

STANLEY MORISON

FIRST PRINCIPLES OF
TYPOGRAPHY

CAMBRIDGE UNIVERSITY PRESS

J

CAMBRIDGE AUTHORS' AND PRINTERS'
GUIDES

I

FIRST PRINCIPLES OF
TYPOGRAPHY

BY
STANLEY MORISON

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PREFACE

THE following essay towards a rationale of book-typography was first attempted as an article, s.v. 'Typography', in the twelfth edition of the *Encyclopedia Britannica* (Chicago and London, 1929). It was reconsidered and entirely rewritten for No. 7 of *The Fleuron* (Cambridge, 1930) when it also went out of print. Thus the essay is twenty years old. It is still, apparently, considered useful.

Although several reprints have been brought out—and I have heard of at least one complete, but unauthorized edition—and extracts have been made, I continued to receive demands for the whole text from printers as well as from those outside the trade for whom the article was originally written. An edition was published in 1936 by the Macmillan Company of America. It was printed at the Yale University Press where, also, a limited edition on special paper was run off. As the brevity of the essay seems to be one of its most approved qualities, no expansion, and only slight revision, was made; and the same text was used for the English edition set up and printed at the Cambridge University Press in 1938.

The present is a reprint of the Amsterdam edition published in 1947, in which the first paragraph was interpolated. The reference to 'bulk' at page 17 might well have been omitted, since the practice, in London, at least prevailing during and since the war, is to economize space. It may be added that while the principles here set forth apply to the typography of books, the sections dealing with composition may be adapted to the design of newspapers and publicity. Those interested in the composition of advertising matter may be referred to my paper 'On Advertisement Settings' in *Signature* No. 3 (London, 1936).

S. M.

London 1950

FIRST PRINCIPLES OF TYPOGRAPHY

I

LETTERS OF THE ALPHABET that are cast or founded for the purpose of impressing upon paper are known as 'types' and the impression thus made as a 'print'. But every impression, from any raised surface, is a 'print'. Hence the impression from the particular raised surfaces known as 'types' is called a 'typographical' impression; or, to use a more old-fashioned term, 'letter-press'. The precise form of the 'types' and the exact position they need to occupy upon the selected paper involve skill in the art that is called 'typography'.

Typography may be defined as the art of rightly disposing printing material in accordance with specific purpose; of so arranging the letters, distributing the space and controlling the type as to aid to the maximum the reader's comprehension of the text. Typography is the efficient means to an essentially utilitarian and only accidentally aesthetic end, for enjoyment of patterns is rarely the reader's chief aim. Therefore, any disposition of printing material which, whatever the intention, has the effect of coming between author and reader is wrong. It follows that in the printing of books meant to be read there is little room for 'bright' typography. Even dullness and monotony in the typesetting are far less vicious to a reader than typographical eccentricity or pleasantry. Cunning of this sort is desirable, even essential in the typography of propaganda, whether for commerce, politics, or religion, because in such printing only the freshest survives inattention. But the typography of books, apart from the category of narrowly limited editions, requires an obedience to convention which is almost absolute—and with reason.

Since printing is essentially a means of multiplying, it must not only be good in itself—but be good for a common purpose. The wider that purpose, the stricter are the limitations imposed upon the printer. He may try an experiment in a tract printed in an edition of 50 copies, but he shows little common sense if he experiments to the same degree in the tract having a run of 50,000. Again, a novelty, fitly introduced into a 16-page pamphlet, will be highly undesirable in a 160-page book. It is of the essence of typography and of the nature of the printed book *qua* book, that it perform a public service. For single or individual purpose there remains the manuscript, the codex; so there is something ridiculous in the unique copy of a printed book, though the number of copies printed may justifiably be limited when a book is the medium of typographical experiment. It is always desirable that experiments be made, and it is a pity that such ‘laboratory’ pieces are so limited in number and in courage. Typography to-day does not so much need Inspiration or Revival as Investigation. It is proposed here to formulate some of the principles already known to book-printers, which investigation confirms and which non-printers may like to consider for themselves.

II

THE laws governing the typography of books intended for general circulation are based first upon the essential nature of alphabetical writing, and secondly upon the traditions, explicit or implicit, prevailing in the society for which the printer is working. While a universal character or typography applicable to all books produced in a given national area is practicable, to impose a universal detailed formula upon all books printed in roman types is not. National tradition expresses itself in the varying separation of the book into prelims, chapters, etc., no less than in the design of the type. But at least there are physical rules of linear composition which are obeyed by all printers who know their job.

DESIGN OF TYPE

The normal roman type (in simple form without special sorts, etc.) consists of an upright design, and a sloping form of it:

ABCDEFGHIJKLMNOPQRSTUVWXYZ&

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ&

abcdefghijklmnopqrstuvwxyz

The printer needs to be very careful in choosing his type, realizing that the more often he is going to use it, the more closely its design must approximate to the general idea held in the mind's eye of readers perforce ruled by the familiar magazine, newspaper and book. It does no harm to print a Christmas card in **black letter**, but who nowadays would read a book in that type? I may believe, as I do, that black letter is in design more homogeneous, more lively and more economic a type than the grey round roman we use, but I do not now expect people to read a book in it. Aldus' and Caslon's are both relatively feeble types, but they represent the forms accepted by the community; and the printer, as a servant of the community, must use them, or one of their variants. No printer should say, 'I am an artist, therefore I am not to be dictated to. I will create my own letter forms', for, in this humble job, no printer is an artist in this sense. Nor is it possible to-day, as it just was in the infancy of the craft, to persuade society into the acceptance of strongly marked and highly individualistic types—because literate society is so much greater in mass and correspondingly slower in movement. Type design moves at the pace of the most conservative reader.

The good type-designer therefore realizes that, for a new fount to be successful, it has to be so good that only very few recognize its novelty. If readers do not notice the consummate reticence and rare discipline of a new type, it is probably a good letter. But if my friends think that the tail of my lower-case r or the lip of my lower-case e is rather

jolly, you may know that the fount would have been better had neither been made. A type which is to have anything like a present, let alone a future, will neither be very 'different' nor very 'jolly'.

So much for Type. The printer possesses also Spaces and Leads as a normal part of his typographical material, straight lines of metal known as rules, braces, and finally a more or less indiscriminate collection of ornaments—head and tail-pieces, flowers, decorated initial letters, vignettes and flourishes. Another decorative medium at his option lies in his command of colour; red is, with sound instinct, the most frequently used. For emphasis, heavy faces are used. White space is an important item of composing-room equipment—margins, blanks, etc., being filled in with what are known as 'quotations'. The selecting and arranging of these elements is known as Composition. Imposition is the placing of the composed matter upon the sheet. Printing includes impressing in due order, perfecting the sheet in due register (backing up), regulating the inking, and achieving a crisp type-page. Finally the tone, weight and texture of the paper are important factors entering into the completed result.

Typography, therefore, controls the composition, imposition, impression and paper. Of paper, it is at least necessary to demand that it be capable of expressing the value of the composition; of imposition, that the margins be proportionate to the area of the text, affording decent space for thumbs and fingers at the side and bottom of the page. The old-style margins are handsome in themselves and agreeable to the purpose of a certain kind of book, but are obviously not convenient in books where the page dimension is unavoidably small or narrow, or the purpose of the book is to be carried in the pocket. For these and other kinds of book, the type may be centred on the measure of the page, and slightly raised above ocular centre.

Imposition is the most important element in typography—for no page, however well composed in detail, can be admired

CHOICE OF TYPE

if the *mise-en-page* is careless or ill-considered. In practical printing to-day, these details of imposition are on the whole adequately cared for; so that it is possible to report that the mass of books presents a tolerable appearance. Even a badly composed work may give a good appearance if it is well imposed—good imposition redeeming bad composition, while a good composition would be effectively ruined by bad imposition.

III

THE designer of the book, therefore, first determines his imposition and then tackles the details of composition. The first principles of composition do not require much discussion since they necessarily follow from the conventions of alphabetical printing in the roman letter accepted by those for whom we are printing. The matter is relatively simple. First, it is certain that the eye cannot read with ease any considerable number of words composed of letters embodying sharply contrasted thicks and thins; secondly, it is none the less certain that the eye cannot agreeably read a mass of words composed even in a rightly constructed letter, if the lines are beyond a certain length. The most expert reader's eye cannot seize more than a certain number of words in a given size except in a proportionate length of line. Thirdly, practice proves that the size of the letter must be related to the length of line. Respect for these principles will generally protect the reader from the risk of 'doubling' (reading the same line twice). The average line of words which the reader's eye can conveniently seize is between ten and twelve. Nevertheless, the typographer, while exerting himself to the utmost to respect this ocular truth, is daily confronted with the fact that unavoidable conditions make it impossible for him to secure a type of the duly related size, and that he is driven to use a relatively small type. To obviate here the risk of 'doubling', he consistently inserts proportionate leads through the matter, so opening the lines that the eye comfortably travels and returns from beginning to end and

LEADING OF TYPE

from end to beginning. The type in this pamphlet has been so treated.

The practice of leading, denounced in certain quarters as essentially evil, is an inevitable necessity to a large proportion of printing; and the skilled typographer, making the best use of his material, makes in turn, wise use of leads. The orthodox high-brow view that leads produce in every instance an unhappy weak-looking effect will not survive a wide experience. On the contrary, it will be found that their absence may effectively ruin even a composition in large type, so that it is true to say that the intelligent use of leading distinguishes the expert from the inexpert printer. A slight differentiation of typeface may make the practice advisable. Clearly, while a letter of the size now under the reader's eye, with fairly long ascenders and descenders, would not require leading unless set to a measure of more than $3\frac{1}{2}$ in., there exist letters with short descenders designed rather to sustain leading by rule than by exception. Baskerville's is a type to which leading is invariably an advantage. The problem of determining the amount to be given is not to be settled by considering only the ascenders or the body of the type, because breadth of letter is also a factor to be reckoned with—some letters are narrow in respect to their height, while others are wide. A composition in a round, open, wide letter, chosen because it is rather loose (that is to say, the space between the letters is greater, or appears greater, by reason of the curves of the c, o, e, g), gains in consistency when there is a satisfactory lead between the lines. It is often argued that loose setting is not admirable in itself; to which it might be replied that the printer is generally bound to carry out the instructions of his customer; often to respect the wishes of an artist who may be illustrating the work; and, not seldom, committed by the publisher to a paper-size dictated by irrelevant considerations.

Further, it is obvious that the space between words composed in a condensed letter may be less than that between

P A R A G R A P H S

words in a round, wide form of letter. Where there is no leading between the lines, and the composition is, for extrinsic reasons, necessarily tight, it may be an advantage to set leads between the paragraphs, even though this result in pages with uneven tails. In paragraphing, it is important to realize that the opening sentence of a work should automatically manifest itself as such. This may be secured by the use of the large initial letter; the printing of the first word in CAPITALS, or SMALL CAPITALS; CAPITALS and SMALL CAPITALS; or by setting the first word into the margin. On no account should the opening of a chapter be indented, since indentation should mark (and always mark) the subsequent sections, i.e. the paragraphs, of the text. The abolition of paragraph-indentations is plainly an undesirable practice; nor is setting the first word in capitals or small capitals an agreeable substitute for the indentation. The space of the indentation should be sufficient to be noticeable.

As both measures must be related, displaying a proportion pleasing to the eye, the depth of the page follows from its width. It seems that the proportions of the oblong are more pleasing than those of the square; and as a horizontal oblong drives out the line to an impossible length, and a two-column arrangement is tedious, the vertical oblong has become the normal page.

Such are the elements of typography; and a volume built up of type-pages composed in accordance with them will be generally satisfactory. There remain only the page headings and the folio. By ranging the headings inside towards the gutter, to the left and right respectively, two pages are fixed as a unity; but they can also be ranged outside to the right and left, or they may be centred. The folio may be centred at the foot, or range either way at the top or bottom (preferably, for quicker reference, on the outside), but it cannot be centred at the top without cancelling the running page headline—only to be done by exception. The running headlines may be set in capitals of the text, in upper and lower-case of the text, or in a combination of capitals. Full-sized

capitals over-emphasize what is, after all, a repetitive page-feature inserted chiefly for the convenience of librarians and readers interested in the identification of leaves which have worked loose. If set in upper and lower-case, the headline loses in levelness, so that it seems well to employ **SMALL CAPITALS**; these are best separated by hair spaces, since the unrelieved rectangular structure and perpendicularity of capitals tend to defeat instantaneous recognition. Full-sized capitals may well be used for chapter headings, with the number of the chapter in smalls; both indications being hair-spaced.

The reader, travelling from the generally invariable blank at the end of a chapter to the beginning of the next, finds a dropped chapter head an agreeably consistent feature, which saves him from feeling suffocated or overpowered by the text.

IV

THE foregoing elementary directions affect the main part of the book, its body. There remains a section which goes before the text, known as the 'preliminaries', often complicated both in respect to arrangement and draftsmanship. Before considering these, it may be well to summarize our present findings—to concentrate them into a formula. According to our doctrine, a well-built book is made up from vertical oblong pages arranged in paragraphs having an average line of ten to twelve consistently spaced words, set in a fount of comfortable size and familiar design; the lines sufficiently separated to prevent doubling and the composition being headed by a running title. This rectangle is so imposed upon the page as to provide centre, head, fore-edge and tail margins of dimensions suitably related not only to the length of line but to the disposition of space at those points where the text is cut into chapters, and where the body joins the prefatory and other pages known as 'preliminaries'.

Now these first pages, being intended rather for reference than for reading and re-reading, are less strictly governed

TITLE-PAGE

by convention than the text-pages. They consequently offer the maximum opportunity for typographic design. The history of printing is in large measure the history of the title-page. When fully developed, the title occupied a recto page, either partially or wholly; and the title-phrase, or the principal words of it, has generally been set in a conspicuous size of type. Sixteenth-century Italian printers generally used large capitals copied from inscriptions, or by exception, from medieval manuscripts; while English use emulated the French in employing a canon line of upper and lower-case, followed by a few lines of pica capitals. Next came the printer's device, and at the foot of the page, his name and address. These large sizes of upper and lower-case, an inheritance from printers who were accustomed to blackletter (which cannot be set in solid capitals), have gone. The device has also vanished (it has been revived by a few publishers), and thus the contemporary title-page is generally a bleak affair, exhibiting in nine out of ten cases a space between the title and the imprint of the printer-publisher, so that this blank tends to be the strongest feature on the page. When the device was first abandoned, the author, printer or publisher took advantage of the leisure of the reader and the blank at their disposal, to draft a tediously long title, subtitle and list of the author's qualifications, designed to fill the entire page. The present-day publisher goes to the other extreme, reducing the title to as few short words as possible, followed with 'by' and the author's name. A professional writer may insert, e.g., 'Author of *The Deluge*' under his name or there may be incorporated a motto; but apart from such exceptions, three and sometimes four inches of space separate the author's name from the first line of the imprint.

The result is that unless the title is set in a size of type out of all relation to that of the remainder of the book, this space is more conspicuous than the chief line. It is more reasonable to lessen this space by shortening the depth of the whole piece from title to imprint. It is clear that a volume in 12-point does not require a 30-point title unless it be a

folio in double-column; and it is of no consequence if the title-page is a little shorter than the text-pages. There is no reason, other than a desire to be 'different', for a title-page to bear any line of type larger than twice the size of the text letter. If the book be set in 12-point, the title need be no larger than 24-point—and may decently enough be smaller. As lower-case is a necessary evil, which we should do well to subordinate since we cannot suppress, it should be avoided when it is at its least rational and least attractive—in large sizes. The main line of a title should be set in capitals; and, like all titling capitals, they should be spaced. Whatever may happen to the rest of the composition, the author's name, like all displayed proper names, should be in capitals.

V

HERE we may pause to counter an objection. It will be contended that whatever the value of our preceding conclusions, their adoption must mean an increase in standardization—all very well for those who have an economic objective but very monotonous and dull for those whose aim is that books shall possess more 'life'. This means that the objectors want more variety, more 'differentness', more decoration. The craving to decorate is natural, and only if it is allowed the freedom of the text-pages shall we look upon it as a passion to be resisted. The decoration of title-pages is one thing—that of a fount to be employed in books is another. Our contention, in this respect, is that the necessities of a mass-production book and the limited edition differ neither in kind nor in degree, since all printing is essentially a means of the multiplication of a text set in an alphabetical code of conventional symbols. To disallow 'variety' in the vital details of the composition is not to insist upon uniformity in display. As already pointed out, the preliminary pages offer scope for the utmost typographical ingenuity. Yet even here, a word of caution may be in place, so soon do we forget, in arranging any piece of display (above all, a title-page), the

RESTRAINT IN TYPOGRAPHY

supreme importance of sense. Every character, every word, every line should be seen with maximum clearness. Words should not be broken except unavoidably, and in title-pages and other compositions of centred matter, lines should hardly begin with such feeble parts of speech as prepositions and conjunctions. It is more reasonable, as assisting the reader's immediacy of comprehension, to keep these to the ends of lines or to centre them in smaller type and so bring out the salient lines in a relatively conspicuous size.

No printer, in safeguarding himself from the charge of monotony in his composition, should admit, against his better judgement, any typographical distraction doing violence to logic and lucidity in the supposed interests of decoration. To twist his text into a triangle, squeeze it into a box, torture it into the shape of an hour-glass or a diamond is an offence requiring greater justification than the existence either of Italian and French precedents of the fifteenth and sixteenth centuries, or of an ambition to do something new in the twentieth. In truth, these are the easiest tricks of all, and we have seen so much of them during the late 'revival of printing' that we now need rather a revival of restraint. In all permanent forms of typography, whether publicly or privately printed, the typographer's only purpose is to express, not himself, but his author. There are, admittedly, other purposes which enter into the composition of advertisement, publicity and sales matter; and there is, of course, a very great deal common to both book and advertisement composition. But it is not allowable to the printer to relax his zeal for the reader's comfort in order to satisfy an ambition to decorate or to illustrate. Rather than run this risk the printer should strive to express himself by the use of this or that small decorative unit, either of common design supplied by the type founders or drawn for his office by an artist. It is quite true that to an inventive printer decoration is not often necessary. In commercial printing, however, it seems to be a necessity, because the complexity of our civilization demands an infinite number of styles and characters.

PRELIMINARY PAGES

Publishers and other buyers of printing, by insisting upon a setting which shall express *their* business, *their* goods, *their* books and nobody else's business or goods or books, demand an individuality which pure typography can never hope to supply. But book-printers, concerned with the permanently convenient rather than with the transiently sensational or the merely fashionable, should be on their guard against title-page borders, vignettes and devices invented to ease their difficulties. There is no easy way with most title-pages; and the printer's task is rendered more difficult by the average publisher's and author's incompetence to draft a title or to organize the preliminaries in reasonable sequence.

VI

THOSE who would like to lessen or vary the tendency towards standardization in day-to-day book production have a field for their activity in the last-mentioned pages. The position on the page of the half-title, title, dedication, etc., and their relation to each other, are not essentially invariable. Nevertheless, as it is well for printers and publishers to have rules, and the same rules, it may be suggested that the headings to Preface, Table of Contents, Introduction, etc. should be in the same size and fount as the chapter heads; and should be dropped if they are dropped. The order of the preliminaries remains to be settled. With the exception of the copyright notice, which may be set on the verso of the title-page, all should begin on a recto. The logical order of the preliminary pages is Half-title or Dedication (I see no reason for including both), Title, Contents, Preface, Introduction. The certificate of 'limitation', in the case of books of that class, may face the title where there is no frontispiece, be incorporated with the half-title, or be taken to the end of the volume. This order is applicable to most categories of books. Novels need neither Table of Contents nor List of Chapters, though one or the other is too often printed. If it is decided to retain either, it would be reasonable to print it

S I Z E O F B O O K S

on the back of the half-title and facing the title-page, so that the structure, scope and nature of the book will be almost completely indicated to the reader at a single opening. Where the volume is made up of a few short stories, their titles can be listed in the otherwise blank centre of the title-page.

VII

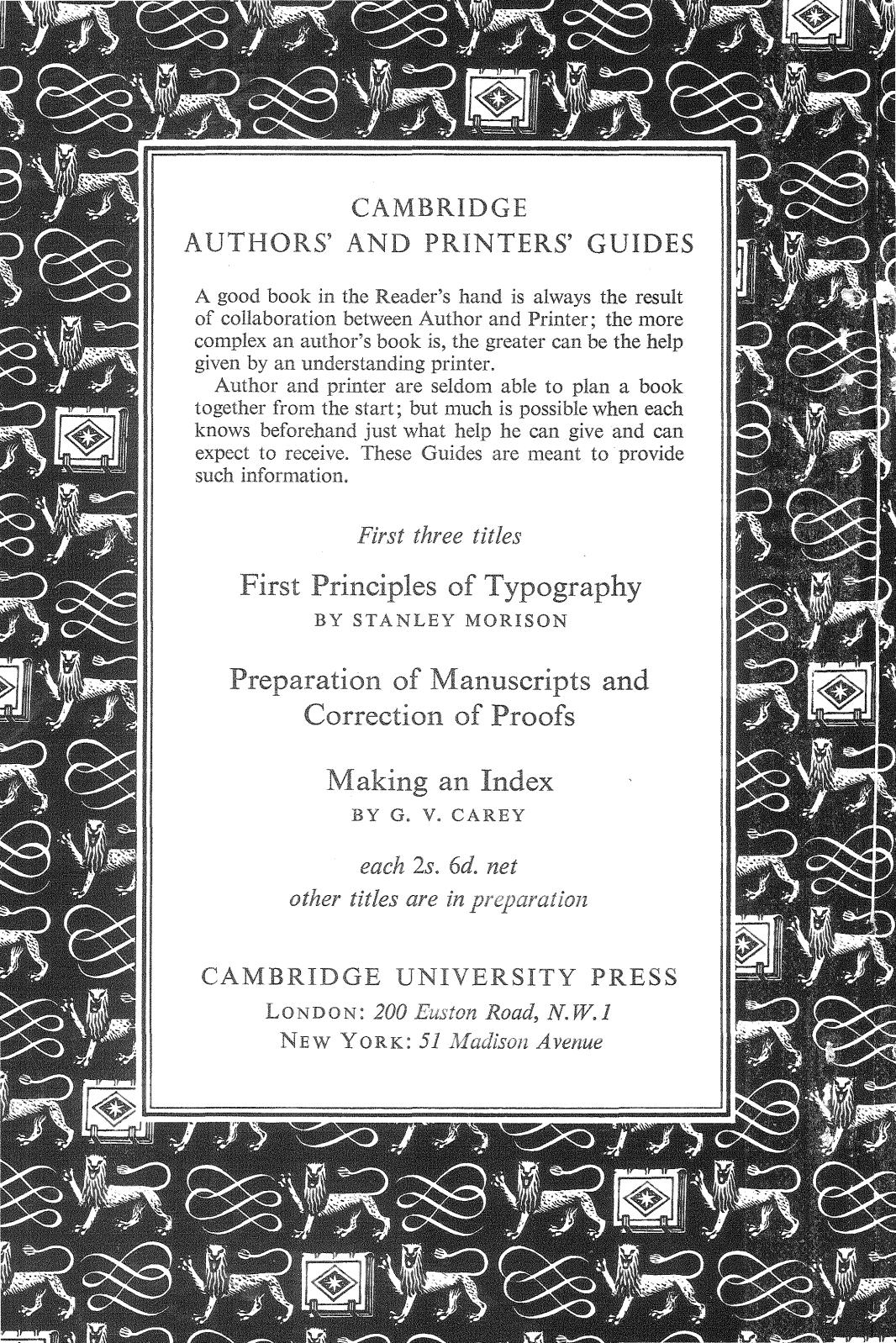
F I C T I O N, Belles-Lettres and Educational books are habitually first published in portable, but not pocketable formats; crown octavo (5 by $7\frac{1}{2}$ in.) being the invariable rule for novels published as such. The novel in the form of Biography will be published as a Biography, demy octavo ($5\frac{5}{8}$ by $8\frac{3}{4}$ in.), the size also for History, Political Study, Archaeology, Science, Art and almost everything but Fiction. Novels are only promoted to this format when they have become famous and 'standard'; when they are popular rather than famous they are composed in pocket ($4\frac{1}{2}$ by $6\frac{3}{4}$ in.) editions. *Size*, therefore, is the most manifest difference between the categories of books.

Another obvious difference is *bulk*, calculated in accordance with the publisher's notion, first, of the general sense of trade expectation and, secondly, of the purchasing psychology of a public habituated to certain selling prices vaguely related to number of pages and thickness of volume (inconsistently enough, weight does not enter into these expectations). These habits of mind have consequences in the typography; they affect the choice of fount and size of type, and may necessitate the adoption of devices for 'driving out', i.e. making the setting take up as much room as possible. By putting the running headline between rules or rows of ornaments; introducing unnecessary blanks between chapters; contracting the measure; exaggerating the spaces between the words and the lines; excessively indenting paragraphs; isolating quoted matter with areas of white space: inserting wholly unnecessary sectional titles in the text and surrounding them with space; contriving to drive a chapter

'FINE PRINTING'

ending to the top of a recto page so that the rest of it and its verso may be blank; using thick paper; increasing the depth of chapter beginnings and inserting very large versals thereto; and so on, the volume can be inflated to an extra sixteen pages and sometimes more—which is a feat the able typographer is expected to accomplish without showing his hand.

Limited editions of standard authors, or of authors whose publishers desire them to rank as such, are commonly given a rubricated title or some other feature not strictly necessary. A dreadful example of overdone rubrication is to be found in an edition of Thomas Hardy's verse, in which the running heads throughout the book are in red—the production of a firm which desired to make an impression on the purchaser in view of the price asked for the edition. This could have been better done by reserving colour for the initial letters. Hand-made paper is generally used for *éditions de luxe*, and none but the brave among publishers will disregard the superstitious love of the book-buying classes for its untrimmed, ugly and dirt-gathering edges. That most of the public prefer to have it so is because a trimmed book looks 'ordinary' to them. Any book which is 'different' from the 'ordinary' in one superficial way or another is apt to impress those lacking trade experience. And there has been a notable increase during recent years in the category of books, generally illustrated, known to the trade as *fine printing*, *éditions de luxe*, *press-books*, *limited editions*, *collectors' books*, etc. Hence, it is hoped that the above setting out of the first principles of typography may give the discriminating reader some sort of yardstick which he can apply not only to the entries catalogued by the booksellers as limited editions, but to the output of publishers responsible for printing the literary and scientific books which are more necessary to society, and are often designed with greater intelligence.



CAMBRIDGE AUTHORS' AND PRINTERS' GUIDES

A good book in the Reader's hand is always the result of collaboration between Author and Printer; the more complex an author's book is, the greater can be the help given by an understanding printer.

Author and printer are seldom able to plan a book together from the start; but much is possible when each knows beforehand just what help he can give and can expect to receive. These Guides are meant to provide such information.

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