

Landmarks in the Development of the Western Book

Mr. Faye is a language specialist in the Catalog Department of the University of Illinois Library. In this article he outlines the landmarks in the development of the Western book stressing the importance of the Latin alphabet.

THE OBJECT of this sketch is to deal briefly with the elements that make up the Western book. The following will be touched upon: the codex form of the book, the material of the book (paper, etc.), printing with movable type, and the development of the Latin alphabet, which is the alphabet of Western books as distinguished from Oriental books. This alphabet appears today in our printed books (in capitals and lower-case letters), in three main styles: Roman, Gothic, and Italic.

The Latin Alphabet

Experience has shown that the Latin alphabet, with its less than thirty letters, is more practical for putting thoughts on paper than an ideogrammatic system, such as the Chinese, with its several hundred ideograms.

It is generally accepted that our alphabet originated with the Semites, was adopted by the Greeks,¹ who added

vowels, and was transmitted to the Romans through the Greek colonies in South Italy.

Let us turn from the origins of our alphabet to the chief materials (papyrus, etc.) that have been used in making the Western book, and to the two main forms (roll and codex) that it has assumed.

Papyrus, Parchment, Roll, Codex, Paper

A passage in a Greek inscription² of the year 305 A.D. is evidence that, at that time, papyrus and parchment were the chief materials of which books were made.³

At first both papyrus and parchment books were rolls; later both appeared in

12:54-56, 1936. Published by St. Louis University.

The Greek alphabet is an important element in the history of Christendom and of European civilization. It is the alphabet of native Greek literature and of Hellenistic literature, which, it is scarcely necessary to point out, includes both the Septuagint and the Greek New Testament. It is also the link between the original Semitic alphabet and the alphabets of the Christian world, being the ancestor of the Latin alphabet used in the Western Church, and of various alphabets (Cyrillic, Coptic, etc.) used in the Eastern Church.

In this sketch but one of the descendants of the Greek alphabet, namely the Latin alphabet, will be dealt with.

² This inscription is published in the *Corpus inscriptionum atticarum*, 3:48. The passage in question is discussed in Th. Birt's *Kritik und Hermeneutik nebst Abriss des antiken Buchwesens*. München, 1913. p. 264.

The passage reads: "... The marginal notes . . . preserved in books (ἐν βιβλίοις) either parchments (διὰ περὶς) or papyri (χάρταις) or in any kind of tablets (ἐν . . . γραμματέοις)." The inscription, then, considers both parchments and papyri as being books, while other materials that received writing are gathered together under and covered by the term γραμματεία (γραμματεῖον, that on which one writes).

³ Papyrus continued to be used for a long time in the papal chancellery. The latest known papal bull on papyrus is one that was issued during the reign of Pope Boniface VIII (1012-24).—*Catholic Encyclopedia*, 3:54.

¹ G. E. Mylonas has fixed the date for the introduction of the historic Greek alphabet into Greece between the twelfth and eighth centuries B.C.

See his article "The Date of the Introduction of the Greek Alphabet" in *The Classical Bulletin*

codex form. Papyrus, being brittle, was not so well adapted to the codex form as parchment. During the fourth century A.D. the parchment codex became supreme. Once established, it held its own throughout the Middle Ages. As regards form, modern books are codices.

The reappearance of the roll, in the photographic film book, has indeed destroyed the monopoly, but has hardly challenged the pre-eminence of the codex.

Our modern books differ, as to material, from the medieval books in one important respect: paper has taken the place of parchment. Paper was invented by the Chinese as early, at least, as the first century of the Christian Era. It was brought into the Near East by the Arabs about the eighth century. The earliest example in Europe appears to be a document in the Escorial dated 1009.⁴ Since the invention of printing, paper, which already earlier had been encroaching upon the monopoly of parchment, after a while definitely took possession of the field.

Up to the Renaissance, medieval books were chiefly parchment codices, written in Roman capitals, to which, in the course of time, were added minuscules (by printers called "lower-case" letters) and letters in the Gothic script. Let us proceed to a consideration of these.

Roman Majuscles (Capitals) and Minuscles (Small Letters)

The Roman capitals of our books today are, essentially, the same as the monumental "square" capitals of the Roman inscriptions. They were also commonly used as a book hand up to and including the fifth century A.D. Characteristic of Roman genius are these letters that have

marched in stately array down the ages.

An examination of the script of the Alcuin Bible,⁵ written at St. Martin's Monastery, Tours, while Alcuin (hence its name) was Abbot there (796-804) reveals remarkable similarity between its minuscules and our present Roman lower-case letters. How did these letters come into being? One must not think of the various styles of writing that have appeared as being related to each other in a vertical genealogical line and descending, the later script from the earlier, in distinct chronological layers. The Carolingian minuscules are not direct descendants of the Roman capitals, they "emerged"—to use a term that has become established—from scripts then in existence.⁶

Important scripts that have not had so evident an influence upon modern letter forms as, for instance, the Carolingian minuscule, must be passed over in silence. We proceed to a mention of the Gothic script.

The Gothic Script

As the Roman square capitals reflect the genius of Rome, so the Gothic script is a flower of the spirit that produced the Gothic cathedrals. As the curve of the Roman arch was broken in the Gothic arch, so the smooth outlines of the Roman

⁵ A facsimile of the first page of Genesis in this Bible is given in Franz Steffens' *Lateinische Paläographie*, 2 verm. Aufl., 1929, plate 47.

This facsimile affords an illustration of the "hierarchy of scripts." The scribes used different styles of writing for different purposes. As the Church had its hierarchy: pope, archbishop, bishop, priest, so writing also had its hierarchy. The Roman square capitals, being, as it were, popes, were used for the important book headings; the minuscules, corresponding to common clerics, were used for the text itself; while for material of intermediate importance other styles of script were used.

⁶ Hellmut Lehmann-Haupt has presented a convenient outline of what took place in his "The Heritage of the Manuscript" in *A History of the Printed Book, Being the Third Number of The Dolphin*, ed. by L. C. Wroth, New York, 1938, pp. 3-23. For details, works on palaeography should be consulted.

⁴ Esdaile, Arundell. *A Student's Manual of Bibliography*. London, 1932, p. 36.

letters became broken and angular in Gothic writing; e.g., the almost circular Carolingian o becomes **O**,—the circle is broken,—hence the terms used to denote this script: *fractura*, by medieval scholars; *Fraktur* in German; and *brisé* in French.

With the material under the next heading we conclude our consideration of the chief varieties of script that have survived in our present-day printed books.

Italian Humanistic and Cursive (i.e., Italic) Hand

Our lower-case Roman letters are derived from the humanistic book hand of the fifteenth century, a product of the Renaissance in Italy, being the fruit of study and imitation of earlier models of Carolingian writing.

There developed also in Italy, during the fifteenth century, a cursive hand, *Italic*—a modification of the humanistic book hand, with some borrowings from the Gothic cursive then current in Italy. This hand survives both in Italic type and in our present-day cursive writing.

The Stage Now Set for the Invention of Printing

All the elements of the printed book, except movable type, were now at hand: *the handy codex form* of the book; *paper*, cheaper than all varieties of parchment, and less bulky and more pliable than ordinary parchment; *the Latin alphabet*, available in the Roman square capitals, in Gothic, in the Renaissance modification of the Carolingian minuscules, and in italics.

Books were, indeed, made, but at great expense; expert technicians and much time were needed. One of the results of the Renaissance was an insistent demand, which scribes and professional calligraphists could not meet, for more books at a

reasonable price. Printing was the solution. Compared with the output of the scribes, that of printing was mass production. The essence of the new invention was that the letters of the alphabet and the current abbreviations and ligatures were each cast into a separate and individual *movable* type. The tendency has been to lessen the number of the abbreviations (a survival is *X* for *Christ*-, as in *Xmas*) and of the ligatures (a survival is *Et* for *et*) that early printing carried on as a legacy from the manuscripts.

Precursors of Typography; a Rival of Typography: Xylography

In earlier examples of printing (namely that done by wood-blocks for the making of playing cards, figures of saints, stamped textiles) that which was printed formed a unified design; letters that perchance appeared in the pattern were not set separately—the design was as much a unit as the poster is today.

These remarks apply also to xylography. In this variety of printing the whole page, consisting usually of illustration with text, was cut on a block of wood and the page printed as a unit. The artist had to make as many designs as there were pages in the book. Xylography flourished most during the years from 1460 to 1480. Its inherent disadvantages made it impossible for xylography to continue competing with typography, which is the kind of printing that uses movable type, the letters being cast in separate, individual types.

The Date of the Invention of Typography

The oldest datable specimen of typography is an astronomical calendar, which, it is concluded, must have been printed in 1447, because it is for the year 1448.

Among the documents from a lawsuit

of 1439 in which Gutenberg took part is the deposition of one Hans Dünne "that about three years before (i.e., 1436) he had made a profit of about one hundred guilders on material 'pertaining to printing' (*das zu dem Trucken gehöret*) sold to Gutenberg." The incunabulist Haebler uses the documents of this lawsuit to dispose of Coster's claims to priority and to establish Gutenberg as the inventor of printing. His implied interpretation of *Trucken*, in the phrase quoted, appears to be that it is equivalent to the modern *Drucken*.⁷

On the basis of this lawsuit it is reasonable to assume that, in the 1430's, Gutenberg either invented printing or was conducting experiments that led to its invention.

Johann Gutenberg the Father of Printing

It may never be proved who was the first *actual* printer in Europe. Claims have been made for Laurens Janszoon Coster. There may be others with claims of priority over Gutenberg. If so, then, after having spent time, ingenuity, industry, and money in inventing movable type, they have failed to leave for posterity products from their print shops or other testimony sufficiently convincing to substantiate their claims.

Gutenberg, on the other hand, stands pre-eminent among the earliest printers. No other printer seems to have had so significant an influence upon early printing. It is a fact that, from his activities in Mainz, printing spread through Europe. Whoever may have been the first *actual* printer, Johann Gutenberg, besides having strong claims to that title, may with good reason be considered the first

among *effectual* printers, and, therefore, may justly be honored as the father of printing.

What Has Been Achieved by the Printed Book

Next to the alphabet, printing is the most important achievement of mankind.

By means of the alphabet, it is possible to record the *ipsissima verba* which clothe our thoughts. The imposing structure of comparative philology is made possible and depends upon documents in alphabetic script. Preserved for us are the very sounds of the words in the Sacred Scriptures and in the masterpieces of literature—what would poetry be, if the sounds of its words were lacking?

The letters of the Latin alphabet, cast in movable types, are the essential element of printing. Later developments in the mass production of printed material (stereotype, linotype, offset, etc.) and in the conservation of the space taken up by printed material (film)—all these depend upon, as their final irreducible units, the single movable types, the individual letters of the Latin alphabet.

Through the medium of printing can be communicated, practically without limit, recorded thought. Anyone able to read may have access to whatever he may desire of what has been set down of human experience, endeavor and aspiration—all this because of less than thirty letters cast in movable type.

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⁷ Haebler, Konrad, *Handbuch der Inkunabelkunde*. Leipzig, 1925, pp. 30-31.

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The Subject Specialist

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make it increasingly useful to those patrons of the library who are engaged in serious research. These considerations, however, will not prevent the assignment, from time to time, of some lesser field of research to a person whose main work may be general and miscellaneous in character.

With a view, then, to smoothing the path for those investigators who use our

libraries, decreasing administrative costs, giving sympathetic service, and expanding the opportunity for satisfying and constructive work to the more ambitious and capable members of the staff, the principle of division of work by subject as against division by process should receive the careful attention of the administrators of our large university and reference libraries.