Universal Multiple-Octet Coded Character Set

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Introduction.

A set of characters used by specialists in medieval European philology and linguistics is absent from the Universal Character Set. These characters differ in nature; some are original ligatures which acquired letter status due to their phonemic value; some are letterforms distinct from other letterforms innovated to distinguish sounds; some are combining diacritical letters used in abbreviations or suspensions of various kinds; and some are best described as "letters with syllabic content". This is not a complete proposal, but a work in progress; all of the example Figures referred to will be added in the next version of this document. Note that the glyphs used in the code charts here may not be optimal.

Theoretical preliminaries.

Contemporary philologists and linguists who want to study the graphemic conventions in use in medieval times—thereby drawing solid or grounded conclusions about the nature and structure of the language systems represented in writing—must rely on *bona fide transcriptions* of the texts. Bona fide transcriptions are only possible when the elemental character set used in the manuscripts is encoded uniquely and available for use in fonts.

What most philologists did in the 20th century was to publish *transliterations*, that is, editions which substitute modern characters (or sequences of modern characters) for the original medieval characters. Transliteration-based editions are virtually useless for those scholars who are interested in the study of medieval writing systems, phonology, and even textual structure. Transliterations (or "normalized editions") and even translations may, of course, be required for editions aimed at students or the general public, but the base texts must result from *transcribing* the sources: the first step must always be a transcription.

Transcription is an editorial process which does not entail the replacement or the distortion of the original character set. A bona fide transcription of a Runic, Coptic, or Egyptian Hieroglyphic text can be no less than a close rendition of the original characters, using typographic versions of Runic letters, Coptic letters, and Hieroglyphic characters. The same practice must apply to European medieval texts.

The practice of *expanding abbreviations* common to medievalists throughout the 20th century is not *transcription*, but simply *transliteration*: abbreviations, or brachygraphemes, were special characters. (Brachygraphy is, according to the *Oxford English Dictionary*, "The art or practice of writing with abbreviations or with abbreviated characters; shorthand, stenography.") Many of these graphemes were

polyvalent—that is, they could be transliterated into different sequences of "normal letters", according to textual context, country, region, time period, and even individual scribal practices. Polyvalence is not a uncommon feature of alphabetic writing systems, as our own modern spelling systems show; for instance, in European Portuguese orthography the letter E can have the values $[\varepsilon]$, $[\varepsilon]$, $[\varepsilon]$, $[\varepsilon]$, $[\varepsilon]$, and \emptyset ; this letter combined with -m or -n can further represent $[\varepsilon]$ and $[\varepsilon \varepsilon]$. Graphemic polyvalence results in many instances from language change and from the conservative nature of spelling systems.

Another common practice in the 20th century was to eliminate the original punctuation and to add modern punctuation—many scholars believed that medieval punctuation served no discernable purpose. "Modernization" of the use of capital letters was also standard practice.

A medieval character set makes it possible to shed many "chronocentric" biases and prejudices which tainted many editorial efforts in the 19th and 20th centuries in many countries, rendering the ensuing editions virtually useless for at least some kinds of contemporary research. This *does not mean* that medievalist scholars wish or even need to represent in print every minutia that handwritten sources present—that is palaeography proper. In medieval texts this is a particularly delicate issue, because scholars have to deal with a considerable amount of regional or individual stylistic variation. The rationale behind encoding medieval characters and designing medieval fonts is not to capture in print every single glyph variation (a task which is virtually impossible and also meaningless), but to capture the *character set* used in the manuscripts under scrutiny. We understand the character/glyph model and how it applies to the medieval character set.

Accurate transcriptions of medieval texts allow scholars to quote medieval texts without distorting their graphemic content, and allow the texts to be studied by means of computer applications such as concordance generators and wordlist generators. Accurate transcriptions which make use of a medieval character set are a means to preserve—and interchange—all the relevant graphemic, textual, and linguistic information contained in a text; they are also indirectly a means to contribute to the preservation of Europe's early heritage.

Case-pairing.

Most of the casing pairs shown below are attested in the examples. Those which are not, fall into two categories: those for which no capital can be constructed (such as LONG S) and those for which natural capitals can be easily formed. In an early version of this document we had proposed a single lower-case character <y> LATIN SMALL LETTER Y WITH STROKE in use by some Welsh medievalists to indicate an epenthetic schwa sound (Figure 8). Subsequently we discovered that this character and its capital are ballotting in FPDAM2, as a character used in the Lubuagan Kalinga language of the Philippines. Because of the general structural feature of the Latin script (from a theoretical point of view), and in order to facilitate modern casing operations for these letters, we have judged it appropriate to supply case-pairs for all the letters which admit of them. In a scholarly publication, for instance, an article title at the top of a journal page might be set in all caps; it would be nonsensical for all but one or two of the medievalist Latin letters to be able to be cased with an all caps command. (This precedent was set with the encoding of the archaic Coptic extensions.)

Discussion.

1. Letters used for medieval Welsh.

- The voiceless lateral fricative written <|l> in modern Welsh may be written in medieval Welsh as a joined ligature of <|t| LATIN SMALL LETTER MIDDLE-WELSH LL. Its capital form <|L> LATIN CAPITAL LETTER MIDDLE-WELSH LL has been used as an abbreviation in Welsh scholarship (Figures 1, 2, 3, 4, 5, 52).
- The voiced dental fricative written <dd> in modern Welsh is written <d> LATIN SMALL LETTER INSULAR D distinctly from <d> in some editions of medieval Welsh texts; Nordic medievalists also make use of this letter (Figures 1, 5, 21, 29, 39, 40, 53, 73).
- $<\delta>$ Some Welsh medievalists (and other Indo-Europeanists of a certain era) also use $<\delta>$ LATIN SMALL LETTER SCRIPT D to write this sound in transcription. While this letter may sometimes have

- been represented in print by using a DELTA from a Greek lead-type font, it derives from the handwritten Latin d, and behaves like a Latin letter in ordering and is found alongside Greek text proper (Figures 6, 7, 8, 41).
- <V 6> A unique <6> LATIN SMALL LETTER MIDDLE-WELSH V is used distinctly from <u>, <v>, and <w>, though it is true to say that the phonetic value of all four of these letters is polyvalent in medieval Welsh (Figures 3, 9, 10, 11, 12, 13).
- <y y> Some Welsh medievalists use LATIN SMALL LETTER Y WITH LOOP to indicate the schwa sound of <y> (Figure 14).
- As in many medieval traditions, <2> LATIN SMALL LETTER R ROTUNDA is distinguished from <r>
 LATIN SMALL LETTER R. This named character is derived from a positional variant of <r>
 following <0> in the South Italian Beneventan, though in medieval Welsh and Nordic it is not limited to this position. In any case, Welsh and Nordic medievalists distinguish R from R ROTUNDA in their printed editions; the letter is also common in early printed texts throughout Europe (Figures 1, 3, 16, 17, 21, 24, 35, 36, 38, 42, 70, 71, 73). The case-pairing <2> LATIN CAPITAL LETTER R ROTUNDA is attested in printed texts from the 15th century (Figure XXX).
- **2. Letters used for medieval Nordic vowels.** Medieval Nordic orthographies innovated a number of letters out of original Latin script ligated letters. Some of these letters are well known today, as the letters $\langle \mathbb{A} \times \mathbb{C} \times \mathbb{C} \rangle$. In medieval Nordic:
- <AA as LATIN LETTER AA is used for phonemic /a:/ (Figures 18, 19, 23, 28, 34).
- <AO x> LATIN LETTER AO is used for phonemic /q/ (Figures 15, 16, 17, 20, 66)
- <AJ au> LATIN LETTER AU is used for phonemic /au/, /o/, /ø/, and /ø:/ (Figure 38, 72)
- $\langle A \rangle$ LATIN LETTER AV is used for phonemic /au/, /o/, /ø/, and /ø:/ (Figures 18, 21, 24, 42, 70, 72)
- <*A* \approx > LATIN LETTER AV WITH HORIZONTAL BAR is used for phonemic $/\sqrt{q}$, $/\phi$, $/\phi$, and $/\phi$. (Figure 24)
- $\langle A \rangle$ LATIN LETTER AY is used for phonemic $\langle 0/, /\phi \rangle$, and $\langle -\phi \rangle$ (Figure 69)
- <00 co>LATIN LETTER 00 is used for phonemic /o:/, (Figure 28)
- $<0^{\circ}$ Catin Letter 0 with Loop is used for phonemic $/\sqrt{q}$, $/\sqrt{g}$:/, and $/\sqrt{g}$ / (Figures 19, 25, 35, 36)
- <W w> LATIN LETTER VY is used for phonemic /y:/ (Figure 28). This collection of characters is a superset of the letters found in the medieval Nordic corpus; no single manuscript contains all of them. Note also that none of these characters is a "ligature" that can be broken; indeed, all of them are known to bear diacritical marks.

3. Letters used for medieval Nordic consonants.

- <\L\ \lambda \) LATIN LETTER BROKEN L was used for phonemic /l:/ (Figure 70)
- $\forall \gamma > \text{LATIN LETTER VEND (ultimately derived from the English letter WYNN) for phonemic } v/ \text{ or } u/.$ Some editions use u, v, and γ in the same text (Figures 21, 26, 35, 36, 42).
- The Icelandic First Grammarian's orthography made use of small capital letters to indicate gemination of consonant sounds, as Uralic linguists did centuries later. Between letters encoded already for Uralicist and IPA use, most of the Latin alphabet is already encoded as small capitals; while <F> SMALL CAPITAL F and <S> SMALL CAPITAL S are yet missing from the UCS (Figure 22). It should be noted that of the traditional Latin alphabet, if these two are added, only *SMALL CAPITAL Q and *SMALL CAPITAL X will remain unencoded.

4. Letters used for medieval Ibero-Romance.

<§ S> The Latin alphabet we use today is only one of several variants. Our own lowercase "Roman" type is derived from the Carolingian variant of the Latin script; the Insular and Germanic variants are fairly familiar to us, having enjoyed a period of typographic development as Gaelic and Fraktur, and a handful of letters from the Insular tradition have been adopted by the Carolingian tradition for one purpose or another (WYNN (as VEND) was used in Old Icelandic and Old Norwegain until ca. 1300; THORN and ETH are still used in Icelandic; Insular g and d have

been resurrected by linguists). The Visigothic variant of the Latin script, however, was replaced before the advent of typography, and its unique letterforms were simply lost to the Carolingian, apart from the <\xi>5 \xi> LATIN LETTER VISIGOTHIC z. The Carolingian script was introduced in Northern Iberia in the 11th century—in Catalonia, the Spanish Mark of the Carolingian Empire, it was introduced earlier—but it only gained widespread use in the course of the the 12th century; the Visigothic script was extinct in the second half of the 12th century (1172 is the date for the last known original Portuguese document). The Visigothic <\xi>5 was employed alongside the Carolingian <z>, and came to be used mainly to represent the voiceless alveolar affricate [ts], while <z> was used mainly for the voiced alveolar affricate [dz] in Old Portuguese, Old Leonese, and Old Castilian. In time, as Carolingian practices replaced all memory of the Visigothic, the head of the <\xi>5 was reanalyzed, its tail reduced, resulting in a new letter <\xi>6 while in modern analysis the tail <\xi> is known as a cedilla/zedilla 'little z', in fact the whole letter is, in origin, a <z>. Documents exist in which <\xi> and <\xi> and <z> are distinct (see Figures 43, 44).

5. Other letters of the Insular tradition. One of the letters of the Insular tradition has already been encoded at U+1D79. (A large number of letters in the Fraktur tradition have been encoded for use in mathematics.) The set of Insular letters which differ significantly enough from Carolingian to warrant distinction is small; medievalists have used them in typeset editions of Germanic and Celtic languages since the 16th century. *Modern* Germanic and Celtic languages do not use these letters, and *modern* Germanic and Celtic fonts which use Fraktur and Insular letterforms employ them as glyph variants pertaining to the entire font. The Insular letters proposed here are only to facilitate the specific need of historical linguistic specialists to differentiate the Insular letters from the Carolingian.

Insular and Carolingian letters coexisted but were often used in different contexts in Britain and Ireland in the Early Middle Ages, for example Insular letters being used for writing English and Carolingian for Latin. They were also mixed to varying degrees, and this unique variant of the Latin alphabet was exported to the Nordic countries in the 11th century; due to its dual inheritance it has often been termed Carolingian-Insular. Since the letter shapes of Insular and Carolingian script ultimately derive from Uncial script, the majority of Insular and Carolingian letters are basically identical, but a handful letters had quite distinct shapes and usage in Insular script, as we know it from English and Nordic writings. Four of these letters are already in the Standard; THORN (from the Runic alphabet), ETH, WYNN (also from the Runic alphabet), and INSULAR G. The letters THORN and ETH are still used in Icelandic, while WYNN was accepted by the Standard due to its usage in early English sources and INSULAR G on foot of its usage as a phonetic character. We now propose to add five distinct letter forms to the Standard, i.e. INSULAR D, INSULAR F, INSULAR R, INSULAR S, and INSULAR T. It should be underlined that it is not a question of adding Insular variants of every Latin character; it is a short list of distinctive letters that have been recognised as separate characters for several centuries in Medieval English and Nordic writing, and which have been used alongside and in contrast to their Carolingian counterparts. In Medieval Nordic editorial practice, these letters are rendered as separate characters in great many editions and distinguished from their Carolingian-based counterparts <d>, <f>, <r>, <s> and <t>. This is in part because the presence of these letters is used as a dating criterion (for example, INSULAR R fell out of use around 1200, while INSULAR F continued to be used well into the 14th century), and in part because they are used in contrast to their Carolingian counterparts. In Ælfric's Old English grammar, the scribe, and the modern medievalist, distinguishes between and <f>, between and <r>, between and <s>, and between <c> and <t> (Figure 39). In the sample from the edition of AM 645 4to and <f> are distinguished (Figure 38).

LATIN SMALL LETTER INSULAR R (Figures 29, 30, 37, 39, 40)

LATIN SMALL LETTER INSULAR S (Figures 16, 29, 30, 37, 39, 40)

- LATIN SMALL LETTER INSULAR T (Figures 29, 30, 37, 39, 40)
- **6. Letters used for medieval abbreviations.** Medieval manuscripts, in both Latin and vernacular languages, use abbreviations extensively. Many of these are abbreviations for whole words, created by omitting letters, such as $s\bar{p}s$ for spiritus; often a line is placed over the letter(s) as an abbreviation marker, as shown here. Such "logographic" or "lexical" abbreviations can usually be represented through characters already encoded in the UCS. In other cases, however, only a part of a word is abbreviated; for example, the prefix con- is represented with the letter o. A number of such syllabic abbreviations, well-documented and commonly used in several languages, require letters or combining marks that are not in the UCS. A range of Latin letters, modified by strokes or hooks, is used to represent a variety of words, syllables, or quasi-syllabic letter sequences. That they are polyvalent is a chief indicator for the requirement to encode these "abbreviation letters" as characters, since they cannot be composed of any specific string of other characters; neither can they be decomposed into a single string. Of these abbreviations:
- K k> LATIN LETTER K WITH STROKE is used for karta, kartula, kalenda (Figures 33, 45, 74)
- P p> LATIN LETTER P WITH STROKE THROUGH DESCENDER is used for Latin and Romance per, par, por, and for pri in Cornish pvecter privacter 'privacy' (Figures 46, 47, 50, 58, 60, 63)
- P p> LATIN LETTER P WITH FLOURISH is used for *pro*, *por* (Figures 46, 50, 52, 54, 55, 58, 60, 61, 63)
- <Q q> LATIN LETTER Q WITH STROKE THROUGH DESCENDER is used for quam, que, quan- (qdo quando, qtum quantum), qui- (ql3 quilibet, qdem quidem) and in Irish for ar (Figures 16, 17, 46, 49, 51, 53, 59, 63).
- K k> LATIN LETTER K WITH DIAGONAL STROKE is used for kalendas and karta (Figure 45)
- K k> LATIN LETTER K WITH STROKE AND DIAGONAL STROKE is used for karta(m) 'document, writ' when < LATIN SMALL LETTER K WITH STROKE is used for karta (Figures 45)</p>
- LATIN LETTER L WITH HIGH STROKE is used for Latin el, ul, vel, for Irish nó 'or', for Norse eða 'or', for el in vt vel 'well', for æl in mtti mælti 'spoke', for al in skt skal 'shall' (Figure 32, 51, 52, 60, 73)
- $\langle \Theta \rangle$ LATIN LETTER O WITH LONG STROKE OVERLAY is used for Latin *obiit* 'he died' (Figures XXX)
- $<\Psi$ > LATIN LETTER P WITH SQUIRREL TAIL is used for Latin *prae* 'before, in front of' (Figures \underline{XXX})
- $\langle Q \rangle$ Q> LATIN LETTER Q WITH DIAGONAL STROKE is used for Latin *quod* 'what', *qui* 'who', *que* 'that', Portuguese \tilde{q} *quem* 'who', Irish *ar* 'on' (Figures 58, 59, 60, 61, 63, 64)
- <f> LATIN SMALL LETTER LONG S WITH DIAGONAL STROKE is used for ser (fvir servir 'to serve'), sere (fno sereno 'serene'), sir, and by itself it also stands for Latin solidi, sed, sunt, secundum, etc., and for Portuguese soldo(s) (Figures 46, 48, 58)
- <f> LATIN SMALL LETTER LONG S WITH STROKE is used in Norse with <f> for ft skal 'shall' (Figures XXX)
- <W \$\psi\$> LATIN LETTER V WITH DIAGONAL STROKE is used for Portuguese ver 'to see', con\$\psi\$sa conversa 'conversation', for vere in \$\psi\$ador vereador 'town councillor', uirgo 'virgin', and vir 'to come' (Figure 65)
- ⟨₱⟩ LATIN LETTER THORN WITH STROKE is used for *bat*, *bess*, *bor*-, *bæt* (Figures 29, 32, 33, 73)
- \P LATIN LETTER THORN WITH STROKE THROUGH DESCENDER is used for *beim*, *beir* (Figures XXX).
- **7. Letters with syllabic content.** This set of characters are also abbreviations, but might be better considered as "letters with syllabic content", because their reading tends to be less polyvalent than those of the abbreviation characters discussed above.
- LATIN SMALL LETTER ET is used for -et in vi3 videlicet (whence "viz."), hab3 habet 'has', for -m in ablune3 ablutionem 'ablution', for -ue in usq3 usque 'until, till, up to', for -que in quig3 quicumque 'whoever', for -us in aquib3 aliquibus 'to someone', for -est in Latin potest pot3 'is

- able', and for medial and final eð in Norse m3 með 'with', m3an með an 'while' (Figures 58, 59, 60, 61, 63, 64)
- <D >> LATIN SMALL LETTER REVERSED C is used for con and com in ɔio2 convenientior 'more suitable, in agreement', ɔpat comparavit 'bought', for -us and -os in Latin in totɔ totus 'all', tuɔ tuos 'your', in Portuguese in todɔ todos 'all', doɔ dous 'two', and in Old Icelandic ɔa kona 'woman' (Figures 46, 50, 66). This is the same character as the Claudian letter discussed in §10 below.
- <3 >> LATIN SMALL LETTER REVERSED C WITH DOT is used for con- and com- in ofmas confirmans 'confirming, witnessing', -us and -os in soldo soldos (for solidos) 'a unit of currency', malado malados 'serfs' (Figures XXX)
- <§ \$\sigma\$ LATIN SMALL LETTER IS is used for -is in dtg dictis 'from having said', impg imperatoris 'ruler, emperor', and for ys and es in Cornish manuscripts: godg godys 'god's', servantg servantes 'servants', mettg mettys 'met' (Figure 57).</p>
- <9 g> LATIN SMALL LETTER CON is used for con and cum and co (Figures 46, 47, 48, 53, 61)
- MODIFIER LETTER US is used for -us in man⁹ manus 'hand', id^9 idus 'ides' (and thousands of other words) and final os in Latin, Portuguese, and Castilian: $oleyr^9$ oleyros 'potters', n^9 nos 'we', u^9 uos 'you', and for us in Norse: h^9 hús 'house' (Figures 50, 52, 59, 66)
- <d_r> LATIN SMALL LETTER DUM is used by itself for Latin dum 'while, whilst', die 'day', Portuguese dia pl. dias 'day'
- <m_> LATIN SMALL LETTER MUM is used for -mum in prim, primum 'first' (Figures XXX)
- <n₊> LATIN SMALL LETTER NUM is used for -num in aetern₊ aeternum 'eternal', un₊ unum 'one' (Figures XXX)
- <r> LATIN SMALL LETTER RUM is used for -rum in martir martirum 'martyr', integr integrum 'intact,
 whole, undivided' (Figures XXX)
- <22 2,> LATIN SMALL LETTER RUM ROTUNDA is used for *-rum* and *-rom* in Latin $n\bar{o}2o2$, nostrorum 'of our', Portuguese fo2, forom 'they went, they were' (Figures 33, 53, 61, 64, 66)
- LATIN LETTER SMALL CAPITAL RUM is used for -rum and -rom in Latin quon quorum (Figures 59, 63)
- LATIN SMALL LETTER TUM is used for -tum in tant tantum 'so much', quant quantum 'how much?' (Figures 58)
- LATIN SMALL LETTER UM is used for um and us in Latin 'ductib' aquar' 'ductibus aquarum' 'to the water streams', for os in Latin-Portuguese cub' cubus, cubos 'cubic measuring container', nept' neptos 'grandson', and for un in Latin vol' tas voluntas 'will', m' dum mundum 'world' (Figures XXX)

Note that the REVERSED C is not the turned c U+0254 small letters open 0 used in the IPA and African orthographies; it is ultimately derived from one of the Claudian letters (see §11 below). It should also be noted that these letters were widely used over a long period throughout Europe. As far west as Ireland, these conventional letters were used, sometimes for purposes quite different from their original use. The phrase $n\acute{o}$ ro-fetatar connachta 'or the Connachtmen found out' could be written t rof7atq $\tilde{\jmath}\tilde{\jmath}a$, where t Latin uel 'or' is used for Irish $n\acute{o}$ 'or', where the Tironian sign 7 is used for et, where $et{q}$ is used for $et{q}$ is used for Irish $et{q}$ but' is used for Irish $et{q}$ 'but'. Old Icelandic manuscripts were among the most abbreviated of all vernacular European manuscripts; in some cases almost every word in a line was abbreviated (Figure 36)

8. Combining characters. Thirteen combining superscript letters are already encoded to represent medieval Germanic manuscripts. These comprise half of the basic Latin alphabet, shown in bold type here: **abcdefghijklmnopqrstuvwxyz**. We propose to add ten more basic superscript letters attested in medieval manuscripts which will bring the repertoire to 23 of the 26 letters: **abcdefghijklmnopqrstuvwxyz**. (It should be noted that of the traditional Latin alphabet, if these ten are added, only *COMBINING LATIN SMALL LETTER J, *COMBINING LATIN SMALL LETTER Q, and *COMBINING

It should be noted explicitly that the combining "capitals" in Old Norse are considered as combining small capitals. Thus a COMBINING SMALL CAPITAL G would be an abbreviation for <gg>, in the same manner as a LATIN LETTER SMALL CAPITAL G (on the base line, that is) would be understood as equivalent to <gg>. The relative x-height of the COMBINING SMALL CAPITALs is the same as that of the x-hight COMBINING SMALL LETTERS. The reason Old Norse added a few small capitals as superscript characters—in addition to the inventory of ordinary small characters—is the peculiar Old Icelandic custom of using small capitals for geminates; this practice was transferred to the practice of abbreviation by way of superscript characters.

- <>> COMBINING LATIN SMALL LETTER AE is used for $at\mathring{q}\delta amikill$ at $atqvæ\delta amikill$ 'resolute' (Figures XXX)
- <>> COMBINING LATIN SMALL LETTER AO is used for heiganous freturn home' (Figures XXX)
- <>> COMBINING LATIN SMALL LETTER AV is used for $\rlap/b p f f \phi z la$, $brau \delta s f \phi z la$ 'feeding with bread' (Figures \underline{XXX})
- <>> COMBINING LATIN SMALL LETTER B is used for <u>XXXX</u> (Figures <u>XXX</u>)
- <>> COMBINING LATIN LETTER SMALL CAPITAL B is used for <u>XXXX</u> (Figures <u>XXX</u>)
- COMBINING LATIN SMALL LETTER C CEDILLA is used for Portuguese \hat{c}^o conçelho 'municipality' (Figures XXX)
- <>> COMBINING LATIN LETTER SMALL CAPITAL D is used for <u>XXXX</u> (Figures <u>XXX</u>)
- <>> COMBINING LATIN SMALL LETTER ETH is used for \(\int \) piot spioti\(\partial \) 'the spear' (Figures \(\frac{XXX}{XXX} \)
-

 COMBINING LATIN SMALL LETTER F is used for XXXX (Figures XXX)
- <>> COMBINING LATIN SMALL LETTER G is used for <u>XXXX</u> (Figures <u>XXX</u>)
- <>> COMBINING LATIN LETTER SMALL CAPITAL G is used for xx° tottogo 'thirtieth' (Figures XXX)
- $\stackrel{k}{<}$ COMBINING LATIN SMALL LETTER K is used for $\stackrel{k}{m}$ mik 'me' (Figures XXX)
- <>> COMBINING LATIN LETTER SMALL CAPITAL K is used for <u>XXXX</u> (Figures <u>XXX</u>)
- COMBINING LATIN SMALL LETTER L is used for Latin \dot{n} nihil 'nothing', Portuguese \dot{g} geral 'general'. Old Norse \dot{c} til 'to' (Figures \underline{XXX})
- <>> COMBINING LATIN LETTER SMALL CAPITAL L is used for mik mikill 'great, tall' (Figures XXX)
- COMBINING LATIN LETTER SMALL CAPITAL M is used for <u>XXXX</u> (Figures <u>XXXX</u>)
- COMBINING LATIN SMALL LETTER N is used for in Latin "u unde 'from', "a ante 'before', q"u quando 'when', Old Norse sið" siðan 'since' (Figures XXX)
- COMBINING LATIN LETTER SMALL CAPITAL N is used for m menn 'men' (Figures XXX)
- COMBINING LATIN SMALL LETTER P is used for <u>XXXX</u> (Figures <u>XXX</u>)
- <>> COMBINING LATIN LETTER SMALL CAPITAL R is used for Gunn Gunnarr 'Gunnar' (Figures XXX)
- COMBINING LATIN SMALL LETTER R ROTUNDA is used for Latin <u>uuo quatuor 'four'</u>, Portuguese pto porto 'harbour', M Martim 'Martin', Old Norse spoi spuròi 'asked' (Figures XXX)
- COMBINING LATIN SMALL LETTER S is used for Old Norse b bess 'this', h hans 'his' (Figures XXX)
- <>> COMBINING LATIN SMALL LETTER LONG S is used for Latin \underline{ub} duos 'two', \underline{uub} tres 'three' (Figures \underline{XXX})
- <>> COMBINING LATIN LETTER SMALL CAPITAL T is used for <u>XXXX</u> (Figures <u>XXX</u>)
- <>> COMBINING LATIN SMALL LETTER Y is used for *fr fyrr 'before' (Figures XXX)
- $\stackrel{\circ}{\sim}$ COMBINING LATIN SMALL LETTER Z is used for $\stackrel{\circ}{q}$ qua $\stackrel{\circ}{\partial}z$ 'said' (Figures XXX)

In addition to these, seven other combining marks are proposed here.

COMBINING DOUBLE CIRCUMFLEX ABOVE is used to denote the two diphthongs [ɛa] and [ɔu] in the first Faroese orthography by Jens Christian Svabo (1746–1824)—it is also used in editions of

- Old English poetry to indicate disyllabic pronunciation of a diphthong that is normally monosyllabic (Figures 27, 31)
- COMBINING OGONEK ABOVE is used for marking vowel-length in Norse or to indicate vowel affection—so \dot{o} represents i-mutated ϕ (Figures 19, 23, 25, 28, 42)
- COMBINING ZIGZAG BELOW is used for $\not D$, $\not D$ ar 'they f.' together with COMBINING ZIGZAG ABOVE (Figures XXX)
- COMBINING IS BELOW is used in Visigothic script for is in noh nobis 'to us', script scriptis 'written', dict dictis 'said' (Figures XXX)
- COMBINING UR ABOVE is used for ur in dicit dicitur 'is said', uocat uocatur 'is called' (Figures 32, 60, 61)
- COMBINING US ABOVE is used for medial and final us in man manus 'hand', medial os in pt post 'after', 'ppitus praepositus 'prelate, leader, governor, prevost' (Figures 32, 33, 39, 51, 52)
- COMBINING LATIN SMALL LETTER FLATTENED OPEN A ABOVE is used for ua in \(\tilde{q}\) qua 'as', \(\tilde{g}\) rda guarda 'guard', for ra or ar in Latin cont contra 'against', su\(\tilde{p}\) supra 'above', Portguese com\(\tilde{p}\) compra 'a purchase', \(\tilde{m}\) ia maria 'Maria', \(\tilde{p}\) te parte 'part', for numerals \(\tilde{v}\) quinta 'fifth', \(\tilde{t}\) prima 'first', una 'one' (Figures 33, 47, 67, 73, 76).
- **9. Punctuation.** Although many editors substitute modern for medieval punctuation, a growing number of medievalists insist that modern punctuation cannot adequately represent the syntactical features of medieval texts. In any case, at present, the reproduction of the punctuation of most medieval manuscripts using currently defined UCS characters is impossible, because many marks (e.g. Punctus elevatus) are simply missing. More subtly, however, even those medieval marks that have modern reflexes may differ in usage as well as in shape. For example, the modern question mark (U+003F) is descended from the Punctus interrogativus, but unlike the modern question mark, the punctus interrogativus may be contrasted with the Punctus percontativus—the former marking questions that require an answer while the latter marks rhetorical questions. These medieval punctuation marks are proposed below. Note that where a number of characters are described as "variants of positura", this does not mean that they are freely-exchangeable glyph variants. Like the Norse ligated letters discussed in §2 above, this collection of punctuation marks is a superset of the letters found in the medieval corpus; no single manuscript contains all of them.
- MEDIEVAL COMMA is used to mark a pause at the end of the rhetorical unit called a *comma*.
- <\(\Gamma\) PARAGRAPHUS is used to mark the beginning of a section of text (Figures 53, 59).
- <2> POSITURA is used to mark the end of a section of text.
- <:-> COLON WITH COMMA ELEVATA POSITURA, an alternative form of POSITURA, was "employed by insular scribes at the end of a paragraph in a series of paragraphs or texts (e.g. annals) to imply that some continuation was to be expected to complete this series" (Parkes 306).
- <:>> COLON WITH MIDDLE COMMA POSITURA is a variant form of POSITURA.
- <;;> TWO DOTS OVER COMMA POSITURA is a variant form of POSITURA.
- <.;.> THREE DOTS WITH COMMA POSITURA is a variant form of POSITURA.
- PUNCTUS ELEVATUS is used in many medieval texts to signal a wide variety of sentence-medial pauses (Figures 53, 63, 70).
- <!> PUNCTUS EXCLAMATIVUS (or *punctus admirativus*) is used in late medieval texts to mark the end of an exclamation.
- PUNCTUS FLEXUS is used to mark sentence-medial pauses, but especially in liturgical texts where the pitch of the voice drops.
- <.'> PUNCTUS INTERROGATIVUS is used to mark the end of a question that requires an answer.
- PUNCTUS PERCONTATIVUS is used in late texts to mark the end of a question that does not require an answer—a rhetorical question.
- <>> PUNCTUS VERSUS is used to mark the end of a sentence or period, or the end of a verse of a psalm.
- <.> LOW PUNCTUS VERSUS is a variant form of PUNCTUS VERSUS.

- <:> SIGNE DE RENVOI is used to connect a marginal note to a place in the text. Its size is typically larget than that of other
- <::> SQUARED FOUR DOT PUNCTUATION.
- <::> TWO DOTS OVER ONE DOT PUNCTUATION. (Figure 62).
- <.:.> ONE DOT OVER TWO DOTS PUNCTUATION.
- VIRGULA SUSPENSIVA is "used to mark the briefest pause or hesitation in a text" (Parkes 307).

- **10. Claudian letters.** The Roman emperor Claudius introduced three letters to the alphabet to indicate sounds he felt could not be represented otherwise. These letters originally occurred only in capital form, but the lower-case form has been adduced to meet Unicode casing requirements as well as those of normal scholarship. An inscription may read OLFMPICUS, but the scholar may prefer to transcribe this as $Ol = y \implies mpicus$ (as in Figure XXX) without the letter, or as OlPmpicus with it.
- <3 >> REVERSED C represented the consonant groups \subset bs \supset and \subset ps \supset . This is the same character as the letter used for con, com, us, and os discussed in §7 below.
- $\prec \exists \exists$ INVERTED F represented consonantal $\subseteq v \supset$ (as opposed to u)
- $\langle F \rangle$ HALF H represented the Greek $\subseteq y \supset (Figures XXX)$.
- 11. Editorial punctuation. The Nordic editorial tradition uses quilled bars to mark ∤deletions∤ in the manuscript and (in reverse order) to mark ∤dittographies∤ (repetitions) (Figures 26, 38, 68). The venerable *Corpus Inscriptionum Latinarum* of Berlin makes use of a large number of paired punctuation, most of which are encoded in the General Punctuation or one of the Mathematics blocks. Two pairs are not yet encoded: the SIDEWAYS U BRACKETS are used to indicate Claudian letters in a transcription, to notate inverted letters, or to notate the insertion of an image into the line of text (such as crux⊃ to indicate a cross). The ((double parentheses)) are used by some other Latinists for similar purposes. They differ from ((doubled parentheses)) quite obviously, and are not joined at the top like the WHITE PARENTHESES U+2985-U+2986 are. The FULLWIDTH WHITE PARENTHESES U+FF5F-U+FF60 used in Asia are unusual in having either a double or a joined presentation, but that glyph variation is not used by Latinists (Figures XXX).

Bibliography.

Aðalheiður Guðmundsdóttir, ed., 2001. *Úlfhams saga*. (Rit 53) Reykjavík: Stofnun Árna Magnússonar á Íslandi.

Anscombe, A., ed. 1907. "Indexes to Old-Welsh Genealogies (Continuation)", In *Archiv für Celtische Lexikographie*, vol III, ed W. Stokes & K. Meyer. [s.l.]: Max Niemeyer.

Bartholomae, Christian. 1961. *Altiranisches Wörterbuch*. 2. unveränderte Auflage. Berlin: Walter de Gruyter. Bartoli, Francesco de. 1470. *Historia quomodo beatus Franciscus petivit a Christo indulgentiam pro Ecclesia S. Mariae de Angelis*. Trevi: Johannes Rothmann.

Brøndum-Nielsen, Johannes. [1943]. *Palæografi. A: Danmark og Sverige*. (Nordisk Kultur XXVIII:A) Stockholm: Albert Bonniers; Oslo: H. Aschehoug; København: J. H. Schultz.

- Brown, Michelle P. 1993. A Guide to Western Historical Scripts from Antiquity to 1600. London: The British Library.
- Cappelli, Adriano. 1973. Lexicon abbreviaturarum: Dizionario di abbreviature latine ed italiane usate nelle carte e codici specialmente del medio-evo riprodotte con oltre 140000 segni incisi. Milano: Editore Ulrico Hoepli.
- Carter, Henry H., 1941. *Cancioneiro da Ajuda. A Diplomatic Edition*, New York: Modern Language Association of America / London: Oxford University Press.
- Cencetti, Giorgio. 1997. *Lineamenti di storia della scrittura latina*. Seconda edizione. Pàtron Editore Bologna. ISBN 88-555-2405-4
- Cleonardo, Nicolao. 1589. *Tabula in grammaticen Hebraeam auctore Nicolao Clenardo*. Lugduni Batavorum: Ex Officina Plantiniana, Apud Franciscum Raphelengium.
- Dahlerup, Verner, ed., 1800. Ágrip af Noregs konunga sögum. Samfund til udgivelse af gammel nordisk litteratur, 2. København: Møller.
- Degnbol, Helle, Bent Chr. Jacobsen, Eva Rode, Christopher Sanders, Þorbjörg Helgadóttir, eds. 1995. *Ordbog over det norrøne prosasprog. 1: a–bam.* København: Den arnamagnæanske kommission.
- Eiríkur Þormóðsson & Guðrún Ása Grímsdóttir, eds. 2003. *Oddaannálar og Oddverjaannáll*. (Rit 59) Reykjavík: Stofnun Árna Magnússonar á Íslandi.
- Evans, D. Simon. 1976. *A grammar of Middle Welsh*. (Medieval and Modern Welsh Series; supplementary volume) Dublin: Dublin Institute for Advanced Studies.
- Farley, A. (Ed.). 1783. Domesday Book: seu liber censualis Wilhelmi primi Regis Angliæ, inter archivos regni in domo capitulari Westmonasterii asservatus: jubente rege ... Georgio Tertio prælo mandatus typis. [London].
- Firchow, Evelyn Scherabon, & Kaaren Grimstad, eds. 1989. *Elucidarius in Old Norse translation*. (Rit 36) Reykjavík: Stofnun Árna Magnússonar.
- Gjerløw, Lilli, 1961: Adoratio crucis. The Regularis Concordia and the Decreta Lanfranci. Manuscript studies in the early medieval church of Norway. [s.l.]: Norwegian Universities Press.
- Guðvarður Már Gunnlaugsson, ed. 2001. Konungsbók Eddukvæða. Codex Regius. Stofnun Árna Magnússonar á Íslandi. Gl. Kgl. Sml. 2365 4to. (Íslensk miðaldahandrit, 3) Reykjavík: Lögberg. ISBN: 997932161x
- Haugen, Odd Einar. 1992. Stamtre og tekstlandskap. Studiar i resensjonsmetodikk med grunnlag i Niðrstigningar saga. 2 vols. Dr.philos. dissertation. Department of Scandinavian languages and literature, University of Bergen.
- Haugen, Odd Einar, ed. 2004. *Handbok i norrøn filologi*. Bergen: Fagbokforlaget. ISBN 82-450-0105-8 Hødnebø, Finn, ed. 1960. *Corpus codicum Norvegicorum medii aevi*. Folio serie vol. II: Norske diplomer
- Holm-Olsen, Ludvig, ed., 1945. *Konungs skuggsjá*. Gammelnorske tekster, 1. Oslo: Norsk Historisk Kjeldeskrift-Institutt.

til og med år 1300. Oslo: Selskapet til utgivelse av gamle norske håndskrifter.

- Hreinn Benediktsson, ed. 1972. *The First Grammatical Treatise: introduction, text, notes, translation, vocabulary, facsimiles.* (University of Iceland Publications in Linguistics; 1) Reykjavík: Institute of Nordic Linguistics.
- Humphreys Henry Noel. [1868]. "The origin and progress of the art of writing; a connected narrative on the development of the art, in its primeval phases in Egypt, China, and Mexico; its middle state in the Cuneatic systems of Ninevah and Persepolis; its introduction to Europe through the medium of the Hebrew, Phœnician, and Greek systems; and its subsequent progress to the present day", in Webster's Improved Dictionary of the English language, exhibiting the origin, orthography, pronunciation, & definition of words; embracing all the principal terms used in literature, science & art, according to the best authorities; and likewise giving the synonymous terms for nearly all the words explained. 2 vols. London, Glasgow, & Edinburgh: William MacKenzie.

Jackson, Kenneth. 19xx.

John, of Garland. [ca. 1505]. *Synonima magistri* / Johannis de garlandia cu expositione magistri Galfridi anglici. [London: Wynkyn de Worde].

Johnson, Samuel. 1828. A dictionary of the English language in which the words are deduced from their originals, and illustrated in their different significations by examples from the best writers, to which are prefixed a history of the language and an English grammar. London: Joseph Ogle Robinson.

Jones, J. Morris. 1913. A Welsh grammar: historical and comparative. London: Oxford University Press.

Jones, Thomas, ed. 1941. Brut y Tywysogyon: Peniarth Ms. 20. Caerdydd: Gwasg Prifysgol Cymru.

[Kålund, Kristian]. 1889. Katalog over den Arnamagnæanske Handskriftsamling. Udgivet af Kommissionen for det Arnamagnæanske Legat. København: Gyldendalske Boghandel.

Klaeber, F., ed., 1950. Beowulf and the Fight at Finnsburg. 3rd ed. Boston: D.C. Heath.

Konráð Gíslason. 1846. Um frum-parta íslenzkrar túngu í fornöld. Kaupmannahöfn.

Maia, Clarinda de Azevedo. 1986. História do galego-português. Estado linguístico da Galiza e do Noroeste de Portugal do século XIII ao século XVI. Coimbra: Instituto Nacional de Investigação Científica.

Marín Martínez, Tomás. 1991. *Paleografica y diplomática*. Quinta edición. 1999 sexta reimpresión. Universidad Nacional de Educación a Distancia (UNED). ISBN 84-362-2052-8

Matras, Christian, ed. 1939. *Svabos færøske Visehaandskrifter*. (Samfund til udgivelse af gammel nordisk litteratur, 59) København: Bianco Lunos Bogtrykkeri A/S.

Millares Carlo, Agustín. 1983. Tratado de Paleografía Española. Madrid: Espasa-Calpe

Nunes, Eduardo Borges. 1969. *Álbum de Paleografia Portuguesa*. Vol. I. Lisboa: Instituto de Alta Cultura / Centro de Estudos Históricos.

Ó Cuiv, Brian, ed. 1994. Aibidil Gaoidheilge & Caiticiosma: Seaán Ó Cearnaigh's Irish Primer of Religion published in 1571. Dublin: Dublin Institute for Advanced Studies. ISBN 1-85500-163-2

Pacheco, José. 1988. *A Divina Arte Negra e o Livro Português (séculos XV e XVI)*, Lisboa: Vega, Fig. 3 — Folha do Prólogo do Sacramental de Clemente Sanchez, Chaves, Autor desconhecido, [1488]., Aquele que se pressupõe ter sido, em Portugal, o primeiro livro impresso em português., p. 87

Parkes, M. B. 1992. *Pause and Effect: An Introduction to the History of Punctuation in the West.* Berkeley: University of California Press. ISBN 0-520-07941-8

Santos, Maria José de Azevedo. 1994. *Da Visigótica à Carolina: a escrita em Portugal de 882 a 1172*. Lisboa: Fundação Calouste Gulbenkian, Junta Nacional de Investigação Científica e Tecnológica. ISBN 84-376-1245-4

Saxoferrato, Bartholus de. 1471. Lectura super I. parte Infortiati. Trevi: Johannes Rothmann.

Stefán Karlsson, ed. 1963. *Islandske originaldiplomer indtil 1450. Tekst.* (Editiones Arnamagnæanæ, Series A, vol. 7) København: Munksgaard.

Tertullian, Quintus Septimus Florens. [1493]. Apologeticus adversus gentes. Venetiis: B. Benalius.

Thomas, Graham, and Nicholas Williams, eds. [In preparation]. *Bewnans Ke: The Life of St Kea*. Aberystwyth: National Library of Wales.

van Arkel-de Leeuw van Weenen, Andrea, ed. 1987. *Möðruvallabók: AM 132 Fol.* Volume Two: Text. Leiden: E. J. Brill.

Virgile. 1509. Opera com. de Servius. Milano: Leonardo Pachel

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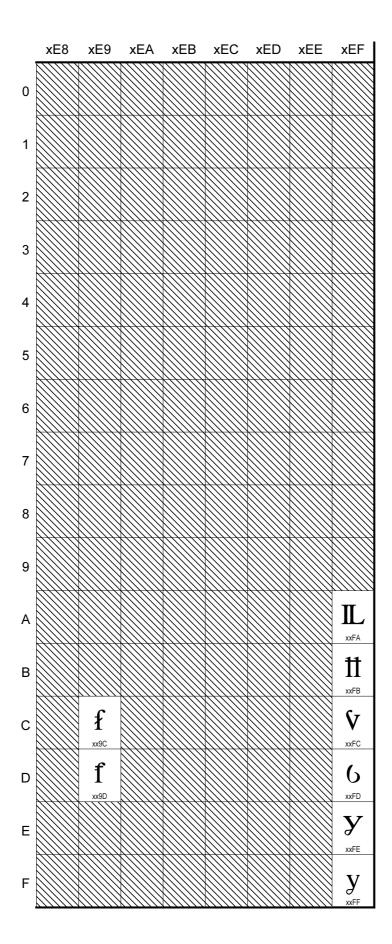
Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible placement.

Medievalist and Latinist additions

- 1DCB © COMBINING DOUBLE CIRCUMFLEX ABOVE
- 1DCC & COMBINING OGONEK ABOVE
- 1DCD ့ COMBINING ZIGZAG BELOW
- 1DCE © COMBINING IS BELOW
- 1DCF [™] COMBINING UR ABOVE
- 1DD0 & COMBINING US ABOVE
 - \rightarrow A764 9 modifier letter us

Superscript Latin letter diacritics

- 1DD1 OCOMBINING LATIN SMALL LETTER FLATTENED OPEN A
- 1DD2 COMBINING LATIN SMALL LETTER AE
- 1DD3 COMBINING LATIN SMALL LETTER AO
- 1DD4 * COMBINING LATIN SMALL LETTER AV
- 1DD5 COMBINING LATIN SMALL LETTER B
- 1DD6 COMBINING LATIN LETTER SMALL CAPITAL B
- 1DD7 & COMBINING LATIN SMALL LETTER C CEDILLA
- 1DD8 ° COMBINING LATIN LETTER SMALL CAPITAL D
- 1DD9 & COMBINING LATIN SMALL LETTER ETH
- 1DDA 6 COMBINING LATIN SMALL LETTER F
- 1DDB & COMBINING LATIN SMALL LETTER G
- 1DDC & COMBINING LATIN LETTER SMALL CAPITAL G
- 1DDD & COMBINING LATIN SMALL LETTER K
- 1DDE * COMBINING LATIN LETTER SMALL CAPITAL K
- 1DDF 🖟 COMBINING LATIN SMALL LETTER L
- 1DE0 COMBINING LATIN LETTER SMALL CAPITAL L
- 1DE2 COMBINING LATIN SMALL LETTER N
- 1DE3 Č COMBINING LATIN LETTER SMALL CAPITAL N
- 1DE4 & COMBINING LATIN SMALL LETTER P
- 1DE5 COMBINING LATIN LETTER SMALL CAPITAL R
- 1DE6 6 COMBINING LATIN SMALL LETTER R ROTUNDA
- 1DE7 & COMBINING LATIN SMALL LETTER S
- 1DE9 ¿ COMBINING LATIN LETTER SMALL CAPITAL T
- 1DEA & COMBINING LATIN SMALL LETTER Y
- 1DEB & OMBINING LATIN SMALL LETTER Z



Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible placement.

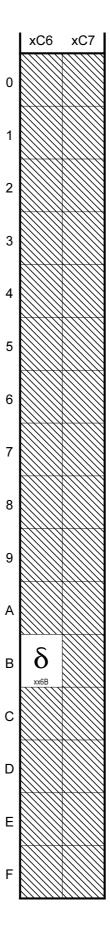
Latinist and medievalist characters

- 1E9C $\,$ f $\,$ LATIN SMALL LETTER LONG S WITH DIAGONAL STROKE
 - → 017F f latin small letter long s
- 1E9D f LATIN SMALL LETTER LONG S WITH HIGH STROKE

Latinist and medievalist characters

- 1EFA IL LATIN CAPITAL LETTER MIDDLE-WELSH LL
- 1EFB # LATIN SMALL LETTER MIDDLE-WELSH LL
- 1EFC \dot{v} LATIN CAPITAL LETTER MIDDLE-WELSH V \rightarrow 01B2 U latin capital letter v with hook
- 1EFD 6 LATIN SMALL LETTER MIDDLE-WELSH V

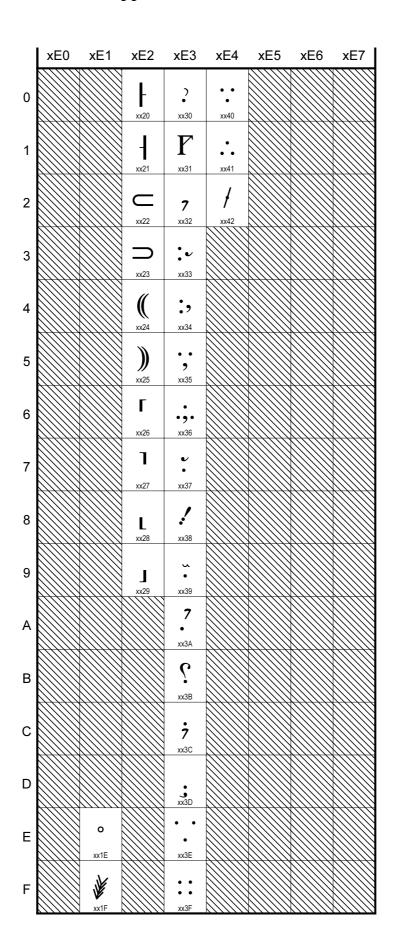
 → 028B v latin small letter v with hook
- 1EFE Y LATIN CAPITAL LETTER Y WITH LOOP
- 1EFF y LATIN SMALL LETTER Y WITH LOOP



Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible placement.

Latinist and medievalist character

2C6B δ LATIN SMALL LETTER SCRIPT D \rightarrow 018D g latin small letter turned delta \rightarrow 03B4 δ greek small letter delta



Supplemental Punctuation

Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible

Latinist and medievalist editorial punctuation

- 2E1E MIDDLE RING
 - → 00B0 ° degree sign → 02DA ° ring above

 - → 1424 ∘ candian syllabics final ring
 - → 2218 ring operator
 - → 25E6 · white bullet
 - → 26AC o medium small white circle
- 2E1F # PALM BRANCH
 - = ramus
- 2E20 | LEFT VERTICAL BAR WITH QUILL
- 2E21 | RIGHT VERTICAL BAR WITH QUILL
- 2E22 ⇐ LEFT SIDEWAYS U BRACKET
 - \rightarrow 2282 ⊂ subset of
- 2E23 → RIGHT SIDEWAYS U BRACKET
 - \rightarrow 2283 \supset superset of
- 2E24 (LEFT DOUBLE PARENTHESIS
 - → 2985 (left white parenthesis
 - → FF5F (fullwidth left white parenthesis
- 2E25)) RIGHT DOUBLE PARENTHESIS
 - → 2986) left right parenthesis
 - → FF60)) fullwidth right white parenthesis
- 2E26 TOP LEFT HALF SQUARE BRACKET
 - → 2308 [left ceiling
 - → 231C \(\top\) top left corner
 - → 2E00 ^r right angle substitution marker
 - → 300C left corner bracket
- 2E27 1 TOP RIGHT HALF SQUARE BRACKET
 - → 2309 1 right ceiling
 - → 231D ¬ top right corner
- 2E28 L BOTTOM LEFT HALF SQUARE BRACKET
 - → 230A L left floor
 - → 231E L bottom left corner
- BOTTOM RIGHT HALF SQUARE BRACKET 2E29
 - → 230B J right floor
 - → 231F _ bottom right corner
 - → 300D 」 right corner bracket

Medieval punctuation

- 2E30 ? MEDIEVAL COMMA
- 2E31 F PARAGRAPHUS
 - → 00B6 ¶ pilcrow sign
 - → 204B P reversed pilcrow sign
 - → 2761 ¶ curved stem paragraph sign ornament
 - \rightarrow 2E0F ___ paragraphos
- 2E32 , POSITURA
- 2E33 : COLON WITH COMMA ELEVATA POSITURA
- 2E34 : COLON WITH MIDDLE COMMA POSITURA
- 2E35 ; TWO DOTS OVER COMMA POSITURA
- 2E36 .;. THREE DOTS WITH COMMA POSITURA
- 2E37 : PUNCTUS ELEVATUS
- 2E38 / PUNCTUS EXCLAMATIVUS
- 2E39 : PUNCTUS FLEXUS
- 2E3A . PUNCTUS INTERROGATIVUS
- 2E3B ? PUNCTUS PERCONTATIVUS
 - → 2426 ? symbol for substitute form two
 - → 061F ? arabic question mark
- 2E3C ; PUNCTUS VERSUS
- . LOW PUNCTUS VERSUS

- 2E3E :: SIGNE DE RENVOI
 - → 205A: two dot punctuation
 - \rightarrow 205B \cdot four dot mark
 - → 2237 :: proportional
- 2E3F :: FOUR DOTS PUNCTUATION
 - → 2058 : four dot punctuation
 - → 2059 :: five dot punctuation
- 2E40 : TWO DOTS OVER ONE DOT PUNCTUATION
 - → 10FB: georgian paragraph separator
 - \rightarrow 2056 ·: three dot punctuation
 - → 2235 : because
- 2E41 :: ONE DOT OVER TWO DOTS PUNCTUATION
 - → 2234 : therefore
- 2E42 / VIRGULA SUSPENSIVA

	x72	x73	x74	x75	x76	x77	x78	x79	х7А	х7В	x7C	x7D	х7Е	x7F
0	A	E	Q	27	8	17								
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6	xx26	xx36	xx46	xx56	xx66									
7	a / xx27	★ xx37	p	3 xx57	F xx67									
8	A xx28	K	P	þ	n xx68									
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С	хх2В С	xx3B	хх4В Q	Yx5B	xx6B									
D	xx2C 2	xx3C	xx4C Q	хх5С Y	xx6C d2									
E	хх2D	xx3D	2 xx4D	3	xx6D									
	xx2E	ххЗЕ	xx4E	xx5E	m2 xx6E									
F	3 xx2F	O xx3F	2 xx4F	3 xx5F	n 2									

Note to reviewers: This is a preliminary proposal. The code points shown are merely suggestions for a possible placement.

Medievalist additions

- A720 AA LATIN CAPITAL LETTER AA
- A721 a LATIN SMALL LETTER AA
- A722 AO LATIN CAPITAL LETTER AO
- A723 & LATIN SMALL LETTER AO
- A724 AJ LATIN CAPITAL LETTER AU
- A725 at LATIN SMALL LETTER AU
- A726 A LATIN CAPITAL LETTER AV
- A727 av LATIN SMALL LETTER AV
- A728 A LATIN CAPITAL LETTER AV WITH HORIZONTAL
- A729 ar LATIN SMALL LETTER AV WITH HORIZONTAL BAR
- A72A AY LATIN CAPITAL LETTER AY
- A72B ay LATIN SMALL LETTER AY
- A72C ⊃ LATIN CAPITAL LETTER REVERSED C
 = capital antisigma
 → 2183 ⊃ roman numeral reversed one hundred
 - → 03FD ⊃ greek capital lunate sigma symbol
- A72D o LATIN SMALL LETTER REVERSED C = small antisigma
- A72E 3 LATIN CAPITAL LETTER REVERSED C WITH DOT

 → 03FF 3 greek capital reversed dotted lunate sigma

 symbol
- A72F o LATIN SMALL LETTER REVERSED C WITH DOT
- A730 & LATIN CAPITAL LETTER TURNED F
 - = capital digamma inversum → 2132 ∃ turned capital f
- A731 J LATIN SMALL LETTER TURNED F
 - = small digamma inversum
 - → 025F † latin small letter dotless j with stroke
- A732 F LATIN CAPITAL LETTER HALF H
- A733 LATIN SMALL LETTER HALF H
- A734 K LATIN CAPITAL LETTER K WITH STROKE
- A736 K LATIN CAPITAL LETTER K WITH DIAGONAL STROKE
- A737 k LATIN SMALL LETTER K WITH DIAGONAL STROKE
- A738 K LATIN CAPITAL LETTER K WITH STROKE AND DIAGONAL STROKE
- A739 & LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE
- A73A L LATIN CAPITAL LETTER BROKEN L
- A73B 1 LATIN SMALL LETTER BROKEN L
- A73C L LATIN CAPITAL LETTER L WITH HIGH STROKE

 → 0141 Ł latin capital letter l with stroke
- A73D ↑ LATIN SMALL LETTER L WITH HIGH STROKE

 → 0142 ↑ latin small letter l with stroke
- A73E O LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY
- A73F & LATIN SMALL LETTER O WITH LONG STROKE OVERLAY
- A740 O' LATIN CAPITAL LETTER O WITH LOOP

 → 01A0 O' latin capital letter o with horn
- A742 OO LATIN CAPITAL LETTER OO
- A743 ω LATIN SMALL LETTER OO
- A744 P LATIN CAPITAL LETTER P WITH STROKE THROUGH DESCENDER

- A745 p LATIN SMALL LETTER P WITH STROKE THROUGH DESCENDER
- A746 & LATIN CAPITAL LETTER P WITH FLOURISH
- A747 p LATIN SMALL LETTER P WITH FLOURISH
- A748 P LATIN CAPITAL LETTER P WITH SQUIRREL TAIL
- A749 $\,\psi\,$ Latin small letter P with squirrel tail
- A74A Q LATIN CAPITAL LETTER Q WITH STROKE THROUGH DESCENDER
- A74B q LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER
- A74C Q LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE
- A74D φ LATIN SMALL LETTER Q WITH DIAGONAL STROKE
- A74E 2 LATIN CAPITAL LETTER R ROTUNDA → 0032 2 digit two → 01BB 2 latin letter two with stroke
- A74F 2 LATIN SMALL LETTER R ROTUNDA
- A750 22 LATIN CAPITAL LETTER RUM ROTUNDA
- A751 27 LATIN SMALL LETTER RUM ROTUNDA
- A752 W LATIN CAPITAL LETTER V WITH DIAGONAL STROKE

 → 2123 W versicle
- A753 * LATIN SMALL LETTER V WITH DIAGONAL STROKE
- A754 W LATIN CAPITAL LETTER VY
- A755 w LATIN SMALL LETTER VY
- A756 & LATIN CAPITAL LETTER VISIGOTHIC Z
- A757 & LATIN SMALL LETTER VISIGOTHIC Z
- A758 D LATIN CAPITAL LETTER THORN WITH STROKE
- A759 † LATIN SMALL LETTER THORN WITH STROKE
- A75A P LATIN CAPITAL LETTER THORN WITH STROKE THROUGH DESCENDER
- A75B b LATIN SMALL LETTER THORN WITH STROKE THROUGH DESCENDER
- A75C Y LATIN CAPITAL LETTER VEND 0x 0194 Y latin capital letter gamma
- A75D V LATIN SMALL LETTER VEND
- A75E 3 LATIN CAPITAL LETTER ET

 → 01B7 3 latin capital letter ezh
- A75F 3 LATIN SMALL LETTER ET → 0292 3 latin small letter ezh
- A760 § LATIN CAPITAL LETTER IS
- A761 g LATIN SMALL LETTER IS
- A762 9 LATIN CAPITAL LETTER CON
- A763 Q LATIN SMALL LETTER CON
- A764 ⁹ MODIFIER LETTER US

Insular tradition

Other characters for the insular tradition are coded elsewhere

- → 1D79 g latin small letter insular g
- A765 ∂ LATIN SMALL LETTER INSULAR D
 → 00F0 δ latin small letter eth
- A766 ‡ LATIN CAPITAL LETTER INSULAR F
- A767 r LATIN SMALL LETTER INSULAR F
- A768 n LATIN SMALL LETTER INSULAR R
- A769 T LATIN SMALL LETTER INSULAR S
- A76A t LATIN SMALL LETTER INSULAR T

Other additions

Other small capital letters for phonetic transcription are encoded elsewhere

A76B F LATIN LETTER SMALL CAPITAL F

A76C s LATIN LETTER SMALL CAPITAL S \rightarrow 017F f latin small letter long s

Latinist abbreviations

A76D d LATIN SMALL LETTER DUM A76E m LATIN SMALL LETTER MUM A76F n LATIN SMALL LETTER NUM A770 r LATIN SMALL LETTER RUM

→ 211E R prescription take → 211F R response

A771 R) LATIN LETTER SMALL CAPITAL RUM

A772 & LATIN SMALL LETTER TUM

A773 & LATIN SMALL LETTER UM