up on barns. The posters were letter pressed using giant 6x8ft carved blocks of wood-direct impression. While there, I saw some makeready sheets laying in a corner. They were probably about 50 or 60 years old. There were all these overlaps- type on type and image on image and they were almost more interesting than the posters themselves. So we did a book of the makereadies... The cover is a collage of six sections from the makereadies. Then we embossed the whole thing." (p47)
K. Hinrichs	"At the same time, in looking back on it I realise it was a very valuable experience because it helped me codify how important the emotional impact of typography is. That was really the genesis of the book - how important typography is in communication, beyond just legibility or style. There are all kinds of other emotional bonds linked to it in our culture. It did not start out this way, but as I worked through the manuscript, I came to see that there were things about typography that I have very strong opinions about. There's nothing like having to articulate it to clarify your thinking. The use of typography is very intuitive for me, but at some point there has to be a rationale behind it. Doing the book helped me explore that." (p63), (FIGURE 9.9)

QUOTATION 5.6: EXAMPLES OF PPR AS A SELECTION ACTIVITY

Most designers explained why they selected their visual patterns for the needs. Also, most designers explained the relationships between their design ideas and the use of specific visual patterns and the needs. Some clients accepted the designers' ideas, and some provided feedback to the designers. The project "Design Typography" (FIGURE:5.7) was left to the designer to decide the need and the visual inputs as long as the design was of interest to the target audience. Charles Anderson stated:

This was the design of the Typographers Int'l. Assn.'s magazine. We could do just about anything we wanted to on typography, as long as it was of interest to designers. (p. 47).

The designers did not use the term visual pattern, or the term visual information, but they described the actual visual inputs they selected and used. From the designers' explanations various key expressions can be interpreted as leading to some sort of pattern. A number of projects involved similar subject matters, but the designers had to satisfy different needs. Subsequently, the designers selected different visual patterns and design methods to satisfy the needs. Most designers stated that they recognised specific visual inputs (they described what the input was) as being appropriate for their particular needs. Recognising a visual pattern as appropriate for certain need can be considered purposive pattern recognition (PPR).

Matching the need patterns and the visual patterns involved, sometimes, various levels of difficulties. Some of these difficulties were related to the complexity of both the need pattern (NP) and the visual patterns, and some were related to the reactions of the PO. Some designers explained that they experienced difficulties during the various stages of the design concept. According to Joe Duffy, "US. West AR." (FIGURE: 5.9) was a huge project and involved a number of requirements.



Duffy explained:

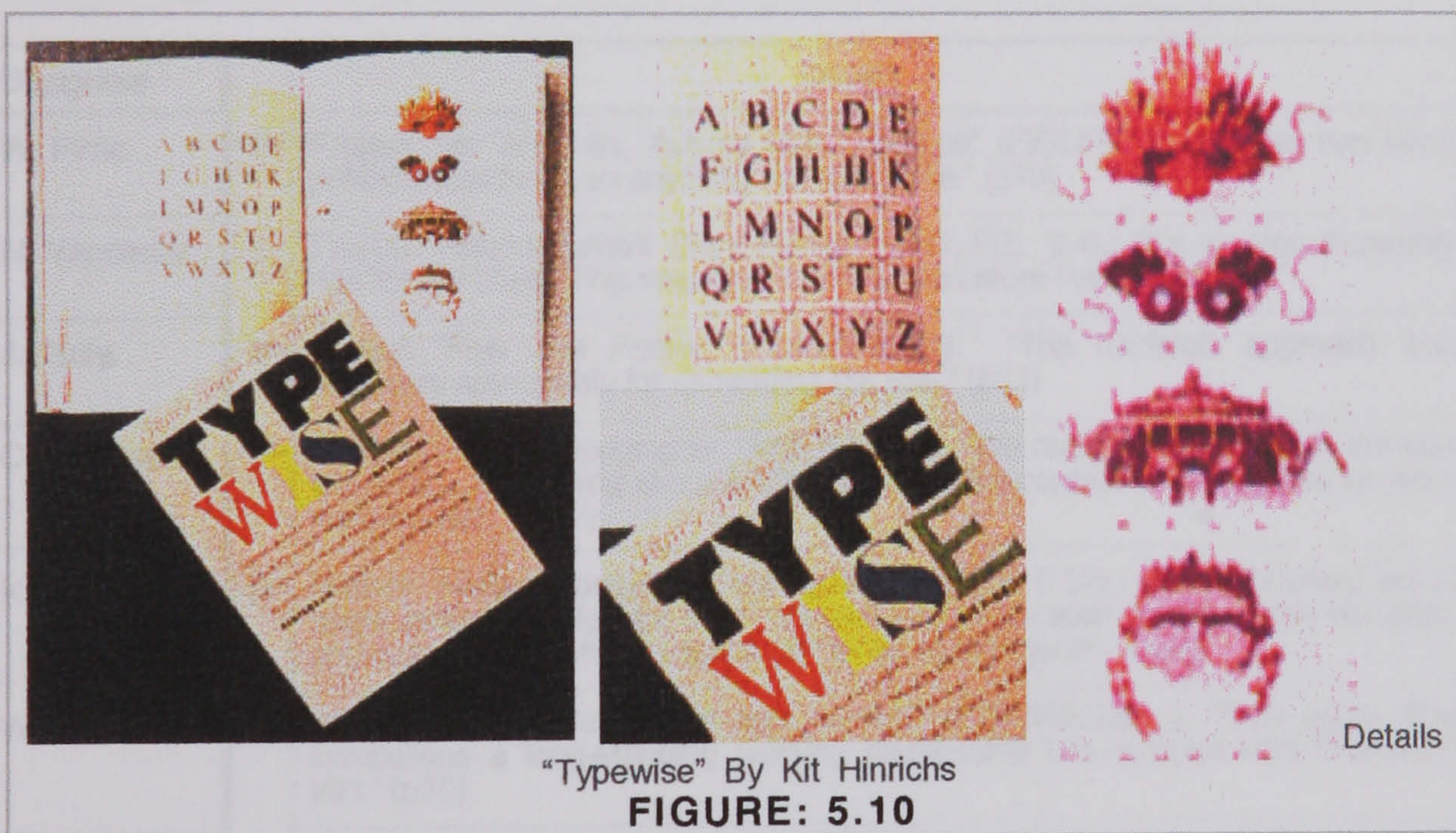
It represents everything good and bad about a large design project. We had to present it to various levels up the corporate ladder, and everyday they wanted to put their two-cents in. We ended up making a lot of changes. The good thing is, we were

still able to do something we're really proud of. That's the great challenge of design: You often have to please a lot of people, and you have to maintain the quality of the work. (p. 54).

Some designers stated that they faced difficulties during the processes of identifying the need and exploring and developing their design concepts. Kit Hinrichs in his project "Typewise" (FIGURE: 5.10) was asked to write and design a book on typography. He explained:

It was a gruelling two-years process of getting the words out of me in some kind of form that was understandable to the rest of the world. (p. 63).

Kit Hinrichs stated that he explored and recognised particular visual patterns about typography that were important for the need during the design process of his project. Hinrichs stated that his project did not start out the way it turned out to be. He explained that articulating the manuscript helped him to clarify his thinking. He indicated that he used typography intuitively, but there was a rationale behind his intuitive activity. April Greiman and Rick Valicenti selected their visual patterns through processes of conjecture and refutation. They stated that they aimed to discover unusual visual possibilities and ideas. This approach can be considered to share some similarity to fine art approaches.



5.7.1 Quality of design ideas and visual patterns

The quality of the visual patterns and design ideas was an important consideration for the selection to take place. The quality of the designs were expressed by the designers in relation to one or more of the following 1) the appropriateness of their design ideas to the needs, 2) the appropriateness of both ideas and visual inputs, 3) the success of the design projects, 4) the appreciation the designers received from their PO, 5) the long business relationships the designers had with their PO after they designed the projects, 6) the survival of some designs long after the designs were

produced and used, 7) the design experiences the designers gained from their projects, 8) the new horizons of business opportunities the designs brought to the designers, 9) the satisfaction and success which the designers achieved by communicating complex needs and intellectual concept through designs, 10) the venturing of using advanced technology successfully and originally, 11) matching the conceived need pattern, 12) reflecting the original properties of the visual patterns when those properties were part of the need patterns, 13) achieving the required conceptual and physical functions of the designs. The designers used various expressions when they described the quality of their designs. Some of these expressions were: “the most powerful”, “accurate”, “appropriate”, “reflect the need”, “reflect the contents of the project”, “new approach”, “new experience”, “reflected the magazine’s personality”, “have a longer life”, “good idea”, “good solution”, “risky but powerful”, “captivating the attention”, “flexible”, “in the most communicative fashion”, “the most beautiful”, “terrific”, “outstanding”, “incredible”, “the best”, “simple”, “clear”, “changing traditional perception”, “clever image”, “capturing the spirits”, “expressive”, “primitive”, “human”, “reflect the history of the product”, “smart”, “humorous”, “original”, etc. Examples of the designers’ opinions about the qualities of their projects are in QUOTATION (5.7)

Designers	Quality
W. Pirtle	Project “Mr. And Mrs, Aubrey Hair Logotype” (FIGURE: 9.18): “This has been published as much as anything I’ve ever done.” (p78)
M. Vanderbyl	Project “Robert Talbott Store Design” (FIGURE: 9.4): “It’s worked incredibly well for the client. This was also, the first retail store I’ve done.” (p87)
J. Duffy	Project “Five Jive Poster” (FIGURE:9.35): “The nostalgic approach was obviously appropriate for something like that.” (p54)
C. Anderson	Project “Design Typography” (FIGURE: 9.7): “We really reflected that in the way we did it ... Everything about it reflects exactly the content of the material we were working with.” (p47)
K. Hinrichs	Project “Nature Company Catalogue” (FIGURE: 9.32): “This ultimately led to some product design for them, as well as identification for the whole company and creation of a ‘visual vocabulary’ for them to draw on.” (p63)
W. Pirtle	Project “Kromekote Poster and Identity” (FIGURE:9.20): “This piece also symbolises a long-standing working relationship I’ve enjoyed with Champion Int’l.” (p79)
F. Woodward	Project “Sinead O’Connor Spread” (FIGURE :9.15): “This was definitely a turning point in the way my work started to look. Everything I did after was measured against this piece.” (p91)
C. Anderson	Project “Self-Promotional Cards” (FIGURE: 9.17) : “In a way, these cards are as flexible as slides: They’re big enough to be seen and read, and they easily can be updated by adding new ones and throwing the old ones away. You can also pick and choose the ones you want to send out.”(p46)
J. Morla	Project “San Francisco Museum Of Modern Art Poster”, FIGURE: 9.46): I think this poster represents effectively the ‘Radical Response’ theme.”(p75)
W. Pirtle	Project “UCLA Summer Session Poster”, (FIGURE: 9.22) : “ I picked this because it might be the best poster I’ve ever done. I think it illustrate the best aspects of my work. It is very simple, almost to the point of being austere. But it wraps up exactly what the message is in a very simple form of communication.”(p79)

QUOTATION 5.7:EXAMPLES OF QUALITIES OF DESIGN PATTERNS

Most designers discussed the processes of selecting visual inputs, the quality of their visual inputs, their design imagery, and how and what they did. In addition, most designers focused on the total quality of the design. Michael Vanderbyl stated:

A poster has to be specific: The message has to be extremely clear. It can't sort of be about kind of something. Everyone who looks at it, no matter where they come from, has to walk away with the same information. So you're dealing on a different intellectual plane which is tied to cultural relevance, symbols, and language. (p. 86).

5.8 Diversity of visual sources

The majority of the designers mentioned their visual sources. In addition, they explained how and why they selected particular visual inputs. Some visual sources were sources of design ideas, and some were sources of visual inputs. The majority of the designers discussed their visual inputs and how they generated their design ideas. The designers' visual sources can be grouped under the following categories: 1) general sources, 2) mental sources, 3) retrieved visual information, 4) art directed visual sources, 5) sources from existing art and design projects including the designers' previous designs, 6) electronic and digital visual sources. The visual sources under these categories overlapped and were diverse. Examples of visual sources are in QUOTATION: (5.8).

Examples of Visual Sources
"collection of historic line art, ads, and printer's cuts from the '30s, '40s, '50s, and early '60s. The collection also includes Anderson-designed images evocative of the first half of this century." (p45)
"...we shot photos of the most beautiful trails in the West. We also used recycled, rough looking paper, Southwestern colours and textures, and woven art and other crafts made by the American Southwestern Indians. A leather tie with a quail feather attached to it was used to bind the whole package together (35,000 pieces). We actually had an Indian tribe in Arizona hand-made them."(p54)
"I started off with a digitised wave image ..." (p58)
"For example, we recently shot TV spots for the lifetime channel ... using all low-end equipment, including Kodak disposal camera prints that were scanned and then animated, 8mm video cameras and the Mac."(p59)
"In every issue there is a map of the destination, and we include stories on what to see if you have just a day in a certain city, or what within an hour walk... a face from the culture that you'd be visiting." (p62)

QUOTATION 5.8: EXAMPLES OF THE DESIGNERS' VISUAL SOURCES

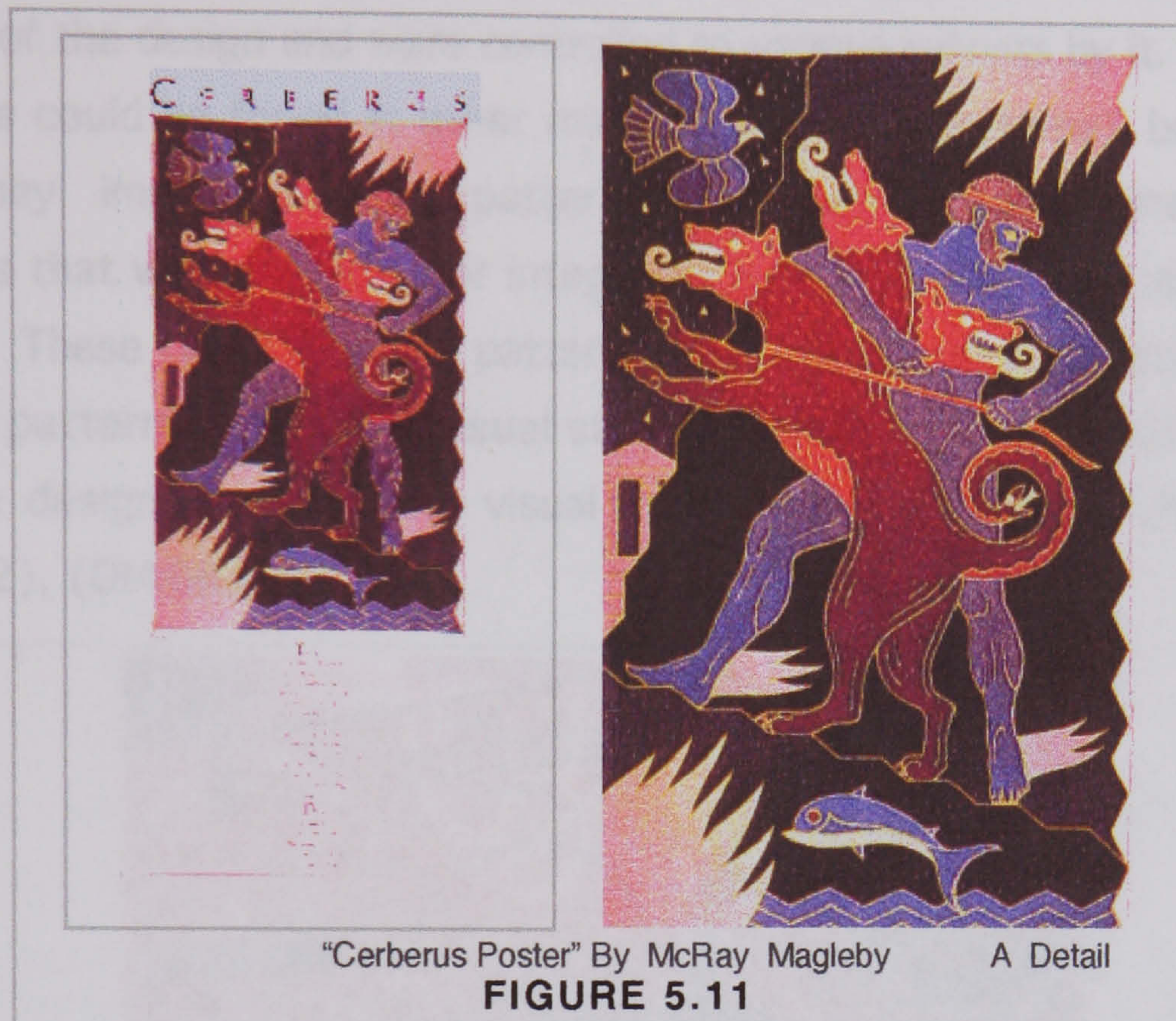
The designers' visual sources for each project overlapped. Some designers used their visual sources as sources for inspiration. McRay Magleby stated that he was influenced by his visual sources for the "Cerberus Poster" project (FIGURE: 5.11). He mentioned various visual sources:

Cerberus was one of a series of six registration posters for BUY, all based on Greek mythology. I had a bunch of books on Greek vase painting, and noticed there were really two periods in this. The earlier of the two, called the Black Figures period, had a lot of Egyptian feel to it. The year before, BUY had hosted the Ramses exhibit and I was quite influenced by it. So the inspiration for these was a combination of influences from Greek vase paintings and from the Egyptian style of doing figures. (p. 71).

Jennifer Morla stated:

In some cases, my work references certain periods of art. Some have clear illusions to specific artists. (p. 74).

Most designers stated that they were influenced by various schools of art and design. Some designers mentioned that they were influenced by particular painters and designers from various art and design periods.



5.8.1 Visual patterns

The designers' explanations revealed that the visual input was not fragments of visual elements or information, neither was it restricted to a visual representation of individual visual things, or just geometrical organisation of or type of textile patterns. From the designers' various explanations, it can be deduced that a visual pattern is an integrated combination of various visual elements that can stimulate particular recognition about a thing or an idea. In addition, it can be deduced that recognising visual patterns can be provoked by various types of sense data, such as a feel pattern, a smell pattern, a touch pattern, a look pattern, and a sound pattern including the nature, quality and properties of these patterns. Visual patterns involved the conceptual interpretation of the designers. From the designers' explanations, it can be considered that visual patterns were provoked by one or more of the following: patterns of sound, touch, feeling, looks, and smells, thought processes, and combination of sense patterns. The visual inputs were discussed as ideas and in terms how the designers thought about their projects. The individual visual elements (parts) were discussed within the totality of the design idea. Visual patterns were of two major types: visual inputs and visual outputs. The visual inputs can be considered

as patterns of design ideas , and the visual outputs (visual marks) can be considered as design patterns. The visual input (a pattern of a design idea) and a design pattern (visual marks) fed into one another during the selection and adaptation processes. From the various types of visual inputs which the designers selected, adapted, and used three main types of visual patterns can be deduced: 1) individual visual patterns each of which was an individual design idea, 2) individual visual patterns that were parts of the main idea of the design and were controlled to various extents by it. These types of visual patterns could be found in other main ideas (visual patterns), but as parts of a design idea they implied what the pattern of the main idea suggested, 3) individual visual patterns that were added to or integrated with the main idea (visual pattern) as a visual layer. These types of visual patterns were used to create specific effects such as; cinematic patterns, particular visual styles, or particular feels. Charles Anderson described the design idea and the visual inputs for the project “Litho INC. Truck” (FIGURE: 5.12), (DIAGRAM 5.4).



From the following quotations examples of visual patterns can be deduced:

- Milton Glaser stated that the project “Push Pin Monthly Graphic Cover Illustration” (FIGURE:5.13) was an anti war piece about the dangers of radiation and the nuclear bomb. He stated that he was influenced by particular visual sources:

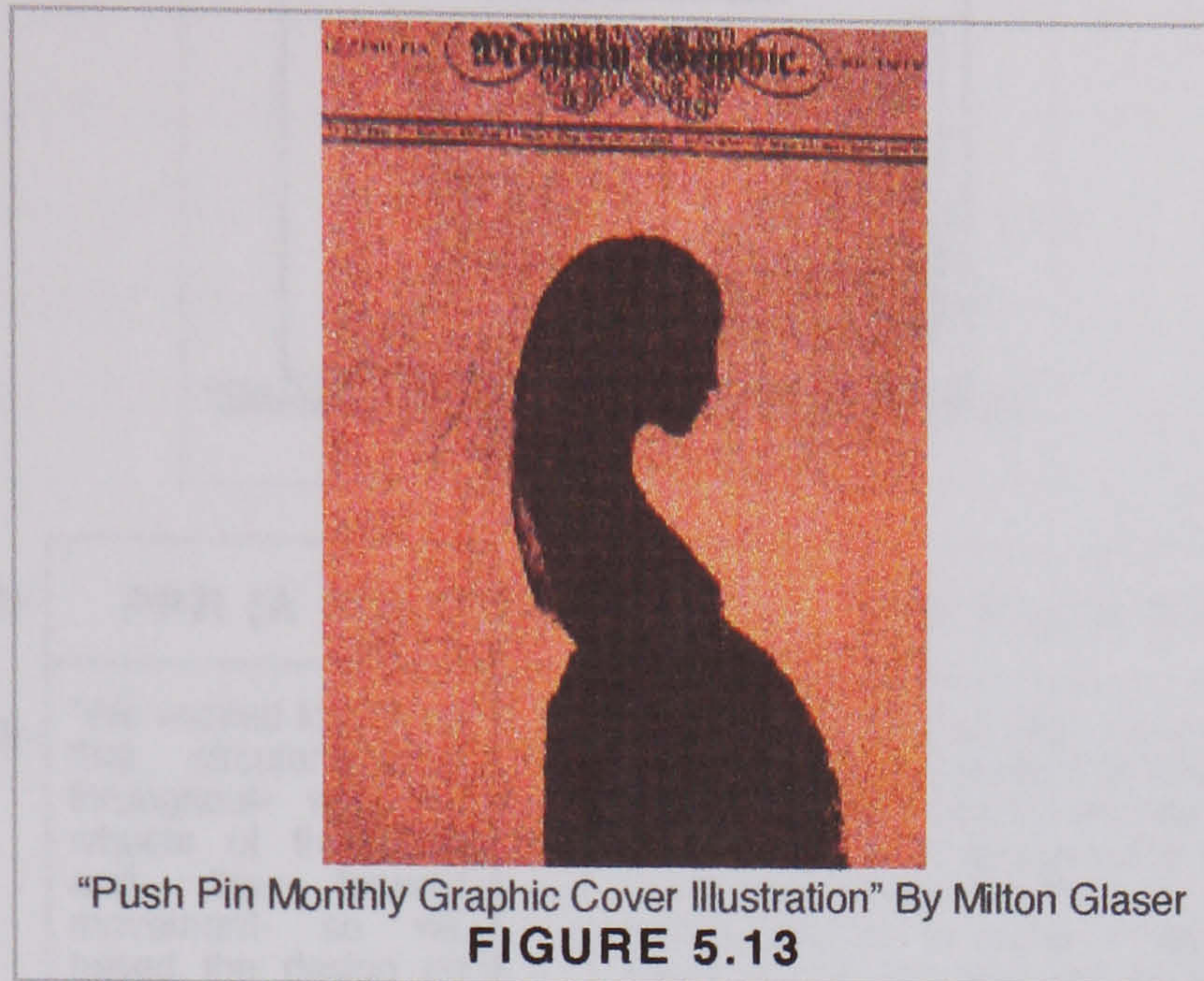
I was very interested in Japanese gestural drawing [then], so I was doing a lot of wash drawings [whose] impact basically depended on a strong silhouette.

Milton Glaser mentioned the design idea of this project (visual pattern):

“I decided to do the most reductive vision of a pregnant woman, with no detail, and this came out rather well. (p. 94).

The reductive vision of a pregnant women was the main visual pattern. The silhouette was 1) a technique, 2) a property:, 3) a visual pattern. The silhouette was a technique because it was a way of reducing visual details and properties and focusing on the visual pattern which was a pregnant woman. Also, it can be a way of pointing out the most characteristic features about a person, and object or a thing. In this project

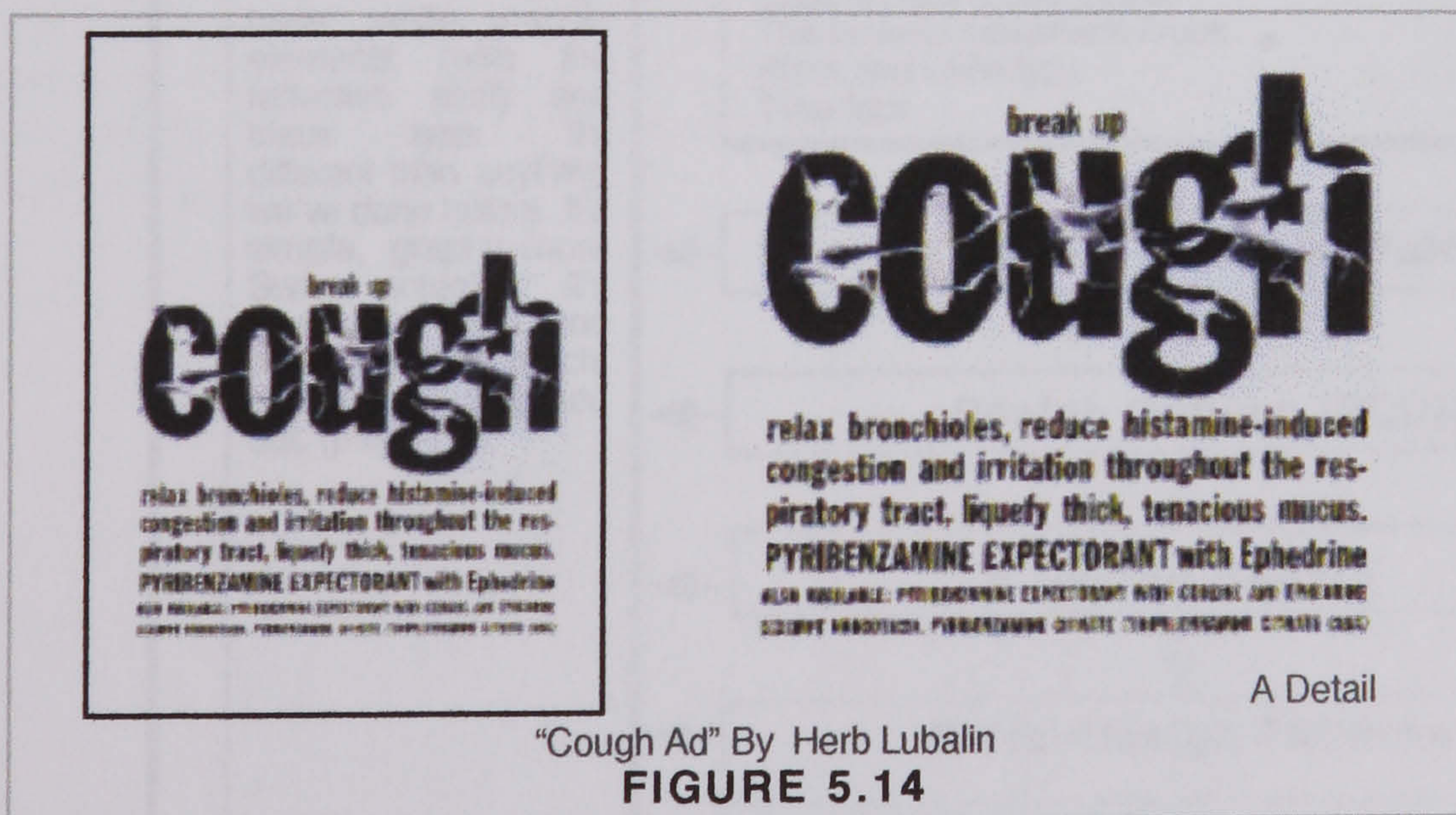
pregnant women in general were important to the need and not a specific pregnant woman. Also, the silhouette was a visual pattern because it can remind the viewer of Japanese gestural drawings. This example can be considered to include various layers of visual patterns that were all recognised as one.



- Marilyn Hoffner discussed the work of Herb Lubalin "Cough Ad" (FIGURE:5.14),

This ad illustrates what we keep going back to with Herb's work: He used words as image. He says 'cough' and it's breaking up as a cough would break up. (p. 98).

The above quotation showed that the designer selected his visual pattern from the act of 'Coughing' and interpreted the sound pattern of coughing into a visual pattern and adapted to the visual patterns of the word "Cough".



- Fred Woodward explained "Sinead O'Connor Spread" project (FIGURE:5.15)

There's something a bit cinematic about the opening to this feature. You do not get to the story until the fourth page- and if it does not hold your interest that long, then it fails. (p. 91).

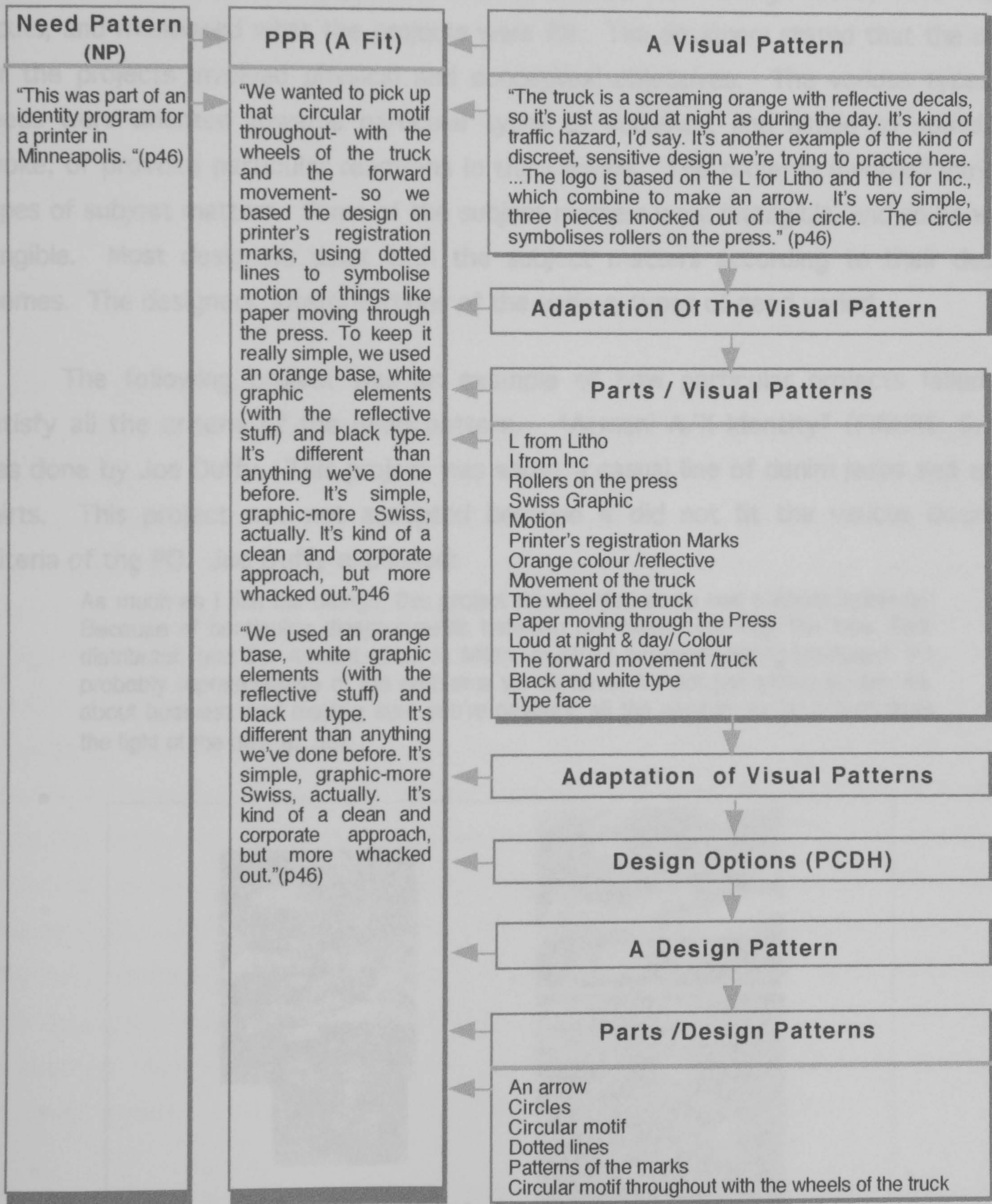
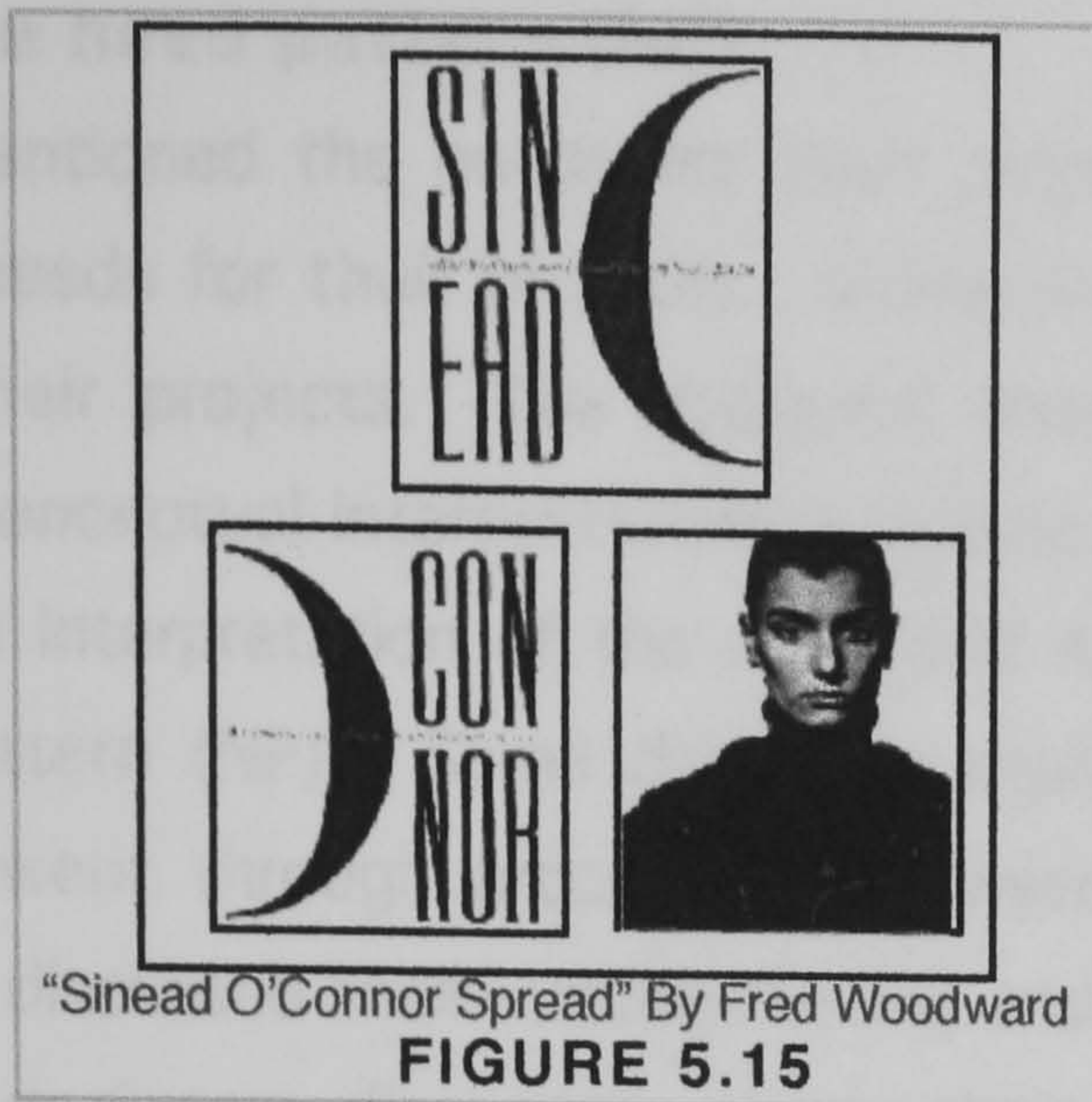


DIAGRAM 5.4: AN EXAMPLE OF A VISUAL PATTERN AND ITS PARTS DURING THE MATCHING PROCESSES WITH NP

5.9 The need and the need pattern (NP)

Most designers mentioned the needs for their projects. The majority of the designers explained the needs for their projects. Some designers explained how they identify the needs for their projects. The designers' explanations showed that the designers had particular conceptual interpretations and ideas about the needs for their projects. The conceptual interpretation of the need and its part as one idea can be considered the need pattern (NP). Some designers explained that recognising the needs for their projects went through processes of conjecture and refutation. The majority of the designers discussed their understanding and thoughts about the needs of their projects. Some designers discussed mostly their design ideas, their visual inputs, and mentioned what the projects were for. The designers stated that the need for the projects involved physical and conceptual objectives. The various types of needs were oriented towards particular types of audience, and aimed to stimulate, evoke, or provoke particular reactions in the viewers. The projects involved various types of subject matters. Some of the subject matters were intangible, and some were tangible. Most designers dealt with the subject matters according to their design themes. The designers' interpretations of the various types of need varied.

- The following project was an example of how particular projects failed to satisfy all the criteria of the need pattern. "Armani A/X Identity" (FIGURE: 5.16) was done by Joe Duffy. This project was about a casual line of denim jeans and sport shirts. This project was not accepted because it did not fit the various business criteria of the PO. Joe Duffy explained:

As much as I like the design, this project represented some real political problems. Because of continuing disagreements between our client, who was the New York distributor, and the Armani office in Milan, much of our work wasn't produced. It's probably representative of the problems we all have. It's not just about design- it's about business and making sure you're covering all the aspects so your work sees the light of the day. (p. 55).



- Examples of some need patterns (NP) are in QUOTATION: 5.9.

Designers	Need Pattern (NP)
N. Brody	<p>The project "State Poster, Fuse, Fontshop INT'L" (FIGURE. 9.29) "The State poster is part of a new magazine format called 'Fuse'. 'Fuse' is a quarterly publication featuring four experimental typefaces and a poster representing each typeface. This is something we've created to push the concept of digital typography. In a way it's like a debate about what typography should be doing"(p51)</p>
A. Greiman	<p>Project "Cerritos Centre For The Performing Arts" (FIGURE:9.35): "When this project started, we were asked to do the title for the building's exterior. Then they asked us to do the interior title; we ended up doing the whole interior, including colour palette, finishes, fabric for the auditorium seating, the main [staircase] in the lobby, elevator doors and signage. We've also done the entire print campaign." (p59)</p>
K. Hinrichs	<p>Project "Potlatch ARs " (FIGURE 9.45): "In this case we were able to talk to our client about not looking at the annual reports as something that focuses on just the last 365 days, but seeing it as a continuing process. We talked about doing an annual report that would stretch over five or six years and look at different aspects of the company each year in detail, so that at the end of this period someone would have a clear impression of what the industry is about. Partially because Potlatch is in the forest products industry and their product [takes up to] 70 years to come to market, they can take a little longer view. These reports were researched heavily and very detailed. As a consequence, they are now actually part of university programs on forestry." (p62)</p>
J. Morla	<p>Project "San Francisco Museum Of Modern Art Poster", (FIGURE: 9. 46): "Radical Response,' the focus of the 1991 San Francisco Museum of Modern Art Design Lecture Series, investigated the qualities that make design radical, featuring four individuals whose approaches to design have transformed the context of the ordinary into the realm of the extraordinary." (p75)</p>

QUOTATION 5.9: EXAMPLES OF NEED PATTERNS (NP)

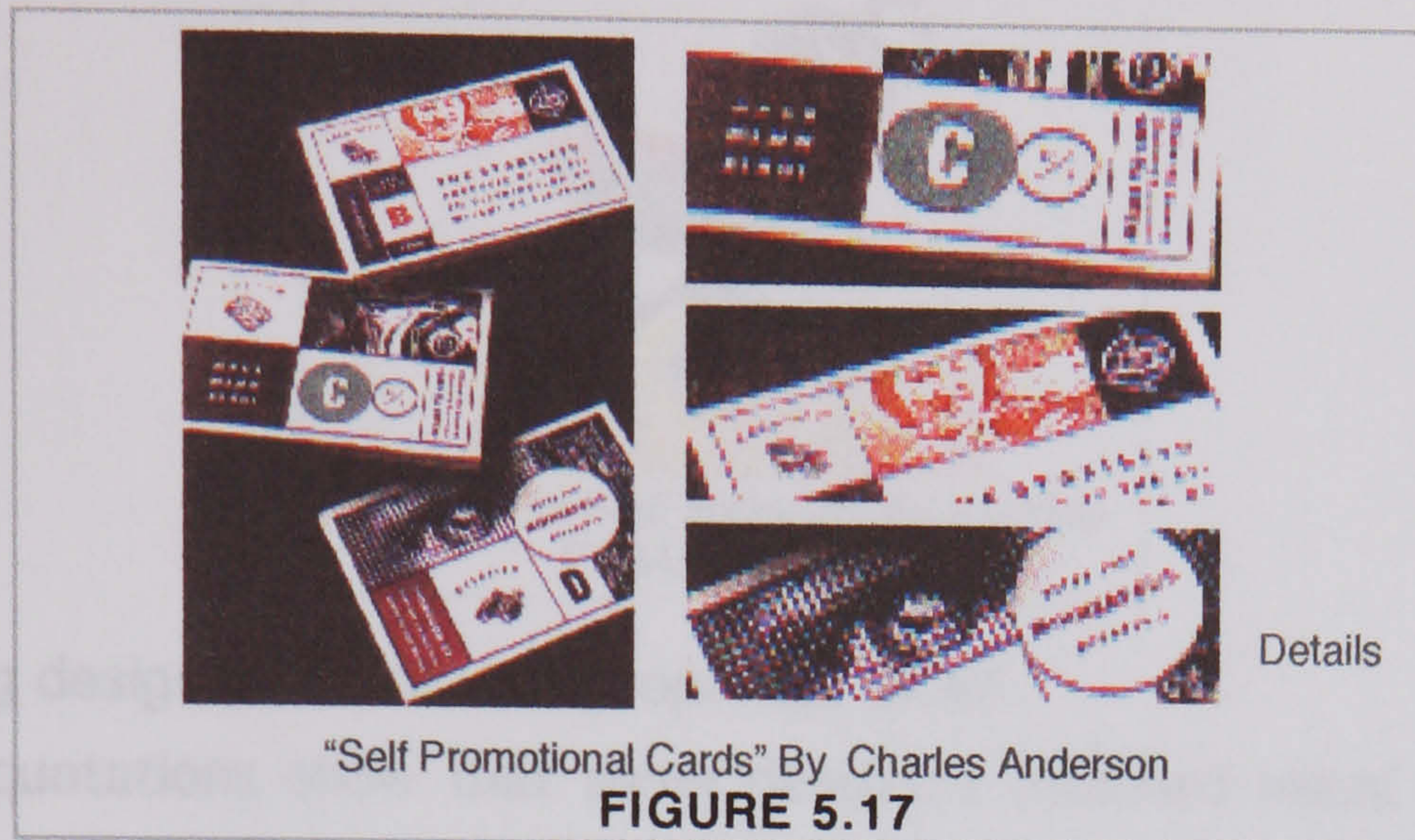
5.10 Design ideas

Design ideas were the main issues that the designers discussed and pointed out in various ways. In addition, design ideas can be considered the main visual patterns that they matched with the NP of their projects. Most of the designers focused on and emphasised their design ideas when they discussed the needs for their projects, and when they discussed their visual patterns. In addition, most designers discussed their design ideas and how they explored, developed, and executed them. Also, they mentioned the importance of their traditional and technological techniques and tools in exploring, developing, and executing their design ideas. From the designers' explanations, it can be deduced that the relationships between the needs, the visual patterns and the use of particular techniques and tools were necessary to each other . The majority of the designers discussed their design styles as part of addressing their design ideas. Some designers discussed how they changed their design styles. Some designers stated that they they combined different styles with each other. The designers' styles according to their descriptions can be grouped under the following categories: 1) figurative styles, 2) abstract styles, 3) painterly styles, 4) geometrical styles, 5) illustrative styles, 6) Swiss styles, 7) Pushpin styles, 8) integration of various styles.

5.10.1 Patterns of competing design Hypotheses (PCDH)

A few designers stated that they created several design options for their

projects at the graphic investigation stage. The design options can be considered as patterns of competing design hypotheses (PCDH). Charles Anderson stated that he had various thoughts about his project “Self Promotional Cards” (FIGURE: 5.17) but he did not mention if he tried these design alternatives.



Also, Joe Duffy stated that they had feedback from the client during the whole design process, and that they kept making changes until the final stage.

5.11 PPR for selecting and matching visual patterns with NP

Most designers stated that they selected appropriate visual inputs or design ideas for the the need. The processes of selecting visual patterns varied. The following are examples of how some designers recognised and selected visual patterns for the NP of their projects:

1) Selection based on intuitive activities

- Woody Pirtle explained his project “Mr. And Mrs. Aubrey Hair Logotype” (FIGURE: 5.18). Pirtle explained why the design matched the need. His explanation showed that the NP and visual patterns completed each other in one thought.



2) Visual patterns construed from NP and involved intuitive selection.

- Woody Pirtle explained the project “KNOLL ‘Hot Seat’ poster” (FIGURE: 5.19). First he explained that the the need was a poster about a new line of seating that was going to be announced at Knoll show room. Pirtle’s explanation showed that each visual pattern matched aspects of the need pattern (NP) (See DIAGRAM:5.3).

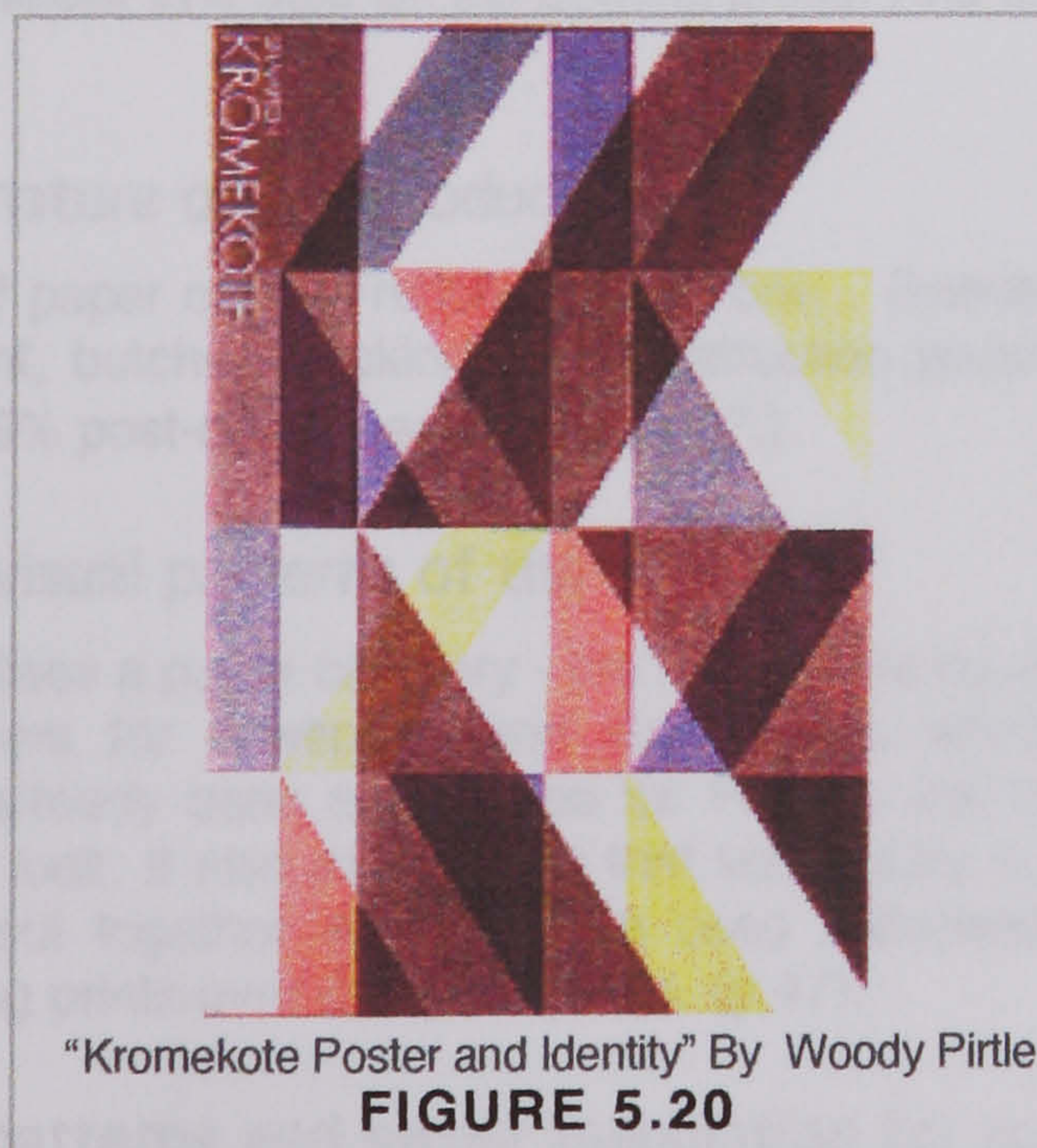


3) Matching design patterns with properties of NP

The following quotations show that some designers matched visual properties from need pattern with visual patterns. Also, they show matching design patterns with design ideas.

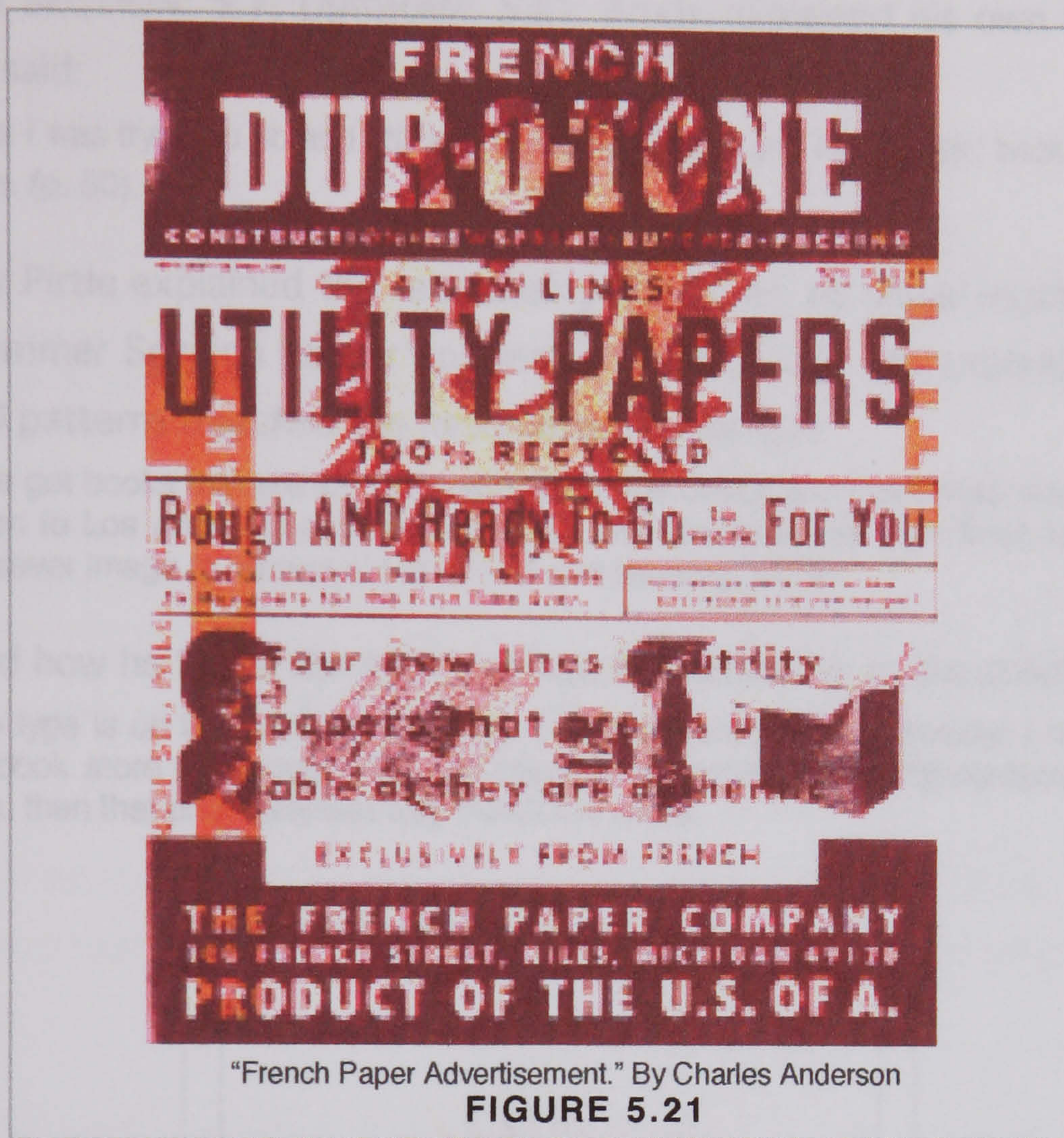
- Woody Pirtle explained that the project “Kromekote Poster and Identity” (FIGURE: 5.20) was a brand identity for a grade of papers by “Champion Int’l”. He explained that he selected the K from the initial letter of the name of the brand, and the image mirror pattern to match the reflective quality of the paper. He said:

Kromekote is a highly reflective paper. The manifestation of the brand identity in this poster is really that the large K, the dark area, is the initial for Kromekote brand. I’ve created the K by taking the top half of the letter and doing a mirror image of it at the bottom, so that it symbolises the reflective character of the paper stock. There are four Ks overlaid with one large K. That’s the beginning of the identity for the Kromekote brand. (p. 79).



- Charles Anderson explained the project “French Paper Advertisement” (FIGURE: 5.21). He stated, “We’ve been working with French Paper on developing this line for the last three years.” Anderson explained the need for the project:

When you rule out additives, embossed textures and plain white sheets and colours, there was not much left. Except these 'real' papers that have been around forever- butcher paper, newsprint, packing paper- that [designers] would use if they could get them in the right format. (p. 47).



"French Paper Advertisement." By Charles Anderson
FIGURE 5.21

Anderson explained that the need for the project was provoked by the difficulties the designers faced in general when they used utility papers for their projects. He said:

It seemed like every time we tried to use utility or industrial papers, they'd jam everything up and score cylinders on the printing press. And they were inconsistent. (p. 47).

Anderson explained the nature of the product:

is for a new line of paper called French Dur-O- Tone... French Dur-O-Tone includes 'printable' newsprint, butcher, packing and construction papers, all 100% recycled and no less than 25% post-consumer waste. (P. 47.)

Anderson explained the visual patterns of the design:

Each photo symbolises a paper category - the meat in the scale for butcher paper, the stack of newspapers for newsprint, and so on. The whole thing fits the visual vocabulary that's already been established for French- the heavy handed, massive type and industrial look. It also expands on that vocabulary in its use of photography and the way it's put together in layers- we used transparent inks, so there's no stripping; everything prints over everything else. (p.47).

4) Layers of visual patterns and visual association for matching NP

The following examples showed that some designers selected visual patterns and associated them with aspects of the need pattern:

- Neville Brody explained that he knew what he was looking for when he selected visual inputs for the project “8 Eyed Spy Record Cover” (FIGURE 5.5). Brody explained how he matched the visual pattern with the NP of “8 Eyed Spy Record Cover”. (See SECTION: 5.7, DIAGRAM: 5.2). Brody explained his own objectives as a designer. He said:

... what I was trying to do and still am, which is trying to put the ‘human’ back into the picture. (p. 50).

- Woody Pirtle explained the relationships between his visual inputs and the need for “UCLA Summer Session Poster” project (FIGURE:5.22). His explanation can show that the visual patterns matched the need pattern. He said:

You’ve got books that are icons for education, the beach and palm trees that pin the location to Los Angeles, and the books actually becoming the palm trees make it a very clever image to represent the school and learning. (p.79).

Pirtle explained how he found the type and how he adapted it to the specific purpose:

All the type is on the spine of the book; it was all done photographically. I went to a used book store and bought two old books, then recreated the typography on the spines, then that photographed with the UCLA name.



5) Patterns construed through processes of conjecture and refutation

The processes of conjecture and refutations were more pronounced by some designers than other designers. However, in the majority of projects there were some indications about such processes but the designers focused mainly on other design

issues. The following quotations show how a specific project went through various processes of conjecture and refutation.

- Charles Anderson explained the need of the project “Self-Promotional Cards” (FIGURE 5.17), which they designed for their design company (‘89-’92). He explained the comparison processes that passed his mind when he decided the fit between the particular need and the design patterns. He said:

I'd been thinking about a self- promo piece for the last 10 years, the whole time I've been in this business. But if you do a book ... people put it on a shelf and it gets lost. Slides are used a lot, but once, at a meeting, there was no projector so we had to hold them up to the light. That's when I decided we'd be better off to have [our self-promotional] in print form. (p. 46).

Anderson described the design patterns and their visual patterns. He said:

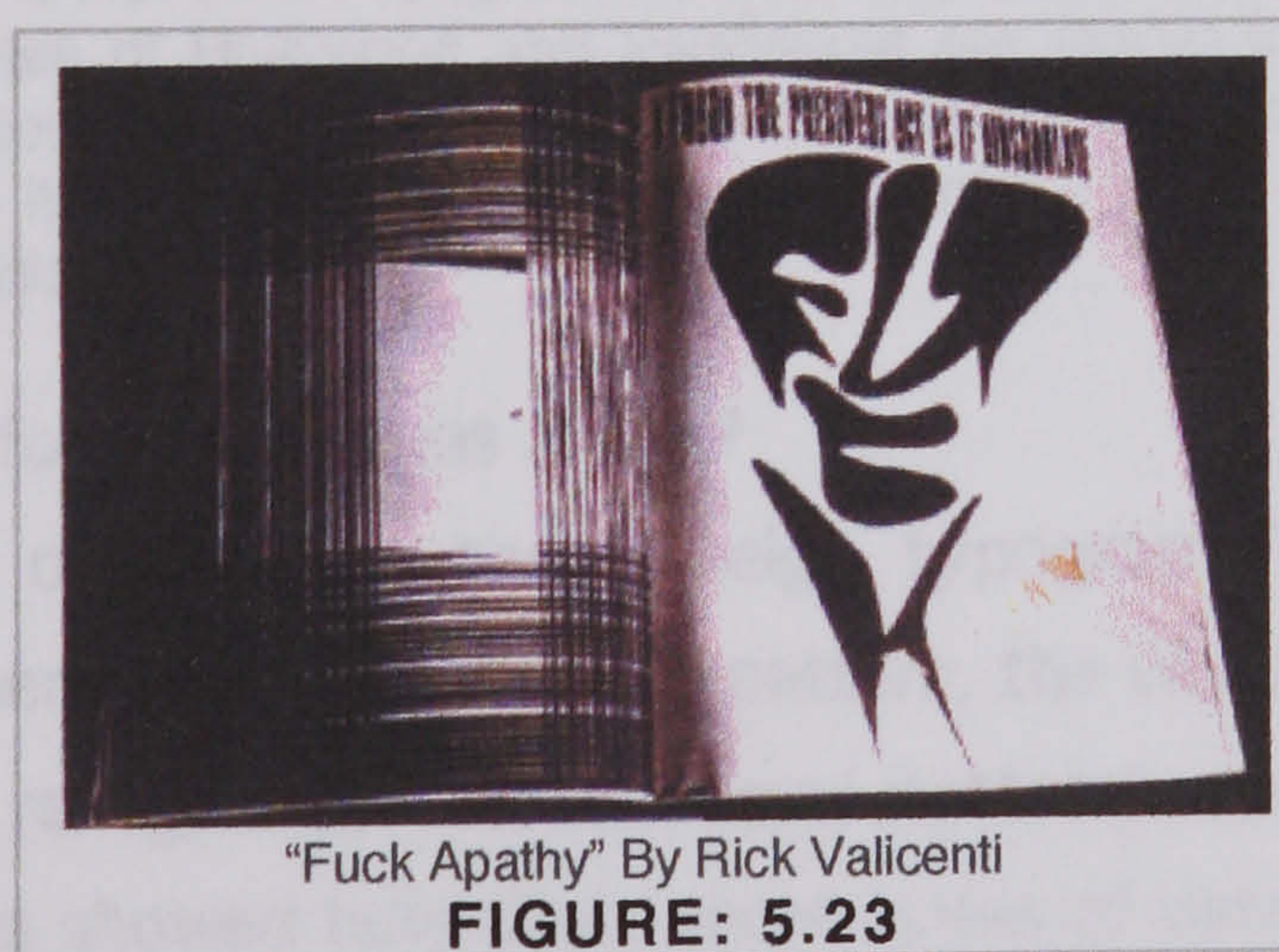
140 cards showing all the work we've done. On the front of each is a picture of the project; on back is its story. Twenty cards fit into each of seven self-locking packets; those fit into a box that stores our whole body of work. (The whole collection is comparable in size to a 280 -pg. book.(p. 46).

6) Design ideas for potential need

Sometimes the need for projects was provoked by design ideas. In other words the idea started first then the designers made use of it by employing the idea for a potential need.

- Rick Valicenti explained how the idea started for his project “Fuck Apathy” (FIGURE: 5.23):

This was designed as my paid ad in ID Magazine's design annual. The point, obviously, is that there's an incredible amount of talent out there [that] understands the power of communication, but we haven't rallied ourselves... This was a fire version in my effort to start a brush fire amongst the design community ... (p. 83).



“Fuck Apathy” By Rick Valicenti
FIGURE: 5.23

Valicenti explained the point of his idea:

Right now we have a bigger-than-ever need for working together, but the design talents who really have the audience are not out there putting it to good use. So I did this to try to move them. (p. 83).

- The following example showed that the visual patterns were construed from

design ideas and point of reference. The project "Paramount Pictures" (FIGURE 5.24) was done by Charles Anderson. He described the project:

It's a brochure full of products we designed for Paramount Pictures. Paramount is licensing its name, and our designs, for products... The brochure is full of mock-ups of clocks, lamps and other products to show potential manufacturers what Hollywood/Paramount products is all about- a combination of our work and the Paramount name.



"Paramount Pictures" Charles Anderson
FIGURE 5.24

Charles Anderson explained the need of "Paramount Picture" project:

Paramount was the first studio to open and is the last remaining in Hollywood, so we figured the histories of Hollywood and Paramount are almost inseparable. We did these products based on the whole history of Hollywood as the reference point. Paramount lends its signature to make them authentic... There are more variables and design consideration.(p.46).

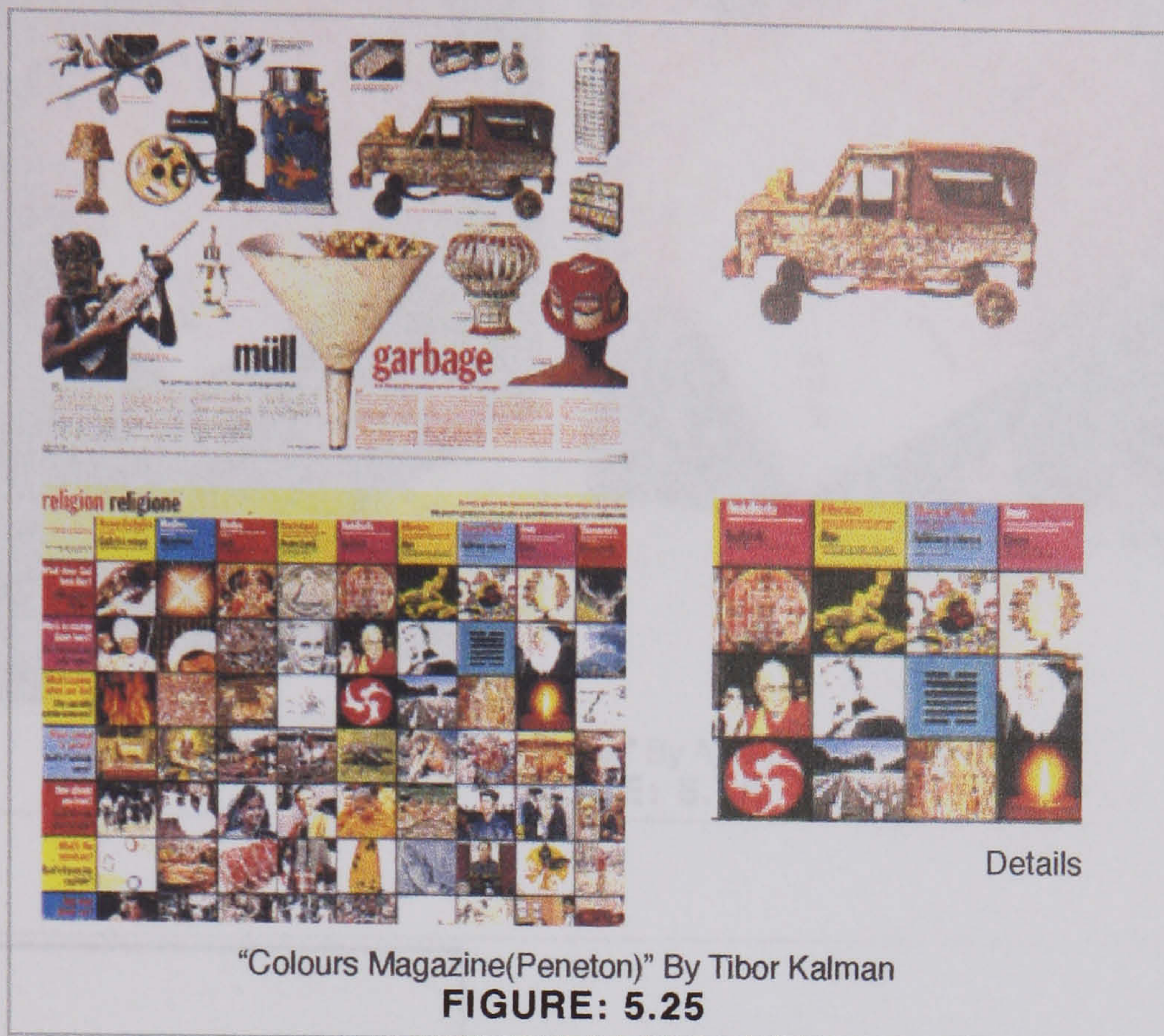
7) Visual patterns for design ideas and NP

The processes of creating the "Design typography" project (FIGURE 5.7) showed that the designers matched the need pattern, the visual patterns and the design ideas as one entity by recognising how the visual patterns were able to match the NP. In addition, this example showed how these three types of patterns contributed to each other (See Section: 5.6).

- The following example can show that visual patterns are more than visual elements. Tibor Kalman explained the understanding he gained from the work he did for "Colours Magazine(Peneton)" (FIGURE: 5.25). He said:

I had become more interested in the content of things than the form of things; my

frustration as a graphic designer and art director was the lack of meaning in graphic design,... Colours really represents were I want to go from now on. It gives me the ability to really communicate ideas instead of just styles. This is a matter of communication as opposed to a matter of how things look. (p. 67).



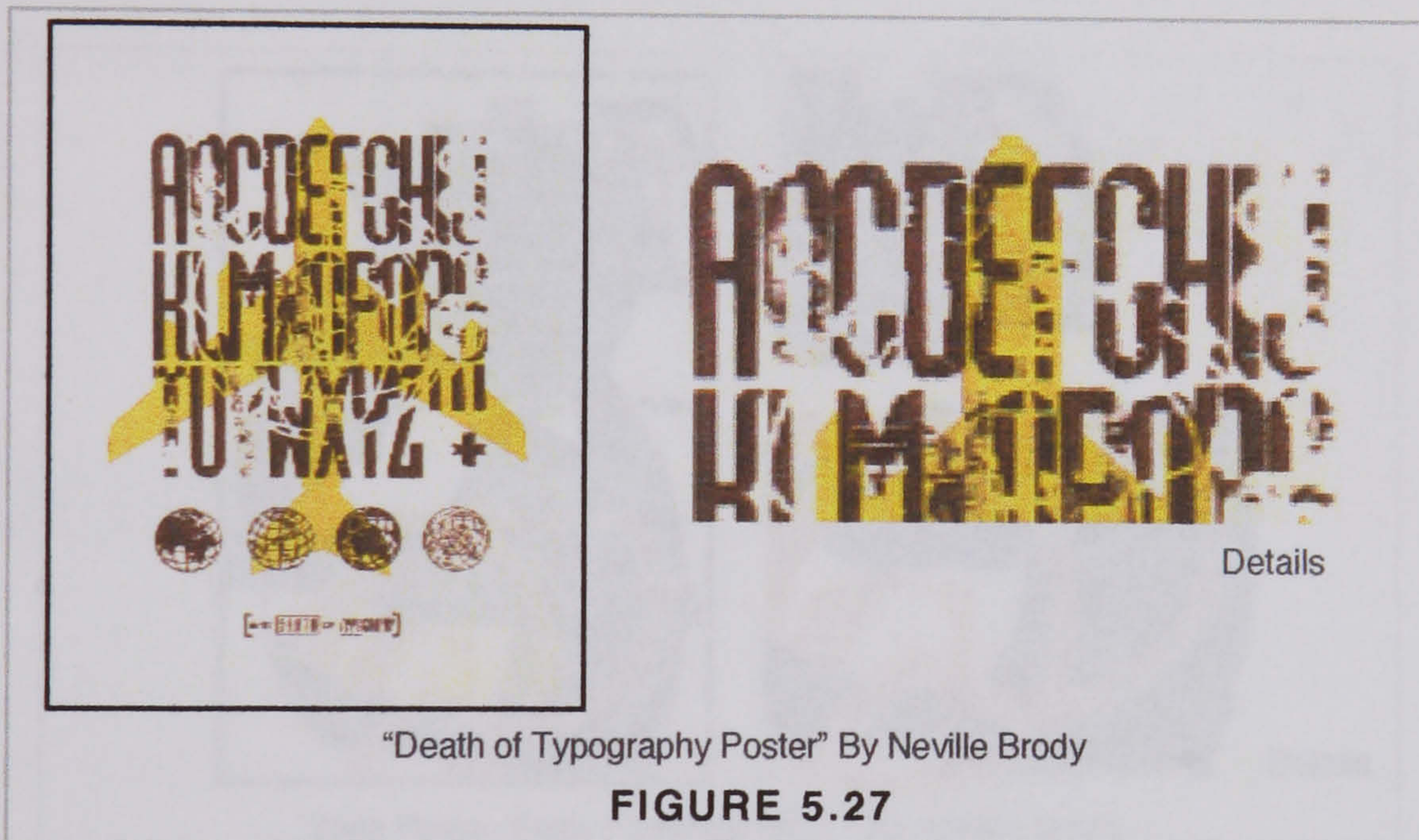
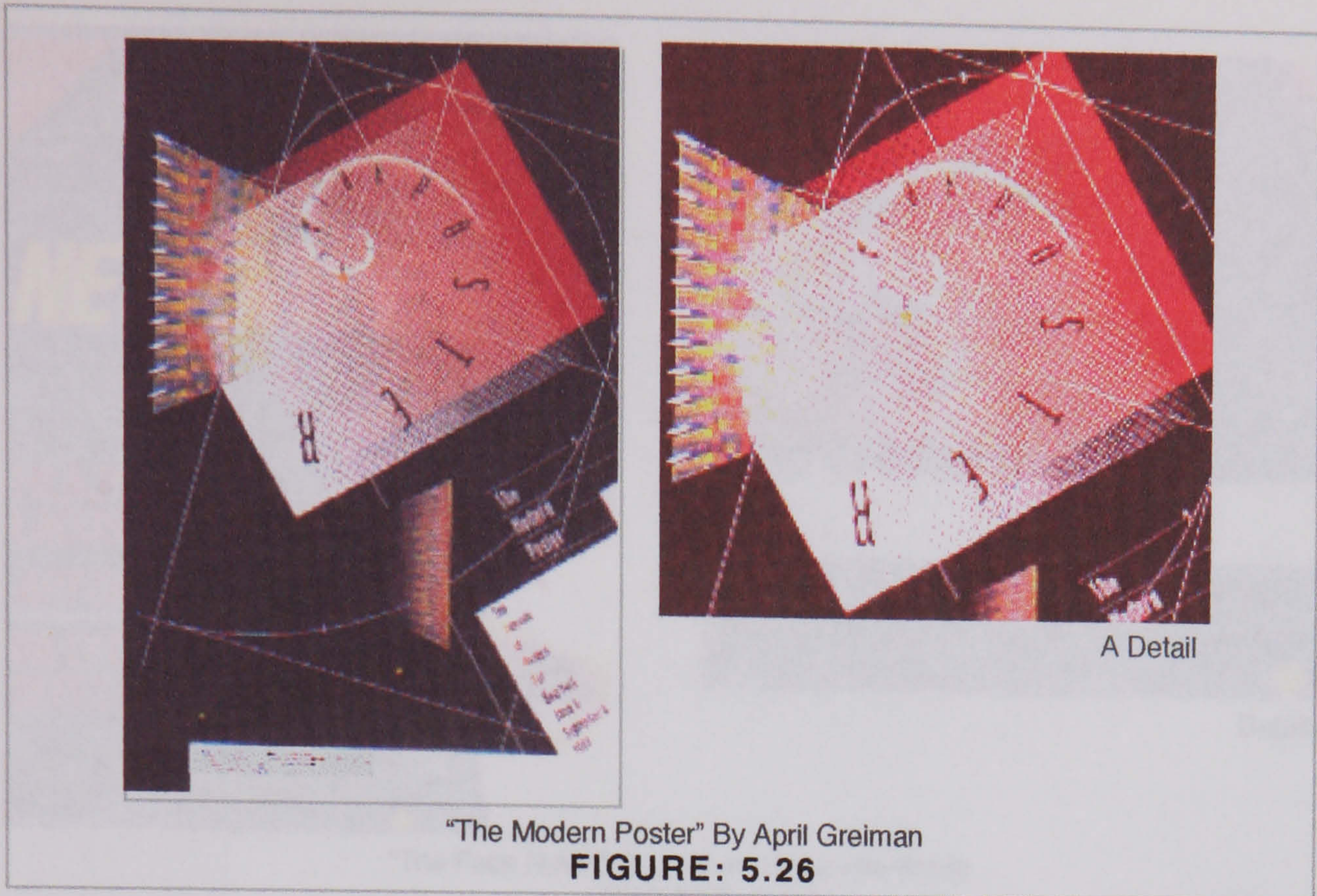
April Greiman explained how she selected her visual patterns for the project “The Modern Poster” (FIGURE: 5.26), Greiman, stated that she came up with a design idea for the subject matter ‘modern poster’, “I finally thought, ‘TV is our version of the poster.’”(p59) Greiman used various types of technology to indicate the technological development of graphic design. She selected her visual patterns and matched them with the of the development of the poster through time, Greiman explained that she adapted these elements:

The three elements of this are a video image, the printed gradation page and the golden section. I shot some still outtakes of a landscape off a video, then began manipulating them- that’s the colourful pixelized pattern, the main image. I used the gradation to communicate time and also evolution of the printed page because it’s a rectangle. Then [I added] the golden section, because it’s the perfect proportion and is the one organising system that’s been used for centuries in making geometry and beauty and harmony. I put in a lot of little icons and a quick history of the evolution of typography. The symbols range from the ankh symbol of Egypt to the happy face.(p. 59).

8) Matching visual patterns with intangible aspects of (NP)

The project “Death of Typography Poster” (FIGURE 5.27) was done by Neville Brody. This project showed that the designer matched the need pattern with the design idea by matching the concept of change which was part of the need pattern by adapting the visual patterns in a way that expressed the idea of change. Neville Brody explained:

The poster was done for a magazine and record publisher called Touch. The message here is that as society has changed, the language should also change. We are taught a certain way of using typography that was created by a different society at a different time to solve different needs. I think design and typography should be organic and kind of flow with society as it evolves.(p. 50).



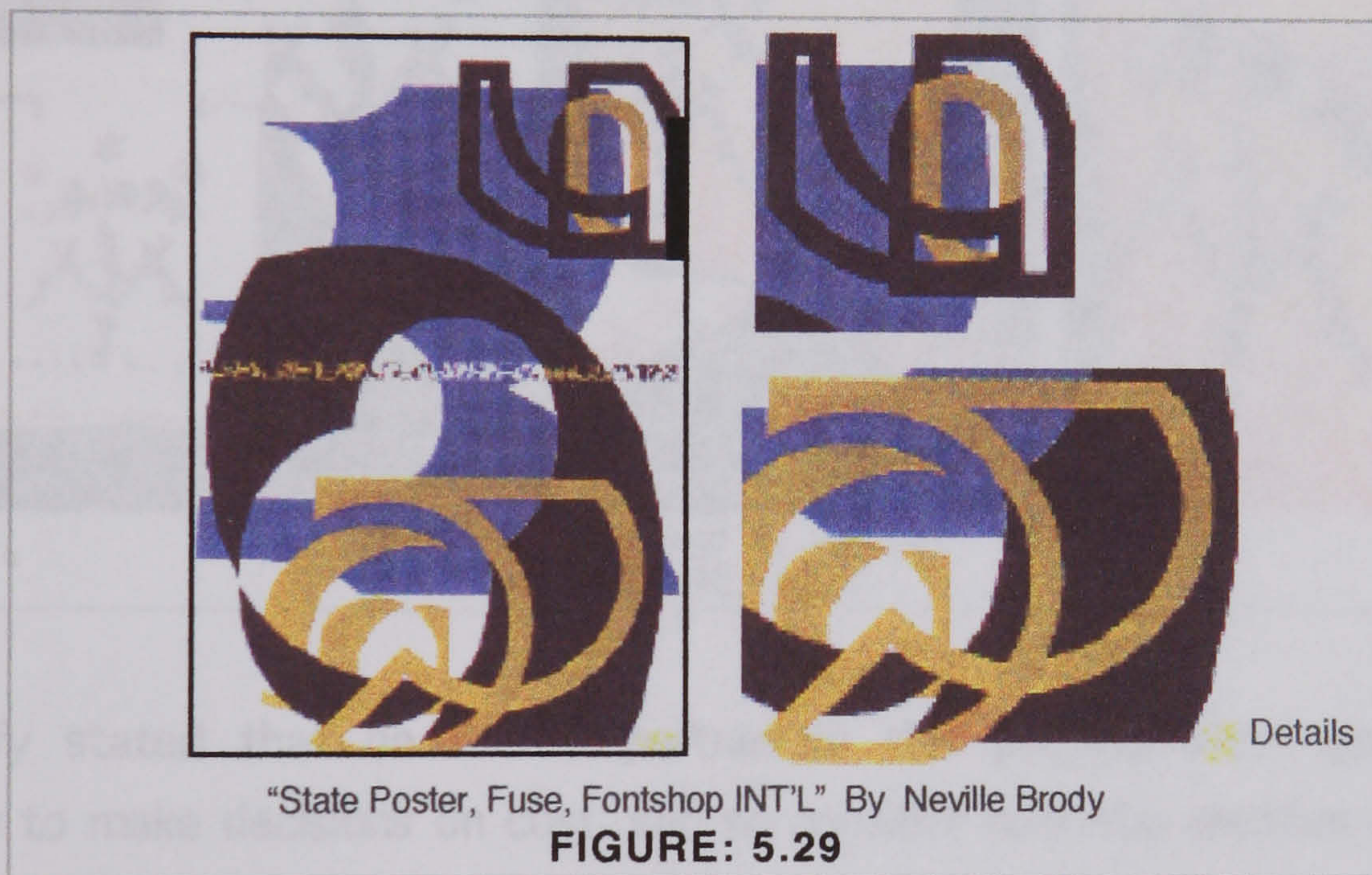
- "The Face New Order Cover" (FIGURE: 5.28) was designed by Neville Brody.

He explained the need of this project:

It was thought that New Order were not recognizable enough to act as cover stars, so a different approach was needed; therefore the crop of the photo of Stephen Morris and the use of italic emphasis... I think this cover accurately represents what The Face was trying to do, which was to try to create a different language to look at a different culture. The Face was not afraid to do that. Its designs certainly break with tradition to look at new forums.

9) Adapting visual pattern to communicate a point of view

The project "State Poster, Fuse, Fontshop INT'L" (FIGURE: 5.29) was done by Neville Brody.



Brody explained the need and concept of the project:

Again, this is an example of forcing type to become more expressive and painterly, and to really deal with the problems of what is language?(p. 51).

10) Matching visual patterns with the theme of the NP

The following projects showed that the designers linked the patterns of the theme which was part of the need pattern to the visual pattern. According to the designers, the themes of their projects were sometimes decided by the PO, by the designers and their PO, or by the designers alone.

- Joe Duffy explained the project "US. West AR." (FIGURE 5.9). He stated, "This was a collaborative effort. It was a huge project (1.3 million copies)". Duffy explained the need and how they selected visual patterns for the project. His

explanation showed variety of visual sources and visual patterns. Also, it showed that the quality of visual patterns were very important. Duffy said:

[They] likened themselves to the early settlers in the West- adventurous, bold and daring, the Spirit of the West. We needed to represent that in the annual report. There theme was 'Nobody knows the Trails Better' so we shot photos of the most beautiful trails in the west. We also used recycled, rough looking paper, Southwestern colours and textures, and woven arts and other crafts made by the American Southwestern Indians. A leather tie with a quail feather attached to it was used to bind the whole package together (35,000 pieces). We actually had an Indian tribe in Arizona hand-made them. (P. 54).

- The "Trail Mark Logo" (FIGURE: 5.25.) was done by Joe Duffy for a new project development (NPD) project. Joe Duffy explained:

Trail Mark is a new store selling Columbia active wear products for camping, fishing, sailing, and other outdoor sports. The first in Minneapolis...(p. 55).



Duffy stated that he was a partner in this project which gave him the opportunity to make decisions on cost, and to consider both the creative and business aspect of the project. Also, he explained:

It gives me the opportunity to try a lot of things I've always wanted to try, but for one reason or another haven't been able to. (p55)

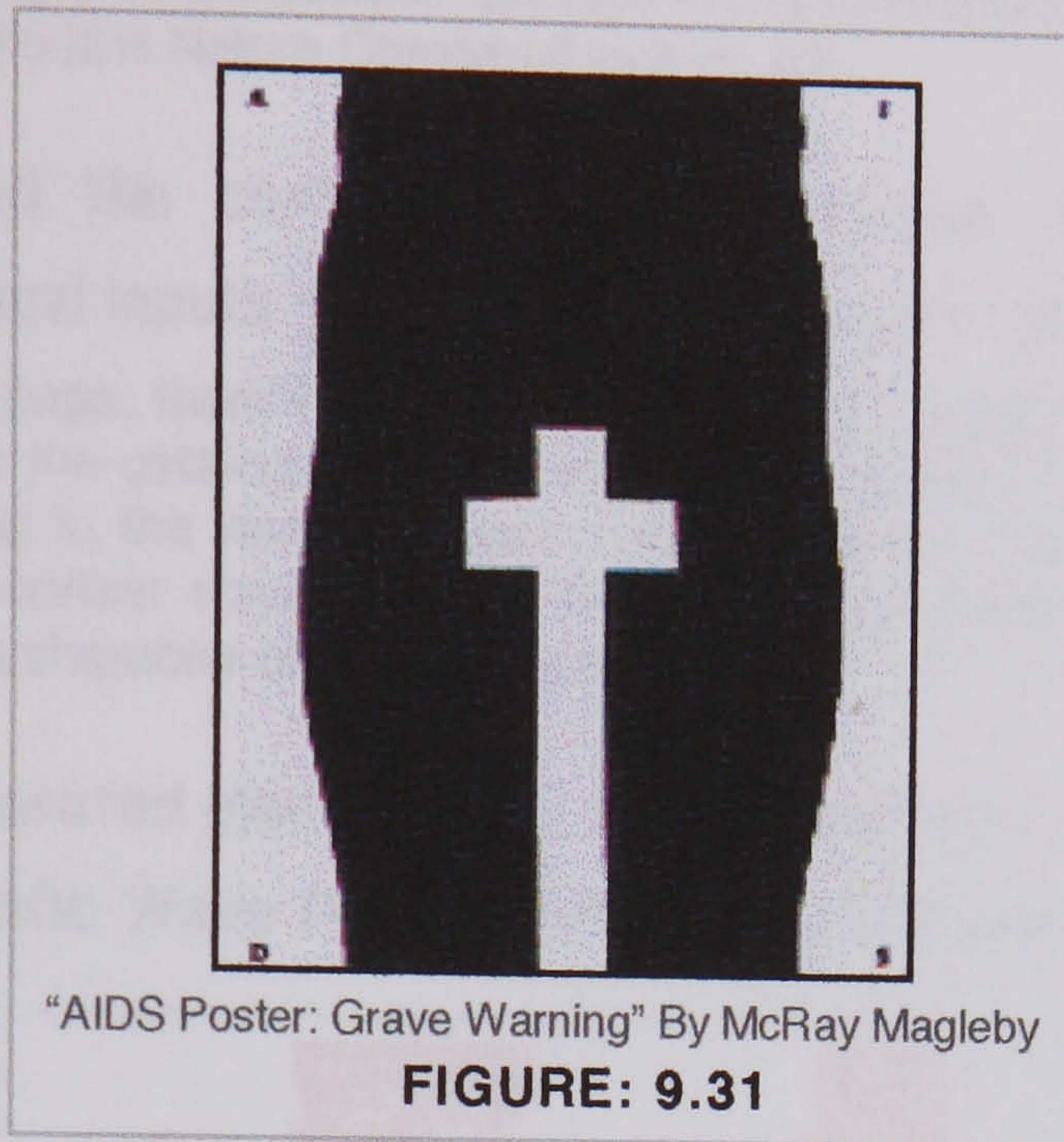
Joe Duffy explained, "We wanted to give it a kind of wilderness outfitter's look." (p55). The designers selected visual patterns from the theme of the need pattern such as wilderness and the adventurous nature of camping, fishing, sailing and out door sports for matching NP. The visual patterns were selected from the wilderness, such as trails marked with stones. Joe Duffy explained:

The Indians marked trails with stones, leaves and sticks. Those elements have been carried through to the store design. Big timbers come out of the store front, and fixtures are very raw and natural. Signage is made of actual sticks, stones and leaves. (p. 55).

- McRay Magleby explained the project "AIDS Poster" FIGURE (5.31) which was

called "Grave Warning". He stated:

The grave marker is a sort of warning that you can die if you don't use your brain a little bit. This design goes back again to the idea of combining two different elements that haven't ever been combined in that way before, to give it a new approach. (p71)



"AIDS Poster: Grave Warning" By McRay Magleby
FIGURE: 9.31

11) Visual patterns from aspects of NP and behavioural activities

Kit Hinrichs explained the project "Nature Company Catalogue" (FIGURE: 5.32).



"Nature Company Catalogue" By Kit Hinrichs
FIGURE 5.32

The designers integrated three types of visual patterns in one pattern: 1) visual patterns of the actual products of the company, 2) visual patterns of reading through traditional magazines, 3) visual pattern that gave the feeling of walking in the store

without being in it. He said:

We felt there was no reason the way people read traditional magazines would not be appropriate for a catalogue. So we did one, and there was a tremendous increase in sales. Through this approach, we were able to capture the feeling of walking in a store without actually being in [it]. This was the first time catalogues had taken this approach. We brought an educational aspects to the catalogues because it was part of the nature of who [the Nature Company] was.(p. 63).

Hinrichs explained the contents of the catalogue, the adaptation of visual patterns and how the visual inputs matched with the need of the project. He said:

As you turn every page, there's a kind of historical and biological nuance. It brought editorial content to the catalogue as well as product offerings. Also, the catalogues were not organised in the normal square-inch relationship... Instead, we chose to present things in certain ways because they were graphically interesting or they would enhance the character of the catalogue.(p. 63).

12) Visual patterns generated electronically to match design ideas

The project "Pacific Wave Poster" (FIGURE 5.33) was done by April Greiman.



"Pacific Wave Poster" By April Greiman
FIGURE 5.33

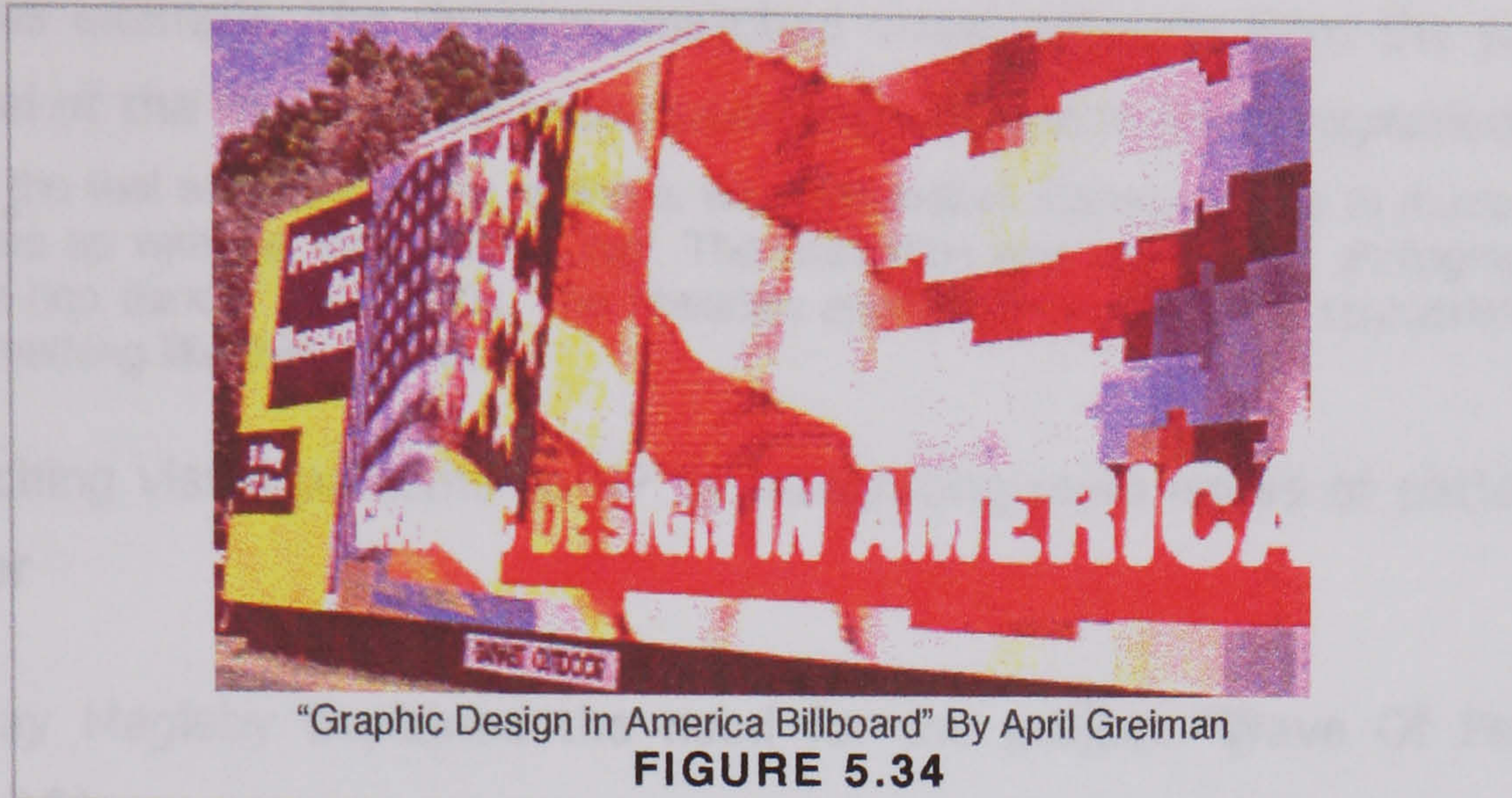
According to April Greiman, this project was done for the Fortuny Museum in Venice for an exhibition of 15 California graphic designers. April Greiman explained how she adapted her visual inputs through various adaptation processes of visual patterns. Greiman explained:

I started off with a digitised wave image- the wave being the water, the subconscious, the female. At that time I was really interested in the sciences, physics and biology particularly. I kept thinking that, in a sense, a pixel is the DNA- the code- of a new language. So this follows the very simple idea of using the wave as a metaphor for the new 'wave' of the electronic revolution. I took a little area in the wave and isolated some pixels, then kept enlarging them, going from the smallest cell or pixel and blowing it up three times until the background image is just like a big snowball. (p. 58).

- April Greiman explained how she designed the project "Graphic Design in America Billboard" (FIGURE: 5.34) for Walker Art Centre. April Greiman described

her artwork. She said:

I had created non tangible artwork- in other words it exists only digitally in the computer- for a major product. We designed the poster and billboard in Los Angeles using the Graphic Paintbox, then digitally communicated it simultaneously to Minneapolis, where the poster was made, and Ohio, where the billboard was made. (p. 58).

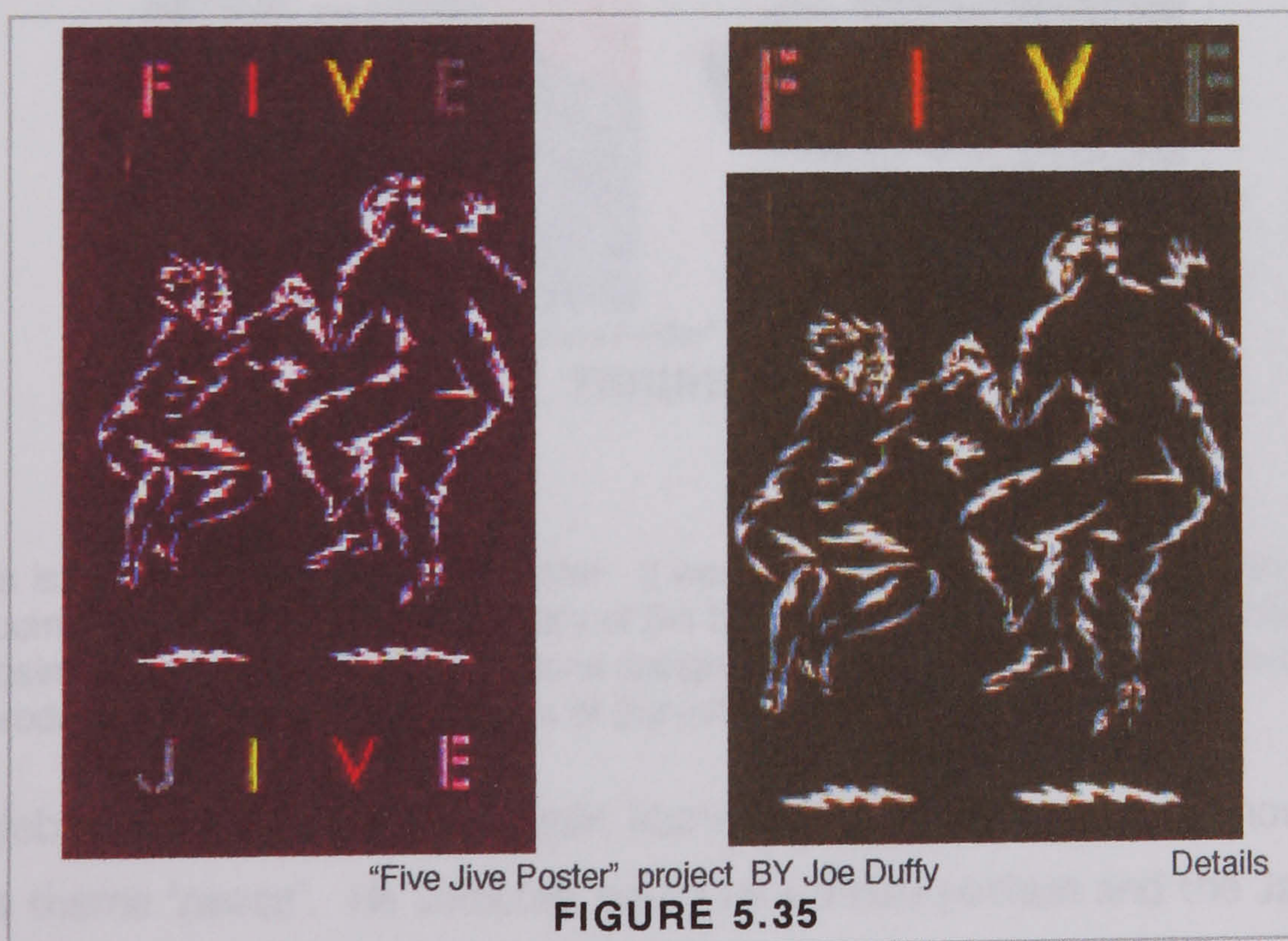


April Greiman described her design idea. In Greiman's explanation one can perceive particular indications of patterns. She said:

The concept here is that graphic design has always been aligned with technology. What better symbol to use than the American flag? I'm showing the impact of four significant technologies on this symbol: steel engraving, offset printing, video and the computer. This shows the evolution of technology influencing the 'texture' of graphic design. (p. 58).

13) Matching feel of visual patterns with feel of sound patterns

The "Five Jive Poster" project (FIGURE 5.35) was designed by Joe Duffy.



Joe Duffy explained that this project was an example of his personal style, and that he did the illustration and the design. Duffy explained that he did this project for

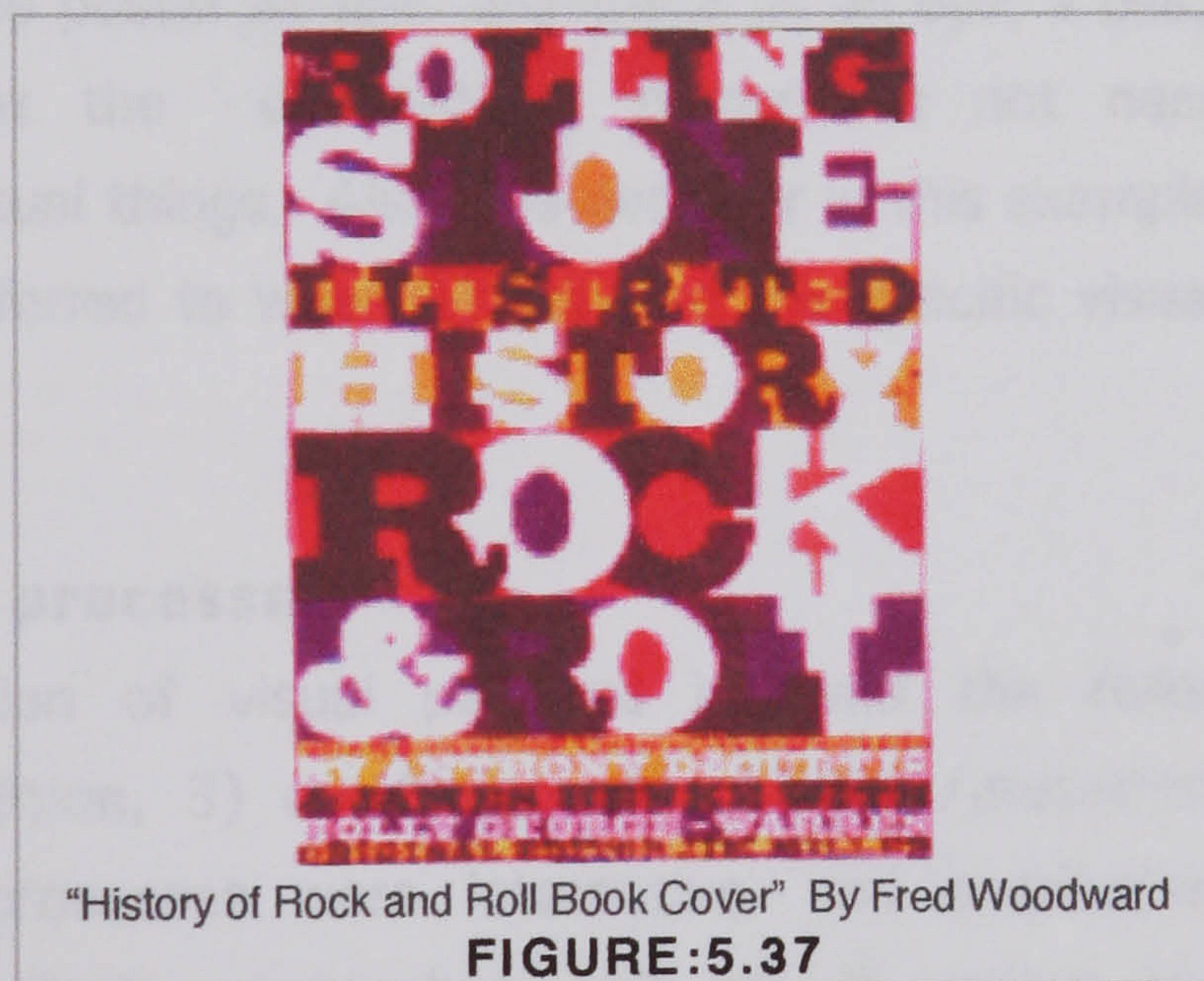
associated in most cultures with signs of peace. According to the designer, the Japanese wave suggest two things: 1) Japan, 2) itself as a wave. The designer adapted the visual patterns to embody peace and Japan in one idea. The adaptation processes included integration, addition, and modification. The doves patterns were adapted to the whitish top of the wave, and some of them were splashed in the air like splash of water, and were connected to the body of the wave by parallel strips to the movement of the wave. The strong body of the wave was matched with the strong wave of peace. Magleby explained:

I've always been intrigued with the famous Japanese wave done by Hokusai. I thought it might work well if I could somehow work in the doves to make it a peace poster, and use the wave - which, in a way, suggests Japan in and of itself. My ideas often come from a marriage of two different elements that, before that time, had no relationship. So the wave and the doves together put a whole new slant on the idea.(p.70).

15) Matching visual patterns with changing aspects of NP

- Fred Woodward explained the project “History of Rock and Roll Book Cover” (FIGURE:5.37). Woodward stated:

As far as I'm concerned, it perfectly reflected the magazine's personality at the time. My challenge was to try to do the same thing all over again- to make it reflect the changes in the times as well as in the magazine, and somehow hold my own.(p.91).



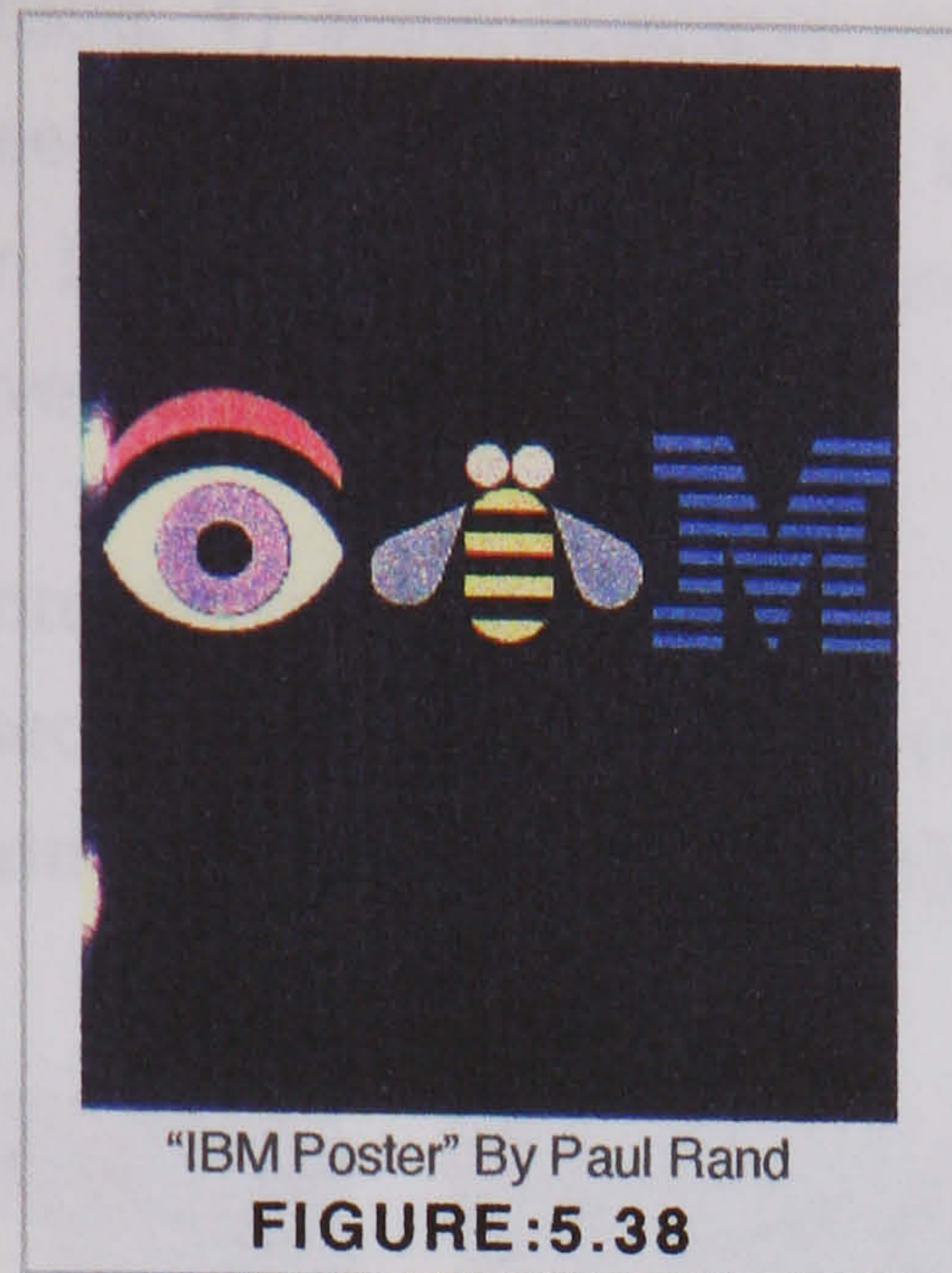
16) Replacing sound patterns by visual patterns for NP

- Paul Rand explained his point of view of dealing with letters and images in his project “IBM Poster” (FIGURE: 5.38). He said:

It's a rebus, a picture that stands for a word. I had to do a poster for a meeting of all IBM design people one year, so I did this.

Rand explained:

The B and I are letters that are also pictures. The M has no picture associated with it, so that made the rebus absolutely IBM- it could not be anything but. I think this makes IBM seem more human. (p.103).



In the above example the letters I and B were used as pictures of an eye, and a picture of a bee. The visual patterns of an eye were not selected from the letter I, nor the visual patterns of a bee were selected from the letter B. In addition, the designer did not explain what the images eye and bee had to do with IBM. But he replaced the visual patterns of the I and the B by their sound patterns, then he selected visual patterns that had the same sound patterns of the I and B. This adaptation was able to make people read the poster as IBM and see it as an eye, a bee, and M. This example can show also that the concept of 'pattern' is not necessarily a restricted representation of visual things. Also, the designer in this example did not mention the visual sources he referred to when he selected the specific visual patterns of the eye and the bee.

5.12 Adaptation processes

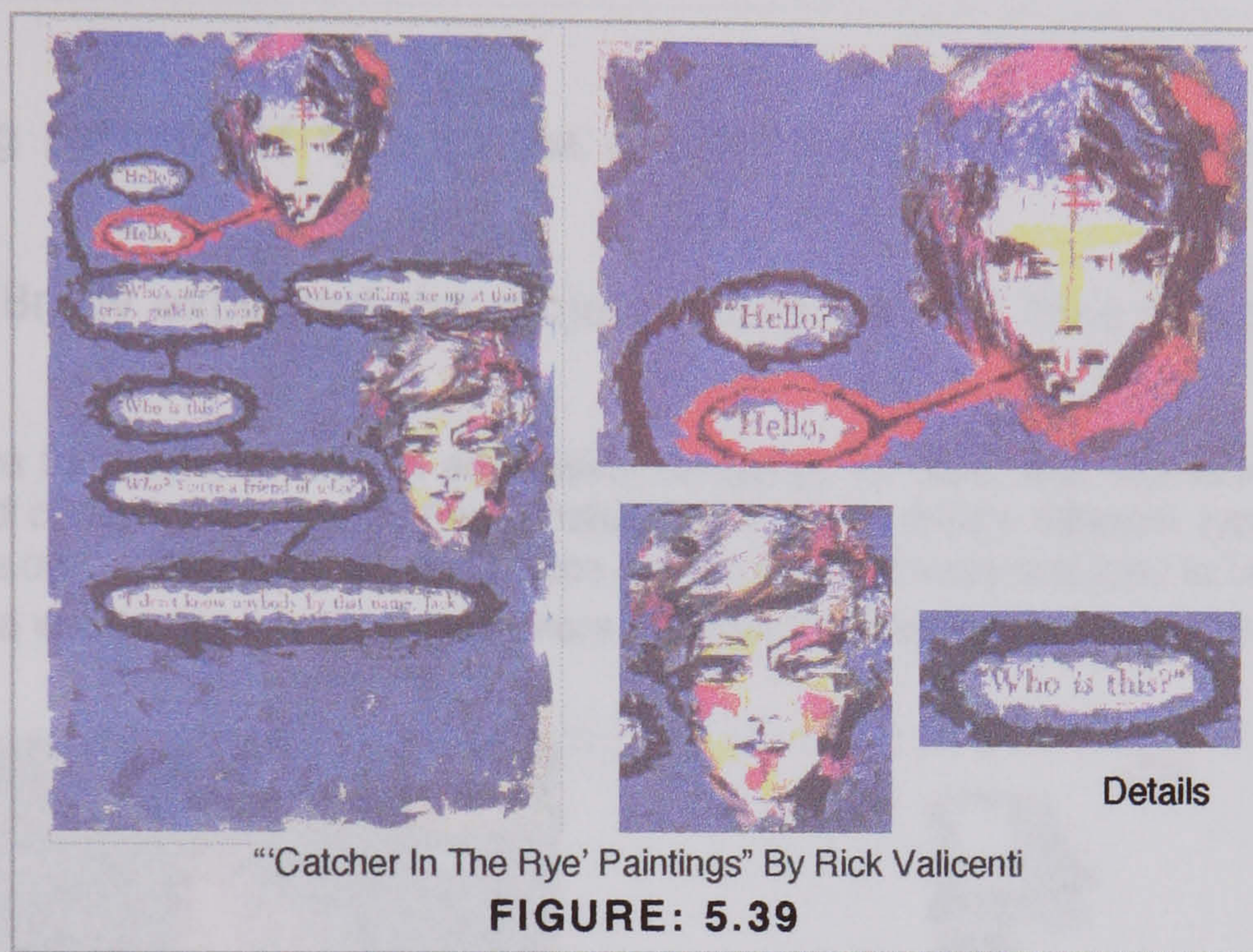
The adaptation of visual patterns involved the following processes:: 1) integration, 2) addition, 3) combining, 4) change /mutation, 5) elimination, 6) extinction. These processes were interactive, and overlapped. In addition, they involved various methods, approaches, and use of various tools. The adaptation methods varied. many respects. From the designers' explanations, it can be deduced: 1) some designers' approaches and method for their individual projects varied but represented some similarities, 2) some designers' approaches and methods varied for each project, 3) some designers' methods and approaches for their projects were a mixture of similar and new approaches, 4) some designers' approaches and methods for some of their projects were new for the designers themselves.

The designers discussed how they adapted their visual patterns in various ways: 1) some designers focused on how they adapted their design ideas to the need, 2) some designers focused on how they adapted their visual patterns to their design ideas, 3) some designers focused on how they adapted their visual patterns by the use of their

traditional or technological tools, 4) some designers focused on the match between their design ideas and the needs without explaining the adaptation processes. From the designers' explanations it can be deduced that there were various types of adaptation. The following examples involved one type or more:

- Adaptation involves intuitive ideas and activities

Rick Valicenti discussed the visual sources and visual inputs for the project “‘Catcher In The Rye’ Paintings” (FIGURE: 5.39), QUOTATION (5.10).



“This was a series of pictures, each done on a page of ‘Catcher in the Rye.’ I used the pages as the canvas, then I used appropriate text to build an image. It was really an exercise in stream-of-consciousness thinking and collage, and also getting back to a little painting (even though these were miniature- paperback size). I did 50 during a two-week vacation. The book was at the guest house where we were staying, and I had never read it. While I was reading, I was struck with how J.D. Salinger had used repetition of different language, words or sounds to build his rhythm. While I was wondering what I could do with the book, it started to rain. I had paints but no paper, so I started painting on the book. Later, a few people told me it was real smart of me to paint on ‘Catcher in the Rye.’ That kind of weird circumstance-when I would borrow something and it would look smarter than it was- has been with me forever. You can tell everybody, or you can let them think otherwise. Here I was obviously interested in the content of the page, but with the addition of images and the elimination of some copy I was able to change meaning. Obviously these are lessons we deal with every day in design, but just to keep the chops polished...” (p82)

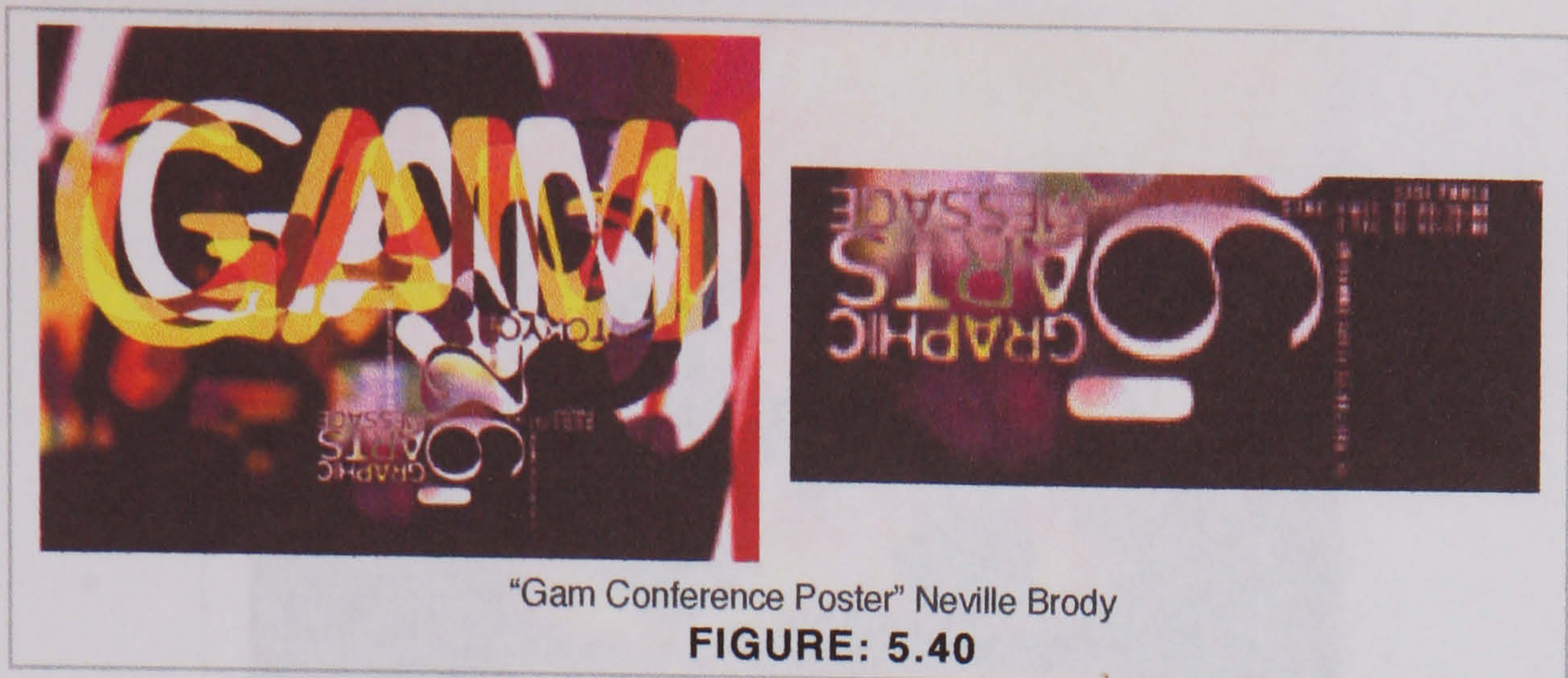
QUOTATION 5.10: AN EXAMPLE OF AN INTUITIVE ADAPTATION OF VISUAL PATTERNS

- Changing type patterns into image patterns

Neville Brody explained the project “Gam Conference Poster” (FIGURE: 5.40), QUOTATION (5.11).

“GAM is short for Graphic Arts Message, which is a conference for designers and students that happens four or five times a year in Japan. Here in this poster, type itself became an image. This also represented the chance to explore possibilities within Photoshop on the the Macintosh. It sort of represented to me the fact that we use the Macintosh as a tool- the idea is to use the Macintosh but hide the fact that you used it” (p51)

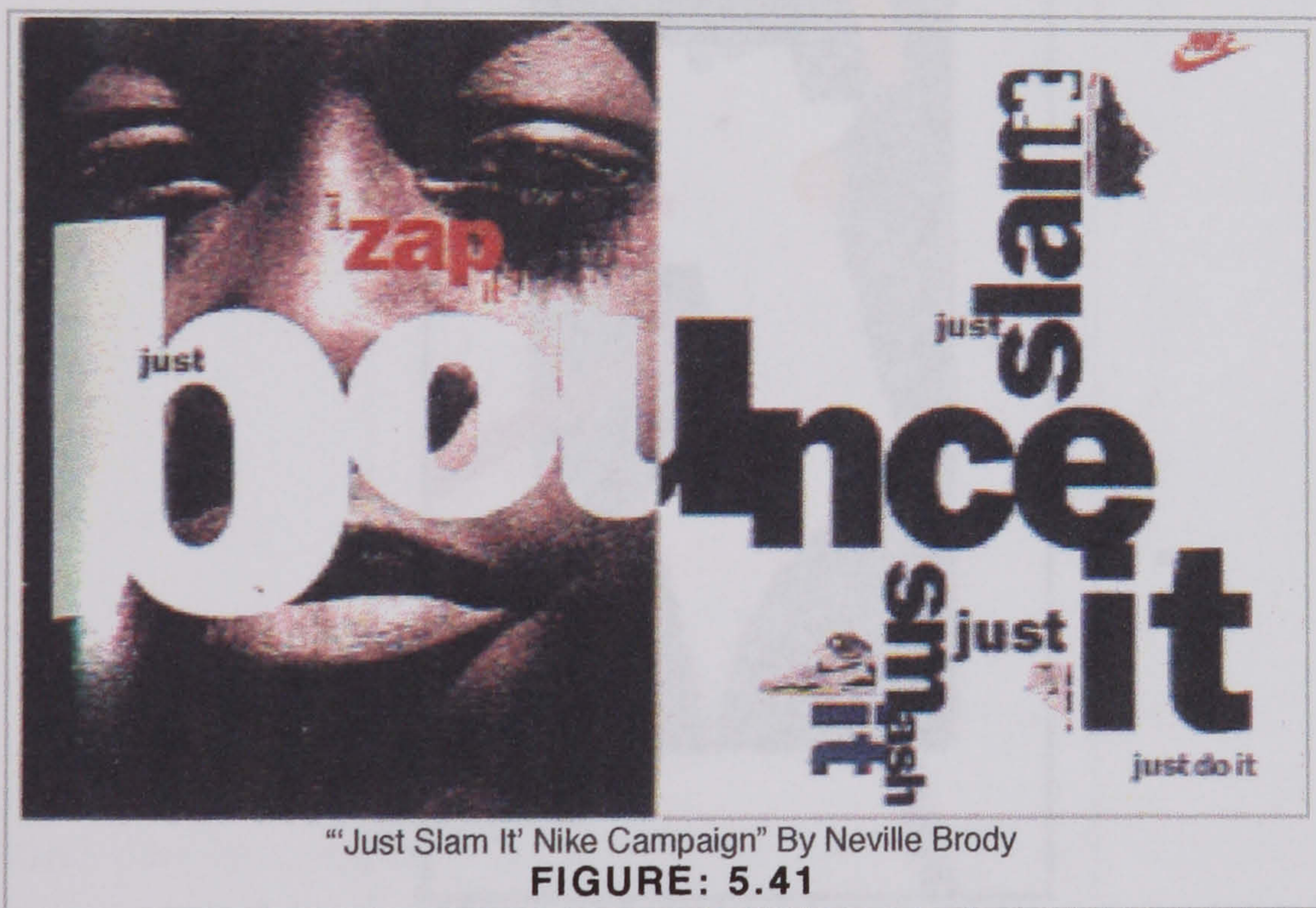
QUOTATION 5.11: AN EXAMPLE OF CHANGING TYPEFACE PATTERN INTO IMAGE PATTERN



- Adapting patterns of type to the design concept by pattern of movement and painterly feel:

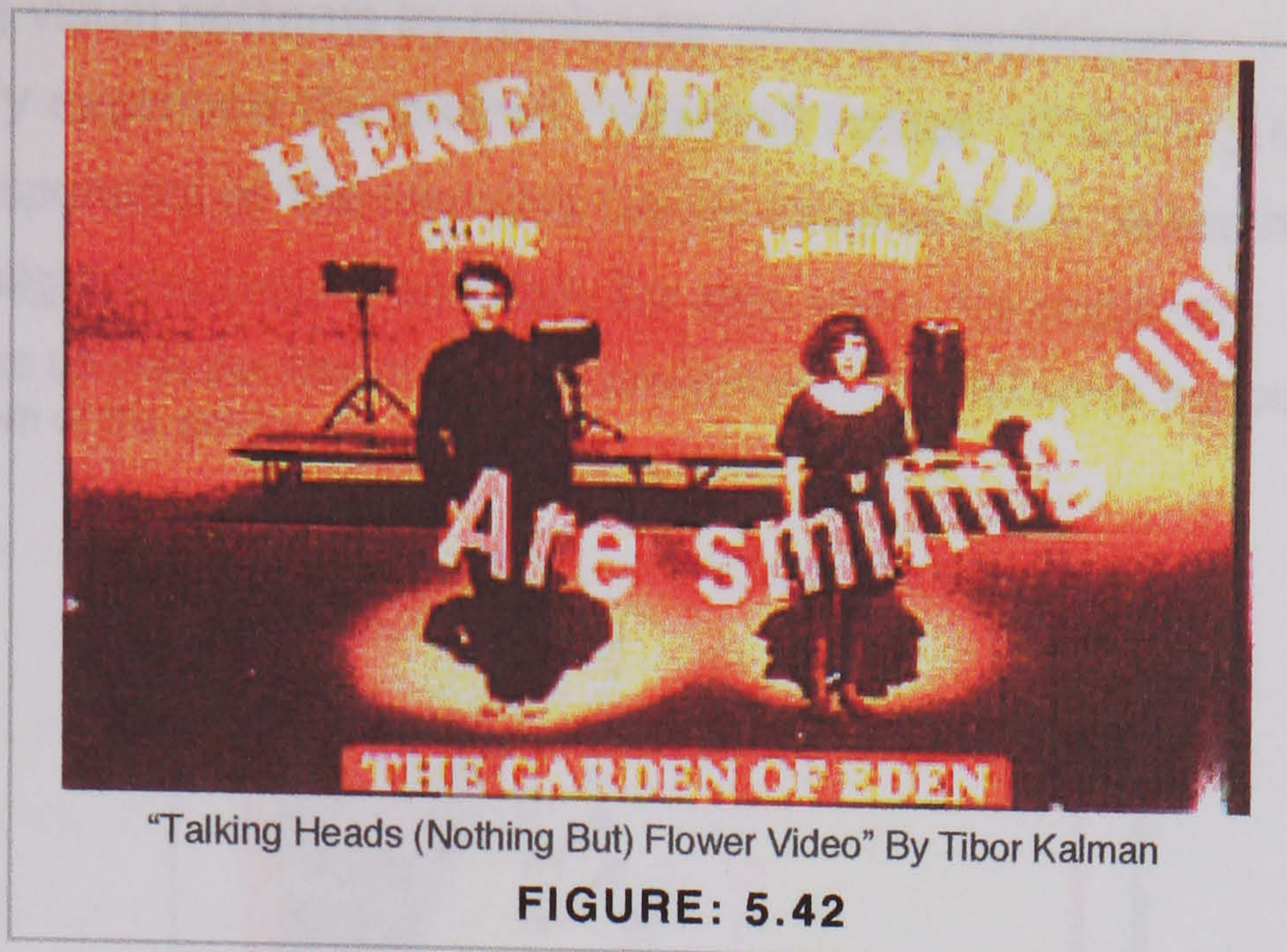
Neville Brody explained the project “‘Just Slam It’ Nike Campaign” (FIGURE: 5.41):

The idea for ‘Just Slam It,’ an advertising campaign for Nike, was representative of the kind of work I was doing then. Instead of trying to create different typefaces, I took the other attitude, which was to use normal type but force that type to be mobile. The idea was to use type in a much more painterly and expressive way. (p. 51).



- Adapting visual patterns by integrating images and text into one idea
Tibor Kalman explained that the “Talking Heads (Nothing But) Flower Video” project (FIGURE: 5.42) was the first real video film that they directed, designed, and produced. Kalman explained that the song was strange- sort of futuristic and ‘future hippy’. Kalman explained that they thought first to do music video with no images, and to use just words. He explained:

So we suggested to shoot a very simple image of the band performing in the background and combine the image with the words of the song. It’s very simple. What we really tried to do was integrate the words and images very thoroughly.(p. 66).



- Adapting visual patterns by using traditional techniques and mathematical guidelines:

McRay Magleby explained the project "New York Poster" (FIGURE: 5.43), and the processes of adapting his visual patterns.



He said:

This was originally commissioned by a group in Dallas for a fashion show. They ended up not using it, so I revised it for a girls' choice dance at BUY. The theme was "New York, New York". At the time I was using a lot of geometric, either straight lines or circular lines in a kind of pinstripe fashion with silver trap line colours over black. I did about 10 different posters in that same style; I think this was the first I tried. They were all hand-rendered. In fact, I was such a fanatic about getting all the angles exactly the same on the diagonal that I even hand-rendered the type so that the angles on the N in New York were the same as the diagonal lines in the poster. I got into a kind of mathematical way of designing for a while: lots of clean, flat shapes with logical organisation of the patterns in a mathematical way. I even divided the space mathematically. (p.70).

- Adapting visual patterns by combining different techniques

Joe Duffy explained the project “Baseball Poster” (FIGURE:5.44). He said that the Tennessee sponsors of the Memphis Chicks baseball team asked him to do a poster that was to highlight the teams’ schedule for that year. He explained:

So I came up with the idea of doing a schedule with baseball cards that punch out at the bottom of the poster. (p. 54).



Duffy stated that he combined illustration and design together. He explained this type of approach, “ I always enjoyed the Pushpin approach to design- a combination of great design and illustration.” (p54) Duffy explained also the design idea and its visual patterns. The visual patterns can be considered to be construed from behavioural actions. He said:

... our thought here was to represent baseball the way it used to be, and the way it continues to be in the minor leagues- void of million- dollar contracts and artificial turf; just guys having a great time playing baseball, and fans enjoying the games and being outdoors. (p. 54).

5.12.1 Methods and tools for adapting visual patterns

The majority of the designers mentioned the techniques and tools they used when

they adapted their visual patterns. Adapting visual patterns involved: 1) how the visual patterns were adapted to match NP, 2) the tools, techniques, and methods used for achieving the match between visual patterns and NP. From the designers' explanations, it can be concluded: 1) some designers used mainly traditional techniques and tools, 2) some designers used mainly Macintosh and electronic systems from the stage of exploring their initial design ideas to the final stage of their designs, 3) some designers used a combination of traditional and modern techniques and tools for most of their projects, 4) some designers used traditional techniques and sometimes used modern techniques, 5) some designers blurred the boundaries between traditional and modern techniques and tools when they used them. The designers' methods and approaches were conceptual, intellectual, and technical aspects.

- McRay Magleby explained that techniques had their own limitations and advantages,

I think my style has evolved over the years as a result of designing for silk-screen, because there are certain things you can do and can't do on it. For example, blends are really nice on the silk-screen because you can angle them differently, whereas when you're offset printing they always have to be at right angles to the paper. (p. 70).

- Kit Hinrichs mentioned various techniques, approaches, considerations and visual patterns that were involved in the project "Potlatch ARs" (FIGURE: 5.45),

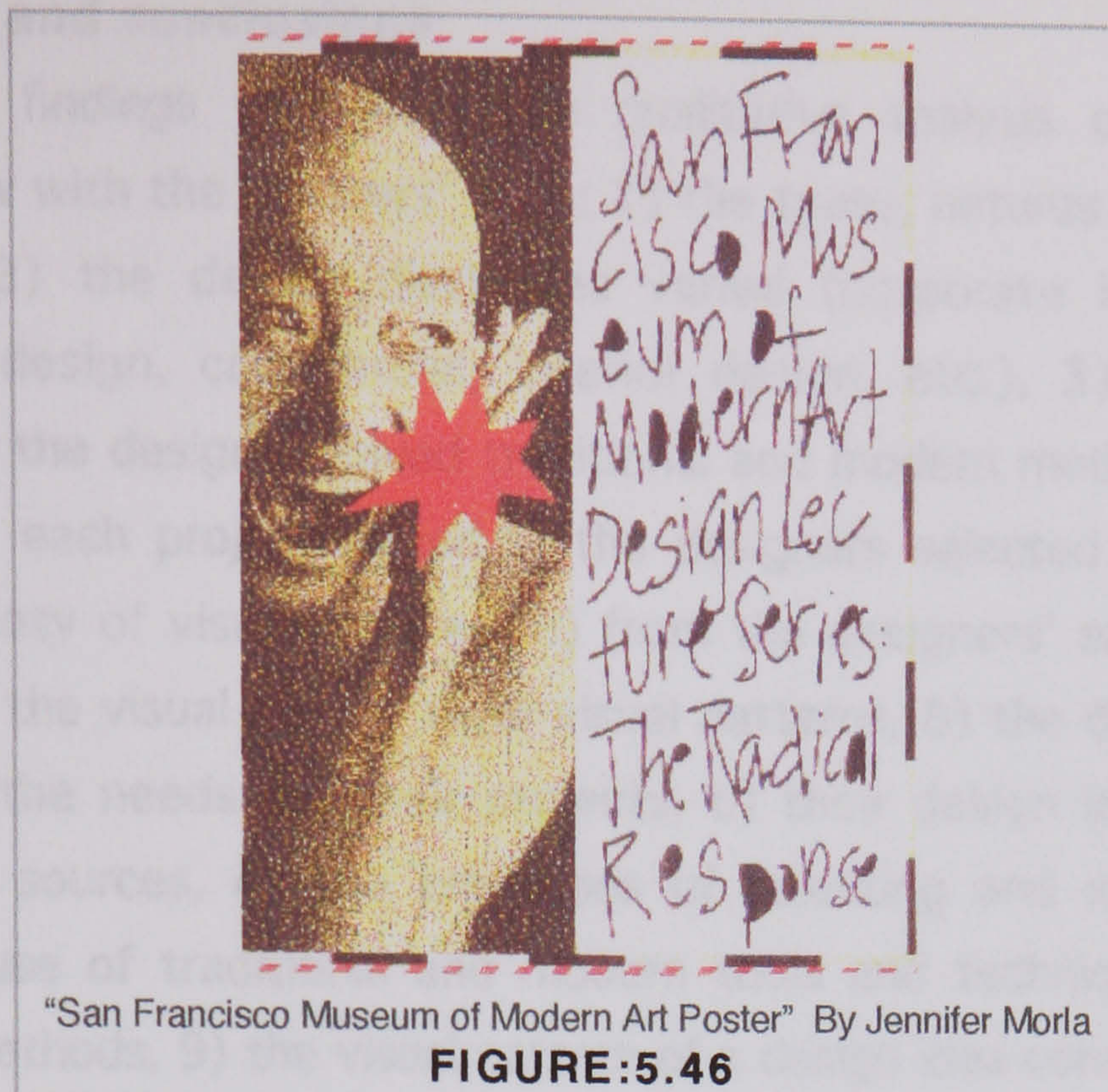
I conceptualise virtually everything on projects like these, and then work together with staff designers. This series of annual reports was done over six years with four different designers, yet there's a consistent vision in the way it looks. Part of that is typographic styling, and part is a somewhat encyclopaedic aspect in that there are multiple images, combinations of photography, illustrations and graphics intermixed throughout so that the tone of voice is consistent from year to year. (p.62).



- The project "San Francisco Museum of Modern Art Poster" (FIGURE:5.46) by Jennifer Morla. She used traditional techniques and computers, and she inspired further aspects of her design idea from a default resultant from a technical limitation of a computer program.

5.13 Summary

The major findings published in this book are based on published interviews with the designers. The projects varied, but the design processes were similar. The visual sources for each project were interpreted that the visual inputs from a variety of sources, including the following: a) the needs of the project, b) the visual inputs and visual sources, c) the use of various techniques and tools, and d) the design approaches and methods used.



- April Greiman explained the project "Cerritos Centre For The Performing Arts" (FIGURE: 5.47). This project was a new theatre in Cerritos, California. The theatre was 1, 900-seat, 250,000- sq.-ft. She explained:

It's significant because it started out as a traditional project, then we were able to implement and expand it through the Mac to include 3D work, interiors, fabric and print work. (p. 59).



- April Greiman (p. 59) mentioned the use of various technologies for generating her visual patterns for the project "The Modern Poster" (FIGURE: 5.26).

5.13 Summary and conclusions

The major findings that from the qualitative analysis of the data of the published interview with the 'Masters' were: 1) the types, natures and contexts of the projects varied, 2) the design disciplines varied (corporate identity, packaging, prints, industrial design, commercial, interior design, etc.), 3) the mediums and materials used for the design involved traditional and modern methods, 4) the various visual sources for each project varied, 5) the designers selected and adapted visual inputs from a variety of visual sources, 6) from the designers' explanation it can be interpreted that the visual inputs were visual patterns, 8) the designers focused on the following: a) the needs for their projects, b) their design ideas, c) their visual inputs and visual sources, d) the processes of selecting and adapting their visual patterns, e) the use of traditional and modern tools and techniques, f) their design approaches and methods, 9) the visual pattern of a design idea consisted of visual parts that worked within the total pattern of the design idea, 10) the designers selected visual patterns from various sources, 11) the designers generated digital visual patterns, 12) the constraints of the need pattern varied.

- **Purposive pattern recognition**

From observing what the designers said they did, it can be concluded that purposive pattern recognition (PPR) was a key activity during the various processes of selecting and adapting visual patterns. Recognising the desired visual patterns involved processes of doing and exploring possibilities, and sometimes it happened intuitively, or as an immediate response to a need. The selection occurred in the following ways: 1) intuitively, 2) immediately, 3) rationally, 3) through processes of conjecture and refutation, 4) based on previous experiences, 5) based on the designers' knowledge of what they were looking for, 6) spontaneously, 7) incidentally, 8) derived from established criteria, 9) by experimental approach. The decisive factor for the selection was the quality of the visual patterns. Matching visual pattern with NP involved the following adaptation processes: 1) integration, 2) elimination, 3) combining, 4) mutation, 5) addition, 6) extinction. The adaptation processes involved the use of various techniques and tools both traditional and modern. Both types of techniques and tools were used by most designers. The use of techniques and tools was integral for achieving the desired visual patterns.

5.14 Discussion, conclusions and suggestions for further research

The next chapter (6) discusses the conclusions, suggestions for further research. The discussion involves the theoretical interpretation of the concepts that emerged from the qualitative analyses of the raw data of this investigation.

CHAPTER 6

DISCUSSION, CONCLUSIONS AND SUGGESTIONS
FOR FURTHER RESEARCH

6.0 Introduction

In this chapter the theoretical interpretation of the present study which is grounded in the findings of the 'interviews with designers', the 'mini-case studies', 'direct observation', and 'Masters' of design is discussed. Before discussing the findings concerning PPR, the first section is a brief summary of the findings on diversity of visual sources. This leads into the section on patterns and PPR. The chapter concludes with suggestions for future research.

6.1 Diversity of visual sources

Visual sources involved various human activities, interests, and resources. In general, visual sources involved every visual entity accessible to designers in any possible way. Most designers stated that the visual sources 'could be anything and every thing'. Even when designers specified certain visual sources, the visual sources they mentioned involved countless differences and similarities. The designers' visual sources covered general and specific areas of information and sometimes shared particular properties with other visual sources (See Section: 3.2, p. 90). Most of the visual sources were not separated by clean cut boundaries. Classifying visual sources in relation to the selection and adaptation processes was not possible without overlooking some of the properties, contents and subtle variations of visual sources. There was evidence that classifying visual sources according to methods of production, visual contents, or visual influences was not able to explain design in terms of selection and adaptation. Also, classifying visual sources according to specific types was hard to achieve without overlooking some aspects of visual sources. Narrowing down the designers' different visual sources into clean cut categories was not sufficient for explaining what designers did and the selection phenomenon. The overlap between various categories of visual sources was evident. The contents of a visual source were very crucial to the designers. Considering each visual difference meant having long lists of visual sources similar to that of a dictionary. Also, there were no specific types of visual sources that summed up all that the designers looked for. Examples of the designers' visual sources are presented in TABLES: 3.4.1, 3.4.2, 3.4.3, 3.4.4 (PP. 97, 98, 98, 99). The diversity of the designers' visual sources can be observed under the following groups: 1) general visual sources (See Section: 3.2.1.1, p.91), 2) retrieved visual sources (See Section: 3.2.1.2, p. 93), 3) art-directed visual sources (See Section: 3.2.1.3, p. 94), 4) found visual sources (See Section: 3.2.1.4, p. 96).

Grouping visual sources into these categories was found useful for examining the following: 1) the diversity of visual sources, 2) the processes involved in using or creating the visual sources, 3) the relationship between the type of visual source and the constraints of the need such as economic constraints. It is important to mention here that classifying visual sources was possible, but was not able to answer the main aims of this study. It can be concluded that classification is not a separate activity from the phenomenon under study, and that it is related directly to it.

Two characteristics related to the visual sources were found of the utmost importance for the selection and adaptation phenomenon, and were substantiated in the raw data of the 'interviews with designers' (Chapter Three), 'the mini-case studies' (Chapter Four), the 'Masters' of design (Chapter Five), and the 'direct observation' (APPENDIX: VII). These two characteristics were: 1) diversity of visual sources, 2) visual sources were sources of visual patterns. More importantly the relationship between these two elements was essential in the selection and adaptation of visual patterns. The more the diversity of visual sources increased the more the variations of visual patterns increased, and both provided the designers with countless alternatives for the selection. It is important to mention here that this progressive relationship involved the possible variation of any image. For example, a number of various types of photographs of an apple can be considered to provide variations of visual patterns in terms of the individual visual elements of the apple, in relation to the methods of production, the visual style, the position of the apple within the framework of the photo, the angle of taking the photograph of that apple, the type of light (natural, artificial, mixture), the actual source of the apple such as from actual apple, from imagination, an imitation of an existing source, a reproduction from previous photo, etc. The above example can show that each element involved potential variations that would subsequently change the properties of the apple. Considering some obvious variations was not found sufficient to explain the selection and adaptation unless it was discussed within a specific context and in relation to specific available alternatives, and in relation to specific need. The match or the fit between the visual pattern and the pattern of need was the basis of selection and further adaptations.

6.1.1 Processes of gathering and selecting visual sources

The processes of gathering and selecting visual sources varied. It was evident that selecting visual sources was a regular activity for most designers. In addition, these processes involved recognising the quality and the information inputs of the visual sources (Marian Dalley; Adrian Talbot; Adrian Shaugnassy; Peter Barrow; Charles Anderson; and others). The designers collected visual sources for specific projects, for potential projects, and as references for various types of visual information. In doing so the designers contributed to expanding their in-house library

as well as their own visual references. There was evidence that the designers gathered, kept, and referred to these sources, but there was no definite time when the use of these sources started or stopped. Most designers stated that for each project they looked at their visual references and searched for new references (See Section: 3.3, p. 99). The processes of gathering and selecting visual sources were interwoven together. There was evidence that the selection processes of visual sources became very dynamic when the designers were working on a specific project. This was due to the fact that the designers needed specific information, and had to meet certain deadlines. It was evident that during the various stages of a project the selection and analysis processes overlapped and fed to each other. Subsequently, further selection took place (See DIAGRAM: 3.2, p. 100). Selecting visual sources for a project involved considering the economic constraints both as budget and time. Many designers stated that if budget or time did not allow them to select certain visual sources they had to find alternative visual sources (Ian Hunderson; Adrian Shaughnessy; Paul Davies; John Harvey; David Caines; Ian Crockart; Ged Equi; Alex Quero; Joe Duffy; and others).

A visual source was not restricted to a specific use of any kind, but there were various considerations when the source was to be used. The designers gathered visual sources by various ways and from various places. The resources of visual sources varied. The main resources were: 1) the project owners (POs), 2) the designers, 3) various types of research, 4) documents, 5) the surroundings, 6) living experiences. Gathering visual sources was a necessity for the selection to take place, but it did not explain the selection that involved the creation of designs. Certain visual sources were selected in particular from a variety of visual alternatives when the physical visual source itself was used in the designs. Examples of the physical use of the visual sources such as photographs were evident. David Caines and John Harvey stated that they had to select certain photos from preselected photos for their fundraising projects beside the use of other visual sources. Simon Shaw stated that for 'News agencies' publications, sometimes, they had to use specific pictures of directors or people, etc. Jenny Brend stated that they had to use photos of directors, and actual architectural projects for corporate publication designs. Adel Nouman stated that for certain events they had to select certain pictures from preselected photographs for their newspapers and magazines.

The quality of the visual sources was a crucial factor when the designers selected visual sources, and it was of the utmost importance when the visual source was used in the designs. Kit Hinrichs, one of the 'Masters', stated that for his project 'POTLATCH' he selected the best pictures from other alternatives, the most unusual, and the freshest. Jenny Brend stated that for corporate publication project they had to use photos, and they select the best ones.

It was evident that selecting variation of visual sources was useful for the following:

- Visual sources were sources of various types of information (Alex Quero; Adrian Talbot; Marian Dalley; Peter Barrow; Jenny Brend; Charles Anderson; Paul Davies, Finn Butler; Tony Watts; Kit Hinrichs; Charles Anderson, Joe Duffy).
- The designers needed general and specific knowledge about certain subject matters and target audiences (Simon Shaw; Ali Osman; William Redfern; David Spencer; Greg Vallance, Mahmoud Kahil, Marian Dalley, Ged Equi).
- The designers wanted to understand the projects within the visual culture of the people who required the projects and the people that the designs addressed (Peter Barrow; Finn Butler; Joe Duffy).
- For having alternative sources in terms of quality (Stewart Webber; Ged Equi; David Caines; John Harvey).
- for selecting specific visual details (Alex Quero; Mahmoud Kahil; Paul Davies).
- For establishing visual criteria (Ged Equi; Tony Watts; Paul Davies; Adrian Shaughnessy; Barry Lowenhoff; John Harvey; Ged Equi).
- For comparison between alternatives (Sue Pile; Michael Bronfield ; Ged Equi; Tony Watts; Iain Crockart).
- As sources of ideas, insights, inspiration, etc. (most designers)
- For creating mood boards for identifying the need for the projects (Majority of designers)
- For having available visual sources when they are needed (most designers)
- For capturing certain feelings and moods (Most designers).
- For knowing the historic background of the projects (most designers).

It was evident that designers selected various types of visual sources for the information contents of the sources. Also, it was evident that the visual source itself was not always important (in terms of its nature) unless it was required for a project in its physical form. The designers' various explanations showed that selecting visual sources was necessary for selecting visual information. The designers' priorities and

approaches when selecting visual sources varied. Selecting visual sources for particular needs was evident. Also, it was evident that selecting visual sources was a continuous process during the various stages of a design idea (William Redfern; David McKay; Sue Pile; Shaughnessy; Tony Watts; Ged Equi; Marian Dalley; Adrian Talbot; Mahmoud Kahil; April Greiman; Rick Valicenti; Milton Glaser, Woody Pirtle; Joe Duffy; Neville Brody; Charles Anderson; and others). In addition, some of the designers' visual sources were memory, imagination, thought process, mental images, ideas. Many psychologists (See Reed, 1996; Gross, 1996; Bruce and Green, 1990; and others) consider that the human mind handles information in terms of patterns. From the findings of this present study the concept of pattern was further described by looking at it in terms of selection and adaptation.

6.2 Pattern

The pattern concept was not borrowed from the existing studies which discuss visual information and other types of information in terms of patterns. It emerged from the qualitative findings of the raw data of this research, and from the designers' various descriptions of their visual information and their visual sources. Subsequently, existing literature on 'pattern' and 'pattern recognition' was surveyed. Useful information was obtained from various academic studies especially those which discuss cognition, perception, sensory systems, and visual thinking.

Observing a visual pattern in terms of selection and adaptation was able to reveal subtle variations about the nature of design and the designers' activities. In this study, the concept of pattern was realised in various forms: 1) as a need pattern, 2) as a visual pattern, 3) as a design pattern. The characteristics of these various types of patterns are discussed in the following sections. This present study was able to look at 'patterns' within a process of selection, adaptation, and making of patterns.

6.3 Visual patterns

It was evident that designers selected various types of visual information from various types of visual sources. From the designers' descriptions, it can be interpreted that the various types of visual information were various types of visual patterns (interviews with designers, mini-case study, direct observation, 'Masters' of design). It was evident that the nature and types of visual patterns varied. The designers' explanations of what a 'visual source' meant to them showed that designers thought of visual sources in terms of visual information, ideas, images, feeling, specific information (See QUOTATIONS: 4.1, p. 157; 4.2, p 158. 4.3, p.153; 4.4, p.158). The designers stated that they selected feelings, visual modes, visual styles, ideas, and specific details from their visual sources. These types of visual information

can be interpreted as visual patterns. It is important to mention here that choosing the expression 'visual pattern' instead of the 'visual information' is not a matter of substituting one term by another. It was found from examining the designers' explanations about their visual information that the term 'visual pattern' can describe the nature of visual information plus the involvement of the designer as a perceiver, a selector, and communicator of that information. In other words, visual information by itself can be observed and interpreted in various ways.

From the designers' various descriptions of their visual information, it was evident that the designers selected both specific visual information (which is considered by psychologists to be a visual pattern) and feelings, modes, styles, expressions, ideas, harmony, certain look, certain smile, movement, motion, ideas about something and how things were in general, relationships (without depicting the same subject matter or objects), etc. Such types of visual information were mentioned by designers (interviews with designers, the mini-case studies, the 'Masters' of design). This sense of a pattern in a way can be considered different from selecting information about an object as a process for recognising what the object is. Recognising the visual pattern in this sense can be considered to involve intimacy with the visual information and intimacy with the purpose for looking at and selecting that information. From the designers' explanations, the concept pattern can be interpreted according to what it is and how it is.

There was evidence that the designers selected visual information in the absence of the physical presence of visual information, such as form reading, brainstorming, discussions, thinking, writing, exchanging ideas. From the various types of visual inputs which the designers selected, adapted, and used three main types of visual patterns can be deduced: 1) individual visual patterns each of which was an individual design idea, 2) individual visual patterns that were parts of the main idea of the design and were controlled to various extents by it., 3) individual visual patterns that were added or integrated with the main idea (visual pattern) as a visual layer. Visual patterns as visual layers were used to create specific effects such as visual styles, or particular feelings (Adrian Shaugnassy; Tony Watts; Charles Anderson; and others), See FIGURES (5.12). Also, the use of visual patterns that depict a pattern of sound, touch, texture, or a feel like soft, smooth, etc was evident (Marian Dalley; Tony Watts; Adrian Shaugnassy; John Harvey). Various examples of the designers visual patterns are in TABLE:4.48 (p. 295), and QUOTATIONS: 4. 35 (p. 328). Also, the use of the visual meaning of words was evident (See FIGURE: 5.18, p. 379. and FIGURE: 5.19, p.380).

- **Design ideas as visual patterns**

It was evident from the designers' various descriptions of their design ideas

that design ideas were visual patterns. Also, it was evident that design ideas started as fuzzy visual patterns and developed further through processes of selecting and adapting visual patterns, and through processes of producing visual marks (design patterns). The most important thing about design ideas was that they were the main visual pattern that the designers explored and developed.

- **Visual pattern and its parts**

There was evidence that a visual pattern consisted of various parts, and it was recognised as one whole. The concept of 'whole' and 'parts' are discussed by many scholars in relation to recognition (Gestalt notion). This study was able to explain the relationships between 'wholes' and 'parts' in terms of selection and adaptation. There was evidence that the parts of a visual pattern developed within the context of the pattern through selection and adaptation processes. In other words the parts were selected and adapted within the context of the overall pattern and according to its development. Most importantly, the 'pattern' as a whole determined the relationships between its parts. The findings showed that even when certain parts were more crucial than other parts, they operated within the context of the whole pattern. The visual pattern was not restricted to a precise number of parts. It can be considered that the totality of the visual pattern made further selection of visual patterns useful for the pattern.

6.4 The need and the need pattern (NP)

There was evidence that the selection and adaptation of visual patterns was a response to a certain type of need (interviews with designers, mini-case studies, direct observation, 'Masters' of design). The need was a necessity or a desire for achieving certain sorts of purposes. It involved various types of human interests, objectives, activities, communication, services, and products. The various examples discussed in this study showed various types of needs each of which had a context of its own. It was evident that identifying the need and the requirements for a project involved various processes of gathering, discussing, comparing and analysing various types of information. In addition it involved the use of various methods some of which were visual such as mood-boards, and the use of models and objects. The processes of identifying the needs for the projects varied from one group of designers to another (See mini-case studies 1, 2, 3, 6). In addition, these processes varied according to the nature of the projects. There was evidence that the designers identified the needs for their projects within the context of each project and according to the objectives and nature of each project. Processes of identifying the need for big projects involved marketing research and testing the findings (Tony Watts; Marian Dalley; Greg Vallance; William Redfern; Paul Davies). Some designers (the 'Masters' of design)

decided the needs for certain projects. It was evident that identifying the need involved understanding and analysing the work of the competitors (for packaging design, corporate identity, corporate publications, retail, exhibitions).

It was evident that the need for a project consisted of various elements and involved various types of implementation. There was evidence that the designers did not deal with the individual elements that involved the need and requirements for a project separately. Instead, the designers while gathering, analysing, and interpreting the given information about each need, they made sure to understand the subtle information about each element and sought to detect relationships between the various elements within the given context. There was evidence that the outcome of these processes was dealt with as one whole by the designers. This one whole can be interpreted as a need pattern (NP). Each NP of a project consisted of several parts. A need pattern involved the perceptual and conceptual interpretation of the need and its requirements. The need pattern (NP) was achieved after the various processes of identifying the need for a project took place.

The designers' processes of identifying the need varied. Establishing a set of criteria about the need and its requirements was evident (Ged Equi; Marian Dalley; Tony Watts; John Harvey). Also, establishing an idea about the need and its requirements was evident (Adrian Shaugnassy; Paul Davies; Iain Crockart; Simon Pandery; Mahmoud Kahil; David Caines; and others). Also, it was evident that establishing criteria or having an idea overlapped. It was found that projects that involved more than one design required establishing a set of references for relating the whole parts (designs) of the project to each other (Marian Dalley; Greg Vallance; Peter Barrow; Tony Watts; Joe Duffy; John Harvey; Barry Lowenhoff; Ged Equi; Paul Davies; David Spencer; Sue Pile; Iain Crockart; Charles Anderson; Kit Hinrichs).

Transforming the need from a set of individual requirements and objectives into one integrated whole was called by the majority of designers "formulating the design problem". Formulating the design problem involved building up a concept about the need and description of procedures and processes of how to go about it. In this study, the term 'need pattern' (NP) is considered to be useful for describing the need in terms of how the selection took place. The need and the selection and implementation processes were interactive. Also, the selection did not work as filling activities of precise templates. Furthermore, the term 'formulation' indicated some kind of boundaries between the need and the implementation processes which did not exist in reality. The word 'need' and the word 'problem' were used exchangeably by the designers to describe the same thing. The processes of identifying the need helped the designers to discover the actual need, and suggest appropriate types of need. For example, 'the PO may think they need a poster in order to enhance their corporate

image, and the designers may think that a brochure is a better way to address that problem'. After the processes of identifying the need were concluded the designers and their PO reached a mutual understanding about the need. The recognition of the need as one whole can be considered as a form of purposive pattern recognition (PPR) of a need pattern (NP). The need pattern (NP) is a feel about a set of variables and their constraints, and it can be considered to be a 'best guess' about a desire or a necessity. The findings from the 'interview with designers', the 'Mini-case studies', and the 'Masters' of design showed that the results of these processes transformed the need from a group of individual elements into one concept (Diagram: 6.1). Examples of the need patterns are in QUOTATIONS: 4.6 (p.166), 4.19 (p.215), 4.27 (p.267), and 4.30 (p.310).

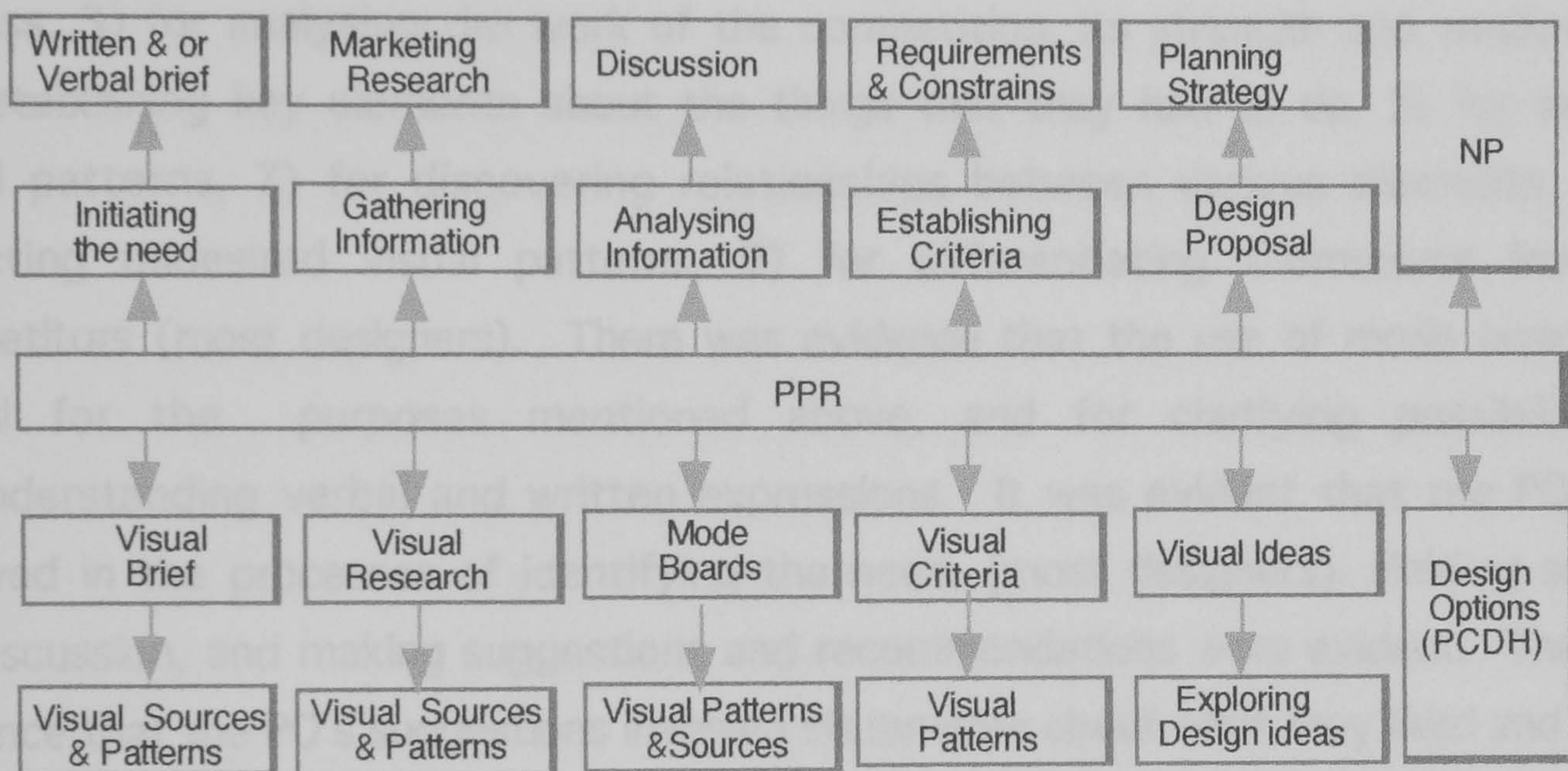


DIAGRAM 6.1: GENERAL PROCESSES FOR IDENTIFYING NP AND SELECTING VISUAL PATTERNS

In most examples, after the NP of a project was established, understood and approved by the designers and their POs, it stayed firm and did not change throughout the design process. However, there were some exceptions when the need changed, and consequently the whole process started again (Joe Duffy; Greg Vallance; Paul Davies; Peter Barrow; and others). Changing parts of the need at an advanced stage created conflict and required adjustment of both the need pattern and the visual patterns and their adaptation (Peter Barrow; Joe Duffy; Paul Davies). Also, when designers handled new project development (NPD) types of projects understanding the need developed as the process of exploration continued until all the involved elements matched together (Marian Dalley; Greg Vallance; Peter Barrow; Paul Davies; David Mecwy; Sue Pile; Chandra Prince). For such projects designers took time to reduce levels of uncertainty as they went along. On rare occasions when the NP changed for some reasons, a new NP took its place and the context within which PPR operated changed. From the designers' explanations, it can be considered that if the NP is not right from the beginning the whole processes afterwards cannot be right.

It was evident that some designers avoided the problems of misunderstanding of

the need by creating mode boards, and having workshops and asked the POs to explain themselves, their needs, and objectives in terms of visual things, objects, and images. (Peter Widdup; William Redfern; Greg Vallance; Sue Pile; and others). Peter Widdup stated that by using mode boards methods they were able to get a feel of how the clients picture themselves and what they wanted to achieve. He added that this process was just for giving them as designers a feel and a sense of direction. Other designers used mode boards method as an aid for analysing the need especially for projects that involved a number of designs and implementations. (William Redfern; Greg Vallance; Jone Ellery; Sue Pile; Marian Dalley).

Creating and using mode boards for the following purposes were evident : 1) for identifying the need, 2) for establishing a set of criteria that the designers had to address, 3) for analysing the work of the competition, its strength and weakness, 4) for establishing key elements about the things that they had to do, 5) for selecting visual patterns, 7) for discovering relationships between various elements, 8) for detecting undesired visual patterns, 9) for differentiating themselves from the competitors (most designers). There was evidence that the use of mode boards was useful for the purposes mentioned above, and for clarifying possibilities of misunderstanding verbal and written expressions. It was evident that the POs were involved in the processes of identifying the need. (most designers). Holding sessions for discussion, and making suggestions and recommendations were evident. There was evidence that the PO's suggestions involved statements about what they liked and did not like, and what worked for them and what did not work. Some projects involved different groups of people from different sectors and these people participated in identifying the need (Finn Butler; David Mecwy).

There was evidence that the processes of gathering and selecting visual sources started for some projects during the processes of identifying the need (David Spencer; Ged Equi; Charles Anderson; Stewart Webber; Paul Davies; Tony Watts). It was evident that the designers preferred the PO to participate in the processes of identifying the need and in other stages for building a mutual understanding of the development of the projects. It is important to mention here that initial design ideas (mental ideas) for various projects developed during the processes of identifying the need. (Peter Barrow; Jenny Brend; Marian Dalley; Ged Equi; David Caines; John Harvey; David Spencer; Greg Vallance; Paul Davies; Adrian Shaugnassy; Kit Hinrichs; April Greiman; Charles Anderson; Milton Glaser; and others). Also, it was evident that for other projects designers started exploring their design ideas after they identified the need for the projects.

- **Types of Constraints of NP**

It was evident that each need pattern involved certain constraints. It was found that the constraints of the need pattern were related to the following: 1) economic, 2) skills and tools for doing things, 3) availability of visual sources, 4) conceptual constraints, 5) the nature of the PO's type of business, culture, and strategies, 6) the nature of the need, 7) the designers' abilities and conditions. These constraints overlapped. It was evident that economic constraints were the dominant ones and they played a part in the following: 1) how the designers used their allocated time and budget, 2) how they used their resources, 3) how they explored, selected and developed their visual patterns, 4) how they applied their skills, and used traditional and modern techniques and tools, 5) the use of materials. Also, it was evident that each of these constraints had limitations of its own. For examples tools had their own limitations to produce things (Peter Barrow; April Greiman; Jennifer Morla). Also, it was evident that skills involved personal abilities and learning processes when doing things .

The availability of visual sources involved the following types of restriction: 1) economic constraints that had to do with copyrights and legal regulations, 2) time restriction that involved getting particular visual patterns from certain sources within a certain period of time, 3) the type of needs as a topic, ie. some needs required the use of specific visual patterns, subsequently, reaching for good visual quality faced various obstacles related to the conditions of the visual patterns and to how the designers dealt with such constraint.

Conceptual constraints had to do with how the POs reacted to design patterns. Subsequently, the designers had to find ways to resolve this type of constraint or work according to it. Conceptual constraints overlapped with economic constraints because reaching an agreement involved processes of selection, use of techniques, methods and tools for reaching a mutual understanding. Planning and marketing strategies were pursued by management people who managed the projects and made agreement with the POs, or by members from both the design consultancies or the organisations and members from the PO party. Reaching a mutual understanding between the three parties: the designers, POs, and the management people involved long processes. Marketing strategies created constraints, because planners, in a way, were not able to understand the designers' ways of thinking and the crafting activities. Subsequently, conceptual constraints occurred. It was evident that designers dealt with the various types of constraints seriously and with responsibility. Some designers stated that when the constraints of a need were not obvious they created themselves certain restrictions, approved them by the PO, and worked within their limits. The importance of constraints is realised by many scholars. John C. Jones (1992) states:

To assume that constraints are always independent of decisions is to remove

6.5 Design patterns

The designers expressed their design ideas visually by producing visual marks on drawing surfaces such as drawing pads, computer screens, etc. These types of visual marks can be considered to be 'design patterns'. The concept 'design pattern' was useful for describing the development of design ideas through processes of selection, adaptation, transformation, and making. Each design pattern consisted of parts. Each of these parts worked within the overall design pattern. When the designers started to produce visual marks the relationship between ideas and design pattern became interactive. Making design patterns involved processes of selecting and adapting visual patterns (Diagram:6.2).

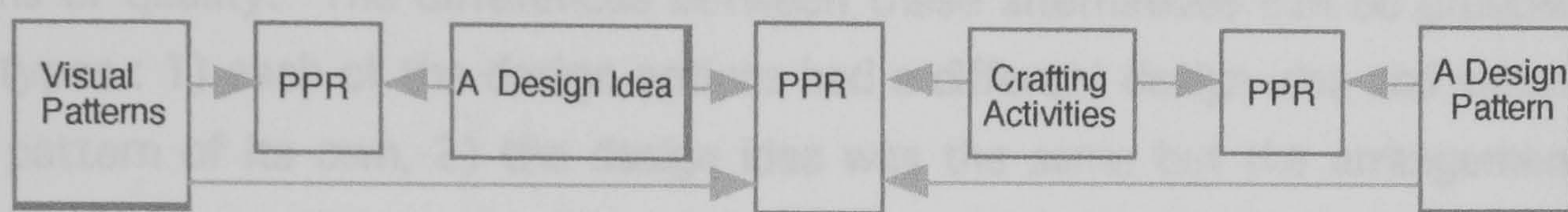


DIAGRAM 6.2: RELATIONSHIP BETWEEN A DESIGN IDEA AND A DESIGN PATTERN

Also, while producing design patterns new visual patterns emerged by chance (accidentally) or as a result from the feedback the designers got from their own actions (producing marks). There was evidence that the design patterns started fuzzy (Most designers). Making design patterns went through various stages. The main stages were: 1) coming up with design ideas and exploring design possibilities, 2) creating design options, 3) selecting the best design options, 4) developing the best design option, 5) crafting design patterns, 6) artwork. Each of these stages involved sub-stages and various processes. It was evident that the boundaries between these stages were not rigid. Also, it was evident that some of these stages overlapped. Encountering unexpected situations or difficulties during these stages was evident. Between these stages the designers had formal evaluation and feedback sessions with the POs. During these sessions various types of suggestions, changes, and recommendations were made, and designers were either given approval to go ahead and develop their ideas further, or they were asked to explore further design possibilities. On very rare occasions design ideas did not require change or exploration because they were recognised as good from the very beginning.

- **Coming up with design ideas and producing visual marks**

It was evident that coming up with design ideas involved the following: 1) searching and selecting visual sources, and selecting visual patterns, 2) producing visual marks and exploring design possibilities, 3) trying various design approaches, 4) creating a number of design option, 4) selecting the best design options. The

sources of design ideas varied. There was evident that sources of design ideas were one or more of the following: 1) thinking, 2) brainstorming, 3) exchanging ideas, 4) through processes of conjecture and refutation, 5) visual sources, 6) visual patterns, 7) by doing. It was evident that during the processes of coming up with design ideas and exploring design possibilities the designers selected and adapted various types of visual patterns. The importance of this stage was evident. It was evident that the development of design patterns depended on the right selection of design ideas.

- **Patterns of competing design hypotheses (PCDH)**

It was evident that the designers created a number of design options for each project as alternative possibilities. The design options can be considered to be pattern of competing design hypotheses (PCDH). PCDH varied in terms of visual patterns and in terms of quality. The differences between these alternatives can be grouped under these types: 1) each of the design options had a different design idea and subsequently had a pattern of its own, 2) the design idea was the same but the arrangement of its parts differed, or the properties of its parts differed, 3) the qualities of some alternatives were better than others. PCDH started as unlimited number of possibilities, then they were narrowed down to one idea for each project.

From the designers' explanations creating alternative design options had to do with the following: 1) as a method for identifying certain aspects related to the NP further, 3) for giving the PO chance to select the most appropriate design pattern, 4) for providing alternative ways for addressing NP, 5) for making sure that one option at least would be selected. It was evident that the designers

6.6 Processes of selecting visual patterns

There was evidence that designers selected visual patterns for matching the NP of their projects. There was evidence that the processes of selecting and adapting visual patterns continued during the various stages of the design ideas. Also, it was evident that the designers sometimes selected visual patterns during the processes of identifying the need. There was evidence that the designers selected visual patterns in the following ways: 1) intuitively or subconsciously, 2) from a thought process, 3) the designers knew what they were looking for, 4) the designers had a feeling about what was appropriate, 5) by processes of conjecture and refutation, 6) by a process of doing things, 7) from previous experience, 8) during processes of exploring, developing, and crafting design pattern, 9) accidentally, 10) spontaneously, 11) by establishing criteria, 12) by knowing certain visual clues.

Recognising visual patterns in one or more of the above ways can be interpreted as purposive pattern recognition (PPR). It was evident that quality of visual patterns was a decisive factor when the designers selected and adapted their visual patterns.

Matching visual patterns with NP can be considered to involve PPR. PPR was a fit and it was a process of matching. The designers either recognised certain visual patterns as a good match for NP, or they recognised visual patterns during a process of trial and error. PPR can be considered to involve a sense of direction of what to do next, and it involved recognising when things worked and when they did not. Discarding certain visual patterns was part of the selection activities. Relevance of visual patterns to the projects had to do with the following: 1) subject matters, 2) target audience, 3) the communicative characteristic of visual patterns and the communication objectives of the projects. Examples of matching visual patterns with NP are in TABLES: 4.5 (p.179), 4.6 (p.180), 4.7 (p.180), 4.8 (p. 195).

- **Quality of visual patterns**

The quality of the visual patterns is one of the decisive factors in selecting visual patterns from other alternatives during the comparison processes. In addition, the quality of visual patterns can be improved by adaption processes and by the use of appropriate tools and techniques. Qualities of visual patterns vary, and can be considered of three major types from the selection view (TABLE:6.1). During the selection and adaptation processes the designers improve the quality of their visual patterns as well as the relevance of visual patterns to their projects. The relevance of visual patterns to NP can be considered to involve the following: 1) subject matters, 2) target audiences, 3) the communicative characteristics of the patterns.

Inherited Quality	It can be considered to relate to the natural quality of a visual pattern (VP).
Acquired Quality	It can be considered to relate to the improvement of the adaptedness of a visual pattern in order to enter a certain context, and it is achieved by further processes of selecting and adapting visual patterns
Original Quality	It can be considered to be the outcome of a mixture of inherited and acquired qualities of visual patterns (visual patterns), or composed from acquired qualities.

TABLE 6.1: POTENTIAL TYPES OF QUALITIES

6.7 Adapting visual patterns

It was evident that adapting visual patterns involved the following processes: 1) addition, 2) combining, 3) integration, 4) adjustment, 5) change/mutation, 6) elimination, 7) extinction. These processes occurred during the various stages of design ideas. Adapting visual patterns by these processes was evident. The designers adapted the visual patterns for matching the overall pattern of the design with NP. Adaptation involved adapting each part of the visual pattern to aspects related to NP. Adaptation involved the use of certain methods, techniques, tools, and materials. Adapting visual patterns involved adapting the design patterns to the physical pattern of the packs and their materials.

'Adaptability' of visual patterns can be considered to involve the 'flexibility' of visual patterns to fit a specific NP. 'Integration' stands for two or more visual patterns becoming one pattern. Mutation stands for a visual pattern being changed. 'Addition' is similar in a way to integration or joining visual patterns, but it also stands for indicating a processes during which more visual patterns are selected. 'Elimination' occurs when parts of a visual pattern are eliminated partly or completely because they do not match the NP, and it produces change in the quality and characteristics of a visual pattern. Also, a new visual pattern may occur by elimination. 'Extinction' occurs when a visual pattern is removed from the original visual inputs, or during the design crafting activities because it is less well adapted. 'Extinction' has to do with the disappearance of a total visual pattern. The comparison between the competing visual patterns and the NP is a continuous process of evaluation and change.

6.8 The theoretical system of PPR

Purposive pattern recognition (PPR) is considered to be a useful way of looking at how designers select, adapt, and use visual patterns when they create designs for their projects. PPR is a mental and purposive activity that manifests itself in a series of actions and processes to reach its goal. The selection part of the mind recognises a particular visual pattern (VP) as being wanted for a particular need (NP). The designer compares the need pattern (NP) with patterns of competing alternatives until there is a fit between the visual pattern and the need pattern (DIAGRAM: 6.3).

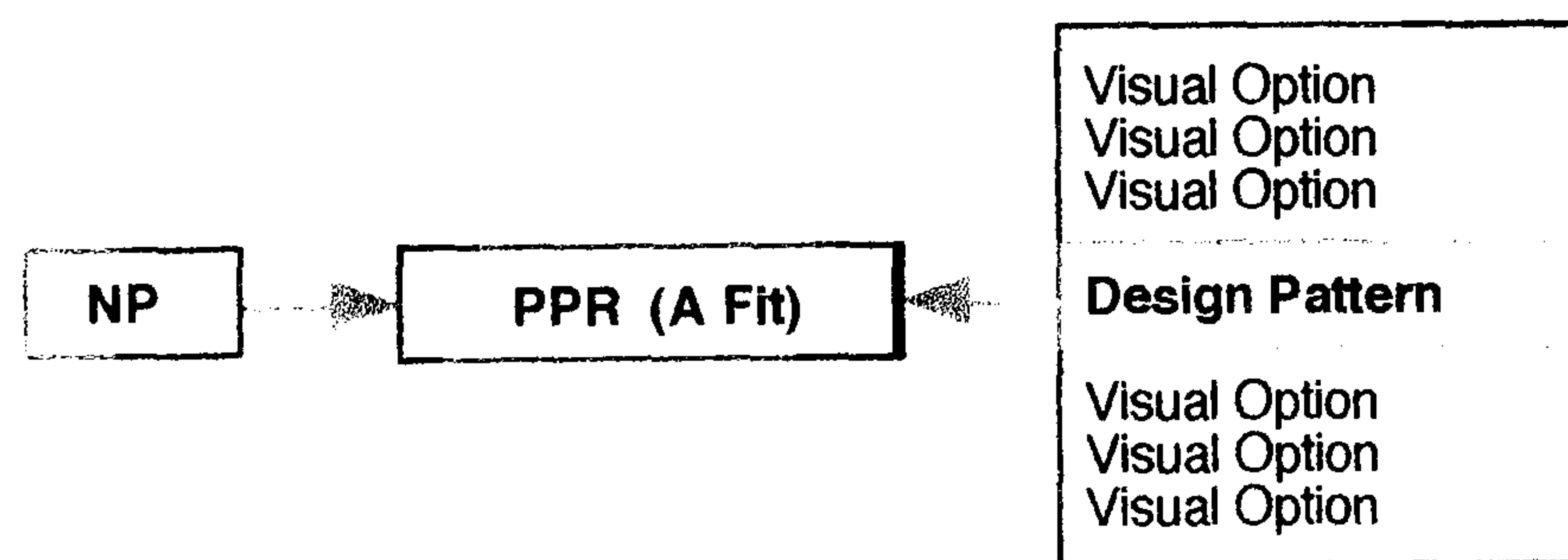


DIAGRAM 6.3: PURPOSIVE PATTERN RECOGNITION ACTIVITY

This study considers the recognition of visual patterns for design projects as purposive and involving factors that emerge from the design context of the projects and their NP. PPR is a selection activity that requires recognition of adaptive visual patterns to start with. In addition, PPR involves recognition of a need pattern (NP) for each project. This study considers pattern recognition (PR) as coexisting with the PPR, and playing an essential part in the PPR activity. The whole of life is full of purposive pattern recognition (PPR). Bruce and Green (1990) state:

An essential part of the behaviour of animals and people is their ability to 'recognise' objects, animals, and people which are important to their survival. People are able to recognise large numbers of other people, the letters of the alphabet, familiar buildings, and so on. Animals may need to recognise landmarks, suitable prey,

potential mates or predators and to behave in the appropriate way to each category.(p. 175)

Recognising something is PR; having a connection between PR and a particular behaviour is PPR. The key thing about PPR is it tells you what to do next. Although patterns, by definition, combine regularities, one of the striking features of patterns is that incomplete patterns can be still recognised. There are well known examples of patterns that exist as little more than a hint. Sentences can be read with the lower half of the letters missing. Tunes can be recognised even when restricted to tapping. People can be recognised by particular patterns of their general outlook, their facial gestures, the way they walk or talk, or by a combination of features. Recognition plays an essential role in PPR activity. Gross (1996) defines recognition:

Recognition is a sensitive form of remembering, whereby something or somebody strike us as familiar without our necessarily being able to name or otherwise identify it. Or we may recognise certain objects or faces as having been 'present' in a test situation when the 'target' items are present with other 'distractor' items (which were not originally present). This is the kind of remembering involved in multiple choice tests- the answers from which you have to choose one can be regarded as retrieval cues.(p281)

Recognition is a way of dealing with both complexity and incomplete data. People 'get a feel' about particular information or needs. The feelings that people get usually are provoked by various types of stimuli. According to psychologists, senses alone provide raw data to the brain, then the brain analyses the information inputs through complex processes. Bruce and Green (1990) say that perception cannot be analysed in terms of its component sensations:

A tune is recognisable despite being played in a different key or at a different speed.
(p. 105).

This study discusses design in terms of 'purposive pattern recognition' (PPR). PPR is a way of describing processes of selecting visual patterns for particular need patterns. PPR is a key activity in the processes of selecting visual patterns for NP. The way purposive pattern recognition (PPR) operates cannot be explained according to physics laws. In other words, quantitative analyses, cause and effect, controlling variables fail to explain how the selection and adaptation of visual patterns take place, because the PPR does not work according to a predetermined pattern. In addition, it involves various interactive processes, activities, factors, and inputs. PPR involves situations that represent levels of uncertainty, and designers handle these situations through exploring possibilities by processes of conjecture and refutation. Therefore, controlling variables can be considered to compromise characteristics of the actual context within which PPR operates. In addition, a cause and effect explanation for the context of PPR, minimises the involvements and interaction of various factors, such as the diversity of thought process, feelings, intuition, vision, insights, imagination,

retrieved information, and the occurrence of new inputs and possibilities while doing things. Edelman (1995) states:

While the real stimulus world certainly obeys the laws of physics, it is not uniquely partitioned into 'objects' and 'events' (Smith and Medin 1981). To survive, an organism must either inherit or create criteria that enable it to partition the world into perceptual categories according to its adaptive needs. Even after the partition occurs as a result of experience, the world remains to some extent an unlabelled place full of novelty (Edelman 1987). (p. 79).

Understanding the selection processes can be obtained from observing how these processes take place and interact with each other within their actual context. Harré Gillett (1994) pointed out that physics laws failed to explain animals behaviour when the animals were isolated from their normal environment, and when selected variables were considered the only principles of perception. They say:

The preoccupation was with mathematical laws linking simple patterns of stimulation to detectable overt movements, and anything that introduced complications (such as instinctive behaviour, physiological mechanisms influencing drive structure, response selection, or perceptual capabilities) was discarded as interfering with the scientific thrust of psychology. Ironically, at about the same time, the biology of animal behaviour was undergoing a remarkable and permanent revolution at the hand of Lorenz, Tinbergen, and von Frisch, who abandoned the laboratory for the study of the whole lives of animals in their natural surroundings... (pp. 3-4).

It was evident that every selection act involved competing alternatives that had competing qualities. During the process of generating design patterns unpredictable variations of patterns took place and the designers selected from them the better ones. The designers explained in various ways that while exploring their design ideas new ideas took place. Langrish (1998) explains the concept 'unfolding' from the physics perspective and compares it with the biological perspective,

From the P (physics) view, evolution is 'unfolding' but biological evolution is not a gradual unfolding of a predetermined pattern. The growth of an embryo or the growth of an oak tree from an acorn are examples of 'unfolding' or development. Confusing unfolding which is predictable with Darwinian change which is not, is a mistake made mainly by physicists who tend to believe that everything in principle is predictable. (p. 2).

The concept of how the human mind selects information is discussed in psychological studies. The theories of the 'intelligent filter' by Daniel Goleman (1985) and the 'selective filter' by Donald Broadbent (1958) do not offer explanation for the selection of visual patterns in the sense that selection stands for in this study. On the other hand, it was found that recent studies on the human brain and its function and structure have discovered that the nervous system in the brain operates purposive selection activities. According to G. Edelman (1995), this proposal is based on two main sets of observation: 1) Individual nervous systems of vertebrate species, 2) the world of stimuli encountered by a newborn animal cannot be described adequately as pre-existing. This purposive selectional system is called "Theory of neuronal group selection (TNGS)". This theory was first developed by Edelman in 1978, and its

recent progress is discussed by Edelman. The discussion of PPR in this study finds supports in the scientific explanations of how the brain selects information according to (TNGS). Edelman (1995) states:

..., we consider that the brain is a selectional system (Edelman 1978, 1987, 1989, 1992), in which selection operates upon variation in somatic time, i.e. during the life time of an individual. (p. 78).

Edelman (1995) explains:

..., the theory propose that selection through differential synaptic amplification is constrained by the action of evolutionarily derived value systems. Key examples of value systems are neuromodulatory systems endowed with diffuse projections that signal the occurrence of events having possible adaptive value for the organism as a whole.(p. 80).

Edelman (1995) explains that the selection does not operate according to programs, sets of instructions, or teachers explicitly controlling synaptic changes in neuronal systems. He explains:

There are , however, structures or constraints in the phenotype that reflect prior evolutionary selection for what we have called 'values'... Certain specialized structures in the brain, for example the cholinergic and aminergic neuromodulatory systems, seem particularly well suited to serve as value systems... According to the TNGS, value-dependent learning is essential in the selection of adaptive behaviours in somatic time. (p. 85).

PPR is more than just 'recognition'; it provides a purpose, and a sense of knowledge of what to do next. In other words, PPR is concerned with how to get, for example, from 'A' (a state of need) to 'Z' (a state of meeting the need) for a project. When the designer at stage 'A' the state 'Z' is not recognised yet, but the designers start to recognise various possibilities. These possibilities are vague, fuzzy visual patterns. PPR between these two states involves processes of selecting and finding ways for matching visual patterns with NP. During these processes some patterns emerge and some disappear depending on how the actions and their results interact and feed to each other. In addition, the emergent patterns are not predictable from their prime components. According to Langrish (1997),

Biology has 'emergent' properties. For example: get enough trees, the properties of a forest emerge. A forest depends on trees; it is not predictable from trees." (Lecture on Biological approach as a research method, DMU)

The designers may or may not have some ideas about how to get to 'Z'. In either case, the designers explore various possibilities some of which are discarded, and some are initially selected and evaluated in terms of their quality and how they are going to work. During these processes the designers get constant feedback and inputs from various sources. In addition, these processes involve intuition and trial and errors activities, use of design skills, and producing visual marks until the match between visual patterns and NP is achieved. PPR involves situations within which various

approaches and selection possibilities take place, and it is not restricted to one type of situation. In addition, designers put plans about how they were going to use their allocated time for satisfying the NP of their projects, and they worked within the framework of the suggested marketing strategies and constraints of the contexts of the NP of their projects. The ways the designers handled these strategies depended on how the designers satisfied them. In other words, they did not explain the selection processes, but the outcome of the selection processes had to satisfy them. PPR involves crafting activities and ways of doing things. The selection activities were interactive with how designers approached their projects, how they expressed the patterns of their ideas in design patterns, and how the design pattern feedback the initial ideas. Langrish (1998) states that ways of doing things involve 'finger tip' knowledge' which can only be obtained by doing. He argues that once we have different ideas of doing things, we have ideas of 'success' and 'betterness'. He says:

Knowing how to do something often involves 'finger tip' knowledge which can only be obtained through doing. You cannot tell someone how to ride a bicycle, when the clay for a pot feels right, how to play the piano or how to knap a flint. You can write down the recipe for a cake but this will assume some shared practical knowledge. Once we have different ways of doing different kinds of things, we have ideas of success and betterness. Some things and some ways are 'better' than alternatives. (p. 9).

PPR activity may occur simultaneously with the pattern recognition (PR) activity or after the PR take place. Also, the PPR may deal with recognised information that are not looked for in particular. For example, students tackling a maths problem will struggle until they see 'the pattern' of the problem. Either simultaneously or soon after the pattern recognition (PR) will become PPR when the 'pattern' of the problem tells the maths student what to do. It may not work: they may be forced to look for another pattern. PPR is a fit between the visual pattern (VP) and the need pattern (NP). The term 'fit' is considered to be useful for describing the completion of the selection activities in satisfying the need pattern of a project. The fit between the visual pattern and the NP is purposive in the sense that it includes knowing what to do next and what works and does not work. Sometimes this may be subjecting the visual pattern to further changes which can be called adaptation. The fit between the NP of a project and a visual pattern is sometimes the outcome of a long process during which the visual pattern changes until the fit is considered to be satisfactory. The selection activity PPR operates for each project within a certain context and under certain constraints. Both adaptation and PPR mean a 'fit'. This study claims that the recognition of visual patterns for certain need is purposive.

The author hopes she has been able to explain PPR and to demonstrate that this concept is grounded in the results of a lengthy piece of research. The final comment is taken from one of the designers who were asked what they themselves thought of PPR (See APPENDIX: IX). Paul Davies responded: "I never realised pattern recognition was

so complex! “ Paul Davies was afterwards contacted by telephone and was questioned whether he had further comments. He said:

I agree completely. Actually it is fascinating. It is just that I did not think of it this way before. But come to think of it now, I think this is what I do.

This quote shows that for at least one person, an ‘addition to knowledge’ has been made.

6.9 Suggestions for further research

1) The ‘Click Factor’

The key event in the suggested process of selecting and adapting visual material is the ‘Click’ that happens in the mind when PPR takes place. It should be possible to investigate this event in some detail to: 1) gain evidence that some identifiable event does actually take place, and 2) to find out more about it. This might be done by asking designers to keep diaries during the initial stages of the design process. In addition, it should be possible to find out how PPR takes place during the verbal discussions between members of the design team and the PO.

2) Other areas of design

To investigate the PPR as a ‘click’ factor in other areas of design may provide more details about the events within which PPR takes place.

3) Application to Memetics

Some of the terminology developed in this thesis has evolutionary implications. Terms like ‘selection’ and ‘adaptation’ are clearly borrowed from evolutionary biology. Design is not genetic. It may, however, be memetic. Since Dawkins (1976) defined the meme as a unit of imitation, there has been a slow but steady growth of interest in ‘idea replicators’ or units of imitation. Langrish (1999) claims:

Memetics has got stuck with the idea that memes are units of something - of culture-of imitation - of infection, etc. In fact, Memetics is crying out for the idea that memes are patterns. Pattern recognition is such a fundamental activity that we take it for granted.

Putting PPR in a memetic evolutionary framework is the next step which could lead to evolutionary theories of all types of design.

APPENDICES

**APPENDIX I: EXAMPLES OF EXCHANGED LETTERS BETWEEN
THE RESEARCHER AND THE DESIGNERS**

• **THE COVERING LETTER**

Visual Sources Of Information
For Graphic Communication Design

This investigation is a partial requirement for an academic research in information design for degree of PhD. It will be submitted to the School of Design and Manufacture, De Montfort University, Leicester, UK.

The topic of this investigation is concerned with the visual sources of information used by designers when they create designs for particular projects in design mini-case studies.

The investigation will cover the following issues:

- 1- Demographic information concerning the respondent and the design organisation
- 2- Project initiation and design process
- 3- Nature and sources of visual information
- 4- Activities prior to form-making of visual imagery
- 5- Visual imagery
- 6- Feedback and references
- 7- Techniques, skills, and production
- 8- Communication objective and the audience

The investigation aims to answer the question of how information designers select, adapt, and use visual sources when they create their visual imagery for their own communication objectives.

Furthermore, the investigation will discuss the techniques and skills required for creating the visual imagery, and special elements, conditions, feedback, and references which are involved in the process.

EXAMPLE OF THE RESEARCHER'S LETTER TO DESIGNERS

Maria Abu-Risha

Lawrence Kershaw Hall of Residence
Room 1.13
85 Jarrow Street
Leicester, LE2 7EP

Mr. Clive Colledge

General Director
THE MERCHANTS GROUP
Southgate House,
Buckinghamshire MK9 3BN

13 Dec 1995

Dear Mr. Clive Colledge,

Thank you very much for offering me the opportunity to meet with your graphic design staff in the 22 of January 1996.

Referring to our talk last Thursday at the School of Design and Manufacture, De Montfort University, Leicester. I am pleased the design unit at your company might be a possible case study for my Ph.D research in information design.

As promised, a short statement about my research topic is enclosed.

I would greatly value a brief discussion with you next week when I visit on the date and time you choose. If you would arrange a few details of your company to be sent to me it will help me prepare my questions.

I take this opportunity to thank you in advance and I look forward to meeting you again.

Yours Sincerely

Maria Abu-Risha

Maria Abu-Risha
Design Researcher
School of Design and Manufacture
De Montfort University
Leicester, UK.

• EXAMPLE OF THE DESIGNERS' LETTERS OF ACCEPTANCE TO PARTICIPATE

Pile Probert Kelly

Consultants in Design

Reference: L-SP/MR.18000.1804

Maria Abu-Risha
Design Researcher
c/o Tom Cassidy
School of Design & Manufacture
Fletcher Building City Campus
De Montfort University
The Gateway
Leicester LE1 9BH

18th April 1996

Dear Ms Abu-Risha

Thank you for your letter dated 10th April 1996 regarding your research project.

I would be grateful if you could contact my assistant, Lottie to arrange a convenient time for you to come into our offices.

I look forward to hearing from you.

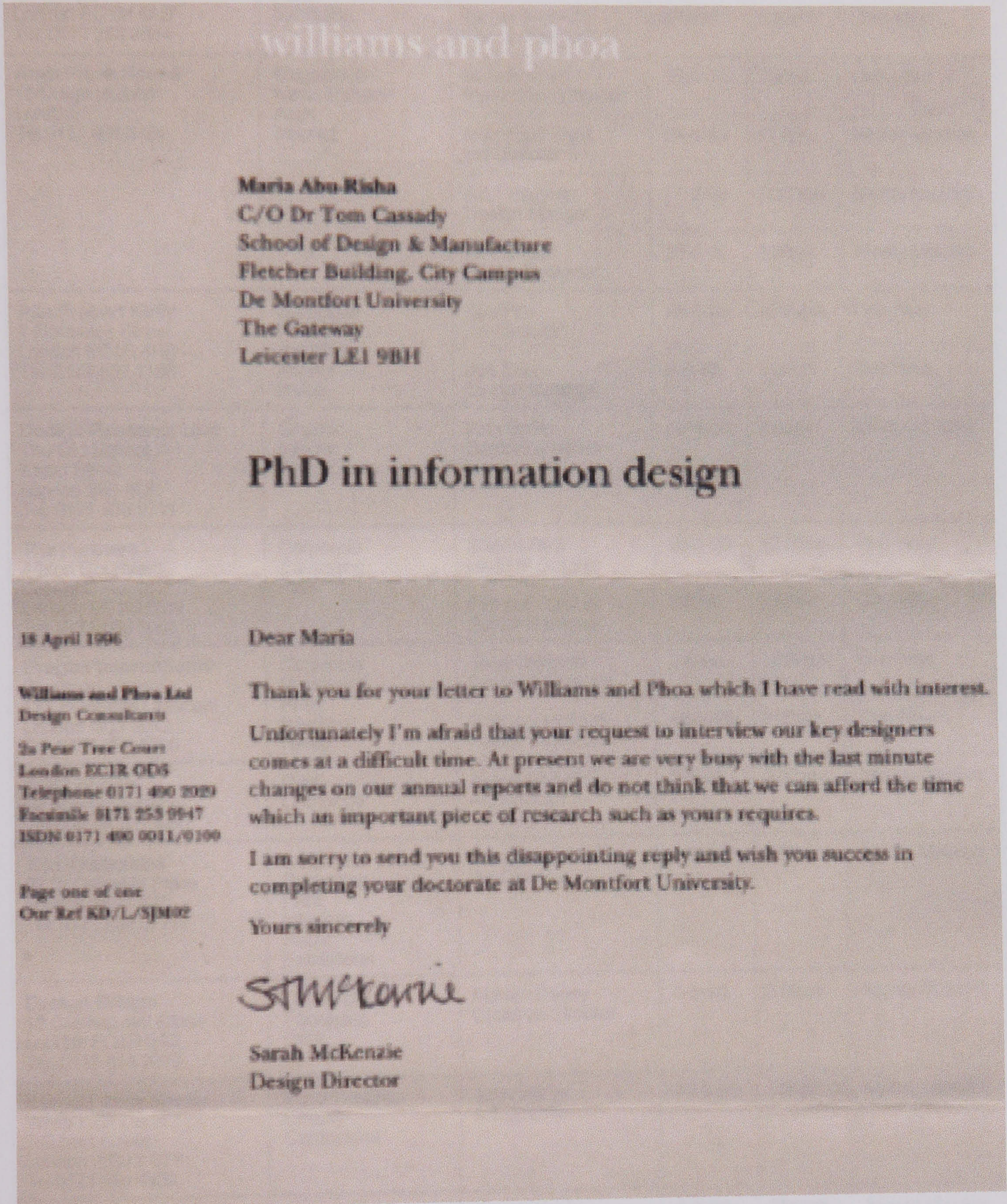
Yours sincerely



Sue Pile
Director

APPENDIX I: INTERVIEW SCHEDULES, INTERVIEWS WITH DR. TOM CASSADY

- An example of letters of apologies



APPENDIX II: INTERVIEW SCHEDULES (INTERVIEWS WITH DESIGNERS)

Design Consultancy & Address	Design Disciplines	Interviewee & Job Title	Date	Time	Length of interview
Butler Cornfield Dedman 101 St John Street Smithfield London EC1M 4AS Tel: 0171 253 2334	Corporate Packaging Print Exhibition	Paul Butler Art Director	24-4-96	2:30pm	Three Hours
		Temm Brennan Senior Designer	9-5-96	2:30pm	One Hour
Arab Press House 184 High Holborn London Tel:0171 831 8181	Magazines News Papers Adds Internet	M.A.I.Ahmadi Publication Director	25-4-96	1:30pm	One Hour
		Mahmoud Kahil Art Director	25-4-96	4:00pm	Ninety Minutes
		Adel Nouman Design Manger	26-2-96	11:30am	Ninety Minutes
		Ali Osman Senior Designer	29-2-96	3:30pm	Ninety Minutes
Pile Probert Kelly 1 Hardwick Street London EC1R 4RB Tel: 0171 837 1198	Corporate Print Exhibition Interior Retail	Sue Pile Art Director	26-4-96	12:00pm	One Hour
		Jon Ellery Design Manager	9-5-96	2:00pm	One Hour
Design Research Unit The Old School Exton Street London SE1 8UE Tel: 0171 633 9711	Graphic Interior Architecture	Finn Butler Senior Designer	29-4-96	4:30pm	Ninety Minutes
The Partners Albion Courtyard Greenhill Rents London EC1M 6BN Tel: 0171 608 0051	Corporate Packaging Print	Shawn Dew Head of Graphic	29-4-96	12:00am	One Hour
		Richard Jonson Senior Designer	8-8-96	9:30am	One Hour
Dragon International Blenheim House 137 Blenheim Crescent London W11 2EQ Tel: 0171 229 6090	Corporate Packaging Print Interiors Retail	Greg Vallance Creative Director	2-5-96	12:00am	One Hour
		William Redford Senior Designer	16-5-96	3:00pm	One Hour
CGI London 19 Shorts Gardens London WC2H 9AU	Print Corporate	Simon Shaw Art Director	2-5-96	2:00 pm	Ninety Minutes
Din Associates 32 St Oswalds Place London SE11 5JE Tel: 0171 582 0777	Corporate Packaging Print Interiors Retail Exhibitions	Valerie Wickes Art Director	2-5-96	4:30pm	Ninety Minutes
Design Bridge 18 Clerkenwell Close London EC1R 0AA Tel: 0171 814 9922	Corporate Packaging Print	Marian Dalley Creative Director	8-5-96	3:00pm	Ninety Minutes
Burnett Associates White Lion Court 7 Garret Street London EC1Y 0TY Tel:0171 490 4939	Fund-Raising Charity Campaigns	John Harvy Art Director	13-5-96	5:00pm	Ninety Minutes
Sears Davies Unit A 25 Copperfield St. London SE1 0EN Tel: 0171 633 0939	Corporate Print	Stuart Webber Art Director	8-5-96	10:00am	Ninety Minutes
Interbrand 40 Long Acre Covent Gardens London WC2E 9JT Tel: 0171 240 4040	Corporate Packaging Print Exhibition	Ged Equi Senior Designer & Project Director	13-5-96	10:00am	Two Hours

Design Consultancy & Address	Design Disciplines	Interviewee & Job Title	Date	Time	Length of interview
Crabtree Hall Plan Creative 70 Crabtree Lane London SW6 6LT Tel: 0171 381 8755	Corporate Packaging Print Interiors Retail	David Mecwy Creative Director	13-5-96	4:30pm	Ninety Minutes
CDT Design Ltd 21 Brownlow Mews London WC1N 2LA Tel: 0171 242 0992	Corporate Packaging Print	Ian Crockett Creative Director	14-5-96	1:45 pm	One Hour
Sampson Tyrell 6 Mercer Street London WC2H 9QA Tel: 0171 379 7124	Corporate Print Interiors Retail	Peter Widdup Art Director	14-5-96	4:00pm	One Hour
Wagstaffs Crown Reach 147a Grosvenor Road London SW1V 3JY Tel: 0171 834 0534	Corporate Packaging Print	Stuart Jeal Art Director	15-5-96	12:00 am	Ninety Minute
Tango Design 14-16 Great Pulteney Street London W1 Tel: 0171 439 7007	Corporate	Ian Cockborn Creative Director	15-5-96	4:00pm	One Hour
Mercury 20 Gainsford Street London SE1 2NE Tel: 0171 815 0161	Corporate Print Exhibition Interior Retail	Elaine Searle Art Director	16-5-96	3:30pm	One Hour
		Chandra Prince Senior Designer	16-5-96	4:30pm	One Hour
Ziggurat 20 Chines Street London WC1 7EX Tel: 0171 636 9966	Corporate Packaging	Paul Davise Art Director	16-5-96	6:00pm	Ninety Minutes
Barrow Parkhill Associates 1K Montagu Mews North London W1H 1AJ Tel: 0171 487 5706	Corporate Packaging Print	Peter Barrow Creative Director	23-5-96	12:00am	Ninety Minutes
Friends of The Earth 26-28 Underwood Street London N1 7JQ Tel: 0171 566 1651	Corporate Prints Campaigns	David Caines Art Director	13-2-96	12:00am	Ninety Minutes
Intro 35 Little Russell Street London WC1A 2HH Tel: 0171 637 1231	Corporate Print	Adrian Talbot Senior Designer	23-5-96	4:00pm	Ninety Minutes
Basten Greenhill Andrews 2 Dryden Street London WC2E 9NA Tel: 0171 379 5500	Corporate Prints	Ian Hunderson Art Director	16-5-96	10:00pm	One Hour
.G.D & O Brend 143 Charing Cress Road London WCH 0EE Tel: 0171 287 7000	Corporate Print Exhibition Interior Retail Packaging	Jenny Brend Art Director	30-5-96	10:30am	One Hour
Siebert Head Ltd 38 Hans Crescent Knightsbridge London SW1X 0LZ Tel: 0171 581 3839	Corporate Print Exhibition Interior Retail Packaging	Tony Watts Art Director	30-5-96	3:30pm	Ninety Minutes
Moor Lowenhoff 48 Britton Street London EC1M 5NA Tel: 0171 490 4299	Corporate Packaging Print Retail Interiors Exhibitions	Barry Lowenhoff Art Director	30-5-96	12:30pm	One Hour

Design Consultancy & Address	Design Disciplines	Interviewee & Job Title	Date	Time	Length of Interview
Edward Briscoe Design 182-194 Union Street London SE1 0LH Tel: 0171 928 2344	Corporate Packaging Print Retail Exhibitions	David Spencer Creative Director	3-6-96	10:30am	One Hour
Holms Marchant Group 15/17 Huntsworth Mews London NW1 6DD TEL: 0171 402 2272	Corporate Packaging Print Retail Exhibitions	Deborah Ford Accounts Management (Manger) Lisa Collett Business Development	6-6-96	2:30pm	One Hour
The Merchant Group	Corporate Prints Retail	Clive Colledge Art Director	7-3-96	11:00 am	Ninety Minutes
Wicham	Corporate Industrial Design Prints	Bell Wicham Art Director	3-6-96	5:00 pm	One Hour
4i Design	Corporate Prints	Alex Quero Art Director	24-2-96	2:00 pm	One Hour
Michael Bronfield Associates (BHB)	Corporate Interior Design	Michael Bronfield Art Director	3-6-96	2:00 pm	One Hour

APPENDIX III: FIRST SHEET OF EACH LIST OF INTERVIEW QUESTION

- **First sheet of each list of question:
'Interviews with designers'**

*Visual Sources of Information for
Designs in Design Mini-Case Studies*

Research Stage : Interviews with designers

Name of Design Consultancy:

Name of Organisation:

Address:

Interviewee:

Art Director:

Senior Designer:

Others:

Address:

Interviewer:

Researcher: Maria Abu-Risha

Address of interviewer:

Maria Abu-Risha

c/o Dr. Tom Cassidy

School of Design & Manufacture

De Montfort University

The Gateway

Leicester LE1 9BH . UK.

Interview schedule:

Semi-Structured questions

Schedule number:

42

Call record:

Reason for no interview: (specify)

Date:

Time:

Length of interview:

Call on which interview was obtained: 1 2 3 4 (circle as appropriate)

- **First sheet of the list of questions:
Mini-case studies**

*Visual Sources of Information for Designs in
Design Mini-Case Studies*

Research Stage : **Mini-Case Studies**

Name of Design Consultancy:

Name of the Organisation:

Address:

Interviewee:

Art Director:

Senior Designer:

Others:

Address:

Interviewer:

Researcher: **Maria Abu-Risha**

Address of interviewer:

Maria Abu-Risha

c/o Dr. Tom Cassidy

School of Design & Manufacture

De Montfort University

The Gateway

Leicester LE1 9BH . UK.

Interview schedule:

Semi-Structured /Structured questions

Schedule number:

25

Call record:

Reason for no interview: (specify)

Date:

Time:

Length of interview:

Call on which interview was obtained: 1 2 3 4 (circle as appropriate)

Appendix IV: Examples of letters from designers concerning
the correction of the text of interviews



Maria Abu-Risha
c/o Dr. Tom Cassidy
School of Design & Manufacture
Fletcher Building
The Gateway
De Montford University
Leicester LE1 9BH

13/12/96

Dear Maria,

Thank you for sending me a copy of your research document regarding visual sources of information for imagery in Graphic / Information Design Case Studies. I have made quite a few changes as you will see - I hope it won't take too long for you to make the corrections.

Kind regards.

Yours faithfully

A handwritten signature in cursive script that reads "Paul Davies".

Paul Davies
Design Director.

Pile Probert Kelly

Consultants In Design

Reference L-SP/MAR.18000.121296

Maria Abu-Risha
 Design Researcher
 c/o Dr Tom Cassady
 School of Design & Manufacture
 De Montford University
 The Gateway
 LEICESTER
 LE1 9BH

12th December 1996

Dear Maria

**Re: Visual Sources for Information for Imagery in
 Information Design Case Studies**

I have read the attached and am happy for you to make use of it, although I made a few amends to the last section which I hope will make the transcript clearer.

I would be happy to meet with you in the New Year to discuss a case study. If you call my secretary Red she will be able to arrange this.

Jon Ellery has since left the company and I will send him his questions and ask him to contact you directly.

Yours sincerely

Sue Pile
 Creative Director

Encls.

APPENDIX V: THE INTERVIEW QUESTIONS FOR THE INTERVIEW WITH DESIGNERS

- Q.1 Who gives you the information about what is needed to be designed?
- Q.2 How is the information given to you ?
- Q.3 What are the contents of the information you are usually given in order to design specific design?
- Q.4 would you mind showing me a brief of what is needed to be done, or any form that specify certain information about what it should be done?
- Q.5 Who defines the need and how?
- Q.6 How many parties are involved in the process at this stage?
- Q.7 Who decides the communication objectives for the message and with what kind of consideration?
- Q.8 Who decides the design discipline for the project?
- Q.9 Who decides the target audience?
- Q.10 When you get the brief for specific need what do you do next?
- Q.11 How do you convert the verbal or written information into visual information?
- Q.12 How do you gather and select your visual sources?
- Q.13 According to what do you choose your visual sources as a designer?
- Q.14 What is the nature of your original visual sources?
- Q.15 After you get your visual sources how do you adapt them to meet the need?
- Q.16 What are the design aspects that you concentrate on when you design?
- Q.17 How do you use the design elements and principle in your design?
- Q.18 Where do you put more emphasis and how?
- Q.19 What type of feedback do you get through the design process and from where?
- Q.20 In how many stages would you divide the design process?
- Q.21 Which stage of the design process is the most important one in your opinion?
- Q.22 What are the most unique aspects in your design that make your design look different from other designers' in your view?
- Q.23 How do you relate your visual concept when you create a design to the target audience?
- Q.24 How much do you depend on your visual sources when you design?
- Q.25 Do you change the original visual source you are using, and how?
- Q.26 How many designers work on one project?
- Q.27 How does the subject matter contribute or doesn't contribute to the advantages when you are designing?
- Q.28 How does the prospective audience change or does change the course of your creation of specific design when you are designing?
- Q.29 What techniques do you use when you design?
- Q.30 What are the effects of the technique you use on your design, and why?
- Q.31 Does the technique you use add visual quality to the final design, and how?
- Q.32 How much do you depend on traditional techniques?
- Q.33 How much do you depend on the computer in percentage?
- Q.34 Do you use other technology besides computers?
- Q.35 How have things changed with new technologies?
- Q.36 How do you adapt use of the new technology to your objectives?
- Q.37 How many stages does the form making take before you have a final design?
- Q.38 How much do you rely on the headline and the text when you design?
- Q.39 How does the artistic material you use for your design play a part in shaping the specific communication objectives you aim to achieve?
- Q.40 How do you cope with complexity as a designer?
- Q.41 In what way are some design problems are more complicated than other ones?
- Q.42 What are the interrelated obstacles to solving design problems?

Appendix VI: THE INTERVIEW QUESTIONS FOR THE MINI-CASE STUDIES

- Q.1 Would you please select one design project that you have done for a particular client and give specific information about the following:
- The client of this project:
 - The client's address:
 - Project title:
 - dates of project. From: To:
 - Budget:
 - Please mention the place and the average size of the market of this project
- Q.2 What was the client's main area of business activity ?
- Q.3 Who was the target audience of this design project ?
- Q.4 What the client said he/she needed concerning this project?
- Q.5 What were the elements of the design brief for this design project ?
- Q.6 What were the communication objectives of this design project ?
- Q.7 How did you gather your information about this design project ?
- Q.8 How did you gather your visual sources for this design project ?
- Q.9 Would you please explain how did you start designing this project?
- Q.10 How did you relate the visual information you selected to your own ideas when you designed this project?
- Q.11 Would you please explain why did you use your visual sources and information in this particular manner?
- Q.12 Would you please explain what was the design idea of this design and how did you achieve it?
- Q.13 Would you please explain the relationships between your ideas, mental images, and the theme of this design and how did you use the visual sources accordingly?
- Q.14 How did each of the following elements influenced your choices when you selected and used your particular visual information for this particular design:
- a. The client's real need.
 - b. The target audience.
 - d. The client's competitors.
 - e. The designers' competitors
 - f. The market situation.
 - g. Others.
- Q.15 Would you please give your own classification of the visual sources and information you selected adapted and used for this project?
- Q.16 Would you please give your own classification of the imagery of your design?
- Q.17 Do you believe that the design you have created communicated the intended message directly or indirectly? How and why?
- Q.18 In your opinion, what are the psychological elements that you displayed in this design?
- Q.19 Would you please explain the techniques you used when you created this design?
- Q.20 Would you please explain how medium of the visual sources played part when you selected, adapted and used your visual information for this design?
- Q.21 Would you please describe what the term 'visual source' means to you?
- Q.22 Would you please describe what the term 'creative design' means to you?
- Q.23 How did the following elements influence your design choices and your processes of selecting visual sources?
- a. your design educational background. If yes how?
 - b. your design experience. If yes how?
 - c. the technology you used. If yes how

-
- d. your design ideas. If yes how?
 - e. your design skills. If yes, how?
 - f. your professional background. If yes how?
 - g. the origin of the visual source. If yes how?
- Q.24 What visual impact have the following elements on your choice of the visual sources for this project:
- a. The marketing strategies. If yes how?
 - b. The findings obtained from the marketing research. If yes how?
 - c. The cultural background of the client. If yes how?
 - d. The cultural background of the target audience. If yes how?
 - e. The cultural background of you as a designer. If yes how?
 - f. The economic situation of the client. If yes how?
 - g. The economic situation of the market. If yes how?
 - h. The economic situation of the graphic consultancy. If yes how?
 - i. The usage of the computer. If yes how?
 - k. The usage of advanced technological tools. If yes how?
 - l. The use of technological devices. If yes how?
 - m. The design trends and movements. If yes how?
 - n. Scientific explorations. If yes how?
 - o. The geographic environment of the target audience. If yes how?
 - p. The geographic environment of you as a the designer. If yes how?
 - q. The existing visual communication symbols. If yes how?
 - r. The Historic background of the project. If yes how?
 - s. Others. Please mention and explain. If yes how?
- Q.25 Would you please explain how the media of our time played part when you selected adapted and used the particular visual sources for this project?

APPENDIX VII: DIRECT OBSERVATION

The direct observation method was used in this research as a complementary method. Direct observation sessions were carried out after analysing the raw data of the 'interviews with designers', and during the stage of the mini-case studies. The designers that were observed during the direct observation had not been interviewed previously. However, there were two exceptions: one creative director (Adrian Shaugnassy) was interviewed for the mini-case study (See Section: 4.2) and one senior designer (Adrian Talbot) was interviewed for the 'interviews with designers'. These two designers were observed during two different types of activities: 1) discussing a certain design brief, 2) during design idea generation and graphic exploration. The direct observation projects were different to the ones discussed in the mini-case studies.

- **Aims of the direct observation**

The aims of the direct observation were:

- 1) To identify the designers' visual sources
- 2) To find out the relationship between the designers' visual sources and visual information.
- 3) To describe how designers select, adapt, and use their visual sources when they create particular designs for specific needs.
- 4) To compare the findings obtained from the direct observation with the findings of the 'interviews with designers' and those of the 'mini-case studies'.

- **Methodology**

After contacting the design consultancies and organisations (consultancies and organisations that participated in the 'interviews with designers') by letters and by phone, two design consultancies ('Siebert Head Ltd and 'Intro') and two organisations ('Friends Of The Earth' and 'Saudi Research and Marketing - Arab Press House') agreed to allow the researcher of this investigation to make direct observations. The design consultancies each allowed one day's observation, while the organisations allowed brief observations (one hour each). Other design consultancies (Design Bridge, Ziggurat, Moor Lowenhoff, Design Research Unit, Burnett Associates, Edward Briscoe) during the interviews for the 'mini-case studies' allowed the author of the present study to make general observations such as seeing the in-house libraries, the electronic equipment, the design studios, and some of their previous designs. During some observation sessions, it was possible to make a thorough observation of the

designers' activities, their works, and the design studios. During other observation sessions, it was only possible to watch the designers and their works.

The researcher used the following techniques during the observation sessions: 1) asking questions, 2) tape-recording the designers when conversation was possible, 3) writing notes, 4) drawing sketches of the designers' drawings when possible.

- **First observation session**
- **Design consultancy: (1)**

Name of Design Consultancy:	Siebert Head Ltd
Creative Director:	Tony Watts
Date:	Wednesday, 15 -1 - 1997
Time:	From 10:30 am to 5:30 pm
Length of time spent in observation:	Seven Hours

- **Introduction**

Mr. Tony Watts, the creative director of the design consultancy 'Siebert Head Ltd', introduced the author of this present study to nine designers, and briefly explained to them the nature of her research, the academic purpose of the observation, and that the researcher might need to ask them questions. Mr. Tony Watts briefly explained to the researcher the nature of the projects which the designers were working on, and pointed out that each project was at a different stage. There were four different projects going on during the observation, and all of them were 'packaging' designs for different kinds of food products. The stages were: 1) coming up with design ideas and graphic exploration (chocolate products); 2) at the beginning of the development stage of the design idea (toothpaste); 3) at the end of the development stage of the design idea; 4) at the colour separation stage.

The direct observation began from the moment the researcher entered the design consultancy. It was a friendly environment. Mr. Tony Watts showed the researcher the main offices, meeting rooms, the design studio, and the coffee room. He also showed her their different types of computers, scanners, and printing machines.

- **The use of space and equipment in the design studio:**

The studio was L-shaped (See Figure: 1). All the designers' desks were located beside the walls and the space in the middle was not occupied (See FIGURE 1 IN this APPENDIX) so that designers could move from one desk to another easily. Each designer had a big desk, a computer, and a bookcase. The bookcases and file cabinets were located beside the walls. Other lower bookcases were placed between the desks of the designers so they were able to see each other. On the shelves of the bookcases there

were many books, magazines and design objects and materials, models of packaging products and designs. On the desk of each designer there was a computer and a movable table lamp. Beside each desk there was an open cabinet divided into two spaces and containing different types of drawing papers and materials. On the desk and the shelves there were different types of labelled bottles and cans of particular products.

- **The designers' activities**

There were nine designers, three male and six female, in the studio working on different packaging design products. Each designer was working on a particular project and was at a different stage of the design process. This gave the researcher the opportunity to observe what happened at each stage (despite the different approaches the designers adopted) and was able to compare it later on with the data from the 'interviews with designers' and 'mini-case studies'.

- **Observation: (1)**
- **Designer:** Daphne Hine
- **Design principle:** Packaging
- **The need for the project**

The project was about designing new packaging for existing chocolate products. The client of this project was from a European country. The new designs were of two kinds. One was based on developing the previous designs. The other project involved designing new packaging for a new brand of chocolate.

- **The design process**

The researcher started by asking the first designer (Daphne Hine) the following question: "I would like to have an idea about this project. Have you got all the information you need for this project?" The designer said: "Yes. First thing we get is a worksheet which just outlines what we are doing, and does not include very much details. But all that I need to know is in the other documents that we've got here." She then showed the researcher a file of document materials, and said:

Originally, the clients did a study of the pack and highlighted some of the problems with it and some of the composition strength. So we got a research document to read. That is the brief that the client has written. They are giving their view of what they think; the good points and the down side of their current design packs. It gives us an idea of the products that they would like us to look at because it is a very wide range. So we are narrowing it down. So we look at one chocolate bar, a box, and a container.

Then the designer stated that she was going to come up with some initial ideas.

She said:

Rough sketches to start with and then probably we are going to have a discussion in a couple of days and then start working.

The researcher saw the designer looking at the brand name of the project and then asked the designer: "Are you working on the brand identity or the whole pack?"

The designer said:

Yes, on the brand identity, that is the main part of this particular project. This particular project is an Amarillo of a branding system. The problem is ... the overall image is quite cheap. It is like an appetite appeal. It is dated, and it is not working against its competition. So we do not know what we have to do; it is just a case of coming up with some systems flexible enough to answer all those problems.

Then the researcher asked the designer if she could stand behind her from a convenient distance and observe her. The designer agreed but she said she did not feel comfortable being watched. The researcher assured her that she would watch from a convenient distance and would not interrupt her while drawing.

The client's need was: 1) to upgrade the product, 2) introduce new chocolate products of the same brand, 3) change the design of the previous packs, 4) maintain the brand identity of the product, 5) keep particular colours such as yellow, 6) make the product stand out among its competitors. The designer explained that some colours such as yellow should be kept because it differentiates the product from its competitors. She added that she was going to develop the design of the brand name (the typeface) of the product and the relationships between the existing visual elements. Also she mentioned that she was looking to introduce new visual elements and eliminate some existing elements. She also said that she was going to change the illustrations of the chocolate bars and develop something new.

All the previous packs shared the same brand name, the logo and some visual elements such as particular colours (yellow, white, orange, and light brown). Each pack had a specific physical shape (different shapes of chocolate bars). Also some of the packs were made from hard materials (cardboard), while others were made from soft plastic materials. Some of them took the shape of chocolate bars and some were loose (for a bag). Daphne started by organising the materials on her desk, sat down on her chair, bent down and took a sketching pad from one of her design shelves underneath the left edge of her desk where there were other design materials such as grid papers, different types of drawing pads and papers, tracing papers and some rulers and drawing triangles, and other traditional design equipment. She picked up the previous packs and looked through each of them. She touched the packs as if she was trying to feel their texture while she observed the packs with profound thought (maybe she was thinking which pack to start working on). She picked up three products of different shapes from a box near her desk, looked at them and put them on her desk at the left side of her drawing pad. She moved one of the packs closer to her, then she opened her drawing pad, she touched the surface of the drawing paper as if to make sure that the surface was straight and smooth, then she drew a horizontal

rectangular shape on the left side of the drawing paper. She looked again at one of the packs and started drawing. The initial sketches the designer did are in Figure: Observation (1).

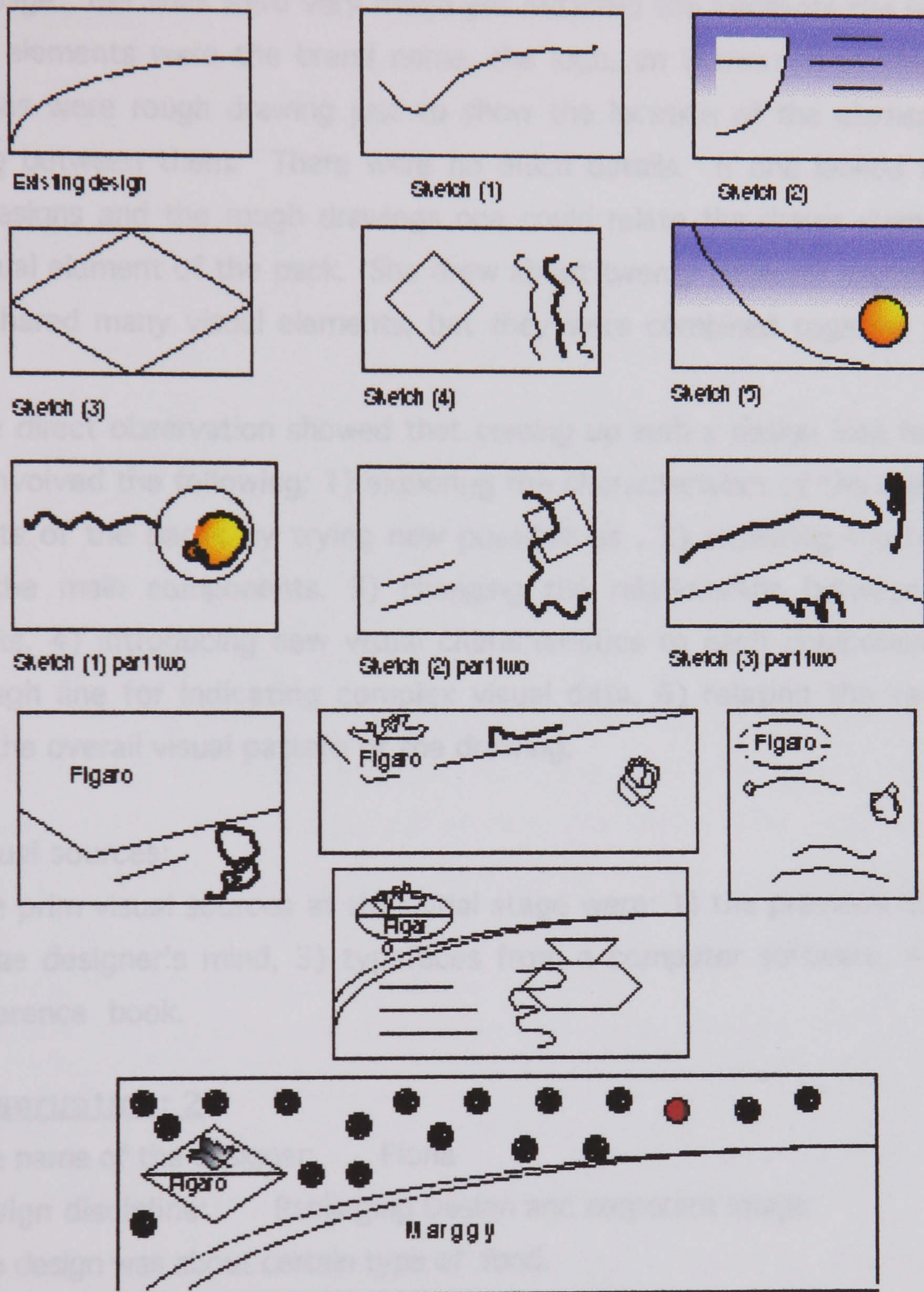


Figure:: Observation (1)

All the time while the designer was drawing she was looking at the existing pack (previous design pack) and thinking (drawing, pausing, and drawing again and so on). She selected the curved line from the existing design. The curved line (white colour) separated the yellow area from the orange area and passed through the design plan from the bottom of the left edge to almost the upper right edge. It seemed that the designer wanted to keep that line but she wanted to put it in different position and give it slightly different shape. Then the designer started the third drawing. She drew a

geometrical shape within a horizontal rectangular shape. She tried various possibilities of the shape of the white line. She started putting some rough shades over some of the areas she created. She took a pause thinking, then she started drawing on a new page. Her lines were very rough yet depicted the elements she was drawing. The visual elements were the brand name, the logo, an illustration of the chocolate. Her sketches were rough drawing just to show the location of the elements and the relationship between them. There were no much details. If one looked at both the previous designs and the rough drawings one could relate the drawn elements to the original visual element of the pack. She drew about twenty different sketches. All the sketches shared many visual elements, but they were combined together in different ways.

The direct observation showed that coming up with a design idea for upgrading the pack involved the following: 1) exploring the characteristics of the previous visual components of the packs by trying new possibilities, 2) exploring the relationships between the main components. 3) changing the relationships between the visual components, 4) introducing new visual characteristics to each component, 5) using simple rough line for indicating complex visual data, 6) relating the various visual inputs to the overall visual pattern of the drawing.

- **Visual sources:**

The prim visual sources at the initial stage were: 1) the previous design packs. 2) from the designer's mind, 3) typefaces from a computer software, 4) typefaces from a reference book.

- **Observation: 2**

- The name of the designer: Fiona
 - Design discipline: Packaging Design and corporate image
- The design was about certain type of food.

- **The need for the project**

To design a number of various chocolate packs for particular brand name for one of the European country.

- **The design process**

The designer was working on the computer screen directly. There was a design format on the screen similar to a design rough on the designer's desk. The composition of the rough design idea was a combination of two techniques: hand drawing and collage of printed pictures. The designer said while she was showing the researcher the

selected design option:

I started this project by drawing initial design ideas on small scale formats. I tried many possibilities, then we chose this particular one. After that I started developing the idea we selected by refining the visual elements and the composition. After that I cut visual clips and pictures from magazines. The clips were a picture of an apple, a dish of cornflakes, a cup of milk, a sky with some white clouds, and a picture of the sun. I drew the actual format I needed for the project. Then I glued the clips of an apple and the other pictures in the same locations of that on my sketch. Then I drew a sky background using marker pens. Also, I changed the colour of the visual clips by using marker pens on their top.

The designer stated that the client of this project saw the sketch and liked it and that he made some suggestions concerning developing the visual shape of the brand name. The designer scanned a picture of sky and used it for the background of the design. She explained that she wanted to give the feel of the background and that the sky was going to be changed at the artwork stage. She said they think to ask an illustrator to use airbrush technique to draw a feel of a sky in the background and not a photo of the sky. She added that she still needed to develop the shape of the brand name to a shape similar to a particular brand name of one of the competitor. She mentioned that the client of this project liked the feel of a brand name of a competing pack. She explained that she was not going to imitate it exactly but she will try to capture the visual feel of it. Also she mentioned that she had to add more visual elements, and to develop the look of the apple and the cup of milk. She added: "The illustrator will do it and give it the required visual style." She said that she did not scanned the sketch she showed the client, and that she used it as a reference only. She explained how she started drawing the actual sketch she had on the screen.

The first thing I did was I enlarged a picture of a complete apple and cut the contour of the apple so that I had a shape of an actual apple. Also I enlarged a picture of a cup of milk and cut out its background so that I had only the cup. Then I selected a picture of the sun, a picture of a sky, and dish of cornflakes. Then I started drawing the actual outlines of the visual elements I had by placing the pictures on my design format and then I drew the contour outline of the shape of each visual element.

The designer showed the researcher a large drawing of an apple and she explained that she traced part of the apple into her sketch. She said that cutting out the background around the apple gave her an opportunity to exactly place the part of the apple she wanted it to appear in her design. She explained that using the picture in this way helped her to move the shape of the apple up and down, right and left, and balance it with the other visual elements in her design. The researcher watched the designer doing the same thing with the cup of milk, the dish of the cornflakes, and the sun. After she finished drawing her visual elements she transferred her design onto the computer by scanning. Then she scanned the picture of the apple and saved it in a separate file, then she copied a part of the apple similar to the one on her screen and pasted it on her drawing conformed it with the outline she drew earlier, and so did with

the cup of milk and pasted part of it exactly within the outline of the cup on her drawing. She left her desk for a while then she came back and scanned a picture of a sky with some clouds, copied part of it, and pasted it on the top right of the background of the design on her screen. Also she scanned the brand name of the project and pasted it a little bit below the centre of the design format. Then she copied an image of the sun and pasted it on the top off centre of the design. The designer opened a file full of pictures and drawings and looked through it searching for few minutes then took out of it a black and white photocopy of an outline drawing of two branches of wheat seeds.

The designer looked at the copy for a while then scanned it, and transferred it onto the screen of the computer, then she copied a branch of the wheat seeds and pasted it on her design. Then she started experimenting by moving the branch slightly back and forth from the right edge of the design towards the inside and changed its original direction. Each time she changed the direction a little bit, she paused a little while looking at her design and thinking. Then she went back working on it again. When she looked satisfied with the position of the branch of wheat she started putting more seeds on the branch and drew little branches (did not exist in the original drawing). She drew the little branches coming out from the direction of the main branch and blooming. The branch was drawn on the left side of the design. She pasted another part of another branch on the right side of the design and looked at it for a moment then she changed its size and position. The branch on the right was located at the top right and coming towards the top middle of the design plan. She shook her head as if she did not like it, then she removed it.

At this stage she was only pasting the seeds from the original drawing. She did not draw any seed herself. She only changed sometimes the size and direction of the seeds, and some of the seeds were copied without a change or with only a minor change. But she drew the little branches (the lines which represented the branches). She went back working on the branch on the left side of the design. She changed the position of the branches and the seeds she drew earlier. She kept working on the movement of the branch and the number and directions of the seeds. The branch was stiff in the beginning then it started to gain some liveliness and it bent as if blooming towards the direction of the first letter of the name of the product. The first letter of the brand name was drawn with an exaggerated movement similar to a cartoon drawing. After the branch started to gain life and looked delicate like a real plant, the designer filled the outlined drawn seeds with low light warm green. The designer started to separate the joints of the little branches from the main branch by removing a small part only near the joint. Yet the eye movement of the viewer can complete the missing parts.

The designer continued working on the little branches. It was obvious that she

was considering the other visual elements in the design because she kept looking at them. She said that she needed to go back and work on the brand name because it was not developed enough. She showed the researcher an existing packaging design of another brand of a similar product, and explained that the client liked the way the brand name of that product was drawn, and that he would like something not exactly the same but similar. She said that some of the letters of the brand name still needed to be developed. She said that the first letter of the brand name was the most important one of the letters because it would lead the others.

The obvious similarity of the branches and seeds of wheat with the original drawing disappeared. The designer changed the movement, direction, size, and colours of the visual elements of the subject matter.

- **Visual elements**

The visual elements were: 1) components of particular breakfast food: an apple, cornflakes, a cup of milk, branches of wheat seeds, 2) the brand name, c) background: sky, white clouds, the sun.

- **Visual sources:**

The visual sources: 1) magazines clips, 2) books, 3) the original pack, 4) CD ROM, 5) a design sketch, 6) retrieved visual sources (imagination, memory, mental images), 7) photocopies from books, 8) a reference book on ornamentation.

- **Adaptation:**

The designer kept selecting and adapting visual elements and visual information while she was developing her design. During the adaptation processes, the designer kept going back and forth between the various visual elements of the design and in her visual sources. The designer adapted the visual patterns in the following ways: 1) integration, 2) change, 3) addition, 3) combining, 4) elimination, 5) adjustment, 5) extinction.

The designer changed the colours, shapes, and characteristics of the following: the apple, the sky, the cup, the image of cornflakes. The designers enhanced the shape and colour of the apple to make it look fresh and more agreeable. She added a deeper blue tints to the sky and made gradations. She kept enhancing the visual quality of the sky and the clouds. She changed slightly the shape of the image of the cornflakes and its position within the framework of the design. Also the colour of the cup was changed. The designers rearranged the relationship between the seeds of wheats and the branches. She did that by removing the seed from its original position (as was in the original visual source) and kept moving the seeds while working on the other elements. The designer used during these processes the software program: 'Illustrator'. The

designer eliminated parts of the clouds.

- **Observation (3)**

One of the designers scanned a photo that was going to be used for a design project for a toothpaste product. The woman in the photo was smiling so that her teeth were seen. The designer and the design team selected a particular photo from twelve alternative photos. They selected the photo that showed the most beautiful smile. The designer said to the other designers that the photo required adaptation because one of the teeth of the woman was not as good as her other tooth, and the line between the front two teeth did not look perfect for the design. Also, parts of the skin of the face around the mouth and the chin were not smooth. The designer scanned another photo, and by using the Photoshop program, copied a better part of the skin from the same area (for maintaining the same tints of the skin colour of that area) and pasted it on the undesired part. Then by using tools from the Photoshop she blended the edge of the part she pasted with the skin. Also, by using other Photoshop tools she corrected the line between the teeth, the colour and edges of the teeth, and added brightness to the tooth.

- **Direct observation: The second session**

- **Design consultancy: (2)**

Name of Design Consultancy:	Intro
Creative Director:	Adrian Shaughnessy
Date:	Thursday 17th of January 1997
Time:	From 11:00 pm to 5 pm
Length of time spent in observation:	Six hours

- **Attending a briefing meeting**

The briefing meeting was between the creative director and a senior designer. During the meeting the following activities took place:

1) identifying the project (both had previous knowledge about it), 2) conforming the client's wishes about the requirements as they were mentioned by previous meeting, 3) explaining the previous design brief of the project and pointing out the new points that the client made, 4) discussing the constraints of the need and requirement, 5) discussing the visual constraints and pointing out the poor quality of the visual sources that the client insisted to use.

The project was about a music album for a client from South America. The creative director explained the design brief in details. Then he started talking about

the requirements and constraints. Some of the major constraints were: 1) the clients wanted the photographs that his wife (a photographer) took to be used in the project, 2) the photos were of very bad quality according to both designers (the creative director and the senior designer). Both designers were not happy about the following: 1) the visual composition of each photograph, 2) the quality of each photograph as a whole (technical and visual), 3) the contents of each photograph, 4) the angles from where the photographs were taken, 5) the irrelevant visual information and component of each photograph, 6) the exposure of each photograph, 7) visual the details of each photograph, 8) the problem of out of focus of some photographs, 9) the lack of identity of each photograph (some photographs were not related to particular subject matter, or idea).

The creative director said that they had to find a way to enhance the quality of the photograph. He picked up a photograph showing a narrow street, buildings, and some cars, and said: if we could remove these cars so that the focus will be on the building of the music centre. Then he said: "this street does not look specifically from a city in South America. If we could give it a feel that makes it look more related." Then he addressed the senior designer "what do you think, can we do it?" The senior designer said that it was very hard to enhance the quality without making many changes. The director said they had to do their best to maintain the same composition of the contents, but in the same time enhanced its quality. Then he asked the designer to try to make the photos fade down so undesired details would disappear. The director suggested certain visual elements of the photos that can be enhanced or replaced without making major changes. The senior designer suggested to scan and paste the photos on paper that has a texture so that certain elements would blend with the texture of the paper. He also suggested to eliminate certain visual elements and replace them by more attractive elements. The director agreed and asked the designer if they had visual references about South America. The answer was no, and the director asked the designer to go to a certain book store and buy a book about South America that included historic buildings and people of South America. He added: "if we could take textures from old walls, old wooden gates and using them to enhance the quality of the outer walls in these photos."

Later on the researcher observed the designer while he was working on one of the photographs. He scanned the photo and open pasted in a transparent state on a background that had soft and fading texture. Then he tried various shades of backgrounds and textures by using different types of paper. Each attempt took some time. The designer was not looking at the time at other visual sources except the various types of paper and the photograph. During these attempts the designers used

different textures and different tints of colours. The designer stated that he would like to reduce the ugly details by making them fade back so the client would recognise the photo and at the same time the bad details would disappear. He explained that he was not selecting at that moment certain texture or type of paper. He explained that he was trying various ways to explore various types of feelings. Then he was going to select the best type of paper and texture. He explained that at that stage he was not sure what kind of feeling would work because of the overall bad quality of the photos. He explained that by trying various materials he would be able to discover possibilities.

The researcher observed another designer. He was was creating a design for another music album. The designer explained that he cut out images, and typefaces from magazines and news papers. Then he photographed them. He stated that he reduced and enlarged the images to various sizes. He explained that his design idea was to attract create a composition that fine details as well as obvious details were important and create interest. He explained that by cutting certain parts of the images and paste them in the same design format and then connect them with parts of the same images but from smaller sizes or different degree of details he was able to keep the eye of the viewer busy trying to see more. He stated that he had a general idea in his mind about how he wanted the design to be. He stated that he could not decide the detailed relationship between the various elements unless he tried various possibilities. He explained that he had a feeling about how the design should look like and by trying various possibilities was able to express this feeling visually.

Another designer was working on typefaces for a text for music album. He was trying various type of fonts for different parts of the text. He stated that it was important to distinguish that each chunk of information was about certain things and that he had to make the viewers realise when they look at the design the nature of each type of information. The text included a poem, a background history of the band group and information about the music instruments.

- **Findings form direct observations:**

1) the designers selected various visual sources for their projects from various alternatives, 2) the designers selected specific visual patterns from their visual sources (details of specific information), 3) designers selected from their visual sources visual patterns that were not restricted to certain details (a feel, a mode, a visual style), 2) the designers used mental visual sources.

Observing the designers showed that visual patterns were of different nature:

1) specific details, 2) visual ideas of something, 4) mixture.

The designers adapted their visual patterns by the following processes: 1)

integration, 2) addition, 3) combining, 4) adjustment, 5) change, 6) elimination, 7) extinction. The designers used traditional and modern techniques for adapting their visual patterns.

- **PPR and the selection and adaptation of visual patterns**

The direct observation showed that the selection of visual patterns occurred in various ways: 1) from thought process, 2) by doing, 2) knowing what one was looking for, 3) by processes of conjecture and refutation, 4) from previous experiences (some designers stated that sometimes certain method work will and they tried them again when they needed. The observation showed that the designers recognised the match between the visual patterns and the need by the following: 1) by a process (doing something and see if it worked or not), 2) by selecting visual patterns that were considered appropriate, 3) by comparing the alternative possibilities they had, 4) by exploring possibilities which were guided by a sense of discovery (the designers did not know what the possibilities were unless they tried), 5) by processes of conjecture and refutation (the designers had certain assumptions and tried each one to see which one worked better). From observation, it can be considered that recognising visual pattern for a specific need pattern involved PPR. Also, it was possible to observe that recognising certain visual patterns as desired for the need involved a process of what to do next. Observation showed that PPR involved selecting patterns as well as rejecting patterns that did not work.

APPENDIX VIII: DESIGN TERMS

- **The aims**

The use of certain design terms by designers and by scholars showed different kinds of concerns. Some of these terms were addressed by this study in relation to certain design contexts and activities. The findings from some design conferences, academic studies, and 'interviews with designers' showed that the terms 'information design', 'graphic design' and other terms had controversial meanings. It was thought that it would be useful to investigate and examine the diversity of these terms by the use of postal questionnaires and interviews. The researcher aimed to find out if different results occurred when the terms were addressed directly.

- **Methodology**

A combined approach of postal questionnaires and interviews was adopted to complement the research methods used in this investigation. Twenty-five postal questionnaires were sent to twenty-five academic design researchers and professional designers and professionals who worked in the field of communication design in the UK and abroad. Four questionnaires were completed. One researcher wished to remain anonymous. Three academic researchers were interviewed. The list of forty one questions was the same for both the postal questionnaires and the interviews. Names and professions of the informants and the time schedules for this part of the study are in TABLE (APPENDIX VIII: 1).

Informants	Method	Schedule
Professor Michael Twyman Head Of Department Departments of Typography Reading University Reading	Interview	Date: 10-2-1997 / Time: 11:30 am
Professor Ian McLarn Visiting Professor University Of West England Bristol	Postal Questionnaire	Date: 28 -4- 1997
Professor of Design (he wished to remain anonymous)	Postal Questionnaire	Date: 28-4-1997
Mr. Don Hutson Artist and academic researcher School of Art And Design Education Gateway House De Montfort University Leicester	Interview	Date: 28-4-1997 / Time: 10:00 AM
Mr. Ray Holland Academic design researcher School of Design & Manufacture The Fletcher Building De Montfort University	Interview	Date 28-4-1997 / Time: 2:00 PM
Mr Conrad Taylor Information Design Director Ideography 4 Wyatt Close, Rotherhithe London SE 16 1UL	Postal Questionnaire	Date 29-4-1997
Mr. Rick Webster B.Se., M.I.S.T.C Transmitton BICC Transmitton Smisby Road Asbby de la Zouch Leicestershire LE6 5UG	Postal Questionnaire	Date 28-4-1997

TABLE APPENDIX VIII (1): NAMES AND PROFESSIONS OF INFORMANTS

- **An example of the researcher's letters to the informant.**

Dr. Karel van der Waarde
Boomlaarstraat 211 - bus 2
2500 Lier
Belgium

28 - 4 - 1997

Graphic/ Information Design and Visual Sources of Information

Dear Dr. Waarde,

I am a Doctoral researcher at the School of Design and Manufacture, at De Montfort University in Leicester, UK. The topic of my research is concerned with the visual sources of information used by graphic/ information designers when they create design imagery for particular needs.

I had the pleasure of meeting you during the fifth annual conference of the ISTC in Windsor last year. I would be grateful if you could spare some of your time to answer my questionnaire. The questionnaire mainly addresses academic and professional researchers, professional designers and technical authors who have contributed to both graphic design and information design domains.

Your comments will be of great value and will be acknowledged. Enclosed with this letter is a brief statement about the nature of this investigation and a list of questions.

Please accept my gratitude in advance and I hope to hear from you soon.

Yours sincerely

Maria Abu - Risha
Ph D Design Researcher
School of Design & Manufacture
De Montfort University
The Gateway
Leicester, LE1 9BH
UK

- **The covering letter**

Dear Mr. Taylor,

Various studies show that graphic designers and design writers use terms related to graphic/information design very loosely, and sometimes different meanings are given to the same terms.

The aim of this postal questionnaire is to help achieve a better understanding of how particular terms are used in the field of graphic / information design.

This questionnaire has two parts. Part (1) focuses on terms which are used to identify particular design fields and differentiate them on the basis of their actual academic disciplines and practical functions in the real world. Part (2) focuses on design terms which are used in general by design professionals when they describe particular design elements and activities.

Graphic and information designers, academic design researchers, Professors of design and design students in the UK, USA, and Japan are involved in the survey. Your help will be appreciated and all respondents will receive a summary of the results.

This investigation is a part of a Ph.D study in information design, within the School of Design and Manufacture, De Montfort University, Leicester, UK.

Sincerely yours

Maria Abu-Risha
Design Researcher

- **The questions**

The questions consisted of a forty one terms. Only the first list of terms is discussed here due to the time and size constraints of this research. The questions were:

Please describe the following terms as they mean to you and give three examples of each.

1. Information Design.
2. Graphic design.
3. Communication design.

- **Terms and their meanings (Part One)**

The findings which emerged from this part of the investigation are not discussed in the main body of the thesis. They were considered complementary. Excerpts of the answers of the first part of the questions are presented in the following TABLES. Some of the researchers did not describe some terms.

- **Descriptions of 'Information Design'**

Informants	The Meaning Of The Term Information Design
Michael Twyman	"Oh dear you shouldn't ask me something like that! I mean I have had that for 10 years as an issue and it's not satisfactorily resolved. I don't find it a useful term let me say to start with because any definition that I find reasonably acceptable like design is orientated towards the user, which you will commonly find being a term.... is not really acceptable in a commercial situation in that if you're using a million copies of something you've got to a variety of needs, so it's in a sense arrogant to say that you're directing towards the user because the user represents a multiplicity of ages, intelligence's perceptions and all sorts of things. So I try not to use the term though I believe I know what people mean by it. That's not going to help you very much." (Interview, 1997)
Ray Holland	"Information design is clarifying the communication for the purpose of the role of decision making for user. Important elements in the relation to information design are the understanding of the language of the user and the decision making process within which they find themselves." (Interview, 1997)
Wished to remain Anonymous	"Graphic communication and presentation of information which helps a user of a product or service to do something eg video a programme or read a destination." (Postal questionnaire, 1997)
Don Hutson	"Basically, I think getting across concepts to people in a straightforward, and in a clear way as possible." (Interview, 1997)
Ian McLarrn	"Design of non persuasion visual information." (Postal questionnaire, 1997)
Conrad Taylor	"The careful organisation of words, images and other "signifier" so as to convey information (or a message) to a reader; using a methodology that researches the audience, and ideally also tests intermediate versions of products with a sample group representative of the audience." (Postal questionnaire, 1997)
Rick Webster	"The visual presentation of design." (Postal questionnaire, 1997)

TABLE APPENDIX VIII (2): DESCRIPTIONS OF 'INFORMATION DESIGN'

- Examples of 'information design projects'

Informants	Examples Of Information Design Projects
Michael Twyman	"A real design task. Bus timetables, leaflets that go out with medicaments and I'll be quite deliberately stretching design here by saying something like the dictionary." (Interview, 1997)
Ray Holland	"The information design project that I've been involved with for example would be to design the information requirements for an organisation that are responsible for policy making in education. That was a strategic information design if you like. The overall requirements and how they integrate together. Another perhaps more micro level would be the information design for the preparation for the Master's course which was to convey the Russian.. programme and to explain very clearly the objectives and the manner in which the programme would be carried. There's an information design challenge in that because it was an extremely complex set of issues and thinking and quite a revolutionary thinking behind the way in which the programme was run, so that the information design could help carry the message very clearly. A third one would be the design of an information system complete with all of the information flows documentation and so forth for a clinic at St Bartholomew's Hospital in London, for diabetes which I was part of a team of three people actually designing that system. So it's very systems orientated for me I suppose information design." (Interview, 1997)
Wished to remain Anonymous	"a. Motorway sign system. b. Tax form. c. Video manual." (Postal questionnaire, 1997)
Ian McLarrn	"Timetables, guide books, instruction materials." (Postal questionnaire, 1997)
Conrad Taylor	"a. A membership directory for the information design association. b. A training manual for the GeoNet email host. c. Animated diagram sequences within a training video." (Postal questionnaire, 1997)
Rick Webster	"a. Data sheets. b. User manuals. c. Reference manuals." (Postal questionnaire, 1997)

TABLE APPENDIX VIII (3): EXAMPLES OF INFORMATION DESIGN PROJECTS

- Descriptions of 'Graphic Design'

Informants	The Meaning Of The Term Graphic Design
Professor Michael Twyman	"Again I don't use the term, although it passes my lips I try not to use the term . So I just have to pass on that one." (Interview, 1997)
Ray Holland	"Graphic design is a, I'm not an experienced graphic designer so this probably not an easy thing for me to make a definition but for me graphic design is the way in which the information is represented. The typography, the visual imagery and the way in which the choice of that appropriate medium can convey the message to those who need the message and again I tend to come back because my commercial experience to the fact that most of the people who need the messages are needing them for the purpose of informing decisions. The graphic design that chosen node of graphic design can make an enormous difference to the way in which that message is received and understood." (Interview, 1997)
Wished to remain Anonymous	"All-embracing term for two-dimensional design related to print, photography, illustration and communication." (Postal questionnaire, 1997)
Professor Ian McLarrn	"Design of graphic material in print and audio visual media for entertainment and persuasion." (Postal questionnaire, 1997)
Conrad Taylor	"The organisation of type, images and other graphic elements to produce a visual display with a message - but not necessarily to inform." (Postal questionnaire, 1997)
Rick Webster	"The artistic presentation of items on a page or screen." (Postal questionnaire, 1997)

TABLE APPENDIX VIII (4): DESCRIPTIONS OF GRAPHIC DESIGN

- Examples of Graphic design projects

Informants	Examples Of Graphic Design Projects
Ray Holland	"Well one project that I actually did a paper on would be to convey messages about future planning for big organisations by using lots of visual imagery. That was a project that I got involved with a conference for Goldsmith's College. Other graphic design projects that I've encountered would relate to the design of new type-faces and typography which we have people working on such projects. The design of posters for schools education we designed. That's another quite common area. That's three isn't it. There was a lot of graphic design. There was also a lot of interface I think between the graphic design projects and the multimedia design projects. There's quite a thin line between them. Communication design." (Interview, 1997)
Wished to remain Anonymous	"a. Underground poster. b. CD cover. c. Annual report.." (Postal questionnaire, 1997)
Conrad Taylor	"a. A magazine. b. A poster to advertise an event. c. An advertisement within a publication." (Postal questionnaire, 1997)
Rick Webster	"a. Design of front cover of magazine (eg Communication)." (Postal questionnaire, 1997)
Ilan McLarrn	"Book covers, Book design, Advertisng, Publicity." postal questionnaire, 1997)

TABLE APPENDIX VIII (5): EXAMPLES OF GRAPHIC DESIGN PROJECTS

- Description of 'communication design'

Informants	The Meaning Of The Term Communication Design
Michael Twyman	"Something broader than information design. It tends to mean multimedia, all of them concentrated on the graphic dimension and I suppose if one wants to communication design down it has been used more than a graphic field ... being spoken ... sound messages. Communication design would include all of those... It's not a field that I work in. ..Good graphic design is communication design, no doubt about that. The term is used to fuzzy edges." (Interview, 1997)
Ray Holland	"For me communication design is bigger than information design. Communication design also needs to include an understanding of the mode and media by which the design is communicated, whether you use advanced information technology methods, whether you use basic traditional oral methods and it's a bigger thing. It's a matter of taking all of the elements which will make to inform whether the communication is going to be successful or not.s." (Interview, 1997)
Wished to remain Anonymous	"Broad term to cover still and moving 2D image which sends message or presents information. Ranges from a book to TV commercial." (Postal questionnaire, 1997)
Conrad Taylor	"I have not met this term and I assign no meaning to it. (Postal questionnaire, 1997)
Rick Webster	"The same as information design: visual presentation of design." (Postal questionnaire, 1997)

TABLE APPENDIX VIII (5): DESCRIPTION OF COMMUNICATION DESIGN

- Examples of communication design projects

Informants	The Meaning Of The Term Information Design
Michael Twyman	"I have a very clear view in my own mind. Graphic means stemming from the ancient Greek that something is either drawn or written. Visual is anything if I look out of the window here I see trees and that's all part of visual communication but it's not graphic, so all graphic communication is visual, but some visual communication is not graphic. It's very simple to me." (Interview, 1997)
Ray Holland	Communication design projects. The choice of the best media. For example electronic ... in many senses is a communication design project because they have to understand what's happening in the world market so to speak. They have to chose the right media, usually via the CD-ROM, via the Net whatever. All of these big choices have to be made. It's a very big issue. So electronic magazines to me would be communication design. Corporate communications in a sense... To me that is the essence of communication design because it encompasses the customer and it designs and it looks at the medium, and it looks at the motivation of the people and it looks into the future. (Interview, 1997)
(The Professor wished his name to remain confidential)	"a. Cinema advertising. b. Labour Party posters. c. British Gas leaflets. "(Postal questionnaire, 1997)

TABLE APPENDIX VIII (7): EXAMPLES OF COMMUNICATION DESIGN PROJECTS

- **Findings**
- Terms and their meanings :

The findings showed that most of the examples that were given about the design disciplines were practised by design consultancies and designers (interviews with designers, mini-case studies) who did not call themselves information designers. Most importantly, the controversial nature of assigning labels to fields of design that share many aspects has still to be resolved. Professor Michael Twyman (1997) stated

I don't actually find these sort of things terribly helpful because they're labels. Labels shift their meanings. I use these labels with different types of audiences, like designing. If I'm talking to an information design company I know what they're about and so I tailor my perception to their subject according to the audience. But in another kind of context I wouldn't dream of referring to information design because I know are going to be .. The term is used to fuzzy edges.

APPENDIX IX: TESTING THE PPR CONCEPT

A report composed of 343 words and accompanied by three focused questions was sent to the designers to allow them to confirm or refute the theoretical propositions. The report was supported by a covering letter which indicated the emergence of PPR phenomenon.

The test was sent by mail to the forty designers who participated in both the 'interviews with designers' and the mini-case studies. Only nine designers responded.

- The text of the report

The designers were sent the following text:

Purposive Pattern Recognition (PPR)

It was found that 'purposive pattern recognition' (PPR) is a key activity in the selection of visual inputs. In fact, all visual inputs may be described as visual patterns. Purposive pattern recognition is a mental and a purposeful activity. The selection part of the mind recognises a particular visual pattern as being wanted for a particular need pattern (NP). The designer compares the pattern of need with patterns of competing alternatives until there is a fit between the two.

A particular project context and its constraints go through diverse and complex processes until the need for a particular project is identified and verified. The final outcome of these processes can be referred to as 'pattern of need'.

From a whole world of visual entities designers select particular visual patterns that fit their design need, but this is not a simple process. It incorporates comparison, competition, and adaptation. The designer's visual references offer ranges of visual patterns that may or may not fit the pattern of need. The visual patterns could be unsatisfactory, satisfactory, good, very good, and best. PPR activity enhances the quality of a visual pattern to satisfy the pattern of need of a project. The survival of particular visual patterns varies. The adaptation involved the following processes: 1) addition, 2) combining, 3) elimination, 4) integration, 5) adjusting, 6) change, 7) extinction.

- **The questions of the test**

The three focused questions of the test were:

Q.1 Do you understand it?

Q.2 Does it fit your own idea of what happens?

Q.3 Do you have any comments?

- **The designers' responses**

The designers' responses to the first question 'Do you understand it?' varied. Six designers understood the given description of PPR and its role in the processes of selecting visual patterns. Their responses were: "Yes". Two designer claimed that they did not understand it , and their answers were: "NO".

The designers' responses to the second question 'Does it fit your own idea of what happens?' varied. Two designers, Peter Widdup (1997), the art director of Sampson Tyrell, said: "NO", and John Harvey (1997), the art director of Burnett, left it blank. The other seven designers respond "Yes", but their explanations varied. One designer stated: "Possibly, but this is very generalised." Two designers gave a conditional confirmation of what happened during the processes of selecting visual patterns. According to Adrian Talbot (1997), a senior designer and a project director at Intro, "Broadly speaking yes." Also, Mr Simon Shew (1997), an art director at CGI London, stated: " Yes, to a degree." Mr Paul Butler (1997), the art director of Butler Cornfield Dedman, stated: "I broadly agree with its contents." Another designer, Deborah Ford (1997), a designer and an accounts manager at Holmes & Marchant Group, agreed, and stated:

Yes. I believe that you have coined a phrase for what most people would call a designer's 'signature... style', which is a result of their background, training, and own subjective taste. But which is also a result of public training taste and acceptance.

The designers' responses to the third and last question 'Do you have any comments?' varied and included various point of views. One art director left it blank. Another designer suggested that the researcher need to define pattern'.

The other designers stated various views. Some of these views supported the theoretical interpretation as PPR and the processes of selecting visual patterns. Furthermore, some designers brought up issues that were considered in the detailed analyses of this study.

It seemed that the word 'pattern' was somehow source of speculation for some designers. Paul Butler discussed various matters concerning the given description and the selection processes. He questioned whether 'pattern' is the

appropriate term and explained his understanding of selecting visual input. He said:

I wonder whether 'pattern' is the appropriate term? Because of its 'decorative design' definition, pattern implies recognising 'shapes' whereas visual stimulus can also be via colour, words, and subject matter.

Butler gave another explanation of how purposive pattern recognition works. He said:

It could also be inferred that pattern recognition - visual stimulus- is about triggering a 'pattern' of thought: I see 'gun' and I think 'war', for instance. One of the problems with the English language (as well as one of its assets) is that words have many shades of meaning.

Butler indicated that a paragraph in the report interested him in particular, and he made further comment about it. The paragraph was: 'The designer adapts and modifies particular patterns to achieve the desired appropriateness by the following: 1) eliminating particular patterns or properties of the patterns, 2) by integrating patterns, 3) by adjusting patterns to each other.' Butler stated:


Yes, the designer does as you describe, but in most cases (and this is a personal judgment based on 27 years of experience) the actions are intuitive and emotional rather than planned and logical. The 'pattern of need' that the 'average' designer seeks is satisfied solely by 'making it look nice'. All of which brings me neatly back to the design community's now age-old dilemma: are we just striving to 'fulfil the brief', or is there more to it than that? Is good design 'art'? Is poor art 'design'?"

Butler was contacted by phone afterwards, he emphasised three points: first he emphasised that the selection processes adopted by designers were not rational in any sense. He said: "There is not any particular logic or rules for what designers do." Also, he indicated that appropriateness had to do with what the designer considered to be nice. The other point was that most of the selection processes were intuitive. Butler agreed that if the word 'pattern' included all kind of visual stimulus could be the right word to explain the visual patterns.

Sue Pile (1997), the art director of Pile Probert Kelly, raised particular concern about the pattern of time in relation to both the project process and design process. She said:

It is unclear as where project process and design process start and finish - possibly, because this should be read in context of a larger piece.

Talbot (1997) described the nature of the selection and elimination processes. He said:

I think, designers' selection / elimination process is largely intuitive. It could be as subtle as the difference in feel between a square edge  , and a curved edge as a key line. But yes, there is an unwritten code of 'appropriateness' and a designer should be able to justify every mark they make as 'appropriate'.

Mahmoud Kahil (1997), the art directors of the Arab Press House- Saudi Research & Marketing, agreed with the given description of PPR and the processes of selecting visual patterns. Also, he raised the issue of selecting the wrong pattern. He said:

I would like to use the word 'disastrous' also if a wrong pattern is selected, because it would ruin the design completely.

Paul Davies (1997), the art director of Ziggurat, agreed with the contents of the given description, and stated:

"I never realised pattern recognition was so complex!" Davies was afterwards contacted by telephone and was questioned whether he had further comments. He said:

I agree completely. Actually it is fascinating. It is just that I did not think of it this way before. But come to think of it now, I think this is what I do.

Deborah Ford (1997) explained how she understood 'pattern'. She said:

Pattern recognition is more obvious in package design than in print. ... There is a level of required information and an order to the breakdown of this information which has to be adhered to. As a design company, we are not in this business for self promotion and therefore do not have a recognisable 'house' style.

Ford linked recognising design styles with purposive pattern recognition. She emphasised the PPR activity in relation to the design outcome and their particular designers, but without explaining the processes of selecting visual patterns. She said:

However, there is an overall 'pattern' to annual report design and I can recognise every individual designer's work when presented to me, because they, in turn, have their own signature framework. In fact, this is 'pattern recognition' as I understand it, in the report ...- a use of ... of graphs, of colour, layout and photography etc,. There is concern to their method of working and which they will adapt as they see fit to make it acceptable to the corporate

Ford explained an example of pattern recognition which was derived from previous awareness of designers' styles. In all the responses the comparison activity was not mentioned, but there were indications that it did take place. This raised the question whether the comparisons which the designers' mind made were taken for granted or it was an intuitive activity.

APPENDIX K: INTERVIEW SCHEDULE FOR THE MINI-CASE STUDIES

Note: Blue colour is used for pointing out the mini-cases that are discussed in details in chapter four.

No.	Design Consultancy	Date	Time	Length of interview
1	Davis Caines Friends of The Earth	20 - 8 - 1996.	2:00pm.	Two Hours
2	Tony Watts Siebert Head Ltd	9 - 1 - 1997	12:30 PM	Ninety Minutes
3	Michael Bronfield (BHB)	9 - 1 - 1997	2:30 PM	Thirty Minutes
4	Adrian Shaugnassy Intro	12 - 2 - 1997	12::30 PM	Two Hours
5	Finn Butler Design Research Unit	9- 1- 1997	4: 30 PM	One Hour
6	Mahmoud Kahil	10 - 1 - 1997	11:00 AM	Ninety Minutes
7	Ali Osman	10 - 1 - 1997	1:00 PM	One Hour
8	Adel Nouman Arab Press House	10 - 1 - 1997	2:00 PM	One Hour
9	Ian Cockborn Tango Design	10 - 1 - 1997	4:00 PM	One Hour
10	Marian Dalley Design Bridge	3 - 2 - 1997	12:30 PM	Ninety Minutes
11	Barry Lowenhoff Moor Lowenhoff	13-1-1997	4:00 PM	Ninety Minutes
12	Paul Butler Butler Cornfield Dedman	14 - 1 - 1997	4:30 pm	Three Hours
13	Ged Equi Interbrand	16 - 1 - 1997	10:30 AM	Two Hours
14	John Harvey Burnett Associates	16 - 1 - 1997	4:00 PM	Ninety Minutes
15	Paul Davies Ziggurat	17-1 - 1997	12:30 PM	Ninety Minutes
16	Peter Widdup Sampson Tyrell	17 - 1 - 1997	4:00 PM	One Hour
17	Jenny Brend .G.D & O Brend	21 - 1 - 1997	12:00 AM	Ninety Minutes
18	David Spencer Edward Briscoe Design	21 - 1 - 1997	4::30 PM	Ninety Minutes
19	Greg Vallance Dragon International	24 - 1 - 1997	3:00 PM	Ninety Minutes
20	Peter Barrow Barrow Parkhill Associates	30 - 1 - 1997	3:00 PM	Two Hours
21	Sue Pile Pile Probert Kelly	3 - 2 - 1997	4:00 PM	One Hour
22	Ian Crockart CDT Design Ltd	4 - 2 - 1997	12:30 PM	Ninety Minutes
23	Deborah Ford Holms Marchant Group	4 - 2 - 1997	3:00 PM	One Hour

Appendix XI:**THE TWELVE MINI-CASE STUDIES**

- **Projects; profiles**
- **Project studies group two:**

Project studies group one: 3D Design Projects. This group consists of five projects that involved packaging and brand identity.

1. PROJECT (1): "ERASURE: COWBOY"

Interviewee	Creative Director: Adrian Shaughnessy
Design Consultancy	Intro
Address	35 Little Russell Street . London WC1A 2HH
Title Of The Project	Erasure: Cowboy (A Music Record)
Nature Of The Project	Erasure Campaign For a New Music Record and CD Cover
Design Discipline (s)	CD Cover, Prints for various applications, Posters, Adds. T. Shirts
The Project's Deadlines & Budget	Starts: January 1997 - Summer 1997. Budget: 60% out of 100% scale
The Clients	Mute Records
Clients' type of business	A Music Band Group
Clients' Address	London Based Company
The Project's Market (s)	UK, USA, Far East, Potential Fans Over All The World

2. PROJECT (2): "Ty-PHOO - TEA"

Interviewee	Art Director: Tony Watts
Design Consultancy	Siebert Head
Address	38 Hans Crescent, Knightsbridge , London SW1X 0LZ
Title Of The Project	Ty-PHOO
Nature Of The Project	Repackaging Ranges of Typhoo tea brand - breakfast teas.
Design Discipline (s)	Corporate identity (Logo) and packaging designs.
The Project's Deadlines & Budget	Production date 1993. Budget: £20,000-£30,000.
The Clients	Premier Brands-Premier beverages.
Client's type of business	Food, biscuits, and tea.
Clients' Address	Merseyside, UK.
The Project's Market (s)	Major Supermarkets, tobacconists ,and small shops in the UK

3. PROJECT (3): "MURRAY McDAVID - WHISKY"

Interviewee	Creative Director: Peter Barrow
Design Consultancy	Barrow Parkhill Associates
Address	1 K Montagu Mews North, London W1H 1AJ
Title Of The Project	Murray McDavid - Whisky
Nature Of The Project	Brand identity & packaging across range of products- Whisky
Design Discipline (s)	Logo and packaging
The Project's Deadlines & Budget	May 1997 to Christmas 1997. Budget: --
The Clients	Whisky broker
Clients' type of business	Whiskey Brokers
Clients' Address	The UK
The Project's Market (s)	UK , USA, and Europe

4. PROJECT (4): "SCHOLL - FOOT CARE"

Interviewee	Creative Director: Marian Dalley
Design Consultancy	Design Bridge
Address	18 Clerkenwell Close, London EC1R 0AA
Title Of The Project	Brand identity & repackaging across range of products -Scholl
Nature Of The Project	Repackaging a range of items of Foot-care products
Design Discipline (s)	Brand Identity and Packaging / Illustrations
The Project's Deadlines & Budget	Started April 1994 and it's on going. Budget: high 80% out of 100%
The Clients	Scholl
Clients' type of business	Manufacture and retail foot care products
Clients' Address	The UK and Europe
The Project's Market (s)	Key countries: UK , Germany, France and Italy

5. PROJECT (5): "BUITONI - NEST LET - PASTA"

Interviewee	Creative Director: Greg Vallance
Design Consultancy	Dragon International
Address	Blenheim House, 137 Blenheim Crescent, London W11 2EQ
Title Of The Project	Buitoni Fresco
Nature Of The Project	Up-grading across range of products. Chilled fresh Pasta
Design Discipline (s)	Brand identity and Packaging
The Project's Deadlines & Budget	October 1995 - December 1995. Budget: Medium range fees
The Clients	Nestle Italia
Clients' type of business	Food manufacturer
Clients' Address	Italy
The Project's Market (s)	UK, Italy, European sector

• **PROJECT STUDIES GROUP TWO:**

Project studies group two: Corporate Identity-logos. This group consists of three projects.

6. PROJECT (6): "COLOUR SOLUTIONS"

Interviewee	Senior Designer /Project Director: Ged Equi
Design Consultancy	Interbrand UK Limited
Address	40 Long Acre , Covent Garden, London WC2E 9JT
Title Of The Project	Colour Solutions
Nature Of The Project	corporate identity and subsequent implementation on stationary
Design Discipline (s)	Corporate Identity (Logo and Corporate image)
Budget & Deadlines	Small budget. Deadlines: May 96 - On going
The Clients	Colour Solution
Clients' type of business	Pre-press reproduction company
Clients' Address	UK
The Project's Market (s)	UK.

7. PROJECT (7): "A BRAND MARK- THE MINI CAR"

Interviewee	Art Director: David Spencer
Design Consultancy	Edward Briscoe Design Ltd
Address	182 -194 Union Street, London SE1 0LH
Title Of The Project	A brand Identity for Mini car
Nature Of The Project	A brand mark that could be used on the car and on ranges of products
Design Discipline (s)	A brand mark
Budget & Deadlines	Good budget . Deadlines October 95 to October 96
The Clients	Rover Group
Clients' type of business	Manufacturing automobiles
Clients' Address	UK
The Project's Market (s)	International

8. PROJECT (8): "CENTRICA"

Interviewee	Senior Designer and Project Director: Iain Crockart
Design Consultancy	CDT
Address	21 Brownlow Mews, London WC1N 2LA
Title Of The Project	Centica
Nature Of The Project	Prints., stationary, items, annual report, signage
Design Discipline (s)	Corporate identity (Logo) and implementation across ranges of items
Budget & Deadlines	High budget. Deadlines: February 1997- on going
The Clients	British Gas
Clients' type of business	The harness of energy
Clients' Address	UK
The Project's Market (s)	UK

- **PROJECT STUDIES GROUP THREE:**

Project studies group three: Corporate publications. This group consists of two projects.

9. PROJECT (9): "FLETCHER KING"

Interviewee	Art Director & Administration manage: Jenny Brend
Design Consultancy	GDO Gilbert Doyle Oakmont Ltd
Address	Barratt House, 341-349 Oxford Street, London W1R 1HB
Title Of The Project	Fletcher King corporate brochure
Nature Of The Project	publication - prints
Design Discipline (s)	Corporate brochure , in-door and out-door photography
Budget & Deadlines	Good budget. / Deadlines: November 1995 - October 1996
The Clients	Fletcher King
Clients' type of business	A property development ASA managers and surveyors.
Clients' Address & Market (s)	UK. / Market (s): England, Europe , and North America

10. PROJECT (10): "LONDON ELECTRICITY"

Interviewee	Art Director: Barry Lowenhoff
Design Consultancy	Moor Lowenhoff
Address	92 St John's Street, London EC1M 4AS
Title Of The Project	Annual Report and accounts: London Electricity
Nature Of The Project	Annual Publication- annual report
Design Discipline (s)	Annual Report, charts, diagrams, illustration, photography
Budget & Deadlines	High budget. / Deadlines: January 1996 to July 1996
The Clients	London Electricity
Clients' type of business	The supply of electricity to London and any other consumers in the south
Clients' Address & Market (s)	London- The South. / Market (s): UK

- **PROJECT STUDIES GROUP FOUR:**

Project studies group four: Designs for environmental and fundraising organisations.

This group consists of two projects.

11. PROJECT (11):

Interviewee	Art Director: David Caines
Design Organisation	Friends Of The Earth
Address	26 - 28 Underwood Street , London N1 7JQ
Title Of The Project	The 25th Birthday Anniversary Of The Friends Of The Earth Supporters' Magazine
Nature Of The Project	A nnevirsary Of The Issue of Magazine 'Earth Matters'
Design Discipline (s)	Magazine / print
Budget & Deadlines	Low Budget. Deadlines: Summer 1996
The Clients	Friends Of The Earth an Campaigners
Clients' type of business	Environmental Campaigns & Fundraising

12. PROJECT (12): "Cold Mailing"

Interviewee	Art Director: John Harvey
Design Consultancy	Burnett Associates
Address	White Lion Court, 7 Garret Street, London EC1 0TY
Title Of The Project	"Cold Mailing"
Nature Of The Project	Fundraising / Charity For Human Rights
Design Discipline (s)	Prints For Cold Mailing
Budget & Deadlines	Low Budget. Deadlines September 1995 to March 1996
The Clients	Amnesty International
Clients' type of business	Campaigning For Human Rights

APPENDIX XII: DESIGNERS' PROFILES MINI-CASE STUDIES
PROJECT STUDIES GROUP ONE: THE DESIGNERS' BACKGROUND

Adrian Shaughnessy	"I left school at 17 and I started work. I didn't do any further education. I did nothing for a year and then I started work as a trainee designer and that's my education. I had no qualifications. I had 'O' levels and 'A' levels, but I had no qualifications, but the thing I knew I wanted to do design or art at the time. I thought I'd like to paint or something and I drifted about for a year and I got a job as a trainee in a very big design studio. They took me on 1973 as a complete junior and it was at the time when there was less commercial pressure and people would stop and explain things to me and give me things to do. Real work I had to earn my living, but I very quickly loved and I very quickly learned what it was about and what I had to do and within a year, much less than a year but say a year to get to a good part I was working as a member of a team producing designs and that's my background. I must have started 1973, so what's that 23 years. A long time."
Tony Watts	Art college - three years. Design college. 30 years professional experience. Places of previous professional experience - all in London but different organisations. All in package design."
Peter Barrow	"We started in 1970, and I started as a freelance designer in 1970, and I merged with my current partner who is a copywriter in 1972 and we formed the company called Barrow Parkhill Associates limited. The original company who was Peter Barrow Associates is still also trading and they tend to specialise in packaging and particularly packaging for the toy industry and that BPA has now become a partnership which actually owns Peter Barrow Associates Ltd. BPA we are careful not to call ourselves a design group in quotes. We really think we are a creative group. So we are a design group, we are a creative group, we do have designers, we have lots of expensive technology that keeps on having to be upgraded, but it is only there to help our clients."
Marian Dalley	"Royal College of Art, MA, 14 years professional experience. Used to work for myself as a company, just running a small partnership company and Parker Stratton."
Greg Vallance	"I got a honours degree in graphic design from Manchester which is now Manchester Metropolitan University, but was Manchester Polytechnic when I was there. The duration of the study was a three year course preceded by a foundation course which was probably the most common course of people you will speak to in my position. The year of graduation was probably 1979. Professional experience is about 18 years. My first job out of college was in publishing, then from there I joined an advertising agency briefly for about a year and a half I then opened a studio for a publishers and did that for another year and a half. After that I joined a design consultancy. I then left and eventually found myself at Addison where I was creative head for a packaging group. Then I was made creative head of the corporate identity group and then joined Randall where I was creative divisional director of the packaging and brand identity. Then I was made creative director of the corporate identity group again. I then went to work in San Francisco as a corporate identity design director and when I came back I then eventually left and went to David Judd with whom I was for two years. Then I joined Dragon two years ago as creative director."

2. PROJECT STUDIES GROUP TWO: THE DESIGNERS' BACKGROUND

The designers	The designers' background
Ged Equi	"I did a degree at the University of Humberside. I got a first class honours degree for three years duration of study and I graduated in 1991. I've had five years professional experience all in the design business. I did about three months work of small various freelance jobs but the rest of time has been Interbrand year's."
David Spencer	"Art college, specialised in graphic design. Graduation 1981. Fifteen years of experience. I worked for many years as a freelancer."
Iain Crockart	"I went to London College of Printing. I left in 1987 with a first class degree in graphic design. Professional experience Nine and a half years."

3. PROJECT STUDIES GROUP THREE: THE DESIGNERS' BACKGROUND

The designers	The designers' background
Jenny Brend	"I went to a grammar school and then art school and did a years foundation course. Then a three degree course in graphic design. I did 'A' levels in art, French and German and then, four years in general study. 23 years experience in multinational companies like ICI and Unilever and running our own company for the last 15 years."
Barry Lowenhoff	"I did a degree in graphics at Canterbury in 1975-78. It was three years and that was after a one year foundation. My professional experience spans from 1978 to present day which is nearly 18 years, 19 years. I worked for several design consultancies."

4. PROJECT STUDIES GROUP FOUR: THE DESIGNERS' BACKGROUND

Designers	The designers' background
David Caines	<p>"I did an honours degree in graphic design at Chelsea School of Art and I also did a year's foundation before that so I was four years there and I graduated in 1986. Before I came here I worked at St Bartholomew's Hospital in the city running a design studio which was not just graphic design. We made training films, video films, we did film editing and that's where... I actually didn't know much about computers at all when I left college and I learnt all about computers at the hospital and how to do graphic design on the computer. Didn't do that at college at all. I didn't go on a Mac all the time I was at college but I was only there for two years. Five years of experience with Friends of the Earth."</p>
John Harvey	<p>"I went to college, its now a university. Bournemouth College and I got it was a Higher National Diploma, so it was only a two year course and, it was in graphic design and I have now been working as a designer, art director for 11 years. Place of previous professional... there is one place before this which now doesn't exist which I designed books and computer game packaging so it was very different to this. It wasn't charity."</p>

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