## MUFI character recommendation

Characters in the official Unicode Standard and in the Private Use Area for Medieval texts written in the Latin alphabet

※ Part 2: Code chart order
※ Version 2.0 (22 December 2006)
※ Compliant with the Unicode Standard version 5.0

[^0]※ www.mufi.info

## Editor

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## Background

Version 1.0 of the MUFI recommendation was published electronically and in hard copy on 8 December 2003. It was the result of an almost two-year-long electronic discussion within the Medieval Unicode Font Initiative (http://www.mufi.info), which was established in July 2001 at the International Medieval Congress in Leeds. Version 1.0 contained a total of $\mathbf{8 2 8}$ characters, of which 473 characters were selected from various charts in the official part of the Unicode Standard and 355 were located in the Private Use Area. Version 1.0 of the recommendation is compliant with the Unicode Standard version 4.0.

Version 2.0 is a major update, published electronically on 22 December 2006. It contains a few corrections of misprints in version 1.0 and 516 additional characters (of which 123 are from charts in the official part of the Unicode Standard and 393 are additions to the Private Use Area). There are also 18 characters which have been decommissioned from the Private Use Area due to the fact that they have been included in later versions of the Unicode Standard (and, in one case, because a character has been withdrawn). The net addition is thus $\mathbf{4 9 8}$ characters, making a total of $\mathbf{1 3 2 6}$ characters. This version of the recommendation is compliant with the Unicode Standard version 5.0.

## Part I \& 2

As of version 2.0, the recommendation has been divided into two parts, each containing the same number of characters, but in different order. Part 1 lists the characters in alphabetical order, beginning with alphabetical characters and then giving numbers, abbreviation characters, punctuation characters, symbols, and finally geometrical and metrical characters. Part 2 lists the characters according to the code charts in the Unicode Standard.

Part 1 is intended for casual users, because it is fairly easy to find any particular character simply by browsing through the document on screen or in print. Part 2 is intended for encoders and font designers, because it lists characters according to Unicode code charts and accordingly in ascending code-point order. It also shows the structure of the Private Use Area more clearly than Part 1. In general, it contains more information than Part 1; it displays decommissions from version 1.0 to 2.0 on a coloured background, it includes appendices specifying all change from version 1.0 to 2.0 , and it distinguishes between ISO entity names (where applicable) and MUFI-recommended entity names.

## Contributors and meetings

Since work with this recommendation began in August 2001, a number of people have given help and advice (in alphabetical order): Jim Allan (U.S.), Deborah W. Anderson (Berkeley, CA), Peter S. Baker (Charlottesville, VA), Michael Beddow (Leeds), Florian Grammel (København), Michael Gullick (Stevenage, UK), Guðvarður Már Gunnlaugsson (Reykjavík), António H.A. Emiliano (Lisboa), Michael Everson (Westport, Ireland), Jost Gippert (Frankfurt am Main),
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In addition to electronic discussions, the MUFI group has also held informal meetings in Oxford (June 2003), Bergen (August 2003), Lisboa (March 2005), Leipzig (August 2005) and Bonn (June 2006). The project has also been presented at several conferences, including the International Medieval Congress in Leeds (July 2003), the ALLC/AHC congress in Göteborg (June 2004) and the 27th Internationalization and Unicode conference in Berlin (April 2005).

## Caveat

Many aspects of this recommendation may be controversial, and more than one of the contributors and advisors listed above may disagree with the solutions chosen in the recommendation. It is, however, clear that this recommendation would have progressed much more slowly and would have been much inferior had it not been for all the help and comments received. The editor would like to thank all contributors for their assistance in this project.

## Publication details

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## Introduction

This recommendation contains a set of characters for the use of Medievalists and, to some extent, Classicists. The two major aims of the recommendation are (1) to establish a selection of characters from the official Unicode Standard and (2) to co-ordinate the usage of code points in the Private Use Area. The selection is intended to cover transcriptions of Medieval sources at different levels of detail and also to be useful for editions, commentaries, and linguistic and lexicographical works that refer to Medieval primary sources. For this reason, it contains a number of variant letter forms, as well as many critical and editorial signs.

## I. Structure

The recommendation contains (1) a representative glyph for each character, (2) an entity name, (3) a Unicode code point, (4) a reference to a Unicode code chart, and (5) a descriptive name. In the case of unusual or sometimes misunderstood characters, short explanatory notes are added immediately below the character.

## I.I. Glyphs

The glyphs (character shapes) used in this recommendation are for guidance only. Unicode makes an important distinction between characters and glyphs; a character is the smallest component of written language that has semantic value. A character thus refers to the abstract meaning and/or shape, rather than a specific shape. A glyph, on the other hand, is the individual shape of the character. Many characters have well-defined glyphs, and no guidance will be necessary, e.g. the $\mathrm{a}-\mathrm{z} / \mathrm{A}-\mathrm{Z}$ of the Latin alphabet. For many other characters, there are few or sometimes no printed examples available. We have spent time with font designers in order to present glyphs that look clear, sufficiently distinct from other glyphs, and consistently shaped within the limitations of the basic font design. In the case of the font used in this recommendation, this means a humanist typeface with its ultimate roots in Latin capitals and Carolingian minuscules. All glyphs in this version of the recommendation belong to the font Andron Scriptor Web and have been designed by Andreas Stötzner (Leipzig).

### 1.2. Entity names

Entities are used in numerous encoding schemes such as SGML and XML. For the sake of interchangeability, it is recommended that entities, as far as possible, conform to the standard ISO entity sets. In addition to the ISO entities, a number of entities for characters not designated in this standard are needed. This recommendation uses the syntax and inventory defined in The Menota handbook, ch. 2 and 5 (http://www.menota.org/guidelines), summarised below.

| Base-line character | main type | variant | ligature | fixed modification | loose modification |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | anc | brk |  | bar | acute |
| a | comb | close | ligred | baracr | breve |
| B | enl | dotless |  | barbl | circ |
| b | ins | high |  |  | curl |
| C | run | long |  | flour | dblac |
| c | scap | med |  | hook |  |
|  |  | open |  | ogon | dotbl |
| etc. | vis |  |  |  | grave |
|  |  | squ |  | slash | macr |
|  |  |  |  | strok | sup |
|  |  |  |  |  | uml |

Note that not all slots need to be filled in; in most cases only one or two slots are used in addition to the base-line character. The meaning of the various parts is explained in this table, listed in alphabetical order:


Some entities, especially for non-alphabetical characters in Basic Latin, Latin-1 Supplement and General Punctuation, have shorter names, modelled on existing entity names. An updated list of ISO-conformant entities can be found at the Oasis web site: http://www.oasis-open.org/cover/xml-ISOents.txt

### 1.3. Code points

Code points are given in hexadecimal format and refer to the Unicode Standard version 5.0. The allocation of code points in the Private Use Area has been coordinated with several font projects (notably Titus and Junicode) with the aim of establishing a common usage among Medievalists. Further information can be found on the MUFI web site (http://www.mufi.info).

Code points in the Unicode Standard are usually given with the prefix ' $\mathrm{U}+$ ', e.g. ' $\mathrm{U}+003 \mathrm{~A}$ ' for the colon, ' $\mathrm{U}+003 \mathrm{~B}$ ' for the semicolon, etc. For reasons of brevity, in this recommendation, this prefix has been omitted.

All code points are located in the Basic Multilingual Plane (BMP) of the Unicode Standard. The Private Use Area of the BMP has a total of 6,400 slots. A large number of PUA characters in this recommendation are concentrated in the section F100-F3FF, but many are also to be found in the section E000-F0FF, co-ordinated with the Titus project. Metrical characters are co-ordinated with the Alphabetum font and located in the F700-F76F section.

Characters in the PUA have been divided into subranges. Note that code points are not necessarily allocated contiguously.
Because Titus and Junicode were already established when this recommendation was made, some code-point conflicts were inevitable. This recommendation gives a single code point for every character in the PUA, but lists duplicate code points in other fonts, notably Junicode, where relevant.

Characters in the PUA should be decommissioned as soon as they can be encoded with ordinary Unicode characters. Since the publication of v. 1.0 of this recommendation, a handful of characters have been accepted by Unicode. These characters are highlighted in yellow, as explained on p. 12.

## I.4. Code charts

In the Unicode Standard, characters are grouped together in code charts, containing from a handful to several hundred characters (in the case of Chinese, Japanese and Korean, several thousand characters). Characters in the Latin alphabet are found in several code charts scattered around in the Standard. In this part of the recommendation, code charts are listed in ascending code-point order, i.e. in the same order as in the Unicode Standard. This means that many categories of characters are spread on various pages, e.g. small capitals. In Part 1, for easier reference, characters are given in alphabetical order.

### 1.5. Descriptive names

Each character has been given a descriptive name, as far as possible according to the rules in the Unicode Standard. The Menota handbook ch. 2 has further details on the interpretation of the Unicode naming rules.

In a few cases, an alternative MUFI descriptive name has been introduced. For example, the character located at 223B in Mathematical Operators (p. 67 below) has the name HOMOTHETIC in the Unicode Standard, but, since this character could be used for a Latin abbreviation (meaning 'est'), a MUFI descriptive name has been listed, LATIN ABBREVIATION SIGN EST.

## 2. Base and precomposed characters

In addition to the base characters $\mathrm{a}-\mathrm{z} / \mathrm{A}-\mathrm{Z}$, the Unicode Standard and this recommendation contain a large numbers of precomposed characters, i.e. base characters with one or more diacritical marks. These characters belong to various ISO charts that were made part of the Unicode Standard in the 1990s, but, as of version 3.0, Unicode is very unwilling to add more precomposed characters. Hereafter, new precomposed characters should be "decomposed" into a base character and one or more combining diacritical marks. This means that a character like "o with ogonek and acute accent", 'Q́', should be encoded as a sequence of "o", "combining ogonek" and "combining acute accent", or $006 \mathrm{~F}+0328+0301$ (or as a combination of "o with ogonek" and "combining acute accent", $01 \mathrm{~EB}+0301$ ). This also applies to precomposed characters already in the standard, e.g. "a with acute accent" which can be decomposed into "a" + "combining acute accent", or $0061+0301$. Some examples of encodings:

| Glyph | Entity name | Code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| Ó | \&oogonacute $;=$ <br> o + \&combogon; + \&combacute; $;$ | E60C $=$ <br> $006 \mathrm{~F}+0328+0301$ | LATIN SMALL LETTER O WITH OGONEK AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING OGONEK + COMBINING ACUTE ACCENT |
| á | \&aacute $;=$ <br> $\mathrm{a}+$ \&combacute; | $00 \mathrm{E} 1=$ <br> $0061+0301$ | LATIN SMALL LETTER A WITH ACUTE <br> = LATIN SMALL LETTER A + COMBINING ACUTE ACCENT |

In this part of the MUFI recommendation, characters have been given with precomposed encodings throughout, with the exception of those in the Private Use Area. They have been given with alternative, "decomposed" encodings, as exemplified with LATIN SMALL LETTER O WITH OGONEK AND ACUTE above. For LATIN SMALL LETTER A WITH ACUTE in Latin-1 Supplement, also exemplified above, a "decomposed" encoding has not been given, although this character can equally well be decomposed. All precomposed characters can in fact be reduced to sequences of base and combining characters, thus greatly reducing the number of characters needed. For the time being, precomposed encoding is widely used, especially in languages with a limited number of precomposed characters (such as Modern English).

Because precomposed and decomposed encodings are strictly equivalent, a text encoded with precomposed characters can at a later stage be "decomposed",
and vice versa. Therefore, although the use of precomposed characters is an important consideration to make, especially when embarking on large encoding projects, it is not an irretrievable decision.

Smart Font technology is needed in order to display and print decomposed characters properly. At the time of writing, this technology is not yet fully mature, and there are also several competing technologies, such as OpenType (Microsoft), Apple Advanced Typography (Apple) and Graphite (Summer Institute of Linguistics). For this reason, we believe that precomposed characters will be needed for some time.

## 3. Unicode resources and proposals

There are several useful web resources for the Unicode Standard and Unicode fonts. Links to further resources can be found on numerous web sites.

## 3.I. The Unicode Standard

The Unicode Standard can be accessed at http://www.unicode org. This site contains a wealth of information on the standard, including code charts in PDF for all ranges. There is also a printed version of the Unicode Standard, published by Addison-Wesley.

### 3.2. The Titus project

The Titus project (Thesaurus Indogermanischer Text- und Sprachmaterialien), founded by Jost Gippert (University of Frankfurt), has developed a font with several thousand characters in the Private Use Area (code points E000-F0FF), primarily for use in comparative linguistics. The allocation of codepoints in Titus and the MUFI character recommendation has been co-ordinated in order to avoid unneccesary code-point conflicts. For a full overview, see the Titus website at http://titus.uni-frankfurt.de

### 3.3. The Junicode font

Junicode is a font designed by Peter S. Baker (University of Virginia) on the basis of Junius, a 17th century font for Old English. It is available as a Unicode font (hence the name Junicode) on http://junicode.sourceforge.net with a number of characters in the Private Use Area. The allocation of code points in the MUFI character recommendation has been co-ordinated with Junicode.

### 3.4. The Medieval Unicode Font Initiative

The Medieval Unicode Font Initiative (MUFI) was established in July 2001 with the aim of co-ordinating work among Medieval scholars, and disseminating
inexpensive or, if possible, free fonts for Medievalists. Several fonts compliant with version 1.0 of the MUFI recommendation have already been published on the MUFI web site, http://www.mufi.info/fonts. We expect that several fonts compliant with version 2.0 will be published shortly. Andron Scriptor Web v. 2.0 is the first of these fonts and is published simultaneously with the recommendation.

### 3.5. Proposals to Unicode

Members of the MUFI group and other scholars have been co-ordinating a proposal to Unicode for a number of Medieval characters. For reasons explained above, it does not contain any precomposed characters, nor any obviously variant letter forms, but it does contain many base characters. This proposal is being edited by Michael Everson and is available from the MUFI web site. A preliminary version of the proposal was sent to the Unicode Technical Committee on 2 August 2005 and the final version on 30 January 2006. Another proposal for Medieval punctuation marks, also edited by Michael Everson, is under development and will probably be finalised in the first half of 2007. In addition, two proposals by David J. Perry, US, one on Roman weight and monetary symbols and one on characters for classical Latin, should be mentioned. Some of the characters in these proposals have been included in the MUFI recommendation. Both proposals are available from the website Fonts For Scholars, http://www.scholarsfonts.net. For updates on all four proposals, see the Unicode web site.

If these proposals are finally accepted, in whole or in part, a number of characters presently in the Private Use Area will be assigned to new code points in the official Unicode Standard. This process may, however, take up to two years. In the meantime, we recommend using the code points in the Private Use Area, as listed in this document.

## 4. Private Use Area

Characters in the Private Use Area (PUA) should be used with great caution. The characters listed in this recommendation are supported by MUFI-compliant fonts, but if a document is displayed with another, non-compliant font, these characters will appear incorrectly (with the unlikely exception of characters that by coincidence are located at the same code points in two different fonts). For documents with a long life expectancy, it is strongly recommended that PUA characters should be encoded with mark-up or entities, and that PUA characters should be used for the final display only, whether on screen or in print. For documents with a short life expectancy, characters may be used with less caution, as long as future problems of storage and interchangeability are considered.

MUFI recommends that if a character in the PUA is accepted by the Unicode Standard, it should be decommissioned and moved to the new code point. Thus, newer versions of MUFI-compliant fonts may lack characters of this type (or, preferably, they should be shown with a warning sign). For this reason, anyone who uses a MUFI-compliant font for a document should keep a copy of that particular font, and make a PDF version of the file for future reference. Earlier versions of fonts might not be accessible at a later date.

## 5. Colour highlighting

1. Characters that have been accepted by the Unicode Standard should be decommissioned from the Private Use Area. They have been highlighted in yellow and an explanatory comment has been added immediately below. The colour yellow colour is also used to indicate deprecation, i.e. that a certain character should no longer be used. Example:

| Glyph | MUFI entity | MUFI code | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\vdots$ | $\& e r ;$ | F152 | F152 | COMBINING ABBREVIATION MARK SUPERSCRIPT ER |

In v. 4.1 of the Unicode Standard, this character has been assigned to code point 035B in Combining Diacritical Marks (see p. 44). This code point (035B) should be used hereafter. The present code (F152) point should be retained for backwards compatibility and not used for any new character.
2. Junicode code points have been retained as far as possible, but in some cases a code point conflict has been inevitable. In these cases, the Junicode code point is highlighted in blue. Variant Junicode code points have been kept for backwards compatibility, but we recommend using the new MUFI code points. Example:

| Glyph | ISO entity | MUFI entity | Code point | (Junicode) | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\dot{\div}$ |  | \&est; | 223B | F150 | HOMOTHETIC | LATIN ABBREVIATION SIGN EST |

## 6. Sign for decommissioned characters

We recommend that a unique and easily recognised sign should be used for characters that have been accepted by Unicode and that, for this reason, should be removed from the Private Use Area. This mark can be used on its own or it can be imposed on the deprecated characters, so that users will see which character it refers to. Examples:
fon (E55C in Private Use Area) indicating that this character should be removed from the PUA; to be substituted with J (0237 in Latin Extended-B)

会
(F10F in Private Use Area) indicating that this character should be removed from the PUA; to be substituted with $\zeta$ (1D79 in Phonetics Extensions)
The decommissioned character has been assigned to F100 in the Private Use Area:

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| \& | \&PUAremove; | F100 | NO LONGER IN THE PRIVATE USE AREA |

Only a few characters have been decommissioned in this version of the MUFI recommendation. However, if the above-mentioned proposals to Unicode are successful, perhaps as many as 150 characters could be decommissioned from the Private Use Area and moved to new code points in the official Standard. In due course, we expect to publish a new version of the MUFI recommendation with the new code points.

## A: Characters in the Unicode Standard

## I: Basic Latin

All 96 characters in this chart have been selected. Characters in Basic Latin may be encoded without the use of entities, but entities have been defined for characters other than the digits $0-9$ and the alphabetical characters A-Z and $a-z$.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :---: | :---: | :---: | :---: | :---: |
|  |  | \&sp; | 0020 | SPACE |
| 1 | \& excl; |  | 0021 | EXCLAMATION MARK |
| " | \" |  | 0022 | QUOTATION MARK |
| In SGML/XML encoded documents, the quotation mark is used to delimit attributes. The entity '\"' refers to the quotation mark as such. |  |  |  |  |
| \# | \# |  | 0023 | NUMBER SIGN |
| \$ | \$ |  | 0024 | DOLLAR SIGN |
| \% | \&perent; |  | 0025 | PERCENT SIGN |
| \& | \& |  | 0026 | AMPERSAND |
| In SGML/XML encoded documents, the ampersand is the opening character of an entity name, as exemplified throughout this recommendation. To avoid confusion, the ampersand as such can be encoded with the entity '\&'. In Medieval primary sources, the ampersand was used as an abbreviation for the conjunction 'and' (Latin 'et', Medieval Nordic 'ok', etc.), in which case it can be specified by markup, e.g. by the <abbr> element. |  |  |  |  |


| 1 | \' | 0027 | APOSTROPHE |
| :---: | :---: | :---: | :---: |
| In SGML/XML encoded documents, the apostrophe may be used in a technical sense. To be able to refer to the apostrophe as such, a separate entity is needed, '\''. In Medieval script, a sign looking like the apostrophe was used as an abbreviation for 'i' or 'e'. We recommend using the character 02BC MODIFIER LETTER APOSTROPHE in Spacing Modyfying Letters for this purpose. |  |  |  |
| ( | \( | 0028 | LEFT PARENTHESIS |
| ) | \) | 0029 | RIGHT PARENTHESIS |
| * | \* | 002A | ASTERISK |
| + | \+ | 002B | PLUS SIGN |
| , | \, | 002C | COMMA |
| - | \‐ | 002D | HYPHEN-MINUS |
| As the name HYPHEN-MINUS indicates, this character is ambiguous. For an unambiguous hyphen character, see 2010 HYPHEN in General Punctuation (p. 57 below), and for an unambiguous minus character, see 2212 MINUS in Mathematical Operators ( p .66 ). |  |  |  |
| - | \. | 002E | FULL STOP |
| The full stop is often used as a mark of abbreviation, typically in suspended (truncated) words. If an encoder wants to make a distinction between the full stop as a punctuation mark and as an abbreviation mark, we recommend that the same character, 002E FULL STOP, should be used in both cases, but that the abbreviation mark is specified by markup, e.g. by the <abbr> element. |  |  |  |
| / | \/ | 002F | SOLIDUS |


| 0 |  |  | 0030 | DIGIT ZERO |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ |  |  | 0031 | DIGIT ONE |
| 2 |  |  | 0032 | DIGIT TWO |
| 3 |  |  | 0033 | DIGIT THREE |
| 4 |  |  | 0034 | DIGIT FOUR |
| 5 |  |  | 0035 | DIGIT FIVE |
| 6 |  |  | 0036 | DIGIT SIX |
| 7 |  |  | 0037 | DIGIT SEVEN |
| $\mathbf{8}$ |  |  | 0039 | DIGIT EIGHT |
| $\mathbf{9}$ |  |  | 003 A | COLON |
| $:$ | \: |  | 003 B | SEMICOLON |

In Medieval script, a sign looking like the semicolon was commonly used as an abbreviation for 'eð' or 'ed', cf. LATIN ABBREVIATION SIGN SEMICOLON at F1AC in the Private Use Area subrange 4 below (p. 87). If an encoder wants to use 003B SEMICOLON for the abbreviation sign, we recommend that this usage should be specified by markup, e.g. by the <abbr> element.


In SGML/XML encoded doccuments, the less-than sign is used as the opening character of an element name, e.g. <text>. To be able to refer to the less-than sign as such, a separate entity is needed, '\&1t;'.

| $=$ | \= |  | 003 D | EQUALS SIGN |
| :--- | :--- | :--- | :--- | :--- |
| $>$ | $\& g t ;$ |  | 003 E | GREATER-THAN SIGN |

In SGML/XML encoded doccuments, the greater-than sign is used as a closing character of an element name, e.g. <text>. To be able to refer to the greaterthan sign as such, a separate entity is needed, '\>'.

| $?$ | \? |  | 003 F | QUESTION MARK |
| :--- | :--- | :--- | :--- | :--- |
| @ | \@ |  | 0040 | COMMERCIAL AT |
| A |  |  | 0041 | LATIN CAPITAL LETTER A |
| B |  |  | 0042 | LATIN CAPITAL LETTER B |
| C |  |  | 0043 | LATIN CAPITAL LETTER C |
| D |  |  | 0044 | LATIN CAPITAL LETTER D |
| E |  |  | 0045 | LATIN CAPITAL LETTER E |
| F |  |  | 0046 | LATIN CAPITAL LETTER F |


| G |  |  | 0047 | LATIN CAPITAL LETTER G |
| :---: | :---: | :---: | :---: | :---: |
| H |  |  | 0048 | LATIN CAPITAL LETTER H |
| I |  |  | 0049 | LATIN CAPITAL LETTER I |
| J |  |  | 004A | LATIN CAPITAL LETTER J |
| K |  |  | 004B | LATIN CAPITAL LETTER K |
| L |  |  | 004C | LATIN CAPITAL LETTER L |
| M |  |  | 004D | LATIN CAPITAL LETTER M |
| N |  |  | 004E | LATIN CAPITAL LETTER N |
| O |  |  | 004F | LATIN CAPITAL LETTER O |
| P |  |  | 0050 | LATIN CAPITAL LETTER P |
| Q |  |  | 0051 | LATIN CAPITAL LETTER Q |
| R |  |  | 0052 | LATIN CAPITAL LETTER R |
| S |  |  | 0053 | LATIN CAPITAL LETTER S |


| T |  |  | 0054 | LATIN CAPITAL LETTER T |
| :--- | :--- | :--- | :--- | :--- |
| U |  |  | 0055 | LATIN CAPITAL LETTER U |
| V |  |  | 0056 | LATIN CAPITAL LETTER V |
| W |  |  | 0057 | LATIN CAPITAL LETTER W |
| X |  |  | 0058 | LATIN CAPITAL LETTER X |
| Y |  |  | 0059 | LATIN CAPITAL LETTER Y |
| $\mathbf{Z}$ |  |  | 005 A | LATIN CAPITAL LETTER Z |
| $[$ | \[ |  | 005 B | LEFT SQUARE BRACKET |
| $\mathbf{~}$ | \\ |  | 005 C | REVERSE SOLIDUS |
| ] | \] |  | 005 D | RIGHT SQUARE BRACKET |
| $\boldsymbol{A}$ | \ˆ |  | $005 E$ | CIRCUMFLEX ACCENT |
| - | \_ |  | 005 F | LOW LINE |
| \ | \` |  | 0060 | GRAVE ACCENT |


| a |  |  | 0061 | LATIN SMALL LETTER A |
| :--- | :--- | :--- | :--- | :--- |
| b |  |  | 0062 | LATIN SMALL LETTER B |
| c |  |  | 0063 | LATIN SMALL LETTER C |
| d |  |  | 0064 | LATIN SMALL LETTER D |
| e |  |  | 0065 | LATIN SMALL LETTER E |
| f |  |  | 0066 | LATIN SMALL LETTER F |
| g |  |  | 0067 | LATIN SMALL LETTER G |
| h |  |  | 0068 | LATIN SMALL LETTER H |
| i |  |  | 0069 | LATIN SMALL LETTER I |
| j |  |  | 006 A | LATIN SMALL LETTER J |
| k |  |  | 006 B | LATIN SMALL LETTER K |
| l |  |  | 006 C | LATIN SMALL LETTER L |
| m |  |  | 006 D | LATIN SMALL LETTER M |


| n |  |  | 006 E | LATIN SMALL LETTER N |
| :--- | :--- | :--- | :--- | :--- |
| O |  |  | 006 F | LATIN SMALL LETTER O |
| p |  |  | 0070 | LATIN SMALL LETTER P |
| q |  |  | 0071 | LATIN SMALL LETTER Q |
| r |  |  | 0072 | LATIN SMALL LETTER R |
| S |  |  | 0073 | LATIN SMALL LETTER S |
| t |  |  | 0074 | LATIN SMALL LETTER T |
| u |  |  | 0075 | LATIN SMALL LETTER U |
| V |  |  | 0076 | LATIN SMALL LETTER V |
| W |  |  | 0077 | LATIN SMALL LETTER W |
| X |  |  | 0078 | LATIN SMALL LETTER X |
| y |  |  | 0079 | LATIN SMALL LETTER Y |
| Z |  |  | 007 A | LATIN SMALL LETTER Z |


| $\{$ | \{ |  | 007 B | LEFT CURLY BRACKET |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\{}$ | \\| |  | 007 C | VERTICAL LINE |
| $\boldsymbol{\}}$ | \} |  | 007 D | RIGHT CURLY BRACKET |
| $\sim$ |  | \&tld; | 007 E | TILDE |
|  |  | \&del; | 007 F | DELETE |

## 2: Latin-I Supplement

All 96 characters in this range have been selected, although many of them are not used in Medieval script. However, these characters are so frequently used in other contexts that it is advisable to include the whole range in a Medieval font. For this and all ensuing code charts, entities are being used in many SGML/ XML documents.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
|  | $\& n b s p ;$ |  | $00 A 0$ | NO-BREAK SPACE |
| $\boldsymbol{i}$ | $\& i e x c l ;$ |  | $00 A 1$ | INVERTED EXCLAMATION MARK |
| $\boldsymbol{£}$ | $\& c e n t ;$ |  | $00 A 2$ | CENT SIGN |
| $\boldsymbol{£}$ | $\& p o u n d ;$ |  | $00 A 3$ | POUND SIGN |


| O. | \¤ | 00A4 | CURRENCY SIGN |
| :---: | :---: | :---: | :---: |
| $¥$ | \¥ | 00A5 | YEN SIGN |
| I | \& brvbar; | 00A6 | BROKEN BAR |
| $\oint$ | \§ | 00A7 | SECTION SIGN |
| .. | \¨ | 00A8 | DIAERESIS |

The entities '\¨' and '\&Ddot;' are also being used for this character.

| C | \© |  | 00 A 9 | COPYRIGHT SIGN |
| :--- | :--- | :--- | :--- | :--- |
| a | \ª |  | 00 AA | FEMININE ORDINAL INDICATOR |
| « | \« |  | 00 AB | LEFT-POINTING DOUBLE ANGLE QUOTATION MARK |
| $\neg$ | \¬ |  | 00 AC | NOT SIGN |
|  | \­ |  | 00 AD | SOFT HYPHEN |

The soft hyphen is an invisible character.

| $\circledR$ | \® |  | 00 AE | REGISTERED SIGN |
| :--- | :--- | :--- | :--- | :--- |
| - | $\&$ macr; |  | 00 AF | MACRON |


| ○ | \° | 00B0 | DEGREE SIGN |
| :---: | :---: | :---: | :---: |
| $\pm$ | \± | 00B1 | PLUS-MINUS SIGN |
| 2 | \² | 00B2 | SUPERSCRIPT TWO |
| 3 | \³ | 00B3 | SUPERSCRIPT THREE |
| , | \& acute; | 00B4 | ACUTE ACCENT |
| $\mu$ | \& micro; | 00B5 | MICRO SIGN |
| 9 | \¶ | 00B6 | PILCROW SIGN |
| - | \· | 00B7 | MIDDLE DOT |
| $s$ | \¸ | 00B8 | CEDILLA |
| 1 | \¹ | 00B9 | SUPERSCRIPT ONE |
| o | \º | 00BA | MASCULINE ORDINAL INDICATOR |
| " | \» | 00BB | RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK |
| $1 / 4$ | \¼ | 00BC | VULGAR FRACTION ONE QUARTER |


| $1 / 2$ | \½ | 00BD | VULGAR FRACTION ONE HALF |
| :---: | :---: | :---: | :---: |
| The entity '\½' is also being used for this character. |  |  |  |
| $3 / 4$ | \¾ | 00BE | VULGAR FRACTION THREE QUARTERS |
| ¿ | \¿ | 00BF | INVERTED QUESTION MARK |
| À | \À | 00C0 | LATIN CAPITAL LETTER A WITH GRAVE |
| Á | \Á | 00 C 1 | LATIN CAPITAL LETTER A WITH ACUTE |
| $\hat{A}$ | \Â | 00C2 | LATIN CAPITAL LETTER A WITH CIRCUMFLEX |
| A | \Ã | 00C3 | LATIN CAPITAL LETTER A WITH TILDE |
| $\ddot{\mathrm{A}}$ | \Ä | 00 C 4 | LATIN CAPITAL LETTER A WITH DIAERESIS |
| A | \Å | 00C5 | LATIN CAPITAL LETTER A WITH RING ABOVE |
| A | \& AElig; | 00C6 | LATIN CAPITAL LETTER AE |
| Ç | \Ç | 00C7 | LATIN CAPITAL LETTER C WITH CEDILLA |
| Ė | \È | 00C8 | LATIN CAPITAL LETTER E WITH GRAVE |
| É | \É | 00C9 | LATIN CAPITAL LETTER E WITH ACUTE |


| $\hat{\mathrm{E}}$ | \& Ecirc; | 00CA | LATIN CAPITAL LETTER E WITH CIRCUMFLEX |
| :---: | :---: | :---: | :---: |
| $\ddot{\mathrm{E}}$ | \& Euml; | 00CB | LATIN CAPITAL LETTER E WITH DIAERESIS |
| İ | \& Igrave; | 00CC | LATIN CAPITAL LETTER I WITH GRAVE |
| Í | \& Iacute; | 00CD | LATIN CAPITAL LETTER I WITH ACUTE |
| İ | \& Icirc; | 00CE | LATIN CAPITAL LETTER I WITH CIRCUMFLEX |
| $\ddot{\mathrm{I}}$ | \& Iuml; | 00CF | LATIN CAPITAL LETTER I WITH DIAERESIS |
| Đ | \& ETH; | 00D0 | LATIN CAPITAL LETTER ETH |
| $\tilde{N}$ | \Ñ | 00D1 | LATIN CAPITAL LETTER N WITH TILDE |
| Ò | \& Ograve; | 00D2 | LATIN CAPITAL LETTER O WITH GRAVE |
| Ó | \Ó | 00D3 | LATIN CAPITAL LETTER O WITH ACUTE |
| Ô | \& Ocirc; | 00D4 | LATIN CAPITAL LETTER O WITH CIRCUMFLEX |
| О | \Õ | 00D5 | LATIN CAPITAL LETTER O WITH TILDE |
| Ö | \Ö | 00D6 | LATIN CAPITAL LETTER O WITH DIAERESIS |


| X | \× | 00D7 | MULTIPLICATION SIGN |
| :---: | :---: | :---: | :---: |
| The multiplication sign, 00D7, can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (p. 106). |  |  |  |
| $\varnothing$ | \& Oslash; | 00D8 | LATIN CAPITAL LETTER O WITH STROKE |
| U' | \& Ugrave; | 00D9 | LATIN CAPITAL LETTER U WITH GRAVE |
| U' | \& Uacute; | 00DA | LATIN CAPITAL LETTER U WITH ACUTE |
| $\hat{\mathrm{U}}$ | \& Ucirc; | 00DB | LATIN CAPITAL LETTER U WITH CIRCUMFLEX |
| $\dot{\mathrm{U}}$ | \Ü | 00DC | LATIN CAPITAL LETTER U WITH DIAERESIS |
| '' | \Ý | 00DD | LATIN CAPITAL LETTER Y WITH ACUTE |
| P | \Þ | 00DE | LATIN CAPITAL LETTER THORN |
| $\beta$ | \ß | 00DF | LATIN SMALL LETTER SHARP S |
| In Medieval sources, the 'sharp s' can also be used as an abbreviation character, in which case it may be specified by markup, e.g. by the <abbr> element. |  |  |  |
| à | \à | 00E0 | LATIN SMALL LETTER A WITH GRAVE |
| á | \á | 00E1 | LATIN SMALL LETTER A WITH ACUTE |
| â | \& acirc; | 00E2 | LATIN SMALL LETTER A WITH CIRCUMFLEX |


| $\tilde{\mathrm{a}}$ | \ã |  | 00 E 3 | LATIN SMALL LETTER A WITH TILDE |
| :--- | :--- | :--- | :--- | :--- |
| ä | \ä |  | 00 E 4 | LATIN SMALL LETTER A WITH DIAERESIS |
| å | \å |  | 00 E 5 | LATIN SMALL LETTER A WITH RING |
| æ | \æ |  | $00 E 6$ | LATIN SMALL LETTER AE |
| Ç | \ç |  | 00 E 7 | LATIN SMALL LETTER C WITH CEDILLA |
| è | \è |  | $00 E 8$ | LATIN SMALL LETTER E WITH GRAVE |
| é | \é |  | $00 E 9$ | LATIN SMALL LETTER E WITH ACUTE |
| $\hat{\mathrm{e}}$ | \ê |  | 00 EA | LATIN SMALL LETTER E WITH CIRCUMFLEX |
| ë | \ë |  | $00 E B$ | LATIN SMALL LETTER E WITH DIAERESIS |
| ì | \ì |  | 00 EC | LATIN SMALL LETTER I WITH GRAVE |
| í | \í |  | $00 E D$ | LATIN SMALL LETTER I WITH ACUTE |
| $\hat{1}$ | \î |  | $00 E E$ | LATIN SMALL LETTER I WITH CIRCUMFLEX |
| $\ddot{i}$ | \ï |  | $00 E F$ | LATIN SMALL LETTER I WITH DIAERESIS |


| ð | \ð | 00F0 | LATIN SMALL LETTER ETH |
| :---: | :---: | :---: | :---: |
| $\tilde{\mathrm{n}}$ | \ñ | 00F1 | LATIN SMALL LETTER N WITH TILDE |
| Ò | \ò | 00F2 | LATIN SMALL LETTER O WITH GRAVE |
| Ó | \ó | 00F3 | LATIN SMALL LETTER O WITH ACUTE |
| Ô | \ô | 00F4 | LATIN SMALL LETTER O WITH CIRCUMFLEX |
| O | \õ | 00F5 | LATIN SMALL LETTER O WITH TILDE |
| Ö | \ö | 00F6 | LATIN SMALL LETTER O WITH DIAERESIS |
| $\div$ | \÷ | 00F7 | DIVISION SIGN |
| $\emptyset$ | \& oslash; | 00F8 | LATIN SMALL LETTER O WITH STROKE |
| ù | \ù | 00F9 | LATIN SMALL LETTER U WITH GRAVE |
| ú | \ú | 00FA | LATIN SMALL LETTER U WITH ACUTE |
| ט̂ | \û | 00 FB | LATIN SMALL LETTER U WITH CIRCUMFLEX |
| ü | \ü | 00FC | LATIN SMALL LETTER U WITH DIAERESIS |


| $\mathrm{y}^{\prime}$ | \ý |  | 00 FD | LATIN SMALL LETTER Y WITH ACUTE |
| :--- | :--- | :--- | :--- | :--- |
| p | \þ |  | 00 FE | LATIN SMALL LETTER THORN |
| $\ddot{\mathrm{y}}$ | \ÿ |  | 00 FF | LATIN SMALL LETTER Y WITH DIAERESIS |

## 3: Latin Extended-A

In the Unicode Standard v. 5.0, this range has 128 characters. The selection below contains 65 characters, mostly precomposed characters with macron, breve, stroke, dot above, and ogonek.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\overline{\mathrm{A}}$ | \Ā |  | 0100 | LATIN CAPITAL LETTER A WITH MACRON |
| $\overline{\mathrm{a}}$ | \ā |  | 0101 | LATIN SMALL LETTER A WITH MACRON |
| $\breve{\mathrm{A}}$ | \Ă |  | 0102 | LATIN CAPITAL LETTER A WITH BREVE |
| ă | \ă |  | 0103 | LATIN SMALL LETTER A WITH BREVE |
| A | \Ą |  | 0104 | LATIN CAPITAL LETTER A WITH OGONEK |
| ą | \ą |  | 0105 | LATIN SMALL LETTER A WITH OGONEK |


| Ć | \Ć |  | 0106 | LATIN CAPITAL LETTER C WITH ACUTE |
| :--- | :--- | :--- | :--- | :--- |
| ć | \ć |  | 0107 | LATIN SMALL LETTER C WITH ACUTE |
| $\dot{\mathrm{C}}$ | \Ċ |  | 010 A | LATIN CAPITAL LETTER C WITH DOT ABOVE |
| $\dot{\mathrm{c}}$ | \ċ |  | 010 B | LATIN SMALL LETTER C WITH DOT ABOVE |
| Đ | \Đ |  | 0110 | LATIN CAPITAL LETTER D WITH STROKE |
| đ | \đ |  | 0111 | LATIN SMALL LETTER D WITH STROKE |
| $\overline{\mathrm{E}}$ | \Ē |  | 0112 | LATIN CAPITAL LETTER E WITH MACRON |
| $\overline{\mathrm{e}}$ | \ē |  | 0113 | LATIN SMALL LETTER E WITH MACRON |
| $\breve{\mathrm{E}}$ |  | \&Ebreve; | 0114 | LATIN CAPITAL LETTER E WITH BREVE |
| $\breve{\mathrm{e}}$ |  | \&ebreve; | 0115 | LATIN SMALL LETTER E WITH BREVE |
| $\dot{\mathrm{E}}$ | \Ė |  | 0116 | LATIN CAPITAL LETTER E WITH DOT ABOVE |
| $\dot{\mathrm{e}}$ | \ė |  | 0117 | LATIN SMALL LETTER E WITH DOT ABOVE |
| E | \Ę |  | 0118 | LATIN CAPITAL LETTER E WITH OGONEK |


| é | \ę |  | 0119 | LATIN SMALL LETTER E WITH OGONEK |
| :--- | :--- | :--- | :--- | :--- |
| $\dot{\mathrm{G}}$ | \Ġ |  | 0120 | LATIN CAPITAL LETTER G WITH DOT ABOVE |
| $\dot{\mathrm{g}}$ | \ġ |  | 0121 | LATIN SMALL LETTER G WITH DOT ABOVE |
| $\hbar$ | \ħ |  | 0127 | LATIN SMALL LETTER H WITH STROKE |
| $\overline{\mathrm{I}}$ | \Ī |  | 012 A | LATIN CAPITAL LETTER I WITH MACRON |
| $\overline{\mathbf{1}}$ | \ī |  | 012 B | LATIN SMALL LETTER I WITH MACRON |
| $\breve{\mathrm{I}}$ |  | \&Ibreve; | 012 C | LATIN CAPITAL LETTER I WITH BREVE |
| $\breve{\mathbf{1}}$ |  | \&ibreve; | 012 D | LATIN SMALL LETTER I WITH BREVE |
| $\mathbf{I}$ | \Į |  | 012 E | LATIN CAPITAL LETTER I WITH OGONEK |
| $\mathbf{1}$ | \į |  | 012 F | LATIN SMALL LETTER I WITH OGONEK |
| $\dot{\mathrm{I}}$ | \İ |  | 0130 | LATIN CAPITAL LETTER I WITH DOT ABOVE |
| $\mathbf{1}$ | \ı |  | 0131 | LATIN SMALL LETTER DOTLESS I |
| IJ | \Ĳ |  | 0132 | LATIN CAPITAL LIGATURE IJ |


| ij | \ĳ |  | 0133 | LATIN SMALL LIGATURE IJ |
| :--- | :--- | :--- | :--- | :--- |
| Ĺ | \Ĺ |  | 0139 | LATIN CAPITAL LETTER L WITH ACUTE |
| Í | \ĺ |  | 013 A | LATIN SMALL LETTER L WITH ACUTE |
| Ł | \Ł |  | 0141 | LATIN CAPITAL LETTER L WITH STROKE |
| $\mathbf{1}$ | \ł |  | 0142 | LATIN SMALL LETTER L WITH STROKE |
| $\mathbf{N ́}$ | \Ń |  | 0143 | LATIN CAPITAL LETTER N WITH ACUTE |
| ń | \ń |  | 0144 | LATIN SMALL LETTER N WITH ACUTE |
| $\mathbf{Y}$ | \Ŋ |  | 014 A | LATIN CAPITAL LETTER ENG |
| $\mathbf{y}$ | \ŋ |  | 014 B | LATIN SMALL LETTER ENG |
| $\overline{\mathrm{O}}$ | \Ō |  | 014 C | LATIN CAPITAL LETTER O WITH MACRON |
| $\overline{\mathrm{O}}$ | \ō |  | 014 D | LATIN SMALL LETTER O WITH MACRON |
| Ŏ |  | \&Obreve; | 014 E | LATIN CAPITAL LETTER O WITH BREVE |
| Ŏ |  | \&obreve; | 014 F | LATIN SMALL LETTER O WITH BREVE |



| ü | \ű |  | 0171 | LATIN SMALL LETTER U WITH DOUBLE ACUTE |
| :--- | :--- | :--- | :--- | :--- |
| Ú | \Ų |  | 0172 | LATIN CAPITAL LETTER U WITH OGONEK |
| $\boldsymbol{U}$ | \ų |  | 0173 | LATIN SMALL LETTER U WITH OGONEK |
| $\ddot{Y}$ | \Ÿ |  | 0178 | LATIN CAPITAL LETTER Y WITH DIAERESIS |
| $\dot{Z}$ | \Ż |  | 017 B | LATIN CAPITAL LETTER Z WITH DOT ABOVE |
| $\dot{Z}$ | \ż |  | 017 C | LATIN SMALL LETTER Z WITH DOT ABOVE |
| $\mathbf{I}$ |  | \&slong; | 017 F | LATIN SMALL LETTER LONG S |

## 4: Latin Extended-B

In the Unicode Standard v. 5.0, this range has 208 characters, of which 37 characters have been selected here. Some of these have acute accent, macron, dot above, or ogonek; others are individual base characters, including Gothic and Old English ones.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{b}$ |  | \&bstrok; | 0180 | LATIN SMALL LETTER B WITH STROKE |  |
| hu |  | \&hwair; | 0195 | LATIN SMALL LETTER HV | LATIN SMALL LETTER HWAIR |


| K | \&khook; | 0199 | LATIN SMALL LETTER K WITH HOOK |  |
| :---: | :---: | :---: | :---: | :---: |
| For a similar-looking but separate character, the ligature of ' $k$ ' and long ' $s$ ', see PUA subrange 5. (Note the hackle of the long 's' in that character.) |  |  |  |  |
| 1 | \& lbar; | 019A | LATIN SMALL LETTER L WITH BAR |  |
| 1 | \&nlrleg; | 019E | LATIN SMALL LETTER N WITH LONG RIGHT |  |
| R | \&YR; | 01A6 | LATIN LETTER YR |  |
| This is the capital form of the character and is seldom used. For the small form, the small capital R should be used, cf. 0280 on p. 40 below. |  |  |  |  |
| 7 | \&Zstrok; | 01B5 | LATIN CAPITAL LETTER Z WITH STROKE |  |
| Z | \&zstrok; | 01B6 | LATIN SMALL LETTER Z WITH STROKE |  |
| 3 | \&EZH; | 01B7 | LATIN CAPITAL LETTER EZH |  |
| $P$ | \&wynn; | 01BF | LATIN LETTER WYNN |  |
| $\overline{\text { E }}$ | \&AEligmacr; | 01E2 | LATIN CAPITAL LETTER AE WITH MACRON |  |
| $\bar{æ}$ | \&aeligmacr; | 01E3 | LATIN SMALL LETTER AE WITH MACRON |  |
| G | \&Gstrok; | 01E4 | LATIN CAPITAL LETTER G WITH STROKE |  |
| $g$ | \& gstrok; | 01E5 | LATIN SMALL LETTER G WITH STROKE |  |
| $Q$ | \&Oogon; | 01EA | LATIN CAPITAL LETTER O WITH OGONEK |  |


| Q | \&oogon; | 01EB | LATIN SMALL LETTER O WITH OGONEK |  |
| :---: | :---: | :---: | :---: | :---: |
| Q | \&Oogonmacr; | 01EC | LATIN CAPITAL LETTER O WITH OGONEK AND MACRON |  |
| $\bar{Q}$ | \&oogonmacr; | 01ED | LATIN SMALL LETTER O WITH OGONEK AND MACRON |  |
| The Unicode Standard v. 5.0 erroneously claims that the pair of characters above is used in Old Icelandic. |  |  |  |  |
| G | \&Gacute; | 01F4 | LATIN CAPITAL LETTER G WITH ACUTE |  |
| g' | \ǵ | $01 F 5$ | LATIN SMALL LETTER G WITH ACUTE |  |
| H | \&HWAIR; | 01F6 | LATIN CAPITAL LETTER HWAIR |  |
| P | \&WYNN; | 01F7 | LATIN CAPITAL LETTER WYNN |  |
| É | \& AEligacute; | 01FC | LATIN CAPITAL LETTER AE WITH ACUTE |  |
| ǽ | \&aeligacute; | 01FD | LATIN SMALL LETTER AE WITH ACUTE |  |
| Ø | \&Oslashacute; | 01FE | LATIN CAPITAL LETTER O WITH STROKE AND ACUTE |  |
| ǿ | \&oslashacute; | 01FF | LATIN SMALL LETTER O WITH STROKE AND ACUTE |  |
| 3 | \&YOGH; | 021C | LATIN CAPITAL LETTER YOGH |  |
| 3 | \&yogh; | 021D | LATIN SMALL LETTER YOGH |  |


| The 'yogh' character is usually drawn with a rounded top in contradistinction to the flat top of EZH (0292 and 01B7). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\dot{\text { A }}$ | \&Adot; | 0226 | LATIN CAPITAL LETTER A WITH DOT ABOVE |  |
| $\dot{\mathrm{a}}$ | \&adot; | 0227 | LATIN SMALL LETTER A WITH DOT ABOVE |  |
| O | \& Odot; | 022E | LATIN CAPITAL LETTER O WITH DOT ABOVE |  |
| $\dot{O}$ | \⊙ | 022F | LATIN SMALL LETTER O WITH DOT ABOVE |  |
| $\bar{Y}$ | \&Ymacr; | 0232 | LATIN CAPITAL LETTER Y WITH MACRON |  |
| $\bar{y}$ | \&ymacr; | 0233 | LATIN SMALL LETTER Y WITH MACRON |  |
| J | \&jnodot; | 0237 | LATIN SMALL LETTER DOTLESS J |  |
| This character was added in v. 4.1 of the Unicode Standard. |  |  |  |  |
| f | \& Jbar; | 0248 | LATIN CAPITAL LETTER J WITH STROKE |  |
| $\dot{j}$ | \&jbar; | 0249 | LATIN SMALL LETTER J WITH STROKE |  |
| The two characters above were added in v. 5.0 of the Unicode Standard. |  |  |  |  |

## 5: IPA Extensions

In the Unicode Standard v. 5.0, this range has 96 characters. The selection below contains 19 characters, mostly small capitals. Additional small capitals are located in Phonetic Extensions, pp. 47-48 below, and PUA subrange 2 Small capitals, pp. 81-82 below.

In many contexts, the whole set of IPA characters are used, e.g. in the phonological analysis of Medieval languages. Although they are not needed for the actual transcription of Medieval texts, we recommend that MUFI-compatible fonts should include the complete range of IPA characters.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{J}$ |  | \&oopen; | 0254 | LATIN SMALL LETTER OPEN O |  |
| This character is primarily used in phonetic transcriptions, e.g. for the Old Norse low back vowel '9'. It can also be used for the Latin abbreviation sign <br> 'con', but we recommend using a separate character for the abbreviation sign, either 2183 and 2184 in Number forms (pp. 64-65) or the characters F1A2, <br> F156, F1A3 and F1A4 in the Private Use Area subrange 4 below (p. 86). Also note that the LATIN SMALL LETTER OPEN O is usually rendered as a turned <br> 'c'glyph, 'o' (i.e. rotated $180^{\circ}$ ). The con abbreviation sign should rather be rendered with a reversed 'c' glyph, 'J' (i.e. flipped horizontally). |  |  |  |  |  |
| d | \&dtail; | 0256 | LATIN SMALL LETTER D WITH TAIL |  |  |
| $\boldsymbol{f}$ | \&jnodotstrok; | 025 F | LATIN SMALL LETTER DOTLESS J WITH STROKE |  |  |


| h | \&hhook; | 0266 | LATIN SMALL LETTER H WITH HOOK |  |
| :---: | :---: | :---: | :---: | :---: |
| See PUA subrange 5 for a similar-looking but separate character, the ligature of ' h ' and long ' s ' (note the hackle of the long 's' in that character). |  |  |  |  |
| $\dot{1}$ | \&istrok; | 0268 | LATIN SMALL LETTER I WITH STROKE |  |
| I | \&iscap; | 026A | LATIN LETTER SMALL CAPITAL I |  |
| J | \&nlfhook; | 0272 | LATIN SMALL LETTER N WITH LEFT HOOK |  |
| N | \&nscap; | 0274 | LATIN LETTER SMALL CAPITAL N |  |
| © | \&oeligscap; | 0276 | LATIN LETTER SMALL CAPITAL OE |  |
| I | \&rdes; | 027C | LATIN SMALL LETTER R WITH LONG LEG |  |
| R | \&rscap; | 0280 | LATIN LETTER SMALL CAPITAL R |  |
| $せ$ | \&ubar; | 0289 | LATIN SMALL LETTER U BAR |  |
| Y | \&yscap; | 028F | LATIN LETTER SMALL CAPITAL Y |  |
| 3 | \&ezh; | 0292 | LATIN SMALL LETTER EZH |  |
| The capital form of 'ezh' is located at 01B7 in Latin Extended-B above. |  |  |  |  |
| B | \&bscap; | 0299 | LATIN LETTER SMALL CAPITAL B |  |


| H |  | \&hscap; | 029 C | LATIN LETTER SMALL CAPITAL H |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| L | \&lscap; | 029 F | LATIN LETTER SMALL CAPITAL L |  |  |

## 6: Spacing Modifying Letters

In the Unicode Standard v. 5.0, this range has 80 characters. The selection below contains 9 modifying letters. Note that these letters are spacing, i.e. occupying a separate position on the base line. Combining diacritical marks are listed in the next section.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| , |  | \&apomod; | 02 BC | MODIFIER LETTER APOSTROPHE | LATIN ABBREVIATION SIGN APOSTROPHE |

In general usage as an abbreviation mark, often meaning 'i' or 'e’ (cf. D.A. Seip, Palcoografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 125). We recommend that this character rather than 0027 APOSTROPHE in Basic Latin should be used as an abbreviation character.

| । |  | \&verbarup; | 02 C 8 | MODIFIER LETTER VERTICAL LINE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\iota$ | $\&$ breve; |  | 02 D 8 | BREVE |  |
| $\cdot$ | $\&$ dot; |  | 02 D 9 | DOT ABOVE |  |
| $\circ$ | \˚ |  | 02 DA | RING ABOVE |  |
| $\iota$ | \˛ |  | 02 DB | OGONEK |  |


| $\sim$ | \˜ |  | 02DC | SMALL TILDE |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $״$ | \˝ |  | 02 DD | DOUBLE ACUTE ACCENT |  |
| x |  | \&xmod; | 02 E 3 | MODIFIER LETTER SMALL X |  |

This character is used to indicate paper manuscripts by the Ordbog over det norrøne prosasprog project in Copenhagen and by the international Old Norse skaldic project. Since it easily can be confused with superscript Roman numeral ' $x$ ' it should either be designed with a cursive form, or there should be a cursive (italic) counterpart to this character in the typeface.

## 7: Combining Diacritical Marks

In the Unicode Standard v. 5.0, this range has 112 characters, of which 39 have been selected here. The combining characters at the end are recent additions to the Unicode Standard. Additional superscript characters are located in PUA subrange 7 below, pp. 95-98. A dotted circle has been used throughout to illustrate the position of the marks in relation to a typical base-line character.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ) |  | \&combgrave; | 0300 | COMBINING GRAVE ACCENT |  |
| \% |  | \&combacute; | 0301 | COMBINING ACUTE ACCENT |  |
| ) |  | \&combcirc; | 0302 | COMBINING CIRCUMFLEX ACCENT |  |
| $\cdots$ |  | \&combtilde; | 0303 | COMBINING TILDE |  |
| - |  | \&combmacr; | 0304 | COMBINING MACRON |  |


| $\overline{\text { - }}$ | \&bar; | 0305 | COMBINING OVERLINE | COMBINING ABBREVIATION MARK <br> BAR ABOVE |
| :--- | :--- | :--- | :--- | :--- | :--- |

The character above is frequently used as an abbreviation mark in Medieval (and Classical) manuscripts. We therefore recommend the entity name '\&bar;' rather than the more cumbersome '\&combovl;'. As a rule, abbreviation marks behave as overlines, i.e. they should connect with adjoining characters. In that way, a continuous overline over more than one character can be displayed by a sequence of single-character overlines.

| $\cdots$ | \&combbreve; | 0306 | COMBINING BREVE |  |
| :---: | :---: | :---: | :---: | :---: |
| $\dot{\square}$ | \&combdot; | 0307 | COMBINING DOT ABOVE |  |
| $\ddot{\square}$ | \&combuml; | 0308 | COMBINING DIAERESIS |  |
| 3 | \&combhook; | 0309 | COMBINING HOOK ABOVE |  |
| $\stackrel{\circ}{\circ}$ | \&combring; | 030A | COMBINING RING ABOVE |  |
| " | \&combdblac; | 030B | COMBINING DOUBLE ACUTE ACCENT |  |
| ) | \&combsgvertl; | 030D | COMBINING VERTICAL LINE ABOVE |  |
| \# | \&combdbvertl; | 030E | COMBINING DOUBLE VERTICAL LINE |  |
| ' | \&combcomma; | 0315 | COMBINING COMMA ABOVE RIGHT | COMBINING ABBREVIATION MARK COMMA ABOVE RIGHT |
| ] | \&combdotbl; | 0323 | COMBINING DOT BELOW |  |


| 3 | \&combced; | 0327 | COMBINING CEDILLA |  |
| :---: | :---: | :---: | :---: | :---: |
| ¢ | \&combogon; | 0328 | COMBINING OGONEK |  |
| - | \&barbl; | 0332 | COMBINING LOW LINE | COMBINING ABBREVIATION MARK BAR BELOW |
| $\underline{=}$ | \&dblbarbl; | 0333 | COMBINING DOUBLE LOW LINE |  |
| $\cdots$ | \&baracr; | 0336 | COMBINING LONG STROKE OVERLAY | COMBINING ABBREVIATION MARK BAR ACROSS |
| \% | \&combtildevert; | 033E | COMBINING VERTICAL TILDE | COMBINING ABBREVIATION MARK VERTICAL TILDE |
| $\overline{\bar{r}}$ | \&dblovl; | 033F | COMBINING DOUBLE OVERLINE |  |
| \% | \&combastbl; | 0359 | COMBINING ASTERISK BELOW |  |
| \% | \&er; | 035B | COMBINING ZIGZAG ABOVE | COMBINING ABBREVIATION MARK ZIGZAG ABOVE |
| ¢ | \&combdblbrevebl; | 035C | COMBINING DOUBLE BREVE BELOW |  |
| a | \&asup; | 0363 | COMBINING LATIN SMALL LETTER A |  |
| e | \&esup; | 0364 | COMBINING LATIN SMALL LETTER E |  |


| i | \&isup; | 0365 | COMBINING LATIN SMALL LETTER I |  |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{+}{\circ}$ | \&osup; | 0366 | COMBINING LATIN SMALL LETTER O |  |
| - | \&usup; | 0367 | COMBINING LATIN SMALL LETTER U |  |
| c | \⫐ | 0368 | COMBINING LATIN SMALL LETTER C |  |
| d | \&dsup; | 0369 | COMBINING LATIN SMALL LETTER D |  |
| $\stackrel{\mathrm{h}}{ }$ | \&hsup; | 036A | COMBINING LATIN SMALL LETTER H |  |
| m | \&msup; | 036B | COMBINING LATIN SMALL LETTER M |  |
| $\stackrel{\mathrm{r}}{\mathrm{r}}$ | \&rsup; | 036C | COMBINING LATIN SMALL LETTER R |  |
| t | \&tsup; | 036D | COMBINING LATIN SMALL LETTER T |  |
| v | \&vsup; | 036E | COMBINING LATIN SMALL LETTER V |  |
| ${ }^{\mathrm{x}}$ | \&xsup; | 036F | COMBINING LATIN SMALL LETTER X |  |

## 8: Greek and Coptic

Only two characters have been selected from this range, which contains 127 characters in the Unicode Standard v. 5.0. At present, this range contains Greek and Coptic characters, but Coptic has been disambiguated from Greek and given a separate range in the Unicode Standard, 2C80-2CFF. However, the old range, $0370-03 \mathrm{FF}$, has retained its name 'Greek and Coptic'. Although not a part of the Latin alphabet, Greek characters are often found in bibliographic or text critical usage among Medievalists, e.g. in quoted text, in manuscript sigla (e.g. AM $243 \mathrm{~b} \alpha$ fol) or in stemmatic recensions (for hyparchetypes or lost manuscripts). We therefore recommend that MUFI-compatible fonts should include the whole range of Greek characters.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\Theta$ | \Θ |  | 0398 | GREEK CAPITAL LETTER THETA |
| $\Theta$ | $\&$ theta; |  | $03 B 8$ | GREEK SMALL LETTER THETA |

## 9: Georgian

Only a single character has been selected from this range, which contains 83 characters in the Unicode Standard v. 5.0. This character has a duplicate code point in Junicode (v. 0.6.12).

| Glyph | ISO entity | MUFI entity | Code point | (Junicode) | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\therefore$ |  | \&tridotright; | 10 FB | F162 | GEORGIAN PARAGRAPH <br> SEPARATOR | PUNCTUATION MARK RIGHT-POINTING <br> TRIANGULAR DOTS |

## 10: Runic

Two characters have been selected from this range, which contains 81 characters in the Unicode Standard v. 5.0. Both characters were used as abbreviation signs in the context of the Latin alphabet; $\psi$ ' for 'fé' (cattle/goods) and $\Psi$ for 'maðr' (man). Although not a part of the Latin alphabet, we recommend that MUFI-compatible fonts should include the whole Runic alphabet.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\Psi}$ |  | \&fMedrun; | 16 A 0 | RUNIC LETTER FEHU FEOH FE F | RUNIC MEDIEVAL LETTER F |
| $\Psi$ |  | \&mMedrun; | 16 D 8 | RUNIC LETTER LONG-BRANCH-MADR M | RUNIC MEDIEVALLETTER M |

## I I: Phonetic Extensions

In the Unicode Standard v. 5.0, this range has 128 characters, of which 18 have been selected here, the majority being small capitals. For additional small capitals, see IPA Extensions, pp. 39-41 above, and PUA subrange 2 Small capitals, pp. 81-82 below.

| Glyph | ISO entity | MUFI entity | Code point | Descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| A |  | \&ascap; | 1 D00 | LATIN LETTER SMALL CAPITALA |
| Æ |  | \&aeligscap; | 1 D 01 | LATIN LETTER SMALL CAPITAL AE |
| C |  | \&cscap; | 1 D 04 | LATIN LETTER SMALL CAPITAL C |
| D |  | \&dscap; | 1 D 05 | LATIN LETTER SMALL CAPITAL D |


| Đ | \&ethscap; | 1D06 | LATIN LETTER SMALL CAPITAL ETH |
| :---: | :---: | :---: | :---: |
| E | \&escap; | 1D07 | LATIN LETTER SMALL CAPITAL E |
| J | \&jscap; | 1D0A | LATIN LETTER SMALL CAPITAL J |
| K | \&kscap; | 1D0B | LATIN LETTER SMALL CAPITAL K |
| M | \&mscap; | 1D0D | LATIN LETTER SMALL CAPITAL M |
| O | \& oscap; | 1D0F | LATIN LETTER SMALL CAPITAL O |
| P | \&pscap; | 1D18 | LATIN LETTER SMALL CAPITAL P |
| T | \&tscap; | 1D1B | LATIN LETTER SMALL CAPITAL T |
| U | \&uscap; | 1D1C | LATIN LETTER SMALL CAPITAL U |
| V | \&vscap; | 1D20 | LATIN LETTER SMALL CAPITAL V |
| W | \&wscap; | 1D21 | LATIN LETTER SMALL CAPITAL W |
| Z | \&zscap; | 1D22 | LATIN LETTER SMALL CAPITAL Z |
| I | \&Imod; | 1D35 | MODIFIER LETTER CAPITAL I |


| $\zeta$ |  | \&gins; | 1 D79 | LATIN SMALL LETTER INSULAR G |
| :--- | :--- | :--- | :--- | :--- |

## 12: Latin Extended Additional

In the Unicode Standard v. 5.0, this range has 246 characters. The selection below contains 88 characters, many with dot below, others with hook above, or macron and acute. For additional precomposed characters of these types, see PUA subranges 19, 21 and 25, pp. 136, 143 and 150 below. Note that two characters below have duplicate code points in Junicode (v. 0.6.12), 1E17 and 1E53.

| Glyph | ISO entity | MUFI entity | Code point | (Junicode) | Descriptive name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\dot{B}$ |  | \&Bdot; | 1E02 |  | LATIN CAPITAL LETTER B WITH DOT ABOVE |
| b |  | \&bdot; | 1E03 |  | LATIN SMALL LETTER B WITH DOT ABOVE |
| B |  | \&Bdotbl; | 1E04 |  | LATIN CAPITAL LETTER B WITH DOT BELOW |
| b |  | \& bdotbl; | 1E05 |  | LATIN SMALL LETTER B WITH DOT BELOW |
| $\dot{\mathrm{D}}$ |  | \& Ddot; | 1E0A |  | LATIN CAPITAL LETTER D WITH DOT ABOVE |
| $\dot{d}$ |  | \&ddot; | 1E0B |  | LATIN SMALL LETTER D WITH DOT ABOVE |
| D |  | \&Ddotbl; | 1E0C |  | LATIN CAPITAL LETTER D WITH DOT BELOW |
| d |  | \&ddotbl; | 1E0D |  | LATIN SMALL LETTER D WITH DOT BELOW |
| 直 |  | \&Emacracute; | 1E16 |  | LATIN CAPITAL LETTER E WITH MACRON AND ACUTE |


| è | \&emacracute; | 1E17 | F185 | LATIN SMALL LETTER E WITH MACRON AND ACUTE |
| :---: | :---: | :---: | :---: | :---: |
| $\dot{\mathrm{F}}$ | \&Fdot; | 1E1E |  | LATIN CAPITAL LETTER F WITH DOT ABOVE |
| $\dot{f}$ | \&fdot; | 1E1F |  | LATIN SMALL LETTER F WITH DOT ABOVE |
| $\dot{\mathrm{H}}$ | \&Hdot; | 1E22 |  | LATIN CAPITAL LETTER H WITH DOT ABOVE |
| h | \&hdot; | 1E23 |  | LATIN SMALL LETTER H WITH DOT ABOVE |
| H | \&Hdotbl; | 1E24 |  | LATIN CAPITAL LETTER H WITH DOT BELOW |
| h | \& hdotbl; | 1E25 |  | LATIN SMALL LETTER H WITH DOT BELOW |
| K | \&Kacute; | 1E30 |  | LATIN CAPITAL LETTER K WITH ACUTE |
| k | \&kacute; | 1E31 |  | LATIN SMALL LETTER K WITH ACUTE |
| K | \&Kdotbl; | 1E32 |  | LATIN CAPITAL LETTER K WITH DOT BELOW |
| k | \&kdotbl; | 1E33 |  | LATIN SMALL LETTER K WITH DOT BELOW |
| L | \&Ldotbl; | 1E36 |  | LATIN CAPITAL LETTER L WITH DOT BELOW |
| 1 | \&ldotbl; | 1E37 |  | LATIN SMALL LETTER L WITH DOT BELOW |


| Ḿ | \& Macute; | 1E3E |  | LATIN CAPITAL LETTER M WITH ACUTE |
| :---: | :---: | :---: | :---: | :---: |
| ḿ | \&macute; | 1E3F |  | LATIN SMALL LETTER M WITH ACUTE |
| $\dot{M}$ | \&Mdot; | 1E40 |  | LATIN CAPITAL LETTER M WITH DOT ABOVE |
| $\dot{\mathrm{m}}$ | \&mdot; | 1E41 |  | LATIN SMALL LETTER M WITH DOT ABOVE |
| M | \&Mdotbl; | 1E42 |  | LATIN CAPITAL LETTER M WITH DOT BELOW |
| m | \&mdotbl; | 1E43 |  | LATIN SMALL LETTER M WITH DOT BELOW |
| $\dot{\mathrm{N}}$ | \&Ndot; | 1E44 |  | LATIN CAPITAL LETTER N WITH DOT ABOVE |
| $\dot{\mathrm{n}}$ | \& ndot; | 1E45 |  | LATIN SMALL LETTER N WITH DOT ABOVE |
| N | \&Ndotbl; | 1E46 |  | LATIN CAPITAL LETTER N WITH DOT BELOW |
| n | \& ndotbl; | 1E47 |  | LATIN SMALL LETTER N WITH DOT BELOW |
| ○́ | \&Omacracute; | 1E52 |  | LATIN CAPITAL LETTER O WITH MACRON AND ACUTE |
| Ó | \&omacracute; | 1 E 33 | F189 | LATIN SMALL LETTER O WITH MACRON AND ACUTE |
| Ṕ | \&Pacute; | 1E54 |  | LATIN CAPITAL LETTER P WITH ACUTE |


| ṕ | \&pacute; | 1E55 | LATIN SMALL LETTER P WITH ACUTE |
| :---: | :---: | :---: | :---: |
| $\dot{\mathrm{P}}$ | \&Pdot; | 1E56 | LATIN CAPITAL LETTER P WITH DOT ABOVE |
| $\dot{\mathrm{p}}$ | \&pdot; | 1E57 | LATIN SMALL LETTER P WITH DOT ABOVE |
| $\dot{R}$ | \&Rdot; | 1E58 | LATIN CAPITAL LETTER R WITH DOT ABOVE |
| $\dot{\mathrm{r}}$ | \&rdot; | 1E59 | LATIN SMALL LETTER R WITH DOT ABOVE |
| R | \&Rdotbl; | 1E5A | LATIN CAPITAL LETTER R WITH DOT BELOW |
| $\stackrel{r}{ }$ | \& rdotbl; | 1E5B | LATIN SMALL LETTER R WITH DOT BELOW |
| $\dot{S}$ | \&Sdot; | 1E60 | LATIN CAPITAL LETTER S WITH DOT ABOVE |
| $\dot{S}$ | \⋅ | 1E61 | LATIN SMALL LETTER S WITH DOT ABOVE |
| S | \&Sdotbl; | 1E62 | LATIN CAPITAL LETTER S WITH DOT BELOW |
| S | \&sdotbl; | 1E63 | LATIN SMALL LETTER S WITH DOT BELOW |
| $\dot{\mathrm{T}}$ | \&Tdot; | 1E6A | LATIN CAPITAL LETTER T WITH DOT ABOVE |
| $\dot{t}$ | \⃛ | 1E6B | LATIN SMALL LETTER T WITH DOT ABOVE |


| T | \&Tdotbl; | 1E6C | LATIN CAPITAL LETTER T WITH DOT BELOW |
| :---: | :---: | :---: | :---: |
| t | \&tdotbl; | 1E6D | LATIN SMALL LETTER T WITH DOT BELOW |
| V | \&Vdotbl; | 1E7E | LATIN CAPITAL LETTER V WITH DOT BELOW |
| Y | \&vdotbl; | 1E7F | LATIN SMALL LETTER V WITH DOT BELOW |
| Ẃ | \&Wacute; | 1E82 | LATIN CAPITAL LETTER W WITH ACUTE |
| W' | \&wacute; | 1E83 | LATIN SMALL LETTER W WITH ACUTE |
| $\ddot{W}$ | \&Wuml; | 1E84 | LATIN CAPITAL LETTER W WITH DIAERESIS |
| $\ddot{W}$ | \&wuml; | 1E85 | LATIN SMALL LETTER W WITH DIAERESIS |
| W | \&Wdot; | 1 E 86 | LATIN CAPITAL LETTER W WITH DOT ABOVE |
| $\dot{\mathrm{W}}$ | \&wdot; | 1E87 | LATIN SMALL LETTER W WITH DOT ABOVE |
| W | \& Wdotbl; | 1E88 | LATIN CAPITAL LETTER W WITH DOT BELOW |
| W | \&wdotbl; | 1E89 | LATIN SMALL LETTER W WITH DOT BELOW |
| $\dot{Y}$ | \&Ydot; | 1E8E | LATIN CAPITAL LETTER Y WITH DOT ABOVE |


| $\dot{\mathrm{y}}$ | \&ydot; | 1E8F | LATIN SMALL LETTER Y WITH DOT ABOVE |
| :---: | :---: | :---: | :---: |
| Z | \& Zdotbl; | 1E92 | LATIN CAPITAL LETTER Z WITH DOT BELOW |
| Z | \&zdotbl; | 1E93 | LATIN SMALL LETTER Z WITH DOT BELOW |
| A | \&Adotbl; | 1EA0 | LATIN CAPITAL LETTER A WITH DOT BELOW |
| a | \&adotbl; | 1EA1 | LATIN SMALL LETTER A WITH DOT BELOW |
| A | \&Ahook; | 1EA2 | LATIN CAPITAL LETTER A WITH HOOK ABOVE |
| ả | \&ahook; | 1EA3 | LATIN SMALL LETTER A WITH HOOK ABOVE |
| 合 | \&Abreveacute; | 1EAE | LATIN CAPITAL LETTER A WITH BREVE AND ACUTE |
| ă | \&abreveacute; | 1EAF | LATIN SMALL LETTER A WITH BREVE AND ACUTE |
| E | \&Edotbl; | 1EB8 | LATIN CAPITAL LETTER E WITH DOT BELOW |
| e | \& edotbl; | 1EB9 | LATIN SMALL LETTER E WITH DOT BELOW |
| ${ }^{1}$ | \&Ihook; | 1EC8 | LATIN CAPITAL LETTER I WITH HOOK ABOVE |
| 1 | \&ihook; | 1EC9 | LATIN SMALL LETTER I WITH HOOK ABOVE |
| I | \&Idotbl; | 1ECA | LATIN CAPITAL LETTER I WITH DOT BELOW |


| i | \&idotbl; | 1ECB | LATIN SMALL LETTER I WITH DOT BELOW |
| :---: | :---: | :---: | :---: |
| ? | \&Odotbl; | 1ECC | LATIN CAPITAL LETTER O WITH DOT BELOW |
| O | \& odotbl; | 1ECD | LATIN SMALL LETTER O WITH DOT BELOW |
| $\bigcirc$ | \&Ohook; | 1ECE | LATIN CAPITAL LETTER O WITH HOOK ABOVE |
| Ő | \&ohook; | 1ECF | LATIN SMALL LETTER O WITH HOOK ABOVE |
| U | \& Udotbl; | 1EE4 | LATIN CAPITAL LETTER U WITH DOT BELOW |
| 4 | \&udotbl; | 1EE5 | LATIN SMALL LETTER U WITH DOT BELOW |
| $U^{2}$ | \&Uhook; | 1EE6 | LATIN CAPITAL LETTER U WITH HOOK ABOVE |
| $\vec{u}$ | \&uhook; | 1EE7 | LATIN SMALL LETTER U WITH HOOK ABOVE |
| Y | \&Ydotbl; | 1EF4 | LATIN CAPITAL LETTER Y WITH DOT BELOW |
| Y. | \& ydotbl; | 1EF5 | LATIN SMALL LETTER Y WITH DOT BELOW |
| $\stackrel{Y}{2}^{2}$ | \&Yhook; | 1EF6 | LATIN CAPITAL LETTER Y WITH HOOK ABOVE |
| $\stackrel{3}{4}^{\text {y }}$ | \&yhook; | 1EF7 | LATIN SMALL LETTER Y WITH HOOK ABOVE |

## 13: General Punctuation

In the Unicode Standard v. 5.0, this range has 100 characters (plus 6 deprecated ones). The selection below contains 50 characters, including a number of spaces with no visible glyph. Note that some of the space characters, e.g. 2009, can be used to distinguish between varying widths of space between words. Some scholars believe there may be two different widths of the space in some Medieval manuscripts, the thinner space being used in compounds or sequences of (e.g.) preposition and noun.

| Glyph | ISO entity | MUFI entity | Code point | (Junicode) | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | \&enqd; | 2000 |  | EN QUAD |  |
|  | \&emqd; | 2001 |  | EM QUAD |  |  |
|  | \  |  | 2002 |  | EN SPACE |  |
|  | \  |  | 2003 |  | EM SPACE |  |
|  | \  |  | 2005 |  | FOURE-PER-EM SPACE |  |
|  | \  |  | 2006 |  | SIX-PER-EM SPACE |  |
|  | \&emsp16; |  |  | FIGURE SPACE |  |  |
|  |  |  |  | PUNCTUATION SPACE |  |  |


|  | \  |  | 2009 |  | THIN SPACE |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | \  |  | 200 A |  | HAIR SPACE |  |
|  |  | \&zerosp; | 200 B |  | ZERO WIDTH SPACE |  |
| - | \‐ |  | 2010 |  | HYPHEN |  |

This is an unambiguous hyphen character. See also 002D HYPHEN-MINUS in Basic Latin (p. 15 above).

| - | \&nbhy; | 2011 |  | NON-BREAKING HYPHEN |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| - | \&numdash; | 2012 |  | FIGURE DASH |  |

The figure dash, 2012, can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (pp. 107-108).

| - | \– | 2013 |  | EN DASH |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| - | \— |  | 2014 |  | EM DASH |
| - | \― |  | 2015 |  | HORIZONTAL BAR |
| $\\|$ | \‖ |  | 2016 |  | DOUBLE VERTICAL LINE |
| ، | \‘ |  | 2018 |  | LEFT SINGLE QUOTATION MARK |

The entity '\’' is also being used for this character. An analogous variant to 2018, '\‚', has not been included in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above).

| , | \‚ | \&lsquolow; | 201A | SINGLE LOW-9 QUOTATION MARK |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| The final ' $r$ ' in the ISO entity is ambiguous, since it is otherwise being used for raised quotation marks, such as 201B and 201F. For this reason, the suffix 'low' has been used in the recommended MUFI entity. |  |  |  |  |  |
| - |  | \&rsquorev; | 201B | SINGLE HIGH-REVERSED-9 QUOTATION MARK |  |
| * | \“ |  | 201C | LEFT DOUBLE QUOTATION MARK |  |
| " | \” |  | 201D | RIGHT DOUBLE QUOTATION MARK |  |

The entity '\”' is also being used for this character. An analogous variant to 201C, '\„', has not been included in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above).

| $"$ | \„ | \&ldquolow; | 201 E |  | DOUBLE LOW-9 QUOTATION MARK |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The final ' $r$ ' in the ISO entity is ambiguous, since it is otherwise being used for raised quotation marks, such as 201B and 201F. For this reason, the suffix 'low' has been used in the recommended MUFI entity.

| ce |  | \&rdquorev; | 201 F |  | DOUBLE HIGH-REVERSED-9 QUOTATION MARK |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\dagger$ | \† |  | 2020 |  | DAGGER |  |
| $\ddagger$ | \‡ |  | 2021 |  | DOUBLE DAGGER |  |
| $\bullet$ | \• |  | 2022 | BULLET |  |  |


| . |  | \&tribull; | 2023 |  | TRIANGULAR BULLET |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| . | \&sgldr; | 2024 |  | ONE DOT LEADER |  |  |
| .. | \&dblldr; | 2025 |  | TWO DOT LEADER |  |  |

Most likely by mistake, two entities, ‘\‥' ("en leader") and '\…' ("em leader"), have been recorded for 2025 TWO DOT LEADER in the survey of ISO-conformant entities published on the Oasis web site (cf. p. 7 above).

| $\ldots$ | \… |  | 2026 |  | HORIZONTAL ELLIPSIS |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| . |  | \&hyphpoint; | 2027 |  | HYPHENATION POINT |  |
|  |  | \&nnbsp; | 202 F |  | NARROW NO-BREAK SPACE |  |
| \%o | \‰ |  | 2030 |  | PER MILLE SIGN |  |
| , | \′ |  | 2032 |  | PRIME |  |
| " | \″ |  | 2033 |  | DOUBLE PRIME |  |
| < |  | \‹ | 2039 |  | SINGLE LEFT-POINTING ANGLE QUOTATION MARK |  |

The entity '\«' is also being used for this character, but has here been reserved for 00AB in Latin-1 Supplement (p. 23 above).


The entity '\»' is also being used for this character, but has here been reserved for 00BB in Latin-1 Supplement (p. 24 above).

| ※ | \&refmark; | 203B |  | REFERENCE MARK |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ** | \&triast; | 2042 |  | ASTERISM |  |
| / | \&fracsol; | 2044 |  | FRACTION SLASH |  |
| E | \&lsqbqu; | 2045 |  | LEFT SQUARE BRACKET WITH QUILL |  |
| ] | \& rsqbqu; | 2046 |  | RIGHT SQUARE BRACKET WITH QUILL |  |
| 7 | \& et; | 204A | F143 | TIRONIAN SIGN ET | LATIN ABBREVIATION SIGN SMALLET |
| As of Junicode version 0.6.12, this character is no longer located at F143, but has been moved to 204A. |  |  |  |  |  |
| P | \&revpara; | 204B |  | REVERSED PILCROW SIGN |  |
| $\because$ | \&lozengedot; | 2058 |  | FOUR DOT PUNCTUATION |  |
| 米 | \& dotcross; | 205C |  | DOTTED CROSS |  |

## 14: Superscripts and subscripts

In the Unicode Standard v. 5.0, this range has 34 characters. The selection below, which is new in v. 2.0 of the MUFI character recommendation, contains the superscript and subscript numbers 0-9. Superscript numbers can be used to differentiate variant character forms (allographs) in display and in print, while subscript numbers are often used to indicate line numbers, also both in display and in print. The superscript numbers 1, 2 and 3 are included in Latin-1 Supplement, p. 24 above, as 00B9, 00B2 and 00B3 respectively.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{0}$ |  | $\&$ sup0; | 2070 | SUPERSCRIPT ZERO |
| $\mathbf{4}$ |  | $\& s u p 4 ;$ | 2074 | SUPERSCRIPT FOUR |
| $\mathbf{5}$ |  | $\&$ sup5; | 2075 | SUPERSCRIPT FIVE |
| $\mathbf{6}$ |  | $\&$ sup6; | 2076 | SUPERSCRIPT SIX |
| $\mathbf{7}$ |  | $\& \sup 7 ;$ | 2077 | SUPERSCRIPT SEVEN |
| $\mathbf{8}$ |  | $\& s u p 9 ;$ | 2079 | SUPERSCRIPT NINE |
| $\mathbf{9}$ |  | $\& s u b 0 ;$ | 2080 | SUBSCRIPT ZERO |
| $\mathbf{1}$ |  | $\& s u b 1 ;$ | 2081 | SUBSCRIPT ONE |


| 2 |  | $\& s u b 2 ;$ | 2082 | SUBSCRIPT TWO |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{3}$ |  | $\&$ sub3; | 2083 | SUBSCRIPT THREE |
| $\mathbf{4}$ |  | $\&$ sub4; | 2084 | SUBSCRIPT FOUR |
| $\mathbf{5}$ |  | $\&$ sub5; | 2085 | SUBSCRIPT FIVE |
| $\mathbf{6}$ |  | $\&$ sub6; | 2086 | SUBSCRIPT SIX |
| $\mathbf{7}$ |  | $\&$ sub7; | 2087 | SUBSCRIPT SEVEN |
| $\mathbf{8}$ |  | $\& s u b 8 ;$ | 2088 | SUBSCRIPT EIGHT |
| $\mathbf{9}$ |  | $\& s u b 9 ;$ | 2089 | SUBSCRIPT NINE |

## 15: Currency Symbols

In the Unicode Standard v. 5.0, this range has 22 characters. Only a single character has been chosen here, the German penny sign. For other monetary (and weight) symbols, see the Private Use Area, subrange 12, below.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\mathcal{Y}$ |  | \&pennygerm; | 20 B 0 | GERMAN PENNY SIGN |

## I6: Letterlike Symbols

In the Unicode Standard v. 5.0, this range has 79 characters. Here, eight characters have been selected. Additional or alternative forms for several of these characters are found in the Private Use Area below.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $Э$ |  | $\&$ scruple; | 2108 | SCRUPLE |  |
| Tb | \&lbbar; | 2114 | L B BAR SYMBOL |  |  |
| See subrange 12 in the Private Use Area for additional forms of this symbol (pp. 112-113 below). |  |  |  |  |  |
| R |  | \&Rtailstrok; | 211 E | PRESCRIPTION TAKE | LATIN CAPITAL LETTER R WITH TAIL STROKE |
| R |  | \&Rslstrok; | 211 F | RESPONSE | LATIN CAPITAL LETTER R WITH DIAGONAL STROKE |

It is questionable whether 211E PRESCRIPTION TAKE and 211F RESPONSE should be recognised as different characters, but, because they in fact appear as different characters in the Unicode Standard, we recommend that both should be included in MUFI-compatible fonts.


See E8BC in subrange 5 in the Private Use Area for a small form of this character.

| $\boldsymbol{Z}$ | \&ounce; | 2125 | OUNCE SIGN |  |
| :--- | :--- | :--- | :--- | :--- |

This character is similar to, but not identical with, the scudi sign, cf. subrange 12 in the Private Use Area below. Attested in Medieval Nordic sources for 'uns', cf. Mål og vekt (Nordisk Kultur vol. 30), Oslo-Stockholm-København 1933, p. 283.

| $J$ |  | \&Fturn; | 2132 | TURNED CAPITAL F | LATIN CAPITAL LETTER TURNED F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I | \&fturn; | 214 E | TURNED SMALL F | LATIN SMALL LETTER TURNED F |  |

This pair of characters is used for one of the Claudian letters in Latin epigraphy. Note that the small form is a turned small capital ' $F$ ' rather than a turned minuscule ' $f$ '. TURNED SMALL F at 214E was added in the Unicode Standard v. 5.0 for reasons of case pairing. For additional Claudian letters, see the two reversed 'C' characters at 2183 and 2184 in Number forms, and the two half ' H ' characters at 2C75 and 2C76 in Latin Extended-C.

## 17: Number Forms

In the Unicode Standard v. 5.0, this range has 50 characters, comprising a number of vulgar fractions and Roman numerals. As a rule, we recommend that Roman numerals should be encoded using the ordinary characters I, V, X, L, C and D. The five numerals selected here are combinations of ' C ' and/or ' $D$ ' outside the ordinary alphabet, and the reversed ' C ', which could be used as a Roman numeral as well as an abbreviation sign for 'con', and a Claudian letter.

Note that two superscript Roman numerals have been added in the Private Use Area, subrange 11 (p. 110).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| D |  | \&romnumCDlig; | 2180 | ROMAN NUMERAL ONE THOUSAND C D |  |
| D |  | \&romnumDDlig; | 2181 | ROMAN NUMERAL FIVE THOUSAND |  |
| (D |  | \&romunmDDdbllig; | 2182 | ROMAN NUMERAL TEN THOUSAND |  |
| O |  | \&CONbase; | 2183 | ROMAN NUMERAL REVERSED ONE HUNDRED | LATIN ABBREVIATION SIGN <br> CAPITAL CON |

In addition to its usage as a Roman numeral, this character was frequently used as an abbreviation for 'con'. It is also known as a Claudian letter, antisigma. The suggested entity name here is based upon its usage as an abbreviation character for 'con'.

| Ј | \&conbase; | 2184 | LATIN SMALL LETTER REVERSED C | LATIN ABBREVIATION SIGN <br> SMALL CON |
| :--- | :--- | :--- | :--- | :--- | :--- |

This is the lowercase version of 2183 ROMAN NUMERAL REVERSED ONE HUNDRED. It was added in v. 5.0 of the Unicode Standard for reasons of case pairing. The suggested entity name refers to the usage as an abbreviation character for 'con'. A similar-looking character is 0254 LATIN SMALL LETTER OPEN O in IPA Extensions above, but that character is usually rendered as a turned 'c' glyph, ' 5 ' (i.e. rotated $180^{\circ}$ ). The 'con' abbreviation sign should rather be rendered with a reversed ' $c$ ' glyph, ' $\quad$ ' (i.e. flipped horizontally).

## 18: Arrows

In the Unicode Standard v. 5.0, this range has 112 characters. The selection below, which is new in v. 2.0 of the MUFI character recommendation, contains four commonly used arrows.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\leftarrow$ |  | \&arrsgllw; | 2190 | LEFTWARDS ARROW |
| $\uparrow$ |  | \&arrsglupw; | 2191 | UPWARDS ARROW |
| $\rightarrow$ |  | \&arrsglrw; | 2192 | RIGHTWARDS ARROW |
| $\downarrow$ |  | \&arrsgldw; | 2193 | DOWNWARDS ARROW |

## 19: Mathematical Operators

Ten characters have been selected from this range, which contains 256 characters in the Unicode Standard v. 5.0. Because six of them have a non-mathematical usage, alternative MUFI descriptive names have been assigned. Note that 223B has a duplicate code point in Junicode (v. 0.6.12).

| Glyph | ISO entity | MUFI entity | Code point | (Junicode) | Unicode descriptive name | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | \− |  | 2212 |  | MINUS |  |
| $\infty$ |  | \∞ | 221E |  | INFINITY |  |
| 人 |  | \&logand; | 2227 |  | LOGICAL AND |  |
| This character can also be used as a metrical character. Cf. subrange 10 in the Private Use Area (p. 109). |  |  |  |  |  |  |
| $\therefore$ |  | \&tridotupw; | 2234 |  | THEREFORE | PUNCTUATION MARK UPWARDSPOINTING TRIANGULAR DOTS |
| There is an ISO entity name for this character, '\∴', but we have given an entity name which better reflects the shape. This character can also be used as a punctuation mark, but we recommend F1EF in the Private Use Area, subrange 8 (p. 103 below), as a punctuation character. |  |  |  |  |  |  |
| $\because$ |  | \&tridotdw; | 2235 |  | BECAUSE | PUNCTUATION MARK DOWNWARDSPOINTING TRIANGULAR DOTS |
| This character can also be used as a punctuation mark, but we recommend F1EE in the Private Use Area (p. 103 below) as a punctuation character. |  |  |  |  |  |  |
| : |  | \&quaddot; | 2237 |  | PROPORTION | PUNCTUATION MARK FOUR DOTS |
| This character can also be used as a punctuation mark, but we recommend F1ED in the Private Use Area (p. 102 below) as a punctuation character. |  |  |  |  |  |  |


| $\dot{\div}$ |  | \&est; | 223 B | F150 | HOMOTHETIC | LATIN ABBREVIATION SIGN EST |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\approx$ | \&esse; | 2248 |  | ALMOST EQUAL TO | LATIN ABBREVIATION SIGN ESSE |  |
| $\neq$ |  | \&notequals; | 2260 |  | NOT EQUAL TO |  |
| $>$ |  | \&dipledot; | 22 D 7 |  | GREATER-THAN WITH DOT | DIPLE WITH DOT |

This character can also be used as a punctuation mark. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 303.

## 20: Miscellaneous Technical

Four metrical characters have been selected from this range, which contains a total of 242 characters in the Unicode Standard v. 5.0. The metrical characters are an addition in v. 4.1 and were proposed by the Thesaurus Linguae Graeca (TLG) project. In addition to the four metrical characters listed below, it should be noted that the anceps, $\times$, can be identified with MULTIPLICATION SIGN (00D7) in Latin-l Supplement and the symbol for long syllable (longum) can be identified with FIGURE DASH (2012) or EN DASH (2013) in General Punctuation. All of these characters can be combined with COMBINING ACUTE ACCENT (0301), COMBINING GRAVE ACCENT (0300) and COMBINING DOUBLE ACUTE ACCENT (030B) in Combining Diacritical Marks in order to indicate stress and alliterative patterns. However, for those who would like to use precomposed metrical characters, there is a full selection in the Private Use Area, subrange 10 below.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\smile$ |  | \&metrshort; | 23 D 1 | METRICAL BREVE |
| $\succsim$ |  | \&metrshortlong; | 23 D 2 | METRICAL LONG OVER SHORT |


| $\varkappa$ |  | $\& m e t r l o n g s h o r t ;$ | 23 D 3 | METRICAL SHORT OVER LONG |
| :--- | :--- | :--- | :--- | :--- |
| 匹兀 | \&metrdblshortlong; | 23 D 4 | METRICAL LONG OVER TWO SHORTS |  |

## 21:Geometric Shapes

Five characters have been selected from this range, which contains 96 characters in the Unicode Standard v. 5.0. Note that the size and line thickness vary from font to font. Many of the characters in this range are used by Ordbog over det norrøne prosasprog (Copenhagen 1989-).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ |  | \&squareblsm; | 25 AA | BLACK SMALL SQUARE |
| $\square$ |  | \&squarewhsm; | 25 AB | WHITE SMALL SQUARE |
| $\triangleright$ | \&trirightwh; | 25 B 9 | WHITE RIGHT-POINTING SMALL TRIANGLE |  |
| $\triangleleft$ | \&trileftwh; | 25 C 3 | WHITE LEFT-POINTING SMALL TRIANGLE |  |
| $\square$ | \&circledot; | 25 CC | DOTTED CIRCLE |  |

The character above can be used as a place holder for base-line characters when displaying diacritical marks. See examples in Combining Diacritical Marks above (p. 42). Although the Unicode character 25 CC has a size similar to capital ' O ', we recommend that it should be drawn with the size of a small ' o '.

## 22: Dingbats

Three characters have been selected from this range, which contains 174 characters in the Unicode Standard v. 5.0.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| † |  | \✗ | 271D | LATIN CROSS | LATIN ABBREVIATION SIGN CROSS |
| $\boldsymbol{\pi}$ |  | \&hedera; | 2766 | FLORAL HEART | HEDERA |
| حט |  | \&hederarot; | 2767 | ROTATED FLORAL HEART BULLET | ROTATED HEDERA |

The two characters above are also known as Aldine leaf (English) or Aldusblatt (German). The name hedera refers to HEDERA (HELIX), the Latin name for ivy, which this leaf resembles.

## 23: Miscellaneous Mathematical Symbols-A

Four characters have been selected from this range, which contains 39 characters in the Unicode Standard v. 5.0. Note that the angle brackets from this range have been chosen rather than 2329 and 232A in Miscellaneous Technical, because the latter are canonically equivalent to the very wide brackets 3008 and 3009 in CJK Symbols and Punctuation. This is to avoid spacing problems which might arise if the CJK brackets were substituted.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\llbracket$ |  | \&lwhsqb; | 27 E 6 | MATHEMATICAL LEFT WHITE <br> SQUARE BRACKET | LEFT WHITE SQUARE BRACKET |
| $\rrbracket$ | \&rwhsqb; | $27 E 7$ | MATHEMATICAL RIGHT WHITE <br> SQUARE BRACKET | RIGHT WHITE SQUARE BRACKET |  |


| $\langle$ |  | \&langb; | $27 E 8$ | MATHEMATICAL LEFT ANGLE <br> BRACKET | LEFT ANGLE BRACKET |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\rangle$ |  | \&rangb; | 27E9 | MATHEMATICAL RIGHT ANGLE <br> BRACKET | RIGHT ANGLE BRACKET |

## 24: Supplemental Mathematical Operators

A single character has been selected from this range, which contains 256 characters in the Unicode Standard v. 5.0.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $/ /$ |  | $\& d b l s o l ;$ | 2 AFD | DOUBLE SOLIDUS OPERATOR | PUNCTUATION MARK DOUBLE SOLIDUS |

This character can be used as a punctuation mark in addition to the single solidus, 002F in Basic Latin (p. 15 above). Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301.

## 25: Latin Extended-C

Two characters have been selected from this range, which contains 17 characters in the Unicode Standard v. 5.0. The whole range was introduced in this version of the Unicode Standard.

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| F |  | \&Hhalf; | 2 C 75 | LATIN CAPITAL LETTER HALF H |


| F | \&hhalf; | 2 C 76 | LATIN SMALL LETTER HALF H |
| :--- | :--- | :--- | :--- |
| This casing pair is used for a Claudian letter in Latin epigraphy. Note that the small form is based on a small capital ' $H$ ' rather than a minuscule ' $h$ '. For ad- <br> ditional Claudian letters, see the two turned ' $F$ ' characters at 2132 and 214 E in Letterlike Symbols, and the two reversed ' $C$ ' characters at 2183 and 2184 in <br> Number forms. |  |  |  |

## 26: Supplemental Punctuation

Five characters have been selected from this range, which contains 26 characters in the Unicode Standard v. 5.0. The Unicode descriptive names for these characters, especially for the first one, can be misleading. For the remaining three half square brackets, see the Private Use Area, subrange 9 below ( p . 104).

| Glyph | ISO entity | MUFI entity | Code point | Unicode descriptive name | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 「 |  | \&luhsqb; | 2E00 | RIGHT ANGLE SUBSTITUTION MARKER | LEFT UPPER HALF SQUARE BRACKET |
| 1 |  | \&luslst; | 2E0C | LEFT RAISED OMISSION BRACKET | LEFT UPPER SLANTED STROKE |
| / |  | \&ruslst; | 2E0D | RIGHT RAISED OMISSION BRACKET | RIGHT UPPER SLANTED STROKE |
| $\backslash$ |  | \& llslst; | 2E1C | LEFT LOW PARAPHRASE BRACKET | RIGHT LOWER SLANTED STROKE |
| In Medieval Nordic editing this stroke is typically used to indicate the end of text added in the margin and is for this reason called 'RIGHT'. |  |  |  |  |  |
| / |  | \&rlslst; | 2E1D | RIGHT LOW PARAPHRASE BRACKET | LEFT LOWER SLANTED STROKE |
| In Medieval Nordic editing this stroke is typically used to indicate the beginning of text added in the margin and is for this reason called 'LEFT'. |  |  |  |  |  |

## 27: Alphabetic Presentation Forms

All seven Latin characters have been selected from this range, which in the Unicode Standard v. 5.0 contains 58 characters from various scripts. The ligatures in the selection below are found in early printed sources and in many modern fonts. Additional ligatures of this type are found in subrange 1 in the Private Use Area below.

| Glyph | ISO entity | MuFl entity | Code point | Unicode descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| ff |  | \ﬀ | FB00 | LATIN SMALL LIGATURE FF |
| fi |  | \ﬁ | FB01 | LATIN SMALL LIGATURE FI |
| fl |  | \ﬂ | FB02 | LATIN SMALL LIGATURE FL |
| ff |  | \ﬃ | FB03 | LATIN SMALL LIGATURE FFI |
| ffl |  | \ﬄ | FB04 | LATIN SMALL LIGATURE FFL |
| ft |  | \&slongtlig; | FB05 | LATIN SMALL LIGATURE LONG S T |
| St |  | \&stlig; | FB06 | LATIN SMALL LIGATURE ST |

## B: Characters in the Private Use Area of the Unicode Standard

Important note: Characters in the Private Use Area (PUA) should be used with great caution. Before using any characters in this area, please read section 4 in the introduction, p. 11 above.

Some characters in the Private Use Area have duplicate code points to accommodate earlier versions of the Junicode font. This is due to an unavoidable code point conflict between the PUA of Junicode and the PUA of other fonts that were co-ordinated by the MUFI group. The code points given in the MUFI column should be used hereafter, but for the sake of backward compatibility, older code points in Junicode may be duplicated in some fonts. This applies to a total of 34 characters in subranges 5, 10, 16, 23, 24, 25 and 30 below.

## Category I: Base characters

Base characters are base-line characters or combining characters making up part of a composite character. The allocation of code points has been co-ordinated with characters in the Titus Cyberbit, Junicode and Alphabetum fonts. Subranges 1, 2, 3, 5 and 7 have been placed in the Titus section, E000-F0FF; subranges $4,6,8,9$ and 11 in the F100-F1FF section (wherever possible, using already existing Junicode code points), subrange 10 in the F700-F71F section (using already existing Alphabetum code points), and subrange 12 in the F2D0-F2FF section.

Two subranges, 13-14, have been reserved for future additions.

## Subrange I: Ligatures

Ligatures are two base-line characters that are joined so that they form a new, composite base-line character. Some consist of two identical characters, e.g. ' $a+a$ ', others of different characters, e.g. ' $a+v$ '. In a few cases, more than two characters are joined in a ligature, e.g. ' $\mathrm{f}+\mathrm{f}+\mathrm{i}$ '.

Structural and non-structural ligatures should be kept carefully apart. Structural ligatures usually have a separate phonological value, while non-structural ligatures are two separate characters that happen to be joined for practical or aesthetical reasons. For example, the structural ligature 'ae' in the Nordic languages reflect a separate sound and can not be split into ' $a$ ' + ' $e$ '. In most cases, words written with 'ae' rather than ' $x$ ' are understandable, but the two are not identical. The Norwegian word 'villaer' (villas) can under no circumstance be rendered as 'villær', and, the other way round, 'tær' (toes) can not be written 'taer'.

In Medieval Nordic manuscripts, structural ligatures may be used to denote length, ' $a+a$ ', diphthong, ' $a+v$ ', or a distinct vowel quality, often mutation (Umlaut), 'a+v'. As a rule of thumb, non-structural ligatures can be split without loss or change of meaning, while structural ligatures must not be split. The ligatures in Alphabetic Presentation Forms (p. 72 above) are prime examples of non-structural ligatures.

The Unicode Standard v. 5.0 does not recognise any of the ligatures in the list below, but 16 of them have been included in the medievalist January 2006 pro-


## (a) Structural ligatures

Structural ligatures have (in most cases) a separate sound value, and should be recognised as characters according to the Unicode definition of a character. A few variant forms are also included here for ease of reference.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :---: | :---: | :---: | :---: |
| A | \&AAlig; | EF90 | LATIN CAPITAL LIGATURE AA |
| ab | \&aalig; | EF91 | LATIN SMALL LIGATURE AA |
| 9 a | \&aacloselig; | EFA0 | LATIN SMALL LIGATURE AA CLOSED FORM |
| This is a variant form of the 'aa' ligature. |  |  |  |
| $\chi$ | \&aeligred; | F204 | LATIN SMALL LETTER AE WITH RIGHT UPPER LOOP |
| Cf. Johs. Brøndum-Nielsen, ed., Palcografi: Danmark og Sverige (Nordisk kultur 23:A), Stockholm etc. [1943], p. 102 |  |  |  |
| de | \&AnecklessElig; | EFAE | LATIN CAPITAL LIGATURE NECKLESS A E |
| \& | \&anecklesselig; | EFA1 | LATIN SMALL LIGATURE NECKLESS A E |


| AO | \&AOlig; | EF92 | LATIN CAPITAL LIGATURE AO |
| :--- | :--- | :--- | :--- |
| a | \&aolig; | EF93 | LATIN SMALL LIGATURE AO |
| $\mathbf{O}$ | \&AOligred; | F205 | LATIN CAPITAL LIGATURE AO NECKLESS |
| $\boldsymbol{O}$ | \&aoligred; | F206 | LATIN SMALL LIGATURE AO NECKLESS |
| The two characters above should be analysed as a ligature of 'a+o' without the neck of 'a', but can be described as the character 'o' with a lower left loop. |  |  |  |
| AU | \&AUlig; | EF94 | LATIN CAPITAL LIGATURE AU |
| au | \&aulig; | EF95 | LATIN SMALL LIGATURE AU |
| A | \&AVlig; | EF96 | LATIN CAPITAL LIGATURE AV |
| a | \&avlig; | EF97 | LATIN SMALL LIGATURE AV |
| $\boldsymbol{d}$ | \&anecklessvlig; | EFA2 | LATIN SMALL LIGATURE NECKLESS AV |
| $\boldsymbol{A}$ | \&AVligslash; | EF98 | LATIN CAPITAL LIGATURE AV WITH STROKE |
| a | \&avligslash; | EF99 | LATIN SMALL LIGATURE AV WITH STROKE |
| AY | \&AYlig; | EF9A | LATIN CAPITAL LIGATURE AY |
| a | \&aylig; | EF9B | LATIN SMALL LIGATURE AY |


| $\mathbf{L}$ | \&Lbrk; | EF9F | LATIN CAPITAL LETTER BROKEN L |
| :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | \&lbrk; | EF9C | LATIN SMALL LETTER BROKEN L |

Breaking the ' 1 ' character in the middle of the stem is one way of making a ligature of two ' 1 ' characters. The small form is attested in Old Icelandic, which in many cases favoured compressed forms (e.g. using small capitals for geminates). The capital form, however, is not (yet) attested, but has been added as an instance of case pairing.

| LI | \&LLligbar; | EEC0 | LATIN CAPITAL LETTER MIDDLE-WELSH LL |
| :--- | :--- | :--- | :--- |
| \# | \&llligbar; | EEC1 | LATIN SMALL LETTER MIDDLE-WELSH LL |

Attested in Medieval Welsh manuscripts and printed sources. From a typological point of view, this is the other way of ligating two ' 1 ' characters.

| $\bigcirc$ | $\& O l o o p ;$ | F20C | LATIN CAPITAL LETTER O WITH LOOP |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{O}^{\boldsymbol{P}}$ | \&oloop; | F20D | LATIN SMALL LETTER O WITH LOOP |

These two characters should be analysed as the ligature of 'o+e' without the bottom (finishing) stroke of the ' $e$ ', but can be designed and described as the character 'o' with an upper right loop.

| OO | \&OOlig; | F20A | LATIN CAPITAL LIGATURE OO |
| :--- | :--- | :--- | :--- |
| OO | \&oolig; | F20B | LATIN SMALL LIGATURE OO |

The ' $\mathrm{o}+\mathrm{o}$ ' ligature was introduced by the Icelander Jón Ólafsson from Grunnavík in the 18th century. Cf. Jón Helgason, Jon Olafsson fra Grunnavik, Copenhagen 1926.

| $ß$ | $\& S Z l i g ;$ | E3E4 | LATIN CAPITAL LETTER SHARP S |
| :--- | :--- | :--- | :--- |

According to v. 5.0 of the Unicode Standard, 'SS' is the capital form of ' $\beta$ ', but there are in fact many modern examples of a specific capital form of ' $\beta$ ', e.g. in some of the Duden dictionaries (on the title page itself, DER GROBE DUDEN). The earliest attested example in print is from 1879 . For a full discussion of this character, see the journal SIGNA vol. 9 (2006).

| VY | \&YYlig; | F212 | LATIN CAPITAL LIGATURE YY |
| :--- | :--- | :--- | :--- |
| Y | \&yylig; | F213 | LATIN SMALL LIGATURE YY |

The ' $y+y$ ' ligature was introduced by the Icelander Jón Ólafsson from Grunnavík in the 18th century. Cf. Jón Helgason, Jon Olafsson fra Grunnavik, Copenhagen 1926. From a graphical point of view, it could also be described as a ' $v+y$ ' ligature.
(b) Non-structural ligatures

Non-structural ligatures do not have a separate sound value. Many of the ligatures below are found in Old Icelandic sources, while others (especially those with ' $c$ ', ' $f$ ' and long ' $s$ ') belong to early printed sources.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{f}$ | \&aflig; | EFA3 | LATIN SMALL LIGATURE AF |
| $\Varangle$ | \&afinslig; | EFA4 | LATIN SMALL LIGATURE A INSULAR F |
| $\boldsymbol{q}$ | \&aglig; | EFA5 | LATIN SMALL LIGATURE AG |
| $\boldsymbol{d}$ | \&allig; | EFA6 | LATIN SMALL LIGATURE AL |


| an | \&anlig; | EFA7 | LATIN SMALL LIGATURE AN |
| :---: | :---: | :---: | :---: |
| a) | \&anscaplig; | EFA8 | LATIN SMALL LIGATURE A SMALL CAPITAL N |
| ¢ | \&aplig; | EFA9 | LATIN SMALL LIGATURE AP |
| $x$ | \&arlig; | EFAA | LATIN SMALL LIGATURE AR |
| $\mathfrak{X}$ | \&arscaplig; | EFAB | LATIN SMALL LIGATURE A SMALL CAPITAL R |
| ゆ | \&athornlig; | EFAC | LATIN SMALL LIGATURE A THORN |
| bb | \& bblig; | EEC2 | LATIN SMALL LIGATURE BB |
| 9 | \&bglig; | EEC3 | LATIN SMALL LIGATURE BG |
| dk | \&cklig; | EEC4 | LATIN SMALL LIGATURE CK |
| ct | \&ctlig; | EEC5 | LATIN SMALL LIGATURE CT |
| d | \&drotdrotlig; | EEC6 | LATIN SMALL LIGATURE D ROTUNDA D ROTUNDA |
| eg | \&eylig; | EEC7 | LATIN SMALL LIGATURE EY |
| fá | \&faumllig; | EEC8 | LATIN SMALL LIGATURE F A WITH DIAERESIS |


| f) | \fj | EEC9 | LATIN SMALL LIGATURE FJ |
| :---: | :---: | :---: | :---: |
| fó | \&foumllig; | F1BC | LATIN SMALL LIGATURE F O WITH DIAERESIS |
| fr | \&frlig; | EECA | LATIN SMALL LIGATURE FR |
| ft | \&ftlig; | EECB | LATIN SMALL LIGATURE FT |
| fü | \&fuumllig; | EECC | LATIN SMALL LIGATURE F U WITH DIAERESIS |
| fy | \&fylig; | EECD | LATIN SMALL LIGATURE FY |
| fft | \&fftlig; | EECE | LATIN SMALL LIGATURE FFT |
| ffy | \&ffylig; | EECF | LATIN SMALL LIGATURE FFY |
| fty | \&ftylig; | EED0 | LATIN SMALL LIGATURE FTY |
| 99 | \&gglig; | EED1 | LATIN SMALL LIGATURE GG |
| g | \&gdlig; | EED2 | LATIN SMALL LIGATURE GD |
| g | \&gdrotlig; | EED3 | LATIN SMALL LIGATURE G D ROTUNDA |
| ¢ | \&gethlig; | EED4 | LATIN SMALL LIGATURE G ETH |


| $N$ | \&nscapslonglig; | EED5 | LATIN SMALL LIGATURE SMALL CAPITAL N LONG S |
| :---: | :---: | :---: | :---: |
| $\propto$ | \&oclig; | EFAD | LATIN SMALL LIGATURE OC |
| P | \&PPlig; | EEDD | LATIN CAPITAL LIGATURE PP |
| PP | \&pplig; | EED6 | LATIN SMALL LIGATURE PP |
| JP | \&ppflourlig; | EED7 | LATIN SMALL LIGATURE PP WITH FLOURISH |
| fä | \&slongaumllig; | EBA0 | LATIN SMALL LIGATURE LONG S A WITH DIAERESIS |
| fh | \&slonghlig; | EBA1 | LATIN SMALL LIGATURE LONG S H |
| f1 | \&slongilig; | EBA2 | LATIN SMALL LIGATURE LONG S I |
| 11 | \&slongllig; | EBA3 | LATIN SMALL LIGATURE LONG S L |
| fö | \&slongoumllig; | EBA4 | LATIN SMALL LIGATURE LONG S O WITH DIAERESIS |
| 月 | \&slongplig; | EBA5 | LATIN SMALL LIGATURE LONG S P |
| 11 | \&slongslonglig; | EBA6 | LATIN SMALL LIGATURE LONG S LONG S |
| $f 11$ | \&slongslongilig; | EBA7 | LATIN SMALL LIGATURE LONG S LONG S I |
| fll | \&slongslonglig; | EBA8 | LATIN SMALL LIGATURE LONG S LONG S L |


| fti | \&slongtilig; | EBA9 | LATIN SMALL LIGATURE LONG S TI |
| :--- | :--- | :--- | :--- |
| ftr | \&slongtrlig; | EBAA | LATIN SMALL LIGATURE LONG S TR |
| fü | \&slonguumllig; | EBAB | LATIN SMALL LIGATURE LONG S U WITH DIAERESIS |
| $\boldsymbol{\beta}$ | \&slongvinslig; | EBAC | LATIN SMALL LIGATURE LONG S INSULAR V |
| tr | \&trlig; | EED8 | LATIN SMALL LIGATURE TR |
| tt | \&ttlig; | EED9 | LATIN SMALL LIGATURE TT |
| $\boldsymbol{\pi}$ | \&trottrotlig; | EEDA | LATIN SMALL LIGATURE T ROTUNDA T ROTUNDA |
| ty | \&tylig; | EEDB | LATIN SMALL LIGATURE TY |
| 5 | \&tzlig; | EEDC | LATIN SMALL LIGATURE TZ |

## Subrange 2: Small capitals

Small capitals have the same form as majuscules (capital letters), but are usually drawn with the same height as a minuscule (small) letter such as ' $x$ '. In Medieval Nordic manuscripts, small capitals were used to denote geminates, i.e. long consonants, or they were used ornamentally. The letters ' B ', ' D ', ' G ', ' M ', ' N ', ' R ', ' S ' and ' T ' were most frequently used as geminates, while these and other letters might also be used as ornaments in the whole or in parts of highlighted words. Some of the small capitals, e.g. ' O ' and ' C ', are difficult to distinguish from minuscule letters.

The Unicode Standard v. 5.0 has allocated nine small capitals to the range IPA Extensions, sc. 'B', 'G', 'H', 'I', 'L', 'N', 'E', 'R' and 'Y' (cf. pp. 39-41 above), and another 15 small capitals for the Uralic Phonetic Alphabet to the range Phonetic Extensions, 'A', 'E', 'C', 'D', 'ETH', 'E', 'J', 'K', 'M', 'O', 'P',
'T', 'U', 'V', 'W' and 'Z' (cf. pp. 47-48 above). Thus, only a handful of small capitals remain unrepresented. Of these, the small capital 'S' and 'F' can appear as geminates in Medieval Nordic. The rest, i.e. 'Q', 'THORN' and ' $X$ ' can only appear as small capitals in ornamental usage.

Small capital 'F' and 'S' have been included in the medievalist January 2006 proposal to Unicode.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\mathbf{F}$ | \&fscap; | EF05 | LATIN LETTER SMALL CAPITAL F |
| $\mathbf{Q}$ | \&qscap; | EF0C | LATIN LETTER SMALL CAPITAL Q |
| $\mathbf{S}$ | \&sscap; | EF0E | LATIN LETTER SMALL CAPITAL S |
| $\mathbf{X}$ | \&xscap; | EF11 | LATIN LETTER SMALL CAPITAL X |
| $\mathbf{P}$ | \&thornscap; | EF15 | LATIN LETTER SMALL CAPITAL THORN |

## Subrange 3: Enlarged minuscules

Enlarged minuscules are recognised as separate characters by some scholars, cf. e.g. Andrea de Leeuw van Weenen (A Grammar of Mödruvallabók, CNWS 85 , Leiden 2000). The traditional view has been to interpret these characters as variants of majuscules and encode them as such. It can be argued that this is a functional rather than a graphemic point of view and that it obscures the obvious distinction between e.g. ' $A$ ' (the majuscule) and ' $a$ ' (the enlarged minuscule).

The Unicode Standard v. 5.0 does not recognise enlarged minuscules.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\boldsymbol{d}$ | \&aenl; | EEE0 | LATIN ENLARGED LETTER SMALLA |


| $2 d$ | \&aaligenl; | EFDF | LATIN ENLARGED LETTER SMALL LIGATURE AA |
| :---: | :---: | :---: | :---: |
| 20 | \&aoligenl; | EFDE | LATIN ENLARGED LETTER SMALL LIGATURE AO |
| b | \&benl; | EEE1 | LATIN ENLARGED LETTER SMALL B |
| C | \&cenl; | EEE2 | LATIN ENLARGED LETTER SMALL C |
| d | \&denl; | EEE3 | LATIN ENLARGED LETTER SMALL D |
| $\partial$ | \&drotenl; | EEE4 | LATIN ENLARGED LETTER D ROTUNDA |
| ð | \&ethenl; | EEE5 | LATIN ENLARGED LETTER SMALL ETH |
| e | \&eenl; | EEE6 | LATIN ENLARGED LETTER SMALL E |
| f | \&fenl; | EEE7 | LATIN ENLARGED LETTER SMALL F |
| f | \& finsenl; | EEFF | LATIN ENLARGED LETTER SMALL INSULAR F |
| g | \&genl; | EEE8 | LATIN ENLARGED LETTER SMALL G |
| h | \&henl; | EEE9 | LATIN ENLARGED LETTER SMALL H |
| i | \&ienl; | EEEA | LATIN ENLARGED LETTER SMALL I |


| $\mathbf{l}$ | \&inodotenl; | EEFD | LATIN ENLARGED LETTER SMALL DOTLESS I |
| :--- | :--- | :--- | :--- |
| $\mathbf{j}$ | \&jenl; | EEEB | LATIN ENLARGED LETTER SMALL J |
| $\mathbf{j}$ | \&jnodotenl; | EEFE | LATIN ENLARGED LETTER SMALL DOTLESS J |
| k | \&kenl; | EEEC | LATIN ENLARGED LETTER SMALL K |
| $\mathbf{l}$ | \&lenl; | EEED | LATIN ENLARGED LETTER SMALL L |
| m | \&menl; | EEEE | LATIN ENLARGED LETTER SMALL M |
| n | \&nenl; | EEEF | LATIN ENLARGED LETTER SMALL N |
| O | \&oenl; | EEF0 | LATIN ENLARGED LETTER SMALL O |
| O | \&oeligenl; | EFDD | LATIN ENLARGED LETTER SMALL LIGATURE OE |
| p | \&penl; | EEF1 | LATIN ENLARGED LETTER SMALL P |
| q | \&qenl; | EEF2 | LATIN ENLARGED LETTER SMALLQ |
| r | \&renl; | EEF3 | LATIN ENLARGED LETTER SMALL R |
| S | \&senl; | EEF4 | LATIN ENLARGED LETTER SMALL S |


| t | \&tenl; | EEF5 | LATIN ENLARGED LETTER SMALL T |
| :--- | :--- | :--- | :--- |
| U | \&uenl; | EEF7 | LATIN ENLARGED LETTER SMALL U |
| V | \&venl; | EEF8 | LATIN ENLARGED LETTER SMALL V |
| W | \&wenl; | EEF9 | LATIN ENLARGED LETTER SMALL W |
| X | \&xenl; | EEFA | LATIN ENLARGED LETTER SMALL X |
| y | \&yenl; | EEFB | LATIN ENLARGED LETTER SMALL Y |
| Z | \&zenl; | EEFC | LATIN ENLARGED LETTER SMALL Z |
| P | \&thornenl; | EEF6 | LATIN ENLARGED LETTER SMALL THORN |

## Subrange 4: Base-line abbreviation characters

This range includes those abbreviation signs which typically occupy a position on the base line. Very few abbreviation signs are included in the Unicode Standard v. 5.0. An exception is the Tironian sign for 'et', which is found in the range General punctuation, 204A (p. 60 above).

- Basic Latin: The ampersand, 0026, for 'et' (= the conjunction 'and'), (p. 14)
- Spacing Modifying Letters: The apostrophe, 02BC, for 'i' or 'e' (p. 41).
- Runic: The runic ' f ', 16A0, for 'fé' and the runic ' m ', 16D8, for 'maðr', both frequently used in Old Norse manuscripts (p. 47).
- Number forms: The reversed 'C', 2183 and 2184, for 'con' (pp. 64-65).
- Mathematical Operators: The homothetic sign, 223B, for 'est' (p. 67).
- Dingbats: The Latin cross, 271D, for 'kross' (p. 69).

| Glyph | MuFl entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| 9 | \&CONdes; | F1A2 |  | LATIN ABBREVIATION SIGN CAPITAL CON DESCENDING |
| 9 | \&condes; | F156 | F156 | LATIN ABBREVIATION SIGN SMALL CON DESCENDING |

This character has a descender, ' x 9 x '. Another form does not have a descender and looks like a reversed ' C '. This character, which also was used as a Roman numeral and as a Claudian letter, antisigma, is located in Number forms at 2183 and 2184, see pp. 64-65 above.

| $\supset$ | \&CONdot; | F1A3 |  | LATIN ABBREVIATION SIGN CAPITAL CON WITH DOT |
| :--- | :--- | :--- | :--- | :--- |
| $\ni$ | \&condot; | F1A4 |  | LATIN ABBREVIATION SIGN SMALL CON WITH DOT |
| 9 | \&usmod; | F151 | F151 | LATIN ABBREVIATION SIGN SPACING RAISED US |
| 9 | \&USbase; | F1A5 |  | LATIN ABBREVIATION SIGN SPACING BASE-LINE CAPITAL US |

This character is positioned on the base line and has capital form (full height).


This is a spacing character positioned on the base line, but not with full height. Evidence from Old Icelandic, e.g. AM 519a, 23r.27.

| 7 | $\& E T ;$ | F142 | F142 | LATIN ABBREVIATION SIGN CAPITAL ET |
| :--- | :--- | :--- | :--- | :--- |

The small form of the above character is 204A TIRONIAN SIGN ET in General Punctuation.

| 7 | \&ETslash; | F1A7 |  | LATIN ABBREVIATION SIGN CAPITAL ET WITH STROKE |
| :--- | :--- | :--- | :--- | :--- |


| $\boldsymbol{z}$ | \&etslash; | F158 |  | LATIN ABBREVIATION SIGN SMALL ET WITH STROKE |
| :--- | :--- | :--- | :--- | :--- |
| $2 \boldsymbol{\gamma}$ | \&RUM; | F15C |  | LATIN ABBREVIATION SIGN CAPITAL RUM |
| $\psi$ | $\& r u m ;$ | F154 | F154 | LATIN ABBREVIATION SIGN SMALL RUM |
| $ð$ | $\& d e ;$ | F159 |  | LATIN ABBREVIATION SIGN SMALL DE |
| $\mathcal{\rho}$ | $\&$ IS; | F15D |  | LATIN ABBREVIATION SIGN CAPITAL IS |
| $\rho$ | $\& i s ;$ | F15A |  | LATIN ABBREVIATION SIGN SMALL IS |
| $\$$ | \&sstrok; | F1A8 |  | LATIN ABBREVIATION SIGN SCRIPT S WITH STROKE |

This character can also be used for the 'soldi' sign, cf. subrange 12 below (p. 115).

| 3 | \&ETfin; | F15E |  | LATIN ABBREVIATION SIGN CAPITAL FINAL ET (3-SHAPED MARK) |
| :--- | :--- | :--- | :--- | :--- |
| 3 | \&etfin; | F155 | F155 | LATIN ABBREVIATION SIGN SMALL FINAL ET (3-SHAPED MARK) |

This pair of characters is used as suspension marks in a number of contexts, e.g. for 'et' in 'videlicet', for 'us' in 'quibus', 'omnibus', for 'ue' in 'neque', 'cumque', for ' m ' in 'nam', 'omnem', for 'est' in 'prodest', 'interest', etc. In the paleographical literature, it is usually described as "a sign looking like the number 3". It is difficult to find a wholly suitable name; the name proposed here takes the abbreviation of 'videlicet' to be prototypical.

; $\quad \&$ sem; $\quad$ F1AC $\quad$|  |  | LATIN ABBREVIATION SIGN SEMICOLON |
| :--- | :--- | :--- |

The character 003B SEMICOLON can be used for the frequent abbreviation sign of similar shape. However, some encoders might want to have a separate character, in which case we recommend using F1AC LATIN ABBREVIATION SIGN SEMICOLON. Neither character should be unified with F1EA PUNCTUS VERSUS, which is a punctuation mark (see p. 100 below).

## Subrange 5: Modified base-line abbreviation characters

This range includes a number of abbreviation characters, typically a base-line character with a stroke across the ascender. The ligatures in this subrange have been included here rather than in subrange 1, because they have some type of modification, typically a stroke across part of the character.

The Unicode Standard v. 5.0 does not recognise any abbreviation characters of this type, but many of them have been included in the medievalist January 2006 proposal to Unicode.

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| d4 | \&dtailstrok; | E8A0 |  | LATIN SMALL LETTER D WITH TAIL STROKE |
| f | \&hslonglig; | EBAD |  | LATIN SMALL LIGATURE H AND LONG S |

The MUFI character recommendation v. 1.0 recommended using 0266 LATIN SMALL LETTER H WITH HOOK for this character, but we believe that it should be analysed as a separate character, because it is in fact a ligature of ' $h$ ' and long ' $s$ ' and thus should be designed with the hackle of long ' $s$ '.

| 百 | \&hslongligbar; | E7C7 |  | LATIN SMALL LIGATURE H AND LONG S WITH STROKE |
| :--- | :--- | :--- | :--- | :--- |
| K | \&kslonglig; | EBAE |  | LATIN SMALL LIGATURE K AND LONG S |

The MUFI character recommendation v. 1.0 recommended using 0199 LATIN SMALL LETTER K WITH HOOK for this character, but we believe that it should be analysed as a separate character, because it is in fact a ligature of ' $k$ ', and long ' $s$ ' and thus should be designed with the hackle of long ' $s$ '.

| 令 | \＆kslongligbar； | E7C8 |  | LATIN SMALL LIGATURE K AND LONG S WITH STROKE |
| :---: | :---: | :---: | :---: | :---: |
| K | \＆Kbar； | E8A4 |  | LATIN CAPITAL LETTER K WITH STROKE |
| k | \＆kbar； | E7C5 | F14B | LATIN SMALL LETTER K WITH STROKE |
| K | \＆Kstrleg； | E8A5 |  | LATIN CAPITAL LETTER K WITH DIAGONAL STROKE |
| l／ | \＆kstrleg； | E8A6 |  | LATIN SMALL LETTER K WITH DIAGONAL STROKE |
| 仅 | \＆Kstrascleg； | E8A7 |  | LATIN CAPITAL LETTER K WITH STROKE AND DIAGONAL STROKE |
| 友 | \＆kstrascleg； | E8A8 |  | LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE |
| 4 | \＆ltailstrok； | E8AF |  | LATIN SMALL LETTER L WITH TAIL STROKE |
| mH | \＆mtailstrok； | E8A9 |  | LATIN SMALL LETTER M WITH TAIL STROKE |
| n | \＆ntailstrok； | E8AA |  | LATIN SMALL LETTER N WITH TAIL STROKE |
| $\theta$ | \＆OBIIT； | E8AB |  | LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY |
| $\theta$ | \＆obiit； | E8AC |  | LATIN SMALL LETTER O WITH LONG STROKE OVERLAY |

Used as abbreviation for obiit（＇he／she died＇）．The character 03B8 GREEK SMALL LETTER THETA in Greek and Coptic is sometimes used for rendering this abbreviation，but we recommend having a separate character．

| P | \&Pbardes; | E270 | F144 | LATIN CAPITAL LETTER P WITH STROKE THROUGH STEM |
| :---: | :---: | :---: | :---: | :---: |
| p | \&pbardes; | E670 | F145 | LATIN SMALL LETTER P WITH STROKE THROUGH DESCENDER |
| ${ }^{1} \mathrm{P}$ | \&Pflour; | E27D | F146 | LATIN CAPITAL LETTER P WITH FLOURISH |
| S | \&pflour; | E67D | F147 | LATIN SMALL LETTER P WITH FLOURISH |
| $\Psi$ | \&Psquirrel; | E8AD |  | LATIN CAPITAL LETTER P WITH SQUIRREL TAIL |
| 2 | \&psquirrel; | E8AE |  | LATIN SMALL LETTER P WITH SQUIRREL TAIL |
| Q | \&Qslstrok; | E8B0 |  | LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE THROUGH TAIL |
| G | \&qslstrok; | E8B1 |  | LATIN SMALL LETTER Q WITH DIAGONAL STROKE |
| $Q$ | \&Qbardes; | E8B2 |  | LATIN CAPITAL LETTER Q WITH STROKE THROUGH TAIL |
| q | \&qbardes; | E68A | F14D | LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER |
| qR | \&q2app; | E8B3 |  | LATIN SMALL LETTER Q LIGATED WITH R ROTUNDA |
| $\mathrm{CH}_{3}$ | \&q3app; | E8BF |  | LATIN SMALL LETTER Q LIGATED WITH FINALET |
| $\varnothing$ | \&qcentrslstrok; | E8B4 |  | LATIN SMALL LETTER Q WITH CENTRAL SLANTED STROKE |
| This is an unusual sign attested in early Icelandic script for/ng/. Cf. Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, p. 53. |  |  |  |  |


| 17 | \&rtailstrok; | E8B5 |  | LATIN SMALL LETTER R WITH TAIL STROKE |
| :---: | :---: | :---: | :---: | :---: |
| R | \&rscaptailstrok; | E8B6 |  | LATIN LETTER SMALL CAPITAL R WITH TAIL STROKE |
| 1 | \&slongbar; | E7FF |  | LATIN SMALL LETTER LONG S WITH STROKE |
| $f$ | \&slongbarslash; | F14F | F14F | LATIN SMALL LETTER LONG S WITH DIAGONAL STROKE |
| ¢ | \&slongflour; | E8B7 |  | LATIN SMALL LETTER LONG S WITH FLOURISH |
| 6 | \&slongslstrok; | E8B8 |  | LATIN SMALL LETTER LONG S WITH SLANTED DESCENDING STROKE |
| \# | \&ttailstrok; | E8B9 |  | LATIN SMALL LETTER T WITH TAIL STROKE |
| W | \&vslash; | E8BA |  | LATIN SMALL LETTER V WITH SHORT SLASH |
| This character has a short diagonal stroke across the left branch and is typically used as a Roman numeral for four and a half ( $41 / 2$ ) |  |  |  |  |
| $\checkmark$ | \&vdiagstrok; | E8BC |  | LATIN SMALL LETTER V WITH DIAGONAL STROKE |
| This character has an emphasised stroke and can be seen as an example of case pairing with 2123 VERSICLE. |  |  |  |  |
| X | \&xslashula; | E8BD |  | LATIN SMALL LETTER X WITH SHORT SLASH ABOVE |
| X | \&xslashlra; | E8BE |  | LATIN SMALL LETTER X WITH SHORT SLASH BELOW |
| The two characters above are typically used as a Roman numeral for nine and a half (91/2). |  |  |  |  |


| $\boldsymbol{p}$ | \&THORNbar; | E336 |  | LATIN CAPITAL LETTER THORN WITH STROKE |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{p}$ | \&thornbar; | E736 |  | LATIN SMALL LETTER THORN WITH STROKE |
| $\boldsymbol{p}$ | \&THORNbarslash; | E337 |  | LATIN CAPITAL LETTER THORN WITH DIAGONAL STROKE |
| $\boldsymbol{p}$ | \&thornbarslash; | F149 |  | LATIN SMALL LETTER THORN WITH DIAGONAL STROKE |
| $\mathbf{p}$ | \&THORNbardes; | E3A0 |  | LATIN CAPITAL LETTER THORN WITH STROKE THROUGH STEM |
| $\mathbf{p}$ | \&thornbardes; | E7A0 |  | LATIN SMALL LETTER THORN WITH STROKE THROUGH DESCENDER |
| $\mathbf{p}$ | \&thornslonglig; | E734 |  | LATIN SMALL LIGATURE THORN AND LONG S |
| $\bar{p}$ | \&thornslongligbar; | E735 |  | LATIN SMALL LIGATURE THORN AND LONG S WITH STROKE |

## Subrange 6: Combining marks

This range includes those abbreviation signs that typically occupy a position above, through or below another base-line character. Combining diacritical marks are also included in this range.

The Unicode Standard v. 5.0 has a large selection in Combining Diacritical Marks (pp. 42-44 above). In the medievalist January 2006 proposal to Unicode, several additional combining marks have been included.

| Glyph | MUFI entity | MUFI code | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\div$ | \&arbar; | F1C0 |  | COMBINING ABBREVIATION MARK BAR ABOVE WITH DOT |


| \% | \&er; | F152 | F152 | COMBINING ABBREVIATION MARK SUPERSCRIPT ER |
| :---: | :---: | :---: | :---: | :---: |
| In v. 4.1 of the Unicode Standard, this character was assigned to code point 035B in Combining Diacritical Marks (see p. 44 above). We recommend that this code point should be used hereafter. The F152 code point should be retained for backwards compatibility and not used for any new character. |  |  |  |  |
| \% | \&erang; | F1C7 |  | COMBINING ABBREVIATION MARK ZIGZAG ABOVE ANGLE FORM |
| $?$ | \&ercurl; | F1C8 |  | COMBINING ABBREVIATION MARK ZIGZAG ABOVE CURLY FORM |
| 3 | \&ersub; | F1C9 |  | COMBINING ABBREVIATION MARK ZIGZAG BELOW |
| Attested in Old Icelandic to abbreviate 'pær', in contrast to the superscript form used to abbreviate 'peir'. |  |  |  |  |
| $\because$ | \&ra; | F157 | F157 | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM |
| \% | \&rabar; | F1C1 |  | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM WITH BAR ABOVE |
| $\stackrel{2}{2}$ | \&urrot; | F153 | F153 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR ROUND R FORM |
| $\because$ | \&urlemn; | F1C2 |  | COMBINING ABBREVIATION MARK SUPERSCRIPT UR LEMNISKATE FORM |
| ? | \&ur; | F1C3 |  | COMBINING ABBREVIATION MARK SUPERSCRIPT UR TILDE FORM |
| In v. 1.0 of the MUFI character recommendation the glyph for this character was unfortunate. It should look like a superscript round ' $r$ ' lying on the side (as shown here). |  |  |  |  |
| $\stackrel{9}{\square}$ | \&us; | F15B |  | COMBINING ABBREVIATION MARK SUPERSCRIPT US |


| $\dot{3}$ | $\&$ combcurl; | F1C4 |  | COMBINING CURL |
| :--- | :--- | :--- | :--- | :--- |
| $\cdots$ | $\&$ combcurlhigh; | F1C5 |  | COMBINING CURL HIGH POSITION |
| $\dot{\cdots}$ | \&combdothigh; | F1CA |  | COMBINING DOT ABOVE HIGH POSITION |

The COMBINING DOT ABOVE HIGH POSITION is an intermediate solution for the positioning of a dot above tall letters. It should be deprecated when Smart Font software allows correct positioning of 0307 COMBINING DOT ABOVE above all letters, irrespective of height or width.

| e | \&combflour; | F1C6 |  | COMBINING FLOURISH |
| :--- | :--- | :--- | :--- | :--- |
| Since P wITH FLOURISH is a separate character (see subrange 5 above) the "decomposed" solution of having a combining flourish should be deprecated. <br> The present code point should be retained for backwards compatibility and not used for any new character. |  |  |  |  |
| Z | \&combisbelow; | F1CB |  | COMBINING ABBREVIATION MARK IS BELOW |
| $\sim$ | \&combcurlbar; | F1CC |  | COMBINING CURLY BAR ABOVE |

Frequently used in handwriting to distinguish the character ' u ' from other minims ( $\mathrm{i}, \mathrm{m}, \mathrm{n}$ ) and thus functionally similar to the dot above the character ' 1 '. For semantic reasons, it should not be unified with the similar-looking characters 0303 COMBINING TILDE (Latin script), 0342 COMBINING GREEK PERISPOMENI (Greek script) or ODC3 COMBINING SUSPENSION MARK (Glagolitic script). The precomposed character LATIN SMALL LETTER U WITH CURLY BAR ABOVE is listed in subrange 27 below.

| 个 | \&combcircdbl; | F163 | F163 | COMBINING DOUBLE CIRCUMFLEX ABOVE |
| :--- | :--- | :--- | :--- | :--- |
| ๔ | \&combdblbrevebl; | F743 |  | COMBINING DOUBLE BREVE BELOW |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 035C in Combining Diacritical Marks. We recommend that this code point should be used hereafter. The F743 code point should be retained for backwards compatibility and not used for any new character.

| ॠ | \&combtripbrevebl; | F1FC | COMBINING TRIPLE BREVE BELOW |
| :--- | :--- | :--- | :--- | :--- | Used below character sequences like 'sch' in the "Rheinische Dokumenta", a semi-official phonetic notation of Low German dialects.

## Subrange 7: Combining superscript characters

This range includes superscript characters, typically placed above another base-line character. They are found in many early German printed texts, and in a large number of Medieval manuscripts. The position immediately above a base-line character distinguishes them from raised interlinear characters typically occupying a position immediately after another base-line character. This latter type includes a handful of phonetic modifiers such as a raised 'w' indicating rounding, a raised ' $h$ ' indicating aspiration etc.

The Unicode Standard v. 5.0 has a selection of 13 superscript characters in the range Combining diacritical marks, ' $a$ ', ' $e$ ', ' $i$ ', ' $o$ ', ' $u$ ', ' $c$ ', ' d ', ' h ', ' m ', ' $r$ ', ' t ', ' $v$ ' and ' $x$ '. They are located at the end of the range, $0363-036 \mathrm{~F}$ (pp. 44-45 above). In the medievalist January 2006 proposal to Unicode, several additional combining superscript characters were included.

The majority of characters in the list below are documented in Andrea de Leeuw van Weenen, A Grammar of Möððruvallabók (CNWS 85), Leiden 2000.

| Glyph | MUFI entity | MUFI code point | Descriptive name |
| :--- | :--- | :--- | :--- |
| $æ$ | \&aeligsup; | F011 | COMBINING LATIN SMALL LETTER AE |
| Although a ligature, this character is named LETTER AE in the Unicode Standard (cf. 00E6 in Latin- 1 Supplement). |  |  |  |
| a | \&anligsup; | F036 | COMBINING LATIN SMALL LIGATURE AN |


| a | \&anscapligsup; | F03A | COMBINING LATIN SMALL LIGATURE A SMALL CAPITAL N |
| :---: | :---: | :---: | :---: |
| ${ }^{\infty}$ | \&aoligsup; | F037 | COMBINING LATIN SMALL LIGATURE AO |
| ${ }^{\text {r }}$ | \&arligsup; | F038 | COMBINING LATIN SMALL LIGATURE AR |
| 》 | \&avligsup; | F039 | COMBINING LATIN SMALL LIGATURE AV |
| b | \&bsup; | F012 | COMBINING LATIN SMALL LETTER B |
| $\stackrel{\text { B }}{ }$ | \&bscapsup; | F013 | COMBINING LATIN LETTER SMALL CAPITAL B |
| ¢ | \&ccedilsup; | F02D | COMBINING LATIN SMALL LETTER C CEDILLA |
| ¢ | \&ethsup; | F014 | COMBINING LATIN SMALL LETTER ETH |
| ¢ | \&drotsup; | F02E | COMBINING LATIN LETTER D ROTUNDA |
| \% | \&dscapsup; | F016 | COMBINING LATIN LETTER SMALL CAPITAL D |
| $\stackrel{f}{\square}$ | \&fsup; | F017 | COMBINING LATIN SMALL LETTER F |
| $\stackrel{\mathrm{g}}{ }$ | \&gsup; | F018 | COMBINING LATIN SMALL LETTER G |
| G | \& gscapsup; | F019 | COMBINING LATIN LETTER SMALL CAPITAL G |


| $\stackrel{1}{1}$ | \&inodotsup; | F02F | COMBINING LATIN SMALL LETTER DOTLESS I |
| :---: | :---: | :---: | :---: |
| ; | \&jsup; | F030 | COMBINING LATIN SMALL LETTER J |
| ) | \&jnodotsup; | F031 | COMBINING LATIN SMALL LETTER DOTLESS J |
| k | \&ksup; | F01B | COMBINING LATIN SMALL LETTER K |
| \% | \&kscapsup; | F01C | COMBINING LATIN LETTER SMALL CAPITAL K |
| $\stackrel{1}{1}$ | \&lsup; | F01D | COMBINING LATIN SMALL LETTER L |
| $\stackrel{ }{4}$ | \&1scapsup; | F01E | COMBINING LATIN LETTER SMALL CAPITAL L |
| M | \&mscapsup; | F020 | COMBINING LATIN LETTER SMALL CAPITAL M |
| n | \⊅ | F021 | COMBINING LATIN SMALL LETTER N |
| $\stackrel{\mathrm{N}}{ }$ | \&nscapsup; | F023 | COMBINING LATIN LETTER SMALL CAPITAL N |
| $\stackrel{\square}{\square}$ | \&oslashsup; | F032 | COMBINING LATIN SMALL LETTER O WITH STROKE |
| \% | \&orrotsup; | F03E | COMBINING LATIN SMALL LETTER O R ROTUNDA |
| ${ }^{\circ}$ | \&orumsup; | F03F | COMBINING LATIN SMALL LETTER O RUM |


| p | \&psup; | F025 | COMBINING LATIN SMALL LETTER P |
| :---: | :---: | :---: | :---: |
| q | \&qsup; | F033 | COMBINING LATIN SMALL LETTER Q |
| $\stackrel{2}{2}$ | \&rrotsup; | F035 | COMBINING LATIN SMALL LETTER R ROTUNDA |
| 4 | \&rumsup; | F040 | COMBINING LATIN SMALL LETTER RUM |
| R | \&rscapsup; | F026 | COMBINING LATIN LETTER SMALL CAPITAL R |
| $\stackrel{\text { s }}{ }$ | \&ssup; | F027 | COMBINING LATIN SMALL LETTER S |
| $\stackrel{\mathrm{r}}{ }$ | \&slongsup; | F028 | COMBINING LATIN SMALL LETTER LONG S |
| $\stackrel{T}{\text { T }}$ | \&tscapsup; | F02A | COMBINING LATIN LETTER SMALL CAPITAL T |
| $\stackrel{\tau}{2}$ | \&trotsup; | F03B | COMBINING LATIN LETTER T ROTUNDA |
| w | \&wsup; | F03C | COMBINING LATIN SMALL LETTER W |
| y | \&ysup; | F02B | COMBINING LATIN SMALL LETTER Y |
| ${ }^{\mathrm{z}}$ | \&zsup; | F02C | COMBINING LATIN SMALL LETTER Z |
| $\stackrel{\mathrm{p}}{ }$ | \&thornsup; | F03D | COMBINING LATIN SMALL LETTER THORN |

## Subrange 8: Punctuation marks

This range includes punctuation marks that are not included in the Unicode Standard v. 5.0. The common marks, such as full stop, comma, colon, semicolon, question mark, hyphen and solidus, are all found in the range Basic Latin (pp. 14-17 above). Some are also located in the range General Punctuation (p. 56). Finally, a few punctuation marks can be identified with characters in other ranges:

- Latin-1 Supplement: middle dot, 00B7 (p. 24)
- Georgian: right-pointing triangular dots, 10FB (p. 46)
- Mathematical Operators: 2234, 2235, and 2237 (p. 66)

At the time of publication, a proposal to Unicode for Medieval punctuation is in preparation (cf. p. 11 above). It will include a number of the characters below.

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| • | \&hidot; | F1F8 |  | DISTINCTIO |
| Described by the grammarian Donatus, who distinguishes between three positions of the dot: on the baseline (to be unified with 002E FULL STOP), middle <br> height (to be unified with 00B7 MIDDLE DOT) and the high dot, shown here. See also Isidore of Sevilla, Etymologiae I 20. Malcolm B. Parkes, Pause and <br> Effect, Aldershot, 1992, p. 13, says that the distinctio was used to indicate "a final pause, after a periodus, or where the sententia is completed". |  |  |  |  |
| , | \&posit; | F1E2 | COMMA POSITURA |  |
| The positura is similar to COMMA 002C, but should be kept apart from this punctuation mark due to a different and more specialised usage. Cf. Malcolm B. <br> Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306. |  |  |  |  |
| , | \&ductsimpl; | F1E3 | HIGH COMMA POSITURA (SIMPLEX DUCTUS) |  |


| ; | \&punctvers; | F1EA |  | PUNCTUS VERSUS |
| :---: | :---: | :---: | :---: | :---: |
| Similar in shape to the semicolon (003B), but should be kept apart from this mark. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992 , pp. $301,306$. |  |  |  |  |
| $\cdot 7$ | \&punctposit; | F1E4 |  | PUNCTUS WITH COMMA POSITURA |
| Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306. |  |  |  |  |
| $\therefore 7$ | \&colmidcomposit; | F1E5 |  | COLON WITH MIDDLE COMMA POSITURA |
| Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 306. |  |  |  |  |
| $\because$ | \&bidotscomposit; | F1F2 |  | TWO DOTS OVER COMMA POSITURA |
| Attested in Old Icelandic, e.g. in Holm perg 15 B 4to (see Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, pl. 8:14) and in GKS 2365 4to (Codex Regius of the Eddic poems). |  |  |  |  |
| $\because$ | \&tridotscomposit; | F1E6 |  | THREE DOTS WITH COMMA POSITURA |
| This punctuation mark looks like an upwards-pointing triangle of dots with a comma between (and below) the two lower dots. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301 and 307. See also 2234 above in Mathematical Operators. |  |  |  |  |
| $\because$ | \&punctelev; | F161 | F161 | PUNCTUS ELEVATUS |
| This form of the punctus elevatus is typically found in English manuscripts and is sometimes seen as the default form. Sometimes called 'tick and point', e.g. by N.R. Ker, English Manuscripts in the Century after the Norman Conquest, Oxford, 1960, p. 46. |  |  |  |  |
| ! | \&punctelevdiag; | F1F0 |  | PUNCTUS ELEVATUS DIAGONAL STROKE |

## Variant form of the punctus elevatus.

| ! | \&punctelevhiback; | F1FA |  | PUNCTUS ELEVATUS WITH HIGH BACK |
| :--- | :--- | :--- | :--- | :--- |

Variant form of the punctus elevatus found in manuscripts in the Low countries, eastern France and the Rhineland.

|  | \&punctelevhack; | F1FB | PUNCTUS ELEVATUS WITH HACKLE |  |
| :--- | :--- | :--- | :--- | :--- |
| Variant form of the punctus elevatus found in manuscripts from southern Germany. |  |  |  |  |
| $?$ | \&punctflex; | F1F5 |  | PUNCTUS FLEXUS |

Looks like the digit 7 with a dot below, sometimes referred to as 'seven and point' (e.g. by N.R. Ker, English Manuscripts in the Century after the Norman Conquest, Oxford, 1960, p. 47). Also called PUNCTUS CIRCUMFLEXUS. Used to mark sentence-medial pauses, especially in liturgical texts where the pitch of the voice drops. Cf. also Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 301, 306. Note that the shape in Parkes' book looks more like an open 'a' than ' 7 ', but this is basically a question of variance.

| $!$ | \&punctexclam; | F1E7 |  | PUNCTUS EXCLAMATIVUS |
| :--- | :--- | :--- | :--- | :--- |

Early form with two dots below each other and a diagonal stroke on top of them. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301.

| $\boldsymbol{f}$ | \&punctinter; | F160 | F160 | PUNCTUS INTERROGATIVUS |
| :--- | :--- | :--- | :--- | :--- |
| $\tilde{\sim}$ | \&punctintertilde; | F1E8 |  | PUNCTUS INTERROGATIVUS HORIZONTAL TILDE |

This is a variant of the question mark where the swash (tilde) is horizontal. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992 , p. 301.

| $\because$ | \&punctinterlemn; | F1F1 |  | PUNCTUS INTERROGATIVUS LEMNISKATE FORM |
| :--- | :--- | :--- | :--- | :--- |

Attested in Old Icelandic, but very marginal. For examples, see Holm perg 15 B 4to (cf. Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, pl. $8: 13$ and $8: 19$ ).


Looks like a horizontally flipped (i.e. reversed) modern question mark. Used in late texts to mark the end of a question that does not require an answer (i.e. a rhetorical question), as opposed to the PUNCTUS INTERROGATIVUS.


Frequently used in English manuscripts in the 12th century in the form of a wavy line or sometimes a straight line. Placed slightly above the base line.

| , | \&medcom; | F1E0 | MEDIEVAL COMMA |
| :--- | :--- | :--- | :--- | :--- |

Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 301. According to Parkes, this mark "appears most frequently in the work of fourteenthcentury Italian scribes" (p. 303).

| $\bar{P}$ | \&parag; | F1E1 |  | PARAGRAPHUS |
| :--- | :--- | :--- | :--- | :--- |

Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, pp. 12, 43, 305.

| $\because$ | \&renvoi; | F1EC |  | SIGNE DE RENVOI |
| :--- | :--- | :--- | :--- | :--- |

Looks like two dots over a single dot. Used to connect a marginal note to a place in the text. Looks similar to TWO DOTS OVER ONE DOT PUNCTUATION below, but has a different usage and the dots are more widely spaced.


Similar to 2237 PROPORTION in Mathematical Operators, but should be recognised as a separate punctuation character and given its own code point.

| $\because$ | \&tridotsdownw; | F1EE |  | TWO DOTS OVER ONE DOT PUNCTUATION |
| :--- | :--- | :--- | :--- | :--- |

Similar to 2235 BECAUSE in Mathematical Operators, but should be recognised as a separate punctuation character and given its own code point.


Similar to 2234 THEREFORE in Mathematical Operators, but should be recognised as a separate punctuation character and given its own code point.

| $\boldsymbol{\beta}$ | \&virgsusp; | F1F4 |  | VIRGULA SUSPENSIVA |
| :--- | :--- | :--- | :--- | :--- |

Looks like a solidus with a dot in the middle. Used to mark a very brief pause or hesitation in the text. Cf. Malcolm B. Parkes, Pause and Effect, Aldershot, 1992, p. 307.

| $/$ | \&virgmin; | F1F7 |  | SHORT VIRGULA |
| :--- | :--- | :--- | :--- | :--- |

Looks like a virgule, but confined within the ' $x$ ' height (like a half-height slash), e.g. ' $x$ / $x$ '. Attested in late paper manuscripts of Medieval Nordic verse and not to be unified with the ordinary comma.

| - | \&brevdot; | F1F3 |  | PUNCTUATION MARK BREVE ABOVE DOT |
| :--- | :--- | :--- | :--- | :--- |

Deprecated in v. 2.0 of the MUFI character recommendation. Probably mistaken for punctus elevatus, and should therefore be removed. The code point should not, however, be used for any other character.

## Subrange 9: Critical and epigraphical signs

Critical signs are used in printed editions, indicating corruptions, deletions, additions etc. Many of these signs are already in the Unicode Standard v. 5.0:

- Basic Latin: asterisk, 002A, square brackets, 005B and 005D, curly brackets, 007B and 007D, single vertical line, 007C (cf. pp. 15-22).
- General Punctuation: double vertical line, 2016 (cf. p. 57).
- Miscellaneous Mathematical Symbols-A: double square brackets, 27E6 and 27E7, and angle brackets, 27E8 and 27E9 (cf. pp. 69-70).

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $r$ | \&luhsqb; | F1D2 |  | LEFT UPPER HALF SQUARE BRACKET |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 2E00 in Supplemental Punctuation (see p. 71 above). The 2E00 code point should be used hereafter, while the code point F1D2 should be retained for backwards compatibility and not used for any new character.

| ᄀ | \&ruhsqb; | F1D3 |  | RIGHT UPPER HALF SQUARE BRACKET |
| :--- | :--- | :--- | :--- | :--- |
| L | \&llhsqb; | F1D4 |  | LEFT LOWER HALF SQUARE BRACKET |
| $\lrcorner$ | \&rlhsqb; | F1D5 |  | RIGHT LOWER HALF SQUARE BRACKET |
| । | \&luslst; | F16E | F16E | LEFT UPPER SLANTED STROKE |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 2E0C in Supplemental Punctuation (see p. 71 above). The 2E0C code point should be used hereafter, while the F16E code point should be retained for backwards compatibility and not used for any new character.

|  | \&ruslst; | F16F | F16F | RIGHT UPPER SLANTED STROKE |
| :--- | :--- | :--- | :--- | :--- |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 2E0D in Supplemental Punctuation (see p. 71 above). The 2E0D code point should be used hereafter, while the F16F code point should be retained for backwards compatibility and not used for any new character.

| ,$~ \& l l s l s t ; ~$ | F1D6 |  | LEFT LOWER SLANTED STROKE |
| :--- | :--- | :--- | :--- | :--- |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 2E1C in Supplemental Punctuation (see p. 71 above). The 2E1C code point should be used hereafter, while the F1D6 code point should be retained for backwards compatibility and not used for any new character.

| , \&rlslst; | F1D7 |  | RIGHT LOWER SLANTED STROKE |
| :--- | :--- | :--- | :--- | :--- |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 2E1D in Supplemental Punctuation (see p. 71 above). The 2E1D code point should be used hereafter, while the F1D7 code point should be retained for backwards compatibility and not used for any new character.

| $\boldsymbol{f}$ | \&verbarq1; | F1D8 |  | VERTICAL LINE WITH LEFT QUILL |
| :--- | :--- | :--- | :--- | :--- |
| ト | \&verbarqr; | FID9 |  | VERTICAL LINE WITH RIGHT QUILL |

This pair of brackets is used to indicate dittography (right quill, then left quill) or erasure (right quill, then left quill) in critical editions of Old Norse texts.

| $\circ$ | \&midring; | F1DA |  | MIDDLE RING |
| :--- | :--- | :--- | :--- | :--- |
| キ | \&ramus; | F1DB |  | PALM BRANCH |
| C | \&lUbrack; | F1DC |  | LEFT SIDEWAYS U BRACKET |
| כ | \&rUbrack; | F1DD |  | RIGHT SIDEWAYS U BRACKET |

This pair of characters is used to enclose Claudian letters in Latin epigraphy.

| $))$ | \&ldblpar; | F1DE |  | LEFT DOUBLE PARENTHESIS |
| :--- | :--- | :--- | :--- | :--- |
| $(($ | \&rdblpar; | F1DF |  | RIGHT DOUBLE PARENTHESIS |

## Subrange IO: Metrical symbols

This is the type of symbols used by Eduard Sievers in his Altgermanische Metrik (Halle: Max Niemeyer, 1893). They are still frequently used in text books, monographs and articles on Medieval Nordic metrics.

Thesaurus Linguae Grecae (TLG) has recently proposed a set of metrical symbols for Greek. This proposal was approved by Unicode and made part of v. 4.1 of the Unicode Standard. The TLG proposal includes symbols for the short syllable (breve), for the combination of a short and long syllable (metrical short over long, or metrical long over short) and for a combination of a long and two short syllables. These characters have been added to Miscellaneous Technical (see pp. 67-68 above). The default character (anceps) is identified with MULTIPLICATION SIGN (00D7) in Latin-1 Supplement, and the symbol for long syllable (longum) is identified with FIGURE DASH (2012) or EN DASH (2013) in General Punctuation. Combinations of anceps, breve or longum with acute accent, grave accent or double acute accent can be achieved by using COMBINING ACUTE ACCENT (0301), COMBINING GRAVE ACCENT (0300) or COMBINING DOUBLE ACUTE ACCENT (030B) in Combining Diacritical Marks. However, this does not work in all applications, so for the time being precomposed characters will be useful.

Junicode and Alphabetum have metrical symbols in different locations of the Private Use Area, so a code-point conflict is inevitable for this range. Since Alphabetum has the largest selection, code points in this font have been chosen, metrical symbols being placed in the F700-F71F section. However, all duplicate code points in Junicode as of version 0.6 .12 are listed below. Alphabetum contains a number of additional metrical symbols, possibly also of interest for Medieval usage. See the F700-F76F section of this font.

Note that combining single and double vertical bars are located in Combining Diacritical Marks, code points 030D and 030E (p. 43 above). They are used to indicate stress (single bar) and stress + alliteration (double bar).

| Glyph | MuFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| X | \&metranc; | F70A | F164 | METRICAL SYMBOL ANCEPS |

As stated above, this character can be encoded with 00D7 MULTIPLICATION SIGN and the entity name '\×'. We recommend that the 00D7 code point should be used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F70A should be given the entity name '\&metranc;' and the descriptive name METRICAL SYMBOL ANCEPS.

| X | \&metrancacute; | F70B | F165 | METRICAL SYMBOL ANCEPS WITH ACUTE (PRIMARY STRESS) |
| :---: | :---: | :---: | :---: | :---: |
| " | \&metrancdblac; | F719 |  | METRICAL SYMBOL ANCEPS WITH DOUBLE ACUTE (PRIMARY STRESS AND ALLITERATION) |
| $\dot{\text { X }}$ | \&metrancgrave; | F70C | F166 | METRICAL SYMBOL ANCEPS WITH GRAVE (SECONDARY STRESS) |
| Х | \&metrancdblgrave; | F71A |  | METRICAL SYMBOL ANCEPS WITH DOUBLE GRAVE (SECONDARY STRESS AND ALLITERATION) |
| $\checkmark$ | \&metrbreve; | F701 | F16A | METRICAL SYMBOL BREVE |
| In v. 4.1 of the Unicode Standard, this character was assigned to code point 23D1 in Miscellaneous Technical (se p. 67 above). We recommend that the 23D1 code point should be used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F701 should be given the entity name '\&metrbreve;' and the descriptive name METRICAL SYMBOL BREVE. |  |  |  |  |
| $\bigcirc$ | \&metrbreveacute; | F706 | F16B | METRICAL SYMBOL BREVE WITH ACUTE (PRIMARY STRESS) |
| " | \&metrbrevedblac; | F717 |  | METRICAL SYMBOL BREVE WITH DOUBLE ACUTE (PRIMARY STRESS AND ALLITERATION) |
| シ | \&metrbrevegrave; | F707 | F16C | METRICAL SYMBOL BREVE WITH GRAVE (SECONDARY STRESS) |
| シ | \&metrbrevedblgrave; | F718 |  | METRICAL SYMBOL BREVE WITH DOUBLE GRAVE (SECONDARY STRESS AND ALLITERATION) |
| - | \&metrmacr; | F700 | F167 | METRICAL SYMBOL LONGUM |

As stated above, this character can be encoded with 2012 FIGURE DASH and the entity name '\&numdash;'. We recommend that the 2012 code point should be used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F700 should be given the entity name '\&metrmacr;' and the descriptive name METRICAL SYMBOL LONGUM.

| - | \&metrmacracute; | F704 | F168 | METRICAL SYMBOL LONGUM WITH ACUTE (PRIMARY STRESS) |
| :---: | :---: | :---: | :---: | :---: |
| \# | \&metrmacrdblac; | F715 |  | METRICAL SYMBOL LONGUM WITH DOUBLE ACUTE (SECONDARY STRESS) |
| - | \&metrmacrgrave; | F705 | F169 | METRICAL SYMBOL LONGUM WITH GRAVE (SECONDARY STRESS) |
| ㅡㅡㄹ | \&metrmacrdblgrave; | F716 |  | METRICAL SYMBOL LONGUM WITH DOUBLE GRAVE (SECONDARY STRESS AND ALLITERATION) |
| $\checkmark$ | \&metrmacrbreve; | F702 |  | METRICAL SYMBOL BREVE ABOVE LONGUM (SHORT OR LONG SYLLABLE) |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 23D3 in Miscellaneous Technical (se p. 68 above). We recommend that the 23D3 code point should be used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F702 should be given the entity name '\&metrmacrbreve;' and the descriptive name METRICAL SYMBOL BREVE ABOVE LONGUM (SHORT OR LONG SYLLABLE).

| ₹ | \&metrbrevemacr; | F703 | METRICAL SYMBOL LONGUM ABOVE BREVE <br> (SHORT OR LONG SYLLABLE) |
| :--- | :--- | :--- | :--- | :--- |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 23D2 in Miscellaneous Technical (se p. 67 above). We recommend that the 23D2 code point is used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F703 should be given the entity name '\&metrbrevemacr;' and the descriptive name METRICAL SYMBOL LONGUM ABOVE BREVE (SHORT OR LONG SYLLABLE).

| ㄴ | \&metrmacrbreveacute; | F708 | METRICAL SYMBOL BREVE ABOVE LONGUM WITH ACUTE (SHORT OR LONG SYLLABLE WITH PRIMARY STRESS) |
| :---: | :---: | :---: | :---: |
| ㄴ | \&metrmacrbrevegrave; | F709 | METRICAL SYMBOL BREVE ABOVE LONGUM WITH GRAVE (SHORT OR LONG SYLLABLE WITH SECONDARY STRESS) |
| $\bar{\sim}$ | \&metrdblbrevemacr; | F72E | METRICAL SYMBOL RESOLVED LIFT |

In v. 4.1 of the Unicode Standard, the character METRICAL SYMBOL RESOLVED LIFT was assigned to code point 23D4 in Miscellaneous Technical and given the descriptive name METRICAL LONG OVER TWO SHORTS. We recommend that the 23D4 code point should be used hereafter. However, for those who would like to continue using the set of metrical symbols in the Private Use Area, we recommend that the character F72E should be given the entity name '\&metrdblbrevemacr;' and the descriptive name METRICAL SYMBOL RESOLVED LIFT.

|  | \&metrdblbrevemacracute; | F71B | METRICAL SYMBOL RESOLVED LIFT WITH ACUTE <br> (PRIMARY STRESS) |
| :--- | :--- | :--- | :--- | :--- |
| $\stackrel{\prime \prime}{\omega}$ | \&metrdblbrevemacrdblac; | F71C | METRICAL SYMBOL RESOLVED LIFT WITH DOUBLE ACUTE <br> (PRIMARY STRESS AND ALLITERATION) |
| $\Lambda$ | \&metrpause; | F714 | METRICAL SYMBOL PAUSE |

There are several alternatives for this character in the Unicode Standard: 2227 LOGICALAND, 2038 CARET, or (as suggested by Thesaurus Linguae Grecae) 032D CARON BELOW. We recommend using the first of these, 2227 LOGICAL AND. This character has been added in Mathematical Operators above (p. 66) and should be used hereafter. However, for those who would like to continue with the complete set of metrical symbols in the Private Use Area, we recommend that the character F714 should be given the entity name '\&metrpause;' and the descriptive name METRICAL SYMBOL PAUSE.

## Subrange II: Additional number forms

Numbers are well covered in the Unicode Standard. The originally Arabic numbers 0-9 are part of the range Basic Latin (p. 16 above), and superscript and subscript numbers are located in the range Superscripts and subscripts (pp. 61-62 above), while Roman numerals are found in the range Number forms (pp. 64-65 above). The present subrange contains a small zero sign used for illegible characters and the three superscript Roman numerals I, V and X.

The characters ' j ', ' $v$ ' and ' x ' with a bar across are often used as numerals for $1 / 2,41 / 2$ and $91 / 2$ respectively. They have been listed in subrange 5 above.
Finally, Roman numerals are often supplied with a raised ' o ' as a morphological complement, e.g. ' $\mathrm{m}^{\circ}$ ' for millesimo or ' $\mathrm{c}^{\mathrm{o}}$ ' for centissimo. When the small ' o ' appears in a raised position immediately after the numeral, we recommend using 00BA MASCULINE ORDINAL INDICATOR in Latin-1 Supplement, because this is a spacing character. When the 'o' appears in superscript position, e.g. $\stackrel{\circ}{\mathrm{m}} \stackrel{\circ}{\circ} \mathrm{c} \mathrm{c}, 0366$ COMBINING LATIN SMALL LETTER O in Combining Diacritical Marks should be used.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| 0 | \&smallzero; | F1BD | SMALL BASE LINE ZERO SIGN |

This sign is commonly used in editions to indicate illegible characters (and could thus have been listed in subrange 9 ). It has the same shape as the digit 0 , but is only of $x$ height: ' $x 000 \mathrm{x}$ '

| $\mathbf{V}$ | $\& V \bmod ;$ | F1BE | MODIFIER CAPITAL LETTER V |
| :--- | :--- | :--- | :--- |
| $\mathbf{X}$ | $\& X \bmod ;$ | F1BF | MODIFIER CAPITAL LETTER X |

The three raised Roman numerals I, V and X are used by Ordbog over det norrøne prosasprog in rendering manuscript signatures. The first of these can be encoded with 1D35 MODIFIER CAPITAL LETTER I in Phonetic Extensions (see p. 48 above), while the latter two have been added here.

## Subrange 12: Weight, currency and measurement

Characters for weight, currency and measurement are covered in several Unicode charts. The most frequent ones, such as the dollar and pound signs, are found in Basic Latin and Latin-1 Supplement, while e.g.the prime, '"', (for minutes or feet) and the double prime, '"', (for seconds or inches) are found in General Punctuation (2000-206F). There is also a separate chart for monetary characters, Currency Symbols (20A0-20CF), and several signs can be found in Letterlike Symbols (2100-214F). One character, 20B0 GERMAN PENNY SIGN, has been selected from Currency symbols (p. 62 above).

The present subrange contains additional Medieval characters for these categories. It is worth noting that what was originally a measure of weight, such as the pound (libra), can also be understood as a currency, since these weights, typically in a precious metal like silver, became monetary symbols in their own right.

Some symbols can be analysed as modified base-line characters and placed in subrange 5. That applies to the long 's' with flourish used in Medieval Nordic for abbreviations of words like 'ser' and 'son', and also as an abbreviation of 'sælda' (of sáld) in the Middle Norwegian measurement halfscelda, ' $41 / 2$ pails of butter’, "hæff". See E8B7 LATIN SMALL LETTER LONG S WITH FLOURISH (p. 91 above).

The journal Signa: Beiträge zur Signographie vol. 3 (2002), "Die Zeichen des Geldes", has an extensive discussion of monetary symbols and contains further documentation of most of the characters listed below.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| $\Pi$ | \&romaslibr; | F2E0 | ROMAN AS LIBRALIS SIGN |

Roman monetary unit, cf. Hans Biedermann and Inge Schwarz-Winklhofer, Das Buch der Zeichen und Symbole, Graz 1980.

| $\boldsymbol{X}$ | \&romXbar; | F2E1 | LATIN CAPITAL LETTER X WITH BAR (DENARIUS SIGN) |
| :--- | :--- | :--- | :--- |
| Called ROMAN DENARIUS SIGN by David J. Perry in his Unicode proposal of 5 May 2006. |  |  |  |
| $\mathbf{X}$ | \&romscapxbar; | F2E2 | LATIN SMALL CAPITAL LETTER X WITH BAR (DENARIUS SIGN) |
| $\Psi$ | \&romscapybar; | F2E3 | LATIN SMALL CAPITAL LETTER Y WITH BAR |


| $\not \square$ | \&romscapdslash; | F2E4 | LATIN SMALL CAPITAL LETTER D WITH SLASH |
| :--- | :--- | :--- | :--- |

The four characters above are Roman monetary units and are attested in Diokletians Preisedikt, ed. Siegfried Lauffer, Berlin 1971.


Used for Denar, Denier and Pfennig, and should therefore be distinguished from the italic form of 00F0 LATIN SMALL LETTER ETH.

| 3 | $\&$ dram; | F2E6 | PHARMACEUTICAL DRAM SIGN |
| :--- | :--- | :--- | :--- |
| Officinal drachme sign. |  |  |  |
| $\ddot{\mathrm{V}}$ | \&ecu; | F2E7 | ECU SIGN |

Attested in Cristoph Pflugbeil, Anfangsgründe der kaufmännischen Rechenkunst, Leipzig 1773.

| $f e$ | \&florloop; | F2E8 | FLOREN SIGN WITH LOOP |
| :--- | :--- | :--- | :--- |
| Monetary sign for Floren, Gulden.   <br> ge \&grosch; F2E9 GROSCHEN SIGN |  |  |  |
| Monetary sign for Grossus, Gros, Groschen. |  |  |  |
| W | \&libradut; | F2EA | DUTCH LIBRA SIGN |
| General Dutch sign for libra. A similar shape is also attested in a number of Medieval Nordic sources for the (skål)pund (lb.); cf. Mål og vekt (Nordisk Kul- <br> tur vol. 30), Oslo-Stockholm-København 1933, p. 283. |  |  |  |


| t | \& librafren; | F2EB | FRENCH LIBRA SIGN |
| :---: | :---: | :---: | :---: |
| This is a simplified variant of 2114 L B BAR SYMBOL in Letterlike Symbols, but with a specific usage compared with this character and also sufficiently different from the Dutch shape shown above. |  |  |  |
| 2 | \& libraital; | F2EC | ITALIAN LIBRA SIGN |
| Italian monetary sign for libra. |  |  |  |
| $\mathcal{L}$ | \& libraflem; | F2ED | FLEMISH LIBRA SIGN |
| Monetary sign for the Flemish pound. |  |  |  |
| 发 | \&liranuov; | F2EE | LIRA NUOVA SIGN |
| $\mathscr{L}$ | \& lirasterl; | F2EF | LIRA STERLINA SIGN |
| The two lira signs above are attested in a printed Italian source from the 19th century. |  |  |  |
| $\downarrow$ | \&markold; | F2F0 | OLD MARK SIGN |
| Monetary sign for the mark, used in several European countries. A similar shape is also attested in a number of Medieval Nordic sources for the Mark (m.); cf. Mål og vekt (Nordisk Kultur vol. 30), Oslo-Stockholm-København 1933, p. 283. |  |  |  |
| 8 | \&markflour; | F2F1 | OLD FLOURISH MARK SIGN |
| $m$ | \&msign; | F2F2 | MARKED SMALL LETTER M SIGN |


| 亿 | \&msignflour; | F2F3 | FLOURISHED SMALL LETTER M SIGN |
| :--- | :--- | :--- | :--- |
| ¢ | \&obol; | F2F4 | PHARMACEUTICAL OBOLUS SIGN |

This is the Obolus sign in medicinal usage; cf. Hans Biedermann and Inge Schwarz-Winklhofer, Das Buch der Zeichen und Symbole, Graz 1980. Cf. also Adriano Capelli, Dizionario di abbreviature latine ed italiane, 6th ed., Milano 1979, p. 411 'scrupulus semis'.


Monetary unit in Medieval Nordic sources for the Penning (sg. peningr, pl. peningar); cf. Mål og vekt (Nordisk Kultur vol. 30), Oslo-Stockholm-København 1933, p. 283. Not to be unified with 20B0 GERMAN PENNY SIGN in Currency Symbols.

| $\varkappa$ | \&reichtalold; | F2F6 | OLD REICHSTALER SIGN |
| :--- | :--- | :--- | :--- |
| $\beta$ | \&schillgerm; | F2F7 | GERMAN SCHILLING SIGN |

Monetary unit, to be kept apart from 00DF LATIN SMALL LETTER SHARP S in Latin-1 Supplement.

| $\mathcal{P Q}$ | \&schillgermscript; | F2F8 | GERMAN SCRIPT SCHILLING SIGN |
| :--- | :--- | :--- | :--- |
| $\zeta$ | \&scudi; | F2F9 | SCUDI SIGN |

Attested in Adriano Capelli, Dizionario di abbreviature latine ed italiane, 6th ed., Milano 1979, p. 411 'scudi'. Should not be unified with 2125 OUNCE SIGN in Letterlike Symbols.

| HS | \&sestert; | F2FA | SESTERTIUS SIGN |
| :--- | :--- | :--- | :--- |

Attested in Leonhard Schumacher, Römische Inschriften, Stuttgart 1988. This is in fact a crossbarred sequence of 'II' (two) and 'S' (semis, i.e. one half), thus expressing the value $21 / 2$ (As). Called ROMAN SESTERTIUS SIGN by David J. Perry in his Unicode proposal of 5 May 2006.

| $\Sigma$ | \&sextans; | F2FB | PHARMACEUTICAL SEXTANS SIGN |
| :---: | :---: | :---: | :---: |
| Attested in Adriano Capelli, Dizionario di abbreviature latine ed italiane, 6th ed., Milano 1979, p. 411 'sextans (2 oncie)', and Hans Biedermann and Inge Schwarz-Winklhofer, Das Buch der Zeichen und Symbole, Graz 1980. Called ROMAN SEXTANS SIGN by David J. Perry in his Unicode proposal. |  |  |  |
| 9 | The Italian 'soldi' sign (attested in manuscripts from the 16 th/17th centuries) can be unified with F1A8 LATIN ABBREVIATION SIGN SCRIPT S WITH STROKE in the Private Use Area, subrange 4 above (p. 87). |  |  |
| (3) | \&ouncescript; | F2FD | SCRIPT OUNCE SIGN |
| Cf. Hans Biedermann and Inge Schwarz-Winklhofer, Das Buch der Zeichen und Symbole, Graz 1980. |  |  |  |
| 7 | \&romas; | F2D8 | ROMAN AS SIGN |
| $\longleftarrow$ | \&romunc; | F2D9 | ROMAN UNCIA SIGN |
| C | \&romsemunc; | F2DA | ROMAN SEMIUNCIA SIGN |
| 2 | \&romsext; | F2DB | ROMAN SEXTULA SIGN |
| $z$ | \&romdimsext; | F2DC | ROMAN DIMIDIA SEXTULA SIGN |
| )) | \&romsiliq; | F2DD | ROMAN SILIQUA SIGN |
| V | \&romquin; | F2DE | ROMAN QUINARIUS SIGN |
| II | \&romdupond; | F2DF | ROMAN DUPONDIUS SIGN |
| The 8 characters above belong to the Unicode proposal of 5 May 2006 by David J. Perry. |  |  |  |

## Subranges 13-14:

Reserved for future additions.

## Category 2: Precomposed characters

Precomposed characters are base-line characters with one or more diacritical marks. They have been co-ordinated with characters in the Titus project and are allocated code points in the E000-F0FF section of the Private Use Area. Precomposed characters will be decommissioned as soon as mature Smart Font technology is widely available.

## Subrange 15: Characters with macron or overline

The overline (bar above) is probably the most used and also the most ambiguous of all abbreviation marks. There are two typical positions of the overline: above the full height of the majuscules and above the $x$-height of the minuscules. In the latter position it typically crosses the ascender of characters like ' $b$ ', ' $d$ ', ' $h$ ', ' $k$ ', 'l', 'thorn' and long 's'. If the word has a mixture of characters with and without ascenders, the bar should sometimes be kept in the upper position over all characters.

There are two typical lengths of the overline: less than the width of a character, like the macron, or the full width of the character, so that it can extend as a continuous line over several characters.

With present font technology, the overline is particularly difficult. In some fonts and operating systems it will change its vertical position depending on the height of each character. Thus, in an abbreviation such as 'ihc' for 'Iesus', the overline may have one position over ' $c$ ', a slightly higher position over ' $i$ ', and an even higher position over ' $h$ '.

This range is intended as a work-around until mature Smart Font technology is widely available. It has separate code points for all characters where the overline crosses the ascender, either as a single stroke (macron-length) or as a continuous stroke (overline).

Note that several characters in this range were used as Roman numerals: ' C ' with overline, F7B5, reversed ' C ' with overline, F23F, 'D' with overline, F7B6, 'I' with overline, E58C, 'L' with overline, F7B4, 'M' with overline, E1D2, 'V' with overline, F7B2, and 'X' with overline, F7B3.

Some of these characters can be identified with characters already in the Unicode Standard v. 5.0:

- Latin Extended-A: 'd' with stroke, 0111, 'h' with stroke, 0127, and 'I' with macron, 012A (pp. 31-32).
- Latin Extended-B: 'b’ with stroke, 0180 (p. 35).

A few others have been included in the Private Use Area above, subrange 5:

- Modified base-line abbreviation characters: 'k' with stroke, E7C5, 'thorn' with stroke, E73B, and 'long s' with stroke, E7FF (pp. 89-91).

Font designers should take care to align the overlines on all characters, i.e. those already in the Unicode Standard and those listed here.

Finally, note that this range has a combining macron and a combining overline, each in two positions: one for minuscules (in the same height as the dot over ' i ') and one for majuscules (in the same height as the accents). These combining characters have 'hard' positions, so that they will have the same height regardless of the characters below. In this respect, they differ from 0304 COMBINING MACRON and 0305 COMBINING OVERLINE, which may be displayed with variable height.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| - | \&macrhigh; | F00A | COMBINING HIGH MACRON WITH FIXED HEIGHT (PART-WIDTH) |
| - | \&macrmed; | F00B | COMBINING MEDIUM-HIGH MACRON WITH FIXED HEIGHT (PART-WIDTH) |
| - | \&ovlhigh; | F00C | COMBINING HIGH OVERLINE WITH FIXED HEIGHT (FULL-WIDTH) |
| $\bar{\square}$ | \&ovlmed; | F00D | COMBINING MEDIUM-HIGH OVERLINE WITH FIXED HEIGHT (FULL-WIDTH) |
| b | \&bovlmed; | E44D | LATIN SMALL LETTER B WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{C}}$ | \&Covlhigh; $=\mathrm{C}+\& \mathrm{bar}$ | $\begin{aligned} & \text { F7B5 } \\ & =0043+0305 \end{aligned}$ | LATIN CAPITAL LETTER C WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER C + COMBINING OVERLINE |
| $\bar{Э}$ | $\begin{aligned} & \text { \&romnumCrevovl; } \\ & =\& \text { CONbase; } \\ & +\& b a r ; \end{aligned}$ | $\begin{aligned} & \text { F23F } \\ & =2183 \\ & +0305 \end{aligned}$ | ROMAN NUMERAL REVERSED ONE HUNDRED WITH OVERLINE = ROMAN NUMERAL REVERSED ONE HUNDRED <br> + COMBINING OVERLINE |


| $\overline{\mathrm{D}}$ | \&Dovlhigh; $=\mathrm{D}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { F7B6 } \\ & =0044+0305 \end{aligned}$ | LATIN CAPITAL LETTER D WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER D + COMBINING OVERLINE |
| :---: | :---: | :---: | :---: |
| đ | \&dovlmed; | E491 | LATIN SMALL LETTER D WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{E}}$ | \&Eogonmacr; <br> = \& Eogon; <br> + \& combmacr; | $\begin{aligned} & \text { E0BC } \\ & =0118 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND MACRON <br> = LATIN CAPITAL LETTER E WITH OGONEK <br> + COMBINING MACRON |
| ę | \&eogonmacr; <br> = \ę <br> + \&combmacr; | $\begin{aligned} & \text { E4BC } \\ & =0119 \\ & +0304 \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND MACRON <br> = LATIN SMALL LETTER E WITH OGONEK <br> + COMBINING MACRON |
| 万 | \&hovlmed; | E517 | LATIN SMALL LETTER H WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{I}}$ | \&Iovlhigh; = I + \&bar; | $\begin{aligned} & \text { E150 } \\ & =0049+0305 \end{aligned}$ | LATIN CAPITAL LETTER I WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER I + COMBINING OVERLINE |
| 1 | \&iovlmed; = i + \&bar; | $\begin{aligned} & \text { E550 } \\ & =0069+0305 \end{aligned}$ | LATIN SMALL LETTER I WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER I WITH + COMBINING OVERLINE |
| $\overline{\mathrm{J}}$ | \&Jmacrhigh; = J + \&combmacr; | $\begin{aligned} & \text { E154 } \\ & =004 \mathrm{~A}+0304 \end{aligned}$ | LATIN CAPITAL LETTER J WITH HIGH MACRON (ABOVE CHARACTER) = LATIN CAPITAL LETTER J + COMBINING MACRON |
| $\overline{\mathrm{J}}$ | \&Jovlhigh; = J + \&bar; | $\begin{aligned} & \text { E152 } \\ & =004 \mathrm{~A}+0305 \end{aligned}$ | LATIN CAPITAL LETTER J WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER J + COMBINING OVERLINE |
| $\bar{\jmath}$ | \&jmacrmed; $=\mathrm{j}+\& \text { combmacr } ;$ | $\begin{aligned} & \text { E554 } \\ & =006 \mathrm{~A}+0304 \end{aligned}$ | LATIN SMALL LETTER J WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER J + COMBINING MACRON |


| $\bar{\jmath}$ | $\& j o v l m e d ;$ <br> $=\mathrm{j}+\& \mathrm{bar} ;$ | E552 <br> $=006 \mathrm{~A}+0305$ | LATIN SMALL LETTER J WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) <br> $=$ LATIN SMALL LETTER J + COMBINING OVERLINE |
| :--- | :--- | :--- | :--- |
| k | \&kovlmed; | E7C3 | LATIN SMALL LETTER K WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\mathbf{U}$ | \&Lstrokmed; | E1B0 | LATIN CAPITAL LETTER L WITH STROKE (ACROSS ASCENDER) |
| $\mathbf{1}$ | \&lstrokmed; | E5B0 | LATIN SMALL LETTER L WITH STROKE (ACROSS ASCENDER) |
| $\mathbf{1}$ | \&lovlmed; | E5B1 | LATIN SMALL LETTER L WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |

The overline in E5B1 has the same height as the stroke in E5B0, but has full width, thus connecting with any strokes on the previous or following character.

| $\bar{L}$ | \&Lovlhigh; $=\mathrm{L}+\text { \&bar; }$ | $\begin{aligned} & \text { F7B4 } \\ & =004 \mathrm{C}+0305 \end{aligned}$ | LATIN CAPITAL LETTER L WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER L + COMBINING OVERLINE |
| :---: | :---: | :---: | :---: |
| $\overline{\mathrm{I}}$ | \&lmacrhigh; $=1+$ \&combmacr; | $\begin{aligned} & \text { E596 } \\ & =006 \mathrm{C}+0304 \end{aligned}$ | LATIN SMALL LETTER L WITH HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER L + COMBINING MACRON |
| $\overline{1}$ | \&lovlhigh; $=1+\& b a r ;$ | $\begin{aligned} & \text { E58C } \\ & =006 \mathrm{C}+0305 \end{aligned}$ | LATIN SMALL LETTER L WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER L + COMBINING OVERLINE |
| $\overline{\mathrm{M}}$ | \&Mmacrhigh; = M + \&combmacr; | $\begin{aligned} & \text { E1B8 } \\ & =004 \mathrm{D}+0304 \end{aligned}$ | LATIN CAPITAL LETTER M WITH HIGH MACRON (ABOVE CHARACTER) = LATIN CAPITAL LETTER M + COMBINING MACRON |
| $\overline{\mathrm{M}}$ | \&Movlhigh; $=\mathrm{M}+\& \mathrm{bar} ;$ | $\begin{aligned} & \text { E1D2 } \\ & =004 \mathrm{D}+0305 \end{aligned}$ | LATIN CAPITAL LETTER M WITH HIGH OVERLINE (ABOVE CHARACTER) = LATIN CAPITAL LETTER M + COMBINING OVERLINE |
| $\overline{\mathrm{m}}$ | \&mmacrmed; <br> $=\mathrm{m}+$ \&combmacr; | $\begin{aligned} & \text { E5B8 } \\ & =006 \mathrm{D}+0304 \end{aligned}$ | LATIN SMALL LETTER M WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER M + COMBINING MACRON |


| $\overline{\mathrm{m}}$ | \&movlmed; = M + \&bar; | $\begin{aligned} & \text { E5D2 } \\ & =006 \mathrm{D}+0305 \end{aligned}$ | LATIN SMALL LETTER M WITH MEDIUM-HIGH OVERLINE (ABOVE CHARACTER) = LATIN SMALL LETTER M + COMBINING OVERLINE |
| :---: | :---: | :---: | :---: |
| $\overline{\mathrm{N}}$ | \&Nmacrhigh; $=\mathrm{N}+\& \mathrm{combmacr}$; | $\begin{aligned} & \text { E1DC } \\ & =004 \mathrm{E}+0304 \end{aligned}$ | LATIN CAPITAL LETTER N WITH HIGH MACRON (ABOVE CHARACTER) = LATIN CAPITAL LETTER $\mathrm{N}+$ COMBINING MACRON |
| $\overline{\mathrm{n}}$ | \&nmacrmed; = $\mathrm{n}+$ \& combmacr; | $\begin{aligned} & \text { E5DC } \\ & =006 \mathrm{E}+0304 \end{aligned}$ | LATIN SMALL LETTER N WITH MEDIUM-HIGH MACRON (ABOVE CHARACTER) = LATIN SMALL LETTER $\mathrm{N}+$ COMBINING MACRON |
| $\varnothing$ | \&Oslashmacr; <br> $=$ \& Oslash; + <br> \& combmacr; | $\begin{aligned} & \mathrm{E} 252 \\ & =00 \mathrm{D} 8 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND MACRON <br> = LATIN CAPITAL LETTER O WITH STROKE <br> + COMBINING MACRON |
| $\bar{\emptyset}$ | \& oslashmacr; <br> = \& oslash; + <br> \&combmacr; | $\begin{aligned} & \text { E652 } \\ & =00 \mathrm{~F} 8 \\ & +0304 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND MACRON <br> = LATIN SMALL LETTER O WITH STROKE <br> + COMBINING MACRON |
| $\overline{\mathrm{C}}$ | \& OEligmacr; <br> = \Œ <br> + \&combmacr; | $\begin{aligned} & \text { E25D } \\ & =0152 \\ & +0304 \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH MACRON <br> = LATIN CAPITAL LIGATURE OE <br> + COMBINING MACRON |
| $\overline{\text { ® }}$ | \&oeligmacr; <br> = \œ <br> + \& combmacr; | $\begin{aligned} & \text { E65D } \\ & =0153 \\ & +0304 \end{aligned}$ | LATIN SMALL LIGATURE OE WITH MACRON <br> = LATIN SMALL LIGATURE OE <br> + COMBINING MACRON |
| I | \&slongovlmed; | E79E | LATIN SMALL LETTER LONG S WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |
| $\overline{\mathrm{V}}$ | \& Vmacr; <br> = V + \&combmacr; | $\begin{aligned} & \text { E34D } \\ & =0056+0304 \end{aligned}$ | LATIN CAPITAL LETTER V WITH MACRON <br> = LATIN CAPITAL LETTER V + COMBINING MACRON |


| $\overline{\mathrm{V}}$ | \&Vovlhigh; <br> $=\mathrm{V}+\& \mathrm{bar} ;$ | F7B2 <br> $=0056+0305$ | LATIN CAPITAL LETTER V WITH HIGH OVERLINE (ABOVE CHARACTER) <br> $=$ LATIN CAPITAL LETTER V + COMBINING OVERLINE |
| :--- | :--- | :--- | :--- |
| $\overline{\mathrm{V}}$ | \&vmacr; <br> $=\mathrm{v}+\&$ combmacr; $;$ | E74D <br> $=0076+0304$ | LATIN SMALL LETTER V WITH MACRON <br> $=$ LATIN SMALL LETTER V + COMBINING MACRON |
| $\overline{\mathrm{X}}$ | \&Xovlhigh; <br> $=\mathrm{X}+\& \mathrm{bar} ;$ | F7B3 <br> $=0058+0305$ | LATIN CAPITAL LETTER X WITH HIGH OVERLINE (ABOVE CHARACTER) <br> $=$ LATIN CAPITAL LETTER X |
| $\overline{\mathrm{p}}$ | \&thornovlmed; | E7A2 | LATIN SMALL LETTER THORN WITH MEDIUM-HIGH OVERLINE (ACROSS ASCENDER) |

## Subrange 16: Characters with acute accent

The Unicode Standard v. 5.0 has acute accent over the vowels ' A ', ' a ', ' E ', 'e', ' I ', ' i ', ' O ', ' o ', ' U ', ' u ', ' Y ' and ' y ' in Latin-1 Supplement ( pp . 25-30 above)
 ' Z ' and ' Z ' in Latin Extended- $A$, ' G ' and ' g ' in Latin Extended- $B$, and ' K ', ' k ', ' M ', ' m ', ' P ', ' p ', ' W ' and ' w ' in Latin Extended Additional.

Combinations of consonants and the acute accent are rare in Medieval sources but have even so been included in the present recommendation. The combining acute accent, 0301, is located in Combining Diacritical Marks (p. 42), and with a Smart Font solution this can be used throughout this subrange.

Note that two characters have duplicate code points in Junicode (v. 0.6.12): E20C and E60C.

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| Á | \&Aogonacute; <br> = A + \&combogon; <br> + \&combacute; | E004 <br> $=0041+0328$ <br> +0301 | LATIN CAPITAL LETTER A WITH OGONEK AND ACUTE <br> = LATIN CAPITAL LETTER A + COMBINING OGONEK <br> + COMBINING ACUTE ACCENT |  |


| á | \&aogonacute; <br> $=\mathrm{a}+\&$ combogon; <br> + \&combacute; | $\begin{aligned} & \text { E404 } \\ & =0061+0328 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER A WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER A + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| ÁA | \&AAligacute; $=\& A A l i g ;+\& c o m b a c u t e ;$ | $\begin{aligned} & \text { EFE0 } \\ & =\text { EF90 }+0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AA WITH ACUTE = LATIN CAPITAL LIGATURE AA + COMBINING ACUTE ACCENT |
| á | \&aaligacute; <br> = \&aalig; + \&combacute; | $\begin{aligned} & \text { EFE1 } \\ & =\text { EF91 + } 0301 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH ACUTE = LATIN SMALL LIGATURE AA + COMBINING ACUTE ACCENT |
| AO | \&AOligacute; <br> $=\& A O l i g ;+\& c o m b a c u t e ;$ | $\begin{aligned} & \text { EFE2 } \\ & =\text { EF92 + } 0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AO WITH ACUTE = LATIN CAPITAL LIGATURE AO + COMBINING ACUTE ACCENT |
| ว́ | \&aoligacute; <br> = \&aolig; + \&combacute; | $\begin{aligned} & \text { EFE3 } \\ & =\text { EF93 + } 0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE AO WITH ACUTE } \\ & \text { = LATIN SMALL LIGATURE AO + COMBINING ACUTE ACCENT } \end{aligned}$ |
| $A^{\prime}{ }^{\prime}$ | \&AUligacute; <br> = \&AUlig; + \&combacute; | $\begin{aligned} & \text { EFE4 } \\ & =\text { EF94 + } 0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AU WITH ACUTE = LATIN CAPITAL LIGATURE AU + COMBINING ACUTE ACCENT |
| á | \&auligacute; <br> = \&aulig; + \&combacute; | $\begin{aligned} & \text { EFE5 } \\ & =\text { EF95 + } 0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE AU WITH ACUTE } \\ & \text { = LATIN SMALL LIGATURE AU + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ÁV | \&AVligacute; <br> = \&AVlig; + \& combacute; | $\begin{aligned} & \text { EFE6 } \\ & =\text { EF96 + } 0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LIGATURE AV WITH ACUTE } \\ & \text { = LATIN CAPITAL LIGATURE AV + COMBINING ACUTE ACCENT } \end{aligned}$ |
| á | \&avligacute; <br> = \&avlig; + \&combacute; | $\begin{aligned} & \text { EFE7 } \\ & =\text { EF97 + } 0301 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH ACUTE = LATIN SMALL LIGATURE AV + COMBINING ACUTE ACCENT |
| $A^{\prime \prime}$ | \&AVligslashacute; <br> $=$ \&AVligslash; <br> + \& combacute; | $\begin{aligned} & \text { EBB0 } \\ & =\text { EF98 } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH STROKE AND ACUTE = LATIN CAPITAL LIGATURE AV WITH STROKE <br> + COMBINING ACUTE ACCENT |


| á | \&avligslashacute; <br> = \&avligslash; <br> + \&combacute; | $\begin{aligned} & \text { EBB1 } \\ & =\text { EF99 } \\ & +0301 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH STROKE AND ACUTE <br> = LATIN SMALL LIGATURE AV WITH STROKE <br> + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| B | \& Bacute; <br> = B + \&combacute; | $\begin{aligned} & \text { E044 } \\ & =0042+0301 \end{aligned}$ | LATIN CAPITAL LETTER B WITH ACUTE <br> = LATIN CAPITAL LETTER B + COMBINING ACUTE ACCENT |
| b́ | \&bacute; <br> $=\mathrm{b}+\&$ combacute; | $\begin{aligned} & \text { E444 } \\ & =0062+0301 \end{aligned}$ | LATIN SMALL LETTER B WITH ACUTE <br> = LATIN SMALL LETTER B + COMBINING ACUTE ACCENT |
| D | \&Dacute; <br> = D + \&combacute; | $\begin{aligned} & \text { E077 } \\ & =0044+0301 \end{aligned}$ | LATIN CAPITAL LETTER D WITH ACUTE <br> = LATIN CAPITAL LETTER D + COMBINING ACUTE ACCENT |
| d | \& dacute; <br> = d + \& combacute; | $\begin{aligned} & \text { E477 } \\ & =0064+0301 \end{aligned}$ | LATIN SMALL LETTER D WITH ACUTE <br> = LATIN SMALL LETTER D + COMBINING ACUTE ACCENT |
| д́ | \&drotacute; <br> = \&drot; + \&combacute; | $\begin{aligned} & \text { EBB2 } \\ & =\text { F109 + } 0301 \end{aligned}$ | LATIN SMALL LETTER D ROTUNDA WITH ACUTE <br> = LATIN SMALL LETTER D ROTUNDA + COMBINING ACUTE ACCENT |
| É | \&Eogonacute; <br> $=\mathrm{E}+\&$ combogon; <br> $+\& c o m b a c u t e ;$ | $\begin{aligned} & \text { E099 } \\ & =0045+0328 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND ACUTE <br> = LATIN CAPITAL LETTER E + COMBINING OGONEK <br> + COMBINING ACUTE ACCENT |
| ę | \&eogonacute; <br> = e + \&combogon; <br> + \& combacute; | $\begin{aligned} & \text { E499 } \\ & =0065+0328 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND ACUTE <br> = LATIN SMALL LETTER E + COMBINING OGONEK <br> + COMBINING ACUTE ACCENT |
| F́ | \&Facute; <br> = F + \& combacute; | $\begin{aligned} & \text { E0F0 } \\ & =0046+0301 \end{aligned}$ | LATIN CAPITAL LETTER F WITH ACUTE <br> = LATIN CAPITAL LETTER F + COMBINING ACUTE ACCENT |


| f | \&facute; <br> = f + \& combacute; | $\begin{aligned} & \text { E4F0 } \\ & =0066+0301 \end{aligned}$ | LATIN SMALL LETTER F WITH ACUTE <br> = LATIN SMALL LETTER F + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| F́ | \&Finsacute; <br> $=\&$ Fins $;+\&$ combacute; | $\begin{aligned} & \text { EBB3 } \\ & =\text { F10C }+0301 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR F WITH ACUTE <br> = LATIN CAPITAL LETTER INSULAR F + COMBINING ACUTE ACCENT |
| f | \&finsacute; <br> = \&fins; + \&combacute; | $\begin{aligned} & \text { EBB4 } \\ & =\text { F10D + } 0301 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH ACUTE <br> = LATIN SMALL LETTER INSULAR F + COMBINING ACUTE ACCENT |
| H' | \&Hacute; <br> = H + \& combacute; | $\begin{aligned} & \text { E116 } \\ & =0048+0301 \end{aligned}$ | LATIN CAPITAL LETTER H WITH ACUTE <br> = LATIN CAPITAL LETTER H + COMBINING ACUTE ACCENT |
| h' | \&hacute; <br> = h + \&combacute; | $\begin{array}{\|l} \text { E516 } \\ =0068+0301 \end{array}$ | LATIN SMALL LETTER H WITH ACUTE <br> = LATIN SMALL LETTER H + COMBINING ACUTE ACCENT |
| J | \& Jacute; <br> = J + \& combacute; | $\begin{aligned} & \text { E153 } \\ & =004 \mathrm{~A}+0301 \end{aligned}$ | LATIN CAPITAL LETTER J WITH ACUTE <br> = LATIN CAPITAL LETTER J + COMBINING ACUTE ACCENT |
| j | \&jacute; $=\mathrm{j}+$ \& combacute; | $\begin{aligned} & \text { E553 } \\ & =006 \mathrm{~A}+0301 \end{aligned}$ | LATIN SMALL LETTER J WITH ACUTE <br> = LATIN SMALL LETTER J + COMBINING ACUTE ACCENT |
| @́ | \&Muncacute; <br> = \&Munc; <br> + \& combacute; | $\begin{aligned} & \text { EBB5 } \\ & =\text { F11A } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER UNCIAL M WITH ACUTE <br> = LATIN CAPITAL LETTER UNCIAL M <br> + COMBINING ACUTE ACCENT |
| @́n | \&muncacute; <br> = \&munc; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBB6 } \\ & =\text { F225 } \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER UNCIAL M WITH ACUTE <br> = LATIN SMALL LETTER UNCIAL M <br> + COMBINING ACUTE ACCENT |


| Q́ | \&Oogonacute; <br> = O + \&combogon; <br> $+\& c o m b a c u t e ;$ | $\begin{aligned} & \text { E20C } \\ & =004 \mathrm{~F}+0328 \\ & +0301 \end{aligned}$ | F190 | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Q́ | \&oogonacute; <br> = o + \&combogon; <br> + \&combacute; | $\begin{aligned} & \text { E60C } \\ & =006 \mathrm{~F}+0328 \\ & +0301 \end{aligned}$ | F191 | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| O | $\begin{aligned} & \text { \&Ocurlacute; } \\ & \text { = \&Ocurl; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { EBB7 } \\ & =\text { E3D3 } \\ & +0301 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH CURL AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER O WITH CURL } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ó | \&ocurlacute; <br> = \&ocurl; <br> + \&combacute; | $\begin{aligned} & \text { EBB8 } \\ & =\text { E7D3 } \\ & +0301 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH CURL AND ACUTE } \\ & \text { = LATIN SMALL LETTER O WITH CURL } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ø | $\begin{aligned} & \text { \&Oslashogonacute; } \\ & =\text { \&Oslash; + \&combogon; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E257 } \\ & =00 \mathrm{D} 8+0328 \\ & +0301 \end{aligned}$ |  | LATIN CAPITAL LETTER O WITH STROKE AND OGONEK AND ACUTE = LATIN CAPITAL LETTER O WITH STROKE + COMBINING OGONEK + COMBINING ACUTE ACCENT |
| Ǿ | $\begin{aligned} & \text { \&oslashogonacute; } \\ & =\text { \&oslash; + \&combogon; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E657 } \\ & =00 \mathrm{~F} 8+0328 \\ & +0301 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH STROKE AND OGONEK AND ACUTE } \\ & \text { = LATIN SMALL LETTER O WITH STROKE + COMBINING OGONEK } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ĆE | $\begin{aligned} & \text { \&OEligacute; } \\ & =\& \text { OElig } ;+ \text { combacute; } \end{aligned}$ | $\begin{aligned} & \text { E259 } \\ & =0152+0301 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN CAPITAL LIGATURE OE WITH ACUTE } \\ & \text { = LATIN CAPITAL LIGATURE OE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ó | \&oeligacute; <br> = \œ + \&combacute; | $\begin{aligned} & \text { E659 } \\ & =0153+0301 \end{aligned}$ |  | LATIN SMALL LIGATURE OE WITH ACUTE <br> = LATIN SMALL LIGATURE OE + COMBINING ACUTE ACCENT |


| ÓO | \&OOligacute; <br> $=\&$ OOlig; + \&combacute; | $\begin{aligned} & \text { EFE8 } \\ & =\text { F20A }+0301 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH ACUTE <br> = LATIN CAPITAL LIGATURE OO + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| Ó | \&ooligacute; <br> = \&oolig; + \&combacute; | $\begin{aligned} & \text { EFE9 } \\ & =\text { F20B }+0301 \end{aligned}$ | LATIN SMALL LIGATURE OO WITH ACUTE <br> = LATIN SMALL LIGATURE OO + COMBINING ACUTE ACCENT |
| ${ }^{2}$ | \&rrotacute; <br> = \&rrot; + \&combacute; | $\begin{aligned} & \text { EBB9 } \\ & =\text { F20E }+0301 \end{aligned}$ | LATIN SMALL LETTER R ROTUNDA WITH ACUTE <br> = LATIN SMALL LETTER R ROTUNDA + COMBINING ACUTE ACCENT |
| 1 | \&slongacute; <br> = \&slong; + \&combacute; | $\begin{aligned} & \text { EBAF } \\ & =017 \mathrm{~F}+0301 \end{aligned}$ | LATIN SMALL LETTER LONG S WITH ACUTE <br> = LATIN SMALL LETTER LONG S + COMBINING ACUTE ACCENT |
| ' | $\begin{aligned} & \text { \&Tacute; } \\ & \text { = T \& \& combacute; } \end{aligned}$ | $\begin{aligned} & \text { E2E2 } \\ & =0054+0301 \end{aligned}$ | LATIN CAPITAL LETTER T WITH ACUTE <br> = LATIN CAPITAL LETTER T + COMBINING ACUTE ACCENT |
| $t^{\prime}$ | \&tacute; $=\mathrm{t}+$ \& combacute; | $\begin{aligned} & \text { E6E2 } \\ & =0074+0301 \end{aligned}$ | LATIN SMALL LETTER T WITH ACUTE <br> = LATIN SMALL LETTER T + COMBINING ACUTE ACCENT |
| V' | \& Vacute; <br> = V + \& combacute; | $\begin{aligned} & \text { E33A } \\ & =0056+0301 \end{aligned}$ | LATIN CAPITAL LETTER V WITH ACUTE <br> = LATIN CAPITAL LETTER V + COMBINING ACUTE ACCENT |
| V́ | \& vacute; = v + \&combacute; | $\begin{aligned} & \text { E73A } \\ & =0076+0301 \end{aligned}$ | LATIN SMALL LETTER V WITH ACUTE <br> = LATIN SMALL LETTER V + COMBINING ACUTE ACCENT |
| ṕ | \&Vinsacute; <br> $=\& V \mathrm{Vins} ;$ <br> + \&combacute; | $\begin{aligned} & \text { EBBA } \\ & =\text { F210 } \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR V (VEND) WITH ACUTE <br> = LATIN CAPITAL LETTER INSULAR V (VEND) <br> + COMBINING ACUTE ACCENT |
| $\underline{V}^{\prime}$ | \&vinsacute; <br> = \&vins; <br> + \& combacute; | $\begin{aligned} & \text { EBBB } \\ & =\text { F211 } \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER INSULAR V (VEND) WITH ACUTE } \\ & \text { = LATIN SMALL LETTER INSULAR V (VEND) } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |

## Subrange 17: Characters with double acute accent

The Unicode Standard v. 5.0 has double acute accent over ' $O$ ', ' $o$ ', ' $U$ ' and ' $u$ ' in Latin Extended- $A$ ( pp . 34-35 above). The list below contains additional character combinations. The combining double acute accent, 030B, is located in Combining Diacritical Marks (p. 43).

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| A̋ | \&Adblac; = A + \&combdblac; | $\begin{aligned} & \text { E025 } \\ & =0041+030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER A WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER A + COMBINING DOUBLE ACUTE ACCENT |
| á | \&adblac; <br> $=\mathrm{a}+\&$ combdblac; | $\begin{aligned} & \text { E425 } \\ & =0061+030 B \end{aligned}$ | LATIN SMALL LETTER A WITH DOUBLE ACUTE = LATIN SMALL LETTER A + COMBINING DOUBLE ACUTE ACCENT |
| ÁA | \&AAligdblac; = \&AAlig; + \&combdblac; | EFEA = EF90 + 030B | LATIN CAPITAL LIGATURE AA WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE AA + COMBINING DOUBLE ACUTE ACCENT |
| áa | \&aaligdblac; <br> = \&aalig; + \&combdblac; | $\begin{aligned} & \text { EFEB } \\ & =\text { EF91 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DOUBLE ACUTE = LATIN SMALL LIGATURE AA + COMBINING DOUBLE ACUTE ACCENT |
| ÁE | \&AEligdblac; <br> = \Æ + \&combdblac; | $\begin{aligned} & \text { E041 } \\ & =00 \mathrm{C} 6+030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DOUBLE ACUTE = LATIN CAPITAL LETTER AE + COMBINING DOUBLE ACUTE ACCENT |
| æ̋ | \&aeligdblac; <br> = \æ + \&combdblac; | E441 $=00 \mathrm{E} 6+030 \mathrm{~B}$ | LATIN SMALL LETTER AE WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER AE + COMBINING DOUBLE ACUTE ACCENT |
| AO | \&AOligdblac; <br> $=\& A O l i g ;+\& c o m b d b l a c ;$ | $\begin{aligned} & \text { EBC0 } \\ & =\text { EF92 + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE AO WITH DOUBLE ACUTE = LATIN CAPITAL LIGATURE AO + COMBINING DOUBLE ACUTE ACCENT |
| áO | \&aoligdblac; = \&aolig; + \&combdblac; | $\begin{aligned} & \text { EBC1 } \\ & =\text { EF93 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AO WITH DOUBLE ACUTE = LATIN SMALL LIGATURE AO + COMBINING DOUBLE ACUTE ACCENT |


| A'V | \&AVligdblac; <br> = \&AVlig; + \&combdblac; | $\begin{aligned} & \text { EBC2 } \\ & =\text { EF96 + 030B } \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE AV + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| á | \&avligdblac; <br> = \&avlig; + \&combdblac; | $\begin{aligned} & \text { EBC3 } \\ & =\text { EF97 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE AV WITH DOUBLE ACUTE <br> = LATIN SMALL LIGATURE AV + COMBINING DOUBLE ACUTE ACCENT |
| E | $\begin{aligned} & \& \text { Edblac; } \\ & =\mathrm{E}+\& \text { combdblac; } \end{aligned}$ | $\begin{aligned} & \text { E0D1 } \\ & =0045+030 B \end{aligned}$ | LATIN CAPITAL LETTER E WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER E + COMBINING DOUBLE ACUTE ACCENT |
| é | \&edblac; <br> = e + \& combdblac; | $\begin{aligned} & \text { E4D1 } \\ & =0065+030 B \end{aligned}$ | LATIN SMALL LETTER E WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER E + COMBINING DOUBLE ACUTE ACCENT |
| É | \&Eogondblac; <br> = \Ę <br> + \&combdblac; | $\begin{aligned} & \text { E0EA } \\ & =0118 \\ & +030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND DOUBLE ACUTE = LATIN CAPITAL LETTER E WITH OGONEK <br> + COMBINING DOUBLE ACUTE ACCENT |
| ę | \&eogondblac; <br> = \ę <br> + \&combdblac; | $\begin{aligned} & \text { E4EA } \\ & =0119 \\ & +030 B \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND DOUBLE ACUTE = LATIN SMALL LETTER E WITH OGONEK <br> + COMBINING DOUBLE ACUTE ACCENT |
| II | $\begin{aligned} & \text { \&Idblac; } \\ & \text { = I + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { E143 } \\ & =0049+030 B \end{aligned}$ | LATIN CAPITAL LETTER I WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER I + COMBINING DOUBLE ACUTE ACCENT |
| 亿 1 | \&idblac; = i + \&combdblac; | $\begin{aligned} & \text { E543 } \\ & =0069+030 B \end{aligned}$ | LATIN SMALL LETTER I WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER I + COMBINING DOUBLE ACUTE ACCENT |
| I̋ | \&Jdblac; = J + \& combdblac; | $\begin{aligned} & \text { E162 } \\ & =004 A+030 B \end{aligned}$ | LATIN CAPITAL LETTER J WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER J + COMBINING DOUBLE ACUTE ACCENT |
| \% | $\begin{aligned} & \text { \&jdblac; } \\ & =\mathrm{j}+\text { \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { E562 } \\ & =006 A+030 B \end{aligned}$ | LATIN SMALL LETTER J WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER J + COMBINING DOUBLE ACUTE ACCENT |


| Q' | \&Oogondblac; = \&Oogon; <br> + \&combdblac; | EBC4 <br> $=01 \mathrm{EA}$ <br> $+030 \mathrm{~B}$ | LATIN CAPITAL LETTER O WITH OGONEK AND DOUBLE ACUTE = LATIN CAPITAL LETTER O WITH OGONEK <br> + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| O' | \&oogondblac; <br> = \&oogon; <br> $+\& c o m b d b l a c ;$ | $\begin{aligned} & \text { EBC5 } \\ & =01 \mathrm{~EB} \\ & +030 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND DOUBLE ACUTE } \\ & \text { = LATIN SMALL LETTER O WITH OGONEK } \\ & \text { + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |
| ø | $\begin{aligned} & \text { \&Oslashdblac; } \\ & =\text { \&Oslash; } \\ & \text { + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBC6 } \\ & =00 \mathrm{D} 8 \\ & +030 \mathrm{~B} \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOUBLE ACUTE = LATIN CAPITAL LETTER O WITH STROKE <br> + COMBINING DOUBLE ACUTE ACCENT |
| Ø | \& oslashdblac; <br> = \ø <br> + \&combdblac; | $\begin{aligned} & \text { EBC7 } \\ & =00 \mathrm{~F} 8 \\ & +030 \mathrm{~B} \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOUBLE ACUTE = LATIN SMALL LETTER O WITH STROKE <br> + COMBINING DOUBLE ACUTE ACCENT |
| C'E | $\begin{aligned} & \text { \&OEligdblac; } \\ & =\& \text { OElig; + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBC8 } \\ & =0152+030 B \end{aligned}$ | LATIN CAPITAL LIGATURE OE WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE OE + COMBINING DOUBLE ACUTE ACCENT |
| Óe | \&oeligdblac; <br> = \œ + \&combdblac; | $\begin{aligned} & \text { EBC9 } \\ & =0153+030 B \end{aligned}$ | LATIN SMALL LIGATURE OE WITH DOUBLE ACUTE <br> = LATIN SMALL LIGATURE OE + COMBINING DOUBLE ACUTE ACCENT |
| $\bigcirc$ | $\begin{aligned} & \& \text { OOligdblac; } \\ & =\& O O l i g ;+\& c o m b d b l a c ; \end{aligned}$ | $\begin{aligned} & \text { EFEC } \\ & =\text { F20A }+030 B \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE OO + COMBINING DOUBLE ACUTE ACCENT |
| ÓO | \&ooligdblac; <br> = \&oolig; + \&combdblac; | $\begin{aligned} & \text { EFED } \\ & =\text { F20B }+030 \mathrm{~B} \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE OO WITH DOUBLE ACUTE } \\ & \text { = LATIN SMALL LIGATURE OO + COMBINING DOUBLE ACUTE ACCENT } \end{aligned}$ |
| V' | $\begin{aligned} & \& V d b l a c ; \\ & =\mathrm{V}+\& \text { combdblac; } \end{aligned}$ | $\begin{aligned} & \text { E34B } \\ & =0056+030 B \end{aligned}$ | LATIN CAPITAL LETTER V WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER V + COMBINING DOUBLE ACUTE ACCENT |


| V | \&vdblac; = v + \&combdblac; | $\begin{aligned} & \text { E74B } \\ & =0076+030 B \end{aligned}$ | LATIN SMALL LETTER V WITH DOUBLE ACUTE <br> = LATIN SMALL LETTER V + COMBINING DOUBLE ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| W"V | \&Wdblac; $=\mathrm{W}+\&$ combdblac; | $\begin{aligned} & \text { E350 } \\ & =0057+030 B \end{aligned}$ | LATIN CAPITAL LETTER W WITH DOUBLE ACUTE = LATIN CAPITAL LETTER W + COMBINING DOUBLE ACUTE ACCENT |
| W ${ }^{\prime \prime}$ | \&wdblac; = w + \&combdblac; | $\begin{aligned} & \text { E750 } \\ & =0077+030 B \end{aligned}$ | LATIN SMALL LETTER W WITH DOUBLE ACUTE = LATIN SMALL LETTER W + COMBINING DOUBLE ACUTE ACCENT |
| Y' | $\begin{aligned} & \& Y \mathrm{Yblac} ; \\ & =\mathrm{Y}+\& \text { combdblac; } \end{aligned}$ | $\begin{aligned} & \text { E37C } \\ & =0059+030 B \end{aligned}$ | LATIN CAPITAL LETTER Y WITH DOUBLE ACUTE <br> = LATIN CAPITAL LETTER Y + COMBINING DOUBLE ACUTE ACCENT |
| " ${ }^{\prime \prime}$ | \&ydblac; = y + \&combdblac; | $\begin{aligned} & \text { E77C } \\ & =0079+030 B \end{aligned}$ | LATIN SMALL LETTER Y WITH DOUBLE ACUTE = LATIN SMALL LETTER Y + COMBINING DOUBLE ACUTE ACCENT |
| V'Y | $\begin{aligned} & \text { \&YYligdblac; } \\ & =\text { \&YYlig; + \&combdblac; } \end{aligned}$ | $\begin{aligned} & \text { EBCA } \\ & =\text { F212 }+030 B \end{aligned}$ | LATIN CAPITAL LIGATURE YY WITH DOUBLE ACUTE <br> = LATIN CAPITAL LIGATURE YY + COMBINING DOUBLE ACUTE ACCENT |
| W | \&yyligdblac; = \&yylig; + \&combdblac; | $\begin{aligned} & \text { EBCB } \\ & =\text { F213 + 030B } \end{aligned}$ | LATIN SMALL LIGATURE YY WITH DOUBLE ACUTE = LATIN SMALL LIGATURE YY + COMBINING DOUBLE ACUTE ACCENT |

## Subrange 18: Characters with dot above

The Unicode Standard v. 5.0 has 40 characters with a dot above in three ranges: ' C ', ' c ', ' E ', ' $\mathrm{e}^{\prime}$, ' $\mathrm{G}^{\prime}$, ' g ', ' I ' (' i ' is already in Basic Latin), ' $Z$ ', and ' z ' in Latin
 ' X ', ' x ', ' Y ', ' y ' and long 's' (no capital version) in Latin Extended Additional.

Many of these combinations are presumably rare in Medieval sources and therefore a limited number of characters have been included in the present recommendation. The combining dot above, 0307, is located in Combining Diacritical Marks (p. 43).

The two characters LATIN CAPITAL LETTER H WITH DOT ABOVE and LATIN SMALL LETTER H WITH DOT ABOVE have been assigned the code points EBD8 and EBD9 respectively by the Titus project, but they are already in the Unicode Standard at code points 1E22 and 1E23 in Latin Extended Additional and have therefore been listed in that range.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\dot{\mathrm{A}}$ | \&AAligdot; <br> = \&AAlig; + \&combdot; | $\begin{aligned} & \text { EFEE } \\ & =\text { EF90 + } 0307 \end{aligned}$ | LATIN CAPITAL LIGATURE AA WITH DOT ABOVE <br> = LATIN CAPITAL LIGATURE AA + COMBINING DOT ABOVE |
| $\dot{\text { a }}$ | \&aaligdot; <br> = \&aalig; + \&combdot; | $\begin{aligned} & \text { EFEF } \\ & =\text { EF91 + } 0307 \end{aligned}$ | LATIN SMALL LIGATURE AA WITH DOT ABOVE <br> = LATIN SMALL LIGATURE AA + COMBINING DOT ABOVE |
| $\dot{\text { A }}$ | ```&AEligdot; = &AElig; + &combdot;``` | $\begin{aligned} & \text { E043 } \\ & =00 \mathrm{C} 6+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER AE WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER AE + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\text { æ }}$ | \&aeligdot; <br> = \æ + \&combdot; | $\begin{aligned} & \mathrm{E} 443 \\ & =00 \mathrm{E} 6+0307 \end{aligned}$ | LATIN SMALL LETTER AE WITH DOT ABOVE <br> = LATIN SMALL LETTER AE + COMBINING DOT ABOVE |
| $\dot{A Y}$ | $\begin{aligned} & \& A Y \text { ligdot; } \\ & =\& \text { AYlig } ; ~ \& c o m b d o t ; \end{aligned}$ | $\begin{aligned} & \text { EFF0 } \\ & =\text { EF9A + } 0307 \end{aligned}$ | LATIN CAPITAL LIGATURE AY WITH DOT ABOVE <br> = LATIN CAPITAL LIGATURE AY + COMBINING DOT ABOVE |
| $\dot{y}$ | \&ayligdot; <br> = \&aylig; + \&combdot; | $\begin{aligned} & \text { EFF1 } \\ & \text { = EF9B + } 0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LIGATURE AY WITH DOT ABOVE } \\ & \text { = LATIN SMALL LIGATURE AY + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{B}}$ | \&bscapdot; <br> = \&bscap; + \&combdot; | $\begin{aligned} & \text { EBD0 } \\ & =0299+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN LETTER SMALL CAPITAL B WITH DOT ABOVE } \\ & \text { = LATIN LETTER SMALL CAPITAL B + COMBINING DOT ABOVE } \end{aligned}$ |
| $\partial$ | \&drotdot; <br> = \&drot; + \&combdot; | $\begin{aligned} & \text { EBD1 } \\ & =\text { F109 }+0307 \end{aligned}$ | LATIN SMALL LETTER D ROTUNDA WITH DOT ABOVE <br> = LATIN SMALL LETTER D ROTUNDA + COMBINING DOT ABOVE |
| $\dot{\mathrm{D}}$ | \&dscapdot; <br> = \&dscap; + \&combdot; | $\begin{aligned} & \text { EBD2 } \\ & =1 \text { D05 }+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL D WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL D + COMBINING DOT ABOVE |


| $\dot{\text { E }}$ | $\begin{aligned} & \& E o g o n d o t ; \\ & =\& \text { Eogon; + \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { E0EB } \\ & =0118+0307 \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE <br> = LATIN CAPITAL LETTER E WITH OGONEK + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| ė | \&eogondot; <br> = \ę + \& combdot; | E4EB $=0119+0307$ | LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE = LATIN SMALL LETTER E WITH OGONEK + COMBINING DOT ABOVE |
| $\dot{G}$ | $\begin{aligned} & \& \text { Finsdot; } \\ & =\& \text { Fins } ;+\& \text { combdot } \end{aligned}$ | $\begin{aligned} & \text { EBD3 } \\ & =\text { F10C }+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER INSULAR F WITH DOT ABOVE } \\ & =\text { LATIN CAPITAL LETTER INSULAR F + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{F}}$ | \&finsdot; <br> = \& fins; + \&combdot; | $\begin{aligned} & \text { EBD4 } \\ & =\text { F10D }+0307 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH DOT ABOVE = LATIN SMALL LETTER INSULAR F + COMBINING DOT ABOVE |
| $\dot{p}$ | \&finssemiclosedot; = \&finssemiclose; + \& combdot; | $\begin{aligned} & \text { EBD5 } \\ & =\text { F21B } \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER SEMI-CLOSED INSULAR F WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER SEMI-CLOSED INSULAR F } \\ & \text { + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\beta}$ | \&finsclosedot; <br> = \&finsclose; <br> + \&combdot; | $\begin{aligned} & \text { EBD6 } \\ & =\text { F207 } \\ & +0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER CLOSED INSULAR F WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER CLOSED INSULAR F } \\ & + \text { COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{F}}$ | \&fscapdot; <br> = \&fscap; + \&combdot; | $\begin{aligned} & \text { EBD7 } \\ & =\text { EF05 }+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL F WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL F + COMBINING DOT ABOVE |
| $\dot{\mathrm{G}}$ | \&gscapdot; <br> = \&gscap; + \&combdot; | $\begin{aligned} & \text { EF20 } \\ & =0262+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL G WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL G + COMBINING DOT ABOVE |
| $\dot{H}$ | \&hscapdot; <br> = \&hscap; + \&combdot; | $\begin{aligned} & \text { EBDA } \\ & =029 \mathrm{C}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL H WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL H + COMBINING DOT ABOVE |
| $\dot{J}$ | \&Jdot; <br> = J + \& combdot; | $\begin{aligned} & \text { E15C } \\ & =004 A+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER J WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER J + COMBINING DOT ABOVE } \end{aligned}$ |


| $\dot{\mathrm{K}}$ | $\begin{aligned} & \text { \&Kdot; } \\ & =\text { K + \&combdot; } \end{aligned}$ | E168 $=004 \mathrm{~B}+0307$ | LATIN CAPITAL LETTER K WITH DOT ABOVE <br> = LATIN CAPITAL LETTER K + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| k | \& kdot; <br> $=\mathrm{k}+\&$ combdot; | E568 $=006 \mathrm{~B}+0307$ | LATIN SMALL LETTER K WITH DOT ABOVE = LATIN SMALL LETTER K + COMBINING DOT ABOVE |
| $\dot{\mathrm{K}}$ | \&kscapdot; <br> = \&kscap; + \&combdot; | EBDB $=1 \mathrm{D} 0 \mathrm{~B}+0307$ | LATIN LETTER SMALL CAPITAL K WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL K + COMBINING DOT ABOVE |
| $\dot{\mathrm{L}}$ | \&Ldot; <br> = L + \&combdot; | $\begin{aligned} & \text { E19E } \\ & =004 C+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER L WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER L + COMBINING DOT ABOVE } \end{aligned}$ |
| j | \&ldot; $=1+\&$ combdot; | $\begin{aligned} & \text { E59E } \\ & =006 \mathrm{C}+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER L WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER L + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{L}}$ | \&lscapdot; <br> = \&lscap; + \&combdot; | $\begin{aligned} & \text { EBDC } \\ & =029 \mathrm{~F}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL L WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL L + COMBINING DOT ABOVE |
| $\dot{\mathbf{M}}$ | \&mscapdot; <br> = \&mscap; + \& combdot; | $\begin{aligned} & \text { EBDD } \\ & =1 \text { D0D }+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN LETTER SMALL CAPITAL M WITH DOT ABOVE } \\ & \text { = LATIN LETTER SMALL CAPITAL M + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathbf{N}}$ | \&nscapdot; <br> = \&nscap; + \&combdot; | $\begin{aligned} & \text { EF21 } \\ & =0274+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL N WITH DOT ABOVE = LATIN LETTER SMALL CAPITAL N + COMBINING DOT ABOVE |
| $\bigcirc$ | $\begin{aligned} & \text { \&Oogondot; } \\ & =\text { \&Oogon; + \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { EBDE } \\ & =01 \mathrm{EA}+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER O WITH OGONEK + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{Q}$ | \&oogondot; <br> = \&oogon; + \& combdot; | $\begin{aligned} & \text { EBDF } \\ & =01 \mathrm{~EB}+0307 \end{aligned}$ | LATIN SMALL LETTER O WITH OGONEK AND DOT ABOVE <br> = LATIN SMALL LETTER O WITH OGONEK + COMBINING DOT ABOVE |
| $\ddot{\varnothing}$ | $\begin{aligned} & \& \text { Oslashdot; } \\ & =\& \text { Oslash; + \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { EBCD } \\ & =00 D 8+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER O WITH STROKE + COMBINING DOT ABOVE } \end{aligned}$ |


| $\dot{\emptyset}$ | \& oslashdot; <br> = \& oslash; + \&combdot; | $\begin{aligned} & \text { EBCE } \\ & =00 \mathrm{~F} 8+0307 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{\mathrm{P}}$ | \&pscapdot; <br> = \&pscap; + \&combdot; | $\begin{aligned} & \text { EBCF } \\ & =1 D 18+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL P WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL P + COMBINING DOT ABOVE |
| $\dot{Q}$ | \&Qdot; <br> $=\mathrm{Q}+\& \mathrm{combdot} ;$ | $\begin{aligned} & \text { E282 } \\ & =0071+0307 \end{aligned}$ | LATIN CAPITAL LETTER Q WITH DOT ABOVE = LATIN CAPITAL LETTER Q + COMBINING DOT ABOVE |
| $\dot{\mathrm{q}}$ | \&qdot; $=\mathrm{q}+\&$ combdot; | $\begin{aligned} & \text { E682 } \\ & =0071+0307 \end{aligned}$ | LATIN SMALL LETTER Q WITH DOT ABOVE = LATIN SMALL LETTER Q + COMBINING DOT ABOVE |
| $\dot{\mathbf{R}}$ | \&rscapdot; <br> = \&rscap; + \& combdot; | $\begin{aligned} & \text { EF22 } \\ & =0280+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL R WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL R + COMBINING DOT ABOVE |
| $\dot{\mathrm{S}}$ | ```&sscapdot; = &sscap; + &combdot;``` | $\begin{aligned} & \text { EF23 } \\ & =\mathrm{EF} 0 \mathrm{E}+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN LETTER SMALL CAPITAL S WITH DOT ABOVE } \\ & \text { = LATIN LETTER SMALL CAPITAL S + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{T}}$ | \&tscapdot; <br> = \&tscap; + \&combdot; | $\begin{aligned} & \text { EF24 } \\ & =1 \mathrm{D} 1 \mathrm{~B}+0307 \end{aligned}$ | LATIN LETTER SMALL CAPITAL T WITH DOT ABOVE <br> = LATIN LETTER SMALL CAPITAL T + COMBINING DOT ABOVE |
| $\dot{\text { U }}$ | $\begin{aligned} & \& U d o t ; \\ & =\text { U + \&combdot; } \end{aligned}$ | $\begin{aligned} & \text { E315 } \\ & =0055+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER U WITH DOT ABOVE } \\ & \text { = LATIN CAPITAL LETTER U + COMBINING DOT ABOVE } \end{aligned}$ |
| $\dot{\mathrm{u}}$ | \&udot; $=\mathrm{u}+\& \operatorname{combdot} ;$ | $\begin{aligned} & \text { E715 } \\ & =0075+0307 \end{aligned}$ | LATIN SMALL LETTER U WITH DOT ABOVE <br> = LATIN SMALL LETTER U + COMBINING DOT ABOVE |
| $\stackrel{\circ}{\text { V }}$ | \&Vdot; <br> $=\mathrm{V}+\&$ combdot; | $\begin{aligned} & \text { E34C } \\ & =0056+0307 \end{aligned}$ | LATIN CAPITAL LETTER V WITH DOT ABOVE <br> = LATIN CAPITAL LETTER V + COMBINING DOT ABOVE |
| $\dot{\mathrm{V}}$ | \&vdot; $=\mathrm{v}+\&$ combdot; | $\begin{aligned} & \text { E74C } \\ & =0076+0307 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER V WITH DOT ABOVE } \\ & \text { = LATIN SMALL LETTER V + COMBINING DOT ABOVE } \end{aligned}$ |


| 1 | $\begin{aligned} & \text { \&Vinsdot; } \\ & =\& \text { Vins } ;+\& \text { combdot } \end{aligned}$ | $\begin{aligned} & \text { E3E7 } \\ & =\text { F210 }+0307 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR V (VEND) WITH DOT ABOVE <br> = LATIN CAPITAL LETTER INSULAR V (VEND) + COMBINING DOT ABOVE |
| :---: | :---: | :---: | :---: |
| $\dot{\nu}$ | \& vinsdot; <br> = \&vins; + \& combdot; | $\begin{aligned} & \text { E7E7 } \\ & =\text { F211 }+0307 \end{aligned}$ | LATIN SMALL LETTER INSULAR V (VEND) WITH DOT ABOVE = LATIN SMALL LETTER INSULAR V (VEND) + COMBINING DOT ABOVE |

## Subrange 19: Characters with dot below

The Unicode Standard v. 5.0 has no fewer than 38 characters with a dot below, i.e. essentially the whole alphabet, 'A-Z' and 'a-z', in Latin Extended Additional. The list below contains additional character combinations. The combining dot below, 0323, is located in Combining Diacritical Marks (p. 43).

Note that the position of the dot below raises problems for the font designer, especially in connection with characters that have descenders or diacritics such as the ogonek. Individually designed glyphs will thus be useful even with a Smart Font solution.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $A$ | \&AAligdotbl; <br> = \&AAlig; + \&combdotbl; | EFF2 $=\mathrm{EF} 90+0323$ | LATIN CAPITAL LIGATURE AA WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE AA + COMBINING DOT BELOW |
| a | \&aaligdotbl; <br> = \&aalig; + \&combdotbl; | EFF3 $=\mathrm{EF} 91+0323$ | LATIN SMALL LIGATURE AA WITH DOT BELOW = LATIN SMALL LIGATURE AA + COMBINING DOT BELOW |
| E | \&AEligdotbl; <br> = \Æ + \&combdotbl; | $\begin{aligned} & \text { E036 } \\ & =00 \mathrm{C} 6+0323 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH DOT BELOW = LATIN CAPITAL LETTER AE + COMBINING DOT BELOW |
| $æ$ | \&aeligdotbl; <br> $=$ \æ + \&combdotbl; | $\begin{aligned} & \mathrm{E} 436 \\ & =00 \mathrm{E} 6+0323 \end{aligned}$ | LATIN SMALL LETTER AE WITH DOT BELOW = LATIN SMALL LETTER AE + COMBINING DOT BELOW |


| $A \bigcirc$ | \&AOligdotbl; <br> $=\& A O l i g ;+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { EFF4 } \\ & =\text { EF92 }+0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AO WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE AO + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| O | \&aoligdotbl; <br> = \&aolig; + \&combdotbl; | $\begin{aligned} & \text { EFF5 } \\ & =\text { EF93 }+0323 \end{aligned}$ | LATIN SMALL LIGATURE AO WITH DOT BELOW <br> = LATIN SMALL LIGATURE AO + COMBINING DOT BELOW |
| A | \&AUligdotbl; <br> = \&AUlig; + \&combdotbl; | $\begin{aligned} & \text { EFF6 } \\ & =\text { EF94 + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AU WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE AU + COMBINING DOT BELOW |
| ạ | \&auligdotbl; <br> = \&aulig; + \&combdotbl; | $\begin{aligned} & \text { EFF7 } \\ & =\text { EF95 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AU WITH DOT BELOW <br> = LATIN SMALL LIGATURE AU + COMBINING DOT BELOW |
| A | \&AVligdotbl; <br> $=\& A V l i g ;+\&$ combdotbl; | $\begin{aligned} & \text { EFF8 } \\ & =\text { EF96 + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE AV + COMBINING DOT BELOW |
| 〕 | \&avligdotbl; <br> = \&avlig; + \&combdotbl; | $\begin{aligned} & \text { EFF9 } \\ & =\text { EF97 + } 0323 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH DOT BELOW <br> = LATIN SMALL LIGATURE AV + COMBINING DOT BELOW |
| AI. | \&AYligdotbl; <br> $=\& A Y l i g ;+\& c o m b d o t b l ;$ | $\begin{aligned} & \text { EFFA } \\ & =\text { EF9A + } 0323 \end{aligned}$ | LATIN CAPITAL LIGATURE AY WITH DOT BELOW <br> = LATIN CAPITAL LIGATURE AY + COMBINING DOT BELOW |
| dy | $\begin{aligned} & \text { \&ayligdotbl; } \\ & \text { = \&aylig; + \&combdotbl; } \end{aligned}$ | $\begin{aligned} & \text { EFFB } \\ & =\text { EF9B }+0323 \end{aligned}$ | LATIN SMALL LIGATURE AY WITH DOT BELOW = LATIN SMALL LIGATURE AY + COMBINING DOT BELOW |
| B | \&bscapdotbl; <br> = \&bscap; + \&combdotbl; | $\begin{aligned} & \text { EF25 } \\ & =0299+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL B WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL B + COMBINING DOT BELOW |
| C | \&Cdotbl; $=\mathrm{C}+\text { \&combdotbl; }$ | $\begin{aligned} & \text { E066 } \\ & =0043+0323 \end{aligned}$ | LATIN CAPITAL LETTER C WITH DOT BELOW <br> = LATIN CAPITAL LETTER C + COMBINING DOT BELOW |
| C | \&cdotbl; = c + \&combdotbl; | $\begin{aligned} & \text { E466 } \\ & =0063+0323 \end{aligned}$ | LATIN SMALL LETTER C WITH DOT BELOW <br> = LATIN SMALL LETTER C + COMBINING DOT BELOW |


| D | \&dscapdotbl; <br> $=$ \&dscap; + \&combdotbl; | $\begin{aligned} & \text { EF26 } \\ & =1 \mathrm{D} 05+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL D WITH DOT BELOW <br> = LATIN LETTER SMALL CAPITAL D + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| Đ | \&ETHdotbl; <br> = \Ð + \&combdotbl; | $\begin{aligned} & \text { E08F } \\ & =00 \mathrm{D} 0+0323 \end{aligned}$ | LATIN CAPITAL LETTER ETH WITH DOT BELOW <br> = LATIN CAPITAL LETTER ETH + COMBINING DOT BELOW |
| ð | \&ethdotbl; <br> $=$ \ð + \&combdotbl; | $\begin{aligned} & \text { E48F } \\ & =00 \mathrm{~F} 0+0323 \end{aligned}$ | LATIN SMALL LETTER ETH WITH DOT BELOW = LATIN SMALL LETTER ETH + COMBINING DOT BELOW |
| E | \&Eogondotbl; <br> $=$ \Ę + \&combdotbl; | $\begin{aligned} & \text { E0E8 } \\ & =0118+0323 \end{aligned}$ | LATIN CAPITAL LETTER E WITH OGONEK AND DOT BELOW <br> = LATIN CAPITAL LETTER E WITH OGONEK + COMBINING DOT BELOW |
| e | \&eogondotbl; <br> = \ę + \&combdotbl; | $\begin{aligned} & \text { E4E8 } \\ & =0119+0323 \end{aligned}$ | LATIN SMALL LETTER E WITH OGONEK AND DOT BELOW <br> = LATIN SMALL LETTER E WITH OGONEK + COMBINING DOT BELOW |
| F | \&Fdotbl; <br> = F + \&combdotbl; | $\begin{aligned} & \text { E0EE } \\ & =0046+0323 \end{aligned}$ | LATIN CAPITAL LETTER F WITH DOT BELOW <br> = LATIN CAPITAL LETTER F + COMBINING DOT BELOW |
| f | \&fdotbl; <br> = f + \&combdotbl; | E4EE $=0066+0323$ | LATIN SMALL LETTER F WITH DOT BELOW <br> = LATIN SMALLLETTER F + COMBINING DOT BELOW |
| F | $\begin{aligned} & \text { \&Finsdotbl; } \\ & \text { = \&Fins; + \&combdotbl; } \end{aligned}$ | $\begin{aligned} & \text { E3E5 } \\ & =\text { F10C }+0323 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR F WITH DOT BELOW <br> = LATIN CAPITAL LETTER INSULAR F + COMBINING DOT BELOW |
| F. | $\begin{aligned} & \text { \&finsdotbl; } \\ & =\text { \&fins; + \&combdotbl; } \end{aligned}$ | $\begin{aligned} & \text { E7E5 } \\ & =\text { F10D }+0323 \end{aligned}$ | LATIN SMALL LETTER INSULAR F WITH DOT BELOW <br> = LATIN SMALL LETTER INSULAR F + COMBINING DOT BELOW |
| G | \&Gdotbl; $=\mathrm{G}+\text { \&combdotbl; }$ | $\begin{aligned} & \text { E101 } \\ & =0047+0323 \end{aligned}$ | LATIN CAPITAL LETTER G WITH DOT BELOW <br> = LATIN CAPITALLETTER G + COMBINING DOT BELOW |
| g | \& gdotbl; = g + \& combdotbl; | $\begin{aligned} & \text { E501 } \\ & =0067+0323 \end{aligned}$ | LATIN SMALL LETTER G WITH DOT BELOW <br> = LATIN SMALL LETTER G + COMBINING DOT BELOW |


| G | \& gscapdotbl; <br> = \&gscap; + \&combdotbl; | $\begin{aligned} & \text { EF27 } \\ & =0262+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL G WITH DOT BELOW = LATIN LETTER SMALL CAPITAL G + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| J. | \&Jdotbl; = J + \&combdotbl; | $\begin{aligned} & \text { E151 } \\ & =004 \mathrm{~A}+0323 \end{aligned}$ | LATIN CAPITAL LETTER J WITH DOT BELOW = LATIN CAPITAL LETTER J + COMBINING DOT BELOW |
| j | \&jdotbl; $=\mathrm{j}+\&$ combdotbl; | $\begin{aligned} & \text { E551 } \\ & =006 \mathrm{~A}+0323 \end{aligned}$ | LATIN SMALL LETTER J WITH DOT BELOW = LATIN SMALL LETTER J + COMBINING DOT BELOW |
| L | \&lscapdotbl; <br> = \&lscap; + \&combdotbl; | $\begin{aligned} & \mathrm{EF} 28 \\ & =029 \mathrm{~F}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL L WITH DOT BELOW = LATIN LETTER SMALL CAPITAL L + COMBINING DOT BELOW |
| M | \&mscapdotbl; <br> = \&mscap; + \&combdotbl; | $\begin{aligned} & \text { EF29 } \\ & =1 \mathrm{D} 0 \mathrm{D}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL M WITH DOT BELOW = LATIN LETTER SMALL CAPITAL M + COMBINING DOT BELOW |
| N | \&nscapdotbl; <br> = \&nscap; + \&combdotbl; | $\begin{aligned} & \text { EF2A } \\ & =0274+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL N WITH DOT BELOW = LATIN LETTER SMALL CAPITAL N + COMBINING DOT BELOW |
| $?$ | \&Oogondotbl; <br> $=\&$ Oogon; + \&combdotbl; | $\begin{aligned} & \text { E208 } \\ & =01 \mathrm{EA}+0323 \end{aligned}$ | LATIN CAPITAL LETTER O WITH OGONEK AND DOT BELOW <br> = LATIN CAPITAL LETTER O WITH OGONEK+ COMBINING DOT BELOW |
| ? | \&oogondotbl; <br> = \&oogon; + \&combdotbl; | $\begin{aligned} & \text { E608 } \\ & =01 \mathrm{~EB}+0323 \end{aligned}$ | LATIN SMALL LETTER O WITH OGONEK AND DOT BELOW = LATIN SMALL LETTER O WITH OGONEK + COMBINING DOT BELOW |
| $\varnothing$ | \&Oslashdotbl; <br> $=\&$ Oslash $;+\&$ combdotbl; | $\begin{aligned} & \text { EBE0 } \\ & =00 D 8+0323 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOT BELOW = LATIN CAPITAL LETTER O WITH STROKE + COMBINING DOT BELOW |
| $\emptyset$ | \& oslashdotbl; <br> $=$ \& oslash; + \& combdotbl; | $\begin{aligned} & \text { EBE1 } \\ & =00 F 8+0323 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT BELOW = LATIN SMALL LETTER O WITH STROKE + COMBINING DOT BELOW |
| 0 | $\begin{aligned} & \& \text { OOligdotbl; } \\ & =\& O O l i g ;+\& c o m b d o t b l ; \end{aligned}$ | $\begin{aligned} & \text { EFFC } \\ & =\text { F20A }+0323 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DOT BELOW = LATIN CAPITAL LIGATURE OO + COMBINING DOT BELOW |


| 00 | \& ooligdotbl; <br> = \&oolig; + \&combdotbl; | $\begin{aligned} & \text { EFFD } \\ & =\text { F20B }+0323 \end{aligned}$ | LATIN SMALL LIGATURE OO WITH DOT BELOW = LATIN SMALL LIGATURE OO + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| $\underline{P}$ | \&Pdotbl; $=\mathrm{P}+\&$ combdotbl; | $\begin{aligned} & \text { E26D } \\ & =0050+0323 \end{aligned}$ | LATIN CAPITAL LETTER P WITH DOT BELOW = LATIN CAPITAL LETTER P + COMBINING DOT BELOW |
| P. | \&pdotbl; $=\mathrm{p}+\&$ combdotbl; | $\begin{aligned} & \text { E66D } \\ & =0070+0323 \end{aligned}$ | LATIN SMALL LETTER P WITH DOT BELOW = LATIN SMALL LETTER P + COMBINING DOT BELOW |
| $Q$ | \&Qdotbl; $=\mathrm{Q}+\&$ combdotbl; | $\begin{aligned} & \text { E288 } \\ & =0051+0323 \end{aligned}$ | LATIN CAPITAL LETTER Q WITH DOT BELOW = LATIN CAPITAL LETTER Q + COMBINING DOT BELOW |
| 9 | $\begin{aligned} & \& q d o t b l \\ & =\text { q }+\& \operatorname{combdotbl} \end{aligned}$ | $\begin{aligned} & \text { E688 } \\ & =0071+0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER Q WITH DOT BELOW } \\ & \text { = LATIN SMALL LETTER Q + COMBINING DOT BELOW } \end{aligned}$ |
| R | \&rscapdotbl; <br> = \&rscap; + \&combdotbl; | $\begin{aligned} & \text { EF2B } \\ & =0280+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL R WITH DOT BELOW = LATIN LETTER SMALL CAPITAL R + COMBINING DOT BELOW |
| $?$ | $\begin{aligned} & \text { \&rrotdotbl; } \\ & =\text { \&rrot; + \&combdotbl; } \end{aligned}$ | $\begin{aligned} & \mathrm{E} 7 \mathrm{C} 1 \\ & =\mathrm{F} 20 \mathrm{E}+0323 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER R ROTUNDA WITH DOT BELOW } \\ & \text { = LATIN SMALL LETTER R ROTUNDA + COMBINING DOT BELOW } \end{aligned}$ |
| S | \&sscapdotbl; <br> = \&sscap; + \&combdotbl; | $\begin{aligned} & \text { EF2C } \\ & =\text { EF0E }+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL S WITH DOT BELOW = LATIN LETTER SMALL CAPITAL S + COMBINING DOT BELOW |
| $!$ | \&slongdotbl; <br> = \&slong; + \&combdotbl; | $\begin{aligned} & \text { E7C2 } \\ & =017 \mathrm{~F}+0323 \end{aligned}$ | LATIN SMALL LETTER LONG S WITH DOT BELOW = LATIN SMALL LETTER LONG S + COMBINING DOT BELOW |
| T | \&tscapdotbl; <br> = \&tscap; + \&combdotbl; | $\begin{aligned} & \mathrm{EF} 2 \mathrm{D} \\ & =1 \mathrm{D} 1 \mathrm{~B}+0323 \end{aligned}$ | LATIN LETTER SMALL CAPITAL T WITH DOT BELOW = LATIN LETTER SMALL CAPITAL T + COMBINING DOT BELOW |
| 1 | $\begin{aligned} & \& \text { Vinsdotbl; } \\ & =\& \text { Vins } ;+\& \text { combdotbl } ; \end{aligned}$ | $\begin{aligned} & \text { E3E6 } \\ & =\text { F210 }+0323 \end{aligned}$ | LATIN CAPITAL LETTER INSULAR V (VEND) WITH DOT BELOW = LATIN CAPITAL LETTER INSULAR V (VEND) + COMBINING DOT BELOW |


| 1. | \&vinsdotbl; <br> = \&vins; + \&combdotbl; | $\begin{aligned} & \text { E7E6 } \\ & =\text { F211 }+0323 \end{aligned}$ | LATIN SMALL LETTER INSULAR V (VEND) WITH DOT BELOW <br> = LATIN SMALL LETTER INSULAR V (VEND) + COMBINING DOT BELOW |
| :---: | :---: | :---: | :---: |
| P | \&THORNdotbl; <br> = \Þ + \&combdotbl; | $\begin{aligned} & \text { E39F } \\ & =00 \mathrm{DE}+0323 \end{aligned}$ | LATIN CAPITAL LETTER THORN WITH DOT BELOW <br> = LATIN CAPITAL LETTER THORN + COMBINING DOT BELOW |
| b | \&thorndotbl; <br> = \þ + \&combdotbl; | $\begin{aligned} & \text { E79F } \\ & =00 \mathrm{FE}+0323 \end{aligned}$ | LATIN SMALL LETTER THORN WITH DOT BELOW <br> = LATIN SMALL LETTER THORN + COMBINING DOT BELOW |

## Subrange 20: Characters with diaeresis

The Unicode Standard v. 5.0 has double dot (diaeresis) over the vowels 'A', 'a', ' $E$ ', 'e', ' I , ' i , ' O ', 'o', ' U ', ' $u$ ', and ' y ' in Latin-1 Supplement (pp. 25-30 above), and over ' Y ' in Latin Extended-A (p. 35), as well as over the consonants 'W' and 'w' in Latin Extended Additional (p. 53).

Combinations with consonants and diaeresis are presumably rare in Medieval sources and therefore have not been included in the present recommendation. The list below contains additional vowels that do appear with diaeresis, including the semi-vowels ' j ' and ' v ' (and also, unusually, the ligature ' pp ').

The combining diaeresis, 0308, is located in Combining Diacritical Marks (p. 43).
$\left.\begin{array}{|l|l|l|l|}\hline \text { Glyph } & \text { MuFl entity } & \text { MuFI code point } & \text { MUFI descriptive name } \\ \hline \ddot{\text { Ä }} & \begin{array}{l}\text { \&AAliguml; } \\ =\text { \&AAlig; + \&combuml; }\end{array} & \begin{array}{l}\text { EFFE } \\ =\text { EF90 }+0308\end{array} & \begin{array}{l}\text { LATIN CAPITAL LIGATURE AA WITH DIAERESIS } \\ \text { = LATIN CAPITAL LIGATURE AA + COMBINING DIAERESIS }\end{array} \\ \hline \ddot{\mathrm{a}} & \begin{array}{l}\text { \&aaliguml; } \\ =\text { \&aalig; + \&combuml; }\end{array} & \begin{array}{l}\text { EFFF } \\ =\text { EF9 }\end{array}+0308\end{array} \quad \begin{array}{l}\text { LATIN SMALL LIGATURE AA WITH DIAERESIS } \\ =\text { LATIN SMALL LIGATURE AA + COMBINING DIAERESIS }\end{array}\right]$

| $\ddot{\text { æ̈ }}$ | \&aeliguml; <br> $=\&$ aelig; $+\&$ combuml; | $\begin{aligned} & \text { E442 } \\ & =00 \mathrm{E} 6+0308 \end{aligned}$ | LATIN SMALL LETTER AE WITH DIAERESIS <br> = LATIN CAPITAL LETTER AE + COMBINING DIAERESIS |
| :---: | :---: | :---: | :---: |
| J | \&Juml; <br> = J + \&combuml; | $\begin{aligned} & \text { EBE2 } \\ & =004 \mathrm{~A}+0308 \end{aligned}$ | LATIN CAPITAL LETTER J WITH DIAERESIS <br> = LATIN CAPITAL LETTER J + COMBINING DIAERESIS |
| j | \&juml; <br> $=\mathrm{j}+\&$ combuml; | $\begin{aligned} & \text { EBE3 } \\ & =006 \mathrm{~A}+0308 \end{aligned}$ | LATIN SMALL LETTER J WITH DIAERESIS <br> = LATIN SMALL LETTER J + COMBINING DIAERESIS |
| 00 | $\begin{aligned} & \text { \&OOliguml; } \\ & \text { = \&OOlig; + \&combuml; } \end{aligned}$ | $\begin{aligned} & \text { EBE4 } \\ & =\text { F20A }+0308 \end{aligned}$ | LATIN CAPITAL LIGATURE OO WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE OO + COMBINING DIAERESIS |
| ÖO | \&ooliguml; <br> = \&oolig; + \&combuml; | EBE5 $=\text { F20B }+0308$ | LATIN SMALL LIGATURE OO WITH DIAERESIS <br> = LATIN SMALL LIGATURE OO + COMBINING DIAERESIS |
| $\ddot{\mathrm{P}}$ | \&PPliguml; <br> = \&PPlig; + \&combuml; | $\begin{aligned} & \text { EBE6 } \\ & =\text { EEDD + } 0308 \end{aligned}$ | LATIN CAPITAL LIGATURE PP WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE PP + COMBINING DIAERESIS |
| $\ddot{\mathrm{P}}$ | \&ppliguml; <br> = \&pplig; + \&combuml; | $\begin{aligned} & \text { EBE7 } \\ & =\text { EED6 + } 0308 \end{aligned}$ | LATIN SMALL LIGATURE PP WITH DIAERESIS <br> = LATIN SMALL LIGATURE PP + COMBINING DIAERESIS |
| $\ddot{\mathrm{V}}$ | \&Vuml; $=\mathrm{V}+\& \text { combuml; }$ | $\begin{aligned} & \text { E342 } \\ & =0056+0308 \end{aligned}$ | LATIN CAPITAL LETTER V WITH DIAERESIS <br> = LATIN CAPITAL LETTER V + COMBINING DIAERESIS |
| $\ddot{\mathrm{V}}$ | \&vuml; = $\mathrm{v}+$ \& combuml; | $\begin{aligned} & \mathrm{E} 742 \\ & =0076+0308 \end{aligned}$ | LATIN SMALL LETTER V WITH DIAERESIS <br> = LATIN SMALL LETTER V + COMBINING DIAERESIS |
| $\ddot{W}$ | \&YYliguml; <br> = \&YYlig; + \&combuml; | $\begin{aligned} & \text { EBE8 } \\ & =\text { F212 }+0308 \end{aligned}$ | LATIN CAPITAL LIGATURE YY WITH DIAERESIS <br> = LATIN CAPITAL LIGATURE YY + COMBINING DIAERESIS |
| $\ddot{\mathrm{Y}}$ | $\begin{aligned} & \text { \&yyliguml; } \\ & \text { = \&yylig; + \&combuml; } \end{aligned}$ | $\begin{aligned} & \text { EBE9 } \\ & =\text { F213 }+0308 \end{aligned}$ | LATIN SMALL LIGATURE YY WITH DIAERESIS <br> = LATIN SMALL LIGATURE YY + COMBINING DIAERESIS |

## Subrange 2 I: Characters with curl above (reversed ogonek)

The Unicode Standard v. 5.0 has a curl above in combination with 'A', 'a', ' I , ' i ', ' O ', ' o ', ' Y ' and ' y ' in Latin Extended Additional ( pp . $54-55$ above). This curl, which is described as a hook in the Standard, is loose and has a different design from the fixed one used in e.g. Medieval Nordic sources. In fact, the latter form might equally well be described as a reversed ogonek. For this reason ' $A$ ', ' $a$ ', ' I , ' i ', ' O ', ' o ', ' Y ', ' y ' and a few other characters have been given separate code points in the list below. The combining curls, F1C5 (high position) and F1C4 (medium-high position), are located in PUA subrange 6 Combining marks (p. 94).

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| Å | \&Acurl; = A + \&combcurl; | $\begin{aligned} & \text { E033 } \\ & =0041+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER A WITH CURL <br> = LATIN CAPITAL LETTER A + COMBINING CURL |
| ả | $\begin{aligned} & \text { \&acurl; } \\ & =\mathrm{a}+\text { \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E433 } \\ & =0061+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER A WITH CURL <br> = LATIN SMALL LETTER A + COMBINING CURL |
| た | \&AEligcurl; <br> = \Æ + \&combcurl; | $\begin{aligned} & \text { EBEA } \\ & =00 \mathrm{C} 6+\mathrm{F} 1 \mathrm{C} 5 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH CURL <br> = LATIN CAPITAL LETTER AE + COMBINING CURL |
| æ | \&aeligcurl; <br> = \æ + \&combcurl; | $\begin{aligned} & \text { EBEB } \\ & =00 \mathrm{E} 6+\text { F1C5 } \end{aligned}$ | LATIN SMALL LETTER AE WITH CURL <br> = LATIN CAPITAL LETTER AE + COMBINING CURL |
| E | \&Ecurl; <br> $=\mathrm{E}+\&$ combcurl; | $\begin{aligned} & \text { E0E9 } \\ & =0045+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER E WITH CURL <br> = LATIN CAPITAL LETTER E + COMBINING CURL |
| é | \&ecurl; <br> = e + \&combcurl; | $\begin{aligned} & \text { E4E9 } \\ & =0065+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER E WITH CURL <br> $=$ LATIN SMALL LETTER E + COMBINING CURL |
| 1 | $\begin{aligned} & \text { \& Icurl; } \\ & \text { = I + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E12A } \\ & =0049+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER I WITH CURL <br> = LATIN CAPITAL LETTER I + COMBINING CURL |


| 1 | \&icurl; <br> = i + \&combcurl; | $\begin{aligned} & \text { E52A } \\ & =0069+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER I WITH CURL <br> = LATIN SMALL LETTER I + COMBINING CURL |
| :---: | :---: | :---: | :---: |
| ${ }^{2}$ | \& Jcurl; <br> = J + \&combcurl; | $\begin{aligned} & \text { E163 } \\ & =0049+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER J WITH CURL <br> = LATIN CAPITAL LETTER J + COMBINING CURL |
| \} | \&jcurl; <br> = j + \&combcurl; | $\begin{aligned} & \text { E563 } \\ & =006 \mathrm{~A}+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER J WITH CURL <br> = LATIN SMALL LETTER J + COMBINING CURL |
| $\bigcirc$ | \&Ocurl; <br> = O + \&combcurl; | $\begin{aligned} & \text { E3D3 } \\ & =004 \mathrm{~F}+\mathrm{F} 1 \mathrm{C} 5 \end{aligned}$ | LATIN CAPITAL LETTER O WITH CURL = LATIN CAPITAL LETTER O + COMBINING CURL |
| O | $\begin{aligned} & \text { \&ocurl; } \\ & =0 \text { + \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E7D3 } \\ & =006 \mathrm{~F}+\mathrm{F} 1 \mathrm{C} 4 \end{aligned}$ | LATIN SMALL LETTER O WITH CURL <br> = LATIN SMALL LETTER O + COMBINING CURL |
| $\varnothing$ | \& Oslashcurl; <br> = \& Oslash; + \&combcurl; | $\begin{aligned} & \text { E3D4 } \\ & =00 \mathrm{D} 8+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND CURL <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING CURL |
| Ø | \&oslashcurl; <br> = \ø + \&combcurl; | $\begin{aligned} & \text { E7D4 } \\ & =00 \mathrm{~F} 8+\mathrm{F} 1 \mathrm{C} 4 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND CURL <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING CURL |
| U | \&Ucurl; = U + \&combcurl; | $\begin{aligned} & \text { E331 } \\ & =0055+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER U WITH CURL <br> = LATIN CAPITAL LETTER U + COMBINING CURL |
| $\mathfrak{U}$ | \&ucurl; <br> $=\mathrm{u}+\&$ combcurl; | $\begin{aligned} & \text { E731 } \\ & =0075+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER U WITH CURL <br> = LATIN SMALL LETTER U + COMBINING CURL |
| Y | $\begin{aligned} & \& Y c u r l ; \\ & =\mathrm{Y}+\& \text { combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E385 } \\ & =0059+\text { F1C5 } \end{aligned}$ | LATIN CAPITAL LETTER Y WITH CURL <br> = LATIN CAPITAL LETTER Y + COMBINING CURL |
| y | $\begin{aligned} & \text { \&ycurl; } \\ & =\text { y }+ \text { \&combcurl; } \end{aligned}$ | $\begin{aligned} & \text { E785 } \\ & =0079+\text { F1C4 } \end{aligned}$ | LATIN SMALL LETTER Y WITH CURL <br> = LATIN SMALL LETTER Y + COMBINING CURL |

## Subrange 22: Characters with ogonek

The Unicode Standard v. 5.0 has ogonek with 'A', 'a', 'E' and 'e' in Latin Extended-A (pp. 30-32 above), and 'O' and 'o' in Latin Extended-B (pp. 36-37). The list below contains additional character combinations. The combining ogonek, 0328, is located in Combining Diacritical Marks (p. 44).

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\underset{\text { E }}{ }$ | \&AEligogon; <br> = \Æ + \&combogon; | $\begin{aligned} & \text { E040 } \\ & =00 \mathrm{C} 6+0328 \end{aligned}$ | LATIN CAPITAL LETTER AE WITH OGONEK = LATIN CAPITAL LETTER AE + COMBINING OGONEK |
| $æ$ | \&aeligogon; <br> = \æ + \&combogon; | $\begin{aligned} & \mathrm{E} 440 \\ & =00 \mathrm{E} 6+0328 \end{aligned}$ | LATIN SMALL LETTER AE WITH OGONEK = LATIN SMALL LETTER AE + COMBINING OGONEK |
| $A$ | \&AVligogon; <br> = \&AVlig; + \&combogon; | $\begin{aligned} & \text { EBF0 } \\ & =\text { EF96 + } 0328 \end{aligned}$ | LATIN CAPITAL LIGATURE AV WITH OGONEK <br> = LATIN CAPITAL LIGATURE AV + COMBINING OGONEK |
| a) | \&avligogon; <br> = \&avlig; + \&combogon; | $\begin{aligned} & \text { EBF1 } \\ & =\text { EF97 + } 0328 \end{aligned}$ | LATIN SMALL LIGATURE AV WITH OGONEK = LATIN SMALL LIGATURE AV + COMBINING OGONEK |
| $C$ | \& Cogon; $=\mathrm{C}+\& \text { combogon; }$ | $\begin{aligned} & \text { E076 } \\ & =0043+0328 \end{aligned}$ | LATIN CAPITAL LETTER C WITH OGONEK = LATIN CAPITAL LETTER C + COMBINING OGONEK |
| $\mathcal{C}$ | \& cogon; = c $+\&$ combogon; | $\begin{aligned} & \mathrm{E} 476 \\ & =0063+0328 \end{aligned}$ | LATIN SMALL LETTER C WITH OGONEK = LATIN SMALL LETTER C + COMBINING OGONEK |
| E | \&Eogoncurl; <br> $=\mathrm{E}+\&$ combogon; <br> $+\& c o m b c u r l ;$ | $\begin{aligned} & \text { EBF2 } \\ & =0045+0328 \\ & + \text { F1C5 } \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND CURL } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING CURL } \end{aligned}$ |
| ę | \&eogoncurl; <br> $=\mathrm{e}+\&$ combogon; <br> + \&combcurl; | $\begin{aligned} & \text { EBF3 } \\ & =0065+0328 \\ & + \text { F1C4 } \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND CURL } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING CURL } \end{aligned}$ |


| $\bigcirc$ | \&Oogoncurl; <br> = O + \&combogon; <br> + \&combcurl; | $\begin{aligned} & \mathrm{E} 24 \mathrm{~F} \\ & =004 \mathrm{~F}+0328 \\ & +\mathrm{F} 1 \mathrm{C} 5 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH OGONEK AND CURL } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING CURL } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Q | \&oogoncurl; $=0+\& c o m b o g o n ;$ <br> + \&combcurl; | $\begin{aligned} & \text { E64F } \\ & =006 \mathrm{~F}+0328 \\ & +\mathrm{F} 1 \mathrm{C} 4 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH OGONEK AND CURL } \\ & \text { = LATIN SMALL LETTER O + COMBINING OGONEK } \\ & \text { + COMBINING CURL } \end{aligned}$ |
| $\varnothing$ | \&Oslashogon; <br> = \Ø + \&combogon; | $\begin{aligned} & \text { E255 } \\ & =00 \mathrm{D} 8+0328 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND OGONEK <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING OGONEK |
| ¢ | \&oslashogon; <br> = \ø + \&combogon; | $\begin{aligned} & \text { E655 } \\ & =00 \mathrm{~F} 8+0328 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND OGONEK = LATIN SMALL LETTER O WITH STROKE + COMBINING OGONEK |
| $T$ | $\begin{aligned} & \& \text { Togon; } \\ & =\text { T+ \&combogon; } \end{aligned}$ | $\begin{aligned} & \text { E2EE } \\ & =0054+0328 \end{aligned}$ | LATIN CAPITAL LETTER T WITH OGONEK = LATIN CAPITAL LETTER T + COMBINING OGONEK |
| $t$ | \&togon; <br> $=\mathrm{t}+$ \&combogon; | $\begin{aligned} & \text { E6EE } \\ & =0074+0328 \end{aligned}$ | LATIN SMALL LETTER T WITH OGONEK = LATIN SMALL LETTER T + COMBINING OGONEK |

## Subrange 23: Characters with breve

The Unicode Standard v. 5.0 has breve over the vowels 'A', 'a', 'E', 'e', 'I', 'i', 'O', 'o', 'U' and 'u' in Latin Extended-A (pp. 30-34 above). The list below contains additional character combinations. The combining breve, 0306, is located in Combining Diacritical Marks (p. 43).

Note that four of the six characters in the list below have duplicate code points in Junicode (v. 0.6.12).

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: |
| $\breve{\text { ¢ }}$ | \&AEligbreve; <br> $=\&$ AElig $;+\&$ combbreve; | $\begin{aligned} & \text { E03F } \\ & =00 \mathrm{C} 6+0306 \end{aligned}$ | F13C | LATIN CAPITAL LETTER AE WITH BREVE = LATIN CAPITAL LETTER AE + COMBINING BREVE |
| $\check{æ}$ | \&aeligbreve; <br> = \æ + \&combbreve; | E43F $=00 \mathrm{E} 6+0306$ | F13D | LATIN SMALL LETTER AE WITH BREVE = LATIN SMALL LETTER AE + COMBINING BREVE |
| $\breve{\varnothing}$ | \&Oslashbreve; <br> $=\&$ Oslash; $+\&$ combbreve; | $\begin{aligned} & \text { EBEE } \\ & =00 \mathrm{D} 8+0306 \end{aligned}$ |  | LATIN CAPITAL LETTER O WITH STROKE AND BREVE <br> = LATIN CAPITAL LETTER O WITH STROKE + COMBINING BREVE |
| $\breve{\emptyset}$ | \&oslashbreve; <br> = \&oslash: + \&combbreve; | $\begin{aligned} & \text { EBEF } \\ & =00 F 8+0306 \end{aligned}$ |  | LATIN SMALL LETTER O WITH STROKE AND BREVE <br> = LATIN SMALL LETTER O WITH STROKE + COMBINING BREVE |
| $\breve{Y}$ | \&Ybreve; $=\mathrm{Y}+\&$ combbreve; | $\begin{aligned} & \text { E376 } \\ & =0054+0306 \end{aligned}$ | F140 | LATIN CAPITAL LETTER Y WITH BREVE <br> = LATIN CAPITAL LETTER Y + COMBINING BREVE |
| $\breve{y}$ | \&ybreve; $=y+\&$ combbreve; | $\begin{aligned} & \text { E776 } \\ & =0079+0306 \end{aligned}$ | F141 | LATIN SMALL LETTER Y WITH BREVE <br> = LATIN SMALL LETTER Y + COMBINING BREVE |

## Subrange 24: Characters with macron and breve

The Unicode Standard v. 5.0 has no precomposed characters with both macron and breve. The list below contains expected character combinations.
Note that seven of the characters in the list below have duplicate code points in Junicode (v. 0.6.12): E410, E43D, E4B7, E537, E61B, E70B and E775. The combining macron, 0304, and the combining breve, 0306, are located in Combining Diacritical Marks (pp. 42-43).

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :---: | :---: | :---: | :---: | :---: |
| $\overline{\mathrm{A}}$ | \&Amacrbreve; <br> = a + \&combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E010 } \\ & =0041+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER A WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER A + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{\bar{a}}$ | \&amacrbreve; <br> = a + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E410 } \\ & =0061+0304 \\ & +0306 \end{aligned}$ | F171 | LATIN SMALL LETTER A WITH MACRON AND BREVE <br> = LATIN SMALL LETTER A + COMBINING MACRON <br> + COMBINING BREVE |
| $\check{\text { E }}$ | \&AEligmacrbreve; <br> = \Æ + \&combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E03D } \\ & =00 \mathrm{C} 6+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER AE WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER AE + COMBINING MACRON <br> + COMBINING BREVE |
| 产 | \&aeligmacrbreve; <br> = \æ + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E43D } \\ & =00 \mathrm{E} 6+0304 \\ & +0306 \end{aligned}$ | F173 | LATIN SMALL LETTER AE WITH MACRON AND BREVE <br> = LATIN SMALL LETTER AE + COMBINING MACRON <br> + COMBINING BREVE |
| $\check{\bar{E}}$ | \&Emacrbreve; <br> = E + \& combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E0B7 } \\ & =0045+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER E WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER E + COMBINING MACRON <br> + COMBINING BREVE |


| $\overline{\mathrm{e}}$ | \&emacrbreve; <br> = e + \&combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E4B7 } \\ & =0065+0304 \\ & +0306 \end{aligned}$ | F175 | LATIN SMALL LETTER E WITH MACRON AND BREVE <br> = LATIN SMALL LETTER E + COMBINING MACRON <br> + COMBINING BREVE |
| :---: | :---: | :---: | :---: | :---: |
| $\check{\overline{\mathrm{I}}}$ | \&Imacrbreve; <br> = I + \& combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E137 } \\ & =0049+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER I WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER I + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{1}$ | \&imacrbreve; <br> = i + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E537 } \\ & =0069+0304 \\ & +0306 \end{aligned}$ | F177 | LATIN SMALL LETTER I WITH MACRON AND BREVE <br> = LATIN SMALL LETTER I + COMBINING MACRON <br> + COMBINING BREVE |
| О | \&Omacrbreve; <br> = $\mathrm{O}+\& \mathrm{combmacr}$; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E21B } \\ & =004 \mathrm{~F}+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER O WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER O + COMBINING MACRON <br> + COMBINING BREVE |
| $\overline{\mathrm{O}}$ | \&omacrbreve; <br> = o + \&combmacr; <br> $+\&$ combbreve; | $\begin{aligned} & \text { E61B } \\ & =006 \mathrm{~F}+0304 \\ & +0306 \end{aligned}$ | F179 | LATIN SMALL LETTER O WITH MACRON AND BREVE <br> = LATIN SMALL LETTER O + COMBINING MACRON <br> + COMBINING BREVE |
| Ø | \&Oslashmacrbreve; <br> = \Ø + \&combmacr; <br> $+\& c o m b b r e v e ;$ | $\begin{aligned} & \text { E253 } \\ & =00 \mathrm{D} 8+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND BREVE = LATIN CAPITAL LETTER O WITH STROKE + COMBINING MACRON + COMBINING BREVE |
| $\breve{\square}$ | \&oslashmacrbreve; <br> = \ø + \&combmacr; <br> $+\&$ combbreve; | $\begin{aligned} & \text { E653 } \\ & =00 \mathrm{~F} 8+0304 \\ & +0306 \end{aligned}$ |  | LATIN SMALL LETTER O WITH STROKE AND MACRON AND BREVE = LATIN SMALL LETTER O WITH STROKE + COMBINING MACRON + COMBINING BREVE |
| $\check{\mathrm{U}}$ | $\begin{aligned} & \text { \& Umacrbreve; } \\ & \text { = U + \&combmacr; } \\ & \text { + \&combbreve; } \end{aligned}$ | $\begin{aligned} & \text { E30B } \\ & =0055+0304 \\ & +0306 \end{aligned}$ |  | LATIN CAPITAL LETTER U WITH MACRON AND BREVE <br> = LATIN CAPITAL LETTER U + COMBINING MACRON <br> + COMBINING BREVE |


| $\check{\bar{u}}$ | \&umacrbreve; <br> = u + \& combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E70B } \\ & =0075+0304 \\ & +0306 \end{aligned}$ | F17B | $\begin{aligned} & \text { LATIN SMALL LETTER U WITH MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER U + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\breve{Y}}{ }$ | \&Ymacrbreve; <br> = Y + \& combmacr; <br> + \&combbreve; | $\begin{aligned} & \text { E375 } \\ & =0059+0304 \\ & +0306 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN CAPITAL LETTER Y WITH MACRON AND BREVE } \\ & \text { = LATIN CAPITAL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |
| $\overline{\mathrm{y}}$ | $\begin{aligned} & \& y m a c r b r e v e ; \\ & =y+\& c o m b m a c r ; \\ & + \text { \&combbreve; } \end{aligned}$ | $\begin{aligned} & \text { E775 } \\ & =0079+0304 \\ & +0306 \end{aligned}$ | F17D | $\begin{aligned} & \text { LATIN SMALL LETTER Y WITH MACRON AND BREVE } \\ & \text { = LATIN SMALL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING BREVE } \end{aligned}$ |

## Subrange 25: Characters with macron and acute

The Unicode Standard v. 5.0 has macron and acute over the vowels ' E ', ' e ', ' O ' and ' o ' in Latin Extended Additional (pp. 31 and 33 above). The list below contains additional character combinations.

Note that five characters in the list below have duplicate code points in Junicode (v. 0.6.12): E40A, E43A, E535, E709 and E773. In addition, Junicode has code points for 'e' with macron and acute, F185, and 'o' with macron and acute, F189. Since the latter two characters are in Latin Extended Additional, at code points 1E16 and 1E52 respectively, they might be considered for deprecation (cf. pp. 31 and 33 above).

The combining macron, 0304, and the combining acute accent, 0301, are located in Combining Diacritical Marks (p. 42).

| Glyph | MUFI entity | MUFI code point | (Junicode) | MUFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| $\dot{A}$ | \&Amacracute; <br> $=\mathrm{a}+$ \&combmacr; <br> $+\&$ combacute; | E00A <br> $=0041+0304$ <br> +0301 | LATIN CAPITAL LETTER A WITH MACRON AND ACUTE <br> = LATIN CAPITAL LETTER A + COMBINING MACRON <br> + COMBINING ACUTE |  |


| 交 | \＆amacracute； <br> ＝a＋\＆combmacr； <br> + \＆combacute； | $\begin{array}{\|l} \hline \text { E40A } \\ =0061+0304 \\ +0301 \end{array}$ | F181 | LATIN SMALL LETTER A WITH MACRON AND ACUTE <br> ＝LATIN SMALL LETTER A＋COMBINING MACRON <br> ＋COMBINING ACUTE |
| :---: | :---: | :---: | :---: | :---: |
| 色 | \＆AEligmacracute； <br> ＝\＆AElig；＋\＆combmacr； <br> + \＆combacute； | $\begin{array}{\|l} \text { E03A } \\ =00 C 6+0304 \\ +0301 \end{array}$ |  | LATIN CAPITAL LETTER AE WITH MACRON AND ACUTE <br> ＝LATIN CAPITAL LETTER AE＋COMBINING MACRON <br> ＋COMBINING ACUTE |
| 㐫 | \＆aeligmacracute； <br> ＝\＆aelig；＋\＆combmacr； <br> $+\&$ combacute； | $\begin{aligned} & \text { E43A } \\ & =00 E 6+0304 \\ & +0301 \end{aligned}$ | F183 | LATIN SMALL LETTER AE WITH MACRON AND ACUTE <br> ＝LATIN SMALL LETTER AE＋COMBINING MACRON <br> ＋COMBINING ACUTE |
| İ | $\begin{aligned} & \text { \& Imacracute; } \\ & \text { = I + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{array}{\|l} \text { E135 } \\ =0049+0304 \\ +0301 \end{array}$ |  | LATIN CAPITAL LETTER I WITH MACRON AND ACUTE <br> ＝LATIN CAPITAL LETTER I＋COMBINING MACRON <br> ＋COMBINING ACUTE |
| $\frac{1}{1}$ | $\begin{aligned} & \text { \&imacracute; } \\ & =\text { i + \&combmacr; } \\ & + \text { \&combacute; } \end{aligned}$ | $\begin{array}{\|l} \hline \text { E535 } \\ =0069+0304 \\ +0301 \end{array}$ | F187 | LATIN SMALL LETTER I WITH MACRON AND ACUTE <br> ＝LATIN SMALL LETTER I＋COMBINING MACRON <br> ＋COMBINING ACUTE |
| Ø | \＆Oslashmacracute； <br> ＝\＆Oslash；＋\＆combmacr； <br> ＋\＆combacute； | $\begin{aligned} & \text { EBEC } \\ & =00 \text { D }+0304 \\ & +0301 \end{aligned}$ |  | LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND ACUTE＝LATIN CAPITAL LETTER O WITH STROKE＋COMBINING MACRON＋COMBINING ACUTE |
| 的 | \＆oslashmacracute； <br> ＝\＆oslash；＋\＆combmacr； <br> ＋\＆combacute； | $\begin{array}{\|l} \text { EBED } \\ =00 \mathrm{~F} 8+0304 \\ +0301 \end{array}$ |  | LATIN SMALL LETTER O WITH STROKE AND MACRON AND ACUTE $=$ LATIN SMALL LETTER O WITH STROKE + COMBINING MACRON＋COMBINING ACUTE |
| $\stackrel{\cup}{U}$ | $\begin{aligned} & \text { \&Umacracute; } \\ & =\text { U + \&combmacr; } \\ & + \text { \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E309 } \\ & =0055+0304 \\ & +0301 \end{aligned}$ |  | LATIN CAPITAL LETTER U WITH MACRON AND ACUTE <br> ＝LATIN CAPITAL LETTER U＋COMBINING MACRON <br> ＋COMBINING ACUTE |


| $\frac{1}{\text { u }}$ | \&umacracute; $=\mathrm{u}+\&$ combmacr; <br> $+\& c o m b a c u t e ;$ | $\begin{aligned} & \text { E709 } \\ & =0075+0304 \\ & +0301 \end{aligned}$ | F18B | $\begin{aligned} & \text { LATIN SMALL LETTER U WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER U + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\prime}{Y}$ | $\begin{aligned} & \text { \&Ymacracute; } \\ & \text { = Y + \&combmacr; } \\ & \text { + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E373 } \\ & =0059+0304 \\ & +0301 \end{aligned}$ |  | $\begin{aligned} & \text { LATIN CAPITAL LETTER Y WITH MACRON AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |
| $\stackrel{\prime}{\text { y }}$ | \&ymacracute; = y + \&combmacr; <br> $+\&$ combacute; | $\begin{aligned} & \text { E773 } \\ & =0079+0304 \\ & +0301 \end{aligned}$ | F18D | $\begin{aligned} & \text { LATIN SMALL LETTER Y WITH MACRON AND ACUTE } \\ & \text { = LATIN SMALL LETTER Y + COMBINING MACRON } \\ & \text { + COMBINING ACUTE } \end{aligned}$ |

## Subrange 26: Characters with dot above and acute accent

The Unicode Standard v. 5.0 has no characters with dot and acute. This combination of diacritical marks is found over vowels in Icelandic manuscripts, and although the two marks could be described as stacking (the dot, then the accent), they should preferably be rendered side by side.

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :--- | :--- | :--- | :--- |
| Á | \&Adotacute; <br> = A + \&combdot; <br> + \&combacute; | EBF4 <br> $=0041+0307$ <br> +0301 | LATIN CAPITAL LETTER A WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER A + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| á | \&adotacute; <br> = + \&combdot; <br> + \&combacute; | EBF5 <br> $=0061+0307$ <br> +0301 | LATIN SMALL LETTER A WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER A + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |


| É | \&Edotacute; = E + \&combdot; $+\&$ combacute; | $\begin{aligned} & \text { E0C8 } \\ & =0045+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| ë | \&edotacute; = e + \&combdot; <br> + \&combacute; | $\begin{aligned} & \mathrm{E} 4 \mathrm{C} 8 \\ & =0065+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| É | \&Eogondotacute; <br> $=\mathrm{E}+\&$ combogon; <br> + \&combdot; + \&combacute; | $\begin{aligned} & \text { E0EC } \\ & =0045+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| ę | $\begin{aligned} & \text { \&eogondotacute; } \\ & \text { = e + \&combogon; } \\ & \text { + \&combdot; + \&combacute; } \end{aligned}$ | $\begin{aligned} & \text { E4EC } \\ & =0065+0328 \\ & +0307+0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER E + COMBINING OGONEK } \\ & \text { + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT } \end{aligned}$ |
| İ | \&Idotacute; <br> = I + \&combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBF6 } \\ & =0049+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER I WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER I + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| 1̈ | \&idotacute; <br> $=\mathrm{i}+\&$ combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBF7 } \\ & =0069+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER I WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER I + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ö | \& Odotacute; $=$ O + \&combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBF8 } \\ & =004 \mathrm{~F}+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN CAPITAL LETTER O WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN CAPITAL LETTER O + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |
| Ö | \&odotacute; <br> $=0+\&$ combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBF9 } \\ & =006 \mathrm{~F}+0307 \\ & +0301 \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER O WITH DOT ABOVE AND ACUTE } \\ & \text { = LATIN SMALL LETTER O + COMBINING DOT ABOVE } \\ & \text { + COMBINING ACUTE ACCENT } \end{aligned}$ |


| Ǫ | \&Oogondotacute; <br> $=\mathrm{O}+\&$ combogon; <br> + \&combdot; + \& combacute; | $\begin{aligned} & \text { EBFA } \\ & =004 \mathrm{~F}+0328 \\ & +0307+0301 \end{aligned}$ | LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER O + COMBINING OGONEK <br> + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT |
| :---: | :---: | :---: | :---: |
| Ő | \&oogondotacute; <br> = o + \&combogon; <br> + \&combdot; + \&combacute; | $\begin{aligned} & \text { EBFB } \\ & =006 \mathrm{~F}+0328 \\ & +0307+0301 \end{aligned}$ | LATIN SMALL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING OGONEK <br> + COMBINING DOT ABOVE + COMBINING ACUTE ACCENT |
| Ø | \&Oslashdotacute; <br> = Oslash + \&combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBFC } \\ & =00 \mathrm{D} 8+0307 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| $\ddot{\square}$ | \& oslashdotacute; <br> = oslash + \&combdot; <br> + \& combacute; | $\begin{aligned} & \text { EBFD } \\ & =00 \mathrm{~F} 8+0307 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER O + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| Ű | \&Udotacute; <br> $=\mathrm{U}+\&$ combdot; <br> + \&combacute; | $\begin{aligned} & \text { EBFE } \\ & =0055+0307 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER U WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER U + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| ű | \&udotacute; <br> $=u+\&$ combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { EBFF } \\ & =0075+0307 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER U WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER U + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| Y' | \& Y dotacute; <br> $=\mathrm{Y}+$ \& combdot; <br> + \&combacute; | $\begin{aligned} & \text { E384 } \\ & =0059+0307 \\ & +0301 \end{aligned}$ | LATIN CAPITAL LETTER Y WITH DOT ABOVE AND ACUTE <br> = LATIN CAPITAL LETTER Y + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |
| ý | \&ydotacute; <br> = y + \&combdot; <br> $+\&$ combacute; | $\begin{aligned} & \text { E784 } \\ & =0079+0307 \\ & +0301 \end{aligned}$ | LATIN SMALL LETTER Y WITH DOT ABOVE AND ACUTE <br> = LATIN SMALL LETTER Y + COMBINING DOT ABOVE <br> + COMBINING ACUTE ACCENT |

## Subrange 27：Characters with other diacritics

This subrange contains a few characters with other types of diacritics．There are two pairs of characters with combining circumflex，over «ea» and＜eu»．They are used in Post－Medieval Faroese sources，but，because some of these texts（like many Icelandic ones）are discussed or cited in the context of Medieval sources they should be allowed here．The same applies to the two characters， i$\rangle$ and＜u»，with inverted breve below．They are frequently found in grammars of Medieval Nordic and sometimes also in the transcription of Medieval sources，typically used for the asyllabic（consonantal）form of these characters，i．e．〈j＞ and 〈v〉．

| Glyph | MUFI entity | MUFI code point | MUFI descriptive name |
| :---: | :---: | :---: | :---: |
| $\stackrel{1}{1}$ | \＆ibrevinvbl； $=\mathrm{i}+\&$ combbrevinvbl； | $\begin{aligned} & \text { E548 } \\ & =0069+032 F \end{aligned}$ | LATIN SMALL LETTER I WITH INVERTED BREVE BELOW ＝LATIN SMALL LETTER I＋COMBINING INVERTED BREVE BELOW |
| U | \＆ubrevinvbl； $=\mathrm{u}+\&$ combbrevinvbl； | $\begin{aligned} & \text { E727 } \\ & =0075+032 F \end{aligned}$ | LATIN SMALL LETTER U WITH INVERTED BREVE BELOW ＝LATIN SMALL LETTER U＋COMBINING INVERTED BREVE BELOW |
| eà | $\begin{aligned} & \text { \&eacombcirc; } \\ & =\text { e + a } \\ & \text { + \&combcircdbl; } \end{aligned}$ | $\begin{aligned} & \text { EBBD } \\ & =0065+0061 \\ & + \text { F163 } \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER EA WITH COMBINING CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER E + LATIN SMALL LETTER A } \\ & \text { + COMBINING DOUBLE CIRCUMFLEX ABOVE } \end{aligned}$ |
| êu | \＆eucombcirc； $=\mathrm{e}+\mathrm{u}$ <br> ＋\＆combcircdbl； | $\begin{aligned} & \text { EBBE } \\ & =0065+0075 \\ & + \text { F163 } \end{aligned}$ | $\begin{aligned} & \text { LATIN SMALL LETTER EU WITH COMBINING CIRCUMFLEX } \\ & \text { = LATIN SMALL LETTER E + LATIN SMALL LETTER U } \\ & \text { + COMBINING DOUBLE CIRCUMFLEX ABOVE } \end{aligned}$ |
| $\widetilde{\mathrm{u}}$ | \＆ucurlbar； ＝i＋\＆combcurlbar； | $\begin{aligned} & \text { EBBF } \\ & =0069+\text { F1CC } \end{aligned}$ | LATIN SMALL LETTER U WITH CURLY BAR ABOVE ＝LATIN SMALL LETTER U＋COMBINING CURLY BAR ABOVE |

Frequently used in handwriting to distinguish the character＇u＇from other minims（i，m，n）．Similarly，the character＇ 1 ＇was written without any distinctive mark in a great number of Medieval manuscripts，but the dot（or an accent）was increasingly used in order to distinguish＇ 1 ＇from other minims（ m ， $\mathrm{n}, \mathrm{u}$ ）．

Subranges 28-29:
Reserved for future additions.

## Category 3: Variant letter forms

Important note: Variant letter forms should only be used when their form is considered to be of importance and the distinction between the "standard" character and the variant form carries paleographical, phonological, semantic or other types of meaning.

This category contains a selection of major variant letter forms in Medieval European writing in the Latin alphabet. In v. 1.0 of the MUFI character recommendation, this category was divided according to national or regional criteria, with one subrange for Nordic characters and one for English characters. However, due to the dissemination of styles across Medieval Europe, many characters belong to more than one range. For this reason, the variant letter forms are listed alphabetically.

No code points from v. 1.0 have been changed, but, because characters are listed alphabetically, code points will no longer be contiguous. Code points for variant letter forms commence with F200. To minimise conflicts with Junicode, code points in this font have been used wherever possible.

Latin script is bicameral, having the opposition between capital (majuscule) and small (minuscule) letters. Uncial script was initially unicameral, but a distinction gradually emerged in Semi-Uncial script. The perspective in this recommendation is the bicameral script introduced with the Carolingian minuscule around 800, so Uncial letter forms have been classified as being either small or capital. The default case is that Uncial letter forms were accommodated within the ' $x$ ' height, meaning that they should be classified as small letters.

Some scholars prefer to view Latin script as tricameral rather than bicameral, making a distinction between majuscules, mediuscules and minuscules. In this model, Uncial letter forms would probably be defined as mediuscules, and should be drawn larger than ' $x$ ' height. For a discussion of this tricameral model, see Andreas Stötzner, "Die Andron - Erweiterte typographische Möglichkeiten mit einer neuen Satzschrift", Gutenberg-Jahrbuch 2004, vol. 79, Mainz: Gutenberg-Gesellschaft, pp.11-25, particularly pp. 21-25.

Within each standard character, variant letter forms are listed in roughly chronological order of the style to which they belong or with which they should be associated, viz. Uncial (including Semi-Uncial), Carolingian, Insular, Proto-Gothic (or Late Carolingian) and Gothic. If a variant letter form can be associated with several styles, it is considered a general variant and listed first among the variant letter forms.

| Glyph | MuFl entity | MuFI code point | (Junicode) | MuFI descriptive name |
| :--- | :--- | :--- | :--- | :--- |
| A | \&Asqu; | F13A | F13A | LATIN CAPITAL LETTER A SQUARE FORM |

This particular variant is found in some manuscripts, particularly CCCC 173, the Parker Chronicle.

| a | \&aunc; | F214 |  | LATIN SMALL LETTER A UNCIAL FORM |
| :--- | :--- | :--- | :--- | :--- |

This is the very typical Uncial shape, with a diagonal main stroke and a long, but very narrow loop to the left. It is also found in Carolingian minuscules, as a variant to the open $u$-shaped form (see below).

| $\boldsymbol{A}$ | \&Ains; | F201 |  | LATIN CAPITAL LETTER A INSULAR FORM |
| :--- | :--- | :--- | :--- | :--- |

This is the enlarged variant of ' a ', triangular in shape. Cf. D.A. Seip, Palcoografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 27. Within a duocameral script it should probably be classified as a capital rather than as an enlarged minuscule.

| a | \&ains; | F200 |  | LATIN SMALL LETTER A INSULAR FORM |
| :--- | :--- | :--- | :--- | :--- |

This is the single-storey ' $a$ ' of the Insular script, similar in shape to modern italic ' $a$ '. It is also found in later Semi-Uncial script, but can probably be most easily associated with Insular script.

| u | \&aopen; | F202 | LATIN SMALL LETTER OPEN A CAROLINGIAN FORM |
| :---: | :---: | :---: | :---: |
| This is the traditional 'open a' from early Carolingian minuscules, similar in shape to 'cc' and easily mistaken for ' $u$ '. |  |  |  |
| d | \&aneckless; | F215 | LATIN SMALL LETTER NECKLESS A |
| A variant form of 'a' attested in Old Icelandic script. |  |  |  |


| a | \&aclose; | F203 |  | LATIN SMALL LETTER CLOSED A GOTHIC FORM |
| :--- | :--- | :--- | :--- | :--- |

This form of 'a' is often referred to as 'two storey' ('to-etasjes'). Cf. D.A. Seip, Palcoografi: Norge og Island (Nordisk kultur 23:B), Oslo etc. 1954, p. 70.


Middle English usage. From the font Junicode.

| Cr | \&ccurl; | F198 |  | LATIN SMALL LETTER C WITH CURL |
| :--- | :--- | :--- | :--- | :--- |

Middle English usage. Not in previous versions of Junicode.

| $\partial$ | $\& d r o t ;$ | F109 | F109 | LATIN SMALL LETTER D ROTUNDA |
| :--- | :--- | :--- | :--- | :--- |

This letter form can be traced back to (Semi)-Uncial script, and is also typical of Insular script. We therefore recommend a general name like D ROTUNDA rather than UNCIAL D or INSULAR D. Similar considerations apply to LATIN SMALL LETTER T ROTUNDA (p. 165 below).

| $\delta$ | $\& d s c r i p t ;$ | F216 |  | LATIN SMALL LETTER SCRIPT D |
| :--- | :--- | :--- | :--- | :--- |

Used for the voiced dental fricative in some editions of Medieval Welsh texts, and by some Indo-Europeanists.

| d | $\&$ dcurl; | F193 | F193 | LATIN SMALL LETTER D WITH CURL |
| :--- | :--- | :--- | :--- | :--- |

Middle English usage. From the font Junicode, but redrawn here.

| E | \&Eunc; | F10A | F10A | LATIN CAPITAL LETTER E UNCIAL FORM |
| :--- | :--- | :--- | :--- | :--- |
| Q | \&Euncclose; | F217 |  | LATIN CAPITAL LETTER CLOSED E UNCIAL FORM |


| $\epsilon$ | \&eunc; | F218 |  | LATIN SMALL LETTER E UNCIAL FORM |
| :--- | :--- | :--- | :--- | :--- |
| e | \&eext; | F219 |  | LATIN SMALL LETTER E EXTENDED BAR FORM |

This is the quite common form of 'e' where the horizontal bar extends to the right of the loop.

| E | \&etall; | F21A |  | LATIN SMALL LETTER E TALL FORM |
| :--- | :--- | :--- | :--- | :--- |
| This is a form of the ' e ' where the loop is distinctly higher than the ordinary ' $x$ ' height. |  |  |  |  |
| F | \&Fins; | F10C |  | LATIN CAPITAL LETTER INSULAR F |
| F | \&fins; | F10D | F10D | LATIN SMALL LETTER INSULAR F |

This form is first seen in Uncial script, but can probably be most uniquely associated with Insular script. It was introduced in early Norwegian script in the 12th century (and subsequently in Icelandic script) and was retained in the formal Gothic script of the 14th century.

| $\mathcal{P}$ | \&finssemiclose; | F21B |  | LATIN SMALL LETTER SEMI-CLOSED INSULAR F |
| :--- | :--- | :--- | :--- | :--- |

This is an intermediate type between the original Insular letter form and the closed, Gothic type.


This is a variant where the two hooks have been reduced to two dots, like a colon. Common in 13th century Medieval Nordic script.

| $\beta$ | \&finsclose; | F207 |  | LATIN SMALL LETTER CLOSED INSULAR F |
| :--- | :--- | :--- | :--- | :--- |

This is the closed, Gothic form of the original Insular lettershape, found in Medieval Nordic script.

| $f$ | \&fcurl; | F194 | F194 | LATIN SMALL LETTER F WITH CURL |
| :--- | :--- | :--- | :--- | :--- |
| Middle English usage. From the font Junicode, but redrawn here. |  |  |  |  |
| G | $\&$ Gsqu; | F10E | F10E | LATIN CAPITAL LETTER G SQUARE FORM |
| $\boldsymbol{\delta}$ | $\&$ Gins; | F10B |  | LATIN CAPITAL LETTER INSULAR G |

The capital Insular ' g ' was not included in Junicode, but, because the small variant is located at F10F, the vacant code point F10B has been selected here.


In v. 4.1 of the Unicode Standard, this character was assigned to code point 1D79 in Phonetic Extensions (see p. 49 above), based on its usage in phonetic notation of Irish. The 1D79 code point should be used hereafter, while the F10F code point should be retained for backwards compatibility and not used for any new character.

| gr | \&gcurl; | F196 | F196 | LATIN SMALL LETTER G WITH CURL |
| :--- | :--- | :--- | :--- | :--- |

Middle English usage. From the font Junicode, but redrawn here.

| $g$ | \&gdivloop; | F21D |  | LATIN SMALL LETTER G WITH SEPARATE LOOPS |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{g}$ | \&glglowloop; | F21E |  | LATIN SMALL LETTER CLOSED G WITH LARGE LOWER LOOP |
| g | \&gsmlowloop; | F21F |  | LATIN SMALL LETTER CLOSED G WITH SMALL LOWER LOOP |
| h | \&Hunc; | F110 | F110 | LATIN CAPITAL LETTER H UNCIAL FORM |

Classified as Insular in v. 1.0 and reclassified as Uncial in v. 2.0 of the MUFI character recommendation.

| b | \&hrdes; | F23A |  | LATIN SMALL LETTER H WITH RIGHT DESCENDER |
| :--- | :--- | :--- | :--- | :--- |
| I | \&Ilong; | F7B8 |  | LATIN CAPITAL LETTER LONG I |

Frequently used in Classical epigraphy. From a Unicode proposal by David J. Perry.

| $\boldsymbol{1}$ | \&ilong; | F220 |  | LATIN SMALL LETTER LONG I |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{J}$ | \&jnodot; | E55C |  | LATIN SMALL LETTER J DOTLESS |

In v. 4.1 of the Unicode Standard, this character was assigned to code point 0237 in Latin Extended-B (see p. 38 above). The 0237 code point should be used hereafter, while the E55C code point should be retained for backwards compatibility and not used for any new character. Also note that the entity name in analogy with '\ı' should be '\&jnodot; rather than the one recommended in v. 1.0 of the MUFI character recommendation, i.e. ' $\& j d 1 ;$;.

| l | \&kunc; | F208 |  | LATIN SMALL LETTER K UNCIAL FORM |
| :--- | :--- | :--- | :--- | :--- |

This character is discussed by Hreinn Benediktsson, Early Icelandic Script, Reykjavík 1965, p. 46.


This is an intermediate type between the Carolingian letter form and the closed, Gothic type. Cf. the three Insular ' f ' variants above.

| $\mathfrak{B}$ | \&kclose; | F209 |  | LATIN SMALL LETTER K CLOSED FORM |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\xi}$ | \&kcurl; | F195 | F195 | LATIN SMALL LETTER K WITH CURL |

Middle English usage. From the font Junicode, but redrawn here.

| $l$ | \&ldes; | F222 |  | LATIN SMALL LETTER L DESCENDING |
| :--- | :--- | :--- | :--- | :--- |
| Attested in Codex Regius of the Eddic poems. |  |  |  |  |
| $\Omega$ | \&Munc; | F11A | F11A | LATIN CAPITAL LETTER M UNCIAL FORM |
| $\Omega$ | \&Muncdes; | F224 |  | LATIN CAPITAL LETTER M UNCIAL FORM WITH RIGHT DESCENDER |
| $\Omega$ | \&munc; | F225 |  | LATIN SMALL LETTER M UNCIAL FORM |
| $\Omega$ | \&muncdes; | F226 |  | LATIN SMALL LETTER M UNCIAL FORM WITH RIGHT DESCENDER |
| $\mathbf{N}$ | \&M5leg; | F227 |  | LATIN CAPITAL LETTER FIVE-LEGGED M |

The five-legged ' M ' is an archaic form of the letter ' M ', and was used to abbreviate the praenomen Manius; cf. e.g. René Cagnat, Cours d'epigraphie latine, 4th ed., Paris: Fontemoing, 1914. Also attested in print in Leonhard Schumacher, Römische Inschriften, Stuttgart 1988.

| $\mathbf{m}$ | \&mrdes; | F223 |  | LATIN SMALL LETTER M WITH RIGHT DESCENDER |
| :--- | :--- | :--- | :--- | :--- |

This character is typically used in word-final position.

| J | \&Nrdes; | F229 |  | LATIN CAPITAL LETTER N WITH RIGHT DESCENDER |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{\eta}$ | \&nrdes; | F228 |  | LATIN SMALL LETTER N WITH RIGHT DESCENDER |

This character is typically used in word-final position with the meaning /n/, and should be kept apart from 014B LATIN SMALL LETTER ENG in Latin Ex-tended-A, cf. p. 33 above.

| $\mathbb{Y}$ | \&nscaprdes; | F22A |  | LATIN LETTER SMALL CAPITAL N WITH RIGHT DESCENDER |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbb{N}$ | \&nscapldes; | F22B |  | LATIN LETTER SMALL CAPITAL N WITH LEFT DESCENDER |

This is a typical Insular form of the character, basically a small capital ' N ', but with a left descender and a low crossbar, like the two letter forms above.

| $\mathfrak{n}$ | \&nflour; | F19A |  | LATIN SMALL LETTER N WITH FLOURISH |
| :--- | :--- | :--- | :--- | :--- |

Middle English usage. Not in previous versions of Junicode.

| q | $\&$ Qstem; | F22C |  | LATIN CAPITAL LETTER Q WITH STEM |
| :--- | :--- | :--- | :--- | :--- |
| 2 | \&Rrot; | F22D |  | LATIN CAPITAL LETTER R ROTUNDA |
| 2 | $\& r r o t ; ~$ | F20E |  | LATIN SMALL LETTER R ROTUNDA |
| $\mathbf{\eta}$ | \&rins; | F125 | F125 | LATIN SMALL LETTER INSULAR R |
| $\mathfrak{r}$ | \&rflour; | F19B |  | LATIN SMALL LETTER R WITH FLOURISH |

Middle English usage. Not in previous versions of Junicode.

| $\boldsymbol{S}$ | $\&$ Sclose; | F126 | F126 | LATIN CAPITAL LETTER S CLOSED FORM |
| :--- | :--- | :--- | :--- | :--- |
| This letter form is possibly a design by the type cutter of the original Junius font. |  |  |  |  |
| G | \&sclose; | F128 |  | LATIN SMALL LETTER S CLOSED FORM | Small form of LATIN CAPITAL LETTER S CLOSED FORM.


| $r$ | \&sins; | F22E |  | LATIN SMALL LETTER INSULAR S |
| :---: | :---: | :---: | :---: | :---: |
| The Insular 's' can easily be taken for the long-stemmed Carolingian 'r', i.e. 'r'. For the latter letter form, we recommend using 027C in IPA Extensions. |  |  |  |  |
| $[$ | \&slongdes; | F127 | F127 | LATIN SMALL LETTER LONG S DESCENDING |
| This character extends below the base line, while the ordinary long 's' is located on the base line. |  |  |  |  |
| C | \&Trot; | F22F |  | LATIN CAPITAL LETTER T ROTUNDA |
| $\tau$ | \& trot; | F129 | F129 | LATIN SMALL LETTER T ROTUNDA |
| This letter form can be traced back to (Semi)-Uncial script, and is also typical of Insular script. Since this letter form is also found on the Continent, we recommend naming the character T ROTUNDA rather than INSULAR T, (as in v. 1.0 of the recommendation). Similar considerations apply to LATIN SMALL LETTER D ROTUNDA (p. 159 above). |  |  |  |  |
| $t 2$ | \&tcurl; | F199 |  | LATIN SMALL LETTER T WITH CURL |
| Middle English usage. Not in previous versions of Junicode. |  |  |  |  |
| D | \&Vwelsh; | F230 |  | LATIN CAPITAL LETTER MIDDLE-WELSH V |
| 0 | \&vwelsh; | F231 |  | LATIN SMALL LETTER MIDDLE-WELSH V |
| Used in Medieval Welsh manuscripts and printed sources. |  |  |  |  |
| 1 | \&Vins; | F210 |  | LATIN CAPITAL LETTER INSULAR V (VEND) |



Additional characters: From F240 to F2CF and from F300 to F3FF, there are total of 400 unallocated slots. In addition, there are approximately 100 unallocated slots in the section F100-F1FF. Junicode has English letter forms in this section. This leaves a total of approx. 500 available slots in the F100-F3FF section of the Private Use Area. Alphabetum uses F400 and upwards for a number of other characters, and Titus occupies the E000-F0FF section.

## C: Stylistic and ornamental variants

This category contains letter shapes that should be regarded as most likely to be stylistic or ornamental variants. The Old English and the Nordic styles of thorn is a particularly apt example. This character is typically drawn quite differently in Old English, ' P ' and ' p ' (shown in Junicode), and in Nordic, ' P ' and ' p ' (shown in Times). Yet, it is the same character. It was in fact borrowed from Old English into Nordic writing in the 11th century and remains to this day in Icelandic.

With modern Smart Font technology, such as Microsoft's OpenType and Apple's AAT, variant forms may be associated with specific characters in a font. For example, old style numerals ( 0123456789 ) can be given as variants to modern tabular numerals ( 012345689 ), ligatures (e.g. ff, fi and fi) to non-ligated sequences (e.g. ff, fi and fj), and one or more stylistic variants can be given for each character, e.g. for ornamental usage. Even though Smart Font technology is not fully supported by all computer applications and there still is some competition between the technologies, we believe that Smart Font technology has now reached sufficient maturity and should be adopted for stylistic and ornamental variants.

In modern Smart Font technology, it is not necessary to assign separate code points to stylistic variants. Thus, a text which has been encoded with the standard code points for capital and small thorn, 00 DE and 00 FE , will look different in an Old English style font like Junicode and in most other fonts, but the character encoding will not be affected and there is thus no risk of loss or change of information.

Some variants have been assigned to separate code points in the Private Use Area by Adobe and other companies, notably old style numerals (F730-F739) and small capitals (F761-F77A, F7E0-F7FF). However, it seems that Adobe is changing policy in this matter and would like to avoid using code points in the Private Use Area. Rather, OpenType or similar technologies are advocated by Adobe for variant forms of numerals, small capitals and the like. For this and other reasons, we recommend that a variant should not be assigned to a code point in the Private Use Area, but to the code point of its "mother" character.

Note that, with the variants listed in this section, it is not always obvious what is the "standard" or default form of a character and what is the variant form. For example, in a font like Junicode, the Old English style of the capital thorn, ' P ', is the default form and the Nordic style, ' P ', is the variant form; in most other fonts it will be the other way round. Similarly, in many fonts the modern style numerals, 012345689 , are the default number forms and the old style numerals, oi23456789, are variants, but an increasing number of fonts prefer to have old style numerals as default.

In SGML/XML encoding, variants may be described by use of markup, whether by entities or by elements. However, since we believe that the variants listed in this section should be handled by Smart Font technology, we give the same code points as for the "standard" characters.

## I: Variant number forms

There are four commonly recognised forms of numerals. The most important distinction is between modern style numerals in which all figures have equal height, 012345689 , and old style numerals in which figures have ascenders or descenders or remain within the ' $x$ ' height, oir23456789. In addition, both types can be proportional, i.e. with varying width (' 0 ' being wider than ' 1 '), or tabular, i.e. with a fixed width so that they will line horizontally as well as vertically in a table. The full set is thus (a) modern style proportional, 012345689 , (b) old style proportional, oI23456789, (c) modern style fixed width and (d) old style fixed width. Although a full set of four types can be useful, we believe that in most cases two sets will be sufficient. Thus a font with old style numerals as default should have modern style numerals as variants, and the other way round. Since modern style numerals have been displayed above on $0030-0039$ ( p .16 ) we give the old style numerals below. Note that 'oI2' are drawn within the ' $x$ ' height, ' 34579 ' are descending and ' 68 ' are ascending.

| Glyph | Code point | MUFI descriptive name |
| :--- | :--- | :--- |
| $\mathbf{O}$ | 0030 | DIGIT ZERO OLD STYLE PROPORTIONAL |
| $\mathbf{1}$ | 0031 | DIGIT ONE OLD STYLE PROPORTIONAL |
| $\mathbf{2}$ | 0032 | DIGIT TWO OLD STYLE PROPORTIONAL |
| $\mathbf{3}$ | 0033 | DIGIT THREE OLD STYLE PROPORTIONAL |
| $\mathbf{4}$ | 0034 | DIGIT FOUR OLD STYLE PROPORTIONAL |
| $\mathbf{5}$ | 0035 | DIGIT FIVE OLD STYLE PROPORTIONAL |
| $\mathbf{6}$ | 0036 | DIGIT SIX OLD STYLE PROPORTIONAL |
| 7 | 0037 | DIGIT SEVEN OLD STYLE PROPORTIONAL |


| 8 | 0038 | DIGIT EIGHT OLD STYLE PROPORTIONAL |
| :--- | :--- | :--- |
| 9 | 0039 | DIGIT NINE OLD STYLE PROPORTIONAL |

## 2: Typographical small capitals

Small capitals, 'ABCDE', are capitals drawn within the 'x' height of the font or slightly taller. The Unicode Standard has accepted a number of small capitals used in phonetic notations, e.g. in IPA Extensions and in Phonetic Extensions. To these, this recommendations has added a handful of small capitals used to denote geminates in Old Norse, cf. subrange 2 above. We shall refer to this type as linguistic small capitals, since they have a separate meaning from their capital counterparts. For example, 0280 LATIN LETTER SMALL CAPITAL R, ' r ' is used to denote a uvular r -sound and cannot be represented by 0052 LATIN CAPITAL LETTER R, 'R'. See e.g. Geoffrey K. Pullum and William A. Ladusaw, Phonetic Symbol Guide, 2nd ed., Chicago: The University of Chicago Press, pp. 167-68. As a rule, linguistic small capitals are drawn wholly within the ' $x$ ' height of the font.

Another type of small capitals are used for emphasis, subtitles or abbreviations, especially in fonts with tall ascenders (which means that sequences of full capitals look more obtrusive than in fonts with shorter ascenders). In many traditions, especially in German typography, small capitals are used for AUTHORS' names. From a functional point of view, this usage is parallel to the usage of italics or bold. We shall refer to this type as typographical small capitals. Typographical small capitals are as a rule drawn slightly taller than the ' $x$ ' height of the font.

Typographical small capitals should be kept strictly apart from linguistic small capitals. While linguistic small capitals have their own code points and thus are separate characters, typographical small capitals should be treated as variants of ordinary capitals. While e.g. 'This book was written by JOHN SMITH' is typographically less elegant than 'This book was written by JOHN SMITH' (or, possibly better, 'JOHN SMITH') the distinction between the full capitals and the small capitals does not count as any linguistic distinction. JOHN SMITH is identical to JOHN SMITH or, for that matter, John Smith and John Smith.

Adobe has assigned code points in the Private Usea Area for typographical small capitals in the section F761-F7FF. As with the variant number forms, we recommend that typographical small capitals should not be assigned to code points in the Private Use Area, but to the code point of its "mother" character using Smart Font technologies.

If a font is extended with typographical small capitals, it should as a minimum have the characters ' $\mathrm{A}-\mathrm{Z}$ ', including frequently used accented characters and some ligatures. The list below contains a suggested minimum but can easily be extended.

| Glyph | Code point | MUFI descriptive name |
| :--- | :--- | :--- |
| A | 0041 | LATIN LETTER SMALL CAPITAL A TYPOGRAPHICAL FORM |
| B | 0042 | LATIN LETTER SMALL CAPITAL B TYPOGRAPHICAL FORM |
| C | 0043 | LATIN LETTER SMALL CAPITAL C TYPOGRAPHICAL FORM |
| D | 0044 | LATIN LETTER SMALL CAPITAL D TYPOGRAPHICAL FORM |
| E | 0045 | LATIN LETTER SMALL CAPITAL E TYPOGRAPHICAL FORM |
| F | 0046 | LATIN LETTER SMALL CAPITAL F TYPOGRAPHICAL FORM |
| G | 0047 | LATIN LETTER SMALL CAPITAL G TYPOGRAPHICAL FORM |
| H | 0048 | LATIN LETTER SMALL CAPITAL H TYPOGRAPHICAL FORM |
| I | 0049 | LATIN LETTER SMALL CAPITAL I TYPOGRAPHICAL FORM |
| J | 004 A | LATIN LETTER SMALL CAPITAL J TYPOGRAPHICAL FORM |
| K | $004 B$ | LATIN LETTER SMALL CAPITAL K TYPOGRAPHICAL FORM |
| L | $004 C$ | LATIN LETTER SMALL CAPITAL L TYPOGRAPHICAL FORM |
| M | $004 D$ | LATIN LETTER SMALL CAPITAL M TYPOGRAPHICAL FORM |


| $\mathbf{N}$ | 004 E | LATIN LETTER SMALL CAPITAL N TYPOGRAPHICAL FORM |
| :--- | :--- | :--- |
| O | 004 F | LATIN LETTER SMALL CAPITAL O TYPOGRAPHICAL FORM |
| P | 0050 | LATIN LETTER SMALL CAPITAL P TYPOGRAPHICAL FORM |
| Q | 0051 | LATIN LETTER SMALL CAPITAL Q TYPOGRAPHICAL FORM |
| R | 0052 | LATIN LETTER SMALL CAPITAL R TYPOGRAPHICAL FORM |
| S | 0053 | LATIN LETTER SMALL CAPITAL S TYPOGRAPHICAL FORM |
| T | 0054 | LATIN LETTER SMALL CAPITAL T TYPOGRAPHICAL FORM |
| U | 0055 | LATIN LETTER SMALL CAPITAL U TYPOGRAPHICAL FORM |
| V | 0056 | LATIN LETTER SMALL CAPITAL V TYPOGRAPHICAL FORM |
| W | 0057 | LATIN LETTER SMALL CAPITAL W TYPOGRAPHICAL FORM |
| X | 0058 | LATIN LETTER SMALL CAPITAL X TYPOGRAPHICAL FORM |
| Y | 0059 | LATIN LETTER SMALL CAPITAL Y TYPOGRAPHICAL FORM |
| Z | $005 A$ | LATIN LETTER SMALL CAPITAL Z TYPOGRAPHICAL FORM |


| À | 00C0 | LATIN LETTER SMALL CAPITALA WITH GRAVE TYPOGRAPHICAL FORM |
| :---: | :---: | :---: |
| Á | 00C1 | LATIN LETTER SMALL CAPITAL A WITH ACUTE TYPOGRAPHICAL FORM |
| A | 00C2 | LATIN LETTER SMALL CAPITAL A WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| A | 00C3 | LATIN LETTER SMALL CAPITAL A WITH TILDE TYPOGRAPHICAL FORM |
| $\ddot{A}$ | 00C4 | LATIN LETTER SMALL CAPITAL A WITH DIAERESIS TYPOGRAPHICAL FORM |
| Å | 00C5 | LATIN LETTER SMALL CAPITAL A WITH RING TYPOGRAPHICAL FORM |
| Æ | 00C6 | LATIN LETTER SMALL CAPITAL AE TYPOGRAPHICAL FORM |
| Ç | 00C7 | LATIN LETTER SMALL CAPITALC WITH CEDILLA TYPOGRAPHICAL FORM |
| È | 00C8 | LATIN LETTER SMALL CAPITAL E WITH GRAVE TYPOGRAPHICAL FORM |
| É | 00C9 | LATIN LETTER SMALL CAPITAL E WITH ACUTE TYPOGRAPHICAL FORM |
| E | 00CA | LATIN LETTER SMALL CAPITALE WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| E | 00CB | LATIN LETTER SMALL CAPITAL E WITH DIAERESIS TYPOGRAPHICAL FORM |
| İ | 00CC | LATIN LETTER SMALL CAPITAL I WITH GRAVE TYPOGRAPHICAL FORM |


| Í | 00CD | LATIN LETTER SMALL CAPITAL I WITH ACUTE TYPOGRAPHICAL FORM |
| :---: | :---: | :---: |
| İ | 00CE | LATIN LETTER SMALL CAPITAL I WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| İ | 00CF | LATIN LETTER SMALL CAPITAL I WITH DIAERESIS TYPOGRAPHICAL FORM |
| N | 00D1 | LATIN LETTER SMALL CAPITAL N WITH TILDE TYPOGRAPHICAL FORM |
| Ò | 00D2 | LATIN LETTER SMALL CAPITAL O WITH GRAVE TYPOGRAPHICAL FORM |
| Ó | 00D3 | LATIN LETTER SMALL CAPITAL O WITH ACUTE TYPOGRAPHICAL FORM |
| Ô | 00D4 | LATIN LETTER SMALL CAPITAL O WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| O | 00D5 | LATIN LETTER SMALL CAPITAL O WITH TILDE TYPOGRAPHICAL FORM |
| Ö | 00D6 | LATIN LETTER SMALL CAPITAL O WITH DIAERESIS TYPOGRAPHICAL FORM |
| OE | 0152 | LATIN LETTER SMALL CAPITAL LIGATURE OE TYPOGRAPHICAL FORM |
| $\emptyset$ | 00D8 | LATIN CAPITAL LETTER O WITH STROKE TYPOGRAPHICAL FORM |
| Ù | 00D9 | LATIN LETTER SMALL CAPITAL U WITH GRAVE TYPOGRAPHICAL FORM |
| Ú | 00DA | LATIN LETTER SMALL CAPITAL U WITH ACUTE TYPOGRAPHICAL FORM |


| $\hat{U}$ | 00 DB | LATIN LETTER SMALL CAPITAL U WITH CIRCUMFLEX TYPOGRAPHICAL FORM |
| :--- | :--- | :--- |
| $\ddot{\mathrm{U}}$ | 00 DC | LATIN LETTER SMALL CAPITAL U WITH DIAERESIS TYPOGRAPHICAL FORM |
| $\ddot{\mathrm{Y}}$ | 0178 | LATIN LETTER SMALL CAPITAL Y WITH DIAERESIS TYPOGRAPHICAL FORM |

## 3: Regional styles

Across Europe, there was a number of regional styles in Medieval writing. The Old English and Nordic style of thorn has already been discussed, and to this can be added two styles of the eth, distinguished by the curvature and angle of the ascender. Since the glyphs in the Unicode Standard have the Nordic style, only the Old English stylistic variants are listed below. However, the default style varies from font to font. In most fonts, the Nordic style is default and an Old English style may be added with Smart Font technology. In some fonts, like Junicode, the Old English style is default and the Nordic style has been added as a variant form.

The list of characters with regional styles is potentially very long. Presently it is limited to the variants of the thorn and eth, since these characters are so frequent and have such distinct shapes in most Old English and Old Norse texts, especially the capital form of the thorn. We recommend that all MUFI-compatible fonts should include these variants.

Note that different code points have not been assigned to the stylistic variants. They should be encoded with the code points in the Unicode Standard.

Characters in this section are displayed in the font Junicode.

| Glyph | Code point | MUFI descriptive name |
| :--- | :--- | :--- |
| $\mathbf{p}$ | 00 FE | LATIN SMALL LETTER THORN OLD ENGLISH STYLE |


| $\boldsymbol{P}$ | 00 DE | LATIN CAPITAL LETTER THORN OLD ENGLISH STYLE |
| :--- | :--- | :--- |
| $\varnothing$ | $00 \mathrm{F0}$ | LATIN SMALL LETTER ETH OLD ENGLISH STYLE |

## 4: Other variants

This section contains variants that do not fit into any of the sections above. Presently, only one variant is listed here, the long 's' without a hackle. From a typographical point of view, we believe that the form with hackle, as seen at 017 F above (p.35) is the preferred form, but font designers who would like to make a variant without a hackle can do so by Smart Font technology.

The character is displayed in the font ReykjavikTimes.

| Glyph | Code point | MuFI descriptive name |
| :--- | :--- | :--- |
| $\int$ | 017 F | LATIN SMALL LETTER LONG S WITHOUT HACKLE |

## Appendix

## Additions and changes in v. 2.0 of the recommendation

A number of characters have been added in v. 2.0, a few have received new code points, and several entity and descriptive names have been changed. This is a complete list of changes. Characters are listed in order of appearance in the recommendation.

## I. New characters

| The official part of the Unicode Standard | 01EC LATIN CAPITAL LETTER O WITH OGONEK AND MACRON |
| :---: | :---: |
| Latin Extended-A | 01ED LATIN SMALL LETTER O WITH OGONEK AND MACRON |
| 0106 LATIN CAPITAL LETTER C WITH ACUTE | 01F4 LATIN CAPITAL LETTER G WITH ACUTE |
| 0107 LATIN SMALL LETTER C WITH ACUTE | 01F5 LATIN SMALL LETTER G WITH ACUTE |
| 0130 LATIN CAPITAL LETTER I WITH DOT ABOVE | 0237 LATIN SMALL LETTER J WITH STROKE |
| 0139 LATIN CAPITAL LETTER L WITH ACUTE | 0248 LATIN CAPITAL LETTER J WITH STROKE |
| 013A LATIN SMALL LETTER L WITH ACUTE | 0249 LATIN SMALL LETTER J WITH STROKE |
| 0141 LATIN CAPITAL LETTER L WITH STROKE | IPA Extensions |
| 0142 LATIN SMALL LETTER L WITH STROKE | 0261 LATIN SMALL LETTER SCRIPT G |
| 0143 LATIN CAPITAL LETTER N WITH ACUTE | 0268 LATIN SMALL LETTER I WITH STROKE |
| 0144 LATIN SMALL LETTER N WITH ACUTE | 0272 LATIN SMALL LETTER N WITH LEFT HOOK |
| 0154 LATIN CAPITAL LETTER R WITH ACUTE | 0292 LATIN SMALL LETTER EZH |
| 0155 LATIN SMALL LETTER R WITH ACUTE | Spacing Modifying Letters |
| 015A LATIN CAPITAL LETTER S WITH ACUTE | 02BC MODIFIER LETTER APOSTROPHE |
| 015B LATIN SMALL LETTER S WITH ACUTE | 02C8 MODIFIER LETTER VERTICAL LINE |
| 017C LATIN SMALL LETTER Z WITH DOT ABOVE | 02E3 MODIFIER LETTER SMALL X |
| 017B LATIN CAPITAL LETTER Z WITH DOT ABOVE | Combining diacritical Marks |
| Latin Extended-B | 0315 COMBINING COMMA ABOVE RIGHT |
| 01E4 LATIN CAPITAL LETTER G WITH STROKE | 0327 COMBINING CEDILLA |
| 01E5 LATIN SMALL LETTER G WITH STROKE | 0333 COMBINING DOUBLE LOW LINE |

033E COMBINING VERTICAL TILDE
033F COMBINING DOUBLE OVERLINE
0359 COMBINING ASTERISK BELOW
035B COMBINING ZIGZAG ABOVE
035C COMBINING DOUBLE BREVE BELOW

## Greek and Coptic

0398 GREEK CAPITAL LETTER THETA

## Phonetic Extensions

1D18 LATIN LETTER SMALL CAPITAL P
1D35 MODIFIER LETTER CAPITAL I
1D79 LATIN SMALL LETTER INSULAR G

## Latin Extended Additional

1 E22 LATIN CAPITAL LETTER H WITH DOT ABOVE 1E23 LATIN SMALL LETTER H WITH DOT ABOVE 1E30 LATIN CAPITAL LETTER K WITH ACUTE 1E31 LATIN SMALL LETTER K WITH ACUTE 1E3E LATIN CAPITAL LETTER M WITH ACUTE 1E3F LATIN SMALL LETTER M WITH ACUTE 1E44 LATIN CAPITAL LETTER N WITH DOT ABOVE 1 E45 LATIN SMALL LETTER N WITH DOT ABOVE 1E54 LATIN CAPITAL LETTER P WITH ACUTE $1 E 55$ LATIN SMALL LETTER P WITH ACUTE 1E58 LATIN CAPITAL LETTER R WITH DOT ABOVE 1E59 LATIN SMALL LETTER R WITH DOT ABOVE

## General Punctuation

2058 FOUR DOT PUNCTUATION
205C DOTTED CROSS
Superscripts and subscripts
2070 SUPERSCRIPT ZERO
2074 SUPERSCRIPT FOUR
2075 SUPERSCRIPT FIVE
2076 SUPERSCRIPT SIX
2077 SUPERSCRIPT SEVEN

2078 SUPERSCRIPT EIGHT
2079 SUPERSCRIPT NINE
2080 SUBSCRIPT ZERO
2081 SUBSCRIPT ONE
2082 SUBSCRIPT TWO
2083 SUBSCRIPT THREE
2084 SUBSCRIPT FOUR
2085 SUBSCRIPT FIVE
2086 SUBSCRIPT SIX
2087 SUBSCRIPT SEVEN
2088 SUBSCRIPT EIGHT
2089 SUBSCRIPT NINE

## Currency Symbols

20B0 GERMAN PENNY SIGN

## Letterlike Symbols

2108 SCRUPLE
2114 L B BAR SYMBOL
211E PRESCRIPTION TAKE
211F RESPONSE
2123 VERSICLE
2125 OUNCE SIGN
2132 TURNED CAPITAL F
214E TURNED SMALL F
Number Forms
2180 ROMAN NUMERAL ONE THOUSAND C D
2181 ROMAN NUMERAL FIVE THOUSAND
2182 ROMAN NUMERAL TEN THOUSAND
2183 ROMAN NUMERAL REVERSED ONE HUNDRED
2184 LATIN SMALL LETTER REVERSED C

## Arrows

2190 LEFTWARDS ARROW
2191 UPWARDS ARROW
2192 RIGHTWARDS ARROW

## 2193 DOWNWARDS ARROW

## Mathematical Operators

221E INFINITY
2227 LOGICAL AND
2235 BECAUSE
2237 PROPORTION
2248 ALMOST EQUAL TO
2260 NOT EQUAL TO
22D7 GREATER-THAN WITH DOT

## Miscellaneous Technical

23D1 METRICAL BREVE
23D2 METRICAL LONG OVER SHORT
23D3 METRICAL SHORT OVER LONG
23D4 METRICAL LONG OVER TWO SHORTS

## Geometric Shapes

25AA BLACK SMALL SQUARE
25AB WHITE SMALL SQUARE
25B9 WHITE RIGHT-POINTING SMALL TRIANGLE
25C3 WHITE LEFT-POINTING SMALL TRIANGLE
25CC DOTTED CIRCLE

## Dingbats

2766 FLORAL HEART
2767 ROTATED FLORAL HEART BULLET
Supplemental Mathematical Operators
2AFD DOUBLE SOLIDUS OPERATOR
Latin Extended-C
2C75 LATIN CAPITAL LETTER HALF H
2C76 LATIN SMALL LETTER HALF H

## Supplemental Punctuation

2E00 RIGHT ANGLE SUBSTITUTION MARKER 2E0C LEFT RAISED OMISSION BRACKET 2E0D RIGHT RAISED OMISSION BRACKET 2E1C LEFT LOW PARAPHRASE BRACKET

2E1D RIGHT LOW PARAPHRASE BRACKET
Alphabetic Presentation Forms
FB00 LATIN SMALL LIGATURE FF
FB01 LATIN SMALL LIGATURE FI FB02 LATIN SMALL LIGATURE FL FB03 LATIN SMALL LIGATURE FFI FB04 LATIN SMALL LIGATURE FFL FB05 LATIN SMALL LIGATURE LONG S T FB06 LATIN SMALL LIGATURE ST

The Private Use Area of the Unicode Standard Category 1: Base characters
Subrange 1: Ligatures
EFA0 LATIN SMALL LIGATURE AA CLOSED FORM EFAE LATIN CAPITAL LIGATURE NECKLESS A E EFA1 LATIN SMALL LIGATURE NECKLESS A E EFA2 LATIN SMALL LIGATURE NECKLESS A V EF9F LATIN CAPITAL LETTER BROKEN L EEC0 LATIN CAPITAL LETTER MIDDLE-WELSH LL EEC1 LATIN SMALL LETTER MIDDLE-WELSH LL
E3E4 LATIN CAPITAL LETTER SHARP S
EFA3 LATIN SMALL LIGATURE AF
EFA4 LATIN SMALL LIGATURE A INSULAR F
EFA5 LATIN SMALL LIGATURE AG
EFA6 LATIN SMALL LIGATURE AL
EFA7 LATIN SMALL LIGATURE AN
EFA8 LATIN SMALL LIGATURE A SMALL CAPITAL N
EFA9 LATIN SMALL LIGATURE AP
EFAA LATIN SMALL LIGATURE AR
EFAB LATIN SMALL LIGATURE A SMALL CAPITAL R
EFAC LATIN SMALL LIGATURE A THORN
EEC2 LATIN SMALL LIGATURE BB
EEC3 LATIN SMALL LIGATURE BG

EEC4 LATIN SMALL LIGATURE CK
EEC5 LATIN SMALL LIGATURE CT
EEC6 LATIN SMALL LIGATURE D ROTUNDA D ROTUNDA EEC7 LATIN SMALL LIGATURE EY EEC8 LATIN SMALL LIGATURE F A WITH DIAERESIS EEC9 LATIN SMALL LIGATURE FJ F1BC LATIN SMALL LIGATURE F O WITH DIAERESIS EECA LATIN SMALL LIGATURE FR EECB LATIN SMALL LIGATURE FT EECC LATIN SMALL LIGATURE F U WITH DIAERESIS EECD LATIN SMALL LIGATURE FY EECE LATIN SMALL LIGATURE FFT EECF LATIN SMALL LIGATURE FFY EED0 LATIN SMALL LIGATURE FTY EED1 LATIN SMALL LIGATURE GG EED2 LATIN SMALL LIGATURE GD EED3 LATIN SMALL LIGATURE G D ROTUNDA EED4 LATIN SMALL LIGATURE G ETH EED5 LATIN SMALL LIGATURE SMALL CAPITAL N LONG S EFAD LATIN SMALL LIGATURE OC EEDD LATIN CAPITAL LIGATURE PP EED6 LATIN SMALL LIGATURE PP EED7 LATIN SMALL LIGATURE PP WITH FLOURISH EBA0 LATIN SMALL LIGATURE LONG S A WITH DIAERESIS EBA1 LATIN SMALL LIGATURE LONG S H EBA2 LATIN SMALL LIGATURE LONG S I EBA3 LATIN SMALL LIGATURE LONG S L EBA4 LATIN SMALL LIGATURE LONG S O WITH DIAERESIS EBA5 LATIN SMALL LIGATURE LONG S P EBA6 LATIN SMALL LIGATURE LONG S LONG S EBA7 LATIN SMALL LIGATURE LONG S LONG S I EBA8 LATIN SMALL LIGATURE LONG S LONG S L EBA9 LATIN SMALL LIGATURE LONG S TI

EBAA LATIN SMALL LIGATURE LONG S TR
EBAB LATIN SMALL LIGATURE LONG S U WITH DIAERESIS EBAC LATIN SMALL LIGATURE LONG S INSULAR V EED8 LATIN SMALL LIGATURE TR
EED9 LATIN SMALL LIGATURE TT
EEDA LATIN SMALL LIGATURE T ROTUNDA T ROTUNDA EEDB LATIN SMALL LIGATURE TY EEDC LATIN SMALL LIGATURE TZ

## Subrange 3: Enlarged minuscules

EFDF LATIN ENLARGED LETTER SMALL LIGATURE AA EFDE LATIN ENLARGED LETTER SMALL LIGATURE AO EEFF LATIN ENLARGED LETTER SMALL INSULAR F EEFD LATIN ENLARGED LETTER SMALL DOTLESS I EEFE LATIN ENLARGED LETTER SMALL DOTLESS J EFDD LATIN ENLARGED LETTER SMALL LIGATURE OE

## Subrange 4: Base-line abbreviation characters

F1A2 LATIN ABBREVIATION SIGN CAPITAL CON DESCENDING F1A3 LATIN ABBREVIATION SIGN CAPITAL CON WITH DOT F1A4 LATIN ABBREVIATION SIGN SMALL CON WITH DOT F1A5 LATIN ABBREVIATION SIGN SPACING BASE-LINE CAPITAL US F1A6 LATIN ABBREVIATION SIGN SPACING BASE-LINE US F1A7 LATIN ABBREVIATION SIGN CAPITAL ET WITH STROKE F15C LATIN ABBREVIATION SIGN CAPITAL RUM
F15D LATIN ABBREVIATION SIGN CAPITAL IS
F1A8 LATIN ABBREVIATION SIGN SCRIPT S WITH STROKE
F15E LATIN ABBREVIATION SIGN CAPITAL FINAL ET (3-SHAPED MARK) F1AC LATIN ABBREVIATION SIGN SEMICOLON
Subrange 5: Modified base-line abbreviation characters
E8A0 LATIN SMALL LETTER D WITH TAIL STROKE
EBAD LATIN SMALL LIGATURE H AND LONG S (no longer unified with 0266 LATIN SMALL LETTER H WITH HOOK)
EBAE LATIN SMALL LIGATURE K AND LONG S (no longer unified with 0199 LATIN SMALL LETTER K WITH HOOK)

E8A4 LATIN CAPITAL LETTER K WITH STROKE
E8A5 LATIN CAPITAL LETTER K WITH DIAGONAL STROKE E8A6 LATIN SMALL LETTER K WITH DIAGONAL STROKE E8A7 LATIN CAPITAL LETTER K WITH STROKE AND DIAGONAL STROKE E8A8 LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE E8AF LATIN SMALL LETTER L WITH TAIL STROKE E8A9 LATIN SMALL LETTER M WITH TAIL STROKE E8AA LATIN SMALL LETTER N WITH TAIL STROKE E8AB LATIN CAPITAL LETTER O WITH LONG STROKE OVERLAY E8AC LATIN SMALL LETTER O WITH LONG STROKE OVERLAY E8AD LATIN CAPITAL LETTER P WITH SQUIRREL TAIL E8AE LATIN SMALL LETTER P WITH SQUIRREL TAIL E8B0 LATIN CAPITAL LETTER Q WITH DIAGONAL STROKE THROUGH TAIL
E8B1 LATIN SMALL LETTER Q WITH DIAGONAL STROKE E8B2 LATIN CAPITAL LETTER Q WITH STROKE THROUGH TAIL E8B3 LATIN SMALL LETTER Q LIGATED WITH R ROTUNDA E8BF LATIN SMALL LETTER Q LIGATED WITH FINAL ET E8B4 LATIN SMALL LETTER Q WITH CENTRAL SLANTED STROKE E8B5 LATIN SMALL LETTER R WITH TAIL STROKE E8B6 LATIN LETTER SMALL CAPITAL R WITH TAIL STROKE E8B7 LATIN SMALL LETTER LONG S WITH FLOURISH E8B8 LATIN SMALL LETTER LONG S WITH SLANTED DESCENDING STROKE
E8B9 LATIN SMALL LETTER T WITH TAIL STROKE E8BA LATIN SMALL LETTER V WITH SHORT SLASH E8BC LATIN SMALL LETTER V WITH DIAGONAL STROKE E8BD LATIN SMALL LETTER X WITH SHORT SLASH ABOVE E8BE LATIN SMALL LETTER X WITH SHORT SLASH BELOW E336 LATIN CAPITAL LETTER THORN WITH STROKE E337 LATIN CAPITAL LETTER THORN WITH DIAGONAL STROKE E3A0 LATIN CAPITAL LETTER THORN WITH STROKE THROUGH DESCENDER

## Subrange 6: Combining marks

F1C7 COMBINING ABBREVIATION MARK ZIGZAG ABOVE ANGLE FORM F1C8 COMBINING ABBREVIATION MARK ZIGZAG ABOVE CURLY FORM F1C9 COMBINING ABBREVIATION MARK ZIG-ZAG BELOW
F1CA COMBINING DOT ABOVE HIGH POSITION F1CB COMBINING ABBREVIATION MARK IS BELOW F1CC COMBINING CURLY BAR ABOVE F1FC COMBINING TRIPLE BREVE BELOW
Subrange 7: Combining superscript characters
F036 COMBINING LATIN SMALL LIGATURE AN F03A COMBINING LATIN SMALL LIGATURE A SMALL CAPITAL N F037 COMBINING LATIN SMALL LETTER AO F038 COMBINING LATIN SMALL LIGATURE AR F039 COMBINING LATIN SMALL LIGATURE AV F02D COMBINING LATIN SMALL LETTER C CEDILLA F02E COMBINING LATIN LETTER D ROTUNDA F02F COMBINING LATIN SMALL LETTER DOTLESS I F030 COMBINING LATIN SMALL LETTER J F031 COMBINING LATIN SMALL LETTER DOTLESS J F032 COMBINING LATIN LETTER SMALL O WITH STROKE F30E COMBINING LATIN SMALL LIGATURE O R ROTUNDA F30F COMBINING LATIN SMALL LIGATURE O RUM F033 COMBINING LATIN SMALL LETTER Q F035 COMBINING LATIN SMALL LETTER R ROTUNDA F040 COMBINING LATIN SMALL LETTER RUM F03B COMBINING LATIN LETTER T ROTUNDA F03C COMBINING LATIN SMALL LETTER W F03D COMBINING LATIN SMALL LETTER THORN

## Subrange 8: Punctuation marks

F1F8 DISTINCTIO
F1E2 COMMA POSITURA
F1E3 HIGH COMMA POSITURA (SIMPLEX DUCTUS) F1EA PUNCTUS VERSUS

F1E4 PUNCTUS WITH COMMA POSITURA
F1E5 COLON WITH MIDDLE COMMA POSITURA
F1E6 THREE DOTS WITH COMMA POSITURA
FIFA PUNCTUS ELEVATUS WITH HIGH BACK
F1FB PUNCTUS ELEVATUS WITH ONSET
F1F5 PUNCTUS FLEXUS
F1E7 PUNCTUS EXCLAMATIVUS
F1E8 PUNCTUS INTERROGATIVUS HORIZONTAL TILDE
F1E9 PUNCTUS PERCONTATIVUS
F1F9 WAVY LINE
F1E0 MEDIEVAL COMMA
F1E1 PARAGRAPHUS
F1EC SIGNE DE RENVOI
F1ED FOUR DOTS PUNCTUATION
F1EE TWO DOTS OVER ONE DOT PUNCTUATION
F1EF ONE DOT OVER TWO DOTS PUNCTUATION
F1F4 VIRGULA SUSPENSIVA
F1F7 SHORT VIRGULA
Subrange 8: Critical and epigraphical signs
F1D8 VERTICAL LINE WITH LEFT QUILL
F1D9 VERTICAL LINE WITH RIGHT QUILL
F1DA MIDDLE RING
F1DB PALM BRANCH
F1DC LEFT SIDEWAYS U BRACKET
F1DD RIGHT SIDEWAYS U BRACKET
F1DE LEFT DOUBLE PARENTHESIS
F1DF RIGHT DOUBLE PARENTHESIS
Subrange 10: Metrical symbols
F72E METRICAL SYMBOL RESOLVED LIFT (= 23D4 METRICAL LONG OVER TWO SHORTS)

## Subrange 11: Additional number forms

F1BD SMALL BASE LINE ZERO SIGN
F1BE MODIFIER CAPITAL LETTER V

F1BF MODIFIER CAPITAL LETTER X
Subrange 12: Weight, currency and measurement
F2E0 LATIN AS LIBRALIS SIGN
F2E1 LATIN CAPITAL LETTER X WITH BAR (DENARIUS SIGN)
F2E2 LATIN SMALL CAPITAL LETTER X WITH BAR (DENARIUS SIGN)
F2E3 LATIN SMALL CAPITAL LETTER Y WITH BAR
F2E4 LATIN SMALL CAPITAL LETTER D WITH SLASH
F2E5 LATIN SMALL LETTER D ROTUNDA WITH BAR
F2E6 PHARMACEUTICAL DRAM SIGN
F2E7 ECU SIGN
F2E8 FLOREN SIGN WITH LOOP
F2E9 GROSCHEN SIGN
F2EA DUTCH LIBRA SIGN
F2EB FRENCH LIBRA SIGN
F2EC ITALIAN LIBRA SIGN
F2ED FLEMISH LIBRA SIGN
F2EE LIRA NUOVA SIGN
F2EF LIRA STERLINA SIGN
F2F0 OLD MARK SIGN
F2F1 OLD FLOURISH MARK SIGN
F2F2 MARKED SMALL LETTER M SIGN
F2F3 FLOURISHED SMALL LETTER M SIGN
F2F4 PHARMACEUTICAL OBOLUS SIGN
F2F5 PENNING SIGN
F2F6 OLD REICHSTALER SIGN
F2F7 GERMAN SCHILLING SIGN
F2F8 GERMAN SCRIPT SCHILLING SIGN
F2F9 SCUDI SIGN
F2FA SESTERTIUS SIGN
F2FB PHARMACEUTICAL SEXTANS SIGN
F2FD SCRIPT OUNCE SIGN
F2D8 ROMAN AS SIGN
F2D9 ROMAN UNCIA SIGN

F2DA ROMAN SEMIUNCIA SIGN
F2DB ROMAN SEXTULA SIGN
F2DC ROMAN DIMIDIA SEXTULA SIGN
F2DD ROMAN SILIQUA SIGN
F2DE ROMAN QUINARIUS SIGN
F2DF ROMAN DUPONDIUS SIGN

## Category 3: Precomposed characters

Subrange 15: Characters with macron or overline
F7B5 LATIN CAPITAL LETTER C WITH HIGH OVERLINE (ABOVE CHARACTER)
F23F ROMAN NUMERAL REVERSED ONE HUNDRED WITH OVERLINE F7B6 LATIN CAPITAL D WITH HIGH OVERLINE (ABOVE CHARACTER) E0BC LATIN CAPITAL LETTER E WITH OGONEK AND MACRON E4BC LATIN SMALL LETTER E WITH OGONEK AND MACRON E1B0 LATIN CAPITAL LETTER L WITH STROKE (ACROSS ASCENDER) F7B4 LATIN CAPITAL LETTER L WITH HIGH OVERLINE (ABOVE CHARACTER)
E1DC LATIN CAPITAL LETTER N WITH HIGH MACRON (ABOVE CHARACTER)
E5DC LATIN SMALL LETTER N WITH HIGH MACRON (ABOVE CHARACTER)
E252 LATIN CAPITAL LETTER O WITH STROKE AND MACRON E652 LATIN SMALL LETTER O WITH STROKE AND MACRON E25D LATIN CAPITAL LIGATURE OE WITH MACRON
E65D LATIN SMALL LIGATURE OE WITH MACRON E34D LATIN CAPITAL LETTER V WITH MACRON
F7B2 LATIN CAPITAL LETTER V WITH HIGH OVERLINE (ABOVE CHARACTER)
E74D LATIN SMALL LETTER V WITH MACRON
F7B3 LATIN CAPITAL LETTER X WITH HIGH OVERLINE (ABOVE CHARACTER)

## Subrange 16: Characters with acute accent

E004 LATIN CAPITAL LETTER A WITH OGONEK AND ACUTE E404 LATIN SMALL LETTER A WITH OGONEK AND ACUTE EBB0 LATIN CAPITAL LIGATURE AV WITH STROKE AND ACUTE EBB1 LATIN SMALL LIGATURE AV WITH STROKE AND ACUTE E044 LATIN CAPITAL LETTER B WITH ACUTE E444 LATIN SMALL LETTER B WITH ACUTE E077 LATIN CAPITAL LETTER D WITH ACUTE E477 LATIN SMALL LETTER D WITH ACUTE EBB2 LATIN LETTER D ROTUNDA WITH ACUTE E0F0 LATIN CAPITAL LETTER F WITH ACUTE E4F0 LATIN SMALL LETTER F WITH ACUTE EBB3 LATIN CAPITAL LETTER INSULAR F WITH ACUTE EBB4 LATIN SMALL LETTER INSULAR F WITH ACUTE E116 LATIN CAPITAL LETTER H WITH ACUTE E516 LATIN SMALL LETTER H WITH ACUTE EBB5 LATIN CAPITAL LETTER UNCIAL M WITH ACUTE EBB6 LATIN SMALL LETTER UNCIAL M WITH ACUTE EBB7 LATIN CAPITAL LETTER O WITH CURL AND ACUTE EBB8 LATIN SMALL LETTER O WITH CURL AND ACUTE E259 LATIN CAPITAL LIGATURE OE WITH ACUTE E659 LATIN SMALL LIGATURE OE WITH ACUTE EBB9 LATIN SMALL LETTER R ROTUNDA WITH ACUTE EBAF LATIN SMALL LETTER LONG S WITH ACUTE E2E2 LATIN CAPITAL LETTER T WITH ACUTE E6E2 LATIN SMALL LETTER T WITH ACUTE EBBA LATIN CAPITAL LETTER INSULAR V (VEND) WITH ACUTE EBBB LATIN SMALL LETTER INSULAR V (VEND) WITH ACUTE

## Subrange 17: Characters with double acute accent

EBC0 LATIN CAPITAL LIGATURE AO WITH DOUBLE ACUTE EBC1 LATIN SMALL LIGATURE AO WITH DOUBLE ACUTE EBC2 LATIN CAPITAL LIGATURE AV WITH DOUBLE ACUTE

EBC3 LATIN SMALL LIGATURE AV WITH DOUBLE ACUTE EOEA LATIN CAPITAL LETTER E WITH OGONEK AND DOUBLE ACUTE E4EA LATIN SMALL LETTER E WITH OGONEK AND DOUBLE ACUTE EBC4 LATIN CAPITAL LETTER O WITH OGONEK AND DOUBLE ACUTE EBC5 LATIN SMALL LETTER O WITH OGONEK AND DOUBLE ACUTE EBC6 LATIN CAPITAL LETTER O WITH STROKE AND DOUBLE ACUTE EBC7 LATIN SMALL LETTER O WITH STROKE AND DOUBLE ACUTE EBC8 LATIN CAPITAL LIGATURE OE WITH DOUBLE ACUTE EBC9 LATIN SMALL LIGATURE OE WITH DOUBLE ACUTE E350 LATIN CAPITAL LETTER W WITH DOUBLE ACUTE E750 LATIN SMALL LETTER W WITH DOUBLE ACUTE EBCA LATIN CAPITAL LIGATURE YY WITH DOUBLE ACUTE EBCB LATIN SMALL LIGATURE YY WITH DOUBLE ACUTE Subrange 18: Characters with dot above
E043 LATIN CAPITAL LETTER AE WITH DOT ABOVE E443 LATIN SMALL LETTER AE WITH DOT ABOVE EBD0 LATIN LETTER SMALL CAPITAL B WITH DOT ABOVE EBD1 LATIN LETTER D ROTUNDA WITH DOT ABOVE EBD2 LATIN LETTER SMALL CAPITAL D WITH DOT ABOVE E0EB LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE E4EB LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE EBD3 LATIN CAPITAL LETTER INSULAR F WITH DOT ABOVE EBD4 LATIN SMALL LETTER INSULAR F WITH DOT ABOVE EBD5 LATIN SMALL LETTER SEMI-CLOSED INSULAR F WITH DOT ABOVE
EBD6 LATIN SMALL LETTER CLOSED INSULAR F WITH DOT ABOVE EBD7 LATIN LETTER SMALL CAPITAL F WITH DOT ABOVE EBDA LATIN LETTER SMALL CAPITAL H WITH DOT ABOVE E15C LATIN CAPITAL LETTER J WITH DOT ABOVE E168 LATIN CAPITAL LETTER K WITH DOT ABOVE EBDB LATIN LETTER SMALL CAPITAL K WITH DOT ABOVE E19E LATIN CAPITAL LETTER L WITH DOT ABOVE E59E LATIN SMALL LETTER L WITH DOT ABOVE

EBDC LATIN LETTER SMALL CAPITAL L WITH DOT ABOVE EBDD LATIN LETTER SMALL CAPITAL M WITH DOT ABOVE EBDE LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE EBDF LATIN CAPITAL SMALL O WITH OGONEK AND DOT ABOVE EBCD LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE EBCE LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE EBCF LATIN LETTER SMALL CAPITAL P WITH DOT ABOVE E282 LATIN CAPITAL LETTER Q WITH DOT ABOVE E682 LATIN SMALL LETTER Q WITH DOT ABOVE E315 LATIN CAPITAL LETTER U WITH DOT ABOVE E715 LATIN SMALL LETTER U WITH DOT ABOVE

## Subrange 19: Characters with dot below

E036 LATIN CAPITAL LETTER AE WITH DOT BELOW E436 LATIN SMALL LETTER AE WITH DOT BELOW EBE0 LATIN CAPITAL LETTER O WITH STROKE AND DOT BELOW EBE1 LATIN SMALL LETTER O WITH STROKE AND DOT BELOW

## Subrange 20: Characters with diaeresis

EBE2 LATIN CAPITAL LETTER J WITH DIAERESIS EBE3 LATIN SMALL LETTER J WITH DIAERESIS EBE4 LATIN CAPITAL LIGATURE OO WITH DIAERESIS EBE5 LATIN SMALL LIGATURE OO WITH DIAERESIS EBE6 LATIN CAPITAL LIGATURE PP WITH DIAERESIS EBE7 LATIN SMALL LIGATURE PP WITH DIAERESIS E342 LATIN CAPITAL LETTER V WITH DIAERESIS E742 LATIN SMALL LETTER V WITH DIAERESIS EBE8 LATIN CAPITAL LIGATURE YY WITH DIAERESIS EBE9 LATIN SMALL LIGATURE YY WITH DIAERESIS Subrange 21: Characters with curl above (reversed ogonek) EBEA LATIN CAPITAL LETTER AE WITH CURL EBEB LATIN SMALL LETTER AE WITH CURL
Subrange 22: Characters with ogonek EBF0 LATIN CAPITAL LIGATURE AV WITH OGONEK EBF1 LATIN SMALL LIGATURE AV WITH OGONEK

E076 LATIN CAPITAL LETTER C WITH OGONEK
E476 LATIN SMALL LETTER C WITH OGONEK
EBF2 LATIN CAPITAL LETTER E WITH OGONEK AND CURL EBF3 LATIN SMALL LETTER E WITH OGONEK AND CURL E2EE LATIN CAPITAL LETTER T WITH OGONEK

## Subrange 23: Characters with breve

EBEE LATIN CAPITAL LETTER O WITH STROKE AND BREVE EBEF LATIN SMALL LETTER O WITH STROKE AND BREVE

## Subrange 24: Characters with macron and breve

E253 LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND BREVE
E653 LATIN SMALL LETTER O WITH STROKE AND MACRON AND BREVE

## Subrange 25: Characters with macron and acute

EBEC LATIN CAPITAL LETTER O WITH STROKE AND MACRON AND ACUTE
EBED LATIN SMALL LETTER O WITH STROKE AND MACRON AND ACUTE
Subrange 26: Characters with dot above and acute accent
EBF4 LATIN CAPITAL LETTER A WITH DOT ABOVE AND ACUTE EBF5 LATIN SMALL LETTER A WITH DOT ABOVE AND ACUTE E0C8 LATIN CAPITAL LETTER E WITH DOT ABOVE AND ACUTE E4C8 LATIN SMALL LETTER E WITH DOT ABOVE AND ACUTE E0EC LATIN CAPITAL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE
E4EC LATIN SMALL LETTER E WITH OGONEK AND DOT ABOVE AND ACUTE
EBF6 LATIN CAPITAL LETTER I WITH DOT ABOVE AND ACUTE EBF7 LATIN SMALL LETTER I WITH DOT ABOVE AND ACUTE EBF8 LATIN CAPITAL LETTER O WITH DOT ABOVE AND ACUTE EBF9 LATIN SMALL LETTER O WITH DOT ABOVE AND ACUTE EBFA LATIN CAPITAL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE

EBFB LATIN SMALL LETTER O WITH OGONEK AND DOT ABOVE AND ACUTE
EBFC LATIN CAPITAL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE
EBFD LATIN SMALL LETTER O WITH STROKE AND DOT ABOVE AND ACUTE
EBFE LATIN CAPITAL LETTER U WITH DOT ABOVE AND ACUTE EBFF LATIN SMALL LETTER U WITH DOT ABOVE AND ACUTE

## Subrange 27: Characters with other diacritics

E548 LATIN SMALL LETTER I WITH INVERTED BREVE BELOW E727 LATIN SMALL LETTER U WITH INVERTED BREVE BELOW EBBD LATIN SMALL LETTER EA WITH COMBINING CIRCUMFLEX EBBE LATIN SMALL LETTER EU WITH COMBINING CIRCUMFLEX EBBF LATIN SMALL LETTER U WITH CURLY BAR ABOVE

## Category 3

## Variant letter forms

F214 LATIN SMALL LETTER A UNCIAL FORM F215 LATIN SMALL LETTER NECKLESS A F198 LATIN SMALL LETTER C WITH CURL F216 LATIN SMALL LETTER SCRIPT D F193 LATIN SMALL LETTER D WITH CURL F217 LATIN CAPITAL LETTER CLOSED E UNCIAL FORM F218 LATIN SMALL LETTER E UNCIAL FORM F219 LATIN SMALL LETTER E EXTENDED BAR FORM F21A LATIN SMALL LETTER E TALL FORM F21B LATIN SMALL LETTER SEMI-CLOSED INSULAR F F21C LATIN SMALL LETTER INSULAR F WITH DOTTED HOOKS F194 LATIN SMALL LETTER F WITH CURL F196 LATIN SMALL LETTER G WITH CURL F21D LATIN SMALL LETTER G WITH SEPARATE LOOPS F21E LATIN SMALL LETTER CLOSED G WITH LARGE LOWER LOOP

F21F LATIN SMALL LETTER CLOSED G WITH SMALL LOWER LOOP F23A LATIN SMALL LETTER H WITH RIGHT DESCENDER F7B8 LATIN CAPITAL LETTER LONG I
F220 LATIN SMALL LETTER LONG I
F221 LATIN SMALL LETTER K SEMI-CLOSED FORM F195 LATIN SMALL LETTER K WITH CURL F222 LATIN SMALL LETTER L DESCENDING F224 LATIN CAPITAL LETTER UNCIAL M WITH RIGHT DESCENDER F225 LATIN SMALL LETTER UNCIAL M F226 LATIN SMALL LETTER UNCIAL M WITH RIGHT DESCENDER F227 LATIN CAPITAL LETTER FIVE-LEGGED M F223 LATIN SMALL LETTER M WITH RIGHT DESCENDER F229 LATIN LETTER CAPITAL N WITH RIGHT DESCENDER F228 LATIN SMALL LETTER N WITH RIGHT DESCENDER F22A LATIN LETTER SMALL CAPITAL N WITH RIGHT DESCENDER F22B LATIN SMALL CAPITAL N WITH LEFT DESCENDER

F19A LATIN SMALL LETTER N WITH FLOURISH F22C LATIN CAPITAL LETTER Q WITH STEM F22D LATIN CAPITAL LETTER R ROTUNDA F19B LATIN SMALL LETTER R WITH FLOURISH F126 LATIN CAPITAL LETTER S CLOSED FORM F128 LATIN SMALL LETTER S CLOSED FORM F22E LATIN SMALL LETTER INSULAR S F22F LATIN CAPITAL LETTER T ROTUNDA F199 LATIN SMALL LETTER T WITH CURL F230 LATIN CAPITAL LETTER MIDDLE-WELSH V F231 LATIN SMALL LETTER MIDDLE-WELSH V F232 LATIN SMALL LETTER X WITH LEFT DESCENDER F233 LATIN SMALL LETTER Y WITH RIGHT MAIN STROKE F236 LATIN CAPITAL LETTER Y WITH LOOP F237 LATIN SMALL LETTER Y WITH LOOP

## 2. Characters with new code points

Characters which have been accepted by the Unicode Standard receive the new, official code points and are removed from the Private Use Area (although the old code points should not be used for other characters for reasons of backward compatibility). Mistakes and duplications may also lead to a character being moved to a new code point.

| Glyph | MUFI v. 1.0 | MUFI v. 2.0 | Descriptive name | Reason |
| :---: | :---: | :---: | :---: | :---: |
| ) | E55C | 0237 | LATIN SMALL LETTER DOTLESS J | Added in Unicode v. 4.1. |
| \% | F152 | 035B | COMBINING ZIGZAG ABOVE | Added in Unicode v. 4.1. |
| ¢ | F743 | 035C | COMBINING DOUBLE BREVE BELOW | Added in Unicode v. 4.1. |
| $\zeta$ | F10F | 1D79 | LATIN SMALL INSULAR G | Added in Unicode v. 4.1. |
| $\dot{\mathrm{T}}$ | 1E6C | 1E6A | LATIN CAPITAL LETTER T WITH DOT ABOVE | Wrong codepoint in MUFI v. 1.0. |
| $\dot{\mathrm{t}}$ | 1E6D | 1E6B | LATIN SMALL LETTER T WITH DOT ABOVE | Wrong codepoint in MUFI v. 1.0. |
| - | F700 | 2012 | FIGURE DASH | Recommended by TLG for metrical encoding. |
| $\wedge$ | F714 | 2227 | LOGICAL AND | Recommended by TLG for metrical encoding. |
| $\checkmark$ | F701 | 23D1 | METRICAL BREVE | Added in Unicode 4.1; recommended by TLG. |


| $\bar{\square}$ | F703 | 23D2 | METRICAL LONG OVER SHORT | Added in Unicode 4.1; recommended by TLG. |
| :---: | :---: | :---: | :---: | :---: |
| $\checkmark$ | F702 | 23D3 | METRICAL SHORT OVER LONG | Added in Unicode 4.1; recommended by TLG. |
| $\bar{\sim}$ | F72E | 23D4 | METRICAL LONG OVER TWO SHORTS | Added in Unicode 4.1; recommended by TLG. |
| も | E73B | E736 | LATIN SMALL LETTER THORN WITH STROKE | Moved to existing Titus codepoint. |
| 于 | E8A1 | 0248 | LATIN CAPITAL LETTER J WITH STROKE | Added in Unicode 5.0. |
| j | E8A3 | 0249 | LATIN SMALL LETTER J WITH STROKE | Added in Unicode 5.0. |

## 3. Characters with new entity names

Several entity names have been changed for reasons of clarity or consistency. Note that the entity names in the MUFI character recommendation are suggestions only; in any SGML/XML project, entities can be defined independently. In MUFI v. 1.0, a handful of characters were given alternative entity names. These alternatives have all been removed in MUFI v. 2.0. We recommend that any distinctions should be made by using markup rather than diverging entity names.

| Glyph | Code point | MUFI v. 1.0 | MUFI v. 2.0 | Descriptive name | Reason |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \& | 0026 | \& or \&ampet; | \& | AMPERSAND | No need for the alternative entity name '\&ampet;', since abbreviation usage can be indicated by markup. |
| 6 | 0027 | \' or \&apo; | \' | APOSTROPHE | No need for the alternative entity name '\&apo;' since abbreviation usage can be indicated by markup, or by 02BC MODIFIER LETTER APOSTROPHE. |
| - | 002E | \. or \& dot; | \. | FULL STOP | No need for the alternative entity name '\˙', since abbreviation usage can be indicated by markup. Also note that 02D9 DOT ABOVE rightly has (and should continue to have) the entity '\˙'. |
| , | 003B | \; or \&ed; | \; | SEMICOLON | No need for the alternative entity name '\&ed;' since abbreviation usage can be indicated by markup, or by F1AC LATIN ABBREVIATION SIGN SEMICOLON. |


| K | 0199 | \&kslonglig; or \&khook; | \&khook; | LATIN SMALL LETTER K WITH HOOK | The entity '\&kslonglig;' now refers to the new character LATIN SMALL LIGATURE K AND LONG S at EBAE in PUA subrange 5. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0254 | \&con; | \&oopen; | LATIN SMALL LETTER OPEN O | Should not be used for the 'con' abbreviation and should for that reason have a more descriptive entity. |
| 于 | 025F | \&jdtlstrok; | \&jnodotstrok; | LATIN SMALL LETTER DOTLESS J WITH STROKE | By analogy with 0131 LATIN SMALL LETTER DOTLESS I with the entity name '\ı'. |
| $h$ | 0266 | \&hslonglig; or \&hhook; | \&hhook; | LATIN SMALL LETTER H WITH HOOK | The entity '\&hslonglig;' now refers to the new character LATIN SMALL LIGATURE H AND LONG S at EBAD in PUA subrange 5. |
| $\bar{\square}$ | 0305 | \&combovl; | \&bar; | COMBINING OVERLINE | For this frequently used abbreviation mark, we recommend the simpler entity name '\&bar;'. |
| e | 201B | \&rsquolrev; | \&rsquorev; | SINGLE HIGH-REVERSED-9 QUOTATION MARK | The ' 1 ' is misleading and should be removed. In analogy with '\’' (2019), the entity name should be '\&rsquorev;', where 'rev' means 'reversed'. |
| $\mu$ | 16A0 | \&frun; | \&fMedrun; | RUNIC MEDIEVAL LETTER F | To make room for more runes it is necessary to distinguish between major forms of the runic alphabet. |


| $\Psi$ | 16D8 | \&frun; | \&fMedrun; | RUNIC MEDIEVAL LETTER M | As above. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\therefore$ | 2234 | \∴ | \&tridotupw; | PUNCTUATION MARK UPWARDSPOINTING TRIANGULAR DOTS | New entity name coined in analogy with '\&quaddot;' and '\&tridotright;' 10FB in Georgian. |
| $O^{\circ}$ | F20C | \& OEligred; | \& Oloop; | LATIN CAPITAL LETTER O WITH LOOP | Clearer entity name. |
| O' | F20D | \&oeligred; | \&oloop; | LATIN SMALL LETTER O WITH LOOP | Clearer entity name. |
| P | EF15 | \&thscap; | \&thornscap; | LATIN LETTER SMALL CAPITAL THORN | By analogy with 00FE '\þ'. |
| $\partial$ | EEE4 | \&duncenl; | \&drotenl; | LATIN ENLARGED LETTER D ROTUNDA | Revised analysis. |
| 9 | F151 | \&ussep; | \&usmod; | LATIN ABBREVIATION SIGN SPACING RAISED US | Better description. |
| $\stackrel{2}{2}$ | F153 | \&ur2; | \&urrot; | COMBINING ABBREVIATION MARK SUPERSCRIPT UR ROUND R FORM | Better description. |
| $\ddot{\text { ¢ }}$ | F1C2 | \&ur8; | \&urlemn; | COMBINING ABBREVIATION MARK SUPERSCRIPT UR LEMNISKATE FORM | Better description. |
| - | F1C3 | \&ur8open; | \&ur; | COMBINING ABBREVIATION MARK SUPERSCRIPT UR TILDE FORM | Simplified description for default form. |
| ; | F1F2 | \& diacom; | \& bidotscomposit; | TWO DOTS OVER COMMA POSITURA | By analogy with other positura marks. |


| $\because$ | F1F1 | \&quest8; | \&punctinterlemn; | PUNCTUS INTERROGATIVUS LEMNISKATE FORM | For reasons of consistency. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| X | F70A | \&anc; | \&metranc; | METRICAL SYMBOL ANCEPS | Specification of metrical usage. |
| X | F70B | \&ancacute; | \&metrancacute; | METRICAL SYMBOL ANCEPS WITH ACUTE | Specification of metrical usage. |
| " | F719 | \&ancdblac; | \&metrancdblac; | METRICAL SYMBOL ANCEPS WITH DOUBLE ACUTE | Specification of metrical usage. |
| $\dot{\chi}$ | F70C | \&ancgrave; | \&metrancgrave; | METRICAL SYMBOL ANCEPS WITH GRAVE | Specification of metrical usage. |
| Х̈ | F71A | \&ancdblgrave; | \&metrancdblgrave; | METRICAL SYMBOL ANCEPS WITH DOUBLE GRAVE | Specification of metrical usage. |
| $\checkmark$ | F701 | \˘ | \&metrbreve; | METRICAL SYMBOL BREVE | Specification of metrical usage. |
| $\bigcirc$ | F706 | \& breveacute; | \&metrbreveacute; | METRICAL SYMBOL BREVE WITH ACUTE | Specification of metrical usage. |
| $\because$ | F717 | \& brevedblac; | \&metrbrevedblac; | METRICAL SYMBOL BREVE WITH DOUBLE ACUTE | Specification of metrical usage. |
| こ | F707 | \& brevegrave; | \&metrbrevegrave; | METRICAL SYMBOL BREVE WITH GRAVE | Specification of metrical usage. |
| $\because$ | F718 | \& brevedblgrave; | \&metrbrevedblgrave; | METRICAL SYMBOL BREVE WITH DOUBLE GRAVE | Specification of metrical usage. |


| - | F700 | \¯ | \&metrmacr; | METRICAL SYMBOL LONGUM | Specification of metrical usage. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - | F704 | \&macracute; | \&metrmacracute; | METRICAL SYMBOL LONGUM WITH ACUTE | Specification of metrical usage. |
| II | F715 | \&macrdblac; | \&metrmacrdblac; | METRICAL SYMBOL LONGUM WITH DOUBLE ACUTE | Specification of metrical usage. |
| - | F705 | \&macrgrave; | \& metrmacrgrave; | METRICAL SYMBOL LONGUM WITH GRAVE | Specification of metrical usage. |
| ㅍ | F716 | \&macrdblgrave; | \&metrmacrdblgrave; | METRICAL SYMBOL LONGUM WITH DOUBLE GRAVE | Specification of metrical usage. |
| $\checkmark$ | F702 | \& macrbreve; | \&metrmacrbreve; | METRICAL SYMBOL BREVE ABOVE LONGUM | Specification of metrical usage. |
| Ј | F703 | \& brevemacr; | \&metrbrevemacr; | METRICAL SYMBOL LONGUM ABOVE BREVE | Specification of metrical usage. |
| $\stackrel{\text { - }}{ }$ | F708 | \&macrbreveacute; | \&metrmacrbreveacute; | METRICAL SYMBOL BREVE ABOVE LONGUM WITH ACUTE | Specification of metrical usage. |
| - | F709 | \& macrbrevegrave; | \&metrmacrbrevegrave; | METRICAL SYMBOL BREVE ABOVE LONGUM WITH GRAVE | Specification of metrical usage. |
| $\stackrel{\prime}{\square}$ | F71B | \&dblbrevemacracute; | \&metrdblbrevemacracute; | METRICAL SYMBOL RESOLVED LIFT WITH ACUTE | Specification of metrical usage. |
| $\stackrel{\prime \prime}{\prime \prime}$ | F71C | \&dblbrevemacrdblac; | \&metrdblbrevemacrdblac; | METRICAL SYMBOL RESOLVED LIFT WITH DOUBLE ACUTE | Specification of metrical usage. |


| A | F201 | \&ainsenl; | \&Ains; | LATIN CAPITAL LETTER A INSULAR <br> FORM | Revised analysis. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| д | F109 | \&dunc; | \&drot; | LATIN SMALL LETTER D ROTUNDA | Revised analysis. |
| E | F10A | \&eunc; | \&Eunc; | LATIN CAPITAL LETTER E UNCIAL <br> FORM | Revised analysis. |
| h | F110 | \&hins; | \&Hunc; | LATIN CAPITAL LETTER UNCIAL H | Revised analysis. |
| ח | F11A | \&munc; | \&Munc; | LATIN CAPITAL LETTER UNCIAL M | Revised analysis. |
| $\boldsymbol{\tau}$ | F129 | \&tunc; | \&trot; | LATIN SMALL LETTER T ROTUNDA | Revised analysis. |

## 4. Characters with new descriptive names

Descriptive names are given as a help for understanding characters. Even if they are not strictly necessary in practical use, they should be perspicuous and consistent, and for that reason several descriptive names have been changed from MUFI v. 1.0 to v. 2.0.

| Glyph | Code point | MUFI v. I . 0 descriptive name | MUFI v. 2.0 descriptive name | Reason |
| :---: | :---: | :---: | :---: | :---: |
| $\mu$ | 16A0 | RUNIC LETTER F | RUNIC MEDIEVAL LETTER F | To distinguish between different forms of the runic alphabet. |
| $\Psi$ | 16D8 | RUNIC LETTER M | RUNIC MEDIEVAL LETTER M | As above. |
| - | 2015 | HORIZONTAL DASH | HORIZONTAL BAR | Name as in Unicode. |
| $P$ | E270 | LATIN CAPITAL LETTER P WITH STROKE THROUGH DESCENDER | LATIN CAPITAL LETTER P WITH STROKE THROUGH STEM | Unfortunate description; the stroke crosses the stem, not the descender. |
| $P$ | E3A0 | LATIN CAPITAL LETTER P WITH STROKE THROUGH DESCENDER | LATIN CAPITAL LETTER THORN WITH STROKE THROUGH STEM | Unfortunate description; the stroke crosses the stem, not the descender. |
| $Q$ | E8B2 | LATIN CAPITAL LETTER Q WITH STROKE THROUGH DESCENDER | LATIN CAPITAL LETTER Q WITH STROKE THROUGH TAIL | Unfortunate description; the stroke crosses the tail, not the descender. |
| $\chi$ | F204 | LATIN SMALL LIGATURE AE WITH MISSING BOTTOM STROKE | LATIN SMALL LETTER AE WITH RIGHT UPPER LOOP | Consistency in naming. |


| $\bigcirc$ | F20C | LATIN CAPITAL LIGATURE OE WITH MISSING BOTTOM STROKE | LATIN CAPITAL LETTER O WITH LOOP | Consistency in naming. |
| :---: | :---: | :---: | :---: | :---: |
| $0^{\circ}$ | F20D | LATIN SMALL LIGATURE OE WITH MISSING BOTTOM STROKE | LATIN SMALL LETTER O WITH LOOP | Consistency in naming. |
| 9 | F156 | LATIN ABBREVIATION SIGN CON | LATIN ABBREVIATION SIGN SMALL CON DESCENDING | Better description. |
| 9 | F151 | SPACING ABBREVIATION MARK SUPERSCRIPT US (9-SIGN) | LATIN ABBREVIATION SIGN SPACING RAISED US | Better description. |
| 3 | F155 | LATIN ABBREVIATION SIGN FINAL ET | LATIN ABBREVIATION SIGN SMALL FINAL ET (3-SHAPED MARK) | Better description. |
| 7 | F142 | LATIN ABBREVIATION LARGE SIGN ET | LATIN ABBREVIATION SIGN CAPITAL ET | Consistency in naming. |
| $\ldots$ | F157 | COMBINING ABBREVIATION MARK SUPERSCRIPT RA (OMEGA SIGN) | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM | Better description. |
| $\overline{\#}$ | F1C1 | COMBINING ABBREVIATION MARK SUPERSCRIPT RA (OMEGA SIGN) WITH BAR ABOVE | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM WITH BAR ABOVE | Better description. |
| $\stackrel{2}{2}$ | F153 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR (2-SIGN) | COMBINING ABBREVIATION MARK SUPERSCRIPT UR ROUND R FORM | Better description. |
| $\propto$ | F1C2 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR (8 SIGN) | COMBINING ABBREVIATION MARK SUPERSCRIPT UR LEMNISKATE FORM | Better description. |
| $\cdots$ | F1C3 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR (OPEN 8 SIGN) | COMBINING ABBREVIATION MARK SUPERSCRIPT UR TILDE FORM | Better description. |


| ? | F15B | COMBINING ABBREVIATION MARK SUPERSCRIPT US (9-SIGN) | COMBINING ABBREVIATION MARK SUPERSCRIPT US | Better description. |
| :---: | :---: | :---: | :---: | :---: |
| ↔ | F163 | COMBINING DOUBLE CIRCUMFLEX OVER TWO CHARACTERS | COMBINING DOUBLE CIRCUMFLEX ABOVE | Consistency in naming. |
| $\because$ | F1F2 | PUNCTUATION MARK DIAERESIS ABOVE COMMA | TWO DOTS OVER COMMA POSITURA | Consistency in naming. |
| $\checkmark$ | F161 | PUNCTUATION MARK PUNCTUS ELEVATUS | PUNCTUS ELEVATUS | Consistency in naming. |
| . | F1F0 | PUNCTUATION MARK PUNCTUS ELEVATUS DIAGONAL STROKE | PUNCTUS ELEVATUS DIAGONAL STROKE | Consistency in naming. |
| ? | F160 | PUNCTUATION MARK PUNCTUS INTERROGATIVUS | PUNCTUS INTERROGATIVUS | Consistency in naming. |
| $\because$ | F1F1 | QUESTION MARK HORIZONTAL 8 FORM | PUNCTUS INTERROGATIVUS LEMNISKATE FORM | Better description. |
| a | F200 | LATIN SMALL LETTER A INSULAR | LATIN SMALL LETTER A INSULAR FORM | Consistency in naming. |
| $\Delta$ | F201 | LATIN ENLARGED SMALL LETTER INSULAR A | LATIN CAPITAL LETTER A INSULAR FORM | Revised analysis. |
| U | F202 | LATIN SMALL LETTER A OPEN FORM | LATIN SMALL LETTER OPEN A CAROLINGIAN FORM | Revised analysis. |
| a | F203 | LATIN SMALL LETTER A CLOSED FORM | LATIN SMALL LETTER CLOSED A GOTHIC FORM | Revised analysis. |
| $\partial$ | F109 | LATIN LETTER UNCIAL D | LATIN SMALL LETTER D ROTUNDA | Revised analysis. |


| E | F10A | LATIN LETTER UNCIALE | LATIN CAPITAL LETTER E UNCIAL FORM | Consistency in naming. |
| :--- | :--- | :--- | :--- | :--- |
| B | F207 | LATIN SMALL LETTER INSULAR F CLOSED <br> FORM | LATIN SMALL LETTER CLOSED INSULAR F | Consistency in naming. |
| h | F110 | LATIN CAPITAL LETTER INSULAR H | LATIN CAPITAL LETTER H UNCIAL FORM | Revised analysis. |
| lc | F208 | LATIN LETTER UNCIAL K | LATIN SMALL LETTER K UNCIAL FORM | Consistency. |
| $\Omega$ | F11A | LATIN LETTER UNCIALM | LATIN CAPITAL LETTER M UNCIAL FORM | Revised analysis. |
| $\boldsymbol{\tau}$ | F129 | LATIN LETTER UNCIAL T | LATIN SMALL LETTER T ROTUNDA | Revised analysis. |

## 5. Characters with other descriptive names in the medievalist proposal to Unicode

In the medievalist proposal to Unicode edited by Michael Everson, several characters have different descriptive names from the ones chosen in MUFI v. 2.0.

| Glyph | Code point | MUFI descriptive name, v. 2.0 | Medievalist proposal descriptive name, January 2006 |
| :---: | :---: | :---: | :---: |
| O) | F1A2 | LATIN ABBREVIATION SIGN CAPITAL CON DESCENDING | LATIN CAPITAL LETTER CON |
| 0 | F156 | LATIN ABBREVIATION SIGN SMALL CON DESCENDING | LATIN SMALL LETTER CON |
| $\bigcirc$ | F1A3 | LATIN ABBREVIATION SIGN CAPITAL CON WITH DOT | LATIN CAPITAL LETTER REVERSED C WITH DOT |
| $\bigcirc$ | F1A4 | LATIN ABBREVIATION SIGN SMALL CON WITH DOT | LATIN SMALL LETTER REVERSED C WITH DOT |
| 9 | F151 | LATIN ABBREVIATION SIGN SPACING RAISED US | MODIFIER LETTER US |
| 27 | F15C | LATIN ABBREVIATION SIGN CAPITAL RUM | LATIN CAPITAL LETTER RUM ROTUNDA |
| 4 | F154 | LATIN ABBREVIATION SIGN SMALL RUM | LATIN SMALL LETTER RUM ROTUNDA |
| 9 | F15D | LATIN ABBREVIATION SIGN CAPITAL IS | LATIN CAPITAL LETTER IS |
| $\rho$ | F15A | LATIN ABBREVIATION SIGN SMALL IS | LATIN SMALL LETTER IS |
| 8 | F1A8 | LATIN ABBREVIATION SIGN SCRIPT S WITH STROKE | LATIN SMALL LETTER UM |


| 3 | F15E | LATIN ABBREVIATION SIGN CAPITAL FINAL ET (3-SHAPED MARK) | LATIN CAPITAL LETTER ET |
| :---: | :---: | :---: | :---: |
| 3 | F155 | LATIN ABBREVIATION SIGN SMALL FINAL ET (3-SHAPED MARK) | LATIN SMALL LETTER ET |
| d4 | E8A0 | LATIN SMALL LETTER D WITH TAIL STROKE | LATIN SMALL LETTER DUM |
| m | E8A9 | LATIN SMALL LETTER M WITH TAIL STROKE | LATIN SMALL LETTER MUM |
| n | E8AA | LATIN SMALL LETTER N WITH TAIL STROKE | LATIN SMALL LETTER NUM. |
| 1 | E8B5 | LATIN SMALL LETTER R WITH TAIL STROKE | LATIN SMALL LETTER RUM |
| R | E8B6 | LATIN LETTER SMALL CAPITAL R WITH TAIL STROKE | LATIN LETTER SMALL CAPITAL RUM |
| $f$ | E7FF | LATIN SMALL LETTER LONG S WITH STROKE | LATIN SMALL LETTER LONG S WITH HIGH STROKE |
| t | E8B9 | LATIN SMALL LETTER T WITH TAIL STROKE | LATIN SMALL LETTER TUM |
| 3 | F1C9 | COMBINING ABBREVIATION MARK ZIG-ZAG BELOW | COMBINING ZIGZAG BELOW |
| $\cdots$ | F157 | COMBINING ABBREVIATION MARK SUPERSCRIPT RA OPEN A FORM | COMBINING LATIN SMALL LETTER FLATTENED OPEN A |
| ) | F1C3 | COMBINING ABBREVIATION MARK SUPERSCRIPT UR TILDE FORM | COMBINING UR ABOVE |
| $\stackrel{9}{9}$ | F15B | COMBINING ABBREVIATION MARK SUPERSCRIPT US | COMBINING US ABOVE |


| ? | F1C4 | COMBINING CURL | COMBINING OGONEK ABOVE |
| :---: | :---: | :---: | :---: |
| Z | F1CB | COMBINING ABBREVIATION MARK IS BELOW | COMBINING IS BELOW |
| a | F039 | COMBINING LATIN SMALL LIGATURE AV | COMBINING SMALL LETTER AV |
| 7 | F1D3 | RIGHT UPPER HALF SQUARE BRACKET | TOP RIGHT HALF SQUARE BRACKET |
| L | F1D4 | LEFT LOWER HALF SQUARE BRACKET | BOTTOM LEFT HALF SQUARE BRACKET |
| 」 | F1D5 | RIGHT LOWER HALF SQUARE BRACKET | BOTTOM RIGHT HALF SQUARE BRACKET |
| $\dagger$ | F1D8 | VERTICAL LINE WITH LEFT QUILL | RIGHT VERTICAL BAR WITH QUILL |
| F | F1D9 | VERTICAL LINE WITH RIGHT QUILL | LEFT VERTICAL BAR WITH QUILL |
| 土 | E1B0 | LATIN CAPITAL LETTER L WITH STROKE (ACROSS ASCENDER) | LATIN CAPITAL LETTER L WITH HIGH STROKE |
| I | E5B0 | LATIN SMALL LETTER L WITH STROKE (ACROSS ASCENDER) | LATIN SMALL LETTER L WITH HIGH STROKE |
| 1 | F210 | LATIN CAPITAL LETTER INSULAR V (VEND) | LATIN CAPITAL LETTER VEND |
| $\nu$ | F211 | LATIN SMALL LETTER INSULAR V (VEND) | LATIN SMALL LETTER VEND |
| $\partial$ | F109 | LATIN SMALL LETTER D ROTUNDA | LATIN SMALL LETTER INSULAR D |




[^0]:    ※ Medieval Unicode Font Initiative (MUFI)

