

Introduction

Since the advent of personal computers, desktop publishing and the more recent development of the World Wide Web, millions of people have become accustomed to using fonts and working with type, but anyone asked to explain what typography was might feel at a loss, unclear of its boundaries or possibilities.

Typography is concerned with the structuring and arranging of visual language. Type design is concerned with the creation of the units to be arranged, the characters which make up a typeface. Both typeform and typography are designed to convey a message. This latter aspect places typography firmly at the root of the broader discipline of graphic design. The question of how typography is used to convey a message can be divided into two. The first part concerns typography's appearance or style. This differs according to time and place, or designer and client: at times typography may play a secondary or even invisible role, at others it may dominate, reflecting the inspiration of the designer and on occasion even laying claim to be 'art'. Some of these approaches are demonstrated and discussed in this book. The second part concerns the practicalities of working with typography, such as legibility, scale and formatting, and these represent the dominant concerns of this book.

The book is designed partly to give good practical advice to students and partly to be a concise source of information that will take you well beyond your student years. Any book inevitably reflects its author's prejudices, and in this case it also reflects the way we teach. One of our key aims is to be broad in scope, to bring together in one book information that at present is spread throughout many. We hope to provide practical advice in an open-minded, non-dogmatic manner. Perhaps our only demand is that you read our book, move on to other material and then come to your own conclusions.

There is also much factual information in this book, not all of which you will necessarily need at once. We have divided the book into discrete chapters which can be read and understood separately and when needed. In many places, detail is removed from the main text and presented as 'side stories' which can be read independently.

What is typography?

It is important at the outset to point out that certain terms have meant slightly different things at different periods in history. In these digital times, font and typeface are used interchangeably, but in the days of metal type they had quite distinct meanings. Throughout this book we have tried to use words in their original, precise senses, as follows. Type is the physical object, a piece of metal with a raised face at one end containing the reversed image of a character. Font (originally spelt 'fount' in Britain) is a set of characters of a given typeface, all of one particular size and style. Typeface refers to a set of fonts of related design; since the end of the nineteenth century the term has referred to a set of related styles, italic, bold, bold italic and so on.

Having established that typography is concerned with both the creation of typefaces and their arrangement to convey a message, we felt that a clearer

definition was needed, something which suggested how type was different from writing or lettering, for instance. A natural place to start seemed to be the dictionary, but we were somewhat surprised by what we found:

- 1 the art, craft, or process of composing type and printing from it.
- 2 the planning, selection, and setting of type for a printed work.

(Collins concise dictionary, 1999)

This definition so strongly reflects the traditional craft nature of the subject and its relationship to the printing trade from which it grew that it could have been written a hundred years ago. It seems quite inadequate today, and while it isn't exactly untrue, it is very limited.

We then asked small groups of students studying graphic design and typography to discuss potential definitions of the discipline. Their ideas highlight different facets of the subject:

'The architecture of ideas and the making of language' – revealing typography's role in the building of narrative, creating intellectual spaces through which the reader moves.

'The sculpting of experience' – reflecting the notion that the form of the message influences the reader's interpretation of the content.

'The management of letters' – stressing the typographer's organizational ability, and alluding to the creation of structure.

'The engine of learning' – typography empowering the literate.

'A formal extension to memory' – stressing the documentation and preservation of ideas, which enables reflection.

'Painting with words' – typography as an expressive art in which the emotional content of ideas is reflected in the manipulation of the form.

Such a diversity of definitions reflects the complexity of typography and the extent of its influence; it also demonstrates its continuing need to adapt both to new technology and to its users' vision of the future. Ultimately, the intellectual journey in pursuit of a definition is far more valuable than the point of arrival, or the unquestioning repetition of a previous generation's belief. It is important to familiarize oneself with past definitions, but not to stick to their dogma. All offer a potential point of departure for developing your own profound and groundbreaking work. No definition of the discipline is fixed, rather, each one should be constantly redefined and adapted in relation to practice.

We thought it would be helpful to put forward our own definition in order to stimulate further discussion about the parameters of the discipline:

Typography:
The mechanical* notation† and
arrangement of language‡.

Following spread Typography surrounds us in Western daily life. It enables, guides and directs us through physical space with signing, time-tables, commercial agreements, advertisements, promotion, tokens of value, receipts, banknotes, tickets and stamps and takes us on intellectual journeys through literature and poetry.

Mechanical Referring to the science of machines, the precise automatization – be it physical or digital – of a task, working through a structured process towards a defined aim. The idea of the mechanical suggests one of the prime differences between typography and lettering: typography means writing using repeatable units, lettering is unique. This idea of manufacture is discussed in Chapter IV.

Notation A graphic system of documenting a discipline through a symbolic code. In this book, that code is the Western or Latin alphabet. Its evolution is explained in Chapter III.

Language Embracing both spoken and written codes: groups of sounds which in various combinations form words with tacitly labelled objects or ideas; arrangements of words which signal complex meanings to groups familiar with the code. Language is the subject of the next chapter.

In this definition we have strived to get away from the specifics of printing and reassert the function of typography: to document, preserve and replicate word-based knowledge and to place it firmly at the core of modern communication design.

Debates within typographic design education have traditionally focused on the appearance of typography in relation to message. They have tended to examine aesthetic and technical considerations such as font selection, hierarchies, spatial arrangement, grids and style. While such discussions are pertinent to all that we do as designers, they perhaps overlook the obvious: that typography is intrinsically visual language.

It is a strange anomaly within the education system that a subject – language – and the notational system devised for its recording – typography – are taught in unrelated institutions. Universities teach anthropology, linguistics, language development, languages and literature, while art and design schools teach typography. Yet typography is to language what maps are to geography, scores are to music and algebra is to mathematics. Surely a subject and its related system of documentation should be investigated together? It is, in our view, vitally important that typographers should begin to understand the features of language while at the same time learning the conventions for its notation and the technical processes for its reproduction.

Language, through type, envelops us in the urban environment. Its messages have so penetrated our psyche that it is almost impossible to imagine a world without type – a world without books or libraries, magazines or maps, road signs, television or advertisements. Like the wheel, electricity and the internal combustion engine, typography underpins modern Western life. Every day we wake up to type: from our first glimpse of an alarm clock, through the tuning of a radio, to the brands of shampoo, toothpaste and cereal we use, we are bombarded by typographic messages all vying for our attention – and all this before we have even glanced at a newspaper.

Type today carries a multiplicity of messages in the most diverse range of formats. Johann Gutenberg, who died a poor man, could hardly have envisaged the profound ramifications of his modular lettering invention, type.

Towards a 26-letter alphabet

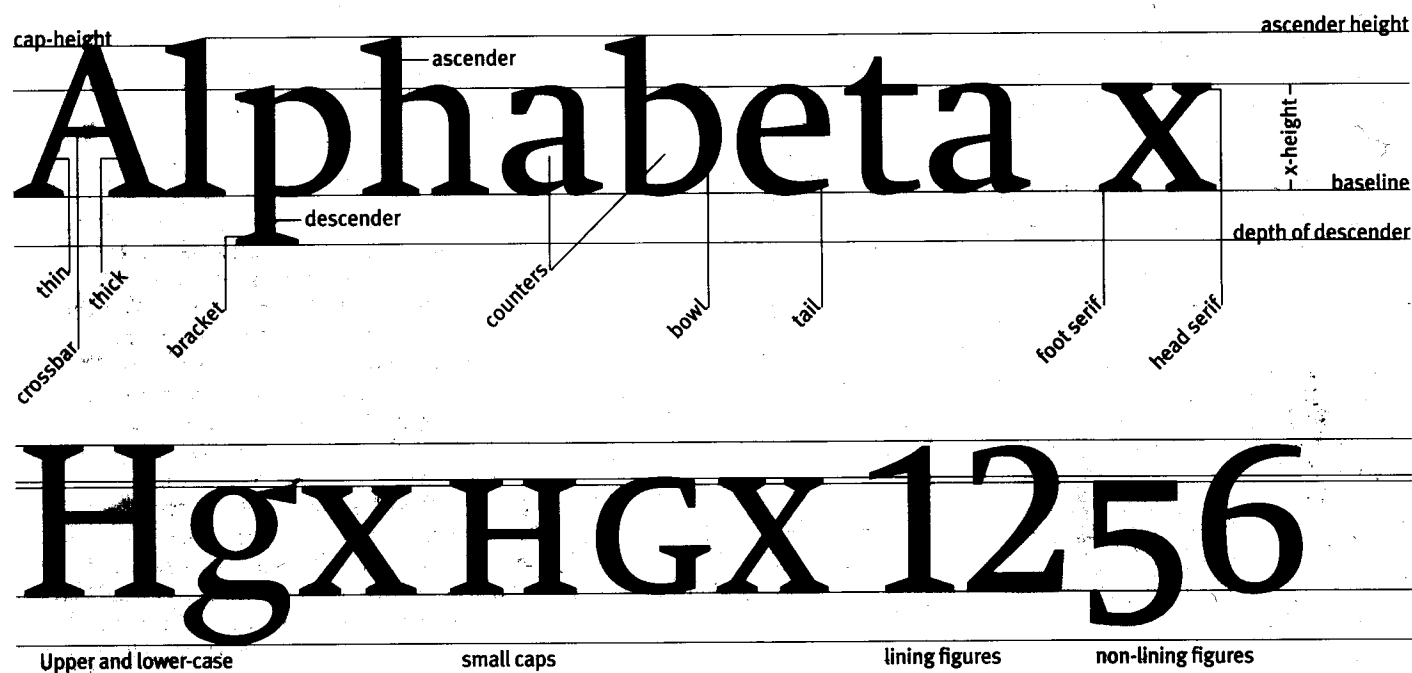
Parts of a letter

Capital ('caps' or 'upper-case') letters are principally constructed between two parallel lines: the baseline and the cap-height.

Lower-case forms have three main vertical proportions. The 'x-height' is quite literally the height of the lower-case x and is not a fixed proportion of the cap height but is specific to each typeface. The x-height is the most important element in determining how large a typeface appears (see also page 128). The part of a lower-case letter that extends above the x-height is known as the ascender and may be higher than the cap-height. The part of a lower-case letter extending below the baseline is the descender.

If writing is the physical notation of language, then type is its mechanical notation. In Europe the invention of type is ascribed to the German Johann Gutenberg (c.1394–1468), although in Korea there is evidence that movable metal type was first used as early as 1241.

The advent of movable type and printing represented the mechanization of an alphabet system whose traceable origins went back some 3,000 years. For the typographer, there are two key elements to the story of the Western alphabet leading up to Gutenberg's invention of type, both of which developed in parallel. The first is the establishment of the 26 symbols that represent the phonemes – both vowels and consonants – of the majority of European languages. The second is the continual refinement of those symbolic forms, leaving a legacy of 26 letters in both capital and lower-case varieties, the concept of a small space between words and a left-to-right reading direction.



Small capitals (small caps)

Some fonts contain small caps, capital letterforms that are designed to work optically with lower case. They are generally a little higher than the x-height. (See page 199 for usage).

Numerals

These can be of two kinds. Numerals of cap height are known as 'lining numerals'. In older typefaces and good contemporary ones, there exist 'non-lining' numerals, which visually balance the lower-case letters. These are a useful alternative, designed for setting running text (see also page 194).

Italics

Upright letters are often referred to as 'roman', sloped letters are known as italics. They may be 'cursive' *ie* with a flow like joined-up writing, or non-cursive which may appear like a sloped roman. The development of italics is outlined on page 60.

