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The text, or extracts from it, and the illustrations, can only be reproduced with the Executive Editor's consent. No responsibility for the loss of MSS, photography or artwork can be accepted. This fifth issue of *icographic* is dedicated to Unesco and its recent *International Book Year*. We very much regret that a combination of difficulties made it impossible for us to publish this issue within 1972. It is our hope, however, that this selection of contributions related to the theme of 'the book' will serve as our tribute to the work that Unesco is doing throughout the world.

Anyone who can read any one of the major European or Asiatic languages is potentially in touch with the intellectual resources of centuries of human knowledge and feeling. Once we learn to read we are given, as it were, our pass-key to the great human cultural warehouse. Through the incredible mechanisms of human language, our life can be shaped, guided, enriched by the accumulated experience of endless numbers of our own species. Sophocles or Confucius may be dead, but we can still learn something of their views concerning the mysteries of human existence.

Newton may be dead, but we can still hear his voice across two and a half centuries. Through the agency of books we can (to paraphrase Charles Lamb), "lose ourselves in other men's minds". As human beings we do not have to depend solely upon our own

experience for information. We can discover what others have already learned; learn what countless men and women, whom we are never likely to meet, have thought and felt memorably about life.

Like all great human achievements, printing by moveable type has presented opportunities for both good and ill.

It has had far-reaching effects upon every field of human enterprise and experience.

Sometimes it has provided the means to liberate men from ignorance and superstition. Equally it has offered the means for proprior up outmoded destrings.

propping up outmoded doctrines. John Olford, the first of our contributors, suggests that books have always offered either the means for bringing about a favourable change in a culture's tradition, or a pretext for arresting such a change. He reminds us that this essential ambivalence is something that should not be taken for granted. The book needs to be protected, as do we all, from threats of exploitation, censorship, suppression or destruction. Equally, the printed word conveys such a degree of permanence about it that we need to remind ourselves that it is not a source of infallible dogma, but merely the tool for the cultivation of the critical intellect.

Peter Kneebone and Germano Facetti discuss the role of the book designer.

Here the designer's problem becomes much less a question of providing an elegant frame round some literary masterpiece, and much more a question of *how best* to convey information, both visually and verbally.

Bruce Robertson and Bob Chapman contribute further to the argument as to *how best* to convey information There seems little doubt that education has often tended to overvalue verbal ways of presenting information.

Learning implies, as a first step, the acquisition of knowledge. There are, however, many problems of communication between the teacher and the taught which might be solved by the judicious use of visual means to augment spoken or written language. In the learning process people may make use of one or more of their senses, sight, hearing, touch, taste or smell. The more of their senses they can bring to bear on any particular subject, the more likely they are to absorb and remember it. Messrs Robertson and Chapman have collected together a sequence of quotations from many eminent men, both ancient and modern, which stress the interrelationship between 'seeing' and 'understanding

They have also selected as illustration: a variety of examples, ranging from an early Christian diagram of their sacred history to a computerized electro-encephalograph of a human epileptic fit.

Albert Kapr feels confident that the book in its present form will remain the optimum form of communication for a long time.

He forecasts, however, that a much more rational classification of the various genres of books will develop. He contends that flow-production and semi-automatic methods will necessitate the defining of a limited number of differentiated specification for the various types of books (literary works, scientific and textbooks, reference books, etc). Even if the bulk of all printed books were produced within the limit of a dozen formats, he sees no reason why this should lead to dull uniformity. Good designers, given these kinds of constraints, should be capable of developing a wide range of usable prototypes without any lowering of quality standards.

My own contribution is a tentative attempt to suggest some new directions for the book now that it is no longer the single, major cultural force.

The future of the book would seem to be only one aspect of the central problem posed by the emergence of a leisured civilization. When leisure becomes a mass phenomenon, how can each individual secure a satisfactory balance between

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Foreword

Edward Wegman

Edward Wegman is Head of Unesco's International Book Year Unit and we are grateful to him for providing this foreword to our fifth issue

his need for rest and entertainment and his need to participate in some kind of social or cultural life? In an age of mass communications, books will still retain their own unique kind of integrity. Their ideas can be absorbed at one's

own pace, obscurities re-read, and assertions checked.

But it would seem appropriate to the spirit of our time that typography should echo the *temporary* nature of the "truths" that get into print. For many centuries ideas have lived longer than people.

Nowadays they are more expendable. To the scientist "truths" have only a temporary mapping function. They are signposts at the frontiers, to be dispensed with when better information arrives.

Typographically, then, what may be needed is something which conveys the shifting, hesitant nature of such knowledge.

There might also be some exploration of new typographical forms for the setting of *affective* language.

Edward Wright treats us to a wide= ranging survey of the book and, more particularly of the many subtle interrelationships between the author and the reader.

Besides the power of the visible word to lay hold of us; to involve us in a complex interplay of illusion and reality, its formal properties have gone through many forms.

gone through many forms. From Chinese ninth-century 'whirlwind' binding to the photographic micro-fiche that can squeeze up to 3000 pages into the area of a postcard, signifies a considerable change in emphasis.

He also discusses some recent studies in the ergonomics of reading. The kinetic nature of reading is not only that of eye movement, considerable changes in body posture are also involved. He sees analyses of reading behaviour as valuable because the book and the reader are to be found in 'duration' rather than in 'time' as recorded by clocks. We are capable of ''losing ourselves'' in a compelling book.

G W Ovink is disturbed by the fact that most typographical designers are passively allowing modern technology to bypass them.

Through their failure to learn of new techniques, and their inability to disengage themselves from traditional ways of thinking, they have made little or no contribution to such developments as linotype, photosetting, and computer setting.

Too many designers think of themselves as visual *artists* rather than as experts in the design of information. Few designers read the texts that they are asked to design. Few of them design according to the meaning which has to be conveyed. Fewer still could rewrite a text if that is necessary or possible. Because of the inertia of designers and print-buyers, efficiency-minded engineers are now taking most of the decisions as to future planning. Many of these decisions are likely to be one-sided and short-sighted. He believes that a new breed of designer or 'informatician' is needed who can act effectively within this increasingly more complex technology.

Since typography has always tended to attract people from many kinds of backgrounds, it is likely that it will do so even more in the future. Engineers and manufacturers will only begin to accept advice from designers when they can show that they know what they are talking about.

When Unesco decided to initiate International Book Year 1972, they approached the International Council of Graphic Design Associations (as one of its advisory bodies), for guidance in the creation of a suitable symbol to give a unity to all the informational material likely to be needed. As a result, the Icograda Board were happy to recommend to the Unesco Planning Committee, the services of Michel Olyff, a Belgian designer with a considerable experience of such problems.

Michel Olyff tells us something of the trials and tribulations of this challenging assignment. He sets out some of the steps that he took in arriving at his solution, including the gathering of a number of existing examples of pictograms or symbols related to the theme of

'the book'. He describes the way in which he finally presented his proposals to a very large international committee, using slide presentation and simultaneous translation in French, Spanish, English and Russian.

Icograda's relations with Unesco during the past two years have been close and productive, and led in July 1972, to the Executive Board of Unesco admitting our organization to the category of *Information and Consultative Relations (Category B).* Our admission to this category means two things. On the one hand, it is a considerable

On the one hand, it is a considerable compliment to lcograda and a recognition that, at a specialized level, there is a need for an organization representing graphic design internationally. On the other hand, it means that if lcograda is to contribute usefully to the solution of some of the world problems reflected by Unesco's programme, we (Member Associations and designers alike) have to measure up to the social, educational and professional role that we have attributed to ourselves.

Executive Editor

"For thousands of years the written word and for centuries the printed word have ... been man's most effective ally in fashioning his thought and in his conquest of freedom". The message opening *International Book Year* by Unesco's Director-General, Mr Rene Maheu, carries with it recognition of the creative role played by words made physical and of the designers, known and unknown, who have transmuted the spoken language into a tool for progress and individual well-being.

Within this larger context, it is evident that excellence in design is inextricably linked with the propagation of Unesco's objectives in education, science, culture, information and, above all, international understanding. It is for this reason that the Organization has welcomed the increasing cooperation with the International Council of Graphic Design Associations. Since this communality of purpose and means is particularly apparent in the world of books, Unesco has been specially appreciative of the work of Icograda in the preparation and carrying out of International Book Year. Like the other professional organizations of the book world, it participated from the beginning in the planning of the Year and, throughout 1972, it has made available its counsel and advice. The very symbol of International Book Year, which has been reproduced on countless posters, stamps, films and books, in all parts of the world, is one result of this collaboration. It was Icograda which nominated the Belgian graphist, Michel Olyff, to design the highly-praised International Book Year symbol. Continuing its efforts for International Book Year, Icograda has now prepared this special issue of icographic and, in so doing, has underlined again the significance of the Year for design and designers everywhere. It seems to Unesco that this particularly valuable contribution to the Year will serve to bring into high relief the ways in which the publishing industry and its designers can meet successfully the social and intellectual challenges of the future. As such, it represents a milestone in promoting increased awareness of the essential link between the effectiveness of a message and the way it is presented.

At this point in International Book Year, when reports of special book activities have been received from more than 120 of Unesco's Member States and half a dozen non-members, it is heartening to note the importance being attached to the design of attractive reading material in so many parts of the world. This holds forth the promise for millions of children, new literates and readers generally that one result of International Book Year will be better "Books for All", not only in terms of content but of design.

Books and barbarity

John Olford

John Olford is a writer and philosopher, currently teaching in the Liberal Studies Department of a Design School in London

Among the symptoms of barbarity in a society, the desire to destroy or otherwise dispose of, books and other comparable devices for the storage and transmission of information and opinion, is one of the most disquieting. For books represent both the material for favourable change in a culture's traditions, and the pretexts for arresting such a change.

"The trials and tribulations of books are equalled only by the trials and tribulations of mankind; their sufferings are identical with those of their creators, and if they live longer they are not immune from decay and death. They have been beaten and burnt, drowned, tortured, imprisoned, suppressed, executed, censored, exiled, reviled, condemned, buried; they are overworked and underworked, misused, and maltreated in every manner known to fate and chance and the most ingenious of miscreants and misguided zealots." *H Jackson*

The spoken word in face-to-face communication is a subtle, flexible instrument; where facial expression, gesture, intonation and significant pauses modify what is said. But the inscriptions of a message on clay, stone or paper, the act of publication, and the distribution of the end-product imply other times and other places for their consumption. There is a degree of permanence and commitment about it which favours religious, commercial and legal transactions. The invention of moveable type faces did not in itself produce movement of opinion; it often served to bolster dogma; and typography has paid scant attention to the gesture of hesitancy, the vocal parentheses and the tentative intonations that characterize the speech of the specious present. Even when authors declare their reservations, print may lead to their being discounted as gestures of undue modesty.

Some authors in some of their books have managed to map a constellation of ideas in such a manner that the book goes beyong their intention in becoming a court of appeal for deciding many other issues. Sir Isaac Newton's *Principia* acquired this function in science, where his *Opticks* had a different success because it rested more on his individual reputation. (see S Toulmin, *Human Understanding*, Vol 1, Oxford; Clarendon, 1972, passim). Goethe's misunderstanding of

Newton's interesting example of its relative status.

When such books as the *Principia* appear, and when they have the authority of an institution behind them (e.g. *The Oxford English Dictionary*) they are frequently invoked to arrest change. Thinking

tends to be less adventurous under their influence, and becomes absorbed by questions about the internal consistency of systems. When these are axiomatized, rationality and deductive justification are assimilated to each other, and any challenge to received doctrine is traced to subor non-rational sources. The concept of rationality then becomes incoherent, and is used in a fumbling way even by those equipped to be clear about it. In place of critical analysis we find romanticising myths about the sources of insight.

It seems that Plato gave a cold reception to the suggestion that a Handbook of Platonism be prepared for his friends in Syracuse. He preferred the dialogue form which is closer to the living word and less open to doctrinal ossification.

At the same time, the book is public property: even when housed and hedged about by institutions and their safeguards. As such it has an explosive disposition when exposed to scrutiny and criticism. Memory fatigue frequently prevents us from recalling the premisses from which even the most studied discourse draws to a conclusion; and when the occasion has passed even the conclusion may vanish beyond recall. But we can read, re-read, and read again; the printed page guarantees total recall. The argument can be surveyed, the steps the author has taken can be tested for their validity. Faced with the primitive ideas and axioms of Euclid, and satisfied with his consistency, we can drop an axiom, or work with its contradictory, and an alternative system may result.

The appearance of alternatives revives reason's flagging spirit. Rational verdicts based on the value of alternative systems may not require the construction of a supersystem; they may be reached by citing the fruitfulness of a system in particular contexts, or in relation to the satisfaction of certain human desires. Once this step is taken, the book can be seen: not as a source of infallible dogma, but as an indispensable tool for the cultivation of the critical intellect and, therefore, of those communal enterprises which seek to locate what we have to comply with, what we can change, what we can enjoy, in doing what ought to be done.

The ambivalence of the book, as an instrument of change and control, must not be taken for granted. It needs to be protected from threats of exploitation, censorship, suppression and destruction - whether these come from the political right or left. The *laissez faire* doctrine that human well-being, truth, or the ambivalence of the book will survive in the free play of market forces must,

at best, be a makeshift. The long term solution must be found within the industry and the forms of life of those who run it. A society which values open access to cultures of the past and to other present cultures, will nurture the growth of institutions which can compete in keeping such channels of communication open.

"It has only just begun to dawn on us that in modern languages the past history of humanity is spread out in an imperishable map, which preserves the inner, living history of ancient man's soul. Indeed, in many common words, words we use every day, the souls of past peoples, their thoughts and feelings, stand around us, not dead, but frozen into their attitudes like courtiers in the garden of the Sleeping Beauty." David Diringer

The designer has a unique opportunity in this respect. He can aid both author and reader by techniques which will ensure legibility and intelligibility. He can make a book a delight to hold and keep. He can exploit marketing techniques to ensure a wider distribution of good stuff. He may even help to persuade some educationalists of the importance of the book, by presenting it to them as an indispensable piece of school-room equipment (which it, too often, is not!).

The role of the book designer

Peter Kneebone and Germano Facetti Peter Kneebone is one of the founder members of Icograda and is currently Chairman of its Signs and Symbols Commission. Germano Facetti is a graphic designer with an international reputation, probably best known for his work for Penguin Books



To talk about the role of the book designer is to talk about the role of the book. An essential first part of the design process is to ask "What?" and "What for?" To overlook this is to diminish appreciably the contribution that the designer can make.

That is to say if one accepts the book designer as being a graphic designer, and the graphic designer as being a person who is designing visual communication, then one inevitably begins to make certain assumptions. Assumptions, in relation to the needs of the publishing industry and of the reading public, about the sort of person a designer should be, the level at which he should function and the part that he should play in decision= making in publishing.

While it seems true that there are too few designers with either the intellectual or the technical equipment to make the imaginative and accurate decisions that are needed, it is also true that there are still too few publishers who understand the importance of these design decisions in relation to the tasks that publishing needs to undertake.

Unesco's International Book Year *Programme of Action* underlines the significance of this:

"Books today have become one of the major media of mass-communication ... Moreover, among the mass media, the book remains the essential tool of knowledge."

The emphasis here shifts the attention from the fine book, with all the aesthetic, sensual and intellectual pleasure that goes with handling it and looking at it, to the book as an object that communicates inform ation and ideas visually to a specific public or to society at large. The designer, in this case, is no longer the person who creates a beautiful box for rare literary chocolates, but rather a person critically concerned with how these ideas and information are communicated. Inaccurate communication is bad communication, and sometimes it is worse than no communication at all.

It is here that the designer, if he is properly equipped and properly used as a collaborator, can play a key part, particularly in educational and scientific publishing, in establishing the communicative structure of the book (language, images and all) at a stage prior to that of making choices about format, quantity of words, or typography. In essence this is not so different from thinking what needs to go into, say, the design of forms, or of sign systems, where the appear-ance is not a final, detachable, attribute, but the logical outcome of an analysis of a need for communication and the objectives of this communication.

Creating identity

A publisher and editor is often a person with artistic taste, and always something of a typographer. The design image of most publishing houses reflects the preferences (or lack of them) of the founders or the editorial staff. Once upon a time the publisher himself would choose the type, the illustrations, paper, binding, and so on. Growth and evolution imposed the necessary specialists in typography, production and publicity, but the delegation of design choice, the responsibility for design co-ordination, still suffers from an intrinsic ambiguity On the one hand it requires the design of books as "mass-produced goods" yet, on the other hand, it must provide each title or series of titles with an interpretive service

The publisher may favour a unified size and binding for obvious economic advantages in manufacturing, packaging, storing and display. But *if* he needs an identity to be detected amongst other publishers, a choice of type sizes, densities, margins and settings will be necessary to cope with the variety of his subjects and readers. In short, design for publishers has to serve within a more or less rigid framework of production and marketing disciplines.

Besides the need for identity there is plenty of room for improvement in the art of transmitting information. Although we are living in an era of high scientific and technological advance we are still content with frozen forms and concepts of visual information in books: so little of such an important sector of human activity has improved since the nineteenth century, and other media, such as the film and the teaching machine, now often compensate for this absence of progress. The physical make-up of books has been unchanged for an even longer period: the turning of pages (with Roman alphabet, for example) remains from right to left, the motion of reading is still from top to bottom of the page, a sequence in progression still takes advantage of size and quantity of pages for its development. Some cf these features retain unquestionable validity: but our "experimental age" is, all the same, slow to improve its basic communication tools.

The traditional book retains the fundamental quality of allowing the reader-onlooker (the receiver of the communication) his own choice of timing. Unlike the film, the book remains independent of the time factor: its uses or enjoyment are not dictated by programming. The rhythm and flow of a film is decided *a priori* by its director, but in a book the sequence is still chosen according to need or whim. choice that books still offer, as opposed to the "directed" choice of the new mass media, is not fully used.

"Designing" a message

The complaint about the difficulty of communicating science or technology has become common; but any person involved in communication of any sort, from teaching to television, realizes that the accumulation of knowledge needs new forms of interpretation and transmission, new channels and new formulae, to provide not a digest or a short cut, but an intuitive, analogic method.

The assumption that our age is more "visual" is supported by the fact that contemporary "readers" behave increasingly like spectators of a film: the persistence of images on the eye's retina links up with the previous imprint and influences those that follow. Their opposition and/or alliance can be used in endless ways, to induce understanding, to express emotion, or to accumulate information in a more *memorable* way.

It is now generally accepted that diagrams and other forms of graphic representation and synthesis do convey information better and faster than actual verbal description. Yet, up to date, the abilities of the diagram designer have only, as a rule, been used for reasons of economy or convention rather than as one of a series of logical choices concerning the nature of communication in specific circumstances.

Occasionally, designers like Massin of Gallimard, the late Will Burtin, Munari, and Edward Hamilton of *Time* and *Life*, undertake history= making experiments in book design, bending the rules of binding, trimming, setting and illustration into new concepts and formats. But these and other pioneering efforts only hint at the plumbing of unexpected depths.

Educational books for developing countries will obviously rely increasingly on diagrammatics and on pictorial form. It may be necessary to design books that have to be shared by thirty or more people whose incomes do not permit luxury prices. Their format and durability may represent a conjunction of techniques that will help readers outside the long-established Western conventions. Images and graphics within books may profitably acknowledge the influence of films, posters and other visual aids.

The intuitive documentary communication of scientific knowledge by Burtin and Hamilton, the expressive typography of Massin, the cut-out non-books of Munari, are for the moment indications of where the design effort might be directed and, especially, of the spirit in which decisions will need to be made if the publishing industry and its designers are to meet successfully the social and intellectual callenges of the future.

Visual aids

Bruce Robertson and Robert Chapman

Bruce Robertson and Robert Chapman are directors of DIAGRAM, a London based co-operative of statisticians and designers

icographic 5, 1973, pp 5-7 Authors' address: 145 Wardour Street, London WI, England

It was a wise and useful provision of the ancients to transmit their thoughts to posterity by recording them in treatises, so that they should not be lost, but, being developed in succeeding generations, through publication in books, should gradually attain in later times, to the highest refinement of learning. And so the ancients deserve no ordinary, but unending thanks, because they did not pass on in envious silence but took care that their ideas of every kind should be transmitted to the future in their writings. (1)

Design must have some motivating IDEA in it: what idea can we modern people think except structure for reasonable service? (2)

see figures 1 and 2

You must be infatuated by the ideas and emotions contained within your subject. Without emotion you can create nothing. Your infatuation is the powder to produce a creative explosion. But an explosion is not enough. Feeling must be given a definite direction. Then you must try to find the form which will express the first vivid impressions which moved your whole being. This form must satisfy your consciousness. (3)

see figure 3

... It appears to me therefore, that our first thoughts, that is, the effect that anything produces on our minds on its first appearance, is never to be forgotten: and it demands for that reason, because it is the first, to be laid up with care. (4)

see figures 4, 5 and 6

... for you can only create if you can care. (5)

All our knowledge has its origins in our perceptions. (6)

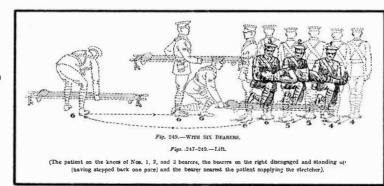
It is the image making part of the soul which makes the work of the higher processes of thought possible. Hence 'the soul never thinks without a mental picture' 'the thinking faculty thinks of its forms in mental pictures' 'no one could ever learn or understand anything, if he has not the faculty of perception, even when he thinks speculatively, he must have some mental picture with which to think'. (7)

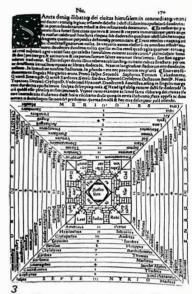
see figure 7



Table tennis manual published in Hong Kong

'First Aid' by Warwick and Tunstall 1913, 80,000 copies sold





The Heavenly Jerusalem, Bovillus Libra de Intellecta, 1509. Diagram contains sacred history, physical heirarchy, the spiritual heirarchy, the virtues, the Prophets, the Apostles, precious stones and the tribes of Israel



'L'Archeometre' by Saint-Yves D'Alveydre

Catcher's skill', drawing by A Ravielli for Sports Illustrated



Conductor punches place where passenger boarded tram Galtig for 1-5 Halter tellen 30 Min ab Stempelaufuruck Retour- und Umweglahrton

.

40

11. 前臂骨力,手腕出力擦動

医手腕上的关键,主要有下出三角

VBZ

50

Tram ticket, Zurich.

00559

26

5

An actual definition of a drawing given by a child may be quoted in this connection "First I think, and then I draw a line around my think" (8)

Common man thought and felt in images far more than in verbal abstractions used by scholars: esthetic discipline might lack a name, but its fruits were everywhere visible ... verbal mastery cannot make up for sensory malnutrition. (9)

Mathematicians measure the form of things with the understanding alone, apart from all concrete matter. We (painters) because we wish to make things visible, should for this purpose use a grosser method, as they say. (10)

see figure 10

O writer, with what words will you describe with a like perfection the whole arrangement of that of which the drawing is here? ... the more detail you write concerning it the more you will confuse the mind of the hearer (11)

see figure 13

The eye, as an instrument to help in the recognition of facts which it is so much more cumbersome to take in by reading, is not yet sufficiently used in history teaching. Writers on economics are aware now of the advantages of visual statistics: history still avails itself far too little of visual aids. (12)

see figure 8

Cold figures are uninspiring to most people. Diagrams help us to see the pattern and shape of any complex situation. Just as a map gives us a bird's eye view of a wide stretch of country, so diagrams help us to visualize the whole meaning of a numerical complex at a single glance. Give me an undigested heap of figures and I cannot see the wood for the trees. Give me a diagram and I am positively encouraged to forget detail until I have a real grasp of the overall picture. Diagrams register a meaningful impression almost before we think. (13)

It is a fact that most beginners are not able to follow diagrams and instructions easily and successfully, however carefully they are planned. As a rule, Origami illustrators try to cram into each page as much information as possible. Unfortunately though, a page filled with diagrams completely bewilders most beginners. (14)

Anyone who has to prepare a statistical map or diagram might sensibly ask himself at the very outset "Why am I drawing this map?" the question is by no means so unnecessary as it may appear at first sight.

but certainly no other single item will be so important in influencing the design as the basic reason for which it is drawn.

There are four broad categories for drawing a diagram ... they are,

To arouse greater interest in the subject matter presented

To clarify it simplify it or explain its important aspects

To prove a point referred to in the text or speech

To act as a statistical 'quarry' for other users. (15)

Statistics, even when they are honestly presented (and how often does that happen nowadays?) are almost always misleading, because one never knows what factors they leave out of account. To give a crude illustration, it would be easy to show, by stating the figures for fuel-consumption and saying nothing about temperatures, that everyone in central Africa is suffering from cold. (16)

see figure 9

Just as we do not expect to see the beauty of the Lake District by looking at the map of Cumberland, we should not expect to see the dignity of a queen or the power of a poet by looking at a historical chart. (17)

see figures 11 and 12

Where natural vivacity is lacking it is necessary to make accidental liveliness. (18)

The artist's representation is therefore a long way removed from truth, and he is able to reproduce everything because he never penetrates beneath the superficial appearance of anything. For example, a painter cannot paint a portrait of a shoemaker or a carpenter or any other craftsman without knowing anything about their crafts at all, yet, if he is skillful enough his portrait of a shoemaker may, at a distance, deceive children or simple people into thinking it is a real carpenter. ... In such cases, we should be on our guard... (19)

St Gringoire says that he who sees and does not understand profits no more than he who hunts and

catches nothing, and Solemon the sage, agrees with him, when he says that one becomes wise by hearing and understanding and when one sees anything obscurely shown, one should ask for the meaning and explanation ... (20)see figure 14

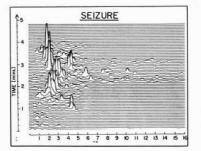
Such tricks hath strong imagination, that, if it would but apprehend some joy, it comprehends some bringer of the joy; or, in the night, imagining some fear, how easy is a bush supposed a bear. (21)

see figures 15 and 16

Alice laughed. 'There's no use trying' she said 'one cannot believe impossible things' 'I dare say you haven't had much practice' said the Queen 'When I was your age, I always did it for half-an-hour a day. Why sometimes, I believed as many as six impossible things before breakfast ... (22)

see figures 15 and 16





8, right

Glorious Gloria' (the cow) with the product of an average year's work. (the Sun Newspaper)

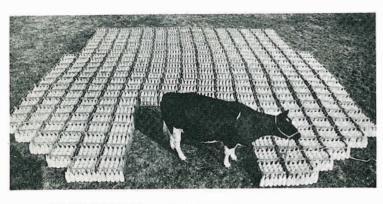
9. right A computer print-out of the sympathies of South Vietnam hamlets

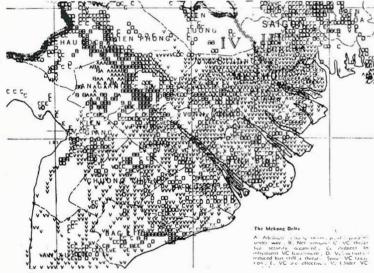
10. left Photogrammetric trace of plaster model of human head

11, right Satellite readings of variations in the Geoid

12. right Isometric drawings of the same information

13 left Computerised electro-encephalography. A dramatic representation of an epileptic fit





+ 90 + 60 +40 + 20 0 60 -20 - 40 (56 - 80 -160 -120 -80 -40 0 +40 +120

Vitruvius, Book 7, The Ten Books on Architecture

W R Lethaby, Architecture, Nature and Magic Sergei M Eisenstein, Lecture at the

Institute of Cinematography 4 Sir Joshua Reynolds, The Third

Discourse 5

George Orwell, Collected Works

Leonardo da Vinci, Notebooks

Frances A Yates, The Art of Memory 8

Roger Fry, Vision and Design

9 Lewis Mumford, *The Culture of Cities*

10 Leon Battista Alberti, De Pictura

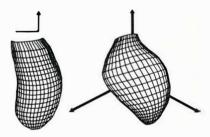
11 Leonardo da Vinci, *Notebooks*

Map produced in Europe showing

German invasion of Poland in World War Two

12 Dantry and Savage, English History at a Glance M J Moroney, Facts and Figures 14 Robert Harbin, Origami 15 G C Dickinson, Statistical Mapping and the Presentation of Statistics 16 George Orwell, New English Weekly 17 H A Vetter, Carnegie Institute of Technology 18 Leonardo da Vinci, Notebooks 19 Plato, The Republic 20 Jean Pucelle, The Belleville Breviary 21 William Shakespeare, A Midsummer Nights Dream 22 Lewis Carroll, Alice through the Looking Glass

14 Excerpts from animated computer display, showing left ventricle of heart at various stages of contraction



16 Map produced in China copying the same source. Note the omission of arrows on right which originally indicated the Russian penetration of Poland





Some tasks for future book design

Albert Kapr

Professor Albert Kapr is Principal of the Hochschule fur Grafik und Buchkunst in Leipzig



Although the 'Götterdämmerung' of the book has been forecast repeatedly, for many types of literature the book in its present form is going to remain the optimum form of communication for a considerable period of time. With this statement it is not intended to minimize the importance of new ways of storing and transmitting knowledge, such as micro films and electronic data storage, but the advantages of these new ways of communication-the ability to store a lot of subject matter in a compact and relatively durable form-must be weighed against the disadvantages of the relatively costly and time-consuming production procedure. And widely read media, as well as media with large audiences, such as illustrated magazines, sound radio and TV, have the weakness that specific subject matter is not easily retrievable. Video cassettes and other innovations may well improve the situation but. meanwhile, the lead of Johannes Gutenberg's idea is not yet seriously challenged.

The International Book Year promoted by Unesco in 1972 draws the attention to the advantages and the growing importance of the book: the book is practical and inexpensive. Any literate person can easily gain access to any desired reading matter. In books and libraries the knowledge of generations is stored in easily accesible form. In the developing countries where literacy programmes are gaining impetus, the book is for an increasing number of people the simplest and most appropriate form of access to national and international cultural wealth.

In this sense the field of industrial product design confronts the book designer with important tasks and it is justifiable to think beyond the work in hand to the somewhat larger context. Most "book-makers" work according to the ideas of Stanley Morison, who defined in his First Principles of Book Design some guide lines for the design of ideal utilitarian books. Morison quite rightly opposed the attitudes of book producers who used the book as a play-ground for their own individual artistic predilections. He defined the book as an apparatus for the purpose of conveying the ideas of the author to the reader, which must function primarily in this sense and which only secondarily might be a work of art. Scientific investigations concerning the readability of text composition have tended to confirm Morison's ideas about the optimum type size, optimum line length, etc.

But Morison, as Cobden-Sanderson before him, always spoke of "the" book or "the" ideal book to be designed. Indeed, during earlier periods there existed mainly "the" renaissance book, "the" baroque book or "the" book of the neo= classical period. During the first half of the nineteenth century nearly all books were printed in Didot type, with considerable leading, columns framed with broad, white margins. The format chosen and the number of illustrations added, constituted the only difference between a novel, a scientific volume or a book for young readers.

This fixation with one style disappeared during the first half of the twentieth century, which was a period of seeking and experimenting, particularly in Germany where nearly all publishing houses and artists designed their own individual book forms. Because of this, it was useful and reasonable of Morison to draw attention to the old rules of book composition which had proved themselves over the centuries. As one might expect, this admonition came from England, where the leading publishing houses had always adhered to the idea of a beautiful book and a beautiful type-the traditional golden rule.

But from the second half of the twentieth century it became obvious that "the" book no longer existed. A differentiation according to genres of literature had taken place. Different categories of literature usually have different functions and command a different circle of readers, and this must logically lead to a different book design.

New inventions and new demands created the basic conditions for book types which had not existed in earlier centuries. Thanks to photography, offset printers and rotogravure volumes of photography were created and the advantages of instructive photographic illustrations influenced other types of book. Yet another category-the phono book-a book with added discs or electronic sound track printed on paper, is now in its formative stage. The text book and hand-book have gained in profile and importance. The type foundries provide a broader pallette of different type founts, differentiated for the various categories of literature, while the paper and supply industries offer paper grades and cover material for different demands and purposes Even the structure of the publishing industry follows largely the categories of literature.

Today, there is no longer just one standard for the ideal form of a book; there are various standards derived from the function that the book has to perform. The rules pertaining to the art book are quite different from those that are appropriate for a novel or a scientific text book. It will take some years yet, before we reach a stage where the specific book genres are fully differentiated and generally recognized. Not only factual considerations, derived from the purposes and readership of the category, but also designed experiments and objective surveys of efficiency are needed to work out an ideal prototype for each category. This need not mean the elimination of the designer or the end of variety in choice of book designs, but the book as an art form must be integrated with the book as a functional object-only a functional book can aslo be a beautiful book.

With regard to literature per se, the book form is largely fixed. We have known for centuries that a type size of 9 or 10pt with moderate leading is easier to read than bigger or smaller type. For continuous or linear reading, the optimum line length of 9 - 10cm or 20 - 22cm has been confirmed. With the reader, the small, handy format of 11cm x 19cm or 12cm x 20cm (approximately hand size), have proved successful; the fore-runners of this format being the Aldin, Elzevir and Didot books. The side ratios of the Golden Section (extreme and mean ratio) and the classical margin proportions are pleasant and practical in use. According to content and author's style, there is a wide choice of founts for the text, of which Garamond, Baskerville and Walbaum Roman may be mentioned as representative. Obviously, this general concept of a literary work may be modified or even disregarded completely in certain cases. Prestige and illustrated editions occasionally demand a larger format, but one must bear in mind that such books can no longer be held in one hand and offer less reading comfort. For comfortable and enjoyable reading the weight of the book plays an important and, today, usually forgotten role. How pleasant are those novels with feather-light paper and flexible cover, as they are even today sometimes issued by experienced publishers!

Scientific and text books may be somewhat broader in their proportions as they are not read continuously, but in sections. Formulae tables and illustrations often make longer lines necessary-up to approximately 28 Cicero. If there are still wider illustrations it is usually better to arrange the text in 2 columns, Scientific and text books must offer a clear lay-out and constitute a carefully composed scientific apparatus. When using the book, the reader usually looks for a certain subject or chapter and the designer (and author) should make it easier for him to find it promptly. The traditional forms of running head for columns or pages are rarely sufficient today. Decimal classification and short summaries at the beginning or end of each chapter, the use of graphic means, such as symbols, colour codes and a clear

typographic composition can improve the efficiency of scientific and text books.

The multiplicity and significance of scientific and text books has increased to such an extent during the last decade that within this category a further differentiation into technical/scientific, sociological, medical literature, etc, is essential. The designer takes into account whether the book is to be read at the desk or on the work bench, or if it is to be used mainly as a reference source. For scientific and text books, Grotesque (sans serif), Times Roman or similar type faces offer an appearance of predominantly factual character.

Art and picture books are used first and foremost in order to look at pictures. The format and general design should support this function. Most picture volumes contain about equal numbers of vertical and horizontal pictures (portrait and landscape format) and in this case an approximately square book design is best suited for displaying all picture forms equally well. In order to obtain a reproduction of as high quality as possible, the choice of printing technique and paper suitable for such techniques is critical. In many cases white art paper is best suited for colour prints: but this shiny material is less satisfactory when reading the foreword and a possibly lengthy introduction. Here unfinished paper in a shade matching the art paper should be used. Classical or broad white margins are, of course, unecessary for art reproduction. The buyer wishes to see the pictures scaled down as little as possible and is unwilling to spend his money on exaggerated white margin. For the reproduction of paintings, a margin of approximately 8mm is usually sufficient. In the case of photographs there is often no need for any form of margin. Art and picture books have moved some way from the classical traditions of book design; they are a twentieth century development and it may be that the design of such books will be increasingly influenced by pictorial devices developed in other fields, such as

Encyclopedias, dictionaries and reference books could also differ more strongly from books designed for continuous reading. The fact that it takes time to find, read and assimilate a word in a dictionary, draws one's attention to the time reserves of the intellectual worker. It also points to the functional problems that need to be solved by the designer. In future, didactic considerations must be given a more prominent place in the design of school books and teaching books.

illustrated magazines and newspapers.

icographic 5, 1973 Author's address: Hochschule fur Grafik und Buchkunst 701 Leipzig, Dimitroffstrasse 11 German Democratic Republic

It is not sufficient merely to pick out key sentences and formulae visually, or to use symbols as memory aids. Learning can be programmed and made easier by means of the typographical and pictorial possibilities that are already available. It is also vital to use the correct type size for children of a given age group. The eyes of many children have been spoilt through reading too small a type size during their first school years. Book producers and publishing houses using a size of type under 10pt for books designed for children under 10 years of age should be brought to court for causing grievous bodily harm!

This is not the place to go into details of further special features of book design, such as are found in musical works or children and adolescent's books. As can be seen, the gigantic structure for which Gutenburg laid the foundation more than 500 years ago is far from complete. Defining differentiated specifications for the various possible forms of the book is not only of philosophical significance but, at the same time, the basis for the semi-automatic flow production of books.

Already Stanley Morison and E R Weiss demanded a reduction in the number of formats to the ten or twelve which they considered sufficient for all purposes. In the German Democratic Republic this has already happened and it cannot be said to have led to dull uniformity and sterility in book design. Neither the author or the reader gains any advantage if every title is produced in a different format. Printing and binding, however, could be made far more economical by radical rationalization, if several titles could be produced consecutively in the same format. The popularity of a standardized book series (eg, the Everyman's series) proves that most readers would have no objection if, let's say all the classics were produced in a uniform format with uniform type fount. For 80% of the total output of literary works, 3 or 4 formats and twice that many prototypes would perhaps be sufficient. The pocket book publishers of some countries have agreed on a uniform pocket book format, in order to realize more efficent methods of co-production and the use of vending machines. I am also convinced that, in the field of scientific and text books, most editions could be produced on the basis of a few programmed prototypes.

Vast technological changes of themselves demand flow production and semi-automatic methods. In future, it will be possible to reduce the production time for composition to a minimum by the use of reading machines, computers and film setters. In book binding, flow line production will be normal; folding, collating, cover production, casing in and finishing will be semi-automatic. In a semi-automatic flow process, the difficulties lie in the artisan nature of making-up, which in turn, is the result of holding on to the traditional attitude that every book has to be designed individually. There will, of course, always be books which do, in fact, demand individual treatment; in my opinion, approximately one-quarter of all books may fall into this category. I am, however, convinced that a reduction to about 12 formats and 36 prototypes, according to literature genres, would not mean a lowering of quality, if standard models are designed by experts in accordance with the best design practice.

The standard model specification would include instructions for making-up, location of page numbers and headings, line length, margin ratios and paper quality. Title page, colour and type of cover material, the cover itself and the dust jacket, however, should be designed individually according to content.

For works of literature, the type fount should not be programmed, whereas type size and leading could be standardized for optimum readability. Art volumes, illustrated books and atlases may prove unsuitable for semi-automatic production. If the conditions stated above are adhered to, the risk of uniformity can be avoided. The technical and economic advantages are obvious.

The advantages of any industrial process depend on large series. As it is not feasible to arbitrarily raise the number of copies per edition we are left only with the possibilities of standardized series or production on the basis of prototypes. Some decades ago, the ready-to-wear, car, machine tool and other industries were faced with similar problems and economic pressure ensured their solution. A car model can be delivered with different bodies and in many colours. If 36 models are available, nobody considers this to be uniformity. Today, technological development in polygraphy has reached a stage where, in the interest of the user, larger series should be produced.

The book, however, is not one of the usual consumer goods or trade commodities. The book is, at the same time, part of our literature and culture. Consideration of cultural values and artistic book production must be taken care of and safeguarded. When changing to flow production—in my opinion an inevitable step in development—not only the rational communication of knowledge should be considered.

book production as a facet of culture and literary art, developed over the centuries and which manifest themselves in the enjoyment of beautiful books and pleasure in reading, must be preserved. They may well be preserved and extended through ontimum model volumes made accessible to an ever growing readership. If a book designer expresses such thoughts it is because there is good reason for it. It is imperative for us to recognize the gigantic scope of this task in good time and see that book designers and graphic artists, together with publishers and technical experts, start the long-term preparation of prototypes.

The book in a changing cultural climate

Patrick Wallis Burke

Patrick Wallis Burke, Executive Editor of this journal, is also Principal Lecturer in Graphic Design to the School of Graphic Design, Ravensbourne, a Diploma College near London



"I hate books", wrote Rousseau, "they only teach us to talk about things we know nothing about."

Since television came into existence in the early thirties, its full effects have only slowly begun to show themselves. In those early days it was seen as little more than a hybrid form of those other media-the newspaper, the film and the radio. It is only lately that some of the consequences of its arrival are being fully grasped. Television has begun to affect many aspects of public affairs; politics, government, the arts, education and the press. It has become the major forum for the discussion of public issues. Its influence is all-pervasive; it can decide what constitutes news; it can establish its own cultural values. And with this awareness of the growing power of television comes increasing anxiety as to who should control it; who should decide what it offers. Because television is now so much a part of our everyday life, it is sometimes easy to forget that what we see and hear is *chosen* for us by a select group of people. The television producers may argue that they always strive to present a balanced view of specific issues but, inevitably, it is the television camera and the men in the control box who always have the last word. In a fascinating way the television camera is so much more misleading than the printed word. Its endless procession of flickering. moving images can often seem so seductively real that we fail to notice the omissions, the exaggerations, the half-truths and the over-generalizations

So for the majority of human beings, the material that is designed to inform them, persuade them or entertain them seems likely to come in an audio-visual package. Television satisfies, presumably, many of the needs that were previously met by the printed word. Perhaps in consequence, many of the traditionally verbal media, such as newspapers and magazines, have become far more 'visual' in their presentation. Increasingly, the printed word serves only as an accompaniment; some kind of orchestration of material that is primarily pictorial.

What, then, does all this mean to the book and the kind of literary culture

that has grown up around it? The book in its present form has, after all, only been an important factor in certain cultures and in certain specific areas of the world. Even in those cultures that we tend to think of as 'bookish' it has needed universal education and a good deal of social and economic change to allow the book to become an important feature of the lives of the majority of their populations.

Certainly books have never been more available. The 'paperback symbolizes the instant accessability of our traditional western literary culture. It also signals its democratization. The paperback is cheap, compact, standardized and expendable. On the bookstalls, Dante and Edgar Wallace wear the same livery. They compete for our attention as equals. Few writers would disapprove of this tendency since a book surely consists of rather more than the materials which go into its making. There are however a number of eminent men who deplore these developments, seeing them as symptomatic of cultural decline.* In this respect they are not unusual. Ours is not the first age, nor will it be the last, to mourn the passing of traditional values.

Not only is our culture more widely available, but leisure to enjoy it is increasing. In the western world working hours have steadily diminished. The future of the book as we know it is only one aspect of the central problem posed by the emergence of a leisured civilization. When leisure becomes the accepted right of every member of society, a mass phenomenon, how can each individual secure an optimum balance, freely chosen, between his need for rest and entertainment and his need to participate in some kind of social or cultural life? What most of the more gloomy members of the intelligentsia fear is that their individual ideas and minority tastes will be submerged by the bland forces of a "mass culture". They note with alarm that present-day mass-culture gives overwhelming priority to entertainment: that it favours escapist attitudes to the detriment of more reflective ones. But given the, as yet, still precarious balance between the ordinary man's work and leisure, this is understandable. Leisure, although on the increase does not yet constitute a completely clean break from work-time activities; a break in which it becomes possible to question one's routines and re-examine stereotyped behaviour.

What many of our more learned brethren seemed to be worried about is the demise of classical "humanist culture", which was once regarded, (and in many academic establishments still is) as the only valid education of the mind and reason. It is remarkable how strong a hold the concept of the "man of culture" still exerts over much western educational thinking.

The conceptual model for the "man of culture" was designed and developed during the sixteenth and seventeenth centuries. "Man of Culture" was actually developed from an earlier prototype, known as Renaissance Man" or sometimes "Universal, or Complete Man" "Renaissance Man" took all human learning for his province. He was likely to be as well versed in arts as in politics, literature and astronomy, music and mathematics, as well as philosophy and theology. Most of us are familiar with those archetypal figures who are held up as exemplars of the concept - Leonardo da Vinci and Erasmus are two of the more popular.

The seventeenth century "Man of Culture" is a nobleman, an aristocrat, but the rise of the upper and middle class bourgeoisie inevitably introduced some modifications to the specification. For one thing, the new bourgeoisie were not really the creators of culture, they were the first of its consumers. Nevertheless, they still retained the ideal of a comparitively close contact with all human knowledge. Given what was known at that time the ideal was, broadly speaking, still an attainable one-though how often it occurred in actual practice is entirely another question.

The eighteenth century saw the emergent, now 'cultivated' elite of the bourgeoisie in opposition to the old aristocratic regimes. This brought about further modifications to the original model. The bourgeoisie somehow lowered the cultural tone of things.

Maybe they always do. Aristocratic "Man of Culture" had sought only intellectual and aesthetic pleasure; knowledge for its own sake.

But then he could afford to, and was unlikely to want any changes in the existing status quo

existing status quo. Bourgeois "Man of Culture", on the other hand, began to see that knowledge might provide a means of overthrowing existing ideologies. His opposition to the ruling class of the time caused him to be excessively preoccupied with what might be called the more 'belligerent' aspects of science.

The eighteenth century "Man of Culture" even became more scientific in his adherence to the original ideal of 'knowing all there was to know'; he extended and developed the encyclopedia.

The beginning of the nineteenth century ought to have seen the end of "Man of Culture" or "Encyclopedic Man" since it ushered in the age of increasing specialization. It was the point at which it became evident that it was no longer possible for any one man to store in his mind the whole range of human knowledge and experience. From that time the feat has become more and more impossible. Each of us knows the feeling of awareness (or is it guilt?) concerning the impossibility of keeping pace with the relentless rise of increasingly more specialized knowledge.

Yet "Man of Culture" was not allowed to die. He was scaled down for secondary school purposes, as universal education spread across Europe and to those lands over which she exerted control. Since it was clear that encyclopedic knowledge was out of the question, the more or less appropriate reaction was to develop the notion of "general culture"—a watered down form of the classical humanist culture for use by the offspring of the proletariat.

As a recipient of this "general culture" I think of it, looking back, as intensely moralistic and with a strong tendency to present its values as timeless and unchanging. "General Culture Men" were given, of course, only a superficial veneer of classical culture-just enough to ensure that we were in tune with the values of a ruling elite. We read classical texts telling of virtuous acts and noble thoughts selected, no doubt, for our edification. We were encouraged to integrate these ideas into our own thinking by means of essays on carefully chosen subjects, full of non-problems long since shorn of any real interest. We learned of the Greek and Roman civilizations who represented, as far as one could judge, the classical ideals in every respect. The real picture of these cultures, more complex and far less virtuous, was never touched upon. Our humanist culture was given to us through our contact with literature. Through literature we could identify with the hero of the novel or play; be moved by the subjective outpourings of the poet: ponder the reflections of the philosopher. Gradually, in some attenuated form, these various works came to occupy for us the roles of the great myths or sagas of old. Through this series of projections and identifications we acquired a system of intellectual attitudes and appropriate emotional responses.

What do we mean, anyway, when we describe someone as "cultured"? Does not any particular culture consist simply of a very large number of norms, customs, symbols and myths?

Someone who is "cultured" is, presumably, someone who has absorbed a considerable proportion of this collection of items; absorbed

icographic 5, 1973, Author's address: Ravensbourne College of Art and Design, Bromley Common, Kent, England

them so thoroughly that they now act as the means of shaping his instincts and channelling his emotions. The "cultured man" embodies a whole range of concepts, value judgements and attitudes which enable him to be aware of his situation and act appropriately. Each of us builds up our "culture" from a residue, stable in the short term, but evolutional in the long run, of information selected and codified in our minds over a period of time. Our "culture" is thus an essential component of the way we think.

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I make this point because although humanist culture may be on the decline, many of its concepts remain widespread and influential. One important feature is the idea that there is a definite heirarchy of knowledge; that *not* all branches of knowledge are of *equal* importance. This seems a questionable concept.

Another, less questionable idea is that before one can learn anything of a specific subject there are certain 'key' concepts that have to be acquired, (examples might include the 'propositions of Euclid' in the case of geometry, or the notion of the 'radical' in the case of chemistry). From these basic key concepts our knowledge of a given subject is seen as growing like an inverted pyramid, each new piece adding to the total structure in a logical progression. Learning in this ordered way demands logical classification of facts, one fact set on top of another, as links in a chain of reasoning. This kind of procedure is particularly true of the exact sciences, such as physics, chemistry and mathematics. It needs saying, however, that this kind of procedure is also adopted in subjects labelled "arts". They may be less scientifically precise, more rhetorical by nature, but their methods are roughly the same.

Clearly, this traditional method of classification, then the building up of a range of associations, finally leading to some form of synthesis, is valid for the growth of any kind of sensible reasoning. What seems to be missing is some sensible means of adapting the process to a new and different setting. What seem to be lacking are the

What seem to be lacking are the threads that will guide us through our expanding knowledge labyrinth. We desperately need "directions for use"; keys to the interrelationships between seemingly unrelated studies. We need some means of being plugged in to specific centres, so that we are helped to understand intersecting key concepts which let us give shape to the whole.

For ours is the century in which there is almost too much 'information' and too little 'gestalt'. We are treated to a tidal wave of information, indiscriminate and of varying importance, which we must somehow assimilate and shape. Via the audio-visual medium of television it pours over us daily-wars, industrial actions. economic crises, a new achievement in science, sport or medicine, a look at an ancient civilization, a detective story, the 'Miss World' contest, they all come out much the same; a patchwork, a piecemeal collection of fragments, juxtaposed in time and space, formless and indeterminate. It obviously includes extremes of good and bad; utter banality is sometimes counterbalanced by real striving for originality. It would seem unfair to say that what television offers if "mass-culture It might be more accurate to describe it as "Poly-culture", since it is permeated by so many kinds of cultural values; nationalistic capitalistic, religious, socialistic, humanistic, and the like. But more importantly, to a greater and greater extent, many of its features are to be found throughout the world. Television is becoming more cosmopolitan in intent and world-wide in coverage. What it offers, at present, may not entice the more culturally privileged, but we may be witnessing the birth of the first universal culture in the history of mankind.

As for the book, there is little to suggest that reading will become a forgotten art practised only by scholars. Indeed, the evidence is that television seems to stimulate, rather than decrease reading. The fact that many people care little for reading books seems rather less important than that anyone who does, can enjoy an almost limitless choice. As an information source, the book will still preserve its own unique kind of integrity. The book demands an investment in mental effort, certainly, but against this can be set the fact that its ideas can be absorbed at one's own pace; obscurities can be re-read, assertions checked. In consequence, the reader experiences the material in a far more intense way and, as a result, it retains for him a solidity that is denied the spoken utterance.

Developments in printing technology make it possible that the traditional typographical arrangement of the book may be changed or extended. Photocomposition, in theory at least, could free the page from the architecture imposed by the 'chase'. The development of devices like the IBM composer offers further possibilities. Through it, the author can become his own designer, should he so wish. In similar fashion, the designer can become his own compositor, and so on. These newly acquired freedoms ought

to mean that more attention will be paid to discovering what the 'reader' truly needs from the printed word. The skilled human reader has a perceptual mechanism that allows him to take in whole words and phrases but, thanks to developments in electronics, the human reader has now been joined by the machine reader. Present-day reading machines read only letter by letter, but they represent an important advance in the mundane and time-consuming tasks of searching, sorting and retrieving vital information.

For human and machine readers to co-exist means a reconciliation of two different reading modes which, in turn, may mean changes in the appearance of the printed word.

Whether these additional opportunites will lead to new and perhaps unsuspected forms, I cannot predict. I can only suggest that in an age so conspicuously wedded to a 'visual' approach to understanding, it seems more than likely that attempts will be made to extend current typographical practice.

It would seem appropriate to the spirit of our times that typography should echo the *temporary* nature of the "truths" that get into print. In typographical terms, Gutenberg's forty-two line bible somehow symbolizes the absolute certainty that what is being offered is "the word of God". For many centuries ideas have tended to live longer than people. Nowadays, ideas are more expendable.

The writings of any scientist, for example, are crammed with admissions of doubt and uncertainty and declarations of only partial knowledge. To the scientist, "truths" have only a temporary mapping function. They are signposts at the frontiers, to be dispensed with when better information arrives. Typographically speaking, then, what may be needed is something which conveys the shifting, tentatlve nature of such knowledge.

Not only in the printing of scientific language, but also in the typesetting of *affective* language, there might be some explorations.

All great literature communicates through the manipulation of both the informative and affective meanings of words. It tells us things we did not know but, more importantly perhaps, it lets us experience feelings that we may not have known. Through it we can enjoy vicariously a richness and variety of life that far exceeds that of our own immediate sensory experience.

Great writers build their word structures with infinite precision; manipulating meaning, tone of voice, rhythm, so that we can be made to experience an endless variety of emotional responses. Yet the visible aspect of the page gives little evidence of this. Typography, it would seem, distinguishes little difference between the *Iliad*, *Steppenwolf*, and *Winnie the Pooh*. But, perhaps it is in the field of educational books that newer forms are most likely to develop. Already there are some signs of change. In the past, education has tended to overvalue verbal presentation of material, ignoring in the process important aspects of the human personaljty—the senses and the emotions. As a result, educational publishers frequently allow a poorly argued text, written by someone with little knowledge of available presentation techniques, to dictate the final form of the textbook.

Could it be, however, that the most significant changes may well occur when graphic designers see it as their business to actually read what they are asked to set down, and begin to think of words as more than patches of grey texture to be tastefully disposed about the page?

*In a recent address entitled "After the Book?", George Steiner gives a masterly account of his misgivings concerning the future of the book. This address, and an excellent series of replies, are published in 'Visible Language', Volume VI, Number 3, Summer 1972

The essential book

Edward Wright

Edward Wright is Head of the Graphics Department at Chelsea School of Art. He is a member of the SIAD/STD Typographer's Computer Working Group



We may pick up a book, read it and then the book can lay hold of us. While it is being written its impetus and the form it takes can bend the author's will. Cervantes made his own helplessness quite plain with gentle irony when he wrote Don Quijote. He creates the characters and the situation, but they attain reality and get the upper hand. They make comments on his predicament and on his writing. Early in the first part the parish priest and the barber with some compassion allow one of his early works to survive their scrutiny At the end of the second part Don Quijote freed from his madness as he dies, asks anyone present who may have the luck to meet the author, to ask him to excuse the many great absurdities which have caused the book to be written. Don Quijote is as vaque about this author's name as Cervantes is vague about the name of that place in La Mancha where Quijote lived; to quote the opening lines " ... the name of which I do not wish to remember.

Cervantes is modern in his awareness of the book becoming that thing, that medium which it is. He confronts illusion with reality, grandiloquent romance with an absurd dusty picaresque experience. This was also Shakespeare's time and both writers died in the year 1616. Shakespeare examined and commented upon his medium through his characters; he also put a play inside a play as Cervantes put his book inside the book. In the shadowy library of the old hidalgo, Cervantes saw a collection of recipes for alienation. Hearing the sombre arrogant language of the epic dreams he added another volume to the shelves, but in it there is the sharp daylight of colloquial speech.

Three hundred years after Cervantes, Charles Péguy in the Cahiers de la Quinzaine, repeatedly questioned the reading habit, the way in which the print makes us lose our contact with life. In the past, according to Peguy: "illiterates read the book of nature, or rather they themselves were that book, the book of creation. In the Note Conjointe sur M. Descartes, an unfinished text published after his heroic death in action in 1914, he compared modern literacy to a weary memory or a daily newspaper continuously overprinted with prefabricated slogans. Peguy was incapable of despair and he made continuous demands upon the honesty of his readers; he believed that to do the job properly 'each cahier should displease at least one-third of the subscribers.' For Pequy a book meant a total commitment to social and spiritual truth, it meant a refusal to be harnessed to an organized opinion-group. A book meant writing, editing, printing, proof correcting, publishing and even opening a bookshop in the Rue de la

Sorbonne, which in turn became a forum for discussion and an outpost of Dreyfusism. By writing in defence of Dreyfus *(La Revue Blanche 15th September 1899)* Péguy made the little bookshop a target for the fanatical rage of the followers of the Anti-Semitic League and their street gangs.

Péguy, aware of the reader reading, wrote as he would speak with warmth and humanity, transcending material things and using simple language developing out of his inherited oral tradition, the vivid speech of his peasant grandmother who had never learnt to read. At the Ecole Normale Supérieure he attended the lectures of Bergson who later on admitted that Pequy understood his essential ideas as he would have wished to express them. For Péguy it was the living present which mattered: he did not look upon books as passports to a literary fame. In Clio 11 (Dialogue de l'Histoire et de l'Ame Païenne) there are some lines on the situation of the reader: "We are so crammed with work so stuffed with scruples our conscience is so filled with guilt that we only read things related to our work. Because of this it is only when we are ill that we can, for a time, recover the capacity to be a reader, a true reader, who wants to read ... and further he continues: "entering into a text means collaborating with its author, and this sort of reading is an act which is common to the reader and to the author When it takes place, the text fulfils its destiny.

The concept of a close relationship between author and reader ("... the text fulfils its destiny") in *Clia* 11 is in keaping with the

in Clio 11, is in keeping with the concept of the book as a piece of team work. This is evident in an early work, Jeanne d'Arc in which the names of all those involved in it. compositors, proof correctors and others, were recorded in the edition. In France many texts by Peguy fulfilled their destiny during the years, 1940-45, of the German occupation. His thought, his way of life and his works were an inspiration to the French Resistance Movement. The 'Imprimeries Clandestine', the clandestine presses in Paris, in Lyon, in Toulouse were the team work of writers, printers, bookbinders and their friends who then undertook the dangerous task of distribution, usually by bicycle. In 1940 Jacques Decour and Politzer had founded the Pensées Libre which was to include contributions that were not purely propaganda; the copy for the second issue was being prepared for the press when they were raided by the Gestapo. One text survived because it had been delayed. This was le Silence de la Mer by 'Vercors', an engraver by profession who had some experience in book design.

With Desvignes they began the publication of the Editions de Minuit, with le Silence de la Mer as the first volume; 25 volumes were published during two and a half years. The printer Claude Oudeville hand set, printed and redistributed the type for each page during the two-hour lunch break in his work shop; the sheets were folded and stitched in the kitchen of the Desvignes apartment and the covers were pasted on by Vercors. In February 1942 the 350 copies of this first volume of the Editions de Minuit began to circulate. Jacques Decour was arrested on the eve of the day when printing of le Silence de la Mer was completed: he was shot three months later, in May 1942.

The Editions de Minuit represents the limited edition with an unlimited circulation: these books were continuously read and passed from one reader to the next. A number of copies of each edition were sold to cover production costs and the rest were then distributed free. The first four volumes, produced by hand were in editions of a few hundred copies, but in 1943 a large stopcylinder machine was made available by E Aulard who worked on it with his foreman Dore, on Saturdays and Sundays, after receiving the linotype composition of the texts; with the aid of Vasseur a bookbinder, the quantity of each edition was increased to more than a thousand copies. The editors were never short of texts which sometimes were brought from Toulouse or Lyon, or from abroad or even overseas the bicycle continued to be the most reliable means of transporting paper and metal and also in distributing the books afterwards.

When Dr Samuel Johnson defined a book as a volume in which we read or write, he was probably including in his definition both the notebook with blank pages and also the printed volume with, as was the custom, margins ample enough for annotation. In the definition there is the implied point of view of the critic and the scholar for whom the book is an instrument of learning capable of absorbing additional ideas and observations in the form of notes. Even if we have no intention of using a book in this way, our attitude is influenced by the great familiarity and pervasiveness of paper in our day-to-day experience. Part of our freedom and sense of intimacy with books derives from a continuous use of the substance from which they are made.

The cultural diffusion of books is the outcome of a purely Chinese invention. During the Later Han Dynasty (105 AD) paper was invented by Ts'ai Lun, and in the early centuries of our era a variety of papers were made from hemp, plant fibres, cellulose and rags; writing paper, wrapping paper, even paper napkins and toilet paper were used. In The Invention of Printing in China and its Spread Westwards, T F Carter gives an account of the earliest known paper, found by Sir Aurel Stein in a watch tower of the Great Chinese Wall: "Rag paper, supposed till 1885 to have been invented in Europe in the fifteenth century, supposed till 1911 to have been invented by the Arabs of Samarkand in the eighth century, was carried back to the Chinese of the second century, and the Chinese record, stating that rag paper was invented at the beginning of the second century, was confirmed." Elsewhere in his own review of T F Carter's book, Joseph Needham confirms the crucial time of transmission towards the West, in the year 751 when Arabs captured Chinese paper makers in Central Asia; "after that, paper was being made in Baghdad in 793, Spain in 1150, Italy in 1276, Germany in 1391 and England in 1494." As early as the fourth century BC a proto-paper called hsi-t'i, had been made by beating out matted waste floss silk in water and Ts'ai Lun who was an inspector of public works, proposed in his report that cheaper ingredients such as tree bark, hemp, rags and fish nets should be used instead. In the latter part of the Han time (206 BC-220 AD) much scientific work and invention in astronomy, chemistry, botany and zoology was being written and copies were in demand: the invention of paper was necessary to diffuse knowledge.

The oldest Chinese books were handwritten on bamboo strips, perforated and tied with cords of silk or thongs of leather to form a lattice bundle. The system was in use for more than a thousand years (c 1300 BC - 300 AD), although the earliest existing examples are those written or edited by Confucius (551 - 479 BC) including the Book of Odes and the I-Ching or Book of Changes. Bamboo books were heavy and their thongs became worn and broken with use. A more portable type of book was the silk scroll which came into use in the fourth century BC. When silk was made exclusively for books, ruled lines were woven into the fabric. The manufacture of silk for writing and for books, introduced one of the fundamental requirements in book production, namely the use of a standard metrification. Pieces of silk of the first century have been found with the width marked in decimal units and it is known that bolts of silk were used for the payment of taxes. In Chinese footmeasures of the Past Nineteen Centuries, Wang Kuo-Wei states that "the standard of value was the

The clandestine presses of the French Resistance produced the limited edition of unlimited circulation. In his shop, Claude Oudeville set and printed Le Silence de la Mer, by Vercors; 350 copies of the first Edition de Minuit were passed from hand to hand and read by an immense number of readers

photograph by Robert Doisneau from Imprimeries Clandestine 1945 icographic, 5, 1973, pp 12-15 Author's address: School of Graphics, Chelsea School of Art, Manresa Road, London SW 3, England

the p'i (bolt) which was required to measure 40 ch'ih in length and 2 ch'ih 2 t'sun in width.'' (30 feet by 19.8 inches; the ch'ih in this instance measuring 9 inches). In ancient China there was another ch'ih used for bronze knife money and to measure a man's height (mentioned by Confucius), this was a 7.1 inch standard, later doubled to measure 0.36 metres, known as the kung (official) ch'ih to distinguish it from the shih ch'ih used in the markets. There is a geometric relationship between the two units of measure ment in which their (8/9) length ratio may reflect the ancient rule for squaring the circle by squaring eight-ninths of its diameter In *Historical Metrology* A E Berriman implies that the shih ch'ih had a geodetic origin, giving shih ch'ih = 0.32m = 12.53 inches and kung ch'ih = 0.36m = 14.14 inches. During the transition from silk to paper via the waste floss silk substance, it appears that the shih ch'ih of 12.53 inches became the standard paper width for scroll books.

Block printed books were probably invented during the Tang dynasty in the province of Szechuan; the earliest known example is the Diamond Sutra (868 AD) in the British Museum, but printed Buddhist scriptures must have been in circula tion before the year 845 when Buddhism was banned by the Emperor T'ang Wu Tsung. In the tenth century State printing was sponsored by Wu Chao-I and later under the prime minister Feng Tao the great work of editing and printing the classics was carried out over a period of twenty-one years until in 953 the collection of one hundred and thirty volumes was completed The establishment of the Sung dynasty in 960 marked the beginning of the most important period in printing. An edition of 5000 volumes of the Buddhist scriptures, the Tripitaka, was published. Later in 1019 this was followed by one of the Taoist scriptures in 4565 volumes Li Fang a minister of the Sung Emperor T'ai-tsung published the first encyclopedia in 978 and this was followed by the publication of books by others who dealt with specialized subjects such as agriculture, engineering or architecture. A Neoconfucian spirit of investigation typified this period. After the seventh century when a number of dictionaries had been published, the scroll-type book became obsolete; the rolling and unrolling of the paper length was inconvenient for works of reference and a pleating system was invented so that the format was folded rather like a computer print= out. Afterwards the 'whirlwind binding' was introduced with a folded cover sheet pasted onto the first and last leaf. The typical Chinese book, light and flexible in its slip case has evolved from the 'butterfly'

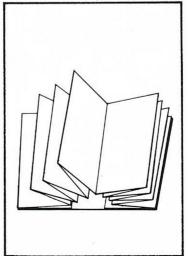


Whirlwind binding' the mid-ninth century pleated paper book in China was rather like a computer print-out with the first and last leaves pasted onto a paper cover sheet

(from Story of the Chinese Book)

Persian text with Chinese pulse= lore diagrams appear in an encyclopedia of Chinese medicine prepared in Persia in 1313. The principal manual on the pulse was written ten centuries before in China

(from Science and Civilization in China)





Two still photographs of reading postures made as part of a DipAD project at Chelsea School of Art, Department of Graphics, by Sister Sarah Clarke, 1968

and 'wrapped back' forms used from the tenth to the fifteenth centuries In the West the lack of an invented substance like paper and the continued use of animal skins for parchment and vellum meant that until paper mills were set up, the book remained a luxury article only within the reach of a privileged social class; there are incidents in the life of St Francis of Assisi showing his awareness that poverty and books could not co-exist at that time. The attitude of St Francis towards books can be seen to express his rejection of their costly material nature when he taught "... as for books, to look for their inwardness, not to their price.

The invention of paper became known to the West through the Moorish conquests in Spain but the invention of printing made its westward way along another route, as the Moslem world refused to put its literature into printed form; block= printed playing cards were probably brought back by Marco Polo and examples of, or information about, moveable type, invented by Pi Sheng during the Sung dynasty, may have arrived in the same way.

The weight and bulk of printed matter mushrooming on the shelves of our libraries and centres of documentation have made microrecording necessary. There are too many microforms and sizes, too many different standards in use and the hardware is still in the process of

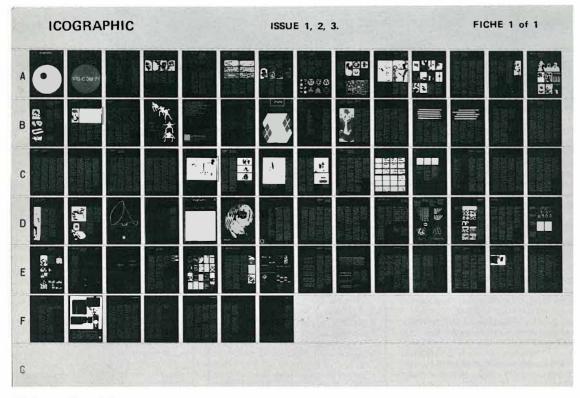
development in many cases. One logical format is the microfiche which reduces 98 pages of a publi-cation onto a 6"x 4" postcard-size transparency; this means that a normal book can be reduced in size and weight onto three fiches which can go through the post in an airmail envelope. The use of fiches in a filing system saves more than 90% of the space which would be occupied by printed matter. The complete record of an ephemeral publication, such as a newspaper which is perishable, can be preserved by this method and a scarce edition of a book, or the single copy of an explorer's diary can be made available for research in any library or centre equipped with a microfiche 'reader'. Desk-top and portable 'readers' project and enlarge the fiche to a readable size; immediate micropublishing is appropriate for a great deal of educational and reference material. Micropublishing depends upon a customary use of the apparatus and its availability, which is a planning problem for librarians and architects. Reading with a microreader is a more visual and abstract occupation than reading a book which is handled. The book is a tactile thing and the reader, reading it, is in a kinetic situation. The reader using a microreader tends to be a spectator; 'browsing' is not possible.

Books according to Jérôme Peignot are in essence the 'meeting place' of an author and each and every one of

the readers. This meeting sometimes becomes a struggle. If there is peace and understanding the book and the reader can become an island, in the middle of a crowd. The book expands out of a closed structure into a sequence of leaves which refer to each other as we read; and we read at our own pace. Young children, learning to read, often embrace their books and handle them with signs of affection and some grown= up readers have admitted to an equivalent response. Sight and touch complementing each other in an informational feed-back, are senses developed during learning. Perceiving with more than one of our senses we understand more completely and become more committed to that which we perceive. In Eye and Brain, R L Gregory makes several illuminating references to this question of touching and seeing and he gives a really remarkable account of 'the case of S. B.', a blind man who gained his sight after a surgical operation at the age of fifty-two. 'S. B.' had made a series of drawings of buses over a period of a year or more, improving the representational accuracy of details which he knew in most cases by touch, but even in his last drawing he omitted the front of the bus which he had not been able to explore with his hands.

The kinetic nature of reading is not merely due to the scanning movement of the eyes travelling over the text and the hands turning the pages upon which the text is distributed; there are also the normal shifting movements of the reader, sometimes modified by a response to what is being read. Anyone who has studied the design of a chair knows that there is no such thing as a single comfortable sitting posture for any particular chair. Comfort is found in a variety of continuously modified positions within the typical postural pattern schematized by the design of a given chair. A study in the applied ergonomics of reading is at present being carried out in the







Left, a microfiche 24 to 1 reduction icographic, issues 1, 2 and 3. With high reduction it will be possible to shrink 3000 pages of A4 format onto the same 6" x 4" size fiche Typography Unit of the University of Reading. Under the direction of Michael Twyman, the research is being made by Sister Sarah Clarke as a time and motion study of children reading in their own environment. A first pilot study was made in 1970 with children from ten to eleven years old chosen because they were competent readers and the subject matter could be wide. They came from a working= class background in an overcrowded North London area, in which the school had a good cultural orientation and a love of books was encouraged among pupils. The environment chosen was a secluded patio out of doors, not unlike the situation in which the children were accustomed to read and study in the playground. The experiment required that the subjects should not be made self-conscious, and the only equipment used was an 8mm cine camera with a wide-angle lens mounted on a tripod. They were given to understand that they were assisting in assessing books, encouraged to read as much as possible and allowed to move about within the patio limits. Recorded reading postures varied from 11 to 780 seconds, and it would seem that there were too many variable conditions in this pilot study. A year later the study was made in two schools in Reading with a more standardized seating, a gridded screen background and filmed from two positions at 90° to each other. Two book formats were used, A4 and A6, with two texts in each book, one of folk mythology and the other of science fiction, in either case. These studies of the effect of book format upon child behaviour during reading, proceed with the elimination of as many variables as possible. The film sequence gives data on changes in reading posture with the large A4 and the small A6 books, which were traced onto time and motion diagrams. The small book was also made 'subjectively' equal in weight to the larger one by putting thin metal plates in the binding.

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The method of using film sequences, statistics, diagrams and written reports can evidently be applied to other parallel situations. The behaviour of small children learning to read, before the visual image has replaced the acoustic one, would be a useful study of kinesthesia, the 'speech-motor' tendency mentioned by H J Chaytor. The same method could be used to study the behaviour of readers using microviewing hardware.

The film sequences used as an aid in analysing reading behaviour is valuable because the book and the reader are to be found in duration rather than in time as recorded by clocks, which is the reason why we lose ourselves in a good book.

Benjamin Lee Whorf in Language Thought and Reality made several comparisons btween the Western concept of time and that of the Hopi Indian: "To us, for whom time is a motion on a space. unvarying repetition seems to scatter its force along a row of units of that space, and to be wasted. To the Hopi, for whom time is not a motion but a 'getting later' of everything that has ever been done. unvarying repetition is not wasted but accumulated. It is storing up an invisible change that holds over into later events ... Hopi may be called a timeless language. It recognizes psychological time, which is much like Bergson's 'duration', but this 'time' is quite unlike the mathematical time, T, used by our physicists."

Books are a repetition and an accumulation. 'Biblion' for the Greeks of antiquity meant an accumulation of writing, a scroll or a book and the word derived from Byblos, a place north of Damascus which gave its name to that substance which it exported, the inner bark of the papyrus plant. Eventually 'biblion', the book, in the Christian world came to mean one single book, the Bible, the essential book.



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Changes in posture of two children reading during a 4 minute period. Outlines traced from a projected film sequence made by Sister Sarah Clarke

The changing responsibilities of the typographic designer

G W Ovink

G W Ovink is art consultant for Tetterode-Nederland and extraordinary professor at the University of Amsterdam in history and aesthetics of the art of printing and allied trades. Dr Ovink is also a board member of the Association Typographique Internationale



We know that the development of professional life moves-inexorably, it seems-towards ever greater specialization. Yet we know too, that specialization got our society into its present mess. We see around us what happens when specialists proceed on their own, without due regard for those consequences of their work which they all too often consider to be outside their province. We see scientists and technicians working without moral consciousness, but also moralists judging without scientific and technical knowledge; we see economists working without social consciousness, but also social idealists making plans without economic insight.

So the typographic designer hardly ever questions the content of the piece of print he has helped to make more penetrating. True, the designer would be in trouble *if* he questioned it! His principal would tell him: "Just make me a good piece of printing; don't bother over what it's about." The designer who *does* bother, is torn between two duties: he must earn a living, but he also feels that he ought to refuse making an effective job of a text which tells people worthless or even wrong things.

Nils Treving, the Swedish audio= visual specialist of the Eselte= Bonniers Company, warned the printers and publishers of the world at last year's *Comprint Congress* in Geneva that we have already reached an audio-visual level of stimulation as bad as our overpopulation and environmental pollution. He called it "mental pollution." There is too much to see and too much to hear—"a sensory overload"—and too much of that is also lacking in credibility, decency, and efficiency. The victim of this mental pollution can do two things: he can stop reading and listening entirely; or he can go on, mixing up what he perceives. Either way, the message does not come across.

Clearly we must reduce the total volume of audio-visual stimulation each individual receives. As far as our field is concerned, in other words, we must print less per capita, and then only true and useful things; and these so well presented that the reader will understand and recollect with a minimum of effort.

Less and better print. How do we set about this without committing economic suicide? Partly we will have to accept a loss of demand. That is the way in which the reading public can show that it has no use for a certain kind of print; either directly, by not buying books or periodicals, or indirectly, by not buying the products advertised through print.

Many wrong or worthless things are printed not because people are wicked

or stupid or vain, but from high= minded hopes, or at least fair motives; only with wrong expectations about the reaction of the readership. If they had known beforehand that the public would not read their stuff. would not understand it or would despise their originators for it, they would often have published it in a different way, or not at all. Scientific evidence about the reader's attitudes can help the designer and publisher to turn out better work. It can help them to screen the material more effectively. I cannot go deeply into this, but I must frankly admit that we have not got very far with research yet, in spite of the great interest that producers of consumer goods, political parties, and public and private institutions also have in knowing how the public will react, and for which they spend large sums on research. Much of that research is on specific cases and the results remian private property, but the techniques of research are developed, and general results on human behaviour are published. But the difficulties are enormous, much greater than some research workers seem to

Let me give you two examples. Both indicate how manifold and complicated influences render the reader's reaction almost unpredictable.

realize

First: the largely passive attitude of the public. The reader does not judge consciously and deliberately. He accepts what is thrust upon him, if it does not differ much from what he expected. He simply undergoes what he gets-unless it is unusually poor, or unusually attractive. If he sees no alternative, he will even accept a definitely inferior product without a grudge against the producer. His ready acceptance of so much typography has surprised most of us. Alas, the same reader will also accept a very well produced piece without much positive effect. if he thinks that it is simply as it ought to be.

What makes the reader expect a certain quality? Clearly, a combi-nation of what the reader has seen lately in the same kind of work from similar producers in his particular sphere of life, and his evaluation of what the producer could have done. The reader discounts poor quality from a man unable to spend more; he discounts good quality from a rich and powerful firm. All these influences are difficult to predict; the more so, now that the new technology sets all the established kinds of printing adrift. Considering this passivity of the reader, and the chance element in his quality standards, it is understandable that the designer is inclined to make what he likes himself. Why should he speculate so much on what the public will like?

My second example of the intricacy of the reader's judgement: we all judge the aspect of a thing according to its price. We call a certain newspaper well set and printed, but call the same quality shoddy if found in a paperback; we admire the quality of a paperback, but would feel cheated if we got that quality in a 15 dollar book. We adjust our standards automatically to what we expect for that kind of product for that price, and what it means to us. A scientist may admire and gladly pay a high price for a typewritten congress report that reaches him soon, but rage against a beautifully produced report at the same price, which he gets a year after the congress.

Though sceptical about the value of most research up to now, I am confident that, in the future, research can help publishers, printers, and designers considerably. The result should be less print, of better quality. The general trend of thought today is not unfavourable. The post= war generation everywhere shows a remarkable willingness to exercise self-restraint in economic growth. Hundreds of thousands of young people are prepared to live with less comfort than they could have. by renouncing lucrative work which goes against their conscience. And that conscience embraces a much wider concept of human decency than that of my generation at that age.

In the communication industry we will also have to apply a voluntary self-restraint. Refusal to cooperate in the printing of non-essential or misleading matter can be direct, by declining an order; more often it will work in a roundabout way which, though slower, will be deadlier. By withdrawing their talents from the production of undesirable matter, the typographers will cause the quality of that work to go down. Less talented and less-principled colleagues will take over. In the course of time, readers will get fed up with the hollowness and ugliness of that kind of printing, and will stop buying. We see this already happening in advertising. Many of you will look back with nostalgia to the advert ising art of the Twenties and early Thirties, as recorded in Sir Francis Meynell's Typography of Newspaper Advertisements or in the first dozen or so Modern Publicity annuals. Those were the days! The wit, the sound approach to the problems, the virtuosity of typography and illustration of that period are rarely found today.

What happened? —a brain drain. Much of the talent that formerly found employment in advertising, has left in disgust. To other media, to social reform, or perhaps to the

contemplative life in Ibiza or Nepal. They could not face the prospect of presenting cigarettes or soft drinks or whisky as the condition for belonging to the respective "with-it" sets, or of presenting detergents as the means of beating your neighbour in the race for greater whiteness. As a result of the brain drain the advertising trade is left with a much higher proportion of unimaginative and pliable men. Eventually the public may come to mistrust and hate all advertising. That is regrettable, for advertising is indispensable for an efficient distribution of goods. A new confidence has then to be built up patiently and at great cost. You will understand my point, however. Producing an effective piece of communication—printed or otherwise-requires a great deal of craftsmanship. If many good craftsmen withdraw their talents from a group of publications, these publications will die from inner weakness.

Some predict even a prominent role for the designer in the improvement of society, namely on the grounds that he is particularly equipped to deal with problems involving mass behaviour. Creativity, they say, consists of the power to recognize, sooner than others, a certain structure or pattern of action. His imagination then enables him to devise a new approach, new solutions. With his vitality he dares to push these forward against the natural mistrust of non-creative people.

Developing the designer into a kind of universal handyman in problem situations is going too far, I think. He should be able to disengage himself from custom and from available patterns; that, however, does not make him the intrinsic revolutionary every artist is claimed to be. In this sense of "finding new ways," every great man is a revolutionary, whether he be artist, scholar, business man, statesman, teacher, or social worker. We must ask: should the ordinary designer in his daily work be as much of an innovator as only the great men can be in other professions?

I hasten to warn against the conception of the designer as the professional brainstormer, ideas man, the universal problem unraveller. And against the whole idea of a free-floating creativity, to be taught in art schools and to be applied wherever new patterns of though are required, in design or elsewhere. Originality is not enough. To be called "creative", a person should have that originality combined with all the knowledge and skill required for a specific job—plus energy and willpower—if he is to perform what others could not think of. Training solely for creativity can be as one= sided as training strictly for professional knowledge and manual skill.

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The present glorification of creativity, originality, and novelty rests on a curious paradox. The demand for creative designers derives from two opposite sources. One is idealistic It hopes to make men who will not be integrated into the capitalistic system, who will not be "Fachidioten' (blind and dumb specialists), but who will use their fresh minds to help in making a better society. The other demand, however, comes precisely from the capitalistic system with its logic of mass production through "built-in obsolescence." its need to create new demands continuously. its perpetual dissatisfaction, its exploitation of stupidity and lower instincts, its unscrupulous pushing of non-essentials presented as important inventions. Thus the training for creativity-for originality of mind and daring-may produce social reformers, if they are so motivated. It may also produce prolific inventors of sales-gimmicks.

It is natural that young people bring a fresh note into the profession. All right, liberate their minds, so that they come up with more new ideas. However, don't we all want a society that is far more stable and natural than the present? We want quiet advertising that is reasonable, honest, informative. We want print containing no more than we need to have. presented so that we can easily under stand, learn, or enjoy it. We want reference works to be clear, manageable, and complete. All this requires a high degree of typographic, editorial, and informational competence-old= fashioned professional skill, partly based on age-old experience. On the other hand, some of these skills have to be acquired in fields formerly alien to the trade.

Let me explain. We ask from the typographic designer an approach to his job as general "informatician," if I may introduce this term. Also we want him to consider the relevancy of his work. This may lead him to decide: "No, this novel should not be a book; it should rather be turned into a radio play." Or: "This catalogue should not be a book of 160 pages I'm asked to do, but a card file -or a micro-film." Or, "You ask me to design this for conventional printing by your ordinary printer, but it will be as effective, or more, if it is typewritten and run off on a small offset machine by yourself." Or vice-versa: "You think that you can do this cheaply, but actually it requires colour reproductions on a much larger format with a completely new text.

The typographic designer who has

thus become a general "informatician" must have a much wider knowledge at his command than is usually taught him. And he must have the authority to intervene in the management policy of his principal. Of course, some designers are already working along such lines today. But they are only the pioneers of what will be a much more general practice tomorrow. It is understood of course that many designers can go on in the traditional way, designing jobs of which the relevancy and the best way of presentation have been established for a long time, or because their temperament or the scope of their talents makes them stick to a single way of working. For many others, however, typography as the selection and display of types selection of formats, materials and lay-out will not be enough.

In the first place, the designer, trained to deal with texts as elements of visual design, will be expected to read texts with critical understanding. I venture to submit that too many designers do not read the texts they have to design, and they do not design according to the meaning of the text, and that they do not rewrite a text if that is necessary and possible. They think of themselves as visual *artists*, not informaticians. If they have no linguistic talents, then they should work together with an editor.

Writing is too serious a business to be left to the writers. That goes for writers in the field of technical and scientific reports, schoolbooks, and manuals. The informatician, with his bag of typographic means of elucidation and suggestion, and his knowledge of the reader's powers of perception, can make things understood in a way that the straightforward, undesigned original text can not. Even more will be demanded from the designer: a knowledge of research methods and results regarding reader's attitudes and performances-legibility problems, aesthetic judgement, buying motivations In short, a general knowledge of all sorts of human behaviour Then: a considerable knowledge of printing technology and its costing; some knowledge of neighbouring techniques.

Is this unrealistic, a vastly exaggerated demand? No, for those designers who decide how huge sums will be spent to reach a certain public effectively, and who have a variety of means to choose from. It will be clear also, that in the present set-up of the information professions, all this is easier said than done. What the job needs, what the designer wants to do, is not how most customers see it today. The man who orders a piece of typographic design, does not regard it as an information problem. He does not ask and does not pay for a fresh evaluation of his job. He thinks that he knows himself what he needs; it is he who pays the piper and can call the tune.

Typographic design should be put on a profitable basis again. A profitable basis means that the designer's fee is found to be a fair price for the designer's usefulness in the whole production.

Of course, many customers simply don't know what design involves, and are unfair when they accuse the designer's of giving too little and asking too much. The final result looks so deceptively simple. But we must admit that there are designers -even famous ones-who do not know enough about techniques and costs, or don't care, and so ask without real necessity for things that can't be done easily and cheaply. The duty of the typographic designer to know about techniques and costs brings us to his responsibility as adviser on the design aspects of technology.

To take only the technique most important for graphic design: typesetting. Regrettably, most of the development and the discussion on future development has bypassed the designer. He was rarely asked to contribute, except on details of type design, and he has not offered many contributions. His art school training did not equip him to tackle these problems; he is afraid of them and all too soon declares them to be corruptions of quality standards he is determined to maintain. The designers may argue, "Why should we go inot the technology of these machines? Of course they are primitive in the beginning, but if we insist on having our way, they will become, simple, foolproof, and versatile' No need to study computer technology and all that now; we just ell the technicians what we want and they will comply.

This may indeed happen, in the long run, but at what a price! I fear that we are about to repeat all the mistakes we made in the development of hot-metal composing machines—and more. It may come out all right in the end, but in the meantime a lot of work will go undesigned but produced on new equipment at little or no profit, because the equipment couldn't handle it properly. Either way, the designer and the printer and the reader will suffer.

The need for active reorientation on new technology may not seem urgent when the designer finds that most of his regular customers and printers are as wary of the new inventions as he is. More and more, though, he will discover customer's switching to different publishing or publicity policies, for which they have totally different suppliers. Or the designer, coming to his regular printer, will find a new machine there, with a new man in charge who isn't a designer, but who still tells the real designer what he can do and what he cannot.

The designer is about to lose many of his former liberties, too. Rightly so, inasmuch as many of these liberties consisted in satisfying personal whims. Let us be honest: it is easy for the designer to supply rough sketches and faulty originals. making his final adjustments in the proofs. It is easy, but it isn't right. The first blow against that kind of false liberty was struck when economists figured out what that took in craftsmen's wages and in idle equipment. The second blow comes now from the new machines and processes, which cannot work from unclear specifications or faulty originals.

The curtailing of the designer is inadmissible, however, when engineers and other technicians want to have it easy in their turn. The trouble is, many designers don't realize how acute the danger to their profession has become, and don't raise their voices unitedly to make their requirements known. If the engineers and equipment manufacturers are allowed free reign, they will organize typesetting and reproduction so that it is most logical, efficient, and cheap according to *their* viewpoint. But their logical, convenient, and profitable methods are not always what the designer needs for ensuring reading comfort and appeal to the public.

Have we forgotten so soon the painful story of the development of the Linotype? The greatest demand for mechanical composition in the 1880's was from the newspapers which needed vast amounts of simple uniform matter set rapidly-American language, of course The Linotype provided just that, and this saddled Europe with 90 channels and a corresponding keyboard, unfit for languages with many accents and for scholarly work History repeated itself with the introduction of 6-channel teletypesetter tape, and again today with simple photocomposing machines, unable to cope with anything else than basic English, unless at great loss of speed and quality. Machines and processes are developed for uses which are first in the greatest manifest demand. It is always thought possible to adjust or extend them for other demands, if such demands become profitable. So the Linotype advanced from single-character matrices to two= character matrices (providing an italic, or bold or special signs, but on the same width as the main figure) to pi matrices for special signs;

from single magazines to four-deckers with side magazines; there are now multiple-mould wheels, quadding and centering devices, saws, etc. *Makeshifts*!

They do their work, but the machine could have been constructed in a different way if the present demand had been manifest in the beginning.

What is a paying proposition in the long run? After 25 years of developing photocomposing machines we still don't know what is needed. Why are the cleverest minds in the industry unable to agree on this? Terrible losses have already been incurred by countless firms! Why is this problem so difficult? It is a fascinating question. I will focus only on the part of the designer in deciding which machine and processes we are going to use most in the future.

A really new machine or process is made not for an existing market, but for a potential market. The potential purchaser doesn't know what the operating costs will be, whether the new product will be acceptable to the public, nor whether his prices will cover cost and profit. The machine manufacturer asks the potential customer, "What do you prefer: cheapness? speed? quality? versatility?

The customer doesn't know; how can he? He is, in turn, dependent on his clients. Moreover, there are other manufacturers who make even more beautiful propositions. Perhaps one should wait a little; let other people lose their money first, and step in when the risk is gone.

Meanwhile, manufacturers incur losses, and printers deprive themselves of benefits the new machine or process could have afforded them.

What has been the result? - photocomposing machines that were too fast, too versatile, and too expensive; machines with an output too small and deficient at any price. New compromises are now being sought involving quality, versatility, speed and price. Their success will depend to a considerable extent on the contribution of the designer to new, efficient design and composition routines. Yet the voice of the designer is hardly heard in all the discussions on the future of printing, notwithstanding all he knows about the requirements of authors and readers. Authors and readers are therefore not heard at all; neither directly, nor via the designer who could represent them.

With the designers and printbuyers largely passive the efficiency= minded engineers seem to have our future planning to themselves. This is a danger. I'm all for efficiency, but *their* efficiency is so often one-sided and short sighted! Today, millions of dollars are spent on the development of information storage, retrieval, and dissemination systems. As with the Linotype, the decisions are being made by interested groups which can make clear= cut demands-and pay for them, now: newspapers, the space industry, medical and pharmaceutical sciences, banking and stock markets, et al. Each has homogeneous material to be processed in bulk, rapidly, for people waiting eagerly for the information. Not so the humanities and the arts, nor even commercial publicity, for their material is not homogeneous. does not come in bulk, and is not needed in a hurry. My fear is that the needs of the sciences, etc., will be met by equipment and processes which seem to present so many advantages that they will have to be adapted for use by the humanities -again by means of unwieldy makeshift adaptions and extensions.

What do we do about it in the field of typographic design?

Most urgent are the problems of photocomposition. Representatives of the humanities should first decide -with the aid of typographic designers and legibility research workers what their minimum requirements are; what is intrinsically important in present rules of composition and lavout; and what, on the other hand, is nice to have if you can get it, but no more than that, considering the adaptability of human nature. Then the printing technician and economist should come in and explain what they absolutely need, and what they can do without, if need be. The two viewpoints should then be brought to a compromise. A few examples.

We all agree that text composition and page make-up will soon be done in one, integrated process, with nothing left to improvization; and that, ideally, all keyboarding and actual character generation should not start before absolutely clean, final copy and design are in. No afterthoughts permitted. This means that both author and designer must visualize the final result before the typographic stage is reached. Can we train authors and designers to renounce their deep-rooted habits, and to adopt difficult new routines-"for the printer's sake," as they will say? Partly they will comply, if the choice is between having the thing done so or not at all; partly they won't comply, whatever the lure or economic pressure. Fortunately, there are several escapes.

It should be emphasized, first, that these are *visual* problems, not merely technical ones. Any difference between original copy and printed result must be predictable through *seeing*. Calculating the number of characters and lines from typescript or tape is not sufficient, because the typographic form affects the visual importance and balance among the parts. It will be necessary, as a rule, to run the tape twice through the photocompositor: once at high speed and low quality, sufficient for the correction of proofs; and once, after correction, at reduced speed and high quality for final resultas many machines can do today. Once agreed on, rules for breaking-off, spacing and capitals; for placing notes, captions, and illustrations can be programmed. Of course, agreement on proper breaking-off rules should be reached between all users of a language, and on proper rules of capital spacing, between all designers. Perhaps some characters in some typefaces should be redesigned to follow general rules, eg., the notorious Bembo capital 'R'. Professor C J Duncan was quite right in ridiculing the individualism and chauvinism which prevented such rules and conventions to be agreed on long ago.

In page make-up of complicated work it is possible to provide for eventualities by using a flexible layout system, with "play-room" so to speak; variations on the basic scheme need not hinder, because the whole style is based on variability and not on uniformity, as traditional typography is. There is the danger that the text done in such a flexible lay out, being less compact, presents too few elements at a single glance; that it looks disjointed, vapid, rambling. Traditional typography gives a terse and succinct exposition of facts, because it concentrates these in the smallest possible area. But that requires a strictly individual treatment of every page, which a largely computerized, run-of-the-mill production does not allow for However, the tape-driven visualizing screens or "terminals" used for editing and correcting tape may help us in this, though it will take some time before these visualizing contraptions can match the ease and accuracy of single-character correction in hand, and Monotype composition.

In all these matters the typographic designer should establish design models which exploit the specific possibilities of the machine, while neutralizing or compensating its specific limitations. Possibly the designer will find that even when he does his very best to meet the engin eer's wishes, there are still things left which the machine cannot produce at a profitable rate, though it should. Then such important reader's requirements should be urged upon the machine manufacturer or, mutatis mutandis, upon the process developer. Only then, when all the possibilities and limitations have been tried out and checked with the people most concerned, will the manufacturer take notice and consider improvements. Engineers and manufacturers will accept good advice from the designer, but only if

the designer knows what he is talking about both in technical and in commercial respects.

How do we get designers who can thus act as typographic informaticians who can cooperate effectively with engineers and salesmen; but who can also act as the loyal opposition? Fortunately, strict separation is lessening between our various educational programmes, between arts schools, trade schools, commercial schools technical colleges universities, and the old apprentice system. Typographic design has always attracted people from different backgrounds, and it will do so even more in the future. Printing can offer much to all kinds of talents, and it will draw on all the gifts a person can muster. The future generation of typographic designers, therefore, should take to heart the line cut on Beatrice Warde's grave-stone: 'Quantum potes, tantum aude'' which we may paraphrase, perhaps, as: "Whatever your talents are, dare to use them to the full.'

This article has been adapted from Dr Ovink's Beatrice Warde Lecture given in London, March 1972. It was first published in 'Visible Language' Volume V1, Number 4, Autumn 1972, and we are grateful to its editor for permission to include it in this issue

Designing the International Book Year symbol Michel Olyff is a consultant designer to a wide variety of industrial concerns. He is a member of the

Michel Olyff is a consultant designer to a wide variety of industrial concerns. He is a member of the Board of the Chambre des Graphistes (CBG) and Union Professionelle des Industrial Designers (UID) as well as a member of AGI icographic 5, 1973, pp 19-21 Author's address: Rue Haute 10 1461 Haut-Ittre, Belgium

What a marvellous subject for a graphic designer, but what a well= worn theme.

How is one to come up with an original idea when there already exist so many previous attempts?

Perhaps, after all, it would be wise not to look too closely at what has been done before, in the hope that one can avoid the usual stereotypes and, hopefully, arrive at something better.

Why try to produce something better, anyway? Well, isn't it important to wipe the slate clean, now and again? And from this new beginning try with some humility to compose a fresh *image* - (for 'symbol' seems far too grand a word)? In it I used an open book and superimposed upon each of its pages human figures whose arms reached out and linked hands. I hoped that this would symbolize in a simple, direct way, the bonds that can unite men through increased knowledge and understanding via the act of reading.

A single symbol for different cultures

I would have liked to have tried out my symbol without giving any verbal explanation of it. I would have liked to have known how each of the cultural groups 'read' its imagery through their distinct and differing traditions. But it was necessary for me to get



An image, then.

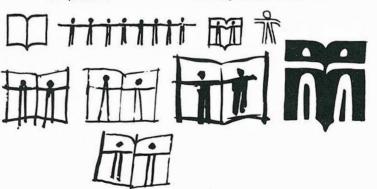
But if I am to speak to the whole world, what language must I use in order to be understood everywhere? Let's look at the words *International Book Year...*

I know how to symbolize a book. I don't know how to symbolize a 'year'.

I don't even know how to symbolize 'international' without resorting to a globe and those same old meridians and parallels. on with the task of making this image that Unesco was to use around the world...

After several comings and goings between Paris and Brussells, Unesco no longer seemed to me just an 'organization', it had become a number of known, friendly faces.

In April 1971, I was invited to present my proposals to the Planning Committee for International



How do I convey this message? Aren't there too many messages already?

These were some of the thoughts that ran through my mind when I got a letter from *lcograda* asking me if I would design a symbol for Unesco.

I worked through a number of ideas. I made a lot of sketches and used

a great many sheets of paper. Finally, I reached a point where one of my ideas seemed to offer distinct possibilities. Book Year, under the presidency of Herman Liebaers, Chief Curator of La Bibliotheque Royale de Belgique and President of the International Federation of Librarians. Attending this meeting were

representatives from each of the international organizations who were to participate in the complex tasks of creating International Book Year 1972.

They included many experts from various member states, representatives from international societies of publishers, booksellers, authors and printers and those who, at the very heart of Unesco, were concerned with scientific education, technological research, cultural development, author's rights, distribution problems, information, and so on. In all, there were about 40 people from Europe, the United States, Latin America, Cuba, Africa, the Near East, India and Japan. Helped by 80 slides and simultaneous translation, backed by Icograda in the person of Peter Kneebone. Chairman of its Signs and Symbols Commission, I made my presentation to this assembly.

I began, firstly, by illustrating the context within which any proposed sign would have to operate, by showing about 50 slides of existing pictograms or symbols based on the idea of 'the book'. Examples included symbols of book fairs, publisher's marks, and the like.

Next, I showed some rough sketches of different directions that I had thought it was possible to follow, explaining in French—and by the use of translation facilities in English, Spanish and Russian—why I had ultimately given them up.

Finally, I showed my suggested 'universal men upon an open book' symbol. This being illustrated in a variety of ways; black on white, white out of black, with perspective distortions, and with variations in configuration.

There followed a long discussion of the proposed design. From the outset there seemed to be general agreement as to its suitability, in terms of its formal properties.

There were some doubts, however, concerning the details of the figures. At that time, I felt that the design was only half way towards its final form, and that many modifications would be needed before arriving at a definitive final version.

It was a testing but exciting occasion.

I must admit to some disappointment also.

I had hoped that such an international committee would provide me with a chance to learn how my symbol was perceived by members of other cultures.

Unfortunately, all the members of the committee, whatever their nationality, appeared from what they said, to be reacting 'graphically' in a westerm manner.

Was it possible that their education, acquired maybe at Oxford, Berkeley or the Sorbonne, had somehow detached them from their original culture?

Sadly, it appears that I shall never know whether my design is 'legible' to people from a culture other than my own.

Early exploratory sketches of an idea that was eventually to lead to the final design.

Some exploratory ideas that were

It had seemed possible that some-

book and a globe, but as ingredients they failed to blend satisfactorily.

Clearly, there was little to be made

not everyone uses arabic numerals

thing might be made of an open

of the figure seventy-two, since

or employs the same calendar

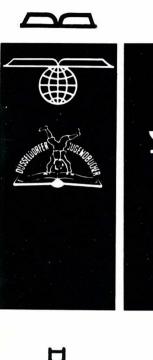
eventually abandoned.

The hope was always to create an image that everyone might use and interpret via their own distinct and differing cultural traditions The book has often been used as a symbol or as a component element of a symbol.

It has been represented in a variety of ways: in plan, elevations, or in perspective.

As a preliminary to the design of the Unesco symbol, Michel Olyff collected together a wide selection of emblems and trade marks from all parts of the world which employed the book, or elements of it, in their construction.

This chart shows the system of classification which he devised for their display and which was used as part of the presentation of his proposals to Unesco. Examples include, international Book Fairs, emblems of Associations, Publisher's marks, etc





Union Internationale des Editeurs, Suisse

Editions Hoch, Dusseldorf, FGR 3

International Book Fair, Jerusalem, Israel 4

Fehr'sche Buchhandlung, Switzerland



Basilius Press, Basle, Switzerland 6

International Book Fair, Warsaw, Poland

International Book Fair, Sofia, Bulgaria 8

Lexikon Press, Italy

Editions Hans-Gunther Ziegler, Switzerland 10 Editions Hundt, Hattingen



11 International Book Fair, Brussells, Belgium 12 Mejdounarodnaia Kniga, USSR 13 'Visual Books', Switzerland 14 Editions Scholaires, Bulgaria 15 Lehrbuch-Reihe, Bulgaria 16 Editions August Lutzeyer 17 Leipzig Fair, GDR 18 Librairie Europeenne, Brussells, Belgium 19 International Book Fair, Frankfurt, FGR 20 American Artist 21 Interbook Limited 22 International Book Fair, Cairo, Egypt

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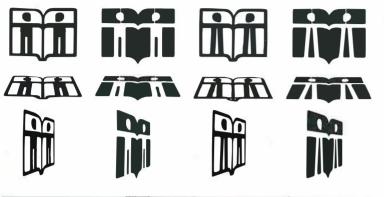




23 Crowell Collier and Macmillan 24 Yellow Pages, Belgium 25 Editions Thomas, Kempen 26 International Book Fair, Belgrade, Yugoslavia 27 International Book Fair, Nice, France 28 Stollfub, FGR 29 **Editions Sauerlander**



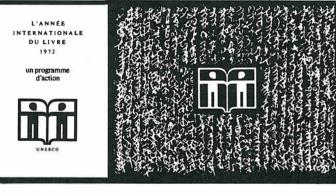
30 United Nations Publications 31 Communist Party Publications, Bulgaria 32 Children's Book Fair, Bologna, Italy 33 Marabout, Belgium 34 Watkinson Library, USA 35 Elliot's Books, USA



10

Left, explorations that attempt to determine how well the symbol resists optical deformation

Below left, shows a preliminary attempt to place the symbol in a typographical setting, and also to superimpose upon another form of writing





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Above, the final evolutionary stages in which, first, the arms of the figures are detached from the outline of the book and the figures are then animated to their definitive form

Left, the final definitive version

'Fatty Joins the Force', a cinema poster advertising an American Keystone comedy. Printed in colour lithography circa 1914, Great Britain. Designer unknown

'La Trappistine', a colour lithograph by Alphonse Marie Mucha, produced in France during the late 1890's



Woodcut poster for the first Exhibition of New German Art, designed by Erich Heckel in 1919 A colour lithograph for an exhibition concerned with the upbringing of the young (Tentoonstelling opvoeding van de Jeugd), designed by the Dutch designer J D Ros in 1919





100 Years of Posters Bevis Hillier Pall Mall Press, London £2.25

In the ruins of ancient Thebes was found a papyrus offering a reward for the return of an escaped slave. Public notices have a very long history.

In our time, however, the poster has become a good deal more than a public notice. The modern poster signals vigorously to an audience whose tastes and aspirations do not predate the rise of modern capitalism. It is addressed, not to an anonymous member of the general public, but to an anonymous potential consumer. All of the famous early posters shown in this book were designed to persuade a growing section of the population to spend money on consumer goods, entertainment or art. It took some time before the poster's function was broadened to include the "selling" of political ideologies.

In his short introduction to the book, Bevis Hillier says that posters;

"have the same relationship to academic art as journalism has to literature. Both posters and journalism are out to catch the eye and make an immediate impression. Both favour overstatement. The posterist is as tempted by cliche as the journalist ... Though the litter bin yawns to receive them too soon after their creation, both can achieve greatness: to Lautrec and Bonnard the poster was as natural a vehicle as the newspaper was to Hemingway, or Defoe, Swift and Dr Johnson."

He goes on to offer his opinion that;

... posters cannot aspire to the achievement of a profound painting or a sustained work of the literary imagination, though this is not to decry their quality or to make a reactionary assault on pop art. Posters were the first pop art, the earliest art form to treat the things of commonplace life in their own manner, brashness for the brash, trivia for the trivial. The pop artist finds his inspiration in the streets. the posterist in his audience. But the greatest art must be introspective. in the best sense - that is divining and delving to the essence of things - and posters are by definition extrovert. Bravura, not subtlety, is what stops the casual passer in his tracks."

100 Years of Posters offers us 96 reproductions (64 in colour) printed in photo-litho by the Dutch company of Lange/van Leer. Almost inevitably one can quarrel with any selection that purports to represent a hundred years of poster art. Bevis Hillier, however, seems to have made a very personal selection (which is no crime) but fails to explain what guided his choice. In his introduction,



'Nord Express', a colour lithograph by 'Cassandre' (Adolphe Jean-Marie Mouron), produced in France in 192



for example, he tells of the major contributions made by such key figures as Aubrey Beardsley and John Heartfield, yet leaves them out. He also shows his awareness of the growth of the poster as pure decoration: as expendable art for the bedsitters of the young all over the world, yet fails to include any examples.

.

In spite of these omissions, this is a fascinating book, showing a wide variety of styles and content. But in a mysterious way, when the poster is taken out of its normal environment it loses some of its sharpness. On the street hoardings it competes for survival; defends itself against others who share its territory, as does any self-respecting mongrel.

Once inside the covers of a book, however, this self-assertiveness seems to go.

Is it just that mongrels look faintly ridiculous as lap-dogs?



'Veritas Mantles for strength and brilliancy' a colour lithograph designed by the English designer John Hassall in 1904.

In 1904, the streets of Britain were lit by gas; a few still are. A gas mantle was made of a woven material impregnated with a mixture of chemicals. This, when lit under controlled conditions, burnt away, leaving a hardened film of ash. The mantle was attached to an insulated pipeclay holder, and surrounded the flame to produce light.

It is interesting to note that the company for which Hassall designed his poster is still in existence

Shell Posters of the 1920's and 30's

A set of six of the famous Shell Petroleum posters of the 1920's and 30's is being made available to loograda members. These are full colour reproductions on good quality poster paper, size 20ins x 30ins (double crown).

Subjects and artists are:

1923 The Leading Line (artist unknown) 1924 Bank on Super Shell (Norman Keene) 1925 Your Car Deserves them Both (artist unknown) 1928 Imperial Airways use Shell (Dacre Adams) 1932 Rye Marshes (Paul Nash) 1938 Guardsmen use Shell (Ben Nicholson)

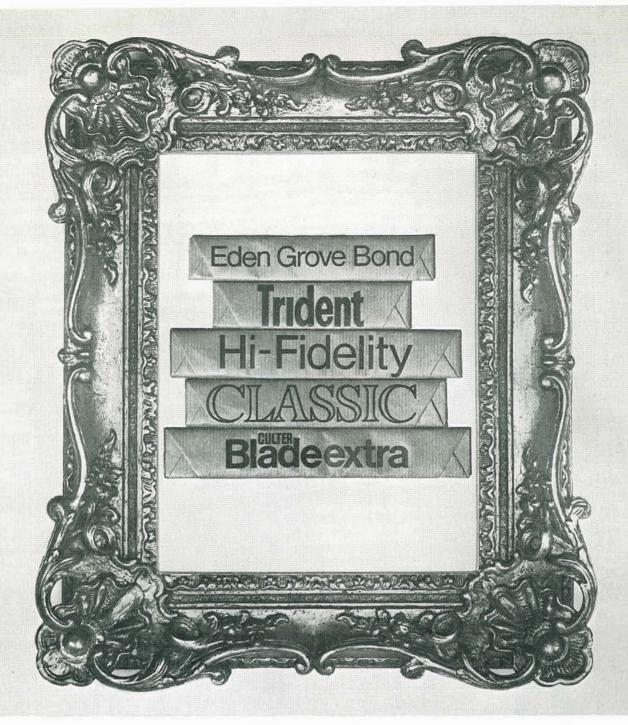
Price for the complete set of six is £5.00 (12 US dollars) including postage and packing (orders from outside Europe will be despatched by surface mail.

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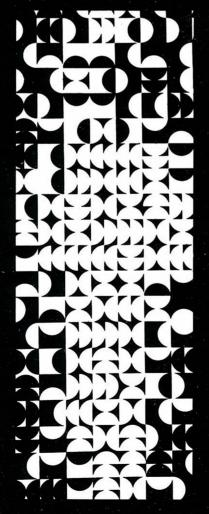
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A section from a computer-aided multi-element geometrical abstract painting 'Black-white Structure' oil on canvas, 220 x 110 cm, by Zdenek Sykora and Jaroslav Blazek, 1966

The International Council of Graphic Design Associations was founded in London in April 1963. Its headquarters are in Amsterdam. ICOGRADA is an association of independent Member Associations. Membership is open to societies of professional graphic designers and organisations concerned with the training of designers and/or the raising of graphic design standards. Member associations are elected at the biennial General Assembly, which elects also the Executive Board, determines policy and overall activities and agrees financial arrangements.

The aims of ICOGRADA are:

1

to raise internationally the standards of graphic design and professional practice by all practicable means. 2

to collect and exchange information on professional, educational and technical matters. 3

to improve graphic design training and to assist the interchange between countries of graphic designers, teachers and students. 4

to organise exhibitions, international assemblies, congresses and symposia and publish documentation on graphic design and visual communications technology, including a News Bulletin. 5

to act as an international forum for co-operation and exchange of views between designers, organisations representing professionals from allied and other fields and those of commerce and industry. 6

to encourage the better use of graphic design and visual communication as a means to improve understanding between people everywhere.