3. Aspects of Palaeography

I. WHAT IS PALAEOGRAPHY?

_Palaeography means, in the strict sense, the study of ancient handwriting, and its basic objects are these: first, to read ancient texts with accuracy; secondly, to date and localize their handwriting. As such it is a major component of two other more complex disciplines: of diplomatic, which studies all aspects of documents and records; and of palaeography in the wider sense, which studies all aspects of books produced by hand (manuscripts). It is to the palaeography of Western Europe in the wider sense that this paper is intended as an introduction; but the handwriting of documents—a subject which the handbooks of diplomatic generally leave to palaeography—will be included in the account of Latin and vernacular handwriting on pp. 60-72._

Books are complex things. Their purpose is the communication of thought, mainly through texts to be read but also through illustrations designed to expound or expand the message of the texts. Every text and every cycle of illustration has a meaning and a history of its own, the elucidation of which is work for historians of language, literature and art, who use many different kinds of evidence, both internal to the texts and illustrations themselves and external. As a student of books, the palaeographer must naturally understand these larger branches of history, and that for two reasons: first because they provide him with invaluable help in his own special tasks of reading, dating and localizing books; and secondly because his own conclusions about the dates and origins of particular books are often vital parts of the evidence used by historians of literature and art. They, in return, are under a similar obligation to understand the methods and potentialities of palaeography. The ultimate justification of palaeographical research lies in its power to contribute to the history of thought, and especially of the long historical process by which all classical and medieval literature and much of medieval art have been transmitted to the present.

The exact place of palaeography in the history of thought will be easier to define when we have considered what aspects of the
manuscript book are the concern of palaeography and of no other discipline. Text and illustration apart, a book is still a complex physical object, with a long and often eventful history of its own; and there is much to be said for defining palaeography as the study of manuscript books as objects in themselves, and of their individual histories. The questions that palaeographers try to answer about a book are these. How, when, where, by whom, and for whom was it first made? How has it been altered since? Who have owned it and used it? Handwriting, with which — as the name implies — palaeography began, is only the most obvious and important of a whole group of operations involved in the manufacture of a book; and the division of labour, especially in the later Middle Ages, often meant that several different craftsmen worked on the production of the same book. The organization of the book trade is, therefore, part of our subject; and so, when we turn to the fates of books after their manufacture, is the history of libraries, public and private.

The physical aspects of a manuscript book that have to be considered are these, in the order in which they come in the process of manufacture: (1) the writing material (papyrus, membrane, or paper); (2) its arrangement to form either a roll or a book; each sheet of material is fastened to the one before, or else a codex, in which groups of sheets are folded to form quires; (3) the ruling of the sheets in preparation for the writing (with subsequent numbering, etc., of the quires); (4) the writing of the main text, often by more than one scribe; (5) its correction and annotation, not necessarily by any of the scribes who wrote it; (6) the writing of titles etc. at the beginning and/or end of chapters, books and texts: which is convenient to call rubrication; (7) the decoration, which may include several distinct operations, from the provision of simple coloured initials, through the painting of more elaborate illuminated and/or historiated initials and borders, to the drawing or painting of illustrations, generally called miniatures; (8) the binding of the book, which includes the method by which the quires of a codex are sewn together as well as the materials and decoration of the covers (most manuscripts have been rebound at least once since they were first written).

Knowledge of handwriting — palaeography in the strict sense — is relevant mainly to the central operations of writing the text, its correction and annotation, and its rubrication; and of course to the evaluation of notes of ownership and other additions made after the book was first completed. It is a complicated subject in itself, and includes the very important matter of the history of abbreviations, as well as subsidiary matters like punctuation and orthography. Knowledge of the other five aspects of book production listed above, and especially knowledge of the decoration, can supplement, often in a very revealing way, what can be learned about a book from its handwriting; and during the last twenty years the word 'codicology' has been widely used in Europe as a name for the study of the aspects of manuscript books other than handwriting. It corresponds to the German term Handschriftenkunde, which was introduced early in the nineteenth century. In the English-speaking countries, however, palaeography is generally understood in the wider sense, as including the subjects dealt with by codicology or Handschriftenkunde. We may now consider in more detail, in the light of this account of the immediate aims of palaeography, what it can contribute to the study of texts and of illustration in manuscripts. The basic element in the study of texts is textual criticism, which seeks to recover, by comparing the more or less faulty versions that survive in manuscripts, and thereafter by emendation, what ancient authors actually wrote. The textual critic uses palaeography for two main purposes: first, to read his manuscripts correctly; and secondly, during the process of recension and reconstruction, to date and localize them as a means of discovering which of them are likely to have been copied from others that survive. The textual critic whose sole aim is the recovery of his author's text tries to be economical in the number of manuscripts he collates, and the ability to date and localize manuscripts with a view to eliminating the copies of existing manuscripts can, with some but not all classes of texts, lighten his labour very considerably. The textual critic who goes further and arranges in textual families all the surviving manuscripts of his text, whether or not they help him to reconstruct its original form, and then — with the help of palaeography — determines their date and origin and the hands through which they have subsequently passed, contributes thereby to the history of the text — what Ludwig Traube called Überlieferungsgeschichte. Here textual criticism and palaeography join forces to collaborate with literary history in discovering the paths by which ancient texts have been transmitted to our own day. Without the contribution of palaeography, our knowledge of the history of scholarship and thought would be much poorer than it is, since we should have to rely for
our information about literary traditions mainly on quotations or
paraphrases of, and references to, one author by another. Thanks
to palaeography and the study of library catalogues, we can learn
when, where and by whom texts were, or could have been, read,
even if the readers were not themselves authors. Occasionally,
palaeography can even reach back beyond the oldest surviving
manuscript of a text, by explaining their errors in terms of scribal
misunderstanding of letter forms or abbreviations in lost exemplars
written in different scripts from those of the surviving manuscripts: a ninth-century scribe writing Caroline minuscule
might divide words in the wrong way, if his exemplar was ancient
and written in *scriptura continua*; mistake E for F, or I for T, if its
script was rustic capitals; or misunderstand certain abbreviations,
if its script was Insular or Spanish.

Books are by no means the only medium in which late antique
and especially medieval art has been transmitted to us — carvings
in stone and in ivory, and metalwork are common enough for most
periods; but paintings on walls are rare before the twelfth century,
and paintings on panels before the fourteenth. Without the miniatures
preserved, and generally well preserved, in books our knowl-
edge of medieval art in Europe would be far poorer than it is; and
for some areas, including England, it would hardly exist. The best
illuminated manuscripts contain the finest and most advanced
texamples of painting in any period; and since books were portable,
they share with ivory carving and metalwork an important role in
the diffusion of new styles. The contents of a library have often
survived when the church or palace in which it was housed has
been destroyed or defaced, along with the rest of its furniture.

Like all archaeological disciplines, palaeography works outwards
from the known to the unknown; and many different aspects of a
book can be used as evidence for its date and place of origin. The
regular development of all the various crafts, including handwrit-
ing, that were involved in the manufacture of books enables us to
arrange our material in the right order; notes by scribes or
illuminators sometimes allow us to assign exact dates and localities
to particular books in a series; some kinds of texts, such as the
kalendars and litanies in liturgical manuscripts, contain variable
elements which reveal when, where and for whose use a book was
made; the subsequent history (provenance) of a book may suggest
the place from which it originally came; textual history can often
contribute; since styles of decoration and illustration in books
changed more rapidly, from time to time and from place to place,
than styles of handwriting, and since they always kept more or less
in step with changes in other branches of art, archaeology and the
history of art are invaluable guides. The palaeographer's work is
indeed complicated, but its very complexity enables him to receive
much help from, and give much help to, specialists in other fields.
It is often laborious, but need never be lonely.

II · PALAEOGRAPHY: AN OVERVIEW

[a] Books in Manuscript

THE DEVELOPMENT of handwriting, the subject matter of palaeo-
graphy in the strict sense, is only the most conspicuous of the
many aspects of manuscripts that can be used as evidence for their
dates and origins. Archaeological study, now generally known as
codicology, of all the materials, techniques and personnel involved
in the production of a manuscript, from quire-formation to deco-
roration, illustration and binding, is no less valuable, not only for
dating and localization but as a source of insight into the charac-
ter of particular manuscripts, every one of which is the product of a
unique set of circumstances.

In the fifth to sixth centuries book production in the West was
equally notable for high standards and high output; and by c. 600
the skills with which the lay workshops of c. 400 had copied pagan
texts for senatorial patrons had been passed on to ecclesiastical
scriptoria attached to monasteries or basilicas. Most books were in
formal script, usually uncial, but scholars copied texts for them-
selves in literary cursive. All documents were still on papyrus, but
most books were on parchment.

The codex, which had been the original form of all Christian
books and had replaced the roll by c. 400, typically consisted of
parchment sheets folded to form quires of eight leaves in which
facing pages matched each other in appearance, and lines were
ruled with a hard point. Text was normally in one or two columns;
format was often squarish; quires were numbered on the last page.
Scribes might introduce paragraphs or pages with an enlarged
letter, write opening lines in red ink, and decorate titles with
simple penwork flourishes. Drawn and painted initials originated in sixth-century Italy; and Greek and Latin illustrated manuscripts of pagan authors (Homer, Virgil, Terence) and of the Bible (Genesis, Kings, the Gospels) were produced.

In seventh- and eighth-century scriptoria on the Continent standards were often lowered and the old model of a quire was not consistently followed. Books also became more colourful, if less elegant, due to the development of the painted initial and of titles in painted capitals. In seventh-century Insular books, parchment of distinctive preparation was arranged in ten-leaf quires of primitive execution. Irish scribes never completely abandoned simple forms of layout and titling, but their innovative initials, decorated with motifs of Celtic origin and followed by several letters of diminishing size, were to influence all Europe until the thirteenth century. By c. 700 Northumbrian scribes had developed these initials and display letters to fill whole pages and added Germanic animal ornament to abstract Celtic designs; and in the major Anglo-Saxon scriptoria (Canterbury, Wearmouth-Jarrow, Lindisfarne), where early Italian models were available, layout, script and titling were also further developed, and successful copies of late antique illustration were painted.

During the Carolingian renaissance (c. 775 to c. 850) books in Caroline minuscule achieved an impressive synthesis between layout, titling and naturalistic illustration based on late antique models, and major initials of Insular (Anglo-Saxon) inspiration. The magnificence of the liturgical manuscripts made for Charlemagne (c. 800) and Charles the Bald (d. 874) was never surpassed. A revised version of the late antique quire was introduced at Tours c. 830 and was practically universal until c. 1150, although catchwords replaced quire numbers (c. 1000 onwards) and lead point replaced hard point ruling (c. 1075 onwards). Books in Protogothic minuscule (late eleventh to late twelfth century) — the last flowering of the monastic scriptoria — were usually taller than before and were conspicuous for their excellent polychrome initials and display script. Historiated major initials often replaced miniatures as the vehicle for illustration.

After c. 1200 books were produced almost entirely in workshops associated either with universities (Paris, Bologna, Oxford) or with centres of royal or mercantile patronage (Paris again, London, Bruges, Cologne, Milan). Materials, textual exemplars and writing were the province of stationers, decoration and illustration of illuminators; and work was now subdivided between specialists in writing, gilding, painting and binding. Since every stage was carefully priced, quality and elaboration varied widely between illuminated books for royal patrons, who sometimes paid retainers to the best artists, and textbooks for university students, or popular texts in the vernacular copied locally by a chaplain or notary. After c. 1175 leaves were ruled on both sides in lead point and later in ink, and the sheets in a quire began to be numbered c. 1275. Paper, a Chinese invention, reached the Arabs during the eighth century, was used by the Greeks as early as the ninth century and began to be manufactured in Italy c. 1230. In the West, it was originally used only for letters, notarial registers and account books; but cheaper books on paper, especially in the vernaculars, were common enough all through the fifteenth century.

In Italy, specifically humanistic book production began c. 1350 with scholars like Petrarch copying texts for their own use, and many fifteenth-century humanists followed that example; but after c. 1440 the writing and illumination of the luxurious volumes required by rulers and churchmen for their libraries of classical and humanistic texts were organized either by stationers, like Vespasiano da Bisticci in Florence, or by librarians, as in Rome and Naples. Poggio Bracciolini (c. 1400) copied from twelfth-century Italian models not only litera antiqua but hard point ruling and white vine decoration, all of which spread from Florence to most other centres in Italy. Most humanistic illumination, and especially the originally Paduan style which dominated in Rome, differed considerably from the late Gothic decoration of contemporary liturgical books. After c. 1480, when the classical market had been swamped by printed editions, the remaining humanistic scribes had to rely on rare special commissions or else on posts as writing masters.

[b] Handwriting

Most surviving examples of late antique and medieval handwriting were written by expert scribes trained to write either books or documents and sometimes both. In the set scripts used in books each separate letter was formed from several distinct strokes of
the pen, while letters in the cursive documentary scripts were formed by fewer strokes and could be joined to each other in various ways. The former were designed primarily for legibility, the latter for speed as well as legibility. Different grades of both literary and documentary handwriting were used in all periods: a Psalter would be more formally written than scholia in the margins of a classical text; a Papal bull or royal letters patent more decoratively than a notarial register or a private letter.

Examples of writing by inexpert writers, some of whom were authors, are rare before the fifteenth century, when the ability to write was beginning to be taken for granted. Besides one or more grades and even styles of writing, a scribe's training included systems of punctuation and abbreviation, both of which, like scripts themselves, varied considerably between periods and areas.

The overall development of handwriting in Western Europe was largely determined by four factors. Set scripts could evolve into cursive scripts through changes in the dactyl of letters, i.e. in the number, order and direction of their constituent strokes; hence the gradual evolution in the Roman period of set, majuscule AEBDGP into cursive, minuscule aebdgp. In reverse, the rapid dactyl of a cursive, documentary script could be elaborated to create a new set script suitable for books. Once a new script had achieved a canonical style, further gradual and unnecessary development almost always compromised its quality, and sometimes even its legibility. Finally, a superannuated script could be deliberately replaced by a more or less revised version of some more suitable and attractive earlier script. One or more of these four factors were at work in each of the six main phases of the development of handwriting in Western Europe after c. 400.

In the Late Antiquity phase (fifth to sixth century) major classical texts such as Virgil could still be written in rustic capitals, the original Roman book script; but most pagan and Christian texts were in uncial, a simpler but still formal script derived from early Roman cursive. Half-uncial, a new script based on contemporary cursive, rivalled uncial in the sixth century; and scholarly marginalia in professionally written books are in an unpretentious literary cursive. The later Roman cursive of official and notarial documents, a somewhat decorative script, had reached maturity by c. 350. Standards were high and the script system was diverse enough to meet all the needs of a highly literate society. The half-uncial and cursive alphabets are easily recognizable as the ancestors of all subsequent European scripts. In the East, texts of Roman law were written in regional versions of uncial and half-uncial.

During the pre-Caroline phase (seventh to eighth century), uncial was still widely used for biblical and liturgical texts, and the elaborate Roman variety of it was skillfully imitated in several Anglo-Saxon centres; but other texts were mostly in various pre-Caroline minuscules, based on regional types of documentary script descended from later Roman cursive. These included Beneventan minuscule in South Italy and Visigothic minuscule in Spain, which survived into the thirteenth century and twelfth century respectively. In France local types evolved in monastic or cathedral scrittoria such as Luxeuil, Corbie and Laon. The Insular scripts, which the Irish taught to the Anglo-Saxons (seventh century), and which spread to certain Continental scrittoria, especially those of the Anglo-Saxon mission in Germany, seem to have descended from handwriting in sub-Roman Britain (fifth century). The system, which included several grades of minuscule and a half-uncial, owed nothing to contemporary Continental script; but the Anglo-Saxons elaborated it under the influence of late antique book script, which they knew from older books imported from Italy. For vernacular texts, Irish minuscule lasted into the nineteenth century, and Anglo-Saxon minuscule into the twelfth century.

The crucial Caroline phase (late eighth century to twelfth century) began with new, experimental book scripts in several scrittoria influenced by Charlemagne's cultural renovatio: some were straightforward simplifications of pre-Caroline minuscule, while others depended heavily on Roman half-uncial. Canonical Carolingian minuscule, which emerged c. 800 in Charlemagne's palace scrittorium and at St Martin's, Tours, owed something to both tendencies. The new script became almost universal on the Continent by c. 850 and dominated South Germany and Central Italy until the late twelfth century.

The Provençal phase (late eleventh century to late twelfth century) originated in England and in parts of Northern France influenced by the version of Caroline minuscule, incorporating features of contemporary Anglo-Saxon minuscule, that had been adopted in English scrittoria c. 950 for texts in Latin. Provençal minuscule soon replaced Caroline as the book script of the Low Countries, North Germany, Scandinavia and Spain. Between
c. 875 and c. 1125 pre-Caroline documentary script had been replaced in most areas by Caroline or Protogothic documentary scripts which, however, often retained the decorative quality of their predecessors.

During the Gothic phase (late eleventh century to early sixteenth century) several types of heavier, more compressed minuscule (textura) were used for all literary purposes, from liturgical to university and vernacular texts, until the fourteenth century, after which the higher grades survived only for biblical and liturgical texts, while the lower were replaced by grades of Gothic cursive bookhand. Some English royal writs were already in semi-cursive script by c. 1150; and by c. 1230 fully developed Gothic cursiva anglica was the norm for all public and private documents and records in England. Similar documentary cursive was in use all over Europe by c. 1250; and most of its earlier, regional types were abandoned, c. 1375-1425, in favour of an elegant type which had been perfected in the French royal chancery by c. 1350. The English sixteenth-century secretary and court hands descended from this and from anglica respectively.

In Italy, with Protogothic script confined to zones of French influence in the extreme north and south, Caroline minuscule gave way c. 1200 to Gothic book hands, including the litera rotunda typical of liturgical books and the litera bononensis of legal text books, both introduced by university scribes at Bologna. Also of Bolognese origin was the Gothic notarial cursive, while the Gothic mercantile cursive was of Tuscan origin. Petrarch (d. 1374) wrote a group of semi-Gothic scripts which set a fashion and included grades of cursive widely used by notaries and some humanists in the fifteenth century. The litera hybrida written after c. 1425 in the Low Countries and North Germany was based on the semi-Gothic script of Papal briefs.

The final, humanistic phase began in Florence (c. 1400) when Poggio Bracciolini launched litera antiqua, a revised version of the Caroline minuscule of twelfth-century Tuscany. Niccolò Niccoli crossed it with his own mercantile cursive (c. 1420) to produce the quicker, more economical humanistic cursive which is the direct ancestor of all modern European handwriting. Both scripts were designed for the transmission of classical texts, but by c. 1460 the cursive had been adopted for Papal briefs and for diplomatic correspondence. Roman and Italic type were based on antiqua (c. 1460) and the cursive (c. 1500) respectively. In Italy c. 1500 liturgical books and business correspondence were still in Gothic scripts and notarial documents largely in semi-Gothic, but the triumph of the humanistic scripts and type face was assured. Elsewhere in Europe Gothic script survived into the seventeenth to eighteenth century and in Germany until 1945.

[c] Manuscript Studies

A MANUSCRIPT BOOK was written to be read and might be illustrated both to reinforce the message of the text and to make it more attractive to the eye. For textual criticism, and indeed for the whole history of literary culture in antiquity and the middle ages, manuscripts are evidently the fundamental source of our knowledge; and thanks to their numbers and their excellent state of preservation, they are of comparable importance for the history of medieval art. Other aspects of manuscripts are the concern of a pair of more specialized disciplines known as palaeography and codicology. The former deals with the reading, dating and localization of handwriting, in documents as well as in books; the latter with the materials, techniques and personnel involved in the remaining aspects of book production. Closely associated with palaeography are the study of inscriptions (epigraphy) and the study of the form, contents and production of documents and records (diplomatic). Where decoration and illustration are concerned, codicology may be indistinguishable in practice from the history of art. Indeed, palaeography, codicology, philology and the history of art are partners in a close symbiotic relationship.

The late antique set of names for scripts included literae virgilianae, doubtless for rustic capitals, and literae africanae, perhaps for half-uncial. In the early middle ages scripts not in current use might be named: libri scoticie scripti for books in Irish script at St Gallen (ninth-century); literae saxoniae for Anglo-Saxon script in post-Conquest England; and Romana scriptura for an early manuscript in uncial at Canterbury (twelfth-century). Medieval scribes who replaced lost documents, sometimes in improved versions, generally imitated an earlier script, but never without some anachronism. From c. 1350 onwards better descriptions of books in library catalogues and a few advertisement sheets of writing mas-
ters testify to the existence of an elaborate set of names for both literary and documentary scripts which is, however, too inconsistent to be of much use to modern palaeographers. Italian humanists recognized late antique books as codices vetustissimi and Beneventan minuscule as literae langobardicae; and their name for the new humanistic book script, litera antiqua, meant that it was of twelfth-century Caroline inspiration, not just another variety of contemporary Gothic writing.

Some sixteenth-century writing manuals include examples of earlier, disused scripts, but systematic historical study began with De re diplomatica libri sex, 1681, the volume in which the French Benedictine historian Jean Mabillon successfully defended against Jesuit scepticism the authenticity of the diplomata by which Merovingian kings had conveyed estates to his order in the seventh century and eighth century. As part of his systematic study of all aspects of medieval documents, Mabillon devoted his fifth book to a connected history of the scripts of Latin books and documents. In Palaeographia Graeca, 1708, Bernard de Montfaucon did for Greek handwriting what his brother in religion Mabillon had done for Latin. Mabillon's fundamental misconception of the relationship between the formal Roman scripts and the pre-Caroline minuscules was corrected by Scipione Maffei, after his rediscovery of the ancient library of Verona Cathedral in 1713; and the monumental Nouveau traité de diplomatie, 1750-65, of two more French Benedictines, Tassin and Toussaint, remained the authority on Latin palaeography for nearly a century. Thomas Astle published the first English handbook (1784), notable for its attention to Insular script; and Charles O’Conor’s pioneering work on early Irish script appeared in 1814. These early treatises were all illustrated by hand-engraved facsimiles of respectable quality.

On the Continent c. 1775 to c. 1825, widespread suppression of decayed religious houses and the political and military consequences of the French Revolution led to the wholesale transfer of medieval books and documents, directly or via private collections, to public libraries and archives, in which they were readily accessible to the philologists and historians whose research was to inaugurate the nineteenth-century flowering of classical and medieval studies. Their improved knowledge of Latin and Greek palaeography began to be available after c. 1870, thanks to photography, in facsimiles of complete manuscripts and in sets of whole-page reproductions from dated or localized manuscripts and documents, on which a new wave of well-illustrated handbooks was based in the generation before 1914. Ludwig Traube (1861–1907), professor of medieval Latin philology at Munich, inaugurated a new era by his insistence on the value of soundly dated and localized manuscripts as evidence for movements in the history of thought. His own exhaustive lists of early Latin books have been the ultimate foundation of much later work, including E. A. Lowe’s Codices Latini Antiquiores (1934–71), on Latin manuscripts to c. 800, and Bernhard Bischoff’s catalogue of ninth-century Continental manuscripts in progress. Since c. 1890, discoveries of papyrus in Egypt have carried Greek palaeography back to the fourth century B.C. and Latin palaeography back to c. 31 B.C. from their previous starting point in the fourth century A.D. Research on illuminated manuscripts, which also began c. 1890, has developed since c. 1930 into an indispensable branch of late antique and medieval art history and archaeology. After 1945, particularly distinguished contributions to knowledge of the early Roman period were made by Jean Mallon and E. G. Turner; and systematic study of humanistic script was initiated by B. L. Ullman and James Wardrop.

The international catalogue of datable manuscripts inaugurated in 1953 by the Institut de Recherche et d’Histoire des Textes in Paris already comprises twenty-four volumes from eight countries; and essays in the associated Nomenclature des écritures liturgiques (1954) have greatly enhanced understanding of late medieval scripts. Concern with aspects of early manuscripts other than text, script and illustration, and notably with the formation of the quire in different periods and areas, began to be shown in the 1920s by Lowe and E. K. Rand; and since 1945 this codicological approach to ‘the archaeology of the manuscript book’, thanks originally to the advocacy of François Malat and L. M. J. Delaissé as editors of Scriptorium (Brussels, 1947 and ongoing) has been profoundly influential on Greek and Latin palaeography in general. The study of later medieval illuminated manuscripts in particular has been inspired by Delaissé’s use of codicology as evidence for the attribution of fifteenth-century Flemish illuminated books to writing houses run by scholarly scribe-publishers, as well as to painters’ workshops. Recent work on late medieval books includes quantitative studies of production and format.
III. PALAEOGRAPHY: LATIN AND WESTERN EUROPEAN VERNACULAR

[a] The Roman Hands

1. Rustic Capitals: The Latin and vernacular handwriting of Western Europe descends in an unbroken line to the present day from the point at which we first catch a clear sight of it, in the first century A.D. The script used throughout the Roman Empire at that time for books, and occasionally for formal documents, is known as 'rustic capitals'. The pen was cut with a broad end and held so that its thickest strokes fell at an oblique angle to the line of writing and it was lifted several times in the formation of a single letter. The rustic capital alphabet is 'majuscule', in that all the letters are contained between a single pair of horizontal lines. The use of this elaborate script, whose letter forms were the natural outcome of using a broad pen held obliquely, was extended to certain sorts of inscription on stone, etc., and it is called rustic only by comparison with the magnificent square capitals characteristic of Roman imperial inscriptions, whose forms were governed by the use of the chisel. Square capitals were seldom used in manuscripts except for titles. Rustic capitals continued in use for literary manuscripts until the sixth century, especially for texts of Virgil, but thereafter appear only in titles, down to the twelfth century.

2. Cursive Capitals: The business hand of the first century, used for correspondence and for most documents, private and official alike, is known as 'cursive capitals'. Here the pen, cut to a sharp point, was held at the same oblique angle but was lifted less often, and this 'cursive' handling automatically produced new and simpler letter forms such as D (two strokes) for D (three strokes) and E (two strokes) for E (four strokes). Some of these new letter forms are 'minuscule' in that parts of them ascend or descend beyond the body of the letter (b, q) instead of being confined between a pair of lines, as in the majuscule rustic capitals (H, Q).

From the second to the early fourth century, parchment was replacing papyrus as the standard writing material for books and the codex was replacing the roll as their standard form. The evidence that survives from this period, during which biblical and other Christian literature was beginning to be copied extensively, is fragmentary and its interpretation still controversial. The main line of development, however, is clear enough. The elaborate letter forms of rustic capitals, with their numerous pen lifts, began to be abandoned, and experiments were made with new book hands in which the simplified letter forms of cursive capitals were written with a broad pen, sometimes held obliquely in the traditional way and sometimes held 'straight,' so that its thickest strokes fell at right angles to the line of writing. It was probably the use of a straight pen that produced, for example, the conversion of cursive capital D (axis oblique) into the fully minuscule d (axis vertical).

3. Uncials, Half-Uncials, and Cursive Minuscule: At the end of this period of transition, in the fourth and fifth centuries, when the evidence becomes more abundant, two new book hands and a new business hand are found in use. The older of the book hands, called 'uncials' (the name dates only from the eighteenth century), was originally written with a slightly oblique pen; but from the sixth century onward a straight pen was used and the hand began to look rounder and more contrived. Although it incorporates several of the cursive letter forms (D, E, h) of cursive capitals and has two forms peculiar to itself (A, V), it also preserves certain forms, such as B, N, R, S, which differ only a little from the forms of rustic capitals; and all three kinds of letter are treated as majuscules, being confined as far as possible between one pair of lines.

From the fourth to the early seventh century most Christian books — biblical, patristic, and liturgical — were written in the uncial script, and even for pagan literature it almost entirely superseded rustic capitals. It survived the collapse of the Roman book trade, and after the sixth century, when the production of all books, pagan as well as Christian, was taken over by the Church — notably by the monasteries, such as Cassiodorus' foundation in southern Italy, the Vivarium, and the houses which observed the Rule of St Benedict; it survived in many centres, especially for biblical and liturgical texts, down to the tenth century. Thereafter, like rustic capitals, uncialis were used only for titles, and they too disappeared in the twelfth century.

The younger of the two new book hands is called 'half-uncial'. This script was less popular than uncialis and never broke their
monopoly of biblical and liturgical texts, although like them it was still being written in the eighth century and even, as a display script for certain purposes, in the ninth. The artificial name half-uncial tells nothing about the origin or nature of the script. It differs from early uncial in being written with a perfectly straight pen. One letter (N) remains more or less unchanged from the capital form, but the rest of the alphabet is cursive in origin. The letter forms which differ most from uncial are a, b, d, g, m, r, s, and the alphabet as a whole is frankly minuscule, since no attempt is made to confine it between a single pair of lines.

The new business hand of the fourth century and after is known as 'cursive miniscule'. Like cursive capitals it was written with a pointed pen, but the pen was held more or less straight. It, too, is a frankly minuscule alphabet and uses basically the same letter forms as half-uncials, although the frequency in cursive minuscule of ligatures between letters tends to conceal the fundamental likeness between the two hands.

The letter forms which distinguish cursive minuscule and half-uncials from rustic and cursive capitals and from uncial were evolved during the obscure period between the first and fourth centuries. The question of whether these forms were evolved in the sphere of the book hands or of the business hands is still undecided, but whatever their origin, their importance for the subsequent history of European handwriting is paramount. They provided the material on which the Caroline (Carolingian) minuscule, first developed in the late eighth century, was based; and that script dominated Europe, in spite of severe modifications, until the end of the Middle Ages. Only in one other period were new letter forms evolved, between the thirteenth and the fifteenth centuries, in the group of scripts known as 'Gothic cursive'; and the influence of these late innovations was ultimately cancelled out, thanks to the revival of Caroline minuscule in a pure form by the Italian humanists at the beginning of the fifteenth century.

[b] The 'National' Hands

DURING THE SIXTH TO EIGHTH CENTURIES, when Western Europe had exchanged the unity of the Roman Empire for the diversity of smaller kingdoms under more or less barbarian rulers, the standard of handwriting in general declined and the new political divisions began to be reflected in the sphere of script. This was the period of the 'national' hands. On the Continent, cursive minuscule survived as the business hand of the successor states and was occasionally used for books. The uncial and even the half-uncial book hands were preserved, especially for Bibles and service books, in a number of centres, not only in Italy. Uncials, indeed, increased their range, since they were taken to England both by St Augustine's mission to Canterbury (597) and again by Benedict Biscop, the founder of the romanizing monasteries at Wearmouth (674) and Jarrow (681) in Northumbria. In Kent uncial probably played an important part throughout the eighth century, but in Northumbria they never seriously challenged the ascendancy of the two Insular hands brought to Lindisfarne from Iona by Irish missionaries in 635.

1. The Insular Hands: By the early eighth century these Insular hands, majuscule and minuscule, were dominant not only in their native Ireland, where no others were in use, but in all the Anglo-Saxon kingdoms. The handsome and formal Insular majuscule, written with a broad pen held straight, was a half-uncial script which allowed uncial Ϝ, Ξ, Π, Ḟ and S to be used as alternative forms. The Irish had presumably received it from Gaul at the time of their conversion to Christianity. Insular minuscule, compressed and relatively informal, was produced by writing the majuscule somewhat cursively, with a narrower pen, held obliquely. It served as the only business hand of England until the middle of the tenth century. Anglo-Saxon writing, both majuscule and minuscule, can generally be distinguished from Irish by its greater precision and by the more orderly arrangement of the text on the page. Both the Insular hands are remarkable for the wedge-shaped serifs at the tops of ascenders and minims.

Irish missionaries in the late sixth and seventh centuries took Insular script to their Continental foundations, among them St Gallen in Switzerland and Bobbio in northern Italy. English missionaries in the eighth century took it to Germany, for example to Fulda, where first-class Insular minuscule was written as late as the middle of the ninth century. A few Irish scribes were at work in Germany in the eleventh century, and in their homeland Insular minuscule continued to be used for texts in Irish until long after the end of the Middle Ages. In England it began to give way to
Caroline minuscule, for books as well as for documents, about the middle of the tenth century, but was used until the twelfth century for texts in English and bequeathed three of its letter forms, g and the borrowed runic letters for th (Þ) and w (Ƿ), to English texts of the thirteenth to fifteenth centuries (in ye for the, y is a debased form of the th-rune, called thorn). Insular majuscule had virtually disappeared everywhere by the middle of the ninth century.

2. OTHER 'NATIONAL' HANDS. Nearly everywhere on the Continent the longer texts, which in Britain and in some Continental Irish or English foundations were written in Insular minuscule, were written in hands that, unlike the Insular hands, were based on the Roman cursive minuscule as it had survived to serve the legal and administrative needs of the barbarian kingdoms. From the late seventh century onward Spain had the Visigothic hand, which was finally dislodged by late Caroline minuscule imported from France, but not till the twelfth century.

From the middle of the eighth century, Italy south of Rome had the Beneventan hand, still used there in the thirteenth century and extended to Dalmatia. The intellectual capital of this area was St Benedict's great foundation at Monte Cassino; Cassinese manuscripts in the Beneventan hand are important for the transmission of a number of classical and early Christian texts.

The eighth-century minuscules of northern Italy were subject to foreign influence, both from France and, via Bobbio near Pavia, from Ireland. On French soil the earliest type of minuscule book hand that had any claim to be called decorative appeared toward the end of the seventh century, at the Irish foundation of Luxeuil, in the Vosges Mountains. This hand owed nothing to Ireland and was simply a formalized version of the sort of cursive minuscule that was then being practised in the Merovingian chancery. In the eighth century several other, more northerly centres, including Laon and Corbie, possessed hands of the same type which arose in the same way as the Luxeuil hand.

[c] The Caroline Hands

DECORATIVE though they were, these French minuscules were a poor vehicle for the diffusion of literature; they must have been slow to write and even to read outside the monasteries or areas in which they were at home. In the second half of the eighth century a number of religious foundations in northern France, Switzerland (notably at St Gallen), and Germany began to experiment, in books and documents alike, with simpler minuscules in which letter forms were less stylized and fewer ligatures were used. The numerous modified minuscules of this period are generally known as 'pre-Caroline'.

The monks of Corbie, at this time, were writing both a minuscule comparable to Luxeuil minuscule and excellent half-uncials, and to these hands they added a new type of minuscule, free of ligatures and thoroughly suitable for use as a book hand, which is known as Maurdrummus minuscule, after an Abbot of Corbie for whom a Bible was written in that script before 781. Since it was written with a straight pen, the stylistic debt of Maurdrummus minuscule to half-uncials is more obvious than in other examples of Caroline minuscule, which elsewhere was written with an obliquely held pen and was closer in style to the pre-Caroline minuscules.

Caroline minuscule differs from half-uncials, in point of letter forms, chiefly in its use of a small uncial a and of a cursive looped g instead of the flat-topped Þ form, and of cursive n (cursive open a and capital N occur in some early examples as alternative forms). Manuscripts in pure Caroline minuscule were written before the end of the eighth century for Charlemagne, after whom the script is named, and his family, but it was not until the second quarter of the ninth century, at Tours, that the script assumed its most impressive form.

With the exceptions already mentioned of Britain, Spain, and South Italy, Caroline minuscule had ousted the national and pre-Caroline book hands from Europe by the middle of the ninth century. The quick reception of this practical and beautiful script over such a wide area must have greatly eased the energetic revival of classical and Christian literature for which the monasteries of northern France and Germany in the time of Charlemagne and his immediate successors are famous. The oldest surviving manuscripts of Latin classical authors are, as a rule, copies in Caroline minuscule that were made in that area during the ninth century.

From the ninth to the twelfth century Caroline minuscule was the only Western book hand, except on the Insular, Beneventan, and Visigothic fringes. By the end of the ninth century, the
lightness and spontaneity of the early period was everywhere being exchanged for a certain monumental uniformity, and distinct national styles were beginning to evolve. The German style, down to the end of the twelfth century, was the most conservative. In Italy, manuscripts of the eleventh and twelfth centuries are remarkable for the roundness of their script, which was handed on to the Italian Gothic book hand of later centuries. The English style, between its creation in the tenth century and the Norman Conquest, was of great beauty and purity. In the twelfth century the English and north French book hands were very similar, and it was in that area that the Caroline minuscule evolved furthest and, in the end, was first transformed into Gothic book hand. The biblical and patristic manuscripts written in the twelfth century by the clergy of the monasteries and cathedrals of Europe, aided latterly by lay scribes whom they engaged to assist them, are one of the finest groups of books ever made, comparable to the Caroline manuscripts of the ninth century and the Italian humanist manuscripts of the fifteenth.

In the ninth century Caroline minuscule replaced the by then ancient cursive minuscule as the business hand of the Continental chanceries. But it was not adopted by the papal Curia until the early twelfth century, and the notaries of Southern Italy did not abandon the old script till the thirteenth. Many twelfth-century documents concerning religious houses were written in book hands, but the standard business hand of the period was a version of Caroline minuscule written with a thin pen. Its ascenders and descenders were greatly lengthened in imitation of late cursive minuscule, and it could be written informally, sometimes even a little cursively, as in the writs of the English kings, or formally, as in papal bulls.

[d] The Gothic Hands

AT THE END of the twelfth century, when literacy was ceasing to be the virtual monopoly of the Church, Western Europe possessed only a limited repertory of handwritings. In spite of regional differences, the most formal of the book hands and the least formal of the business hands were only the opposite ends of a single scale, that of Caroline minuscule in its last phase. With the thirteenth century a new situation began to develop in response to major changes in the nature of society. On the one hand the masters and students of the newly founded universities needed an ever-increasing number of textbooks, and the rise of a literate middle class in the towns led to a demand for works of devotion and romances in the vernacular. On the other hand, the records and documents of government and commerce became far more complicated and numerous.

Books and documents continued to be written in religious houses, but the great majority of both were from now on written by laymen, either by scribes who could be hired to write books, etc., on the same sort of terms as any other craftsman, or by notaries and official clerks who wrote documents as part of their legal and administrative duties. Most books and documents of the thirteenth to fifteenth centuries were still written on vellum, and paper was not extensively used before the beginning of the fifteenth century. It was manufactured in Spain, by the Arabs, as early as the twelfth century and in Italy from the middle of the thirteenth, but it was not widely produced in northern Europe before the fifteenth century, and did not come into its own as a material for books until the invention of printing.

The so-called Gothic handwritings of the later Middle Ages present a far more varied picture than those of the preceding Caroline period. Service books, including the Books of Hours used for private prayer, were written in a variety of formal book hands which descend directly from the Caroline minuscule of the late twelfth century. The hallmarks of these Gothic book hands are (1) the uniform treatment, following several distinct systems, of vertical strokes which end on the base line; (2) the use of angular forms instead of smooth curves (Φ for o); (3) the overlapping of convex forms which lie back to back (e.g. θ, ϖ), otherwise termed 'biting of bows'. The first of these three features appears in northern Europe before the end of the eleventh century, perhaps under Insular influence; the other two appear in the last quarter of the twelfth.

In the universities of Paris and Oxford, textbooks were written in a less formal Gothic book hand, and the scribes who wrote them used the same hand for romances, etc., in the vernacular. In the thirteenth and fourteenth centuries many university manuscripts were produced under the system of the pecia (piece), devised by
the authorities in order to ensure the rapid and accurate diffusion of the numerous new textbooks, in all subjects from theology to law, which were composed during that period. An officially approved copy, or exemplar, of the new text was deposited by the university with a stationer. The separate peciae of which it consisted, i.e., gatherings of four leaves (eight pages), were then hired out one at a time to a scribe engaged by a student, or to the student himself, to copy. Since the peciae were independent of each other, more than one scribe could—and often did—work from the same exemplar at the same time. The pecia system was already in decline when the invention of printing made it superfluous. Not unlike the Parisian university hand was the minute writing used in the innumerable ‘pocket’ Bibles written in the thirteenth century in response to the revival of interest in the Scriptures that was brought about by the teaching of the new orders of friars.

In all the Gothic book hands the ascenders and descenders are shorter, the letters narrower, the words better separated from each other, and the lines generally closer together than in the twelfth-century Caroline minuscule.

During the first half of the thirteenth century the same reduction in scale had become the rule in the business hands, and at the same time the ascenders began to be decorated with forks or hairline loops or both. The letters were still formed on the Caroline model, but from the early thirteenth century onward the pen began to be handled more cursorily (i.e., with fewer lifts) and a certain number of new letter forms came into being as a result; of these, looped ɔ and looped ɔ were among the earliest. The new Gothic cursive soon began to be used for books, other than service books, and a stylized version of it was evolved in Northern Europe, originally in France, during the second half of the fourteenth century. During the early fifteenth century the northern kind, which is generally known as lettre bastarde, gave rise in France and Flanders to a complex and monumental variety used for books of all sorts but not for documents, which was strongly influenced by the contemporary Gothic book hands.

In the second quarter of the fifteenth century another type of script, to which the name bastard is sometimes given and which originated in the diocese of Cologne and the Low Countries, was evolved for use in non-liturgical books by modifying the contemporary book hand in the direction of the Gothic cursive (note-worthy forms being a, f, g, and long s). This was the last new Gothic hand to appear before the invention of printing and the spread of the humanist hands from Italy brought in a new era in the production of books.

In this brief summary of the Gothic hands little has been said about national differences. But the handwriting of France, England, Germany, the Low Countries, Spain, and Italy can as a rule be easily distinguished from one another. When they cannot, it is generally because French influence is particularly strong. From the thirteenth to the early fifteenth century Paris, with its university, was the intellectual capital of Europe and set the fashion for handwriting as for much else. Italy alone, which possessed in Bologna another major university and centre of the book trade, remained more or less completely aloof from French developments after the thirteenth century. By the middle of the fifteenth century French influence was no longer being felt even in Northern Europe, and England and Germany, for instance, either went their own way or, like France itself, borrowed the new humanist hands from Italy.

[e] The Humanist Hands

1. HUMANISTIC ROUND HAND: By the middle of the fourteenth century Italy possessed a Gothic cursive—ultimately of French origin—suitable for correspondence and informal documents, a formalized version of the same hand suitable for important documents and some books, and a type of Gothic book hand, often called litera (or littera) rotunda, which closely resembled the litera Bonomensis written from the thirteenth century onward by the scribes attached to the University of Bologna in their manuscripts of canon and civil law. Litera rotunda, which preserved much of the roundness of the Italian twelfth-century book hand, was used for service books until the sixteenth century and after, and was even borrowed, for the same purpose, by Flemish scribes at the end of the fifteenth.

By the second half of the fourteenth century, however, learned Italians such as Petrarch, Boccaccio, and the Florentine chancellor Coluccio Salutati were beginning—in their old age—to complain in their letters about the illegibility of litera rotunda. Petrarch
Fig. 33 and Boccaccio both wrote simplified book hands of their own, and a variety of 'pre-humanistic' Gothic hands of the same general kind were in use by the end of the century.

It was their preoccupation with classical Latin texts, most of the early manuscripts of which are written in more or less pure Caroline minuscule of the ninth to early twelfth centuries, that suggested to the humanists the source of a major reform of the book hand by which the unsatisfactory rotunda could be banished once and for all. The inventors of Caroline minuscule in the late eighth century had drawn some of their inspiration from the by then ancient half-uncial. The humanists in turn went back to the Caroline minuscule, and in particular to the twelfth-century variety. Salutati refers to a manuscript of Abelard (d. 1142) as written in antiqua littera.

Salutati himself seems, on more than one occasion, to have tried to imitate Caroline minuscule, but the credit for evolving a new calligraphic book hand on the basis of it almost certainly belongs to another great humanist, Poggio Bracciolini (1380-1459), in due course to be chancellor of Florence in his turn, who as a young man was employed by Salutati as a copyist. Poggio's earliest surviving manuscript in humanistic round hand was probably written in 1402-03; his first dated manuscript is of 1408. By 1420 a number of good scribes were writing books in the new hand at Florence. Within a generation it had spread in a pure form to other Italian cities and also had begun to influence writers of rotunda, producing a mongrel hand, or rather group of hands, known as 'gothico-humanistic.' By the end of the century humanistic round hand of a sort was being written here and there in most countries of Europe and was on the way to superseding the Gothic 'black-letter' as the standard (Roman) type in printed books.

The capital letters of the earlier Florentine scribes were based on the rustic capitals which they found in the titles of their Caroline exemplars. Soon after the mid fifteenth century, square capitals, based on Roman imperial inscriptions, appeared in the manuscripts of Paduan scribes associated with the archaeologically minded painter Andrea Mantegna, and by 1500 they had been adopted throughout Italy by scribes and printers alike.

2. HUMANISTIC CURSIVE. The other new Italian hand of the fifteenth century, 'humanistic cursive,' was no less influential than the round hand. It not only provided the printers with their italic type but ultimately it superseded the Gothic cursives as the medium for correspondence and, until the invention of the typewriter, for documents. The earliest-known examples are the work of Niccolò Niccoli (1364-1437), another Florentine humanist and a close friend of Poggio. The cursive was written with a thinner pen, held more obliquely, than the round hand, although the letter forms, except a, are the same. The most original feature of humanistic cursive is the allowance which it made, even in its earliest stages, for horizontal or slanting linkages between letters, a system which was developed in due course to produce the fully cursive handwriting of today. A few slanting linkages were already being employed in Gothic cursive, but currency between letters had generally been achieved, in the late Roman cursive minuscule as well as in Gothic cursive, by complicated ligatures which distorted the basic forms of the letters concerned.

By the end of the fifteenth century in Italy, both the new humanistic hands had undergone the formalization, involving loss of spontaneity, which sooner or later overtook all forms of handwriting. The round hand of Pierantonio Sallando (c. 1460 to c. 1540), for instance, was written with a straighter pen and shows smoother, more monumental forms than the script of the Florentine scribes working in Poggio's tradition. By 1501 an analogous development in the humanistic cursive had brought it to the point of formalization at which it was possible for the Venetian printer Aldus Manutius to adopt it as the type face now known as italic. These late forms of the humanistic hands were particularly influential with the printers, and once they had adopted them, the scribes quickly abandoned the older, less formal varieties.

The most important variety of humanistic cursive, in its effect on printers and writers alike, was the littera cancellaresca used in the papal chancery for the writing of briefs. It first appeared there, similar in style to the cursive being written in the chanceries of other Italian states, during the papacy of Pius II (1455-64). By the end of the century it had been raised to a high degree of formality and was being written with consummate skill by officials — scrivitori da brevi apostolici such as Lodovico Arrighi (fl. 1510-27) from Vicenza, the author of the first printed manual of handwriting (La Operina, 1522). Since Arrighi's numerous imitators, in Northern Europe and Spain as well as in Italy, followed him in recommending cancellaresca as the standard script for private, but not necessarily for official or commercial purposes,
that hand must be regarded as the ancestor of the hands written
today in Western Europe and, for European languages, in the
countries overseas which have at one time or another belonged to
any of the Western European powers.

[f] Abbreviations in Medieval Manuscripts

THE ABBREVIATIONS found in vernacular texts are few and simple
but in the Latin texts of most of the Middle Ages they play a
conspicuous part, so that some knowledge of them is essential to
anyone who consults medieval manuscripts. The various dictionaries
of abbreviations, especially A. Cappelli's, provide an ade-
quate means of interpreting particular forms, but the system as a
whole varied, like script itself, according to time and place, and
a word or two on the significance of these variations must be said.
To have recognized the existence and implications of the historical
development of abbreviations was the achievement of Ludwig
Traube (1861-1907), whose teaching -- together with the new
weapon of photographic facsimiles -- put fresh life into Latin
palaeography after the relatively stagnant period which followed
the codification of the pioneer work of Jean Mabillon and Scipione
Maffei.

In suspensions the abbreviated word or its syllables are cut
short, as in M for Marcus, Aug for Augustus, tm for tamen; in
contractions the ending of the word is preserved, as in tm for tamen,
nrm for nostrum, nro for nostro. Suspensions were used in Roman
inscriptions from the earliest times for names and titles and for
words or groups of words which occurred often and allowed no
misunderstanding. Suspensions such as these, with -b -q followed
by a point (standing for the common endings -bus -que) and a
horizontal line placed beside or above a vowel (standing for final
-m or -n), are the only abbreviations found in non-literate manu-
scripts down to the sixth century. There do survive however, some
legal manuscripts and some informally written literary manus-
scripts (including sets of marginal notes to literary texts) that date
from the fourth to fifth centuries and use a few contractions as part
of their stock of notae iuris (see below).

From the fourth century onwards a special group of contractions,
known as nomina sacra and derived from Greek manuscripts, are
used in Christian texts for the names of God (DēS, DēM, etc., for
Deus, Deum, etc.; IHS (the H represents the capital form of the
Greek eta) for Jesus; DNS for Dominus). Some later contractions,
such as eps for episcopus, were doubtless formed on the analogy of the
nomina sacra, but a more important source of suspensions and
contractions alike were the notae iuris, not confined to legal terms,
used in the early manuscripts of Roman law. These included
combinations of letters and conventional signs, such as p with a bar
across the descender for per, and shorthand symbols, such as
reversed e for the prefix con-, which came from the 'Tironian'
system of shorthand, invented by Cicero's freedman Tiro and
subsequently much elaborated. Some of these notae iuris were used
by writers of the national hands on the Continent in the seventh
and eighth centuries; many more were known to the Irish at an
early stage and handed on by them to the Anglo-Saxons, so that in
the eighth century they reached all the Insular centres on the
Continent.

In the ninth century the diffusion of Caroline minuscule was
accompanied by the formation and diffusion of a unified system of
abbreviation which drew on all the above-named sources and
which, by the twelfth century, was common to most of Europe.
From the seventh to the tenth century, however, abbreviations
provide an invaluable means of dating and localizing manuscripts.
The use of nm instead of nrm for nostrum suggests a date before the
eighth century; t followed by a sign like an arabic figure 2 for -tur
first appears, on the Continent, about 820; p with a tick on the bow
for per is Insular; nrm for nostrum is Spanish; the sign which
meant pro on the French side of the Pyrenees meant per on the
Spanish side. Again, misunderstandings by a French or German
scribe of abbreviations in the manuscript that he was copying may
show that it was written in, say, the Insular or the Visigothic hand.

In the thirteenth century the Caroline system was vastly ex-
tended by the scribes who copied the works of the scholastic
theologians and philosophers, and many of the new abbreviations
coined by them were current until the end of the Middle Ages.
The Italian humanist scribes, however, tended to use only the
abbreviations they found in their Caroline exemplars, and before
long they were often writing whole manuscripts from which all
but the simplest abbreviations were excluded. Before 1500 the
printers, especially when they used Gothic fonts, cut type for many
of the abbreviation symbols used by contemporary scribes.
[g] The Sixteenth to Twentieth Centuries

1. The Writing Masters: After Arrighi published La Operina in 1522 the development of European handwriting followed, until very recently, the fashions set by writing masters whose primary source of income was the teaching of handwriting and the publication of manuals. Such men had existed in the fifteenth century, as is known from the surviving sheets of specimens they wrote to advertise their teaching, but their influence was not so great. If writing masters have a fault, it is their tendency to introduce new styles and ‘systems’ of handwriting merely in order to go one better than their competitors but this desire for novelty has, on the whole, been balanced by the equally pressing need to serve the practical ends of administration and commerce, for which most of their pupils were destined. It is in the handwriting of the innumerable clerks on whom all sorts of office work depended between the sixteenth century and the invention of the typewriter that changes in the writing masters’ teaching are most clearly reflected; the literati have always followed them less closely and their writing has at times been subject to fashions which have little to do with the world of the professionals.

2. English Hands: Humanistic cursive triumphed in the long run, but in the sixteenth century it was still a minority script, except perhaps in Italy during the later years. In England a small, light, very cursive variety of Gothic minuscule, evolved during the first half of the century and known as ‘secretary hand’, was still the normal handwriting in the reign of James I, although most well-educated men and women, from the mid sixteenth century onward, also wrote an elegant cancellaresca which derived from the models of Arrighi and his Italian contemporaries. During the second quarter of the seventeenth century the secretary hand was rapidly disappearing, and many Englishmen wrote a mixed hand, basically humanistic but with more or fewer secretary letter forms, of which curly E was the most tenacious; it can still be found occasionally toward the middle of the eighteenth century. An upright and enlarged version of secretary — the ‘engrossing hand’ — survived in law offices well beyond the eighteenth century, and until 1731 documents issued by certain courts of law, including the Chancery and the Courts of Common Pleas and King’s Bench, were still written in large Gothic hands, of the utmost complexity, which had begun to be differentiated from everyday Gothic cursive, and from each other, before the end of the fifteenth century.

3. Other European Hands: In Holland a neat Gothic hand resembling English secretary was freely used, along with humanistic cursive, as late as the third quarter of the seventeenth century. Gothic cursive reached its nadir in the hands of French and Spanish lawyers of the sixteenth and seventeenth centuries, although less conservative writers in those countries adopted the humanistic style within a generation of Arrighi’s first publication. When, in the middle of the seventeenth century, Colbert banished Gothic from government offices in France, it was replaced by the three varieties of a compromise hand called ronde, still sometimes taught in France today, all of which included a few Gothic letter forms, notably a peculiar form of final s. The variety called écriture financière was upright and Gothic in style, while écriture italienne-bastarde was sloping and humanistic in style.

In Germany and Austria a variety of Gothic cursive called Kurrentschrift was only superseded as the normal everyday handwriting after World War II. Its development can be traced back in an unbroken line to the early years of the sixteenth century, and during its first hundred years of life it was fairly close to the English secretary hand and the Gothic hand of Holland although from the eighteenth century onward it grew taller and narrower than ever they were. Kanzeleschrift, used in the more formal documents, bore the same sort of relation to Kurrent as, in England, the engaging hand bore to secretary.

Still more formal was Fraktur, an elongated Gothic book hand first used by a printer in the Gebetbuch of Emperor Maximilian (1512-13); it is the ancestor of what was until the mid twentieth century the normal type face for books printed in the German language.

4. Later Manuals: Returning to the tradition of humanistic cursive, the generation of Italian writing masters who followed Arrighi practised a lighter, more cursive form of cancellaresca, in which the tops of the ascenders were generally finished with a decorative blob (cancellaresca testeggiata). In the manual of G. A. Herculano (1574) the specimens were printed not (as hitherto) from wooden blocks but from copper plates which allowed a more reticent contrast: between the thinness of the ascenders and the thickness of the blobs; by the end of the century a flashy testeggiata had become the fashionable style throughout Europe, and it also
furnished the humanistic component in the French ronde and in the mid seventeenth-century English mixed hand.

The testeggia style dominates the English manuals of Edward Cocker (1631-75), which included specimens of the 'mixed' hand; but a reaction in favour of something plainer and more practical set in soon after his death, as may be seen in the manuals published in London by Colonel John Ayres between 1680 and 1700. In the anthology of English specimens issued by George Bickham as The Universal Penman, between 1733 and 1741, it is apparent that the result of Ayres's reform was the canonization of a style which, whatever its debt to certain French and Dutch masters of the early seventeenth century, was both profoundly original and admirably suited to the needs of the time in commercial as well as private life. There were two varieties of this new 'copperplate' style: 'round hand', the bolder of the two, was considered appropriate for business use; 'Italian', lighter and narrower, was the ladies' hand. Such was the success of copperplate that by the end of the eighteenth century it had been adopted in France (where it has coexisted with ronde), Spain, and Italy, in all of which countries it was known as 'the English hand'.

John Sealy's manual of about 1770, The Running Hand, recommends a sloping Italian with loops (not in regular use before), in which all the letters are linked; and it is apparently to the influence of running hand that we should attribute the change which came over English handwriting in general in the last years of the eighteenth century. Loops and links have been the general rule ever since.

From 1809 onward Joseph Carstairs taught a new 'system' of writing in which the whole forearm was moved. The result was a hand which, unlike copperplate, tended to sprawl. Most English children today are taught to write after late nineteenth-century models which owe much to Carstairs. The adoption, during the 1820s, of steel pens allowed the ordinary writer to contrast his thick and thin strokes in a way which had previously been possible for those, including the writing masters themselves, who were prepared to take considerable trouble over cutting the quill to a sharp and flexible point.

The partial break which has taken place in the English tradition as it has existed between Ayres's time and the successors of Carstairs, is ultimately due to the influence of William Morris (1834-96). In about 1870 Morris began both to practise formal handwriting modelled on early humanistic round hand and to reform his own everyday handwriting in a manner which seems to imitate humanistic cursive of the same period. In 1898 Mrs M. M. Bridges published models which frankly derive from Italian cancellaresca of the early sixteenth century. Edward Johnston (1872-1944), although his principal achievement was in the field of formal calligraphy, exerted a powerful influence on this movement for the reform of everyday writing through his championship of the broad pen. An early and unfortunate consequence of a misunderstanding of Johnston's address to the Conference of Teachers in 1913 was the invention of 'print script', a hand in which the letters are entirely separate from each other and imitate the forms of roman type. Children are supposed to go on from this to linking their letters, but do not always manage to make the change.

A handsome model, based on good cancellaresca, was published by Johnston's pupil Graily Hewitt in 1916, but it is too like a book hand for school use, and makes inadequate provision for linking of letters. The less formal models of Marion Richardson (1928 and 1935) and Alfred Fairbank (1932 and 1935) deal satisfactorily with the question of links and, furthermore, share a distinct new style evolved (it is true) from careful study of the cancellaresca of Arrighi and his contemporaries, but as easily distinguishable from it as the copperplates of Ayres and his contemporaries. It remains to be seen whether it has the same success as its Italian and English predecessors, but under the aegis of the Society for Italic Handwriting, founded in 1954, the new style is steadily gaining ground in British schools, has established outposts in the British Commonwealth, Europe, and the United States.

5. UNITED STATES: The United States, as the first overseas dependency of European script to gain an undoubted independence, deserves a word to itself. Until the middle of the eighteenth century, North America relied on models brought from England; the colonists wrote secretary, humanist, or mixed hands which were indistinguishable from those of their contemporaries at home. Benjamin Franklin executed the first colonial models of the Italian, round, and secretary hands and published them in The American Instructor (Philadelphia, 1748). They scarcely diverged from standard English practice. Christoph Saur's Hoch-Deutsch Amerikanische Calender (Germantown, 1754) contains the second oldest colonial models, mostly of Kurrent, the national hand of the
Pennsylvania Dutch, but with a line or two of English round hand thrown in.

The first genuinely American copybook was John Jenkins’ The Art of Writing (Boston, 1791), which expounded a ‘system’ of constructing the letters from a few basic strokes but still followed the style of contemporary English round hand. The ‘running hand,’ which goes back to Seally’s English manual of about 1770, appeared in American copybooks soon after 1800 and was strongly recommended by B. H. Rand in his Philadelphia manual of 1814.

From 1830 onward, because of the advocacy of Benjamin Foster of New York, Joseph Carstairs’ method and style became popular in the United States and inspired the ‘Spencerian’ style of writing, an unquestionably native variety, never imitated in Britain, which was for many years supreme in North America. The credit for its invention was long and hotly disputed between two followers of Foster, A. R. Dunton and P. R. Spencer, who began to teach the style in the 1840s. Whoever was first in the field, it was the prosperous chain of business schools directed by Spencer’s sons that gave the style its name and canonized the wide, swinging movement and the strong contrast between thick and thin strokes.

The later versions of ‘Spencerian’ which dominated the United States from the 1890s and even spread to parts of South America, as a result of the success of the manuals still being published by the firms of Zaner-Bloser and Palmer, preserve the characteristic swing but use a line of constant, medium thickness.

The work of the English reformers was introduced into the United States by Ernst F. Dettner and by Frances M. Moore. The former studied under Johnston in 1913 and then began to teach formal calligraphy in Chicago. The latter, who taught writing in a New York school, worked under Graff Hewitt in 1923 and published her Handwriting for the Broad-Edge Pen in 1926. Both branches of the movement are flourishing, although the ‘Italic’ branch seems to have made less progress in the schools than its British counterpart. The new style is basically Johnstonian, but American calligraphers show more sympathy than the British with the freedom and eclecticism that mark the calligraphy of the German-speaking countries of Europe, in which the craft was revived, early in the twentieth century, by Rudolf von Larisch and O. Hurm of Vienna.

IV · PUNCTUATION

Punctuation is the use of spacing, conventional signs and certain typographical devices as aids to the understanding and correct reading, both silently and aloud, of handwritten and printed texts. The word is derived from the Latin punctus, ‘point’. From the fifteenth century to the early eighteenth the subject was known in English as pointing; and the term punctuation, first recorded in the middle of the sixteenth century, was reserved for the insertion of vowel points (marks placed near consonants to indicate preceding or following vowels) in Hebrew texts. The two words exchanged meanings between 1650 and 1750.

Since the late sixteenth century the theory and practice of punctuation have varied between two main schools of thought: the elocutionary school, following late medieval practice, treated points or stops as indications of the pauses of various lengths that might be observed by a reader, particularly when he was reading aloud to an audience; the syntactical school, which had won the argument by the end of the seventeenth century, saw them as something less arbitrary, namely, as guides to the grammatical construction of sentences. Pauses in speech and breaks in syntax tend in any case to coincide; and although English-speaking writers are now agreed that the main purpose of punctuation is to clarify the grammar of a text, they also require it to take account of the speed and rhythm of actual speech.

Syntactical punctuation is, by definition, bad when it obscures rather than clarifies the construction of sentences. Good punctuation, however, may be of many kinds: to take two extreme examples—Henry James would be unintelligible without his numerous commas, but Ernest Hemingway seldom needs any stop but the full point. In poetry, in which the elocutionary aspect of punctuation is still important, and to a lesser degree in fiction, especially when the style is close to actual speech, punctuation is much at the author’s discretion. In non-fictional writing there is less room for experiment. Stimulating variant models for general use might be the light punctuation of George Bernard Shaw’s prefaces to his plays and the heavier punctuation of T. S. Eliot’s literary and political essays.

1. Punctuation in Greek and Latin to 1600: The punctuation now used with English and other western European languages is
derived ultimately from the punctuation used with Greek and Latin during the Classical period. Much work remains to be done on the history of the subject, but the outlines are clear enough. Greek inscriptions were normally written continuously, with no divisions between words or sentences; but in a few inscriptions earlier than the fifth century B.C., phrases were sometimes separated by a vertical row of two or three points. In the oldest Greek literary texts, written on papyrus during the fourteenth century B.C., a horizontal line called the *paragraphos* was placed under the beginning of a line in which a new topic was introduced. This is the only form of punctuation mentioned by Aristotle. Aristophanes of Byzantium, who became librarian of the museum at Alexandria about 200 B.C., is usually credited with the invention of the critical signs, marks of quantity, accents, breathings, and so on, still employed in Greek texts, and with the beginnings of the Greek system of punctuation. Rhetorical theory divided discourse into sections of different lengths. Aristophanes marked the end of the short section (called a *comma*) by a point after the middle of its last letter, that of the longer section (*colon*) by a point after the bottom of the letter, and that of the longest section (*periodos*) by a point after the top of the letter. Since books were still being written in tall majuscule letters, like those used in inscriptions and like modern capital letters, the three positions were easily distinguishable. Aristophanes' system was seldom actually used, except in a degenerated version involving only two points. In the eighth or ninth century it was supplemented by the Greek form of question mark (?). The modern system of punctuating Greek texts was established by the Italian and French printers of the Renaissance, whose practice was incorporated in the Greek types cut by Claude Garamond for Francis I of France between 1541 and 1550. The colon is not used in Greek, and the semicolon is represented by a high point. Quotation marks and the exclamation mark were added more recently.

In almost all Roman inscriptions points were used to separate words. In the oldest Latin documents and books, dating from the end of the first century B.C. to the beginning of the second century A.D., words were divided by points, and a change of topic was sometimes indicated by paragraphing: the first letter or two of the new paragraph projected into the margin instead of being indented, as they have been since the seventeenth century. Roman scholars, including the fourth-century grammarian Donatus and the sixth-century patron of monastic learning Cassiodorus, recommended the three-point system of Aristophanes, which was perfectly workable with the majuscule Latin scripts then in use. In practice, however, Latin books in their period were written continuously — the point between words had been abandoned. The ends of sentences were marked, if at all, only by a gap (which might be followed by an enlarged letter) or by an occasional point. The only books that were well punctuated at that time were copies of the Vulgate Bible, for which its translator, St Jerome (d. 419/420), devised punctuation *per cola et commata* ('by phrases'), a rhetorical system, based on manuscripts of Demosthenes and Cicero, which was especially designed to assist reading aloud. Each phrase began with a letter projecting into the margin and was in fact treated as a minute paragraph, before which the reader was expected to take a new breath.

2. EARLY MEDIEVAL PRACTICE: During the seventh and eighth centuries, which saw the transition from majuscule to minuscule handwriting (minuscule scripts were usually smaller than majuscule and had projections above and below the body of the letters, as in modern lower-case letters), scribes to whom the Latin language was no longer as well-known as it had been, especially Irish, Anglo-Saxon, and German scribes, to whom it was a foreign language, began to separate words. It was only in the thirteenth century that monosyllables, especially prepositions, were finally detached from the word following them. To mark sentences, a space at the end became the rule; and an enlarged letter, often a majuscule, generally stood at the beginning of sentences and paragraphs alike. The use of points was somewhat confused by St Isidore of Seville (d. 636), whose encyclopaedia recommended an aberrant version of the three-point system; but a point, high or low, was still used within or after sentences. The ends of sentences were often marked by a group of two or three marks, one of which might be a comma and not a simple point.

St Jerome's concern for the punctuation of sacred texts was shared by Charlemagne, king of the Franks and Holy Roman emperor, and his Anglo-Saxon adviser Alcuin, who directed the Palace School at Aachen from 782 to 796. An important element in the educational revival over which they presided was the improvement of spelling and punctuation in biblical and liturgical manuscripts. It is in the earliest specimens of the new Caroline
minuscule script, written at Corbie and Aachen (now in northern France and West Germany, respectively), about 780-800, that the first evidence for a new system of punctuation appears. It soon spread, with the script itself, throughout Europe, reaching its perfection in the twelfth century. Single interior stops in the form of points or commas and final groups of stops continued in use; but they were joined by the mark later known as *punctus elevatus* (\(\uparrow\)) and by the question mark (*punctus interrogativus*), of much the same shape as the modern one but inclined to the right. The source of these two new marks was apparently the system of musical notation, called neums, which is known to have been used for Gregorian chant from at least the beginning of the ninth century. *Punctus elevatus* and *punctus interrogativus* indicated not only a pause and a syntactical break but also an appropriate inflection of the voice. By the twelfth century another mark, *punctus circumflexus* (\(\uparrow\)), had been added to *elevatus* to indicate a rising inflection at the end of a subordinate clause, especially when the grammatical sense of the sentence was still not complete. Liturgical manuscripts in particular, between the tenth and the thirteenth century, made full use of this inflectional system: it is the origin of the ‘colon’ still used to divide verses of the Psalms in breviaries and prayer books. In the later Middle Ages it was especially the Cistercian, Dominican, and Carthusian orders and the members of religious communities such as the Brethren of the Common Life who troubled to preserve a mode of punctuation admirably adapted to the constant reading aloud, in church and refectory, that characterized the religious life. The hyphen, to mark words divided at the ends of lines, appears late in the tenth century; single at first, it was often doubled in the period between the fourteenth and eighteenth centuries.

3. LATE MEDIEVAL PRACTICE: Most late medieval punctuation was haphazard by comparison with twelfth-century work — notably in the university textbooks produced at Paris, Bologna, and Oxford in the thirteenth and fourteenth centuries. In them, as elsewhere, a form of paragraph mark representing \(c\) for *capitulum* (‘chapter’) is freely used at the beginning of sentences. Within the same period the plain point and *punctus elevatus* are joined by the virgule (\(\downarrow\)), as an alternative form of light stop. Vernacular literature followed the less formal types of Latin literature; and the printers, as usual, followed the scribes. The first printed texts of the Bible and the liturgy are, as a rule, carefully punctuated on the inflectional principle. The profusion of points and virgules in the English books of the printer William Caxton pays remarkably little attention to syntax. Parentheses, used in the same way as now, appear by about 1500. During the fifteenth century some English legal documents were already being written without punctuation; and British and American lawyers still use extremely light punctuation in the hope of avoiding possible ambiguities.

4. POST-MEDIEVAL PUNCTUATION: The beginnings of post-medieval punctuation can be traced to the excellent manuscripts of classical and contemporary Latin texts copied in the new humanistic scripts by Italian scribes of the fifteenth century. To about 1450 the point and the *punctus elevatus* seem to have been preferred for minor pauses; after that date they are often replaced by the virgule and what is now called the colon (\(\downarrow\)). The virgule, originally placed high, sank to the base line and developed a curve — turned, in fact, into a modern comma. The Venetian editor and printer Aldus Manutius (Aldo Manuzio; died 1515) made improvements in the humanistic system, and in 1566 his grandson of the same name expounded a similar system in his *Orthographiae ratio* (‘System of Orthography’); it included, under different names, the modern comma, semicolon, colon, and full point, or period. Most importantly, the younger Aldo stated plainly for the first time the view that clarification of syntax is the main object of punctuation. By the end of the seventeenth century the various marks had received their modern names, and the exclamation mark, quotation marks, and the dash had been added to the system.

5. PUNCTUATION IN ENGLISH SINCE 1660: By the end of the sixteenth century writers of English were using most of the marks described by the younger Aldo in 1566; but their purpose was elocutionary, not syntactical. When George Puttenham, in his treatise *The Arte of English Poesie* (1589), and Simon Daines, in *Orthographia Anglicana* (1640), specified a pause of one unit for a comma, of two units for a semicolon, and of three for a colon, they were no doubt trying to bring some sort of order into a basically confused and unsatisfactory situation. The punctuation of Elizabethan drama, of the devotional prose of John Donne or of Richard Hooker, and indeed of Bunyan’s *Pilgrim’s Progress* (1678), was almost wholly elocutionary; and it lacked the inflectional element that had been the making of twelfth-century punctuation. It was Ben Jonson, in his *English Grammar*, a work composed about 1617 and published
posthumously in 1640, who first recommended syntactical punctuation in England. An early example is the 1625 edition of Francis Bacon's *Essays*; and from the Restoration onward syntactical punctuation was in general use. Influential treatises on syntactical punctuation were published by Robert Monteith in 1704 and Joseph Robertson in 1795. Excessive punctuation was common in the eighteenth century: at its worst it used commas with every subordinate clause and separable phrase. Vestiges of this attitude are found in a handbook published in London as late as 1880. It was the lexicographers Henry Watson Fowler and Francis George Fowler, in *The King's English*, published in 1906, who established the current British practice of light punctuation. Punctuation in the United States has followed much the same path as in Britain, but the rules laid down by American authorities have in general been more rigid than the British rules.

The system of punctuation now used by writers of English has been complete since the seventeenth century. Three of its most important components are the space left blank between words; the indentation of the first line of a new paragraph; and the uppercase, or capital, letter written at the beginning of a sentence and at the beginning of a proper name or a title. The marks of punctuation, also known as points or stops, and the chief parts that they play in the system are as follows:

1. The end of a grammatically complete sentence is marked by a full point, full stop, or period. The period may also be used to mark abbreviations.

2. The colon (:) is used like a full point and was followed by an upper-case letter, now serves mainly to indicate the beginning of a list, summary, or quotation.

3. The semicolon (;) ranks half-way between a comma and a full point. It may be substituted for a period between two grammatically complete sentences that are closely connected in sense; in a long or complicated sentence, it may precede a coordinate conjunction (such as 'or', 'and', 'but').

A comma (,) is the 'lightest' of the four basic stops. As the most usual means of indicating the syntactical turning points in a sentence, it is exposed to abuse. It may be used to separate the elements of a series, before a relative clause that does not limit or define its antecedent, in pairs to set off or isolate words or phrases, or in combination with coordinating conjunctions.

Other punctuation marks used in modern English include parentheses, which serve, like a pair of commas, to isolate a word or phrase; question, exclamation, and quotation marks; the hyphen; and the apostrophe.

6. PUNCTUATION IN FRENCH, SPANISH, GERMAN, AND RUSSIAN: Since the modern punctuation of all the western European languages stems from the practice of the great Italian and French printers of the fifteenth and sixteenth centuries, national differences are not considerable. In French *guillemets* ('«') or dashes are used to mark quotations. In Spanish, since the middle of the eighteenth century, an inverted mark of interrogation or exclamation has stood at the beginning of sentences as well as the normal mark at the end; and quotations may be marked either as in French or as in English. German punctuation, which is still based on rules propounded in 1781, is more rigorously syntactical than the rest: all relative clauses and all clauses beginning with *dass* ('that') must be preceded by a comma. Quotations are marked either by pairs of commas ('„“') or by reversed *guillemets* ('‹ ›'). Letter spacing, as well as italic type, is used for emphasis. Early Russian punctuation was based on Greek practice, since the Cyrillic alphabet is derived from the Greek; and by the seventeenth century several quite elaborate systems had evolved in different areas. Since the eighteenth century Russia has used a form of western European punctuation that has much in common with German practice: notably an even wider obligatory use of commas with subordinate and indeed coordinate clauses, and letter spacing (as well as italics) for emphasis. German quotation marks, French guillemets, and dashes may be used for direct speech.

7. PUNCTUATION IN ORIENTAL AND AFRICAN LANGUAGES: In Hebrew manuscripts written since the ninth century the main use of points is to indicate the vowel sounds, the alphabet being consonantal only. In Biblical texts points and commas are used to mark the middle and end of verses; and in the commentaries points mark the end of sentences. Since the late eighteenth century, when Jews in Germany began to compose secular texts in Hebrew, the punctuation of such texts has been based on German practice. Early Arabic manuscripts had no punctuation, since the structure of the language ensured that the main and subordinate clauses were readily distinguishable without it. After Arabic began to be printed, European punctuation marks were gradually adopted. The
first such mark was the reversed comma; it is now the commonest and indicates a suitable point at which to pause and draw breath.

In Sanskrit, prose texts use one vertical stroke to mark the end of the sentence, and verse texts use one vertical stroke for the end of a line, two for the end of a couplet. In Bengali, Gujarati, Hindi, and Marathi, the vertical stroke is used as in Sanskrit, in conjunction with other marks borrowed from English. The diacritical signs and elements of punctuation found in Tamil were introduced early in the eighteenth century by a Jesuit missionary.

Before the modern period, the grammatical structure of written Chinese was such that no punctuation was required; but in the nineteenth century editors of texts began to add hollow circles, intended either to mark the ends of phrases or to emphasize particular passages. Since 1912 some of the European punctuation marks have been adopted, notably the marks of interrogation and exclamation and the comma (the hollow circle serves as full point). Direct speech is indicated either by double inverted commas or by an L-shaped mark placed at a corner of the first and last characters. Characters are capitalized by the addition of a straight or wavy line underneath or at the side, according to whether the text is written horizontally or vertically.

In Japan a complicated system of kaeriten and kanten marks was used from the eighth century onward to clarify the meaning and grammatical construction of texts in Chinese. As a result of contact with Europeans in the fifteenth and sixteenth centuries, a hollow point (・) and a reversed virgule (‘) were used during the Edo period (1603-1868) as equivalents of the European full-point and comma. Since 1868 they have been joined by the solid point (to separate items in a list), by the dash used as in English, and, finally, by the European marks of exclamation and interrogation.

The history of punctuation in Africa is part of the history of the scripts used in different parts of the continent: the Coptic script, based on the Greek alphabet with some additions from demotic writing, for the ancient language of Egypt; a derivative of South Semitic script, known as Ethiopic, for the languages of Ethiopia; Arabic script for speakers of Arabic, Berber, and Swahili; Latin — i.e., European — script for the languages first recorded during and since the nineteenth century.

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1. Gothic cursive, Italy, 5c. |
2. Gothic cursive, Italy, 6c. |
4. Gothic cursive, France, early 10c. |
5. Gothic cursive, England, end of 11c. |
6. Gothic cursive, France, mid 11c. |
7. Gothic cursive, France, early 12c. |
9. Gothic cursive, Italy, mid 13c. |
10. Gothic cursive, France, mid 13c. |
12. Gothic cursive, Italy, early 15c. |
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14. Gothic cursive, Italy, end of 15c. |
16. Gothic cursive, Italy, end of 16c. |
17. Gothic cursive, England, mid 17c. |
18. Gothic cursive, Italy, mid 18c. |
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Table showing the development of medieval handwriting from Roman capitals to Humanistic cursive (Figs. 1-20)
Fig. 35. Littera cancellaresca, 1319. 

Fig. 36. Secretary hand, 1552. 
Letter by Roger Ascham. London, B. L., Lansdowne 3

Fig. 37. Round. From Louis Barbeder, 
Les Ecritures Financières et 
Italiennes Bastarde, Paris, 1659

Fig. 38. Consularmente transscrita, 1660 or 
1691. John Florio, letter to Sir R. Cotton. 
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Fig. 39. Fraktur, 1512-13. 
From the printed prayer-book of Emperor Maximilian

Fig. 40. Kurrentschrift, 1757-58. 
Example of Goethe’s hand-writing from his early school-book Labores Juveniles. 
Frankfurt, Universitätsbibli.

Fig. 41. English copperplate: 
(top) round hand and (bottom) Italian. 
From Philip Hofer (ed.), 
“The Universal Penman”, engraved by 
George Bickham, London, 1743.

Fig. 42. Running hand by John Steally, 
c. 1770. (From Sir Ambrose Heal, 

Fig. 43. Indic. From Marion Richardson, 

Fig. 44. Spencerian. Poem copied by 
P. R. Spencer, 1850 (Dartmouth College)
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<tr>
<th>No.</th>
<th>Description</th>
<th>Period</th>
<th>Example</th>
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<tbody>
<tr>
<td>1</td>
<td>Rustic capital, Rome, early 6c.</td>
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<td>A B D E G M N P R S</td>
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<td>Uncial, Italy, 5c.</td>
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<td>3</td>
<td>New Roman cursive, Italy, 4c.</td>
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<td>4</td>
<td>Half-uncial, Italy, early 6c.</td>
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<td>5</td>
<td>Precaroline (Luxeuil) minuscule, Late 7c.</td>
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<td>6</td>
<td>Insular minuscule, England, mid 8c.</td>
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<td>7</td>
<td>Insular half-uncial, England, 8c.</td>
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<td>A B D E G M N P R S</td>
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<td>8</td>
<td>Caroline minuscule, France, early 9c.</td>
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<td>9</td>
<td>Caroline minuscule, Italy, mid 12c.</td>
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<td>English Caroline minuscule, mid 11c.</td>
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<td>11</td>
<td>Proto-Gothic minuscule, England, mid 12c.</td>
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<td>Gothic textura quadrata, France, early 14c.</td>
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<td>Gothic textura rotunda, France, early 14c.</td>
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<td>Gothic cursiva anglica, England, late 13c.</td>
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<td>15</td>
<td>Gothic cursive, France, early 15c.</td>
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<td>16</td>
<td>Littera bonomiosa, Bologna, 14c.</td>
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<td>17</td>
<td>Semi-Gothic cursive, Italy, late 14c.</td>
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<td>18</td>
<td>Littera hybrida, Low Countries, mid 15c.</td>
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<td>19</td>
<td>Littera antiqua, Italy, mid 15c.</td>
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<td>20</td>
<td>Humanistic cursive, Italy, late 15c.</td>
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Table showing the development of medieval handwriting from Roman capitals to Humanistic cursive (Figs. 1-20)
Fig. 21. Cursive capitals, A.D.166.
Sale of a slave. London, B. L.,
Pap. CCXXXIX

Fig. 22. Insular and Caroline minuscule,
11th Century. Psalter in Latin and

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Fig. 24. Beneventan script, late 11th
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Fig. 25. Maurdrummus minuscule,
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Fig. 26. Caroline business hand (England),
1156. Writ of Henry II. London,
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Fig. 27. Caroline business hand (Papal Curia),
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EXAMPLES OF SCRIPTS

Fig. 28. Gothic book hand (England), 1283-1306. Petrus Comestor. London, B. L., Royal 3.D.V.

Fig. 29. Gothic business hand (England), 1230. Lease to Abingdon Abbey. London, B. L., Harley Charter 75.F.36

Fig. 30. Gothic cursive minuscule (England), early 15th century. Hoccleve. De Regimine Principum. London, B. L., Harley 4866

Fig. 31. Lettre bâtarde, c.1435. Henri de Ferrières, Livre du Roy Modus et de la Reine Ratio. New York, Pierpont Morgan Lib., M. 820

Fig. 32. Gothic cursive minuscule (Italy), 14th century. Petrarch (autograph), 'Sonnets'. Vatican City, Bibli. Apost., Vat. Lat. 3196

Fig. 33. Prehumanistic book hand (Italy), 14th century. Petrarch (autograph), 'Life of Caesar'. Paris, B. N., lat. 5784

Fig. 34. Humanistic round hand, 1490, by Pierantonio Sallando. Apicinus. Oxford, Bod. Lib., Canon. Class. Lat. 148
Ad circumpetione quam quidam nostrorum sub anno sexto anni XII. Augusti

And I pray god, my habitation may
my house not be burned down

Seci domino susceptor meus
es tu: et refugi mepum: deus
meus sperabo in eum.

Zad 8:6.

In Alphabeta Textus manuscipt.
Johannes apseculi scribi est.
In hulla commenda abun.

Fig. 35. Littera cancellaresca, 1519.
Brief of Pope Leo X, ascribed to
Lodovico degli Arrìghi. London,
Public Record Office, S.P. 1/19

Fig. 36. Secretary hand, 1552.
Letter by Roger Ascham. London, B. L.,
Lansdowne 3

Fig. 37. Ronde. From Louis Barbedor,
Les Écritures Financières et
Italiennes Bastarde, Paris, 1680

Fig. 38. Cancellaresca testeggiata, 1600 or
London, B. L., Cotton Julius C.III

Fig. 39. Fraktur, 1512-13.
From the printed prayer-book
of Emperor Maximilian

Fig. 40. Kurrentschrift, 1757-59.
Example of Goethe's hand-writing
from his early school-book Laborum Juveniles.
Frankfurt, Universitätsbibli.
Fig. 41. English copperplate: (top) round hand and (bottom) Italian. From Philip Hofer (ed.), 'The Universal Penman', engraved by George Bockham, London, 1743.

Fig. 42. Running hand by John Seally, c. 1770. (From Sir Ambrose Heal, 'The English Writing-Masters and their Copy-Books, 1570-1800', London, 1931)

I will lift up mine eyes From whence cometh my

Fig. 43. Italic. From Marion Richardson, 'Writing and writing patterns', London, 1935.

Fig. 44. Spencerian. Poem copied by P. R. Spencer, 1850 (Dartmouth College)