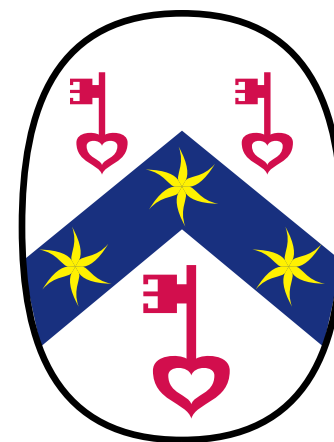


Bembino

A new high-quality font



A Publication of the Research Group on Manuscript Evidence

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A new high-quality font

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Set in RGME Bembino.

	Œ		Ɔ		Ɔ		à	
	0030		0050		0070		00E0	
!	1	Œ	Ɔ	ɑ	q		á	
0021	0031	0041	0051	0061	0071		00E1	
”	2	Ɔ	Œ	Ɔ	Ɔ		â	ò
0022	0032	0042	0052	0062	0072		00E2	00F2
	3	Ɔ	Œ	c	Ɔ			ó
	0033	0043	0053	0063	0073			00F3
\$	4	Ɔ	Œ	Ɔ	Ɔ		ä	ô
0024	0034	0044	0054	0064	0074		00E4	00F4
%	5	Ɔ	Œ	e	u			
0025	0035	0045	0055	0065	0075			
	6	Ɔ	Œ	f	v		ö	
	0036	0046	0056	0066	0076		00F6	
,	7	Ɔ	Œ	g	w			
0027	0037	0047	0057	0067	0077			
(	8	Ɔ	Œ	h	Ɔ	”	è	‘
0028	0038	0048	0058	0068	0078	00A8	00E8	2018
)	9	Ɔ	Œ	i	Ɔ		é	ù
0029	0039	0049	0059	0069	0079		00E9	00F9
*	:	Ɔ	Œ	j	Ɔ		ê	ú
002A	003A	004A	005a	006A	007A		00EA	00FA
+	;	Œ	[	Ɔ			ë	û
002B	003B	004B	005B	006B			00EB	00FB
,		Œ		l	|		ì	ü
002C		004C		006C	007C		00EC	00FC
—		Œ	]	m			í	
002D		004D	005D	006D			00ED	201D
•		Œ		n			î	”
002E		004E		006E			00EE	201E
		Ɔ	—	o		ß	ï	“
		004F	005F	006F		00DF	00EF	201F

Bembino

Welcome to Bembino

Bembino is a brand new digital font, based on the “Bembo” font produced by Aldus Manutius and in use in the 1490’s. The characters are drawn from the examples in the 1988 edition of *An Atlas of Typeforms* by James Sutton and Alan Bartram, with a few changes to make it more legible for modern readers.

This document shows the glyphs that are available in the latest release of the full font. The current range of glyphs is suitable for setting texts in English and most Western European languages based on the Latin alphabet. The font may also be used to set Greek, both modern and polytonic, and the Russian subset of the cyrillic languages, Hebrew, including masoretic texts, and Egyptian Arabic. It does not include the full range of presentation forms for all Arabic languages.

Bembino is a free font. It is, however, the copyright of the Research Group on Manuscript Evidence, to prevent someone from taking the font and selling it for money.

Why build yet another font?

With thousands of fonts available, the vast majority of them being free, why should anyone consider building yet another font? There are two reasons that led to the development of Bembino.

The first is that quantity does not bring quality. Probably only 1 font in 1,000 of those on the internet are usable for anything more than a few lines of text or a heading in a poster. Most have only one style, and one weight, and lack the essential characters needed for proper typesetting.

At the other extreme are the commercial fonts. These are designed for professional use and come in all needed weights, styles and variants with upwards of a thousand glyphs in each. However, they also come with a hefty price tag, and numerous restrictions. The second reason is that it is impossible to extend their character sets by adding new glyphs into the font without running the risk of being accused of unlawful copying.

There are similar efforts being made by others to develop high-quality fonts with extensive coverages. Two shining examples are Junicode, which concentrates on Western-European characters over many centuries, and the Code2000 project which is building a ‘full’ unicode font, but in a single style.

Bembino aims to fill the gap between these efforts by concentrating on very high-quality glyphs in multiple weights and styles. It will never cover the full unicode set (which includes Chinese ideographs, the Korean syllabary, Devanagari with all its presentation forms and so on) but the glyphs that it does offer will be usable and harmonious.

Why now?

For many years, digital font design has been hampered by competing formats, and only a slow acceptance that more than 256 glyphs might be needed at any one time. The first real step towards open font standards came in 1990 when Adobe Systems Incorporated published the Adobe Type 1 Font Format. Although the format had been decoded earlier, this was the first time it was possible to produce high-quality PostScript fonts without using either an undocumented format, or expensive commercial tools.

The main drawbacks of Type 1 fonts are the limitation of only 256 active glyphs at any one time, and the separation of the outlines from the font metrics in two separate files. The TrueType font specification, which appeared only a few years later merged the outlines and metrics into a single file, and supported up to 65,536 glyphs in a single font. However, TrueType has a less powerful curve-drawing model than PostScript and a very difficult raster-hinting mechanism (compared to Type 1 and its successor, Type 2).

These various issues were resolved around 2001 with the definition of OpenType, which is a wrapper for both Type 2 and TrueType fonts in a single file. Using OpenType, the metric, kerning and glyph substitution tables are contained in the same file as the PostScript Type 2 outlines, so offering the best of both worlds.

OpenType also supports multiple languages and sets of stylistic variations within a single language.

Two other factors that help support high-quality typesetting are the continued expansion of the Unicode standard to provide fixed encoding for known glyphs; and the appearance of layout software that can use the wide range of layout tables in an OpenType font. Again, Adobe is leading the way with InDesign. Usually, better-quality printed output will be generated from professional typesetting programs, as opposed to using Word- or Text-processing software intended only for office applications.

Why Bembo?

Quite simply, Bembo is one of the most beautiful fonts ever devised. It builds on the earlier ‘Venetian’ designs of Nicholas Jenson, but with the much lighter color than comes from a more open font. The upper-case letters sit slightly shorter than the lower-case ascenders and the height of the non-ascending lower-case letters is lower than the ‘newspaper’ fonts like Times New Roman, which contributes to the clear open look of the type, even when set tightly on the page. These design elements are carried through into the language extensions and the Greek and Cyrillic letter forms.

Each glyph is individually recognisable, with no confusion between lower-case l, upper-case I and digit 1, or upper-case O and digit 0. This is aided by the serifs which help separate the individual glyphs, without being obtrusive or distracting. Compared to the later fonts of Garamond or Caslon the serifs are simple, with flat feet and gentle curves into the ascenders. Both of these features translate well into outlines for modern laser printers.

Bembino is not an exact copy of Bembo. In the original design, the italic ‘g’ was a slanted form of the roman, which is hard to distinguish in isolation. Bembino uses a g based on the (later) Perpetua. The original italic ‘y’ retained a footed serif, and this was replaced with a y from an earlier Jenson font. The only other noticable changes are the replacement of old-style numerals with more modern lining numerals, to avoid confusion with lower-case o and small-caps i or o, and the use of a full-height question mark. Apart from those changes the outlines are as close to the illustrated forms as we can make them.

Copying and Copyright?

Is it legal to copy, or to copyright, a font? The answer is yes to both questions. It is not possible to copyright the shape of an individual letter (you cannot claim copyright over ‘the letter e’ and make people pay whenever they use it). You *can* copyright the means to generate the shape of a letter ‘e’, just as you can copyright a specific method to place windows on a computer screen.

There are many fonts available named Bembo, including commercial fonts, with shapes similar to Bembino. Letter shapes from other fonts insipred the cursive and fraktur styles. Although Bembino resembles these letter forms, it is a brand new font developed without copying any existing font program.

Bembino is a copyrighted font program which embodies a method of generating letter outlines by means of a computer apparatus. You may not take that program and claim it as your own work, nor may you sell the program, either on its own or as part of a font package.

However, the Research Group on Manuscript Evidence grants you otherwise unrestricted use of the output of the Bembino program, for both private and commercial purposes. You may use the font to typeset a book which you sell for a profit. You may also embed the font program in a PDF file for which you charge a fee to download.

The Research Group on Manuscript Evidence does not require any licensing, downloading or shareware fees for using Bembino. An acknowledgement in a colophon, or elsewhere, would be appreciated, and donations to the Group are always welcome. The Research Group mission is described on our website, which also contains details of the methods for making donations. In many cases, donations may by fully tax-deductible.

What’s in the font?

Bembino comes in three styles: regular, italic and cursive, and five weights (normal, medium, halfbold, semibold and bold). There is also a separate single-weight file containing a Fraktur style. Examples of the styles and weights are shown on page 18 of this booklet. The three main styles contain different sets of glyphs as shown in the font tables, stating on page 19. All contain the basic ASCII upper- and lower-case letters. The regular and italic also contain numbers, punctuation

<i>È</i>	<i>À</i>	<i>Ð</i>	<i>a</i>	<i>h</i>	<i>è</i>
0400	0410	0420	0430	0440	0450
<i>Ë</i>	<i>Б</i>	<i>С</i>	<i>б</i>	<i>с</i>	<i>ë</i>
0401	0411	0421	0431	0441	0451
	<i>В</i>	<i>М</i>	<i>б</i>	<i>м</i>	
	0412	0422	0432	0442	
	<i>Т</i>	<i>У</i>	<i>т</i>	<i>у</i>	
	0413	0423	0433	0443	
	<i>Д</i>	<i>З</i>	<i>г</i>	<i>ф</i>	
	0414	0424	0434	0444	
<i>Ї</i>	<i>Е</i>	<i>Х</i>	<i>e</i>	<i>x</i>	<i>ɣ</i>
0405	0415	0425	0435	0445	0455
<i>Ї</i>	<i>М</i>	<i>У</i>	<i>м</i>	<i>у</i>	<i>і</i>
0406	0416	0426	0436	0446	0456
<i>Ї</i>	<i>З</i>	<i>У</i>	<i>з</i>	<i>у</i>	<i>і</i>
0407	0417	0427	0437	0447	0457
<i>Ї</i>	<i>У</i>	<i>У</i>	<i>u</i>	<i>u</i>	<i>j</i>
0408	0418	0428	0438	0448	0458
	<i>Ў</i>	<i>У</i>	<i>ў</i>	<i>у</i>	
	0419	0429	0439	0449	
	<i>Н</i>	<i>В</i>	<i>к</i>	<i>в</i>	
	041A	042A	043A	044A	
	<i>А</i>	<i>В</i>	<i>а</i>	<i>в</i>	
	041B	042B	043B	044B	
	<i>М</i>	<i>В</i>	<i>м</i>	<i>в</i>	
	041C	042C	043C	044C	
	<i>Н</i>	<i>Д</i>	<i>н</i>	<i>д</i>	
	041D	042D	043D	044D	
	<i>О</i>	<i>Ю</i>	<i>о</i>	<i>ю</i>	
	041E	042E	043E	044E	
	<i>П</i>	<i>А</i>	<i>п</i>	<i>а</i>	
	041F	042F	043F	044F	

	<i>0</i>	<i>@</i>	<i>P</i>	<i>`</i>	<i>ƚ</i>		<i>À</i>		<i>à</i>		<i>ff</i>
	0030	0040	0050	0060	0070		00C0		00E0		FB00
<i>!</i>	<i>1</i>	<i>A</i>	<i>2</i>	<i>a</i>	<i>q</i>		<i>Á</i>	<i>Ñ</i>	<i>á</i>	<i>ñ</i>	<i>fi</i>
0021	0031	0041	0051	0061	0071		00C1	00D1	00E1	00F1	FB01
<i>"</i>	<i>2</i>	<i>B</i>	<i>R</i>	<i>b</i>	<i>ƚ</i>		<i>Â</i>	<i>Ô</i>	<i>â</i>	<i>ò</i>	<i>fl</i>
0022	0032	0042	0052	0062	0072		00C2	00D2	00E2	00F2	FB02
<i>#</i>	<i>3</i>	<i>C</i>	<i>S</i>	<i>c</i>	<i>s</i>		<i>Ã</i>	<i>Ó</i>	<i>ã</i>	<i>ó</i>	<i>ffi</i>
0023	0033	0043	0053	0063	0073		00C3	00D3	00E3	00F3	FB03
<i>\$</i>	<i>4</i>	<i>D</i>	<i>T</i>	<i>d</i>	<i>t</i>		<i>Ä</i>	<i>Ö</i>	<i>ä</i>	<i>ô</i>	<i>ffl</i>
0024	0034	0044	0054	0064	0074		00C4	00D4	00E4	00F4	FB04
<i>%</i>	<i>5</i>	<i>E</i>	<i>U</i>	<i>e</i>	<i>u</i>		<i>Å</i>	<i>Õ</i>	<i>å</i>	<i>õ</i>	<i>ff</i>
0025	0035	0045	0055	0065	0075		00C5	00D5	00E5	00F5	0000
<i>&</i>	<i>6</i>	<i>F</i>	<i>V</i>	<i>f</i>	<i>v</i>			<i>Ö</i>		<i>ö</i>	
0026	0036	0046	0056	0066	0076			00D6		00F6	
<i>'</i>	<i>7</i>	<i>G</i>	<i>W</i>	<i>g</i>	<i>w</i>	<i>Ç</i>	00C7		<i>ç</i>		
0027	0037	0047	0057	0067	0077		<i>È</i>		<i>è</i>		
0028	0038	0048	0058	0068	0078		00C8		00E8		
<i>)</i>	<i>9</i>	<i>I</i>	<i>Y</i>	<i>i</i>	<i>y</i>	<i>É</i>	00C9	<i>Ù</i>	<i>é</i>	<i>ù</i>	
0029	0039	0049	0059	0069	0079		<i>Ê</i>	<i>Ú</i>	<i>ê</i>	<i>ú</i>	
002A	003A	004A	005A	006A	007A		00CA	00DA	00EA	00FA	
<i>+</i>	<i>;</i>	<i>H</i>	<i>[</i>	<i>k</i>	<i>{</i>	<i>Ë</i>	00CB	<i>Û</i>	<i>ë</i>	<i>û</i>	
002B	003B	004B	005B	006B	007B		<i>Ï</i>	<i>Ü</i>	<i>ì</i>	<i>ü</i>	
002C	003C	004C	005C	006C	007C		00CC	00DC	00EC	00FC	
<i>–</i>	<i>=</i>	<i>M</i>	<i>]</i>	<i>m</i>	<i>}</i>	<i>Í</i>	00CD	<i>Ý</i>	<i>í</i>	<i>ý</i>	
002D	003D	004D	005D	006D	007D		<i>Ĵ</i>		<i>î</i>		
002E	003E	004E	005E	006E	007E		00CE		00EE		
<i>/</i>	<i>?</i>	<i>O</i>	<i>–</i>	<i>o</i>		<i>Ĵ</i>	00CF		<i>ï</i>	<i>ÿ</i>	
002F	003F	004F	005F	006F					00EF	00FF	

Book Title Page

Chapter Title

Section Heading

Subsection Heading

Inline heading within running text

Examples of Headings using varying font styles and weights

and a set of small-capitals. They also contain the presentation forms for ff, fi, fl, ffi, fll, and fj and a range of quotation marks for various styles of typesetting.

Usage Guide

The section offers some suggestions from the designer for how these fonts might be used. The first (and only?) rule of typography is to set what looks right on the page. Certain disciplines, such as mathematics and linguistics, have their own rules for use of bold, italic or small-caps, but for general text-layout the following guidelines may be helpful.

The bold and italic fonts are designed for maximum contrast with the regular, when used inline at the same point size. Usually, one or other of these two styles is used to provide emphasis. The choice of which to use may be determined by other factors (such as using italics for quotations or inline references), but the choice should be consistent throughout the document.

The italic font is suitable for setting more than one line of text (for example poetry) but modern readers may find it harder to read large blocks of italic as compared to the regular style. The bold font is not designed primarily for setting long blocks of text, it will be harder to read than using a lighter weight.

The intermediate weights are good for setting headings and titlings. Despite the defaults of some word

processors, it is quite reasonable (and, before the advent of bad Desk-Top Publishing, normal) to use only a single font within a document. The general rule for good legibility is that the larger the point size the less weight in the font. Setting titles in 36pt full-weight bold makes title pages look like ‘posters’ rather the opening pages of books. However, it is important that headings are easily located and well-separated from the main text.

A well-chosen set of weights and sizes will not require any alternation between roman and italic styles for the headings. The semantics of italics does not need to be ‘inverted’ arbitrarily for headings at some levels and not others. The following set of suggestions may help set the standard for other documents.. The examples are shown in the displayed area above.

The “Book Title Page” is set in 36pt Regular, and shows very well the open nature of the font characters.

The “Chapter Title” is set in 24pt Medium. This gives a similar visual weight as the larger size set in Regular.

The other three headings are designed for a body size of 11pt, and would need to be increased slightly for larger body text. The “Section Heading” is 16pt Halfbold and the “Subsection Heading” is 13pt Semibold. The inline heading demonstrates the strong contrast between Regular and Bold when set at the same point size (11pt).

Inline heading consume minimal space, and yet can easily be distinguished from the text that immediately follows it.

Another other option for titles is to use capitals and small-caps, for example INTRODUCTION, PREFACE and so on. It provides good visual contrast without increasing the font weight and is less obtrusive than using all capitals. This style is good for running headings, since it does not detract from the main text. Small-caps are also less distracting when used for abbreviations in running text, compare 400AD with 400AD.

Not all features and styles have to be used, of course. For typing a simple letter, only the regular style at a single point size may be needed, since the message should be carried by the text, not by the layout. Basic word processing may also need italic, and one of the heavier weights for a single level of heading,. A more complex document with more than one section-level could look better with both half-bold and full-bold in a three-weight configuration. Finer- grade typography and typesetting can bring in the other weights to maintain the right color on the page, as needed.

Text set significantly smaller than the main point size may be easier to read in medium rather than regular. This will depend on the printing technology and the quality of the paper. Based on the design parameters of the font, an increase of weight may be needed at point sizes below 8pt on a 600 d.p.i. laser printer if the serifs are to be accurately retained.

What is “Good Typesetting”?

Many factors combine to produce a layout that is easy to read, visually appealing and conveys the intended meaning. The features and capabilities of a font, beyond the range of glyphs it supports, can all help improve the quality of the final product.

Kerning & Presentation Forms

Some pairs of glyphs do not look good when set side-by-side. One example is the pair ‘V’ and ‘A’ which appear too far apart, and may lead the reader to think there is a word-space between them. In such cases, the inter-glyph spacing must be adjusted to bring the glyphs closer together, as in “VA”. This process is called kerning, and Bemfino contains sets of tables to provide the correct kerning data.

Another example is the pair ‘f’ and ‘i’. In this case, the dot on the i overlaps the overhang on the f, producing an awkward ‘blob’ that distorts the overall color (weight) of the font. Using kerning to increase the space between the glyphs does not help, since that then creates too much space at the base of the characters. The solution in this case is to use a special ‘presentation form’ of the pair, “fi” which retains the correct spacing at the base of the glyph without producing the heavy blob. Such forms are often misnamed “ligatures” from an old printing term. The term presentation form emphasises that the alternate glyph is purely for presentation on the page, the textual content retains the two (or three) letters, for example when performing automated spelling checks.

Digraphs

Digraphs are the opposite case to presentation forms. There are two cases, one is where a pair of letters appears as a single glyph, and is stored and processed as a single glyph, or example æ and œ. Typesetting systems lacking the correct glyphs may be able to present only ‘æ’ and ‘œ’. The second case is where what appears to be a pair of letters is treated as a single character, for example “j” used as a single letter in Dutch.

Diacritical Marks

These are often termed ‘accents’, but the more general term is a diacritical or combining mark. There are four main places where such marks are used. The most frequent is the traditional ‘accent mark’ which is an essential feature of a particular language (schon and schön have completely different meanings in German). Bemfino provides a range of pre-formed combinations, as opposed to building the form ‘on the fly’ by overprinting a base and accent. Using the correct glyph (i.e. Unicode code-point) allows typesetting programs to sort, check and format the language correctly.

The second most common use of diacritical marks is to indicate stress or tone. Stress marks usually indicate an exception to a language’s normal rule, as with perche` in Italian, with its non-standard stress on the final syllable. Chinese pinyin uses a set of marks to indicate the tone quality of a syllable: mā, má and mà all represent different tones, and different words.

The third use of marks is to indicate meter in poetry, marking long and short vowels.

	<i>P</i>	<i>À</i>	<i>Ð</i>	<i>Ā</i>	<i>Ġ</i>	<i>Ł</i>	<i>Ț</i>	
	F770	F780	F790	F7A0	F7B0	F7C0	F7D0	
<i>A</i>	<i>Q</i>	<i>Á</i>	<i>Ñ</i>	<i>Ǻ</i>	<i>Ç</i>	<i>Ń</i>	<i>Ǻ</i>	
F761	F771	F781	F791	F7A1	F7B1	F7C1	F7D1	
<i>B</i>	<i>R</i>	<i>Â</i>	<i>Ò</i>	<i>Ȧ</i>	<i>Ĥ</i>	<i>Ŧ</i>	<i>Ƒ</i>	
F762	F772	F782	F792	F7A2	F7B2	F7C2	F7D2	
<i>C</i>	<i>S</i>	<i>Ã</i>	<i>Ó</i>	<i>Ć</i>	<i>Ħ</i>	<i>Ň</i>	<i>Ũ</i>	
F763	F773	F783	F793	F7A3	F7B3	F7C3	F7D3	
<i>D</i>	<i>T</i>	<i>Ä</i>	<i>Ô</i>	<i>Ĉ</i>	<i>Ĩ</i>	<i>Ț</i>	<i>Ū</i>	
F764	F774	F784	F794	F7A4	F7B4	F7C4	F7D4	
<i>E</i>	<i>U</i>	<i>Å</i>	<i>Õ</i>	<i>Č</i>	<i>Ī</i>	<i>Ō</i>	<i>Ǫ</i>	
F765	F775	F785	F795	F7A5	F7B5	F7C5	F7D5	
<i>F</i>	<i>V</i>	<i>Æ</i>	<i>Ö</i>	<i>Č</i>	<i>Ǻ</i>	<i>Ǫ</i>	<i>Ǫ</i>	
F766	F776	F786	F796	F7A6	F7B6	F7C6	F7D6	
<i>G</i>	<i>W</i>	<i>Ç</i>		<i>Ǻ</i>	<i>Ț</i>	<i>Ő</i>	<i>Ú</i>	
F767	F777	F787		F7A7	F7B7	F7C7	F7D7	
<i>H</i>	<i>X</i>	<i>È</i>	<i>Ø</i>	<i>Ð</i>	<i>İ</i>	<i>Œ</i>	<i>Ț</i>	
F768	F778	F788	F798	F7A8	F7B8	F7C8	F7D8	
<i>I</i>	<i>Y</i>	<i>É</i>	<i>Ù</i>	<i>Ē</i>	<i>Ț</i>	<i>Ř</i>	<i>Ŵ</i>	
F769	F779	F789	F799	F7A9	F7B9	F7C9	F7D9	
<i>J</i>	<i>Z</i>	<i>Ê</i>	<i>Ú</i>	<i>Ǻ</i>	<i>Ĵ</i>	<i>Ŗ</i>	<i>Ŷ</i>	
F76A	F77A	F78A	F79A	F7AA	F7BA	F7CA	F7DA	
<i>K</i>		<i>Ë</i>	<i>Û</i>	<i>Ė</i>	<i>Ț</i>	<i>Ř</i>	<i>Ž</i>	
F76B		F78B	F79B	F7AB	F7BB	F7CB	F7DB	
<i>L</i>		<i>Ì</i>	<i>Ü</i>	<i>Ę</i>	<i>Í</i>	<i>Ś</i>	<i>Ž</i>	
F76C		F78C	F79C	F7AC	F7BC	F7CC	F7DC	
<i>M</i>		<i>Í</i>	<i>Ý</i>	<i>Ǻ</i>	<i>Ț</i>	<i>Ŝ</i>	<i>Ž</i>	
F76D		F78D	F79D	F7AD	F7BD	F7CD	F7DD	
<i>N</i>		<i>Î</i>	<i>Ɔ</i>	<i>Ĝ</i>	<i>Ɛ</i>	<i>Ş</i>		
F76E		F78E	F79E	F7AE	F7BE	F7CE		
<i>O</i>		<i>Ĭ</i>	<i>Ÿ</i>	<i>Ǻ</i>	<i>İ</i>	<i>Š</i>		
F76F		F78F	F79F	F7AF	F7BF	F7CF		

<div>È</div> <div>0400</div>	<div>Á</div> <div>0410</div>	<div>Â</div> <div>0420</div>	<div>á</div> <div>0430</div>	<div>â</div> <div>0440</div>	<div>è</div> <div>0450</div>			<div>เ็</div> <div>0E10</div>	<div>เํ</div> <div>0E20</div>	<div>เ่</div> <div>0E30</div>	<div>เ้</div> <div>0E40</div>	<div>เุ</div> <div>0E50</div>
<div>Ě</div> <div>0401</div>	<div>Б</div> <div>0411</div>	<div>С</div> <div>0421</div>	<div>б</div> <div>0431</div>	<div>с</div> <div>0441</div>	<div>ě</div> <div>0451</div>		<div>เํ</div> <div>0E01</div>	<div>เ่</div> <div>0E11</div>	<div>เ้</div> <div>0E21</div>	<div>เุ</div> <div>0E31</div>	<div>เ้</div> <div>0E41</div>	<div>เุ</div> <div>0E51</div>
	<div>В</div> <div>0412</div>	<div>Т</div> <div>0422</div>	<div>в</div> <div>0432</div>	<div>т</div> <div>0442</div>			<div>เํ</div> <div>0E02</div>	<div>เ่</div> <div>0E12</div>	<div>เ้</div> <div>0E22</div>	<div>เุ</div> <div>0E32</div>	<div>เ้</div> <div>0E42</div>	<div>เุ</div> <div>0E52</div>
<div>Í</div> <div>0403</div>	<div>Г</div> <div>0413</div>	<div>У</div> <div>0423</div>	<div>г</div> <div>0433</div>	<div>у</div> <div>0443</div>			<div>เํ</div> <div>0E03</div>	<div>เ่</div> <div>0E13</div>	<div>เ้</div> <div>0E23</div>	<div>เุ</div> <div>0E33</div>	<div>เ้</div> <div>0E43</div>	<div>เุ</div> <div>0E53</div>
	<div>Д</div> <div>0414</div>	<div>Ф</div> <div>0424</div>	<div>д</div> <div>0434</div>	<div>ф</div> <div>0444</div>			<div>เํ</div> <div>0E04</div>	<div>เ่</div> <div>0E14</div>	<div>เ้</div> <div>0E24</div>	<div>เุ</div> <div>0E34</div>	<div>เ้</div> <div>0E44</div>	<div>เุ</div> <div>0E54</div>
<div>Š</div> <div>0405</div>	<div>Е</div> <div>0415</div>	<div>Х</div> <div>0425</div>	<div>е</div> <div>0435</div>	<div>х</div> <div>0445</div>	<div>š</div> <div>0455</div>		<div>เํ</div> <div>0E05</div>	<div>เ่</div> <div>0E15</div>	<div>เ้</div> <div>0E25</div>	<div>เุ</div> <div>0E35</div>	<div>เ้</div> <div>0E45</div>	<div>เุ</div> <div>0E55</div>
<div>І</div> <div>0406</div>	<div>Ж</div> <div>0416</div>	<div>Ц</div> <div>0426</div>	<div>ж</div> <div>0436</div>	<div>ц</div> <div>0446</div>	<div>і</div> <div>0456</div>		<div>เํ</div> <div>0E06</div>	<div>เ่</div> <div>0E16</div>	<div>เ้</div> <div>0E26</div>	<div>เุ</div> <div>0E36</div>	<div>เ้</div> <div>0E46</div>	<div>เุ</div> <div>0E56</div>
<div>İ</div> <div>0407</div>	<div>З</div> <div>0417</div>	<div>Ч</div> <div>0427</div>	<div>з</div> <div>0437</div>	<div>ч</div> <div>0447</div>	<div>ï</div> <div>0457</div>		<div>เํ</div> <div>0E07</div>	<div>เ่</div> <div>0E17</div>	<div>เ้</div> <div>0E27</div>	<div>เุ</div> <div>0E37</div>	<div>เ้</div> <div>0E47</div>	<div>เุ</div> <div>0E57</div>
<div>Ј</div> <div>0408</div>	<div>И</div> <div>0418</div>	<div>Ш</div> <div>0428</div>	<div>и</div> <div>0438</div>	<div>ш</div> <div>0448</div>	<div>ј</div> <div>0458</div>		<div>เํ</div> <div>0E08</div>	<div>เ่</div> <div>0E18</div>	<div>เ้</div> <div>0E28</div>	<div>เุ</div> <div>0E38</div>	<div>เ้</div> <div>0E48</div>	<div>เุ</div> <div>0E58</div>
	<div>Й</div> <div>0419</div>	<div>Щ</div> <div>0429</div>	<div>й</div> <div>0439</div>	<div>щ</div> <div>0449</div>			<div>เํ</div> <div>0E09</div>	<div>เ่</div> <div>0E19</div>	<div>เ้</div> <div>0E29</div>	<div>เุ</div> <div>0E39</div>	<div>เ้</div> <div>0E49</div>	<div>เุ</div> <div>0E59</div>
	<div>К</div> <div>041A</div>	<div>Ъ</div> <div>042A</div>	<div>к</div> <div>043A</div>	<div>ъ</div> <div>044A</div>			<div>เํ</div> <div>0E0A</div>	<div>เ่</div> <div>0E1A</div>	<div>เ้</div> <div>0E2A</div>	<div>เุ</div> <div>0E3A</div>	<div>เ้</div> <div>0E4A</div>	<div>เุ</div> <div>0E5A</div>
	<div>Л</div> <div>041B</div>	<div>Ы</div> <div>042B</div>	<div>л</div> <div>043B</div>	<div>ы</div> <div>044B</div>			<div>เํ</div> <div>0E0B</div>	<div>เ่</div> <div>0E1B</div>	<div>เ้</div> <div>0E2B</div>		<div>เุ</div> <div>0E4B</div>	<div>เุ</div> <div>0E5B</div>
	<div>М</div> <div>041C</div>	<div>Ь</div> <div>042C</div>	<div>м</div> <div>043C</div>	<div>ь</div> <div>044C</div>		<div>เํ</div> <div>0E0C</div>	<div>เ่</div> <div>0E1C</div>	<div>เ้</div> <div>0E2C</div>	<div>เุ</div> <div>0E4C</div>			
	<div>Н</div> <div>041D</div>	<div>Э</div> <div>042D</div>	<div>н</div> <div>043D</div>	<div>э</div> <div>044D</div>		<div>เํ</div> <div>0E0D</div>	<div>เ่</div> <div>0E1D</div>	<div>เ้</div> <div>0E2D</div>	<div>เุ</div> <div>0E4D</div>			
	<div>О</div> <div>041E</div>	<div>Ю</div> <div>042E</div>	<div>о</div> <div>043E</div>	<div>ю</div> <div>044E</div>		<div>เํ</div> <div>0E0E</div>	<div>เ่</div> <div>0E1E</div>	<div>เ้</div> <div>0E2E</div>	<div>เุ</div> <div>0E4E</div>			
	<div>П</div> <div>041F</div>	<div>Я</div> <div>042F</div>	<div>п</div> <div>043F</div>	<div>я</div> <div>044F</div>		<div>เํ</div> <div>0E0F</div>	<div>เ่</div> <div>0E1F</div>	<div>เ้</div> <div>0E2F</div>	<div>เุ</div> <div>0E3F</div>	<div>เ้</div> <div>0E4F</div>		

The final place where marks occur frequently is in typesetting mathematical texts. Unlike languages there are few, if any, restrictions of which marks can appear over, under, or around which glyphs. For example **ü** represents the second derivative of the vector **u** with respect to time. Constructing the forms reqiured for mathematics is usually best left to an equation editing system that can compose the glyphs in the correct sequence. Unlike language typesetting, there is not the same requirement for spelling, grammar and semantics checking in mathematical formulæ.

Sequential Forms

Certain scripts use different forms for the letters depending where they appear in a word. In general there are four identified classes of letter positions:

- Initial forms: at the start of a word.
- Medial forms: in the middle of a word.
- Final forms: at the end of a word.
- Isolated forms: when the letter stands alone.

Unlike presentation forms, the sequential forms do not depend on the letters around them, only their position within the word. There are, of course, some exceptions, for example the use of ‘isolated’ alif rather than ‘initial’ alif when following by particular letters in arabic. Bembino has the appropriate glyphs for final forms in Greek, Hebrew, and Arabic, and the tables for a typesetting programming to access them.

Why are there no opticals?

“Optical” fonts are outlines that have been adjusted for use at a specific point size, or range of point sizes. They are intended to compensate for the fact that linearly-scaled fonts appear darker at larger point sizes, and lighter at smaller point sizes. Hence, by slightly thinning or thickening the strokes they create the ‘optical illusion’ of a consistent color on the page. While this is indeed the effect, the real value of optical variants is unclear. Since an optical variant is usually specified over a narrow range of point sizes (say from 11pt to 14pt), most documents end up using each optical only once (it is rare to find both 12pt and 13pt type in the same document). This turns into a four-fold increase in the size of the font pack used in a document, for little real gain in legibility or appearance.

Bembino offers instead more weights than are usually found, and the effect of an optical font can be gained by a good choice of weight for the font size and purpose. These aspects are discussed in the “Usage Guidelines” above.

Why are there separate small caps?

Producing the effect of small-caps by simply scaling the capitals of the main font may produce an acceptable result. It works with Bembino (the scale factor is exactly 70%), but the resulting glyphs may appear rather too light on the page at normal point sizes. The small caps are designed to have slightly darker color than the equivalent scaled caps and blend in better at point sizes below about 36pt. This is particularly noticable in the italic fonts.

One advantage of dynamically mapping smallcaps (using OpenType features) is that searching for “The” will also match “THE”. There are no separate presentation forms for small caps fi or fl (etc.) since they are exactly the two glyphs of the original pair of characters (FI or FL).

What language is that?

Bembino is a multi-lingual font. It can be used to typeset most European languages, Greek, Hebrew, Arabic, and the Russian languages that use Cyrillic. As a result, there are a number of similar glyphs in the font.. Latin, Greek and Cyrillic all have glyphs that look like A, B, E, O, P but with different pronunciations. However, Latin ‘C’ looks too wide in russian, and Latin ‘M’ with sloping sides is distracting to a russian-born reader.

In those cases where a similar glyph distracts from legibility, Bembino uses forms appropriate to the particular language, even for similar glyphs. However, they do occupy different code points and a typesetting program should use the correct code-point for the language being typeset. This allows allows the correct kerning and hyphenation rules to be applied for that language. In general, there is no way to infer language from the printed form. If a particular glyph appears in a text (e.g. Ł) then the Unicode tables can be consulted to infer that the word is probably Polish.

Special Character Positions

Some glyph positions in the font contain special characters that are represented by short names in the font tables. These glyphs do not appear literally as shown in the tables, but have the following meanings.

sp (<0020>). The space character. Produces no visible mark on the page. May be considered as a potential line-breaking point when typesetting..

nbsp (<00A0>). Non-breaking space character. Unlike sp, this cannot be considered as a line-breaking point.

shy (<00AD>). Soft-hyphen. Appears as a hyphen if a line is broken at that point, otherwise occupies no space on the page.

nqsp (<2000>) and **ensp** (<2002>). En-quad and en-space. A space one-half the of width of an em-space.

mqsp (<2001>) and **emsp** (<2003>). Em-quad and em-space. A space equal to the type size in points..

3msp (<2004>). One-third of an em-space.

4msp (<2005>). One-quarter of an em-space

6msp (<2006>). One-sixth of an em-space.

fsp (<2007>). Figure space. The width of a digit glyph.

psp (<2008>). Punctuation space. The width of a narrow punctuation glyph.

thsp (<2009>). Thin space. One-fifth of an em-space.

hsp (<200A>). Hair space. The thinnest space available in the font.

zws (<200B>). Zero width space. Usually occupies no width, but may expand if a line is justified.

zwj (<200C>) and **zwnj** (<200D>). Zero-width joiner and non-joiner. Used for glyph combinations.

lrm (<200E>) and **rlm** (<200F>). Left-right and Right-left marker. Used to switch directions for Hebrew and Arabic texts.

ὀ	ὐ	ὡ	ὰ	ᾱ	ῃ	ὄ	ᾳ	~	ϊ	ϋ	
1F40	1F50	1F60	1F70	1F80	1F90	1FA0	1FB0	1FC0	1FD0	1FE0	
ό	ύ	ώ	ά	ᾱ	ῃ	ὅ	ᾳ	~	ϊ	ϋ	
1F41	1F51	1F61	1F71	1F81	1F91	1FA1	1FB1	1FC1	1FD1	1FE1	
ὀ	ὐ	ὡ	ἐ	ᾱ	ῃ	ὄ	ᾱ	ῃ	ἰ	ϋ	ὤ
1F42	1F52	1F62	1F72	1F82	1F92	1FA2	1FB2	1FC2	1FD2	1FE2	1FF2
ὀ	ὐ	ὡ	έ	ᾱ	ῃ	ὄ	α	η	ί	ύ	ω
1F43	1F53	1F63	1F73	1F83	1F93	1FA3	1FB3	1FC3	1FD3	1FE3	1FF3
ὓ	ϋ	ῶ	ῆ	ᾱ	ῃ	ῶ	ᾱ	ῃ		ὀ	ὄ
1F44	1F54	1F64	1F74	1F84	1F94	1FA4	1FB4	1FC4		1FE4	1FF4
ὓ	ϋ	ῶ	ῆ	ᾱ	ῃ	ῶ				ὀ	
1F45	1F55	1F65	1F75	1F85	1F95	1FA5				1FE5	
	ϋ	ῶ	ἰ	ᾱ	ῃ	ῶ	ᾱ	ῃ	ἰ	ϋ	ῶ
	1F56	1F66	1F76	1F86	1F96	1FA6	1FB6	1FC6	1FD6	1FE6	1FF6
	ϋ	ῶ	ί	ᾱ	ῃ	ῶ	ᾱ	ῃ	ἰ	ϋ	ῶ
	1F57	1F67	1F77	1F87	1F97	1FA7	1FB7	1FC7	1FD7	1FE7	1FF7
Ό		Ω	ὀ	Α	Η	Ο	Ἀ	Ε	Ι	Υ	Ο
1F48		1F68	1F78	1F88	1F98	1FA8	1FB8	1FC8	1FD8	1FE8	1FF8
Ό	Υ	Ω	ό	Α	Η	Ο	Ἀ	Ε	Ι	Υ	Ο
1F49	1F59	1F69	1F79	1F89	1F99	1FA9	1FB9	1FC9	1FD9	1FE9	1FF9
”Ό		”Ω	ὐ	Α	Η	Ο	Α	Η	Ι	Υ	Ω
1F4A		1F6A	1F7A	1F8A	1F9A	1FAA	1FBA	1FCA	1FDA	1FEA	1FFA
”Ό	”Υ	”Ω	ύ	Α	Η	Ο	Α	Η	Ι	Υ	Ω
1F4B	1F5B	1F6B	1F7B	1F8B	1F9B	1FAB	1FBB	1FCB	1FDB	1FEB	1FFB
”Ό		”Ω	ὼ	Α	Η	Ο	Α	Η		Ρ	Ο
1F4C		1F6C	1F7C	1F8C	1F9C	1FAC	1FBC	1FCC		1FEC	1FFC
Ό	”Υ	”Ω	ώ	Α	Η	Ο	,	”	”	”	,
1F4D	1F5D	1F6D	1F7D	1F8D	1F9D	1FAD	1FBD	1FCD	1FDD	1FED	1FFD
		”Ω		Α	Η	Ο	,	”	”	”	,
		1F6E		1F8E	1F9E	1FAE	1FBE	1FCE	1FDE	1FEE	1FFE
	”Υ	”Ω		Α	Η	Ο	,	”	”	”	
	1F5F	1F6F		1F8F	1F9F	1FAF	1FBF	1FCF	1FDF	1FEF	

		<i>í</i>	<i>Π</i>	<i>ύ</i>	<i>π</i>	
		0390	03A0	03B0	03C0	
		<i>Α</i>	<i>Ρ</i>	<i>α</i>	<i>ρ</i>	
		0391	03A1	03B1	03C1	
		<i>Β</i>		<i>β</i>	<i>ς</i>	<i>Υ</i>
		0392		03B2	03C2	03D2
		<i>Γ</i>	<i>Σ</i>	<i>γ</i>	<i>σ</i>	<i>Υ</i>
		0393	03A3	03B3	03C3	03D3
<i>΄</i>	<i>΄</i>	<i>Δ</i>	<i>Τ</i>	<i>δ</i>	<i>τ</i>	<i>Ϋ</i>
0374	0384	0394	03A4	03B4	03C4	03D4
<i>΄</i>	<i>΄</i>	<i>Ε</i>	<i>Υ</i>	<i>ε</i>	<i>υ</i>	
0375	0385	0395	03A5	03B5	03C5	
	<i>Α̇</i>	<i>Ζ</i>	<i>Φ</i>	<i>ζ</i>	<i>φ</i>	
	0386	0396	03A6	03B6	03C6	
	<i>·</i>	<i>Η</i>	<i>Χ</i>	<i>η</i>	<i>χ</i>	<i>ϣ</i>
	0387	0397	03A7	03B7	03C7	03D7
	<i>Ε</i>	<i>Θ</i>	<i>Ψ</i>	<i>θ</i>	<i>ψ</i>	
	0388	0398	03A8	03B8	03C8	
	<i>Η</i>	<i>Ι</i>	<i>Ω</i>	<i>ι</i>	<i>ω</i>	
	0389	0399	03A9	03B9	03C9	
<i>ι</i>	<i>Ι</i>	<i>Κ</i>	<i>Ϊ</i>	<i>κ</i>	<i>ϊ</i>	
037A	038A	039A	03AA	03BA	03CA	
		<i>Λ</i>	<i>Ϋ</i>	<i>λ</i>	<i>ϋ</i>	
		039B	03AB	03BB	03CB	
		<i>Ο</i>	<i>Μ</i>	<i>ά</i>	<i>μ</i>	
		038C	039C	03AC	03BC	03CC
		<i>Ν</i>	<i>έ</i>	<i>ν</i>	<i>ύ</i>	
		039D	03AD	03BD	03CD	
<i>;</i>	<i>Υ</i>	<i>Ξ</i>	<i>ή</i>	<i>ξ</i>	<i>ώ</i>	
037E	038E	039E	03AE	03BE	03CE	
	<i>Ω</i>	<i>Ο</i>	<i>ί</i>	<i>ο</i>		
	038F	039F	03AF	03BF		
		<i>ά</i>	<i>έ</i>	<i>ή</i>	<i>ί</i>	
		1F00	1F10	1F20	1F30	
		<i>ά</i>	<i>έ</i>	<i>ή</i>	<i>ί</i>	
		1F01	1F11	1F21	1F31	
		<i>ὰ</i>	<i>ὲ</i>	<i>ὴ</i>	<i>ὶ</i>	
		1F02	1F12	1F22	1F32	
		<i>ᾱ</i>	<i>ῃ</i>	<i>ῆ</i>	<i>ῖ</i>	
		1F03	1F13	1F23	1F33	
		<i>ᾳ</i>	<i>ΰ</i>	<i>ῧ</i>	<i>Ὶ</i>	
		1F04	1F14	1F24	1F34	
		<i>ᾶ</i>	<i>ῥ</i>	<i>Ῠ</i>	<i>Ί</i>	
		1F05	1F15	1F25	1F35	
		<i>ᾷ</i>		<i>`</i>	<i>ΰ</i>	
		1F06		1F26	1F36	
		<i>Ᾱ</i>		<i>Ῠ̇</i>	<i>Ὶ̇</i>	
		1F07		1F27	1F37	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F08	1F18	1F28	1F38	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F09	1F19	1F29	1F39	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F0A	1F1A	1F2A	1F3A	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F0B	1F1B	1F2B	1F3B	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F0C	1F1C	1F2C	1F3C	
		<i>Α̇</i>	<i>Ε̇</i>	<i>Η̇</i>	<i>Ι̇</i>	
		1F0D	1F1D	1F2D	1F3D	
		<i>Ἀ̇</i>		<i>Ῥ̇</i>	<i>Ὶ̇</i>	
		1F0E		1F2E	1F3E	
		<i>Ἀ̇</i>		<i>Ῥ̇</i>	<i>Ὶ̇</i>	
		1F0F		1F2F	1F3F	



The Nature of the Glyphs

The diagram above shows three of the roman regular-weight glyphs in outline form, with the spacing as they would appear if set as “Vel” in normal text. The diagram illustrates some of the main design features of Bembino.

Obviously, the glyphs contain serifs (the extensions at the top of ‘V’ and the foot of ‘l’). Unlike a sansserif font, serifs provide clear demarcations for the end of strokes. By varying the serif forms it is possible to distinguish ‘I’, ‘l’ and ‘1’, which are often confused in sansserif fonts (for example Helvetica). Serifs also aid the eye in grouping letters into words, since they provide visual continuity at the baselines of most words.

The serifs are simple, with a flat top, or bottom, and are equally weighted to either side of the glyph. The serifs also have vertical sides. All these features aid in maintaining a consistent appearance across multiple glyph sizes, avoiding unnecessary distinctions that draw the eye away from the main glyph shape and therefore slow reading.

The curve of the ‘e’ at the base of the bowl descends below the baseline on which the ‘V’ and ‘l’ sit. This produces an ‘optical illusion’ that the ‘e’ is actually on the baseline. If the base of the bowl merely sits on the baseline, it appears too high when printed. The top of the ‘e’ extends slightly above the top of an ‘x’ for the same reason.

The height of the tall lower-case letters exceeds that of the upper-case (capital) letters. This design feature is usually attributed to Aldus Manutius, and is often termed ‘Aldine’ capitals. This subtle effect improves the legibility of the lower-case letters, and slightly reduces the impact of the capital letters, making them stand out less on the page.

The diagram illustrates the effect of kerning between the ‘V’ and the ‘e’. Without adjustment the ‘e’ would sit only to the right of the end of the ‘V’, introducing a space almost as wide as a letter-space and destroying the visual grouping of the letters into a word. By reducing the space between ‘V’ and ‘e’ at the centerline of the ‘e’ to match the space between ‘e’ and ‘l’ the continuity is restored.

For most typesetting, the distance between the bottom of the ‘y’ and the top of the ‘l’ is the tightest (smallest) interline spacing that can be set without overlapping. This distance is slightly less than the font design size, so it is possible to set 12pt/12pt (12pt font on 12pt linespacing), though the result is very dense on the page.

Certain glyphs will exceed that distance, specifically accented capitals (Å, É etc.). Setting texts with accents requires approximately 20% more interlinear spacing, or leading, to avoid overlapping lines. Setting Arabic with full vowel markings requires about 50% more interline spacing.

Technical Details

The Bembino Font Family comprises 16 font files. There are 5 Regular (upright, Roman) files and 5 Italic files. These styles all appear under the name Bembino when loaded into a typesetter. Since cursive and fraktur are not defined font styles, the remaining 6 font files appear under a different font names. The 5 cursive weights are called Pietro (after the archbishop who commissioned the original font) and the single fraktur font appears as Frangelico (a small pun on fraktur) in a font listing.

Bembino is usually distributed as a single compressed directory (.zip file) containing all 16 fonts. To install the fonts on a PC running Windows it is usually simply enough to copy the files from the zip archive into the WINDOWS/Fonts directory on the main hard-drive. Windows-7 users can use the install option of the Font Manager to copy the files.

If you have installed a previous version of Bembino on a Windows machine, you will have to delete the old version before you can install the new one, since Windows will not automatically overwrite font files. Once installed, the font names should appear in the Font Dialog boxes or pull-down menus for most text processors (for example Microsoft Word) or typesetting software (for example Adobe InDesign).

Bembino is designed for printing on laser printers using a minimum of 300 print dots per inch, not for screen display. Because of the way Windows chooses to display non-TrueType fonts, especially in combination with the Microsoft Cleartype system, you may notice artefacts when displaying Bembino on-screen. Typically these appear as shadows on verticals, uneven weight in sloping lines or even false colors at the edges of the glyphs. None of these artefacts will be present in the final output, particularly if you are able to export and print using PDF, rather than using the Windows print function.

Bembino is written in the input language of the Outline Font Editor component of ResearchDesk. ResearchDesk is a toolkit of document management systems being developed by the Research Group on Manuscript Evidence. The box on the right shows the part of the program that generates the letter ‘l’ in the Regular font (as displayed on the previous page).

```
.subr (smfoot) [64 0] | 118 0
D 66 -72 -57 | 66 -72 -60
L -72 -75 | -72 -96
L 136 -75 | 190 -96
L 137 -57 | 190 -60
D 66 64 0 | 66 118 0
R

.subr (smtop) [-64 -119] | -118 -140
L -16 0 | -40 0
L -136 -45 | -190 -45
L -136 -61 | -190 -81
D 66 -64 -119 | 66 -118 -140
R

.gsubr (l) [0 499] | 0 457
S (smfoot)
L 64 618 | 118 597
S (smtop)
R

.char (l) <006c> 28 252 | 28 302
h 0 18 0 300 | 0 39 0 300
t 693 0 300 | 693 0 300
v 100 64 0 1200 | 100 118 100 900
M 100 75 | 100 96
G (l)
E
```

The outline Font Editor translates the commands into Adobe Type-2 charstring operations and OpenType Font tables according to the published, and public, specifications for these systems. This process generates the sixteen .otf files in the Bembino distribution.

Further details of the font program and the design parameters (stem widths, serif construction etc.) are available from the RGME for anyone who is interested in working with Bembino at the font design level.

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<i>Ā</i>	<i>Ď</i>	<i>Ġ</i>	<i>Ĩ</i>	<i>ƚ</i>	<i>Ŏ</i>	<i>Š</i>	<i>Ů</i>			̀		̣
0100	0110	0120	0130	0140	0150	0160	0170			0300		0320
<i>ā</i>	<i>ď</i>	<i>ġ</i>	<i>ħ</i>	<i>Ł</i>	<i>ő</i>	<i>š</i>	<i>ů</i>			́		
0101	0111	0121	0131	0141	0151	0161	0171			0301		
<i>Ǻ</i>	<i>Ē</i>	<i>Ģ</i>	<i>Ĳ</i>	<i>ƥ</i>	<i>Œ</i>	<i>Ț</i>	<i>Ț</i>			̂		̃
0102	0112	0122	0132	0142	0152	0162	0172			0302		0342
<i>ǻ</i>	<i>ē</i>	<i>ĝ</i>	<i>ĵ</i>	<i>Ň</i>	<i>œ</i>	<i>ț</i>	<i>ȕ</i>			̃	̇	̣
0103	0113	0123	0133	0143	0153	0163	0173			0303	0313	0323
<i>Ȧ</i>	<i>Ě</i>	<i>Ĥ</i>	<i>Ĵ</i>	<i>ń</i>	<i>Ř</i>	<i>Ț</i>	<i>Ű</i>			̄	̇	
0104	0114	0124	0134	0144	0154	0164	0174			0304	0313	
<i>q</i>	<i>ě</i>	<i>ĥ</i>	<i>ĵ</i>	<i>Ŋ</i>	<i>ř</i>	<i>ť</i>	<i>û</i>			̅		̣
0105	0115	0125	0135	0145	0155	0165	0175			0305		0345
<i>Ć</i>	<i>Ė</i>	<i>Ħ</i>	<i>Ƙ</i>	<i>ŋ</i>	<i>Ŗ</i>	<i>Ʀ</i>	<i>Ŷ</i>	Ɔ		̇		̣
0106	0116	0126	0136	0146	0156	0166	0176	0186		0306		0326
<i>ć</i>	<i>ė</i>	<i>ħ</i>	<i>ķ</i>	<i>Ņ</i>	<i>ŗ</i>	<i>ƥ</i>	<i>ŷ</i>		<i>Ʀ</i>	̇		̣
0107	0117	0127	0137	0147	0157	0167	0177		01F7	0307		0327
<i>Ĉ</i>	<i>Ė</i>	<i>Ĩ</i>	<i>κ</i>	<i>ň</i>	<i>Ř</i>	<i>Ů</i>	<i>Ÿ</i>			̈		̣
0108	0118	0128	0138	0148	0158	0168	0178			0308		0328
<i>ĉ</i>	<i>ę</i>	<i>ĩ</i>	<i>Ł</i>	<i>ň</i>	<i>ř</i>	<i>ů</i>	<i>Ž</i>					
0109	0119	0129	0139	0149	0159	0169	0179					
<i>Ċ</i>	<i>Ě</i>	<i>Ī</i>	<i>Í</i>	<i>Ŋ</i>	<i>Ś</i>	<i>Ū</i>	<i>ž</i>			̊		
010A	011A	012A	013A	014A	015A	016A	017A			030A		
<i>ċ</i>	<i>ě</i>	<i>ī</i>	<i>Ł</i>	<i>ŋ</i>	<i>ś</i>	<i>ū</i>	<i>Ž</i>			̋		
010B	011B	012B	013B	014B	015B	016B	017B			030B		
<i>Č</i>	<i>Ĝ</i>	<i>Ĭ</i>	<i>Ĵ</i>	<i>Ō</i>	<i>Ŝ</i>	<i>Ŭ</i>	<i>ž</i>			̌		
010C	011C	012C	013C	014C	015C	016C	017C			030C		
<i>č</i>	<i>ĝ</i>	<i>ĭ</i>	<i>Ł</i>	<i>ō</i>	<i>ŝ</i>	<i>ŭ</i>	<i>Ž</i>					
010D	011D	012D	013D	014D	015D	016D	017D					
<i>Ď</i>	<i>Ğ</i>	<i>Ĺ</i>	<i>Ʀ</i>	<i>Ŏ</i>	<i>Ş</i>	<i>Ű</i>	<i>ž</i>	<i>Ǝ</i>				
010E	011E	012E	013E	014E	015E	016E	017E	018E				
<i>đ</i>	<i>ğ</i>	<i>ĺ</i>	<i>Ł</i>	<i>ő</i>	<i>ş</i>	<i>ű</i>	<i>ƒ</i>	<i>Ǝ</i>	<i>Ʀ</i>			
010F	011F	012F	013F	014F	015F	016F	017F	018F	01BF			

	<i>0</i>	<i>@</i>	<i>P</i>	<i>`</i>	<i>p</i>		◦	<i>À</i>	<i>Ð</i>	<i>à</i>	<i>ð</i>		<i>ff</i>
0020	0030	0040	0050	0060	0070	00A0	00B0	00C0	00D0	00E0	00F0		FB00
<i>!</i>	<i>1</i>	<i>A</i>	<i>Q</i>	<i>a</i>	<i>q</i>	<i>ı</i>	<i>±</i>	<i>Á</i>	<i>Ñ</i>	<i>á</i>	<i>ñ</i>		<i>fi</i>
0021	0031	0041	0051	0061	0071	00A1	00B1	00C1	00D1	00E1	00F1		FB01
<i>"</i>	<i>2</i>	<i>B</i>	<i>R</i>	<i>b</i>	<i>r</i>	<i>ç</i>	<i>²</i>	<i>Â</i>	<i>Ò</i>	<i>â</i>	<i>ò</i>		<i>fl</i>
0022	0032	0042	0052	0062	0072	00A2	00B2	00C2	00D2	00E2	00F2		FB02
<i>#</i>	<i>3</i>	<i>C</i>	<i>S</i>	<i>c</i>	<i>s</i>	<i>£</i>	<i>³</i>	<i>Ã</i>	<i>Ó</i>	<i>ã</i>	<i>ó</i>		<i>ffi</i>
0023	0033	0043	0053	0063	0073	00A3	00B3	00C3	00D3	00E3	00F3		FB03
<i>\$</i>	<i>4</i>	<i>D</i>	<i>T</i>	<i>d</i>	<i>t</i>	<i>¤</i>	<i>´</i>	<i>Ä</i>	<i>Ô</i>	<i>ä</i>	<i>ô</i>		<i>ffl</i>
0024	0034	0044	0054	0064	0074	00A4	00B4	00C4	00D4	00E4	00F4		FB04
<i>%</i>	<i>5</i>	<i>E</i>	<i>U</i>	<i>e</i>	<i>u</i>	<i>¥</i>	<i>μ</i>	<i>Å</i>	<i>Õ</i>	<i>å</i>	<i>õ</i>		<i>ff</i>
0025	0035	0045	0055	0065	0075	00A5	00B5	00C5	00D5	00E5	00F5		0000
<i>&</i>	<i>6</i>	<i>F</i>	<i>V</i>	<i>f</i>	<i>v</i>	<i>/</i>	<i>¶</i>	<i>Æ</i>	<i>Ö</i>	<i>æ</i>	<i>ö</i>		
0026	0036	0046	0056	0066	0076	00A6	00B6	00C6	00D6	00E6	00F6		
<i>'</i>	<i>7</i>	<i>G</i>	<i>W</i>	<i>g</i>	<i>w</i>	<i>§</i>	<i>·</i>	<i>Ç</i>	<i>×</i>	<i>ç</i>	<i>÷</i>		
0027	0037	0047	0057	0067	0077	00A7	00B7	00C7	00D7	00E7	00F7		
<i>(</i>	<i>8</i>	<i>H</i>	<i>X</i>	<i>h</i>	<i>x</i>	<i>”</i>	<i>,</i>	<i>È</i>	<i>Ø</i>	<i>è</i>	<i>ø</i>		
0028	0038	0048	0058	0068	0078	00A8	00B8	00C8	00D8	00E8	00F8		
<i>)</i>	<i>9</i>	<i>I</i>	<i>Y</i>	<i>i</i>	<i>y</i>	<i>©</i>	<i>¹</i>	<i>É</i>	<i>Ù</i>	<i>é</i>	<i>ù</i>		
0029	0039	0049	0059	0069	0079	00A9	00B9	00C9	00D9	00E9	00F9		
<i>*</i>	<i>:</i>	<i>J</i>	<i>Z</i>	<i>j</i>	<i>z</i>	<i>ª</i>	<i>º</i>	<i>Ê</i>	<i>Ú</i>	<i>ê</i>	<i>ú</i>		
002A	003A	004A	005A	006A	007A	00AA	00BA	00CA	00DA	00EA	00FA		
<i>+</i>	<i>;</i>	<i>K</i>	<i>[</i>	<i>k</i>	<i>{</i>	<i>«</i>	<i>»</i>	<i>Ë</i>	<i>Û</i>	<i>ë</i>	<i>û</i>		
002B	003B	004B	005B	006B	007B	00AB	00BB	00CB	00DB	00EB	00FB		
<i>,</i>	<i><</i>	<i>L</i>	<i>\</i>	<i>l</i>	<i>/</i>	<i>¬</i>	<i>¼</i>	<i>Ì</i>	<i>Ü</i>	<i>ì</i>	<i>ü</i>		
002C	003C	004C	005C	006C	007C	00AC	00BC	00CC	00DC	00EC	00FC		
<i>–</i>	<i>=</i>	<i>M</i>	<i>]</i>	<i>m</i>	<i>}</i>		<i>½</i>	<i>Í</i>	<i>Ý</i>	<i>í</i>	<i>ý</i>		
002D	003D	004D	005D	006D	007D	00AD	00BD	00CD	00DD	00ED	00FD		
<i>.</i>	<i>></i>	<i>N</i>	<i>^</i>	<i>n</i>	<i>~</i>	<i>®</i>	<i>¾</i>	<i>Î</i>	<i>Þ</i>	<i>î</i>	<i>þ</i>		
002E	003E	004E	005E	006E	007E	00AE	00BE	00CE	00DE	00EE	00FE		
<i>/</i>	<i>?</i>	<i>O</i>	<i>_</i>	<i>o</i>		<i>-</i>	<i>¿</i>	<i>Ĭ</i>	<i>ß</i>	<i>ï</i>	<i>ÿ</i>		
002F	003F	004F	005F	006F		00AF	00BF	00CF	0)DF	00EF	00FF		

Sample Texts

The following pages contain sample texts to illustrate the different scripts and languages for which Bembino has been designed.

The first page shows the opening paragraph of *The War of the Worlds*, written by H.G. Wells and published in 1898. The text is set in Regular, Italic and Cursive styles at the same weight and point size.

The second pages gives examples of transcribed speech using glyphs from the International Phonetic Alphabet. These are short extracts taken from *An Introduction to the Pronunciation of English* by A.C. Gimson (4th ed. 1989, published by Edward Arnold).

The next two pages show ancient Greek, in both the upright and italic fonts. The text is taken from the opening of Book 4 of Aristotle’s *Historia Animalium*, or “The History of Animals” (Των περι τα ζωια ιστοριον). It demonstrates the wide range of polytonic marks required to set ancient Greek.

The next two pages show modern Russian, in both the upright and italic fonts. The text is taken from a learner’s edition of “Taman: A small town on the Black Sea” (Тамань: маленький городок на берегу моря) a short story by Mikhail Lermontov contained within his novel *A Hero of Our Time* (Герой нашего времени) written in 1839 and revised in 1841. Other than the simplified vocabulary, the learner’s edition also includes the stress marks over the vowels, which would not be required for native readers. This is demonstrated on the following page, which shows the classical edition, in cursive script

The next page shows three small examples of other scripts, an extract from the New Testament in Old Armenian (from the Zohrab Bible); some of the runes from the Franks Casket in the British Museum; and part of a newspaper article in modern Thai.

The next page is in Hebrew, the opening of the Book of Genesis in the Hebrew version of the Bible, entitled *Berashit* (בראשית) “In the Beginning”. The text is taken from *Holy Scriptures of the Old Testament, Hebrew and English* (British & Foreign Bible Society, London 1985)

and demonstrates the use of the masoretic vowel marks as well as the cantillation marks and their combination.

The final page shows a sample of Arabic typesetting. The text is the opening Surah, الفاتحه “Al Fatihah (The Opening)” of the Koran.

Although these samples are all monolingual, Bembino is designed to enable texts requiring different scripts to be set inline in their native scripts with consistent weights, heights, and font color, as demonstrated by the previous paragraphs on this page. This accords with the principles of design and text layout as described and demonstrated in the “Style Manifesto” published in *ShelfLife*, Number 1, Winter 2006 (ISSN 1528-7971), the illustrated Bulletin of the Research Group on Manuscript Evidence.

The Eve of the War

No one would have believed in the last years of the nineteenth century that this world was being watched keenly and closely by intelligences greater than man’s and yet as mortal as his own; that as men busied themselves about their various concerns they were scrutinised and studied, perhaps almost as narrowly as a man with a microscope might scrutinise the transient creatures that swarm and multiply in a drop of water. With infinite complacency men went to and fro over this globe about their little affairs, serene in their assurance of their empire over matter. It is possible that the infusoria under the microscope do the same. No one gave a thought to the older worlds of space as sources of human danger, or thought of them only to dismiss the idea of life upon them as impossible or improbable. It is curious to recall some of the mental habits of those departed days. At most, terrestrial men fancied there might be other men upon Mars, perhaps inferior to themselves and ready to welcome a missionary enterprise. Yet across the gulf of space, minds that are to our minds as ours are to those of the beasts that perish, intellects vast and cool and unsympathetic, regarded this earth with envious eyes, and slowly and surely drew their plans against us. And early in the twentieth century came the great disillusionment.

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	P	À	Đ	Ā	Ġ	Ł	Ṭ
	F770	F780	F790	F7A0	F7B0	F7C0	F7D0
A	Q	Á	Ñ	Ǻ	Ç	Ń	Ť
F761	F771	F781	F791	F7A1	F7B1	F7C1	F7D1
B	R	Â	Ò	Ą	Ĥ	Ŋ	Ƒ
F762	F772	F782	F792	F7A2	F7B2	F7C2	F7D2
C	S	Ã	Ó	Ć	Ħ	Ň	Ũ
F763	F773	F783	F793	F7A3	F7B3	F7C3	F7D3
D	T	Ä	Ô	Ĉ	Ĩ	Ŋ	Ū
F764	F774	F784	F794	F7A4	F7B4	F7C4	F7D4
E	U	Å	Õ	Č	Ī	Ȫ	Ǫ
F765	F775	F785	F795	F7A5	F7B5	F7C5	F7D5
F	V	Æ	Ö	Č	Ǫ	Ǫ	Ǫ
F766	F776	F786	F796	F7A6	F7B6	F7C6	F7D6
G	W	Ç		Ǻ	Ł	Ŏ	Ǫ
F767	F777	F787		F7A7	F7B7	F7C7	F7D7
H	X	È	Ø	Đ	İ	Œ	Ʊ
F768	F778	F788	F798	F7A8	F7B8	F7C8	F7D8
I	Y	É	Ù	Ē	Ĳ	Ŕ	Ŵ
F769	F779	F789	F799	F7A9	F7B9	F7C9	F7D9
J	Z	Ê	Ú	Ǻ	Ĵ	Ŗ	Ŷ
F76A	F77A	F78A	F79A	F7AA	F7BA	F7CA	F7DA
K		Ë	Û	Ė	Ꞥ	Ř	Ž
F76B		F78B	F79B	F7AB	F7BB	F7CB	F7DB
L		Ì	Ü	Ę	Í	Ś	Ž
F76C		F78C	F79C	F7AC	F7BC	F7CC	F7DC
M		Í	Ý	Ǻ	Ł	Ŝ	Ž
F76D		F78D	F79D	F7AD	F7BD	F7CD	F7DD
N		Î	Ɔ	Ĝ	Ʊ	Ş	
F76E		F78E	F79E	F7AE	F7BE	F7CE	
O		Ï	Ÿ	Ǻ	Ł	Š	
F76F		F78F	F79F	F7AF	F7BF	F7CF	

	I	i		←	⇐	∀	∠	≠	⊐	ℵ ⁰	◐	♀	♂				
	2160	2170		2190	21D0	2200	2220	2260	2290	2400	25D0	2640	2650				
	II	ii		↑	⇑	Σ				⊐	□	◐	⊕	℥			
	2161	2171		2191	21D1	2211				2291	25A1	25D1	2641	2651			
	III	iii		→	⇒	−	≈	⊂	⊐	△	☾	♂	⚡				
	2162	2172		2192	21D2	2212	2242	2282	2292	25B3	263D	2642	2652				
⅓	IV	iv		↓	⇓	∃	≈	⊃		⌒	☾	℥	⚡				
2153	2163	2173		2193	21D3	2203	2243	2283		2423	263E	2643	2653				
⅔	V	v		↔	⇌		≤	⊤				℥	?				
2154	2164	2174		2194	21A4		2264	22A4				2644	26B3				
¼	VI	vi		↕	⇕	∅	≥	⊥				℥	⚡				
2155	2165	2175		2195	21A5	2205	2265	22A5				2645	26E2				
⅖	VII	vii		↖	↗	△	:	⊆				♂					
2156	2166	2176		2196	21A6	2206	2236	2286				2646					
⅜	VIII	viii		↗	⇓	▽	∧	⊇				♀					
2157	2167	2177		2197	21A7	2207	2227	2287				2647					
⅘	IX	ix		↘		∈	∨	≈				☺	♂	₣			
2158	2168	2178		2198		2208	2228	2248				263A	2648	26B8			
⅙	X	x		↙			∩					☹	♂	*			
2159	2169	2179		2199			2229			2639	2609	2649	26B9				
⅚	XI	xi		⇌		∈	√	∪			ℵ ⁿ	♂	♂	≠			
215A	216A	217A		219A		220A	221A	222A			240A	260A	264A	26BA			
⅛	XII	xii		↔		∇	√ ³	∫	÷	○	♂	☹	π				
215B	216B	217B		219B		22BB	221B	222B	223B	25CB	260B	264B	26BB				
⅜	L	l					√ ⁴			~	·	♂	☹	☹			
215C	216C	217C					221C			223C	25CC	260C	264C	26BC			
⅝	C	c										♂	♂				
215D	216D	217D										260D	264D				
⅞	D	d											☹				
215E	216E	217E											264E				
⅑	M	m				Π			⊐	⊐	●	♀	♂				
215F	216F	217F				220F			228F	22FF	25CF	263F	264F				

Old English

ju:das 'kwæθ to: him. næs nɑ: se: 'skɑrɪɔt. 'driçtən, 'hwæt is jə'wɔrdən θæt θu: wilt θe: 'sylfnə jə'swɔtliɟən ʊs næs 'mɪddanærdə.

ju:das 'kwæθ to: him. næs nɑ: se: 'skɑrɪɔt. 'driçtən, 'hwæt is jə'wɔrdən θæt θu: wilt θe: 'sylfnə jə'swɔtliɟən ʊs næs 'mɪddanærdə.

se: 'hæ:lənd 'ɒndswarɔdə ɒnd 'kwæθ him; jɪf hwa: me: 'lɒvəθ he: 'hɪlt mɪ:nə 'sprætʃə ɒnd mɪ:n 'fædər 'lɒvəθ hɪnə ɒnd we: 'kɒmæθ to: him ɒnd we: 'wyrkɪəθ 'ærdɔŋgstɔ:əə mɪd him.

Middle English

'hwan θat 'a:prɪl ,wɪθ hɪs 'ʃurəs sɔ:tə
θə 'drɔxt ɔf 'mɑrtʃ hæθ 'pɜrsəd ,to: ðə 'rɔ:tə
and 'bɑ:ðəd 'e:vri 'væɪn ɪn 'swɪtʃ lɪ'ku:r
ɔf 'hwɪtʃ vɜ'tɪu ɛn'dzɛndərd ,ɪs θə 'flur
hwan ,zɛfɪrʊs eɪk ,wɪθ hɪs 'swɛtə 'brɛ:θ

Shakespeare

nəu ɔ:ər ðe wɪn hæf wɜ:ld
nɛ:tər sɪ:mz dɛd, ənd wɪkɪd dremz əbju:z
ðe kɜ:teɪnd slɪp: wɪtʃkɪft sɛlɪbrɛ:ts
pɛɪl hɛkəts ɒfərɪŋz: ənd wɪðərd mɜ:rdər,
əlarəmd bæɪ hɪz sɛntɪnəl, ðe wʊlf,

Modern English

aɪ 'do:nt 'ju:ʒəlɪ kəm 'hɪ:r baɪ 'kɑ:r — ðe 'tre:nz ə 'gʊd 'di:l ,mɔ:r kən'vɪnɟɛnt wɛn
wɪ:r 'spɛndɪŋ ə 'ʃu: 'aʊərz ɪn 'təʊn wɪð ðə 'bɔɪz. ju: 'hæf tə bɪ: 'so 'ɛ:rlɪ ɪf ju: 'wɒnt
tə 'faɪnd ə 'pɑ:rkɪŋ ,plɛ:s. aɪ 'θɪŋk 'mɔ:st 'ɡarɑ:ɔzɪz 'ʃɑ:rdʒ 'faɪr tu: 'mætʃ fɜr 'pʊr 'fɔ:k
laɪk 'əs. ðe 'reɪlfɛrɪz 'ʃɪ:pər — so: 'ʃæl wɪ: 'mɪt ət ðe 'ste:ʃɛn?

ΤΩΝ ΠΕΡΙ
ΤΑ ΖΩΙΑ ΙΣΤΟΡΙΩΝ

Δ

Περὶ μὲν οὖν τῶν ἐναίμων ζώων ὅσα τε κοινὰ ἔχουσι μέρη καὶ ὅσα ἴδια ἕκαστον γένος, καὶ τῶν ἀνομοιομερῶν καὶ τῶν ὁμοιομερῶν, καὶ ὅσα ἐκτὸς καὶ ὅσα ἐντός, εἴρηται πρότερον· περὶ δὲ τῶν ἀναίμων ζώων νυνὶ λεκτέον. ἔστι δὲ γένη ταῦτα πλείω, ἔν μὲν τὸ τῶν καλουμένων μαλακίων· ταῦτα δ' ἐστὶν ὅσα ἄναιμα ὄντα ἐκτὸς ἔχει τὸ σαρκῶδες, ἐντὸς δ' εἴ τι ἔχει στερεόν, καθάπερ καὶ τὰ ἔναιμα τῶν ζώων, οἷον τὸ τῶν σηπιῶν γένος. ἔν δὲ τὸ τῶν μαλακοστράκων· ταῦτα δ' ἐστὶν ὅσων ἐκτὸς τὸ στερεόν, ἐντὸς δὲ τὸ μαλακὸν καὶ σαρκῶδες· τὸ δὲ σκληρὸν αὐτῶν ἐστὶν οὐ θραυστὸν ἀλλὰ θλαστόν, οἷόν ἐστι τό τε τῶν καράβων γένος καὶ τὸ τῶν καρκίνων. ἔτι δὲ τὰ ὀστρακόδερμα· τοιαῦτα δ' ἐστὶν ὧν ἐντὸς μὲν τὸ σαρκῶδές ἐστὶν, ἐκτὸς δὲ τὸ στερεόν, θραυστὸν ὃν καὶ κατακτόν, ἀλλ' οὐ θλαστόν· τοιοῦτον δὲ τὸ τῶν κοχλίων γένος καὶ τὸ τῶν ὀστρέων ἐστίν. τέταρτον δὲ τὸ τῶν ἐντόμων, ὃ πολλὰ καὶ ἀνόμοια περιείληφεν εἶδη ζώων. ἔστι δ' ἔντομα ὅσα κατὰ τοῦνομά ἐστὶν ἐντομάς ἔχοντα ἢ ἐν τοῖς ὑπτίοις ἢ ἐν τοῖς πρανέσιν ἢ ἐν ἀμφοῖν, καὶ οὔτε ὀστῶδες ἔχει κεχωρισμένο οὔτε σαρκῶδες, ἀλλὰ μέσον ἀμφοῖν· τὸ σῶμα γὰρ ὁμοίως καὶ ἔσω καὶ ἔξω σκληρόν ἐστὶν αὐτῶν. ἔστι δ' ἔντομα καὶ ἄπτερα, οἷον ἱουλος καὶ σκολόπενδρα, καὶ πτερωτά, οἷον μέλιττα καὶ μηλολόνθη καὶ σφήξ· καὶ ταὐτὸ δὲ γένος ἐστὶ καὶ πτερωτὸν καὶ ἄπτερον, οἷον μύρμηκές εἰσι καὶ πτερωτοὶ καὶ ἄπτεροι, καὶ αἱ καλούμεναι πυγολαμπίδες.

Τῶν μὲν οὖν μαλακίων καλουμένων τὰ μὲν ἔξω μόρια τάδ' ἐστίν, ἔν μὲν οἱ ὀνομαζόμενοι πόδες, δεύτερον δὲ τούτων ἐχομένη ἡ κεφαλή, τρίτον δὲ τὸ κύτος, ὃ περιέχει τάντος, καὶ καλοῦσιν αὐτὸ κεφαλὴν τινες, οὐκ ὀρθῶς καλοῦντες· ἔτι δὲ πτερύγια κύκλω περὶ . . .

nqsp	–	‡	‰		0	0		SM	
2000	2010	2020	2030		2070	2080		2120	
mqsp	–	‡				1			B
2001	2011	2021				2081			2141
ensp	—	•	/			2		TM	
2002	2012	2022	2032			2082		2122	
emsp	—	►	”			3			{
2003	2013	2023	2033			2083			2983
3msp	—	•	”	/	4	4	£		Z
2004	2014	2024	2034	2044	2074	2084	20A4		2124
4msp	—	••	、	{	5	5			T
2005	2015	2025	2035	2045	2075	2085			2144
6msp	||	...	“	}	6	6			}
2006	2016	2026	2036	2046	2076	2086			2984
fsp	=	•	”		7	7			
2007	2017	2027	2037		2077	2087			
psp	‘		^		8	8			
2008	2018		2038		2078	2088			
thsp	’		<		9	9			
2009	2019		2039		2079	2089			
hsp	,		>	7	+	+			
200A	201A		203A	204A	207A	208A			
zws	‘		※		–	–			
200B	201B		203B		207B	208B			
zwnj	“				=	=			
200C	201C				207C	208C			
zwj	”	!			((
200D	201D	203D			207D	208D			
lrm	”))			
200E	201E				207E	208E			
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27E6

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27E7

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2983

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3016

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3017

一 4E00	事 4E8B	会 4F1A	個 500B	分 5206	及 53CA	問 554F	太 592A	小 5C0F	性 6027	把 628A	最 6700	此 6B64	火 706B
七 4E03	二 4E8C	但 4F46	們 5011	刘 5218	友 53CB	嗎 55CE	女 5973	少 5C11	恩 6069	提 63D0	會 6703	比 6BD4	為 70BA
万 4E07	于 4E8E	位 4F4D	做 505A	別 5225	口 53E3	四 56DB	她 5979	就 5C31	情 60C5	教 6559	月 6708	民 6C11	無 7121
三 4E09	云 4E91	何 4F55	像 50CF	到 5230	只 53EA	回 56DE	好 597D	山 5C71	想 60F3	文 6587	有 6709	水 6C34	然 7136
上 4E0A	五 4E94	作 4F5C	先 5148	前 524D	可 53EF	因 56E0	如 5982	峰 5CF0	意 610F	新 65B0	木 6728	没 6C92	王 738B
下 4E0B	些 4E9B	你 4F60	光 5149	力 529B	台 53F0	国 56FD	子 5B50	川 5DDD	愛 611B	方 65B9	本 672C	法 6CD5	現 73FE
不 4E0D	交 4EA4	使 4F7F	入 5165	加 52A0	右 53F3	國 570B	字 5B57	工 5DE5	感 611F	於 65BC	机 673A	海 6D77	球 7403
両 4E21	人 4EBA	來 4F86	全 5168	動 52D5	各 5404	土 571F	学 5B66	左 5DE6	應 61C9	日 65E5	来 6765	清 6E05	理 7406
个 4E2A	什 4EC0	信 4FE1	兩 5169	北 5317	同 540C	在 5728	學 5B78	己 5DF1	成 6210	明 660E	東 6771	湛 6E5B	生 751F
中 4E2D	他 4ED6		八 516B	區 5340	名 540D	地 5730	它 5B83	已 5DF2	我 6211	是 662F	果 679C		用 7528
主 4E3B	以 4EE5		六 516D	十 5341	后 540E	城 57CE	完 5B8C	常 5E38	或 6216	時 6642	校 6821		田 7530
久 4E45	仲 4EF2		其 5176	千 5343	否 5426	夏 590F	定 5B9A	年 5E74	所 6240	曜 66DC	森 68EE		由 7531
之 4E4B			円 5186	南 5357	吧 5427	外 5916	家 5BB6	式 5F0F	手 624B	書 66F8	樣 6A23		男 7537
九 4E5D			再 518D	原 539F	呢 5462	多 591A	實 5BE6	当 5F53	才 624D		機 6A5F		當 7576
也 4E5F		得 5F97	凰 51F0	去 53BB	和 548C	大 5927	將 5C07	很 5F88	打 6253		次 6B21		發 767C
了 4E86		心 5FC3	出 51FA	又 53C8		天 5929	對 5C0D	後 5F8C	找 627E		正 6B63		白 767D

ΤΩΝ ΠΕΡΙ

ΤΑ ΖΩΙΑ ΙΣΤΟΡΙΩΝ

Δ

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ТАМА́НЬ

I. ГОРОДО́К НА БЕРЕГУ́ МО́РЯ

Тамáнь — ма́ленький городо́к на берегу́ мо́ря. Я ду́маю — это са́мый ма́ленький и са́мый бе́дный из всех городо́в Росси. И са́мый непритный. Грязно, бе́дно в Тамáни: грязные у́лицы, ста́рые забо́ры вдоль у́лиц, дома́ — ма́ленькие бе́дные. Во всём го́роде то́лько оди́н ка́менный дом, у са́мого въ́езда в го́род. В нём по́чта и во́енное нача́льство. Все други́е дома́ в Тамáни — не дома́, а ма́ленькие избу́шки.

Одна́жды, по́здно но́чью подъезжа́ю на трóйке к Тамáни. Я о́чень уста́л и го́лоден. Я уже́ мно́го, мно́го днёй в доро́ге. Меня́ посыла́ет моё во́енное нача́льство на Кавка́з. Моя́ уста́лая трóйка въезжа́ет в го́род и оста́навливается у ка́менного до́ма. Я начина́ю стуча́ть. Стучу́ о́чень до́лго. Наконе́ц, слы́шу го́лос:

«Кто идёт?»

«Я офице́р. Меня́ посыла́ет во́енное нача́льство на Кавка́з. Я за́втра еду́ да́льше. Мне нужна́ кварта́ра на́ ночь.»

Из до́ма выхо́дит каза́к, у́нтер-офице́р. Сно́ва:

«Кто вы? Что ну́жно?»

«Я офице́р. Еду́ на Кавка́з. Я мно́го днёй в доро́ге и о́чень уста́л. Мне нужна́ кварта́ра на́ ночь. Хочу́ за́втра е́хать да́льше.»

Каза́к веде́т меня́ по го́роду. Мы оста́навливаемся у ка́ждой избу́шки, у ка́ждого са́мого бе́дного до́мика. Стучи́м. Про́сим. Но кварта́р в го́роде нет.

	ぐ	だ	ば	む	る	=	グ	ダ	パ	ム	ヰ	
	3050	3060	3070	3080	3090	30A0	30B0	30C0	30D0	30E0	30F0	
ぁ	け	ち	ぱ	め	ゑ	ァ	ケ	チ	パ	メ	ヱ	、 3001
3041	3051	3061	3071	3081	3091	30A1	30B1	30C1	30D1	30E1	30F1	
ぁ	げ	ぢ	ひ	も	を	ア	ゲ	ヂ	ヒ	モ	ヲ	
3042	3052	3062	3072	3082	3092	30A2	30B2	30C2	30D2	30E2	30F2	
い	こ	っ	び	ゃ	ん	ア	コ	ッ	ビ	ャ	ン	
3043	3053	3063	3073	3083	3093	30A3	30B3	30C3	30D3	30E3	30F3	
い	ご	っ	ぴ	ゃ		ィ	ゴ	ツ	ピ	ヤ	ヴ	
3044	3054	3064	3074	3084		30A4	30B4	30C4	30D4	30E4	30F4	
う	さ	づ	ふ	ゅ		イ	サ	ヅ	フ	ュ		
3045	3055	3065	3075	3085		30A5	30B5	30C5	30D5	30E5		
う	ざ	て	ぶ	ゅ		ウ	ザ	テ	ブ	ユ		
3046	3056	3066	3076	3086		30A6	30B6	30C6	30D6	30E6		
え	し	で	ぷ	よ		エ	シ	デ	プ	ヨ	ヅ	
3047	3057	3067	3077	3087		30A7	30B7	30C7	30D7	30E7	30F7	
え	じ	と	へ	よ		エ	ジ	ト	ヘ	ヨ	ヰ	
3048	3058	3068	3078	3088		30A8	30B8	30C8	30D8	30E8	30F8	
お	す	ど	べ	ら		オ	ス	ド	ベ	ラ	ヱ	
3049	3059	3069	3079	3089		30A9	30B9	30C9	30D9	30E9	30F9	
お	ず	な	ぺ	り		オ	ズ	ナ	ペ	リ	ヲ	
304A	305A	306A	307A	308A		30AA	30BA	30CA	30DA	30EA	30FA	
か	せ	に	ほ	る	ゝ	カ	セ	ニ	ホ	ル	・	
304B	305B	306B	307B	308B	309B	30AB	30BB	30CB	30DB	30EB	30FB	
が	ぜ	ぬ	ぼ	れ	°	ガ	ゼ	ヌ	ボ	レ	ー	
304C	305C	306C	307C	308C	309C	30AC	30BC	30CC	30DC	30EC	30FC	
き	そ	ね	ぽ	ろ	ゝ	キ	ソ	ネ	ポ	ロ	ゝ	
304D	305D	306D	307D	308D	309D	30AD	30BD	30CD	30DD	30ED	30FD	
ぎ	ぞ	の	ま	わ	ゝ	ギ	ゾ	ノ	マ	ワ	ゝ	
304E	305E	306E	307E	308E	309E	30AE	30BE	30CE	30DE	30EE	30FE	
く	た	は	み	わ		ク	タ	ハ	ミ	ワ		
304F	305F	306F	307F	308F		30AF	30BF	30CF	30DF	30EF		

Тамань









































































































































Тамань – самый скверный городишко из всех приморских городов России. Я там чуть-чуть не умер с голова, да еще вдобавок меня хотели уломить. Я приехал на перекладной тележке поздно ночью. Ямщик остановил усталую тройку у ворот единственного каменного дома, что при въезде. Часовой, черноморский казак, услышав звон колокольчика, закричал спросонья диким голосом: «Кто идет?» Вышел урядник и десятник. Я им объяснил, что я офицер, еду в действующий отряд по казеннойадобност, и стал требовать казенную квартиру. Десятник нас повел по городу. Из которой избе ни подведем – занята. Было холодно, я три ночи не спал, измучился и начал сердиться. «Веди меня куда-нибудь разбойник! хоть к черту, только к месту!» – закричал я. «Есть еще одна фатера, – отвечал десятник, почесывая затылок – только бащемиу благородию не понравится; там нечисто». Не поняв точного значения последнего слова, я велел ему идти вперед, и после долгого странствования по грязным переулкам, где по сторонам я видел один только ветхие заборы, мы подъехали к небольшой хате, на самом берегу моря.

Полный месяц светил на камышовую крышу и белые стены моего нового жилища; на дворе, обеденном огадой из булыжника, стояла избогась другая лачужка, менее и древнее первой. Берег обрывом спускался к мрю почти у смыш стен ее, и внизу с непрерывным ропотом плескались темно-синие волны. Луна тихо смотрела на беспокойную, но покорную ей стихию, и я мог различить при свете ее, далеко от берега, два корабля, которых черные снасти,

0	٠	ي	ي	ش	ء	ب	ج	ز	ض	غ	ل	ى	
06E0	06F0	0750	0760	0770	FE70	FE80	FE90	FEA0	FEB0	FEC0	FED0	FEE0	FEF0
	١	ث	ي	ژ	ـ	آ	ب	ح	س	ط	ف	م	ي
	06F1	0751	0761	0771	FE71	FE81	FE91	FEA1	FEB1	FEC1	FED1	FEE1	FEF1
	٢	پ	ک	ط	ء	آ	ب	ح	س	ط	ف	م	ي
	06F2	0752	0762	0772	FE72	FE82	FE92	FEA2	FEB2	FEC2	FED2	FEE2	FEF2
	٣	ت	ک		ل	أ	ة	ح	س	ط	ف	م	ي
	06F3	0753	0763		FE73	FE83	FE93	FEA3	FEB3	FEC3	FED3	FEE3	FEF3
	٤	ن	ک		ل	أ	ة	ح	س	ط	ف	م	ي
	06F4	0754	0764		FE74	FE84	FE94	FEA4	FEB4	FEC4	FED4	FEE4	FEF4
	٥	ب	م		ل	ؤ	ت	خ	ش	ظ	ق	ن	لآ
	06F5	0755	0765		FE85	FE95	FEA5	FEB5	FEC5	FED5	FEE5	FEF5	
	٦	ب	م		ل	ؤ	ت	خ	ش	ظ	ق	ن	لآ
	06F6	0756	0766		FE76	FE86	FE96	FEA6	FEB6	FEC6	FED6	FEE6	FEF6
	٧	خ	ن		ل	إ	ز	خ	ش	ظ	ق	ز	لأ
	06F7	0757	0767		FE77	FE87	FE97	FEA7	FEB7	FEC7	FED7	FEE7	FEF7
٨	چ	ن	ل		إ	ت	خ	ش	ظ	ق	ز	لأ	
06F8	0758	0768	FE78		FE88	FE98	FEA8	FEB8	FEC8	FED8	FEE8	FEF8	
٩	ب	ن	ل		ئ	ث	د	ص	ع	ک	ه	لإ	
06F9	0759	0769	FE79		FE89	FE99	FEA9	FEB9	FEC9	FED9	FEE9	FEF9	
ش	د	ف	ل	ئ	ث	د	ص	ع	ک	ه	لإ		
06FA	075A	076A	FE7A	FE8A	FE9A	FEAA	FEBA	FECA	FEDA	FEAA	FEFA		
ض	و	ز	ل	ـ	ژ	ذ	ص	ء	ک	ه	لا		
06FB	075B	076B	FE7B	FE8B	FE9B	FEAB	FEBB	FECB	FEDB	FEEB	FEFB		
غ	ش	ر	ل	ـ	ژ	ذ	ص	ء	ک	ه	لا		
06FC	075C	076C	FE7C	FE8C	FE9C	FEAC	FEBC	FECC	FEDC	FECC	FEFC		
ء	غ	ش	ل	ـ	ا	ج	ر	ض	غ	ل	و		
06FD	075D	076D	FE7D	FE8D	FE9D	FEAD	FEBD	FECD	FEDD	FEED			
ذ	م	غ	ش	ل	ا	ج	ر	ض	غ	ل	و		
06EE	06FE	075E	076E	077E	FE7E	FE8E	FE9E	FEAE	FEBE	FECE	FEDE	FEEE	
ر	ه	غ	چ	ک	ـ	ب	ج	ز	ض	ف	ل	ى	
06EF	06FF	075F	076F	077F	FE7F	FE8F	FE9F	FEAF	FEBF	FECF	FEDF	FEFF	

בראשית

א בְּרֵאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ : וְהָאָרֶץ
הָיְתָה תִּהְיוּ וְנָהוּ וְהַשָּׁדַי צִלְפִּינִי תְהוֹם וְרוּחַ אֱלֹהִים
מְרַחֶפֶת עַל־פְּנֵי מַיִם: וַיֹּאמֶר אֱלֹהִים יְהִי אוֹר וַיְהִי־
אוֹר: וַיֵּרָא אֱלֹהִים אֶת־הָאוֹר כִּי־טוֹב וַיַּבְדֵּל אֱלֹהִים בֵּין
הָאוֹר וּבֵין הַשָּׁדַי: וַיִּקְרָא אֱלֹהִים אֶל־אוֹר יוֹם וְלַחֹשֶׁךְ
קָרָא לַיְלָה וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם אֶחָד: פ
וַיֹּאמֶר אֱלֹהִים יְהִי רָקִיעַ בְּתוֹךְ הַמַּיִם וַיְהִי מִבְדִּיל בֵּין
מַיִם לַמַּיִם: וַיַּעַשׂ אֱלֹהִים אֶת־הַרָקִיעַ וַיַּבְדֵּל בֵּין הַמַּיִם
אֲשֶׁר מִתַּחַת לַרָקִיעַ וּבֵין הַמַּיִם אֲשֶׁר מֵעַל לַרָקִיעַ וַיְהִי־
כֵן: וַיִּקְרָא אֱלֹהִים לַרָקִיעַ שָׁמַיִם וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר
יוֹם שֵׁנִי: פ
וַיֹּאמֶר אֱלֹהִים יִקְווּ הַמַּיִם מִתַּחַת הַשָּׁמַיִם אֶל־מָקוֹם אֶחָד
וְתִרְאָה הַיַּבָּשָׁה וַיְהִי־כֵן: וַיִּקְרָא אֱלֹהִים אֶל־אָרֶץ
י

										
	05A0	05B0	05C0	05D0	05E0	05F0		FB20	FB30	FB40
										
0591	05A1	05B1	05C1	05D1	05E1	05F1		FB21	FB31	FB41
										
0592	05A2	05B2	05C2	05D2	05E2	05F2		FB22	FB32	
										
0593	05A3	05B3	05C3	05D3	05E3	05F3		FB23	FB33	FB43
										
0594	05A4	05B4	05C4	05D4	05E4	05F4		FB24	FB34	FB44
										
0595	05A5	05B5	05C5	05D5	05E5			FB25	FB35	
										
0596	05A6	05B6	05C6	05D6	05E6			FB26	FB36	FB46
										
0597	05A7	05B7	05C7	05D7	05E7			FB27		FB47
										
0598	05A8	05B8		05D8	05E8			FB28	FB38	FB48
										
0599	05A9	05B9		05D9	05E9			FB29	FB39	FB49
										
059A	05AA	05BA		05DA	05EA			FB2A	FB3A	FB4A
										
059B	05AB	05BB		05DB				FB2B	FB3B	FB4B
										
059C	05AC	05BC		05DC				FB2C	FB3C	FB4C
										
059D	05AD	05BD		05DD				FB1D	FB2D	FB4D
										
059E	05AE	05BE		05DE				FB1E	FB2E	FB4E
										
059F	05AF	05BF		05DF				FB1F	FB2F	FB4F

È 0400	А 0410	Р 0420	а 0430	р 0440	è 0450	W 0460		Ç 0480	Г 0490
Ё 0401	Б 0411	С 0421	б 0431	с 0441	ё 0451	w 0461		ç 0481	г 0491
Ђ 0402	В 0412	Т 0422	в 0432	т 0442	ђ 0452	Ђ 0462	Θ 0472		Ғ 0492
Ѓ 0403	Г 0413	У 0423	г 0433	у 0443	ѓ 0453	Ѓ 0463	Θ 0473		Ғ 0493
Є 0404	Д 0414	Ф 0424	д 0434	ф 0444	є 0454	Є 0464	Ƶ 0474		
Ѕ 0405	Е 0415	Х 0425	е 0435	х 0445	ѕ 0455	Ѕ 0465	Ƶ 0475		
І 0406	Ж 0416	Ц 0426	ж 0436	ц 0446	і 0456	А 0466			
Ї 0407	З 0417	Ч 0427	з 0437	ч 0447	ї 0457	А 0467			
Ј 0408	И 0418	Ш 0428	и 0438	ш 0448	ј 0458				
Љ 0409	Й 0419	Щ 0429	й 0439	щ 0449	љ 0459				
Њ 040A	К 041A	Ъ 042A	к 043A	ъ 044A	њ 045A				
Ћ 040B	Л 041B	Ы 042B	л 043B	ы 044B	ћ 045B				
Ќ 040C	М 041C	Ь 042C	м 043C	ь 044C	ќ 045C				
Ў 040D	Н 041D	Э 042D	н 043D	э 044D	ў 045D				
Ў 040E	О 041E	Ю 042E	о 043E	ю 044E	ў 045E				
Ѡ 040F	П 041F	Я 042F	п 043F	я 044F	ѡ 045F				

h 04BA

h04BA

الفاتحه

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ

الرَّحْمَنِ الرَّحِيمِ

مَالِكِ يَوْمِ الدِّينِ

إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ

اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ

صِرَاطَ الَّذِينَ أَنْعَمْتَ عَلَيْهِمْ غَيْرِ الْمَغْضُوبِ عَلَيْهِمْ وَلَا الضَّالِّينَ

Font Samples

The following lines show the different styles and weights of the sixteen fonts in the Bembino Font Family

Style	UpperCase	LowerCase	SmCaps
Regular.Normal	ABCDEF	abcdef	<i>ABCDEF</i> G
Regular.Medium	ABCDEF	abcdef	<i>ABCDEF</i> G
Regular.HalfBold	ABCDEF	abcdef	<i>ABCDEF</i> G
Regular.SemiBold	ABCDEF	abcdef	<i>ABCDEF</i> G
Regular.Bold	ABCDEF	abcdef	<i>ABCDEF</i> G
Italic.Normal	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i> G
Italic.Medium	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i> G
Italic.HalfBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i> G
Italic.SemiBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i> G
Italic.Bold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i> G
Cursive.Normal	<i>ẠḄC̣ḌẸF̣</i>	<i>abc̣def̣</i>	
Cursive.Medium	<i>ẠḄC̣ḌẸF̣</i>	<i>abc̣def̣</i>	
Cursive.HalfBold	<i>ẠḄC̣ḌẸF̣</i>	<i>abc̣def̣</i>	
Cursive.SemiBold	<i>ẠḄC̣ḌẸF̣</i>	<i>abc̣def̣</i>	
Cursive.Bold	<i>ẠḄC̣ḌẸF̣</i>	<i>abc̣def̣</i>	
Fraktur.Normal	𝄒𝄢𝄣𝄤𝄬𝄭	abc̣def̣	

The Japanese Kana and Kanji glyphs are only available in the Regular.Normal style.

ὀ	ὐ	ὖ	ὰ	ᾀ	῀	ὠ	ᾶ	~	ϊ	ϋ	
1F40	1F50	1F60	1F70	1F80	1F90	1FA0	1FB0	1FC0	1FD0	1FE0	
ό	ύ	ώ	ά	ᾁ	῁	ὡ	ᾷ	≈	ῑ	ϋ	
1F41	1F51	1F61	1F71	1F81	1F91	1FA1	1FB1	1FC1	1FD1	1FE1	
ὀ	ὐ	ὖ	ἐ	ᾂ	ῂ	ὢ	ᾷ	ῆ	ῖ	ϋ	ὦ
1F42	1F52	1F62	1F72	1F82	1F92	1FA2	1FB2	1FC2	1FD2	1FE2	1FF2
ὀ	ὐ	ὖ	έ	ᾃ	ῃ	ὣ	ᾶ	ῇ	ῗ	ϋ	Ϝ
1F43	1F53	1F63	1F73	1F83	1F93	1FA3	1FB3	1FC3	1FD3	1FE3	1FF3
ὀ	ὐ	ὖ	ἡ	ᾄ	ῄ	ὤ	ᾷ	ῆ		ρ	ϙ
1F44	1F54	1F64	1F74	1F84	1F94	1FA4	1FB4	1FC4		1FE4	1FF4
ὀ	ὐ	ὖ	ή	ᾅ	῅	ὥ				ρ	
1F45	1F55	1F65	1F75	1F85	1F95	1FA5				1FE5	
	ϣ	ϝ	ι	ᾆ	ῆ	ϙ	ᾶ	ῇ	ῗ	ϋ	Ϟ
	1F56	1F66	1F76	1F86	1F96	1FA6	1FB6	1FC6	1FD6	1FE6	1FF6
	ϣ	ϝ	ί	ᾇ	ῇ	ϙ	ᾷ	ῆ	ῗ	ϋ	ϟ
	1F57	1F67	1F77	1F87	1F97	1FA7	1FB7	1FC7	1FD7	1FE7	1FF7
Ό		Ω	ὀ	Α̣	Η̣	Ο̣	Ă	Ǝ	İ	Ÿ	Ό
1F48		1F68	1F78	1F88	1F98	1FA8	1FB8	1FC8	1FD8	1FE8	1FF8
Ό	Υ	Ω	ό	Α̣	Η̣	Ο̣	Ā	Ǝ	Ī	Ȳ	Ό
1F49	1F59	1F69	1F79	1F89	1F99	1FA9	1FB9	1FC9	1FD9	1FE9	1FF9
Ό		”Ω	ὐ	”Α̣	”Η̣	”Ο̣	Α	Η	Ι	Υ	”Ω
1F4A		1F6A	1F7A	1F8A	1F9A	1FAA	1FBA	1FCA	1FDA	1FEA	1FFA
”Ό	”Υ	”Ω	ύ	”Α̣	”Η̣	”Ο̣	Α	Η	Ι	”Υ	”Ω
1F4B	1F5B	1F6B	1F7B	1F8B	1F9B	1FAB	1FBB	1FCB	1FDB	1FEB	1FFB
”Ό		”Ω	ὖ	”Α̣	”Η̣	”Ο̣	Α̣	Η̣		”Ρ	”Ο̣
1F4C		1F6C	1F7C	1F8C	1F9C	1FAC	1FBC	1FCC		1FEC	1FFC
”Ό	”Υ	”Ω	ώ	”Α̣	”Η̣	”Ο̣	’	”	”	”	’
1F4D	1F5D	1F6D	1F7D	1F8D	1F9D	1FAD	1FBD	1FCD	1FDD	1FED	1FFD
		”Ω		”Α̣	”Η̣	”Ο̣	’	”	”	”	’
		1F6E		1F8E	1F9E	1FAE	1FBE	1FCE	1FDE	1FEE	1FFE
	”Υ	”Ω		”Α̣	”Η̣	”Ο̣	’	”	”	”	
	1F5F	1F6F		1F8F	1F9F	1FAF	1FBF	1FCF	1FDF	1FEF	

		í	Π	ύ	π		ῥ	κ		ά	έ	ή	ι			
		0390	03A0	03B0	03C0		03E0	03F0		1F00	1F10	1F20	1F30			
		Α	Ρ	α	ρ	ϑ	ῥ	ϙ		1F01	1F11	1F21	1F31			
		0391	03A1	03B1	03C1	03D1	03E1	03F1								
		Β		β	ς	Υ		Ϸ		Ǻ	Ǽ	ῥ	ῖ			
		0392		03B2	03C2	03D2		03F2		1F02	1F12	1F22	1F32			
		Γ	Σ	γ	σ	Υ		Ϸ		Ǻ	Ǽ	ῥ	ῖ			
		0393	03A3	03B3	03C3	03D3		03F3		1F03	1F13	1F23	1F33			
’	’	Δ	Τ	δ	τ	Ÿ		Θ		Ǻ	Ǽ	ῥ	ῖ			
0374	0384	0394	03A4	03B4	03C4	03D4		03F4			1F04	1F14	1F24	1F34		
’	’	Ε	Υ	ε	υ	φ		€			Ǻ	Ǽ	ῥ	ῖ		
0375	0385	0395	03A5	03B5	03C5	03D5		03F5			1F05	1F15	1F25	1F35		
	Α	Ζ	Φ	ζ	φ	ω		Ɔ		Ǻ		ῥ	ῖ			
	0386	0396	03A6	03B6	03C6	03D6		03F6			1F06		1F26	1F36		
	·	Η	Χ	η	χ	ϣ					Ǻ		ῥ	ῖ		
	0387	0397	03A7	03B7	03C7	03D7					1F07		1F27	1F37		
	Έ	Θ	Ψ	θ	ψ	Ω		C			Α	Έ	Η	Ι		
	0388	0398	03A8	03B8	03C8	03D8					1F08	1F18	1F28	1F38		
	Η	Ι	Ω	ι	ω	φ					Α	Έ	Η	Ι		
	0389	0399	03A9	03B9	03C9	03D9					1F09	1F19	1F29	1F39		
’	’	Κ	Ϊ	κ	ϊ	Ϛ				Α	Έ	Η	Ι			
037A	038A	039A	03AA	03BA	03CA	03DA				1F0A	1F1A	1F2A	1F3A			
Ϛ		Λ	Ÿ	λ	Ϛ	ς				Α	Έ	Η	Ι			
037B		039B	03AB	03BB	03CB	03DB				1F0B	1F1B	1F2B	1F3B			
Ϸ	Ο	Μ	ά	μ	ό	Ϛ				Α	Έ	Η	Ι			
037C	038C	039C	03AC	03BC	03CC	03DC				1F0C	1F1C	1F2C	1F3C			
Ϛ		Ν	έ	ν	ύ	Ϛ				Α	Έ	Η	Ι			
037D		039D	03AD	03BD	03CD	03DD				03FD	1F0D	1F1D	1F2D	1F3D		
;	Υ	Ξ	ή	ξ	ώ			C			Ǻ		ῥ	ῖ		
037E	038E	039E	03AE	03BE	03CE						03FE	1F0E		1F2E	1F3E	
	Ω	Ο	ί	ο							Ǻ		ῥ	ῖ		
	038F	039F	03AF	03BF			03FF				1F0F		1F2F	1F3F		

Font Tables

The following pages show the sets of glyphs available in each of the four font styles (Roman, Italic, Cursive and Other). Most of them are familiar upper-case, lower-case and small-caps glyphs, but some are designed to improve the appearance of pages when they are typeset. Each glyph is identified by its Unicode index number, in hexadecimal. Version 5.2 or above of the Unicode standard explains the purpose and use for all glyphs in the appendix.

Regular

Page 2 comprises the standard ASCII character set, and its extension into ISO8859-1 (Western-European languages), plus the latin presentation forms.

Pages 3 and 4 show the extensions for Eastern European and minor European languages, plus ‘wynn’ for Old English. Page 5 shows the non-composed diacriticals.

Page 6 contains the International Phonetic Alphabet, and Page 7 shows Armenian and Runes. The Runic section is still under development

Pages 8 and 9 contain the Greek alphabet, and the precomposed polytonic Greek forms.

Page 10 contains the Cyrillic alphabet and Page 11the Hebrew alphabet.

Pages 12 and 13 show the Arabic glyphs, including all the presentation forms. Note that most of the ‘B’ set of presentation forms are omitted in this release.

Page 14 shows Thai and the continuation of the Kanji. Page 15 the Japanese Hiragana and Katakana forms. Page 16 contains the (small) subset of Chinese-Japanese Kanji contained within this release of Bembino

Pages 17 and 18 contain various special characters and mathematical symbols, and the page 19, the last of this group shows, the small-capital forms of those letters that have explicit small-caps glyphs.

Italic

The second group of pages shows the glyphs in the italic font. Pages 20 and 21 show the ISO8859-1 ASCII forms and the Eastern European extensions. Pages 22 and 23 show the Greek and polytonic forms. Page 24 shows the Cyrillic and Thai alphabets and Page 25 shows the small-caps forms.

Cursive

Pages 26 and 27 show the avilable Latin and Cyrillic cureive forms in the ‘Pietro’ font.

Fraktur

Page 28 shows glyphs available in the ‘Frangelico’ font. this font is available in a single weight and style and contains glyphs for non-standard applications. Currently this set contains the Fraktur alphabet, used for some mathematical symbols, and for setting older forms of Germanic lanuguages.

sp	0	@	P	`	p	nbsp	◌ ^o	À	Ð	à	ð		ff
0020	0030	0040	0050	0060	0070	00A0	00B0	00C0	00D0	00E0	00F0		FB00
!	1	A	Q	a	q	ı	±	Á	Ñ	á	ñ		fi
0021	0031	0041	0051	0061	0071	00A1	00B1	00C1	00D1	00E1	00F1		FB01
"	2	B	R	b	r	ç	²	Â	Ò	â	ò		fl
0022	0032	0042	0052	0062	0072	00A2	00B2	00C2	00D2	00E2	00F2		FB02
#	3	C	S	c	s	£	³	Ã	Ó	ã	ó		ffi
0023	0033	0043	0053	0063	0073	00A3	00B3	00C3	00D3	00E3	00F3		FB03
\$	4	D	T	d	t	ⱥ	´	Ä	Ô	ä	ô		ffl
0024	0034	0044	0054	0064	0074	00A4	00B4	00C4	00D4	00E4	00F4		FB04
%	5	E	U	e	u	¥	μ	Å	Õ	å	õ		fj
0025	0035	0045	0055	0065	0075	00A5	00B5	00C5	00D5	00E5	00F5		0000
&	6	F	V	f	v	ı	¶	Æ	Ö	æ	ö		
0026	0036	0046	0056	0066	0076	00A6	00B6	00C6	00D6	00E6	00F6		
'	7	G	W	g	w	§	·	Ç	×	ç	÷		
0027	0037	0047	0057	0067	0077	00A7	00B7	00C7	00D7	00E7	00F7		
(	8	H	X	h	x	¨	,	È	Ø	è	ø		
0028	0038	0048	0058	0068	0078	00A8	00B8	00C8	00D8	00E8	00F8		
)	9	I	Y	i	y	©	¹	É	Ù	é	ù		
0029	0039	0049	0059	0069	0079	00A9	00B9	00C9	00D9	00E9	00F9		
*	:	J	Z	j	z	ª	◌ ^o	Ê	Ú	ê	ú		
002A	003A	004A	005A	006A	007A	00AA	00BA	00CA	00DA	00EA	00FA		
+	;	K	[	k	{	«	»	Ë	Û	ë	û		
002B	003B	004B	005B	006B	007B	00AB	00BB	00CB	00DB	00EB	00FB		
,	<	L	\	l	|	¬	¼	Ì	Ü	ì	ü		
002C	003C	004C	005C	006C	007C	00AC	00BC	00CC	00DC	00EC	00FC		
–	=	M	]	m	}	shy	½	Í	Ý	í	ý		
002D	003D	004D	005D	006D	007D	00AD	00BD	00CD	00DD	00ED	00FD		
.	>	N	^	n	~	®	¾	Î	Þ	î	þ		
002E	003E	004E	005E	006E	007E	00AE	00BE	00CE	00DE	00EE	00FE		
/	?	O	_	o		-	¿	Ï	ß	ï	ÿ		
002F	003F	004F	005F	006F		00AF	00BF	00CF	00DF	00EF	00FF		

	Հ	Դ		հ	ր		Վ	Ժ	Ի	Լ	Խ		
	0540	0550		0570	0580		16A0	16B0	16C0	16D0	16E0		
Ա	Ձ	Յ	ւ	ձ	ց		Վ	Ր	Լ	Դ	Խ		
0531	0541	0551	0561	0571	0581		16A1	16B1	16C1	16D1	16E1		
Բ	Ղ	Ի	բ	ղ	ւ		Ո	<	Ի	Յ	Խ		Ն
0532	0542	0552	0562	0572	0582		16A2	16B2	16C2	16D2	16E2		16F2
Գ	Ճ	Փ	գ	ճ	փ		Ո	Լ	Տ	Ի	Խ		Փ
0533	0543	0553	0563	0573	0583		16A3	16B3	16C3	16D3	16E3		16F3
Դ	Մ	Ք	դ	մ	ք		Ո	Ի	Փ	Յ	Ճ		
0534	0544	0554	0564	0574	0584		16A4	16B4	16C4	16D4	16E4		
Ե	Յ	Օ	ե	յ	օ		Ո	Ի	Դ	Կ	Ձ		
0535	0545	0555	0565	0575	0585		16A5	16B5	16C5	16D5	16E5		
Զ	Ն	Ֆ	զ	ն	ֆ		Ս	Ի	Դ	Մ	Խ		
0536	0546	0556	0566	0576	0586		16A6	16B6	16C6	16D6	16E6		
Է	Շ		է	շ	ւ		Ս	Ճ	Դ	Ք	Լ		
0537	0547		0567	0577	0587		16A7	16B7	16C7	16D7	16E7		
Ը	Ռ		ը	ր			Ֆ	Ճ	Ը	Կ	Ձ	Լ	
0538	0548		0568	0578			16A8	16B8	16C8	16D8	16E8		16F8
Թ	Չ	՛	թ	չ	:		Ֆ	Ի	Կ	Ի	Գ		
0539	0549	0559	0569	0579	0589		16A9	16B9	16C9	16D9	16E9		
Ժ	Պ	՛	ժ	պ	և		Ֆ	Ո	Ջ	Ը	Դ	Խ	
053A	054A	055A	056A	057A	058A		16AA	16BA	16CA	16DA	16EA		16FA
Ի	Ջ	՛	ի	ջ	փս		Ֆ	Ո	Կ	Ի	·	Ի	
053B	054B	055B	056B	057B	FB13		16AB	16BB	16CB	16DB	16EB		16FB
Լ	Ռ	՛	լ	ր	ւն		Ֆ	Ճ	Լ	Ծ	:		
053C	054C	055C	056C	057C	FB14		16AC	16BC	16CC	16DC	16EC		
Խ	Ս	`	խ	ս	ւփ		Ի	Ի	Լ	Ճ	Ճ		
053D	054D	055D	056D	057D	FB15		16AD	16BD	16CD	16DD	16ED		
Ծ	Վ	◌ ^o	ծ	վ	փս		Ժ	Ի	Լ	Ճ	Ի		
053E	054E	055E	056E	057E	FB16		16AE	16BE	16CE	16DE	16EE		
Կ	Տ	՛	կ	տ	ւփս		Ճ	Ի	Ձ	Ճ	Ճ		
053F	054F	055F	056F	057F	FB17		16AF	16BF	16CF	16DF	16EF		

À 01E0	Ǻ 01F0	Ā 0200	Ř 0210	Ȳ 0232 ȳ 0233		Ḃ 1E02	Ḥ 1E2A	Ṗ 1E56	Ṽ 1E7E	ḥ 1E96	Ẑ 1E92					
ā 01E1		à 0201	ř 0211			ḃ 1E03	ḥ̣ 1E2B	ṗ̣ 1E57	ṽ 1E7F	Ḅ̇ 1EA0	ẓ̂ 1E93					
Ā̊ 01E2		Ā̊ 0202	Ř̊ 0212			Ḃ̊ 1E04	Ḥ̊ 1E32	Ṗ̊ 1E58	Ṽ̊ 1E80	Ḃ̊ 1EA1	Ḭ̊ 1EFA					
ā̊ 01E3		ā̊ 0203	ř̊ 0213			ḃ̊ 1E05	ḥ̊ 1E33	ṗ̊ 1E59	ṽ̊ 1E81	Ḃ̊ 1EB8	Ḭ̊ 1EFB					
	Ć 01F4	Ē 0204	Ũ 0214	Λ 0245		Ḍ 1E0A	Ḭ̣ 1E34	Ṛ 1E5A	Ẉ̀ 1E82	Ḅ̇ 1EB9	Ḫ̣ 1EFC					
	ć 01F5	ē 0205	ũ 0215			ḍ 1E0B	ḭ̣ 1E35	ṛ̣ 1E5B	ẉ̀ 1E83	Ḅ̇ 1ECA	ḫ̣ 1EFD					
Ǻ̊ 01E6		Ê̊ 0206	Ũ̊ 0216	À̊ 0226	Ǻ̊ 0237	Ḑ̣ 1E0C	Ḑ̣ 1E36	Ṩ 1E60	Ẉ̀ 1E84	Ḅ̇ 1ECB						
Ǻ̊ 01E7	Ɔ̊ 01F7	ê̊ 0207	ũ̊ 0217	à̊ 0227		ḑ̣ 1E0D	ḏ̣ 1E37	ṩ 1E61	ẉ̀ 1E85	Ḑ̣ 1ECC						
Ǻ̊ 01E8	Ǻ̊ 01F8	Ĭ̊ 0208	Ş̊ 0218	Ḑ̣ 1E0E		Ḑ̣ 1E40	Ṣ̣ 1E62	Ẉ̀ 1E86	Ḑ̣ 1ECD							
Ǻ̊ 01E9	Ǻ̊ 01F9	ĩ̊ 0209	ş̊ 0219	ḑ̣ 1E0F		Ḑ̣ 1E41	ṣ̣ 1E63	ẉ̀ 1E87	Ḑ̣ 1EE4							
Ḑ̣ 01EA	Ǻ̊ 01FA	Î̊ 020A	Ṭ̊ 021A			Ḑ̣ 1E1E	Ḑ̣ 1E42	Ṭ̊ 1E6A	Ẉ̀ 1E88	Ḑ̣ 1EE5	Ḑ̣ A765					
Ḑ̣ 01EB	Ǻ̊ 01FB	î̊ 020B	ṭ̊ 021B			Ḑ̣ 1E1F	Ḑ̣ 1E43	ṭ̊ 1E6B	ẉ̀ 1E89	Ḑ̣ 1EF2	Ḑ̣ A77A					
	Ǻ̊ 01FC	Ò̊ 020C				Ḑ̣ 1E22	Ḑ̣ 1E44	Ṭ̊ 1E6C	Ẉ̀ 1E8A	Ḑ̣ 1EF3	Ḑ̣ A77C					
	Ǻ̊ 01FD	ò̊ 020D				Ḑ̣ 1E23	Ḑ̣ 1E45	ṭ̊ 1E6D	ẉ̀ 1E8B	Ḑ̣ 1EF4	Ḑ̣ A783					
		Ô̊ 020E	Ǻ̊ 021E	Ò̊ 022E		Ḑ̣ 1E24	Ḑ̣ 1E46	Ṭ̊ 1E6E	Ẉ̀ 1E8E	Ḑ̣ 1EF5	Ḑ̣ A785					
		ô̊ 020F	Ǻ̊ 021F	ò̊ 022F		Ḑ̣ 1E25	Ḑ̣ 1E47	ṭ̊ 1E6F	ẉ̀ 1E8F		Ḑ̣ A787					

̀ 0300	̇ 0310	̈ 0320	̉ 0330	̀ 0340	̂ 0350	̃ 0360		
́ 0301	̂ 0311	̊ 0321	̋ 0331	́ 0341	̇ 0351	̈ 0361		
̂ 0302	̇ 0312	̋ 0322	̌ 0332	̃ 0342	̂ 0352	̈ 0362		
̃ 0303	̇ 0313	̊ 0323	̋ 0333	̇ 0343	̊ 0353	̂ 0363		
̄ 0304	̇ 0314	̈ 0324	̉ 0334	̇ 0344	̊ 0354	̂ 0364		
̄ 0305	̇ 0315	̈ 0325	̉ 0335	̇ 0345	̊ 0355	̂ 0365		
̇ 0306	̊ 0316	̋ 0326	̌ 0336	̃ 0346	̂ 0356	̈ 0366		
̈ 0307	̊ 0317	̋ 0327	̌ 0337	̃ 0347	̈ 0357	̂ 0367		
̈ 0308	̊ 0318	̋ 0328	̌ 0338	̃ 0348	̈ 0358	̂ 0368		
̇ 0309	̊ 0319	̋ 0329	̌ 0339	̃ 0349	̊ 0359	̂ 0369		
̈ 030A	̊ 031A	̋ 032A	̌ 033A	̃ 034A	̈ 035A	̂ 036A		
̈ 030B	̊ 031B	̋ 032B	̌ 033B	̃ 034B	̊ 035B	̂ 036B		
̇ 030C	̊ 031C	̋ 032C	̌ 033C	̃ 034C	̊ 035C	̂ 036C		
̈ 030D	̊ 031D	̋ 032D	̌ 033D	̃ 034D	̊ 035D	̂ 036D		
̈ 030E	̊ 031E	̋ 032E	̌ 033E	̃ 034E	̊ 035E	̂ 036E		
̈ 030F	̊ 031F	̋ 032F	̌ 033F	̃ 034F	̊ 035F	̂ 036F		