# Gbe elements of abbzeviation ín mesieval fatín palcograpby 

By ADRIANO CAPPELLI<br>Translated by David Heimann and Richard Kay

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# University of Kansas Publications Library Series, 47 

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& \text { By ADRIANO CAPPELLI } \\
& \text { Translated by David Heimann } \\
& \text { and Richard Kay } 378,7 \% \\
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University of Kansas Libraries, 1982
RDO112 21839 OCT 8198 ?

Printed in Lawrence, Kansas, U.S.A. by the University of Kansas Printing Service

## PREFACE

Take a foreign language, write it in an unfamiliar script, abbreviating every third word, and you have the compound puzzle that is the medieval Latin manuscript. For over two generations, paleographers have taken as their vade mecum in the decipherment of this abbreviated Latin the Lexicon abbreviaturarum compiled by Adriano Cappelli for the series "Manuali Hoepli" in 1899. The perennial value of this work undoubtedly lies in the alphabetic list of some 14,000 abbreviated forms that comprises the bulk of the work, but all too often the beginner slavishly looks up in this dictionary every abbreviation he encounters, when in nine cases out of ten he could ascertain the meaning by applying a few simple rules. That he does not do so is simply a matter of practical convenience, for the entries in the Lexicon are intelligible to all who read Latin, while the general principles of Latin abbreviation are less easily accessible for rapid consultation, at least for the American student. No doubt somewhere in his notes there is an outline of these rules derived from lectures or reading, but even if the notes are at hand they are apt to be sketchy; for reference he would rather rely on the lengthier accounts available in manuals of paleography, but more often than not he has only Cappelli's dictionary at his elbow. This
does indeed devote forty-six introductory pages to "Brachigrafia Medioevale," but because this essay is in Italian, our Latinist almost invariably will consult it only as a last resort after he has failed to find the form he seeks entered in the Lexicon proper. Obviously, he could be spared much effort if the Lexicon were available in an English edition, as once it was in German, but since only the introductory pages require translation, it seems more practicable to issue them separately as a supplement to the Italian edition currently in print, and its publisher, Dr. Ulrico Hoepli, has graciously consented.

The purpose of this booklet is simply to make Cappelli's prefatory treatise on the elements of Latin abbreviation available in English. It is intended as an aid to those who are learning to transcribe Latin manuscripts, and for this limited practical objective it should prove a satisfactory guide, as it provides the beginner with an extensive description in English of the common abbreviatory practices of medieval Latin scribes. No doubt Cappelli's classification of abbreviations was an imperfect system, overly rationalized, and as an historical statement of the development of Latin brachygraphy it is largely antiquated, but neither defect impairs its usefulness to one who wishes only to expand abbreviations correctly, since the principles remain true no matter when or where they originated and however they are presented.

The present work, then, is a translation, complete and unabridged, of Adriano Cappelli's essay "Brachigrafia Medioevale" as it appears on pages xi-lvi of his Lexicon abbreviaturarum: Dizionario di abbreviature latine ed italiane usate nelle carte e codici specialmente del medio-evo . . .
(3rd ed., Milan, 1929; lxxiii +531 pp.). The only innovation is a decimal system of section numbers, which has been added for convenient reference.

The Lexicon first appeared in 1899 as part of the series "Manuali Hoepli" and has since been revised four times, twice in Italian for the same series $(1912,1929)$ and twice in German for "J. J. Webers illustrierte Handbücher" (Leipzig, 1901, 1928). A longer version of the Latin title was used in 1899-Lexicon abbreviaturarum quae in lapidibus, codicibus et chartis praesertim medii-aevi occurruntbut all subsequent editions have reduced it to two words, following the example of the German translator: Lexicon abbreviaturarum: Wörterbuch lateinischer und italienischer Abkürzungen. The first Italian edition contained 13,000 entries, and although 3000 more were added in the German translation of 1901, the next Italian edition was enlarged by only a thousand in 1912 to its present size of approximately 14,000 entries. Since 1929 no changes have been introduced into the Italian text, which continues to be reprinted by the Casa Editrice Libraria Ulrico Hoepli, Via U. Hoepli 5, Milano 20121.

A valuable supplement based on Vatican manuscripts is also available: August Pelzer, Abréviations latines médiévales: Supplément au Dizionario di abbreviature latine ed italiane de Adriano Cappelli (Louvain-Paris, 1964; vii+86 pp.). Cappelli's French precursor has also reappeared in facsimile: L. A. Chassant, Dictionnaire des abréviations latines et françaises usitées dans les inscriptions lapidaires et metalliques, les manuscrits et les chartes du Moyen âge, 5th ed., Paris, 1884; reprinted by Olms (Hildesheim, 1965; lii+172 pp.).

The translators wish to thank James Helyar for the care with which he edited this volume, and especially for his help in restoring the penwork of the examples and for his calligraphy on the title page and cover.

David Heimann Richard Kay

## 0. INTRODUCTION

0.1 The medieval abbreviation system goes back to the ancient Roman system of sigla, which are isolated letters that represent an entire word. It is also derived in part from the system of Tironian notes, a sort of shorthand that in Roman times was employed primarily to record public speeches. Considerable elements of both the sigla system and that of Tironian notes survive in the widespread medieval abbreviation system that flourished, especially in Italy, from the 10 th through the 15 th centuries. ${ }^{1}$ This is the system of medieval Latin abbreviation whose general rules and principles we shall now examine.
0.2 All medieval abbreviations, for both Latin and Italian words, can be divided into six categories, each of which will be treated in turn. Abbreviation can be indicated by: 1. Truncation,
2. Contraction,
3. Abbreviation marks significant in themselves,
4. Abbreviation marks significant in context,
5. Superscript letters,
6. Conventional signs.

## 1. ABBREVIATION BY TRUNCATION

1.1 A word is abbreviated by truncation when only the first part of the word is actually written out, while an abbreviation mark replaces the missing final letters. Two kinds of marks are employed: (a) general signs, which indicate simply that the word has been abbreviated without specifying whether it has been truncated or contracted; and (b) specific truncation signs, which always indicate that
some letters are lacking at the end of the word.
1.2 Both kinds of marks can have many forms; the following are the most common:

General signs:


886

Truncation signs:

1.3 The general signs can all be written above a word, either as a separate character or in ligature with the longshafted letters. The last three, with closed loops, are used especially in papal bulls and royal charters.
1.4 The first truncation sign, a dot or period, is generally placed after the abbreviated word and is still in use today with the same meaning. Of the other signs, the first three are cross-strokes cut diagonally through the last letter of the abbreviated word, while the last three are tails that form a ligature with the final letter. Although the next to the last sign can be used to indicate simply the omission of any final letter(s), it is used especially to indicate the dropping of the ending $-i$. The third sign from the last is usually joined to the letter $d$ to indicate the endings $-d u m$ and -dam, or the syllable dis. Some examples follow:

$$
\begin{aligned}
& \text { s.p.d. }=\text { salutem plurimam dicit } \\
& \text { mund }=\text { mundio }^{2}
\end{aligned}
$$


als:

| í | $=$ antern |
| :--- | :--- |
| d | $=$ demaria |


g.0. $=$ micendmen



4


Pt


RTM药



15 Among the varimas ablerevations by trameation, the Bigla are easily the most important. They are also the most difforult to interpet since they reprochace only the inatial letter of the abbrevinted word. Fortunately, is is generally
only the most frequently used words and phrases that are so abbreviated. A few general rules will facilitate interpretation.
1.51 It is generally the majuscule form of the initial letter that is used, followed by a period. This practice is observed in both inscriptions and written documents. In the latter, however, we find minuscule letters are also used, neither followed by a period nor separated by a space. For example:

$$
\begin{array}{ll}
\mathrm{fq}=\text { filius quondam } & \mathrm{nq}=\text { nunc } q u o n d a m \\
\mathrm{hq}=\text { honesta foemina } & \mathrm{rq}=\text { relicta quondam. }
\end{array}
$$

1.511 Often, however, instead of a period such sigla are marked by a general sign of abbreviation that is placed above the siglum ( $\$ 1.2-3$ ).
1.52 Sigla which precede or follow proper names generally refer to position, title, or rank.
J.C. $=$ Juris consultus
C. C. = Causidicus Collegiatus
D = Dux or Dominus
N.E.R. $=$ Notarius Ecclesiae Romanae.
1.53 In medieval documents, and especially in juridical usage, isolated sigla can refer to a proper name that begins with the letter in question.
1.54 Not all medieval sigla are initial letters of the words they represent. We find, for example:

1.55 Doubled sigla generally indicate the plural number or the superlative degree, or sometimes also a word in which
the letter in the abbreviation occurs two or more times.

$$
\begin{array}{ll}
\mathrm{FF} .=\text { Fratres } & \mathrm{LL}=\text { libentissime } \\
\overline{\mathrm{GG}}=\text { Gregorius } & \underline{\mathrm{PP}}=\text { Papa } \\
\mathrm{II} .=\text { leges } & \overline{\mathrm{pp}}=\text { propter } .
\end{array}
$$

1.56 Some sigla involve a tripled letter, especially in inscriptions, to indicate a group of three persons. AAA $=$ Augusti tres, $\mathrm{DDD}=$ Domini tres, ggg $=$ germani tres.
1.57 Sigla are occasionally written upside down, backwards, or sideways in inscriptions, when they refer to female names or titles: $\mathbf{W}$ or $\Sigma=$ Mulier; $\mathcal{F}=$ Filia, $\mathbf{I}=$ Liberta; $\mathbf{I}=$ Tita; $\mathcal{O}=$ Caia or Gaia. It must be pointed out, however, that the backward C (O) is frequently used for the syllables con- or contra-, as in: $\mathrm{OL}=$ Conlibertus; OS C $=$ Contrascriptor; and $\mathrm{D}=$ Centurio.
1.58 In inscriptions, in order to distinguish sigla from numerals, a horizontal line is at times placed above the numerals, thus:

## $\cos \overline{\text { XIIII }}=$ Consul decimus quartus

1.581 Sometimes, however, the horizontal bar over the numeral letter is used to increase the value by a factor of 1000. Hence: $\overline{\mathbf{L}}=$ quinquaginta milia; $\overline{\mathbf{X}}=$ decem milia, etc.
1.582 Even in inscriptions, however, the horizontal bar often serves simply to indicate an abbreviation. Thus: $\overline{\mathbf{X P}}=$ Christus; $\overline{\mathrm{MIL}}=$ Militiae or Militum; $\overline{\mathbf{E P V}}=$ Episcopus. These last examples cannot, strictly speaking, be called sigla, since, in addition to the initial letter, they also contain other letters of the abbreviated word.
1.6 The decline of the sigla system in the 8th and 9th centuries was marked by the appearance of less radical truncations which are much easier to interpret.

| AUG. | G. $=$ Augustus |
| :---: | :---: |
| am | = mmen |
|  | $=\mathrm{ante}$ |
| B0.m | ME. $=$ Boare Memoriae |
|  | = datum, datae |
| dim | = dimidium |
|  | = domino |

$\overline{\mathrm{in}}=$ inde
Ind $=$ Indictione
$\overline{\mathrm{NN}}=$ Incipit
Not $=$ Notarius
$\overline{\mathbf{o b}}=$ obligatio
ren $=$ renuntiando
$\overline{\mathbf{s i g}}=$ sigillo.
1.7 The system of abbreviation by truncation, however, simple as it is, was not the most popular system in the Middle Ages. In most cases, it was customary to further abbreviate truncated words by omitting one (or more) of the middle letters of the word. Thus $\overline{\mathrm{Kal}}=$ Kalendas is further abbreviated $\overline{\mathrm{K} 1}$. Similarly, $\overline{\text { quat }}=$ quatenus becomes q. Further examples:

| $\overline{\mathrm{Dn}}$ | $=$ Domino |
| ---: | :--- |
| $\overline{\mathrm{dI}}$ | $=$ dilectissimi |
| $\overline{\mathrm{dr}}$ | $=$ denarii |
| $\overline{\mathrm{fl}}=$ filius |  |
| $\overline{\mathrm{hb}}$ | $=$ habet |
| $\overline{\mathrm{ei}}$ | $=$ enim |
| carl | $=$ chartula |
| $\mathbf{N B}$ | $=$ nobis |

1.8 The conclusion of certain words abbreviated by truncation is indicated by special signs of abbreviation, or by small letters written above the line at the end of the word, or by writing the end of the word itself but in ab-
breviated form. The first two methods will be discussed below ( $\$ 3$ and 5); for the third group, the following list illustrates some of the most common abbreviations of word endings:
$\ldots \overline{\mathrm{b}}=\ldots$..bis; no $\overline{\mathrm{h}}=$ nobis, ur $\overline{\mathrm{b}}=$ urbis etc.
$\ldots \overline{\mathrm{c}}=\ldots \mathrm{cum}, \ldots \mathrm{cit} ; \overline{\mathrm{g}} \overline{\mathrm{c}}=$ graecum, $\mathrm{Io} \overrightarrow{\mathrm{c}}=\mathrm{Iocum}, \overline{\mathrm{fec}}=\mathrm{fecit}$, dic $=$ dicit etc.
$\ldots \bar{d}=\ldots$ dem,.. dam, ...dum; een $=$ eaedem, $q^{\circ} n \bar{d}=$ quondam, $\overline{\operatorname{bn}} \overline{\mathrm{d}}=$ habendum ete.
$\ldots . \overline{1}, \ldots l=\ldots$ lis,... bilis; epal' $=$ episcopalis, 9 uttil $=$ convertibilis etc.
$\ldots \bar{m}=\ldots \mathrm{men}, \ldots \mathrm{mum} ;$ crim $=$ crimen, $\mathrm{f}^{\prime} \bar{m}=$ firmum etc. $\ldots \bar{n}=\ldots$ nim, ...num; eten $\overline{=}$ etenim, do $\bar{n}=$ donum etc.
$\ldots \bar{t}=\ldots$ tum,... $\operatorname{ter} ; \mathbf{a c} \bar{t}=$ actum, similit $=$ similiter etc.
$\ldots \bar{u}=\ldots$...it, ...um; c'au $=$ creavit, hindu $=$ habendum etc.
$\ldots \overline{\mathrm{x}}=\ldots \mathrm{xit} ;$ int $^{\mathrm{o}} \mathrm{d} \overline{\mathrm{x}}=$ introduxit, $\overline{\mathrm{I}}$ ell $\overline{\mathrm{x}}=$ intellexit.

## 2. ABBREVIATION BY CONTRACTION

2.1 A word is abbreviated by contraction when one or more of the middle letters are missing. Such an omission is indicated by one or the general signs of abbreviation (\$1.2).
2.2 Such abbreviations, according to Paoli, ${ }^{4}$ can be divided into pure and mixed. They are pure when they preserve the first and last letters of the contracted word, omitting all the middle letters. For example: $\overline{\mathrm{oa}}=\mathrm{omnia} ; \overline{\mathrm{pns}}=$ praesens; $\overline{\mathrm{dno}}=$ domino; $\overline{\mathrm{dia}}=$ dimidia; $\overline{\mathrm{epo}}=$ episcopo; etc. They are called mixed if, in addition to the beginning and end of the word, they also preserve some of the middle letters. The result is actually two or more contractions in the same word.

| $\overline{\mathrm{pbr}}=$ presbyter | $\overline{\text { Oio }}=$ ommino |
| :---: | :---: |
| $\overline{\mathrm{mgro}}=$ magistro | $\overline{\text { 0ps }}=$ omnipotens |
| $\overline{\mathrm{K} 18}=$ Kalendas | $\overline{\mathbf{r I m}}=$ relativum |
| $\overline{\mathrm{mla}}=\mathrm{multa}$ | $\overline{\text { sedm }}=$ secundum |
| $\overline{\text { mil }}=$ Medio | $\overline{\text { prbrs }}=$ presbyteris |
| $\overline{\text { pnia }}=$ poenitentia | $\overline{\text { vir }}=$ universal |

2.3 Among the pure contractions note especially those which preserve only the initial and final letters of the contracted word.

2.4 Contractions can occur either in the declined or in the indeclinable parts of the abbreviated word.

$$
\overline{\text { effctm }}=\text { effectum, } \overline{\text { snalr }}=\text { sententialiter. }
$$

2.41 Most generally, however, the stem, or indeclinable part, of the word is truncated and one or more of the first letters of the word ending are also dropped, often leaving only the final letter. Word endings thus shortened are said to be headless or acephalous, in distinction to truncated endings (\$1.8).

| $\overline{\operatorname{sim}}=$ elementum | $\overline{\mathrm{rcs}}=$ rectus | $\overline{\mathrm{sbi}}=$ subiecti. |
| :--- | :--- | :--- |
| $\overline{\mathrm{fls}}=$ falsus | $\overline{\mathrm{sbs}}=$ substantiae |  |

2.5 The following two tables list the most common contractions and truncations, first those involving the indeclinable stem of the word and next those affecting the word ending.
2.51 Stems Commonly Contracted or Truncated.
$\overline{\mathrm{acc}} \ldots=$ accus..., accid...; $\overline{\text { accat }}=$ accusat, $\overline{\text { acciol }}=$ accusationi, $\overline{\mathrm{accns}}=$ accidens, $\overline{\text { acente }}=$ accidente etc.
$\overline{\mathrm{a}} . . .=$ anim...; $\overline{\text { aie }}=$ animae, $\overline{\text { aial }}=$ animal etc.
$\overline{\text { apl... }}=$ apostol...; $\overline{\text { apls }}=$ apostolus, $\overline{\text { aplica }}=$ apostolica etc.
$\mathrm{bn}_{\mathrm{n}}^{\mathrm{I}} . \mathrm{=}=$ bene..., bon...; $\mathrm{bnfm}=$ beneficium, $\overline{\text { bndnt }}=$ benedicunt. bna $=$ bona, bnorum $=$ bonorum etc.
cl... $=$ clausul...; clis $=$ clausulis, olam $=$ clausulam stc.
$\overline{\mathrm{co}} \ldots=$ commun...; $\overline{\text { coem }}=$ communem, $\overline{\text { colcatol }}=$ communicationi etc.
$\mathrm{d} \overline{\mathrm{n}} \ldots=$ domin...$;$ dnice $=$ dominice, dnacoi $=$ dominacioni etc. dī... $=$ divisi...; diol $=$ divisioni, dis $=$ divisus, d $\overline{l o m}=$ divisionem etc.
$d \overline{\operatorname{m}} . . .=$ divin...$;$ dina $=$ divina, $d \overline{\operatorname{m}}=$ divini, dīo $=$ divino etc.
 rentiís, $\sqrt{d r n t i e}=$ differentiae etc.
dr... $=$ divers...; drsa $=$ diversa, drimode $=$ diversimode ete.
$\overline{\mathrm{ee}} \ldots=$ esse...; $\overline{\text { eetis }}=$ essetis, eel $\overline{\mathrm{r}}=$ essentialiter etc.
$\overline{\mathrm{e}} . . .=$ elemen...; el$\overline{\mathbf{a}}=$ elementa, $\overline{\mathrm{e} \mid \mathrm{tis}}=$ elementis, el $\bar{m}=$ elementum etc.
$\overline{\text { ep }} . . .=$ еріscop...; ерm $=$ episcopum, ерs $=$ ерiscopus etc.
eppl... $=$ epistol...; epla $=$ epistola, eplis $=$ epistolis etc.
$\overline{\operatorname{exn}} \ldots=$ existen...; exns $=$ existens, $\overline{\operatorname{exn}} \mathrm{te}=$ existente etc.
$\overline{\mathrm{fc}} . .=\mathrm{fac} . . ;$ fca $=\mathrm{facta}, \overline{\mathrm{fcto}}=$ facto $^{5}$ etc.
$\overline{\mathrm{fl}} . .=\mathrm{fals} . . ; \overline{\mathrm{flo}}=\mathrm{falso}, \overline{\mathrm{flm}}=$ falsum etc.
$\overline{\mathrm{fr}} . . .=$ fratr..., frater; $\overline{\mathrm{fribus}}=$ fratribus, $\overline{\mathrm{fr}}=$ fratres, $\overline{\text { frna }}=$ fraterna, $\overline{\mathrm{frne}}=$ fraternae etc.
$\overline{\mathrm{g} 1 . .}=$ glori...; $\overline{\text { glam }}=$ gloriam, glosion glorioso etc.
$\overline{\mathrm{gn}} \ldots=$ gener...; gne $=$ genere, gnalis $=$ generalis etc.
$\bar{h} . .=$ hab...; heo $=$ habeo, hitum $=$ habitum etc.
hñ... = haben..., habun...; hn̄di=habendi, h̄̄däs=habundans etc.
 $\overline{\mathrm{ic}} . . .=$ iamdict...; $\overline{\mathrm{icti}}=$ iamdicti, $\overline{\mathrm{c} t \mathrm{~m}}=$ iamdictum etc. $\overline{\text { ist... }}=$ iamscript...; $\overline{\text { isto }}=$ iamscripto, $\overline{\text { istis }}=$ iamscriptis etc. $\overline{\ln } . . .=$ licen..., liben..., locumten...; Inia $=$ licentia, Inter $=$ libenter, $\overline{\mathrm{n}} \mathrm{s}=$ locumtenens.
$\bar{\Gamma} \ldots=$ litter...; $\overline{\operatorname{ra}}=$ littera, $\overline{\operatorname{lre}}=$ litterae etc.
$\overline{\mathrm{mgr}} . .=$ magistr...; mgra $=$ magistro, mgratum $=$ magistratum. $\overline{\mathrm{mi}} . . .=$ miseri..., misericordi...; $\overline{\text { mia }}=$ miseria, miam $=$ misericordiam, $\overline{\text { mir }}=$ misericorditer etc.
$\overline{m l} .$. mul...; $\overline{m l a}=$ multa,$\overline{m l r}=$ mulier etc.
$\overline{\mathrm{mr}} . . .=$ matr..., mater...; $\overline{\mathrm{mre}}=$ matre, $\overline{\mathrm{mrm}}=$ matrimonium, $\overline{\text { mrona }}=$ matrona $\overline{\text { mrna }}=$ materna etc.
$\overline{\text { noi... }}=$ nomin $\ldots ; \overline{\text { nola }}=$ nomina, $\overline{\text { nolat }}{ }^{0}=$ nominatio etc.
$\overline{\mathrm{nr}} . . .=$ nostr...; $\overline{\mathrm{nra}}=$ nostra, $\overline{\mathrm{nrm}}=$ nostrum etc.
obnn... $=$ obstan...$;$ obste $=$ obstante, obntib $=$ obstantibus etc. $\overline{0 c c o}=0,0$ casio $; \overline{0 c c o s}=$ occasione, occoalr $=$ occasionaliter etc. $\overline{\text { of }}=$ omni...; $\overline{\text { ola }}=$ omnia, $\overline{\text { olno }}=$ omnino, $\overline{\text { ofm }}=$ omnium etc.
omp... $=$ omnipoten...; omps $=$ omnipotens, ompis $=$ omnipotentis etc.
$\overline{\text { on }} .$. osten... ; ondo $=$ ostendo, onsio $=$ ostensio etc.
$\overline{\mathrm{p}} . . .=$ praesen..., poeniten...; pns $=$ praesens, pna $=$ poenitentia.
$\overline{\mathrm{ppp} . . .}=$ praeposit...; $\overline{\mathrm{pps}}=$ praepositus, $\overline{\mathrm{ppm}}=$ praepositum etc.
$\overline{\mathrm{ppl}} . . .=$ popul...; $\overline{\mathrm{ppli}}=$ populi, $\overline{\mathrm{ppIm}}=$ populum, $\overline{\mathrm{pp} \mid r i s}=$ popularis etc.
$\overline{\mathrm{pr}} . . \mathrm{p}=$ patr...; pater...; $\overline{\mathrm{pria}}=$ patria, $\overline{\mathrm{prs}}=$ patris, $\overline{\text { prnus }}=$ paternus etc.
$q_{n} . . .=$ quando..., quan..., quon...; qnq $=$ quandoque, $q \bar{n} t=$ quantum, $q \bar{n} m=$ quoniam etc.
$\overline{q 0}=q u a e s t i o ; \overline{q 0 m}=$ quaestionem, $\overline{q 018}=$ quaestionis etc.
$\overline{\mathrm{rc}} . . .=$ rec...; $\overline{\mathbf{r c a}}=$ recta,$\overline{\mathrm{rem}}=$ rectum, $\overline{\text { reep }}=$ receptio etc.
$\overline{\mathrm{r}} . . .=$ regul..., rela...; ria $=$ regula, $\overline{\text { rilibus }}=$ regularibus, $\overline{\text { rite }}$ $=$ relative, rlois $=$ relationis etc.
$\overline{\mathrm{rn}} . . .=$ respon..., renun...; $\overline{\text { rndit }}=$ respondit, $\overline{\text { rnsum }}=$ responsum, $\overline{\text { ens }}=$ renuntians. rntils $=$ renuntiis etc.
$\overline{\text { ro }} \ldots=$ ratio; $\overline{\text { roe }}=$ ratione, $\overline{\text { role }}=$ rationale etc.
$\overline{\mathbf{s b}} . . .=$ substan..., subiect...; $\overline{\mathrm{sba}}=$ substantia, sbalis $=$ substantialis, shiue $=$ subiective etc.
$\overline{s c} . . .=$ sanct...; scm $=$ sanctum, scuarij $=$ sanctuarii, scio $=$ sanctio etc.
$\overline{\text { scd }} . .=$ secund...; $\overline{\text { scdm }}=$ secundum, $\overline{\text { seds }}=$ secundus etc. $\overline{\text { scl }} . .=$ saecul...; $\overline{\text { scla }}=$ saecula, $\overline{\text { sclare }}=$ saeculare etc.
$\overline{8 g} . . .=$ signific...; sgans $=$ significans, $\overline{\text { sgabit }}=$ significabit etc. $\overline{s i l} . .=$ simul..., simil...; silatoe $=$ simulatione, sila $=$ similia, silr $=$ similiter etc.
$\overline{s l} . . .=$ singul..., solut..., sqecul...; sloe $=$ solutione, sion $=$ solutio, slorum $=$ singulorum.
$\overline{\mathbf{s n}} . . .=$ senten...; sna or snia $=$ sententia, snalr $=$ sententialiter, sl$\overline{\operatorname{aris}}=$ saecularis etc.
$\overline{\mathbf{s p}} . .=$ speci..., spirit; spall $=$ speciali, spalr $=$ specialiter,
$\overline{\text { spes }}=$ species, spū $=$ spiritu, spitale $=$ spirituale, spual' $=$ spiritualis etc.
$\overline{s r}=$ super; srbi$=$ superbi, srfile $=$ superficisle, sriri $=$ superiori etc.
$\overline{\text { tp }} \ldots=$ temp $\ldots ;$ tpla $=$ templa, tps $=$ tempus, tyra $=$ tempora. $\operatorname{tr} . . .=$ termin $\ldots ; \operatorname{tro}=$ termino, $\operatorname{tr} \bar{m}=$ terminum, tros $=$ terminos etc.

$\overline{\mathrm{xp}} \ldots{ }^{6}=$ christ...; $\overline{\mathrm{xpi}}=$ Christi, $\overline{\mathrm{xpafor}}{ }^{9}=$ Christoforus etc.
2.52 Endings Commonly Contracted or Acephalous.
$\ldots a=\ldots \mathrm{ta}, \ldots \mathrm{tia} ; \overline{\mathrm{rea}}=$ recta, $\overline{\text { relca }}=$ relicta, mia $=$ multa, $\overline{d r a}=$ differentia etc.
$\overline{\mathrm{bIr}}=. .$. biliter; deTcabir $=$ delectabiliter etc.
$\overline{\mathrm{br}}=$...biter; pbr$=$ presbyter etc.
bs $=$...bus; testibs $=$ testibus, hrdbs $=$ heredibus etc.
$\overline{\mathrm{co}}=\ldots$ cio, ...ctio; $\overline{\mathrm{ico}}=$ inicio (initio), $\overline{\mathrm{nddc}}=$ benedictio etc.
$. d \bar{t}=$ dunt $; c^{\prime} d \bar{t}=$ credunt,$d \overline{n t}=$ dicunt etc.
$\overline{\mathrm{e}}=\ldots$..tiae, $\ldots \mathrm{me} ; \mathbf{s \overline { b } e}=$ substantiae, $\overline{\mathrm{plle}}=$ plurime etc.
$\sqrt{3}=$...tis; ompls $=$ omnipotentis etc.
$\overline{\mathrm{Ir}}=\ldots$ liter, ...lariter; $\overline{\mathrm{tal} / \mathrm{r}}$ (or $\overline{\mathrm{tI})}=$ taliter, $\overline{\mathrm{pplr}}=$ popu. lariter etc.
$\overline{\mathrm{It}}=$...libet; $\overline{\text { qmolt }}=$ quomodolibet etc.
$\ldots=\ldots \mathrm{nem}, \ldots \mathrm{em}, \ldots \mathrm{um} ; \overline{\text { orom }}=$ orationem, $\overline{\text { sam }}=$ salutem, $\overline{\text { fretm }}=$ fructum etc.
$\overline{\mathrm{ns}}=\ldots$ ens; $\overline{\text { acons }}=$ accidens, $\overline{\text { his }}=$ habens etc.
$.0=\ldots$ to, ...tio; feo $=$ facto, $\overline{\text { raO }}=$ ratio etc.
$\overline{\omega e}=\ldots$ one $^{2}$; dīe $=$ divisione, dispoe $=$ dispositione, collod $=$ collatione etc.
. $\overline{0}=\ldots$ oni; diloI $=$ dilationi, diol $=$ divisioni etc. $\ldots r=\ldots$ er, ...ter,.. tur, $\ldots \mathrm{ur} ; \mathrm{d} \overline{\mathrm{nr}}=$ dicuntur, $d \bar{r}=$ dicitur, $\overline{u l d n r}$ (or $\overline{\mathrm{unr}}$ ) $=$ videntur $\overline{\mathrm{ppr}}=$ propter etc.
$\ldots \overline{\mathrm{r} t}=\ldots \mathrm{runt} ; \overline{\mathrm{fert}}=\mathrm{ferunt}, \overline{\text { huert }}=$ habuerunt, $\overline{\mathrm{er} t}=$ grunt.
$. . \overline{\mathrm{a}}=\ldots$..cunt; $\mathrm{a} \overline{\mathrm{dst}}=\mathrm{adsunt}$, past $=$ possunt etc.
$\ldots \mathrm{s}=. . \mathrm{us}, \ldots$ es, $\ldots$ is, ...rus, $\ldots$ ens; $\overline{\mathrm{fls}}=$ falsus, $\overline{\mathrm{frs}}=$ fratres, priors $=$ presbyteris, $\overline{\text { dis }}=$ divisus, $\overline{\mathrm{rcs}}=$ rectus, $\overline{\text { dice }}=$ dices, asper $=$ aspectus etc.
$\ldots \mathrm{t}=\ldots \mathrm{it}, \ldots \mathrm{unt} ; \overline{\mathrm{Incpt}}=$ incipit, $9 \overline{\mathrm{tigt}}=$ contingent, $\overline{\mathrm{pett}}=$ petunt, $\overline{\text { volt }}=$ volunt etc.
...to $=$...to; $\overline{\text { tepto }}=$ temptatio, $\overline{\text { mao }}=$ mention etc.
$\ldots \overline{\mathrm{tm}}=\ldots$ tum, $\overline{\mathrm{ctm}}=$ iamdictum, $\overline{\text { fret }}=$ frustum etc.

## 3. ABBREVIATION MARKS

## SIGNIFICANT IN THEMSELVES

3.0 These are abbreviation marks that indicate which elements of the abbreviated word are missing, no matter what letter the symbol is placed above or joined with as a ligature. There are seven types:
I. $-, \rightarrow=\mathrm{m}, \mathrm{n}$
II. $9,2=$ con, com, cum, can
III. 9 = us, os, is, s
IV. $\sim$.. $=r, r e, r a, ~ a r$
V. $2 \rightarrow \sim \cup=$ ur, fur, or
vi. $22,2,2 \ell=$ rum
VII. $7, \boldsymbol{Q}=$ et, е.
3.1 The first sign is a straight or slightly curved line,
which we already know as a general abbreviation sign. It is frequently used to indicate the omission of the letters $m$ or $n$ :

$$
\overline{\operatorname{cod}}{ }^{\mathrm{o}}=\text { conditio, } \overline{\operatorname{comue}}=\text { commune, } \overline{\mathbf{i}}=\mathrm{in}
$$

3.11 This symbol was used throughout the Middle Ages, especially to indicate the omitted letter $m$ in the endings $-a m$, -em, -um.
allā $=$ aliam, nobile $=$ nobilem, actū $=$ actum etc.
3.12 In the Visigothic script prior to the 9th century, a line with a dot over it ( - ) indicates the omission of the letter $m$, while a plain line ( - ) can indicate either a contraction or the letter $n$. But this disrinction is not observed in later Visigothic hands, for from the 9th century on, the line is always dotted, even when used as a general mark of abbreviation. ${ }^{8}$
3.2 The second symbol, which bears a strong resemblance to the arabic numeral 9, and sometimes, especially in Gothic hands, to the inverted letter C , is one of the oldest abbreviation symbols. It is to be found in the examples collected by Valerius Probus ${ }^{9}$ and in the Tironian notes, always with the meaning of con or cum. It was very popular in the Middle Ages, and many words beginning with this symbol have been collected in the Lexicon under the letter $C$. This is one of the few symbols that is invariably written on the same line as the other letters, never above or below. Frequently it stands alone, but is also used in conjunction with abbreviation signs or superscript letters.

9 codo $=$ concedo $\quad 9^{n}=$ contra

| clr9 $=$ circum | $\overline{9}=$ condam (quondam) |
| :--- | :--- |
| 9 pleui $=$ complevi | $9^{a}=$ contra |
| 9 gnitio $=$ congnitio | $9^{9}=$ conceptus |
| 9 ctis $=$ cunctis | $9^{a a}=$ contraria |
| 9 tis $=$ cunctis | $9^{i}=$ communi. |

3.3 The third symbol can resemble the preceding one, but often it has instead the form of an outsize comma. Whatever the form, it almost always can be recognized by its distinctive position, since with only rare exceptions it is written above the line and at the end of a word. Generally it stands for the ending -us; but it can also be used for os, $-i s$, or simply $s$.

| pri $^{9}=$ prius | nob $^{9}=$ nobis |
| :--- | :--- |
| $\mathbf{s u}^{9}=$ suus | $\mathbf{f i}^{9}=$ filius |
| $\mathbf{p}^{9}=$ post | iu $^{9}=$ ius |
| id $^{9}=$ idus | $n^{9}=$ nos. |
| $\mathbf{i}^{9} \mathbf{t}^{9}=$ iustus |  |

3.31 Wattenbach ${ }^{11}$ lists as other meanings for the symbol 9 the combinations $e t$ and $u e$. E.g. $q 9=$ que; man $9=$ manet; s 9 = set (sed). There are, however, very few instances of this apart from the common sign s9 for set; this is probably to be explained as a corruption of the 7 -mark ( $\mathrm{s} 7=$ set; cf. §3.7). ${ }^{12}$
3.32 A sign very similar to the -us was occasionally placed above certain consonants to mark the omission of er, but never at the end of a word.

> ภ̄c? $\mathrm{m}=$ sincerum
> $\operatorname{cecut}^{2}=$ revertitur.

But since this is not actually a symbol for $-u s$, we shall treat it more fully in $\$ 4.31$.
3.4 The fourth symbol, which consists simply of a wavy line, sometimes very pronounced, almost like the letter $u$, is written above a word to indicate the omission of the letter $r$ or a syllable which contains an $r$, such as $r e, r a, a r$.

$$
\underset{\text { corige }}{\sim}=\text { corrigere, } \underset{\sim}{\sim} \tilde{p e t e}^{2}=\text { petere } .
$$

3.41 In many cases, however, this wavy line is used to indicate the letter $a$ or a syllable that ends with $a$.

$$
\begin{aligned}
& \mathfrak{\sim} \hat{O}=\text { nota } \\
& p \tilde{u}=\text { puta. }
\end{aligned}
$$

The symbol is, in this case, simply a transformation of the letter $a$, which about the 13 th century came to be confused with the characteristic symbol for $r$. Down to the end of the 15 th century, the two symbols are almost indistinguishable. Examples of this are to be found in the words: $\tilde{1}=\mathrm{ita}$, infra; $\widetilde{\mathrm{p} p}=\mathrm{papa} ;$ môrlr $=$ mortaliter.
3.42 In manuscripts of the 14 th and 15 th centuries, especially those written in Gothic script, this wavy line develops further into a broken horizontal bar, or two heavy dots closely spaced.

$$
\dot{N \ddot{0}}=\text { Nota, } \ddot{q} l e=q u a l e, \text { s } \ddot{p}=\text { sopra } .
$$

3.5 The fifth sign, resembling an arabic numeral 2 or an $S$ lying on its side ( $\infty$ ), was extensively used in most medieval hands to indicate an omitted $u r$ or $t u r$, generally
at the end of a word and almost always written above the line. On rare occasions it can also stand for the syllable er or ter, but not at the end of a word.

| tenot ${ }^{2}=$ tenetur | g $^{2} 8=$ generis |
| :--- | :--- |
| dic $^{2}=$ dicitur | ma $^{2}=$ materias |
| $c^{2}$ rit $=$ currit | cot $^{2} 0=$ caetero. |

3.6 The sixth sign is somewhat similar to the fifth. It also resembles an arabic 2 , but with an oblique line through the tail. Almost always on the line and at the end of the word, most commonly it is used to indicate the syllable -rum. Note that since the oblique line is also a sign of truncation, this sign can further stand for any final syllable that begins with an $r$ (see §1.4).

$$
\begin{aligned}
& \text { illo2f }=\text { illorum } \\
& \text { co2p }=\text { coram } \\
& \text { nota2p }
\end{aligned}
$$

3.7 The seventh sign, similar to the arabic numeral 7 and standing for et or $e^{13}$ is used both independently as a conjunction and also in the composition of larger words. This is true also of the ampersand (\&), a form which is popular even today.
3.71 With the addition of a horizontal bar above the character, either form stands for etiam or, when it occurs at the end of a word, ent.

$\operatorname{ag\& }=$ agent Fduct $=$ edicti \& triu $=$ aeternum.
3.72 In its 7 -shape, this sign is sometimes used for the enclitic -que; e.g., at7 $=$ atque. Less frequently this stands for $u s$, especially after the letter $b$ in the final syllable: quib7 $=$ quibus. Most likely this form is a corruption of the symbol 9 , standing for $-u s$, written, as it sometimes was, on the line rather than above. As a matter of fact, we also find the word quibus abbreviated quib9.
3.8 Many other peculiar signs were used during the Middle Ages to express the conjunction et: they are listed in the Lexicon together with the other conventional signs.

## 4. ABBREVIATION MARKS SIGNIFICANT IN CONTEXT

4.0 Among the abbreviation signs that indicate which elements are missing in the abbreviated word, there are some whose meaning is not set and constant but varies relative to the letter with which the sign stands. These signs are:

$$
\begin{aligned}
& \text { I. - } \\
& \text { II. }: ~: ~
\end{aligned}
$$

## III. <br> 

## IV. 2 Z

4.1 Here again the first sign is a straight line. Its meaning depends on the context. As has already been said, it can be a mark of abbreviation in general ( $\$ 1.3$ ) or can signat the omission of $m$ or $n$ ( $\$ 3.1$ ). The same line assumes different meanings when it cuts across the shaft of the letters $d$, $h$, or $l$, and when it is written above the letters $p$ and $q$ or cuts across the tails of these letters.

$$
\begin{aligned}
& \dot{b}, \bar{b}=\text { bre..., ber..., ...bub } \\
& \bar{c}=\text { cum, con, cen... }
\end{aligned}
$$

$\overline{7}=$ condam (quondam)
$\dot{A}, \dot{O}=$ de..., der..., ...nd
ђ = haec, hoc, her...

$$
t, t=v e l, u l . . ., \ldots e l
$$

$$
\overline{\mathrm{m}}=\text { men..., mun }
$$

$$
\overline{\mathbf{n}} \quad=\text { non, nun... }
$$

$$
\theta \quad=\text { obit }
$$

$$
P=\text { per, par..., porn... }
$$

$$
\begin{array}{ll}
\bar{p} \cdot \hat{p} & =\text { prae, are... }{ }^{14} \\
\overline{p p}, p p & =\text { propter, papa }{ }^{15} \\
& =\text { qua }{ }^{16} \\
\bar{q} & =\text { quass } \\
\bar{q} & \\
\overline{q q}, \overline{q 9} & =\text { quoque } \\
\bar{q} & =\text { quai } \\
\overline{\mathrm{q}} & =\text { ter..., term..., ten... } \\
\bar{u} & =\text { ven..., ven... }
\end{array}
$$

4.2 The period, the colon, the semicolon, and the mark like an arabic 3 are used almost always at the end of a word, and are written on rather than above the line.
4.21 When these signs follow the letter $b$ (b. b: b; b3) they all can stand for -us; the last two can also stand for $-e t$.
4.22 When they follow the letter $q$, they stand for -use (forming the enclitic -que), although the 3 -mark, and sometimes the semicolon, can stand alone for the enclitic -que.
4.23 The semicolon following the letter $s$ is frequently found in 12th-century Lombard charters for -is at the end of a word ( $-s$; =-sis).
4.24 In 14th-century hands the 3-mark stands for est, either independently as the copulative verb, or at the end of a word, such as: prod3 $=$ prodest; it'3 $=$ interest.
4.25 A dot or period written above $h$ stands for hoc; above $u$ the point signifies $u t$.
4.26 These examples illustrate $\$ 4.21$ ff.

4.27 In bookhands of the 8th and 9th centuries, the sign q ; is generally augmented by a point ( $\mathrm{q} ;$ ) whenever it stands for quae, either independently or as a component of a larger word. This distinguishes it from the enclitic -que (q; ).

$$
\mathrm{q} ; \cdot \mathrm{q} ;=\mathrm{quaeque}, \mathrm{q}: \cdot \mathrm{so}=\mathrm{quaeso}^{18}
$$

4.28 The following contractions deserve special attention.

4.281 When the 3-mark occurs at the end of a word and is preceded by the vowel $a, e$, or $u$, it generally does not stand for $-u s$ or et, but rather for $m$. It is almost always written on the same line as the other letters in the word, for example: na3 $=$ nam; $\overline{\mathrm{oe}} 3=$ omnem; hitu $3=$ habitum. In the Lombardic script, however, it is more frequently written above the line, not only at the end but in the middle of the word as well. ${ }^{20}$
4.282 The same sign following the vowel $o$ is often used for the final syllable -nem, as in opio3 $=$ opinionem. ${ }^{21}$
4.283 In a Roman charter of the year $1177,{ }^{22}$ we find the 3 -mark with its tail cut by an oblique line, standing for the syllable -rum, as in:

$$
\begin{aligned}
& \text { ypothccuz }=\text { ypotecarum } \\
& \text { romcurcoz }=\text { romanorum. }
\end{aligned}
$$

4.2831 In Lombard charters of the 11th century, the ending -orum is expressed thus:

4.29 Two periods positioned on either side of an isolated letter have the following meanings:

$$
\begin{array}{ll}
\cdot 0 .=\text { est } & \cdot s \cdot=\text { scilicet } \\
\cdot i \cdot=\text { id est } & \cdot t \cdot=\text { tunc } \\
\cdot n \cdot=\text { enim } & .9 \cdot=\text { condam (quondam) } \\
\cdot \mathbf{q}=\text { quasi } & \cdot 7 \cdot=\text { etiam. }
\end{array}
$$

4.3 The third sign is simply an oblique line, frequently
hooked at one or both ends, cutting transversely across almost any letter of the alphabet, and assuming a variety of different meanings. Most of the time it indicates the omission of the syllables er, ar, or re.
4.31 This sign was often replaced by the other three signs illustrated at §4.0: a sort of backward question mark $(S)$; a slightly wavy line standing vertically above the letters ( $S$ ); and a 9-like sign similar to the one for $-u s$.
4.32 We have already seen (\$1.4) that an oblique line cutting across a siglum or the last letter of an abbreviation can be used simply to indicate truncation. To avoid confusion with this usage, the oblique line (or an alternate form) is not used with contextual significance at the end of a word.
4.33 An alphabetical list of the applications subsumed under $\$ 4.3$ may be helpful.

$$
\begin{aligned}
& b, b, b, b=\text { bar...,ber.., bre..., bir.... } \\
& \text { B20 } \begin{array}{c}
\text {...ub. e.g. } \\
\text { Bartholomaeo }
\end{array} \\
& \text { bul = brevi } \\
& \text { abe }=\text { abire } \\
& \text { bbuýl = barbigeri } \\
& \int 6=\text { sub. }
\end{aligned}
$$

$$
\begin{aligned}
& \ell^{2} \subset a r=\text { cercar } \\
& \text { stle = chartulae } \\
& { }^{c} \mathrm{~d}^{-}=\text {credunt } \\
& c^{5} l^{\circ}=\text { circulo } \\
& \text { } \operatorname{lç}=\text { sincerum } . \\
& \text { d, } 8=d e r \ldots, \text { de..., di... e.g. } \\
& \text { diculm }{ }^{9}=\text { decernimus } \\
& \text { deleo }=\text { derelicto } \\
& \text { \&勺t } \quad=\text { creditur } \\
& \text { es } \\
& \text { Seet } \\
& =\text { esse. e.g. } \\
& =\text { debssent. } \\
& f, f^{s} f^{7} \\
& =f e r . . ., \text { fre... fir... e.g. } \\
& \text { fins } \\
& =\text { feriis }
\end{aligned}
$$

$$
\begin{aligned}
& \overrightarrow{y q} t^{5} \quad=\text { frequenter } \\
& \text { fug }=\text { fervet } \\
& =\text { firmum. } \\
& \mathcal{G}, \mathcal{S}^{+}, \mathscr{G}, \mathscr{G}, \mathscr{G}=\text { gar..., ger..., gre... e.g. } \\
& 99^{5} 9^{5}=\text { congregare } \\
& \text { Sy~ } \quad=\text { germen } \\
& \operatorname{sim} a^{a}=\text { Germania } \\
& \text { beds } \quad=\text { heredes } \\
& \begin{array}{ll}
\text { bemo } & =\text { heremo (erem } \\
14 & =\text { in integrum. }
\end{array} \\
& d \cdot J^{5} \\
& J_{e^{2}}=\text { Jeremiae } \\
& \int a x^{a 3}=\text { Jerarchiam. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { X,t } \\
& =l e r \ldots, \ldots u l \text {, lor..., al... - } \\
& \operatorname{ctı}^{9}=\stackrel{\text { e.g. }}{\text { clericus }} \\
& \text { pet }=\text { procul } \\
& \text { gtía = gloria } \\
& \text { th2s }=\text { talis. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { み九tuo }=\text { mortis } \\
& \stackrel{\varsigma}{\text { m̌utii }}=\text { mercurii } \\
& \text { mito }=\text { merito. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 晛. = denariis } \\
& \text { ģe }=\text { genere } \\
& \text { veñabl' = venerabilis } \\
& \text { fiñ }=\text { finiri. }
\end{aligned}
$$

$$
\begin{array}{rll}
P, P, P & =\text { pro. e.g. } \\
\text { pct } & =\text { procul } \\
\mathcal{P}^{t} & =\text { prout. }
\end{array}
$$

$$
=p r a e . ., p r i \ldots \text { e.g. }
$$

$$
\begin{array}{ll}
\text { ppat } & =\text { praeparat } \\
\text { p̀nceps } & =\text { princeps }
\end{array}
$$

$$
\dot{P}
$$

$=$ praesens praesentibus.

$\chi^{2}, \mathfrak{r}^{\mathfrak{r}} \mathfrak{r}, \dot{r}$
$=$ rar..., rer..., re... e.g.
$\stackrel{5}{4} 9$
$=$ rarjus
que $\quad=$ quaerere
$c^{2} y^{2}$
$=$ currere
rsła = regula

Hua $a=$ relevatur

$\begin{aligned} t, t, t^{5}, t^{5}, t^{5} & =\text { tar..., ter..., tre... } \\ \text { cyta } & =\text { cytara (cythara) }\end{aligned}$
$\tan \bar{u}=$ terminum
tra, tra $=$ terra
$t_{S}=\operatorname{tres}$
tbo $=$ tribus

$\not \lambda, \mathcal{Z}_{2}, \frac{1}{\mathcal{U}}, \hat{\imath}_{\mathcal{\lambda}}^{5}, \stackrel{?}{2}=$ ver..., vir... e.g.

$$
\operatorname{cais}^{5} Q=\text { caveret }
$$

Xogo $=$ virgo

$$
\text { OHO }=\text { overs (orvero) }
$$

$$
g u f^{2}=\text { conversatio }
$$

?
vt $=$ virtù.

$$
\stackrel{\varsigma}{\chi}, \dot{\chi} \quad=x e r \ldots \text { e.g. }
$$

excess = exercere.
4.34 The same signs completely change their meaning when used to cut across a letter $q$ over which a line or letter has been written.

$$
\begin{array}{ll}
\bar{q}=\text { quem } & {\underset{q}{m}}^{m}=\text { quantum } \\
g_{1}, \tilde{q}=\text { qua } & q^{q}=\text { quibus. } \\
q^{2}=\text { quid } &
\end{array}
$$

4.35 Finally, in the eth century, the s-form of this mark stands for $u$.

$$
l^{\prime} x, g^{\prime} d=\text { lux, quod etc. }
$$

4.4 The fourth sign is very similar to the arabic numeral 2 or the letter $z$. When it follows the letter $q$, the meaning is quid. Standing alone it frequently means et (sac. xv) or, if capped by a line, etiam. After the letters $u$ or $a$ at the end of a word, it indicates the omission of $m$. After the
letter $s$ it stands for et or $e d$.

| $\mathbf{q}^{2} \mathbf{q}^{\mathbf{2}}$ | $=$ quia |  | suz |
| ---: | :--- | ---: | :--- |
| $\frac{\mathbf{z}}{\mathbf{z}}$ | $=$ sum |  |  |
| $\overline{\mathbf{z} d i o}$ | $=$ etiam |  | miaz |

4.41 The sign most often used is certainly the first: $q^{2}$ for quia. The meaning of et or $m$ occurs mostly in Lombard hands and in incunabula.

## 5. ABBREVIATION BY SUPERSCRIPT LETTERS

5.1 At the end of a word, a superscript letter, whether a vowel or a consonant, can simply indicate the ending of the word, with a few exceptions which will be explained below (\$5.6).

## SUPERSCRIPT VOWELS

5.2 In other cases, a vowel written above a consonant generally stands for that vowel and the letter $r$, which can precede or follow it. Thus the vowels when superscript can stand for $a r, c r$, $i r, o r, u r$, or for $r a, r e, r i, r o, r u$.

| $\mathrm{m}^{\text {a }}$ is | $=$ martis | $\mathrm{fa}^{\text {a }}{ }^{\text {e }}$ | $=$ fractione |
| :---: | :---: | :---: | :---: |
| cetu | = certum | $\mathrm{g}^{\text {ex }}$ | $=\mathrm{grex}$ |
|  | $=$ circumstantias | eginu | $=$ egritudinum |
| fotis | $=$ fortis | eg ${ }^{\circ} \mathrm{ni}$ | $=$ egrotationi |
| $\mathrm{fig}^{2} \mathrm{at}$ | $=$ figuratum | $\mathrm{p}^{\text {V }} \mathrm{da}^{\text {a }}$ | $=$ prudentia. |
| $\mathrm{g}^{\mathrm{a}}$ | $=$ congrua |  |  |

5.3 Note, however, these special uses of superscript vowels:
5.31 The vowels $a, i, o$, when written above a letter $g$ that forms part of a word, ${ }^{24}$ stand for the syllables na, ni, no.

$$
\begin{aligned}
& \text { sigaclum = signaculum } \\
& \text { slgifire }=\text { significare } \\
& \text { agoso's = agnoscere }{ }^{24}
\end{aligned}
$$

5.32 The letter a written above the letter $r$ often stands for regula.

$$
\operatorname{rare}^{-0}=\text { regularem, } \mathrm{rat} \overline{\mathrm{~T}}=\text { regulativa } .
$$

5.33 The vowels $a, c, i, o$, written above the letter $q$, generally stand for the syllables ua, ue, ui, uo.

$$
\begin{array}{ll}
q^{2 / \sqrt{r}}=\text { qualiter } & \mathbf{q}^{\prime} c^{\prime} \mathbf{d}^{\prime}=\text { quicquid } \\
\mathbf{q}^{\circ} 9_{3}=\text { quaecumque } & \mathbf{q}^{\circ} \mathbf{d a m}^{0}=\text { quodammodo. }
\end{array}
$$

5.331 There is an exception, however, in the case of $\mathrm{q}^{\mathrm{o} n e}=$ quaestione.
5.34 The letter $c$ followed by a superscript $i$ can stand for either cir or cri, as well as cui.

$$
\begin{aligned}
& \mathrm{ol}_{3}=\text { cuilibet } \\
& \mathrm{o}^{\prime} 3=\text { cuique } .
\end{aligned}
$$

5.35 The symbol 9 or 3 followed by superscript i can signify either commumi or conveni.

$$
\begin{array}{ll}
9^{\prime} \overline{0 m}=\text { communionem } & 9 y^{\prime}=\text { communiter } \\
{ }^{\prime}{ }^{\prime} \overline{6 e}=\text { inconveniens } & 9^{\prime} \overline{u t}=\text { conveniunt. }
\end{array}
$$

5.36 The letter $m$ with o superscript represents modo.
$\mathbf{q}^{\circ} \mathrm{m}^{\circ}{ }^{\mathbf{l}} \mathbf{3}=$ quomodolibet.
5.37 The vowel $u$ written above the line to indicate the syllable ur is encountered only rarely, because, as we have seen ( $\$ 3.4,3.5$ ), the symbol 2 or the wavy line ( $\sim$ ) were generally used for this purpose. Thus the letter $u$ almost always stands for $r u$, or simply $u$, or for some other syllable containing $u$.
5.38 Often a vowel with a superscript vowel has a fixed meaning. The following are the most common examples.
$\mathbf{a}^{\mathbf{a}}=$ anima, alia, $\mathbf{a}^{\mathrm{a}} \mathrm{ia}=$ animalia, $\mathbf{a}^{\mathrm{a} m}=$ aliam etc. $\mathbf{a}^{\mathbf{i}}=$ aliqui, ali..., $\mathbf{a}^{\mathrm{i}} \mathrm{d}=$ aliquid, $\mathbf{a}^{\mathrm{i}} \mathbf{c} 9=$ alicuius, $\mathrm{a}^{\mathrm{i}} \mathbf{c}^{\mathrm{i}}=$ alicui etc. $\mathbf{a}^{\mathrm{vd}}=$ aliud
$\theta^{\mathrm{a}} . .=$ equa..., $\mathrm{e}^{\mathrm{a} I \mathrm{I}}=$ aequali, $\overline{\mathrm{a}} \overline{\mathrm{r}}=$ aequaliter etc.
 $\mathrm{i}^{\mathrm{a}}=\mathrm{ita},{ }^{\mathrm{a}} \mathrm{q}_{3}=$ itaque etc.
$j i=\mathrm{ibi}, \mathrm{i}_{\mathrm{d} \boldsymbol{e}}=\mathrm{ibidem}$ etc.
$0^{\mathrm{a}}=$ ota..., no ${ }^{\text {a }} \mathrm{hil}=$ notabilis, $n 0^{2} \overline{\mathrm{n}}=$ notandum etc.
$\mathbf{o}^{\mathfrak{i}}=$ omni..., omini.., $\boldsymbol{o}^{\mathbf{j}} \mathbf{p o}^{\mathfrak{a}}=$ omnipotentia, doium $=$ dominium, $0^{\text {ib }} 3=$ omnibus etc.
$u^{i}=u b i$, and at the end of a word ...uit, $u^{1} q 3=u b i q u e$, oportu $=$ oportuit


## SUPERSCRIPT CONSONANTS

5.4 Consonants, too, are sometimes written above the line, but less frequently, particularly the consonants with a long shaft ( $b, p$, etc.), since they occupy too much space. A
consonant that is placed superscript to another consonant is never the first or last character in a word.
5.41 The letter $c$ is the consonant most frequently superscript to another consonant. Usually it stands for ec or iec, except when in conjunction with the letter $d$, in which case it means ic or $u c$.

| dotaie | $=$ dictamine | $\mathrm{rctine}^{\text {ctine }}=$ rectitudine |
| :---: | :---: | :---: |
|  | $=$ introductum | oboto $=$ obiecto |
| pfoma | $=$ perfectissima | $\overline{\mathrm{s}} \mathrm{C}^{\mathrm{c}}$ = subiectae. |
| expctat | $=$ expectant |  |

5.42 The letter $l$ with its shaft crossed by an abbreviation symbol is frequently superscript to the consonant $n$, standing for nihil:

$$
\begin{aligned}
& \text { no }^{\frac{1}{2} 01^{9}=\text { nihilominus }} \\
& n^{7} 0=\text { nihilo }
\end{aligned}
$$

5.43 The letter $n$ sometimes stands superscript to the letter $q\left(q^{n}\right)$ with the meaning of quando. Thus $q^{n} 3=q u a n-$ doque; $\mathbf{a}^{\mathbf{1}} \mathbf{q}^{\mathrm{n}}=$ aliquando.
5.44 A superscript $r$ combined with $t$ represents the syllables ter or tur, as in: cetro $=$ caetero; cētrio $=$ centurio. ${ }^{25}$
5.45 Especially in the 12 th century, the letter $s$ was frequently written above the line at the end of a word with no special significance: it is a final $s$ and nothing more. E.g. patri ${ }^{\text {s }}=$ patris. ${ }^{26}$
5.46 The letter $t$ superscript to a consonant almost always
stands for $-i t$, except when it stands with the letter $p$, in which case the meaning is potest or post.

| $\mathrm{m}^{\text {tit }}$ | $=$ mittit | $\mathrm{p}^{\text {tils }}=$ potestatis |
| :---: | :---: | :---: |
| legtióo | $=$ legittimo | $\mathrm{p}^{\text {cha }}=$ postquam. |
| pentetia | $=$ poenitentia |  |

5.47 The letter $p$ with a superscript $x$ stands for the syllable -plex.

$$
9 p \times 10=\text { complexio, iэpxi }=\text { incomplexi. }
$$

5.51 Only rarely are consonants written above vowels, usually to indicate the ending of a siglum.

$$
\begin{array}{ll}
\mathbf{a}^{\mathbf{1}}=\text { animal } & \mathbf{i}^{\mathrm{m}}=\text { illum } \\
\mathbf{a}^{\mathbf{d}}=\text { aliud } & \mathbf{i}^{\mathrm{a}}=\text { illud } \\
\mathbf{a}^{\mathrm{t}}=\text { aut } & \mathbf{o}^{\mathbf{m}}=\text { oppositum } \\
\mathbf{a}^{\mathbf{t}}=\text { est, erit } & \mathbf{o}^{\mathrm{t}}=\text { ostendit. }
\end{array}
$$

5.52 Note, however, the forms:

$$
\mathbf{a}^{\mathrm{n}}=\text { ante, } \mathbf{a}^{\mathrm{n}} \mathbf{q}^{\mathrm{a}}=\text { antequam, obico }=\text { obiecto, } \mathbf{u}^{\mathrm{n}}=\text { unde } .
$$

5.6 When a letter is written above the line at the end of a word, its primary function, as we have already remarked ( $\$ 5.1$ ), is to indicate the ending of the word. There are some exceptions, however, when the final superscript letter is not the final letter of the word but rather the most characteristic letter of the ending. In this respect we have already noted $\mathbf{a}^{\mathbf{n}}=$ ante and $\mathbf{q}^{\mathbf{n}}=$ quando ( $\$ 5.43,5.52$ ). Some other examples:

| $\mathrm{h}^{1}=\mathrm{hic}$ | ig ${ }^{\mathbf{i}}=\mathbf{i g i t u r}$ |
| :---: | :---: |
| $h^{\text {e }}=\mathrm{hoc}$ | $\mathrm{n}^{\boldsymbol{e}}=\mathrm{nec}^{\text {c }}$ |
| $\mathrm{m}^{\circ}=$ monacus | $\mathbf{u}^{\mathbf{n}}=$ unde |
| $\operatorname{leg}^{\mathbf{i}}=$ legitur | Excell ${ }^{m}=$ Excellentissimus, Excellentissimis etc. |

5.61 In the last example, the superscript $m$ stands for the superlative.
5.62 In some expressions of frequent occurrence, the letters written like an exponent above the line stand, not for the final letter or letters of the word in question, but for some characteristic letter or letters in the following word.

| $=$ alio modo | $0^{\text {too }}=$ opposito modo |
| :---: | :---: |
| $\mathbf{e x}^{0}=$ ex adverso | op $^{\text {too }}=$ opposito modo |
| $9^{\text {sm }}=$ consequens falsum | $\overline{\mathbf{p t}}{ }^{\mathbf{c}}=$ potest sic |
| $\mathrm{h}^{00}=$ hoc modo | $\underline{p}^{\text {too }}=$ primo modo |
| $\mathrm{h}^{\text {on }}=$ hoc nomen | $\overline{\text { sili }}=$ simili modo |
| $\mathrm{i}^{00}=$ illo modo | $\overline{\text { silio }}{ }^{\circ}=$ simili modo |
| $1110^{\circ}=$ illo modo | $\mathbf{u t}^{\mathbf{t}}=\mathrm{ut} \mathrm{dicit}$ |
| $\overline{\mathrm{n}^{\text {c }}}=$ non | $\underline{\underline{u t r}}{ }^{\text {r }}=$ ut probatur |
| $\overline{n^{2}}=$ non dicitur | $\mathbf{v}^{1} \quad=$ verbi gratia ${ }^{\text {27 }}$ |
| $\mathrm{n}^{00}=$ nullo modo | $7^{\circ}{ }^{\text {c }}=$ et sic |
| $\overline{10}{ }^{0}=$ nullo modo | $7^{\text {ciis }}=$ et sic de aliis |

5.63 Most of the time, letters written above the line at the end of a word are accompanied by some abbreviation symbol to indicate the ending of the word itself. Such cases are partially illustrated by the examples already given for abbreviations by truncation and contraction ( $\$ 1.8,2.52$ ). Here the superscript endings are listed separately with examples of each.
$\bar{a}, a_{0}, a_{3}=\ldots a m$. e.g.
$\operatorname{arm}^{2}=$ harmoniam
in ${ }^{\circ}$ 3 $=$ iustitiam.
$b_{3} \quad=\ldots$...us. e.g.
$\partial t^{t_{3}}=$ continentibus.
$\uparrow \quad=$...cis. e.g.
$\operatorname{can}^{\top}=$ canonicis.


nol $=$ notandam.

$$
\begin{aligned}
& =\ldots \text { nem, ..et. e. } \\
\text { mag' } 3 & =\text { magnitudinem } \\
\operatorname{sig}^{e} 3 & =\text { gignificet. }
\end{aligned}
$$

e.g.

$$
\begin{aligned}
& \neq \nu, t=\ldots \text {..lis, ..lls. e.g. } \\
& \operatorname{Sif}^{7}=\text { divisibilis } \\
& \text { j̀a } a^{b}=\text { communicabilis } \\
& \text { anai }{ }^{t}=\text { amabilis. } \\
& \bar{m} . \Delta=\text {...mum. e.g. } \\
& 9^{-\infty}=\text { generalissimum. } \\
& \approx \quad=\text {..num. e.g. } \\
& \text { metpo } 0^{\overline{=}}=\text { metropolitanum } \\
& \operatorname{cep}^{-}=\text {sempitornum. } \\
& \cdots \cdot \eta=\ldots m e n . \text { e.g. } \\
& a^{m} \quad==a m e n \\
& \text { Pgıl }^{2}=\text { regimen. } \\
& \text { of. }=\text {...onis. e.g. } \\
& 99^{9} a^{-11}=\text { considerationis. } \\
& 03,03=\text {...onem. e.g. } \\
& \mathrm{Dun}^{\sqrt{3}}=\text { dimensionem }
\end{aligned}
$$

$\partial e^{\sigma} \quad=$ demonstrationem.

$$
f a^{3}=\text { faceret. }
$$

$$
\begin{aligned}
r e & =\ldots \text { ris. e.g. } \\
8 e^{7} & =\text { decembris. }
\end{aligned}
$$

$$
2 \quad=\ldots u r ; \ldots t u r .^{20}
$$

$$
r, b \quad=\ldots a s, \ldots t e s . \quad \text { e.g. }
$$

$$
f+0^{\circ}=\text { distantias }
$$

$$
\mathscr{D}^{\circ}=\text { habentes. }
$$

$$
5
$$

$$
=\ldots s . \quad \text { e.g. }
$$

$$
\text { men }^{\prime}=\text { meis. }
$$

$$
\begin{aligned}
& 04,0 e \\
& \sin \\
& \text { =...one. } \\
& \text { e.g. } \\
& \text { mitre } \\
& =\text { multiplicatione. } \\
& \tau \\
& =\ldots \text {..ter. e.g. } \\
& d_{n}{ }^{*} \quad=\text { dupliciter. } \\
& ? \\
& =\ldots r i \text { e.g. } \\
& =\text { determinari, determinare. } \\
& 7 \\
& =\text {...ret. e.g. }
\end{aligned}
$$

$t$
$\begin{aligned} & \hat{\imath} t \hat{n} Q^{t}=\text {..it. ecg. } \\ &=\text { intendit }\end{aligned}$
posit $=$ potuit.
$\begin{aligned} & \hat{\mathbf{t}} \quad \mathbf{L}_{\mathbf{1}}{ }^{\hat{}} \quad=\text {..tum. ecg. } \\ &=\text { licitum. }\end{aligned}$
R.: $\quad \begin{aligned} \quad \text { du" } & =\text {..ter. ecg. } \\ & =\text { dupliciter. }\end{aligned}$
7
$=$...ais. ecg.
9/ág ${ }^{2 / 4}=$ consanguinitatis.
Fe
$\begin{aligned} \gamma_{t}^{\text {te }} & =\text {...tum. ecg. } \\ & =\text { deitatem } .\end{aligned}$
$m g \quad=\ldots v u s . \quad$ ecg.
deming $=$ demonstratives.

## 6. CONVENTIONAL SIGNS

6.1 This category includes all those signs, for the most part not recognizable as letters and almost always isolated, that stand for a frequently used word or phrase.
6.2 Among the abbreviation marks that are significant in themselves, we noted that the signs 9 and 5 mean con or cum even when they stand alone ( $\$ 3.2$ ); and also that
the conjunction et is most commonly represented by the signs 7 and \& (§3.7). Excepting the ampersand, all these signs are derived from Tironian notes and were used in almost all medieval writing, including even lapidary inscriptions.
6.21 These signs were not, however, always written in the more common form, that is, resembling a backward C or the arabic numerals 9 and 7. The list in the Lexicon (p. 68) illustrates the sign representing con or cum in the form of an $o$ cut by an oblique line (esp. saec. xiii), ${ }^{29}$ or an arabic 2, or some other peculiar forms, all of them derived, however, from the original form described above. The same is true of many of the contractions which stand for the conjunction et (see Lexicon, p. 408).
6.22 In other cases, when cum or et have been abbreviated at the beginning of a word, the form of the sign is altered because an abbreviation mark has been joined to it: consult the signs for contra and quondam (Lexicon, p. 408) and those for et caetera, aeterni, and etiam (p. 409).
6.3 Other important symbols are $\div$ and $=$, for cst and esse respectively, whether alone or as a component of larger words. These, too, are subject to some modification (see Lexicon, pp. 408-409). Note especially: $\mathrm{i} \div$ for id est; in $\div$ for inest; $\mathrm{it} \div$ for interest; $=\mathrm{m}^{9}$ for essemus; $=^{\mathrm{e}}$ for essentiae, etc.
6.4 Many peculiar signs were used throughout the Middle Ages, and even in more recent times, to indicate monetary units, weights, and measures.
6.41 The principal sign for libra as money (Ital. lira) is
a single or a double $o$, but always in a form that is different from ordinary script and which has frequently been further altered by an abbreviation mark (see Lexicon, p. 410). The sign for libra as weight (Ital. libbra) was represented in the 8th century by three converging lines (Lexicon, p. 410), but it underwent considerable modification in the course of the Middle Ages, until finally in the 15th century its form closely approximated the letter $L$, which is still used for the Italian lira (cf. $£=$ pound sterling).
6.42 The sign for an ounce weight (uncia), which from the 15 th through the 17 th centuries was written as a spiral, is actually nothing more than the syllable oz (Ital. onza) written with a single stroke of the pen (Lexicon, p. 410 b no. 10).
6.43 A small triangle stands for scudi (saec. xv-xvi).
6.44 Another, much larger, triangle was affixed to the verso of a dispatch towards the end of the 15 th century as an indication that the letter was to be delivered by courier (per staffetta). Four crossed lines on the verso of a dispatch indicated that it was to be delivered by horseback (per cavalcata; Lexicon, p. 411). In the 15th century the sign of a gallows was affixed by rulers to their most urgent letters as a warning to the courier (Lexicon, p. 410 b no. 12).
6.5 This discussion of conventional symbols must necessarily include grammatical symbols, especially those current in the 8th and 9th centuries. The following definitions are quoted from, among others, St. Isidore, De originibus, and Nicolai, De siglis veterum. (See Lexicon, p. 412 for specimens.)

Antigraphus. A symbol which is joined with a period to indicate that there is a different meaning in the translations. Est una e notis sententiarum quae cum puncto apponitur ubi in translationibus diversus sensus habetur. (Isidore, I.20)

Antisigma. A symbol which is affixed to those verses whose order is to be inverted, following the usage of earlier authorities. Una e notis sententiarum quae ponitur ad cos versus quorum ordo permutandus est, sicut et in antiquis auctoribus positum invenitur. (Ibid.)

Antisigma cum puncto. A symbol which is employed in passages where there are two verses with the same meaning and there is some doubt as to which is to be preferred. Antisigma cum puncto ponitur in iis locis ubi in codem sensu duplices versus sunt et dubitatur qui potius eligendum sit. (Ibid.)

Asteriscus. A little star affixed to a passage in which something is missing, in order to clarify the position of the missing elements. Asteriscus est stellula quae apponitur iis quae omissa sunt, ut illucescant per eam notam quae deesse videntur. (See Thomas de S. Quercu, Lexicon etymologicum.)

Asteriscus cum obelo. Aristarchus uses this sign to mark verses that are not in their proper place. Hac nota Aristarchus usus est in versibus iis, qui suo loco non sunt positi. (Isidore, I.20)

Ceraunium. This sign is used whenever there are several suspect verses and the individual verses are not marked with an obelus. Ceraunium ponitur quoties multi versus improbuntur, nec per singulos obelantur. (Ibid.)

Cryphia. The lower half of a circle with a period is
used in passages where some difficult and abstruse problem cannot be properly solved. Circuli pars inferior cum puncto ponitur in its locis ubi quaestio dubia et obscura aperiri vel solvi non potuit. (Ibid.)

Limniscus. A horizontal comma or dash between two periods is used to mark passages in which exegetes of Sacred Scripture have given the substance of the passage in equivalent but not identical words. Limniscus est virgula inter geminos punctos iacens, apponitur in iis locis, quae Sacrae Scripturae interpretes codem sensu sed diversis sermonibus transtulerunt. (Ibid.)

Obelus. A horizontal comma or dash is used to mark words or sentences which have been superfluously repeated, or in passages where the reading is marked by some obvious falsification. Est virgula iacens; apponitur in verbis vel sententiis, superflue iteratis, sive in iis locis ubi lectio aliqua falsitate notata est. (Nicolai, De siglis veterum, p. 104)

Obelus superne appunctatus. An obelus with a period written above it is used to indicate that the passage in question ought perhaps to be deleted. Ponitur in iis de quibus dubitatur, utrum tolli debeant necne. (Isidore, 1.20)

## 7. ROMAN AND ARABIC NUMERALS

7.0 Schonemann ${ }^{30}$ and, following him, Gloria ${ }^{31}$ have expressed the opinion that the numerical signs used by the Romans were simply abbreviations. This is not the place to present any detailed argument against this assertion, which I believe to be completely unfounded. Still it would seem beneficial to provide for the student a conspectus of roman and arabic numeral forms, the former in alphabetical
order and the latter in the order of successive magnitudes, to facilitate consultation of the lists in the Lexicon (pp. 413428).
7.1 It is a well-known fact that the Romans expressed numerical quantities exclusively by the letters of their alphabet. The rather bizarre signs occasionally employed for inscriptions are simply alterations, sometimes rather considerable, of the original letters.
7.11 For example, the sign for 1000 , which approximates a horizontal arabic $8(\infty)$ is derived from the earlier sign CIO (later $\Phi$ ), which also stands for 1000 . The sign which is similar to the Greek letter pi ( $\Pi=2000$ ) is simply the figure II with a superscript bar written very low ( $\overline{\mathrm{II}}$ ). The same is true of many other signs (see $\$ 7.5$ ).
7.2 One letter is frequently inverted, namely C , but always preceded by the letter $I$, to form such numbers as $10=500$ (later written simply as $D$ ); $100=5000$; 10つつ $=50,000$.
7.3 The most ancient sign for the number 1000 seems to have been CIO. Its value could be raised ten times by the addition of two other C's, one to the right and the other to the left in the same position as the first two. Hence: CCIOO $=10,000 ; ~ C C C I O O O=100,000$.
7.31 On ancient inscriptions, the number 10,000 is also expressed by the sign which is derived from CCIOO. For example, see the inscription of $C$. Duilius, reproduced in Ricci, Epigraphia latina, p. 145, pl. xxvi.
7.4 The numeral CIS or M enclosed in an oval ring
has 10 times its original value; enclosed within two oval rings it has 100 times its original value. Similarly, a half circle around the numeral I 5 or $D$ stands for 5000 and two half circles stand for the number $50,000 .{ }^{32}$
7.5 A single bar placed above a roman numeral increases the value by a factor of 1000 .
7.51 Exceptional are the numeral letters A and B (500 and 300 ), for which the horizontal line indicates a value only 10 times the original ( 5000 and 3000). ${ }^{33}$
7.52 Two horizontal bars written aboye a number give it a value a million times the original: $\overline{\mathrm{D}}=500,000,000$.
7.53 A numeral with a vertical line on either side and a horizontal bar above is raised in value 100,000 times. Thus: $|\overline{\mathrm{C}}|=10,000,000 ;|\overline{\mathrm{X}}|=1,000,000$.
7.6 The well-known rule that a numeral standing to the left of a larger roman numeral is to be subtracted from it (e.g. $\Phi 1 \supset O=4000$ ) appears to have been little honored by the ancient Romans themselves, and there are only rare examples from the Middle Ages. ${ }^{34}$
7.61 On the other hand, we sometimes encounter a reversed form of the numerals IIIX and VIX, with the values of 13 and 16 respectively, in an attempt to reproduce the order of the Latin expressions tertio decimo and sexto decimo. ${ }^{35}$
7.71 Occasionally, especially in medieval French documents, multiplication by 20 was expressed by means of two small $x$ 's that are written as superscripts to the numbers III, VI, VII, etc.: IIII $^{x x}=80 ; V^{x} \mathbf{X I}=131$.
7.72 To express the number $1 / 2$ it was customary to write the letter $s$ (the initial letter of semis, one-half) after the roman numeral: LXIIS = sexaginta duo semis ( $621 / 2$ ). This practice dates back to the most ancient times. ${ }^{36}$ In the Middle Ages it was more customary to find the number $1 / 2$ expressed by a diagonal line cutting the last character in the numeral ( $\mathbf{X} \pm=[15-1 / 2]=141 / 2$ ); or by either a colon or a semicolon divided by a horizontal line ( $\div$ or $\div$ ); or finally, and especially in Lombard documents from the 15th century, by a sign similar to the arabic 3 .
7.73 The numeral letters $\mathbf{C}$ and M , especially in the later Middle Ages, were frequently written as superscripts to smaller numbers as a sign of multiplication: VIII $^{c}=800$; $\mathrm{XI}^{\mathrm{c}}=1100 ;{ }^{37} \mathrm{H}^{\mathrm{m}}=2000$.
7.74 In Ligurian documents, multiplication by a thousand is frequently expressed by the letter $O$ cut by a horizontal line (saec. xv ex.; Lexicon, p. 419).
7.8 Arabic numerals, it must be recalled, are of ancient Indian origin, and were borrowed by the Arabs about the 9 th century, who referred to them as "Indian numerals." This system spread through Europe only much later through the work of the Pisan mathematician Leonardo Fibonacci, who gathered together much of the mathematical advances and knowledge of the Arabs in his book, the Liber abaci (A.D. 1202), a work which, as Bariola rightly remarked, ${ }^{38}$ outlined the scope of all modern arithmetic.
7.81 In the Lexicon, pages $422-428$ reproduce a series of arabic numerals as they were written from the 12 th to the 18th century. One item of particular interest is the peculiar
form of many of these numerals, so different from our modern method of writing them. This is true especially of the figures for $2,4,5$, and 7 . Inexperienced scribes frequently confused the 7 with the 2 , and the 5 with the 4 or 9 , and vice versa.
7.82 It must be noted (see Lexicon, p. 425) that even in arabic numerals, the number $1 / 2$ is expressed in the 15 th century by a line between two dots ( $4 \div=4 \frac{1}{2}$ ), or by a small superscript cross to the right of the number itself ( $4^{+}$). This last form appears to be a corruption of $1 / 1$, which was another popular way of expressing the fraction $1 / 2$ in that same century, e.g., $71 / 1=7 \frac{1 / 2}{2}$ (Lexicon, p. 427). ${ }^{39}$ Towards the end of the 15 th century, we begin to note the emergence of the form similar to modern usage: $1 / 2$.

## SUPERSCRIPT LETTERS

7.91 In the 16 th century, multiplication by 1000 is expressed by a line and a small letter $m$ written above an Arabic numeral: $\frac{\mathrm{m}}{100}=100,000$. There is, however, no example of a line with a small letter $c$ written above it to indicate multiplication by 100.
7.92 Other letters are added to arabic numerals as superscripts, but they simply stand for the ending, especially in the case of ordinal numerals: $2^{\circ}=$ secundo; $5^{\text {t9 }}=$ quintus; $7^{a}=$ septima.
7.93 Occasionally, words that begin with the syllables sex-, sept-, trin-, dupl-, etc., are abbreviated by writing the first part of the word as a numeral and the conclusion as a superscript.
$6^{17}=$ sextilis
$7^{11}=$ septentrionalis
$3^{\text {tas }}=$ trinitas
$2^{r}=$ dupliciter
$4^{10}=$ quadruplo
$3^{\prime} \mathrm{anl}^{9}=$ triangulus
$19^{\text {ales }}=$ Decemnovennales.
7.94 The following forms also deserve attention.

$$
\begin{aligned}
& 2^{\text {od }}=\text { secundo notandum } \\
& 2^{\text {ate }}=\text { secunda parte } \\
& 2^{\circ 00}=\text { secundo modo } \\
& 4^{\text {too }}=\text { quarto modo }
\end{aligned}
$$

## NOTES

1. On Tironian notes, see Kopp, Paleografia critica (Mannheim, 1817-1829); Schmitz, Commentarii notarum tironianarum (Leipzig, 1893); Chatelain, Introduction à la lecture des notes tironiennes (Paris, 1900); Schiaparelli, Tachigrafia sillabica nelle carte italiane (Rome, 1910). On the derivation of medieval abbreviations from sigla and Tironian notes, see Sickel, Die Urkundenlehre der Karolinger, pp. 305-308. Also Paoli, Le abbreviature nella paleografia latina del Medio-Evo (Florence, 1891), p. 35, to which the present classification of abbreviations is indebted; see also his Programmo scolastico di paleografia latina e di diplomatica (3rd ed., Florence, 1910). The Lexicon contains a bibliography (pp. 517-531) of works on paleography [compiled in 1910, where the full form of titles cited in these notes will be found].
2. In cursive Lombardic hands, saec. viii in.
3. The use of italics indicates that the abbreviation occurs in documents written in Italian.
4. Le abbreviature, p. 14.
5. The abbreviation $\overline{\mathrm{fc}}$ almost always stands for fac when it occurs at the beginning of a word: in the middle, however, it generally stands for fec: ifcom = infectionem; 9 fcis $=$ confectis, etc.
6. From the Greek letters $\chi \rho$.
7. The ending $\overline{-\overline{c o m}}=-$ onem, e.g. dioem $=$ divisionem. The same is true of -ois $=$-onis.
8. In the uncial script saec. vi, we note some rare instances of a line with a dot over it to indicate $m$, while the
simple line stands for $n$. Usually the line with a dot was used saec. vi for either $m$ or $n$. Sce the Palaeographical Society Facsimiles, ser. ii, pl. 50.
9. Printed by Mommsen in Notarum Laterculi.
10. For cognitio. In saec. xi-xv a superfluous $n$ was frequently inserted before gn: e.g. congnatione, recongnitum, ingroro.
11. Anleitung zur lateinischen Pälaeographie, p. 22.
12. In the Liber diurnus pontificum romanorum (Milan, Bibl. Ambrosiana, MS. I. 2 Sup.: saec. ix), the enclitic -que is sometimes represented by $q$ followed by a large comma that resembles the sign for -us; but more often the MS uses a dot instead of the comma.
13. The sign is especially used for $e$ in MSS written in Italian.
14. The straight line over the $p$ and the $q$ can sometimes be replaced by a curved line similar to the sign for $-u s$ and having the same meaning.
15. In Lombardic documents, the symbol $\overline{\mathrm{p}}$ frequently stands for Pavia (Papia).
16. In saec. viii the same sign is used for -que; in AngloSaxon hands it stands for quam and quia.
17. In saec. viii-x the sign $q$; or $q$ : can stand for both -que and qui. Thus $\mathrm{q}: \mathrm{d}=$ quid; $\mathrm{q} ; \mathrm{s}=q u i$.
18. In the Liber diurnus (supra, n. 12), the letter $q$ is sometimes followed by a period, both for the enclitic -que and for -quae at the end of a word. In saec. ix-xii, charter hands often represent -que by a simple vertical line, slightly curved, and followed by two periods. See Archivio paleografico italiano, Vol. I, pl. 2, and Vol. III, pl. 2. These are Roman charters, but the same sign is also found in

Lombardy at this time.
19. As a rule, the contractions $v 3, \mathrm{t} 3, \mathrm{~d} 3, \mathrm{~h} 3, \mathrm{p} 3$ do not occur in conjunction with any of the general abbreviation marks. When such marks are added, they usually denote the plural number: $\overline{\mathrm{v} 3}=$ valent; $\overline{\mathrm{t} 3}=$ tenent; $\overline{\mathrm{d}}=$ debent, etc.
20. See Paleografia artistica di Montecassino (Montecassino, 1877-1879), pl. 39. The 3-mark standing for $n$ instead of $m$ has been encountered only once, in the word fluē 3 for fumen. See also Walther, Lexicon diplomaticum, col. 130.
21. Excepting, however, iō $3=$ ideoque.
22. Now in the Archivio di Stato di Roma; ed. Monaci, Archivio paleografico italiano, Vol. III, pl. 2.
23. Except in Visigothic script, saec. viii, where this sign is used for qui.
24. When the letter $g$ stands alone, each of these superscript vowels gives it an absolute meaning: erga, igitur, ergo ( $\sec$ §1.54).
25. In this last case, however, superscript $r$ generally has the Gothic form, i.e. it resembles an arabic 2.
26. See Lexicon, pl. i (A.D. 1114), lines 3 and 6.
27. The two abbreviation marks written above the letter $v$ are perhaps intended to distinguish this abbreviation from another common meaning ( $\mathrm{v}^{\mathrm{a}}=$ vestra), or to indicate that there are two words involved. In the majority of cases, however, two such superimposed abbreviation marks would occur at the end of a word, one of them to indicate the presence of a contraction while the other would stand for the final $m$ of the word itself. Thus: succō $=$ successionem; $\overline{\overline{\mathbf{c a}}}=$ causam $; \overline{\overline{\mathrm{q}}}=$ quaedam.
28. See §3.5.
29. In Ligurian hands saec. xv , the sign o cut by a short horizontal line represents the syllable de, both standing alone and as an element of a longer word. See Lexicon, pp. 406-407.
30. Versuch eines vollständigen Systems der allgemeinen Diplomatik (Leipzig, 1818), p. 605.
31. Lezioni di paleografia (Padua, 1860), p. 37.
32. See also Ritschel, Priscae latinitatis monumenta epigraphica (Berlin, 1862).
33. This practice must be carefully distinguished from that of writing a horizontal line above the letters merely as an indication of their numeral value, to distinguish them from other letters and marks ( $\$ 1.8$ ).
34. The few examples I have encountered all derive from saec. xv ex.; all stand for the number IX (never for IV), and occur especially in French and Piedmontese documents. Walther lists the form LXL $(=90)$ as one used in saec. viii.
35. Lupi, Manuale di paleografia delle carte (Florence, 1875), p. 175.
36. There are, however, some examples from the Middle Ages as well, esp. French, saec. xiii: Reusens, Elements de paléographie, pp. 254-255.
37. In documents from Siena, saec. xiii. See Paoli, Programma, p. 49.
38. Storia della ragioneria italiana (Milan, 1897), p. 48.
39. These signs for the number $1 / 2$ were all found in Lombardic documents in the Archivio di Stato di Milano.

