icographic

8

Henry Steiner

Almost all of our contributors to
this issue draw our attention to ways
of writing other than that of our
familiar Roman alphabet.
And it is salutary for most of us to
recognise that there are some systems
of writing, such as Chinese or Arabic,
that are used by a large section of
the world's population—millions of
people, to whom our alphabet is
completely unfamiliar.

One writing for one world—the
pioneer work of C K Bliss
Patrick Wallis Burke

The author discusses the differences
between alphabetic and pictographic
modes of recording human experi-
ence. In alphabetic systems, *words*
come first, *ideas* second, whereas in
ideogrammatic forms of writing, the
idea is paramount. Each ideogram is
a thought-picture, not merely a unit
in the systematic dissection of the
sound-structure of a language.
And since ideogrammatic writing is
not linked to speech-sounds, it can
achieve a universality that is
impossible with a phonetic system.
The author believes that the work of
C K Bliss is important because he
forces us to consider whether there
might not be entirely new ways of
transcribing language—ways that
could lead to one language for one
world.

'Stamp on it'—some aspects of
postage stamp design
Stuart Rose

The author, who is Design Adviser to
the British Post Office, gives a short
historical survey of British postage
stamp design, from the first-ever
stamp (the Penny Black of 1840),
to the present day.
He then goes on to discuss the various
difficulties that accompany the design
of the many commemorative issues
that are now produced in Britain.
He believes that too many people
look at stamps as works of art and,
in so doing, fail to appreciate the
skill of the designer in solving the
many difficult graphical problems
posed by the subject.

Easier than ABC—some experiments
with a 'plastic' language
Peter Watson

The author briefly describes the work
of Dr Hodges of California State
University, who has been studying
the problem of how to help low-IQ,
non-verbal children to develop their
ability to communicate. She has
achieved some remarkable successes
by means of a plastic language kit,
made up of various coloured, shaped
pieces of plastic, which the children
use to symbolise various objects or
actions.

Communication in an environment
and by an environment
Peter Kneebone

The author makes a plea for a much
broader consideration of the many
factors that are involved in inform-
ative signing within a human
environment.
Countries, cities, towns and villages
each have their own corporate
idnetities, however irrationally they
may have been acquired. But they
also have to contain a great deal of
public information, usually in the
form of signs.
Much more skill and knowledge is
required to ensure that the visual
identity of the information system
satisfactorily relates to the visual
identity of the environment.

The roots of the problem
Hartford Davis

Following a visit to Sweden, the
author gives some disturbing facts
about the Swedish paper-making
industry, which is now reaching its
'limits to growth.'

TypoAsia 74
Sato Keinosuke

The author gives a brief account of
the first meeting of typographical
experts from Asia, which was
sponsored jointly by the Asian
Cultural Centre for Unesco, and the
Tokyo Book Development Centre.
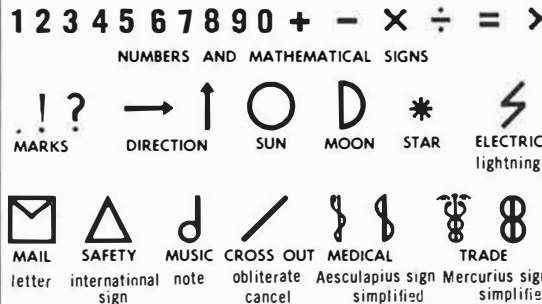
Six thousand years of writing
René Ponot

The author surveys the development
of the art of writing from its earliest
beginnings, and demonstrates the
clear relationship between the
appearance of a writing system and
the materials and tools used in its
production. His article is generously
illustrated with examples of writing
taken from the Engraving Room of
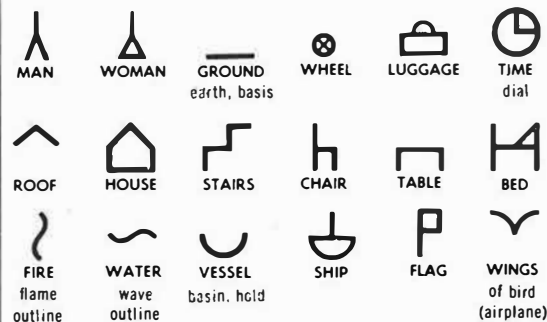the French State Press in Paris.

Read the symbols line by line, not haphazardly here and there, and see how quickly you can combine them to new meanings. Children succeed in their first lesson.

Here are 30 international symbols already used all over the world

1 2 3 4 5 6 7 8 9 0 + − × ÷ = >

NUMBERS AND MATHEMATICAL SIGNS

MARKS	DIRECTION	SUN	MOON	STAR	ELECTRIC lightning

MAIL letter	SAFETY international sign	MUSIC note	CROSS OUT obliterate cancel	MEDICAL Aesculapius sign simplified	TRADE Mercurius sign simplified

Here are 29 *Blissymbols*

MAN	WOMAN	GROUND earth, basis	WHEEL	LUGGAGE	TIME dial

ROOF	HOUSE	STAIRS	CHAIR	TABLE	BED

FIRE flame outline	WATER wave outline	VESSEL basin. hold	SHIP	FLAG	WINGS of bird (airplane)

Some of these symbols are already combinations, as for instance: a *house* can be symbolised by *roof* over *ground*, a *ship* by *vessel* over *water*, etc. But it is simpler to use an auxiliary Outline Symbol for *house, ship* and other meanings as shown throughout this folder.

MOUTH speech	EAR hearing	EYE sight	NOSE smell	HAND touch	PLANT see later vegetable, fruit

By putting the Action Symbol on top of the symbols above, we indicate the Action (verb) of these pictured things, as to see, to smell, to touch.
With this, children wrote whole sentences in their first lesson.

PEN writing	PAPER page	EMOTION heart	REASON skull	CONSCIENCE higher reason

The higher mind above the individual mind (skull outline) indicates God, parents, teachers, who instill *conscience* in us.

How to use the "line letter."

Alphabetical letters are formed by lines. By adding one horizontal line to F we get the different sound E.
In much the same way we can use the "Line Letter" for the forming of hundreds of pictorial symbols as shown below:

LINE line repeated, copy, print	REPEAT	LIMITS	OPEN. OPENING special openings see below	CLOSED. ENCLOSURE

The symbols for *open* and *closed* can be used for banks, consulates, etc. together with symbols for time and days (see below).

DOOR special opening	DOOR MAN	ENTRANCE	EXIT	FIRE EXIT flame

ROOM cabin	ROOM steward	WAITER	ROOM MAID	LIFT	LIFT ATTENDANT

WAITING ROOM lounge (chair)	WRITING ROOM pen	BAR drink glass outline	ROOM WITH 2 BEDS

WATER wave	SHOWER coming down	BATHROOM tub	WATER BOWL basin and/or toilet	HOT flame radiating heat	PULL PAPER TOWEL

STREET pointer at ground next to house	SHOP room open to street level	TRAVEL BUREAU shop for travel	FLOWER SHOP flower bulb outline

POST OFFICE house of letters	LETTER BOX	AIRLETTER wings	TELEGRAM electric letter

POSTMAN messenger	POSTCARD	POSTAGE STAMP usual location of stamp	PARCEL	WEIGHT scales outline

TRAVELLER man, wheel, ground	HOTEL house for traveller	MOTEL hotel plus garages

One writing for one world- the pioneer work of C K Bliss

Patrick Wallis Burke

Experiments conducted by teachers have shown that children grasp these pictorial *Blissymbols* quicker than words. They can read new combinations they have never seen before, and they can boldly and logically combine new meanings they need when writing to penfriends who speak other languages.

CAR   BUS   TRAM   RAILWAY   AIRPLANE   SHIP

trolley   steam, electric   wings

TRAM STOP   RAILWAY STATION   AIRPORT   HARBOUR   WHARF No.3

house, wings   ship

PAPER   TRAVEL TICKET   TICKET OFFICE   TIME TABLE   TRAINS

room   book (2 pages) and dial

sun coming up   sun over earth   moon coming up   moon over earth   24 hour time dial

SUN   MORNING   DAY   MOON   EVENING   NIGHT   TIME : 8.30 p.m.

SPRING   SUNDAY   MONDAY   HOLIDAY   JANUARY   FEBRUARY

sun over earth, 1st day of week   2nd day, etc   happy day heartlifting joy   moon indicates month 2nd month, etc.

HOLD   RESERVATION   RESERV. SEAT 6   RESERV. FLIGHT B   RESERVATION CANCELLED

in the widest sense   paper held in hold (see foregoing symbol)   crossed out

Blissymbols can be typed and cabled by Facsimile Telegram without any telegraphic coding, decoding, and without translation into any language.

Here is an example of a Facsimile Telegram;

PLEASE RESERVE   1 ROOM   2 BEDS   BATH   GARAGE   ARRIVE   SUNDAY

friendly appeal (heart)   reservation symbol   paper held in hold   1st day of week

DEPARTURE   ARRIVAL   THROUGH   EXPRESS TRAIN   CHANGE TRAINS

arrow stops at line post   through train   step down and step up

Why are the symbols so simple?
Because the line elements can be put on any typewriter by removing the capital letters, but leaving the small letters for names and ordinary correspondence.
An IBM ball typewriter is even better.

PLATFORM No.3   CAR 5   COMPARTMENT 7   SEAT 9   WINDOW SEAT

BEFORE   AFTER   TIME DELAY   LATE ARRIVAL   TRAIN No. 7 CANCELLED

dot before and after line   after time   arrival after time   crossed out

car for time within limits (dial outline)   pointer at parking ground   liquid for driving wheels

TAXI, HIRE CAR   PARK HERE   CAR   MECHANIC   SERVICE STAT   GASOLINE

PORTER   LUGGAGE   CHECK IN   CHECK OUT   LUGGAGE   LOCKER WITH KEY

STOP!   LOOK!   LISTEN!   MEN AT WORK   ROAD REPAIR   FORD

ahead   eye   ear   man with hammer   road interrupted   under water

LOOK OUT! DANGER!   LOOK UP! LOW DOOR!   LOOK DOWN! STEPS!   LOOK RIGHT! RIGHT CORNER!

eye and safety sign   underpass   under bridge   eye, corner outline

YES!   NO!   DON'T TOUCH!   DRINK   WATER   DON'T DRINK!

positive   negative   hand   mouth   wave   negative, mouth

DANGER! HIGH VOLTAGE!   DON'T SPIT!   NO SMOKING   SMOKERS' ROOM

safety sign   negative, mouth   negative mouth, cigarette, flame

DANGER! INFLAMMABLE!   ALARM FIRE!   FIRE EXTINGUISHER   TO FIRE STAIRS   FIRE EXIT

safety sign flame   ear flame   flame   flame crossed out   flame outline

MEDICAL   DOCTOR   FIRST AID BOX   PHARMACY   HOSPITAL

Aesculapius sign (snake around rod)   shop open to street level   Aesculap

So runs the biblical account of the way in which Adam's early language was changed into the confusion of tongues we know today.
The *Book of Genesis,* in which it occurs, is probably one of the oldest stories in that extraordinary rag-bag of Hebrew poetry, history, anecdote, and devotion, that now forms the basis of present-day Christian mythology
It has all the marks of being a traditional story, known to the Israelites long before its ancient author set it down.
The story begins abruptly.
We are not told who is speaking, nor who is being addressed and, whenever I heard it as a child, it always gave me the uncomfortable feeling that I should not be listening.

If this vengeful Lord was intent on creating a wide variety of spoken languages he was remarkably successful. It has been estimated that there are now at least 2,800 different languages being spoken in the world today, not counting minor dialects.

Human language is rooted in speech. All known societies, no matter how 'primitive' they may appear in other respects, possess fully developed languages.
Human beings may tread the earth naked, and clutching all their material possessions in one hand, but they are never *dumb,* in any sense of the word.
And learning to speak is our most remarkable intellectual accomplishment. Very few of us, indeed, ever manage to do anything quite as clever again. Present-day research in phonetics, or into the neurology and physiology of speech, only increases one's wonder at the astonishing skills that are mastered.
Yet we all take it completely for granted.
In speech we exchange ideas and feelings. We hang out pennants of sound; thread together the meaningful sound-units we call words.
The ideas imprisoned within the words are the common property of all mankind, yet the wording systems

3

used to convey them are as diverse as
the cries of the birds.

Since words die as soon as they are
uttered, man has long sought ways of
trapping them; making them
permanent by such means as writing
and printing.
In essence, the problem facing the
inventor of a writing system is to find
a satisfactory *eye* language to act as
a substitute for the primary *ear*
language.
A study of early writing systems
shows that our modern scripts
developed from pictorial represent-
ational signs of various kinds.
At the outset, they were a completely
distinctive way of recording human
experience. They were true *eye*
languages.
Pressures in the development of
spoken language, however, gradually
turned these scripts into phonetic or
partly phonetic systems.
But once writing disengages itself
from pictorial representation it
becomes completely dependent upon
the spoken language and develops
into a more or less faithful recording
of the sounds of speech.
It becomes visible *ear*-language.

Ideograms and alphabets represent
two solutions of the same basic
problem.
Phonetically written words, however,
cannot draw upon the same stores of
meaning as ideograms.
Phonetic and syllabic alphabets use
essentially arbitrary symbols to
represent a compartively compre-
hensive spectrum of the sounds that
make up a given language.
Speech sounds are split into their
components and letters are coined or
borrowed to represent these sound
components.
Faced with various groupings of
letters and knowing each of their
sounds, one can utter back the word.
The word, however, is meaningless;
no more than a label attached to
some idea, object or event.
The function of the word is merely
that of triggering off in one's mind
the idea for which it stands.
In alphabetic systems, *words* come
first, *ideas* second.
In ideogrammatic forms of writing,
on the other hand, the idea is
paramount.
Each ideogram is a thought-picture;
an entity, not a unit in the system-
atic dissection of the sound-structure
of a language.

It is difficult for anyone familiar
only with the common European
languages to appreciate the
differences between alphabetic and
ideogrammatic languages.
Yet there does exist a language
spoken by more people than any
other, and with a literary tradition
of over 35 centuries, which is ideo-
grammatic , not alphabetic, in
construction.
If we look at the structure of the

MEDICAL **DOCTOR** **FIRST AID BOX** **PHARMACY** **HOSPITAL**
Aesculapius sign (snake around rod)   room open to street level   Aesculap

STANDING **WEAK** **LYING** **SICK** **PAIN** **UNHAPPY** **AMBULANCE**
human being   knees bent   knees drawn up (downhearted)   Aesculapius sign

SHIP EMBARKATION **TIME 8–10 a.m.** **DECK 3 CABIN 39** **DISEMBARK**
into ship and   24 hour time dial   level inside ship   out of ship

ALARM ! **ABANDON SHIP** **PROCEED UPSTAIRS TO DECK 2 BOAT 4**
safety, ear   ship crossed out   lifeboat showing oar

SELF 1 **OTHERS 2** **REASON** **MENTAL LINE** **SELFISH 1** **RESPONSIBILITY 2**
I am No. 1   skull   drawing a line   thinking   thinking, caring
second to me   in your mind   of myself   for others

MOUTH **EAR** **LANGUAGE** **TELEPHONE** **COIN OPERATED TELEPHONE**
speech   mouth, ear, electricity   coin into box, mouth, ear, electric

INTERPRETER **INFORMATION** **ENQUIRY** **MAN** **FLAG** **STATE** **FRANCE**
man of language   man open for questions   flag over territory   tricolore
(mouth, ear)   in black and white

TOLL BAR **CUSTOMS** **ENTRY VISA** **BRITISH PASSPORT**
pay here   toll station   of state (flag over territory)   book (2 pages)
paper into   state   of state for travel

NAME **ADDRESS** **PLEASE SIGN YOUR NAME AND ADDRESS** **ROOF PROTECTION** **POLICEMAN**
word written   pointer on place on earth   man who protects
(pen) and spoken (mouth)   friendly appeal (heart)

TRADE **MONEY** **BANK** **PAY IN** **PAY OUT** **EXCHANGE**
simplified Mercurius sign   house of money   banks   no money symbol needed

PAPER MONEY **COIN MONEY** **CHECK** **TRAVELLER CHECK**
page outline   disc outline   horizontal page   travel (wheel on ground)

FOOD **WAITER** **DINING ROOM** **DINING CAR** **MENU CARD**
mouth and Mother Earth   explanation for food symbol see before

DANISH DELICACY **COOKING** **BAKING** **FRYING** **SOUP**
food, happy taste   fire under   fire under   fire under   wave in plate
Danish flag in black   pot with water   oven   plate (grill)
and white

A few numbers next to the special food symbols indicate
all usual meat, fowl, fish, fruit, vegetables, (see below)

RESERVATION TABLE No. 6 **ANIMAL** **DOMESTIC ANIMAL** **BIRD** **TROUT**
explained before   4 legger   animal under roof   fish

various meats expressed by numbers   2 beef, 3 mutton, 4 pork, etc.
bird 1 chicken, 2 turkey, 3 duck, etc.   fish 1 carp, 2 trout, etc.

ORANGE **STRAWBERRY** **GRAPES** **POTATO** **TOMATO** **LETTUCE**
fruit, 1 apple, 2 pear, 6 orange, etc.   vegetable below,
vegetable above ground

vegetable   vegetable below ground, 1 potato, 2 radish, etc.
vegetable above ground, 1 tomato, 2 bean etc.
vegetable, leaves only, 1 cabbage, 4 lettuce, etc.
vegetable below, vegetable above ground

FRUIT **BERRY**   berry, 1 strawberry, 2 raspberry, etc.
berry on stick (grapes) no. 1
carbon dioxide   bottle veg. above ground no. 1   freezing into cubes
fruit

BOTTLE **AERATED WATER** **FRUIT JUICE** **TOMATO JUICE** **ICECOLD water** **CHEESE section**

DRINK GLASS **STRONG DRINK** **WINE** **BEER** **DRINK WAITER**
CH chemical for alcohol   berry on stick (grapes) no. 1   berry on stick (hop) no. 2

SHOW HOUSE **THEATRE TICKET** **SECOND BALCONY** **HOUSE FULL** **CINEMA**
for shows to see (eye)   second level   basin, hold   show house, electric

MUSIC **OPERA** **CONCERT HALL** **STADIUM, RACES**
note   show house with music   to listen only (ear)   overtaking arrows
indicate competition

MUSICIAN **12 MAN BAND** **SINGER** **DANCING NIGHTLY**
man and musical note   mouth music, legs and feet, moon over earth

Chinese language, we find that it is not conspicuously complex.
In many ways it might be said to be simpler than the Western languages.
It has little 'grammar' as we know it. Verbs are not conjugated; nouns are not declined. Gone are the syntactical rituals that have plagued western schoolchildren for generations.
Since it is not the primary purpose of the Chinese characters to render sounds, the Chinese written language has developed independently from the evolutionary changes that have taken place in the spoken language. This has made it possible for the written language to provide a literary continuity across thousands of years, as well as binding together the diverse cultures of China.

Although the sounds of the language have changed considerably over the centuries, the written characters have changed little.
A modern Chinese man would not be able to understand the spoken language of Confucius. Yet he can read and understand Confucius' written characters just as they were set down over fourteen centuries earlier.
On the other hand, few Englishmen could translate even a twelfth-century English text, since they would be faced with a phonetic rendering of an unfamiliar language, much closer in character to German than is their present-day speech.

Chinese characters have a more direct connection with their meaning than do English words.
If we write down the sequence of letters that spells "horse," it has meaning only through the mediation of the sounds that each of the letters makes.
It would little real difference to English-speakers if we adopted the Cyrillic alphabet, or the Shaw alphabet, to render the same sounds, since the shape of the letters bears no relation to the concept "horse." The Chinese character "horse" means horse without any reference to the sound of the word.
It still bears an echo of the animal that inspired the early symbol.
Form and meaning are much more closely linked.

Throughout history, the Chinese language has been notoriously difficult to learn. Way back in 1930 it was estimated that only three million newspapers were sold in China, to be read by only one person in twenty-five.
Certainly, under the communists, the Chinese have made considerable progress in increasing literacy.
They have instituted some simplification of the written language, reducing the number of written characters to three thousand and modifying the more complicated ones to make them easier to memorise and write.

But for all its tortuousness, Chinese can be wonderfully apt and vivid. Much more importantly, it has the advantage that the written language can be understood by speakers of totally different dialects.

This is one reason why it is difficult to 'Romanise' Chinese.
To do so would merely separate the various Chinese tongues from each other.
Just look at the way in which the Roman alphabet is used in languages like English, French and Hungarian.
If I wish to conjure up the concept of 'square,' then I must write either "square," "carré" or "négyszög."
If I were to show an Englishman, a Frenchman and a Hungarian, a picture of a square, they would each recognize it at once.
And this is what the Chinese ideograms do for Mandarin, Wu, Xiang, Cantonese, Kejia, Gan, Min, Mongolian, Tibetan, Formosan and Japanese speakers.

Language may be primarily spoken sound, yet writing does not have to be tied to the demands of rendering the sound-patterns of language.
What we succeed in communicating is determined only by the means we use for communication, and Western sounds and forms are only one among many. It is only an historical accident that has led to the Roman alphabet being the major vehicle for present-day communication.
At this present time, when men from every country are meeting every day, there is a need for some form of common language— something that is capable of conveying ideas, regardless of language barriers.

Charles K Bliss, the inventor of *Semantography,* is a pioneer in this field, whose remarkable work deserves rather more serious attention than it has had so far.
The information which accompanies this article is taken from a tourist folder which he has produced, and it serves as a useful introduction to the system that he has developed.
Charles Bliss was a graduate of the University of Technology, Vienna, and also studied at the Austrian Federal Training and Research Insitute in the Graphic Arts, Vienna.

He has give the following description of the stages that led him to Semantography (Greek for "a meaningful writing");

"1 I was born in 1897 in the Babel of old Austria where 20 nationalities hated each other, because they spoke and thought in different languages.
2 As a boy, mad about chemistry, it was a revelation to learn that H O means water in all lnguages.
3 In 1922 I graduated in chemical engineering from the University of Technology in Vienna, entered an

electronics firm, and was impressed by the pictorial symbols in radio diagrams.
4 Later, as a victim in Dachau and Buchenwald, I saw how words can trun men into killers. I tried "words" of an international language—music. My good wife smuggled my instruments into the camp, and with them I won the hearts of my jailers and my freedom.
5 We fled to China, and there I was fascinated by what Lin Yutang called "The Second Great Wall of China," its picto-ideographic script.
I scaled the wall and looked into a wonderland where people of different languages could read the same letter, book, and newspaper.
7 Chinese scholars told me that the main unifying factor that welded many tribes and invaders into the largest nation on earth was this universal script. They said that a European Nation would have been a reality many centuries ago, If Englishmen and Estonians, Frenchmen and Finns, Greeks and Germans, Romans and Russians, etc., had such a script which they could read in all their languages.
8 I studied Chinese history and was amazed by the racial and religious tolerance of the Chinese. Could that all-encompassing script be the cause?
9 This Chinese script moved the great mathematician Leibnitz (1646-1716) to predict the invention of a simple "Symbolis Universalis" in which pictorial symbols could be operated in a simple symbolic logic.
10 I did not know that Leibnitz' speculation was considered impossible to realize. And so, "where ignorance is Bliss, it's folly to be wise" I started in 1942 and published in 1949."

Since then, Bliss has published a number of works relating to *Semantography.* In these he has further developed it as a logical, semantic—even ethical tool.
Although he sees it only as an auxiliary medium, to be used only where the language barrier has to be bridged, he believes that its symbolic logic can be a help to many people. And I think that he is probably right. Like him, I have found that exposure to a language like Chinese has a decidedly liberating effect upon one's conception of the nature of language.
Certainly, I was startled to discover how parochial my grammatical habits were.
Marshall McLuhan believes that our phonetic modes of writing have led us to a lineal, sequential form of awareness. He observes that;

"Consciousness is not a verbal process. Yet during all our centuries of phonetic literacy we have favored the chain of inference as the mark of logic and reason. Chinese writing, in contrast, invests each ideogram with a total intuition of being and reason

that allows only a small role to visual sequence as a mark of mental effort and organization. In Western literate society it is still plausible to say that something "follows" from something, as if there were some cause at work that makes such a sequence.
It was David Hume who, in the eighteenth century, demonstrated that there is no causality indicated in any sequence, natural or logical. The sequential is merely additive, not causative."

He goes on to say that;

"Today in the electric age we feel as free to invent non-lineal logics as we do to make non-Euclidean geometries. Even the assembly line, as the method of analytic sequence for mechanizing every kind of making and production, is nowadays yielding to new forms." (1)

Bliss' preoccupation with the development of a different form of communication is understandable.
We inhabit a planet that is changing at an increasing rate.
Increasingly, due to modern communication devices, we have already been driven to the expedient of inventing new systems of recoding our existing alphabet.
Perhaps there may be better approaches along quite different lines. He demonstrates that pictographic writing can make use of our visual sense in order to give access to human experience—that it can give pictorial expression to oral meanings. Certainly, he forces one to consider whether there might not be entirely new ways of transcribing language.
Ways that will lead us, he believes, to one writing for one world.

Selected references

Marshall McLuhan, *Understanding Media: The extensions of Man,* Routledge and Kegan Paul, London, 1964

An example of Bengal script from a handwritten collection of poems (India, 1926) by Rabindranath Tagore

Some examples of the logotypes of various Asian newspapers. Reading from top to bottom, these are: India (Hindi), India (Bengali), Thailand, Laos, Malaysia, Sri Lanka, and the Khmer Republic

TypoAsia 74
Sato keinosuke

The majority of participating countries use Indian type letters. Syllables are formed by adding vowel signs over, under, or on both sides of the consonant. If typefaces are constructed with the vowel signs integral with the character, the number of pieces becomes extremely large. Consequently, the vowel signs are cast separately from the consonants, as additional characters. There are a great many, and they are very small, so that it takes a lot of time to set type. They are also easy to damage or lose. For syllables that are used very frequently, the vowel signs are made integral with the character. As a result, there is a real need for studies of frequency of syllables to be undertaken.

The examples shown below are as follows:
The upper two types are examples of those currently in use in Indonesia.
The top sample is in Bataksh, the one below is Makassaarsch.
Both are produced by the Amsterdam Type Manufacturing Company.

Below them are two typefaces designed in Japan.
The upper one is for Thailand, the lower is for Laos

A first meeting of Asian typographical experts was held in Tokyo, Japan, in March 1974.
It was sponsored jointly by the Asian Cultural Centre for Unesco (ACCU) and the Tokyo Book Development Centre (TBDC).
The meeting also received the cooperation of the Japanese National Commission for Unesco, the Japanese Typographical Association and the Japanese Association of Type Founders.

The meeting was attended by experts from India, Indonesia, Japan, Khmer Republic, Laos, Malaysia, and Thailand. In addition, technical advisers from Japan and Thailand, and observers from the Khmer Republic, took part in the discussions.

For some time now the Asian Cultural Centre for Unesco and the Tokyo Book Development Centre have been engaged in cooperative work in the development of new, non-Latin typefaces for use in Asia. During the course of this work they had found that throughout Asia there was, as yet, no well developed print culture and little understanding of the importance of good typography.
This first meeting, therefore, was organized to meet certain important objectives—these being;

1
to exchange data and information concerning the present state of typography throughout Asia,
2
to discuss what kinds of typography would be most appropriate for use in the printing of newspapers and in textbooks for primary and secondary school education,
3
to discover effective ways in which regional cooperation might be extended in order to develop and improve typographical practice within the regions.

Prior to discussion, the meeting was told of the work being done by the Tokyo Book Development Centre, in the design and development of new non-Latin typefaces. In 1969 work began on a new Thai typeface. During the past five years three new faces belonging to the same family had been completed. These were to be known as *Unesco-TI-Fine*, *Unesco-TI-Bold,* and *Unesco-TI-italic* of 19.5 point size. In addition, *Unesco-TI-Bold* of 30 point, and *Unesco-TI-Bold* of 36 point had also been completed.
In 1970 work began on the design of a Laotian typeface. So far two new designs have been developed, *Unesco-Li-Fine,* in 24 point and *Unesco-LI-Bold* in 32 point.
Work has also been in progress since 1972 on a new typeface in Khmer characters.

During the meeting, experts presented reports on the state of the typographical arts within their own countries. There was also detailed discussion of the particular problems represented by textbook production. It was conceded that the present supply of available typefaces was limited and inadequate.
The meeting therefore resolved that member countries would collect together specimens of elegant type or calligraphy for further study by the Tokyo Book Development Centre.

Problems of type-casting were also discussed. At present, different type-founders used differing formulae for their type alloys. Since many of the Asian countries have no type=founding facilities, it is vital that extremely costly type should not only be durable but give sharp impressions. It had been found that very frequently joint characters set in certain foundry type, broke down when run on high speed printing plant.
It was also noted that different countries supply type at differing type-heights. Holland, for example,

uses 24.85mm, Belgium: 23.68mm, France: 23.56mm, England; 23.32 mm, and Japan; 23.45mm.
Such variations cause considerable problems to book producing agencies.
The meeting resolved, therefore, that all member countries should adopt a standard type-height, both in the manufacture of type, and in the ordering of type from outside countries.

'Stamp on it'-some aspects of postage stamp design

Stuart Rose

The author, who is Design Advisor to the British Post Office, gives a short historical survey of British postage stamp design, from the first=ever stamp (the Penny Black of 1840), to the present day. He then goes on to discuss the various difficulties that accompany the design of the many commemorative issues that are now produced in Britain

Depending on where you happen to be standing at the time, the very mention of the words 'Postage stamp' will conjure up a wide variety of meanings and stimulate a great number of differing reactions, some of them highly emotional.

I suppose to most of us the words will recall questionable deals in dog-eared swops, obtained by dubious acts from some poor stamp dealer in the Strand, and conducted with typical school-boy threats behind the Pavilion during a school match. To others they will call up a vision of tweezers, spy=glasses and stamp albums with the seductive hope of an investment in a fortune to be gathered in old age.

For many they just suggest an art=form which they may not understand yet feel they know all about and for which they accuse the Post Office of wasting its time and their money. But to designers they will denote an area of industrial design, perhaps one of the most sophisticated in the whole field of graphics, certainly a highly significant one in the performance of one of the largest systems of package handling in the country.

It is not for nothing, therefore, that the Post Office received a Design Award from the Design Council for its 1972 issues of stamps, an award given not for their philatelic qualities but for their excellence as printed examples of industrial design.

Therefore, it is at stamps as objects of design that I want to look, rather than as examples of fine art or indeed at their other functions as subjects for collecting and philatelic interest. And if from this standpoint I can tread rather more firmly, I was going to say "stamp", on some popular misconceptions about stamps, so much the better.

It has always seemed to me that there exists a fundamental contradiction between the aims and objects of the Post Office and those of the philatelist and collector. For whereas we will spend endless time, money and energy in an attempt to achieve perfection, the philatelist in his pursuit of oddities, mistakes and imperfections sustains a highly prosperous trade. Certainly there is no other corner in the printer's world where his errors are sought after with such avidity.

If we then accept the concept that the postage stamp is first and foremost an object of industrial design, what are the influences which affect its design and production and how significant are they in terms of the ultimate result.

Broadly there are, I suppose, five main areas of influence. Those imposed by the operational requirements on a stamp as an essential aid to the processing of mail, those imposed by the choice of subject, by the type and quality of outside advice sought by the Post Office, by the standard of performance of the designers themselves and by the technical competence of the printers.

All these factors have, in varying degrees, influenced the design and production of stamps ever since the introduction of the *Penny Black* in 1840, and they are as significant today as they were then.

To most of us, perhaps, the best stamp that has ever been produced. But in our parlance it was not designed. It was the piecemeal result of an intellectual solution to a number of practical problems.

But before we start to analyse these influences on the design of stamps today, let us go back to the beginning and see how these same influences affected the production of early stamps.

Like so many bright ideas the Postage Stamp was the result of the Reform Bill of 1832. One of the many sociological abuses the Bill sought to reform was that attaching to the inefficiency, high cost and privileged abuse of the Postal Service.

In his pamphlet "Post Office Reform, its importance and practicability" Rowland Hill had set out his argument for a uniform postage of 1d for a letter weighing ½ ounce for delivery anywhere in the British Isles and almost as an afterthought had suggested that if every house was fitted with a letter box and postage was pre-paid, I quote "the letter carrier would drop the letters and having knocked he would pass on as fast as he could walk."

The system Rowland Hill sought to reform was then a cash-on-delivery system. Time was wasted in awaiting an answer at a house, argument with the recipient over payment, often repeated visits to get an answer resulted inevitably in a very heavy financial loss for the Post Office. It was, therefore, this new concept of pre-payment of postal charges that immediately influenced the design of the new labels as they were first called. It is of some interest that Rowland Hill himself had forecast the stamp as we know it by specifying a suitable label as "a bit of paper just large enough to bear the stamp (that is the cancellation) and covered at the back with a glutinous wash which the user might, by applying a little moisture, attach to the back of the letter."

Perhaps I should explain that Rowland Hill's stamp originally assumed a continuance of the current practice whereby a letter when folded and sealed on the back made its own cover without the use of an envelope. Ultimately, Rowland Hill's recommendations for reform of the Postal Service were accepted and, in September 1839, the Lords of the Treasury sent an invitation to artists, scientists and the public to submit ideas and designs in connection with the forthcoming introduction of prepaid postage and the penny post.

Some five weeks were allowed for the preparation of the designs, but in spite of that, 2,600 suggestions and designs were submitted, although only forty-nine of them were concerned with an adhesive stamp. Of these, only four were considered worthy of development. There is no doubt that the over-riding consideration in the production of this new label was security. And not surprisingly, for the 1d stamp was a valuable commodity representing about a third of the average labourer's daily wage.

One of the four winners of the competition, Benjamin Cheverton, had some interesting recommendations to make on this question of forgery. He wrote, "Now it so happens that the eye being educated to differences in the features of the face, the detection of any deviation in the forgery would be more easy, the difference of effect would strike an observer more readily than in the case of letters or any mere mechanical or ornamental device, although he may be unable, perhaps, to point where the difference lies or in what it consists."

And what more familiar portrait than that of the dearly beloved Queen? Although the competition was a stimulus to inventive thinking the immediate results were disappointing, considering the great number of submissions that were made.

However, it may be interesting to look at what the four main prizewinners sent in, largely I admit, because some are very pretty designs and very much a product of their time.

George Dickinson entered some rather charming hand drawn conceits that were, in fact, to denote different services. It was Dickinson, incidentally, who proposed printing stamps in sheets on special security water=marked paper.
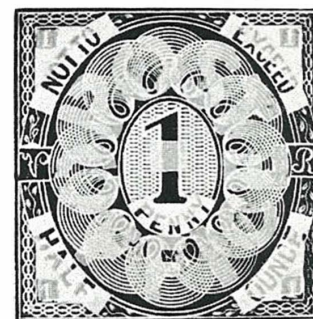
Perhaps the most decorative was an engraved design from Charles Fenton Whiting printed in two colours simultaneously from a combined set of dies. His obsession with the security aspect of his design was typical of many entries, but the strong emphasis he placed on the numerical value was significant.

James Chalmers, a bookseller and printer from Dundee, produced a straightforward typographic statement. He had already submitted to the Post Office, some eighteen months before the competition was launched, some rectangular designs which he had proposed should be gummed on the back and used to seal the letter sheet.

So it was that William Wyon, who had engraved a bas-relief portrait of the young Queen from a drawing by Henry Corbauld for use on the City Medal struck in 1837, was commissioned to engrave the dies for a similar portrait to be printed by Perkins, Bacon and Company for use on the first adhesive stamp. The background was machine engraved by a technique in current use on bank notes and devised to reduce to a minimum all chances of forgery.

Rowland Hill himself had recommended that "labels, if made of some paper difficult to imitate and like the medicine stamps, printed from complex plates with various colours in the same impression, thus requiring the combined ingenuity of the papermaker, the engraver and the printer, would be secure against forgery" . . . and here speaks the careful client . . . "and the cost, only 1d for 200."

Hand in hand with this obsession for security against forgery went an equal concern against the possibility of re-use. The printers had recommended the use of black for printing the engraved plates, but the black cancellation mark was found to be inadequate. So the ink on the cancellation was changed to red. Alas, the printer's ink was more permanent than the cancellation which, with the help of a solvent, could be removed from the stamp. After only one year, therefore, the black penny had to be replaced with a red penny and printed with fugitive ink, less permanent than the cancellation, which now became black again.

During the forty years which had passed since the introduction of the Penny Black, new stamps had been produced of different values but without sufficient attention being paid to their operational efficiency. With the result that in 1884 the Post Office was forced to set up a Committee of enquiry into the whole question of stamp design to quell a growing tide of complaint from its own staff and the public mainly on the confusion caused between values and colours which were hard to distinguish. It is fascinating to read the terms of reference for that Committee drawn up one hundred years ago:
" 1   It is of the first importance that, in any new scheme of Postage Stamps which may be devised, there should be a variety of colour, form, and design as to render the Stamps of different values easily distinguishable from one another, both by Post Office officials and by the public, not only when first used, but also after they have been cancelled.
2   The Stamps should be printed in so thorough and effective a manner as to prevent fraudulent use of them after they have once passed through the Post.
3   They should also be such in manufacture and design as to preclude the possibility of imitation.
4   Regard should be had to the desirableness of producing Stamps which shall have as much artistic merit as is compatible with the first three conditions.
5   The whole subject requires very careful and deliberate consideration, with the help of information and suggestions, not only from practical

officers of the Department who may be called to assist the Committee, but also from any persons, skilful in design or otherwise, of whose knowledge and taste the Committee may desire to avail themselves, for it has become most desirable, in the case of previous failures, that an amended scheme should now be devised which may hold out every reasonable promise of efficiency and permanence."

Whoever it was who drafted these instructions had an understanding of the factors which govern the "design" of stamps, which was quite remarkable for his period.
The issue which resulted from the Committee's recommendations was in many respects a disappointment, and it is difficult to trace any close association with the original brief. Admittedly, the values are now expressed in numerals instead of words, but the set lacks any clear consistency in the overall pattern. And so the pattern of stamp design was set for nearly the next forty years and not only a change in reign was thought a sufficiently important occasion for a change in design and poor Edward VII on his accesion had to content himself with having his own portrait slotted into the same frame vacated by his mother.

Today we have become so used to the idea of new stamps that it is difficult to appreciate that it was not until 1925 that a special stamp was issued for the first time to celebrate an occasion and that the opening by King George V of the British Empire Exhibition at Wembley.
Once this revolutionary step of producing stamps for a particular event had been taken, it was natural that others would follow, but the pace was leisurely, and it was not until 1966 when Wedgewood-Benn was Postmaster General that the pace really got hot.

Let me explain the differences which exist between two types of stamps currently in use in this country, the definitives and the special issues, for the influences which affect stamp design generally are not common to both types.
First then the ordinary stamps, the definitive issue which includes now some nineteen different monetary values. These are available all the year round at all Post Offices and, by and large, the only philatelic interest in them once they are issued, is technical rather than visual, changes in printing cylinder numbers, and in the past, differences between phosphor overprints on the front and types of adhesive on the back.

Operationally, these stamps are highly vulnerable because they account for by far the greatest volume of mail. Any embarrassment to sorting operations, both manual

and mechanical, which is generated by these stamps can have disastrous effects.
The special, or commemorative issues, however, fall into a different category. First, they will only relate in value to four or five established service rates—first-class mail and possibly four air-mail rates.
We never publish in a non-tariff rate denomination.
Then they are only available for a month at Post Office counters and after that for only a year at our own Philatelic Bureau in Edinburgh.
Thereafter, you can only buy them through the trade.
Conversely, in spite of their comparatively short life in Post Office hands, they create far more problems in their design and production than do the definitives.
Operationally, of course, they have to conform to the same behavioural patterns as do the definitives, but questions of choice of subject, advice, and design competence apply more to them than to the definitives.
Primarily, a postage stamp is a receipt for the prepayment of a postal service and it is the only indication to the postal staff of the type of service the customer has bought. It must, therefore, denote clearly the value of the service by portraying the monetary denomination in numerals, and by colour.
It must be capable of cancellation to prevent re-use and in a manner which will neither obliterate the value recognition nor make illegible the date on the date stamp.
It must also for overseas mail denote the country of origin. Traditionally, since the first Penny Black, we have always used the sovereign's head to identify British stamps and it has appeared in varying sizes on every stamp we have ever produced, whether in a definitive or in a commemorative issue.

Insofar as a stamp must indicate the type of service that has been bought, it then becomes a significant indicator in the sorting and trafficking processes for that service.
Any ambiguity, therefore, in the identification of its value or confusion with other values can very easily cause delay in the processing of mail, whether by hand or by machine.
Nowadays, an increasing volume of mail is being sorted mechanically and, broadly, the system relies on light reflections from bars of phosphor printed on the surface of the stamp which activate electronically a release device. The quality of that signal has a direct relationship with the hue of the colour on which the phosphor is printed. As a rule of thumb we get a weaker signal at the yellow end of the spectrum than we do at the blue end, and also where the tonal values are dark rather than light.
On special issues, however, where

there is no second class value, we sometimes print the phosphor all over the surface when the background colour is too dark to give a satisfactory signal and compensate by increasing the width of the white margin. The reflection then comes from the margin and not from the printed area.
We have had to do that on two occasions recently; on the Reynolds and Raeburn paintings and on the Commonwealth Parliamentary Association stamp, designed by Richard Downer.
In the sale of stamps at a Post Office counter, the clerk must be able to identify the value quickly and with certainty and the customer, too, must be in no doubt that he has got what he paid for.

So much, then, for some of the operational requirements of a stamp, none of which are so restrictive as to inhibit the designer in producing a satisfactory visual result, provided they are kept well in the forefront of his mind.
But when we come to the choice of subject for special issues, then we find ourselves in a far more restrictive area. The Post Office will receive anything up to two hundred suggestions from national organisations, private people, influential bodies of one sort or another, laying claim for an issue of stamps to commemorate an event, a person or an anniversary.
In addition, we compile our own list of what we consider to be suitable subjects in terms of public acceptability and political expediency.
We are expected, too, to take some heed to what our marketing experts would have us believe to be suitable subjects, although I must admit that if they were to have it all their own way, babies, dogs, pop stars and football players would be the ideal subjects, all of them admirable and wholly lovable in their own way, but not I think the best material for a postage stamp.
Out of all this wealth of advice and suggestion we have to choose six or seven subjects, for that is the maximum number of issues in a year which we can handle and which the public can stomach.
Increasingly, I believe, we are becoming more aware of the influence of the subject on the ultimate design result. Inevitably, there are some subjects which will defy even a tolerable graphic solution, let alone a good one. However worthy they may be as subjects, as stamps they can only be mediocre.
It is not easy to define that area at all accurately, but my belief is that the more conceptual a subject is, the less likely is it that we will produce a good stamp.
But what do we mean by a good stamp?
To answer that question in terms of graphic expression and aesthetic

result is, I fear, too difficult for me to explain, but it can, I believe, be answered in terms of attitudes. Miniaturist design demands a quite specific approach, for it is more than a question of possessing the necessary skill and craftsmanship to paint within a very small area. If we accept that a stamp designer must have a tolerable standard of craftsmanship to be any good at all, it is his ability or not to analyse a subject and extract from it the one meaningful factor that will enable him to produce a good, or not-so-good stamp.

To my mind, stamp design is first and foremost, an intellectual process and it is this capacity to crystalise a problem into one inevitable graphic expression that makes the difference between a good and not-so-good designer.

Admittedly, this is true of all industrial design but it seems to be more critical in the design of stamps where the room to manoeuvre is more cramped.

But if we place this degree of analytical responsibility on the designer to find the solution, it follows that the Post Office itself must be quite clear in its own mind what the problem is and how it thinks it sees the solution.

Not in visual terms, necessarily, but in the way it believes the public will react to a certain point of view and the way in which a particular graphic delineation will be seen as the proper expression of a well= defined policy.

Let me take a fairly obvious example of what I mean.

Christmas can be expressed visually, either as great big kid's party, with toys and crackers and Christmas trees, or as a sentimental picture of an England which never really existed with stage-coaches, deep snow, fat jovial welcoming inn-keepers and a roaring bright fire inside a half-timbered coaching inn, or as a religious festival seen through the eyes of the mediaevalist or brought more up-to-date with the Mowbray version of a rather different Palestinian scene.

All these options are open to the designer, but it is essential that both the designer and the Post Office know which expression politically, (with a small 'p') the Post Office could not tolerate. For unless this sort of understanding exists, a designer cannot design with intelligence and certainly not with confidence.

Over the years I believe we have increased our understanding of the necessity to be more professional in our dealings with the designer and certainly, the advice the Post Office seeks itself is now far more knowledgeable of the problems of design. Since the birth of the first postage stamp in 1840 the Post Office has always sought the advice of experts

in fields related to the arts and crafts of stamp production. Artists, critics, engravers and printers had all been consulted over the years to ensure that the best advice was available, for then the Post Office laid little claim to being skilled in matters of aesthetic judgement.

But the advice it sought tended to be fine-art based and, there were times too, when it was glad to be able to rely on the exceptional philatelic knowledge of the sovereign himself. It is not unusual to find that advice on stamp design was sought from Garter King at Arms, the Director of the National Gallery and even as recently as 1948, on the occasion of the silver wedding of George VI the artists were told that the stamp would be printed in blue, because that was the colour thought by the Royal Fine Art Commission to be appropriate.

I must say some funny things went on with that issue, because before they started work the artists were told to go and look at some stamps produced in Belgium between 1935 and 1939 (ten years earlier) of Queen Astrid, Prince Baudouin, and Rubens, which had been contained within a simulation of a picture frame. It was suggested (by whom I cannot establish) that a design of this nature seemed appropriate for a personal occasion such as their Majesties' silver wedding. "What's on the wireless, dear? A beautiful picture of the King and Queen!"

Fortunately, by the time we arrived at the silver wedding of their daughter, this sort of unprofessional advice was no longer offered nor sought.

With the setting up of the Council of Industrial Design in 1944, however, a new body of design advice was formed under its auspices in the shape of a Stamps Advisory Panel, and for a number of years this panel was responsible for the design of stamps. But in 1968 it was replaced by a Post Office Committee under the chairmanship of a Post Office Director and composed of MPs, philatelists, designers and non= professional, but aesthetically informed members.

At the same time the Post Office created the full-time post of Design Director, and so took one more significant step towards making itself more professionally informed on matters of stamp design.

I find this whole question of the interaction of advice and direction on the design of stamps a fascinating one, for there seems to be a very definite relationship between the character of the advice and the resulting style of design.

If we only go back twenty years to the beginning of this reign, perhaps we can appreciate better this change of attitude towards stamp design.

Just look at the first five stamps of the reign—the new definitives. Five designs, five different designs by Enid Marx, Farrar-Bell, G Knipe, Mary Adshead and Edmund Dulac, with one more by Lynton Lamb for the high values.

I suppose at a time when these were the only stamps in circulation, it was a good thing to build variety into the issue. But in my view, the Post Office rather overdid the '57 variety' thing in the Regional stamps. It is interesting that the five regions were given the power to design their own stamps without any central control.

But today we take the opposite view, and when Arnold Machin was commissioned to design a new definitive range in 1966, we went for consistency of design throughout the set, including the Regionals adapted by Jeffery Matthews, and the impressions on pre-printed stationery.

Machin had already made a new bas= relief portrait of the Queen for use on the new coinage, and this formed the basis of his portrait for the stamp. In choosing the more formal profile pose he gave the stamp a greater feeling of dignity and authority than was possible with the earlier three-quarter photographic head.

His original concept was a bas-relief profile surrounded by some sort of rococo decoration and he had prepared some preliminary designs which were highly decorative. The total effect, however, would depend on the quality of the modelling in the head and the right balance in the photograph of the sculpture. Machin therefore carried out a number of photographic tests with the printers, Harrison and Sons, seeing his sculpture under a variety of lighting conditions. But the Post Office and Machin were so delighted with this very simple effect of the head on its own that it agreed to drop the words 'Postage' and 'Revenue', and he gave up his original idea of a more decorative design.

Arnold Machin admits to having been inspired by the original Penny Black of 1840, which had been engraved from Wyon's bas-relief on his commemorative City of London medal. The result certainly is, in my view, one of the best stamps of the reign, having about it all the classicism and dignity of the first Victorian stamp.

But to pursue this question of advice and the preparation of briefs. In 1958 we issued these stamps in honour of the 7th British Empire and Commonwealth Games held at Cardiff. The Post Office brief to the designers said nothing about representing athletics but insisted that some heraldic motif symbolising Wales had to be included.

In 1970 we were asked to issue another set of stamps for the 9th Commonwealth Games in Edinburgh. This time our brief to the designers said "athletics", but such was the change in the sociological climate, that we had to ask them to portray only those events which had a multi= racial complement of competitors.

In 1970 we aimed to create a visually related set by trying to find a literary common denominator— and we found it in people.

For what subjects could be more disparate than the signing of the Declaration of Arbroath in 1320, the Sailing of the Mayflower in 1620, the Anniversary of Florence Nightingale and the Founding of the Royal Astronomical Society, both in 1820, and the signing of the International Co-operative Alliance in 1895.

This, I am afraid, is typical of the problem the Post Office faces now by having created in the past a precedent for issuing stamps mainly to commemorate a person, a place or an event, rather than stamps devoted to a particular theme.

Inevitably, in pursuing this policy, it finds itself in the embarrassing position of having to issue a stamp under pressure, whether it can be made to relate stylistically to other subjects or not. For a number of reasons we prefer not to issue just one stamp of a low value at a time, for the cost of distributing the stamp and providing all the philatelic services the trade expects with a new issue, is uneconomic. So we try to go for the omnibus set such as this, in spite of the inevitable design problems which follow.

I mentioned earlier the sort of misconceptions that can develop in people's minds through a misunderstanding of the real problems involved. If you believe that the design of stamps has everything to do with art you will tend to look at it in much the same way as you look at a painting, and you will fail to appreciate the most important factor which is the skill or non-skill with which the designer has solved the problem posed by the subject.

Unless the distinction between art and design is quite clear in the mind of those who are concerned with the design, approval and production of stamps, unless they think of designers as solvers of problems and not as artists who are concerned only with their own ideas, then their view will be biased in the direction of personal opinion (and isn't their opinion as

good as the artist's?) and away from the direction of informed judgement.
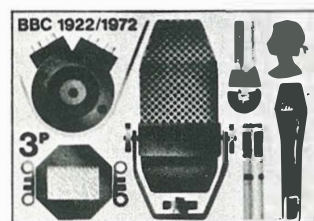
From time to time we find ourselves exposed, like all public corporations, to public criticism of our judgement. In a way the Post Office is in a difficult position insofar as it imposes on its public certain conditions of choice which the public cannot avoid. If you, as the public, do not like our stamps, you cannot go and buy the ones you do like somewhere else.
Recognition of a monopolistic position on the part of a supplier can be frustrating to the public.
The Post Office, to a point accepts, therefore, that it has a responsibility, in democratic theory at least, to give the public what it wants, but in doing so is aware that in practice that can be a fallacy.
For just as the public is incapable of arriving at a representative point of view, even if it knew what it wanted, so it realises that in most specialist fields it knows more than the other man. Certainly, it realises that it is rarely wise, as one Postmaster= General would have us believe, that we should always aim to "please the man on the Clapham Common bus."

At the heart of the public acceptance of a stamp is public understanding, or the degree of public familiarity with the subject and, thereafter, the quality of subject recognition which the designer builds into it.
I spoke earlier of the dependence of design quality on subject suitability. Let me pursue that further.

The first 'definitives' for the reign of Queen Elizabeth II

I confess I always become a little suspicious when a stamp demands a caption to make the design intelligible, rather than to give information, and suspicious more of the choice of subject than of the quality of the design.

So far I have said nothing about the final influence of the design of stamps, the technical competence of the printer.
Without doubt, it has been the gigantic strides which the printer has made in improving his techniques of miniscule reproduction that has contributed so significantly to the development of stamp design and production in the United Kingdom.
When you recall that the first two= colour gravure stamp was printed in 1960 and the first multi= coloured stamp in 1963, you will appreciate how much has been achieved in so short a time.

Having spent all this time in trying to explain my views on what it takes to create a good stamp, I would like to cite one or two recent issues which I believe prove my point.

There was, I believe, a fundamental mistake in the choice of the BBC as a subject, for we had been asked to give visual expression to what, for most people, was an auditory experience, however manfully David Gentleman dealt with the problem. Similarly with Post Office Technology in 1969. Each stamp by David Gentleman was a brilliant distillation of a very complex subject, but they were all relatively unintelligible until you read the small type.
You could argue that the design becomes more intriguing, but to me it suggests that the designer was given an impossible job of making graphically credible a subject which las literary, rather than visual interest.

An attempt to create a visually related set of stamps with a literary common denominator, 1970

This I believe to be a classic by David Gentleman . . .

as indeed were his designs for the Investiture of Prince Charles. They have a magical quality which quite properly exemplifies the somewhat fairy-tale character of the whole affair.

Peter Watson
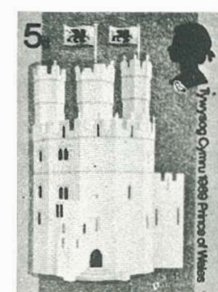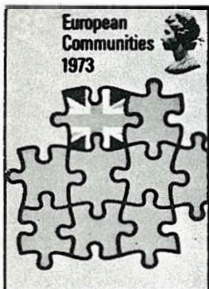
Peter Murdoch's jig-saw EEC gets nearest to solving the insoluble and is a quite brilliant answer to a wholly unreasonable conceptual question; and to make you realise, yet again, the nature of our problem, one of the least publicly popular stamps we have ever produced.

Ted Ripley' 'County Cricket' is an interesting one, for not only do these drawings of W G Grace go right to the point, since Grace had been involved in formulating the rules of the County Championships, but they did in the end mislead people into thinking this was a set to commemorate the great cricketer, even though his name does not appear. ·

Rosalind Dease's 'Tutankhamun' certainly deserves a place, as does Richard Downer's 'Commonwealth Parliamentary Association.'

I also include Marjorie Saynor's 'Explorers', but for an additional reason in that they were painted as miniatures, the same size as the actual stamps.

I cannot resist a comment with which to close, on two somewhat controversial issues, because in a funny way they sum up all the problems surrounding the current Post Office policy on the production of special issues of stamps.
We wanted to issue a set of stamps in honour of the Queen's Silver Wedding last year. And why not? We operate a service called Royal Mail and we did not give her one for her wedding.
The problem as we saw it was to give the stamps a sense of regality without the royal pomp and circumstance. For when Lieutenant Mountbatten married Princess Elizabeth she was not then the Queen. How, then, twenty-five years later, can we convey the sense of this historic fact without distorting it?
Jeffery Matthews found the right formula in designing a classic pose for the portraits but removing all the adornments of royalty. To me, one of the best stamps of the reign.

But come the following year and we want to produce a stamp for their daughter's wedding. First, we must avoid the repetition of her parent's Silver Wedding, but for more than obvious reasons. To try to invest this stamp with an undue sense of royalty would have been foolish and unpopular.

The designers, Collis Clements and Ted Hughes, took the point and they aimed to create a relaxed sense of the involvement of the two young people concerned.
Those of you who have seen some of Norman Parkinson's recent photographs will understand what I am saying. Within the unbelievably tight limits of production, they have succeeded, and the stamp they produced is exactly the result of the intellectual analysis of the problem that I have already outlined.

I have told you only a tiny part of the problems which face any postal administration which takes the design and production of its stamps professionally seriously. For that is exactly what the Post Office does today, and what is more, the support it gets from the designers it commissions is the highest commendation it can have for the rightness of this policy.
Woe betide anyone who tries to "stamp on it."

The illustrations of design proposals by James Chalmers, Charles Fenton, George Dickinson, and William Wyon are reproduced by kind permission of the Reginald M Phillips Collection in the National Postal Museum.

Today Charlie W is a star pupil. A year ago he was a mental write-off to many people. He had an IQ of only 15 then (the average is 100), and the chances of him ever being able to look after himself or do any of the ordinary things which children enjoy seemed completely beyon him.

The chief reason was that, associated with his extremely low intelligence, Charlie was unable to talk at the age of seven, nor had he any prospect.

Yet today Charlie is at school and is avidly learning new things every day. He can communicate with the people around him—children and adults—can play simple organised games and can even count. He is now behaving as though his IQ has been doubled—even trebled—inside a year.

He has been transformed because of a remarkable piece of scientific insight by psychologists at California State University. With luck, Charlie will be just the first of many low IQ non-verbal children suddenly to discover, in a limited but priceless way, what life has to offer.

It all started with chimpanzees. A few years ago, psychologist David Premack, at Santa Barbara—also in California—started experiments on communication between chimpanzees He had an idea to make a "language" from pieces of coloured plastic because the chimps could not speak. For example, he taught them that a red triangle meant "apple", a yellow diamond meant "put" and a black square meant "table." He was then able to tell a chimp to "Put the apple on the table," and the chimp would understand and follow his command. Premack found that his chimpanzees could easily learn a "vocabulary" of more than 100 words in a few months and had no problem in stringing together sentences of up to seven words. Not only did the chimps understand him; they used the plastic language to communicate among themselves.

It is one of those ironies of science that chimpanzees benefited before anybody realised the system might have useful applications for people. In fact, it wasn't until last year that psychologist Patricia Hodges, of California State University, thought that what worked with chimps might work with retarded children.

Children with IQs of less than about 40 usually have no language. Some learn to understand basic word like "stop," but few learn to actually use words themselves. This lack of a language makes their handicap even worse because they cannot express o fully use their limited ability.
To Dr Hodges, therefore, they are in a situation not unlike that of the chimpanzees. She therefore visited Dr Premack, looked over his colony

Communication in an environment and by an environment

Peter Kneebone

Do you want an apple ? No

of "talking chimps," and borrowed a plastic language set.

For four months, with assistants, she has been working with a group of non-verbal children, aged seven to fourteen, who have IQs ranging from 15 to 38.

To begin with she and her staff used concrete symbols like an apple or banana and then moved on to more abstract terms like fruit.
At first a teacher would hold up, say, a red triangle and the child had to point to an apple in the middle of a bowl of fruit. Next the child learned the shape that stood for "pick up" and learned to distinguish this from, say, "peel." He or she were then taught the distinction between "pick up the banana" and "peel the banana."

They also learned to use the language themselves—to say, for example, "I want a wash."
Within four months, three-quarters of the children learned to construct three- to seven word sentences.
But Charlie has been the star.

It has surprised Dr Hodges and her colleagues that the children's performance on the "language" has not been related to IQ.
Charlie shows this more than anybody. Though he had the lowest IQ of any of the children, according to the conventional tests, he developed so well in his use of the plastic symbols that he made two important advances.

First he has learned to count. He has learned the symbols for numbers, for adding up and subtraction, for "equals" and for "not equal." He can now do simple arithmetic.

Second, and potentially even more important, Charlie is now at a school for educationally sub-normal children (generally reckoned to have an IQ of 50 at the very least) and he is learning the deaf sign language. Nobody expects he will ever be able to speak with his tongue, but with luck he will acquire a reasonable vocabulary with the deaf sign language.

The effect on a child of suddenly acquiring language, even in this plastic form, is incredible, as Dr Hodges told me last week. "All of a sudden the child begins to expand and refine his internal life."

Dr Hodges feels that their success has come because the "language" they have been using is so concrete. "The children can pick up the 'words,'

finger them, chew them, lick them. This way their limited intelligence enables them to realise the principle of language—that words relate to other things in the outside world."

The scheme has been so successful that Dr Hodges is thinking of producing elementary books for these children so that they can progress at their own pace.
She also thinks that the method could be useful for autistic children.

This may be her next research project, but if any special schools, hospitals or university research departments in Britain are interested in trying her approach, she can supply a film showing how to go about it.
Her address is the Department of Psychology, California State University, Los Angeles, California 90036, USA.

When we speak of corporate identity we are probably thinking of systems of products, services, events, and so on, and the way in which they are identified and communicate coherently with us, either as users or as potential users. A corporate identity, in this sense, is something which is designed (perhaps for the first time, or perhaps revised and recreated more than once) to identify, coordinate and express the special character of the system in all its manifestations—both to its consumers and to those who operate it.
To make me feel good about buying it, or feel good about working for it.
To make me recognise it instantly.
To make me want it. To tell me how to use it. To rationalise its functioning. Also to make it more profitable.

It may be applied as a cosmetic to improve the appearance independent-ly of the reality, or as a first-aid dressing to enable it to continue functioning without curing organic defects, or as an adhesive to connect artificially a number of dissociated elements. But a corporate identity programme should not only seem coherent. It should also express what is coherent in a system and help it to be more coherent. It is the outward manifestation and projection of a personality. As such it is not only a graphic phenomenon, but may be experienced through, for example, human relations, human services, and structural, spatial and audible means. Socially it is frequently designed to influence and inform particular target human groups—economic groups, cultural groups, categories of employees.

What happens if we look now at man= made systems used and consumed by most of us most consistently, and with a minimum of real choice exercised by us?
We choose, or are persuaded, to buy a Mercedes, or a floor polish, or a festival ticket, or a seat on a particular airline, or a toothpaste. Or we choose not to, or are not persuaded. But where choice is severe-ly limited, and where we are frequently placed by necessity, is in the various socio-environmental systems in which we spend most of our time—towns, villages, railway stations, and so on. Of course we may choose to try to live independently of such systems, but economic, cultural, political and social pressures and needs make it unlikely that many of us will. Perhaps it is only in the pharmaceutical field, when my doctor prescribes a specific product and dosage, that I am limited in my choice and untouched by presentation or reputation. On the other hand, of course, my doctor may well have been influenced in his particular prescription choice for just these reasons.

There are two particularly interesting

aspects of environmental corporate identity, considered in the broadest sense. Firstly it presents more complex problems, entailing differ-ent priorities, than the more familiar and evident corporate identity programmes we have referred to, and may lead us to redefining what we mean by corporate identity in this context. Secondly it is more evidently concerned with the needs of individual human beings.

When I speak of the corporate identity of a socio-environmental system I am not thinking, for example, simply of a municipal authority which attempts to express itself visually in a coherently designed way—through the use of a symbol, coordinated printed matter, identical colours on vehicles, and so on. These are some of the outward manifestations of the traditional corporate identity programme. Their purpose is to communicate a particular image of the special character of the system—the identity it wishes to be recognised by, for whatever motive. Just as the clothes I wear are an expression of my identity—whether I have taken great care over their choice or have assembled them haphazardly.

With a socio-environmental system the corporate identity is both the essence and the appearance. That is to say that it is impossible to disentangle the functions, the needs, the relationships, the objectives and the values on the one hand, from the visual whole and all its elements on the other. This visual whole is infinitely rich and complex. It is whatever we think of when we speak of the overall 'character' or the 'feel' of, say, a town. And it is made up of everything from the climate and the physical surroundings and approaches (such as mountains or motorways), to the spaces and the structures, to the letterforms, the images, the objects, to you and me— the users of the system, of the environment.

Not only are we consumers of the environment (just as we are the users of a commercial system— a make of soap or an airline), but we are also part of that environment— an element in that socio-environ-mental system—a piece of the whole corporate identity that is projected. This is quite unlike the relationship of a consumer to a product or a service to its corporate identity. When I consume a particular socio= environmental system I may be doing so by choice or by accident, permanently or temporarily. The impressions I receive may be different from those you receive. I may feel I am standing outside it as an observer, or I may feel that I am inside it as an active participant or perhaps as a victim.

How the system has come to be what
it is is also very complex, subject to
many influences and the result of
a variety of factors. It can be the
result of planning or accident, of
growth, of sudden change, of policy
imposed from outside or from inside,
of administrative actions, or
commercial actions, or group actions,
or individual actions. It can be all or
some of these. In other words, it is
evolutionary and relatively
unpredictable. It is different on
Wednesday and on Sunday. When
the sun shines or when it rains. When
I am old or when I am young. When
there are tourists or when there are
not. When, suddenly, some new
notices are erected or a building is
repainted. When new detours or
one-way systems are applied in its
streets.

These environments exist as
expressions of different kinds of
human needs. First there are the
causal needs that determine the
existence and fundamental character
of the environment—political,
cultural, commercial, industrial,
occupational, social. So the environ-
ment happens and evolves. Then
there are the functional needs
relating to how the system operates
in terms of its users. It is used by me,
a person happening to be inside the
system at a given moment, and it is
used also, as well as controlled and
directed or administered, by the
deciders—those who role is to make
the system function and determine
how it should function. Of course
these two categories overlap, and I
could say that I participate in the
evolution of the system and that
I can, indeed should, play a
significant part in determining how
it should function. The distinction
between the two categories is,
however, useful because it points to
two different communication needs.
These are the need to receive
information and the need to transmit
information.

I will limit myself to a single, but
vital, area of information. It is one
which has great influence on the
identity of the environment and how
we react and perceive this identity.
Of course, in a sense, the environ-
ment, though we may attribute a
soul to as to do this, has an identity only when
we recognise, experience and interpret
it. Consequently how we function
within the environment, how the
environment helps us to do this, and
how the environment is modified to
make communication more effective
are all critical matters.

The communication referred to here
relates to the need to orientate
oneself, to be directed, to be warned,
and to identify services, facilities and
features within a particular environ-
mental system. Conversely we could
say that it refers (on the part of the
deciders) to the need to orientate,

to direct, to warn, etc. That is to say
there is a need for messages of a
specific sort to exist. We can further
say that there is a need for them to
be legible and unambiguous.
However we can also observe that the
needs of the users are not always
accurately understood by the
deciders, that the actions of the
deciders do not always reflect the
users' needs, that the users do not
always understand the deciders'
intentions, that, in fact, there can
be a conflict of needs and that the
means of transmitting the inform-
ation often violates the needs of the
environment. If the user, the
individual, you and me, the public at
large, is not well informed and if the
environment is offended and its
identity degraded, then we find
ourselves reaching a self-defeating
crisis point.

Visually, in the environment, these
messages appear to us very often as
signs containing words and images.
They tell us many things—or rather
they intend to tell us many things.
Where we are, where to cross the
street, where to post a letter, which
way to turn, where to park a car,
where to find the cathedral, when to
stop, when to be careful, and so on.
Of course these messages do not
always have to be communicated by
words or images. Many could (in
cases where the environment is still
being created) be built into the
conception and fabric of the
system—through a careful
consideration of spaces, colours,
structural and human relationships,
and so on, in terms of orientation,
direction and identification. This
could be so in new towns or
hospitals or airports or railway
stations. But this is rarely the case—
except in a few one-off situations
like major exhibitions.
What is almost invariably the case
is that new information is
imposed, like a postage stamp, on
an old system. Signs grow like
weeds in our urban environment.
Like weeds they are unneccessary.
First of all there are the names of
streets and the numbers of houses
and signposts on the roads between
towns and villages. Then, more and
more rapidly, more an more needs
become apparent.

This has been due to various factors.
Urban systems have grown larger
and more complex. The demands
made by both private and public
transport have become more and
more insistent. Tourism, national
and international, is no longer
restricted to limited privileged
sections of the population.
Governments and local authorities
have become more conscious of
their duty to inform, direct and
warn, even if they often do not
understand the nature of the
problems posed.

Consider now some interesting
features of the question.

Public signs, and I am not thinking
exclusively of road signs, have been
so freely applied in many urban
environments that they do not simply
stand out as carriers of useful
messages. They also, by their profu-
sion, frequently cancel each other
out. While they have, automatically,
become part of the environment
because they exist in it, at the same
time they may clash discordantly
with the environment as it was, and
pollute visually rather than clarify.
What is remarkable is that we accept
the situation as complacently as we
do.

Two comparisons illustrate the point.
The first is between a relatively new
and somewhat older environment,
both created for travel, both in
Amsterdam. At the airport, Schipol,
the purpose of the environment has
been correctly analysed and the
signs (all verbal and bi-lingual) are
unusually large. They dominate the
environment because our first need
in it is to be informed and directed.
Environment and message are one.
On the other hand, although Dutch
Rail have made a pretty good job of
improving and coordinating the
confusion of the international rail-
way pictograms, they have applied
them with such abandon at the main
railway station that we no longer
read them. They have become a rich
decorative element superimposed.
The second comparison is between
two attitudes to the urban use of
road signs—in France and in England.
In England, on the whole, a certain
restraint and logic are felt to have
been active in the placing of the
signs so that information is, again on
the whole, where you need it without
being over-obtrusive. In France,
however, you are too often assaulted
by an incoherent abundance.

There are curious contradictions
implicit in the use of public inform-
ation signs. They are, as we have seen,
part of each environment in which
they function and they also have to
stand apart from the environment in
order to tell us how to use it. That is
to say that the 'no waiting' sign, or
the traffic light, or the town map, or
the post box, once they are placed in
the cathedral square are as much a
part of the square as is the cathedral.
Though the cathedral may be bigger,
visually the 'no waiting' sign may
strike us first.

Perhaps this is something like the
presence of pylons and water towers
and railway viaducts in the open
countryside. Their presence relates to
a precise need at a particular point in
our technical-cultural development.
Whether it meets the need is another
matter.

There is absolutely nothing inherently

wrong in this unless we try to make
a case for a static society with a
static environment. It is, however,
essential to understand that, while
the signs are carriers of messages and
are sending out their particular
signals, the total environment in
which they stand is now itself send-
ing out new kinds of signals because
of the addition to it of the signs.
Just as the valley with the railway
line running across it is no longer the
valley as it was before the railway
came.

This may appear obvious. Just like
the fact that we are, with certain
exceptions, talking about signs that
are not only applied to meet specific
needs in a specific place but are
common also to a very wide variety
of urban environments. Not only are
the messages common to all the
environments ('No Entry', 'Town
Centre', 'Stop', 'Post Office' and so
on, are identical messages in
different places). It is also important
that they should be immediately
recognised as being the same.
Consequently a considerable effort
has been, and is being made, to
achieve visual standardisation—
internationally as well as nationally—
of very many signs, particularly
those that carry pictures rather than
words. Even if you do not under-
stand a language, and even if the
shop bears no identifying marks, you
will always recognise a baker's shop
by its smell and by the contents of
its window. These are its dominant
signals. This is not the case with all
other kinds of essential information.

So we are confronted with a
communication situation which (as
far as the signs are concerned) can take
four main visual forms—signs which
are part of an international system,
signs which are part of a national
system, signs which are part of a
local system, and the many cases
where signs from these different
categories are seen in combination
with each other. So, to return to the
question of environmental identity,
we find that a socio-environmental
system has a particular identity
(which is certainly corporate,
however irrational it may seem),
that (because of the increasingly
complex needs of its users and its
administrators) it contains public
information in the form of signs
which (in order to communicate
effectively) are often conceived as
part of a general system with a quite
different kind of visual corporate
identity, and that the two (the
environment and the information)
cohabit to produce a system with a
changed identity. The result may be
'effcient and homogeneous, or it
may be disastrous.

Now what needs emphasising is that
the problem of public information is
not solved when we have created a
system or systems of signs with a

The roots of the problem

Hartford Thomas

clear identity and with every care taken in matters of colour, image, letterform, proportion and so on. With every care also taken in terms of message content. It is essential to remember that these systems are going to be imposed on other systems which they will then modify—perhaps to help them function better, perhaps to make them more chaotic.

There are many questions of vital importance. Where, how and why are signs applied? Are they applied in contradictory relationship to each other? Can they be read in the context of all the architectural and commercial information we are also receiving? Are they cleaned or renewed when they are degraded? Do they have to function by night as well as by day? What analysis has been made of the spatial and social parameters of the problem in each given context? What analysis has been made of the sequence in which we need to receive messages, and also of their optimum frequency? And so on, and so on.

Otherwise walking through a town can be like trying to listen to a concert on the radio with interference from three other stations in three different languages. What is most important to remember is that it is human needs that we are meeting, that before we do anything we must understand what these are—or we shall fail.

If you are looking for moral stories about the way we live now you can hardly do better than consider the present state of the paper industry.

Moral number one: we are already at the limits of growth when the growth rate in demand for paper products exceeds the growth of the forests.

Moral number two: the times are out of joint, all of them. By which I mean, for example, demand can swing from stagnation to boom in six months, but but it takes two or three years to build a paper-making machine, and up to 90 years to grow a tree; currency exchange rates can alter by 20 per cent or more within the period of a one-year contract.

Moral number three: the scale of things is out of joint, too. One new paper-making machine, churning out newsprint paper 26 feet wide at a rate of 1,000 yards a minute without stop for a year at a time can more than meet the current excess demand on a paper producing company—but if two other companies also build new machines, this could lead to financially crippling over-capacity, for one machine costs around £15 millions.

Moral number four: what kind of a world do we want to live in, anyway? Standard of living is closely linked to the quantity of paper products consumed. To meet the demand for paper, juggernaut felling machinery can now clear mature forest at the

rate of say 5,000 to 6,000 trees a day with a typical working group of 50 to 60 men. This will be replaced by conifer plantations. Not beautiful.

And so on. I came back with these rather sombre thoughts after a week in Sweden looking at some of the Swedish forests and paper mills, and talking to some of the people who head the industry and are responsible for its future development.

The Swedish industry is deeply concerned, and putting a very large effort indeed into the regeneration of the forests it fells. Svenska Cellulosa, which is the biggest forest owner in Europe, with forests covering an area about half the size of Switzerland, believes it should be possible to double the timber volume felled—but in 80 to 100 years. Currently it is planting 20 to 50 million tree plants a year— but Scandinavian pine and spruce take. from 70 to 90 years to mature.

That is the baffling nature of the time scale. For the next twenty years Sweden's forests will be suffering from insufficient replanting in the early decades of this century. It is argued that this shortfall can be met in the next twenty years by a once-for-all cutting of the remaining over=age forests. Unhappily, the effect of that would be to bring the forest potential back to the current level of supply around 1995. And what will have happened to demand by then?

As a rule of thumb forecast, it is said that the demand for paper products rises at about one-and-a-half times the rate of economic growth in the developed countries, say 6 per cent (perhaps more) every year. It is improbable, to say the least, that the world's forest resources, already stretched to the limit in Europe and North America, can cope with that.

So the hunt is on for faster growing trees. The Canadian *pinus contorta* which matures in 45 to 60 years is being introduced in Scandinavia. Some Swedish companies are already looking overseas to the possibility of the fast growing eucalyptus (which has the disadvantage of a weak fibre).

What of technology? Are we getting to the limits there too? On the scale of the machinery, yes, where the object has been to economise on high labour costs. But there is still scope for the use of new techniques. One is much more thorough collection of paper waste for recycling, which is already practicable. And 500,000 tons of paper waste is equivalent to one million trees.

There are one or two other possibilities. One is to use the whole tree, roots, branches, needles and all, instead of leaving the stump in the ground, and stripping away the branches and bark as in present practice. This is already being tried out in the United States. Again, you can get more paper per tree by grinding down the wood into a dust rather than stewing it in chemicals to make pulp, which involves substantial loss of fibre.

Mr Sverker Kastrup, who is vice=chairman of the board of Swedisch Pulp and Paper Association, and executive vice-president of Svenska Cellulosa, put it this way: "The availability of wood is going to be a more restricting factor than anything else. Our forests will yield more as reafforestation comes to fruition, but it will be only a slow expansion. The great expansion period is behind us."

For a world which is everywhere hell-bent on accelerating its rate of growth, and for a world which signals its wealth by the amount of paper and packaging of every kind that it uses, that is, or ought to be, a sobering thought. Oil, plastics, paper . . . where do we next come up against the limits to growth?

Note to contributors

Six thousand years of writing

René Ponot

icographic would like to include a considerably larger selection of material from our Member Associations in future issues of the magazine.
Accordingly the Executive Editor would like to receive articles from members, or suggested experts in member countries.
Wherever possible, we would like to group submitted articles into an issue that bears upon a particular theme.
It would be helpful if such contributions were thought of as attempts to add to the collective knowledge of our organization and to the raising of design standards via cognitive, rather than intuitive judgements.
Graphic design has been slower to accumulate 'ergonomic' data than some of the other design professions, so that we would welcome reports of any investigation that could add to an understanding of the processes of visual communication.

Articles can be from 2,000 to 6,000 words (depending upon the extent of illustrative material).
They may be submitted in either French, German or English.
It would be particularly helpful if summaries in the remaining two languages could be submitted with the main text.

Listed below is a selection of suggested headings. The list is in no way definitive, it is intended merely to trigger off responses from possible contributors.

Aesthetics (ethical or descriptive), Art movements in relation to visual communication, Animation, Book Design, Creativity, Cartography, Cartoons, Computer typesetting, Computer graphics, Corporate image, Children's books, Concrete poetry, Colour theory, Colour printing, Design philosophy, Design practise, Education, Education of graphic designers, Educational use of visual communication, Ergonomics of visual communication, Film, Film=setting, Graphic design schools, Graphics in architecture, coinage, entertainment, heraldry, music, magic or the occult, popular culture, religions, sport, science, space-travel, stamps, seals, transport, etc.
Human communication, Information theory, International languages, Legibility research, Methodology, Magazine and newspaper design, Psychology of perception, Printing processes, Photography, Semiotics, Traffic signs, Television and video-tape as media for visual communication, 'Underground' publishing.

Please address all contributions or enquiries to the Executive Editor, *icographic,* 7 Templeton Court, Radnor Walk, Shirley, Croydon CRO 7NZ England.

The general public is surprised and impressed to learn that many people wrote "in the past" on a wide variety of materials. Doesn't this happen nowadays and in many extraordinary ways? The man in the street can have few preconceived ideas about it. Does the mother who dishes out a ladle-full of soup containing dozens of letters of the alphabet, ask herself whether the pasta is a material for writing?

It is because the public clearly has an interest in the variety of forms of writing that has led me to discuss them. And I cannot do it more effectively than to choose some of the more attractive samples of writing from the Engraving Room of the State Press, which has one of the richest typographical collections in the world. (1)

The ability to write is universal

It will be necessary, before anything else, to limit my subject matter.
I am not going to try to procede to classifications nor establish relationships, still less to make up a family tree (searchers will find too many hidden reefs).
Moreover, I would not be able in just a few lines to give the slightest insight into the history of the types that I am going to show. But I can display them and attempt to explain the why's and wherefore's of some of their peculiarities.
In any case, nothing prevents me from inviting the reader to share the wonder and enjoyment that one feels at the sight of this ability to write. The art which bears witness, in the words of Marcel Cohen, to all the systems that make visible that which is expressed by words.

It is saying in another way what Etiemble asserts when he points out that between the different types of script and their beauty there exists an ancient—one might say, congenital—affinity. Beauty, the quest for which, in writing, is not the privilege of any race or nation. (2)

Experts put the number of languages currently spoken in the world at 2,800, without including dialects of lesser importance. (3)
Of these, many do not have a script, or use a borrowed one.
On the other hand, some languages do have their own script, the decipherment of which, whether it has been accomplished or not, remains an indispensible part of the work of researchers.

Although the number of scripts—some 400—is well down on the number of languages, it still remains that thousands of signs, all with a longer or shorter life, have served to fix graphically the thoughts of man for more than six thousand years.

The materials and the tools

And "only" 400 scripts is still a lot. For it would not do to think that all are equally original. The majority are content to have forgotten their ancestry. They have evolved in a certain area in accordance with the requirements of a certain language and, what is more important, in relationship to their specific materials and tools.

It is essential, therefore, always to bear in mind *on* what and *with* what people write.

On what?

Among the fifty or so examples that I have chosen can be seen writing on papyrus (Egypt), linen (Egypt), tablets of baked earth (Mesopotamia), stone (Mesopotamia), marble (Greece), copper (India), leather (Dead Sea area), deer-skin (Mexico), birch bark (India), agave (Central America), bamboo (Polynesia), palm leaves (India), wood (Scandinavia), silk (China), ivory (Autun in France), wax tablets (Egypt and Western Europe).

With what?

It is obvious that the implements used for writing on each of these materials cannot be the same: reed, brush (of papyrus or animal bristles), stylus and spatula, goose-feather, etc.

The material and the instrument are decisive.

It is easy to understand that two individuals in their search for a system of writing will conceive their signs in a totally different way, according to whether one is using a reed on papyrus and the other a stylus on clay.

And if, instead of devising their own writing, they confine themselves to reproducing an existing model, the results will be equally dissimilar. After a certain time, the nature of the material will condition the action of the implement in such a way that no resemblance will exist any more between the original and the reproductions, nor between the reproductions themselves.

I could also add to the list of materials for writing: glass, bone, lead, iron, etc, without forgetting parchment, vellum and, of course, paper.
The length of the list is not important. All were not materials that were invented. That did not prevent them, at the time, from playing an important role. Although the shape or form of the signs result initially from the material and the implement one should not overlook their further development which can place everything in question.

For example, when paper came into common use, or when the position of the hand holding the goose feather changed, people witnessed predetermined transformations in style, but not the birth of new writing systems. Nevertheless, this does not prevent the inexperienced eye from perceiving a different script.

Which comes back to saying that it is very difficult to determine, with regard to script, how much its form is due to the material on which it is found, unless one is certain that this material is the one for which it was invented.

All peoples have bowed down to the glories of stone inscriptions. But should we conclude that such writing that has come down to us in exclusively epigraphic form, has never been used in other ways? This particular form may be no more than an occasional adaption to stone of that which the scribes in question normally put on to different material. Material which, alas, was perishable and of which time has preserved nothing for us. Before all other information, it is undoubtedly the knowledge of the material of creation and transformation that helps us to understand better "why some languages and scripts have disappeared without leaving any trace, or only the slightest trace of them survive, while others, protected from the rigours of time, favoured by climate and on less destructible material, have remained intact and have been able to be restored for us in this modern age." (4)

The shapes give rise to restrictions

One also notices the directions of the scripts. Why do they not always go in the same direction?

There are various reasons for this, of which the most obvious is the question of being careful—that of not damaging or destroying the signs that have already been made.

According to the material (clay, for example) or the instrument (eg, ink) it will be possible for the scribe to be led to exclude this or that direction that would cause him too many disappointments. Moreover, once he is in possession of a perfectly adjusted system, speed of execution will become his major preoccupation and one will see the birth of one or more cursives (from *currere:* to run). The hand wants to go more quickly than the equipment will allow and it often happens that the letters lean in the direction of the ends of the lines. Thus every inclined script can (subject to confirmation) be considered the cursive form of an earlier script (existing or extinct) and the direction of its inclination is likely to

indicate with almost complete certainty the direction in which this script was written. One can certainly produce exceptions—we shall not fail to do so—but it is certain that even a superficial search would reveal additional influences, such as a change in the direction the papyrus or parchment is held in relation to the hand of the writer.

A last point arises: the characters reproduced on these pages are typographic. They have thus, *a priori,* lost some of the spontaneity of the scripts that served as their model.

Similarly they have been subjected to various deformations of which some are inherent in the need to restrict the symbol to a rectangle making up the face of each typographical sign, and others result, despite the ability of the engraver, because it is not always possible to reproduce on the steel punch the graphic fineness born of the handling of an implement to which the engraver's tool bears only a chance resemblance.

It remains for us in turning to the fifty scripts which follow (listed alphabetically for convenience) to emphasise some of their peculiarities which bear out some of the observations that have just been made.

Scripts in space

Bearing in mind that names do not always give a picture, I shall begin by placing the examples geographically.

Amongst the European scripts we find: Anglo-Saxon (1), Etruscan (16), Old Gothic (18), Iberian (25), Runic (42), Slavonic (46).

The Near East and Mediterranean are represented by: Arabic (2 and 3), Aramaic (4 and 5), Coptic (12), Cypriot (13), Estrangelo (14), Ethiopean (15), Georgian (17), Greek (19 and 20), Hebrew (24), Egyptian (22) and Hittite hieroglyphs (23), Libya (30), Mandaean (31), Nabataean (34), Ninivite cuneiforms (36), Palmyrian (37), Persian (38), Phœnician (40), Punic (41), Samaritan (43), Southern Arabian (47), Syriac (48), Tifinag (51), Avestic Zand (52).

In India and Central Asia they are joined by: Burmese (6), Brahmin (7), Cham (9), Canarese (10), Gujarati (21), Javanese (26), Kharoshthi or Kharotti (27), Nagari or Deva-nagari (35), Sinhalese (45), Tamil (49), Tibetan (50).

The Far East and Indonesia provide: Buginese (8), Chinese (11), Khmer (28), Laotian (29), Manchu (32), Phags-pa (39), Siamese (44). Whilst finally from Central America we have Mayan (33).

Scripts in their temporal context

It also seems a good idea to put these scripts in their context in time, even if summarily. I shall confine myself to putting a date alongside the name of each example. This will generally be that of the oldest known document (in the case of inscribed characters) or that of the first use of the stylus (in the particular case of manuscript characters).

The majority of these scripts are alphabetic, but some have remained at earlier stages of evolution.

This is so in the case of Egyptian (22), Hittite (23) and Mayan (33) hieroglyphs, Ninivite cuneiform (36) and Chinese signs (11) that are ideographic, made up with some phonetic elements.

Other scripts have gone as far as a syllabic notation and the majority have even undergone semi-alphabetisation. Among them: Cypriote (13), which is of unknown origin, but is found in inscriptions probably engraved between the sixth to the third century BC. Manchu (32), derived from Mongol, which dates only from the beginnings of the seventeenth century (the founding of an independent Manchu empire), is also syllabic. Similarly Brahmin (7), India's oldest script, and with it all those of that part of the world to which it gave birth: Canarese (10), Gujarati (21), Kharoshthi or Kharotti (27), Nagari (35), Sinhalese (45), Tamil (49), Tibetan (50), and others.

Left and right, top and bottom

As regards the direction in which these scripts are written, everyone knows that European languages, of which Anglo-Saxon (1), Georgian (17), and Slavonic (46) are shown here, are written from left to right. But this is far from being the general rule. Let us not forget, however, that some scripts with which we are less familiar, such as Javanese (26), Khmer (28), Laotian (29), Thai (44), to which we can add all the Indian scripts previously referred to (Canarese, Gujarati, Nagari, Sinhalese, Tamil, Tibetan) also go from left to right. All except one—Kharoshthi (27), introduced by the government scribes of the Achemenide Persians after Darius conquered the Indus (end of the sixth century BC) and being based on Aramaic, is written from right to left.

Also written right to left are Etruscan (16), Arabic (2 and 3), Aramaic (4 and 5), Cypriote (13), Estangelo (14), Hebrew (24), Palmyrian (37), Phœnician (40), Punic (41), Avestic Zand (52), and others.

Everyone thinks of Chinese (11) as

soon as one mentions vertically written scripts, from top to bottom and moving from the right. However, this case is not so well known, Manchu (32), and Phags-pa (39) are written in the same way. But we shall see that there is nothing particularly surprising in this. Phags-pa is nothing more than an attempt at phonetic notation of Chinese. In 1620 Kublai Khan, the "Great Khan" of Marco Polo, founder of the Mongol dynasty in China, summoned to his court a great Tibetan Llama whom he commissioned to produce this new script intended for the Mongol people of China. As for Manchu, we have just noted that it had been created some twenty years earlier in 1599 to replace Mongol. Libyan (30), that has still not been adequately interpreted, is found reading both from left to right and from top to bottom.

Let us also remember that Egyptian hieroglyphs (22) appear according to circumstances in both vertical and horizontal lines. Horizontally, they are read from right to left or from left to right. This depends upon the signs representing persons or animals when the heads always point towards the beginning of the line.

The Mayan signs (33) offer examples of using the horizontal as much as the vertical.

Southern Arabian (47) is 'boustrophedon', which is to say that it goes in the manner of an ox working (in Greek: *bous*)—one line going from right to left, the next from left to right, and so on. The Hittite hieroglyphs (23), sometimes arranged in columns, are generally boustrophedon when written horizontally. Tifinag (51), of unknown origin, is still used by the Tuaregs, a Berber tribe, for writing short inscriptions on objects or stones, reading from top to bottom, from right to left, or boustrophedon. Certain 'directional' letters guide the reader.

Runes (42), are characters used by the various Germanic tribes before their conversion to Christianity, are almost all engraved on rocks or tombs in the form of inscriptions that are generally short. The longest one presently known is made up of no more than two hundred signs. Their direction is not fixed, in that it can alternate, but left to right does predominate. The runes are usually formed of a vertical stem to which are attached one or more bars, avoiding curves and reaching as far as possible horizontally. This is explained by assuming that the runes were originally engraved on wood, a material in which it is easier to cut bars at right angles or obliquely to the grain, than in line with it.

1 Anglo-Saxon—9th century AD

2 Arabic Naskhi—6th century AD

3 Arabic Kufic—7th or 8th century AD

4 Early Aramaic—8th century BC

5 Early Aramaic—4th century BC

6 Burmese—11th century AD

7 Brahmi—3rd century AD

8 Buginese—remote past (?)

9 Cham—4th to 15th century AD

10 Kanarese (and Telugu)—5th century AD

11 Chinese in k'ai shu form—3rd century AD

12 Coptic—3rd century AD

Before ''writing'' them, the Babylonians drew their characters on clay tablets, using a bevelled reed. Although clay had the advantage of being present in abundance in Babylonia, it suffered the inconvenience of being poorly adapted to work with a stylus, but what could have replaced it?

The curves, for example, leave smudges on the edge of the grooves and have a tendency to become angular. Also the scribes had early on made a change in their technique.

Instead of scratching the clay, they drew their signs with rapid strokes on the tablet, the read being held in the whole hand. The resulting impressions, of course, had the characteristic shape of corners, hence their name cuneiform (36).

The Palmyrian alphabet (37) which was used from the fourth century BC until the sacking of Palmyria by Aurelius in 273 AD, is derived from Aramaic, from which it is distinguished by an abundance of curves, loops and flourishes.

13 Cypriote—5th century BC

17 Georgian—5th century AD

21 Gujarati—2nd century AD

14 Estrangelo—1st century AD

18 Gothic—end of the 4th century AD

22 Egyptian hieroglyphs—circa 3000 BC

15 Ethiopian—4th century AD

19 Greek (an inscription of 2nd century BC)

23 Hittite hieroglyphs—circa 1500 BC

16 Etruscan—7th century BC

20 Greek (manuscript of 4th century AD)

24 Hebrew—5th century BC

The Chinese script (11), for which there is evidence of texts going back almost four thousand years, has undergone a long graphic evolution. But it was the brush that was decisive in finally giving the signs their angular appearance by which we now know them. And this was due to the way in which the brush was held in the hand of the user.

The rounded shape of Laotian characters (29) is determined by both the material and the implement used. They are written on Latania leaves using a style and a flat rule as a guide.
Sinhalese (45) also has recourse to the stylet, but the characters are written on palm leaves.

The influence of speed

Clearly, the desire to write swiftly brings about changes in the forms of the writing.
Compare the "cursive" form of Gujarati (21) to the "carefully written" form of Nagari (35), from which it is derived—the horizontal bars forming the

25 Iberian—circa 60 BC

29 Laotian—in 9th century form

33 Maya—from 10th to 16th century AD

26 Javanese—8th century AD

30 Libyan—2nd or 3rd century AD

34 Nabataean—1st century BC

27 Kharoshthi—3rd century AD

31 Mandaean—3rd century AD

35 Nagari—in 13th century form

28 Khmer—in 14th century form

32 Manchu—17th century AD

36 Ninivite cuneiform—circa 3000 BC
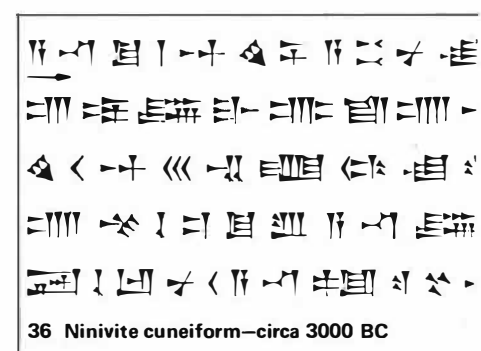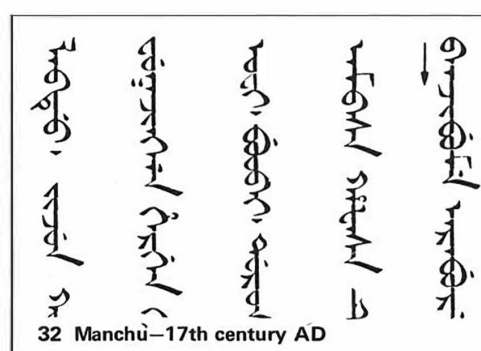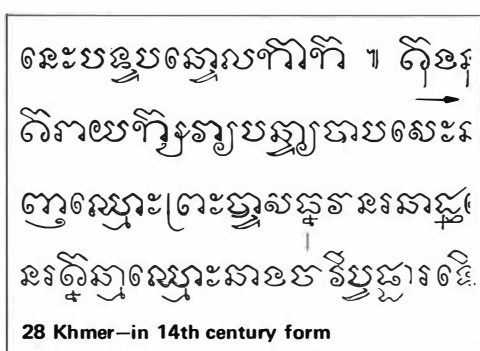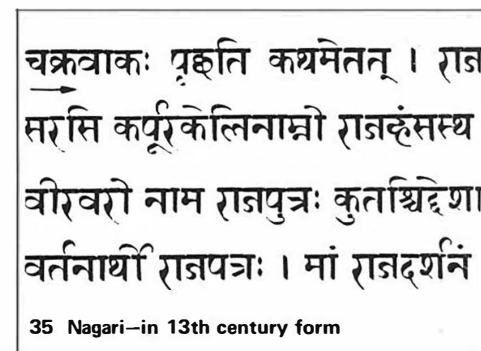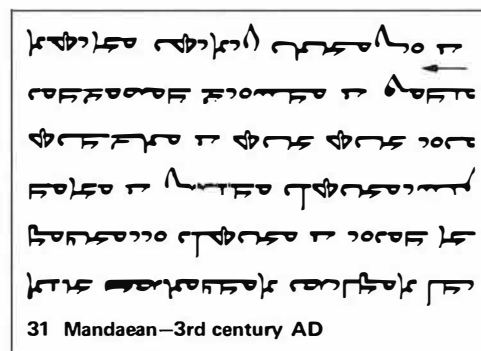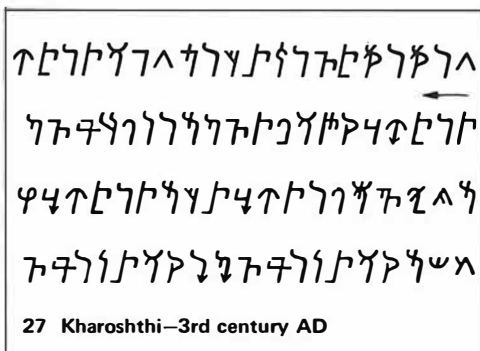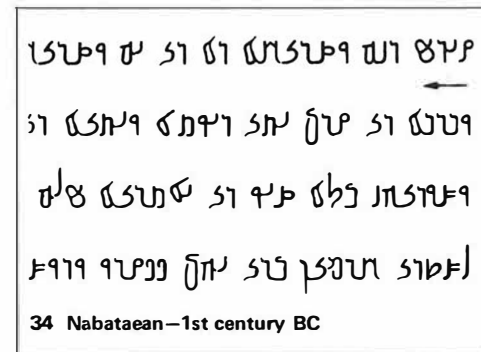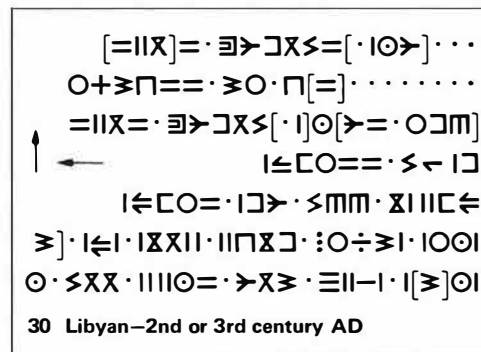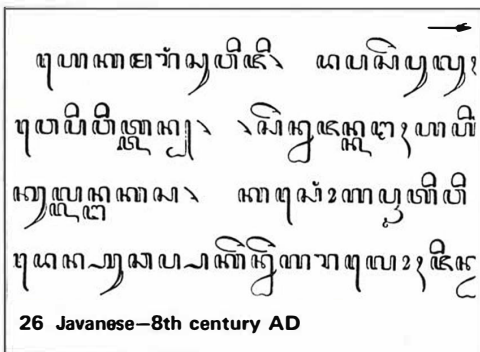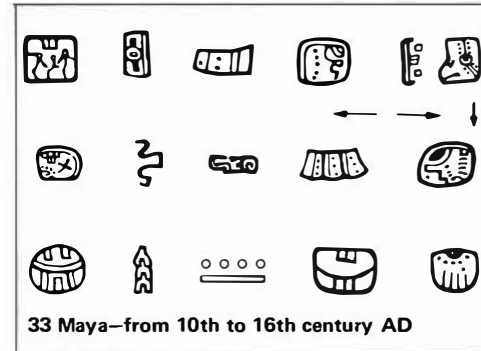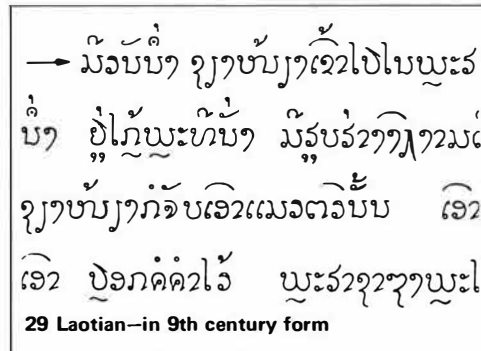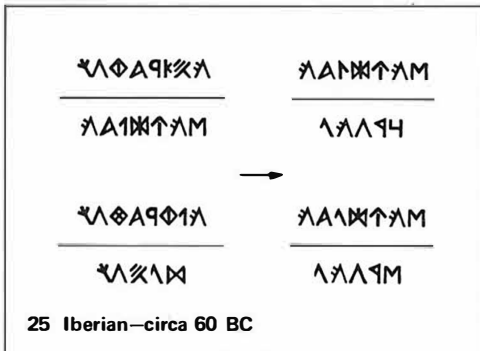
tops of the letters have just disappeared.

Further to be noted is the slant adopted by the cursive style of Estrangelo (14), written from right to left, and Georgian (17), Greek (20), Thai (44), and Tamil (49), written from left to right.

The exceptions that I shall leave unexplained, since I have not done enough research into the reasons, are Coptic (12), Palmyrian (37) and Phœnician (40).

In the case of Kharoshthi (27), the only Indian script written from right to left, is it not possible to postulate a certain copying of Tamil (49), or other

varieties of local cursives written from left to right?

As for Persian (38) from the end of the fourteenth century AD, shown here, it only appears to lean in the opposite direction. It is, in fact, appropriately called "suspended writing" (nesta'liq) because each word, written obliquely, starts above the line

37 Palmyrian—from 9th century BC to 272 AD

41 Punic—146 BC

45 Sinhalese—3rd century BC

38 Persian—end of the 14th century

42 Runic—1st century AD

46 Slavonic—9th century AD

39 Phags-pa—13th century AD

43 Samaritan—circa 900 BC

47 Southern Arabic—6th century BC

40 Classical Phoenician—circa 13th century BC

44 Siamese—after the 5th century AD

48 Syriac—1st century AD

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to finish below it, so that the downward movement prevails over the forward one.

Finally, Syriac (48), also called Jacobite, assumed its particular appearance of a script inverted towards the left for a similar reason: the scribes wrote the signs from top to bottom and they were then read from right to left.

An aesthetic function of efficiency

Have I said enough to make it clear that the diversity of written forms has nothing gratuitous about it? Their beauty, which speaks for itself, does not need explaining, but doubtless it was not useless to show that their beauty is not the mere triumph of ingenuity or fantasy. It is that beauty born of a gesture that must conquer in order to convince. Curiosity aroused by the sight of so many signs different from our own, can all too often give rise to a feeling of condescension, or superiority.

How to design in Chinese (without really being able to read it)

Henry Steiner

And yet their effectiveness is not to be questioned. Some are familiar to millions of people, to whom our twenty-six letters seem equally mysterious. Since they are known to everyone, two last examples will provide a suitable conclusion for me.

365 Muslims, of whom only 65 millions, take note, have Arabic as a mother tongue, read and write Arabic (when they are literate).

The problem of China is more complex. The script is made up of such a large number of signs that the average person does not have the time to learn how to use them. Of the 50,000 to 80,000 that have been used over the years, 8,000 are still in use at present, of which 1,000 are needed for basic reading. It is thus all too clear, but none the less true for all that, that for 750 million Chinese to be able to read and write is to be able to decipher and draw these characters.

References

1 The Engraving Room of the State Press, classed as an historical monument in 1946, contains for foreign characters alone, more than 300,000 types that enable them to reproduce sixty-five ancient or modern scripts. The author and *icographic* extend their thanks to the Director of the State Press for having given them permission to take out the illustrations in this study from their sample work entitled *The Engraving Room of the State Press*, (Paris 1963).

2 Etiemble, Marcel Cohen, in *l'Art de l'écriture* Unesco Exhibition of 50 pictures, 1965)

3 Pei, Mario A: *The World's Chief Languages* (Allen and Unwin, 1949)

4 Doblhofer, E: *le Déchiffrement des écritures* (Paris, Arthaud, 1959)

5 A printing type has on its upper face (or surface face), the type face or reproduction sign in relief and in reverse. The type face, or printing part, can thus more or less completely take up the surface face according to its shape

49 Tamil—19th century stylization

50 Tibetan—7th century AD

51 Tifinagh—1st century AD

52 Avestic Zand—13th century AD

The designs shown in this article were done by me during the past few years, employing Chinese characters.

I have been practising in Hong Kong for a dozen years and have used Chinese typography or calligraphy on many projects either because we were communicating to a Chinese-reading audience, or because of their appropriateness, or because of their exotic flavour.

In the accompanying examples, it will be noted that the same devices apply which one would employ in designing with European typography. Among these are; contrast of size or texture or style, emphasis through colour, substitution of pictures for letters.

It is difficult, if not impossible, to combine sizeable areas of Chinese and English text on one page in a visually satisfactory manner, and I avoid it whenever possible. But it is feasible in very small doses and in some of the illustrations can be noted combinations using either harmony or contrast.

Chinese characters are, however, a joy for the designer used to the disciplines of European typography. They can be set vertically, or horizontally, reading either left-to-right or the reverse. Since each character is constructed inside an invisible square they can easily be copy cast with a piece of graph paper. And they *look* nice, whether one can read them or not. In fact, it could be argued that illiteracy enhances the appreciation of their formal qualities (which is a marvellous excuse for my not having made more progress in learning to read them after so many years).

Right hand illustration: Lavatory signs. Most Chinese characters have too many strokes to adapt to the dotted alphabet that I designed for this building's graphics This is a case of pure luck
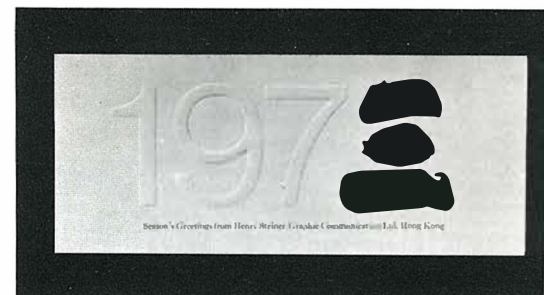
Left hand illustration:
Many complex Chinese ideographs are built up of simpler ones. In this logo for a Japanese antique dealer, the character 'Sumi' contains within it the second character of the name 'Sumi Da.' The change of colour brings it out of hiding as can be seen on the front cover of this journal

Right hand illustration:
A tin for peanut oil. The three radical strokes of the character for 'oil' have been replaced by photographs of peanuts. Thus the composite ideogram communicates instantly to the Chinese clientele for whom this package was designed

Right hand illustration:
The Chinese number 3, consisting obviously of three strokes, makes a perfectly legible date in this greeting card


Left hand illustration:
A section of the New Testament in Chinese with the characters meaning 'Peace on Earth' enlarged in the left panel. The squareness of Chinese typography gives this Christmas card its visual harmony

Right hand illustration:
The character meaning 'jade' somewaht resembles the capital letter E, which it replaces in this logo for a jeweller


Left hand illustration:
The common outline and the Helvetica-like design of the Chinese characters gives a unity to this exit sign—part of a set of architectural graphics

Right hand illustration:
The cover of an annual report for a Hong Kong newspaper. The report was done in Chinese throughout and took full advantage of the characteristics of Chinese typography. The title runs vertically (the ability to do this must make European designers envious) and in keeping with tradition the report opens from the left—or what in many areas would be considered 'the back of the book.'
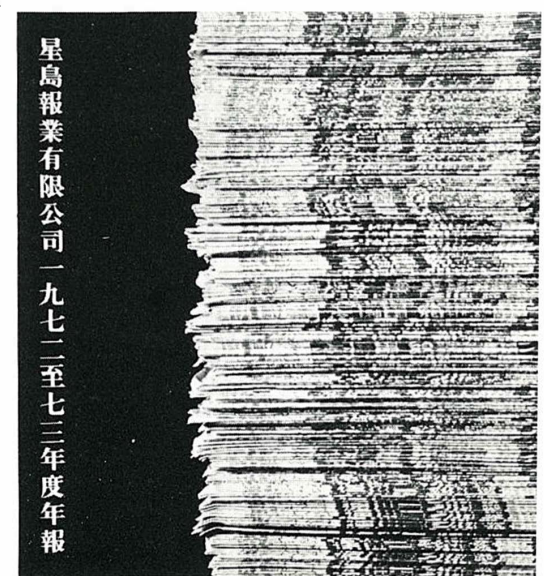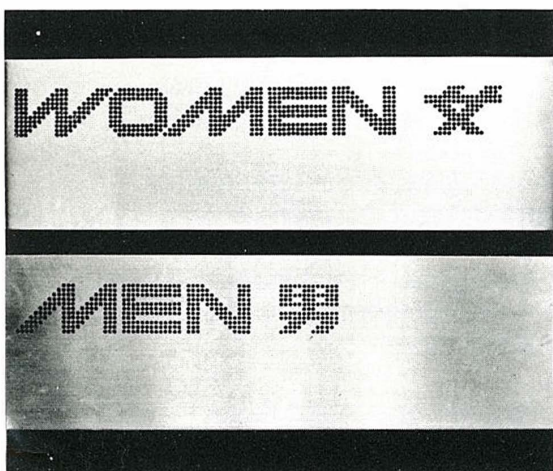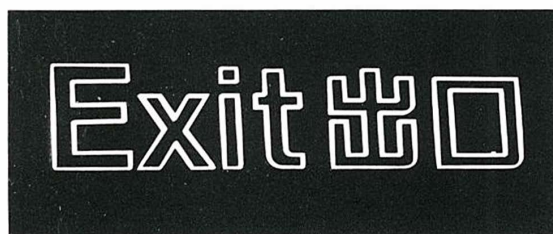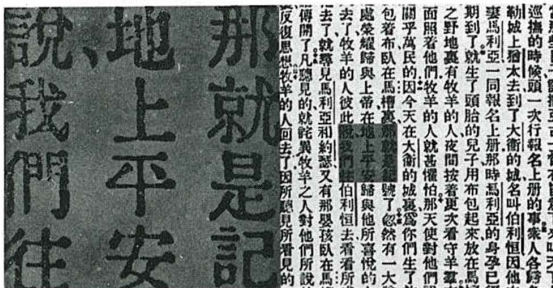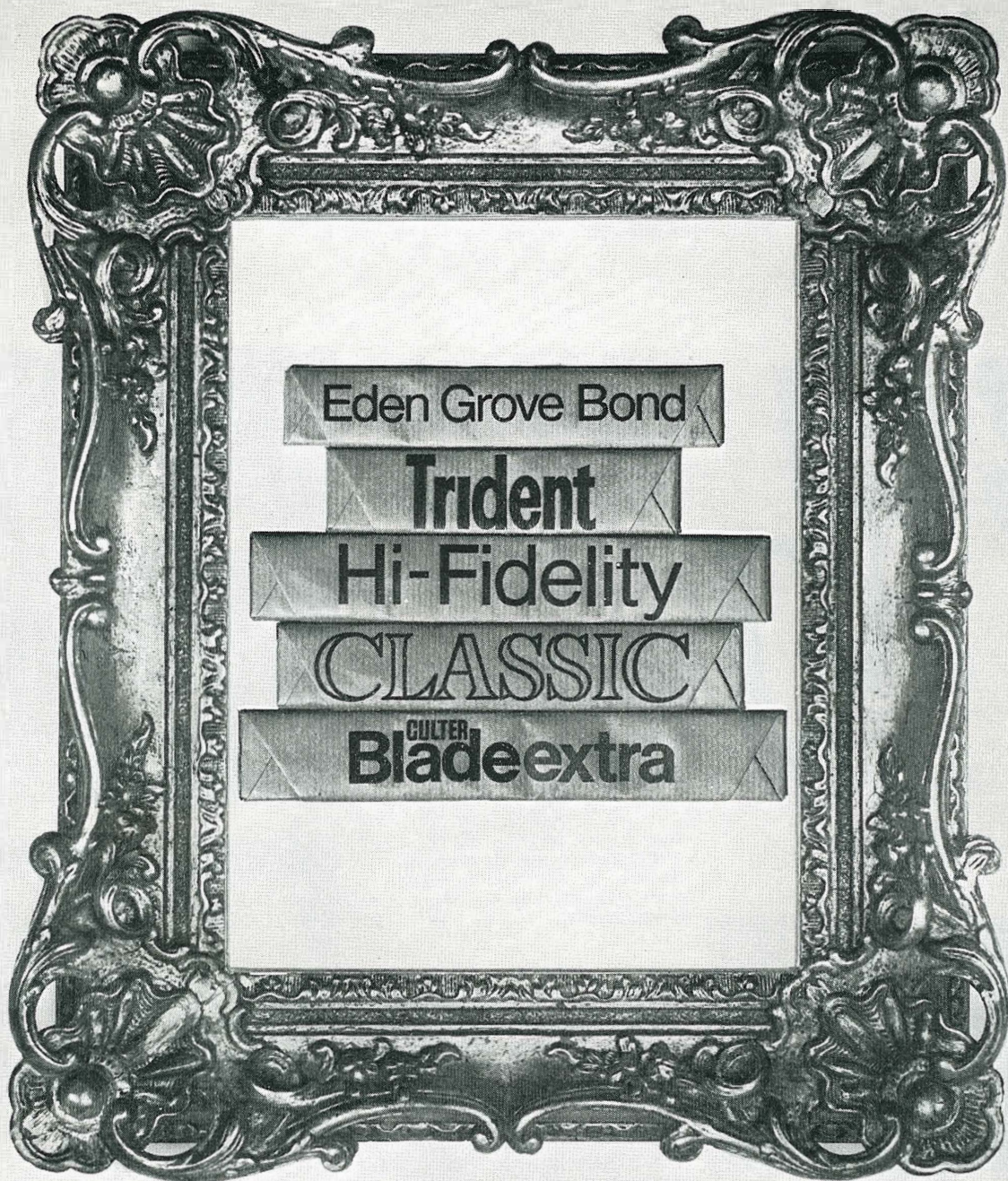
Is one of the family a friend of yours?

So one's an old friend.

Let's see why.

First you like the way the paper runs. Fast. Trouble-free.

Well it must to remain such an old friend.

Then you get the product when you need it. Which must mean your paper stockist is on-the-ball.

None of this happens by chance.

Culter Guard Bridge make papers that print for maximum impact. And picks a stockist who answers your phone with a fast delivery of Hi-Fidelity Art.

That's not your old friend?

That's just the point.

All five of our branded lines are friends of somebody. So if you can rely on one, you can rely on the lot!

It's because we're not a giant that we can make such a statement.

Big enough to make five national names. But not big enough to lose control on quality from making to making.

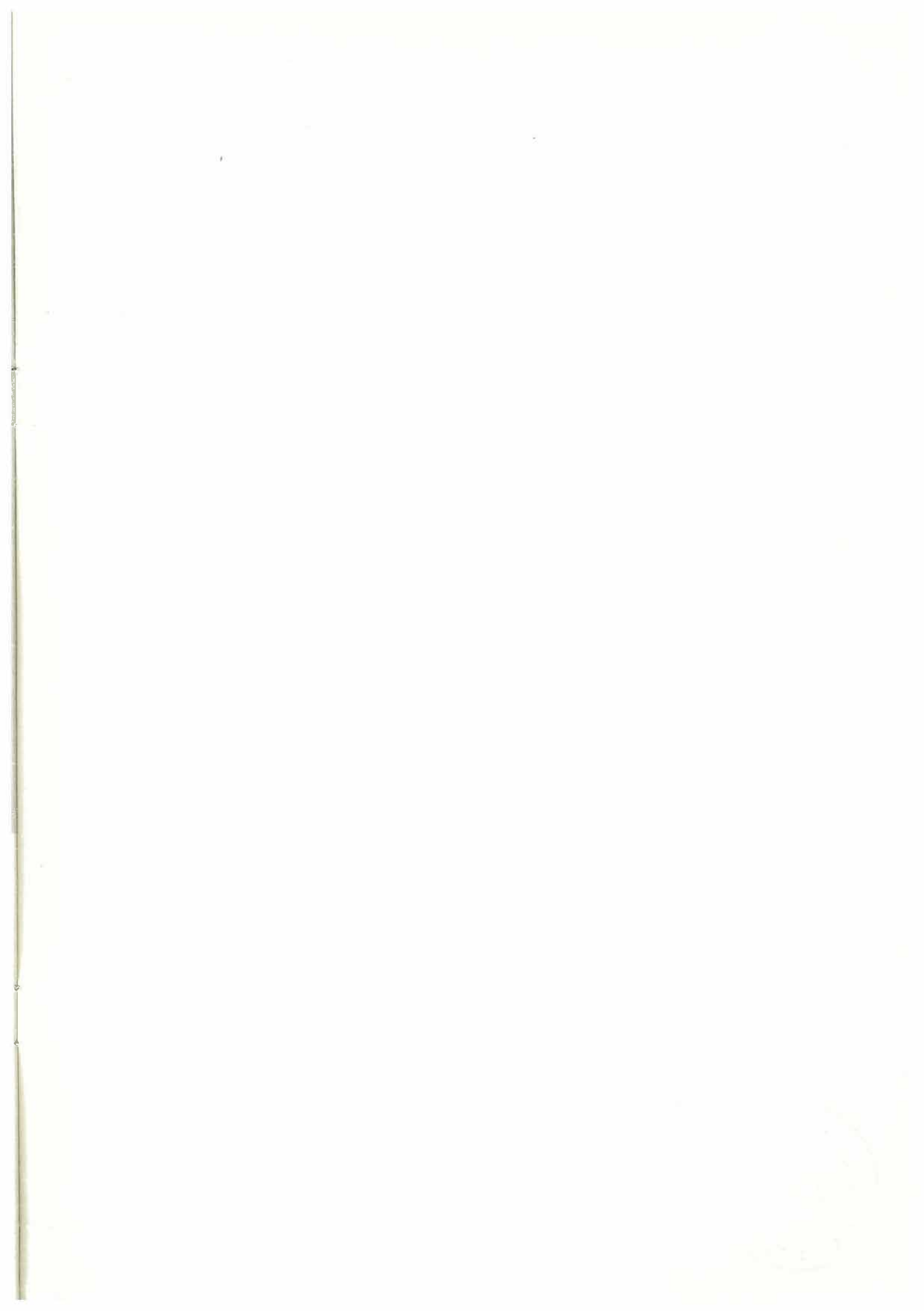So how about meeting four new friends from Culter Guard Bridge?

Not all at once of course. Just when you need them from your nearest stockist.

We supply so many there's bound to be one in your neighbourhood.

CULTER GUARD BRIDGE
Papermakers

ICOGRADA

The International Council of Graphic Design Associations was founded in London in April 1963. 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 over-all 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.