Junicode

the font for medievalists

specimens and user’s guide
The design of Junicode is based on scans of George Hickes, *Linguarum vett. septentrionalium thesaurus grammatico-criticus et archaeologicus* (Oxford, 1703–5). This massive two-volume folio is a fine example of the work of the Oxford University Press at this period: printed in multiple types (for every language had to have its proper type) and lavishly illustrated with engravings of manuscript pages, coins and artifacts.

The type used for Hickes’s *Thesaurus* resembles those assembled by John Fell (1625–86) and bequeathed by him to the University of Oxford. To my eye, however, it looks more like the “Pica Roman” purchased by the University in 1692 than like any of Fell’s. For printing in Old English, this type was supplemented by the “Pica Saxon” commissioned by the early Anglo-Saxonist Franciscus Junius (1591–1677) and bequeathed by him to the University. Specimens of both can be found in *A Specimen of the Several Sorts of Letter Given to the University by Dr. John Fell, Sometime Lord Bishop of Oxford. To Which Is Added the Letter Given by Mr. F. Junius* (Oxford, 1693). Junius’s Pica Saxon was mixed freely with Pica Roman in printing the *Thesaurus*.

The Foulis Greek font has a different origin from Junicode’s Latin (though it harmonizes well), being based on type designed by Alexander Wilson (1714–86) of Glasgow and used in numerous books published by the Foulis Press, most notably the great Glasgow Homer.
Specimens

Opima frugibus atque arboribus insula, et alendis apta pecoribus ac iumentis; uineas etiam quibusdam in locis germinans...
nans Opima frugibus atque arboribus insula, et alendis apta pecoribus ac iumentis; uineas etiam quibusdam in locis germinans

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Old and Middle English

We æthrynon mid ūrum ārum þā yðan þæs dēopan wæles; wē ðǝsawon eac þa muntas ymbe þære sealtan sæ strande, and wē mid aðenedum hrægle and gesundfullum windum þær gewicodon on þam gemærum þære fægerestan þēode. Þā yðan ðetacnið þisne dēopan crafte, and þa muntas ðetacnið eac þa miċelnyssa þisses crafte.

Sīþen þe sege and þe assaut watz sesed at Troye, Þe borȝ brittene and brent to brondez and askez, Þe tulk þat þe trammes of tresoun þer wroȝt Watz tried for his tricherie, þe trewest on erthe: Hit watz Enniæ þe athel, and his highe kynde, Þat sīþen deprece prouinces, and patrounes bcome Welneþe of al þe wele in þe west iles.

*Apply the OpenType feature ss02 (Stylistic Set 2) for insular letter-forms.*

Heþ cýneƿulþ benam ȝigebȝyt hir miȝer ȝ peʃteaxna piotan ȝon un-ɲytum ȝeðu buþon hamtûnﬁcne ȝ he hæþde þa of he ofgul þone alþopmon þe hí leȝeʃt þunode ȝ hiene þa cýneƿulþ on andred adþæþde ȝ h þæþ þunode of þæþ hine án fían ofʃcang æþ þuygeʃtloðan ȝ he riþe þone alþopmon cumbþan ȝ re cýneƿulþ ofþ miȝum þeʃeþtum þeȝht uʍ̃ bȝeþpalū.

Old Icelandic

*For Nordic shapes of þ and ð, specify the Icelandic language, if your application has good language support; or apply the OpenType ss01 (Stylistic Set 1) feature.*

Um haustit sendi Mǫrðr Valgarðsson orð at Gunnarr myndi vera einn heimi, en lid alt myndi vera niðri í eyjum at lúka heyverkum. Ríðu
Þeir Gizurr Hvíti ok Geirr Goði austr yfir ár, þegar þeir spurðu þat, ok austr yfir sanda til Hofs. Pá sendu þeir orð Starkaði undir Þríhyrningi; ok fundusk þeir þar allir er at Gunnari skyldu fara, ok réðu hversu at skyldi fara.

**Runic**

```plaintext
ᚠᛁᛋᚳ ᚠᛚᚩᛞᚢ ᚪᚻᚩᚠ ᚩᚾ ᚠᛖᚱᚷᛖᚾᛒᚷᛁᚷ ᚹᚪᚱᚦ ᚷᚪ᛬ᛇᚱᛁᚳ ᚷᚱᚩᚱᚾ ᚦᚨᚱᚴᛁᚳ ᛒᚪᚾ ᚱᛖᚢᛗᚹᚪᛚᚢᛇ ᚪᚾᛞ ᚱᛖᚢᛗᚹᚪᛚᚢᛇ ᚸᛁᛇᚹᚩᛗ ᚸᚱᚩᚾᛁᛗ ᛒᚪᚾ ᚱᛖᚢᛗᚹᚪᛚᚢᛇ ᚪᚾᛞ ᚱᛖᚢᛗᚹᚪᛚᚢᛇ
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**German**


**Use c2sc for small cap Eszett:** die straße ist zu schmal für autos. Die strasse ist zu schmal für autos. **Die strasse ist zu schmal für autos. Use c2sc for small cap Eszett:** die straße ist zu schmal für autos. **Die straße ist zu schmal für autos.**
Latin

Unicode contains the most common Latin abbreviations, making it suitable for diplomatic editions of Latin texts.


Gothic

jabai auk həs gașiḥib ʒuk ʒana habandan kunḩi in galiuge stada anakumbjandan, niu miṉwissei is siuks wisandins timrjada du galiu-gagudam gasalib matjian? faqisitnīḥ auk sa unmahteiga ana ʒeınamma witubnja броjar in jectories Kristus gaswalt. swaŋ ʒan fraurukjandans wiθra broḫruns, slahandans iże gahugd siuka, du Kristau fraurukjeiŋ.

Use ss19 to produce Gothic letters automatically from transliterated text and ss20 to produce Latin letters from Gothic. Available in all four faces.

Sanskrit Transliteration

mānaṁ dvividhāṁ viṣayadvai vidyātsaktyaśaktitaḥ
arthakriyāṁ keśadiṁ nartho 'narthādhimokṣataḥ
sadrśasadṛsatvācca viśayāviśayatvataḥ
śabdasyānanimittanāṁ bhāve dhīsadasattvataḥ

International Phonetic Alphabet

hwan θαt a:pril wiθ is ju:ras so:τα θα druxt ɔf marʧ haθ pe:rsad to: θα ro:te and ba:δεδ evri væin m swipe liku:r ɔf hwif vertiu endʒendræd is θα flu:r hwan zefirus e:k wiθ his swe:τα bræ:θ

Greek

The Greek typeface packaged with Junicode is Foulis Greek, named for the Foulis brothers, publishers of the famous Glasgow Homer (1756–8), which used the Greek Double Pica cut by Alexander Wilson. Those who want a more modern Greek face that harmonizes well with Junicode should consider GFS Didot Classic or GFS Porson.

βίβλος γενέσεως ἰησοῦ χριστοῦ υἱοῦ δαυὶδ υἱοῦ ἀβραὰμ. ἀβραὰμ ἐγέννησεν τὸν ἱσαάκ, ἵσαακ δὲ ἐγέννησεν τὸν ἱακωβ, ἱακωβ δὲ ἐγέννησεν τὸν ἱοῦδαν καὶ τοὺς ἀδελφοὺς αὐτοῦ, ἱοῦδας δὲ ἐγέννησεν τὸν φάρες καὶ τὸν ζάρα ἐκ τῆς ςαμάρ, φάρες δὲ ἐγέννησεν τὸν ἑσρώμ, ἑσρὼμ δὲ ἐγέννησεν τὸν ἀμιναδάβ, ἀμιναδὰβ δὲ ἐγέννησεν τὸν ναασσών, ναασσών δὲ ἐγέννησεν τὸν βόες ἐκ τῆς ραχά

Turn on Historic Ligatures and Stylistic Alternates for old-style ligatures and alternative letter-shapes:

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Lithuanian

Lithuanian poses several typographical challenges. An accented i retains its dot: į; and certain characters with ogonek must avoid colliding with a following j: ėj ųj. Make sure Contextual Alternates (calt) is turned on; for į, use i followed by combining dot accent (0307) and acute (0301).


Polish

The default shape and position of ogonek in Junicode are suitable for modern Polish. For the medieval Latin e-caudata, consider using ss15.

Mieszkańcy całej ziemi mieli jedną mowę, czyli jednakowe słowa. A gdy wędrowali ze wschodu, napotkali równinę w kraju Szinear i tam zamieszkali. I mówili jeden do drugiego: Chodźcie, wyrabiajmy cegłę i wypalmy ją w ogniu. A gdy już mieli cegłę zamiast kamieni i smołę zamiast zaprawy murarskiej, rzekli: Chodźcie, zbudujemy sobie miasto i wieżę, której wierzchołek będzie sięgał nieba, i w ten sposób uczynimy sobie znak, abyśmy się nie rozproszyli po całej ziemi.

Czech

Special care has been taken with the handling of Eastern European languages. The developer solicits suggestions for further improvement.

Pojďme do Betléma a přesvědčme se o tom, co nám anděl oznámil.

**Fleurons**

Junicode contains a number of fleurons (floral ornaments) copied from a 1785 Caslon specimen book. This document contains a number of examples. Fleurons may be found at these code-points: E270, E27D, E670, E67D, E68A, E736, E8B0, E8B1, EF90–EF9C, EF9F, F011, F014, F018, F019, F01B, F01D, F01E.
OpenType Features

Following is a list of the OpenType features in Junicode. For instructions on applying OpenType features, consult the documentation for your preferred application. The first three of these (Standard Ligatures, Contextual Alternates, Kerning) should generally be on (they already are in most applications, but in Microsoft Word you must turn them on yourself).

Standard Ligatures (liga)

Like many old-style fonts, Junicode contains the most common f-ligatures (first flight offer office afflict fjord) and some that are less common (e.g. thrift fifty afraid für fördern). It also has long-s ligatures (e.g. assert start flick omission).

Contextual Alternates (calt)

When this feature is on, Junicode will avoid unsightly collisions between neighboring characters such as f and vowels with diacritics, e.g. fèler fif ful. If you find that f collides with some other character, you can select the narrow f via the OpenType STYLISTIC ALTERNATES feature.

Kerning (kern)

In most text-based applications, KERNING (which makes fine adjustments to the spacing between characters) is on by default, but in Mi-
crosoft Word it must be turned on explicitly. Turn it off for an antique look.

**Stylistic Alternates (salt)**

This feature gives you direct access to a number of alternates that are available via other features. Some of these (for example the narrow f) may be useful to avoid collisions that the font designer has not anticipated. In Foulis Greek, a number of alternative letter shapes can be accessed in this way: e.g. ββγγρϱττφϕ.

**Discretionary Ligatures (dlig)**

This feature will give you fancy ligatures, e.g. acht star track bitten attract, and also connected Roman numbers (I II III IV V VI VII VIII IX X XI XII—regular and italic faces). Use it also for circled numbers and letters: [1] = ①; [A] = Ⓐ; [a] = Ⓐ; [[1]] = ⓵; <1> = ❶ (regular and italic faces only).

**Historic Ligatures (hlig)**

Nearly all of MUFI’s “non-structural” ligatures are accessible via Historic Ligatures. Even if you are not a medievist, you may still be amused by the strange effects you can achieve by turning on this feature: e.g. track fa sock aardvark. This feature will also permit you to access a large number of historical ligatures in Foulis Greek, e.g. ἱφθίμους ἐτελείειο διαζήτην μάχεσθαι χραίσμῃ.

**Historic Forms (hist)**

This feature provides long f. In keeping with the usage of early printers, round s is preserved at the ends of words: “When to the sessions of sweet
silent thought.”

**Mark Positioning (mark and mkmk)**

Where no precomposed character is available, combining marks are still correctly positioned, and marks can be “stacked” via Mark to Base (mark) and Mark to Mark (mkmk): ŏ́ (o + U+306 + U+301); ī̆ (i + U+304 + U+306). The dot of an i or j followed by a diacritic is removed: i. If your application supports these features, they are almost certainly on by default.

**Small Capitals (smcp and c2sc)**

Use Small Caps to change lower-case letters to small caps; add Caps to Small Caps for text entirely in small caps. Junicode has true small caps rather than scaled capitals. Special small cap versions of common combining diacritics are available, and these should be positioned correctly relative to the base characters: ÄÇÉ. *Regular, Italic, and Bold faces.*

**Old-Style Numbers (onum)**

You have a choice of either standard “lining” figures or old-style figures, selected by Old-Style Numbers: 0123456789 0123456789.

**Slashed Zero (zero)**

Turn on this feature for a slash through the digit zero (both lining and old-style): θ ø.
Superscripts and Subscripts (sup, subs)

Superscript numbers are rendered with Superscripts: ⁰¹²³⁴⁵⁶⁷⁸⁹. Subscript numbers are rendered with Subscripts: ₀₁₂₃₄₅₆₇₈₉. In the regular and italic styles there is a complete alphabet of superscripts (e.g. ᵃᵇᶜᵈᵉᵢᵉ).

Fractions (frac)

A sequence of number + slash + number is rendered by a fraction if the fraction has a Unicode encoding and this feature is on: ½ ¼ ⅓ ¾ (complete set of Unicode fractions in regular and italic).

Letters with flourishes (swsh)

For letters with flourishes (sometimes used for setting Middle English texts), use Swash: α β γ δ ξ. Some capital swashes are also available in the italic face, based on those in Hickes’s Thesaurus: A D F Q À E.

Mirrored runes (rtlm)

In the regular and italic faces Junicode contains mirrored versions of runes. To access these, use Right-to-Left Mirroring: ᚤᚦᚨᚪᚾᚪᚱᛁᚪᚬᚾᚩᚱᚻ. This feature will not reverse the order of the runes, but only the shapes of the characters.

Greek letters in IPA

Earlier versions of Junicode contained an awkward workaround for the problem of IPA characters based on Greek together in a font with a complete Greek character set in a different style. Now that Junicode’s Greek has been moved to the Foulis Greek font, IPA characters based
on Greek have been moved to the Greek range, and no special coding is needed to access them.

**Nordic letter-shapes**

The default shapes of ð and þ in Junicode are English: this is unusual in modern fonts. For the shapes used in Icelandic, specify the Icelandic language, if your application has good language support, or select **Stylistic Set 1**: ðþ.

**Insular letter-shapes (ss02)**

Use **Stylistic Set 2** for insular letter-forms: abcdefg.

**Overlined characters (ss04, ss05)**

Use **Stylistic Set 4** for roman numbers with high overline (viii XCV) and **Stylistic Set 5** for lower-case roman numbers with medium-high overline (viii dix). These Stylistic Sets will work only with letters used in Roman numbers.

**Enlarged minuscules (ss06)**

**Stylistic Set 6** produces enlarged minuscules, thus: abcdefg. Since the underlying text remains unchanged, enlarged text can be searched like normal text.

**Deleted text (ss07)**

In medieval manuscripts, text is often deleted by placing a dot under each letter. Both Unicode and MUFI define many characters with dots below: if possible, you should avoid hard-coding these and instead use **Stylistic Set 7**.
Alternate yogh (ss08)

For Middle English, always use the yogh at U+021C and U+021D (ȝ). Unicode also has an alternative yogh, which in Junicode has a flat top. If you prefer this, leave the underlying text the same and specify STYLISTIC Set 8: ȝ.

Retired letter-shapes (ss09)

The design of a few Junicode characters has changed since the font was introduced. The original designs, if you prefer them, will always be available via STYLISTIC Set 9. Currently there are just a few such alternates: ȳ for ð, T for T, t for t.

Long slashes (ss10)

Some users prefer slashes and backslashes that are longer than Junicode’s default. Use STYLISTIC Set 10 to access these: a/a, a/\.

Alternative italic æ (ss11)

In texts that contain both æ and œ, the two may be confused in the italic face: æ æ. In this case, use STYLISTIC Set 11 to substitute æ for æ.

E caudata (ss15)

Medieval Latin texts often use an e with tail, called e caudata, to represent Latin æ or œ. Polish, Lithuanian, and several other languages also use this letter. While in modern editions of medieval texts the cauda (or in Polish, the ogonek) is often attached to the very bottom of the letter, in modern Polish and Lithuanian printing it is attached to the end of the bottom stroke: Polish ę, medieval Latin ę. The modern
Polish version of the letter is acceptable for medieval Latin; however, if you prefer a centered cauda, use Stylistic Set 15.

**Linguistic alternates (ss17)**

One character (ʔ, U+0294) has an alternate shape used in phonetic transcription. Access this with Stylistic Set 17.

**Old-Style Punctuation (ss18)**

Old books generally set extra space before the heavier punctuation marks (; : ! ?); they also leave extra space inside quotation marks and parentheses (e.g. “here”). For a similar effect, use Stylistic Set 18. Make sure that Contextual Alternates are also on so that Junicode can correct the spacing in certain environments.

**Latin-to-Gothic Transliteration (ss19)**

As transliteration of Latin to Gothic characters is straightforward, it can easily be handled with OpenType features. Note that the Gothic alphabet has no distinction between upper- and lower-case, so capitals and lower-case letters are transliterated the same way: महेदाइ सुश्रान्थ गाह इन्न मांस लेइक.

**Gothic-to-Latin Transliteration (ss20)**

The same as ss19, but in reverse. It produces all lower-case letters. Thus गाधब नन यास माइ फान्स स्वेस्वा म्मा becomes ‘gadob nu was mais ßans sweswamma’.
Other Features

Treatment of Obsolete Characters

A number of medieval characters originally assigned by MUFI to the Unicode Private Use Area have been accepted into the Unicode standard. For several years Junicode retained the obsolete characters, adding a mark to warn document maintainers to reencode their documents. Beginning with version 0.7.3 obsolete MUFI characters were removed from the font.

Character Protrusion

For XeLaTeX users who use the Microtype package for character protrusion, a configuration file (mt-Junicode.cfg) is provided for Junicode. Users of XeLaTeX will need Microtype version 2.5 or higher. The configuration file is designed for XeLaTeX, but it can easily be edited to work with LuaTeX.
Miscellanea

The Junicode font is available at http://junicode.sourceforge.net/. You can also find it in the repositories of many Linux distributions and via CTAN. Visit the Junicode Project Page at SourceForge to leave feature requests and bug reports. Suggestions and Contributions are welcome: if you wish to contribute to Junicode, leave a patch at the Project Page or contact the developer. Feature requests and bug reports can be left in the same place.

Junicode comes in Regular, Italic, Bold and Bold Italic faces, but the Regular and Italic faces have the fullest character set and are richest in OpenType features. The font implements the recommendation of the Medieval Unicode Font Initiative version 4.0. Download the complete recommendation at http://www.mufi.info/.

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