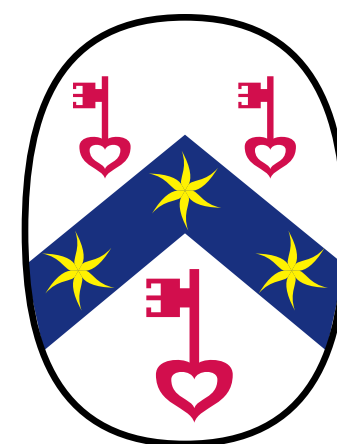


# Bembino

A new high-quality font



A Publication of the Research Group on Manuscript Evidence

Font Version 1.6

错 9519	随 968F	領 9818	鳥 9CE5
長 9577	隣 96A3	題 984C	鳳 9CF3
长 957F	隸 96B7	頓 987F	鸡 9E21
門 9580	雕 96D5	領 9886	麻 9EBB
開 958B	雨 96E8	風 98A8	麼 9EBC
間 9593	雪 96EA	饭 996D	黑 9ED1
關 95DC	雲 96F2	饱 9971	黑 9ED2
间 95F4	零 96F6	饿 997F	點 9EDE
阳 9633	電 96FB	馆 9986	鼠 9F20
降 964D	霜 971C	香 9999	鼻 9F3B
限 9650	露 9732	驢 9A62	龍 9F8D
院 9662	青 9752	马 9A6C	
除 9664	静 9759	驴 9A74	
陪 966A	非 975E	體 9AD4	
陳 9673	面 9762	高 9AD8	
陷 9677	音 97F3	魚 9B5A	

Bembino  
A new high-quality font

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Set in RGME Bembino.

洗	热	猴	當	礼	竹	结	聽	菊	要	說	说	起	過
6D17	70ED	7334	7576	793C	7AF9	7ED3	807D	83CA	8981	8AAA	8BF4	8D77	904E
洱	無	玉	發	祝	第	给	肉	菜	見	請	请	足	道
6D31	7121	7389	767C	795D	7B2C	7ED9	8089	83DC	898B	8ACB	8BF7	8DB3	9053
活	然	王	白	神	等	编	肺	華	親	論	读	跪	還
6D3B	7136	738B	767D	795E	7B49	7F16	80BA	83EF	89AA	8AD6	8BFB	8DEA	9084
海	照	玩	百	票	筵	罪	能	萬	覺	謝	谅	路	那
6D77	7167	73A9	767E	7968	7B77	7F6A	80FD	842C	89BA	8B1D	8C05	8DEF	90A3
淫	煮	現	的	福	管	置	腊	著	见	證	谈	車	邪
6DEB	716E	73FE	7684	798F	7BA1	7F6E	814A	8457	89C1	8B49	8C08	8ECA	90AA
深	燃	球	皮	秋	箱	罰	腐	蒲	视	认	谢	辣	邮
6DF1	71C3	7403	76AE	79CB	7BB1	7F70	8150	84B2	89C6	8BA4	8C22	8FA3	90AE
添	爱	理	盜	种	籍	羊	自	虎	計	讨	谷	亾	部
6DFB	7231	7406	76D7	79CD	7C4D	7F8A	81EA	864E	8A08	8BA8	8C37	8FB6	90E8
清	父	甚	盜	科	粉	美	至	虫	訊	记	豆	过	都
6E05	7236	751A	76DC	79D1	7C89	7F8E	81F3	866B	8A0A	8BB0	8C46	8FC7	90FD
湛	片	生	目	称	糸	義	與	蛇	討	讲	象	迎	酒
6E5B	7247	751F	76EE	79F0	7CF8	7FA9	8207	86C7	8A0E	8BB2	8C61	8FCE	9152
滿	牛	用	直	程	系	老	色	蝥	記	论	貪	还	醋
6EE1	725B	7528	76F4	7A0B	7CFB	8001	8272	86F0	8A18	8BBA	8CAA	8FD8	918B
漂	物	田	租	種	紙	考	芒	行	許	证	資	这	里
6F02	7269	7530	76F8	7A2E	7D19	8003	8292	884C	8A31	8BC1	8CC7	8FD9	91CC
火	牲	由	看	稱	組	者	花	街	話	识	賜	追	重
706B	7272	7531	770B	7A31	7D44	8005	82B1	8857	8A71	8BC6	8CDC	8FFD	91CD
炒	特	电	真	空	給	而	英	衣	該	话	貪	送	金
7092	7279	7535	771F	7A7A	7D66	800C	82F1	8863	8A72	8BDD	8D2A	9001	91D1
点	犬	男	知	立	經	耳	茶	被	誓	该	賜	這	锅
70B9	72AC	7537	77E5	7ACB	7D93	8033	8336	88AB	8A93	8BE5	8D50	9019	9505
為	狗	町	石	站	红	耶	草	裡	語	诫	赤	造	钟
70BA	72D7	753A	77F3	7AD9	7EA2	8036	8349	88E1	8A9E	8BEB	8D64	9020	949F
烦	猪	畜	碌	章	绍	聖	荷	西	誠	语	走	進	
70E6	732A	755C	788C	7AE0	7ECD	8056	8377	897F	8AA1	8BED	8D70	9032	

# 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 22 of this booklet. The three main styles contain different sets of glyphs as shown in the font tables, starting on page 24. All contain the basic ASCII upper- and lower-case letters. The regular and italic also contain numbers, punctuation

处	如	它	对	工	府	忌	愛	手	救	晚	机	森	民
5904	5982	5B83	5BF9	5DE5	5E9C	5FCC	611B	624B	6551	665A	673A	68EE	6C11
夏	妄	守	寿	左	式	快	感	才	教	普	杀	椒	气
590F	5984	5B88	5BFF	5DE6	5F0F	5FEB	611F	624D	6559	666E	6740	6912	6C14
夕	妻	安	将	巧	张	念	愿	打	敬	暑	李	楼	气
5915	59BB	5B89	5C06	5DE7	5F20	5FF5	613F	6253	656C	6691	674E	697C	6C17
外	姐	完	將	己	当	怎	慈	找	文	曜	杏	槐	水
5916	59D0	5B8C	5C07	5DF1	5F53	600E	6148	627E	6587	66DC	674F	69D0	6C34
多	姦	定	尊	已	形	思	慢	技	新	書	村	樣	永
591A	59E6	5B9A	5C0A	5DF2	5F62	601D	6162	6280	65B0	66F8	6751	6A23	6C38
大	婆	宜	對	市	彩	性	憎	抄	方	曾	来	橘	汁
5927	5A46	5B9C	5C0D	5E02	5F69	6027	618E	6284	65B9	66FE	6765	6A58	6C41
天	婚	宝	小	布	衍	恋	懂	把	於	最	杯	機	汉
5929	5A5A	5B9D	5C0F	5E03	5F77	604B	61C2	628A	65BC	6700	676F	6A5F	6C49
太	婢	実	少	希	佛	恨	應	护	旅	會	東	次	池
592A	5A62	5B9F	5C11	5E0C	5F7F	6068	61C9	62A4	65C5	6703	6771	6B21	6C60
夫	嫂	客	尔	常	待	恩	戀	担	无	月	松	欢	決
592B	5AC2	5BA2	5C14	5E38	5F85	6069	6200	62C5	65E0	6708	677E	6B22	6C7A
奉	子	室	就	年	很	息	成	招	日	有	极	欲	汽
5949	5B50	5BA4	5C31	5E74	5F88	606F	6210	62DB	65E5	6709	6781	6B32	6C7D
女	字	宫	居	并	後	惠	我	拜	早	朋	果	正	没
5973	5B57	5BAB	5C45	5E76	5F8C	6075	6211	62DC	65E9	670B	679C	6B63	6C92
奴	孝	害	屋	幸	得	您	戒	拜	时	朝	校	此	没
5974	5B5D	5BB3	5C4B	5E78	5F97	60A8	6212	62DD	65F6	671D	6821	6B64	6CA1
奶	学	家	山	庆	從	情	或	持	明	期	样	段	油
5976	5B66	5BB6	5C71	5E86	5F9E	60C5	6216	6301	660E	671F	6837	6BB5	6CB9
奸	孩	寄	岁	应	德	惊	戸	提	春	木	桂	殺	法
5978	5B69	5BC4	5C81	5E94	5FB7	60CA	6238	63D0	6625	6728	6842	6BBA	6CD5
她	孫	寒	峰	底	心	想	房	播	是	本	桃	母	
5979	5B6B	5BD2	5CF0	5E95	5FC3	60F3	623F	64AD	662F	672C	6843	6BCD	
好	學	實	川	店	必	意	所	放	時	木	桔	比	
597D	5B78	5BE6	5DDD	5E97	5FC5	610F	6240	653E	6642	672F	6854	6BD4	

ㄣ	尸	厶	下	么	人	亻	們	兩	分	區	口	否	喝
3105	3115	3125	4E0B	4E48	4EBA	4F1D	5011	5169	5206	5340	53E3	5426	559D
彡	日	儿	丌	之	什	但	假	八	切	十	古	吧	嗎
3106	3116	3126	4E0C	4E4B	4EC0	4F46	5047	516B	5207	5341	53E4	5427	55CE
冂	冫	一	丕	九	仆	位	做	公	刘	千	只	吩	噁
3107	3117	3127	4E0D	4E5D	4EC6	4F4D	505A	516C	5218	5343	53EA	5429	55EF
匸	ㄣ	メ	与	也	今	住	偶	六	初	华	可	告	四
3108	3118	3128	4E0E	4E5F	4ECA	4F4F	5076	516D	521D	534E	53EF	544A	56DB
勹	厶	凵	𠂇	习	介	何	偷	关	别	南	台	呢	回
3109	3119	3129	4E0F	4E60	4ECB	4F55	5077	5173	5225	5357	53F0	5462	56DE
去	丫	一	𠂇	书	从	佛	像	兴	别	博	史	周	因
310A	311A	4E00	4E10	4E66	4ECE	4F5B	50CF	5174	522B	535A	53F2	5468	56E0
彡	ㄣ	丁	丑	了	仕	作	僕	其	到	卧	右	味	国
310B	311B	4E01	4E11	4E86	4ED5	4F5C	50D5	5176	5230	5367	53F3	5473	56FD
勹	ㄣ	𠂇	丝	事	他	你	儿	内	刻	厅	号	命	國
310C	311C	4E02	4E1D	4E8B	4ED6	4F60	513F	5185	523B	5385	53F7	547D	570B
ㄣ	世	七	両	二	代	使	元	円	前	原	吃	和	土
310D	311D	4E03	4E21	4E8C	4EE3	4F7F	5143	5186	524D	539F	5403	548C	571F
𠂇	𠂇	上	兩	于	令	來	先	再	力	厦	各	耐	圣
310E	311E	4E04	4E24	4E8E	4EE4	4F86	5148	518D	529B	53A6	5404	5490	5723
厂	ㄣ	丁	並	云	以	便	光	冬	加	厨	合	咖	在
310F	311F	4E05	4E26	4E91	4EE5	4FBF	5149	51AC	52A0	53A8	5408	5496	5728
ㄣ	么	丌	个	五	们	保	兒	冰	劳	去	同	哪	地
3110	3120	4E06	4E2A	4E94	4EEC	4FDD	5152	51B0	52B3	53BB	540C	54EA	5730
く	又	万	中	些	仲	信	兔	涼	動	又	名	啊	坐
3111	3121	4E07	4E2D	4E9B	4EF2	4FE1	5154	51C9	52D5	53C8	540D	554A	5750
丁	𠂇	丈	为	交	仿	俩	入	几	務	及	后	問	埃
3112	3122	4E08	4E3A	4EA4	4EFF	4FE9	5165	51E0	52D9	53CA	540E	554F	57C3
虫	ㄣ	三	主	京	休	倆	内	凰	勞	友	向	啡	城
3113	3123	4E09	4E3B	4EAC	4F11	5006	5167	51F0	52DE	53CB	5411	5561	57CE
彡	尤	上	久	亮	会	個	全	出	北	发	吗	喜	声
3114	3124	4E0A	4E45	4EAE	4F1A	500B	5168	51FA	5317	53D1	5417	559C	58F0

# 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 Bemino 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). Bemino 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.

idsp		ぐ	だ	ば	む	る	=	グ	ダ	バ	ム	ヰ
3000		3050	3060	3070	3080	3090	30A0	30B0	30C0	30D0	30E0	30F0
、	あ	け	ち	ぱ	め	ゑ	ァ	ケ	チ	パ	メ	ヱ
3001	3041	3051	3061	3071	3081	3091	30A1	30B1	30C1	30D1	30E1	30F1
。	あ	げ	ぢ	ひ	も	を	ア	ゲ	ヂ	ヒ	モ	ヲ
3002	3042	3052	3062	3072	3082	3092	30A2	30B2	30C2	30D2	30E2	30F2
	い	こ	っ	び	ゃ	ん	ィ	コ	ッ	ビ	ャ	ン
	3043	3053	3063	3073	3083	3093	30A3	30B3	30C3	30D3	30E3	30F3
	い	ご	っ	び	ゃ		ィ	ゴ	ッ	ピ	ャ	ヴ
	3044	3054	3064	3074	3084		30A4	30B4	30C4	30D4	30E4	30F4
	う	さ	づ	ふ	ゆ		ウ	サ	ヅ	フ	ユ	
	3045	3055	3065	3075	3085		30A5	30B5	30C5	30D5	30E5	
【	う	ざ	て	ぶ	ゆ		ウ	ザ	テ	ブ	ユ	
3016	3046	3056	3066	3076	3086		30A6	30B6	30C6	30D6	30E6	30F5
】	え	し	で	ふ	よ		エ	シ	デ	フ	ヨ	ヰ
3017	3047	3057	3067	3077	3087		30A7	30B7	30C7	30D7	30E7	30F8
	え	じ	と	へ	よ		エ	ジ	ト	ヘ	ヨ	ヱ
	3048	3058	3068	3078	3088		30A8	30B8	30C8	30D8	30E8	30F9
	お	す	ど	べ	ら		オ	ス	ド	ベ	ラ	ヲ
	3049	3059	3069	3079	3089		30A9	30B9	30C9	30D9	30E9	30FA
	お	ず	な	ぺ	り		オ	ズ	ナ	ペ	リ	・
	304A	305A	306A	307A	308A		30AA	30BA	30CA	30DA	30EA	30FB
	か	せ	に	ほ	る	ゝ	カ	セ	ニ	ホ	ル	ー
	304B	305B	306B	307B	308B	309B	30AB	30BB	30CB	30DB	30EB	30FC
「	が	ぜ	ぬ	ぼ	れ	ゝ	ガ	ゼ	ヌ	ボ	レ	、
300C	304C	305C	306C	307C	308C	309C	30AC	30BC	30CC	30DC	30EC	30FD
」	き	そ	ね	ぼ	ろ	ゝ	キ	ソ	ネ	ポ	ロ	ゝ
300D	304D	305D	306D	307D	308D	309D	30AD	30BD	30CD	30DD	30ED	30FE
『	ぎ	ぞ	の	ま	わ	ゝ	ギ	ゾ	ノ	マ	ワ	
300E	304E	305E	306E	307E	308E	309E	30AE	30BE	30CE	30DE	30EE	
』	く	た	は	み	わ		ク	タ	ハ	ミ	ワ	
300F	304F	305F	306F	307F	308F		30AF	30BF	30CF	30DF	30EF	

	0	@	P	`	p		À		à	
	0030	0040	0050	0060	0070		00C0		00E0	
!	1	U	Q	a	q		Á		á	
0021	0031	0041	0051	0061	0071		00C1		00E1	
"	2	B	R	b	r		Â	Ë	â	è
0022	0032	0042	0052	0062	0072		00C2	00D2	00E2	00F2
#	3	C	S	c	s		Ã	Ó	ã	ó
0023	0033	0043	0053	0063	0073		00C3	00D3	00E3	00F3
\$	4	D	T	d	t		Ä	Ô	ä	ô
0024	0034	0044	0054	0064	0074		00C4	00D4	00E4	00F4
%	5	E	U	e	u		Ë		ë	
0025	0035	0045	0055	0065	0075		00D5		00F5	
&	6	F	B	f	v		Ë		ë	
0026	0036	0046	0056	0066	0076		00D6		00F6	
'	7	G	W	g	w					
0027	0037	0047	0057	0067	0077					
(	8	H	X	h	x	¨	È		è	
0028	0038	0048	0058	0068	0078	00A8	00C8		00E8	
)	9	I	Y	i	y		É	Û	é	ù
0029	0039	0049	0059	0069	0079		00C9	00D9	00E9	00F9
*	:	J	Z	j	z		Ê	Ü	ê	ú
002A	003A	004A	005a	006A	007A		00CA	00DA	00EA	00FA
+	;	R	[	ř	{		Ë	Û	ë	û
002B	003B	004B	005B	006B	007B		00CB	00DB	00EB	00FB
,	<	L	\	l			Ë	Û	ì	ü
002C	003C	004C	005C	006C	007C		00CC	00DC	00EC	00FC
–	=	M	]	m	}		Ë		í	
002D	003D	004D	005D	006D	007D		00CD		00ED	
.	>	N	^	n	~		Ë		î	
002E	003E	004E	005E	006E	007E		00CE		00EE	
/	?	D	_	o			Ë	ß	ï	
002F	003F	004F	005F	006F			00CF	00DF	00EF	

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 formulae.

#### 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. Bemino 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.

Bemino 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 Bemino (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?

Bemino 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, Bemino 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 of width of an em-space.

**mqup** (<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.

È	А	Р	а	р	è
0400	0410	0420	0430	0440	0450
Ë	Б	С	б	с	ë
0401	0411	0421	0431	0441	0451
	В	М	в	м	
	0412	0422	0432	0442	
	Т	У	т	у	
	0413	0423	0433	0443	
	Д	З	д	з	
	0414	0424	0434	0444	
І	Е	Х	е	х	і
0405	0415	0425	0435	0445	0455
Ї	И	У	и	у	і
0406	0416	0426	0436	0446	0456
Ї	З	У	з	у	і
0407	0417	0427	0437	0447	0457
Ј	У	У	у	у	ј
0408	0418	0428	0438	0448	0458
	Ў	У	ў	у	
	0419	0429	0439	0449	
	Н	Б	к	б	
	041A	042A	043A	044A	
	Л	В	л	в	
	041B	042B	043B	044B	
	М	Б	м	б	
	041C	042C	043C	044C	
	Н	Д	н	д	
	041D	042D	043D	044D	
	О	Ю	о	ю	
	041E	042E	043E	044E	
	П	А	п	а	
	041F	042F	043F	044F	



	0	@	P	`	ƚ	À		à		ff
	0030	0040	0050	0060	0070	00C0		00E0		FB00
!	1	A	2	a	q	Á	Ñ	á	ñ	f
0021	0031	0041	0051	0061	0071	00C1	00D1	00E1	00F1	FB01
"	2	B	R	b	ƚ	Â	Ò	â	ò	À
0022	0032	0042	0052	0062	0072	00C2	00D2	00E2	00F2	FB02
#	3	C	S	c	s	Ã	Ó	ã	ó	ff
0023	0033	0043	0053	0063	0073	00C3	00D3	00E3	00F3	FB03
\$	4	D	T	d	t	Ä	Ô	ä	ô	ff
0024	0034	0044	0054	0064	0074	00C4	00D4	00E4	00F4	FB04
%	5	E	U	e	u	Å	Õ	å	õ	f
0025	0035	0045	0055	0065	0075	00C5	00D5	00E5	00F5	0000
&	6	F	V	f	v		Ö		ö	
0026	0036	0046	0056	0066	0076		00D6		00F6	
'	7	G	W	g	w	Ç		ç		
0027	0037	0047	0057	0067	0077	00C7		00E7		
(	8	H	X	h	x	È		è		
0028	0038	0048	0058	0068	0078	00C8		00E8		
)	9	I	Y	i	y	É	Ù	é	ù	
0029	0039	0049	0059	0069	0079	00C9	00D9	00E9	00F9	
*	:	J	Z	j	z	Ê	Ú	ê	ú	
002A	003A	004A	005A	006A	007A	00CA	00DA	00EA	00FA	
+	;	K	[	k	{	Ë	Û	ë	û	
002B	003B	004B	005B	006B	007B	00CB	00DB	00EB	00FB	
,	<	L	\	l		Ë	Ü	ì	ü	
002C	003C	004C	005C	006C	007C	00CC	00DC	00EC	00FC	
-	=	M	]	m	}	Ë	Ý	í	ý	
002D	003D	004D	005D	006D	007D	00CD	00DD	00ED	00FD	
.	>	N	^	n	~	Ë		î		
002E	003E	004E	005E	006E	007E	00CE		00EE		
/	?	O	_	o		Ë		ï	ÿ	
002F	003F	004F	005F	006F		00CF		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 Bembindo.

Obviously, the glyphs contain serifs (the extensions at the top of ‘V’ and the foot of ‘l’). Unlike a sans-serif font, serifs provide clear demarcations for the end of strokes. By varying the serif forms it is possible to distinguish ‘l’, ‘I’ and ‘1’, which are often confused in sans-serif 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 (À, 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 Bemmino Font Family comprises 16 font files. There are 5 Regular (upright, Roman) files and 5 Italic files. These styles all appear under the name Bemmino 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.

Bemmino 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 Bemmino 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).

Bemmino 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 Bemmino 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.

Bemmino 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 Bemmino 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 Bemmino at the font design level.

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	<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>Ģ</i>	<i>Ń</i>	<i>Ț</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>Ŕ</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>Ț</i>	<i>Ŗ</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>Ċ</i>	<i>Ī</i>	<i>Ō</i>	<i>Ŭ</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>Ĵ</i>	<i>Ǫ</i>	<i>Ű</i>
F766	F776	F786	F796	F7A6	F7B6	F7C6	F7D6
<i>G</i>	<i>W</i>	<i>Ç</i>		<i>Ǫ</i>	<i>Ł</i>	<i>Ǫ</i>	<i>Ū</i>
F767	F777	F787		F7A7	F7B7	F7C7	F7D7
<i>H</i>	<i>X</i>	<i>È</i>	<i>Ø</i>	<i>Đ</i>	<i>Ĭ</i>	<i>Œ</i>	<i>Ʊ</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>Ĳ</i>	<i>Ŗ</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>Ě</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>Ꞥ</i>	<i>Ř</i>	<i>Ž</i>
F76B		F78B	F79B	F7AB	F7BB	F7CB	F7DB
<i>L</i>		<i>Ï</i>	<i>Ü</i>	<i>Ě</i>	<i>Ł</i>	<i>Ś</i>	<i>Ž</i>
F76C		F78C	F79C	F7AC	F7BC	F7CC	F7DC
<i>M</i>		<i>Í</i>	<i>Ý</i>	<i>Ě</i>	<i>Ł</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>Ł</i>	<i>Ş</i>	
F76E		F78E	F79E	F7AE	F7BE	F7CE	
<i>O</i>		<i>Ï</i>	<i>Ÿ</i>	<i>Ǫ</i>	<i>Ł</i>	<i>Š</i>	
F76F		F78F	F79F	F7AF	F7BF	F7CF	

È	À	Á	à	á	è			ᳵ	ᳶ	᳷	᳸	᳹	ᳺ	᳻
0400	0410	0420	0430	0440	0450			0E10	0E20	0E30	0E40	0E50		
Ë	Б	С	б	с	ë			᳼	᳽	᳾	᳿	ᳺ	᳻	᳼
0401	0411	0421	0431	0441	0451			0E01	0E11	0E21	0E31	0E41	0E51	
	В	Т	в	т		Ѣ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	0412	0422	0432	0442		0462		0E02	0E12	0E22	0E32	0E42	0E52	
Í	Г	У	г	у		ѣ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0403	0413	0423	0433	0443		0463		0E03	0E13	0E23	0E33	0E43	0E53	
Є	Д	Ф	д	ф	е	Ю		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0404	0414	0424	0434	0444	0454	0464		0E04	0E14	0E24	0E34	0E44	0E54	
Š	Е	Х	е	х	š	Ѹ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0405	0415	0425	0435	0445	0455	0465		0E05	0E15	0E25	0E35	0E45	0E55	
Ī	Ж	Ц	ж	ц	ī	А		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0406	0416	0426	0436	0446	0456	0466		0E06	0E16	0E26	0E36	0E46	0E56	
İ	З	Ч	з	ч	ï	А		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0407	0417	0427	0437	0447	0457	0467		0E07	0E17	0E27	0E37	0E47	0E57	
Ĵ	И	Ш	и	ш	ĵ	Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
0408	0418	0428	0438	0448	0458	0468		0E08	0E18	0E28	0E38	0E48	0E58	
	Й	Щ	й	щ		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	0419	0429	0439	0449		0469		0E09	0E19	0E29	0E39	0E49	0E59	
	К	Ъ	к	ъ		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041A	042A	043A	044A		046A		0E0A	0E1A	0E2A	0E3A	0E4A	0E5A	
	Л	Ы	л	ы		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041B	042B	043B	044B		046B		0E0B	0E1B	0E2B	᳽	᳾	᳿	ᳺ
	М	Ь	м	ь		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041C	042C	043C	044C		046C		0E0C	0E1C	0E2C	᳽	᳾	᳿	ᳺ
	Н	Э	н	э		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041D	042D	043D	044D		046E		0E0D	0E1D	0E2D	᳽	᳾	᳿	ᳺ
	О	Ю	о	ю		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041E	042E	043E	044E		A656		0E0E	0E1E	0E2E	᳽	᳾	᳿	ᳺ
	П	Я	п	я		Ѧ		᳽	᳾	᳿	ᳺ	᳻	᳼	᳽
	041F	042F	043F	044F		A657		0E0F	0E1F	0E2F	᳽	᳾	᳿	ᳺ

# Sample Texts

The following pages contain sample texts to illustrate the different scripts and languages for which Bemino 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" (Ἱστορία τῶν ζῴων). 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, الفاتحة "Al Fatihah (The Opening)" of the Koran.

Although these samples are all monolingual, Bemino 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.

Further examples may be found in our companion booklet "MultiLingual Bemino" which can be downloaded from the RGME Website.

## 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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ὀ	ὐ	ὠ	ὰ	ὰ	ἡ	ὠ	ᾱ	~	ĩ	ũ	
1F40	1F50	1F60	1F70	1F80	1F90	1FA0	1FB0	1FC0	1FD0	1FE0	
ὀ	ὐ	ὠ	ά	ὰ	ἡ	ὠ	ᾱ	~	ĩ	ũ	
1F41	1F51	1F61	1F71	1F81	1F91	1FA1	1FB1	1FC1	1FD1	1FE1	
ὀ	ὐ	ὠ	ε	ὰ	ἡ	ὠ	ὰ	ἡ	ĩ	ũ	ὠ
1F42	1F52	1F62	1F72	1F82	1F92	1FA2	1FB2	1FC2	1FD2	1FE2	1FF2
ὀ	ὐ	ὠ	έ	ὰ	ἡ	ὠ	α	ἡ	ĩ	ũ	ω
1F43	1F53	1F63	1F73	1F83	1F93	1FA3	1FB3	1FC3	1FD3	1FE3	1FF3
ὀ	ὐ	ὠ	η	ὰ	ἡ	ὠ	α	ἡ		ὀ	ὠ
1F44	1F54	1F64	1F74	1F84	1F94	1FA4	1FB4	1FC4		1FE4	1FF4
ὀ	ὐ	ὠ	ή	ὰ	ἡ	ὠ				ὀ	
1F45	1F55	1F65	1F75	1F85	1F95	1FA5				1FE5	
	ũ	ᾱ	ĩ	ὰ	ἡ	ὠ	ᾱ	ἡ	ĩ	ũ	ᾱ
	1F56	1F66	1F76	1F86	1F96	1FA6	1FB6	1FC6	1FD6	1FE6	1FF6
	ũ	ᾱ	ĩ	ὰ	ἡ	ὠ	α	ἡ	ĩ	ũ	ὠ
	1F57	1F67	1F77	1F87	1F97	1FA7	1FB7	1FC7	1FD7	1FE7	1FF7
Ɀ		Ɀ	ὀ	Α	Η	Ɀ	Α	Ε	Ι	Υ	Ɀ
1F48		1F68	1F78	1F88	1F98	1FA8	1FB8	1FC8	1FD8	1FE8	1FF8
Ɀ	Υ	Ɀ	ό	Α	Η	Ɀ	Α	Ε	Ι	Υ	Ɀ
1F49	1F59	1F69	1F79	1F89	1F99	1FA9	1FB9	1FC9	1FD9	1FE9	1FF9
Ɀ		Ɀ	ὐ	Α	Η	Ɀ	Α	Η	Ι	Υ	Ɀ
1F4A		1F6A	1F7A	1F8A	1F9A	1FAA	1FBA	1FCA	1FDA	1FEA	1FFA
Ɀ	Υ	Ɀ	ύ	Α	Η	Ɀ	Α	Η	Ι	Υ	Ɀ
1F4B	1F5B	1F6B	1F7B	1F8B	1F9B	1FAB	1FBB	1FCB	1FDB	1FEB	1FFB
Ɀ		Ɀ	ὠ	Α	Η	Ɀ	Α	Η		Ρ	Ɀ
1F4C		1F6C	1F7C	1F8C	1F9C	1FAC	1FBC	1FCC		1FEC	1FFC
Ɀ	Υ	Ɀ	ώ	Α	Η	Ɀ	,	”	”	”	,
1F4D	1F5D	1F6D	1F7D	1F8D	1F9D	1FAD	1FBD	1FCD	1FDD	1FED	1FFD
		Ɀ		Α	Η	Ɀ	,	”	”	”	,
		1F6E		1F8E	1F9E	1FAE	1FBE	1FCE	1FDE	1FEE	1FFE
	Υ	Ɀ		Α	Η	Ɀ	,	”	”	”	,
	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>A</i>	<i>P</i>	<i>α</i>	<i>ρ</i>		
	0391	03A1	03B1	03C1		
	<i>B</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>T</i>	<i>δ</i>	<i>τ</i>	<i>Υ̇</i>
0374	0384	0394	03A4	03B4	03C4	03D4
<i>,</i>	<i>‘</i>	<i>E</i>	<i>Y</i>	<i>ε</i>	<i>υ</i>	
0375	0385	0395	03A5	03B5	03C5	
	<i>À</i>	<i>Z</i>	<i>Φ</i>	<i>ζ</i>	<i>φ</i>	
	0386	0396	03A6	03B6	03C6	
	<i>·</i>	<i>H</i>	<i>X</i>	<i>η</i>	<i>χ</i>	<i>ϝ</i>
	0387	0397	03A7	03B7	03C7	03D7
	<i>E</i>	<i>Θ</i>	<i>Ψ</i>	<i>θ</i>	<i>ψ</i>	
	0388	0398	03A8	03B8	03C8	
	<i>H</i>	<i>I</i>	<i>Ω</i>	<i>ι</i>	<i>ω</i>	
	0389	0399	03A9	03B9	03C9	
<i>ι</i>	<i>I</i>	<i>K</i>	<i>Ĭ</i>	<i>κ</i>	<i>ϊ</i>	
037A	038A	039A	03AA	03BA	03CA	
	<i>Λ</i>	<i>Υ̇</i>	<i>λ</i>	<i>υ̇</i>		
	039B	03AB	03BB	03CB		
	<i>Ο</i>	<i>M</i>	<i>ά</i>	<i>μ</i>	<i>ό</i>	
	038C	039C	03AC	03BC	03CC	
	<i>N</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>O</i>	<i>ί</i>	<i>ο</i>		
	038F	039F	03AF	03BF		

<i>ά</i>	<i>έ</i>	<i>ή</i>	<i>ι</i>
1F00	1F10	1F20	1F30
<i>ά</i>	<i>έ</i>	<i>ή</i>	<i>ι</i>
1F01	1F11	1F21	1F31
<i>ᾀ</i>	<i>ἔ</i>	<i>ἦ</i>	<i>ἰ</i>
1F02	1F12	1F22	1F32
<i>ᾀ</i>	<i>ἔ</i>	<i>ἦ</i>	<i>ἰ</i>
1F03	1F13	1F23	1F33
<i>ᾶ</i>	<i>Ἓ</i>	<i>ἧ</i>	<i>ἱ</i>
1F04	1F14	1F24	1F34
<i>ᾶ</i>	<i>Ἓ</i>	<i>ἧ</i>	<i>ἱ</i>
1F05	1F15	1F25	1F35
<i>ᾷ</i>		<i>ῆ</i>	<i>ῖ</i>
1F06		1F26	1F36
<i>ᾷ</i>		<i>ῆ</i>	<i>ῖ</i>
1F07		1F27	1F37
<i>Α</i>	<i>Ε</i>	<i>Η</i>	<i>Ι</i>
1F08	1F18	1F28	1F38
<i>Α</i>	<i>Ε</i>	<i>Η</i>	<i>Ι</i>
1F09	1F19	1F29	1F39
<i>Ἀ</i>	<i>Ἐ</i>	<i>Ἡ</i>	<i>Ἰ</i>
1F0A	1F1A	1F2A	1F3A
<i>Ἀ</i>	<i>Ἐ</i>	<i>Ἡ</i>	<i>Ἰ</i>
1F0B	1F1B	1F2B	1F3B
<i>Ἀ</i>	<i>Ἐ</i>	<i>Ἡ</i>	<i>Ἰ</i>
1F0C	1F1C	1F2C	1F3C
<i>Ἀ</i>	<i>Ἐ</i>	<i>Ἡ</i>	<i>Ἰ</i>
1F0D	1F1D	1F2D	1F3D
<i>Ἀ</i>		<i>Ῥ</i>	<i>Ὶ</i>
1F0E		1F2E	1F3E
<i>Ἀ</i>		<i>Ῥ</i>	<i>Ὶ</i>
1F0F		1F2F	1F3F

## Old English

ju:das 'kwæθ to: him. næs nɑ: se: 'skɑrɪt. 'driçtən, 'hwæt is jə'wɔrdən θæt θu: wilt θe: 'sylfnə jə'swɔtliçən ʊs næs 'middanæardə.

se: 'hæ:lænd 'bndswarɔdə bnd 'kwæθ him; jif hwa: me: 'lɔvɑθ he: 'hilt mi:nə 'spræ:tfə bnd mi:n 'fædər 'lɔvɑθ hi:nə bnd we: 'kɔmɑθ to: him bnd we: 'wyrkiɑθ 'ærdɔŋgstɔ:æ mid him.

## Middle English

'hwan θat 'ɑ:prɪl ,wɪθ his 'ʃurəs sɔ:tə θə 'drɔxt ɔf 'mɑrtʃ hɑθ 'pɜrsəd ,to: ðə 'rɔ:tə and 'bɑ:ðəd 'e:vri 'væin in 'swɪtʃ lɪ'ku:r ɔf 'hwɪtʃ ver'tiu en'dzændərd ɪs θə 'flur hwan zefi'rɔs e:k ,wɪθ his 'swetə 'bre:θ

## Shakespeare

nəu ɔ:ər ðe wɪn hæf wɜ:ld  
nɛ:tər si:mz dɛd, ənd wɪkɪd dre:mz əbju:z  
ðe kɜ:teɪnd slɪp: wɪtʃkrɑft selɪbre:ts  
pɛ:l hekəts ɒfəriŋz: ənd wɪðərd mɜ:rdər,  
əlɑ:rəmd bæi hɪz sentɪnəl, ðe wɒlf,

## Modern English

ai 'dɔ:nt 'ju:zəlɪ kəm 'hɪr baɪ 'kɑ:r — ðe 'tre:nz ə 'gɒd 'di:l ,mɔ:r kən'vɪnjent wen  
wɪr 'spendɪŋ ə 'ʃu: 'aʊəz in 'təʊn wɪð ðə 'bɔɪz. ju: 'hæf tə bi: 'so 'ə:rlɪ ɪf ju: 'wɒnt  
tə 'faɪnd ə 'pɑ:rkɪŋ ple:s. ai 'θɪŋk 'mɔ:st 'gɑ:rɑ:dʒɪz 'ʃɑ:rdʒ 'fɑ:r tu: 'mɛtʃ fɜr 'pɜr 'fɔ:k  
laɪk 'əs. ðe 're:lfeɪrɪz 'ʃɪ:pər — so: 'ʃal wi: 'mɪt ət ðe 'ste:ʃən?

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 ἐντὸς, 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 ἄναιμα 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 θλαστὸν, οἷον ἐστὶ τὸ τε τῶν καράβων γένος καὶ τὸ τῶν καρκίνων. ἔτι δὲ τὰ ὀστρακόδερμα· τοιαῦτα δ' ἐστὶν ὧν ἐντὸς μὲν τὸ σαρκῶδες ἐστὶν, ἐκτὸς δὲ τὸ στερεόν, θραυστὸν ὄν καὶ κατακτόν, ἀλλ' οὐ θλαστὸν· τοιοῦτον δὲ τὸ τῶν κοχλιῶν γένος καὶ τὸ τῶν ὀστρέων ἐστίν. τέταρτον δὲ τὸ τῶν ἐντόμων, ὃ πολλὰ καὶ ἀνόμοια περιείληφεν εἶδη ζώων. ἔστι δ' ἕντομα ὅσα κατὰ τοῦνομά ἐστὶν ἐντομάς ἔχοντα ἢ ἐν τοῖς ὑπτίοις ἢ ἐν τοῖς πρηνέσιν 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' ἕντομα καὶ ἄπτερα, οἷον ἴουλος καὶ σκολόπενδρα, καὶ πτερωτά, οἷον μέλιττα καὶ μηλολόνηθι καὶ σφήξ· καὶ ταῦτ' ὅσα γένος ἐστὶ καὶ πτερωτὸν καὶ ἄπτερον, οἷον μύρμηκες εἰσι καὶ πτερωτοὶ καὶ ἄπτεροι, καὶ αἱ καλούμεναι πυγολαμπίδες.

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...

Ā	Ð	Ġ	Ī	ƚ	Ŏ	Š	Ū			◌̇		◌̇
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0102	0112	0122	0132	0142	0152	0162	0172			0302		0342
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0104	0114	0124	0134	0144	0154	0164	0174			0304	0313	
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0107	0117	0127	0137	0147	0157	0167	0177		Ɔ	0307		0327
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0108	0118	0128	0138	0148	0158	0168	0178			0308		0328
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010A	011A	012A	013A	014A	015A	016A	017A			030A		
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010B	011B	012B	013B	014B	015B	016B	017B			030B		
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010C	011C	012C	013C	014C	015C	016C	017C			030C		
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010D	011D	012D	013D	014D	015D	016D	017D					
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010E	011E	012E	013E	014E	015E	016E	017E	018E				
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0024	\$	4	D	T	d	t	¤	´	Ä	Ô	ä	ô	fl
0025	%	5	E	U	e	u	¥	µ	Å	Õ	å	õ	FB02
0026	&	6	F	V	f	v	/	¶	Æ	Ö	æ	ö	ffi
0027	'	7	G	W	g	w	§	·	Ç	×	ç	÷	FB03
0028	(	8	H	X	h	x	¨	,	È	Ø	è	ø	FB04
0029	)	9	I	Y	i	y	©	¹	É	Ù	é	ù	fj
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## 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 забóры вдоль у́лиц, дома́ — ма́ленькие бе́дные. Во всём го́роде то́лько оди́н ка́менный дом, у са́мого въезда́ в го́род. В нём по́чта и во́енное нача́льство. Все други́е дома́ в Тамáни — не дома́, а ма́ленькие избúшки.

Одна́жды, по́здно но́чью подвезжа́ю 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 избúшки, у ка́ждого са́мого бе́дного до́мика. Стучи́м. Про́сим. Но кварта́р в го́роде нет.

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



	I 2160	i 2170		← 2190	⇐ 21D0	∇ 2200	∠ 2220	≠ 2260	⊐ 2290	∅ 2400	● 25D0	♀ 2640	♁ 2650
	II 2161	ii 2171		↑ 2191	⇑ 21D1	∑ 2211			⊑ 2291	□ 25A1	◐ 25D1	⊕ 2641	♃ 2651
	III 2162	iii 2172		→ 2192	⇒ 21D2	− 2212	≈ 2242	⊂ 2282	⊒ 2292	△ 25B3	☾ 263D	♂ 2642	♁ 2652
1/3 2153	IV 2163	iv 2173		↓ 2193	⇓ 21D3	∃ 2203	≈ 2243	⊃ 2283		◌ 2423	☾ 263E	♃ 2643	♁ 2653
2/3 2154	V 2164	v 2174		↔ 2194	⇌ 21A4		≤ 2264	⊤ 22A4				♃ 2644	♀ 26B3
1/5 2155	VI 2165	vi 2175		↕ 2195	⇕ 21A5	∅ 2205	≥ 2265	⊥ 22A5				♃ 2645	♃ 26E2
2/5 2156	VII 2166	vii 2176		↖ 2196	⇗ 21A6	△ 2206	:	⊆ 2286				♃ 2646	
3/5 2157	VIII 2167	viii 2177		↗ 2197	⇘ 21A7	∇ 2207	∧ 2227	⊇ 2287				♃ 2647	
4/5 2158	IX 2168	ix 2178		↘ 2198		∈ 2208	∨ 2228	≈ 2248		☺ 263A		♃ 2648	₺ 26B8
1/6 2159	X 2169	x 2179		↙ 2199			∩ 2229			☹ 2639	☺ 2609	♃ 2649	✱ 26B9
5/6 215A	XI 216A	xi 217A		↔ 219A		∈ 220A	√ 221A	∪ 222A		♃ 240A	♃ 260A	♃ 264A	₺ 26BA
1/8 215B	XII 216B	xii 217B		↔ 219B		∇ 22BB	∛ 221B	∫ 222B	≈ 223B	○ 25CB	♃ 260B	♃ 264B	π 26BB
3/8 215C	L 216C	l 217C					∜ 221C		~ 223C	· 25CC	♃ 260C	♃ 264C	♃ 26BC
5/8 215D	C 216D	c 217D		↔ 21D4							♃ 260D	♃ 264D	
7/8 215E	D 216E	d 217E		↔ 21AE								♃ 264E	
1/1 215F	M 216F	m 217F				Π 220F		⊐ 228F	⊑ 22FF	● 25CF	♀ 263F	♃ 264F	

# ТАМА́НЬ

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Одна́жды, по́здно но́чью подвезжа́ю на тро́йке к Тамáни. Я о́чень уста́л и го́лоден. Я уже́ мно́го, мно́го днeй в доро́ге. Меня́ посыла́ет моё во́енное нача́льство на Кавка́з. Мо́я уста́лая тро́йка въезжа́ет в го́род и оста́навливается у ка́менного до́ма. Я начина́ю сту́чать. Сту́чу о́чень до́лго. Нако́нeц, слы́шу го́лос:

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# Тамань

Тамань – самый скверный городишко из всех приморских городов России. Я там чуть-чуть не умер с голода, да еще вдобавок меня хотели умопить. Я приехал на перекладной тележке поздно ночью. Эмицик 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 казенную квартиру. Десятник нас повел по городу. В которой избе ни подъяедем – 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 вашему благородию не понравится; там не чисто». 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 избочась другая лачужка, менее и древнее первой. Берег обрывом спускался к мряю почти у самых стен ее, и внизу с беспрерывным 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,

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mosp	-	‡				1				В В
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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 2984
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 27E6
fsp	=	•	”		7	7			Ⓟ Ⓡ	] ]
2007	2017	2027	2037		2077	2087			2117 2127	27E7
psp	‘		^		8	8				
2008	2018		2038		2078	2088				
thsp	’		<		9	9			°F P	
2009	2019		2039		2079	2089			2109 2119	
hsp	,		>	7	+	+			Q K	[
200A	201A		203A	204A	207A	208A			211A 212A	3016
zws	‘		※		-	-			Å	] ]
200B	201B		203B		207B	208B			212B	3017
zwnj	“				=	=				
200C	201C				207C	208C				
zwj	”		?		(	(			H R	
200D	201D		203D		207D	208D			210D 211D	
lrm	”				)	)				
200E	201E				207E	208E				
rlm	“				n				R	
200F	201F				207F				211E	

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

ᨧ	ᨦ	ᨣ	ᨡ
2DA0	2DB0	2DC0	2DD0
ᨧ	ᨦ	ᨣ	ᨡ
2DA1	2DB1	2DC1	2DD1
ᨧ	ᨦ	ᨣ	ᨡ
2DA2	2DB2	2DC2	2DD2
ᨧ	ᨦ	ᨣ	ᨡ
2DA3	2DB3	2DC3	2DD3
ᨧ	ᨦ	ᨣ	ᨡ
2DA4	2DB4	2DC4	2DD4
ᨧ	ᨦ	ᨣ	ᨡ
2DA5	2DB5	2DC5	2DD5
ᨧ	ᨦ	ᨣ	ᨡ
2DA6	2DB6	2DC6	2DD6

ᨧ	ᨦ	ᨣ	ᨡ
2DA8	2DB8	2DC8	2DD8
ᨧ	ᨦ	ᨣ	ᨡ
2DA9	2DB9	2DC9	2DD9
ᨧ	ᨦ	ᨣ	ᨡ
2DAA	2DBA	2DCA	2DDA
ᨧ	ᨦ	ᨣ	ᨡ
2DAB	2DBB	2DCB	2ddb
ᨧ	ᨦ	ᨣ	ᨡ
2DAC	2DBC	2DCC	2DDC
ᨧ	ᨦ	ᨣ	ᨡ
2DAD	2DBD	2DCD	2DDD
ᨧ	ᨦ	ᨣ	ᨡ
2DAE	2DBE	2DCE	2DDE

# Other Scripts

## Armenian (Rom 3:23–3:26)

Բայց անդ ինչ էս զինչ ինձ տեղի ՚ի կողմանս յայտուիկ. եւ անձնկ յոյժ ունիմ ՚ի բազմեմ անաց գալ ատ ձեզ: յորժամ անցանիցեմ ՚ի սպանիս, անկն ունիմ յանցանելն ատ նոսա՝ տեսանել զձեզ. եւ ՚ի ձէնջ յողարկել անդր, եթէ նմիս իսկ փոքր ՚ի շատէ ձեռք լցայց: Բայց այժմ երթամ յե(րուսաղէ)մ պաշտել զս(ուր)բուն: քանզի հաճոյ թուեցաւ մակեդոնացոցն եւ արայեցոցն՝ հաղորդութիւն ինչ առնել ընդ աղքատս սրբոցն՝ որ ենն յե(րուսաղէ)մ:

## Runes

RFMPFFΓNF+WRMMPHΓNHTPQXM+  
 XIBRFPR  
 FFQXMFNIFPΓNFI+RFMFJFHTRI  
 FHTFN+MX

## Thai

### บทอ่าน๓

ปัจจุบันคนไทยนิยมไปเที่ยวซื้อของที่ศูนย์การค้าเพราะว่าสะดวก  
 สามารถซื้อของได้เกือบทุกอย่างครบครันรอบพาลูกหลานไปเที่ยวที่ศูนย์  
 การค้าด้วยเพราะว่าเด็กชอบศูนย์การค้าทุกแห่งจะติดแอร์ทำให้อากาศเย็นสบาย

# בראשית

א בְּרֵאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ : וְהָאָרֶץ  
 הָיְתָה רֵחָף וְנִהְיָ וְהַשָּׁף צֶלְפָּנִי תְהוֹם וְרוּחַ אֱלֹהִים  
 3 מְרַחֶפֶת עַל־פְּנֵי חַמִּים : וַיֹּאמֶר אֱלֹהִים יְהִי אוֹר וַיְהִי־  
 4 אוֹר : וַיִּרְא אֱלֹהִים אֶת־הָאוֹר כִּי־טוֹב וַיְבָרֶךְ אֱלֹהִים בֵּין  
 ה האֹר וּבֵין הַשָּׁף : וַיִּקְרָא אֱלֹהִים אֶת־הָאוֹר יוֹם וְלַחֲשׁוֹךְ  
 קָרָא לַיְלָה וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם אֶחָד : פ  
 6 וַיֹּאמֶר אֱלֹהִים יְהִי רִקִּיעַ בְּתוֹךְ הַמַּיִם וַיְהִי מְבֹדֵל בֵּין  
 7 מַיִם לַמַּיִם : וַיַּעַשׂ אֱלֹהִים אֶת־הַרְקִיעַ וַיְבָרֶךְ בֵּין הַמַּיִם  
 אֶשֶׁר מִתְּהַת לַרְקִיעַ וּבֵין הַמַּיִם אֲשֶׁר מֵעַל לַרְקִיעַ וַיְהִי־  
 8 כֵן : וַיִּקְרָא אֱלֹהִים לַרְקִיעַ שָׁמַיִם וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר  
 יוֹם שֵׁנִי : פ  
 9 וַיֹּאמֶר אֱלֹהִים יִקְוּוּ הַמַּיִם מִתַּחַת הַשָּׁמַיִם אֶל־מְקוֹם אֶחָד  
 י וְתִרְאָה הַיַּבְשָׁה וַיְהִי־כֵן : וַיִּקְרָא אֱלֹהִים אֶת־הָאָרֶץ

ዠ	᐀	ᐁ	ᐂ	ᐃ	ᐄ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ
12E0	12F0	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390	2D80 2D90
ዡ	ᐁ	ᐂ		ᐄ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ
12E1	12F1	1301		1321	1331	1341	1351	1361	1371	1381	1391	2D81 2D91
ዢ	ᐂ	ᐃ	ᐄ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ
12E2	12F2	1302	1312	1322	1332	1342	1352	1362	1372	1382	1392	2D82 2D92
ዣ	ᐃ	ᐄ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ
12E3	12F3	1303	1313	1323	1333	1343	1353	1363	1373	1383	1393	2d83 2D93
ዤ	ᐄ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ
12E4	12F4	1304	1314	1324	1334	1344	1354	1364	1374	1384	1394	2D84 2D94
ዥ	ᐅ	ᐆ	ᐇ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ
12E5	12F5	1305	1315	1325	1335	1345	1355	1365	1375	1385	1395	2D85 2D95
ዦ	ᐆ	ᐇ		ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ
12E6	12F6	1306		1326	1336	1346	1356	1366	1376	1386	1396	2D86 2D96
ዧ	ᐇ	ᐈ		ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ	
12E7	12F7	1307		1327	1337	1347	1357	1367	1377	1387	1397	2D87
የ	ᐈ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ
12E8	12F8	1308	1318	1328	1338	1348	1358	1368	1378	1388	1398	2D88
ዩ	ᐉ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ	ᐕ
12E9	12F9	1309	1319	1329	1339	1349	1359	1369	1379	1389	1399	2D89
ደ	ᐊ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ		ᐖ
12EA	12FA	130A	131A	132A	133A	134A	135A	136A	137A	138A		2D8A
ዱ	ᐋ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ		ᐒ	ᐓ	ᐔ		ᐗ
12EB	12FB	130B	131B	132B	133B	134B		136B	137B	138B		2D8B
ደ	ᐌ	ᐍ	ᐎ	ᐏ	ᐑ	ᐒ		ᐓ	ᐔ	ᐕ		ᐙ
12EC	12FC	130C	131C	132C	133C	134C		136C	137C	138C		2D8C
ደ	ᐍ	ᐎ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ	ᐕ		ᐖ		ᐚ
12ED	12FD	130D	131D	132D	133D	134D	135D	136D		138D		2D8D
ደ	ᐎ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ		ᐕ		ᐖ		ᐛ
12EE	12FE	130E	131E	132E	133E	134E	135E	136E		138E		2D8E
ደ	ᐏ	ᐑ	ᐒ	ᐓ	ᐔ	ᐕ		ᐖ		ᐗ		ᐜ
12EF	12FF	130F	131F	132F	133F	134F	135F	136F		138F		2D8F

ሀ	ሐ	ሠ	ሰ	ቀ	ቐ	በ	ተ	ተ	ነ	ከ	ኰ	ኸ	ዐ
1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	12A0	12B0	12C0	12D0
ሁ	ሐ	ሠ	ሰ	ቀ	ቐ	ቡ	ቱ	ተ	ነ	ከ			ዐ
1201	1211	1221	1231	1241	1251	1261	1271	1281	1291	12A1			12D1
ሂ	ሐ	ሠ	ሰ	ቀ	ቐ	ቢ	ቱ	ተ	ነ	ከ	ኰ	ኸ	ዐ
1202	1212	1222	1232	1242	1252	1262	1272	1282	1292	12A2	12B2	12C2	12D2
ሃ	ሐ	ሠ	ሰ	ቀ	ቐ	ባ	ታ	ተ	ነ	ከ	ኰ	ኸ	ዐ
1203	1213	1223	1233	1243	1253	1263	1273	1283	1293	12A3	12B3	12C3	12D3
ሄ	ሐ	ሠ	ሰ	ቀ	ቐ	ቤ	ቱ	ተ	ነ	ከ	ኰ	ኸ	ዐ
1204	1214	1224	1234	1244	1254	1264	1274	1284	1294	12A4	12B4	12C4	12D4
ህ	ሐ	ሠ	ሰ	ቀ	ቐ	ብ	ታ	ተ	ነ	ከ	ኰ	ኸ	ዐ
1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	12A5	12B5	12C5	12D5
ሆ	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ			ዐ
1206	1216	1226	1236	1246	1256	1266	1276	1286	1296	12A6			12D6
ሐ	ሐ	ሠ	ሰ	ቀ		ቧ	ታ	ተ	ነ	ከ			
1207	1217	1227	1237	1247		1267	1277	1287	1297	12A7			
ለ	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
1208	1218	1228	1238	1248	1258	1268	1278	1288	1298	12A8	12B8	12C8	12D8
ሉ	ሐ	ሠ	ሰ	ቀ		ቧ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
1209	1219	1229	1239			1269	1279		1299	12A9	12B9	12C9	12D9
ሊ	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
120A	121A	122A	123A	124A	125A	126A	127A	128A	129A	12AA	12BA	12CA	12DA
ለ	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
120B	121B	122B	123B	124B	125B	126B	127B	128B	129B	12AB	12BB	12CB	12DB
ሌ	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
120C	121C	122C	123C	124C	125C	126C	127C	128C	129C	12AC	12BC	12CC	12DC
ል	ሐ	ሠ	ሰ	ቀ	ቐ	ቦ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
120D	121D	122D	123D	124D	125D	126D	127D	128D	129D	12AD	12BD	12CD	12DD
ሎ	ሐ	ሠ	ሰ			ቧ	ታ	ተ	ነ	ከ	ኰ	ዐ	ዘ
120E	121E	122E	123E			126E	127E		129E	12AE	12BE	12CE	12DE
ሊ	ሐ	ሠ	ሰ			ቧ	ታ	ተ	ነ	ከ		ዐ	ዘ
120F	121F	122F	123F			126F	127F		129F	12AF		12CF	12DF

# الفاتحة

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 Bemmino Font Family

Style	UpperCase	LowerCase	SmCaps
Regular.Normal	ABCDEF	abcdef	ABCDEF
Regular.Medium	ABCDEF	abcdef	ABCDEF
Regular.HalfBold	ABCDEF	abcdef	ABCDEF
Regular.SemiBold	ABCDEF	abcdef	ABCDEF
Regular.Bold	<b>ABCDEF</b>	<b>abcdef</b>	<b>ABCDEF</b>
Italic.Normal	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i>
Italic.Medium	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i>
Italic.HalfBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i>
Italic.SemiBold	<i>ABCDEF</i>	<i>abcdef</i>	<i>ABCDEF</i>
Italic.Bold	<b><i>ABCDEF</i></b>	<b><i>abcdef</i></b>	<b><i>ABCDEF</i></b>
Cursive.Normal	<i>A B C D E F</i>	<i>abcdef</i>	
Cursive.Medium	<i>A B C D E F</i>	<i>abcdef</i>	
Cursive.HalfBold	<i>A B C D E F</i>	<i>abcdef</i>	
Cursive.SemiBold	<i>A B C D E F</i>	<i>abcdef</i>	
Cursive.Bold	<b><i>A B C D E F</i></b>	<b><i>abcdef</i></b>	
Fraktur.Normal	A̢C̢D̢E̢F̢	abc̢def̢	

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

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

ا		ذ	-	ـ	و	ـ	پ	ت	غ	گ	ة	ي	
0600		0630	0640	0650	0660	0670	0680	0690	06A0	06B0	06C0	06D0	
س		ء	ر	ف	ـ	ا	ع	ر	ف	گ	ه	ي	
0601		0621	0631	0641	0651	0661	0671	0681	0691	06A1	06B1	06C1	06D1
م		آ	ز	ق	ـ	ا	خ	ر	ب	گ	ه	ے	
0602		0622	0632	0642	0652	0662	0672	0682	0692	06A2	06B2	06C2	06D2
ص		أ	س	ك	ـ	ا	ج	م	ب	گ	ة	ئ	
0603		0623	0633	0643	0653	0663	0673	0683	0693	06A3	06B3	06C3	06D3
		ؤ	ش	ل	ـ	ا	ج	ر	ف	گ	و	-	
		0624	0634	0644	0654	0664	0674	0684	0694	06A4	06B4	06C4	06D4
	ط	إ	ص	م	ء	ا	خ	ر	پ	ل	و	ه	
	0615	0625	0635	0645	0655	0665	0675	0685	0695	06A5	06B5	06C5	06D5
ٲ		ئ	ض	ن	ـ	ا	و	چ	ر	ق	ل	و	
0606		0626	0636	0646	0656	0666	0676	0686	0696	06A6	06B6	06C6	
ٲ		ا	ط	ه	ـ	ا	و	چ	ر	ف	ل	و	
0607		0627	0637	0647	0657	0667	0677	0687	0697	06A7	06B7	06C7	
		ب	ظ	و	ـ	ا	ئ	ر	ق	ل	و		
		0628	0638	0648	0658	0668	0678	0688	0698	06A8	06B8	06C8	
%		ة	ع	ى	ـ	ا	ئ	ر	ك	ن	و		
0609		0629	0639	0649	0659	0669	0679	0689	0699	06A9	06B9	06C9	
%		ت	غ	ي	ـ	ا	ئ	ب	ك	ن	ق		
060A		062A	063A	064A	065A	066A	067A	068A	069A	06AA	06BA	06CA	
	؛	ث	ك	ـ	ا	ر	ب	ب	پ	ن	و		
	061B	062B	063B	064B	065B	066B	067B	068B	069B	06AB	06BB	06CB	
،		ج	ك	ـ	ا	ر	ب	ت	پ	ن	ى		
060C		062C	063C	064C	065C	066C	067C	068C	069C	06AC	06BC	06CC	
ر		ح	ى	ـ	ا	*	ت	د	ص	ك	ن	ى	
060D		062D	063D	064D	065D	066D	067D	068D	069D	06AD	06BD	06CD	
ر	ث	خ	ت	ـ	ا	ب	پ	ث	ض	ك	ه	ى	
060E	061E	062E	063E	064E	065E	066E	067E	068E	069E	06AE	06BE	06CE	
ع	؟	د	ث	ـ	ا	و	ت	ت	ظ	گ	چ	و	
060F	061F	062F	063F	064F		066F	067F	068F	069F	06AF	06BF	06CF	

# 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.

Page 32 contains the Cyrillic alphabet and Page 33 the Hebrew alphabet.

Pages 34 and 35 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.

Pages 36 and 37 contain (most of) the Ethiopic alphabet; Page 38 shows Thai and the continuation of the Ethiopic.

Pages 39 and 40 contain various special characters and mathematical symbols, and the page 41, 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 42 and 43 show the ISO8859-1 ASCII forms and the Eastern European extensions. Pages 44 and 45 show the Greek and polytonic forms. Page 46 shows the Cyrillic and Thai alphabets and Page 47 shows the small-caps forms.

## Cursive

Pages 48 and 49 show the available Latin and Cyrillic cursive forms in the 'Pietro' font.

## Fraktur

Page 50 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.

## Chinese and Japanese

The Chinese and Japanese glyphs are only available in the Regular font, normal weight. There are no heavier-weight glyphs in the current version of Bembino.

Page 51 shows the Japanese Hiragana and Katakana forms. Pages 52, 53, and 54 contain the (small) subset of Chinese-Japanese Kanji designed within this release of Bembino, starting with the 'Bopomofo' syllables.





È 0400	А 0410	Р 0420	а 0430	р 0440	è 0450	W 0460		С 0480	Г 0490		У 04B0	
Ë 0401	Б 0411	С 0421	б 0431	с 0441	ë 0451	w 0461		с 0481	г 0491		У 04B1	
Ђ 0402	В 0412	Т 0422	в 0432	т 0442	ђ 0452	Ђ 0462	Θ 0472		Ф 0492			
Ѓ 0403	Г 0413	У 0423	г 0433	у 0443	ѓ 0453	Ђ 0463	Θ 0473		Ф 0493	Н 04A3		
Є 0404	Д 0414	Ф 0424	д 0434	ф 0444	є 0454	Ю 0464	Ѵ 0474					
Ѕ 0405	Е 0415	Х 0425	е 0435	х 0445	ѕ 0455	Ю 0465	Ѵ 0475					
І 0406	Ж 0416	Ц 0426	ж 0436	ц 0446	і 0456	А 0466					И A656	
Ї 0407	З 0417	Ч 0427	з 0437	ч 0447	ї 0457	А 0467					и A657	
Ј 0408	И 0418	Ш 0428	и 0438	ш 0448	ј 0458	И 0468						
Љ 0409	Й 0419	Щ 0429	й 0439	щ 0449	љ 0459	И 0469						
Њ 040A	К 041A	Ъ 042A	к 043A	ъ 044A	њ 045A	Ж 046A			К 049A		н 04BA	
Ђ 040B	Л 041B	Ы 042B	л 043B	ы 044B	ђ 045B	Ж 046B			к 049B			
Ѓ 040C	М 041C	Ь 042C	м 043C	ь 044C	ѓ 045C	Ж 046C						
Й 040D	Н 041D	Э 042D	н 043D	э 044D	й 045D	Ж 046D						
Ў 040E	О 041E	Ю 042E	о 043E	ю 044E	ў 045E							
Ц 040F	П 041F	Я 042F	п 043F	я 044F	ц 045F						У 04AF	

Ā 0100	Đ 0110	Ġ 0120	İ 0130	ı 0140	Ŏ 0150	Š 0160	Ŭ 0170	ƒ 0180	ε 0190			ı 01C0	ÿ 01D0
ā 0101	đ 0111	ġ 0121	ı 0131	l 0141	ŏ 0151	š 0161	ŭ 0171	ƒ 0181	f 0191			ı 01C1	ÿ 01D1
Ǻ 0102	Ē 0112	Ĝ 0122	Ĵ 0132	ł 0142	Œ 0152	Ț 0162	Ț 0172	Б 0182	f 0192				ö 01D2
ǻ 0103	ē 0113	ĝ 0123	ĵ 0133	ń 0143	œ 0153	ț 0163	ț 0173	Б 0183	G 0193				Ů 01D3
Ą 0104	Ě 0114	Ĥ 0124	Ĵ 0134	ń 0144	Ŕ 0154	Ť 0164	Ŵ 0174	Ь 0184	У 0194	Р 01A4			ů 01D4
ą 0105	ě 0115	ĥ 0125	ĵ 0135	Ń 0145	ŕ 0155	ť 0165	ŵ 0175	Ь 0185	u 0195	β 01A5			Ů 01D5
Ć 0106	Ĕ 0116	Ħ 0126	Ķ 0136	ŋ 0146	Ŗ 0156	Ʀ 0166	Ŷ 0176	Ɔ 0186	ı 0196				ũ 01D6
ć 0107	ĕ 0117	ħ 0127	ķ 0137	ň 0147	ŗ 0157	ƥ 0167	ŷ 0177	Ɔ 0187			З 01B7		Ů 01D7
Ĉ 0108	Ė 0118	Ĩ 0128	κ 0138	ň 0148	Ř 0158	Ū 0168	Ÿ 0178	ƥ 0188					ú 10D8
ĉ 0109	ė 0119	ĩ 0129	ł 0139	ň 0149	ř 0159	ũ 0169	Ž 0179	Đ 0189	k 0199				Ů 01D9
Ċ 010A	Ě 011A	Ī 012A	Í 013A	Ń 014A	Ś 015A	Ū 016A	ž 017A	Đ 018A					ů 01DA
ċ 010B	ě 011B	ī 012B	ł 013B	ŋ 014B	ś 015B	ū 016B	Ž 017B	Đ 018B					Ů 01DB
Č 010c	Ĝ 011C	Ĭ 012C	ł 013C	Ŏ 014C	Ŝ 015C	Ŭ 016C	ž 017C	đ 018C					ù 01DC
č 010D	ĝ 011D	ĭ 012D	l 013D	ō 014D	ŝ 015D	ŭ 016D	Ž 017D	g 018D				Ǻ 01CD	ə 01DD
Ď 010E	Ĝ 011E	Į 012E	ł 013E	Ŏ 014E	Ş 015E	Ŭ 016E	ž 017E	Đ 018E	η 019E			ǻ 01CE	Ǻ 01DE
ď 010F	ġ 011F	į 012F	l 013F	ö 014F	ş 015F	ű 016F	f 017F	Θ 018F	Θ 019F			ƒ 01BF	Ǻ 01DF



	ί	Π	ύ	π		ϋ	κ		ά	έ	ή	ι
	0390	03A0	03B0	03C0		03E0	03F0		1F00	1F10	1F20	1F30
	Α	Ρ	α	ρ	ϑ	ϣ	ϱ		ά	έ	ή	ι
	0391	03A1	03B1	03C1	03D1	03E1	03F1		1F01	1F11	1F21	1F31
	Β		β	ς	Υ		Ϸ		ᾶ	ἔ	ἥ	ἰ
	0392		03B2	03C2	03D2		03F2		1F02	1F12	1F22	1F32
	Γ	Σ	γ	σ	Υ		Ϸ		ᾷ	ἔ	ἥ	ἰ
	0393	03A3	03B3	03C3	03D3		03F3		1F03	1F13	1F23	1F33
'	'	Δ	Τ	δ	τ	Υ	Θ		Ᾱ	ἔ	ἥ	ἰ
0374	0384	0394	03A4	03B4	03C4	03D4	03F4		1F04	1F14	1F24	1F34
,	“	Ε	Υ	ε	υ	φ	€		Ὰ	ἔ	ἥ	ἰ
0375	0385	0395	03A5	03B5	03C5	03D5	03F5		1F05	1F15	1F25	1F35
	Α	Ζ	Φ	ζ	φ	ω	ἔ		Ά		ἥ	ἰ
	0386	0396	03A6	03B6	03C6	03D6	03F6		1F06		1F26	1F36
	·	Η	Χ	η	χ	ϣ			ᾼ		ἥ	ἰ
	0387	0397	03A7	03B7	03C7	03D7			1F07		1F27	1F37
	Έ	Θ	Ψ	θ	ψ	Φ			Ά	Έ	Ή	Ί
	0388	0398	03A8	03B8	03C8	03D8			1F08	1F18	1F28	1F38
	Ή	Ι	Ω	ι	ω	φ	Ϸ		Ά	Έ	Ή	Ί
	0389	0399	03A9	03B9	03C9	03D9	03F9		1F09	1F19	1F29	1F39
˘	Ί	Κ	Ϊ	κ	ϊ	Ϸ			Ά	Έ	Ή	Ί
037A	038A	039A	03AA	03BA	03CA	03DA			1F0A	1F1A	1F2A	1F3A
◊		Λ	Υ	λ	υ	ς			Ά	Έ	Ή	Ί
037B		039B	03AB	03BB	03CB	03DB			1F0B	1F1B	1F2B	1F3B
€	Ο	Μ	ά	μ	ό	Ϸ			Ά	Έ	Ή	Ί
037C	038C	039C	03AC	03BC	03CC	03DC			1F0C	1F1C	1F2C	1F3C
ϑ		Ν	έ	ν	ύ	Ϸ			Ά	Έ	Ή	Ί
037D		039D	03AD	03BD	03CD	03DD			1F0D	1F1D	1F2D	1F3D
;	Υ	Ξ	ή	ξ	ώ				Ά		Ή	Ί
037E	038E	039E	03AE	03BE	03CE				1F0E		1F2E	1F3E
	Ω	Ο	ί	ο					Ά		Ή	Ί
	038F	039F	03AF	03BF					1F0F		1F2F	1F3F

◌̀	◌́	◌̂	◌̃	◌̄	◌̅	◌̆
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

