Junicode

Version 0.7.2

The Junicode font is designed to meet the needs of medieval scholars; however, it has a large enough character set to be useful to the general user. It comes in Regular, Italic, Bold and Bold Italic faces. The Regular face has the fullest character set, and is richest in OpenType features.

Both the selection and design of the characters in Junicode reflect the needs of medievalists. However, many persons writing in ancient and modern languages have found the font useful. If you wish to see better support for any language, please leave a request at the Junicode project page (http://sourceforge.net/projects/junicode).

Junicode implements most of the recommendation of the Medieval Unicode Font Initiative (version 3.0). Look for special MUFI characters (those not in the Unicode standard) in the Private Use Area (U+E000 and above). Download the complete recommendation at http://www.mufi.info/.

Junicode is licensed under the SIL Open Font License: for the full text, go to http://scripts.sil.org/OFL. Briefly: You may use Junicode in any kind of publication, print or electronic, without fee or restriction. You may modify the font for your own use. You may distribute your modified version in accordance with the terms of the license.

OpenType Features

Only OpenType-aware applications can make use of OpenType features. Among these are Adobe InDesign, Mellel, and (to a limited extent) Microsoft Word. XeTeX, a typesetting program built on top of TeX, has especially good support. The following are standard OpenType features (not all available in all faces). For OpenType features especially for medievalists, see the next section.

Like many old-style fonts, Junicode contains several f-ligatures (first flight offer office afflict fjord). It also has a number of other standard ligatures, e.g. thrift fifty afraid für fördern. It also has long-s ligatures (aſſert ſtart ſlick omiſſion and more). Most OpenType-aware applications will use these by default. You can disable them by turning off "Standard Ligatures" (liga). *All faces.*

If "Contextual Alternates" (calt) and "Horizontal Kerning" (kern) are on (as they should be by default), Junicode will avoid collisions between f and vowels with diacritics, e.g. fêler fíf fŭl.

For circled numbers and letters, use "Discretionary Ligatures" (dlig):
    [1] = ①
    [A] = Ⓐ
    [a] = ⓐ
    [[1]] = ◉
    <1> = ❶
The same feature also gives you connected Roman numbers (I II III IV V VI VII VIII IX X XI XII), and fancy ligatures, e.g. act ſtar track bitten attract. *Regular face only.*

With "Glyph Composition/Decomposition" (ccmp), a base character followed by one or more combining diacritical marks is replaced with a pre-composed character when that would look different from the character + diacritic sequence: for example A + U+301 makes Á, where a special upper-case form of the diacritic is used. *All faces, depending on the availability of composed characters and combining diacritics.*

Where no precomposed character is available, combining marks should still be correctly positioned, and marks can be "stacked" via "Mark to Base" (mark) and "Mark to Mark" (mkmk): ő (o + U+306 + U+301); ĭ̄ (i + U+304 + U+306). The dot of an i or j followed by a diacritic will generally be removed: ĭ. *All faces; anchors less plentiful in bold and italic faces than in regular; diacritic stacking not available in bold italic.*

Use "Small Caps" (smcp) to change lower-case letters to small caps; add "Caps to Small Caps" (c2sc) 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 face only.*

You have a choice of either standard "lining" figures or old-style figures, selected by "Old-Style Numbers" (onum): 0123456789 0123456789. *All faces.*

Superscript numbers are rendered with "Superscripts" (sups): 0123456789. Subscript numbers are rendered with "Subscripts" (subs): 0123456789. *Regular only.*

A sequence of number + slash + number is rendered by a fraction if the fraction has a Unicode encoding and "Fractions" (frac) is on: ½ ¼ ⅔ ¾. *All faces, but fullest in regular and bold.*

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 "Style Set 9" (ss09). Currently there are just a few such alternates: ð for ð, T for T, т for т.

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 (ss18). Make sure that Contextual Alternates are also on so that Junicode can correct the spacing in certain environments (but you will have to kern the English plural possessive apostrophe manually).

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 (currently beta). The configuration file will work only with XeLaTeX, though it can probably be made to work with LuaTeX by commenting out the last five lines of the \DeclareCharacterInheritance command.

Notes on Junicode and MUFI

The MUFI specification defines a great many characters of interest to medievalists; the current version of Junicode contains most of these. While many MUFI characters have Unicode encodings, many others have MUFI-recommended encodings in the "Private Use Area" (PUA) of the Unicode standard—that is, a range of code points not assigned to Unicode characters and available for use in fonts for specialized purposes. Use of the PUA allows MUFI to include many characters that are not part of the Unicode standard.

There are risks with this approach. First, use of the PUA is deprecated by Adobe and Microsoft (major players in fonts and type rendering), and it is uncertain whether applications will continue to support it indefinitely. Second, and probably more important, MUFI characters are regularly accepted by the Unicode Consortium, whereupon they lose their PUA encodings and receive Unicode encodings—breaking any application that uses them.

To minimize these risks, the MUFI specification strongly recommends "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." An alternative to entities is the use of OpenType features. If you are using an OpenType-aware application (e.g. XeTeX, InDesign, Mellel, and to a limited extent MS Word), many or all of the OpenType features of Junicode can help you avoid using PUA characters directly.

Characters with diacritics. Both Unicode and MUFI contain large numbers of characters with diacritics. Make it a habit never to use these "precomposed" characters directly; rather use the "plain" character followed by a character from the Unicode "Combining Diacritics" range. (This works with Word for Windows when Uniscribe is enabled, and also with other OpenType-aware applications.) In almost all cases the application will either substitute the correct precomposed character or position the diacritic correctly. For characters with more than one diacritic, follow these rules: when diacritics are stacked vertically, insert the one closest to the base character first; when diacritics are arranged horizontally, insert the leftmost one first. Examples: a + macron + acute = a̅́; o + dot + acute = ǒ. Remember that Unicode has both spacing and combining diacritics; only the combining diacritics will work correctly. If any combination fails to work for you, please leave a bug report at the Junicode website.

Small caps. Make it a hard-and-fast rule *never* to insert any small cap character into your documents. The encoding of small caps is inherently unstable and non-portable. Early versions of MUFI recommend using small

cap-like characters from the Unicode phonetic ranges, but this would be an error with many fonts, including Junicode, which size phonetic "small caps" to harmonize with lower-case characters, whereas true small caps are somewhat larger. Always use the small caps command provided by the application you are using. If the application is able, it will use Junicode's true small caps.

You may use the "small caps" in the phonetic ranges to set IPA text. The "small cap" ʀ is also recommended for setting transliterations of early Norse runic texts.

Nordic letter-shapes. The default shape of ð and þ in Junicode is 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 "Style Set 1" (ss01): ðþ.

Insular letter-shapes. Insular letter-forms have recently been accepted by Unicode, and therefore their encodings have changed. For Junicode, use "Style Set 2" (ss02) for insular letter-forms if your application supports it: abcðeꝼᵹ. Turn off "Standard Ligatures" (liga) for best results.

Old English and Old Icelandic typography. When Old English or Old Icelandic is set with Junicode, some letter combinations can produce unattractive collisions. To avoid this, make sure that "Contextual Alternates" (calt) and "Standard Ligatures" (liga) are on (as they should be by default): hæfð hæfþ fūl nīð.

Enlarged minuscules. In Junicode, "Style Set 6" (ss06) produces enlarged minuscules, thus: abcdefg. Since the underlying text remains unchanged, enlarged text can be searched like normal text.

Overlined characters. The MUFI specification envisions a font-based mechanism for producing text with overlines. Probably this will not be practical in the near future; rather, use your application's line-drawing facilities to produce text with overlines. For Junicode, roman numbers are an exception. Use "Style Set 4" (ss04) for roman numbers with high overline (v̅i̅i̅i̅ X̅C̅X̅V̅) and "Style Set 5" (ss05) for lower-case roman numbers with medium-high overline (v̅i̅i̅i̅ d̅c̅l̅x̅).

Letters with hook above. The Unicode standard contains several precomposed characters with combining hook above in the Latin Extended Additional range (e.g. ẢỎ). These are used automatically when a vowel is followed by the diacritic U+0309. However, MUFI contains a series of pre-

composed characters in which the hook differs in shape and position. Use "Style Set 14" (ss14) for the MUFI characters (e.g. ǺǾ).

Letters with flourishes. For letters with flourishes (sometimes used for setting Middle English texts), use "Swash" (swsh): cʇ dʇ fʇ gʇ kʇ ꝺ ꝼ.

Ligatures. Nearly all of MUFI's ligatures are accessible via "Historical Ligatures" (hlig). Even if you are not a medievalist, you may still be amused by the strange effects you can achieve by turning on this feature: egg track caught fan sock book save aardvark chaos ꬱ ꬰ ꬲ ꬳ.

Deleted text. 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 "Style Set 7" (ss07).

Alternate yogh. For Middle English, always use the yogh at U+021C and U+021D (Ȝȝ). 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 "Style Set 8" (ss08): Ȝȝ.

Deprecated characters. A number of characters which were encoded in the Private Use Area in MUFI versions 1 and 2 have been adopted by Unicode and now have different code points. In Junicode these characters remain at their old locations, but are marked with a small "x" to remind users to migrate to the newer code points (e.g. ꭗꝣ). The file "replacements" contains a list of these deprecated code points with their replacements; use this to update your documents. If you are unable to change the encoding of an older document but you can use OpenType features, turn on "Style Set 3" (ss03); this will automatically substitute newer for older code points.

E caudata. Medieval Latin texts often use an *e* with tail, called *e caudata*; this represents Latin *ae* or *oe*. 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 "Style Set 15" (ss15).

Mirrored runes. In the regular face Junicode contains mirrored versions of runes. To access these, use Right-to-Left Mirroring (rtlm): ᚠᚡᚢᚣᚤᚥᚦᚧ.

Old and Middle English

Wē æthrynon mid ūrum ārum þā ȳðan þæs dēopan wæles; wē ġesāwon ēac þā muntas ymbe þǣre sealtan sǣ strande, and wē mid āðēnedum hræġle and ġesundfullum windum þǣr ġewīcodon on þām ġemǣrum þǣre fæġerestan þēode. Þā ȳðan ġetācniað þisne dēopan cræft, and þā muntas ġetācniað ēac þā miċelnyssa þisses cræftes.

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

Heþ cẏnepulſ benam riȝebþẏht hiſ þiceſ ꝸ þeſtſeaxna þioꞇan ſoþ unþẏhꞇum ðæðum buꞇon hamꞇunſciþe ꝸ he hæſðe þa oþ he oſſloȝ þone aldoþman þe him lenȝeſꞇ þunoðe ꝸ hiene þa cẏnepulſ on anðþeð aðþæſðe ꝸ he þæþ þunaðe oþ þæꞇ hine an ſþan oſſꞇanȝ æꞇ þþẏſeꞇeſſloðan ꝸ he þþæc þone aldoþman cumbþan ꝸ ſe cẏnepulſ oſꞇ miclum ȝeſeohꞇum ſeahꞇ uuiþ bþeꞇþalum.

SIÞEN þe sege and þe assaut watz sesed at Troye,
Þe borȝ brittened 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 Ennias þe athel, and his highe kynde,
Þat siþen depreced prouinces, and patrounes bicome
Welneȝe of al þe wele in þe west iles.

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 (Style Set 1) feature.

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

Runic

ᚠᛁᛋᚲ ᚠᛚᛖᚹᛆ ᚠᚢᚹᛖ ᛘᛏ ᚠᛖᚱᛖᚷᛏᚾᛒᛖᚱᛁᚲ ᚹᛖᚱᚦ ᚷᛆ:ᛊᚱᛁᛚ ᚷᚱᛖᚱᛏ ᚦᛖᚱ ᛖᛖ ᛘᛏ ᚷᚱᛖᛚᛏ
ᚷᛁᛊᚠᚠᛖ ᚼᚱᛖᛏᛖᛊ ᛒᚠᛏ
ᚱᛖᛘᚹᛖᛏᛖᛊ ᚠᛏᛈ ᚱᛖᛚᛘᚹᛖᛏᛖᛊ ᛏᚹᛟᚷᛖᛏ ᚷᛁᛒᚱᛖᚦᛖᚱ ᚠᛊᛟᛞᛞᚹ ᛘᛁᚱ ᛈᚼᛚᛁᚹ ᛘᛏ ᚱᛖᛘᚹ
ᛚᚾᛊᛏᛁ: ᚹᚦᚱᚹ ᚾᛏᛏᛖᚷ

Latin

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

Adiuuanos dīſ ſalutariſ noſter & ꝓpꝕ głam nominiſ tui dnē liƀanoſ· & ꝓpitiuſ eſto peccatiſ noſtriſ ꝓpter nomen tuum· Ne forte dicant ingentib: ubi eſt dīſ eorum & innoteſcat innationib: corā oculiſ nr̄iſ· Poſuerunt moſticina ſeruorū ruorū eſcaſ uolatilib: cęli carneſ ſcōꝫ tuoꝫ beſtiiſ tenice· Facti ſum̊ oƀꝓbrium uiciniſ nr̄iſ·

Gothic Transliteration

jabai auk ƕas gasaiƕiþ þuk þana habandan kunþi in galiuge stada anakumbjandan, niu miþwissei is siukis wisandins timrjada du galiugagudam gasaliþ matjan? fraqistniþ auk sa unmahteiga ana þeinamma witubnja broþar in þize Xristus gaswalt. swaþ þan frawaurkjandans wiþra broþruns, slahandans ize gahugd siuka, du Xristau frawaurkeiþ.

Sanskrit Transliteration

mānaṃ dvividhaṃ viṣayadvai vidyātśaktyaśaktitaḥ
arthakriyāyāṃ keśadirnārtho 'narthādhimokṣataḥ

sadṛśāsadṛśatvācca viṣayāviṣayatvataḥ
śabdasyānyanimittānāṃ bhāve dhīsadasattvataḥ

International Phonetic Alphabet

hwan θat ɑːprɪl wiθ is ʃuːrəs soːtə θə drʊxt ɔf marʧ haθ peːrsəd toː θə roːte and baːðəd ɛvrɪ væɪn ɪn swɪʧ lɪkuːr ɔf hwɪʧ vɛrtɪʊ ɛnʤendrəd ɪs θə fluːr hwan zɛfɪrʊs eːk wɪθ hɪs sweːtə bræːθ

Greek

The Greek typeface (available only in the regular face) is based on the Greek Double Pica cut by Alexander Wilson of Glasgow in the eighteenth century. It is not really suitable for setting modern Greek; 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 ἀβραάμ. ἀβραὰμ ἐγέννησεν τὸν ἰσαάκ, ἰσαὰκ δὲ ἐγέννησεν τὸν ἰακώβ, ἰακὼβ δὲ ἐγέννησεν τὸν ἰούδαν καὶ τοὺς ἀδελφοὺς αὐτοῦ, ἰούδας δὲ ἐγέννησεν τὸν φάρες καὶ τὸν ζάρα ἐκ τῆς θαμάρ, φάρες δὲ ἐγέννησεν τὸν ἐσρώμ, ἐσρὼμ δὲ ἐγέννησεν τὸν ἀράμ, ἀρὰμ δὲ ἐγέννησεν τὸν ἀμιναδάβ, ἀμιναδὰβ δὲ ἐγέννησεν τὸν ναασσών, ναασσὼν δὲ ἐγέννησεν τὸν σαλμών, σαλμὼν δὲ ἐγέννησεν τὸν βόες ἐκ τῆς ῥαχάβ, βόες δὲ ἐγέννησεν

Lithuanian

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

Visa žemė turėjo vieną kalbą ir tuos pačius žodžius. Kai žmonės kėlėsi iš rytų, jie rado slėnį Šinaro krašte ir ten įsikūrė. Vieni kitiems sakė: Eime, pasidirbkime plytų ir jas išdekime. – Vietoj akmens jie naudojo plytas, o vietoj kalkių – bitumą. Eime, – jie sakė, – pasistatykime miestą ir bokštą su dangų siekiančia viršūne ir pasidarykime sau vardą, kad nebūtume išblaškyti po visą žemės veidą.

Polish

At the urging of Polish type designer Adam Twardoch, the default shape and position of ogonek in Junicode are now suitable for modern Polish. Suggestions for further improvements are solicited.

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.

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abcdefghijklmnopqrstuvwxyz æðþ3
ABCDEFGHIJKLMNOPQRSTUVWXYZ ÆÐÞ3
αβγδεζηθικλμνξοπρςστυφχψω
ΑΒΓΔΕΖΗΘΙΚΛΜΝΞΟΠΡΣΤΥΦΧΨΩ

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

Developer

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Contributors

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Thanks to the many users who have submitted feature requests and bug reports.

This document was set with X⅃TEX.