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	0030	0040	0050	0060	0070	
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0021	0031	0041	0051	0061	0071	
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0022	0032	0042	0052	0062	0072	
#	3	ȝ	ȝ	c	s	
0023	0033	0043	0053	0063	0073	
\$	4	ȝ	ȝ	ð	t	
0024	0034	0044	0054	0064	0074	
%	5	ȝ	ȝ	e	u	
0025	0035	0045	0055	0065	0075	
&	6	ȝ	ȝ	f	v	
0026	0036	0046	0056	0066	0076	
'	7	ȝ	ȝ	g	w	
0027	0037	0047	0057	0067	0077	
(	8	ȝ	ȝ	h	ȝ	"
0028	0038	0048	0058	0068	0078	00A8
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0029	0039	0049	0059	0069	0079	
*	:	ȝ	ȝ	j	ȝ	
002A	003A	004A	005a	006A	007A	
+	;	ȝ	[	ѣ	{	
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002C	003C	004C	005C	006C	007C	
-	=	ȝ	]	m	}	
002D	003D	004D	005D	006D	007D	
.	>	ȝ	^	n	~	
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002E	003E	004E	005E	006E	007E	
002F	003F	004F	005F	006F		

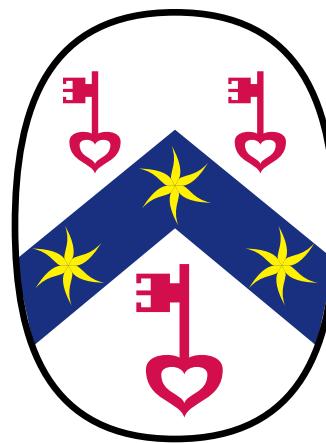
ȝ		à	
00C0		00E0	
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00C2	00D2	00E2	00F2
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00C3	00D3	00E3	00F3
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00C4	00D4	00E4	00F4
	ð		ð
	00D5		00F5
	ð		ö
	00D6		00F6

ȝ		è	
00C8		00E8	
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00C9	00D9	00E9	00F9
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00CA	00DA	00EA	00FA
ȝ	û	ë	û
00CB	00DB	00EB	00FB
ȝ	ü	ì	ü
00CC	00DC	00EC	00FC
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00CD		00ED	
ȝ		î	
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00CF	00DF	00EF	

# Bembino

## A new high-quality font



A Publication of the Research Group on Manuscript Evidence

<i>Ѐ</i>	<i>Ӑ</i>	<i>Ӗ</i>	<i>ӂ</i>	<i>ӂ</i>	<i>ӂ</i>
0400	0410	0420	0430	0440	0450
<i>Ӯ</i>	<i>Ӯ</i>	<i>Ӯ</i>	<i>Ӯ</i>	<i>Ӯ</i>	<i>Ӯ</i>
0401	0411	0421	0431	0441	0451
<i>Ӱ</i>	<i>Ӱ</i>	<i>Ӱ</i>	<i>Ӱ</i>	<i>Ӱ</i>	<i>Ӱ</i>
0412	0422	0432	0442		
<i>Ӳ</i>	<i>Ӳ</i>	<i>Ӳ</i>	<i>Ӳ</i>	<i>Ӳ</i>	<i>Ӳ</i>
0413	0423	0433	0443		
<i>Ӵ</i>	<i>Ӵ</i>	<i>Ӵ</i>	<i>Ӵ</i>	<i>Ӵ</i>	<i>Ӵ</i>
0414	0424	0434	0444		
<i>ӵ</i>	<i>ӵ</i>	<i>ӵ</i>	<i>ӵ</i>	<i>ӵ</i>	<i>ӵ</i>
0405	0415	0425	0435	0445	0455
<i>Ӷ</i>	<i>Ӷ</i>	<i>Ӷ</i>	<i>Ӷ</i>	<i>Ӷ</i>	<i>Ӷ</i>
0406	0416	0426	0436	0446	0456
<i>ӷ</i>	<i>ӷ</i>	<i>ӷ</i>	<i>ӷ</i>	<i>ӷ</i>	<i>ӷ</i>
0407	0417	0427	0437	0447	0457
<i>Ӹ</i>	<i>Ӹ</i>	<i>Ӹ</i>	<i>Ӹ</i>	<i>Ӹ</i>	<i>Ӹ</i>
0408	0418	0428	0438	0448	0458
<i>ӹ</i>	<i>ӹ</i>	<i>ӹ</i>	<i>ӹ</i>	<i>ӹ</i>	<i>ӹ</i>
0419	0429	0439	0449		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041A	042A	043A	044A		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041B	042B	043B	044B		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041C	042C	043C	044C		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041D	042D	043D	044D		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041E	042E	043E	044E		
<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>	<i>ӻ</i>
041F	042F	043F	044F		

Bembino  
A new high-quality font

Mildred Budny & Leslie French

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Set in RGME Bembino.

	o	@	p	'	n	
	0030	0040	0050	0060	0070	
!	1	A	2	a	q	
0021	0031	0041	0051	0061	0071	
"	2	B	R	b	r	
0022	0032	0042	0052	0062	0072	
#	3	C	S	c	s	
0023	0033	0043	0053	0063	0073	
\$	4	D	T	d	t	
0024	0034	0044	0054	0064	0074	
%	5	E	U	e	u	
0025	0035	0045	0055	0065	0075	
&	6	F	V	f	v	
0026	0036	0046	0056	0066	0076	
,	7	G	W	g	w	
0027	0037	0047	0057	0067	0077	
(	8	H	X	h	x	
0028	0038	0048	0058	0068	0078	
)	9	I	Y	i	y	
0029	0039	0049	0059	0069	0079	
*	:	J	Z	j	z	
002A	003A	004A	005A	006A	007A	
+	;	K	{	k	}	
002B	003B	004B	005B	006B	007B	
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002C	003C	004C	005C	006C	007C	
-	=	M	/	m	}	
002D	003D	004D	005D	006D	007D	
.	>	N	^	n	~	
002E	003E	004E	005E	006E	007E	
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002F	003F	004F	005F	006F	007F	

A	à		
00C0	00E0		
A	á	ñ	
00C1	00D1	00E1	00F1
A	â	ò	
00C2	00D2	00E2	00F2
A	ã	ó	
00C3	00D3	00E3	00F3
A	ä	ö	
00C4	00D4	00E4	00F4
A	å	ð	
00C5	00D5	00E5	00F5
	Ö		ö
00D6			00F6
C	c		
00C7	00E7		
E	è		
00C8	00E8		
É	é	ù	
00C9	00D9	00E9	00F9
Ê	ê	ú	
00CA	00DA	00EA	00FA
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00CE	00EE		
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00CF	00EF	00FF	

# 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 noticeable 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 inspired 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 be 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, starting on page 19. All contain the basic ASCII upper- and lower-case letters. The regular and italic also contain numbers, punctuation

Italic SmallCap

	<i>P</i> F770	<i>À</i> F780	<i>Đ</i> F790	<i>Ā</i> F7A0	<i>Ğ</i> F7B0	<i>Ł</i> F7C0	<i>Ț</i> F7D0	
<i>A</i> F761	<i>Q</i> F771	<i>Á</i> F781	<i>Ñ</i> F791	<i>Ă</i> F7A1	<i>Ğ</i> F7B1	<i>Ń</i> F7C1	<i>Ț</i> F7D1	
<i>B</i> F762	<i>R</i> F772	<i>Â</i> F782	<i>Ò</i> F792	<i>Ӓ</i> F7A2	<i>ߵ</i> F7B2	<i>߷</i> F7C2	<i>߸</i> F7D2	
<i>C</i> F763	<i>S</i> F773	<i>Ã</i> F783	<i>Ó</i> F793	<i>Ć</i> F7A3	<i>ߵ</i> F7B3	<i>߷</i> F7C3	<i>߸</i> F7D3	
<i>D</i> F764	<i>T</i> F774	<i>Ä</i> F784	<i>Ӯ</i> F794	<i>ߵ</i> F7A4	<i>ߵ</i> F7B4	<i>ߵ</i> F7C4	<i>߸</i> F7D4	
<i>E</i> F765	<i>U</i> F775	<i>Å</i> F785	<i>Ӧ</i> F795	<i>ߵ</i> F7A5	<i>ߵ</i> F7B5	<i>ߵ</i> F7C5	<i>߸</i> F7D5	
<i>F</i> F766	<i>V</i> F776	<i>Ӕ</i> F786	<i>Ӯ</i> F796	<i>ߵ</i> F7A6	<i>ߵ</i> F7B6	<i>ߵ</i> F7C6	<i>߸</i> F7D6	
<i>G</i> F767	<i>W</i> F777	<i>Ҫ</i> F787		<i>ߵ</i> F7A7	<i>ߵ</i> F7B7	<i>ߵ</i> F7C7	<i>߸</i> F7D7	
<i>H</i> F768	<i>X</i> F778	<i>Ѐ</i> F788	<i>ܶ</i> F798	<i>ܶ</i> F7A8	<i>ܶ</i> F7B8	<i>ܶ</i> F7C8	<i>ܶ</i> F7D8	
<i>I</i> F769	<i>Y</i> F779	<i>ܺ</i> F789	<i>ܺ</i> F799	<i>ܺ</i> F7A9	<i>ܺ</i> F7B9	<i>ܺ</i> F7C9	<i>ܺ</i> F7D9	
<i>J</i> F76A	<i>Z</i> F77A	<i>ܻ</i> F78A	<i>ܺ</i> F79A	<i>ܻ</i> F7AA	<i>ܻ</i> F7BA	<i>ܻ</i> F7CA	<i>ܻ</i> F7DA	
<i>K</i> F76B		<i>ܻ</i> F78B	<i>ܺ</i> F79B	<i>ܻ</i> F7AB	<i>ܻ</i> F7BB	<i>ܻ</i> F7CB	<i>ܻ</i> F7DB	
<i>L</i> F76C		<i>ܻ</i> F78C	<i>ܺ</i> F79C	<i>ܻ</i> F7AC	<i>ܻ</i> F7BC	<i>ܻ</i> F7CC	<i>ܻ</i> F7DC	
<i>M</i> F76D		<i>ܻ</i> F78D	<i>ܺ</i> F79D	<i>ܻ</i> F7AD	<i>ܻ</i> F7BD	<i>ܻ</i> F7CD	<i>ܻ</i> F7DD	
<i>N</i> F76E		<i>ܻ</i> F78E	<i>ܺ</i> F79E	<i>ܻ</i> F7AE	<i>ܻ</i> F7BE	<i>ܻ</i> F7CE		
<i>O</i> F76F		<i>ܻ</i> F78F	<i>ܺ</i> F79F	<i>ܻ</i> F7AF	<i>ܻ</i> F7BF	<i>ܻ</i> F7CF		

<i>È</i>	<i>A</i>	<i>P</i>	<i>a</i>	<i>p</i>	<i>è</i>			<i>ѓ</i>	<i>ѭ</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0400	0410	0420	0430	0440	0450			0E10	0E20	0E30	0E40	0E50	
<i>Ё</i>	<i>Б</i>	<i>С</i>	<i>б</i>	<i>с</i>	<i>ё</i>			<i>Ռ</i>	<i>Ւ</i>	<i>՞</i>	<i>՞</i>	<i>՞</i>	<i>՞</i>
0401	0411	0421	0431	0441	0451			0E01	0E11	0E21	0E31	0E41	0E51
	<i>B</i>	<i>T</i>	<i>բ</i>	<i>տ</i>				<i>Ջ</i>	<i>Վ</i>	<i>Դ</i>	<i>Ղ</i>	<i>Ղ</i>	<i>Ղ</i>
	0412	0422	0432	0442				0E02	0E12	0E22	0E32	0E42	0E52
<i>Ѓ</i>	<i>Г</i>	<i>Ү</i>	<i>զ</i>	<i>յ</i>				<i>Ջ</i>	<i>Ւ</i>	<i>Ճ</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0403	0413	0423	0433	0443				0E03	0E13	0E23	0E33	0E43	0E53
	<i>Դ</i>	<i>Փ</i>	<i>դ</i>	<i>փ</i>				<i>Թ</i>	<i>Թ</i>	<i>Թ</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
	0414	0424	0434	0444				0E04	0E14	0E24	0E34	0E44	0E54
<i>S</i>	<i>E</i>	<i>X</i>	<i>ե</i>	<i>ք</i>	<i>s</i>			<i>Թ</i>	<i>Թ</i>	<i>Թ</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0405	0415	0425	0435	0445	0455			0E05	0E15	0E25	0E35	0E45	0E55
<i>I</i>	<i>Ж</i>	<i>Ц</i>	<i>յշ</i>	<i>ւչ</i>	<i>i</i>			<i>Հ</i>	<i>Ե</i>	<i>Ժ</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0406	0416	0426	0436	0446	0456			0E06	0E16	0E26	0E36	0E46	0E56
<i>Ї</i>	<i>Յ</i>	<i>Կ</i>	<i>զ</i>	<i>ւ</i>	<i>ї</i>			<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0407	0417	0427	0437	0447	0457			0E07	0E17	0E27	0E37	0E47	0E57
<i>J</i>	<i>Ա</i>	<i>Ա</i>	<i>ս</i>	<i>սս</i>	<i>j</i>			<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
0408	0418	0428	0438	0448	0458			0E08	0E18	0E28	0E38	0E48	0E58
	<i>Յ</i>	<i>Յ</i>	<i>յ</i>	<i>ւյ</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
	0419	0429	0439	0449				0E09	0E19	0E29	0E39	0E49	0E59
<i>K</i>	<i>Ե</i>	<i>Ե</i>	<i>կ</i>	<i>ն</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041A	042A	043A	044A					0E0A	0E1A	0E2A	0E3A	0E4A	0E5A
<i>Լ</i>	<i>Ե</i>	<i>Լ</i>	<i>լ</i>	<i>ել</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041B	042B	043B	044B					0E0B	0E1B	0E2B		0E4B	0E5B
<i>M</i>	<i>Ե</i>	<i>Մ</i>	<i>մ</i>	<i>եմ</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041C	042C	043C	044C					0E0C	0E1C	0E2C		0E4C	
<i>Հ</i>	<i>Թ</i>	<i>Հ</i>	<i>հ</i>	<i>եհ</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041D	042D	043D	044D					0E0D	0E1D	0E2D		0E4D	
<i>Օ</i>	<i>Յ</i>	<i>Յ</i>	<i>օ</i>	<i>յօ</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041E	042E	043E	044E					0E0E	0E1E	0E2E		0E4E	
<i>Ռ</i>	<i>Յ</i>	<i>Ր</i>	<i>ռ</i>	<i>յր</i>				<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>	<i>՚</i>
041F	042F	043F	044F					0E0F	0E1F	0E2F	0E3F	0E4F	

# 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-caps. They also contain the presentation forms for ff, fi, fl, ffi, ffl, and ֆ 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 page, the textual content retains the two (or three) letters, for example when performing automated spelling checks.

Digraphs

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 Bembino 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, for example æ and œ. Typesetting systems lacking the correct glyphs may be able to present only ‘ae’ and ‘oe’. The second case is where what appears to be a pair of letters is treated as a single character, for example ‘ij’ 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). Bembino 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 *perchè* 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.

Italic Greek

$\acute{o}$	$\grave{v}$	$\grave{\omega}$	$\grave{a}$	$\grave{a}$	$\grave{\eta}$	$\grave{\omega}$	$\grave{a}$	$\grave{a}$	$\grave{a}$	$\grave{t}$	$\grave{v}$
1F40	1F50	1F60	1F70	1F80	1F90	1FA0	1FB0	1FC0	1FD0	1FE0	
$\acute{o}$	$\grave{v}$	$\grave{\omega}$	$\acute{a}$	$\grave{a}$	$\grave{\eta}$	$\grave{\omega}$	$\bar{a}$	$\tilde{a}$	$\bar{a}$	$\bar{t}$	$\bar{v}$
1F41	1F51	1F61	1F71	1F81	1F91	1FA1	1FB1	1FC1	1FD1	1FE1	
$\ddot{o}$	$\ddot{v}$	$\ddot{\omega}$	$\grave{e}$	$\grave{a}$	$\grave{\eta}$	$\grave{\omega}$	$\grave{a}$	$\grave{\eta}$	$\grave{t}$	$\grave{v}$	$\grave{\omega}$
1F42	1F52	1F62	1F72	1F82	1F92	1FA2	1FB2	1FC2	1FD2	1FE2	1FF2
$\ddot{o}$	$\ddot{v}$	$\ddot{\omega}$	$\acute{e}$	$\grave{a}$	$\grave{\eta}$	$\grave{\omega}$	$\acute{a}$	$\eta$	$\acute{t}$	$\acute{v}$	$\acute{\omega}$
1F43	1F53	1F63	1F73	1F83	1F93	1FA3	1FB3	1FC3	1FD3	1FE3	1FF3
$\check{o}$	$\check{v}$	$\check{\omega}$	$\grave{\eta}$	$\check{a}$	$\check{\eta}$	$\check{\omega}$	$\acute{a}$	$\acute{\eta}$		$\dot{q}$	$\acute{\omega}$
1F44	1F54	1F64	1F74	1F84	1F94	1FA4	1FB4	1FC4		1FE4	1FF4
$\check{o}$	$\check{v}$	$\check{\omega}$	$\acute{\eta}$	$\check{a}$	$\check{\eta}$	$\check{\omega}$				$\dot{q}$	
1F45	1F55	1F65	1F75	1F85	1F95	1FA5				1FE5	
	$\check{v}$	$\check{\omega}$	$\grave{i}$	$\check{a}$	$\check{\eta}$	$\check{\omega}$	$\check{a}$	$\tilde{\eta}$	$\tilde{t}$	$\tilde{v}$	$\tilde{\omega}$
	1F56	1F66	1F76	1F86	1F96	1FA6	1FB6	1FC6	1FD6	1FE6	1FF6
	$\check{v}$	$\check{\omega}$	$\acute{i}$	$\check{a}$	$\check{\eta}$	$\check{\omega}$	$\check{a}$	$\tilde{\eta}$	$\tilde{t}$	$\tilde{v}$	$\tilde{\omega}$
	1F57	1F67	1F77	1F87	1F97	1FA7	1FB7	1FC7	1FD7	1FE7	1FF7
$\grave{O}$		$\grave{\Omega}$	$\grave{o}$	$\grave{A}$	$\grave{H}$	$\grave{\Omega}$	$\grave{A}$	$\grave{E}$	$\grave{I}$	$\grave{Y}$	$\grave{O}$
1F48		1F68	1F78	1F88	1F98	1FA8	1FB8	1FC8	1FD8	1FE8	1FF8
$\acute{O}$	$\acute{Y}$	$\acute{\Omega}$	$\acute{o}$	$\acute{A}$	$\acute{H}$	$\acute{\Omega}$	$\acute{A}$	$\acute{E}$	$\acute{I}$	$\acute{Y}$	$\acute{O}$
1F49	1F59	1F69	1F79	1F89	1F99	1FA9	1FB9	1FC9	1FD9	1FE9	1FF9
$\grave{O}$		$\grave{\Omega}$	$\grave{v}$	$\grave{A}$	$\grave{H}$	$\grave{\Omega}$	$\grave{A}$	$\grave{H}$	$\grave{I}$	$\grave{Y}$	$\grave{\Omega}$
1F4A		1F6A	1F7A	1F8A	1F9A	1FAA	1FBA	1FCA	1FDA	1FEA	!FFA
$\grave{O}$	$\grave{Y}$	$\grave{\Omega}$	$\acute{v}$	$\grave{A}$	$\grave{H}$	$\grave{\Omega}$	$A$	$H$	$I$	$Y$	$\Omega$
1F4B	1F5B	1F6B	1F7B	1F8B	1F9B	1FAB	1FBB	1FCB	1FDB	1FEB	1FFB
$\grave{O}$		$\grave{\Omega}$	$\grave{\omega}$	$\grave{A}$	$\grave{H}$	$\grave{\Omega}$	$A$	$H$		$P$	$\grave{\Omega}$
1F4C		1F6C	1F7C	1F8C	1F9C	1FAC	1FBC	1FCC		1FEC	1FFC
$\grave{O}$	$\grave{Y}$	$\grave{\Omega}$	$\acute{\omega}$	$\grave{A}$	$\grave{H}$	$\grave{\Omega}$	,	"	"	"	"
1F4D	1F5D	1F6D	1F7D	1F8D	1F9D	1FAD	1FBD	1FCD	1FDD	1FED	1FFD
		$\check{\Omega}$		$\check{A}$	$\check{H}$	$\check{\Omega}$		"	"	"	"
		1F6E		1F8E	1F9E	1FAE	1FBE	1FCE	1FDE	1FEE	1FFE
	$\check{Y}$	$\check{\Omega}$		$\check{A}$	$\check{H}$	$\check{\Omega}$	,	"	"	"	"
	1F5E	1F6E		1F8E	1F9E	1FAE	1FBE	1FCE	1FDE	1FEE	1FFE

	<i>ī</i>	$\Pi$	<i>v̄</i>	$\pi$	
	0390	03A0	03B0	03C0	
	<i>A</i>	$P$	<i>α</i>	$\varrho$	
	0391	03A1	03B1	03C1	
	<i>B</i>		$\beta$	$\varsigma$	$\Upsilon$
	0392		03B2	03C2	03D2
	$\Gamma$	$\Sigma$	$\gamma$	$\sigma$	$\Upsilon$
	0393	03A3	03B3	03C3	03D3
,	,	$\Delta$	$T$	$\delta$	$\tau$
0374	0384	0394	03A4	03B4	03C4
,	,	$E$	$Y$	$\varepsilon$	$\upsilon$
0375	0385	0395	03A5	03B5	03C5
	$A$	$Z$	$\Phi$	$\zeta$	$\varphi$
	0386	0396	03A6	03B6	03C6
.	$H$	$X$	$\eta$	$\chi$	$\chi$
0387	0397	03A7	03B7	03C7	03D7
	$E$	$\Theta$	$\Psi$	$\theta$	$\psi$
0388	0398	03A8	03B8	03C8	
	$H$	$I$	$\Omega$	$\iota$	$\omega$
0389	0399	03A9	03B9	03C9	
,	$T$	$K$	$\ddot{I}$	$\kappa$	$\ddot{\iota}$
037A	038A	039A	03AA	03BA	03CA
	$A$	$\ddot{Y}$	$\lambda$	$\ddot{u}$	
	039B	03AB	03BB	03CB	
	$O$	$M$	$\acute{a}$	$\mu$	$\acute{o}$
	038C	039C	03AC	03BC	03CC
	$N$	$\acute{e}$	$\nu$	$\acute{u}$	
	039D	03AD	03BD	03CD	
;	$\acute{Y}$	$\Xi$	$\acute{\eta}$	$\xi$	$\acute{\omega}$
037E	038E	039E	03AE	03BE	03CE
	$\Omega$	$O$	$\acute{i}$	$o$	
	038F	039F	03AF	03BF	

$\grave{a}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F00	1F10	1F20	1F30
$\grave{\alpha}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F01	1F11	1F21	1F31
$\grave{\alpha}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F02	1F12	1F22	1F32
$\grave{\alpha}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F03	1F13	1F23	1F33
$\grave{\alpha}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F04	1F14	1F24	1F34
$\grave{\alpha}$	$\grave{\varepsilon}$	$\grave{\eta}$	$\grave{i}$
1F05	1F15	1F25	1F35
$\grave{\alpha}$		$\tilde{\eta}$	$\tilde{i}$
1F06		1F26	1F36
$\grave{\alpha}$		$\tilde{\eta}$	$\tilde{i}$
1F07		1F27	1F37
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F08	1F18	1F28	1F38
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F09	1F19	1F29	1F39
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F0A	1F1A	1F2A	1F3A
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F0B	1F1B	1F2B	1F3B
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F0C	1F1C	1F2C	1F3C
$\grave{A}$	$\grave{E}$	$\grave{H}$	$\grave{I}$
1F0D	1F1D	1F2D	1F3D
$\grave{A}$		$\tilde{H}$	$\tilde{I}$
1F0E		1F2E	1F3E
$\grave{A}$		$\tilde{H}$	$\tilde{I}$
1F0F		1F2F	1F3F

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  $\ddot{u}$  represents the second derivative of the vector  $\mathbf{u}$  with respect to time. Constructing the forms required 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 noticeable 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 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 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** (<200E>). Left, right and Right

left marker. Used to switch directions for Hebrew and Arabic texts.

$\bar{A}$	$\bar{D}$	$\dot{G}$	$\dot{I}$	$\dot{l}$	$\check{O}$	$\check{S}$	$\check{U}$		$\grave{o}$	
0100	0110	0120	0130	0140	0150	0160	0170		0300	
$\bar{a}$	$\bar{d}$	$\dot{g}$	$\iota$	$\dot{L}$	$\check{o}$	$\check{s}$	$\check{u}$		$\acute{o}$	
0101	0111	0121	0131	0141	0151	0161	0171		0301	
$\check{A}$	$\check{E}$	$\dot{G}$	$\dot{J}$	$\dot{t}$	$\text{Œ}$	$\dot{T}$	$\dot{U}$		$\hat{o}$	
0102	0112	0122	0132	0142	0152	0162	0172		0302	
$\check{a}$	$\bar{e}$	$\dot{g}$	$\ddot{y}$	$\acute{N}$	$\alpha$	$\dot{t}$	$\dot{u}$		$\tilde{o}$	
0103	0113	0123	0133	0143	0153	0163	0173		0313	0323
$\check{A}$	$\check{E}$	$\hat{H}$	$\hat{J}$	$\acute{n}$	$\acute{R}$	$\check{T}$	$\hat{W}$		$\bar{o}$	
0104	0114	0124	0134	0144	0154	0164	0174		0313	
$\check{q}$	$\check{e}$	$\hat{h}$	$\hat{j}$	$\acute{N}$	$\acute{r}$	$t'$	$\hat{w}$		$\bar{o}$	0345
0105	0115	0125	0135	0145	0155	0165	0175		0306	
$\acute{C}$	$\acute{E}$	$\text{H}$	$K$	$\eta$	$R$	$F$	$\acute{Y}$	$C$	$\check{o}$	
0106	0116	0126	0136	0146	0156	0166	0176	0186	0326	
$\acute{c}$	$\acute{e}$	$\acute{h}$	$\acute{k}$	$\acute{N}$	$\acute{r}$	$t$	$\acute{y}$		$\check{o}$	
0107	0117	0127	0137	0147	0157	0167	0177		0307	0327
$\hat{C}$	$\acute{E}$	$\check{I}$	$\kappa$	$\check{n}$	$\check{R}$	$\check{U}$	$\acute{Y}$		$\check{o}$	
0108	0118	0128	0138	0148	0158	0168	0178		0308	0328
$\hat{c}$	$\acute{\epsilon}$	$\acute{i}$	$\acute{L}$	$\acute{n}$	$\acute{r}$	$\acute{u}$	$\acute{Z}$		$\check{o}$	
0109	0119	0129	0139	0149	0159	0169	0179		030A	
$\dot{C}$	$\acute{E}$	$\bar{I}$	$\acute{l}$	$\acute{N}$	$\acute{S}$	$\bar{U}$	$\acute{z}$		$\check{o}$	
010A	011A	012A	013A	014A	015A	016A	017A		030B	
$\dot{c}$	$\acute{e}$	$\bar{i}$	$\acute{L}$	$\acute{\eta}$	$\acute{s}$	$\bar{u}$	$\dot{Z}$		$\check{o}$	
010B	011B	012B	013B	014B	015B	016B	017B		030C	
$\check{C}$	$\hat{G}$	$\check{I}$	$\acute{J}$	$\acute{O}$	$\hat{S}$	$\check{U}$	$\acute{z}$		$\acute{x}$	
010C	011C	012C	013C	014C	015C	016C	017C		$\check{o}$	
$\check{c}$	$\acute{g}$	$\acute{i}$	$\acute{L}$	$\bar{o}$	$\acute{s}$	$\acute{u}$	$\acute{Z}$		$\acute{o}$	
010D	011D	012D	013D	014D	015D	016D	017D		$\acute{o}$	
$\check{D}$	$\check{G}$	$\acute{I}$	$\acute{l}$	$\acute{O}$	$\acute{S}$	$\acute{U}$	$\acute{z}$	$Z$	$\acute{o}$	
010E	011E	012E	013E	014E	015E	016E	017E	018E	018F	01BF
$\acute{d}$	$\acute{g}$	$\acute{i}$	$\acute{L}$	$\acute{o}$	$\acute{s}$	$\acute{u}$	$\acute{f}$	$\acute{p}$		
010F	011F	012F	013F	014F	015F	016F	017F	018F		

	<i>o</i>	<i>@</i>	<i>P</i>	<i>`</i>	<i>p</i>	<i>°</i>	<i>À</i>	<i>D</i>	<i>à</i>	<i>ð</i>		
0020	0030	0040	0050	0060	0070	00A0	00B0	00C0	00D0	00E0	00F0	
!	1	A	Q	a	q	i	±	Á	Ñ	á	ñ	
0021	0031	0041	0051	0061	0071	00A1	00B1	00C1	00D1	00E1	00F1	
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0022	0032	0042	0052	0062	0072	00A2	00B2	00C2	00D2	00E2	00F2	
#	3	C	S	c	s	ƒ	³	Ã	Ó	ã	ó	
0023	0033	0043	0053	0063	0073	00A3	00B3	00C3	00D3	00E3	00F3	
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0024	0034	0044	0054	0064	0074	00A4	00B4	00C4	00D4	00E4	00F4	
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0025	0035	0045	0055	0065	0075	00A5	00B5	00C5	00D5	00E5	00F5	
&	6	F	V	f	v	'	¶	Æ	Ö	æ	ö	
0026	0036	0046	0056	0066	0076	00A6	00B6	00C6	00D6	00E6	00F6	
'	7	G	W	g	w	§	·	Ç	X	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	
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002C	003C	004C	005C	006C	007C	00AC	00BC	00CC	00DC	00EC	00FC	
-	=	M	J	m	}		½	Í	Ý	í	ý	
002D	003D	004D	005D	006D	007D	00AD	00BD	00CD	00DD	00ED	00FD	
.	>	N	^	n	~	®	¾	Î	P	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	



## 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 'T', 'T' and 'I', 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 'I' 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.

The authors of Bembino may be contacted by email as follows:

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 Leslie French: codeinc @ gmail.com

## SmallCaps

	P F770	À F780	Đ F790	Ā F7A0	᷇ F7B0	᷈ F7C0	᷉ F7D0
A F761	Q F771	Á F781	᷎ F791	᷏ F7A1	᷌ F7B1	᷍ F7C1	᷎᷉ F7D1
B F762	R F772	᷐ F782	᷑ F792	᷒ F7A2	᷎᷈ F7B2	᷒᷉ F7C2	᷑᷉ F7D2
C F763	S F773	᷌ F783	Ó F793	Ć F7A3	᷌᷈ F7B3	᷉᷍ F7C3	᷎᷌᷉ F7D3
D F764	T F774	᷋ F784	ᷔ F794	᷌᷈ F7A4	᷌᷉ F7B4	᷎᷌᷉ F7C4	᷎᷌᷉ F7D4
E F765	U F775	᷅ F785	ᷔ᷉ F795	᷌᷈ F7A5	᷌᷉ F7B5	ᷔ᷉ F7C5	᷎᷌᷉ F7D5
F F766	V F776	᷄᷈ F786	ᷔ᷉ F796	᷌᷈ F7A6	᷌᷉ F7B6	ᷔ᷉ F7C6	᷎᷌᷉ F7D6
G F767	W F777	᷊᷌ F787		᷌᷉ F7A7	᷌᷉ F7B7	᷌᷉ F7C7	᷎᷌᷉ F7D7
H F768	X F778	᷃᷈ F788	ᷔ᷉ F798	᷌᷈ F7A8	᷌᷉ F7B8	᷌᷈᷉ F7C8	᷎᷌᷉ F7D8
I F769	Y F779	᷄᷈ F789	ᷔ᷉ F799	᷌᷈ F7A9	᷌᷉ F7B9	᷌᷉ F7C9	᷎᷌᷉ F7D9
J F76A	Z F77A	᷄᷈ F78A	ᷔ᷉ F79A	᷌᷈ F7AA	᷌᷉ F7BA	᷌᷉ F7CA	᷎᷌᷉ F7DA
K F76B		᷄᷈ F78B	ᷔ᷉ F79B	᷌᷈ F7AB	᷌᷉ F7BB	᷌᷉ F7CB	᷎᷌᷉ F7DB
L F76C		᷃᷈ F78C	ᷔ᷉ F79C	᷌᷈ F7AC	᷌᷉ F7BC	᷌᷉ F7CC	᷎᷌᷉ F7DC
M F76D		᷃᷈ F78D	ᷔ᷉ F79D	᷌᷈ F7AD	᷌᷉ F7BD	᷌᷈᷉ F7CD	᷎᷌᷉ F7DD
N F76E		᷄᷈ F78E	ᷔ᷉ F79E	᷌᷈ F7AE	᷌᷉ F7BE	᷌᷈᷉ F7CE	
O F76F		᷄᷈ F78F	ᷔ᷉ F79F	᷌᷈ F7AF	᷌᷉ F7BF	᷌᷈᷉ F7CF	

I 2160	i 2170	$\leftarrow$ 2190	$\Leftarrow$ 21D0	$\forall$ 2200	$\angle$ 2220	$\neq$ 2260	$\square$ 2290	$\backslash^0$ 2400	$\bullet$ 25D0	$\varphi$ 2640	$\times$ 2650
II 2161	ii 2171	$\uparrow$ 2191	$\Uparrow$ 21D1	$\Sigma$ 2211			$\sqsubseteq$ 2291	$\square$ 25A1	$\bullet$ 25D1	$\oplus$ 2641	$\mathbb{y}$ 2651
III 2162	iii 2172	$\rightarrow$ 2192	$\Rightarrow$ 21D2	- 2212	$\approx$ 2242	$\subset$ 2282	$\sqsupseteq$ 2292	$\triangle$ 25B3	$\beth$ 263D	$\sigma$ 2642	$\mathbb{w}$ 2652
$\frac{1}{3}$ 2153	IV 2163	$\downarrow$ 2193	$\Downarrow$ 21D3	$\exists$ 2203	$\simeq$ 2243	$\supset$ 2283		$\mathbb{c}$ 2423	$\beth$ 263E	$\mathfrak{y}$ 2643	$\mathfrak{p}$ 2653
$\frac{2}{3}$ 2154	V 2164	$\leftrightarrow$ 2194	$\Leftarrow$ 21A4		$\leq$ 2264	T 22A4			$\mathfrak{h}$ 2644	$\mathfrak{p}$ 26B3	
$\frac{1}{5}$ 2155	VI 2165	$\updownarrow$ 2195	$\uparrow$ 21A5	$\emptyset$ 2205	$\geq$ 2265	$\perp$ 22A5			$\mathfrak{H}$ 2645	$\mathfrak{o}$ 26E2	
$\frac{2}{5}$ 2156	VII 2166	$\nwarrow$ 2196	$\rightarrowtail$ 21A6	$\Delta$ 2206	:	$\subseteq$ 2286			$\Psi$ 2646		
$\frac{3}{5}$ 2157	VIII 2167	$\nearrow$ 2197	$\downarrow$ 21A7	$\nabla$ 2207	$\wedge$ 2227	$\supseteq$ 2287			$\mathfrak{w}$ 2647		
$\frac{4}{5}$ 2158	IX 2168	$\searrow$ 2198		$\in$ 2208	V 2228	$\approx$ 2248	$\odot$ 263A		$\mathfrak{p}$ 2648	$\mathfrak{f}$ 26B8	
$\frac{1}{6}$ 2159	X 2169	$\swarrow$ 2199			$\cap$ 2229		$\odot$ 2639	$\odot$ 2609	$\mathfrak{r}$ 2649	$*$ 26B9	
$\frac{5}{6}$ 215A	XI 216A	$\leftrightarrow$ 219A		$\in$ 220A	$\checkmark$ 221A	$\cup$ 222A		$\mathfrak{n}$ 240A	$\mathfrak{o}$ 260A	$\mathfrak{p}$ 264A	$\mathfrak{x}$ 26BA
$\frac{1}{8}$ 215B	XII 216B	$\rightarrowtail$ 219B		$\vee$ 22BB	$\check{v}$ 221B	$\int$ 222B	$\ddot{\cdot}$ 223B	$\circ$ 25CB	$\mathfrak{y}$ 260B	$\mathfrak{d}$ 264B	$\mathfrak{x}$ 26BB
$\frac{3}{8}$ 215C	L 216C		$\leftrightarrow$ 21D4				$\sim$ 223C	$\cdot$ 25CC	$\mathfrak{s}$ 260C	$\mathfrak{z}$ 264C	$\mathfrak{q}$ 26BC
$\frac{5}{8}$ 215D	C 216D		$\leftrightarrow$ 21AE						$\mathfrak{o}$ 260D	$\mathfrak{m}$ 264D	
$\frac{7}{8}$ 215E	D 216E			$\Pi$ 220F		$\sqsubset$ 228F	$\sqsupseteq$ 22FF	$\bullet$ 25CF	$\varphi$ 263F	$\Omega$ 264E	
$\frac{1}{Y}$ 215F	M 216F								$\mathfrak{m}$ 264F		

# 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 page 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" (Τῶν περὶ τὰ ζῷα ιστορίων). 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, "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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mqsp	-	‡				1		B	B
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ensp	—	•	'			2		TM	
2002	2012	2022	2032			2082		2122	
emsp	—	►	”			3			{
2003	2013	2023	2033			2083			2983
3msp	—	.	””	/	4	4	£	Z	T
2004	2014	2024	2034	2044	2074	2084	20A4	2124	2144
4msp	—	..	`	[	5	5		N	
2005	2015	2025	2035	2045	2075	2085		2115	
6msp		...	””	]	6	6		Ω	F
2006	2016	2026	2036	2046	2076	2086		2126	2146
fsp	=	.	”””		7	7		P	
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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	”				)	)		H	R
200E	201E				207E	208E		210D	211D
rlm	“				n				R
200F	201F					207F		211E	

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

## Old English

ju:das 'kwæθ to: him. næs na: se: 'skarið. 'driçtən, 'hwæt is jə'wɔrdən θæt θu:  
wilt θe: 'sylfnə jə'swutlijən us næs 'míddanærdə.

ju:das 'kwæθ to: him. næs na: se: 'skarið. 'driçtən, 'hwæt is jə'wɔrdən θæt θu:  
wilt θe: 'sylfnə jə'swutlijən us næs 'míddanærdə.

se: 'hæ:lənd 'þndswarðə nnd 'kwæθ him; jif hwa: me: 'løvaθ he: 'hilt mi:nə  
'spræ:tʃə nnd mi:n 'fædər 'løvaθ hinə nnd we: 'komaθ to: him nnd we: 'wyrkiaθ  
'eardvñgstoe: mid him.

## Middle English

'hwan θat 'a:pril wɪθ his 'ʃurəs so:tə  
θə 'droxt of 'martʃ haθ 'persəd to: ðə 'ro:tə  
and 'ba:ðəd 'e:vrɪ 'væin in 'switʃ lɪ'ku:r  
of 'hwitʃ vərtiu en'dzəndərd is θə 'flur:  
hwan zef'ros ek wɪθ his 'swetə 'bre:θ

## Shakespeare

nəu o:ər ðe wyn ha:f wyrld  
nə:tər si:mz dəd, ənd wɪkɪd dre:mz əbjuz  
ðe kyrteind sli:p: wɪtʃkraft səlibre:ts  
pə:l hækəts pərəriż: ənd wiðərd myrdər,  
əlarəmd bəi hɪz sentinel, ðe wulf,

## Modern English

ai 'do:nt 'ju:ʒəlī kəm 'hɪ:r bai 'ka:r — ðe 'tre:nz ə 'gud 'di:l mɔ:r kən've:njent wən  
wi:r 'spendij ə 'fju: 'auərz in 'ta:n wið ðə 'bɔ:z. ju: 'haf tə bi: 'so 'ərlı if ju: 'wənt  
tə 'famd ə 'parkin ples. ai 'θi:nk 'mo:st 'gara:dʒiz 'fə:rdz 'far tu: 'məts fər 'pur 'fo:k  
laik 'es. ðe 're:lfe:rz 'tʃi:pər — so: 'ʃal wi: 'mi:t et ðe 'ste:ʃen?

ΤΩΝ ΠΕΡΙ  
ΤΑ ΖΩΙΑ ΙΣΤΟΡΙΩΝ  
Δ

Περὶ μὲν οὗν τῶν ἐναίμων ζῷων ὅσα τε κοινὰ ἔχουσι μέρη καὶ ὅσα ἴδια ἔκαστον γένος, καὶ τῶν ἀνομοιομερῶν καὶ τῶν ὁμοιομερῶν, καὶ ὅσα ἑκτὸς καὶ ὅσα ἐντός, εἴρηται πρότερον· περὶ δὲ τῶν ἀναίμων ζῷων νυνὶ λεκτέον. ἔστι δὲ γένη ταῦτα πλείω, ἐν μὲν τὸ τῶν καλουμένων μαλακίων· ταῦτα δ' ἔστιν ὅσα ἄναιμα ὄντα ἑκτὸς ἔχει τὸ σαρκῶδες, ἐντὸς δ' εἴ τι ἔχει στερεόν, καθάπερ καὶ τὰ ἔναιμα τῶν ζῷων, οἷον τὸ τῶν σηπιῶν γένος. ἐν δὲ τὸ τῶν μαλακοστράκων· ταῦτα δ' ἔστιν ὅσων ἑκτὸς τὸ στερεόν, ἐντὸς δὲ τὸ μαλακὸν καὶ σαρκῶδες· τὸ δὲ σκληρὸν αὐτῶν ἔστιν οὐ θραυστὸν ἀλλά θλαστόν, οἷόν ἔστι τό τε τῶν καράβων γένος καὶ τὸ τῶν καρκίνων. ἔτι δὲ τὰ ὀστρακόδερμα· τοιαῦτα δ' ἔστιν ὡν ἐντὸς μὲν τὸ σαρκῶδές ἔστιν, ἑκτὸς δὲ τὸ στερεόν, θραυστὸν ὃν καὶ κατακτόν, ἀλλ' οὐ θλαστόν· τοιοῦτον δὲ τὸ τῶν κοχλιῶν γένος καὶ τὸ τῶν ὀστρέων ἔστιν. τέταρτον δὲ τὸ τῶν ἐντόμων, ὃ πολλὰ καὶ ἀνόμοια περιείληφεν εἰδὴ ζῷων. ἔστι δ' ἐντομα ὅσα κατὰ τούνομά ἔστιν ἐντομάς ἔχοντα ἥ ἐν τοῖς ὑπτίοις ἥ ἐν τοῖς πρανέσιν ἥ ἐν ἀμφοῖν, καὶ οὕτε ὀστῶδες ἔχει κεχωρισμένο οὕτε σαρκῶδες, ἀλλὰ μέσον ἀμφοῖν· τὸ σῶμα γὰρ ὁμοίως καὶ ἔσω καὶ ἔξω σκληρόν ἔστιν αὐτῶν. ἔστι δ' ἐντομα καὶ ἄπτερα, οἷον ἵουλος καὶ σκολόπενδρα, καὶ πτερωτά, οἷον μέλιττα καὶ μηλολόνθη καὶ σφήξ· καὶ ταῦτο δὲ γένος ἔστι καὶ πτερωτὸν καὶ ἄπτερον, οἷον μύρμηκές εἰσι καὶ πτερωτοὶ καὶ ἄπτεροι, καὶ αἱ καλούμεναι πυγολαμπίδες.

Τῶν μὲν οὗν μαλακίων καλουμένων τὰ μὲν ἔξω μόρια τάδ' ἔστιν, ἐν μὲν οἱ ὄνομαζόμενοι πόδες, δεύτερον δὲ τούτων ἔχομένη ἥ κεφαλή, τρίτον δὲ τὸ κύτος, ὃ περιέχει τάντος, καὶ καλοῦσιν αὐτὸ κεφαλήν τινες, οὐκ ὄρθως καλοῦντες· ἔτι δὲ πτερύγια κύκλῳ περὶ . . .

	ぐ	だ	ば	む	る	=	グ	ダ	バ	ム	ヰ	
	3050	3060	3070	3080	3090	30A0	30B0	30C0	30D0	30E0	30F0	
あ	け	ち	ぱ	め	ゑ	ア	ケ	チ	パ	メ	ヰ	
3041	3051	3061	3071	3081	3091	30A1	30B1	30C1	30D1	30E1	30F1	、 3001
あ	げ	ぢ	ひ	も	を	ア	ゲ	ヂ	ヒ	モ	ヲ	。
3042	3052	3062	3072	3082	3092	30A2	30B2	30C2	30D2	30E2	30F2	3002
い	こ	つ	び	や	ん	ア	コ	ツ	ビ	ヤ	ン	
3043	3053	3063	3073	3083	3093	30A3	30B3	30C3	30D3	30E3	30F3	
い	ご	つ	び	や		イ	ゴ	ツ	ビ	ヤ	ヴ	
3044	3054	3064	3074	3084		30A4	30B4	30C4	30D4	30E4	30F4	
う	さ	づ	ふ	ゆ		イ	サ	ヅ	フ	ユ		
3045	3055	3065	3075	3085		30A5	30B5	30C5	30D5	30E5		
う	ざ	て	ぶ	ゆ		ウ	ザ	テ	ブ	ユ		
3046	3056	3066	3076	3086		30A6	30B6	30C6	30D6	30E6		
え	し	で	ぶ	よ		エ	シ	デ	プ	ヨ	ヴ	
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	ヰ	
3049	3059	3069	3079	3089		30A9	30B9	30C9	30D9	30E9	30F9	
お	ず	な	ペ	り		オ	ズ	ナ	ペ	リ	ヂ	
304A	305A	306A	307A	308A		30AA	30BA	30CA	30DA	30EA	30FA	
か	せ	に	ほ	る	"	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	一	
304C	305C	306C	307C	308C	309C	30AC	30BC	30CC	30DC	30EC	30FC	
き	そ	ね	ぼ	ろ	♪	キ	ソ	ネ	ボ	ロ	ヽ	
304D	305D	306D	307D	308D	309D	30AD	30BD	30CD	30DD	30ED	30FD	
ぎ	ぞ	の	ま	わ	ゞ	ギ	ゾ	ノ	マ	ワ	ヽ	
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		

	ີ	ັ	ິ	ຶ	ົ
	0E10	0E20	0E30	0E40	0E50
ໆ	໇	່	້	໊	໋
0E01	0E11	0E21	0E31	0E41	0E51
໌	ໍ	໎	໏	໐	໒
0E02	0E12	0E22	0E32	0E42	0E52
໌	ໆ	ໍ	ແ	ໆ	ໃ
0E03	0E13	0E23	0E33	0E43	0E53
່	້	໊	່	້	່
0E04	0E14	0E24	0E34	0E44	0E54
່	້	໊	່	້	່
0E05	0E15	0E25	0E35	0E45	0E55
ໍ	້	໊	່	້	ໍ
0E06	0E16	0E26	0E36	0E46	0E56
ໍ	້	໊	່	້	ໍ
0E07	0E17	0E27	0E37	0E47	0E57
່	້	໊	່	້	່
0E08	0E18	0E28	0E38	0E48	0E58
ໍ	້	໊	່	້	ໍ
0E09	0E19	0E29	0E39	0E49	0E59
ໍ	້	໊	່	້	ໍ
0E0A	0E1A	0E2A	0E3A	0E4A	0E5A
ໍ	້	໊	່	້	ໍ
0E0B	0E1B	0E2B		່	້
ໍ	້	໊		່	້
0E0C	0E1C	0E2C		່	້
ໍ	້	໊		່	້
0E0D	0E1D	0E2D		່	້
ໍ	້	໊		່	້
0E0E	0E1E	0E2E		່	້
ໍ	້	໊	່	້	ໍ
0E0F	0E1F	0E2F	0E3F	0E4F	

百	管	行	資	這	雨
767E	7BA1	884C	8CC7	9019	96E8
的	系	被	赤	進	雲
7684	7CFB	88AB	8D64	9032	96F2
目	給	裡	起	過	電
76EE	7D66	88E1	8D77	904E	96FB
租	經	西	足	道	青
76F8	7D93	897F	8DB3	9053	9752
看	美	要	路	還	面
770B	7F8E	8981	8DEF	9084	9762
真	老	見	車	那	音
771F	8001	898B	8ECA	90A3	97F3
知	者	覺	辵	部	題
77E5	8005	89BA	8FB6	90E8	984C
石	而	計		都	風
77F3	800C	8A08		90FD	98A8
科	耳	訊		重	體
79D1	8033	8A0A		91CD	9AD4
程	聽	話		金	高
7A0B	807D	8A71		91D1	9AD8
種	能	該		長	鳳
7A2E	80FD	8A72		9577	9CF3
站	自	語		門	麼
7AD9	81EA	8A9E		9580	9EBC
章	與	說		958B	9EDE
7AE0	8207	8AAA		9593	9F8D
竹	花	請		95DC	龍
7AF9	82B1	8ACB		95DC	
第	華	論		9673	
7B2C	83EF	8AD6			
等	著	謝			
7B49	8457	8B1D			

## ΤΩΝ ΠΕΡΙ

### ΤΑ ΖΩΙΑ ΙΣΤΟΡΙΩΝ

Δ

Περὶ μὲν οὖν τῶν ἑναίμων ζώων ὅσα τε κοινὰ ἔχουσι μέρη καὶ ὅσα ἴδια ἔκαστον γένος, καὶ τῶν ἀνομοιομερῶν καὶ τῶν ὁμοιομερῶν, καὶ ὅσα ἐκτὸς καὶ ὅσα ἐντὸς εἴρηται πρότερον περὶ δὲ τῶν ἀναίμων ζώων νυνὶ λεκτέον. ἔστι δὲ γένη ταῦτα πλείω, ἐν μὲν τῷ τῶν καλουμένων μαλακίων ταῦτα δ’ εἴ τι ἔχει στερεόν, καθάπερ καὶ τὰ ἑναίμα τῶν ζώων, οἷον τὸ τῶν σηπιῶν γένος. ἐν δὲ τῷ τῶν μαλακοστράκων ταῦτα δ’ ἔστιν ὅσων ἐκτὸς τὸ στερεόν, ἐντὸς δὲ τῷ μαλακὸν καὶ σαρκῶδες τὸ δὲ σκληρόν αὐτῶν ἔστιν οὐ θραυστὸν ἄλλα θλαστόν, οἷόν ἔστι τό τε τῶν καράβων γένος καὶ τὸ τῶν καπκίνων. ἔτι δὲ τὰ ὀστρακόδερμα· τοιαῦτα δ’ ἔστιν ὕν ἐντὸς μὲν τῷ σαρκῶδές ἔστιν, ἐκτὸς δὲ τὸ στερεόν, θραυστὸν δὲν καὶ κατακτόν, ἄλλ’ οὐ θλαστόν τοιοῦτον δὲ τὸ τῶν κοχλιῶν γένος καὶ τὸ τῶν ὀστρέων ἔστιν. τέταρτον δὲ τὸ τῶν ἑντόμων, δὲ πολλὰ καὶ ἀνόμοια περιείληφεν εἴδη ζώων. ἔστι δὲν τοιαῦτα δ’ ἔστιν κατὰ τούνομά ἔστιν ἑντομάς ἔχοντα ἥ ἐν τοῖς ὑπτίοις ἥ ἐν τοῖς πρανέσιν ἥ ἐν ἀμφοῖν, καὶ οὔτε ὀστῶδες ἔχει κεχωρισμένο οὔτε σαρκῶδες, ἄλλὰ μέσον ἀμφοῖν τὸ σῶμα γὰρ ὁμοίως καὶ ἔσω καὶ ἔξω σκληρόν ἔστιν αὐτῶν. ἔστι δὲν τοιαῦτα καὶ ἀπτερα, οἷον ἰουλος καὶ σκολόπενδρα, καὶ πτερωτά, οἷον μέλιττα καὶ μηλολόνθη καὶ σφήξ καὶ ταῦτο δὲ γένος ἔστι καὶ πτερωτὸν καὶ ἀπτερον, οἷον μύρμηξ εἰσι καὶ πτερωτοὶ καὶ ἀπτεροι, καὶ αἱ καλούμεναι πυγολαμπίδες.

Τῶν μὲν οὖν μαλακίων καλουμένων τὰ μὲν ἔξω μόρια τάδ’ ἔστιν, ἐν μὲν οἱ ὄνομαζόμενοι πόδες, δεύτερον δὲ τούτων ἔχομένη ἡ κεφαλή, τρίτον δὲ τὸ κύτος, δὲ περιέχει τάντος, καὶ καλοῦσιν αὐτὸ κεφαλήν τινες, οὐκ ὁρθῶς καλοῦντες· ἔτι δὲ πτερούγια κύκλῳ περὶ..

# ТАМАНЬ

## I. ГОРОДÓК НА БЕРЕГÚ МÓРЯ

Тамáнь — мáлеңкýй городóк на берегú мóря. Я дúмаю — это сáмый мáлеңкýй и сáмый бéдный из всех городóв Росси. И сáмый непритный. Грýзно, бéдно в Тамáни: грýзные úлицы, стáрые забóры вдоль úлиц, домá — мáлеңкýе бéдные. Во всём гóроде тóлько один кáменный дом, у сáмого въéзда в гóрод. В нём почта и воéнное начáльство. Все другíе домá в Тамáни — не домá, а мáлеңкýе избúшки.

Однáжды, пóздно нóчью подъезжáю на трóйке к Тамáни. Я óчень устáл и гóлоден. Я ужé мнóго, мнóго днéй в дорóге. Менá посылает моё воéнное начáльство на Кавkáз. Мой устáлая трóйка въезжáет в гóрод и останáливается у кáменного дóма. Я начинáю стучáть. Стучú óчень дóлго. Наконéц, слýшу гóлос:

«Кто идёт?»

«Я офицéр. Менá посылает воéнное начáльство на Кавkáз. Я зáвтра еду дáльше. Мне нужна квартира нá ночь.»

Из дóма выхóдит казáк, úнтер-офицéр. Снóва:

«Кто вы? Что нýжно?»

«Я офицéр. Еду на Кавkáз. Я мнóго днéй в дорóге и óчень устáл. Мне нужна квартира нá ночь. Хочú зáвтра ехать дáльше.»

Казáк ведёт менá по гóроду. Мы останáливаемся у кáждой избúшки, у кáждого сáмого бéдного дóмика. Стучíм. Прóсим. Но кварти́р в гóроде нет.

٠ 06E0	٠ 06F0	ب 0750	ب 0760	ش 0770	= FE70	ء FE80	ب FE90	ج FEA0	ز FEB0	ض FEC0	غ FED0	ل FEE0	ى FEF0
١ 06F1	ب 0751	ث 0761	ر 0771	= FE71	- FE81	ـ FE91	ـ FEA1	ـ FEB1	ـ FEC1	ـ FED1	ـ FEE1	ـ FEF1	
٢ 06F2	ب 0752	ك 0762	ح 0772	= FE72	- FE82	ـ FE92	ـ FEA2	ـ FEB2	ـ FEC2	ـ FED2	ـ FEE2	ـ FEF2	
٣ 06F3	ت 0753	ڭ 0763		= FE73	- FE83	ـ FE93	ـ FEA3	ـ FEB3	ـ FEC3	ـ FED3	ـ FEE3	ـ FEF3	
٤ 06F4	ن 0754	ڭ 0764		= FE74	- FE84	ـ FE94	ـ FEA4	ـ FEB4	ـ FEC4	ـ FED4	ـ FEE4	ـ FEF4	
٥ 06F5	ب 0755	م 0765		= FE85	- FE95	ـ FEA5	ـ FEB5	ـ FEC5	ـ FED5	ـ FEE5	ـ FEF5		
٦ 06F6	ـ 0756	ـ 0766		= FE76	- FE86	ـ FE96	ـ FEA6	ـ FEB6	ـ FEC6	ـ FED6	ـ FEE6	ـ FEF6	
٧ 06F7	ـ 0757	ـ 0767		= FE77	- FE87	ـ FE97	ـ FEA7	ـ FEB7	ـ FEC7	ـ FED7	ـ FEE7	ـ FEF7	
٨ 06F8	ـ 0758	ـ 0768		= FE78	- FE88	ـ FE98	ـ FEA8	ـ FEB8	ـ FEC8	ـ FED8	ـ FEE8	ـ FEF8	
٩ 06F9	ـ 0759	ـ 0769		= FE79	- FE89	ـ FE99	ـ FEA9	ـ FEB9	ـ FEC9	ـ FED9	ـ FEE9	ـ FEF9	
ش 06FA	ـ 075A	ـ 076A		= FE7A	- FE8A	ـ FE9A	ـ FEAA	ـ FEBAA	ـ FECAA	ـ FEDAA	ـ FEEAA	ـ FEFA	
ض 06FB	ـ 075B	ـ 076B		= FE7B	- FE8B	ـ FE9B	ـ FEAB	ـ FEBB	ـ FECB	ـ FEDB	ـ FEEB	ـ FEFB	
غ 06FC	ـ 075C	ـ 076C		= FE7C	- FE8C	ـ FE9C	ـ FEAC	ـ FEBAC	ـ FECAC	ـ FEDC	ـ FEEC	ـ FEFC	
ـ 06FD	ـ 075D	ـ 076D		= FE7D	- FE8D	ـ FE9D	ـ FEAD	ـ FEBD	ـ FECD	ـ FEDD	ـ FEEED		
ـ 06EE	ـ 06FE	ـ 075E	ـ 076E	ـ 077E	ـ FE7E	ـ FE8E	ـ FE9E	ـ FEAE	ـ FEBE	ـ FEC	ـ FED	ـ FEE	
ـ 06EF	ـ 06FF	ـ 075F	ـ 076F	ـ 077F	ـ FE7F	ـ FE8F	ـ FE9F	ـ FEAF	ـ FEBF	ـ FECF	ـ FEDF	ـ FEEF	

# ТАМАНЬ

## I. ГОРОДÓК НА БЕРЕГУ МÓРЯ

Тамáнь — мáленький городóк на берегú мóря. Я дўмаю — э́то сáмый мáленький и сáмый бéдный из всех городóв Россíи. И сáмый неприятный. Грáзно, бéдно в Тамáни: грáзные у́лицы, стáрые забóры вдоль у́лиц, домá — мáленькие бéдные. Во всём гóроде тóлько один кáменный дом, у сáмого въéзда в гóрод. В нём почта и воéнное начáльство. Все другíе домá в Тамáни — не домá, а мáленькие избúшки.

Однажды, поздно ночью подъезжаю на тройке к Тамани. Я очень устал и голоден. Я ужё много, много дней в дороге. Меня посылает моё военное начальство на Кавказ. Моя усталая тройка въезжает в город и останавливается у каменного дома. Я начинаю стучать. Стучу очень долго. Наконец, слышу голос:

## *«Кто идёт?»*

«Я офицер. Меня посылают военное начальство на Кавказ. Я завтра еду дальше. Мне нужна квартира на ночь.»

*Из дома выходит казак, юнкер-офицер. Снова:*

## *«Кто вы? Что нужно?»*

«Я офицер. Еду на Кавказ. Я многое днёй в дороге и очень устал. Мне нужна квартира на ночь. Хочу завтра ехать дальше.»

*Казак ведёт меня по городу. Мы останавливаемся у каждой избушки, у каждого самого бедного дома. Стучим. Проблема. Никвартиры в городе нет.*

# Память

Памань – самый скверный городишко из всех приморских городов России. Я там чуть-чуть не умер с голова, да еще вдобавок меня хотели уморить. Я приехал на перекладной тележке поздно ночью. Жмилик 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 казенной надобности, и стал требовать казеннную квартиру. Десятник нас повел по гарнису. К которой избе ни подъедем — 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 фатефа, — отвечал десятник, почесывая затылок — только вашему 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 стоянкам я видел один только бедные заборы, мы подъехали к небольшой хате, на самом берегу моря.

Полный месяц светил на камышовую крышу и белые стены моего нового жилища; на дворе, обведенном оградой из булыжника, стояла избогасть другая лачуга, менее и древнее первои. Берег обрывом спускался к морю почти у самых стен ее, и внизу с беспечным 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,

	וֹ	וּ	וִ	וָ	וַ	וֶ		וֻ	וְ	וֵ
	05A0	05B0	05C0	05D0	05E0	05F0		FB20	FB30	FB40
וָ	וָ	וָ	וָ	וָ						
0591	05A1	05B1	05C1	05D1	05E1	05F1		FB21	FB31	FB41
וָ	וָ	וָ	וָ	וָ						
0592	05A2	05B2	05C2	05D2	05E2	05F2		FB22	FB32	
וָ	וָ	וָ	וָ	וָ						
0593	05A3	05B3	05C3	05D3	05E3	05F3		FB23	FB33	FB43
וָ	וָ	וָ	וָ	וָ						
0594	05A4	05B4	05C4	05D4	05E4	05F4		FB24	FB34	FB44
וָ	וָ	וָ	וָ	וָ						
0595	05A5	05B5	05C5	05D5	05E5			FB25	FB35	
וָ	וָ	וָ	וָ	וָ						
0596	05A6	05B6	05C6	05D6	05E6			FB26	FB36	FB46
וָ	וָ	FB27		וָ						
0597	05A7	05B7	05C7	05D7	05E7					FB47
וָ	וָ	FB28	FB38	FB48						
0598	05A8	05B8		וָ	וָ			FB29	FB39	FB49
וָ	וָ	וָ		וָ	וָ			FB2A	FB3A	FB4A
0599	05A9	05B9		וָ	וָ			FB2B	FB3B	FB4B
וָ	וָ	וָ		וָ	וָ			FB2C	FB3C	FB4C
059A	05AA	05BA		וָ	וָ					
וָ	וָ	וָ		וָ	וָ					
059B	05AB	05BB		וָ	וָ					
וָ	וָ	וָ		וָ	וָ					
059C	05AC	05BC		וָ	וָ					
וָ	וָ	וָ		וָ	וָ					
059D	05AD	05BD		וָ	וָ					
וָ	וָ	וָ		וָ	וָ					
059E	05AE	05BE		וָ	וָ					
וָ	וָ	וָ		וָ	וָ					
059F	05AF	05BF		וָ	וָ					

Ѐ	Ӑ	Ӗ	Ӑ	Ӗ	Ӗ	Ѡ		Ҫ	Ӯ	Ӯ					
0400	0410	0420	0430	0440	0450	0460		0480	0490						
Ӷ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ	Ӯ					
0401	0411	0421	0431	0441	0451	0461		0481	0491						
ӭ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ	Ӯ					
0402	0412	0422	0432	0442	0452	0462	0472		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0403	0413	0423	0433	0443	0453	0463	0473		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0404	0414	0424	0434	0444	0454	0464	0474		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0405	0415	0425	0435	0445	0455	0465	0475		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0406	0416	0426	0436	0446	0456	0466	0476		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0407	0417	0427	0437	0447	0457	0467	0477		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0408	0418	0428	0438	0448	0458	0468	0478		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
0409	0419	0429	0439	0449	0459	0469	0479		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040A	041A	042A	043A	044A	045A	046A	047A		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040B	041B	042B	043B	044B	045B	046B	047B		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040C	041C	042C	043C	044C	045C	046C	047C		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040D	041D	042D	043D	044D	045D	046D	047D		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040E	041E	042E	043E	044E	045E	046E	047E		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ		Ӯ	Ӯ					
040F	041F	042F	043F	044F	045F	046F	047F		Ӯ	Ӯ					

# Other Scripts

## Armenian (Rom 3:23–3:26)

Բայց նրան ոչ եւս գոյ ինձ տեղի ՚ի կողմանս յայսոսիկ. Եւ անծովկ յոյժ ունիս ՚ի բազում ամաց զալ առ ձեզ: յորժամ անցանիցեւմ ՚ի սպանիա, նկն ունիս յանցանելն առ նոստ՝ տեսանել զձեզ. Եւ ՚ի ձէնջ յուղարկել անդր, եթէ նախ իսկ փնքր ՚ի շատէ ձեւք լցայց: Բայց այժմ երթամ յե(րուսաղէ)մ պաշտել զս(ուր)բսն: քանզի հաճոյ թուեցա մակերդուացոցն եւ արայեցոցն՝ հաղորդութին ինչ առնել ընդ աղքասս սրբոցն՝ որ ենն յե(րուսաղէ)մ:

## Runes

ᚱՓՐՓՐՌՈՒՖՒՄՔՄՌՄՌՓՐԻՌՉՋԽՄ

ԽՅԲՐՓՐՓՐ

ԲՎՇՋՄԽԲՆԽԲՐՈՒՐԻՌԲՐՓՐՎՀԲՒՐԻՐ

ԲՎՐԲԴՌԽՄԽ

## Thai

### ນທວ່ານຕ

ປັຈຸບັນຄນໄຫຍນໄປເຖິງວ້ອຂອງທີ່ສູນຍົກຮັດຕໍ່ພະລາວ

ສາມາດຮ້ອຂອງໄດ້ເກືອບທຸກອຍ່າງຄຣອບຄ້ວ່າຂອບພາລູກຫລານໄປເຖິງວ່າທີ່ສູນຍົກ

ຮັດຕໍ່ພະລາວຈຳກົດຂອບສູນຍົກຮັດຕໍ່ພະລາວແກ່ຈະຕິດແວຣ໌ທຳໃຫ້ອາກາສເຢັນສນາຍ

K  
049A

h  
04BA

Y  
04AF

בָּשָׂר יְתָא

בְּרָאשֵׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמֶן וְאֶת הָאָרֶץ: וְהָאָרֶץ  
הָיָתָה תְּהוֹן בָּהּ וְהַשָּׁקֵךְ צָלָפְנֵי תְּהוֹם וְרוּחַ אֱלֹהִים  
עַל-פְנֵי חָמִים: וַיֹּאמֶר אֱלֹהִים יְהִי אֹור וַיְהִי  
אֹור: וַיֹּאמֶר אֱלֹהִים אֶת-הָאֹור כִּי-טוֹב נִבְקָל אֱלֹהִים בֵין  
הָאֹור וּבֵין הַשָּׁקֵךְ: וַיֹּיקְרָא אֱלֹהִים לְאֹור יוֹם וְלַחֲשֵׁךְ  
קְרָבָא לְילָה וַיְהִי עָרֵב וַיְהִי בְּקָרָב יוֹם אַחֲרָה: פ  
וַיֹּאמֶר אֱלֹהִים יְהִי רְקִיעַ בְּתוֹךְ הָמָיִם וַיְהִי מְבָדֵל בֵין  
מְיֻם לְמַיִם: וַיַּעֲשֵׂה אֱלֹהִים אֶת-הָרָקִיעַ וַיִּבְקָל בֵין הַמְּיֻם  
אֲשֶׁר מִפְּקַדְתָ לְרָקִיעַ וּבֵין הַמְּיֻם אֲשֶׁר מִעַל לְרָקִיעַ וַיְהִי  
כֵן: וַיֹּיקְרָא אֱלֹהִים לְרָקִיעַ שָׁמָיִם וַיְהִי עָרֵב וַיְהִי בְּקָרָב  
יוֹם שְׁנִי: פ  
וַיֹּאמֶר אֱלֹהִים יְקֻנוּ הַמְּיֻם מִתְחַת הַשָּׁמֶן אֱלֹמְקוּם אֶחָד  
וּוְתַּרְאָה הַיְבָשָׁה וַיְהִי כֵן: וַיֹּיקְרָא אֱלֹהִים לַיְבָשָׁה אֶרְץ

ሀ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ኩ	ዕ
1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	12A0	12B0	12C0	12D0	
ሁ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ				ዕ
1201	1211	1221	1231	1241	1251	1261	1271	1281	1291	12A1				ዕ
ሂ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ኩ	ዕ
1202	1212	1222	1232	1242	1252	1262	1272	1282	1292	12A2	12B2	12C2	12D2	
ሂ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ኩ	ዕ
1203	1213	1223	1233	1243	1253	1263	1273	1283	1293	12A3	12B3	12C3	12D3	
ሂ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ኩ	ዕ
1204	1214	1224	1234	1244	1254	1264	1274	1284	1294	12A4	12B4	12C4	12D4	
ሁ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ኩ	ዕ
1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	12A5	12B5	12C5	12D5	
ሁ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ				ዕ
1206	1216	1226	1236	1246	1256	1266	1276	1286	1296	12A6				ዕ
ሁ	ሰ	ወ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ				ዕ
1207	1217	1227	1237	1247		1267	1277	1287	1297	12A7				
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
1208	1218	1228	1238	1248	1258	1268	1278	1288	1298	12A8	12B8	12C8	12D8	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
1209	1219	1229	1239			1269	1279		1299	12A9	12B9	12C9	12D9	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120A	121A	122A	123A	124A	125A	126A	127A	128A	129A	12AA	12BA	12CA	12DA	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120B	121B	122B	123B	124B	125B	126B	127B	128B	129B	12AB	12BB	12CB	12DB	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120C	121C	122C	123C	124C	125C	126C	127C	128C	129C	12AC	12BC	12CC	12DC	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120D	121D	122D	123D	124D	125D	126D	127D	128D	129D	12AD	12BD	12CD	12DD	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120E	121E	122E	123E			126E	127E		129E	12AE	12BE	12CE	12DE	
ለ	ሙ	ሩ	ኩ	ቀ	ቁ	በ	ተ	ገ	ነ	ኩ	ከ	ኩ	ዕ	
120F	121F	122F	123F			126F	127F		129F	12AF		12CF	12DF	

# الفاتحة

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ

رَحْمَنِ الرَّحِيمِ

مَالِكِ يَوْمِ الدِّينِ

إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ

اهْدِنَا الصَّرَاطَ الْمُسْتَقِيمَ

صَرَاطَ الَّذِينَ أَنْعَمْتَ عَلَيْهِمْ غَيْرَ الْمَغْضُوبِ عَلَيْهِمْ وَلَا  
الظَّالِمِينَ

# 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	ABCDEFG
Regular.Medium	ABCDEF	abcdef	ABCDEFG
Regular.HalfBold	ABCDEF	abcdef	ABCDEFG
Regular.SemiBold	ABCDEF	abcdef	ABCDEFG
Regular.Bold	<b>ABCDEF</b>	<b>abcdef</b>	<b>ABCDEFG</b>
Italic.Normal	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEFG</i>
Italic.Medium	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEFG</i>
Italic.HalfBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEFG</i>
Italic.SemiBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEFG</i>
Italic.Bold	<b><i>ABCDEF</i></b>	<b><i>abcdef</i></b>	<b><i>ABCDEFG</i></b>
Cursive.Normal	<i>A<small>B</small>C<small>D</small>E<small>F</small></i>	<i>abcdef</i>	
Cursive.Medium	<i>A<small>B</small>C<small>D</small>E<small>F</small></i>	<i>abcdef</i>	
Cursive.HalfBold	<i>A<small>B</small>C<small>D</small>E<small>F</small></i>	<i>abcdef</i>	
Cursive.SemiBold	<i>A<small>B</small>C<small>D</small>E<small>F</small></i>	<i>abcdef</i>	
Cursive.Bold	<b><i>A<small>B</small>C<small>D</small>E<small>F</small></i></b>	<b><i>abcdef</i></b>	
Fraktur.Normal	<i>A<small>B</small>C<small>D</small>E<small>F</small></i>	<i>abcdef</i>	

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

Regular Gree

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

Pages 25 and 26 show the extensions for Eastern European and minor European languages, plus ‘wynn’ for Old English. Page 27 shows the non-composed diacriticals.

Page 28 contains the International Phonetic Alphabet, and Page 29 shows Armenian and Runes. The Runic section is still under development

Pages 30 and 31 contain the Greek alphabet, and the precomposed polytonic Greek forms.

Pages 32 and 33 contain (most of) the Ethiopic alphabet; the few remaining glyphs not shown on these pages are also present in the font.

Page 34 contains the Cyrillic alphabet and Page 35 the Hebrew alphabet.

Pages 36 and 37 show the Arabic glyphs, including all the presentation forms. Note that most of the 'B' set of presentation forms are omitted in this release. The font contains the typographic tables for correctly identifying the isolated, initial, medial and final forms of both Arabic and Hebrew.

Page 38 shows Thai and the continuation of the Kanji.  
Page 39 the Japanese Hiragana and Katakana forms.

Page 40 contains the (small) subset of Chinese-Japanese Kanji contained within this release of Bembino

Pages 41 and 42 contain various special characters and mathematical symbols, and the page 43, the last of this group shows, the small-capital forms of those letters that have explicit small-caps glyphs.

Italian

The second group of pages shows the glyphs in the italic font. Pages 44 and 45 show the ISO8859-1 ASCII forms and the Eastern European extensions. Pages 46 and 47 show the Greek and polytonic forms. Page 48 shows the Cyrillic and Thai alphabets and Page 49 shows the small-caps forms.

## Cursive

Pages 50 and 51 show the available Latin and Cyrillic cursive forms in the 'Pietro' font.

Fraktur

Page 52 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 languages.

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

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

ä	g̊	ẘ	R	z̊	q̊	h̊	?	·̊	ꝑ̊	ꝑ̊
	0250	0260	0270	0280	0290	02A0	02B0	02C0	02D0	02E0
a	g̊	m̊	B̊	z̊	?̊	h̊	ꝑ̊	·̊	1̊	ꝑ̊
	0251	0261	0271	0281	0291	02A1	02B1	02C1	02D1	02E1
v̊	G̊	j̊	s̊	z̊	ꝑ̊	j̊	<	,	s̊	>
	0252	0262	0272	0282	0292	02A2	02B2	02C2	02D2	02E2
b̊	ꝑ̊	n̊	ʃ̊	z̊	d̊z̊	r̊	>	,	x̊	◦
	0253	0263	0273	0283	0293	02A3	02B3	02C3	02D3	02E3
c̊	ꝑ̊	N̊	f̊	?̊	d̊z̊	ꝑ̊	^	-	<	~
	0254	0264	0274	0284	0294	02A4	02B4	02C4	02D4	02E4
e̊	ꝑ̊	Θ̊	l̊	ꝑ̊	d̊z̊	ꝑ̊	v̊	-	l̊	“
	0255	0265	0275	0285	0295	02A5	02B5	02C5	02D5	02E5
đ̊	h̊	œ̊	ʃ̊	z̊	t̊s̊	r̊	^	+	l̊	“
	0256	0266	0276	0286	0296	02A6	02B6	02C6	02D6	02E6
d̊	h̊	ω̊	ꝑ̊	ꝑ̊	t̊ʃ̊	ẘ	ˇ	-	l̊	~
	0257	0267	0277	0287	0297	02A7	02B7	02C7	02D7	02E7
ɛ̊	i̊	ɸ̊	t̊	ꝑ̊	t̊c̊	ẙ	‘	ˇ	l̊	:
	0258	0268	0278	0288	0298	02A8	02B8	02C8	02D8	02E8
ə̊	l̊	r̊	ẘ	B̊	f̊j̊	’	-	·	l̊	ꝑ̊
	0259	0269	0279	0289	0299	02A9	02B9	02C9	02D9	02E9
ɔ̊	I̊	J̊	ʊ̊	ə̊	ls̊	”	’	◦	L̊	’
	025A	026A	027A	028A	029A	02AA	02BA	02CA	02DA	02EA
ɛ̊	ł̊	ł̊	v̊	g̊	ż̊	‘	ˇ	‘	ł̊	ł̊
	025B	026B	027B	028B	029B	02AB	02BB	02CB	02DB	02EB
z̊	ł̊	r̊	Å	H̊	ẘ	’	—	~	ł̊	ł̊
	025C	026C	027C	028C	029C	02AC	02BC	02CC	02DC	02EC
z̊	ł̊	r̊	ℳ̊	j̊	ꝑ̊	’	—	”	=	ꝑ̊
	025D	026D	027D	028D	029D	02AD	02BD	02CD	02DD	02ED
ɛ̊	ł̊	r̊	λ̊	k̊	ꝑ̊	’	—	ˇ	”	ꝑ̊
	025E	026E	027E	028E	029E	02AE	02BE	02CE	02DE	02EE
ł̊	ẘ	l̊	Y̊	L̊	ꝑ̊	’	—	×	ˇ	~
	025F	026F	027F	028F	029F	02AF	02BF	02CF	02DF	02EF
										1D79

Ā	Đ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0100	0110	0120	0130	0140	0150	0160	0170	0180	0190	
ā	đ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0101	0111	0121	0131	0141	0151	0161	0171	0181	0191	
Ă	Ē	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0102	0112	0122	0132	0142	0152	0162	0172	0182	0192	
ă	ē	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0103	0113	0123	0133	0143	0153	0163	0173	0183	0193	
À	Ě	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0104	0114	0124	0134	0144	0154	0164	0174	0184	0194	01A4
ą	ě	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0105	0115	0125	0135	0145	0155	0165	0175	0185	0195	01A5
Ć	È	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0106	0116	0126	0136	0146	0156	0166	0176	0186	0196	
ć	è	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0107	0117	0127	0137	0147	0157	0167	0177	0187		
Ĉ	Ę	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0108	0118	0128	0138	0148	0158	0168	0178	0188		
ć	ę	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
0109	0119	0129	0139	0149	0159	0169	0179	0189	0199	
Ć	Ę	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010A	011A	012A	013A	014A	015A	016A	017A	018A		
ć	ę	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010B	011B	012B	013B	014B	015B	016B	017B	018B		
Č	Ĝ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010c	011C	012C	013C	014C	015C	016C	017C	018C		
č	ĝ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010D	011D	012D	013D	014D	015D	016D	017D	018D		
Đ	Ğ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010E	011E	012E	013E	014E	015E	016E	017E	018E	019E	
đ	ğ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
010F	011F	012F	013F	014F	015F	016F	017F	018F	019F	
Ā	Ə	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
01CD	01DD									
ă	ā	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
01CE	01DE									
đ	đ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ
01BF	01CF	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ	ጀ

Ā	ጀ	À	Ŕ		Ḃ	Ḩ	Ṗ	Ѷ	ݙ	ܶ
01E0	01F0	0200	0210		1E02	1E2A	1E56	1E7E	1E96	1E92
ā		à	ŕ		ḃ	ݡ	ܪ	ݚ	ܠ	ܰ
01E1		0201	0211		1E03	1E2B	1E57	1E7F	1EA0	1E93
Æ		Â	Ŗ	܍	܃	܄	܈	܋	܉	܊
01E2		0202	0212	܍	1E04	1E32	1E58	1E80	1EA1	1EFA
æ		â	ର	܍	܃	܄	܈	܋	܉	܊
01E3		0203	0213	܍	1E05	1E33	1E59	1E81	1EB8	1EFB
	ጀ	Ѐ	Ӯ		܃	܄	܈	܋	܉	܊
	01F4	0204	0214		1E0A	1E34	1E5A	1E82	1EB9	1EFC
	ǵ	ë	ü		܃	܄	܈	܋	܉	܊
	01F5	0205	0215		0245	܃	܄	܈	܋	܉
ጀ		Ѐ	Ӯ	܍	1E0B	1E35	1E5B	1E83	1ECA	1EFD
01E6		0206	0216	܍	܃	܄	܈	܋	܉	܊
݁	ጀ	ê	û	܍	1E0C	1E36	1E60	1E84	1ECB	
01E7	01F7	0207	0217	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E0D	1E37	1E61	1E85	1ECC	
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E0E	1E40	1E62	1E86	1ECD	
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E0F	1E41	1E63	1E87	1EE4	
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E1E	1E42	1E6A	1E88	1EE5	A765
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E1F	1E43	1E6B	1E89	1EF2	A77A
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E22	1E44	1E6C	1E8A	1EF3	A77C
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E23	1E45	1E6D	1E8B	1EF4	A783
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E24	1E46	1E6E	1E8E	1EF5	A785
݁		܍	܍	܍	܃	܄	܈	܋	܉	܊
݁		܍	܍	܍	1E25	1E47	1E6F	1E8F		A787

Regular Accents

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