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NATIONAL COLLEGE OF ART & DESIGN

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Faculty of Design
Department of Industrial Design

Industrial Design and Typography:
An exploration of type and its application to product design.

by
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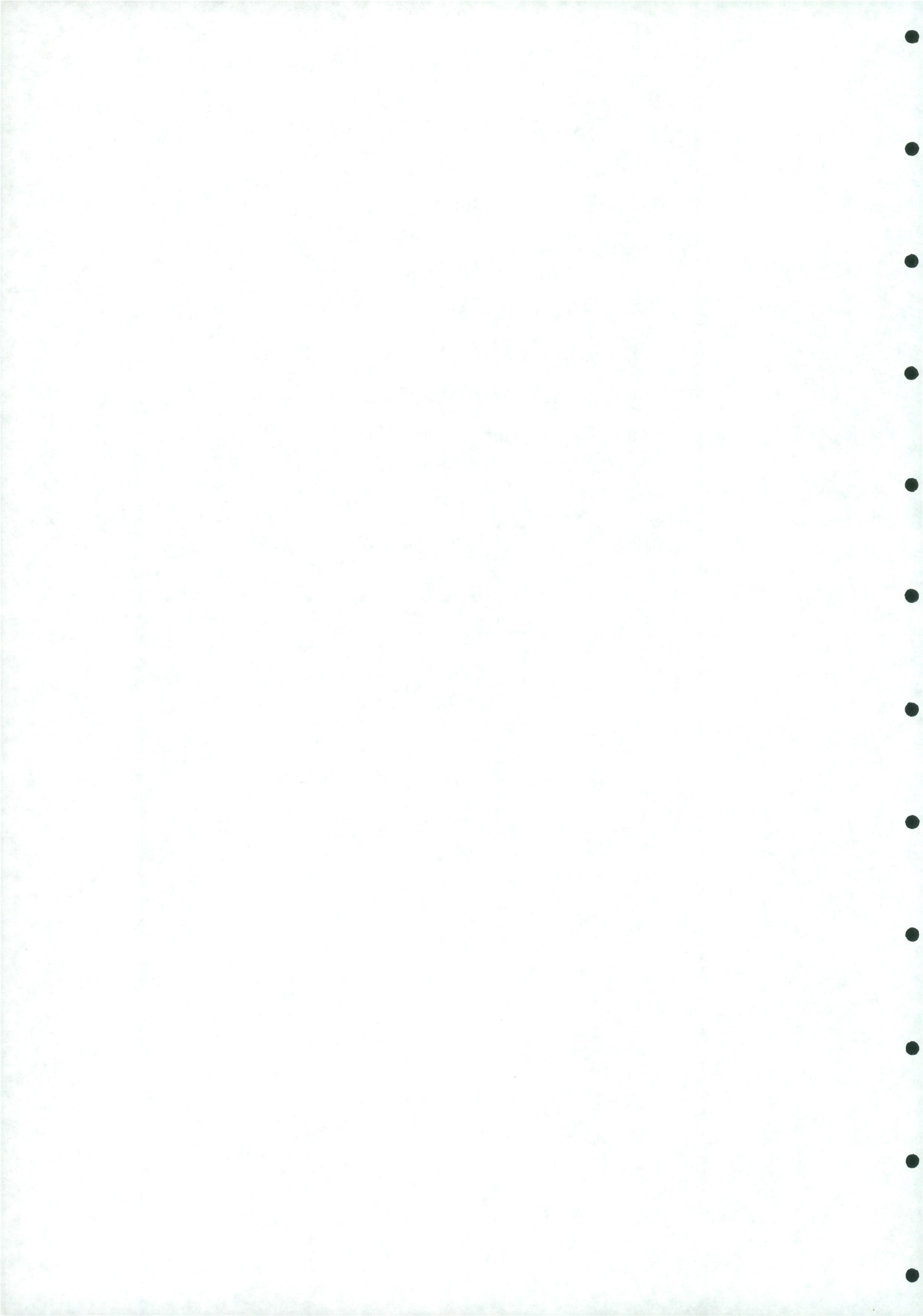


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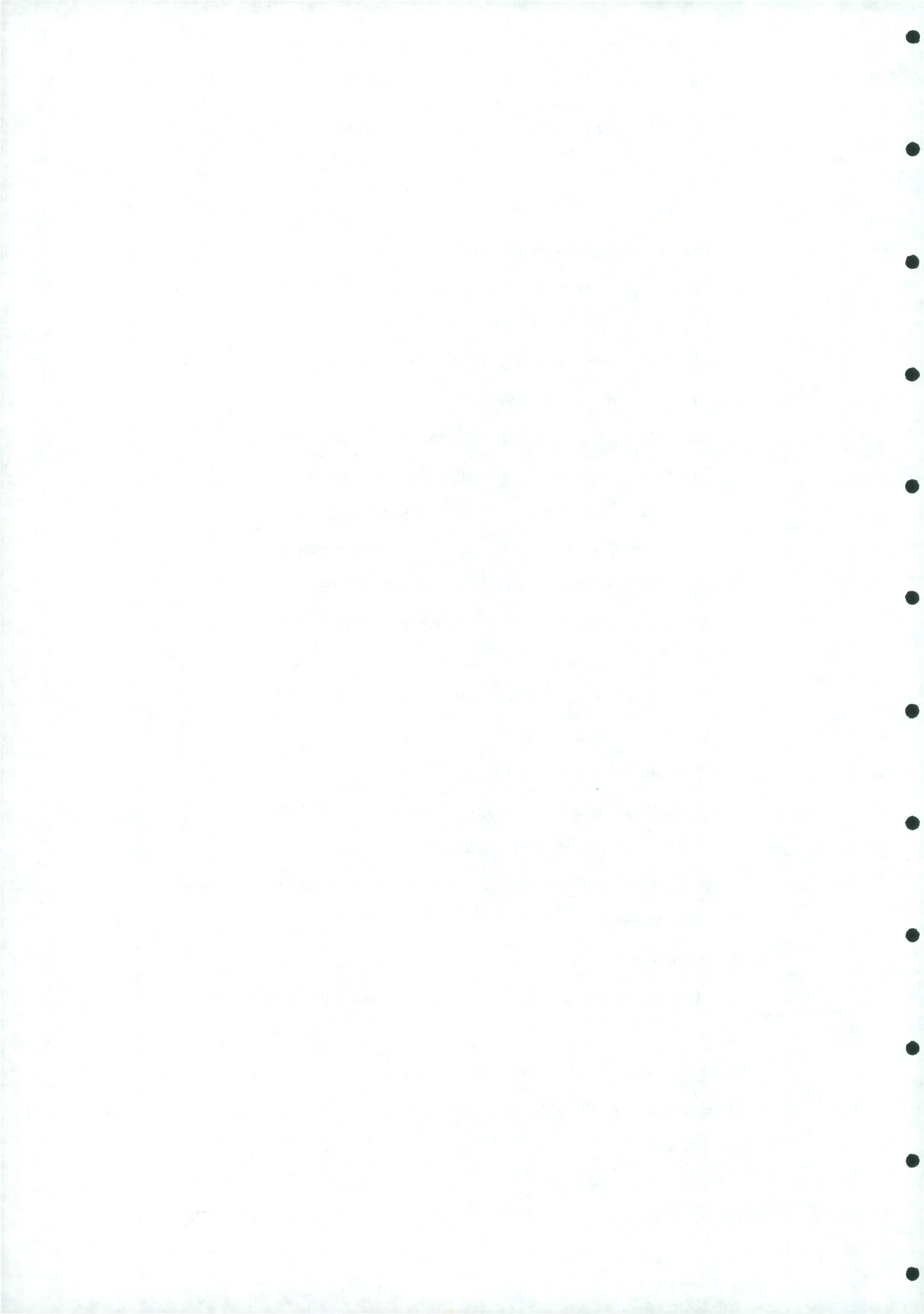
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TYPOGRAPHY AND INDUSTRIAL DESIGN

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INTRODUCTION

Of all the components of any successful product the element of typography can be argued to be one of the most visually prominent yet least talked about. A wide range of product areas show an obvious need for the qualities that typography can lend: the added visual component that sparks off the product, the value adding medium, the symbol that opens a window of associations or explains more about the object. The evidence lies all around us. Our homes, our shops, our countless products of industrial manufacture, all bear witness to these needs. What lies beneath this array of writing and symbols? This is the question that this thesis sets out to explore.

The industrial designer's vocabulary includes communication media such as form, colour, texture, and dynamics. The appropriate graphic or phrase on rendering, model or finished product endorses the ideas communicated and adds a level of meaning peculiar to typography. How does type add what it does? How are writing and the typographical symbol historically related to man's artifacts? Why does type on products look the way it does? Are there any universal constants in product typography? What might the future hold? This thesis is an attempt to understand something that is obviously important but so often consigned to that grey, inter-disciplinary area between industrial design and graphic design.

As with any discussion on the particular application of such fundamental issues as writing, symbols and communication to the field of design it is important to define the scope. The word typography will cover: phonographic text, ideographic symbols such as logotypes, and pictographic symbols such as those indicating function. In the treatment of historical issues the emphasis will not be on tracing entire histories but rather the use of more isolated examples to illustrate trends and constants. As questions become resolved the tendency is



generally for more to arise. This thesis is executed as a quest for understanding. An examination of the multitude of signs and messages that cover our manufactured world will undoubtedly ask as well as answer.

The thesis is laid out in the form of three main chapters and a conclusion: Chapter One—Type Industry shall treat the evolution of writing as a communications tool characterised by technological revolution. This will be an attempt to understand how techniques and media have effected the written word in the past. Writing and letter-forms since the invention of printing shall be discussed in detail as having been the principal medium determining the application of typography to products. This chapter shall conclude with the effects of change in this the age of technological and media revolution, that may determine the future direction of the typography of industrial design.

The second chapter, Type Manifesto covers writing as a cornerstone of civilisation and discusses the use of writing and the printed word as a powerful ideological tool for the dissemination of ideas, politics and philosophies. The modern use of technique as a medium in itself and the increase in pictographic symbols are discussed with reference to contemporary theories. An analysis of corporate image and the increasingly sophisticated role of typography in communicating the ideology of commerce concludes this chapter.

Chapter Three, Type Object. The conclusions drawn from previous chapters are discussed with respect to product typography. Classical architecture, nineteenth century product design, post-war and current industrial design are analysed in an attempt to identify possible underlying trends. A typology of product typography takes the first step in determining a theory of its contemporary application.

Case Studies; The present day application of type and corporate image thinking is discussed taking the 1992 audio equipment range by Philips as an example. Philips were chosen because of their high profile in ground breaking design, both technically and aesthetically.

Conclusions from chapter three shall be applied to the chosen products to provide example and clarification. Two further products that display interesting use of symbols and media shall be presented as specific



illustrations of the direction in which product communication may be moving.

Interviews; Conclusions drawn from interviews with members of the industrial design profession shall establish the current industry position on product typography. The interviews shall attempt to discover any underlying policies or trends with respect to product graphics and whether this is an area commonly covered in the design brief.

Conclusion; At this point the thesis shall summarise its conclusions on how typography has been applied to man made objects, the effect of technological development and new media, and how typography is used to sell products. Any trends in these areas will be identified in order to form an idea of the future of the typography of industrial design.

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TYPOGRAPHY AND INDUSTRIAL DESIGN

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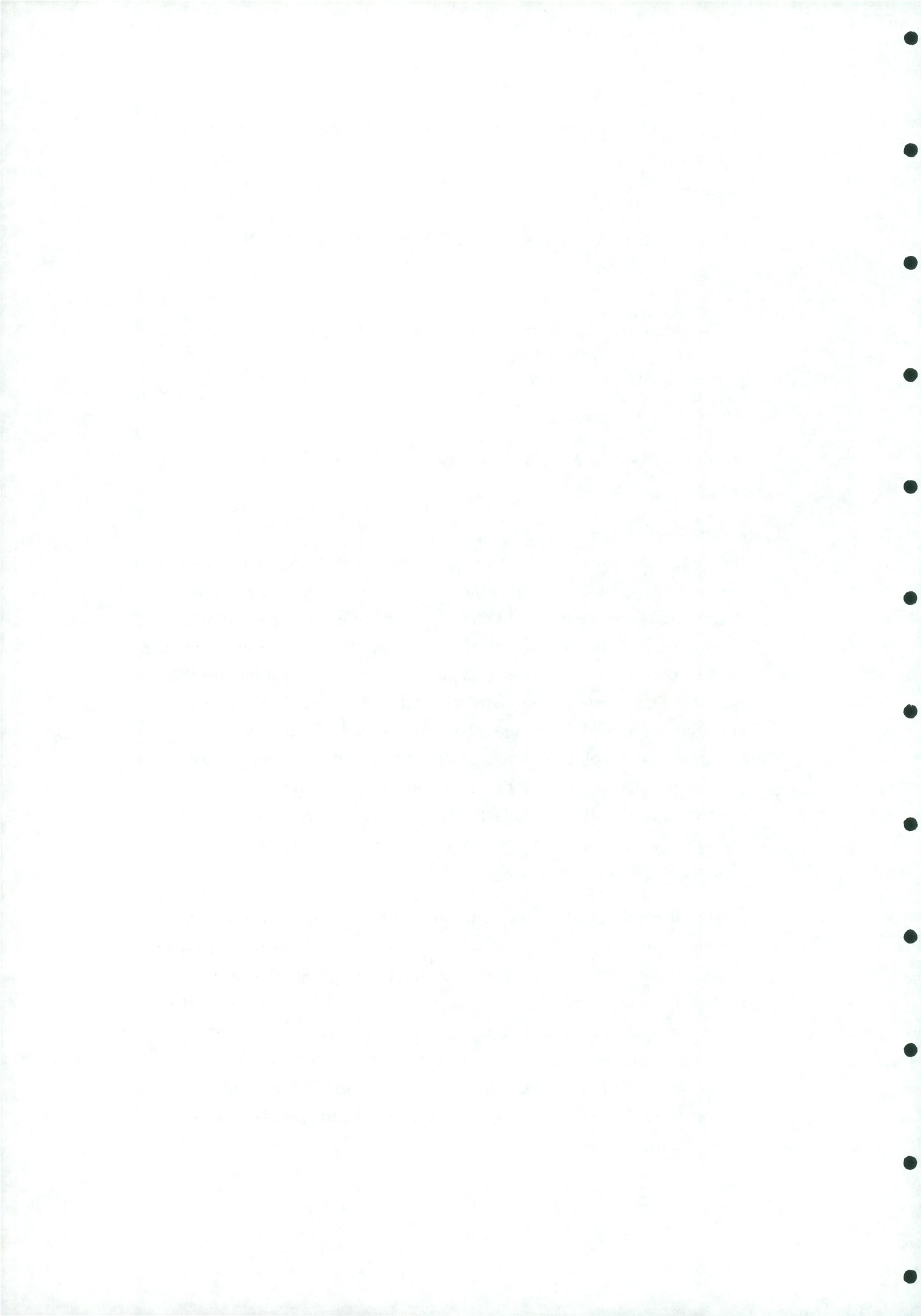
CHAPTER 1 - TYPE INDUSTRY

We should note the force, effect and consequences of inventions which are nowhere more conspicuous than in those three which were unknown to the ancients, namely, printing, gunpowder, and the compass. For these three have changed the appearance and state of the whole world.

Francis Bacon, Novum Organum, Aphorism 129.

Among the guiding forces in the creation of a written form are the mind and sum-of-all-experience of the designer. Yet among the thoughts and experiences that colour the creative process there are also the effects of relaying the idea, the variances of the medium. Even before printing there were many techniques for making shapes with meaning; from the blowpipe spray pens of cave painters to stonemasonry, tablet and stylus, pen and paper. Each medium changes the visual character of its product. Also changed is the technician; the advent of printed books was a technological revolution accompanied by deep social change. This process is being repeated today with the rise of global coverage electronic media; the video technique. This chapter sets out to explore how media and technological revolution can effect the application of typography to industrial design.

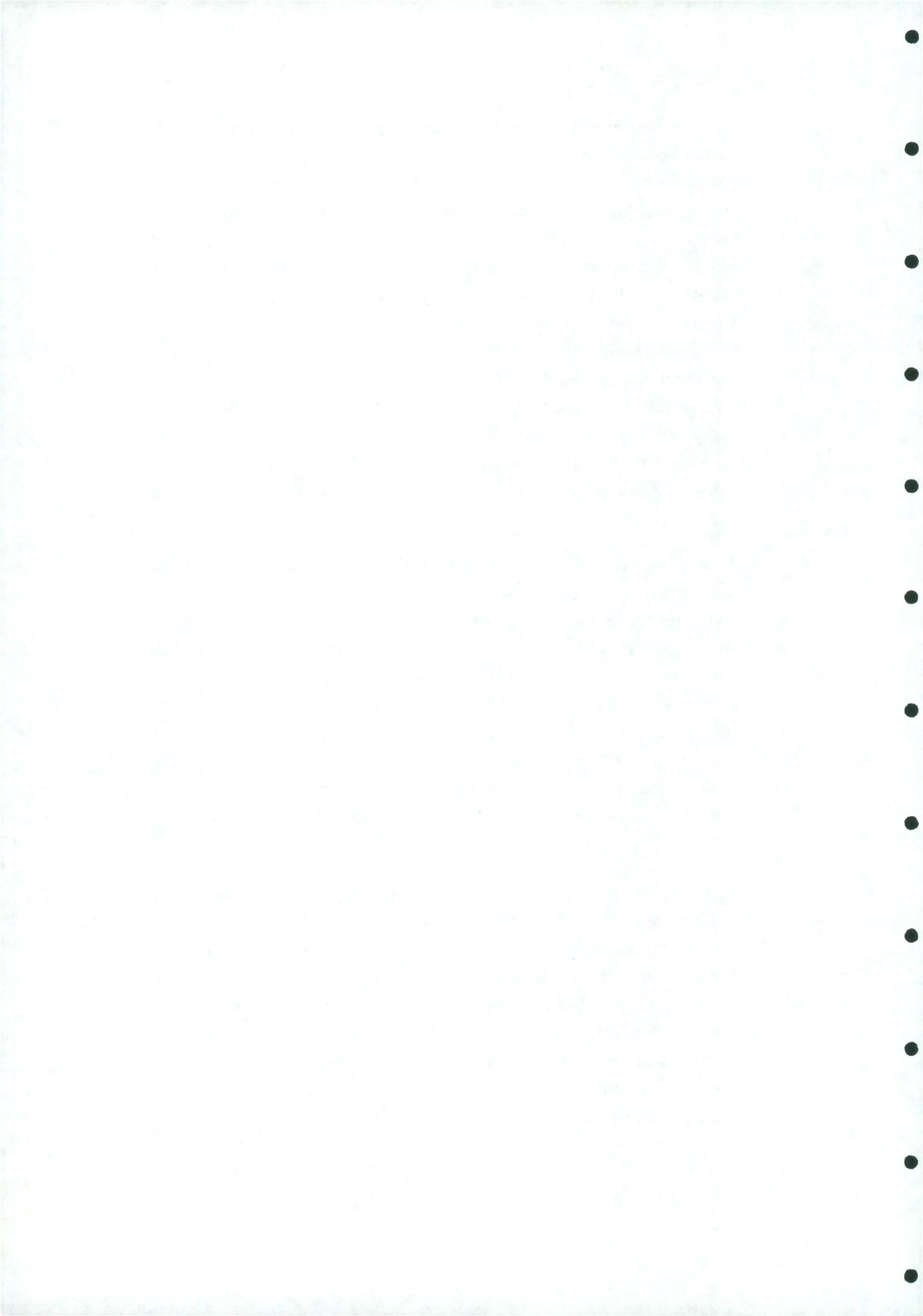
Man is the animal of abstract thought; the planner, the thinker, the shaper of his surroundings. Our society is based on a truce of sharing. Shared family, land, ideas, shared understanding. There is a deep-rooted drive in every one of us to identify and to be identified with. Our language, our art, our choices, all broadcast identifying codes. The way our abstract thoughts become encrypted and decoded, the 'language' of symbols is one of the preoccupations of industrial design, a profession largely concerned with communicating ideas to and for the consumer.



The point in our ancient history where a picture became a repeatable symbol was the birth of written communication. This transformation required a considerable change in thinking. The picture of a particular hunt painted on a prehistoric cave wall in Normandy employs different mental processes for its execution and understanding than the stylised symbol of any-hunt-in-general. The point at which these processes and the concept of a set of symbols were widely accepted was the moment that writing was born. It is important to note that as is common in histories of technological development, key events arose in parallel or at different times in different centres of civilisation. In some instances, for example China, things took a different course to that which gave rise to our western alphabet. Every ancient civilisation needed the development of some form of writing in order to progress to any great sophistication; Civilisation requires literacy (12, p. 4).

The first written symbols were pictographic: early drawings describing items or movements may have choreographed religious rituals. Egyptian cuneforms and heiroglyphics are the most widely studied form of pictographic writing. Their history is one of continual change as each symbol evolved and became more stylised and new symbols were added to the vocabulary. Certain symbols completely lost their obvious visual reference and developed into abstract shapes representing a given idea; ideograms. The heiroglyphics of Egypt are the ancestors of the Phoenician, Greek and the Roman alphabet in use today: the characters of our alphabet are an abstracted evolution of ancient pictograms.

The next great technological leap was the concept of a phonetic alphabet, each symbol or character corresponding to a sound in the spoken language rather than a particular idea. It was a long way from picture-writing to the alphabet. In the former there is no connection between the symbol and the spoken name for it; the latter has become the graphic counterpart of speech. Writing became the written expression of the spoken word rather than an entirely separate pictographic or ideographic language. An equivalent change in thinking was needed, now we could listen with our eyes instead:



Only the phonetic alphabet makes a break between eye and ear (24, p. 27).

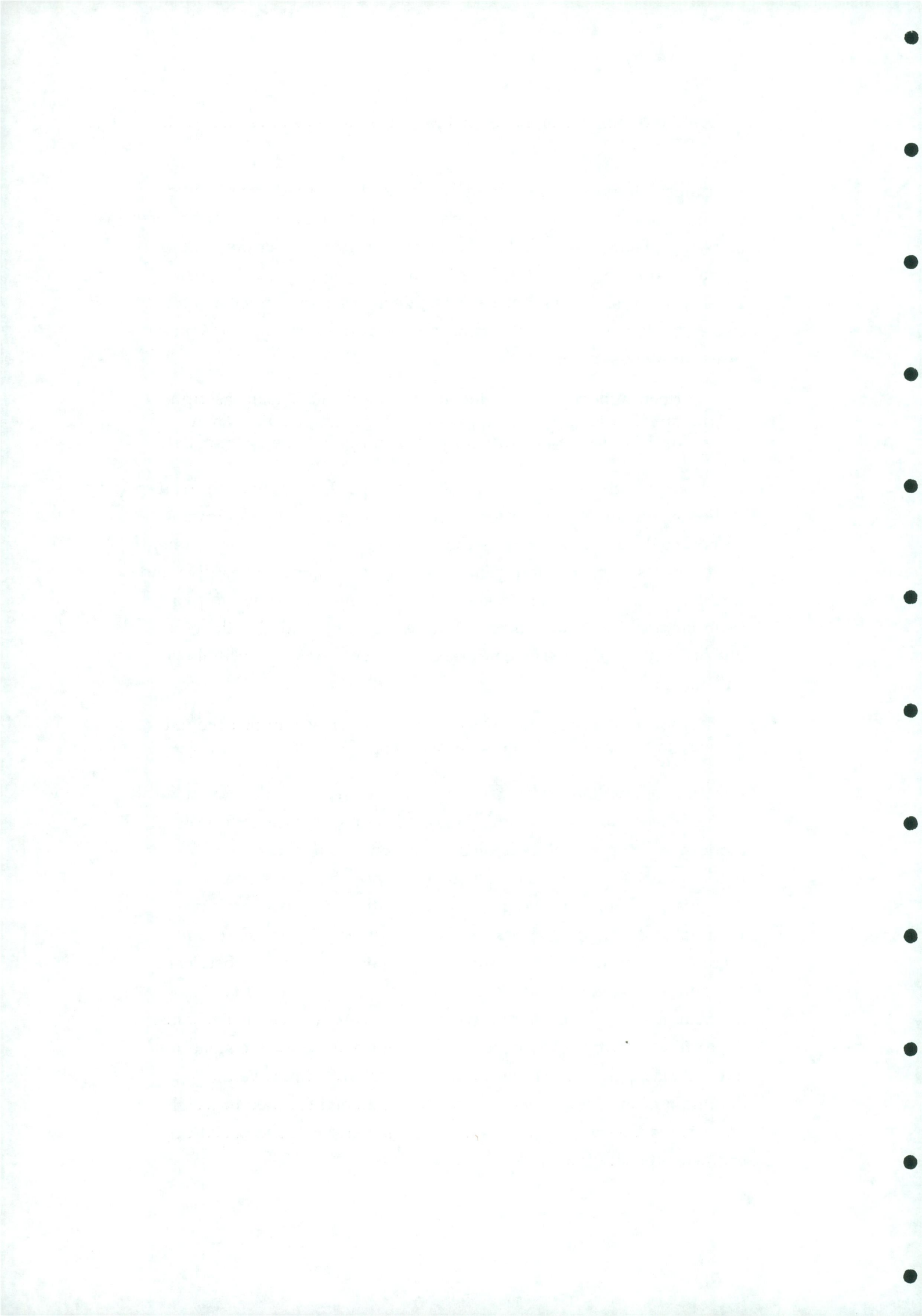
A number of civilisations have required and provided the conditions for the evolution of a phonetic alphabet. These include the society of ancient India and the ancestors of Hebrew and Arabic scripts. The alphabet in use in the western world today is the Roman alphabet. Twenty six or so letters that have remained essentially unchanged for two millenia use juxtaposition and accent in representing the sounds of western spoken languages.

Fourteen hundred years after the cutting of the Trajan inscription the tablet in Henry VII's chapel was inscribed, and no Roman would have found any difficulty in reading the letters (15, p. 24).

The Roman alphabet is a remarkable yet imperfect mechanism for it still relies on context for a great part of its phonetic communication. Although the basic letterforms themselves have remained the same, the elements of proportion, contrast and subtle delineation of line and serif have been in constant change. Eric Gill puts this down to two main factors; The human need for variety of form and also the effect with which this chapter is concerned: different lettering technologies and media.

The form of serif on the Roman carved letter was in fact the natural way to finish an incised line neatly (15, p. 29).

Examining how letterforms consistently alter with the development of different techniques and conditions of use will clarify the effect of modern developments. A letter's basic elements and the key relationships between them must be conserved for it to be easily recognisable. For example the capital A with its two converging verticals and horizontal crossbar. These elements can be altered but there is an extremely fine line in typographical experiment between recognition and confusion. In addition to the basic elements of individual letterforms there have evolved various visual mechanisms for further improving the legibility of a typeface; Serifs, the small foot like details on the extremities of all classical faces, improve the definition of lines in a body of text. A heightened contrast in weight of the various lines and bowls comprising the letter helps to speed up character recognition.



Although the Roman alphabet had in fact developed from the Egyptian pictographic vocabulary and its decendent scripts it was in about 100 AD when the alphabet was known in the carved medium that it reached a state of stability. When Roman letters were subsequently written with pen and tablet the letterforms were changed due to the differing medium.

Nevertheless, in no case does the scribe imagine he is inventing a new form; he is only concerned to make well or ill the form with which he is familiar (15, p. 30).

The written word moved very slowly towards the accessibility and flexibility of the spoken. However, the phonetic alphabet was prevented by the medium of handwriting from reaching its full potential. By the fifteenth century, more than a thousand years after the finalisation of the Roman alphabet, only an educated elite concentrated in monasteries and universities scattered about Europe could read or write. An interesting observation by Umberto Eco (11, p.10) declares that in scribal culture, images such as the statues and carvings of the great Gothic cathedrals were the literature of the medieval peasant. They were symbols or ideograms that directly related to both religious and popular narratives.

Reliance on the tedious process of dictation and hand copying in the creation of a book hindered the flow of literacy and written ideas. In the scriptoria and universities books were relatively scarce and inaccurate. Standard catalogues for the small library stocks didn't exist. Within books hidden away in dark library vaults information was further concealed by the lack of mechanisms such as an index or footnotes. Outside literacy was rare and spoken culture reigned supreme. Scribal communities were often separated by weeks of travel. The process of finding, studying, or copying a book was extremely inconvenient and the results were often inconclusive and unreliable.

It is very difficult to make anything other than an educated guess about the scribal cultural condition. Nothing was accurate, accuracy was so difficult to attain for want of modern techniques that the concept was not popularly entertained. This applied to manuscripts and also to historical records. It is only after the advent of printing that records began to be kept on matters such as scribal culture:



Scribal culture can only be examined through a veil of print...the very texture of scribal culture was so fluctuating, uneven and multiform that few long range trends can be traced. There was no typical scribe or even manuscript (12, p. 9).

Even the literate elements of medieval society can be described as semi-oral insofar as books were 'published' by being dictated and copied. Students took formalised notes during lectures read aloud from manuscripts. These means led to a high degree of cumulative inaccuracy and also absorbed a great deal of student and lecturer time. Time that could possibly have been spent analysing or discussing the information. The technological characteristics of writing determined not only visual, stylistic elements; the products of scriptoria possess a particular oratorical style that appears strange and overbearing to the more individualistic modern reader. The most repercussive feature of the scribal means of publication was the relatively small number of books produced each year.

Then printing was born. In the latter half of the 15th century in the northern German town of Mainz, Johann Gutenberg (1400-68) invented a machine that could produce multiple text and images on paper. Although rudimentary printing had appeared in China in the 7th century Gutenberg, a goldsmith, had devised a printing technique using cast-metal movable type. This was combined with a press derived from the wine-press, oil based ink, and paper (another Chinese invention). What Gutenberg achieved was the bringing together of several techniques. His first major publication; the Gutenberg Bible appeared in 1456.

In northern Europe the dominant form of handwriting was of the Gothic variety. Thus the first typefaces cut for Gutenberg's press were almost exact facsimiles of the script. Eric Gill (1882-1940) the English typographer, makes the point that letter-forms evolved through continual copying and changes in media, that the artist always saw themselves as making existing forms and not inventing new ones.

In Roman times the Roman scribe imitated the stone inscription forms because, for him, nothing else was letters; so, in the fifteenth century, when the written was the most common and influential form of lettering the position is reversed and the letterpunch cutter copies the scribe (15, p. 32).



Immediately the faces began to change as it became apparent just how much of the style was due to scribal idiosyncrasies and in fact how many differing Gothic scripts there were, almost as many as there were scribes.

In the fifteenth century Italy was on the rise as the centre of European culture. Italian scripts were rounded with less contrast compared to the Gothic style. Typefaces for printing based on these scripts evolved and mixed with the northern styles; Gill again makes the point that these early typographers never saw themselves as inventing new forms but were merely adapting existing forms to the 'exigencies of typefounding and printing'. Handwriting itself, the source of all typeforms was influenced in turn by the products of printing technology. Lettering technology strongly influences letterforms. Equally as important is the influence that the dominant technology exerts on the products of lesser techniques.

As the Roman, when he thought of lettering thought of inscription letters; as the medieval man thought of written letters; so in the twentieth century the printed letter is lettering for us (15, p. 41).

Sixteenth century printed specimen books stripped diverse scribal hands of personal idiosyncrasies. They did for handwriting what handwriting had once done for typography itself (12, p. 54).

A good example are the typeforms rendered by modern day stonecarvers. Roman stonecarved letterforms shaped the forms of the pen. Written forms shaped the products of the printing press. Nowadays, when the principle medium of lettering has been printing, stonecarved letterforms copy the printed ideal. This concludes that the dominant lettering technologies of any time will determine the concept of typography and will thus influence all contemporary letterforms.

John Heskett sees the advent of printed specimen and pattern books as of great importance in the eventual development of the industrial design profession.

The pattern books contained designs that could be applied repetitively and in a variety of contexts, and their significance for the history of industrial design was that a designer, by publishing in



this form, was divorced from any involvement in the means by which the patterns were applied and used (18, p. 11).

With a strongly established print culture great changes in all aspects of society were seen. The initial effect was the freeing of academics from the role of human printing presses. The learned suddenly had time to learn even more. Because individual libraries could obtain copies of published works relatively easily there was less of a need to spend long periods travelling. In addition to a marked improvement in access to books, the actual printed matter was clearer with improvements being most dramatic in the reproduction of tables and diagrams. Old titles were multiplied and the thinking of centuries was suddenly widely available. Conflict between sources was more visible and this encouraged a sorting out and processing of old information. A significant amount of new publications were in fact lists and critiques of older ones. With so much contradiction evident, reliance on the old theories faded and there was a surge of reappraisal and intellectual activity.

Title pages were easy to integrate and this encouraged the adoption of standardised catalogue systems for libraries. Printing affected all areas of authorship and study by opening up the phonetic alphabet and making the medium of the word accessible beyond the scriptoria walls. The manuscript tone had been that of giving a speech to a crowd of people. The more intimate and fluent quality of printed text encouraged the development of more suitable literary forms such as the informal essay employed by Bacon. A telling change was seen in the subjects being published. Perhaps most significant were the appearance of guidebooks to previously published works, analysis and categorisation, practical instruction; a move towards the lay reader.

What had been an extreme example of a sellers market; manuscripts were like gold-dust, quickly became an opportunity for the Master printer-publisher to find new markets. Commercial pressures encouraged innovations that would make books more attractive and accessible to the reader; running headings, footnotes, tables of contents, better figures, cross references, etc. Woodcuts also allowed the accurate and consistent printing of images and diagrams; this a revolution in itself. Another important effect was a diversification into non-



academic subject matter. Books appeared discussing topics such as; the arts of craftsmen, variations in regional costume, the correct behaviour of young ladies, etc. In effect the emergence of printing and the printer's profit motive to sell more books brought literacy out of the dreaming spires and was the beginning of the rise of mass culture.

McLuhan sees the birth of printing as not only an important technological revolution but a truly monumental changing point in our communication based society. He draws comparisons between non-literate cultures of Africa and pre-Gutenberg western culture (24, p. 26). Prior to the late fifteenth century Europeans communicated on a mainly oral-aural basis. According to McLuhan this medium had characteristic effects on social interchange and the individual's way of thinking. The advent of printing switched the emphasis in communication from ear to eye and deeply changed the perception of our surroundings. His suppositions are based on study of the non-literate cultures of Africa and their comparison with that of western man.

The interiorisation of the technology of the phonetic alphabet translated man from the magical world of the ear to the neutral visual world (24, p. 18).

Typography tended to alter language from a means of perception to a portable commodity (24, p. 161).

Apart from some technophobic resistance and sentimentality for the noble spirit and diligence required of a scribe, Gutenberg's invention was embraced with enthusiasm and examples of the printing press spread quickly throughout northern Europe and towards Italy. By 1470, less than twenty years after the first of Gutenberg's bibles was produced, Florence bibliophiles were placing orders to Rome for printed books. It is difficult to give an authoritative comparison of the scribal production rate with that of printing. Eisenstein gives an indication;

A man born in 1453, the year of the fall of Constantinople, could look back from his fiftieth year on a lifetime in which about eight million books had been printed, more perhaps than all the scribes of Europe had produced since Constantine founded his city in A.D. 330 (12, p. 16).



The organisation required to edit, correct, set and print a book resulted in a new more organised character to the printed publication. It also necessitated the bringing together of several disciplines and the creation of new ones; priests, professors, linguists, pressmen, typefounders, poets, all gathered in a new form of shop structure. In effect the printing house became a site of cross-cultural interchange. Because mistakes were made visible by the ability to compare editions the printers were obliged to follow books with lists of any errata and typographical corrections that had escaped the proof reader's eye. Precision and standardisation became essential. However, as with all techniques it was possible to misapply the potential of printing;

In the hands of ignorant printers driving to make quick profits, data tended to get garbled at an ever more rapid pace. But under the guidance of technically proficient masters, the new technology also provided a way of transcending the limits which scribal procedures had imposed upon technically proficient masters in the past (12, p. 73).

In the very course of accelerating a process of corruption which had gone on in a much slower and more irregular fashion under the aegis of scribes, the new medium made this process more visible to learned men and offered a way of overcoming it for the first time.

The Oxford English dictionary gives a dual usage of the word literally: 'As of literature' or alternatively: 'Used to indicate that the following word or phrase must be taken in its literal (now often in its strongest admissible) sense.' The enshrinement in language, the museum of values, of the word 'literally' as the strongest admissible sense of definition or precision underlines the recent historical attitude to the printed word. The word 'printing' itself has a minor definition as 'clear careful script imitating the printed form': Printing, the dominant technique, shapes handwriting one of the now minor techniques.

In summary, the establishment of printing gave rise to and strongly influenced several trends; The communication of knowledge became more fluent, the thinking of centuries was suddenly widely available, and more people learned to read and benefited from this knowledge, academics were freed time to study, an individual was able to read,



evaluate and choose his own philosophy; standardisation, categorisation and precision in both content and illustration became obligatory, the printing-house structure established a new vibrant interdisciplinary community, and the commodity of learning gave rise to new marketing structures.

The invention of typography provided the first uniformly repeatable commodity, first assembly line and the first mass production (12, p. 124).

These effects strongly influenced, perhaps even initiated those shifting of values which we call the Renaissance, the Enlightenment and the Industrial Revolution. The initial establishment of printing and its deep effect parallel the far-reaching developments occurring in the communications industry of today.

Developments in typographic design from the formulation of the classic Renaissance faces were subtle and due to refinements in the printing process, social and commercial changes, national temperament, and of course, the need for variety. In the early nineteenth century Gutenberg's methods were finally superseded with the development of the hot-metal setting technique. Coupled with improved paper quality and printing machinery this allowed the design of finer faces with more delicate serifs and even features. The industrial revolution and the great corresponding changes in thinking gave rise in turn to a typographical revolution; the more assertive and contrastful 'modern faces' pioneered by Bodoni. These faces suited the changing, heightening tone of subject matter and were also more legible for the hurried reading of new literary vehicles such as newspapers and advertisements.

Through all these changes in typestyle and format since the day of Gutenberg's invention the volume of printed matter and number of printed publications had been spiraling upwards and upwards. Lettering was now an affair of the printing press and all other techniques felt this influence.

Hot metal gave way to computer controlled photosetting systems. Photosetting relies on scaling up and down the film master of a given typestyle to achieve different letter sizes of that style. This was a

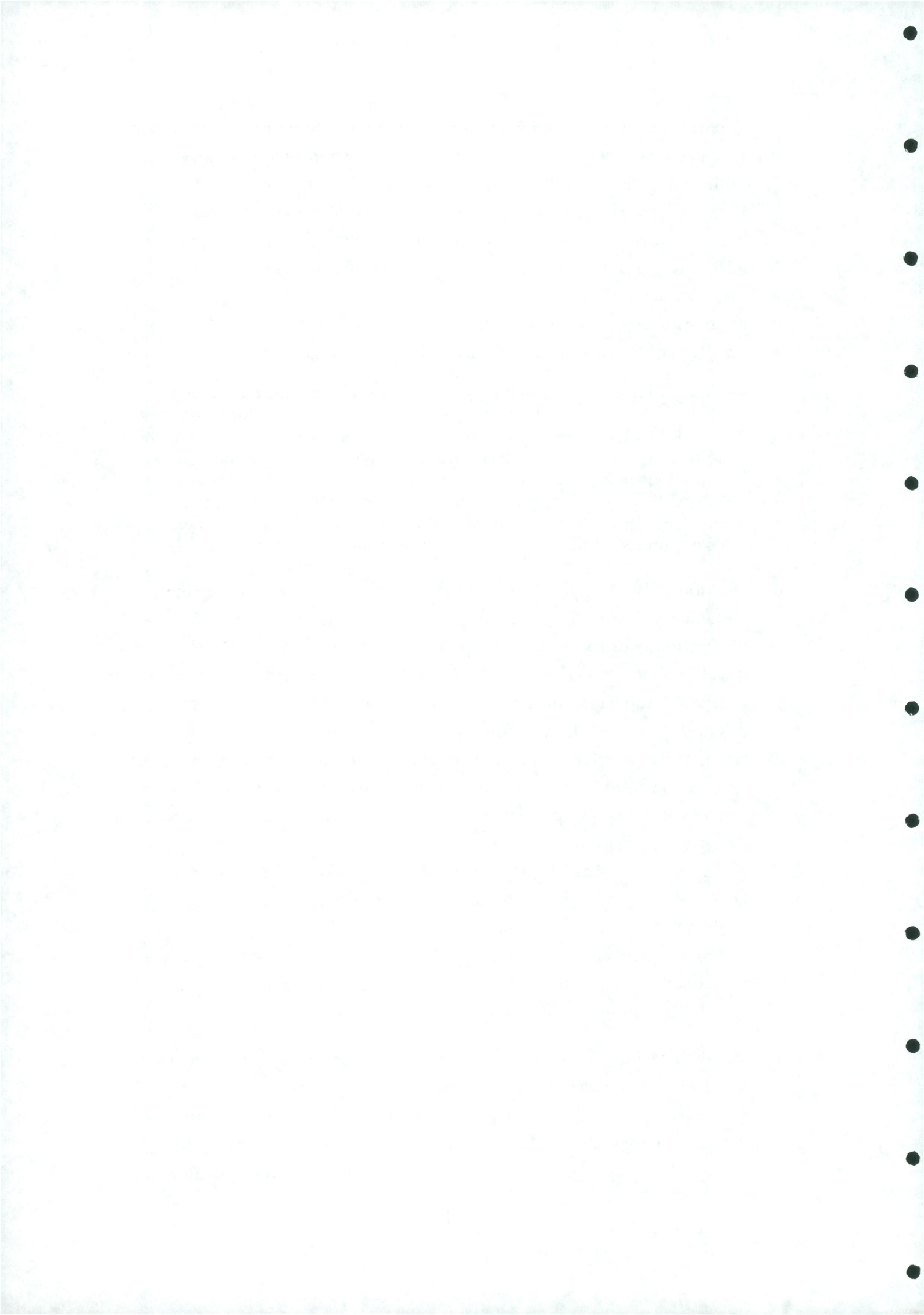


departure from the technology of Gutenberg and that of hot metal, each typesize in a typestyle having its own metal form designed to give optimum legibility at that size. The speed and flexibility of the photsetter was considered worth the sacrifice of custom typesizes. New, averaged out versions of old typefaces were designed to give adequate reproduction in a range of sizes, details such as serifs and intersections of line were altered to suit the peculiarities of light shining through film onto light sensitive paper. Once again the adoption of a new technology changed aspects of typography.

Such adaptation of existing forms to new techniques has been a feature throughout the history of printing: Gutenberg followed the black letter manuscript forms, the early printers in Italy adapted the Carolingian hand, the early filmsetting systems used designs adapted from hot metal types. In the same way desktop publishing systems are drawing on designs from conventional typesetting systems, but typefaces specially devised for postscript and other computer systems are already making their appearance (36, p. 9).

Desktop publishing has been popularly hailed as the second coming of Gutenberg. The widespread adoption of personal computers, illustration, wordprocessing and page make-up software, and the development of inexpensive, high resolution laser printers has made possible a publishing system that will sit comfortably on the average desktop. DTP as it is commonly known has made amateur typographers and graphic designers of an expanding public. These systems are used for the most part in attempts at producing a 'professional looking publication' that is, a publication that resembles the product of traditional means. Not surprisingly, due to certain technical peculiarities of DTP technology and software, new typically DTP ways of composing publications and even typography are evolving. For example the ideosyncratic Beowulf typeface relies on the computer basis of DTP technology in the innovative random component of its form: No two characters are ever identical. Again, new forms follow new techniques.

Marshall McLuhan sees techniques that have spread literacy as central to our whole modern condition. Printing brought us from the oral, tribal society of medieval times to the visual, open society of today. In the 'Gutenberg Galaxy' McLuhan sees Chinese society as having remained mainly oral. Chinese characters are ideographic and do not



make the break between eye and ear, semantic meaning and visual code, required for phonetic literacy. McLuhan states that the Chinese are considerably more refined and perceptive than people of the phonetically literate Western world, but the Chinese are tribal, people of the ear.

The concern of Chinese philosophy with harmony, roles and the balanced interplay of the senses is further evidence for McLuhan that literacy is the root cause of Western man's social condition in recent history. Western society has been open, non-tribal. It is no longer a biological unit such as the tribe or extended family but a system formed of abstract linkages that has enabled civilisation to exist.

Professor Nick Stanley, Director of the School of Research at Birmingham polytechnic, in a lecture on contemporary Chinese design sociology (33) disagreed with McLuhan. Professor Stanley's counter argument states that the highly subtle visual basis of Chinese ideograms requires even finer visual concentration than the simple western alphabets of 20 characters or so. If an emphasis of the visual sense had been the seed of the western open, abstract or non-tribal society then these effects would be seen to an even greater extent in Chinese society.

However, McLuhan's theories are not to be discounted. It is only after decades of study that a Chinese attains a reasonable command of calligraphy, only a handful of intellectuals are considered truly literate or 'good writers' at any one time. Their many thousand ideographic characters are simply too numerous and too subtly differentiated to be read with ease. Chinese society is similar in certain respects to the European medieval condition with an educated elite and a chiefly orally communicating mass culture. This, coupled with study of other orally based societies seems to support the views held by McLuhan. The invention of the printing press is largely responsible for the condition of modern western society and hence has shaped not only typography but other, even more fundamental aspects of industrial design.

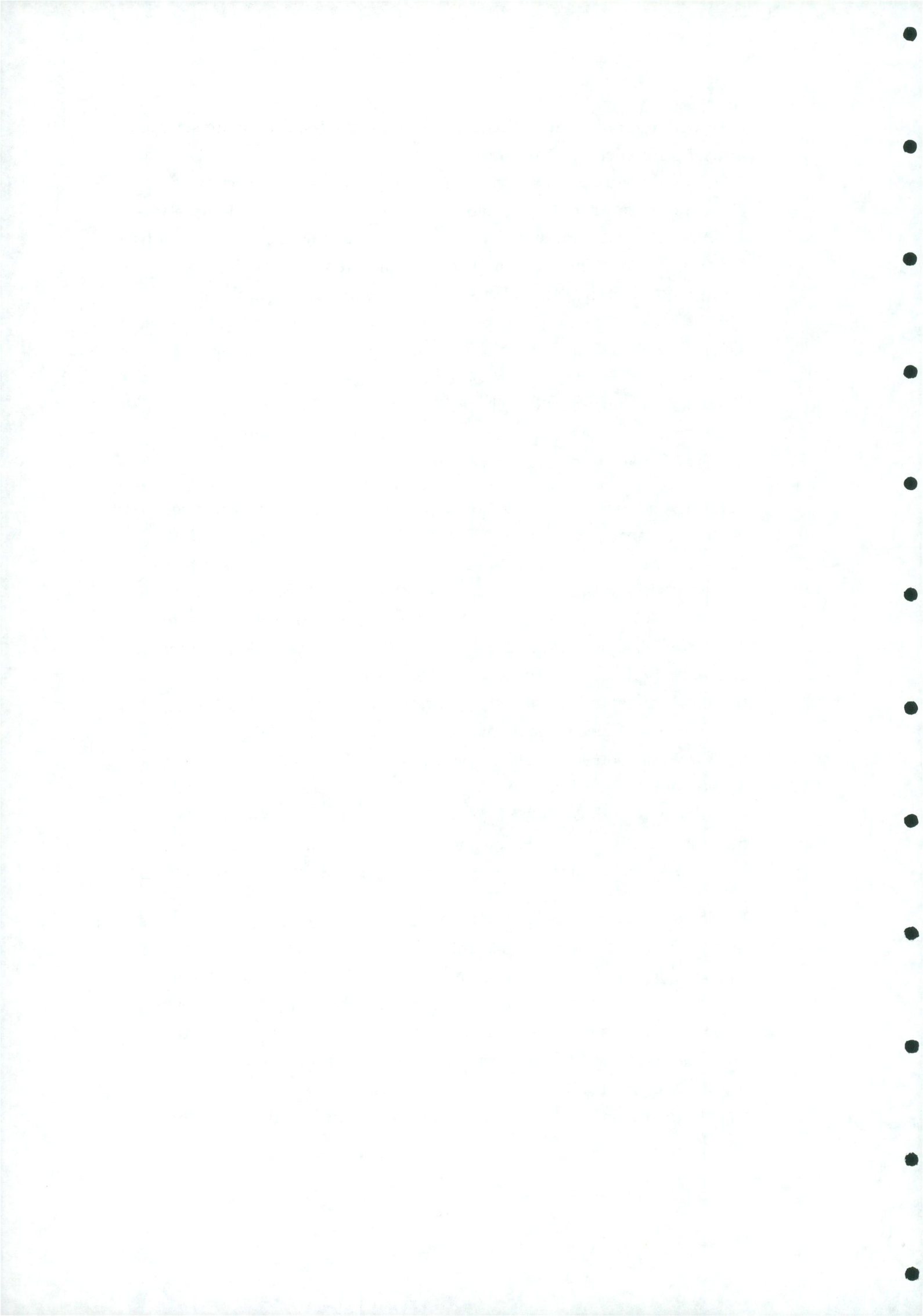
The social changes that western civilisation underwent during the establishment of print culture are paralleled by the changes happening



now with the rise of global coverage satellite media. There are several crucial differences; Firstly, since the advent of printing, civilisation has increasingly become an affair of the masses. The peasant society of Tuscany did not need to be involved for us to consider the Renaissance an affair of great importance for sixteenth century humanity. Herbert Marcuse sees society as having been led forwards by leaps in thinking performed by an intellectual elite (23). This view is not applicable in today's society. Modern thinkers such as Roland Barthes have devoted much of their writings to the loves and hates of ordinary people (2). Since the electronic media revolution our times have been characterised more by the activities of everybody than of the few. Nowadays, even the academic world would grant 'peasants' an important place in matters of culture.

Secondly, according to social commentators including McLuhan the age of Gutenberg has come to an end. The technology of printing that made literacy both possible and necessary has been surmounted by the gentle wash of radio and television and the ancient charms of being talked to and shown. It is important to realise that only a fraction of our history has been typographic. Printing as the principle medium, its effects on typeforms, industry and society has been the formative technical influence on product typography in the past. With the ongoing rise of electronic media as the principle cultural vehicle of our time we will soon see its effects on the typography of industrial design. Video is moving us back towards a condition where the image and non-abstract symbol are the literature of the people. What this may mean is a decline in the use of phonetic text and an increase in representative, non-abstract pictography on the surface of our products.

While McLuhan's Global Village concept pictures us as in certain ways returning to a pre-literate tribal state, the effect of this on our surroundings will be very different. Apart from the effects of five hundred years of social development video technology differs deeply from that of medieval narrative ornament. This difference is most dramatic in the new dimension of movement. If what is evident from the study of the printing revolution's effect on our society and letterforms carries through, one outlandish result of video could be



animated narrative ornamentation. Video style has already begun to influence other media.

Currently we are seeing an increasing occurrence in the video orientated 'flying logo'. The logotype is conceived first and foremost with the requirements, abilities and technical features of video in mind. The logo for Sky television in its video form is an animated sequence using state of the art computer animation techniques. The printed matter for Sky television, magazine advertisements, etc. refers to the video orientated logo. Just as Roman scribes imitated the technical peculiarities of stonecarved letterforms, the dominant form of letter at the time, so printing now begins to imitate video. New technology is permitting magazine advertisements to be electronically animated (37, p. 52), this is a response to the condition we are discussing. Not only printed forms but all typography must respond to the video revolution, including that of industrial design.

The wide ground covered in this chapter introduces two important determinants of the state of product typography. Firstly that the shapes of letterforms are in part determined by the dominant lettering technology of the age. Secondly, the forms that grace today's products are therefore a result of the particularities of printing technology. With the evident decline of printing as the dominant medium and the rise of electronic media the question is asked; What will 'videography' look like? What effect will it have on our concept of letters and how will it manifest itself in the creations of the future industrial designer?

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CHAPTER 2 - TYPE MANIFESTO

In the beginning was the Word, and the Word was with God and the Word was God.

The gospel of St. John 1,1. Challoner-Rheims Bible.

In ancient word magic a sign held the value of the idea represented (10, p. 19). Signs had mystical power, signs warded off evil, signs were positive and brought good fortune. Christianity sees Jesus Christ as the physical embodiment of the eternal word of God. Words and symbols have had profound value since the dawn of humankind and continue to bring value to the products of commercial culture. The carved sheaves of corn on the shank of a craftman's plough were essentially an invocation of bountiful harvest and a value adding feature as well as decoration. The question as to why many of today's products carry visual badges, logotypes, words and phrases describing a high level of performance, can be made clearer by considering the longstanding tradition of ornament. In effect the typography of industrial design can be seen as corporate culture's manipulation of tradition to communicate a manifesto of commercial success.

The thinking behind today's product typography is not new: 'Megabass sub-active woofer system' may be thought of as a prayer to the good function of the appliance and the potency of its owner, 'Sony' may be seen as a political symbol or flag, a window on cultivated associations. This chapter is a concise examination of the history of symbols and words and how they have been manipulated visually to convey ideas and represent political and aesthetic ideologies. This will lead closer to understanding the successful communication of the corporate manifesto through the medium of product typography.

Man's early exploration of applied ornament seemed invariably to grace objects of material or sentimental value. It would be reasonable



to state that ornamentation and carvings of patterns and symbols that added nothing to the possible function of an object added a great deal to its perceived value. This value might have related to the workmanship involved, but was also contributed to by what the pattern or symbol meant. As primitive technology developed there was an increase in the types of man-made object that didn't seem to merit ornamentation: Symbols of value were reserved for jewellery, weapons, objects of affection or reverence. Items such as ceramic roof tiles and cross spars in the animal enclosures of early farms were left plain: they probably were considered banal and two-a-penny, not worth the effort, not suitable media.

Script culture objects of consideration were awash with images, the literature of the illiterate. The Gothic cathedral is a monument not only to God but to the earthly deeds of man, his principle creation. The statues and images within its high buttressed walls and ranged over its spires and ledges are tributes both to the saints of heaven and man and his arts. Kings and figures of local import, matters of scripture and local life, loves and fears, poets and devils, all held their place in the 'text' of Gothic ornament. The craft manufacture of the time also chose certain objects as more suitable for ornamentation. A butterchurn or a beam over the entrance to the larder was more likely to display a carved symbol of prosperity than items such as a gate or henfeed bucket.

This state of affairs requires a hierarchy of appropriateness for ornament. Something that is beautifully carved has received the craftsman's care and attention. It has an extra value endowed by both the skill required and the sentiments expressed. Something without ornament is less important in the craftsman's world. We can thus say that the hierarchy of ornament is indeed a hierarchy of value with many steps ranging from precious to worthless. A lecture by William Dyce in the Journal of Design describes a mid nineteenth century viewpoint;

Ornamental art is an ingredient necessary to the completeness of the results of mechanical skill. I say necessary, because we all feel it to be so. The love of ornament is a tendency of our being (18, p. 21).



Although each individual may have a different set of values and choose to ornament something that another individual may not, any culture must hold a certain common conception of the hierarchy. This hierarchy is that which is manipulated by the workers in corporate image. Where mechanisms including logotypes and product graphics give one washing powder of equal function more value than its twin and raise it to the status of cultural icon.

While only a fraction of our history has been typographic, a still smaller portion of typographic history has been concurrent with industrial design. In order to understand how typography is used today to convey the corporate image or ideology an analysis of the historical use of printing as a political tool will be helpful.

With the establishment of printing and the dramatic increase in literacy writing became an extremely important political and ideological tool. It is significant that without printing technology the widespread sale of papal indulgences would not have been possible. Martin Luther relied heavily on printing both in spreading his ideas and also in making the Protestant move back to the pure words of the Bible possible for more than the few. Matters such as religion became more open for questioning and discussion. Because of a heightening awareness of mankind's intellectual achievements religion became less blind faith and more a celebration of God's achievements through his wondrous creation man (12, p. 158).

The new emphasis on precision developed the visual arts in areas such as perspective, rendering of materials, plant life and the anatomy of man.

The process of standardisation brought about more clearly all deviations from classical canons reflected in diverse buildings, statues, paintings and objets d'art... A heightened consciousness of the three orders set down by Vitruvius accompanied the output of architectural prints and engravings (12, p. 54).

Classical types were sharply defined and complied with. Ornamentation was influenced by these trends becoming less an pictographic narrative mode and more a literal, accurate representation with abstract meaning. With the increase in literacy there was a steady



increase in the use of phonetic characters to convey meaning on monuments, buildings, merchant's signage, etc.

The communicative power of a typestyle rather than the content of the text was considerably less in Renaissance times than today. This would be due to two main factors; The youth of the art, associations had not had as much time to develop, and secondly, the media of the time were not as completely subject to man's will as modern technology permits. The move from the dark ages to the age of the enlightenment was to be seen much earlier in the content rather than the style of a text.

A key to this assumption lies in the statement by Eric Gill that typography was always a favourite art for sponsorship by the establishment. Its abstract nature unlike the painting or sculpture of the time made it resistant to rebellious adulteration and thus very popular with the bedeviled rulers of European monarchies. However, even in the first century of printing loose associations of typestyle with content and therefore ideas began to be formed.

The first strongly defined example of this was the design of the humanist, Renaissance faces based on Italian script. Compared to the first Gothic based typestyles, the Italian styles were lighter, freer, and easier to read. They were a clear stylistic paradigm of the new ideas. Although practically all present day bookfaces are close decendents of the Renaissance faces they were once new and once helped represent a revolutionary change in thinking. This, as in any question of representation is a recurrent theme in the ideological component of typography: style associations are never constant but change and shift in the tide of cultural progress.

The activists of the French revolution used the printing press to good effect in the spreading of their ideology. The production of political tracts printed in large numbers and distributed to the citizens of Paris and centres of population created the sense of solidarity crucial to overthrow an oppressive monarchist regime. In the confusion of post-revolutionary France the pamphlets of competing political factions and revolutionary news-sheets turned the streets white with printed political debate. The printing press received due recognition for its contribution:



The French Revolutionaries believed that combined with schooling, printed works in many forms, didactic plays, civic festivals and monuments the flood of images would contribute to an educational environment which would create a nouvelle homme for the new society (9, p. 289).

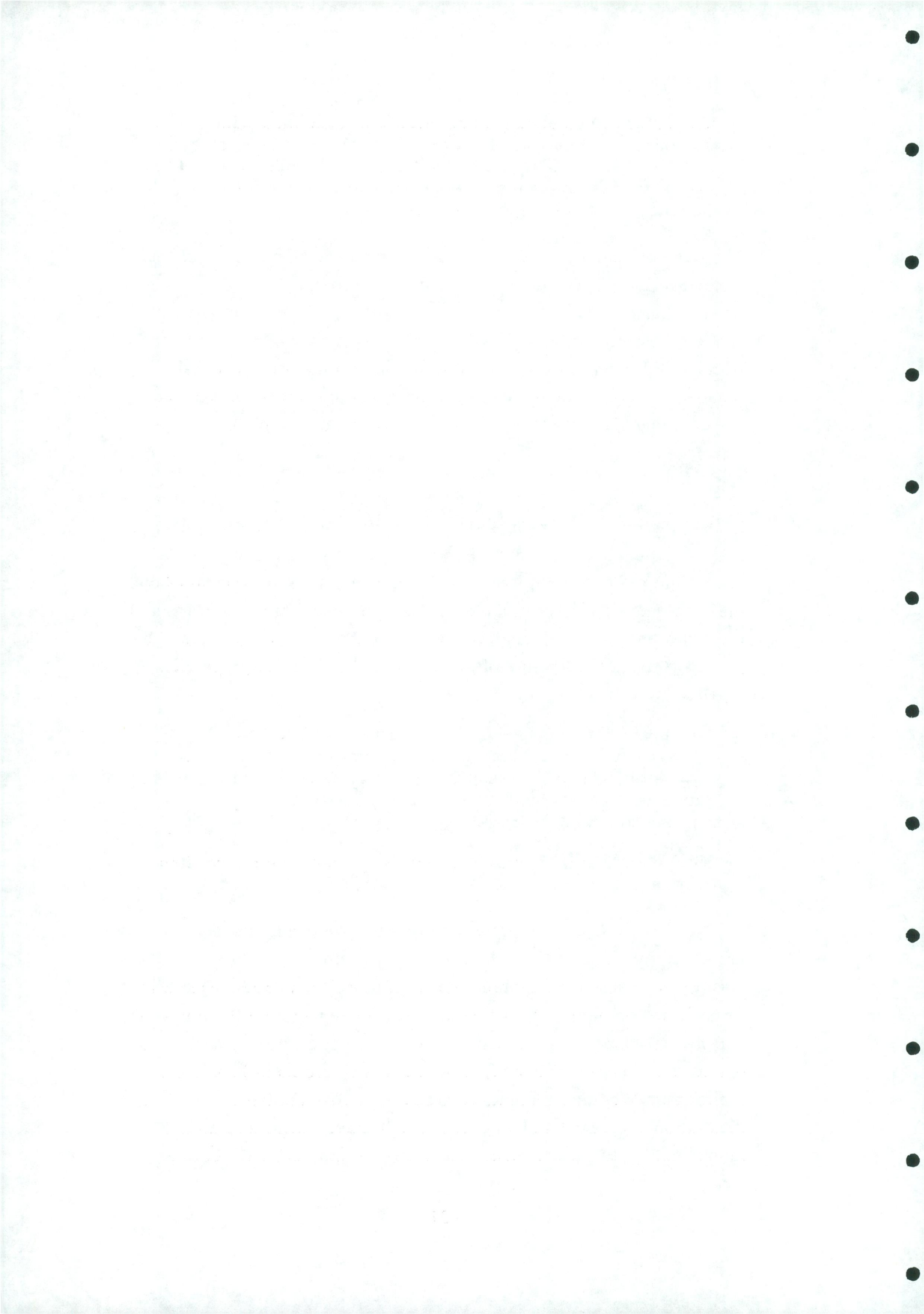
The Revolutionaries relied on a level of literacy for the success of their printed forum. Their ideas were conveyed through the medium of print just as the manufactured ideas of today's commercial interests are conveyed through product labelling and logotypes. Stylistically their tracts and pamphlets were almost universally printed in the classic renaissance faces. The more fanciful products of royal patronage and the monumental faces were employed only in satirical pieces.

The Futurist movement was an excellent example of the use of media to further political aims. Launched by a printed manifesto in Le Figaro in 1909 the movement proposed a politics of violent change, industry and the great adventure of modern times. Strong personalities such as that of Filippo Marinetti, leader of the movement, used every available medium and more to project their philosophy from Italy to Europe and the rest of the world. Typography was transformed in the process. The Words-in-freedom literature of the futurists used type and typestyles as a painter would paint;

I am against what is known as the harmony of a setting . When necessary we will use three or four columns to a page and twenty different typefaces. We shall present hasty perceptions in italic and express a scream in bold type ... a new painterly typographic representation will be born on the page.

Filippo Marinetti, Manifesto of Futurist Painting, Le Figaro, 20th February, 1909.

Art Nouveau was an interpretation of Celtic ornamental tracery. An aesthetic applied to many arts including furniture and architecture, it was first formalised in a graphic style during the early 1800s. Abstracted forms based on natural motifs were suited for typographical application and the Art Nouveau style was popularised through posters and bookjacket illustrations such as those by Mackmurdo and Beardsley. Mainstream Victorian graphics consisted of a busy jumble of illustration and Egyptian block serif typography, illustrations and figures tended towards realism. Art Nouveau graphics were boldly



simple and borrowed from Japanese prints in their use of white space, abstracted natural forms and human figures flowed around and through sinuous text. Art Nouveau form was also extremely suitable for wrought ironwork and had considerable influence of architecture. Although the use of symbolic motifs was a link with classical iconography, the exploration of expression through abstract forms had a great influence on aesthetic philosophy and later explorations of typographic form (Ferebee, p. 59).

Walter Gropius, one of the pioneers of the aesthetic philosophy Modernism, was the founder of the Bauhaus school of architecture and industrial design. He saw the world of design as clogged with a welter of heterogeneous ornament, images of a distant past no longer relevant to modern life and the new revolutionary manufacturing techniques. Gropius called for a design thinking that produced objects and buildings;

Logical products of the intellectual, social and technical conditions of our age (16, p. 18).

To achieve this he proposed the rationalistic approach; by discarding superfluous ornament and reducing to the essential, design would be purified. He also saw standardisation as necessary;

It is a commonplace that repetition of the same things for the same purposes exercises a settling and civilising influence on men's minds (16, p. 27).

Gropius saw the subtle proportioning of his new purified environment as the medium of beauty; rational design would be enduringly pleasing in its 'honesty of thought and feeling'. These ideas were reflected in the education and work of Bauhaus students in design, architecture and also typography.

The work of the Typography department played a great part in the propagation of the theories of the school through the design of books and pamphlets published under its name (6, p. 7).

The typographical innovations of Futurism concentrated mainly on the arrangement of text on the page and the positioning of words in an array of typestyles relative to each other. Modernism in its exploration of the abstract was an opportunity for radical innovation in the forms



themselves. Innovation that would deeply influence typography up to the present day.

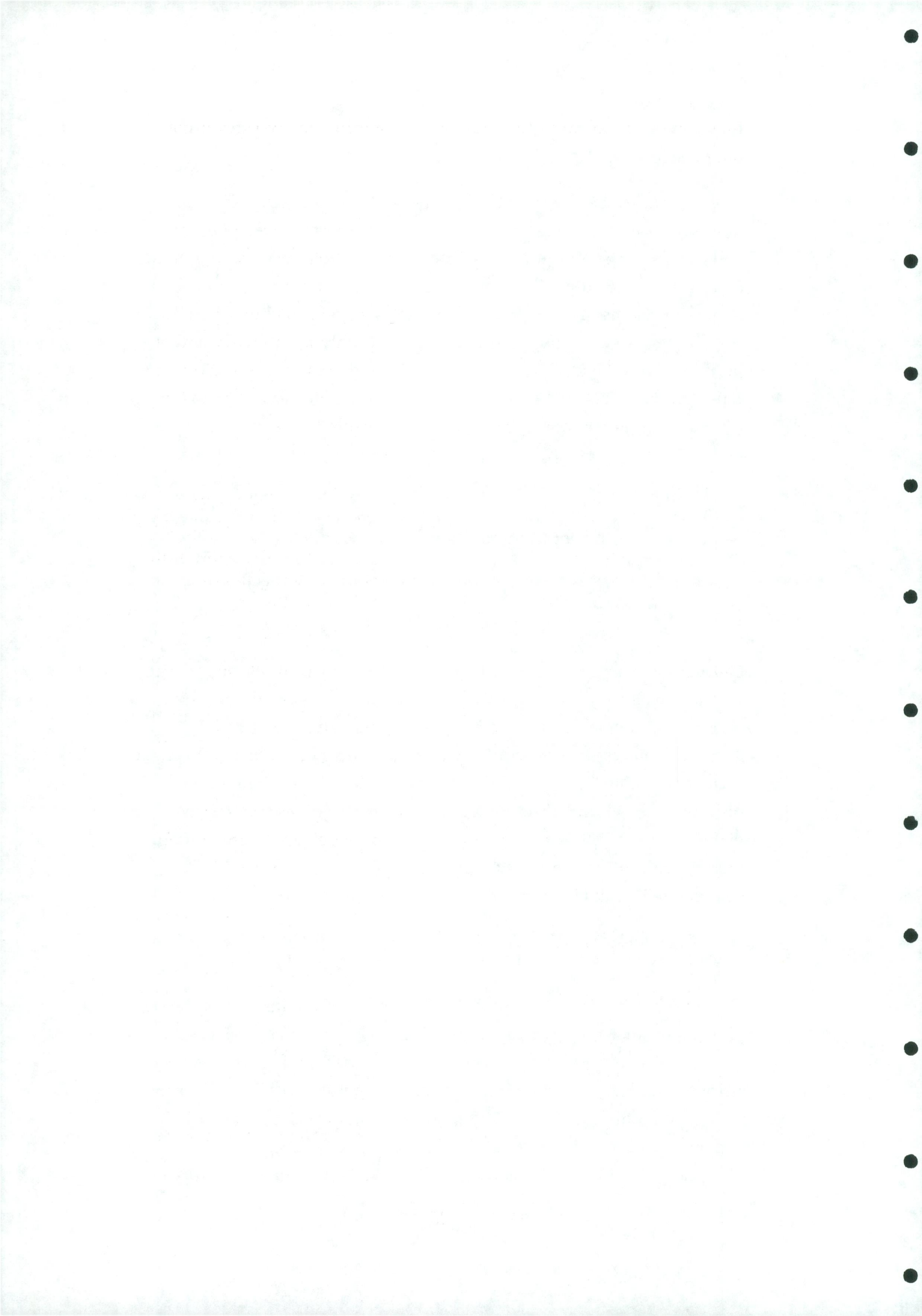
Eric Gill was one of the most successful early typographers in the modernist vein, the creator of faces including Perpetua and Gill Sans, still fresh looking and in popular use today. He had been a student of architecture and saw 1930 as a time formed by the humanism of the Renaissance, and the Protestant and Cartesian reforms but where the conflict between industry and humanity had only been falsely and superficially resolved. His answer was to abandon attempts at ornamentation in manufactured products, to leave humanity to the hands of the human craftsman; a separation of the incompatible worlds of art and industry. These views are reflected in his typographical work;

Taking the shape of A to be that which the judgement of the mind lays down we have to conform it to the nature of the machine and not attempt to impose upon mechanical production either those ornamental exuberances which are natural and proper enough to human beings working with their hands or those peculiarities of detail which are proper to the pen, the chisel and the graver (15, p. 14).

Gill held a view common to the northern European modernists; that which is well proportioned and rationally designed to suit its purpose and means of manufacture cannot possibly be ugly. He stressed however a necessary division between the realms of art and industry if society was not to be drowned in 'robots with red noses'; mass produced fancy. Industrial products well made and commercially viable are incidentally beautiful in their efficiency, good handcrafted works, beautiful in their very substance are, by accident, also commercially viable (15, p. 69).

Ornamental typography is to be avoided no less than ornamental architecture in an Industrial Civilisation (15, p. 13).

The criticisms of Modernism as an abstractionist intellectual orientated philosophy that produced cold inhuman architecture could well be levelled at their typography. This is not to say that the pure typeforms stripped of historical fancy have not been hugely successful. The sans serif type families influenced by modernist philosophy such as Univers, Futura and Optima are to be seen everywhere, they are



excellently legible, have good impact for display and are practically the only faces used in functional labeling of products. Yet Modernist typography failed to purify classic forms out of existence.

The director of the typographical department at the Bauhaus was Herbert Bayer. He propounded a policy of complete rationalisation. Not only would typefaces be constructed from geometric primitives such as the circle and the square, or colours constricted to black, white and a warm primary, but one alphabet would be developed to replace the upper and lower case and italic alphabets. This insistence on basic scientific rules in dealings with human needs was as unsuccessful in its application to book typography as to architecture.

After some experimentation it was discovered that if a face is to be readable over more than a few pages of text the type designer must sacrifice pure geometry to the needs of the eye. The sans serif faces that achieve adequate readability such as Univers 55 show variation in line stress and contrast and are not strictly composed of circular and rectangular forms. Modernist thinking has strongly influenced typography, but the path of strict rationalism has been abandoned to address the needs unserved by geometry and neglected by the typographers of the Bauhaus.

Letters which have no reference to written forms tend to lack the subtle rhythm of a good text face. (36, p. 13)

The eye needs serifs to best follow a line of text; contrast, stress, geometric inconsistency, all help in turning a page of abstract shapes into printed communication. While the Modernist attempt at invading the critical field of typefaces for books failed to replace or improve on classic forms their proposed reforms had lasting effects on the typography of signage.

The typography of the Bauhaus was singularly successful in conveying the Modernist ideology. So much so that it suffered similar fundamental failings to those of Modernist architecture. The Modernist attempted revolution of abstract letterforms did succeed in several crucial areas: it called many purely ornamental typographical and typesetting practices into question, some beautifully pure modern



signage faces were born, and most importantly the potential of abstract letterforms to convey ideas was clearly demonstrated to the future.

The sans serif has become such a stylistically neutral norm for all product labelling that the use of a classic face, the norm for books, has become a strong styling statement on the surface of products. The medium of context is a recurrent theme. The rationalist typeform while not ideal as a bookface is more legible than most classical faces and thus suitable for any product labeling which indicates function. The Modernist exploration of the abstract world of typography was the most visible and profound since the establishment of mechanised writing. It prepared the world for an increased use of typographic media in the transmission of ideology.

Post-modernism is the name given to a way of thinking that has emerged as both a reaction and an evolution from the modernist aesthetic philosophy. The post-modern philosophy sees itself as a response to the fragmented, speeding, disjointed pastiche of late twentieth century culture: the post-modern condition. This approach encompasses an even more vast array of arts and disciplines than did modernism. Post-modernism declares the end of prohibition, the language and signs of the past, present, north, south, east and west are free to be used in whatever combination of quote and reaction desired

Eclecticism is the degree zero of contemporary general culture: one listens to reggae, watches a western, eats MacDonald's food for lunch and local cuisine for dinner, wears Paris perfume in Tokyo and retro clothes in Honk Kong, knowledge is a matter for TV games (22, p. 29).

Beneath the style, Post-modernism is an honest response to both constant and momentary modern day needs neglected by rationalism: defence, disposal and the tumultuous fin-de-siecle panic of pacific-rim culture. At worst it has been accused of all the failings of particularly cynical advertisement, a glossing over of mis-applied modernism. Whatever strong criticisms there are of Post-modernist philosophy it has to be conceded that it is a response to rather than a cause of what has been called the Post-modern condition.

The effect of Post-modernism on typography can also be compared to its effect on architecture. The failings of rationalist buildings in



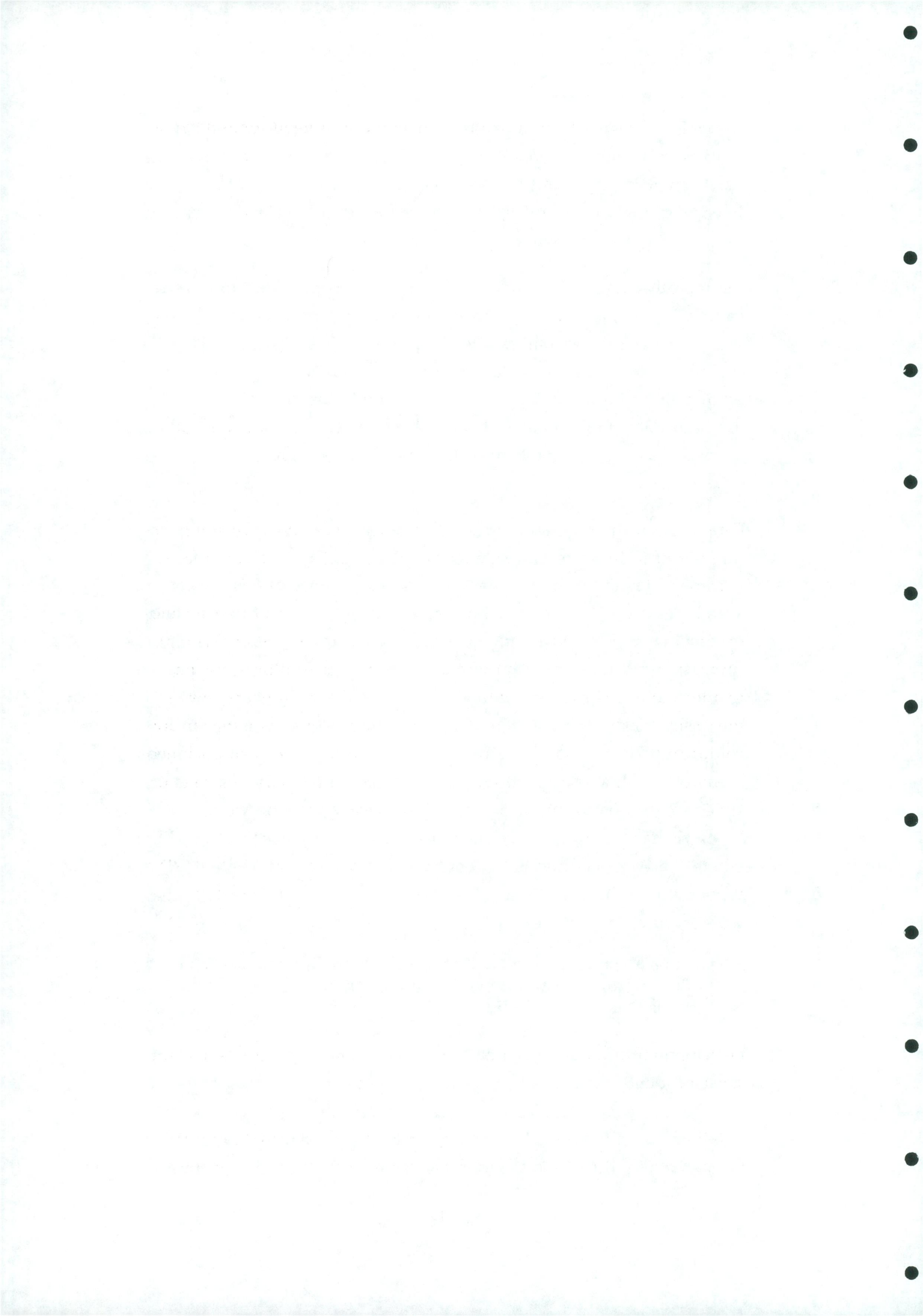
recognising deeper human needs such as those of territory and privacy have been acknowledged. The blind faith in geometrical reduced form has been abandoned and the necessary use of ornament and reference have been addressed. Typographers are allowed to use classic faces and ornamental elements without being labeled populist (27, p. 10).

On the other hand the Renaissance emphasis on precision in classical canons is gone, as is the modernist reverence for proportion. Coupled with new design possibilities afforded by postscript typesetting these trends are clearly seen in the distorted pseudo-classical faces of mainstream graphic design. While Post-modernism is more an aesthetic anarchy than an aesthetic philosophy or ideology it is still a set of ideas equally capable of being expressed through the medium of type.

One of the many effects of industrial progress was an expansion in the number of techniques available to the artist. Choice of technique became as legitimate a means of expression as choice of form, colour or subject matter. The effects of this process on the world of fine art and ornamentation have been huge but are beyond the scope of this discussion. Where typography is concerned industrial progress has led to a technology characterised by its flexibility. There are very few impossibilities in the creation of typographical elements either in form, colour or texture. Thousands of ornamental faces have been designed many of which are firmly associated with particular activities, eras or styles. With this scope for choice the expressive component of typestyle has finally followed literacy out of the dark ages to a condition where the style medium is frequently more loaded than content. The typography of industrial design is one of the chief instruments of the workers in corporate identity.

Groups always develop an identity, a personality and a behaviour pattern of their own, different from and greater than the sum of the personalities involved (25, p. 13).

Development of identity is a natural process and its history is ancient: a sense of identity is natural to any society. Industrial organisations, as they get more complex, have to develop a culture that enables both its employees and the outside world to understand what that organisation is. With the industrial revolution also arrived the age of corporate



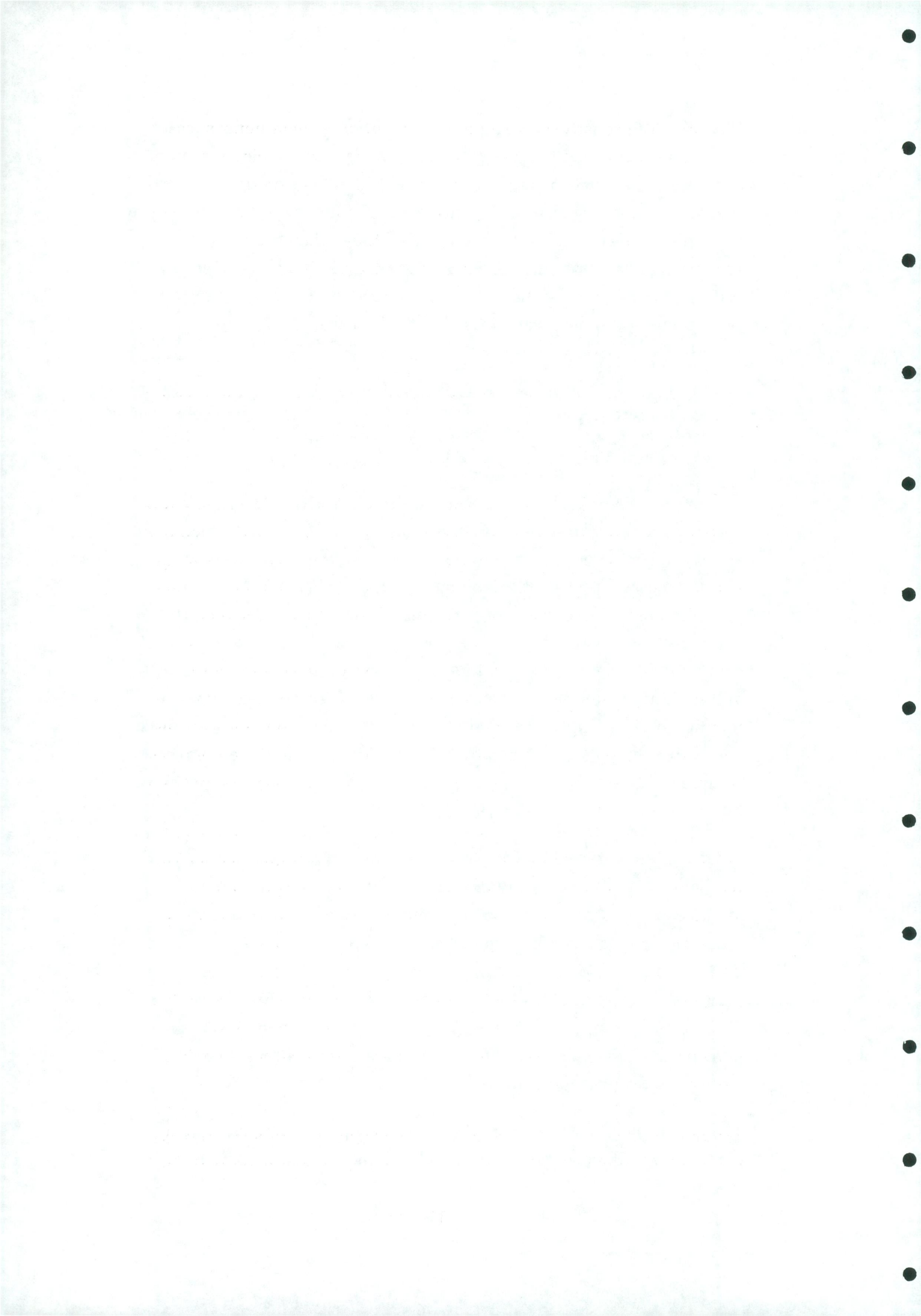
identity. The construction and management of large systems such as railway networks led to problems that were very much bigger than had ever been attempted before. All the requirements of modern management emerged virtually at the same time; marketing, employee relations, finance and accountancy, technology, planning and scheduling. The bringing together of so many individuals with different social backgrounds, skills and even languages could not have been successful unless standards of behaviour were laid down and then heavily emphasised.

The individuality of the great companies was expressed in styles of architecture, typography and liveries or engines and carriages, even down to the knives and forks and crockery used in refreshment rooms and dining cars (5, p. 17).

The railway companies were a natural ground for the development of corporate identity design. The service they provided was distinct; the speedy transport of people in a thoroughly modern way. Employees had to be given a sense of belonging easily lost in such large organisations. There was a high degree of competition between rival companies, customers had to be impressed with both the individual company's efficient service and its style. Corporate colours, insignia, and militaristic uniforms became part of the widening vocabulary of identity. Ollins emphasises that one of the main reasons for a strong company identity was the creation of solidarity among the employees, a company way of doing things, a distinct force in the marketplace (25, p. 19)

Peter Behrens directed an early corporate identity programme for AEG, the national power company of Germany in 1907. A prominent architect, he was commissioned not only to design new buildings for AEG but also their graphics and electrical products. It is this concept of design continuity or house style that makes Behrens one of the pioneers of corporate identity by design. He saw the public perception of large state companies such as AEG as being fundamental to their perception of the German nation; from the outset Behrens' task had a strong political component.

The goal of Behrens' work for AEG was to create a strong consistent perception of the company through all the means that it came in

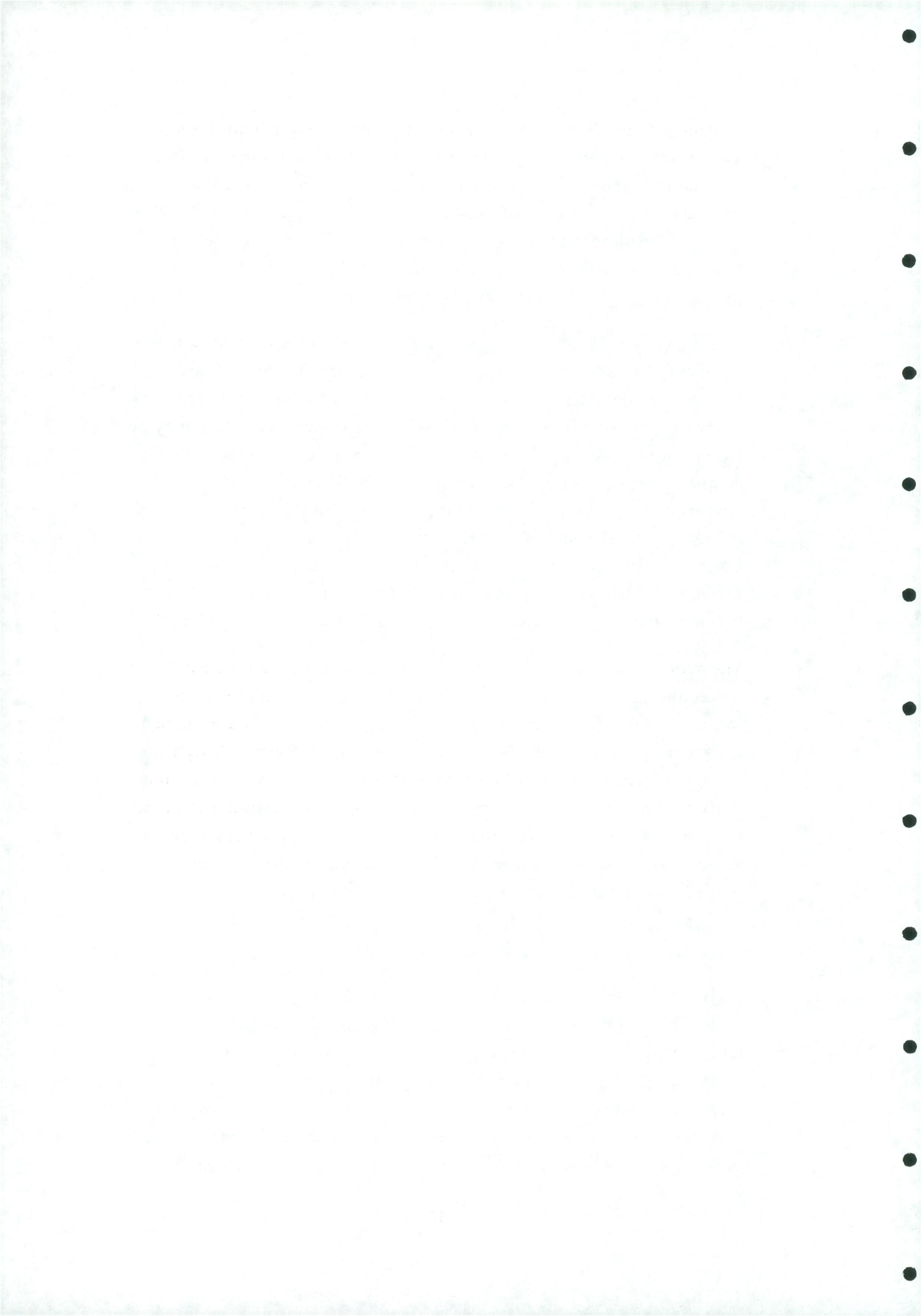


contact with the public. New generator buildings were built in the strong, weight contrasting light, machine age style. Their monumental associations were echoed in Behrens' graphics and his typography, a medium with which he had experimented in his formative years (26, p. 201). The various logotypes he devised for AEG are characterised by their monumental carved typefaces and references to the seal of office or guildsman symbol in the layout of the letters.

There has been an overwhelming tendency in corporate identity for large corporations to adopt superhuman imagery. Commercially desirable values such as quality, strength, decisiveness and masculinity override values such as sensitivity, humanity or emotion. This may be traced to the political roots of modern corporate identity where the company logo takes the place of flag or military insignia. Another tendency is the creation of an identity without substance: the treatment of signs without treating what they represent: 'The Emperor's New Clothes Syndrome' (25, p. 11). This is part of a wider human theme: the tendency to dissociate the visual icon from meaning, every aesthetic becomes in some part a pure style detached from the original idea.

The Wolff-Ollins consultancy based in London carried out many corporate identity programmes including the recent Allied Irish Bank scheme. Widely regarded as one of the most successful and influential consultant groups in the field, this was due to their policy of a dynamic changing identity rather than a static passive one. Ollins classifies the portion or portions of corporate identity seen by the consumer as brand identity. Brand identity can be developed solely as a marketing tool and an aid to sell products, ie. Mr Kipling's confectionery, or can be part of a greater corporate identity designed to seduce not only customers but investors, suppliers, and high-calibre employees: the identities of Sony, IBM, and Philips are good examples.

In summary, the development of a corporate identity is the process whereby a company and all its complex components becomes represented by a set of easily digestible signs. This can be a mostly natural process or an artificial design led one. The existence of a corporate identity is good in that it simplifies issues for employees and customers alike. It can also be a failure by trying to project values that don't exist. Successful identities represent and are signs for qualities

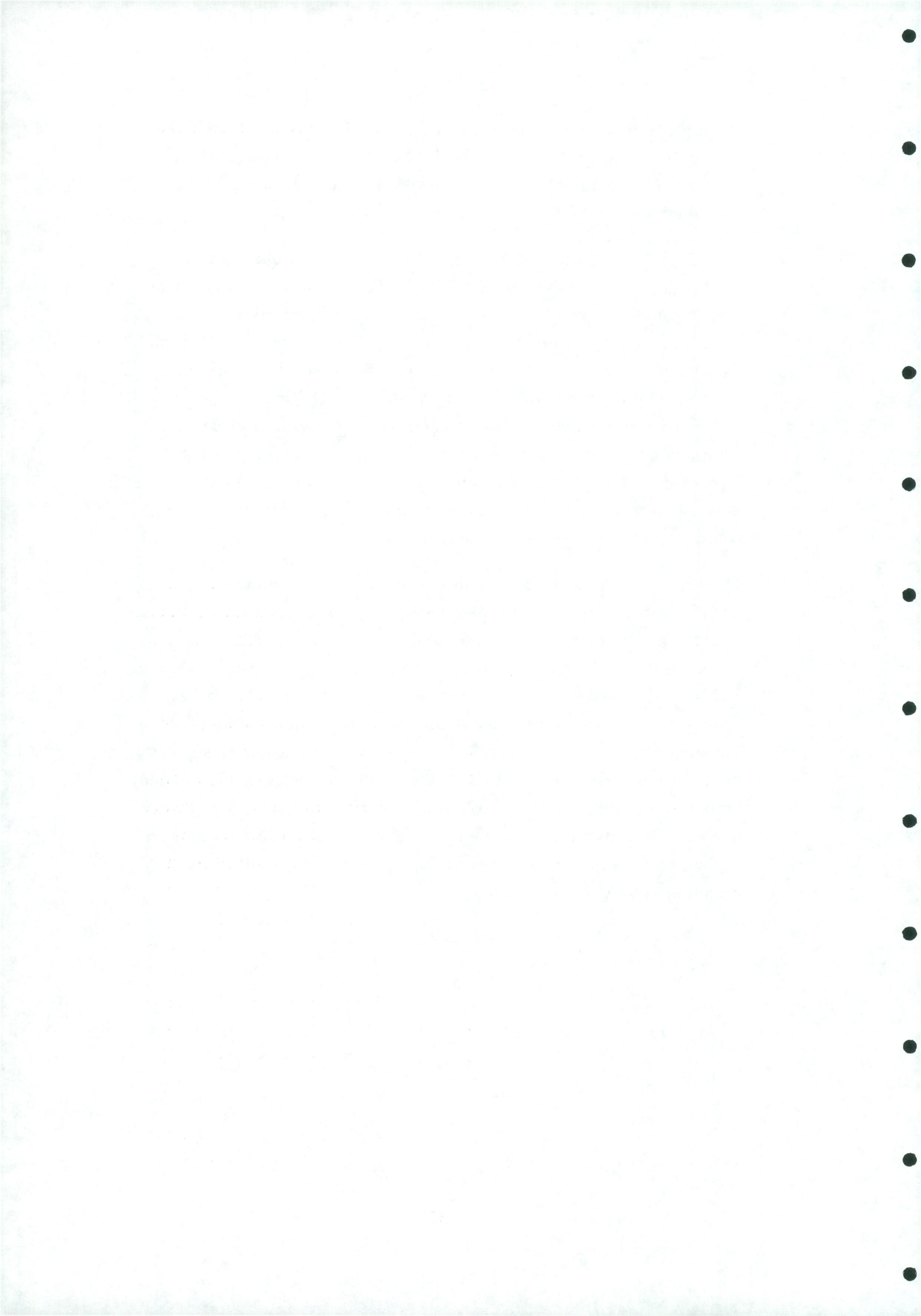


that are also experienced by people: they reenforce rather than invent. Typography became fully integrated into the process of identity design with the establishment of the first multi-disciplinary corporate design consultancies in the 1950s (25, p. 155).

Another notable trend is the increased use of pictographic symbols on the surface of products. An example of this would be the small triangle that is commonly used to indicate 'play' on audio-visual equipment. McLuhan sees the rise of global media as initiating a return to a tribal based 'closed' society in which emphasis would move away from phonetic literacy and towards the symbol (24, p.31). This may be partly true but a more conventional explanation would be the simple need of companies to communicate with the multi-lingual global market. Well designed pictographic symbols are the lowest common denominator for communication between people of differing languages and an increasingly similar global culture.

This chapter has identified as constant the need to communicate, to leave a mark, to identify. Written words have been used for thousands of years to convey meanings and ideologies. With modern technological developments, as in many fields of endeavour, technique has become a media in itself; The style of a typeface can sometimes convey even more information about the authors than the text itself. This medium of technique was explored by modern aesthetes such as the Futurists and further refined by the Modernist typographers. Today typography, a neglected facet of contemporary industrial design theory, is a powerful instrument in the communication of an increasingly sophisticated corporate ideology and a primary component in the design of commercial products.

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CHAPTER 3 - TYPE OBJECT

In a highly competitive world where there are few obvious differences in technical quality to help distinguish products from one another, it is the perceptible characteristics of products to which consumers and users generally turn (19, p. i).

Effects of new techniques on written communication have been explored; how the particularities of the dominant media can effect not only the forms of letters but the very society of their creators. Words as communicators of ideas and the increasing use of the letterform as a medium in itself have been related to the modern aesthetic movements and the ideology of corporate image. In this chapter historical and current applications of type are analysed in an attempt to identify possible underlying trends. A typology of product typography takes the first step in determining a theory of its contemporary application.

The way phonetic text is applied to an object depends on the literacy of the population and what that literacy means. An example of this is the practice of engraving the names of political bodies on the prominent portions of public buildings. This was inherited from the architecture of classical Rome (15, p. 14). The architrave of the pantheon (25 - 27 bc.) is engraved: 'M AGRIPPA L F COSTERTIUM FECIT'. Marcus Agrippa was a leader of men. The engraving of his name on the temple of all gods is a manifestation of his earthly power and a possible endorsement and alliance of this power by the celestial powers that be. Contributing to this political declaration is the fact that at the time of the inscription literacy was relatively rare: words meant privilege and power in themselves. No better example of this is the naming of units of time itself, the months of July and August by the emperors Julius and Augustus.

Applied text in medieval times continued to be a political and religious tool characterised by an aura of mystery and word magic. The Roman

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Catholic church has always used rituals, special clothing and complex and impressive titles to impress the mass of the laity (25, p. 16). The symbols and engraved writing of the Gothic cathedral provide a good example of this: the incredible mystery of the huge light filled cathedrals, the mystery of fine statues and the mystery of letters were deeply impressive to the medieval layman.

The commercial world of the middle ages was so rudimentary that it didn't require or employ modern sales techniques (25, p. 17). Applied text was historically an extremely powerful political and religious tool and it wasn't until the age of printing dawned and literacy began to spread that it began to be employed for more mundane tasks such as shop signage and product labeling. The medieval use of seals and marques to indicate quality or authenticity is a use of typography that continues in modern packaging.

When the industrial revolution began to take effect in the lives of ordinary people literacy was widespread. New sales and marketing practice began to explore available techniques for making the cornucopia of new products attractive and competitive. Product typography was one such embellishment technique. As with ornamentation the nineteenth century reaction to type was one of quantity and diverse styles. This is exemplified in the typical advertising posters of the era.

The styling of early industrial products called on forms from classical architecture. Their product typography was also reminiscent of the engraved titles on classical buildings. The use of classical imagery symbolized the scientific rationality and order of principles so admired by Victorian society. It also identified the product with those admired values and made it more desirable to buy and own.

Examination of products between the mid-nineteenth century and the second world war reveals, in the midst of revolutionary technological development, very little fundamental change in the way typography was being applied. Deep changes in thinking were occurring in the field of graphic design but it took the establishment of the multi-disciplinary design consultancy in America of the early 1950s for these changes to be reflected in product graphics. The consultancy brought together the



expertise of industrial designers, graphic artists, and the marketing and advertising team. The thinking of the marketing man and the technique of the graphic artist had a profound effect on the typography of the industrial designer (25, p. 155).

The further trends that bring product typography to today's sophisticated condition are: the growing emphasis on branding, the increase in incomprehensible technology, socially stratified marketing, and cultural developments discussed in McLuhan's Global Village theory (24, p. 31).

Branding is a mechanism increasingly employed by companies to artificially differentiate products from each other. Branding is the portion of corporate image made visible to the consumer and used to identify products from those of competitors. Alternatively any one company may promote a series of brands. There are a large number of marketing techniques that employ the differentiating capacity of branding to increase overall sales. Unilever is one of the world's largest consumer goods corporations. Its products include most of the soap powder brands on sale in Ireland. Unilever appeals to investors as Unilever the corporation but to the consumer it promotes itself only through its many individual brands. This guarantees a larger market share than if it simply promoted itself as Unilever (25, p. 31).

The consumer electronics company Philips uses branding to better penetrate niche markets. 'Moving sound' is their range of audio equipment aimed at 'young people on the move'. Moving sound is a brand identity that through advertising, styling and a large element of typography is made to be perceived as younger and more exciting to younger people than mainstream Philips products with equivalent technology. The rationale is that if Philips create focused branding that concentrates on niche markets their overall market share will be greater than with sole promotion of a general range. Branding is a sophisticated combination of advertising, styling and other associative elements. Typography is often the principle means of conveying branding on products due to its relatively flexible technology.

How typography appears on products is often the result of another mechanism: vertical marketing. The horizontal dimension of a gross



market addresses factors such as age group, gender, interests, and personality. The vertical dimension describes spending power, taste class, etc. How typography is applied on a product for the elderly for example, depends further on the social class and taste of the target section of the overall market. The values that delineate this conceptual graph of overall and niche markets are continually changing in response to factors of commerce and fashion. Again the engraved title of the Pantheon illustrates the change in attitude to applied typography. Whereas in classical Rome carved letters were enshrouded in enigmatic mystery and prestige, now in times of universal literacy our most exclusive products are characterised by a reactionary lack of ornament and superfluous text.

Another growing feature is the use of pictograms or ideograms in conjunction with literal text. This has been ergonomically proven to improve comprehension if the pictograms are well designed and thoroughly tested (35, p. 428), but it would also appear to be a response to the international, even global scale of many markets. Pictograms have an up to date international feel that is perhaps indicative of the decline in literacy postulated by McLuhan (24, P. 31).

The many applications of typography on industrial design products can be broken down into four main areas. The construction of a typology is one of the first steps towards a deeper understanding and the formulation of a general theory of design typography. It will be noticed that audio and consumer electronic equipment frequently provides example. This product area is particularly innovative and free of tradition, marketing is both sophisticated and global, and typography is frequently used in all four modes on the same object, thus facilitating analysis.

The logotype is a typographical and/or graphic representation of corporate identity. Associations cultivated by advertising, word of mouth, experience, by all the means the consumer and company come in contact, are in theory triggered by the product logo (25, p. 29). The logo can act as icon of the corporate ideology or can help simplify and condense the multi-media messages of a branding campaign. The fact that many corporate ideologies are very similar: appear good and sell



more, results in a particular style in the logos of related product manufacturers.

The encapsulation of a set of complicated ideas in easily digestible graphic elements has also been employed in improving the comprehension of sophisticated product features. The term 'functional identity' will be applied to this second category of product typography. This is a recent development, consistent use of functional identities didn't exist on the product ranges of five years ago. An example of this is the identity for compact disc technology. The customer doesn't have to read a lengthy description in a foreign language or understand the principles behind CD. The distinctive sign that he has seen countless times on other audio systems is recognisable at a glance and confirms that the stereo under examination has a compact disc unit. Some functional identities have to be displayed by law as they describe syndicated technology, for example Dolby noise reduction. Product semantics tried to convey this information through form but prohibitive complexity, the greater graphic literacy of the average person and the simple economic advantages of superficial graphics have resulted in an increasing use of functional identities.

The third order of product typography could be described as 'literate ornament' these are phrases that serve no purpose other than pure embellishment; type for type's sake. An example of this is the phrase 'full-logic double cassette' displayed prominently on the fascia of the Sharp JX20X portable stereo system. This phrase does describe a function, but without needing to and in terms unfamiliar to the average buyer. The analogy of ornament is appropriate in that 'literate ornament' often refers to other typographical forms to add apparent value, ie. functional identities or product specifications. The attitudes of certain markets to ornament also apply: products aimed at the lower market range exhibit a large degree of literate ornament while those at the upper range are free of all obviously superfluous decoration, both in typography and form. This third mode of product typography can be extremely obvious or extremely subtle again depending on factors such as market. Its distinguishing purpose is giving a product extra value. Another name for literate ornament would be 'promotional waffle'.



The fourth and final category is functional typography. It is important to note that this is only distinguished from other categories in that the literal information it conveys needs to be conveyed. Information such as product description and number, instructions, and labels of control features. Functional type can also have aesthetic and ornamental components but in general it chooses to proclaim efficiency in a simple sans serif. Within this category are included pictographic and ideographic symbols. Functional type can also be manipulated in whether or not it is normally visible to the user. Many complicated products choose to conceal their complexity behind closed doors. A product with all its controls and functional type on clear display projects a completely different image than if they were concealed. Again this depends on marketing factors.

So far four distinct typographical categories have been described: Logotypes, Functional Identities, Literate Ornament and Functional typography. These are all visible to a greater or lesser extent in consumer electronic products. Yet typography of this nature can seem inappropriate or even ugly on other product groups. For every object there may be a slightly different suitable application of type. The next section discusses the areas of furniture, architecture, industrial equipment, and personal products, in order to explore how in some objects each of the four typographical modes are employed to a different degree or not at all.

Furniture is as a rule practically devoid of typography. The area of avante garde or reactionary furniture will not be treated to facilitate analysis. It seems strange that while someone's proudly owned stereo will generally broadcast typographical information their sofa or bed will not. In fact prominently displayed branding or text labels would detract hugely from the furniture aesthetic. Furniture may be branded at the point of sale but this is always removable or concealed in use.

The answer may lie in the merit of simplicity and obviousness of function in furniture. Consider for example a dentist's chair with its complicated structure and positioning functions. A logotype would seem more natural due to underlying functions and commercial messages. Typography implies additional functions not visible in form. Mario Bellini, the highly regarded Milanese based architect



describes furniture as different from products or architecture in exactly this way.

(In furniture) we have remained relatively indifferent to the temptations of new performance levels and to the logic of "progress" in general...the mass produced item has conquered the office and attacked the kitchen but left the furniture of bedroom and sitting room undefiled (4, p.10).

However furniture is a regular site for various forms of ornament, why not literary ornament? Again the source of literary ornament imagery is in the prominent branding and functional identity of a product. This has not existed in the history of the chair and so literary ornament seems inappropriate. Perhaps the relentless march of branding will start to change this and some day a chair shall proudly and typographically proclaim its 'mitred lapped dovetail joints'.

Architecture was introduced earlier as a precursor of product type in the example of the Pantheon. Looking at today's buildings surprisingly little has changed. Important public or governmental buildings whether stone or glass are almost invariably based on classical canons (27, p. 259). Upon the architrave or equivalent is sure to be seen text equivalent to Agrippa's statement of power. In the case of the commercial building the logo replaces direct political statement with that of corporate identity. It proclaims the building as home of a certain product, the building is not the commodity however, the logo refers to the product or company.

Functional text such as direction signage may also be prominent depending on how public or exclusive the building is. The lower sophistication of architectural typography can be related to two main factors: Architecture is an evolving art generally mindful of classical restraint and implicit majesty, the most avant garde buildings still conserve classical elements whether in form, proportion or typology. Secondly, the sophisticated marketing mechanisms employed to sell domestic products are simply not appropriate in the system of architect - builder - private buyer. References to product typography on the surfaces of commercial buildings have already started to appear on two-colour 'blade runner' style video screens. These are small and simple as yet but who knows what market mechanisms are held by the future.



Products used by industry are characterised by restraint. Logos are always prominent and reflect a heavy emphasis on brand reliability. In the case of a machine that is operated for long periods of intensive use functional graphics are of great importance. The science of ergonomics devotes much thought to precise layout of controls, working distances, and the legibility of type. With industrial products the emphasis is always on function and a more businesslike approach, this has become the aesthetic of industrial products.

Although the marketing of a steam turbine is conducted on a more down to earth level than that of a Sony Walkman industrial markets show signs of becoming more design conscious. The same conditions that are prompting companies like Philips Medical to devote increasing resources to styling will doubtless invade many areas of industrial production. This is sure to involve the power and techniques of typography.

Personal domestic products are perhaps the best example of how type is employed by corporate culture. The emphasis is on developing a continual series of new market and value adding techniques. Form, material, colour, texture and applied typography are used in parallel and conjunction to make commercial products more desirable. These mechanisms appeal to the consumer on many levels, from logic; this product must have loads of really efficient functions, to emotion; It's the sort of thing a successful, tasteful person would own. The result of this high-as-possible sales pitch is continual development and evolution of new typographic vehicles. Personal products are becoming a field of innovation in every area. This market that produces radical new technology at a frequency of months will doubtless be the birthplace of further typographical modes.

This chapter examined how typography has been applied to today's manufactured objects. From classical Rome, through the age of revolutions to the present day certain underlying constants were traced. The growth of marketing and commercial culture have been identified as employing and developing these constants and needs, to sell more products. Some directions, purposes and techniques of



product typographical categories were explored in a brief analysis of current products and product groups. This analysis is continued in the following chapter taking three specific case studies as examples.

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4 - CASE STUDIES

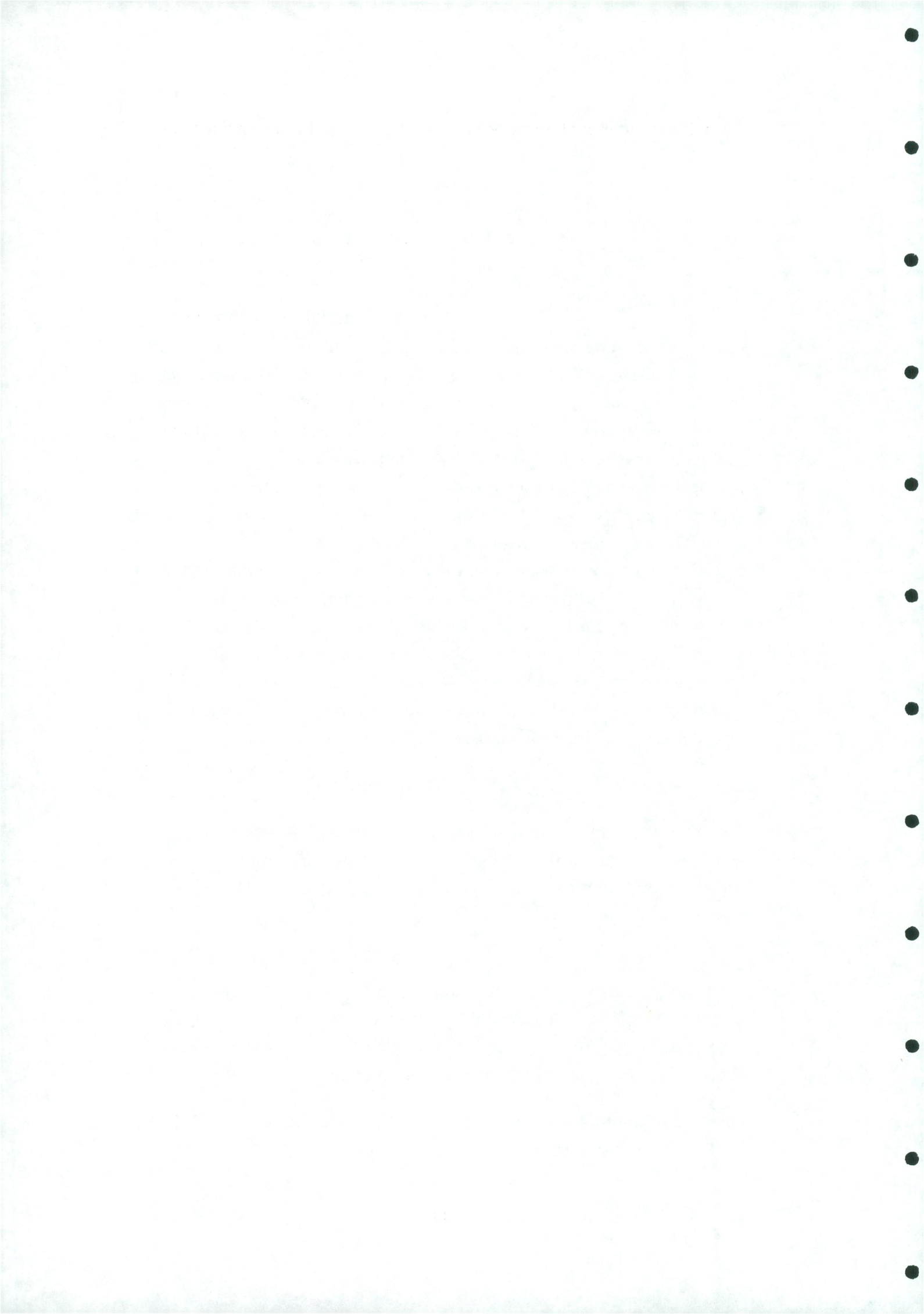
Of the many large consumer electronics corporations in the global market Philips are characterised by their excellent tradition of research. The developers of cassette tape, the video disc and the compact disc, their design and marketing has also recently become distinguished by innovation. It can be said that if Philips do anything, if a product is a certain way, it is for a reason. This prompts the choice of three of their products for an analysis of how typography is applied in this highly competitive and market orientated area. The three case studies cover: the state-of-the-art Philips video recorder and a comparison with their next most sophisticated model, The Moving Sound roller radio-cassette recorder, and the Car-vision mini television. Each case shall be introduced and the item shall be analysed under the four typographical categories: Logotypes and branding, Functional identities, Literal ornament, and Functional typography. Two further case studies discuss the possible future direction of graphics and symbolism.

Case 1. The VR 813 Philips video cassette recorder.

This VCR is the most sophisticated in a range of eight recorders and incorporates some of the latest television and audio technology. As such it is an example of how high technology is presented to the upper end of the market.

The Philips logo is positioned prominently on the lower left of the front panel. The matchline branding on the lower right identifies the recorder as belonging to the Philips improved definition TV range of video products. This grouping of products in technically matched families is conceivably a mechanism for encouraging customer loyalty.

Functional identities represent the technologies of wide screen TV and the Super-VHS standard.



Literal ornament is almost absent. The HQ symbol to the right of S-VHS is non-standard between companies and is used to indicate the recommended high quality tape. A certain component of the use of HQ would seem to be ornamental as its use is quite arbitrary across the Philips range.

Functional text is mostly concealed behind a flap on the front of the machine. The sans serif text and consistent use of pictographic symbols for common controls provides a good example of contemporary functional typography. The electronic display shows status, for example 'pause' in both text and symbol: the two vertical bars below the 'u' of 'pause'. It is interesting that the 'S' symbol indicating S-VHS mode is also displayed in its stylized form.

The VR 713, the next most sophisticated model, is distinguished by having less actual functions but being made appear to have more. Typography is the agent of this illusion. The 713 has twelve listed features in the product brochure to the 813's 16 but its use of typography would give the impression that it had several extra. Instead of S-VHS the 713 provides only the VHS standard but the functional identity is displayed in a more prominent position and is actually slightly larger.

Literate ornament is prominent on the left side of the front panel. In a list of functions we are informed of the sampling frequency of CD quality sound and how many video/audio heads the machine possesses (actually one less than the unassuming VR 813).

Functional text is also more worded, for example the same feature is labeled 'pull' in the 813 but 'pull here to open' in the 713.

To conclude this case the contrast in typographical application between these two 1992 Philips VCRs provides an excellent example of market trends in different price brackets. The high-end product tends to be as understated as possible but it is interesting that the necessary functional identities and branding are still conserved. The products nearer mid-range show a consistent use of stronger form and resonant literate ornament.



Case 2. The Philips Moving Sound Roller Radio.

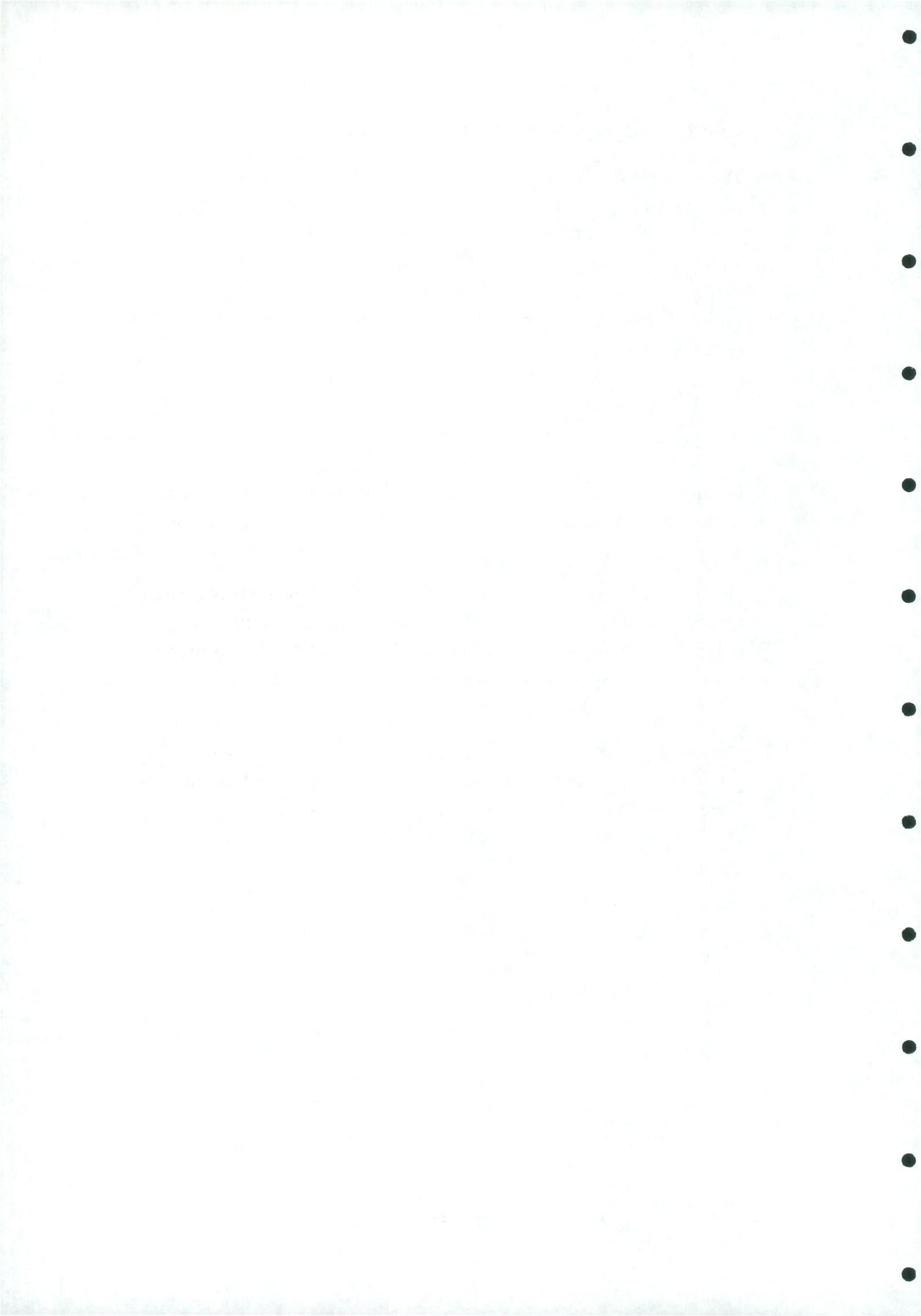
The Roller Radio was the first in a range of Philips Moving Sound portable audio products aimed at the younger consumer. Moving sound is a niche market concept with several aims. The promotion of audio products as a 'form of clothing' (19, p. 139) with distinctive shape, colour and styling that reflects the needs of this market. The capture of young customers both to increase sales and to create possible life-long customers.

The Philips logo is standard and prominent.

Functional identities are not in evidence due to the simple non-technical performance nature of the product and its styling. The headphones symbol on the lower left may be thought of as a functional identity as they represent a technical capability very much in demand by this market.

Ornamental typography is a strong feature of the whole Moving Sound range especially in later items. The 'Splash' motif is purely ornamental and makes no reference to product capabilities. Strong use of colour and graphic elements blur any distinction between ornamental and functional type.

The Moving Sound Roller Radio exceeded estimated sales figures with pre-release orders and became one of Philips' most successful products. More recent Moving Sound products have been directed at an older age group in their use of darker colours and technology based styling and typography.



Case 3. The Philips Car Vision LCD television.

This is an example of crucial aspects of a product hinging on applied typography. There are a growing number of LCD mini-TVs on the market. These operate as status symbols of exclusive leading edge technology. The Philips Car Vision was originally known as the 4 LC 1000. With superficial restyling and the addition of the label 'Car Vision' this product trades on the free lifestyle and car that would perceivably go with such an item. The simple addition of 'Car Vision' and the product's promotional and point-of-sale material open these associations.

The Philips logo is again standard and very prominent.

Functional identity and ornament are not employed as this product trades on freedom, conceptual simplicity, and the prominence of the Car Vision motif.

The functional typography of this functionally basic product is used simply and concisely. The main operations such as volume, tuning, colour adjustment, etc. are indicated ideographically by means of the two pairs of arrows to the left of the screen.

This product was conceived during the creation of the sophisticated Philips collection. The creed of current high-end typography is simplicity. However, simplicity of typography still allows the Car Vision identity to be crucial to the impact of this product.



Case 4. Contemporary Poster aimed at a youth audience.

This example of current graphical thinking is the poster for the Designer of Tomorrow awards 1990 held by Californian design institute FIDM.

The Neo-theo typeface used in this poster is a good example of contemporary typeface design. The emphasis is not on creating a long-lived classic but rather an impermanent exploration of form appropriate to the particular message. This style of typeface has become associated with avant-garde magazine design.

The overall aesthetic of the poster, while reminiscent of 1950s science fiction comic art, calls also on modern-day video imagery in tone of presentation, colour and the screen-like information panels towards the bottom.

Particularly interesting is the use of the three icon-faces at the centre that 'talk' to the reader. The goal of this poster is to reach as wide a youth audience as possible. This is achieved by identifying the poster with the young reader through up-to-date imagery, references to television and particularly references to the immediate, persuasive tone of video-speak. This poster is an example of contemporary graphic design and how the media revolution may be starting to influence communication.



Case 5. Universally accessible Computer-User interface based on video culture.

The Apple Macintosh computer provided the first example of a consistent user interface based on analogy with life experience. Operations that are common in an office environment are related to operations necessarily performed on computer, for example, Deleting a file is achieved by throwing a graphical icon in the form of a bundle of papers into an icon resembling the archetypical trashcan. This particular analogous environment is called the 'desktop' and has been proved to decrease learning times and encourage computer use in many everyday areas.

The problem of increasing structural complexity and power has prompted much research into alternative analogies. The case under discussion is one such effort, a 'desktop' based on architecture. The Information Visualiser newly announced by Xerox's Palo Alto Research Center adapts the ancient visual metaphor of architectural space as an animated mnemonic for storing and retrieving large amounts of information. This is stored in interconnected 3D 'rooms' and makes databases easier, quicker and cheaper to access.

Virtual reality systems incorporate a similar film-based analogy in which the reader - writer - organiser navigates a simulated three dimensional environment presented to enable the viewer to walk through and to manipulate 'data objects' inside buildings, forests or any number of convenient scenarios.

John Wood, Director of design studies at Goldsmiths college sees the current search for a universally accessible user analogy as ending inevitably in the soap opera. For everybody, mass culture, not just people used to the office environment, or with an interest in huge scientific databases, an analogy based on a stylized version of 'everyday life' would be the most suitable.

Products, ideas, themes, data and beliefs would all be encoded into simulated characters, actions and dramas on the viewing screen... First, users adopt a favourite character from the cast and manipulate it to find their way around the set. They would conduct themselves by wielding virtual reality objects such as telephones,

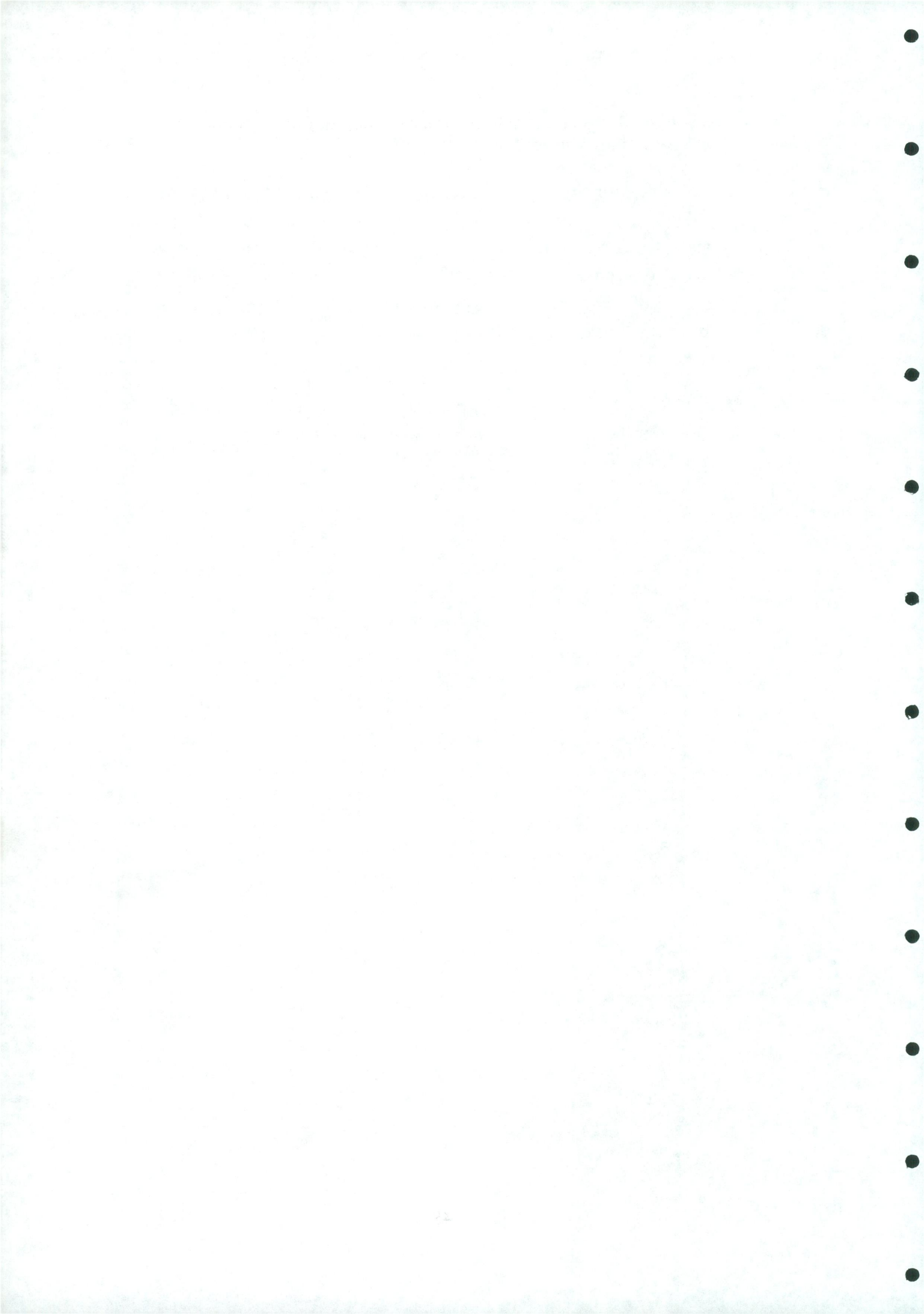


car-doors and steering wheels or by seeking out other characters to ask them questions (39, p. 40).

This does seem incredible yet if the information based culture speculated for the future is to have promise for more than a computer literate elite some interface based on mass knowledge will have to be found. The technicalities of everyday life are vastly more complicated than those of navigating a computer system. Wood's speculation is based on tapping this experience rather than requiring special computer experience.

This final case has been an example of how an area such as interface design is finding the analogy of the printed page increasingly inappropriate for presenting information.

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TYPOGRAPHY AND INDUSTRIAL DESIGN

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5 - INTERVIEWS

1. Tom Skinner & Matt Ryan, Goldstar Design Centre, Dublin, 10/2/92.

The Goldstar Design Centre is the Dublin branch of a series of international 'in-house' design offices for Goldstar, the Korean consumer electronics giant. Those interviewed are chief designers and are in a position to comment on the graphic policy of a large international corporation.

∞ How often are you responsible for the graphic elements of a design?

≈ Very rarely. Goldstar have a graphics centre in Korea and they are mainly responsible for product graphics.

∞ If your responsibility is mainly the design and form of a product would you ever use typography as a design element, for instance, to mirror a curve?

≈ Perhaps more in the future. Goldstar is modernising their design element. There may arise a system where graphics are developed in conjunction: the graphic designer becomes part of the team. This is growing more and more common.

∞ In Philips for example?

≈ Yes, Philips tend to use multi-disciplinary teams.

∞ Having discussed the conclusions of my work, what do you see as the role of product graphics?

≈ First, I would have to strongly stress the difference between branding elements and other graphics. The majority of purchases are by brand with the customer looking for a particular logo and then buying that product. In this capacity the logo is a point of



reference. Branding elements are growing more important, perhaps more immediately important than form.

∞ Is this to say that branding graphics in particular are regarded before other design elements?

≈ Yes, a large amount of the time, but if the design isn't of a high standard the branding will eventually risk becoming associated with a shoddy product. The customer is primarily concerned with brand but only as a simplification of many other factors. If you sell an excellent product with an unknown name it will take a long time for sales to grow. Advertising helps.

∞ And the other graphic elements?

≈ 'Functional identities' as you have called them are very important. People are vastly more aware of the meanings of words than form. If you have a design feature that you want to emphasise you really have to spell it out. This goes for most areas of design, the customer has to be able to understand what this product can do for them, in all ways.

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2. Philip Kenny, Design Manager, Blackbox Design, Limerick, 26/2/92.

Blackbox Design is one of the most successful Irish design consultancies. Their clients include several international consumer goods companies including Krupps and Moulinex. They are notable for their involvement with graphic aspects of industrial design.

∞ How often are you responsible for the graphic elements of a design?

≈ Quite often. Our customers may ask us to propose a graphics solution. On some occasions we have had to develop the product name and also its appearance on the product.

∞ Would the use of graphics ever be included in a client brief?

≈ Yes, with large customers such as Krupps. Generally they supply the required branding and symbols, anything else depends on the product and a lot of discussion. It has happened that the working names and product logos that we use in presentation have been retained by the company and produced under that name.

∞ You use imaginary graphic elements to enhance the product presentation?

≈ Yes, they add to the proposed product the same qualities graphics add to the manufactured item.

∞ How important is the role of product typography?

≈ Firstly, colour is the most important factor in some product areas. The bathroom or kitchen for example. Branding is very important. Another area of graphics, perhaps not exactly typography, is ornamental graphics. Your view of 'functional identity' is quite accurate. It is very important to communicate how a product will perform.

∞ Do you see typography as a value adding component?

≈ Absolutely. We have been involved in the design of a jug kettle that is now sold under several different colour, graphics and pattern schemes. It is an identical product but the prices are all different.



The white 'plain' model is £4 cheaper than the model with a simple eternal bow pattern. Typography has a great effect on perceived value.

- ∞ What about the case of the top of the range, expensive item. Often there is very little surface embellishment?
- ≈ Sophistication requires an element of mystery, or leaving something unsaid.
- ∞ Why, for example would it not seem suitable for a chair to use typography, almost unnatural?
- ≈ A chair with typography would perhaps seem loud, too pretentious. I suppose the value of furniture is in conceptual simplicity: Its a chair, that's all.
- ∞ What would your reaction be to the prediction that in the next five years we will be seeing applied logos based on video imagery: moving, changing colour, etc?
- ≈ Anything is possible. In fact, this is starting to happen already on hi-fi displays. Perhaps products will have miniature LCD screens to display their logo. Who knows?

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Member of audio sales team, Switzers, Dublin, 11/2/92.

Switzers home entertainment department are in a position to comment on what the customer generally looks for in an audio product.

∞ What sort of product do people want when they come into your shop?

≈ The buying customer always goes by brand. "I want a Sony walkman, Can I look at your Philips Moving sound radio" If its got what they want and the price is right they'll take it.

∞ They saw the advertisement and they know what they want?

≈ Yes, but sometimes you get an older customer looking for Pye or Fergusson. They're not heavily advertised but they know the names from years back. Even if Ferguson is below standard equipment. They stick with the names they know.

∞ Do people ever comment on the product graphics?

≈ Not really, the younger ones might say something. All they want to know is what is has and the price.

∞ How about these signs, the one for Compact Disc or this one for remote control. Do they help show what the product can do?

≈ I suppose they do. You can see very quickly that it's got a remote. Its not that obvious sometimes what a stereo can do.

∞ There seems to be less graphics on your more expensive product?

≈ Yes, the higher range models are very plain. It depends on the customer. Moving sound has a lot of decorations. Mostly they just look and decide whether they like something or not, but price is always the most important consideration.

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7 - CONCLUSION

When treating any large subject based on the variances of modern society the difficulty lies in a detached analysis of matters that concern oneself. History provides the luxury of hindsight: past evolution has only allowed the fittest of ideas to survive. Modern life immerses one in an ocean of action and reaction, innovation and revival, statement and contradiction, the battleground for posterity. To sift through this disorder and identify future trends requires an analysis of history and the modern arena, and an element of imagination. This thesis has attempted to identify past trends in typography and trace the changes of modern western society. The result is a proposal of several conceivable directions that future product typographers may pursue:

It has been identified that the visual characteristics of lettering always obey those of the dominant media. The dominant medium for the last five hundred years has been printing, this has created a resultant reference to printed forms and the possibilities of paper and printer's ink in the typography of design products. Although there has been no decline in the printed output of western society the emphasis of cultural icon is changing away from the static, timeless printed word to the global dynamic video medium. This is changing everything from our deepest values to their outward manifestations in the fields of graphic and industrial design.

Already a growing number of multi-media communications systems evidence video as the primary medium. It will not be long until the logotypes, identities, ornament, and functional media of product design increasingly choose video references over those of typography. Already the electroluminescent displays of audio equipment incorporate elements previously the domain of surface graphics. The future may well provide examples of manufacturer logotypes that move and change colour on the surface of our surroundings. This is



already happening in architecture and advertising displays, the move into industrial design would seem inevitable.

The consistent use that Man has made of symbols to add cultural and ideological value to artifacts looks set to continue. Our regard for the symbol as an entity possessing value in itself has been a permanent feature of history. Typographical symbols have been cornered by commerce as a vehicle of corporate culture and have marketing associations that will perhaps discourage their use on furniture and handcrafted objects. However, the use of type or its future equivalent will certainly be employed by commerce in an increasing number of value adding ways. Branding, the applied icon of marketing associations, is frequently the first thing the consumer sees or asks for. The manipulation of brand values is on the increase as companies realise the potential of myth-making over reality to boost sales.

The problem of helping customers understand, or more precisely have a mental picture of complicated technological features was a problem tackled by American design semantics thinking. For commerce the goal is not to help people understand technological principles but only that a certain product has a certain comprehensible set of capabilities. To simplify choice, and thus speed up the process of purchase decision the possible features of a product are broken up into modules represented by graphic identities. This graphic solution for communicating performance to potential buyers also has many practical advantages over gross manipulation of form. This is a typographical mechanism that has only become evident in the last five years. Its now widespread use indicates that the graphic functional identity may have much future potential.

All mechanisms that speed up the process of purchase decision are good for sales. This is the principle employed at auctions and on American TV shopping. The goal is not to bewilder the customer but to make the product that will best suit his needs and pocket obvious. This applies in the design of an overall product range. Personal stereos communicate an ascending range of features. The ideal is for these features to be in distinct bands that the customer can evaluate and weigh against products of lower and higher price. As purchases tend to be primarily by brand it is in the manufacturer's interest to provide

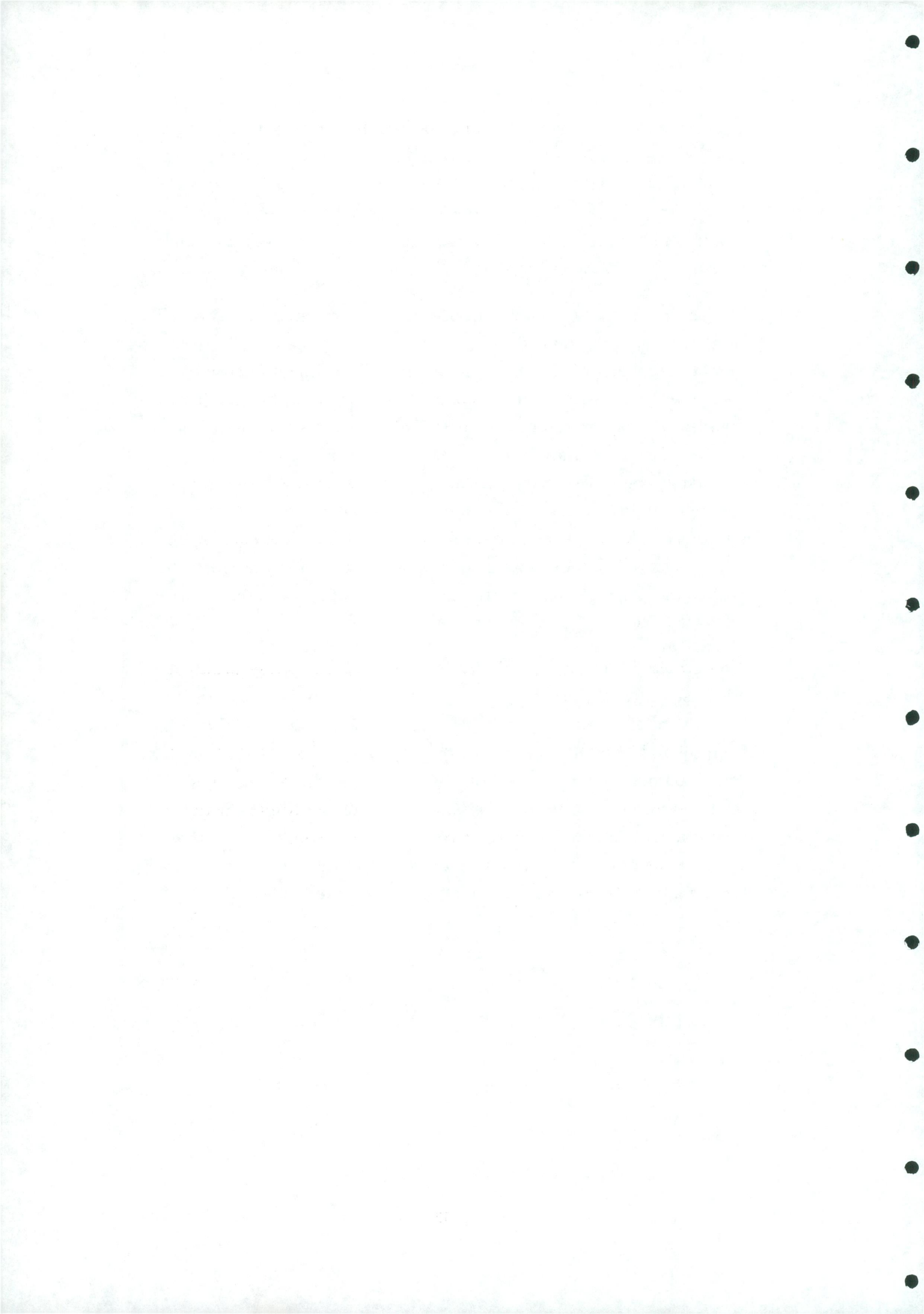


clear choice within their own range both in features provided and the clear communication of these features to the buyer. This simplification of choice will ensure that the customer captured by advertising will remain brand loyal. Whether one agrees or not with such attempted manipulation of the buyer or even if it succeeds in what it sets out to accomplish, this use of typography by commerce is literally universal.

The emphasis in many areas, specifically those covered by industrial design, is on communication. With the continual merging of smaller markets into larger ones the direction is towards one immense global consumer base. There will always be huge cultural differences between peoples and nations, indeed one result of global media is an increased awareness of one's individual culture. However, the awareness and understanding of foreign modes and values has also grown. For commerce this is a challenge to address consumers from all nations without the need for extreme product localisation. This challenge is initiating a visible move in product typography away from words in a particular language and towards universally comprehensible pictographic or ideographic symbols.

Typography in its sheer flexibility as a medium has always been addressed by students of art history in their analysis of a particular aesthetic or culture. This excellent ability to carry ideas or values apart from textual content also makes typography an excellent medium for conscious manipulation. The full recognition of this potential is a relatively recent occurrence. Perhaps in the distant future, media revolution will make our current conception of typography redundant. Typography or its equivalent ideological vehicle will be a rich medium for industrial designers in the information founded culture of the future.

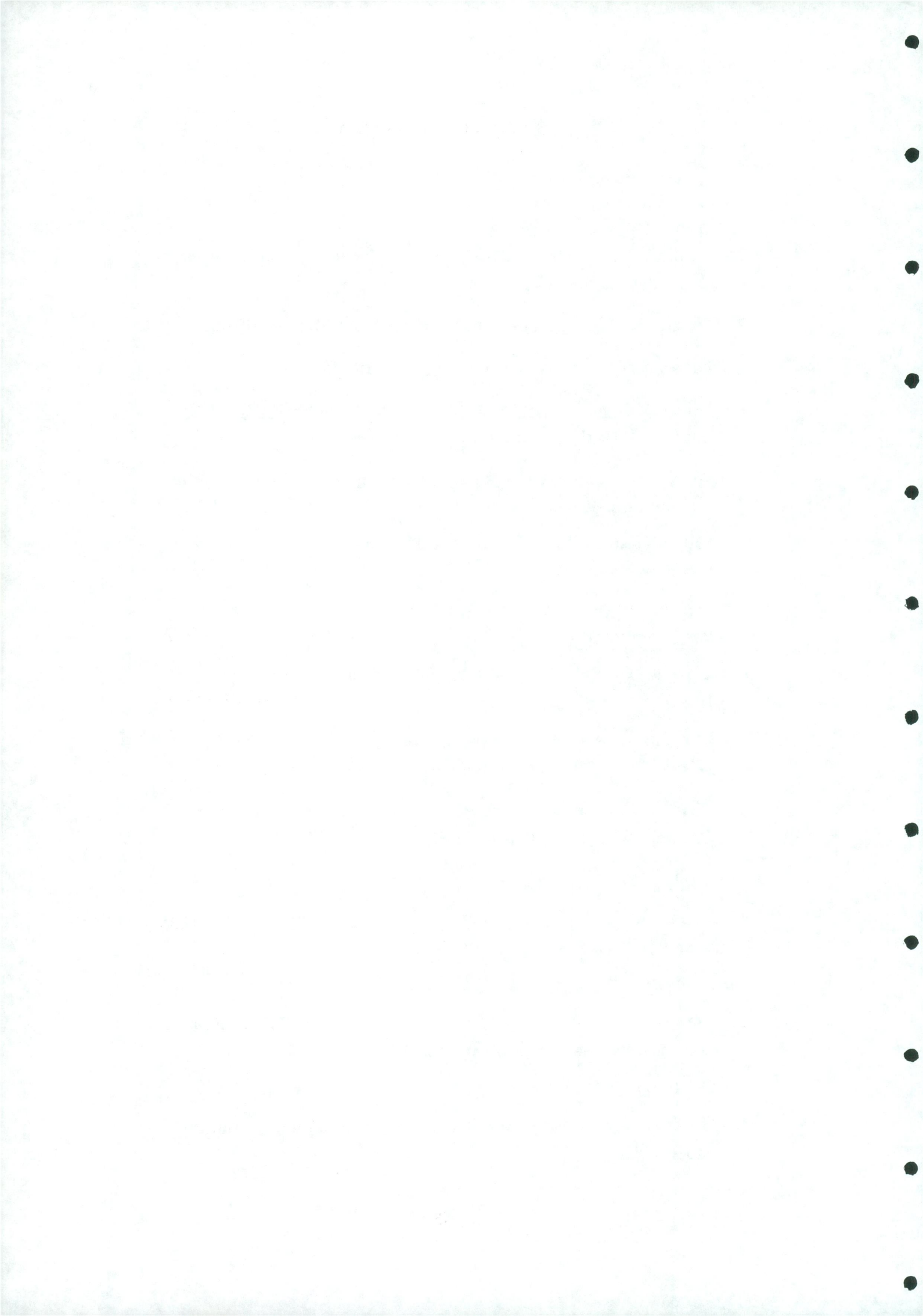
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