

The Journal of Typographic Research
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News of Current Letterform Research

Developments in a variety of disciplines are revealing implications for letterform investigation undreamed of only a generation ago, but the Journal must be aware of specific research projects in order to report on them. Without a supporting association, the Journal must rely on reports of letterform research activity from *interested individuals*.

The Journal, therefore, encourages communication from research people, administrators, and students on individual and departmental research projects, theses, research grants, etc. Please send the Journal Editor a copy of any research report or an outline of the study—with the name and address of the people involved.

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Letterform research being an academic orphan, the Journal has no reservoir of talent to call upon for help in handling the myriad editorial and organizational jobs that need doing. Journal activities that involve communication with an international body of individuals and research groups can be particularly rewarding.

If you would like to join the Journal's staff, please write the Editor—mentioning, if possible, any particular area of activity you are interested in.

literacy teaching goes on, on a much smaller scale, in the advanced countries too. In Britain, for example, it is partly remedial, for failures from the education system, and partly initial, for adult immigrants. In developing and developed countries alike, it is only in this area of literacy promotion that, in English, the term "literacy" is used. Adult non-literates are "illiterates"—which is a useful distinction to make at the zero and minimal levels of literacy; and in UNESCO usage, which is educationally unexceptional in this respect, only illiterates are the object of literacy teaching.

This is odd. Literacy is fundamental to the educational process; yet the term "literacy" plays little part in educational theory in the English-speaking world. Of course, the theory and practice of making children literate receives enormous attention, but it does so under the general heading of "reading."

The list of five psycholinguistic components of initial standard literacy which we have put forward in this paper may be very inadequate; but at least it puts the literate's linguistic knowledge first and the perceptual and motor skills last, as an indicator, however crude, of where the emphasis should lie.

1. See J. Mountford, "Writing-system: A Datum in Bibliographical Description" in Conrad H. Rawski (ed.), *Toward a Theory of Librarianship: Papers in Honor of Jesse Hawk Shera* (Cleveland: Press of Case Western Reserve University, forthcoming).
2. For points in this paragraph see an earlier article in *The Journal of Typographic Research*: J. Mountford, "'Writing' and 'Alphabet'," II (July 1968), 221-232.
3. See C. A. Anderson, "Literacy and Schooling on the Development Threshold: Some Historical Cases," Chapter 18 of C. A. Anderson & M. J. Bowman (eds.), *Education and Economic Development* (London: Cass, 1966).

This article is based on a presentation given in Section 3 (Psychology of First Language Learning) of the Second International Congress of Applied Linguistics, Cambridge, England, September 1969.

The Emergence of Gothic Handwriting

Leonard E. Boyle

During the mid-eleventh century Caroline script began to undergo significant changes. The growing market for writings, both academic and popular, demanded a small, clear, and highly abbreviated style. The new Gothic script originated out of this need for compression; e.g., the fusing of opposite curves of letters where they were found back to back and the judicious use of abbreviations. The transitional styles of writing are illustrated.

The year 1200 marks the end of a period of some four hundred years during which the predominant script in Europe was the graceful and unambiguous book hand we now call Caroline. This had been introduced a little before 800, in the time of Charlemagne (hence the name), in order to put an end to the medley of scripts, most of them too contorted for easy private or public reading, that had developed out of the late Roman business cursive in the former provinces of the Roman Empire. Devised after some thirty years of experimentation, possibly at Charlemagne's instigation, the pleasant, controlled, and generally unabbreviated Caroline form of writing was in fact based directly on the legible, unligatured minuscule book hand (semiuncial) of the late Roman period (fourth to sixth centuries). By the year 900, this new hand had conquered most of continental Europe.

About 1050, however, the Caroline script began to undergo small but significant changes. For example, instead of employing the graceful curves and the sharply pointed finishing strokes of pure Caroline writing, scribes now developed a tendency to break and to stagger the strokes of a letter. Thus the top parts of m and n, which were straight in Caroline writing, took on a humped look; similarly, the ends of minim strokes (as in i or m or n) began to turn up lazily and to resemble the trunk of an elephant. These marked departures from standard Caroline practice first appeared in Normandy around 1050.

In nomine Christi
 ymacthrmetgoruma
 luictanpamilya penob.
 pratro guctuystnagry

Figure 1. Later Roman, or minuscule, cursive, fourth century. All of the illustrations in this essay were drawn by Hs. Ed. Meyer and appear in his book *Die Schriftentwicklung* (Zürich: Graphis Press, 1958).

Equia omnequ-
 fit antequam fi-
 at non fyt no sc
 um filij bcdgh p r x y

Figure 2. Semiuncial, fifth century.

Probably the shift from sharp finials to a broader, rather snub finishing stroke was due to the adoption in Normandy (and elsewhere, later on) of the obliquely cut pen, which scribes in England and Ireland had been using for their insular script. The Caroline style of writing had been challenging the insular form in England from about 950, when Benedictine monks from Normandy were invited into southern England to promote monastic reform; in turn, the broad insular pen seems to have gained a foothold in Normandy in the next century. It was also in Normandy in the middle of the eleventh century that a further departure from the Caroline canon of writing was to be seen. Where Caroline insisted on letter separation in order to make reading (and reading in public in particular) less subject to hesitation or error, there began at that time the practice of joining certain letters and, indeed, making some letters (e.g., pp, bb) overlap to form a monogram.

These changes heralded the beginnings of that non-Caroline form of writing to which the humanists of the fifteenth century, despising it as barbarous when compared to Caroline, attached the label "Gothic." However, the era of full-blown Gothic did not commence much before 1200. Caroline writing, but with the intimations of Gothic noted above, dominated the eleventh and twelfth centuries: the script continued to be clear and spacious, and abbreviations were kept to a minimum. Yet there were definite indications from 1150 onward that a growing demand for books, a widening readership, and the increasing use of the written document for business transactions were bringing about a general abandonment of the leisurely Caroline hand. The twelfth-century renaissance, a direct result of the quest for original sources and a scientific methodology begun during the Gregorian reform (1050–1100), saw a multiplication of schools, scholars, and treatises. After the publication of the two most influential syntheses of the twelfth century—the *Decretum* of Gratian for church law about 1140, and the *Sentences* of Peter Lombard for theology some fifteen years later—whole new classes of legal and theological literature come into being: glosses and commentaries, questions and repetitions, summae and distinctiones, and the like. In addition, the growing literacy of the clergy, a process hastened by educational decrees of the Third Lateran Council (1179), especially that which established chairs of grammar in every cathedral church,

Nonne reges pascuntur
apostolus bur. lucc come
debas & luccm. openseba
mm. Et quoulerum sum & c

Figure 3. Pre-Caroline book hand, seventh century.

consideret. Et tunc illa
naturam que super ip-
sam est. In .b p g h k x y z.

Figure 4. Anglo-Saxon insular writing, eighth century.

que sint illa que cum
greca consentiant uen-
tate decerna. b f h k p x y z

Figure 5. Caroline writing, ninth–tenth centuries.

occasioned a demand outside of the schools for cheap, portable books of a none too professional nature; and it is significant that the first popular manuals of theology and law began to appear about 1200.

Given this growing market for writings, both academic and popular, it was only a matter of time before the generously spaced and uncluttered pages of a typical Caroline manuscript gave way to a more economical layout and to more parsimonious methods of writing. Further, the great upsurge of scholastic learning at Bologna, Paris, and Oxford had brought about the eclipse of monasteries as the chief centers of book production. Professional non-monastic scribes were now emerging as a class; and what these scribes needed in order to meet the rising demand for the written word was an expeditious and profitable yet legible method of writing as much as possible in the

Ego q̄s amo arguo & casti-
go. Emulare ḡ & penitenti
a age. Ecce sto. b d f h k p x y z

Figure 6. Caroline writing, eleventh–twelfth centuries.

ad'o cōmissis. feralis exitū aliq̄
remediū querens. p̄ q̄o egre m̄
tē ab immunctis ma. h k r y s s

Figure 7. Caroline writing, late twelfth century.

smallest possible area. In fact such a method lay readily to hand in the small, clear, and highly abbreviated style of writing that had developed out of the Caroline book hand in chanceries and business centers of the twelfth century. This neat, "cursive" hand enabled a lot of ground to be covered quickly with a freely flowing pen, and was ideal for recording or for preserving file copies (rolls, registers) of business transactions, state and legal affairs, and ecclesiastical correspondence; by 1200 it was an established form of writing, best seen in the earliest extant series of registers of papal letters (1198–1216: Innocent III), or in the earliest groups of English administrative documents from the same period (1199–1216: King John).

The influence of this cursive or documentary hand is clearly reflected in the changeover in literary productions about 1200 from the large, expansive Caroline hand to a minute and sometimes

coz. Idem profecto sunt se
mēet nepotes. Meminif
tis credo. aghklqvwxyzs

Figure 8. Early Gothic, thirteenth century. Note the feet of m and n, the fusion of curves (de), and the Gothic r in the first line.

Magnus Dominus et
laudabilis nimis: in ci
uitas. fhkllpqrstvwxyz

Figure 9. Angled Gothic, fifteenth century.

crabbed style of writing. The script now became smaller and more compressed than Caroline, and abbreviations began to abound, all in the interests of time, space, and increase of output. The disruption of the Caroline canon of writing, which had been threatening for some one hundred and fifty years, was complete.

In this new Gothic script the most significant and far-reaching departure from Caroline—the mark, indeed, of pure Gothic—was the

Gloria laudis resonet in ore
omniū Patri genitoqz proli
spiritui sancto pariter Resul
tet laude perhenni Labori
bus dei vendunt nobis om

Figure 10. Rotunda, printed type, fifteenth century. Note the Gothic r and capitals.

oblationem seruitutis nostre: s; 7
cūcte familie tue. Quæsumus do
mine ut placatus accipias: diesqz
nros i tua pace disponas, atqz ab
eterna damnaciōe nos eripi: et in
electoz tuoz iubeas grege mune
rari. Per xp̄m dñm nrm Amen.

Figure 11. Textura, printed type, fifteenth century.

phenomenon of combining or fusing the opposite curves of letters where these were found back to back. The breakdown of Caroline had begun with the introduction of the obliquely cut insular pen and with the overlapping of certain rounded letters; now, the better to save space, scribes began to fuse opposing curves where possible. Thus, when a letter such as o was preceded by a letter such as p, or was succeeded by a letter such as c, the bow or curve of one letter was merged with the opposite bow or curve of the other (e.g., po, oc; bc, bd, be, bg). By 1220 this was a steady (and for dating purposes, invaluable) feature of the new book hand. Not every word, of course, provided a ready-made juxtaposition, back to back, of opposite curves, but a judicious use of abbreviations offered over a hundred combinations of bows and curves (thus the opposing curves of *o* and *e* in *omne* could be merged in the abbreviated form \bar{e}). The fashion became so popular, indeed, that scribes often imposed curves on uncurved letters, forcing them to merge with the curves of naturally curved letters. The wide use of the old “uncial” form of *d* (D) as an alternative to the regular minuscule *d*, probably was due to the fact that the availability of two forms of *d* almost doubled the range of fusion of *d* with bowed letters.

This phenomenon of the “fusion of opposite curves” is at its most elegant in the *scriptura rotunda* of Italy (and especially of Bologna) from 1250 onward. In centers outside of Italy, however, there developed a form of compression that made the bows of letters more angular than round, so that the merging of curves in the Gothic of northern countries was more often than not a merging of angled bows.

In fully developed Gothic, whether curved or angled, letters follow one another with mathematical precision. Generally the writing tends to be heavy, but there is always a harmony of angle with angle and curve with curve; the almost invariable use of a Gothic *r* (a letter resembling the Arabic number 2) after the letter *o* instead of the straight Caroline *r*, is a good example of the preoccupation with symmetry, for the 2 form of *r*, with its pleasant curves, blends more agreeably than the plain *r* with the bows of *o*, as in *o2*. The use of the broad pen heightens the impression of weight and solidity, echoing to some extent the Gothic architecture of the period. A page written in the full, disciplined Gothic looks very much like a woven pattern

Superis habeo gratiam
 quorum maiestate sug
 gerente mihi fauorum
 opperfici. djksvwxyzi

Figure 12. Humanistic script: a return to Caroline, fifteenth century.

Sic splendente domo, claris na-
 talibus orta Scintillas, raraque
 tuos virtu & ffghjkwxyz œæ?
 RARAQUE TUOS VIR-
 TUTE PARENTES ILLU
 FGKHW JXMYDBNCIZ
 1234567890

Figure 13. Humanistic type, about 1500.

