

The Viking fonts*

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Abstract

The viking package provides two sets of Runic letters in the form used by the Scandinavian vikings around 1000 AD. It is a “modernized” set of 16 characters some of which are assigned several pronunciations.

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1 Introduction

This package is based on the runic package by Peter Wilson, but was modified to represent the Runic alphabet as it was used by the Scandinavian vikings. The original 24 letter *Futhark* had at that time been simplified to a 16 letter alphabet, which existed in two forms: one form with shorter and one form with longer branches.

This package accommodates both sets of runic characters in the place of the upper and lower case latin characters, respectively.

*This file has version number v1.0, last revised 2003/08/12.

This manual is typeset according to the conventions of the L^AT_EX DOC-STRIP utility which enables the automatic extraction of the L^AT_EX macro source files [GMS94].

Section 2 describes the usage of the package. Commented code for the fonts is in Sections 3 and 4 and source code for the package is in Section 5.

2 The runic package

The font in this package represents the later runic alphabet used by the Scandinavian vikings from about 700 AD until about 1200 AD when the runes were replaced by both the medieval runic alphabet and the roman (latin) alphabet. Originally this runic alphabet was developed from the older versions with 24 letters, represented in the Lpackrunic package by Peter Wilson. The shape of the runes had been simplified and the number was reduced from 24 to 16 characters.

The font presented here is based on information from Enoksen [Eno98], Jansson [Jan84], Brink [Bri83] and Gustavson [Gus91].

Many of the Runic characters have a direct correspondence with the modern Latin alphabet. The *S* rune is allowed in a second mirrored form, which was mapped as *Z*. The *yR* rune changed their pronunciation towards *Y* during the viking ages, which allowed me to map it at this character position. Unlike Wilson I chose to avoid a command for the *thurs* (*thorn*) rune and placed it as the letter *D* instead. Since it also represents the sound *dh* this does not appear unreasonable and eases the writing of texts and the reading of the source code.

The uppercase letters will produce the long-armed form of the runes, while the lowercase letters correspond to the somewhat shorter alternative form (Swedish: *kortkvist runor*).

The letter sequence for the viking futhark abecedary mapping is:

F U D O R K H N I A S T B M L Y : .

with the two punctuation marks : and . commonly found in runic inscriptions.

<code>\futfamily</code> <code>\textfut</code>	This command selects the Runic font family. The family name is <code>vik</code> . The command <code>\textfut{<text>}</code> typesets <code><text></code> in the Runic font.
--	--

3 The Metafont code

3.1 The parameter file

We deal with the parameter file first, and start by announcing what it is for.

```

1 <*up>
2 %% VIK10.MF Computer Runic font 10 point design size.
3
Specify the font size.
4
5 font_identifier:="Viking"; font_size 10pt#;
6
```

```

u    Define the very simple font parameters.
ht   7 u#:=.2pt#;                % unit width
s    8 ht#:=7pt#;                % height of characters (CM cap-height is approx 6.8pt)
o    9 s#:=1.5pt#;              % width correction (right and left)
px   10 o#:=1/20pt#;            % overshoot
font-normal-space 11 px#:=.7pt#;    % horizontal width of pen
font-normal-shrink 12 font_normal_space:=7pt#; % width of a blank space
font-x-height     13 font_normal_shrink:=.9pt#; % width correction for blank space
font-quad         14 font_x_height:=4.5pt#;    % height of one ex
                 15 font_quad:=10pt#;         % an em
                 16

```

Finally, call the driver file for the Runic font.

```

17 input vikttitle      %% switch to the driver file---Runic title
18
19 end
20
21 </up>

```

3.2 The driver file

Announce the file and switch into Metafont mode

```

22 < *mfd>
23 % This is VIKTITLE.MF. It makes the short Runic font.
24
25 font_coding_scheme:="Runic glyphs";
26 mode_setup;
27

```

ho Perform additional setup.

```

leftloc 28 ho#:=o#;                % horizontal overshoot
py       29 leftloc#:=s#;          % leftmost xcoord of character
        30 py#:=.9px#;              % vertical thickness of the pen
        31
        32 define_pixels(s,u);
        33 define_blacker_pixels(px,py);
        34 define_good_x_pixels(leftloc);
        35 define_corrected_pixels(o);          % turn on overshoot correction
        36 define_horizontal_corrected_pixels(ho);
        37

```

midloc Variables for the middle xcoord and rightmost xcoord of a character.

```

rightloc 38 numeric midloc, rightloc;

```

stylus Define the pen.

```

39 pickup pencircle xscaled px yscaled py;
40 stylus:=savepen;
41

```

```

stugna Define the thicker pen for the E rune.
42 pickup pencircle xscaled 2px yscaled 2px;
43 stugna:=savepen;
44

beginglyph A macro to save some typing of beginchar arguments.
45 def beginglyph(expr code, unit_width) =
46   beginchar(code, unit_width*ht#+2s#, ht#, 0);
47   midloc:=1/2w; rightloc:=(w-s);
48   pickup stylus enddef;
49

cmchar cmchar should precede each character
50 let cmchar=\\;
51

Finally, input the file that does all the work.
52
53 input vikglyph;          % Runic glyphs
54
55 end
56
57 </mfd>

```

3.3 The glyph code

The following code generates the glyphs for the Runic font. The characters are defined in the futhark ordering.

```

58 <*maj>
59 % VIKGLYPH.MF Program file for Runic font.
60 %
61 %

F The long-armed F
62 cmchar "Runic letter F";
63 beginglyph("F",0.6);
64 z1 = (leftloc, 0.0h);
65 z2 = (leftloc, 0.4h);
66 z3 = (leftloc, 0.7h);
67 z4 = (leftloc, 1.0h);
68 z5 = (midloc, 1.0h);
69 z6 = (rightloc, 1.0h);
70 draw z1--z4;
71 draw z2--z6;
72 draw z3--z5;
73 labels(1,2,3,4,5,6);
74 endchar;

```

U The long-armed U

```
75 cmchar "Runic letter U";
76 beginglyph("U",0.6);
77 z1 = (leftloc, 0.0h);
78 z2 = (leftloc, 1.0h);
79 z3 = (0.75rightloc, 0.65h);
80 z4 = (rightloc, 0.0h);
81 draw z1--z2--z3--z4;
82 labels(1,2,3,4);
83 endchar;
```

D The long-armed TH

```
84 cmchar "Runic letter TH";
85 beginglyph("D",0.4);
86 z1 = (leftloc, 0.0h);
87 z2 = (leftloc, 0.2h);
88 z3 = (leftloc, 0.8h);
89 z4 = (leftloc, 1.0h);
90 z5 = (rightloc, 0.5h);
91 draw z1--z4;
92 draw z2--z5;
93 draw z3--z5;
94 labels(1,2,3,4,5);
95 endchar;
```

O The long-armed O

```
96 cmchar "Runic letter O";
97 beginglyph("O",0.4);
98 z1 = (leftloc, 0.0h);
99 z2 = (leftloc, 0.4h);
100 z3 = (leftloc, 0.7h);
101 z4 = (leftloc, 1.0h);
102 z5 = (rightloc, 0.5h);
103 z6 = (rightloc, 0.2h);
104 draw z1--z4;
105 draw z2--z6;
106 draw z3--z5;
107 labels(1,2,3,4,5,6);
108 endchar;
```

R The long-armed R

```
109 cmchar "Runic letter R";
110 beginglyph("R",0.6);
111 z1 = (leftloc, 0.0h);
112 z2 = (leftloc, 1.0h);
113 z3 = (0.7(leftloc+rightloc), 0.75h);
114 z4 = (0.3(leftloc+rightloc), 0.5h);
115 z5 = (rightloc, 0.0h);
116 draw z1--z2--z3--z4--z5;
```

```

117 labels(1,2,3,4,5);
118 endchar;

K The long-armed K
119 cmchar "Runic letter K";
120 beginglyph("K",0.4);
121 z1 = (leftloc, 0.0h);
122 z2 = (leftloc, 0.5h);
123 z3 = (leftloc, 1.0h);
124 z4 = (rightloc, 1.0h);
125 draw z1--z3;
126 draw z2--z4;
127 labels(1,2,3,4);
128 endchar;

G The long-armed G
129 cmchar "Runic letter G";
130 beginglyph("G",0.4);
131 z1 = (leftloc, 0.0h);
132 z2 = (leftloc, 0.5h);
133 z3 = (leftloc, 1.0h);
134 z4 = (rightloc, 1.0h);
135 z5 = (midloc, 0.95h);
136 draw z1--z3;
137 draw z2--z4;
138 draw z5;
139 labels(1,2,3,4,5);
140 endchar;

H The long-armed H
141 cmchar "Runic letter H";
142 beginglyph("H",0.4);
143 z1 = (midloc, 0.0h);
144 z2 = (midloc, 1.0h);
145 z3 = (leftloc, 0.3h);
146 z4 = (leftloc, 0.7h);
147 z5 = (rightloc, 0.7h);
148 z6 = (rightloc, 0.3h);
149 draw z1--z2;
150 draw z3--z5;
151 draw z4--z6;
152 labels(1,2,3,4,5,6);
153 endchar;

N The long-armed N
154 cmchar "Runic letter N";
155 beginglyph("N",0.4);
156 z1 = (midloc, 0.0h);
157 z2 = (midloc, 1.0h);

```

```

158 z4 = (leftloc, 0.7h);
159 z6 = (rightloc, 0.3h);
160 draw z1--z2;
161 draw z4--z6;
162 labels(1,2,4,6);
163 endchar;

I The long-armed I
164 cmchar "Runic letter I";
165 beginglyph("I",0.4);
166 z1 = (midloc, 0.0h);
167 z2 = (midloc, 1.0h);
168 draw z1--z2;
169 labels(1,2);
170 endchar;

E The long-armed E
171 cmchar "Runic letter E";
172 beginglyph("E",0.4);
173 z1 = (midloc, 0.0h);
174 z2 = (midloc, 1.0h);
175 z3 = (midloc, 0.5h);
176 draw z1--z2;
177 pickup stugna
178 draw z3;
179 labels(1,2,3);
180 endchar;

A The long-armed A
181 cmchar "Runic letter A";
182 beginglyph("A",0.4);
183 z1 = (midloc, 0.0h);
184 z2 = (midloc, 1.0h);
185 z4 = (leftloc, 0.3h);
186 z6 = (rightloc, 0.7h);
187 draw z1--z2;
188 draw z4--z6;
189 labels(1,2,4,6);
190 endchar;

S The long-armed S
191 cmchar "Runic letter S";
192 beginglyph("S",0.4);
193 z1 = (rightloc, 0.0h);
194 z2 = (rightloc, 0.7h);
195 z3 = (leftloc, 0.3h);
196 z4 = (leftloc, 1.0h);
197 draw z1--z2--z3--z4;
198 labels(1,2,3,4);
199 endchar;

```

Z The long-armed mirrored S

```
200 cmchar "Runic letter Z";
201 beginglyph("Z",0.4);
202 z1 = (leftloc, 0.0h);
203 z2 = (leftloc, 0.7h);
204 z3 = (rightloc, 0.3h);
205 z4 = (rightloc, 1.0h);
206 draw z1--z2--z3--z4;
207 labels(1,2,3,4);
208 endchar;
```

T The long-armed T

```
209 cmchar "Runic letter T";
210 beginglyph("T",0.4);
211 z1 = (midloc, 0.0h);
212 z2 = (midloc, 1.0h);
213 z3 = (leftloc, 0.8h);
214 z4 = (rightloc, 0.8h);
215 draw z1--z2;
216 draw z2--z3;
217 draw z2--z4;
218 labels(1,2,3,4);
219 endchar;
```

B The long-armed B

```
220 cmchar "Runic letter B";
221 beginglyph("B",0.4);
222 z1 = (leftloc, 0.0h);
223 z2 = (leftloc, 0.5h);
224 z3 = (leftloc, 1.0h);
225 z4 = (rightloc, 0.75h);
226 z5 = (rightloc, 0.25h);
227 draw z1--z3;
228 draw z3--z4--z2;
229 draw z2--z5--z1;
230 labels(1,2,3,4,5);
231 endchar;
```

M The long-armed M

```
232 cmchar "Runic letter M";
233 beginglyph("M",0.6);
234 z1 = (midloc, 0.0h);
235 z2 = (midloc, 0.7h);
236 z3 = (midloc, 1.0h);
237 z4 = (leftloc, 1.0h);
238 z5 = (rightloc, 1.0h);
239 draw z1--z3;
240 draw z2--z4;
241 draw z2--z5;
```



```

242 labels(1,2,3,4,5);
243 endchar;

L The long-armed L
244 cmchar "Runic letter L";
245 beginglyph("L",0.4);
246 z1 = (leftloc, 0.0h);
247 z2 = (leftloc, 1.0h);
248 z3 = (rightloc, 0.8h);
249 draw z1--z2--z3;
250 labels(1,2,3);
251 endchar;

Y The long-armed Y
252 cmchar "Runic letter Y";
253 beginglyph("Y",0.6);
254 z1 = (midloc, 0.0h);
255 z2 = (midloc, 0.3h);
256 z3 = (midloc, 1.0h);
257 z4 = (leftloc, 0.0h);
258 z5 = (rightloc, 0.0h);
259 draw z1--z3;
260 draw z2--z4;
261 draw z2--z5;
262 labels(1,2,3,4,5);
263 endchar;

: The punctuation :
264 cmchar "Runic letter :";
265 beginglyph(":",0.2);
266 z3 = (leftloc, 0.4h);
267 z4 = (leftloc, 0.6h);
268 z5 = (rightloc, 0.6h);
269 z6 = (rightloc, 0.4h);
270 draw z3--z5;
271 draw z4--z6;
272 labels(3,4,5,6);
273 endchar;

. The punctuation .
274 cmchar "Runic letter .";
275 beginglyph(".",0.2);
276 z3 = (midloc, 0.5h);
277 draw z3;
278 labels(3);
279 endchar;

f The short-armed F
280 cmchar "Runic letter F";

```

```

281 beginglyph("f",0.3);
282 z1 = (leftloc, 0.0h);
283 z2 = (leftloc, 0.5h);
284 z3 = (leftloc, 0.75h);
285 z4 = (leftloc, 1.0h);
286 z5 = (rightloc, 1.0h);
287 z6 = (rightloc, 0.75h);
288 draw z1--z4;
289 draw z2--z6;
290 draw z3--z5;
291 labels(1,2,3,4,5,6);
292 endchar;

```

u The short-armed U

```

293 cmchar "Runic letter U";
294 beginglyph("u",0.3);
295 z1 = (leftloc, 0.0h);
296 z2 = (leftloc, 1.0h);
297 z4 = (rightloc, 0.0h);
298 draw z1--z2--z4;
299 labels(1,2,4);
300 endchar;

```

d The short-armed TH

```

301 cmchar "Runic letter TH";
302 beginglyph("d",0.3);
303 z1 = (leftloc, 0.0h);
304 z2 = (leftloc, 0.2h);
305 z3 = (leftloc, 0.8h);
306 z4 = (leftloc, 1.0h);
307 z5 = (rightloc, 0.5h);
308 draw z1--z4;
309 draw z2--z5;
310 draw z3--z5;
311 labels(1,2,3,4,5);
312 endchar;

```

o The short-armed O

```

313 cmchar "Runic letter O";
314 beginglyph("o",0.3);
315 z1 = (leftloc, 0.0h);
316 z2 = (leftloc, 0.4h);
317 z3 = (leftloc, 0.7h);
318 z4 = (leftloc, 1.0h);
319 z5 = (rightloc, 0.5h);
320 z6 = (rightloc, 0.2h);
321 draw z1--z4;
322 draw z2--z6;
323 draw z3--z5;

```

```

324 labels(1,2,3,4,5,6);
325 endchar;

r The short-armed R
326 cmchar "Runic letter R";
327 beginglyph("r",0.3);
328 z1 = (leftloc, 0.0h);
329 z2 = (leftloc, 1.0h);
330 z3 = (0.7(leftloc+rightloc), 0.75h);
331 z4 = (0.3(leftloc+rightloc), 0.5h);
332 z5 = (rightloc, 0.0h);
333 draw z1--z2--z3--z4--z5;
334 labels(1,2,3,4,5);
335 endchar;

k The short-armed K
336 cmchar "Runic letter K";
337 beginglyph("k",0.3);
338 z1 = (leftloc, 0.0h);
339 z2 = (leftloc, 0.5h);
340 z3 = (leftloc, 1.0h);
341 z4 = (rightloc, 1.0h);
342 draw z1--z3;
343 draw z2--z4;
344 labels(1,2,3,4);
345 endchar;

h The short-armed H
346 cmchar "Runic letter H";
347 beginglyph("h",0.2);
348 z1 = (midloc, 0.0h);
349 z2 = (midloc, 1.0h);
350 z3 = (leftloc, 0.5h);
351 z5 = (rightloc, 0.5h);
352 draw z1--z2;
353 draw z3--z5;
354 labels(1,2,3,5);
355 endchar;

n The short-armed N
356 cmchar "Runic letter N";
357 beginglyph("n",0.3);
358 z1 = (leftloc, 0.0h);
359 z2 = (leftloc, 1.0h);
360 z4 = (leftloc, 0.6h);
361 z6 = (rightloc, 0.3h);
362 draw z1--z2;
363 draw z4--z6;
364 labels(1,2,4,6);
365 endchar;

```

i The short-armed I

```

366 cmchar "Runic letter I";
367 beginglyph("i",0.2);
368 z1 = (midloc, 0.0h);
369 z2 = (midloc, 1.0h);
370 draw z1--z2;
371 labels(1,2);
372 endchar;

```

a The short-armed A

```

373 cmchar "Runic letter A";
374 beginglyph("a",0.3);
375 z1 = (leftloc, 0.0h);
376 z2 = (leftloc, 1.0h);
377 z4 = (leftloc, 0.4h);
378 z6 = (rightloc, 0.7h);
379 draw z1--z2;
380 draw z4--z6;
381 labels(1,2,4,6);
382 endchar;

```

s The short-armed S

```

383 cmchar "Runic letter S";
384 beginglyph("s",0.2);
385 z1 = (midloc, 0.5h);
386 z2 = (midloc, 1.0h);
387 draw z1--z2;
388 labels(1,2);
389 endchar;

```

t The short-armed T

```

390 cmchar "Runic letter T";
391 beginglyph("t",0.3);
392 z1 = (rightloc, 0.0h);
393 z2 = (rightloc, 1.0h);
394 z3 = (leftloc, 0.8h);
395 draw z1--z2;
396 draw z2--z3;
397 labels(1,2,3);
398 endchar;

```

b The short-armed B

```

399 cmchar "Runic letter B";
400 beginglyph("b",0.3);
401 z1 = (leftloc, 0.0h);
402 z2 = (leftloc, 0.3h);
403 z3 = (leftloc, 0.6h);
404 z4 = (leftloc, 1.0h);
405 z5 = (rightloc, 0.8h);

```

```

406 z6 = (rightloc, 0.5h);
407 draw z1--z4;
408 draw z2--z6;
409 draw z3--z5;
410 labels(1,2,3,4,5,6);
411 endchar;

m The short-armed M
412 cmchar "Runic letter M";
413 beginglyph("m",0.3);
414 z1 = (midloc, 0.0h);
415 z2 = (midloc, 1.0h);
416 z3 = (leftloc, 1.0h);
417 z4 = (rightloc, 1.0h);
418 draw z1--z2;
419 draw z3--z4;
420 labels(1,2,3,4);
421 endchar;

l The short-armed L
422 cmchar "Runic letter L";
423 beginglyph("l",0.3);
424 z1 = (leftloc, 0.0h);
425 z2 = (leftloc, 1.0h);
426 z3 = (rightloc, 0.8h);
427 draw z1--z2--z3;
428 labels(1,2,3);
429 endchar;

y The short-armed Y
430 cmchar "Runic letter Y";
431 beginglyph("y",0.2);
432 z1 = (midloc, 0.0h);
433 z2 = (midloc, 0.5h);
434 draw z1--z2;
435 labels(1,2);
436 endchar;
437 </maj>

```

4 The font definition files

```

438 <*.fdotl>
439 \DeclareFontFamily{OT1}{vik}{-}{}
440 \DeclareFontShape{OT1}{vik}{m}{n}{ <-> vik10 }{}
441 \DeclareFontShape{OT1}{vik}{bx}{n}{ <-> sub vik/m/n }{}
442 \DeclareFontShape{OT1}{vik}{b}{n}{ <-> sub vik/m/n }{}
443 \DeclareFontShape{OT1}{vik}{m}{sl}{ <-> sub vik/m/n }{}
444 \DeclareFontShape{OT1}{vik}{m}{it}{ <-> sub vik/m/n }{}

```

```

445 </fdotl>
446 <*fdtl>
447 \DeclareFontFamily{T1}{vik}{}
448 \DeclareFontShape{T1}{vik}{m}{n}{ <-> vik10 }{}
449 \DeclareFontShape{T1}{vik}{bx}{n}{ <-> sub vik/m/n }{}
450 \DeclareFontShape{T1}{vik}{b}{n}{ <-> sub vik/m/n }{}
451 \DeclareFontShape{T1}{vik}{m}{sl}{ <-> sub vik/m/n }{}
452 \DeclareFontShape{T1}{vik}{m}{it}{ <-> sub vik/m/n }{}
453 </fdtl>

```

5 The viking package code

Announce the name and version of the package, which requires L^AT_EX 2_ε.

```

454 <*usc>
455 \NeedsTeXFormat{LaTeX2e}
456 \ProvidesPackage{viking}[2003/08/12 v1.0 package for Runic fonts]

```

`\vikfamily` Selects the futharc (Runic) font family in the OT1 encoding.

```

457 \newcommand{\vikfamily}{\usefont{OT1}{vik}{m}{n}}

```

`\textvik` Text command for the viking (Runic) font family.

```

458 \DeclareTextFontCommand{\textvik}{\vikfamily}

```

The end of this package.

```

459 </usc>

```

References

- [Eno98] Lars Magnus Enoksen. *Runor*. Historiska Media, 1998. ISBN 91-89442-55-5
- [Bri83] Thorgunn Snædal Brink. *Runstenar och runinskrifter i Sigtuna kommun*. Bohusläningens Boktryckeri, 1983. ISSN 0280-8439
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- [Gus91] Helmer Gustavson. *Runstenar i Vallentuna*. CEWE, 1991. ISBN 91-971070-6-9
- [GMS94] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Addison-Wesley Publishing Company, 1994. ISBN 0-201-54199-8

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

Symbols	<code>\font-x-height</code> <u>7</u>	P
<code>\.</code> <u>274</u>	<code>\futfamily</code> <u>2</u>	<code>\ProvidesPackage</code> . . 456
<code>\:</code> <u>264</u>	G	<code>\px</code> <u>7</u>
<code>\;</code> 50	<code>\G</code> <u>129</u>	<code>\py</code> <u>28</u>
A	H	R
<code>\A</code> <u>181</u>	<code>\H</code> <u>141</u>	<code>\R</code> <u>109</u>
<code>\a</code> <u>373</u>	<code>\h</code> <u>346</u>	<code>\r</code> <u>326</u>
B	<code>\ho</code> <u>28</u>	<code>\rightloc</code> <u>38</u>
<code>\B</code> <u>220</u>	<code>\ht</code> <u>7</u>	S
<code>\b</code> <u>399</u>	I	<code>\S</code> <u>191</u>
<code>\beginglyph</code> <u>45</u>	<code>\I</code> <u>164</u>	<code>\s</code> <u>7</u> , <u>383</u>
C	<code>\i</code> <u>366</u>	<code>\stugna</code> <u>42</u>
<code>\cmchar</code> <u>50</u>	K	<code>\stylus</code> <u>39</u>
D	<code>\K</code> <u>119</u>	T
<code>\D</code> <u>84</u>	<code>\k</code> <u>336</u>	<code>\T</code> <u>209</u>
<code>\d</code> <u>301</u>	L	<code>\t</code> <u>390</u>
<code>\DeclareFontFamily</code> 439, 447	<code>\L</code> <u>244</u>	<code>\textfut</code> <u>2</u>
<code>\DeclareFontShape</code> 440–444, 448–452	<code>\l</code> <u>422</u>	<code>\textvik</code> <u>458</u>
<code>\DeclareTextFontCommand</code> 458	<code>\leftloc</code> <u>28</u>	U
E	M	<code>\U</code> <u>75</u>
<code>\E</code> <u>171</u>	<code>\M</code> <u>232</u>	<code>\u</code> <u>7</u> , <u>293</u>
F	<code>\m</code> <u>412</u>	V
<code>\F</code> <u>62</u>	<code>\midloc</code> <u>38</u>	<code>\vikfamily</code> . . . <u>457</u> , 458
<code>\f</code> <u>280</u>	N	Y
<code>\font-normal-shrink</code> . <u>7</u>	<code>\N</code> <u>154</u>	<code>\Y</code> <u>252</u>
<code>\font-normal-space</code> . . <u>7</u>	<code>\n</code> <u>356</u>	<code>\y</code> <u>430</u>
<code>\font-quad</code> <u>7</u>	O	Z
	<code>\O</code> <u>96</u>	<code>\Z</code> <u>200</u>
	<code>\o</code> <u>7</u> , <u>313</u>	