

The Roman Alphabet

STAN KNIGHT

There is a popular notion that the evolution of the Roman script can be plotted out like a family tree, showing a single line of development from Roman times to the present day. Its history, however, is far too ancient, too complex, and too widespread for that. A multitude of influences—political, religious, esthetic, economic, or pragmatic—have been brought to bear on the way that the Roman script has been formed throughout the ages.

The original manner in which the Latin language was written down was devised over 2000 years ago (SECTION 23). Since then, Roman scripts have been used not only for Latin but also for the majority of the world's languages (SECTION 59).

The scope of this survey allows only an indication of the historical highlights in the development of the Roman script, and a hint of the more obvious causes and influences that created change.

Ancient Roman scripts

The earliest examples we have of Latin letters are of those carved in stone, some dating from the sixth or even seventh century B.C.E. Early Roman letters were monoline capitals of distinct form (FIGURE 43A), derived from earlier Greek models. Sometimes the text was *retrograde*, i.e. read from right to left.

By the first century C.E. the carved capitals had developed a level of sophistication and legibility which has ensured their survival to modern times in both typography and calligraphy. The detailing of these incised letters (FIGURE 43B), in the balance of their thin and thick strokes and the subtle serifing, was clearly due to preliminary planning with an edged pen or brush (see Catich 1968).

The scripts of ancient Rome can be grouped according to their use and their character: *Cursive* scripts, the informal styles used for minor documents and the everyday handwriting of the intelligentsia, most usually written with a blunt, pointed pen or stylus; and *Calligraphic* or *Book* scripts, those more formal scripts written by professional scribes for large-scale literary manuscripts, using a specially cut edged pen which produces the characteristic thick and thin strokes.



A. Vatican. Dedication to Hercules. ca. 144 B.C.E.



B. Rome, Appian Way. 1st or 2nd century C.E.

NO MINNE AB BAN ALEX EUTYCH EN SINE AUO NIO NOME

C. British Library, Papyrus 229. 166 C.E. (*nomine abban quem eutychon sive quo alio nomine*).

ANTARSTRONDEALACVIRGULTAFACESOVE

D. Vatican Library, Ms. Pal.Lat.163 t. 4th or 5th century.

HADRIANUS ALEXANDRIA MAROMAN

E. Oxford, Bodleian Library, Ms. Auct.T.2.26. Mid 5th century.

DEPERPECUAVINZINITATEBEACAOM

F. Bamberg, Staatsbibliothek, Ms.Patr.87. 6th century.

IMPROBIDVRISSVRGENS

G. Vatican Library, Vat.Lat.3256. 4th or 5th century.

CRUM COMITATUM VESTRUM TIRONES EX PROVINCIA

H. British Library, Papyrus 447. ca. 345 C.E. (*crum comitatum vestrum tirones ex provincia*).

FIGURE 43. Ancient Roman scripts. A. Monoline capitals. B. Inscriptional capitals. C. Old Roman Cursive. D. Rustic capitals. E. Uncials. F. Half Uncials. G. Square capitals. H. New Roman Cursive.

Old Roman Cursive

The earliest known handwritten Latin document can be traced to the first century B.C.E. Old Roman Cursive dates from some time before that and lasts into the third century C.E. (FIGURE 43C). The script bears some features of the earliest Latin inscriptions; but since it is written quickly (*cursive* means ‘running’) and inconsistently, there is a loss of legibility. Some letters were remodeled, others became linked together (in *ligatures*), and abbreviations are common. Following the epigraphic pattern, little or no word space is allowed. This script was ideally suited for the stylus and wax tablet, and can even be seen in the graffiti of Pompeii (see Aris 1990: I.4).

Rustic Capitals

The earliest fully developed Latin book script was Rustic Capitals, and we know of examples from the first century C.E. The Gallus Fragment may even date from as early as 22 B.C.E. (see Knight 1984, Introduction). Despite its unsophisticated name, this is a mature, calligraphic script used for many deluxe manuscripts (FIGURE 43D). It has narrow letterforms and a very steep pen angle (the edge of the pen held at almost 90° to the writing line). Following Old Roman Cursive, the **A** often lacks a crossbar, the **M** is widely spread, and the bowl of **R** overlaps the vertical stem. The words are divided with a centered point in the epigraphic manner.

Uncial scripts

Uncial was a popular script in common use from the fourth to eighth centuries for the text of books (FIGURE 43E). Most of the earliest surviving Uncial manuscripts have their origins in northern Africa. The oldest datable Uncial script is from Hippo and was written some time between 396 and 426 (see Lowe 1934–72 Suppl.: vii–x, also Knight 1984: B4). Later, Uncials were used in Italy (particularly in Rome) mostly for biblical texts; and through missionary activity the script spread to other parts of the Empire, including Britain, where it reached a very high level of accomplishment. However, the notion that Uncials were deliberately devised as a Christian book hand, to replace Rustic and Square Capitals used for “pagan” classics, cannot be maintained (see Woodcock and Knight 1992: 38).

Uncials did not evolve directly from Rustic Capitals; Rustics are constructed differently, using a much steeper pen angle—compare the forms of **A**, **D**, **E**, and **R**. The particular characteristics of Uncial scripts include **A** with a bowl, round forms of **D**, **E**, **H**, **M**, ascenders for **D**, **H**, **K**, **L**, and descenders for **F**, **G**, **P**, **Q**.

Half Uncial scripts

These scripts were first called Half Uncials in the mistaken idea that they were a degenerate form of Uncials. However, early Uncials used a slanted, natural pen angle evolving from scripts like that of the *De Bellis Macedonis* fragment (written perhaps as early as 100 C.E.). This shows a mixed script with discernible Uncial characteristics (see M. Brown 1990: 22–23; Knight 1984: Intro. fig. 5).

Early Half Uncials, which appeared in the fourth century, derived from scripts like that of the fragment of Livy's *Epitome* written early in the third century (Aris 1990: II,2; Knight 1984: Intro. fig. 1). Both use a flattened pen angle (the edge of the pen held parallel to the writing line).

The characteristics of Half Uncials (FIGURE 43F) are long ascenders **b, d, f, h, l** and descenders **f, g, p, q**; long **s**; round forms of **a** and **t**; “figure 5” **g**; **m** with a straight first stroke and curving end stroke; and “capital” form of **N**.

Square Capitals

Written versions of Imperial carved letters were employed for the text of prestigious manuscripts of Virgil in the fourth and fifth centuries (FIGURE 43G). They follow the inscriptional capitals in letterform and generous spacing, but their detailed character was extremely difficult for the scribe and slowed down the writing. T. J. Brown (pers. comm.) rightly regarded the use of such capitals for manuscript texts as “a late idea and a bad one”!

Only two ancient Square Capital manuscripts survive, both in fragments: Codex Sangallensis (St. Gallen, Stiftsbibliothek, Ms.Cod. 1394, pp. 7–49) and Codex Augusteus (four folios in the Vatican, Ms.Lat. 3256, and three folios in Berlin, Deutsche Staatsbibliothek, Ms.Lat. F.416).

New Roman Cursive

This rapid script, the result of a reform of Old Roman Cursive (completed by the 4th century), was the administration and correspondence script of Late Antiquity (FIGURE 43H). The speed of writing, together with the greater use of ligatures and cursive loops (a minimal **a**, and diagonal headstrokes on certain letters like **c** and **e**), make this a difficult script to read.

New Roman Cursive, however, was widely used and would play an important part in the development of the later Regional scripts.

Regional hands

These are the various scripts which arose in local centers as, in the fifth century, the control of the Roman Empire declined. New Roman Cursive mixed with Half Uncial

A sample of Luxeuil Minuscule script showing the text: *citr quia unus quisque praedicator arro*. The letters are angular and highly stylized, with many unusual letterforms.

A. British Library, Add. Ms.11878. Mid 8th century (*citr^m quia unus quisque praedicator arro*).

A sample of Corbie ab script showing the text: *thesalonicensib; pietatis doctrina(m) adversarii*. The script is more rounded than Luxeuil Minuscule but still retains many of its angular features.

B. British Library, Harley Ms.3063. End 8th century (*thesalonicensib(us), pietatis doctrina(m) adversarii*).

A sample of Visigothic Minuscule script showing the text: *regneis non estia finis. Dixit autem maria*. The script is more rounded and less angular than the previous two.

C. British Library, Add. Ms.30844. 10th century (*regneis non estia finis. Dixit au(te)m maria*).

A sample of Beneventan Minuscule script showing the text: *dixit caelo esse qui nos creavit et dicimus*. The script is more rounded and less angular than the previous two.

D. British Library, Add. Ms. 16413. Early 9th century (*dixit caelo esse qui nos creavit et dicimus*).

FIGURE 44. Regional scripts. A. Luxeuil Minuscule. B. Corbie ab. C. Visigothic Minuscule. D. Beneventan Minuscule.

formed the main ingredients of these diverse minuscule scripts, which generally flourished from the fifth through the eighth centuries (see M. Brown 1990: 32–47). We can survey here only the most important.

Luxeuil Minuscule

This script was developed at the end of the seventh and early eighth centuries at the French abbey founded by the Irish missionary Columbanus. It was E. A. Lowe (1972: 2.389–98) who identified the original source of this very distinctive script.

Luxeuil Minuscule (FIGURE 44A) is a rather angular script with many unusual letterforms—a like double c, tall, ampersand-like e, g with a looped top, and a high-shouldered r. The use of looping ligatures, e.g. *er*, *ro*, *rs*, *te*, and *tr*, adds to the difficulty in deciphering this script. It derives from New Roman Cursive (by way of the Merovingian chancery) with some Half Uncial features. By this time, word separation was fairly consistently used.

Corbie ab

Another French minuscule is linked with the Abbey of Corbie, founded from Luxeuil ca. 661 C.E. The Corbie connection, however, has been questioned (see Ganz 1990).

Corbie ab has many of the features of Luxeuil Minuscule, but *a* and *b* are particularly distinctive (FIGURE 44B). The *a* looks more like *u*, *b* like a tall *t*. In addition, *e*

is tall, the strokes of **o** often cross at the top (especially when ligatured), it has a long **r**, tall **s**, and a looped entrance to **t**. Word separation is inconsistent.

Visigothic Minuscule

This Spanish local script depends more on Half Uncial than New Roman Cursive and this, together with the use of some Uncial letters (e.g. **D** and **G**), makes it an altogether more legible script (FIGURE 44C).

A few simple ligatures persist. The letter **a** is open like a double c, **t** has a large looped entrance stroke which could be confused with a round a. Other features include the distinctive abbreviation marks, heavy triangular serifs on the ascenders, and ornate versions of **x** and **z**.

Because of its comparative isolation, Visigothic Minuscule had a long life, surviving until the twelfth century.

Beneventan Minuscule

Developed in southern Italy from the middle of the eighth century, this script survived locally until early in the fourteenth century, even in some places until the fifteenth century. It derives some features from New Roman Cursive, but most from Half Uncial. E. A. Lowe (1980) made a special study of this script.

Beneventan Minuscule is a self-consciously stylish script (FIGURE 44D). The letter **a** has a closed double c form, **d** is “uncial,” **e** looks more like an ampersand, and **t** has a large, looped entrance. Some simple ligatures are retained. Overall there is a wavy aspect to the script, particularly in **i**, **m**, **n**, and **u**, most prominent in eleventh-century examples due to the steeper pen angle used then.

Insular scripts

Following the departure of the Romans from Britain, there developed an extensive and coherent pattern of scripts, originating in Christian Ireland. Vigorous Irish missionary activity took the scripts to northern England and eventually many parts of Europe. Later, fine versions of Roman Uncials were incorporated into the system (but never in Ireland).

The term *Insular* refers to scripts of the British Isles up to the mid ninth century and is often used when Anglo-Saxon or Irish origin is uncertain.

Insular Minuscule

A system of minuscule scripts deriving from such everyday cursive hands as that of St. Boniface (see Lowe 1934–72, vol. 2, p. 237) reached (by the 8th century) a mature enough form to be used for fine manuscript books (FIGURE 45A). Word division and

Etur continuo disciplina divinae legis

A. Oxford, Ms. Bodl. 819. 2nd half 8th century (*etur continuo disciplina divinae legis*).

scribserunt lucas euangeliſta
 awritton lucas evangelista de godspellere

B. British Library, Cotton Ms. Nero. D. iv. ca. 698 C.E. (*scribserunt awritton lucas evangelista de godspellere*).

Dixit inimicus persequens comprehenda(m) partibo

C. British Library, Add. Ms. 37517. Ca. 1000 C.E. (*Dixit inimicus persequens comprehenda(m) partibo*).

FIGURE 45. Insular scripts. A. Insular Minuscule. B. Insular Half Uncial; Anglo-Saxon Cursive (in the glosses to the Latin text). C. Anglo-Saxon Square Minuscule.

punctuation are quite consistent. Numerous ligatures and abbreviations occur. **a** and **d** are open; **c** and **e** are tall (especially in ligature); **p**, **r**, and **s** all have descenders and are very similar in appearance. Overall, the aspect is of a compressed letterform written with a steeply slanted pen.

Insular Half Uncial

These more formal book scripts, so characteristic of Insular manuscripts, probably originated in Ireland as a modification of the Roman Half Uncial. One of the earliest known Irish manuscripts, ca. 600 C.E., reveals a script somewhere between the two (see Lowe 1934–72, vol. 2, p. 271).

The majestic script of the Gospels written at Lindisfarne, ca. 698 C.E., shows Insular Half Uncial at its most developed stage (FIGURE 45B). These are heavy, rounded letters written with a flattened pen angle. The characteristic forms are **a**, **b**, **g**, **l**, and **n**. Alternative “uncial” forms of **A**, **D**, **N**, **R**, and **S** occur, perhaps due to the influence of the nearby Wearmouth-Jarrow scriptoria and their magnificent Uncial scripts. The interlinear gloss, added in the mid tenth century in Anglo-Saxon Cursive, is the earliest surviving English translation of the Gospels.

Anglo-Saxon Minuscules

From the middle of the tenth century, Carolingian Minuscule was used in England for Latin texts. Old English texts continued to be written in Anglo-Saxon Pointed Minuscule, a script which survived until the mid twelfth century. Anglo-Saxon Square Minuscules of the tenth and early eleventh centuries were perhaps an attempt to incorporate some Carolingian influence into the local script (FIGURE 45C).

Carolingian Minuscule

The reforms of Charlemagne, in the late eighth and early ninth centuries, encouraged the use of a legible and beautiful book script which emerged in the calligraphic centers under his influence in France. Carolingian Minuscule evolved from the ancient Roman Half Uncial script and incorporated certain features from local minuscule scripts. Early manuscripts from the Abbey at Corbie show how Half Uncial could be modified to a more minuscule form (FIGURE 46A).

Compared to the many barely readable cursive and over-elaborate regional scripts, the mature Carolingian Minuscule was a disciplined and formal script, capable of maintaining legibility even at extremely small sizes (FIGURE 46B).

The general aspect is of a flowing, rounded script with long ascenders and descenders, creating a very even texture. It employs a slightly slanted pen angle (rather than the flattened angle of the Half Uncial) and maintains a more defined body height. Certain letterforms were improved—Uncial **a** soon replaced the Half Uncial form, and the distinctive looped **g** (like the one used in Luxeuil Minuscule) replaced the “figure 5” form. Very few ligatures are used; in some Carolingian manuscripts there are none.

The emergence of the Carolingian Minuscule is one of the most important developments in the history of Western calligraphy. It became an international script and was copied and adapted in succeeding centuries by scribes in all areas under Carolingian rule.



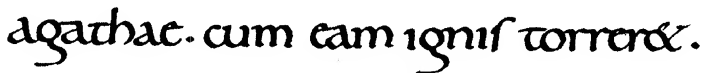
Quare grauaft uigum tuum

A. Amiens, Bibliothèque Municipale, Ms. II. ca. 772–781 C.E.



qui romae estis euangelizare

B. British Library, Add. Ms.10546. ca. 834–843 C.E.



agathae. cum eam ignis torrens.

C. British Library, Add. Ms.49598. Ca. 963–984 C.E.



ecconem deberet. sic a subditis tribu

D. Private collection, Life of St. Ursula. Mid 12th century.

FIGURE 46. Carolingian Minuscule. A. Modified Half Uncial. B. Carolingian Minuscule. C. English Carolingian Minuscule. D. Italian Carolingian Minuscule.

English Carolingian Minuscule

Following ecclesiastical reforms in the mid tenth century, English scribes wrote a very distinctive version of Carolingian Minuscule (FIGURE 46C). Larger in scale and more formal in structure, it maintains many of the features of the earlier French Carolingian Minuscule—"uncial" **a** and **h**, looped **g**, long **s**, and "half uncial" **t**. The use of **&** to represent *-et-* within a word seems peculiar to Anglo-Saxon manuscripts. A number of cursive ligatures occur and abbreviation is common.

English Carolingian Minuscule at its best is a supremely legible and calligraphic script. It was generally reserved for Latin texts and lasted to the end of the eleventh century.

Italian Carolingian Minuscule

Carolingian Minuscule reached Italy at an early stage. (Charlemagne was crowned Holy Roman Emperor in the year 800.) It was used for books and documents from the ninth through the thirteenth centuries, alongside Beneventan Minuscule and other more cursive scripts, such as the Papal Documentary (see M. Brown 1990: 116–21).

Italian Carolingian Minuscule (FIGURE 46D) reached its peak in the twelfth century and rivals the achievements of English tenth-century scribes. The round, upright letters are quite heavy, but they are well constructed and confidently written. Discreet serifs were added to the base of the first stems of **m** and **n**.

This is the script which, later, was revived by Humanist scholars and printers.

Gothic scripts

The rise of the secular universities and the expansion of the monastic system in the twelfth century prompted the need for many more books. Different grades of scripts were employed during this period to cope with the demand (see M. Brown 1990: 80–115).

Transitional Gothic

Gothic scripts developed directly from Carolingian Minuscule, and the period of transition from the mid eleventh century through the end of the twelfth produced scripts of increasing compression and angularity, sometimes referred to as *Protothotic* (FIGURE 47A).

The letterforms of Transitional Gothic are narrow, with a hint of angularity. The "waistline" serifs are heavy, and the base terminations are more elaborate than before.

felix in ope locuples in fide cum rege

A. British Library, Cotton Ms. Tib. B. viii. Late 12th century.

Benedicite rores et pruina domino

B. British Library, Royal Ms. 2. B. vii. Ca. 1310–20.

procuracionem: ut per diuine legis

C. Cambridge, Fitzwilliam Museum, Ms. 298. Ca. 1300.

lum iesum christus rogamus

D. Private collection, Carvajal Missal. Ca. 1520.

pao le tumbel de son pere yne est assez pres sudit autel

E. British Library, Harley Ms. 1319. Early 15th c. (*pao le tumbel de son pere qui est assez pres sudit autel*).

Roes de son fait La premiere

F. British Library, Royal Ms. 19.C.viii. Ca. 1496. (*Roes de son fait La premiere*).

FIGURE 47. Gothic scripts. A. Transitional Gothic. B. Gothic Prescissus. C. Gothic Quadrata. D. Gothic Rotunda. E. Secretary script. F. Gothic Bâtarde.

Gothic Prescissus

The features of fully developed Gothic book scripts from the end of the twelfth century are lateral compression, heavy weight, and sharp angularity. Additional details include the usual use of the “figure 2” **r** (when following **o** and other curved letters), and the sharing of stems (*biting*) of certain letters (e.g. **b**, **d**, and **p** before **e** or **o**).

Prescissus scripts are high-grade, sophisticated scripts whose letter stems (e.g. **m** and **n**) are cut off square at the baseline (FIGURE 47B). Numerous alternative forms are used—**d** in both round and upright forms, **r** in branching and “figure 2” shapes, and **s** both round and long.

Gothic Quadrata

Another sophisticated series of scripts, which have consistently angled baseline terminations (FIGURE 47C). The letter **i**, for example, is made in three movements. That **i** shape is repeated as part of so many letters that it results in the “picket fence” effect so characteristic of Gothic scripts.

Fifteenth- and sixteenth-century versions of this script became extremely difficult to read because they are even more compressed, and the baseline terminations are invariably made with elaborate, overlapping lozenge-shaped strokes.

Gothic Rotunda

In Spain and Italy, rigidly angular Gothic scripts were largely avoided. Instead, a book script evolved in the thirteenth century (continuing in places until the 18th century) which was truly Gothic, but was more rounded. Gothic Rotunda (FIGURE 47D) was widely used for liturgical texts, ranging from tiny, personal Books of Hours to enormous ceremonial manuscripts (often with musical notation).

This script has the texture and heavy appearance of the northern Gothics, but it maintains the roundness of the Carolingian minuscule. The letters **D** and **h** take Uncial form. Both forms of **r** and **s** are used (round **s** is reserved for word endings). The unusual form of **g** is unique to Gothic Rotunda. Like all Gothic scripts, Rotunda is written with a slanted pen angle, the square baseline terminations being completed with a corner of the pen.

Gothic Bâtarde

The Gothic period saw a revival of true cursive scripts, introduced first in England at the end of the twelfth century. Many of these scripts incorporate impressive calligraphic flourishes and other decorative features. The Secretary script, as its name implies, was primarily used for correspondence and other informal documents (FIGURE 47E). This script has an angular, pointed look with mannered pen flourishes and a swelling applied to certain ascending letters (especially **f** and long **s**). From the end of the thirteenth century, cursives were accepted for use as book scripts, especially those intended for universities.

Later in the Gothic period, a number of mixed scripts appeared, combining elements of cursive and book scripts, e.g. Bastard Secretary (see M. Brown 1990: 108f.).

The formalized book script evolving from Secretary, Gothic Bâtarde, is particularly associated with the Court at Burgundy in northern France (FIGURE 47F). It retains many of the vanities and peculiar letterforms of the Secretary Script (e.g. **r** and short **s**), while having the formality and texture of other Gothic book scripts.

Humanist scripts

Humanist scholars at the beginning of the fifteenth century began a reformation of scripts, in a conscious effort to improve legibility and elegance in book design. That Humanist approach was deliberately opposed to the prevailing Gothic style of northern Europe.

Humanist Minuscule

Poggio Bracciolini of Florence has been credited with the revival, in 1402–1403, of Carolingian Minuscule based on twelfth-century Italian models. Undoubtedly he worked in collaboration with other scholars (see Ullman 1932: 140–43, Aris 1990: 21, Knight 1984: F3).

Humanist Minuscule is usually written small, with lengthened ascenders and descenders (FIGURE 48A). Carolingian characteristics are retained—Uncial **h**, long **s**, and **ct** and **st** ligatures. Later Humanist Minuscule includes short **s** at word endings.

Humanist Cursive

A quickly written form of Humanist Minuscule was devised by Niccolò Niccoli, ca. 1420. This new book script, which we now refer to as Italic, has a more cursive aspect than the minuscule—a forward slant, and some letter joins (FIGURE 48B).

Humanist Italic

Formal versions of this Cursive script were developed by Papal Chancery scribes, like Ludovico degli Arrighi (FIGURE 48C). The names they gave to these scripts varied

spiritualem et corporalem mihi

A. British Library, Yates Thompson Ms.7. Ca. 1515.

folius triduo sumis: Legis eā mense Julio.

B. British Library, Add. Ms.21115. Late 15th century.

nium iudicio cadere' uisum est, oratore

C. British Library, Royal Ms. 12.C.viii. Ca. 1517.

FIGURE 48. Humanist scripts. A. Humanist Minuscule. B. Humanist Cursive. C. Humanist Italic.

from scribe to scribe. The writing master Bernardino Cantaneo distinguished two major types: *Cancellaresca Formata*, with rounded arches on **m** and **n** and serified ascenders; and *Cancellaresca Corsiva*, with narrower, pointed arches and hooked ascenders.

Cursive writing from the sixteenth century

Humanist Cursive, following the *cancellaresca* style of the writing masters such as Arrighi, was the handwriting of choice for Europe's intelligentsia and nobility in the sixteenth century. Cellini, Raphael, the left-handed Michelangelo, even Queen Elizabeth I (FIGURE 49A) all wrote in the "Italian" manner.

The Secretary Hand, a cursive lightweight Gothic script, evolved in England during the first half of the sixteenth century and endured for business use for more than a century. A variety of Gothic cursive first seen in the sixteenth century, *Kurrentschrift*, was taught in Germany and Austria as everyday handwriting until the end of World War II (SECTION 63). In France the *Ronde* style was introduced ca. 1650, retaining a few Gothic letterforms, and it survived in certain places in France to the late twentieth century.

G. F. Cresci, in his manual of 1570, introduced a rather mannered version of *cancellaresca*. It was rounder, with greater slope, looser texture, and "blobbed" ascenders. Varieties of this "Italian Round Hand" were popular in the seventeenth century in the American Colonies and many European countries.

The pointed pen

The evolution of copperplate printing for book illustrations led to the use of a flexible, pointed pen (rather than the edged pen) to produce strongly contrasted thick and thin strokes (FIGURE 49B). John Ayres' *Writing Book*, published in England in 1680, illustrated the new Copperplate style with its looping flourishes and ligatures, and its rather over-ornate capitals.

Early American manuals, like that of Benjamin Franklin (1748), relied heavily on imported European models. It was not until one hundred years later that the uniquely American Spencerian style emerged. P. R. Spencer developed, as a "Commercial Cursive," a monoline copperplate hand with occasional, almost random, use of thick strokes. Numerous attempts to simplify the Spencerian approach followed (FIGURE 49C). The two most publicized, by C. P. Zaner (1895) and Austin Palmer (1901), retained their influence and popularity in USA school systems throughout the twentieth century. Their only competitor was *Manuscript*, recommended in 1924 by Marjorie Wise, a skeletal Roman form taught to young children as unjoined letters (FIGURE 49D).

truste the not fulfillinge of your promes to profe

A. Letter written by Queen Elizabeth I of England when a young girl. 1548.

am well pleas'd wth yo^r performance in Writing

B. George Shelley, from *Penmanship in Its Utmost Beauty*. London, 1731.

It was during one of my sun

C. H. W. Ellsworth, from *The Penman's Art Journal*. New York, 1907.

without asking, Hither hurried when

D. Marjorie Wise, from *On the Technique of Manuscript Writing*. New York, 1924.

FIGURE 49. Cursive writing from the sixteenth century. A. Cancellaresca. B. Copperplate. C. Commercial cursive. D. Manuscript.

In England in the early twentieth century, simplified Copperplate models, like that of Vere Foster, were the most common in educational use, though a type of Manuscript or Printsript superseded them.

Italic revival

A return to *cancellaresca* was pioneered by Alfred Fairbank with his *Handwriting Manual* (1932). This italic revival has gained ground in many British schools and has spread to certain parts of Europe, the British Commonwealth, and the USA. Along with an English Carolingian Minuscule favored by the British pioneer, Edward Johnston (1872–1944), *cancellaresca* underlies the craft of calligraphy that has won increasing popularity through the twentieth century.

The printed word

The invention of printing by movable metal type in the fifteenth century was, eventually, to bring to an end the very long tradition of copying books by hand. Significantly, the early printers relied heavily on the methods, *mise-en-page*, and letterforms of calligraphy they knew. Some scribes became involved in the new technology by hand-lettering initials in printed books, and even by designing typefaces.

Mainz

Johann Gutenberg's experiments with movable type in Mainz, as early as 1436, led the way in the development of a practical method for making books by means of printing. His first printed work, the so-called 42-line Bible (ca. 1456), uses the format, style, and late Gothic Quadrata script of contemporary German manuscripts (FIGURE 50A). He followed the calligraphic practice of abbreviations, ligatures, and even biting. Marginal initials and other letters were written in by hand (usually in red, hence *rubricated*).

Johann Fust and his son-in-law Peter Schöffer, a French calligrapher, using Gutenberg's machinery (and perhaps his types), produced one of the most beautifully printed books of all time, the Mainz Psalter of 1457 (FIGURE 50B). It incorporates a magnificent Gothic Quadrata typeface, large two-color initials, and small capitals rubricated by hand. Some of the copies were actually printed on vellum.

The invasion of the city of Mainz in 1462, causing the dispersion of printers, among others, hastened the spread of printing to other cities in Europe, most significantly to Venice.

The typeface used in the first printing in England, by William Caxton (dated 13 December 1476), was based on the popular Gothic Bâtarde script.

Venice

As in Germany, the first printers in Venice looked to contemporary scribal manuscripts for their models. Thus Humanist Minuscule (ultimately derived from the ancient Carolingian Minuscule) provided the inspiration for the first Italian typefaces, and the *mise-en-page* reflected the airiness and elegance of Humanist manuscripts. Capitals were based on calligraphic examples of classical Roman Square Capital forms.

Nicolas Jenson, a Frenchman who moved to Venice (probably via Mainz), produced the first Roman type for his Eusebius of 1470 (FIGURE 50C).

Three years later, Aldus Manutius established himself as a printer in Venice. He refined Jenson's approach and improved the presswork, using lighter inking. He collaborated with Francesco Griffo, a scribe and punchcutter, who designed type with capitals slightly shorter than the ascenders (as in calligraphy) to produce a better balanced page of text. This Venetian "white page" typography set the pattern which is followed to this day.

Griffo also designed a Chancery Italic type, based on his own writing. It was first used in an edition of Virgil's *Opera*, printed by Aldus in 1501 (FIGURE 50D). The italic was not used just for emphasis, as today. It was designed to condense the text and make books a more convenient size to handle. Other scribes, most notably Ludovico degli Arrighi, also designed italic typefaces.

diuiciē xp̄ianorū. Si habes ī potestate

A. Gutenberg, 42-line Bible. Ca. 1456.

obprobriū hōim ⁊ abiectio plebis Omnes

B. Schöffer & Fust, Mainz Psalter. 1457.

Quare multarum quoq; gentium p

C. Jenson, Eusebius. 1470.

P rincipio, sedes apibus, statioq; petenda

D. Manutius and Griffo, Virgil. 1501.

FIGURE 50. Historical type specimens. A, B. Early types from Mainz. C. The first Roman type.
D. The first Italic type.

Garamond

During the second quarter of the sixteenth century, the leadership in typography passed to France. The new Roman type was primarily the work of the typefounder Claude Garamond. It was still Venetian in character, but more refined and less mannered. The fitting of the letters was much smoother. The typeface was conceived as a harmonious family of capitals, lowercase, and italics. The italics were intended not as a separate book face, but to be used within the text for emphasis and contrast.

Modern versions of the Garamond style often mistakenly follow the later types of Jean Jannon. The most “authentic” modern revival is the Adobe Garamond of 1989 (FIGURE 51A), based on an original Garamond specimen sheet of 1492. The Adobe italics, also derived from the 1492 sheet, were originally designed by Robert Granjon, a colleague of Garamond.

Caslon

An Englishman, William Caslon, much improved on the imported Dutch types of the time. His first specimen sheet of 1734 showed Roman letters with more personality than previously (FIGURE 51B). His italic, supplied with many Baroque flourishes and swash capitals, was more dependent on pointed than edged pen calligraphy. It has an especially flamboyant &. It is noteworthy that the first printings of the American Declaration of Independence and the United States Constitution used Caslon’s type.

Baskerville

John Baskerville, another energetic Englishman, designed a lighter, more elegant Roman typeface, used first for the printing of Virgil's *Georgicon* in 1757 (FIGURE 51C). His background as a writing teacher shows especially in his italics. To be able to print it properly he had to devise machinery, new ink, and even a smoother paper.

Baskerville typefaces are usually described as *Transitional*—moving away from the sixteenth-century *Old Style* of Garamond (with diagonal accent, heavy thin strokes, and angled serifs), toward the late eighteenth century *Modern* of Didot and Bodoni (with vertical accent, hairline thin strokes, and horizontal serifs).

Bodoni

Radically different Roman typestyles emerged in France in the mid eighteenth century from the typefoundries of Fournier and Didot. These were copied and refined by Giambattista Bodoni of Parma, Italy (FIGURE 51D). His typefaces were dark in color yet razor-sharp, requiring very smooth paper like that of Baskerville. They were characterized by a strong thick-and-thin contrast, flat hairline serifs, and a horizontal accent (i.e. the thickest parts of the O occur at 9 o'clock and 3 o'clock).

The nineteenth century

Typography was greatly influenced in the nineteenth century by commercial advertising's demand for large, bold letters. (The first sans serif letters in type were produced by the William Caslon Company in 1816.) Three typical styles emerged: Egyptians, with slab or slab-bracketed serifs (e.g. Clarendon, Rockwell, and Playbill; FIGURE 51E); Ornaments and Fat Faces (e.g. Thorowgood Italic, Ultra Bodoni, and numerous decorative capitals); and "Gothics," heavy sans serif letters (e.g. Franklin Gothic and Grotesque 216).

The twentieth century

Roman type in the twentieth century has evolved in two ways: First, in the search for "authentic" versions of classic typefaces like Bruce Rogers's Centaur (Monotype, 1929), a Jenson revival (FIGURE 51F); Slimbach's Garamond (Adobe, 1989); Louis Hoell's Bodoni (Bauer, 1924); and Adrian Frutiger's Univers (Deberny and Peignot, 1957), a harmonized family of "Gothic" sans serif typefaces. Second, in innovation, for example like Paul Renner's Futura (Bauer, 1928), a sans serif based on geometric shapes; and Eric Gill's Gill Sans (Monotype, 1928), a sans serif following the proportions of Roman capitals. There are also unusual serif faces like Gill's epigraphic Perpetua (Monotype, 1929); Hermann Zapf's Melior (Stempel, 1952), with its

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz &
abcdefghijklmnopqrstuvwxyz

A. Adobe Garamond, Robert Slimbach. 1989.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz & ™
abcdefghijklmnopqrstuvwxyz

B. Adobe Caslon, Carol Twombly. 1990.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz &
abcdefghijklmnopqrstuvwxyz

C. Monotype Baskerville. 1923.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz &
abcdefghijklmnopqrstuvwxyz

D. Bauer Bodoni, Louis Hoell. 1924.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz &

E. Stephenson Blake Playbill. 1938.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz &

F. Monotype Centaur, Bruce Rogers. 1929.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
 abcdefghijklmnopqrstuvwxyz &

G. Linotype Optima, Hermann Zapf. 1958.

FIGURE 51. Contemporary versions of traditional and modern typefaces.

extraordinary elliptical shape; and Zapf's Optima (Stempel, 1958), a serifless Roman (FIGURE 51G).

Fundamentally, little has changed. The capital letters we use still follow the Classical Roman forms of 2000 years ago, and our lowercase letters depend heavily on the ninth-century Carolingian Minuscule from France.

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