

作りましょう 0.7

パラメタ方式フォントファミリ
校とプリティプリントのソース

Tsukurimashou 0.7

Parametric Font Family
Proofs and pretty-printed
source code

Matthew Skala

mskala@ansuz.sooke.bc.ca

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Proofs and pretty-printed source code for Tsukurimashou
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Volume IV

U+0000 to U+2FFF

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00

tsuku-01.mp

01

tsuku-02.mp

02

tsuku-03.mp

03

tsuku-20.mp

20

tsuku-21.mp

21

tsuku-24.mp

24

tsuku-25.mp

25

tsuku-26.mp

26

tsuku-27.mp

27

tsuku-2e.mp

2E

tsuku-2f.mp

2F

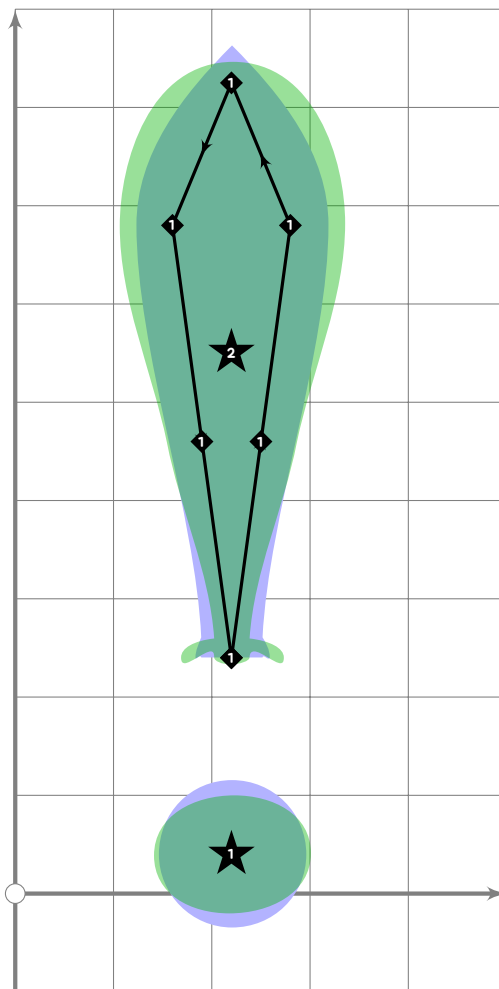
tsuku-00.mp

00

```
1 %
2 % Unicode page 00 (ASCII/ISO Latin-1) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31
32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input accent.mp;
39 input latin.mp;
40 input numerals.mp;
41 input punct.mp;
42
43 do_late_includes;
44
45
46
47 transform ascii_punct_xf;
48 if is_proportional:
49   ascii_punct_xf:=identity scaled (1.7*tsu_punct_size) shifted centre_pt;
50 else:
51   ascii_punct_xf:=
52     identity scaled (1.1*tsu_punct_size) shifted (250,latin_vcentre);
53 fi;
54
55
56
```

Ascii

```
57 % ASCII
58
59 % WARNING this code is substantially duplicated in tsuku-ff; just
60 % enough differences to make sharing impractical
61
62 % exclamation point
63 tsu_rescale_native_narrow;
```



```

64 beginsuglyph("exclam";33);
65   if tsu_pbrush_size>=(tsu_punct_size*0.5):
66     push_lcblob(fullcircle
67       xscaled (tsu_punct_size+tsu_pbrush_size)
68       yscaled (tsu_punct_size+tsu_pbrush_size*tsu_pbrush_shape)
69       rotated tsu_pbrush_angle
70       shifted (220,40));
71   else:
72     push_stroke(fullcircle scaled tsu_punct_size shifted (220,40),
73       (2,2)-(2,2)-(2,2)-(2,2)-cycle);
74     push_lcblob(get_stroke(0));
75   fi;
76
77   push_stroke((220,240){up}..(280,680){up}..{curl 1}(220,825){curl 1}..
78     (160,680){down}..{down}(220,240),
79     (1,1)-(2,2)-(2,2)-(2,2)-(1,1));
80
81   if tsu_pbrush_size>=30:
82     push_lcblob((subpath (0,1,3.9) of get_stroke(0))-cycle);
83   fi;
84

```



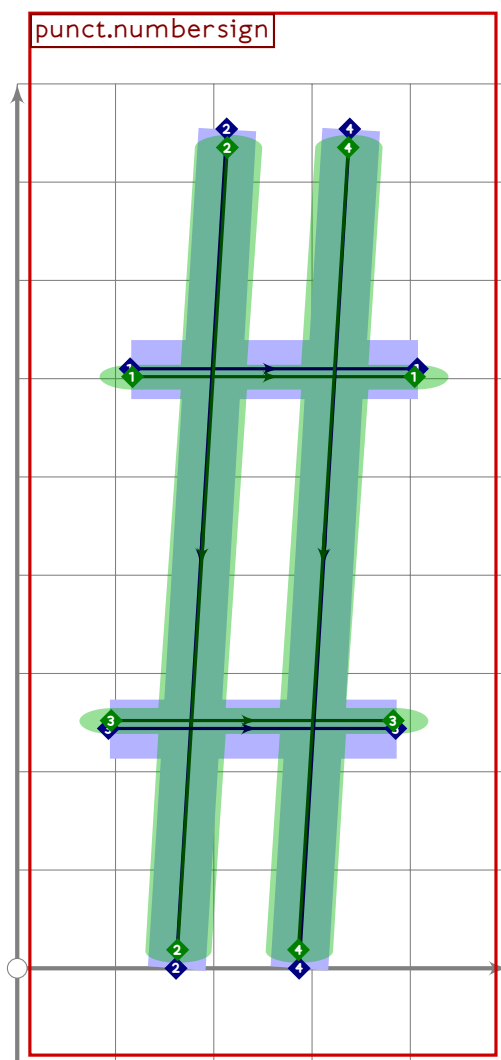
```
85     tsu_render;
86 endtsuglyph;
87 tsu_rescale_half;
88
```



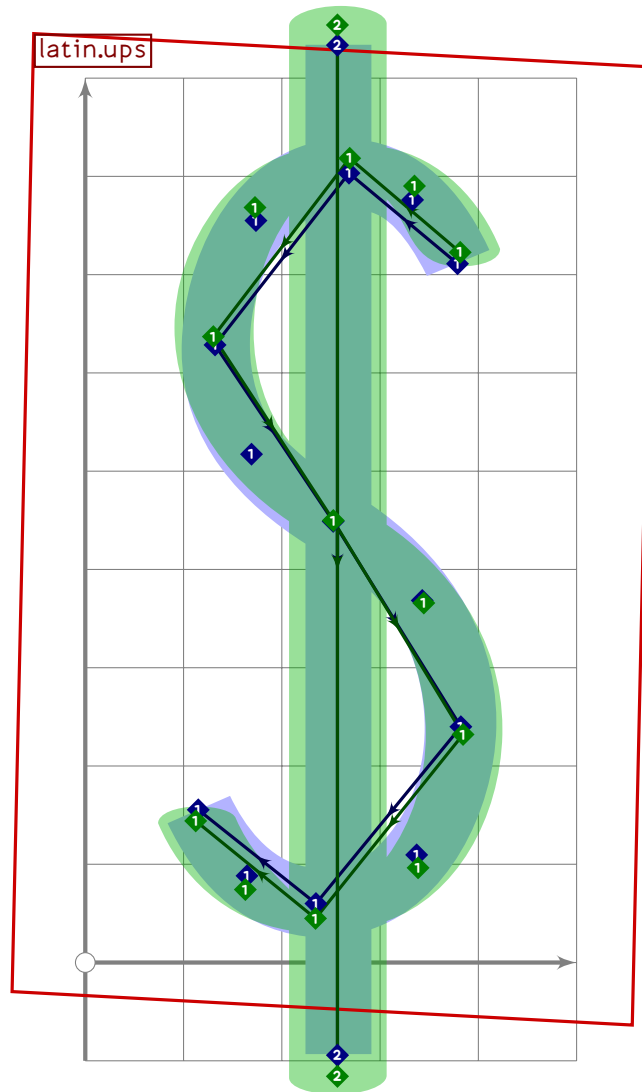
```
89 % ASCII (neither left nor right) quotation mark
90 begint Suglyph("quotedbl";34);
91     punct.asciiquote;
92     tsu_render;
93 endtsuglyph;
94
```

U+0023
tsuku.numbersign

00



```
95 % number sign
96 begintsuglyph("numbersign";35);
97   punct.numbersign;
98   tsu_render;
99 endtsuglyph;
100
```



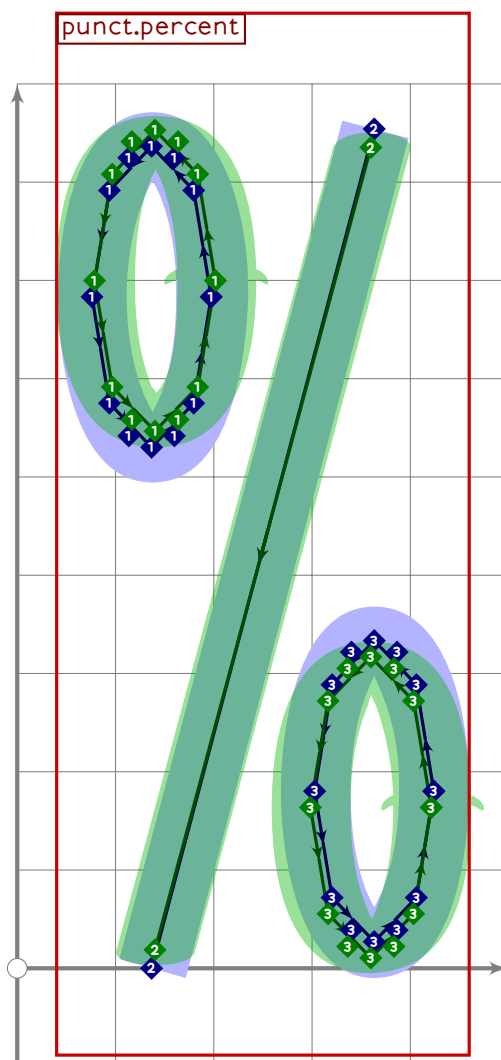
```

101 % dollar sign
102 beginsuglyph("dollar";36);
103   tsu_xform(identity shifted -centre_pt
104     rotated -2 xyscaled (1.06,0.92) shifted centre_pt)(latin.ups);
105
106   numeric x[],y[];
107   x1=x2=0.53[xpart llcorner get_strokep(0),xpart lrcorner get_strokep(0)];
108   y1=1.12[latin_wide_low_r,latin_wide_high_r];
109   y2=(-0.15)[latin_wide_low_r,latin_wide_high_r];
110
111   push_stroke(z1-z2,(2,2)-(2,2));
112   set_bosize(0,90);
113
114   tsu_render;
115   endtsuglyph;
116

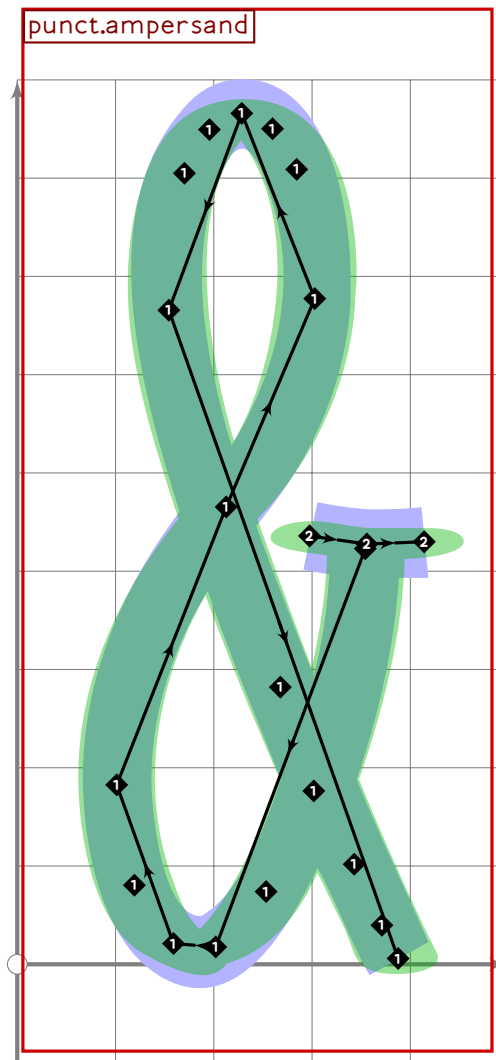
```

U+0025
tsuku.percent

00



```
117 % percent
118 begintsuglyph("percent",37);
119   punct.percent;
120   tsu_render;
121 endsuglyph;
122
```



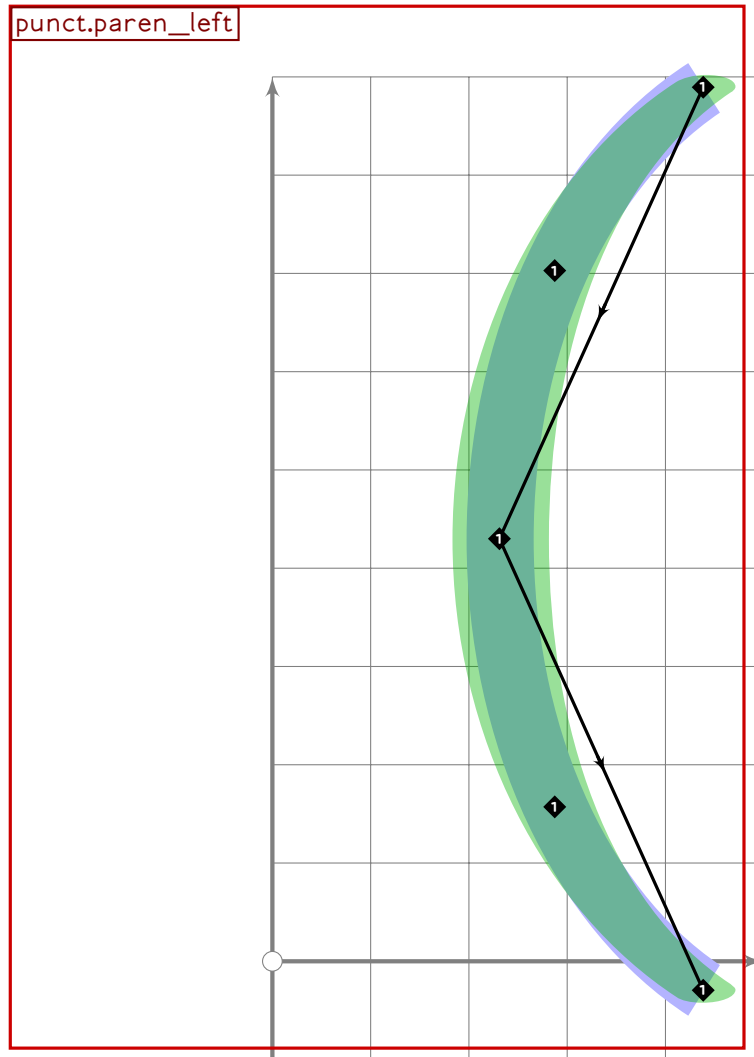
```
123 % ampersand
124 begintsuglyph("ampersand",38);
125   punct.ampersand;
126   tsu_render;
127 endtsuglyph;
128
```

U+0027
tsuku.quotesingle

00



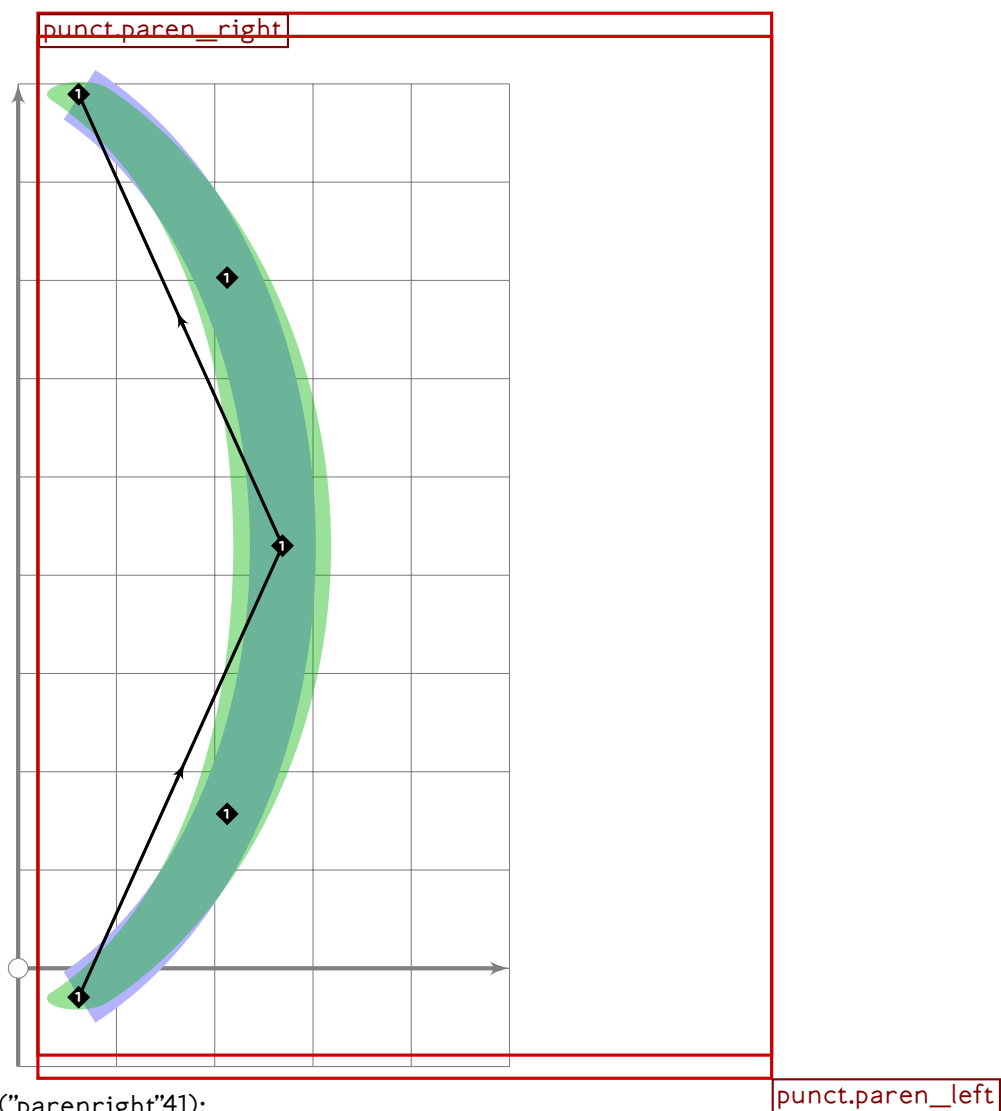
```
129 % apostrophe
130 beginsuglyph("quotesingle",39);
131 punct.make_comma((480,vmetric(0.94)),0);
132 tsu_render;
133 endsuglyph;
134
```



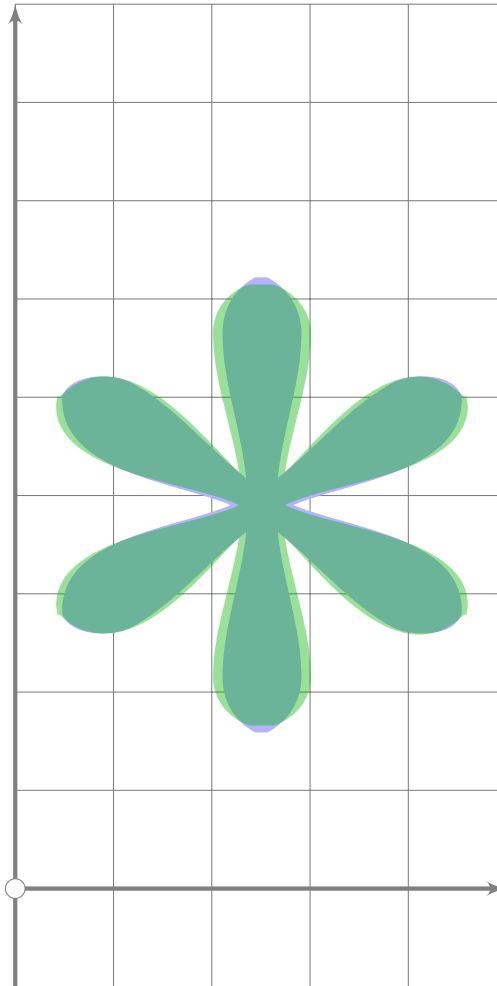
```
135 % left and right parentheses
136 beginsuglyph("parenleft";40);
137 punct.paren_left;
138 tsu_render;
139 endtsuglyph;
```

U+0029
tsuku.parenright

00



```
140 begintsuglyph("parenright";41);
141 punct.paren_right;
142 tsu_render;
143 endtsuglyph;
144
145 % WARNING changing rescale setting
146 tsu_rescale_native_conditional;
147
```

```

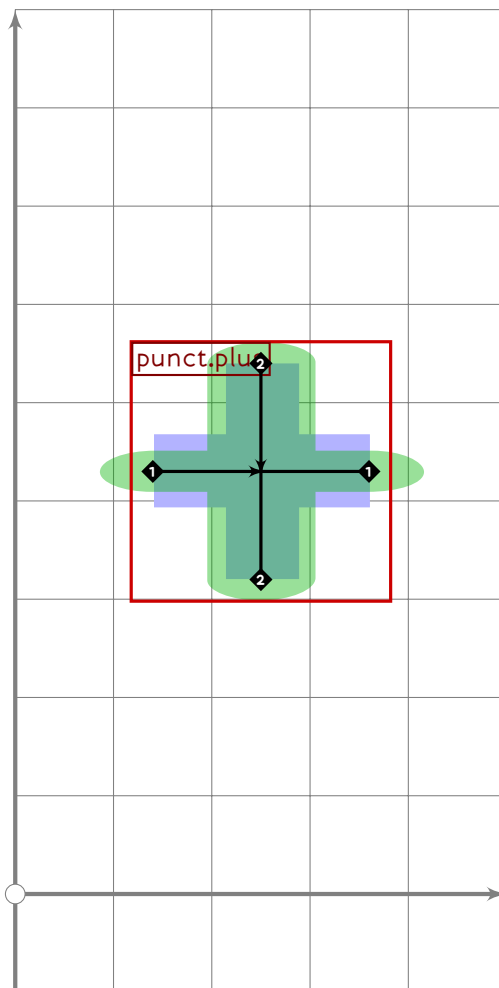
148 % asterisk
149 begintsuglyph("asterisk";42);
150   begingroup
151     save lobe,glyph,nlobes;
152     path lobe,glyph;
153     numeric nlobes;
154
155     lobe:=(1,0){up}..((1+tsu_brush_max)*tsu_punct_size/8,140){up}
156       ..{curl 1}{0,175}{curl 1}
157       ..(-(1+tsu_brush_max)*tsu_punct_size/8,140){down};
158     if rescale_slant>50:
159       lobe:=(lobe..(-1,0){down}..(0,-1)..cycle) scaled (tsu_punct_size/70);
160       nlobes:=5;
161     else:
162       lobe:=(lobe..(lobe rotated 180)..cycle) scaled (tsu_punct_size/80);
163       nlobes:=3;
164     fi;
165
166     default_nib:=fix_nib(35*tsu_brush_max,
167       35*tsu_brush_max*tsu_brush_shape,
168       tsu_brush_angle);

```

```

169
170     for i:=0 upto nlobes-1:
171         pen_stroke()(lobe rotated (i*360/nlobes)
172                     shifted (centre_pt+(-250,0)))(glyph);
173         dangerousFill glyph.r;
174     endfor;
175 endgroup;
176 endtsuglyph;
177

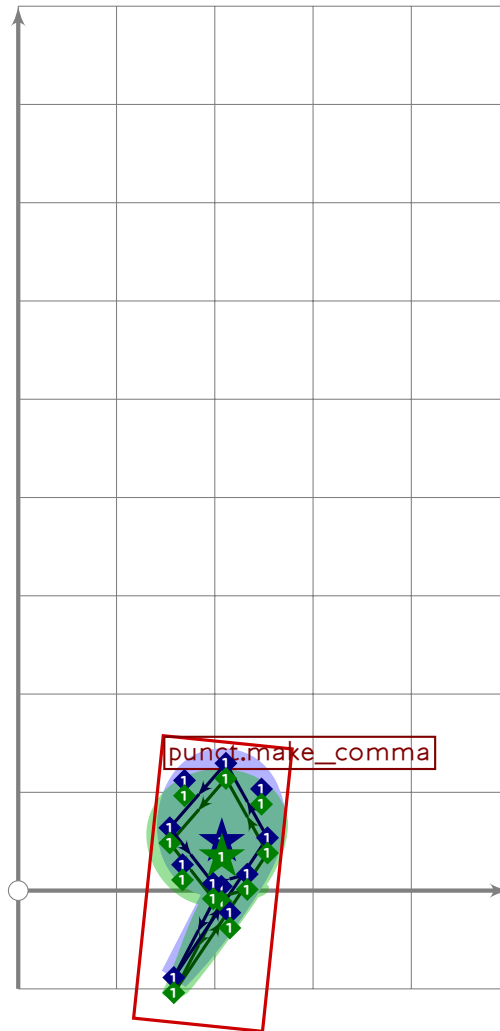
```



```

178 % plus
179 begintsuglyph("plus";43);
180 punct.plus(ascii_punct_xf);
181 tsu_render;
182 endtsuglyph;
183
184 % WARNING changing rescale setting
185 tsu_rescale_half;
186

```



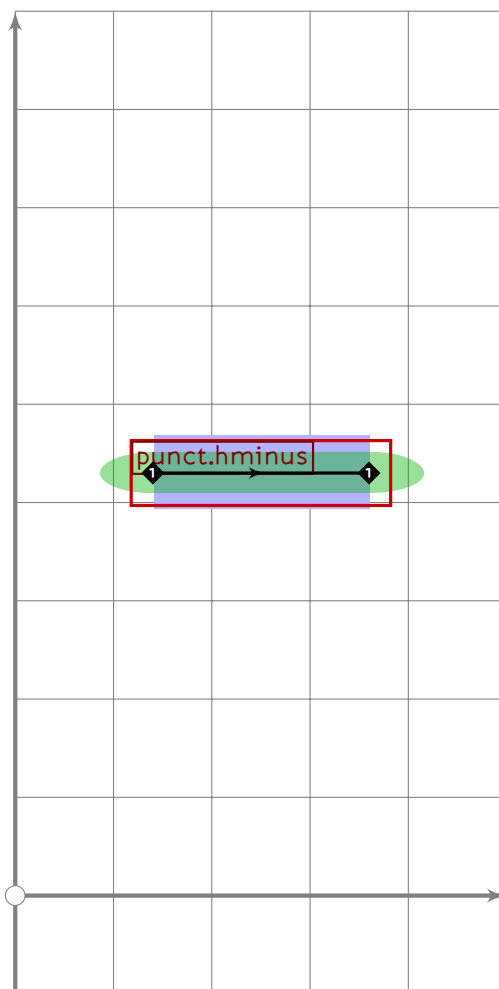
```

187 % comma
188 begintsuglyph("comma";44);
189 punct.make_comma((380,vmetric(0.03)),0);
190 tsu_render;
191 endtsuglyph;
192
193 % hyphen-minus
194 tsu_rescale_native_conditional;

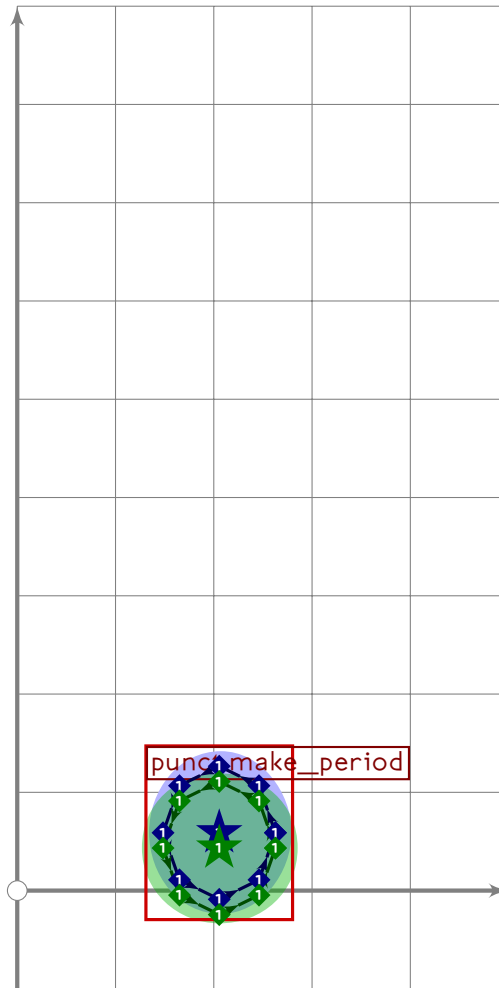
```

U+002D
tsuku.hyphen

00



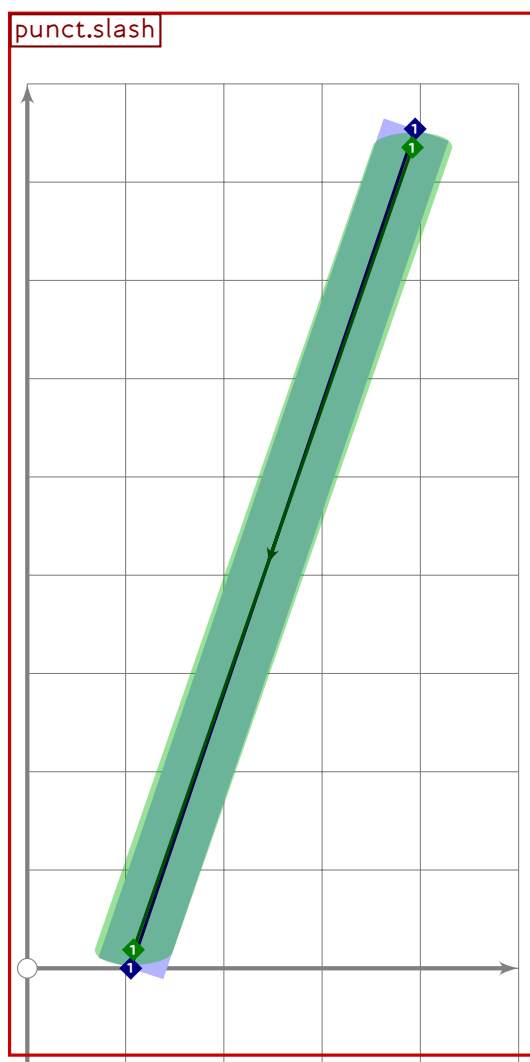
```
195 begintsuglyph("hyphen";45);
196   punct.hminus(ascii_punct_xf);
197   tsu_render;
198 endtsuglyph;
199 tsu_rescale_half;
200
```



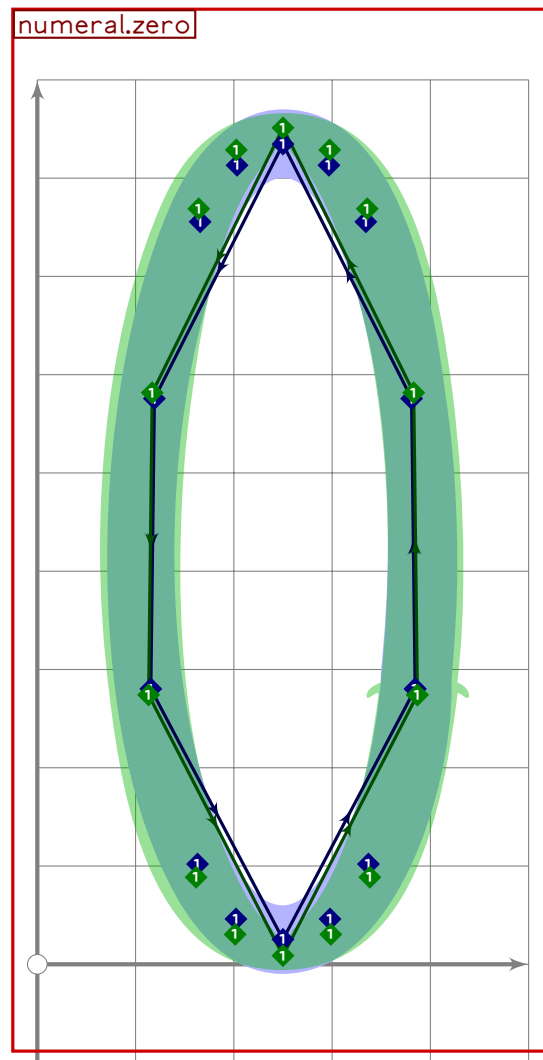
```
201 % period
202 beginsuglyph("period";46);
203 punct.make__period((380,vmetric(0.03)));
204 tsu_render;
205 endsuglyph;
206
```

U+002F
tsuku.slash

00



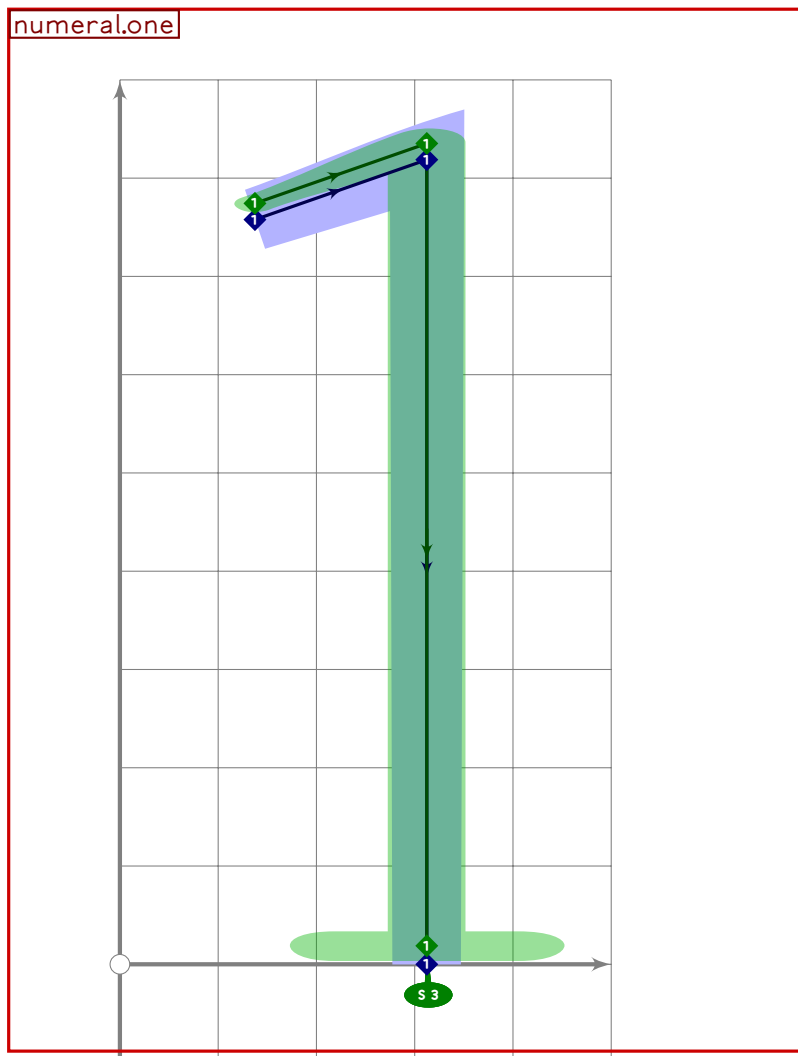
```
207 % slash
208 begint Suglyph("slash";47);
209   punct.slash;
210   tsu_render;
211 endtsuglyph;
212
```



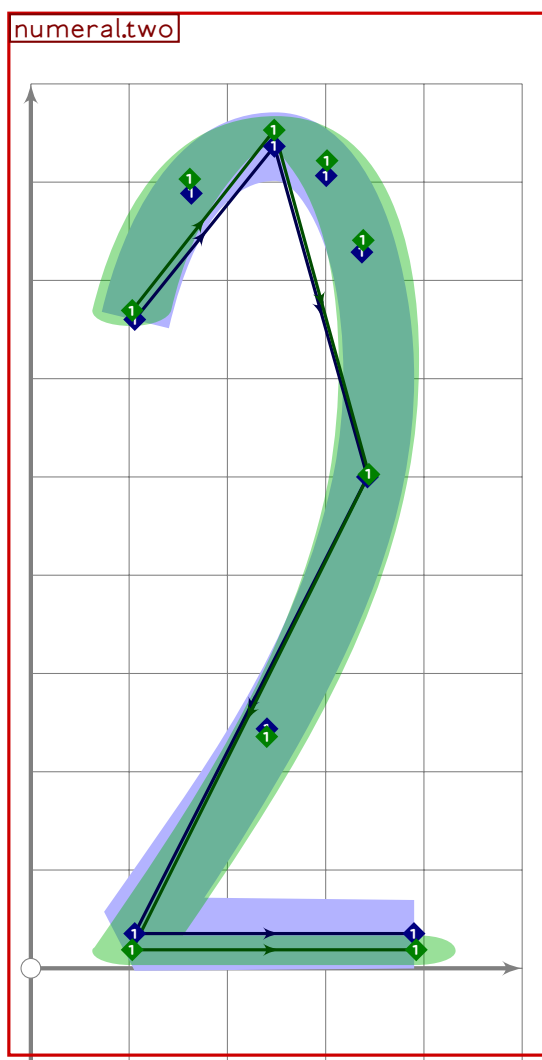
```

213 % 0
214 begintsuglyph("zero";48);
215   numeral.zero;
216   tsu_render;
217 endtsuglyph;
218

```



```
219 % 1
220 beginsuglyph("one",49);
221   numeral.one;
222   tsu_render;
223 endsuglyph;
224
```

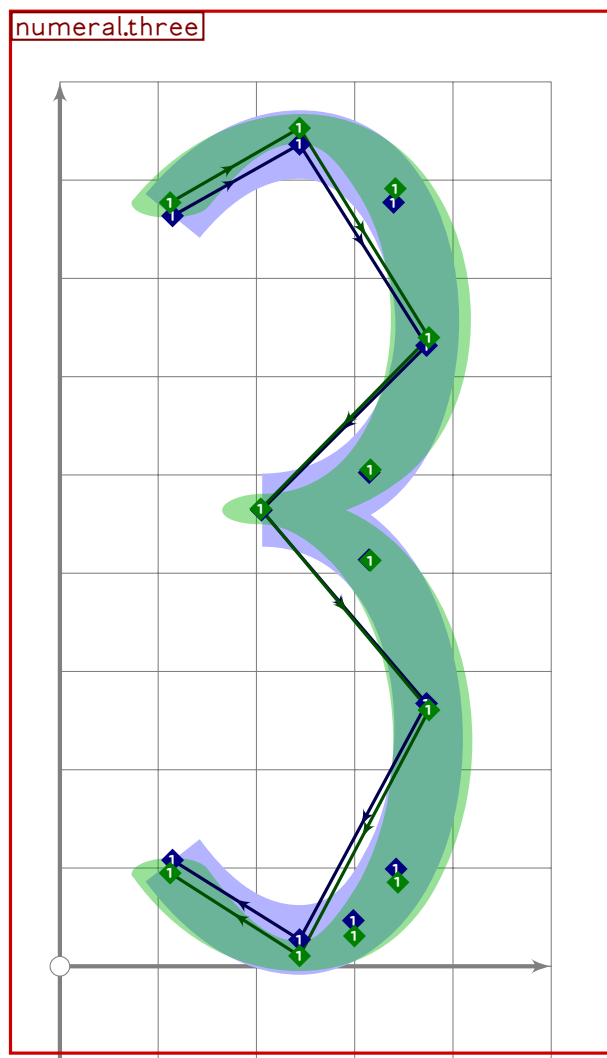
```

225 % 2
226 beginsuglyph("two",50);
227   numeral.two;
228   tsu_render;
229 endsuglyph;
230

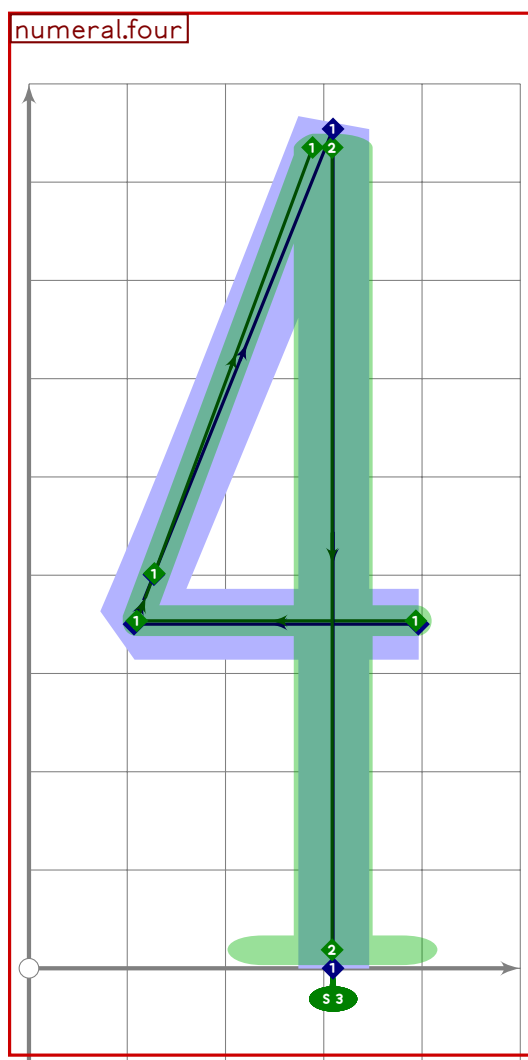
```

U+0033
tsuku.three

00



```
231 % 3
232 beginsuglyph("three",51);
233   numeral.three;
234   tsu_render;
235 endsuglyph;
236
```



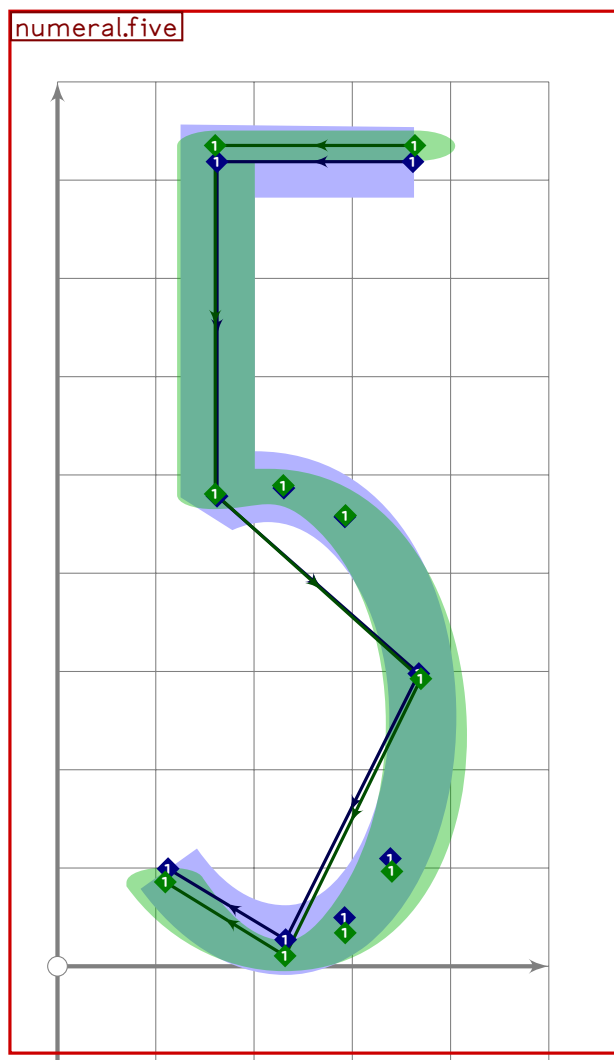
```

237 % 4
238 begintsuglyph("four";52);
239  numeral.four;
240  tsu_render;
241 endtsuglyph;
242

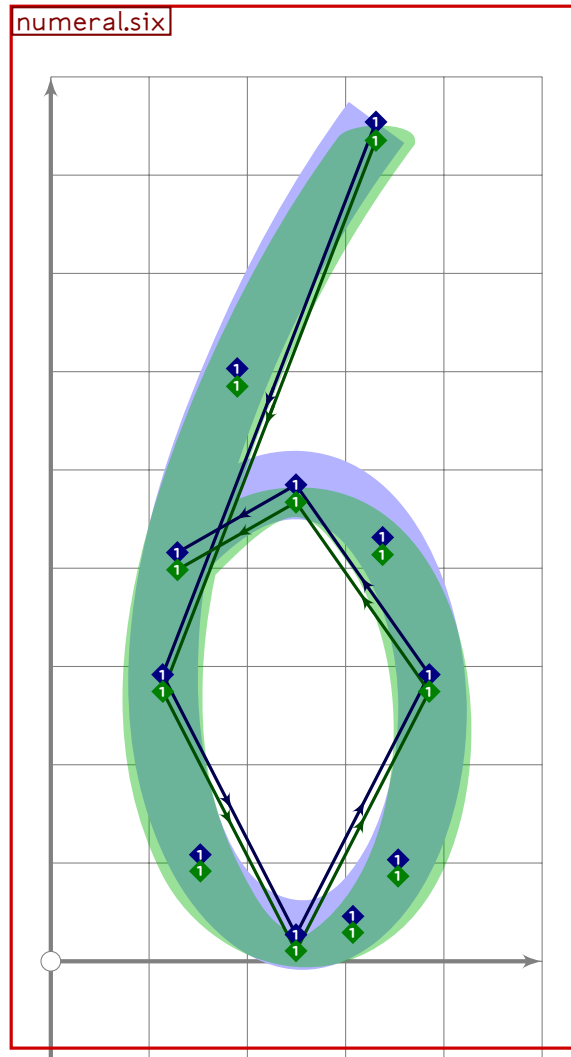
```

U+0035
tsuku.five

00



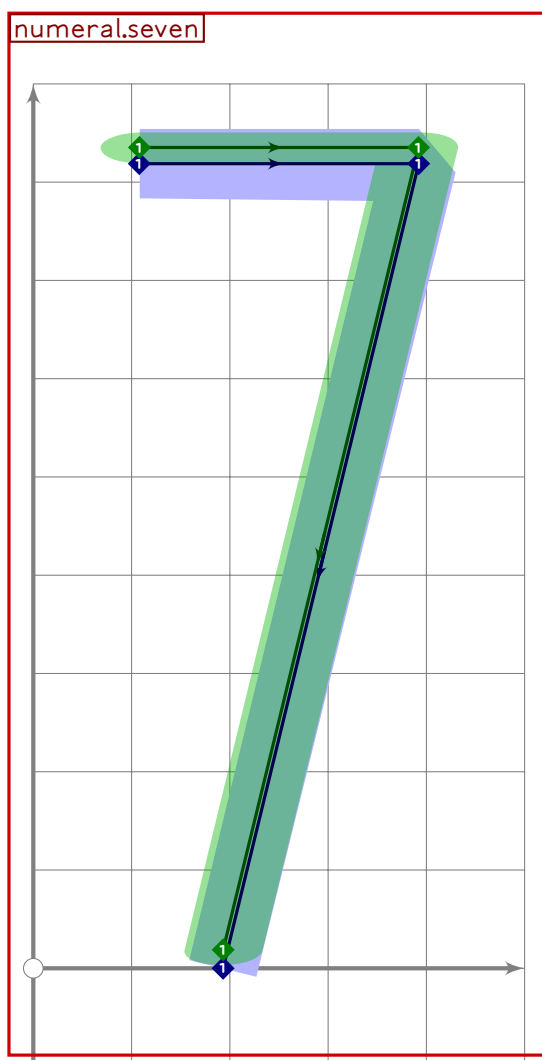
```
243 % 5
244 begintsuglyph("five",53);
245   numeral.five;
246   tsu_render;
247 endtsuglyph;
248
```



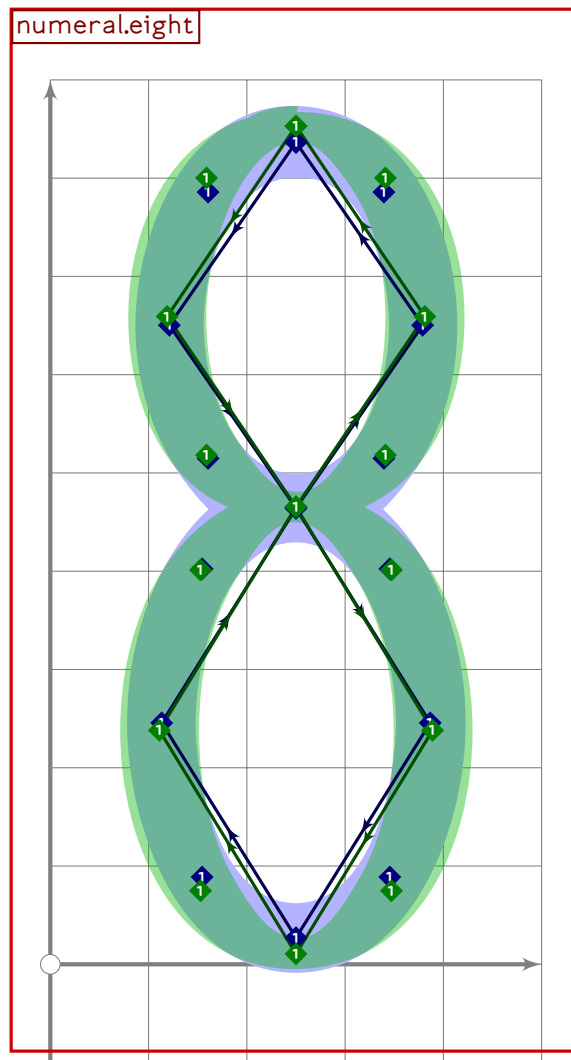
```
249 % 6
250 begintsuglyph("six",54);
251   numeral.six;
252   tsu_render;
253 endtsuglyph;
254
```

U+0037
tsuku.seven

00



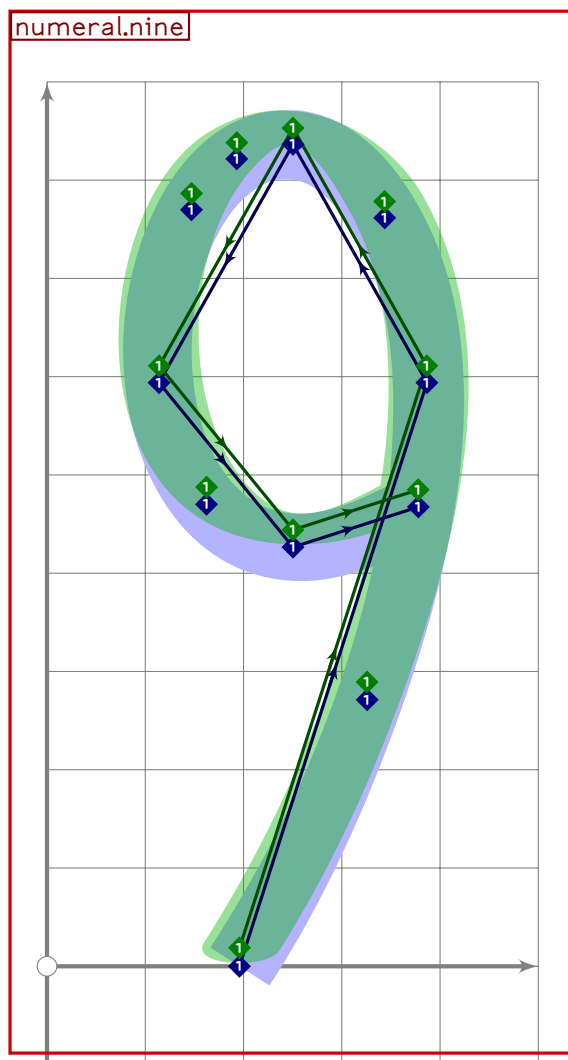
```
255 % 7
256 begint Suglyph("seven";55);
257   numeral.seven;
258   tsu_render;
259 endtsuglyph;
260
```



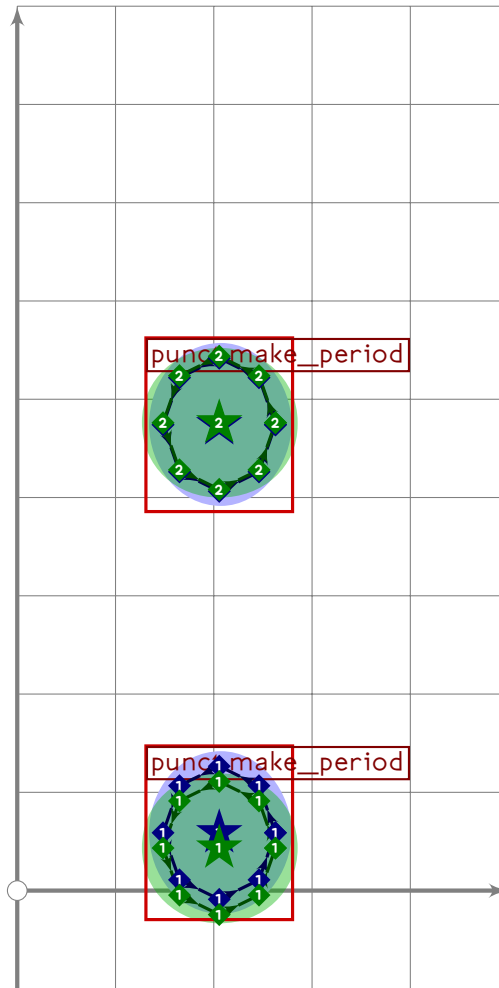
```

261 % 8
262 begintsuglyph("eight",56);
263   numera.eight;
264   tsu_render;
265 endtsuglyph;
266

```



```
267 % 9
268 begintsuglyph("nine",57);
269   numeral.nine;
270   tsu_render;
271 endtsuglyph;
272
```

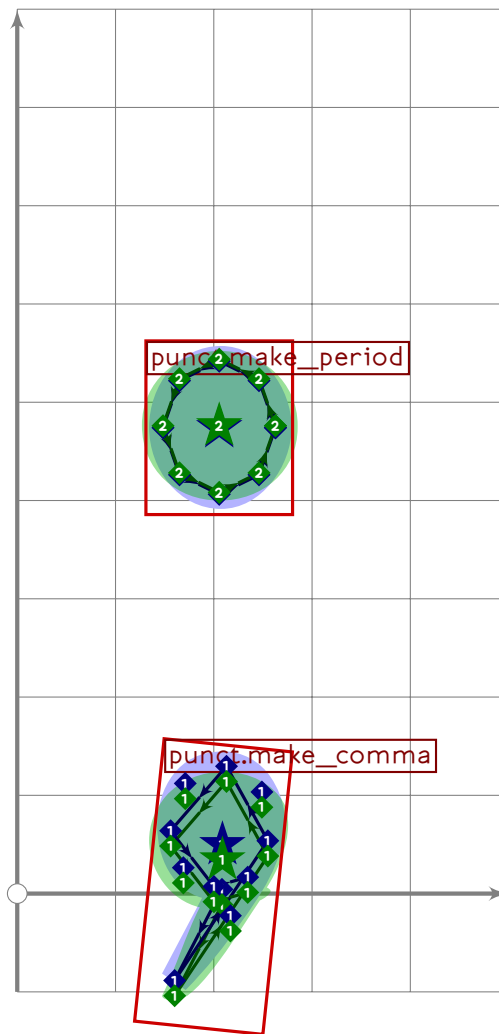
```

273 % colon
274 begintsuglyph("colon",58);
275 punct.make_period((380,vmetric(0.03)));
276 punct.make_period((380,vmetric(0.56)));
277 tsu_render;
278 endtsuglyph;
279

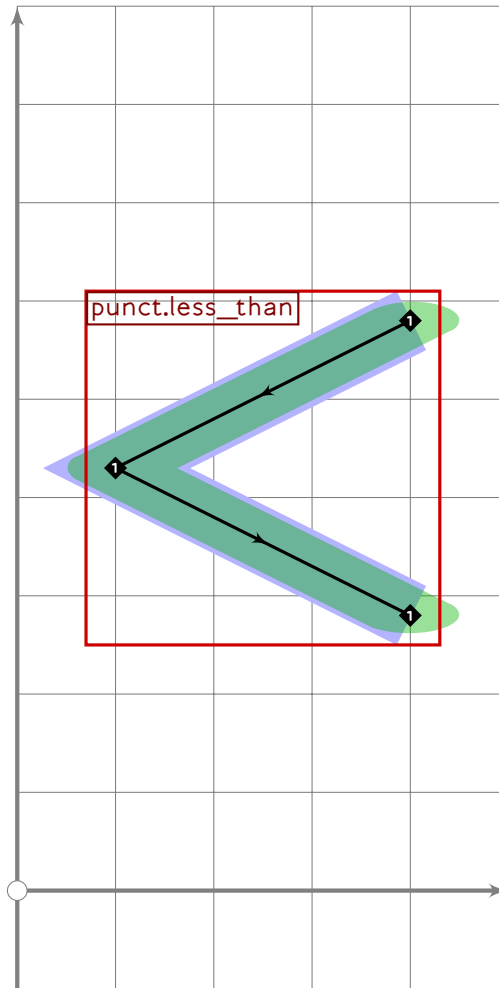
```

U+003B
tsuku.semicolon

00



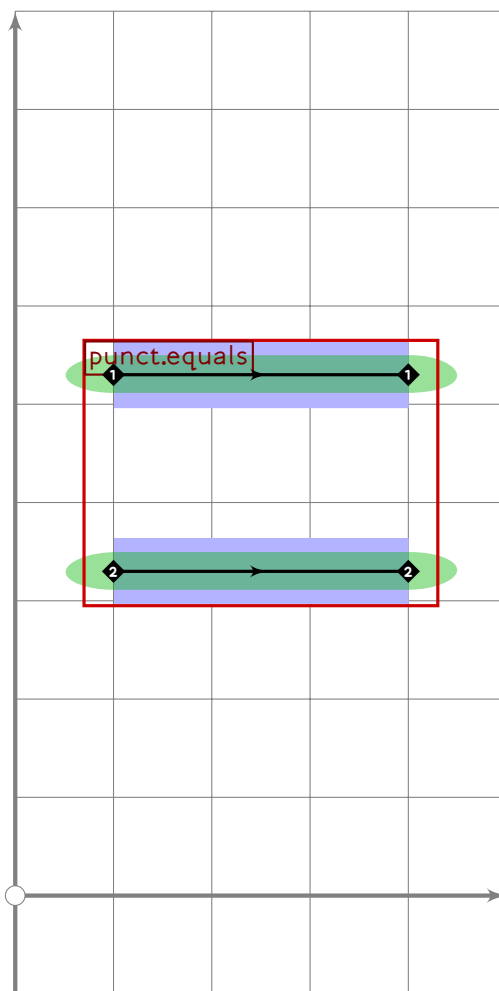
```
280 % semicolon
281 begintsuglyph("semicolon",59);
282 punct.make_comma((380,vmetric(0.03)),0);
283 punct.make_period((380,vmetric(0.56)));
284 tsu_render;
285 endtsuglyph;
286
287 % WARNING, changing rescale setting
288 tsu_rescale_native_conditional;
289
```



```

290 % less than
291 begintsuglyph("less",60);
292   punct.less_than
293     (identity scaled (if is_proportional: 2.1 else: 1.5 fi*tsu_punct_size)
294       shifted (250,latin_vcentre));
295   tsu_render;
296 endsuglyph;
297

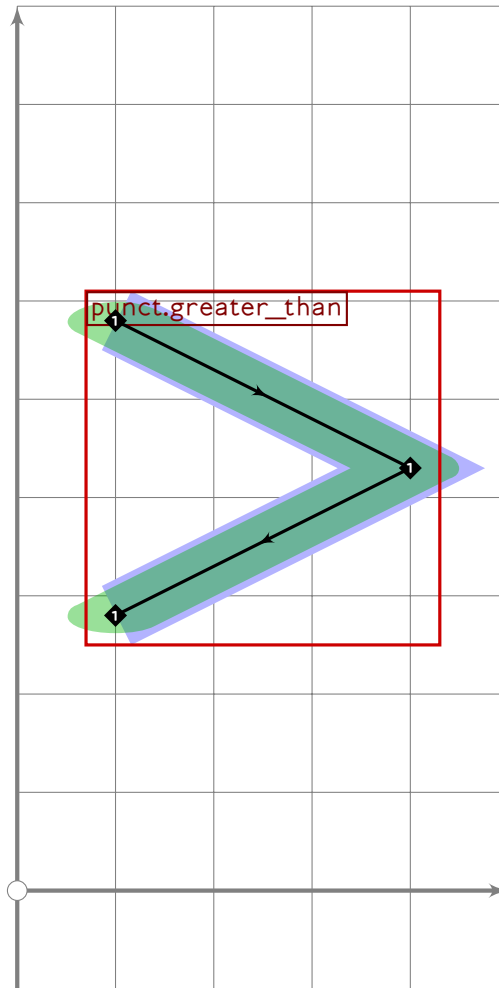
```



```

298 % equals
299 begint Suglyph("equals",61);
300 punct.equals
301     (identity scaled (if is_proportional: 2.1 else: 1.5 fi*tsu_punct_size)
302       shifted (250,latin_vcentre));
303 tsu_render;
304 endtsuglyph;
305

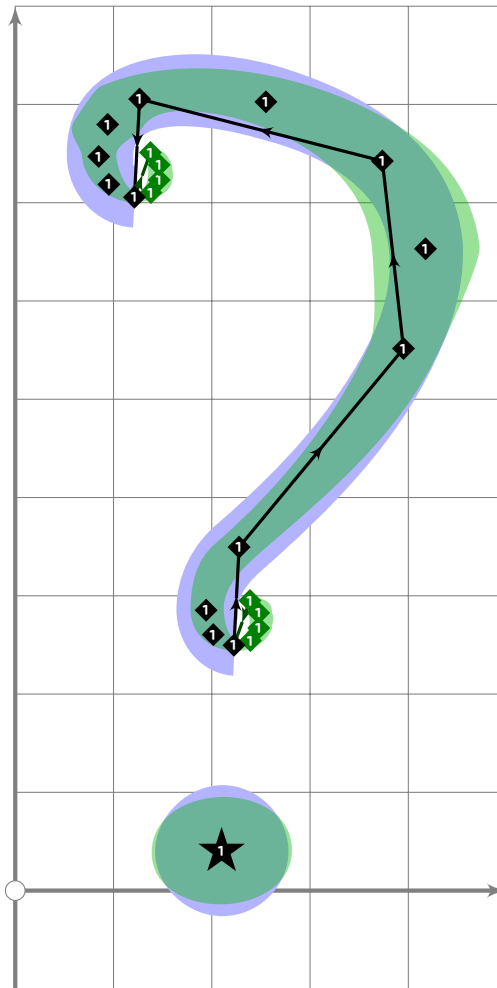
```



```

306 % greater than
307 begintsuglyph("greater",62);
308   punct.greater_than
309     (identity scaled (if is_proportional: 2.1 else: 1.5 fi*tsu_punct_size)
310       shifted (250,latin_vcentre));
311   tsu_render;
312 endtsuglyph;
313

```



```

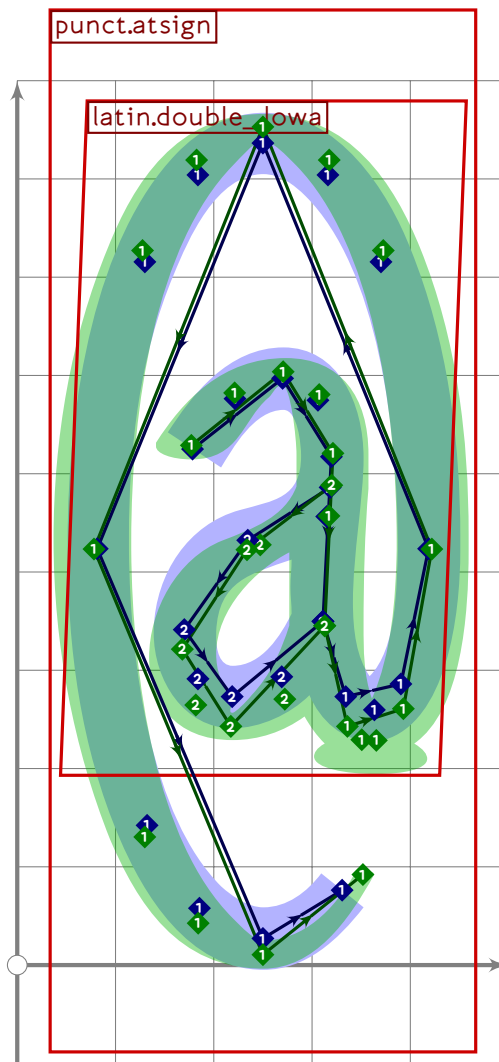
314 % question mark
315 begintsglyph("question",63);
316     numeric r;
317     if tsu_pbrush_size>=(tsu_punct_size*0.5):
318         push_lcblob(fullcircle
319             xscaled ((tsu_punct_size+tsu_pbrush_size)*0.89)
320             yscaled ((tsu_punct_size+tsu_pbrush_size*tsu_pbrush_shape)*0.89)
321             rotated tsu_pbrush_angle
322             shifted (210,40));
323     else:
324         push_stroke(fullcircle scaled tsu_punct_size shifted (210,40),
325             (2,2)-(2,2)-(2,2)-(2,2));
326         if tsu_pbrush_size>=30:
327             push_lcblob(get_stroke(0));
328         fi;
329     fi;
330     r:=tsu_punct_size/2;
331
332     push_stroke((210,300){right}..(210,300-r){left}..
333         (210,300+r)..(210+2.5*r,750)..
334         tension 1.3..(210-2.5*r,750+r)..

```

```

335      (210-2.5*r,750-r){right}..
336      (210-2.5*r,750){left},
337      (0.8,0.8)-(1,1)-(2,2)-(2,2)-(2,2)-(2,2)-(1,1)-(0.8,0.8));
338      replace_strokep(0)(insert_nodes(oldp)(2.5) rotatedaround ((210,10),-3));
339
340      tsu_render;
341      endtsuglyph;
342
343      % WARNING, changing rescale setting
344      tsu_rescale_half;
345

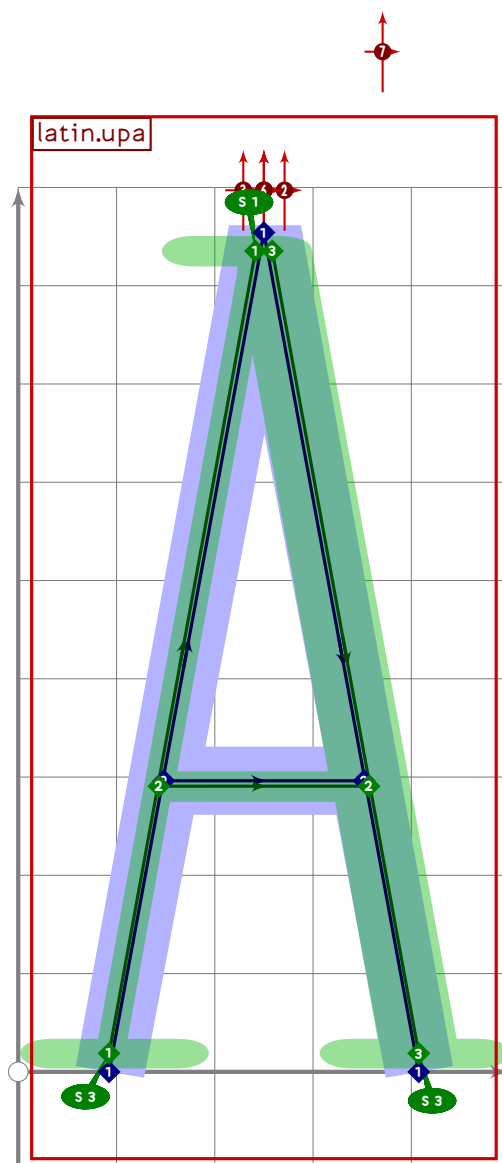
```



```

346 % commercial at
347 begint Suglyph("at",64);
348      punct.atsign;
349      tsu_render;
350      endtsuglyph;
351
352      tsu_accent.up_default_anchors;
353

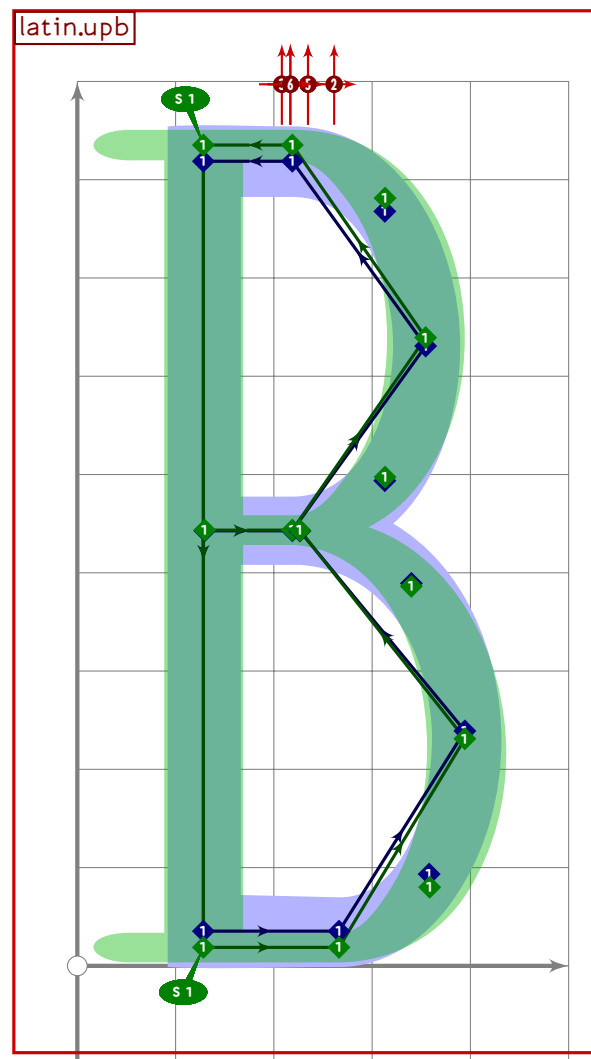
```



```

354 % A
355 begintsuglyph("A",65);
356   latin.upa;
357   tsu_render;
358 endtsuglyph;
359

```

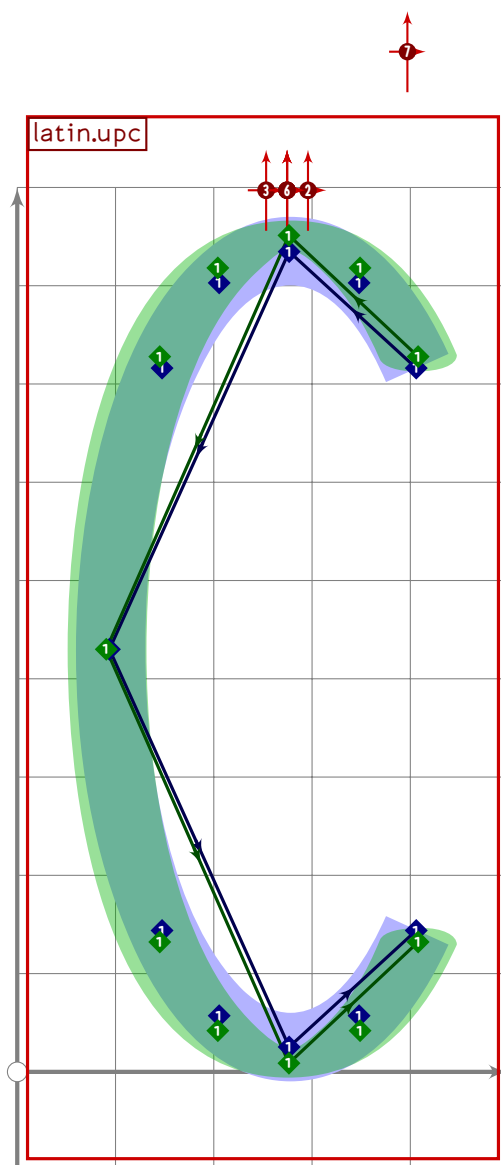
```

360 % B
361 begint Suglyph("B",66);
362 latin.upb;
363 tsu_render;
364 endtsuglyph;
365

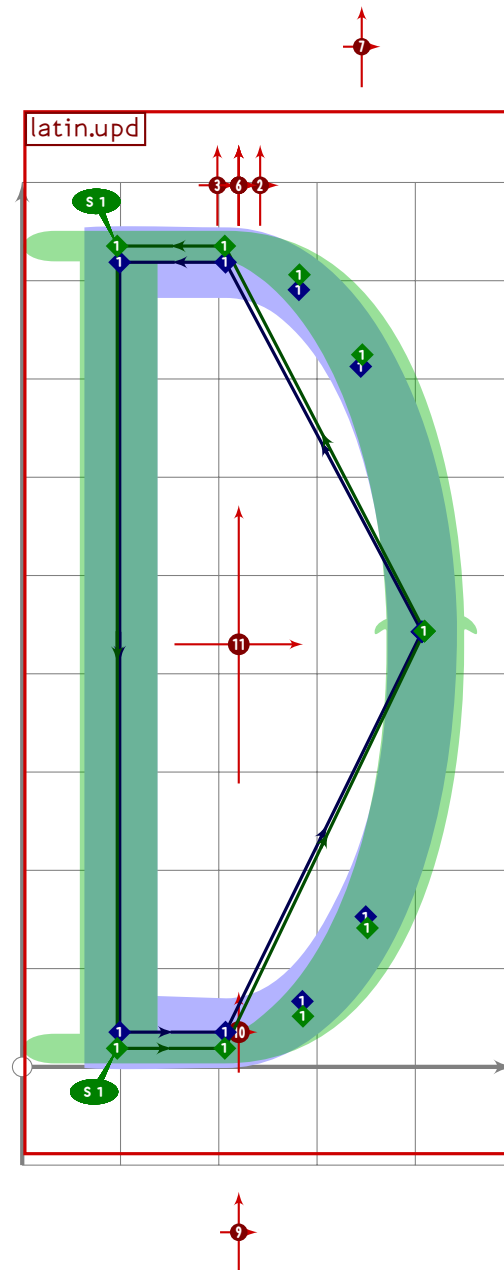
```

U+0043
tsuku.C

00



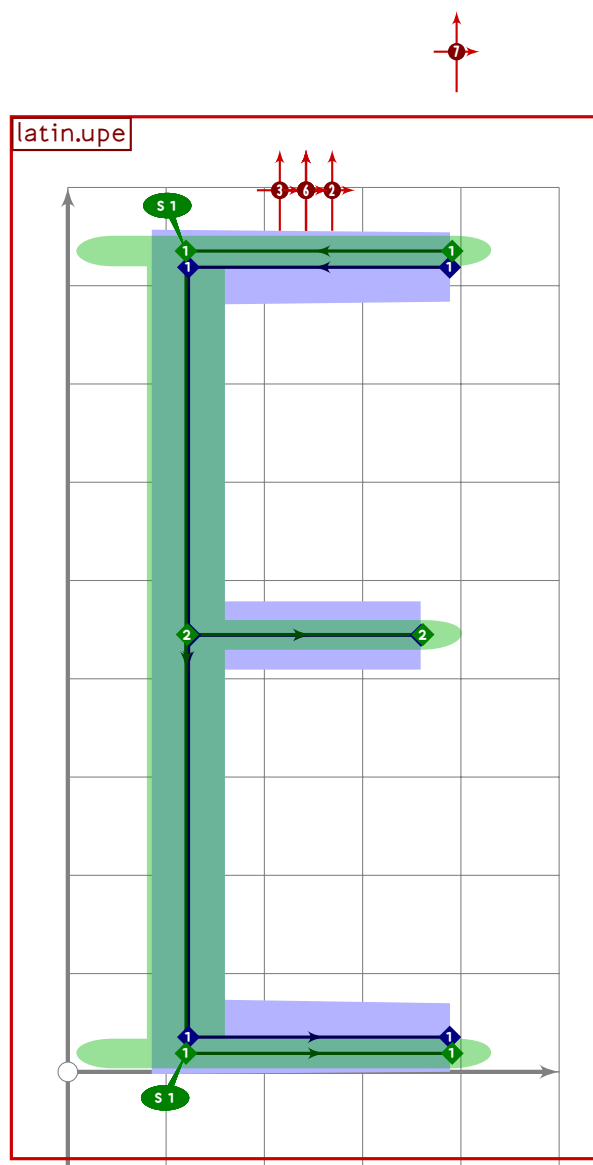
```
366 % C
367 begintsuglyph("C",67);
368 latin.upc;
369 tsu_render;
370 endtsuglyph;
371
```



```

372 % D
373 begintsuglyph("D",68);
374 latin.upd;
375 tsu__render;
376 endtsuglyph;
377

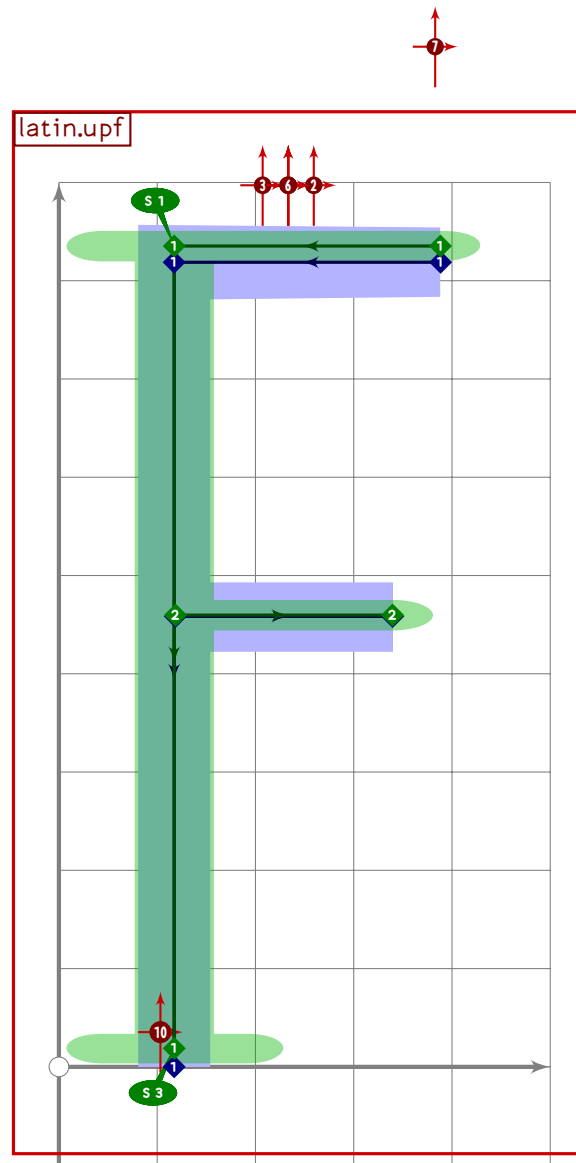
```



```

378 % E
379 begint Suglyph("E";69);
380 latin.upe;
381 tsu_render;
382 endtsuglyph;
383

```



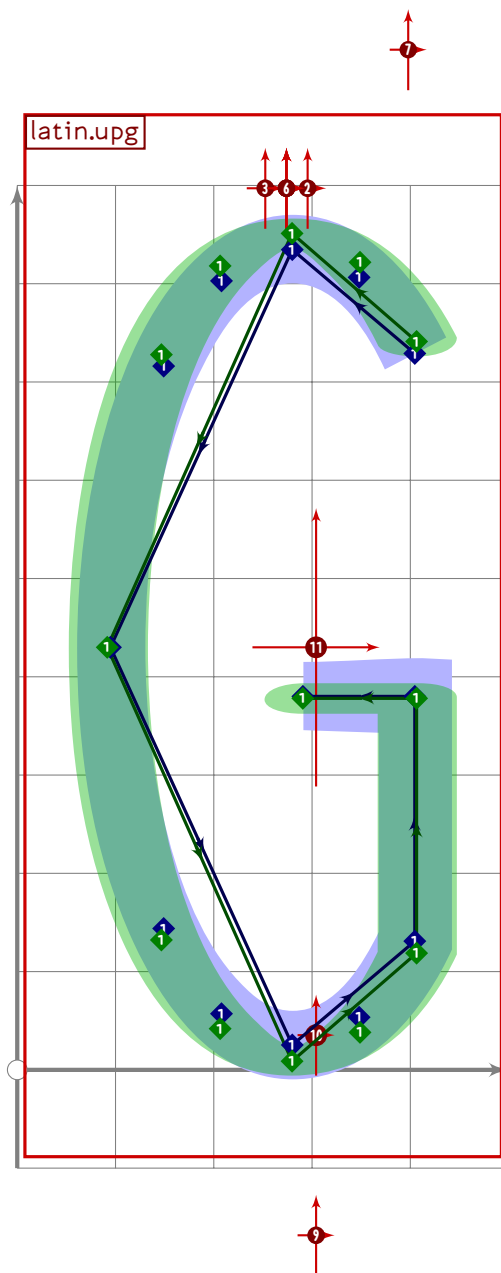
```

384 % F
385 begintsuglyph("F";70);
386 latin.upf;
387 tsu_render;
388 endtsuglyph;
389

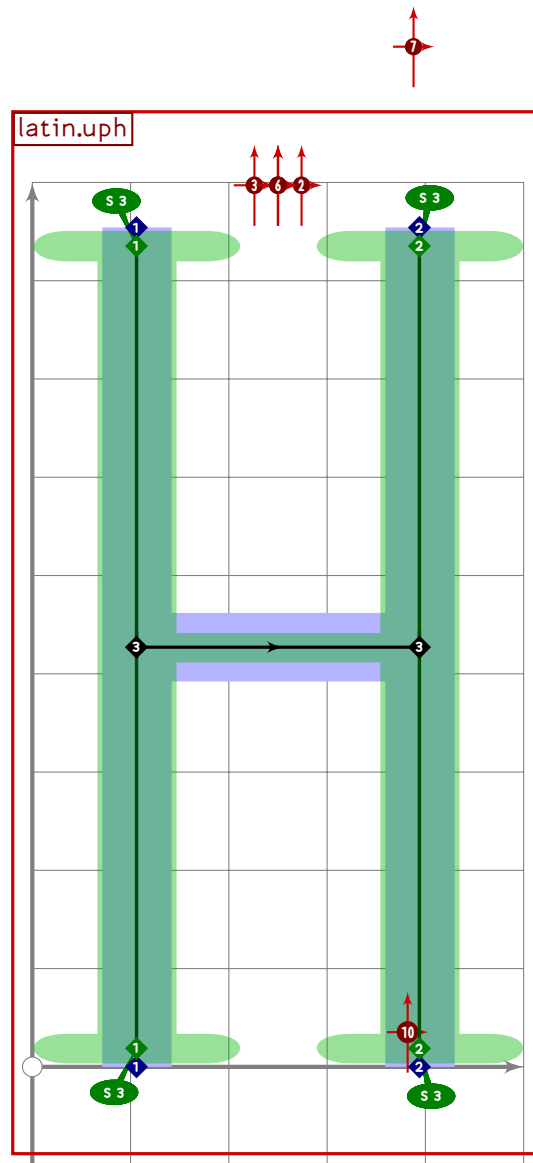
```

U+0047
tsuku.G

00



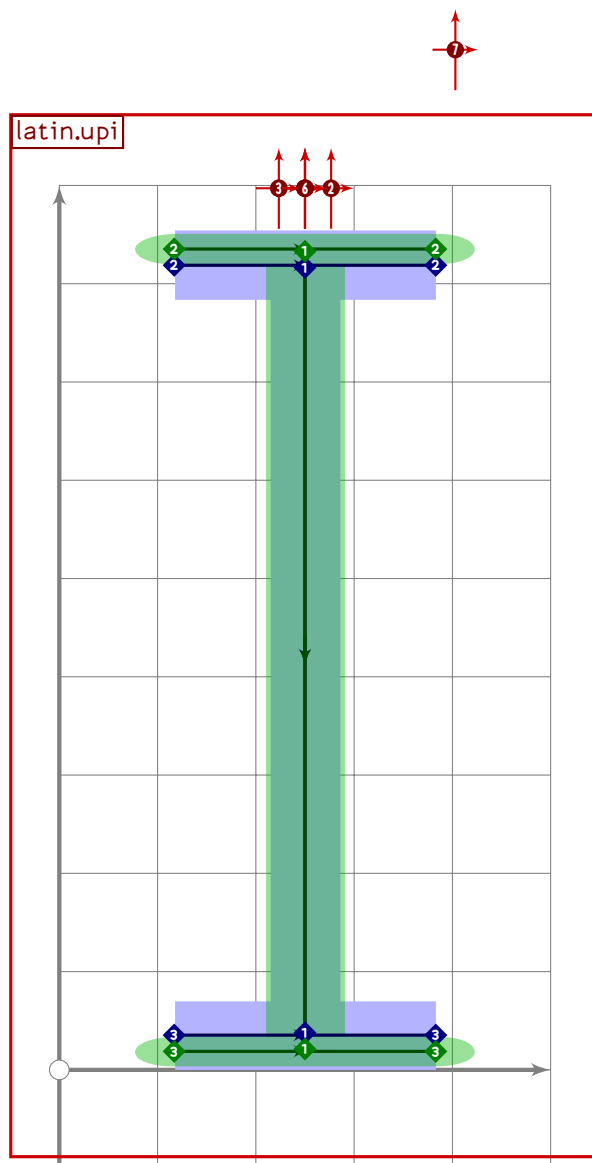
```
390 % G
391 begint Suglyph("G";71);
392 latin.upg;
393 tsu_render;
394 endtsuglyph;
395
```



```

396 % H
397 begintsuglyph("H";72);
398 latin.uph;
399 tsu_render;
400 endtsuglyph;
401

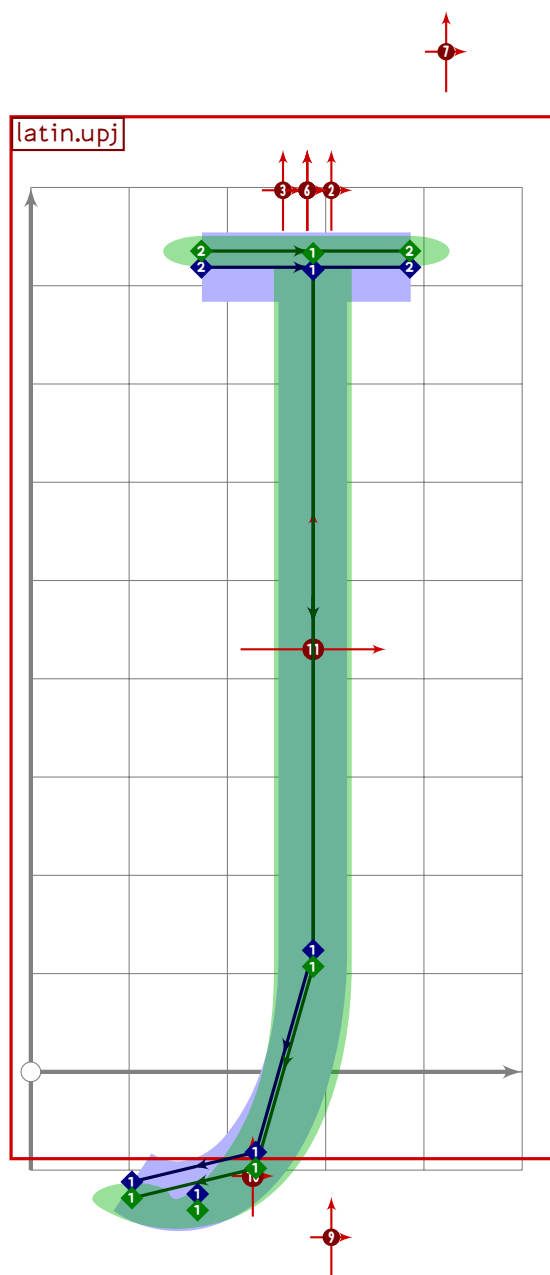
```



```

402 % I
403 begintsuglyph("I";73);
404 latin.upi;
405 tsu_render;
406 endtsuglyph;
407

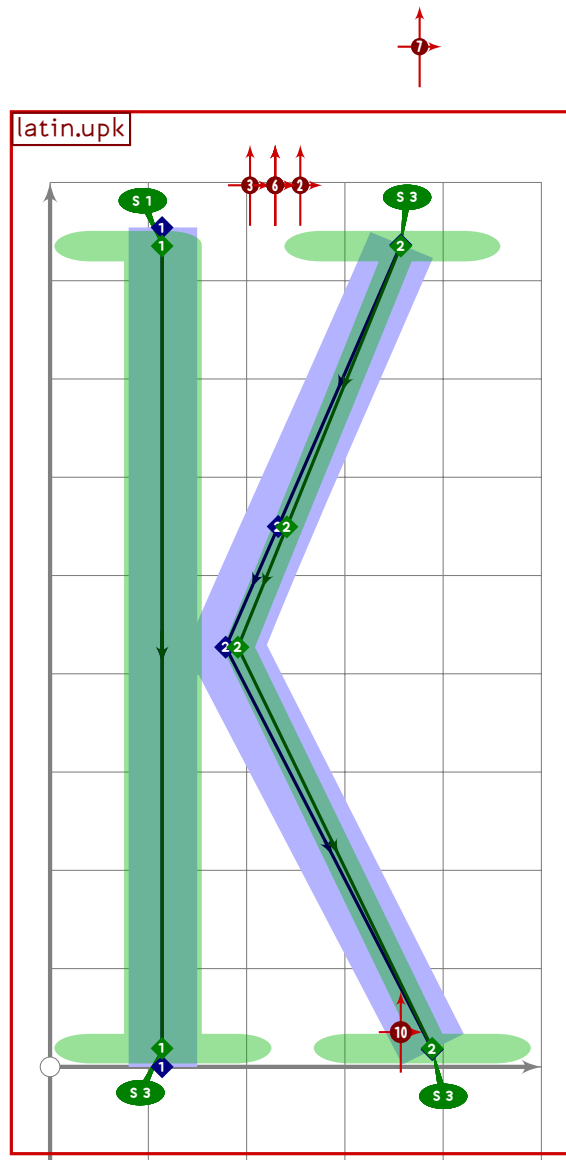
```

```

408 % J
409 begintsuglyph("J",74);
410 latin.upj;
411 tsu_render;
412 endtsuglyph;
413

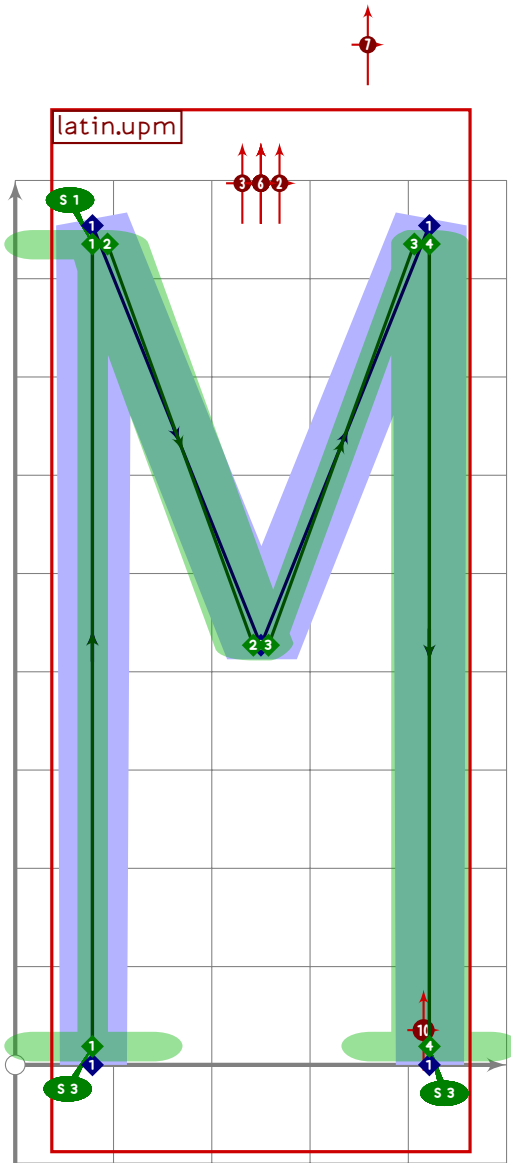
```



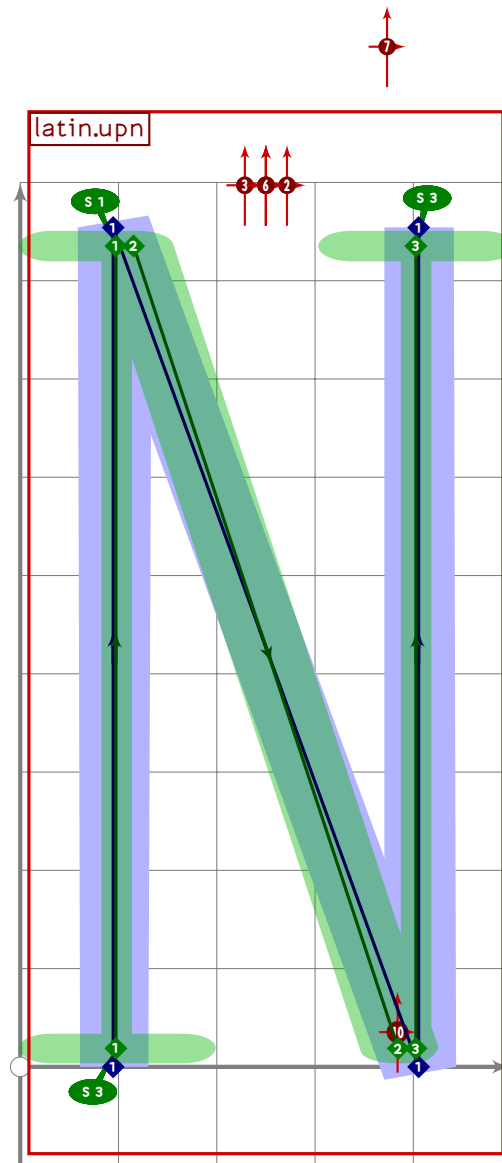
```

414 % K
415 begintsuglyph("K";75);
416 latin.upk;
417 tsu_render;
418 endtsuglyph;
419

```

```
426 % M
427 begint Suglyph("M";77);
428 latin.upm;
429 tsu_render;
430 endtsuglyph;
431
```



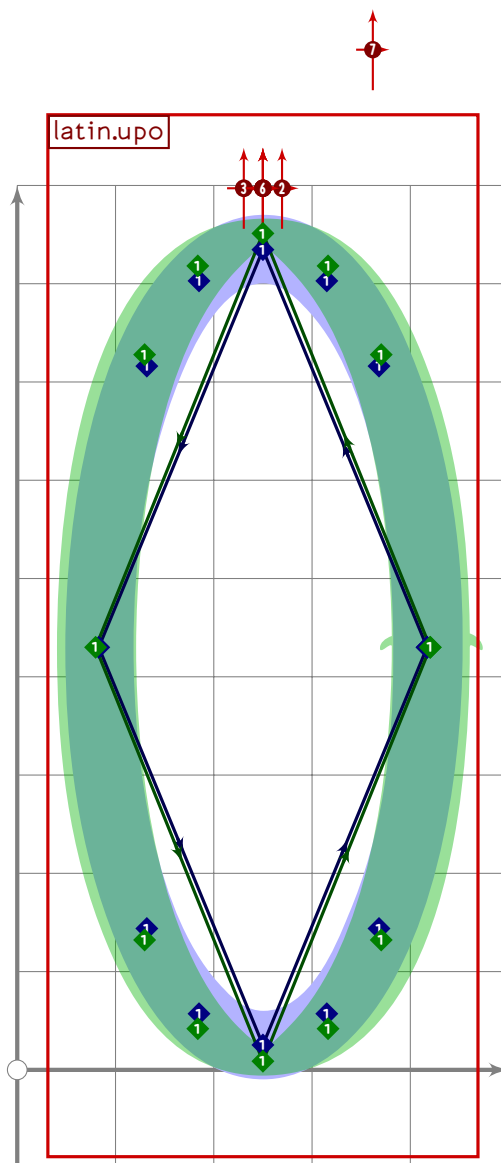
```

432 % N
433 begintsuglyph("N";78);
434 latin.upn;
435 tsu_render;
436 endtsuglyph;
437

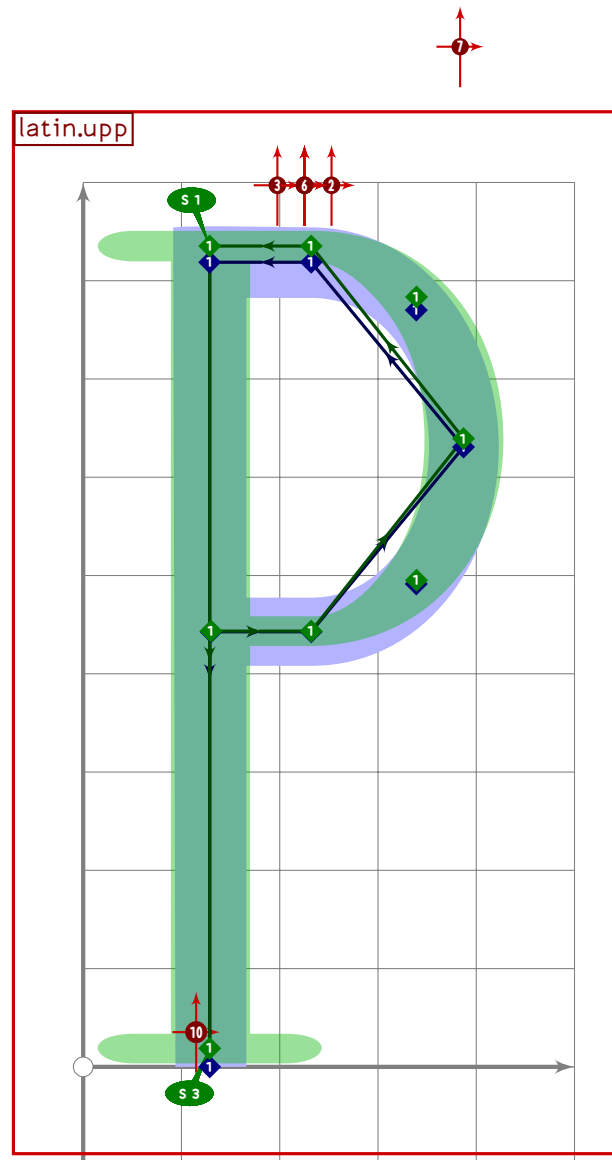
```

U+004F
tsuku.O

00



```
438 % O
439 begintsuglyph("O";79);
440 latin.upo;
441 tsu_render;
442 endtsuglyph;
443
```



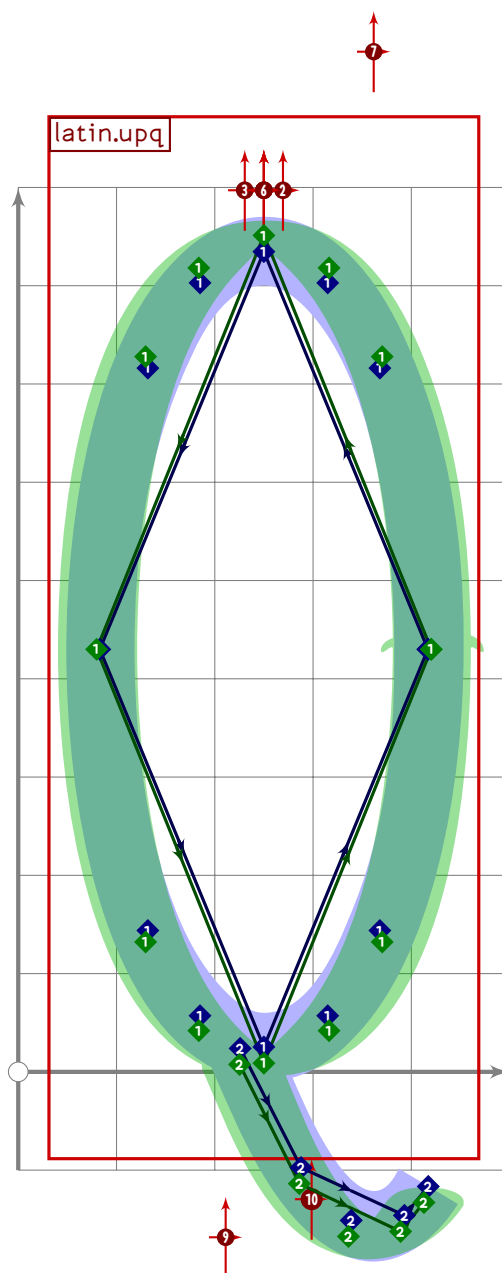
```

444 % P
445 begint Suglyph("P";80);
446 latin.upp;
447 tsu_render;
448 endtsuglyph;
449

```

U+0051
tsuku.Q

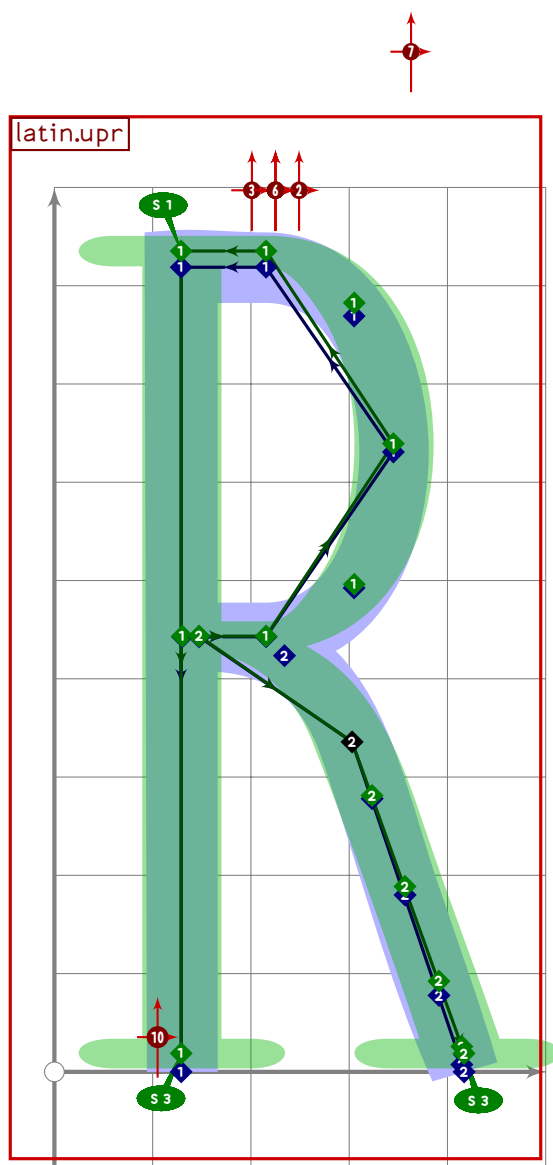
00



```

450 % Q
451 begintsuglyph("Q";81);
452 latin.upq;
453 tsu_render;
454 endtsuglyph;
455

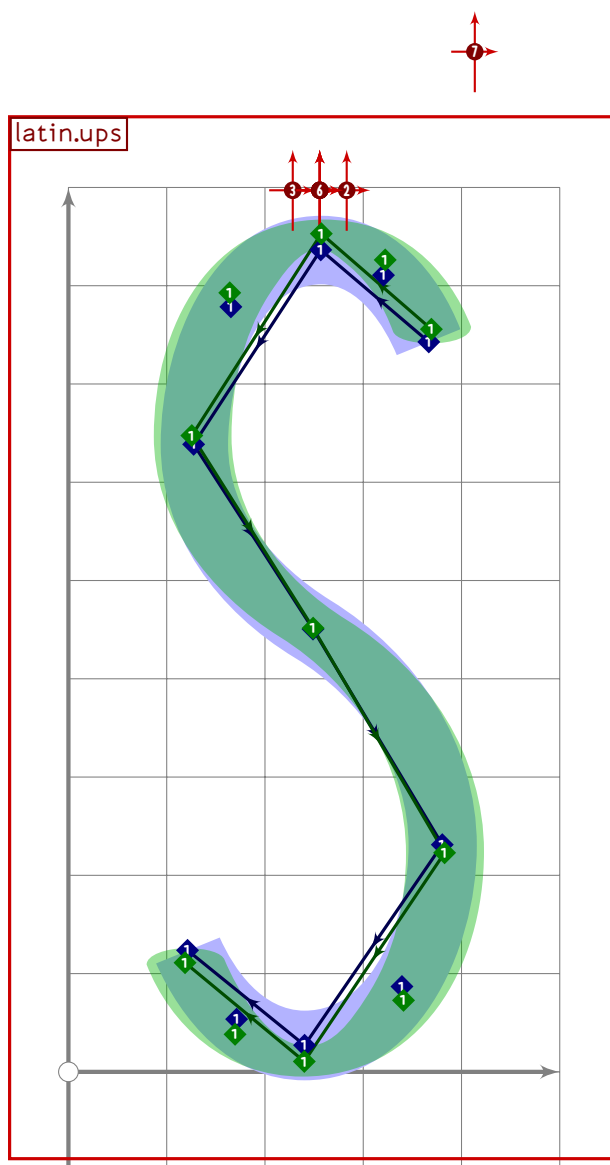
```

```

456 % R
457 begintsuglyph("R";82);
458   latin.upr;
459   tsu_render;
460 endtsuglyph;
461

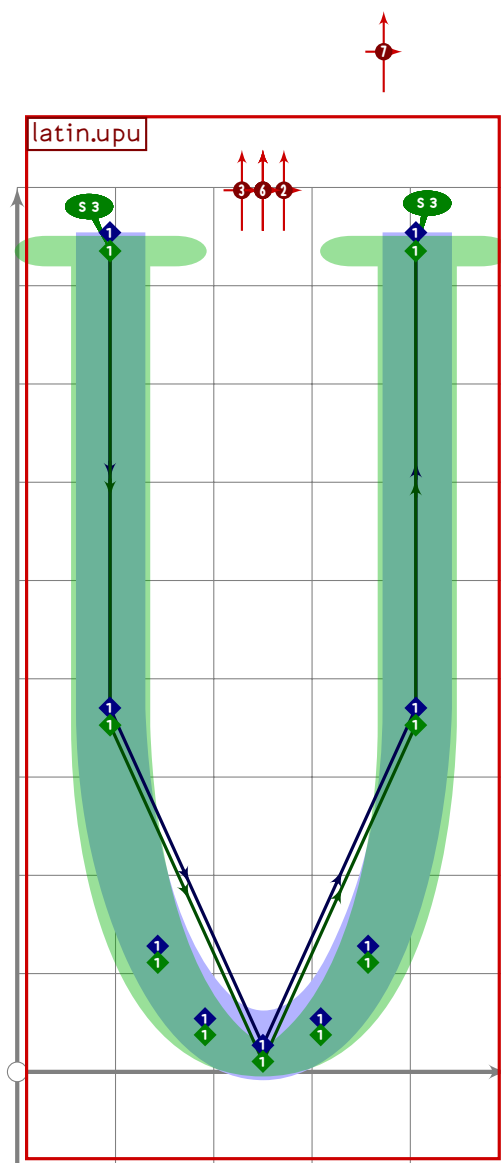
```



```

462 % S
463 begintsuglyph("S";83);
464 latin.ups;
465 tsu_render;
466 endtsuglyph;
467

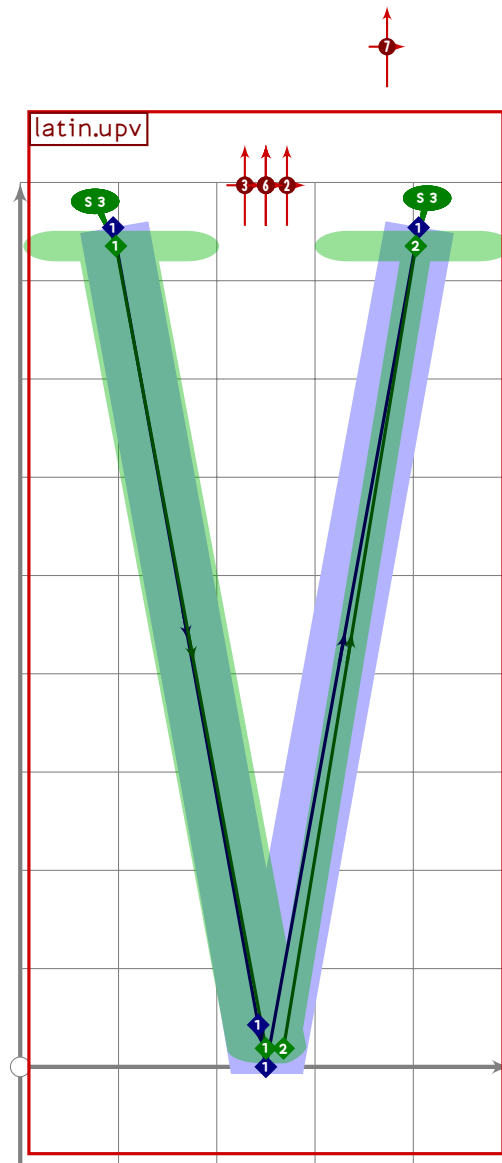
```

```

474 % U
475 begintsuglyph("U",85);
476 latin.upu;
477 tsu_render;
478 endsuglyph;
479

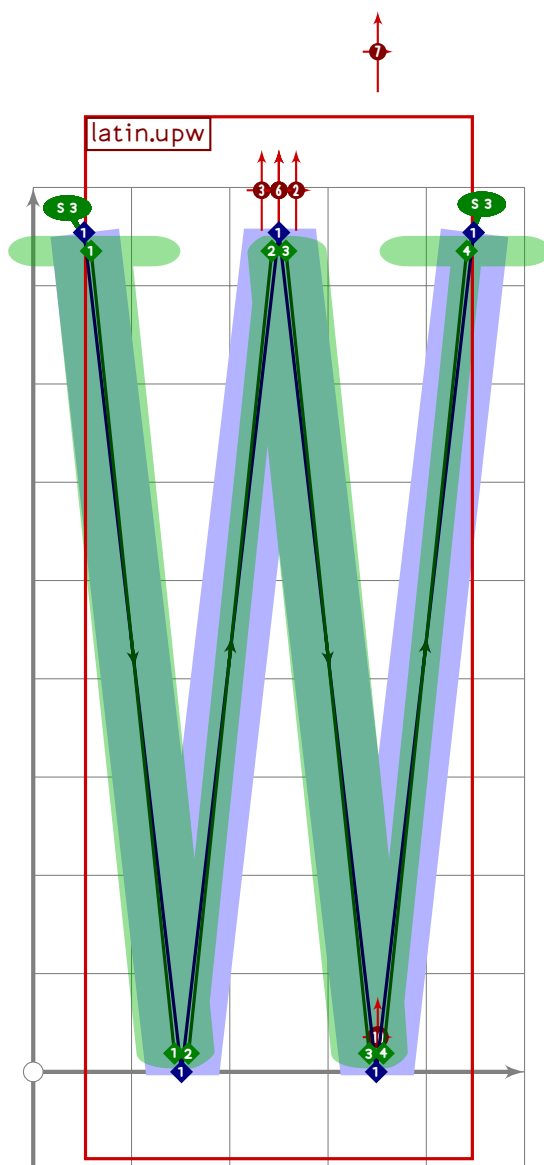
```



```

480 % V
481 begintsuglyph("V",86);
482 latin.upv;
483 tsu_render;
484 endsuglyph;
485

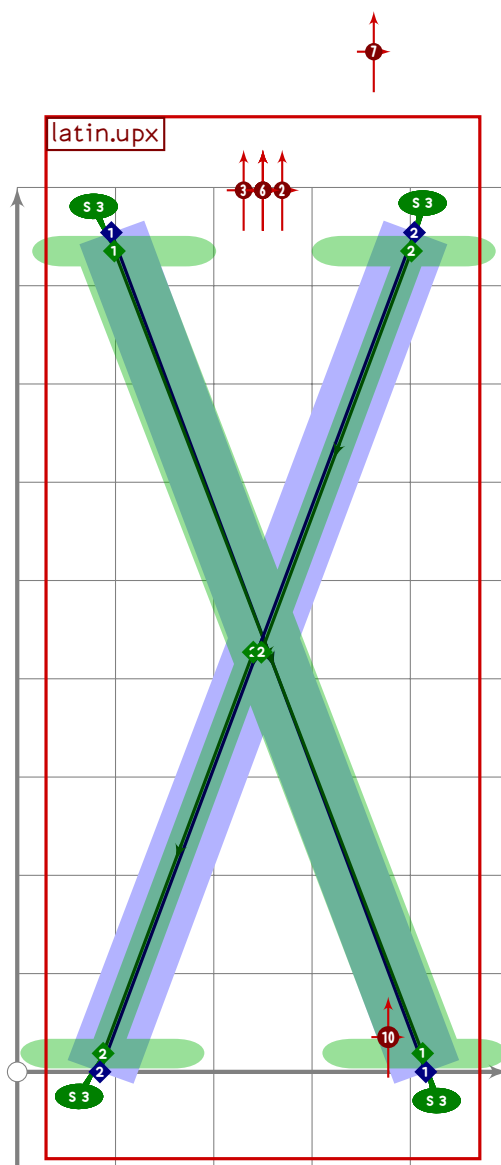
```



```

486 % W
487 begintsuglyph("W";87);
488   latin.upw;
489   tsu_render;
490 endtsuglyph;
491

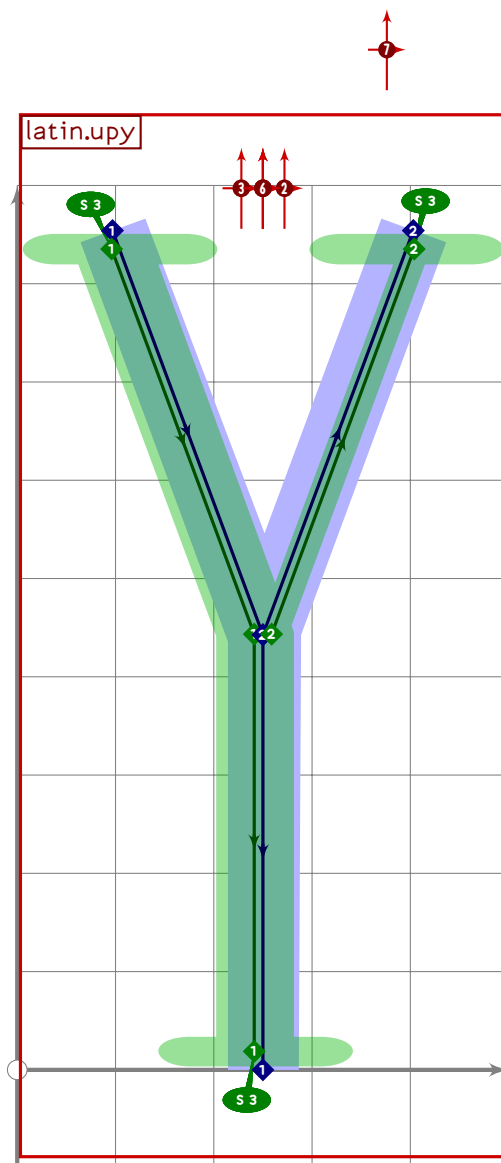
```



```

492 % X
493 begintsuglyph("X";88);
494 latin.upx;
495 tsu_render;
496 endtsuglyph;
497

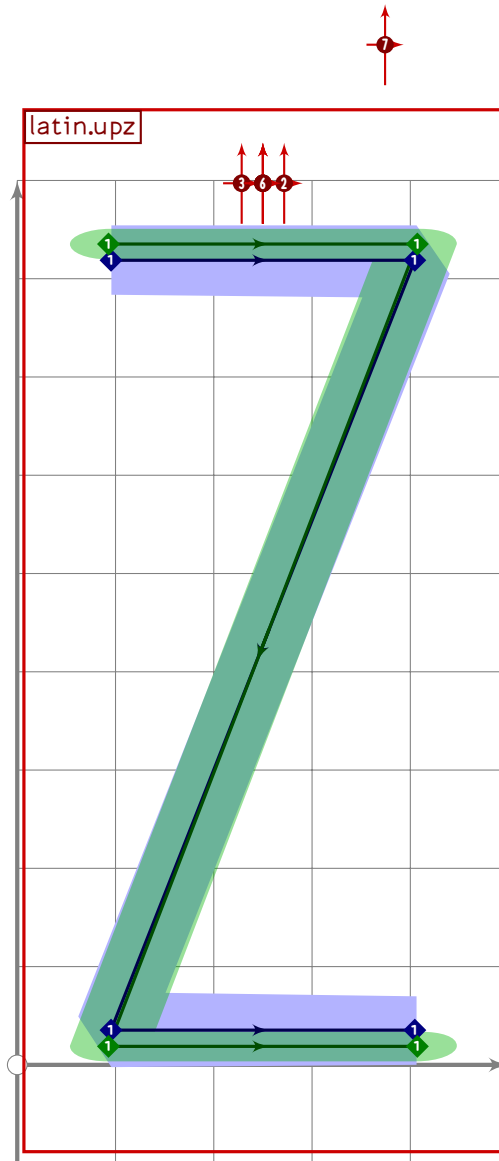
```



```

498 % Y
499 begint Suglyph("Y";89);
500 latin.upy;
501 tsu_render;
502 endtsuglyph;
503

```

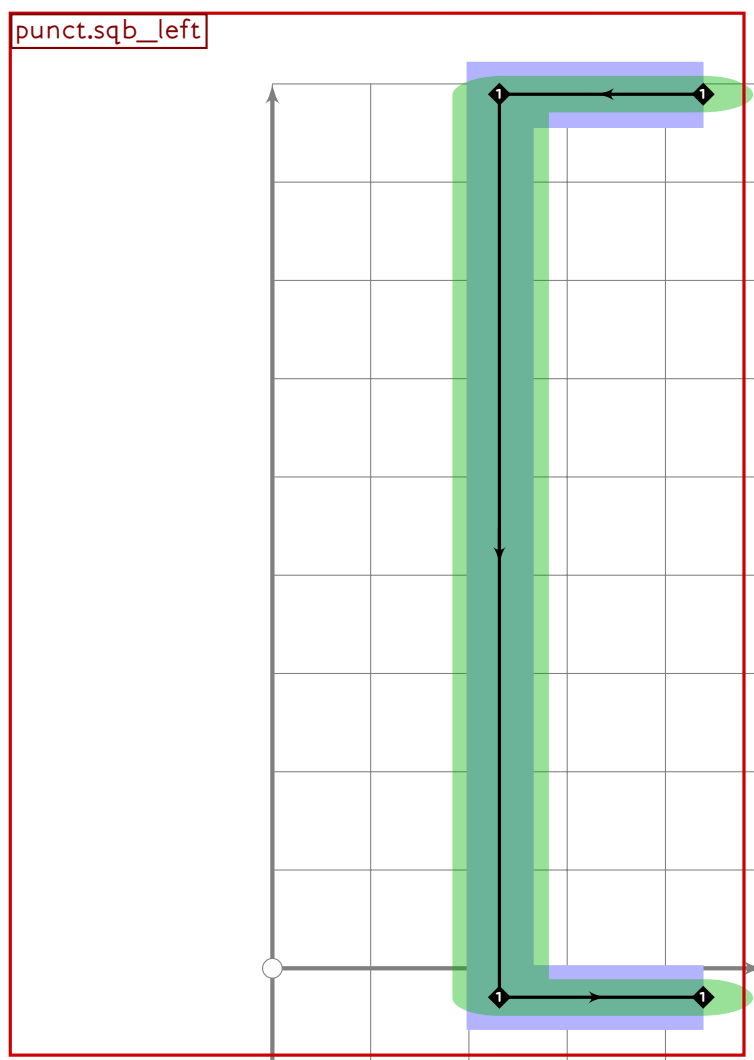
```

504 % Z
505 begintsuglyph("Z";90);
506 latin.upz;
507 tsu_render;
508 endtsuglyph;
509
510 tsu_accent.clear_default_anchors;
511

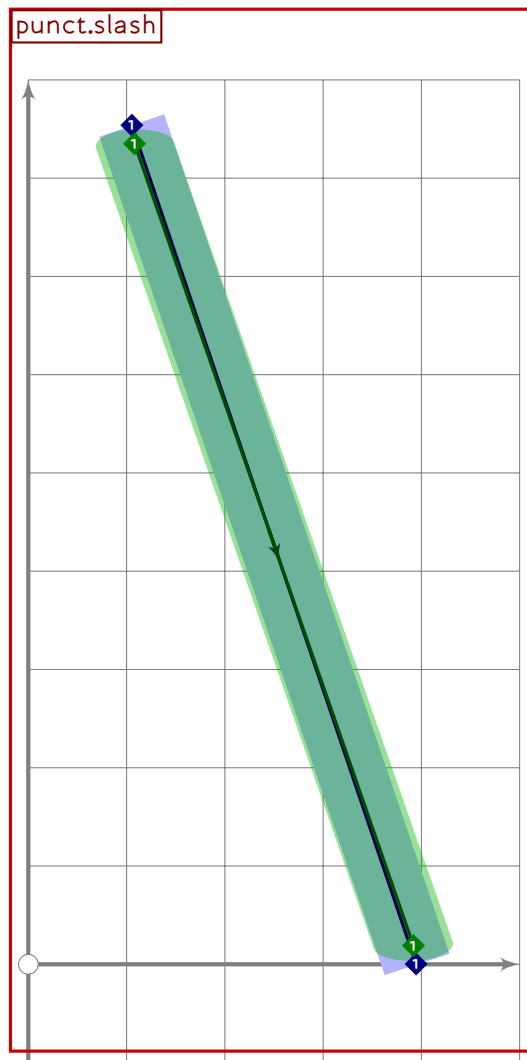
```

U+005B
tsuku.bracketleft

00



```
512 % left and right square brackets, backslash between
513 begintsuglyph("bracketleft";91);
514   punct.sqb_left;
515   tsu_render;
516 endtsuglyph;
```



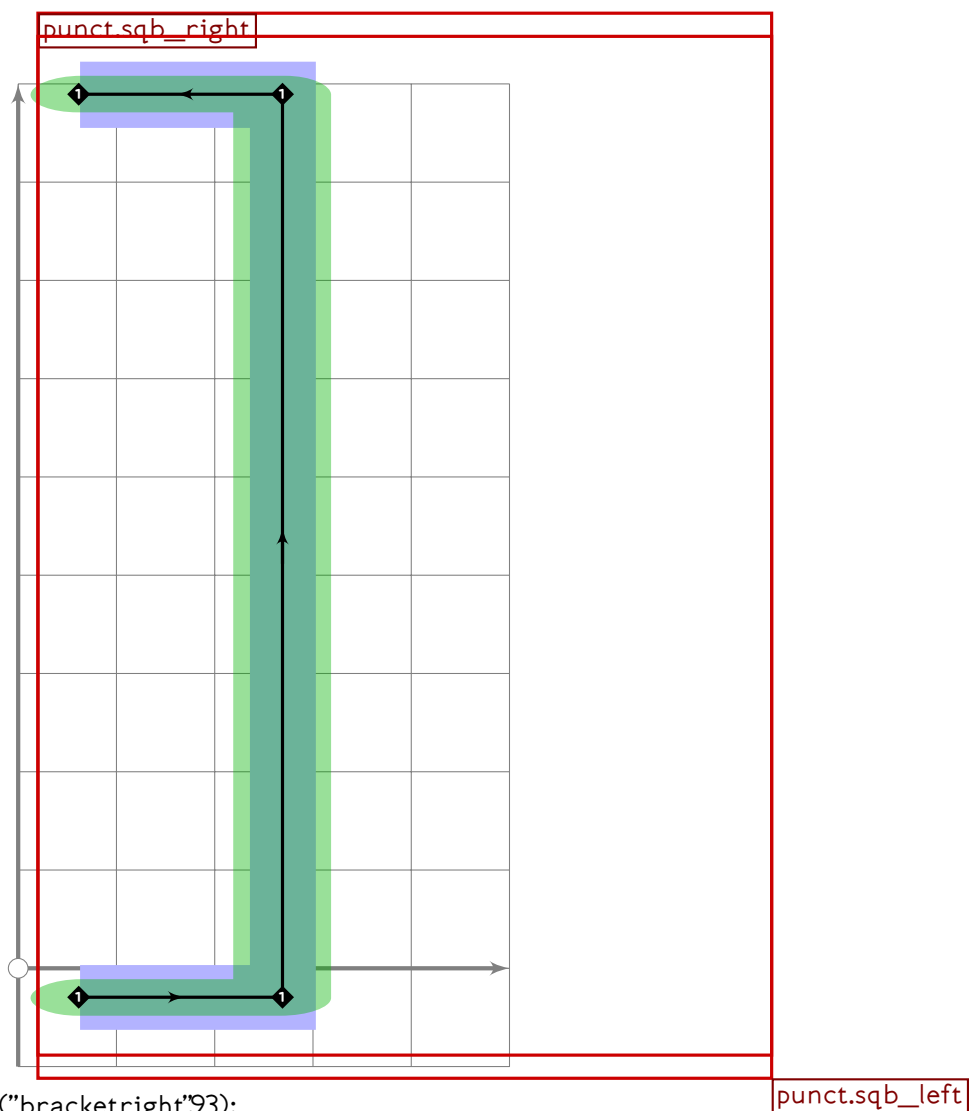
```

517 % backslash
518 begintsuglyph("backslash";92);
519 punct.slash;
520 replace_strokep(0)(oldp reflectedabout (centre_pt,(centre_pt+down)));
521 tsu_render;
522 endtsuglyph;

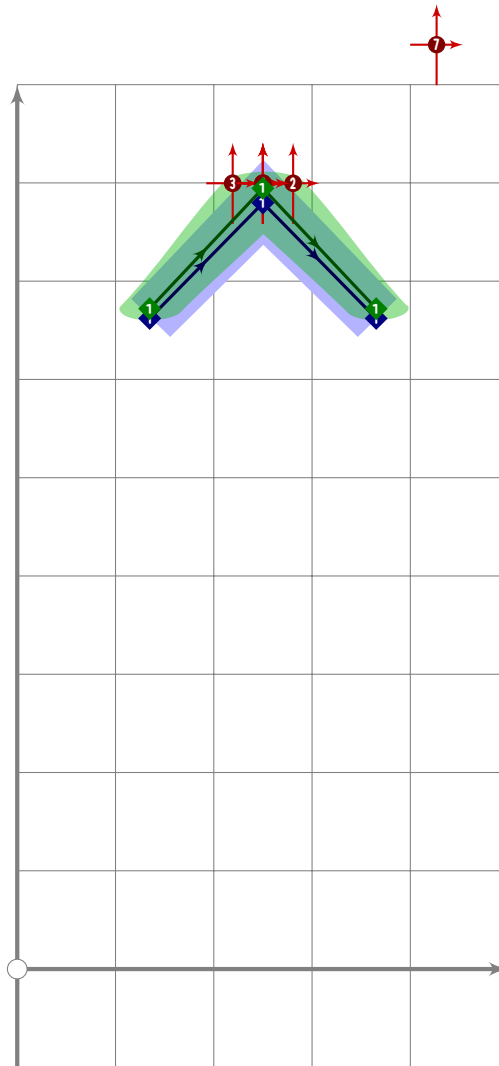
```

U+005D
tsuku.bracketright

00



```
523 begintsuglyph("bracketright";93);  
524 punct.sqb_right;  
525 tsu_render;  
526 endsuglyph;  
527
```



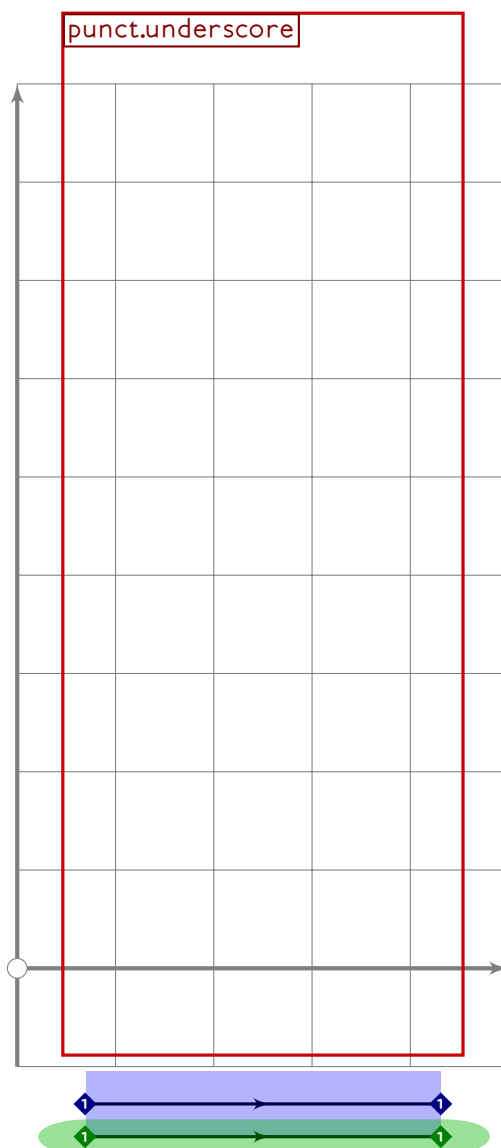
```

528 % circumflex accent/caret
529 begintsuglyph("asciicircum",94);
530   tsu_accent.circumflex;
531   tsu_render;
532 endsuglyph;
533

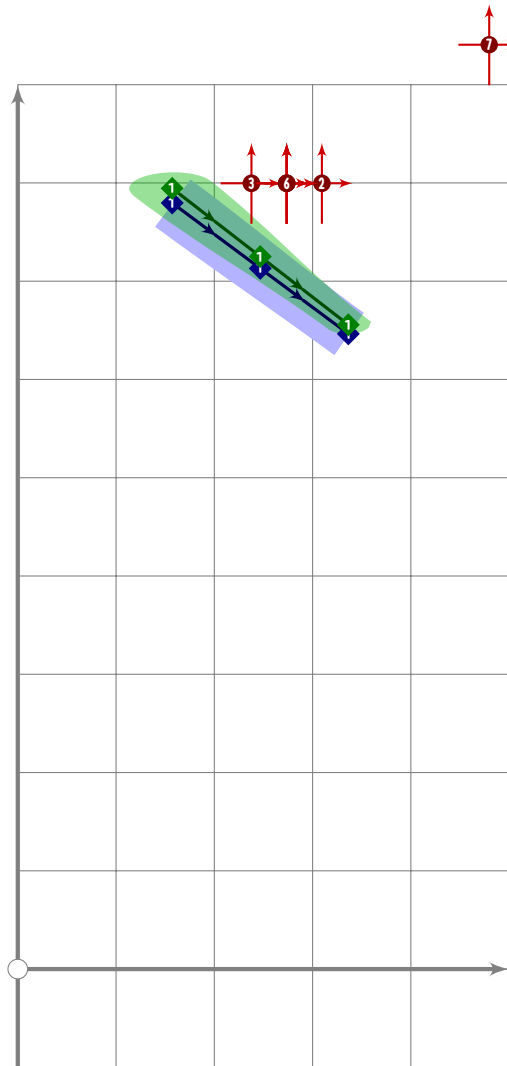
```

U+005F
tsuku.underscore

00



```
534 % underscore
535 beginsuglyph("underscore";95);
536 punct.underscore;
537 tsu_render;
538 endtsuglyph;
539
```



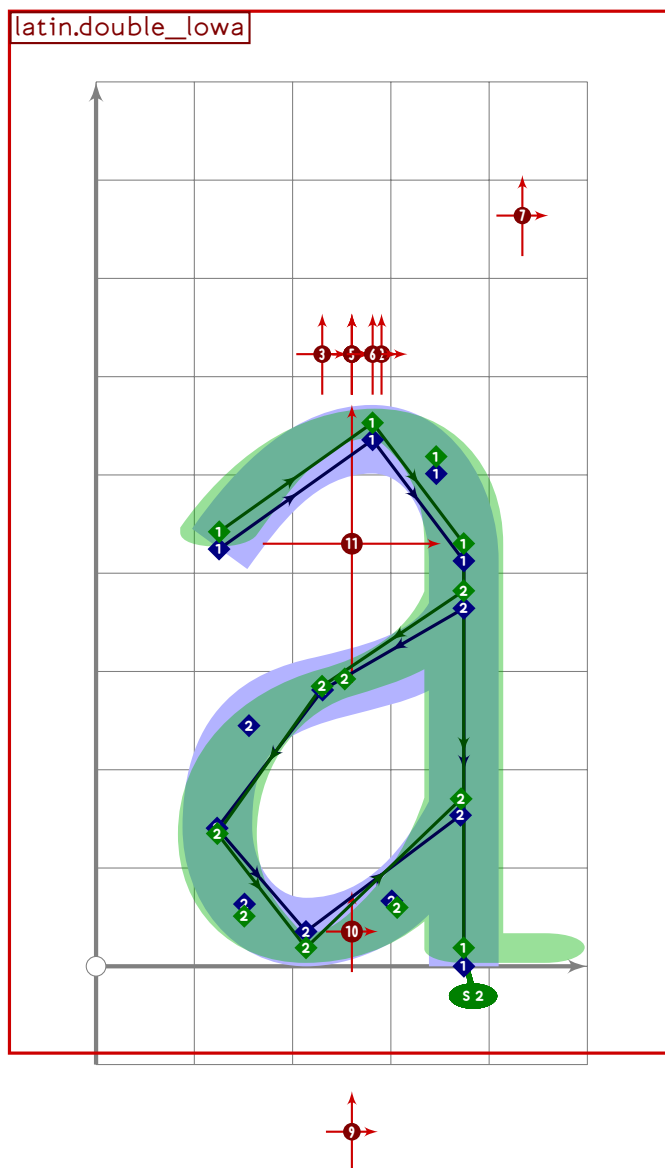
```

540 % grave accent
541 begintsuglyph("grave",96);
542   tsu_accent.grave;
543   tsu_render;
544 endtsuglyph;
545
546 % WARNING changing rescale setting
547 tsu_rescale_half_lc;
548
549 tsu_accent.low_default_anchors;
550

```

U+0061
tsuku.a

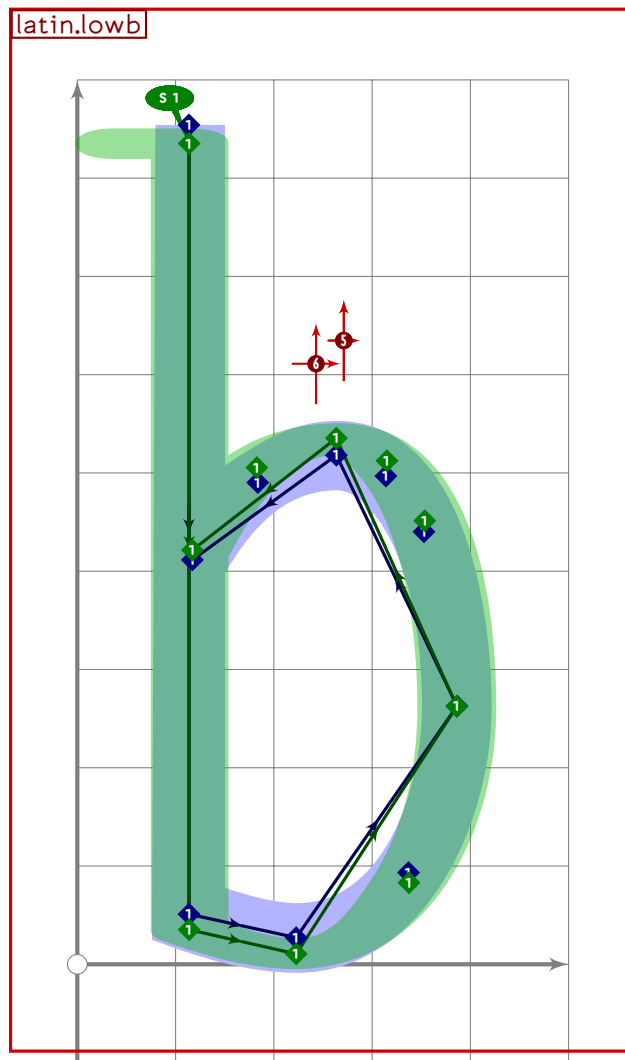
00



```

551 % a
552 begintsuglyph("a",97);
553   latin.low_a;
554   tsu_render;
555 endtsuglyph;
556

```

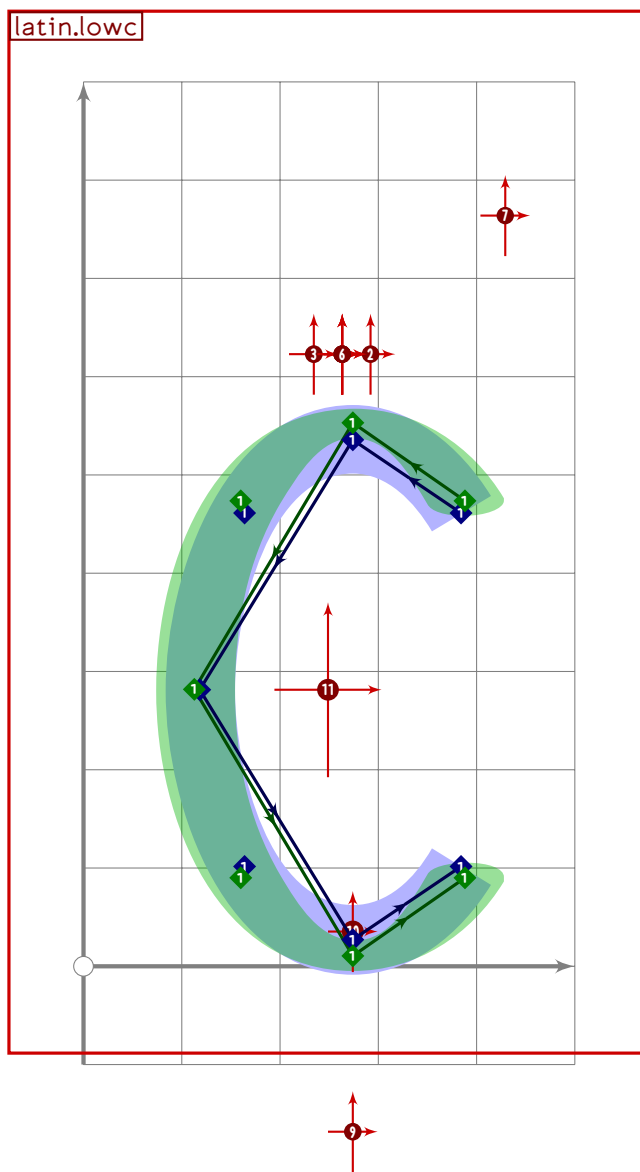
```

557 % b
558 begintsuglyph("b";98);
559 latin.lowb;
560 tsu_render;
561 endtsuglyph;
562

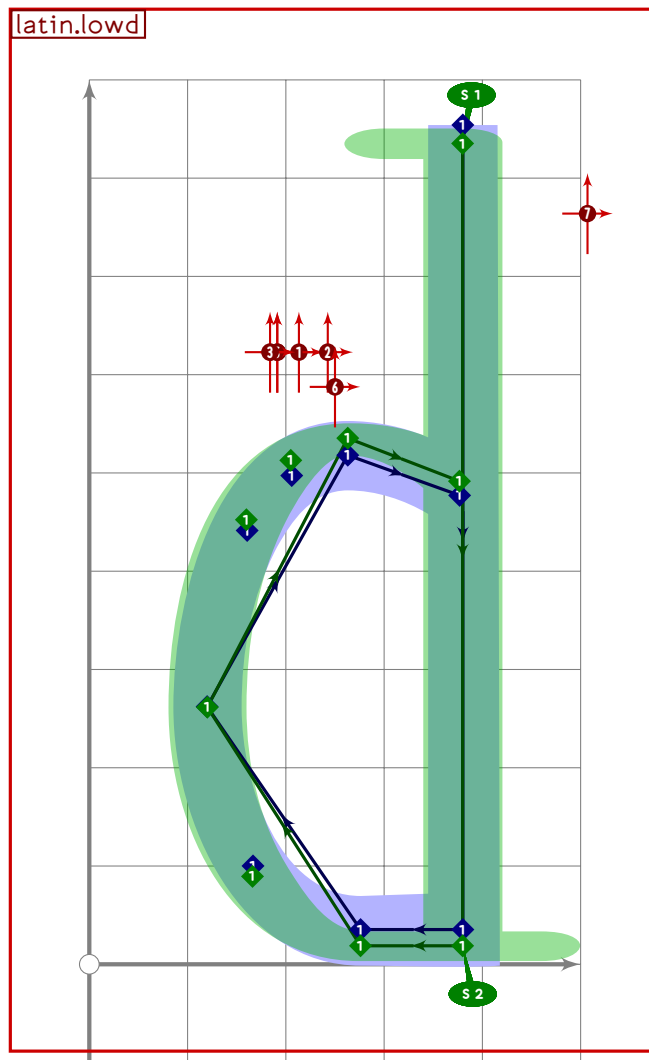
```

U+0063
tsuku.c

00



```
563 % c
564 begintsuglyph('c';99);
565 latin.lowc;
566 tsu_render;
567 endtsuglyph;
568
```



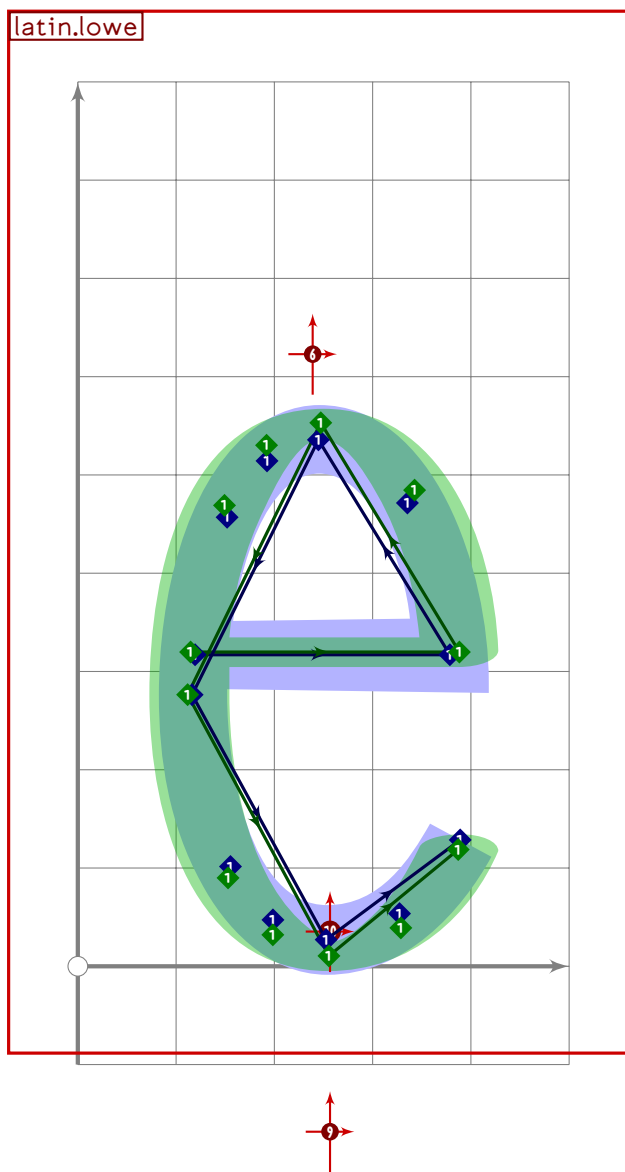
```

569 % d
570 beginsuglyph("d",100);
571   latin.lowd;
572   tsu_render;
573 endsuglyph;
574

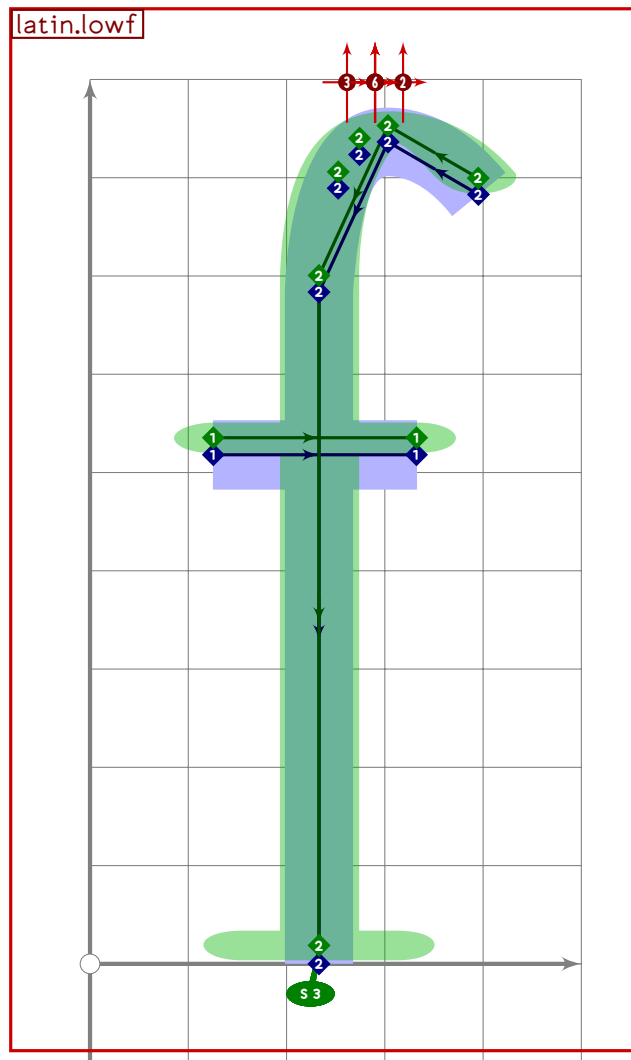
```

U+0065
tsuku.e

00



```
575 % e
576 begintsuglyph("e",101);
577   latin.lowe;
578   tsu_render;
579 endtsuglyph;
580
```



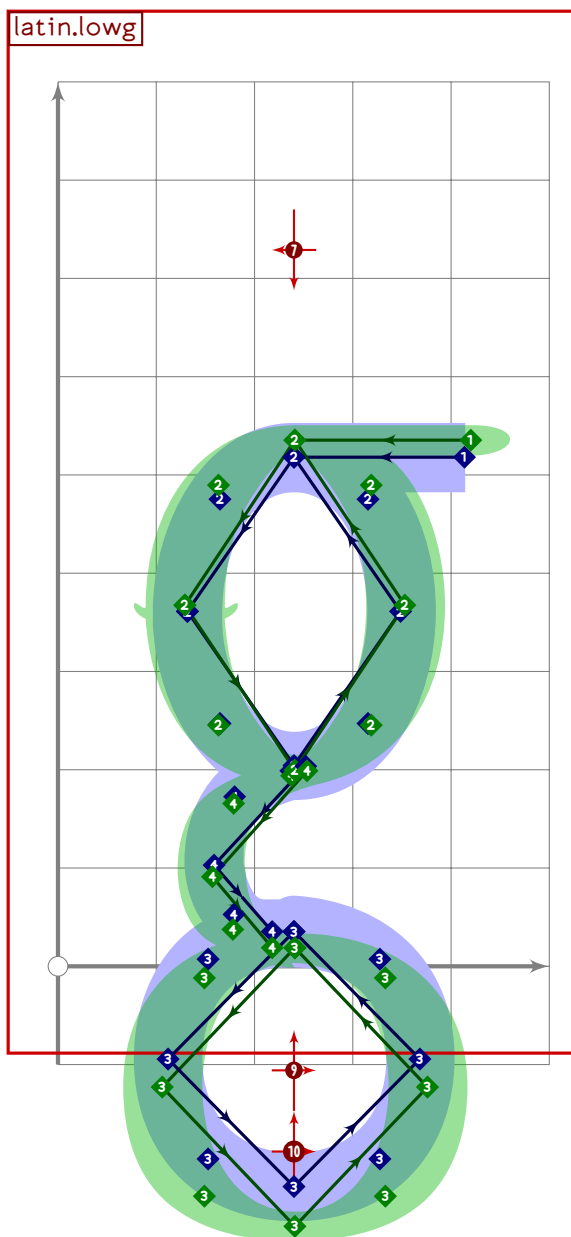
```

581 % f
582 begintsuglyph("f",102);
583 latin.lowf;
584 tsu_render;
585 endtsuglyph;
586

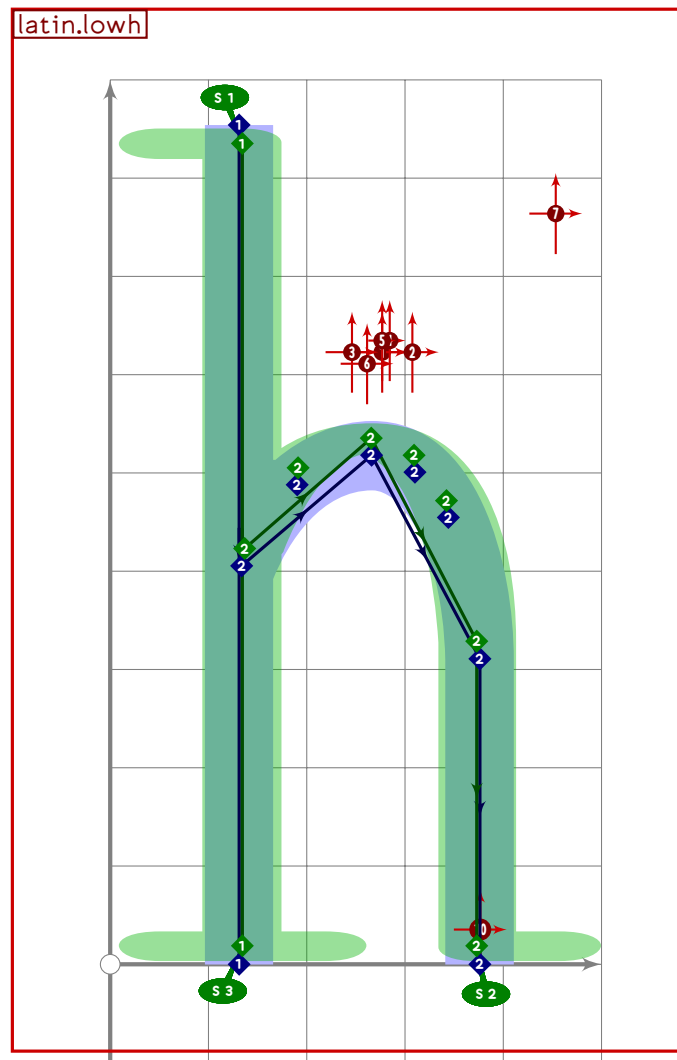
```

U+0067
tsuku.g

00



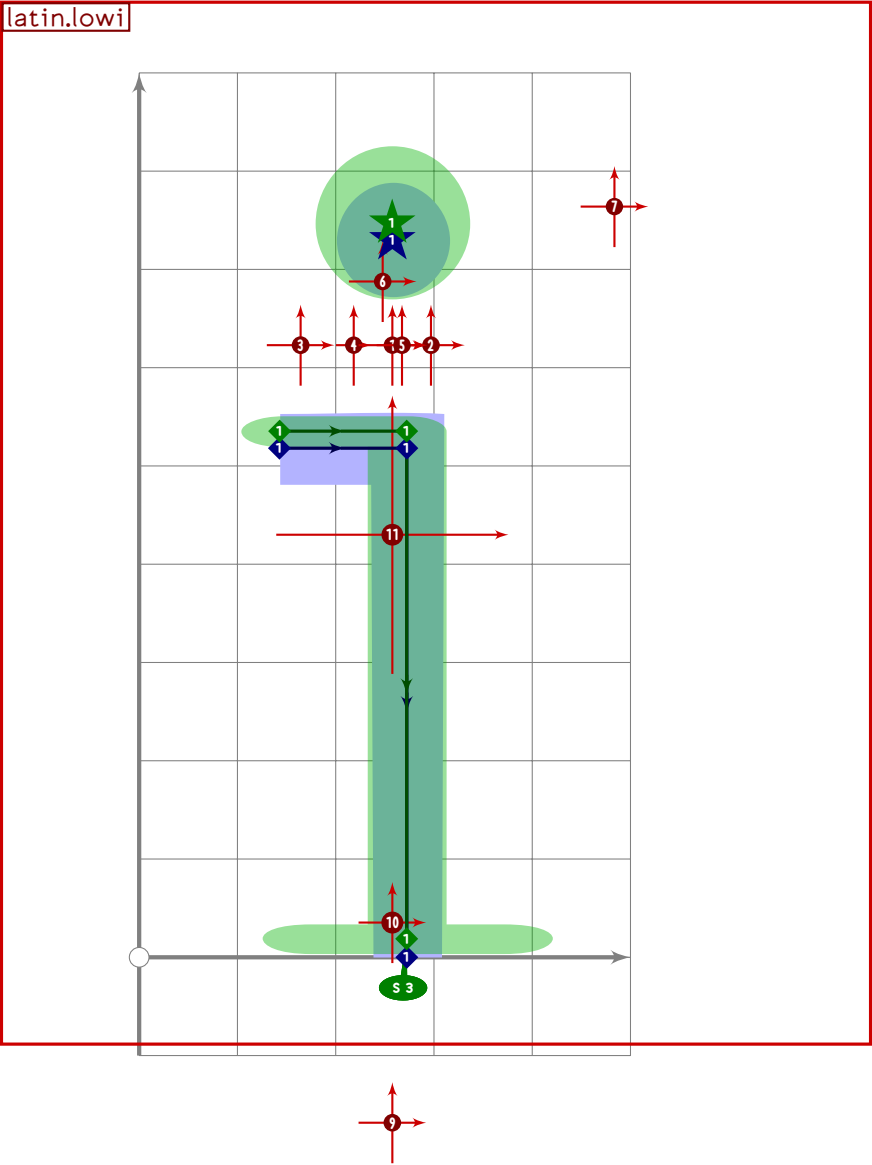
```
587 % g
588 begintsuglyph("g",103);
589 latin.lowg;
590 tsu_render;
591 endtsuglyph;
592
```



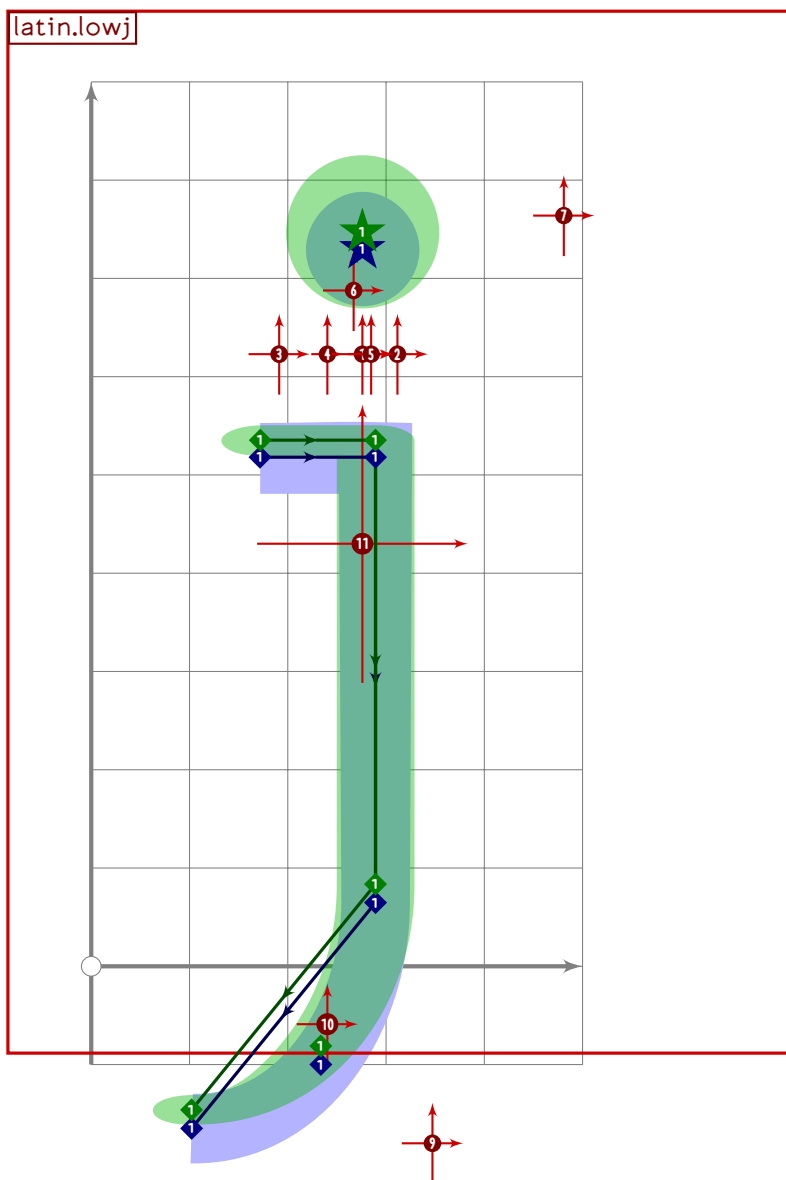
```

593 % h
594 beginsuglyph("h",104);
595   latin.lowh;
596   tsu_render;
597 endsuglyph;
598

```



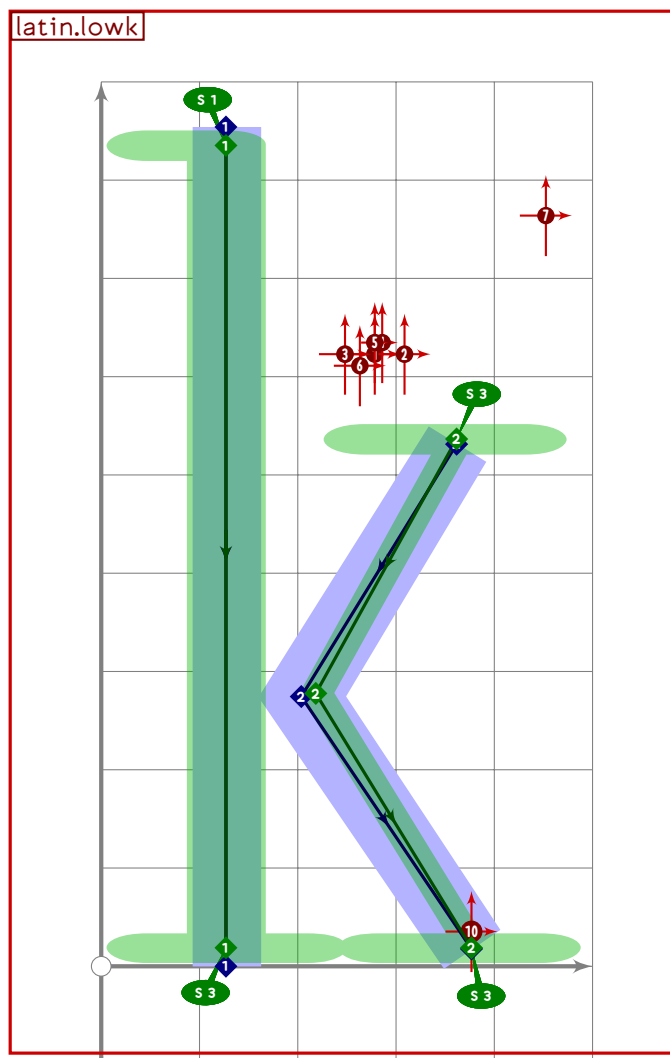
```
599 % i
600 begintsuglyph("i",105);
601 latin.lowi;
602 tsu_render;
603 endtsuglyph;
604
```

```

605 % j
606 begintsuglyph("j";106);
607   latin.lowj;
608   tsu_render;
609 endtsuglyph;
610

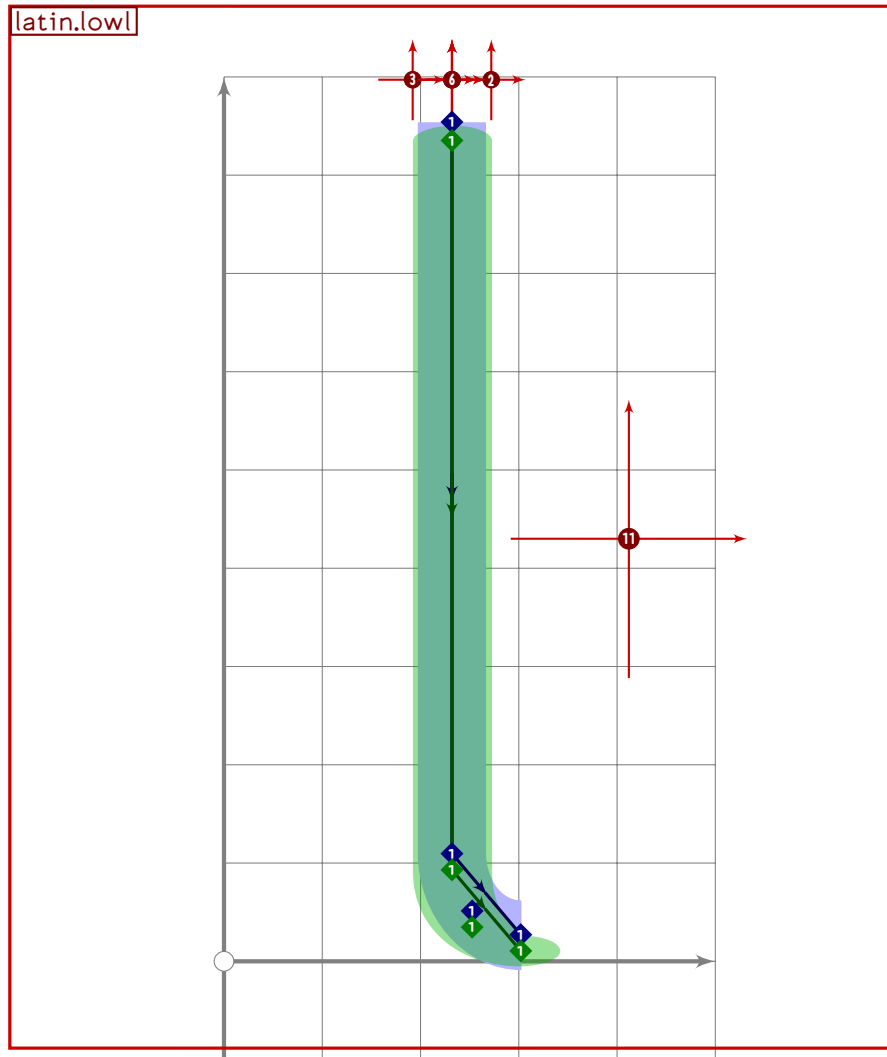
```



```

611 % k
612 begint Suglyph("k",107);
613   latin.lowk;
614   tsu_render;
615 endtsuglyph;
616

```



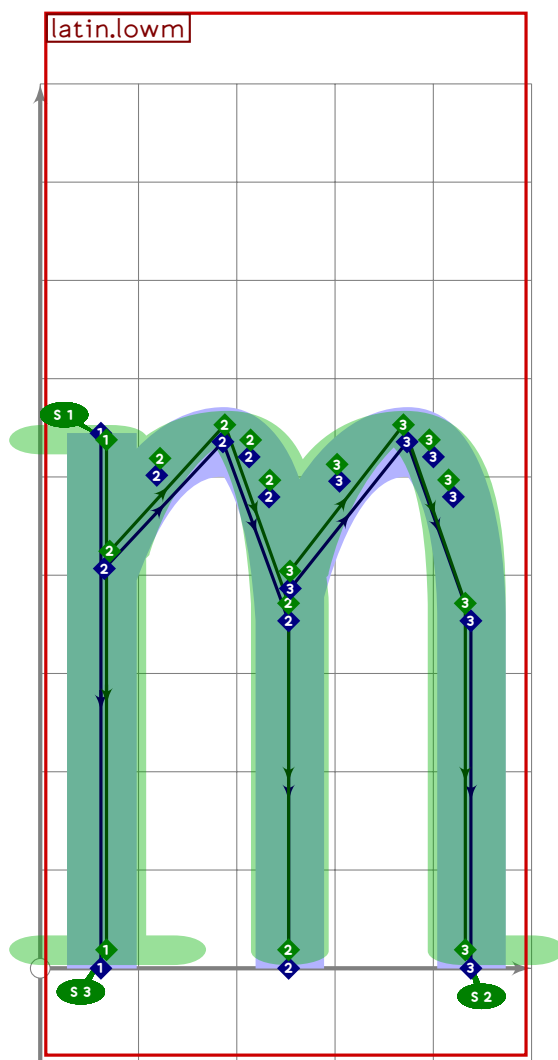
```

617 % l
618 begint Suglyph("l",108);
619   latin.lowl;
620   tsu_render;
621 endtsuglyph;
622

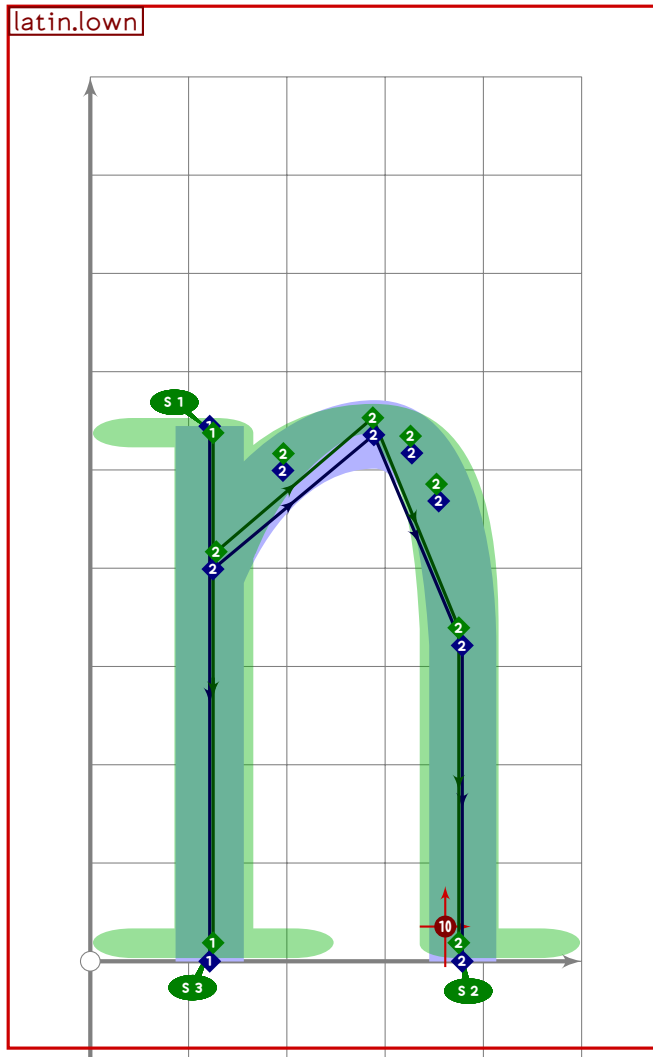
```

U+006D
tsuku.m

00



```
623 % m
624 beginsuglyph("m",109);
625   latin.lowm;
626   tsu_render;
627 endsuglyph;
628
```



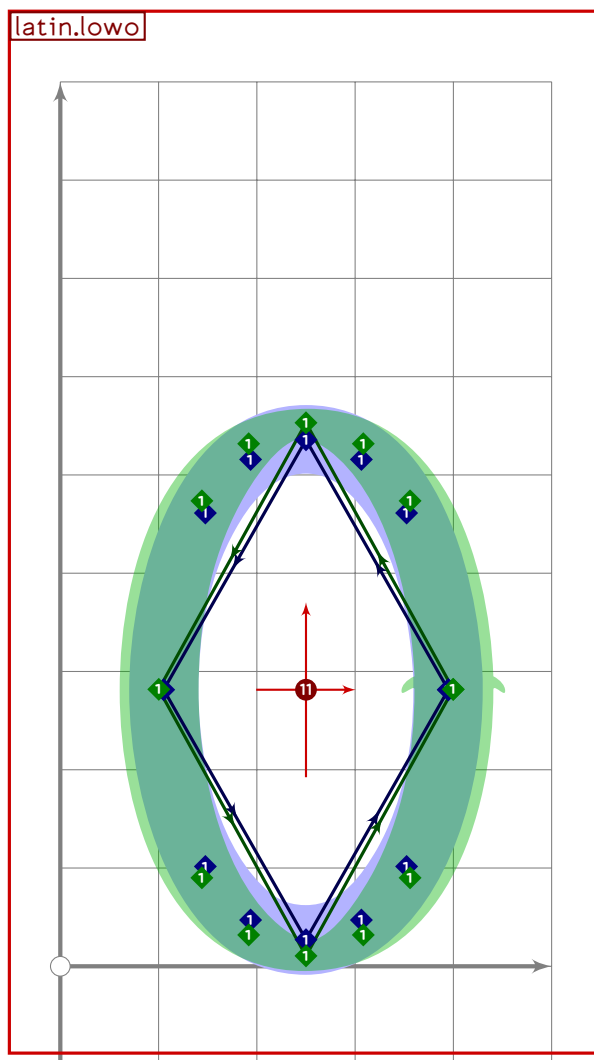
```

629 % n
630 beginsuglyph("n",110);
631   latin.lown;
632   tsu_render;
633 endsuglyph;
634

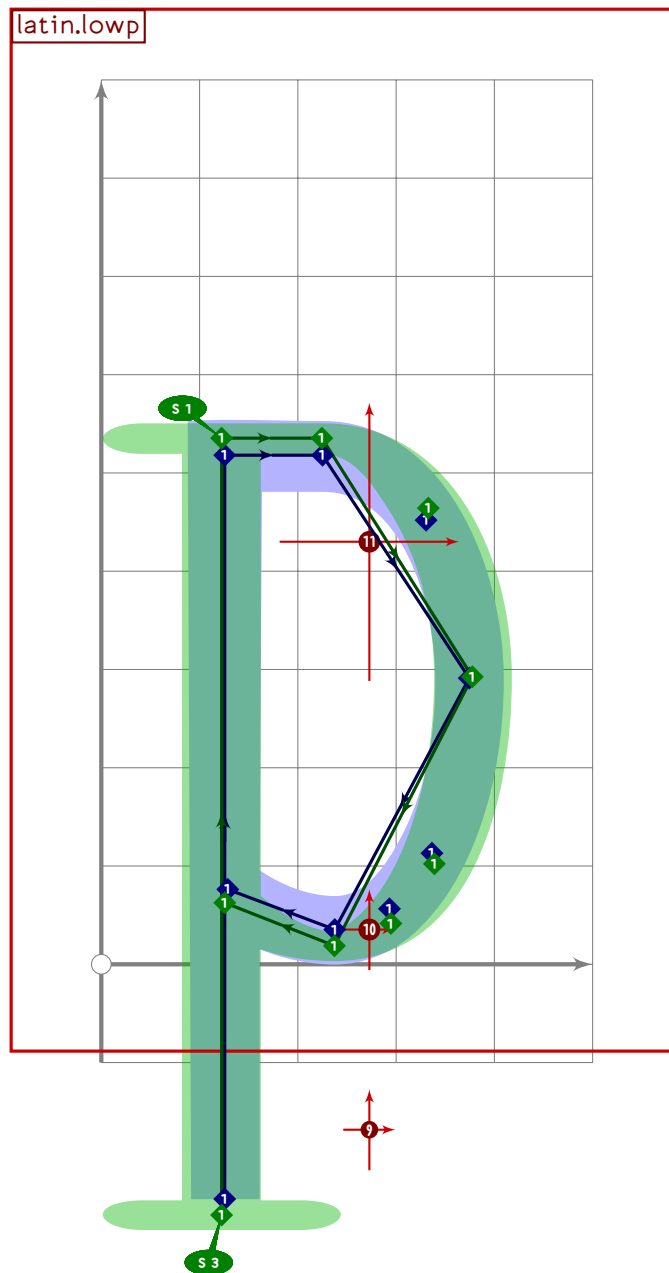
```

U+006F
tsuku.o

00



```
635 % o
636 beginsuglyph("o";111);
637   latin.low;
638   tsu_render;
639 endsuglyph;
640
```



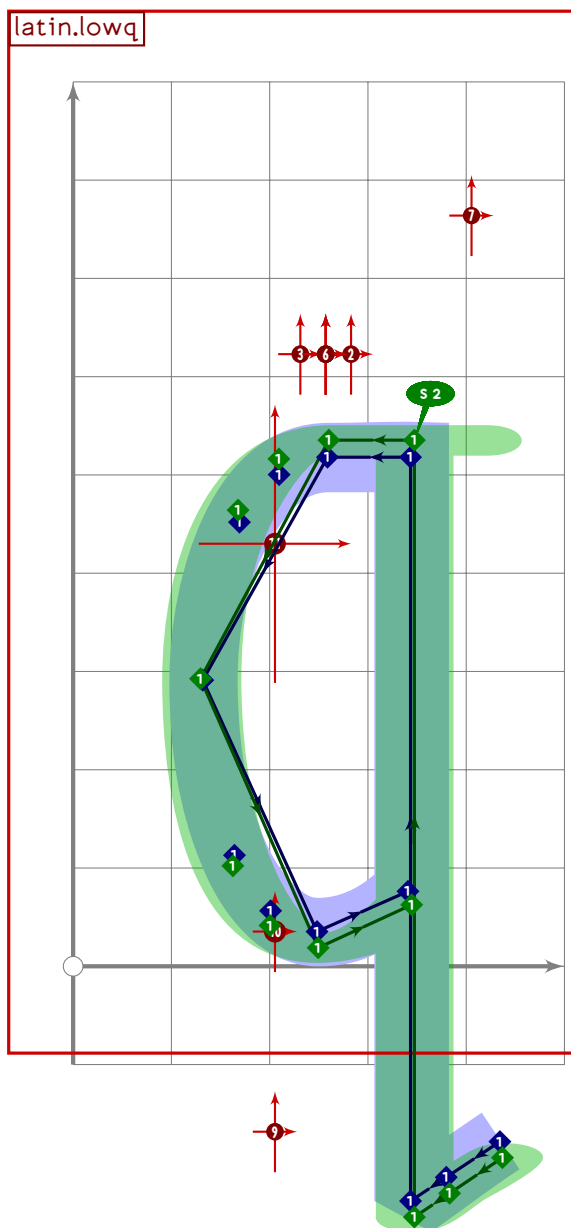
```

641 % p
642 begintsuglyph("p",112);
643   latin.lowp;
644   tsu_render;
645 endtsuglyph;
646

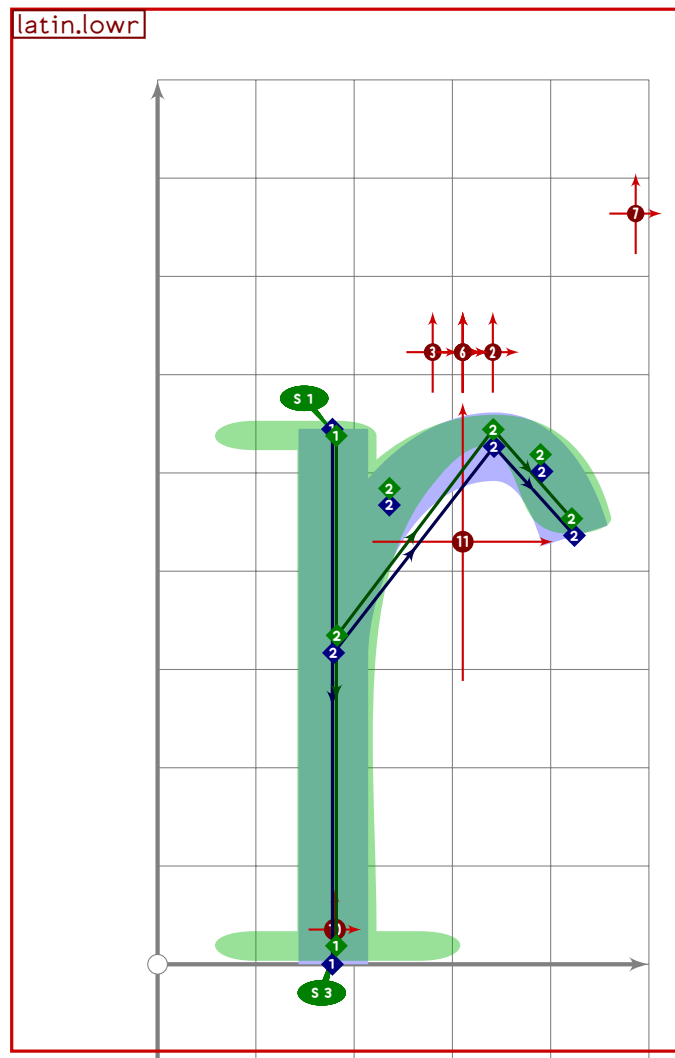
```

U+0071
tsuku.q

00



```
647 % q
648 begintsuglyph("q",113);
649   latin.lowq;
650   tsu_render;
651 endtsuglyph;
652
```

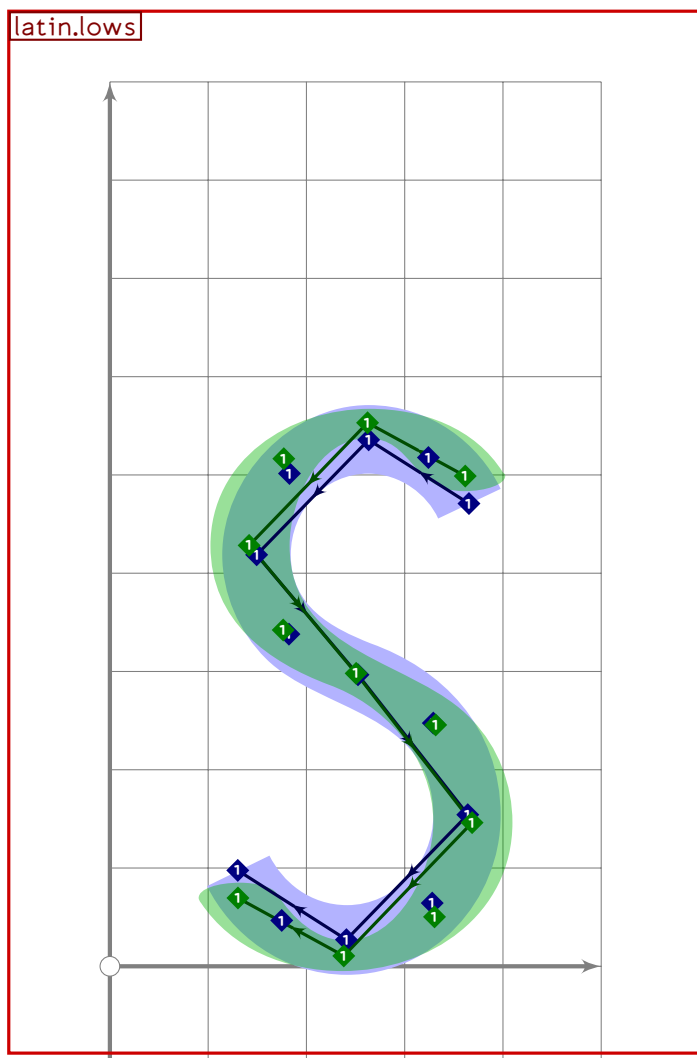
```

653 % r
654 begintsuglyph("r",114);
655   latin.lowr;
656   tsu_render;
657 endtsuglyph;
658

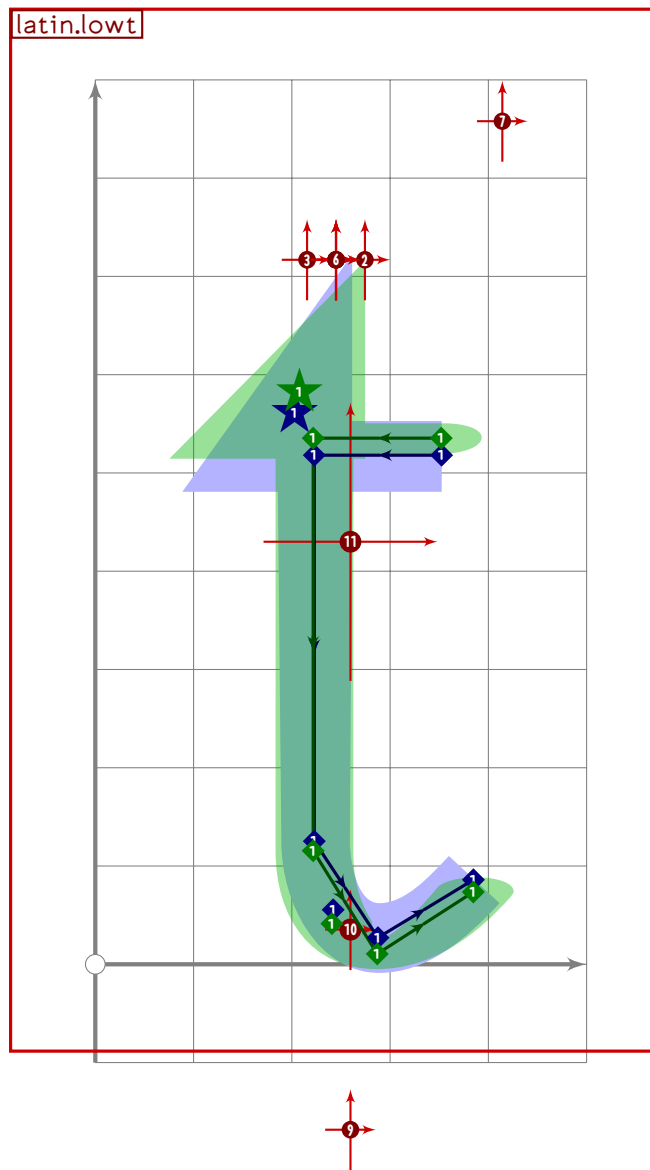
```

U+0073
tsuku.s

00



```
659 % s
660 beginsuglyph("s",115);
661   latin.lows;
662   tsu_render;
663 endsuglyph;
664
```



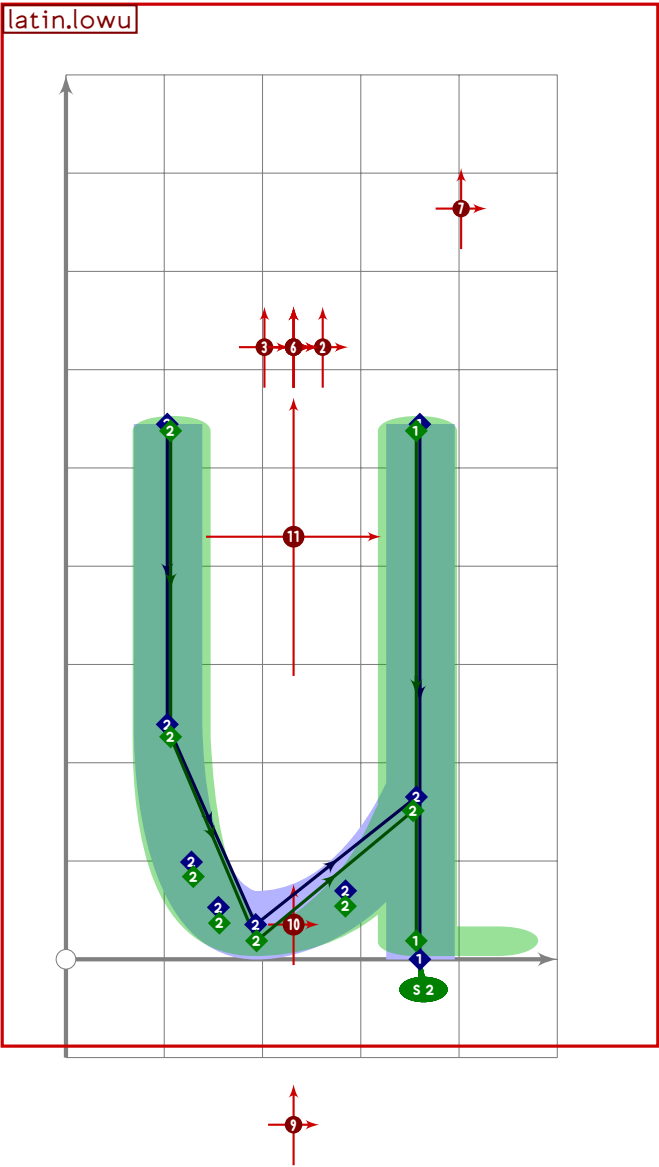
```

665 % t
666 begintsuglyph("t",116);
667   latin.lowt;
668   tsu_render;
669 endtsuglyph;
670

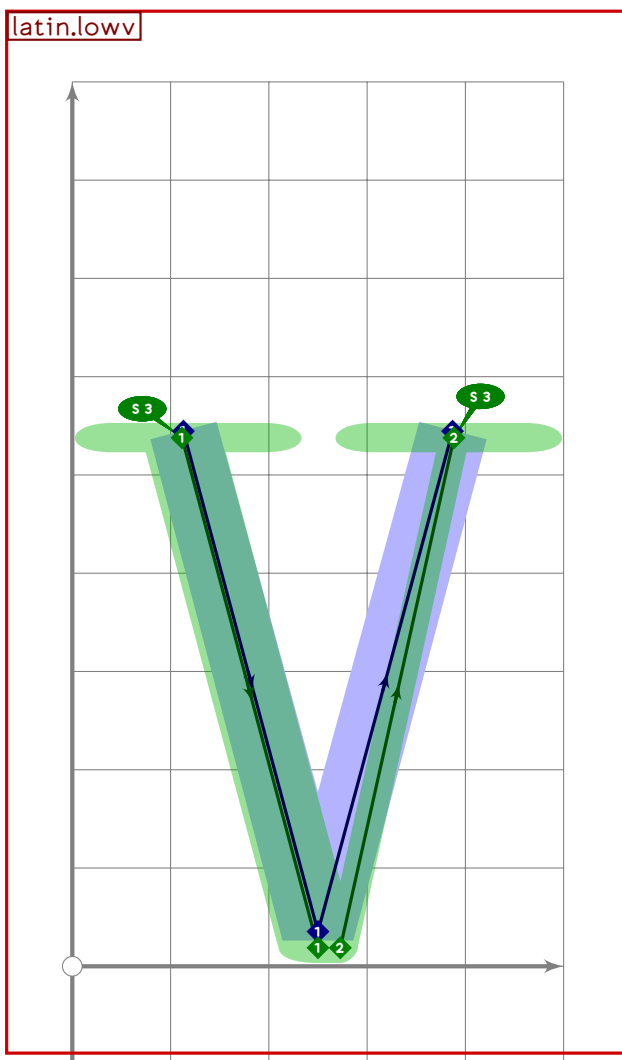
```

U+0075
tsuku.u

00



```
671 % u
672 beginsuglyph("u",17);
673 latin.lowu;
674 tsu_render;
675 endsuglyph;
676
```



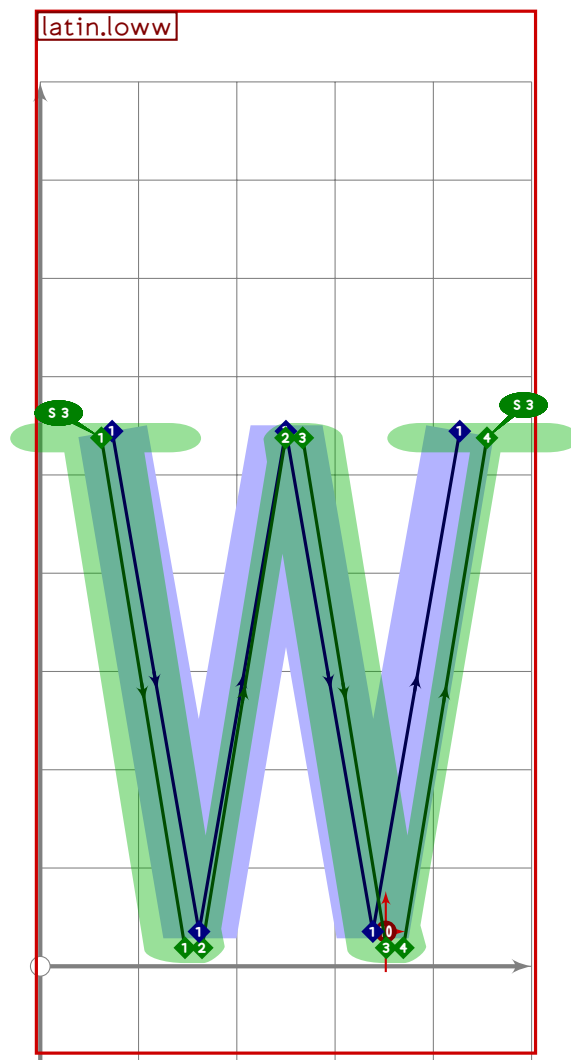
```

677 % v
678 begintsuglyph("V",118);
679   latin.lowv;
680   tsu_render;
681 endsuglyph;
682

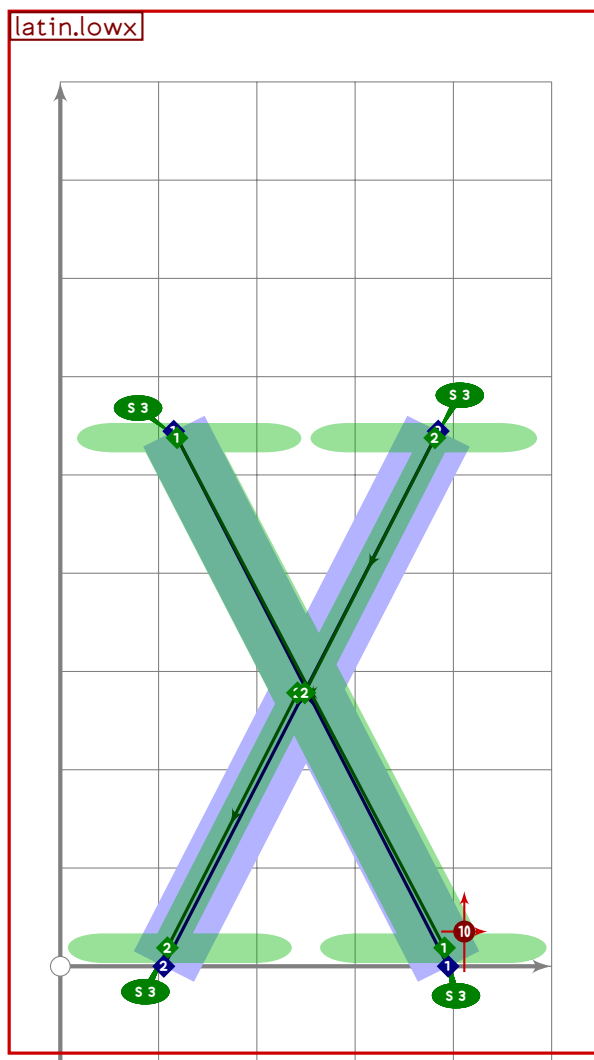
```

U+0077
tsuku.w

00



```
683 % w
684 beginsuglyph("w",119);
685   latin.loww;
686   tsu_render;
687 endsuglyph;
688
```



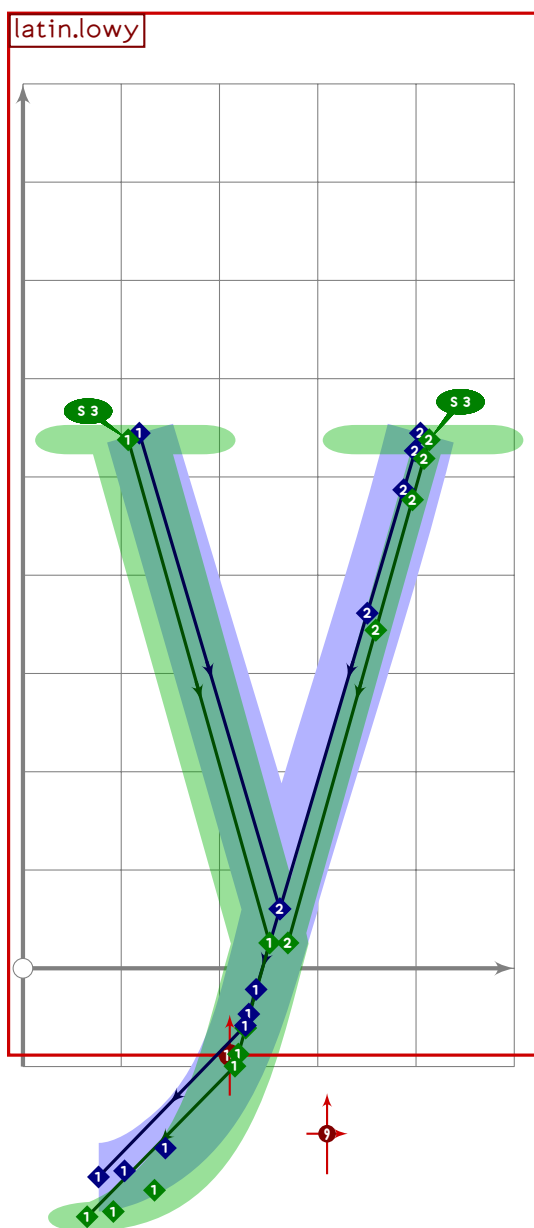
```

689 % x
690 beginsuglyph("x",120);
691   latin.lowx;
692   tsu_render;
693 endsuglyph;
694

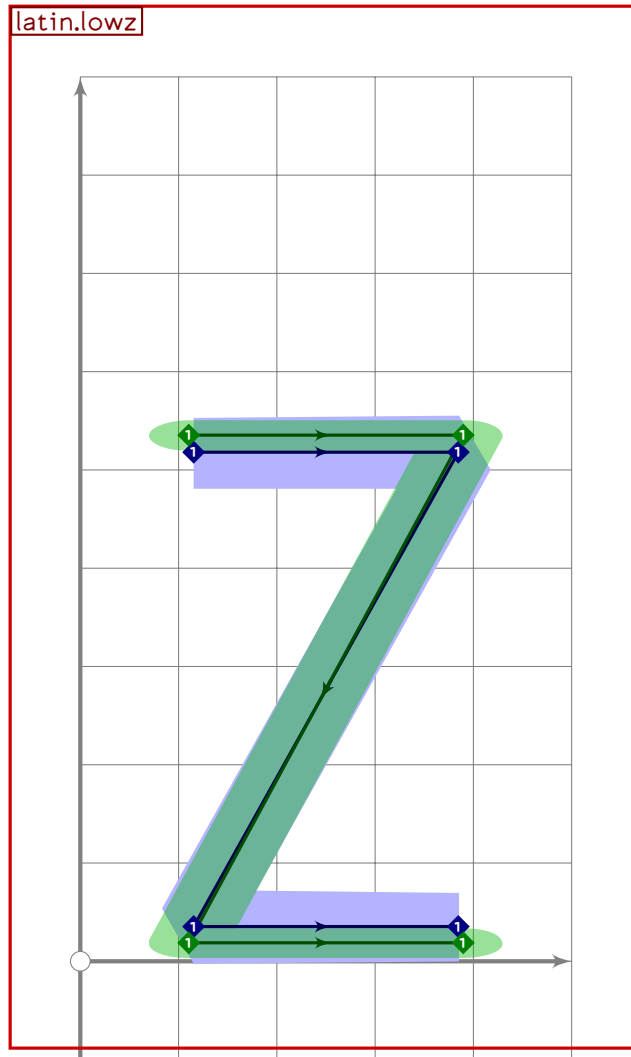
```

U+0079
tsuku.y

00



```
695 % y
696 begintsuglyph("y",121);
697   latin.lowy;
698   tsu_render;
699 endtsuglyph;
700
```

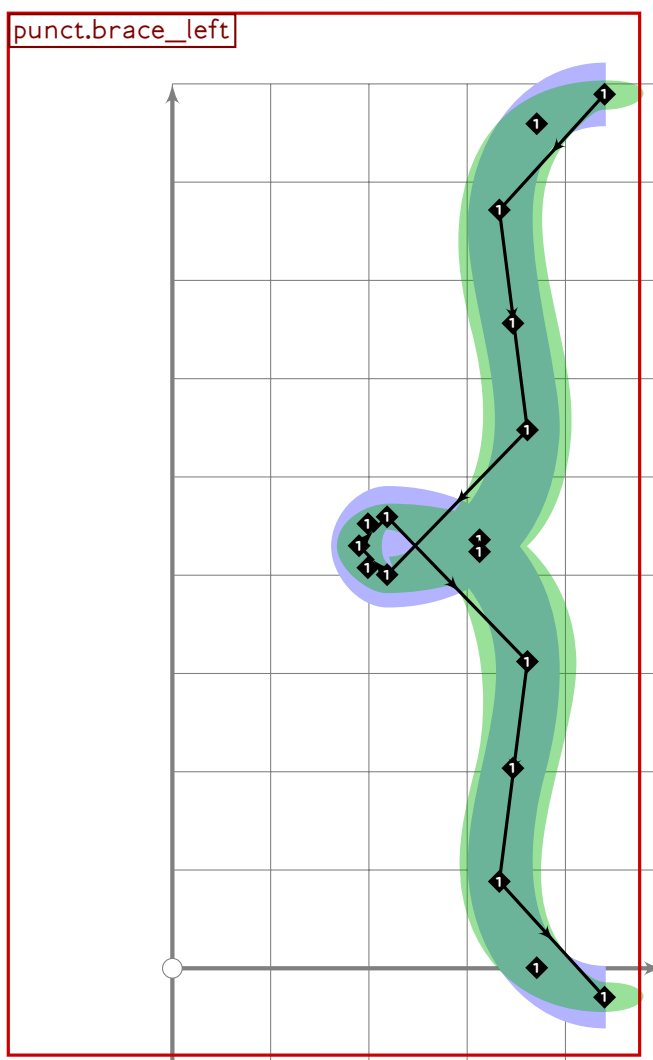
```

701 % z
702 beginsuglyph("z";122);
703   latin.lowz;
704   tsu_render;
705 endsuglyph;
706
707 tsu_accent.clear_default_anchors;
708
709 % WARNING changing rescale setting
710 tsu_rescale_half;
711

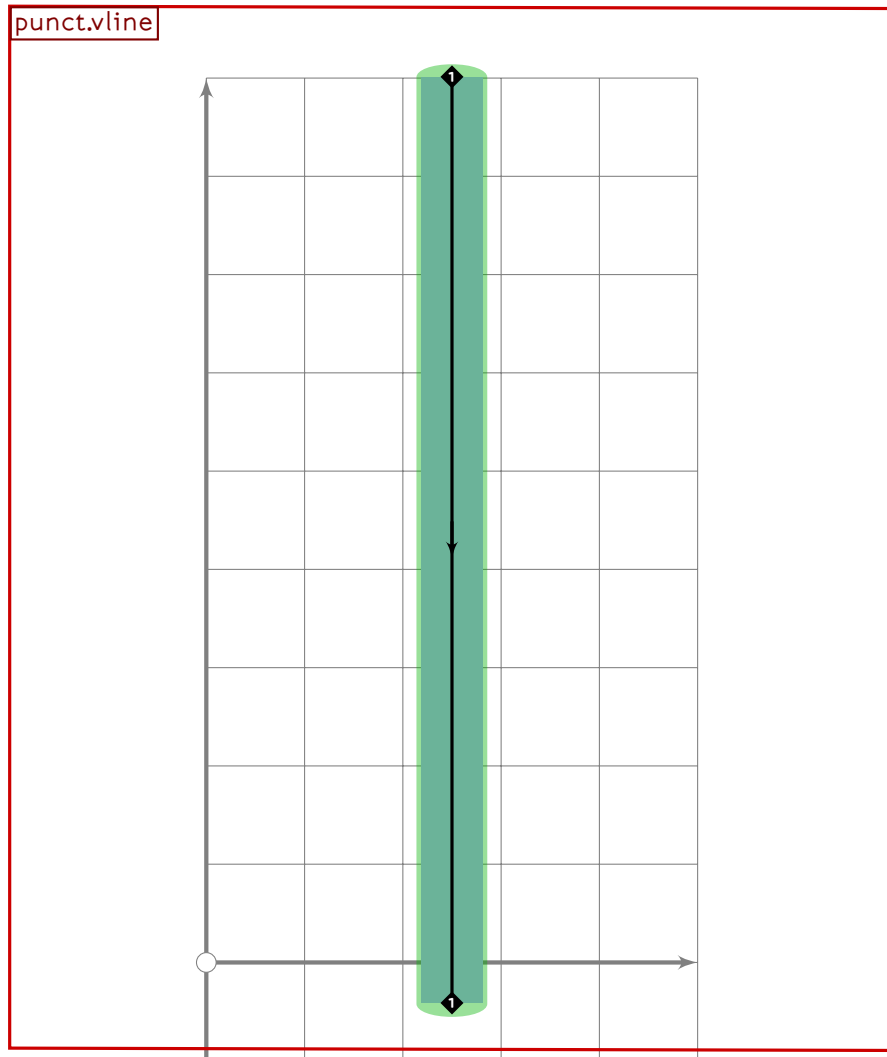
```

U+007B
tsuku.braceleft

00



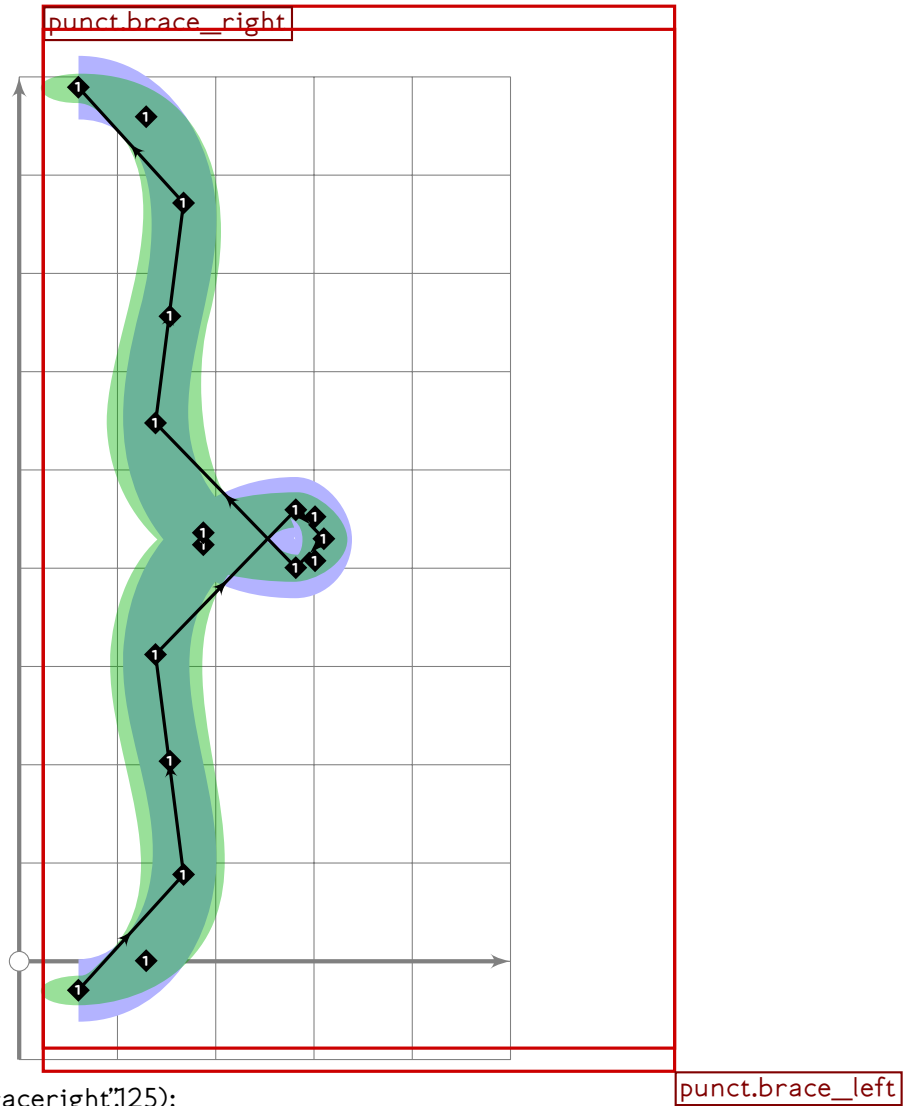
```
712 % left and right square brackets
713 beginsuglyph("braceleft";23);
714   punct.brace_left;
715   tsu_render;
716 endsuglyph;
```



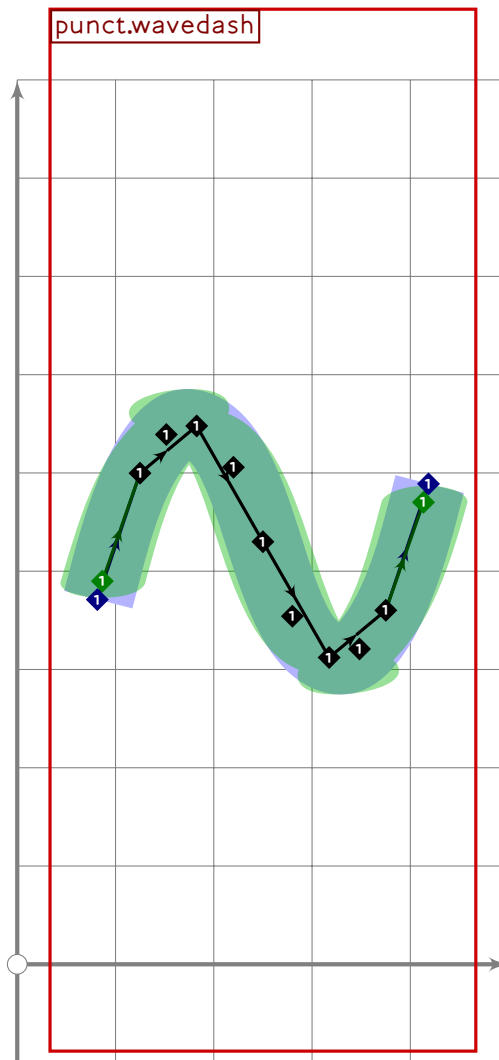
```
717 beginsuglyph("bar",124);  
718   punct.vline;  
719   tsu_render;  
720 endsuglyph;
```

U+007D
tsuku.braceright

00



```
721 begint Suglyph("braceright",125);  
722 punct.brace_right;  
723 tsu_render;  
724 endsuglyph;  
725
```



```

726 % "tilde" - rescaled "wave dash"
727 begintsuglyph("asciitilde",126);
728   punct.wavedash;
729   tsu_render;
730 endsuglyph;
731
732
733
734 % 007F through 009F are nonprinting control characters.
735 % 00A0 is a space, supplied by the make-font script later
736
737
738
```

Latin-1 Extra Characters

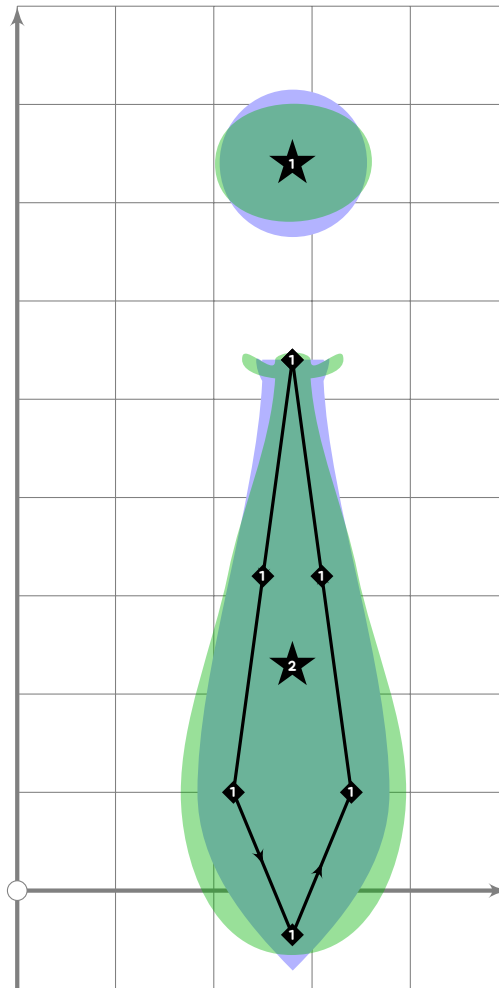
```

739 % LATIN-1 EXTRA CHARACTERS
740
741 transform tsu_xf.latin_one_supert,tsu_xf.latin_one_circled,
742   tsu_xf.latin_one_cbound;
```

```

743
744 if is_proportional:
745     xypart tsu_xf.latin_one_super=yxpart tsu_xf.latin_one_super=0;
746     xxpart tsu_xf.latin_one_super=yypart tsu_xf.latin_one_super=0.65;
747     (500,latin_wide_xheight_r) transformed tsu_xf.latin_one_super=
748         (500,2*latin_vcentre);
749
750     xypart tsu_xf.latin_one_circled=yxpart tsu_xf.latin_one_circled=0;
751     xxpart tsu_xf.latin_one_circled=yypart tsu_xf.latin_one_circled=0.5;
752     centre_pt transformed tsu_xf.latin_one_circled=centre_pt;
753
754     tsu_xf.latin_one_cbound=identity scaled 225 shifted centre_pt;
755
756 else:
757     xypart tsu_xf.latin_one_super=yxpart tsu_xf.latin_one_super=0;
758     xxpart tsu_xf.latin_one_super=yypart tsu_xf.latin_one_super=0.55;
759     (500,latin_wide_xheight_r) transformed tsu_xf.latin_one_super=
760         (250,2*latin_vcentre);
761
762     xypart tsu_xf.latin_one_circled=yxpart tsu_xf.latin_one_circled=0;
763     xxpart tsu_xf.latin_one_circled=yypart tsu_xf.latin_one_circled=0.333;
764     centre_pt transformed tsu_xf.latin_one_circled=(250,latin_vcentre);
765
766     tsu_xf.latin_one_cbound=identity scaled 150 shifted (250,latin_vcentre);
767 fi;
768
769 % inverted exclamation point
770 tsu_rescale_native_narrow;

```



```

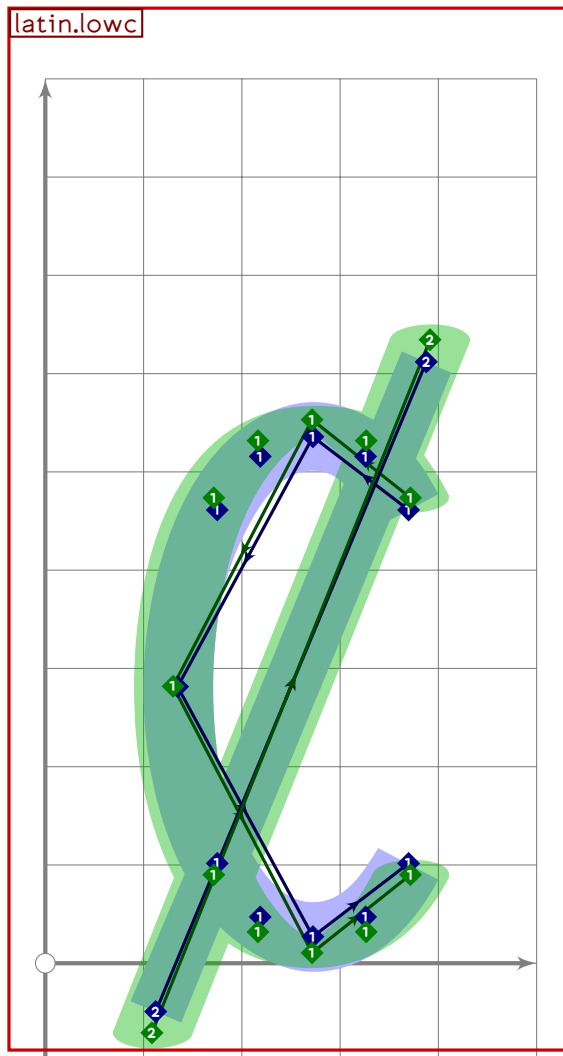
771 begint Suglyph("exclamdown",161);
772   if tsu_pbrush_size>=(tsu_punct_size*0.5):
773     push_lcblob(fullcircle
774       xscaled (tsu_punct_size+tsu_pbrush_size)
775       yscaled (tsu_punct_size+tsu_pbrush_size*tsu_pbrush_shape)
776       rotated tsu_pbrush_angle
777       shifted (220,40)
778       rotatedaround ((250,390),180));
779   else:
780     push_stroke(fullcircle
781       scaled tsu_punct_size
782       shifted (220,40)
783       rotatedaround ((250,390),180),
784       (2,2)-(2,2)-(2,2)-(2,2));
785     if tsu_pbrush_size>=30:
786       push_lcblob(get_stroke(0));
787     fi;
788   fi;
789
790   push_stroke(((220,240){up}..(280,680){up}..{curl 1}(220,825){curl 1}..
791     (160,680){down}..{down}(220,240))

```

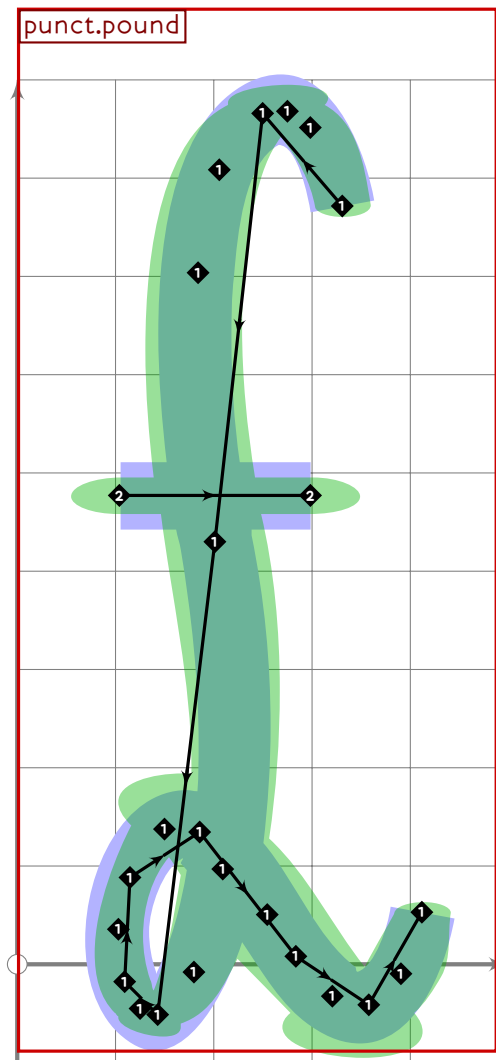
U+00A2
tsuku.cent

00

```
792     rotatedaround ((250,390),180),
793     (1,1)–(2,2)–(2,2)–(2,2)–(1,1));
794
795     if tsu_pbrush_size>=30:
796         push_lcblob((subpath (0,1,3,9) of get_strokep(0))–cycle);
797     fi;
798
799     tsu_render;
800 endtsuglyph;
801 tsu_rescale_half;
```



```
802
803     begint Suglyph("cent",162);
804     tsu_accent.apply(latin.lowc)(tsu_accent.slash);
805     tsu_render;
806 endtsuglyph;
```

```

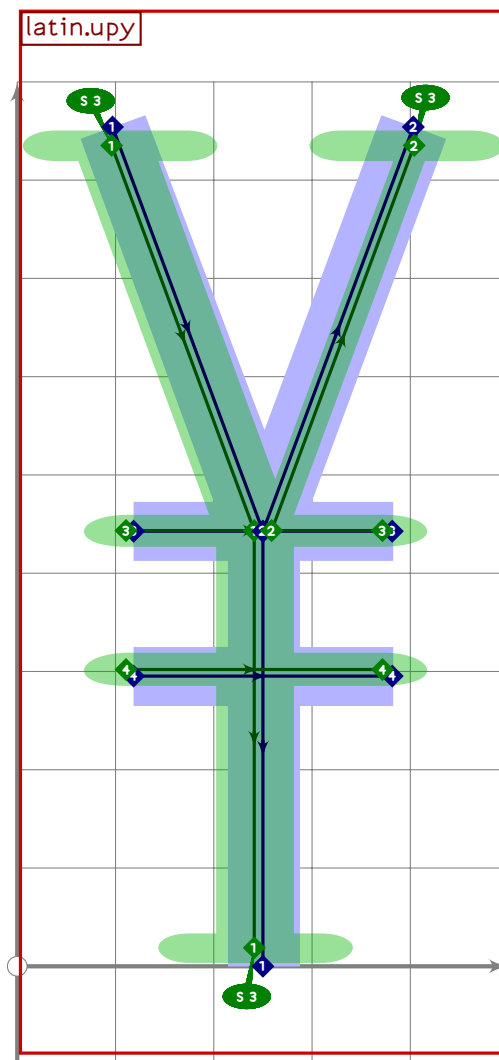
807
808 begintsuglyph("sterling",163);
809   punct.pound;
810   tsu_render;
811 endtsuglyph;
812
813 begintsuglyph("currency",164);
814   punct.currency;
815   tsu_render;
816 endtsuglyph;
817

```

[see page 373]

U+00A5
tsuku.yen

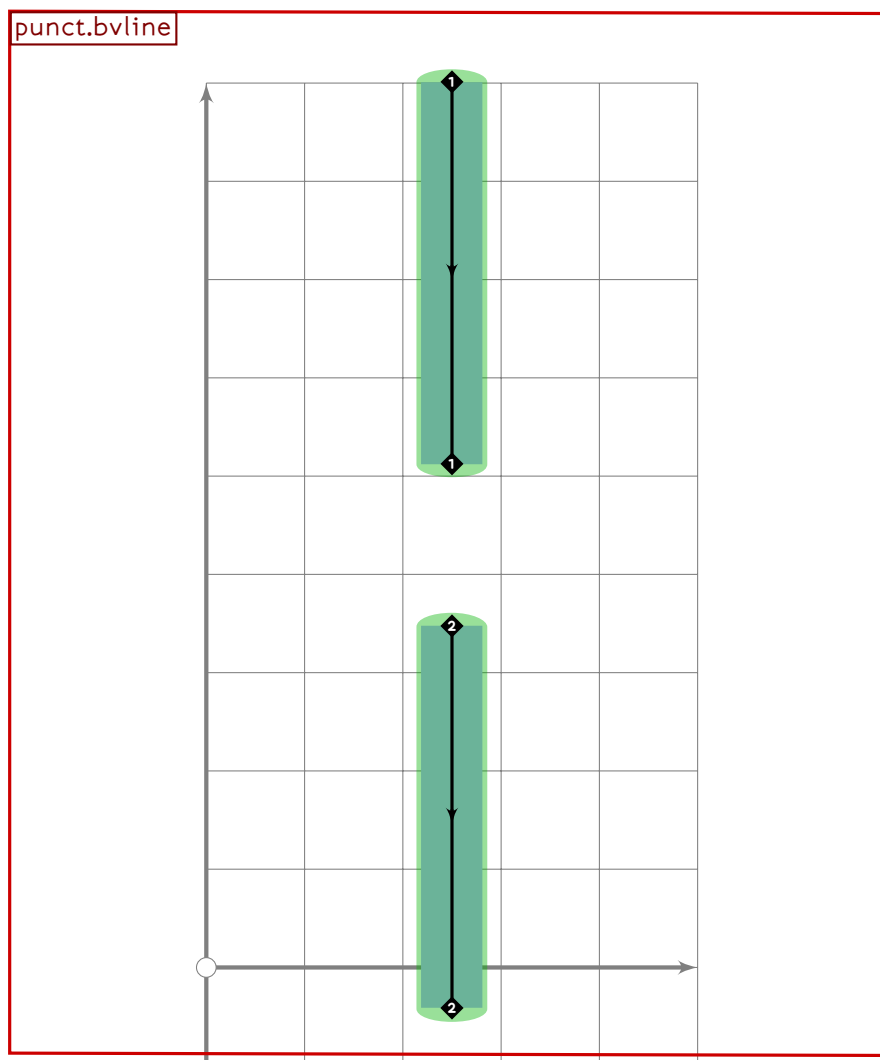
00



```

818 % yen sign
819 begint Suglyph("yen",165);
820 latin.upy;
821 push_stroke((((-240,0)-(240,0)) shifted point 1 of get_stroke(-1),
822   (2,2)-(2,2));
823 set_bosize(0,80);
824 push_stroke((((-240,0)-(240,0)) shifted point 1.333 of get_stroke(-2),
825   (2,2)-(2,2));
826 set_bosize(0,80);
827 tsu_render;
828 endtsuglyph;

```



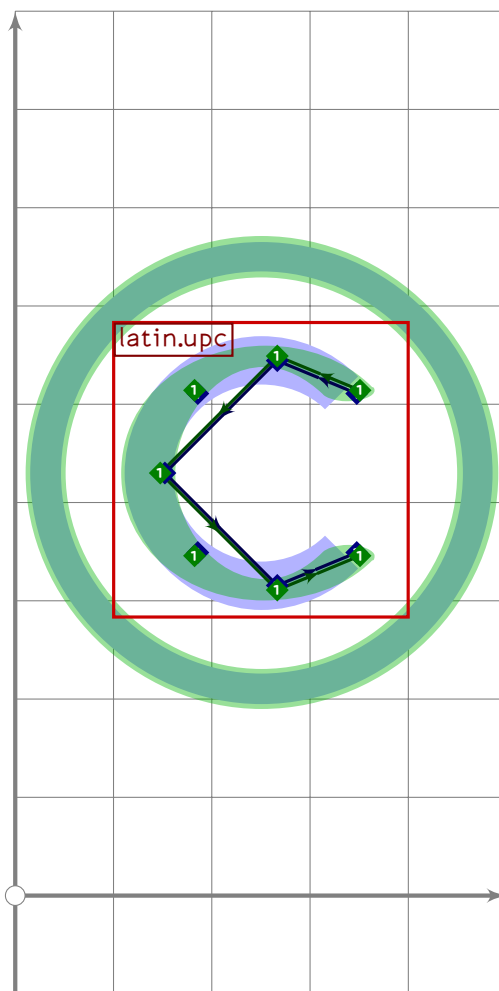
```

829
830 begintsuglyph("brokenbar",166);
831   punct.bvline;
832   tsu_render;
833 endtsuglyph;
834
835 begintsuglyph("section",167);
836   punct.section;
837   tsu_render;
838 endtsuglyph;
839
840 % naked umlaut
841 begintsuglyph("dieresis",168);
842   tsu_accent.umlaut;
843   tsu_render;
844 endtsuglyph;
845
846 % WARNING, setting rescale
847 tsu_rescale_native_conditional;

```

[see page 395]

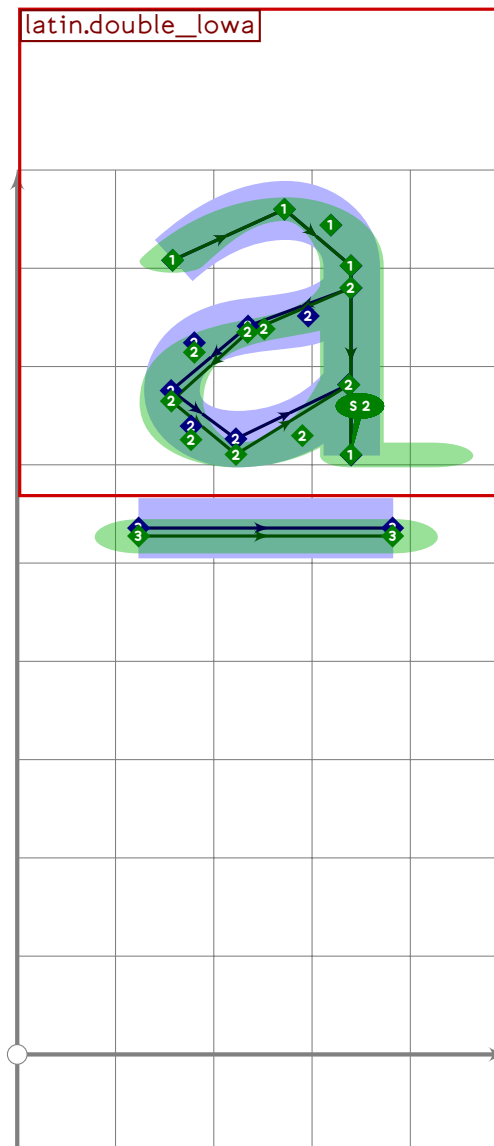
[see page 109]



```

848
849 begintsuglyph("copyright",169);
850   Fill fullcircle scaled (1320+120*tsu_brush_max) shifted centre_pt
851     transformed tsu_xf.latin_one_circled;
852   unFill reverse fullcircle scaled (1320-120*tsu_brush_max)
853     shifted centre_pt transformed tsu_xf.latin_one_circled;
854   tsu_xform(tsu_xf.latin_one_circled)(latin.upc);
855   tsu_render_in_circle(tsu_xf.latin_one_cbound);
856 endsuglyph;

```



```

857
858 beginsuglyph("ordfeminine",170);
859   tsu_xform(tsu_xf.latin_one_super)(
860     latin.low_a;
861     push_stroke((270,-110)-(740,-110),(2,2)-(2,2));
862     set_bosize(0,get_bosize(-1));
863     tsu_render;
864 endtsuglyph;
865
866 % WARNING, changing rescale setting
867 tsu_rescale_half;
868
869 beginsuglyph("guillemotleft",171);
870   punct.guillemet_left;
871   tsu_render;
872 endtsuglyph;
873

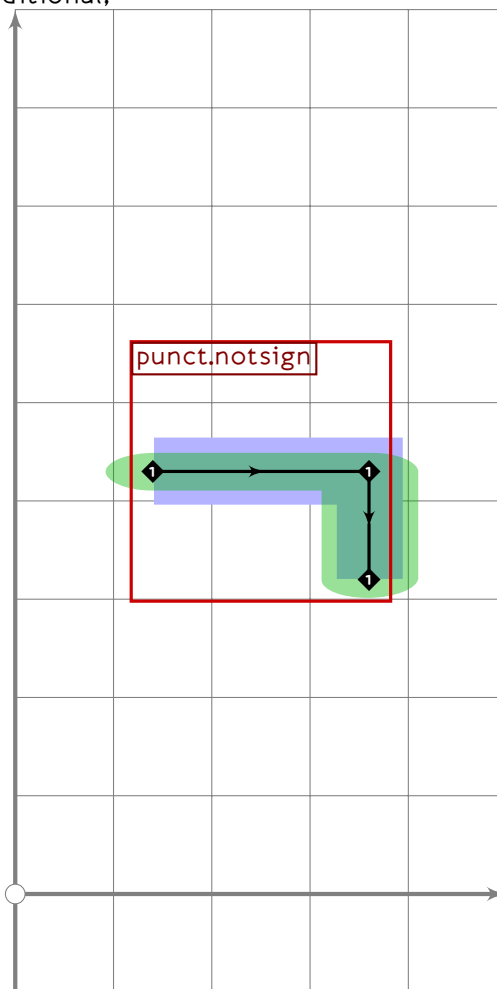
```

[see page 381]

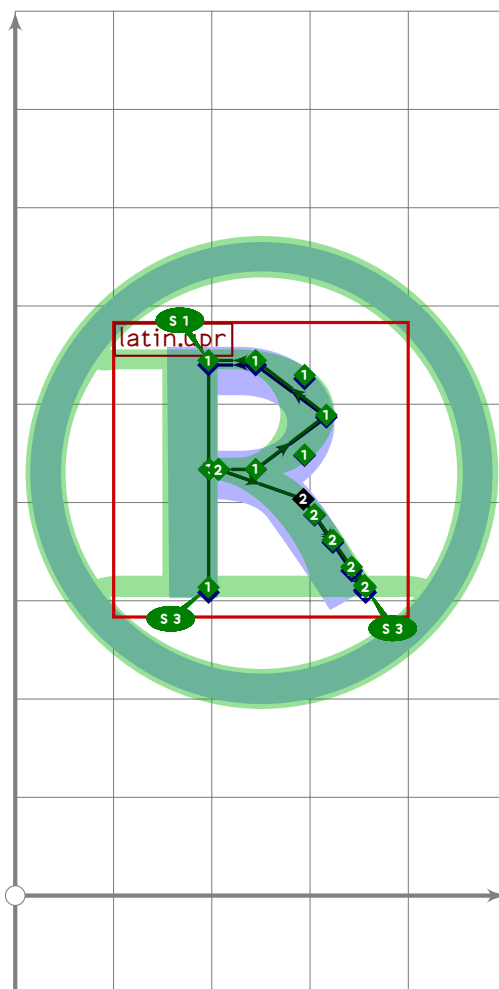
U+00AC
tsuku.logicalnot

```
874 % WARNING, setting rescale  
875 tsu_rescale_native_conditional;
```

00

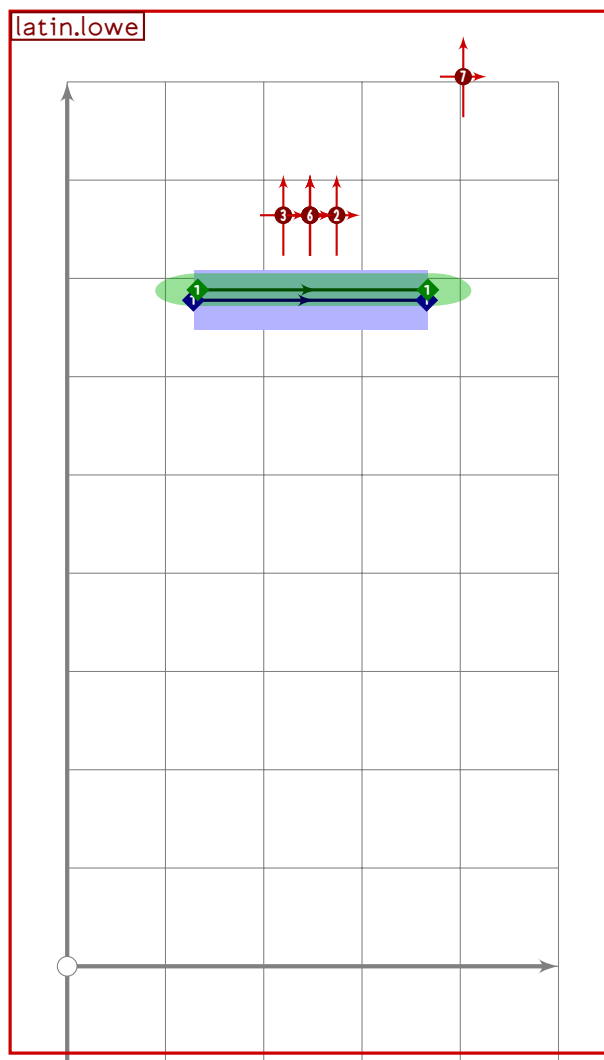


```
876  
877 begint Suglyph("logicalnot",172);  
878   punct.notsign(ascii_punct_xf);  
879   tsu_render;  
880 endtsuglyph;  
881  
882 % soft hyphen is a zero-width space and added by make-font script
```

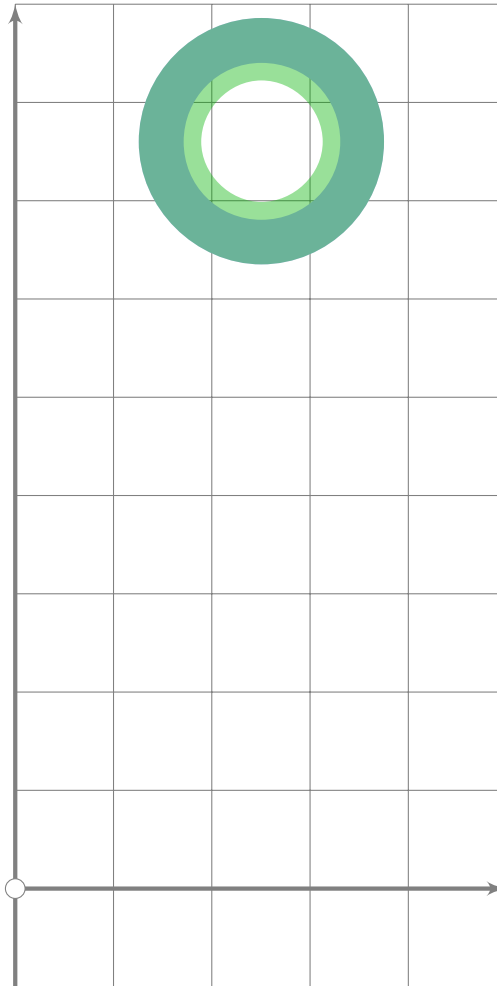


951

00



952



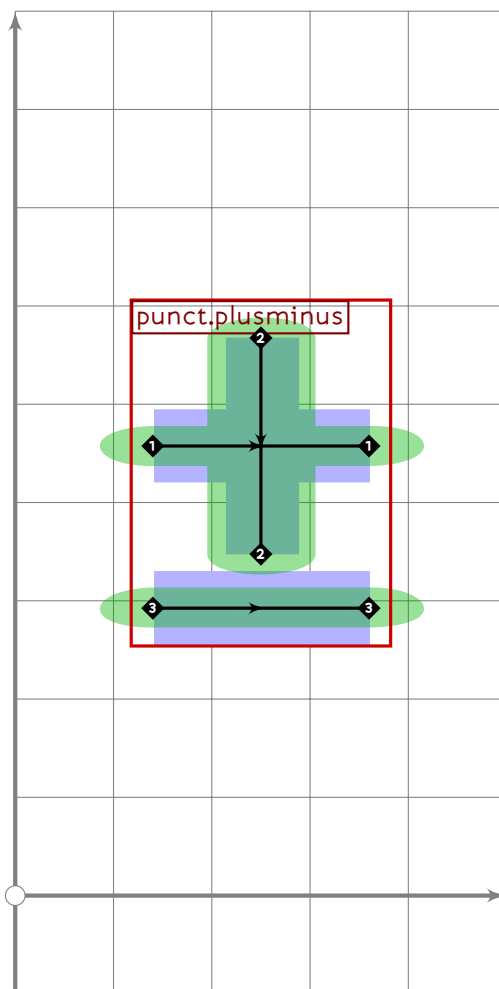
```

904
905 begintsuglyph("degree",176);
906   Fill fullcircle scaled (2.5*tsu_punct_size) shifted (250,760);
907   unFill reverse fullcircle
908     scaled (2.5*tsu_punct_size-120*tsu_brush_max) shifted (250,760);
909 endtsuglyph;

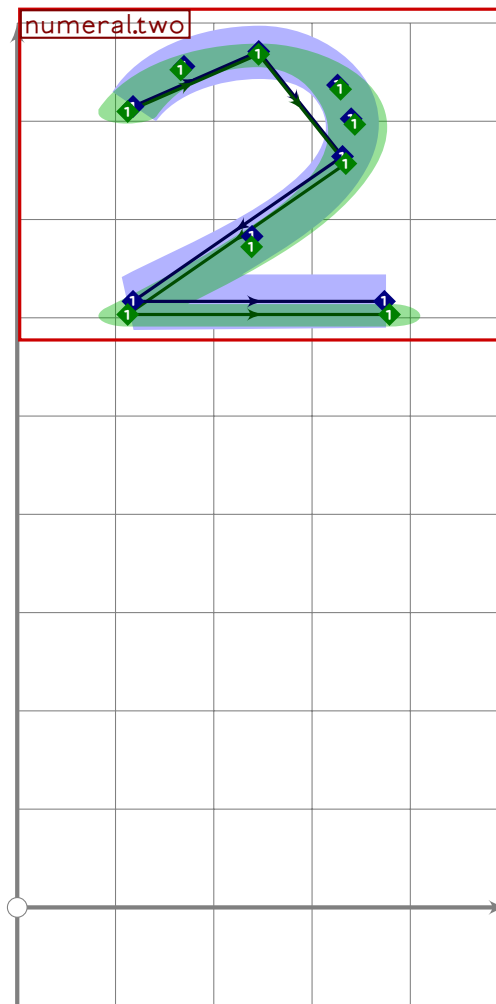
```

U+00B1
tsuku.plusminus

00



```
910
911 begint Suglyph("plusminus",177);
912   punct.plusminus(ascii_punct_xf);
913   tsu_render;
914 endtsuglyph;
```



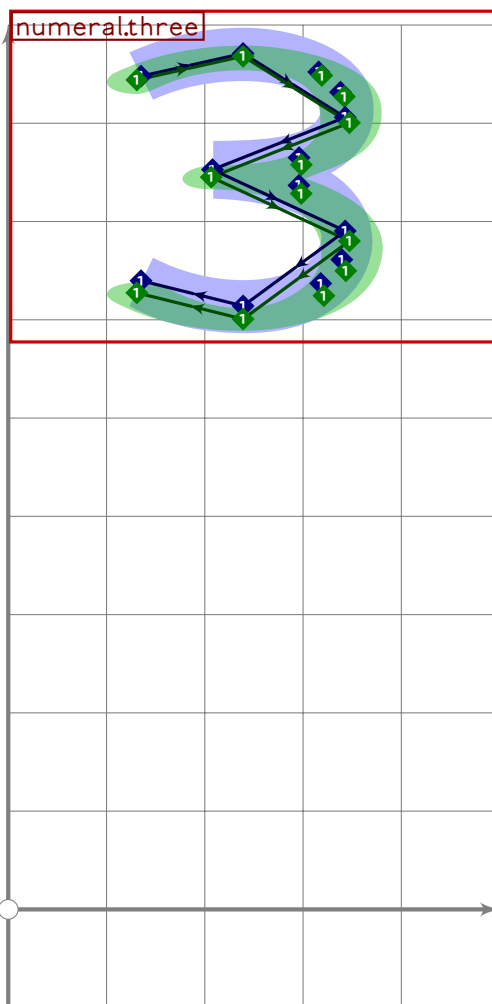
```

915
916 begintsuglyph("uni00B2";178);
917   tsu_xform(identity yscaled 0.68 transformed tsu_xf.latin_one_super)(
918     numeral.two);
919   tsu_render;
920 endtsuglyph;

```

U+00B3
tsuku.uni00B3

00



```
921
922 begintsuglyph("uni00B3";179);
923   tsu_xform(identity yscaled 0.68 transformed tsu_xf.latin_one_super)(
924     numeral.three);
925   tsu_render;
926 endtsuglyph;
927
928 % WARNING, changing rescale setting
929 tsu_rescale_half;
930
931 % naked acute
932 begintsuglyph("acute";180);
933   tsu_accent.acute;
934   tsu_render;
935 endtsuglyph;
936
937 % micro
938 begintsuglyph("mu";181);
939   punct.micro;
940   tsu_render;
941 endtsuglyph;
```

[see page 101]

[see page 384]

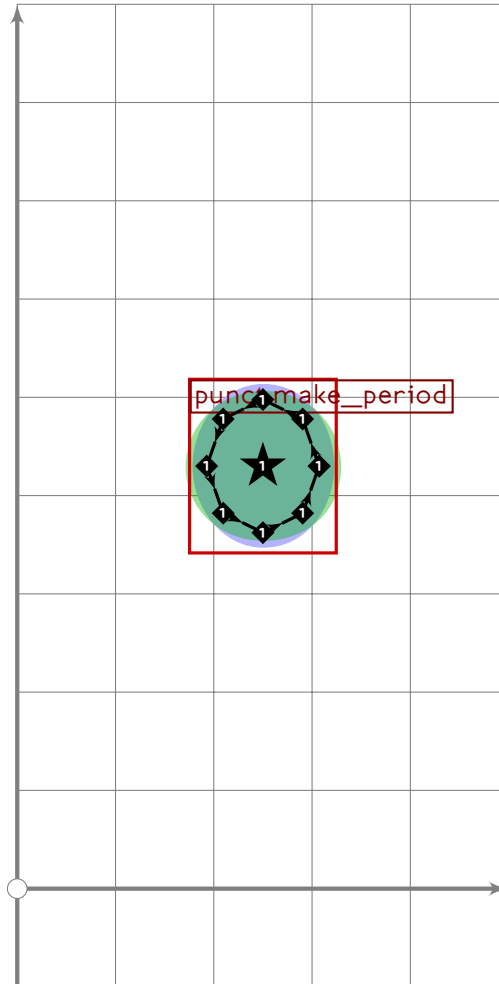
[see page 391]

00

```

942
943 % pilcrow
944 begintsuglyph("paragraph",182);
945   punct.pilcrow;
946   tsu_render;
947 endtsuglyph;
948

```



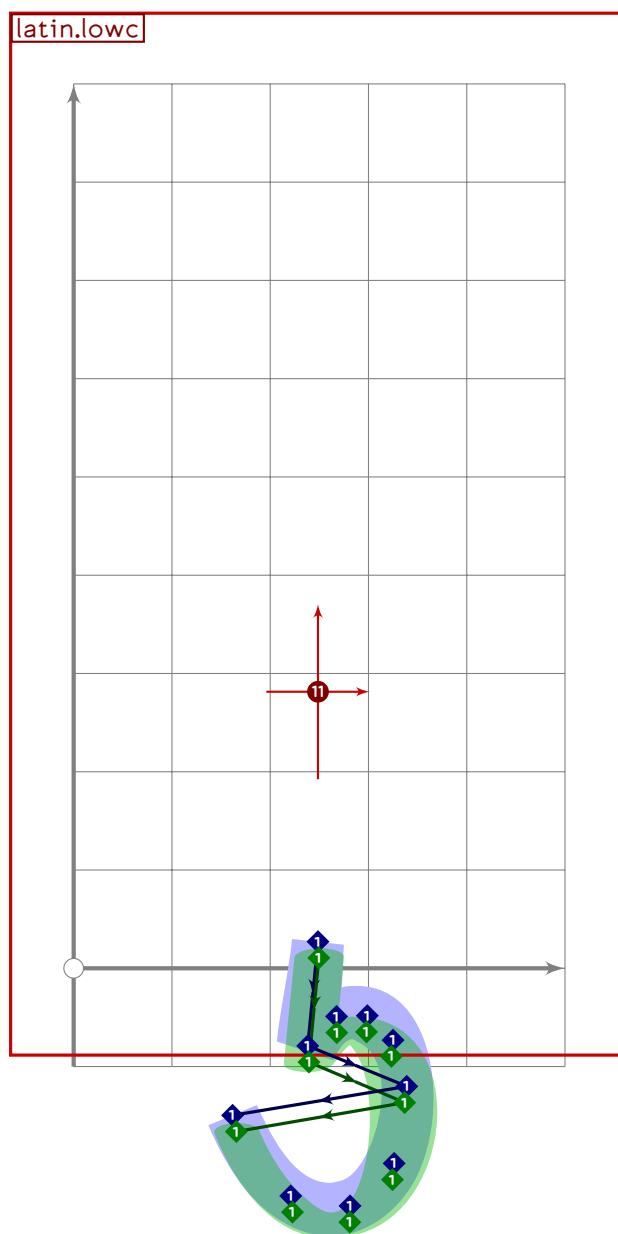
```

949 % period at centre
950 begintsuglyph("periodcentered",183);
951   punct.make__period(centre_pt);
952   tsu_render;
953 endtsuglyph;
954

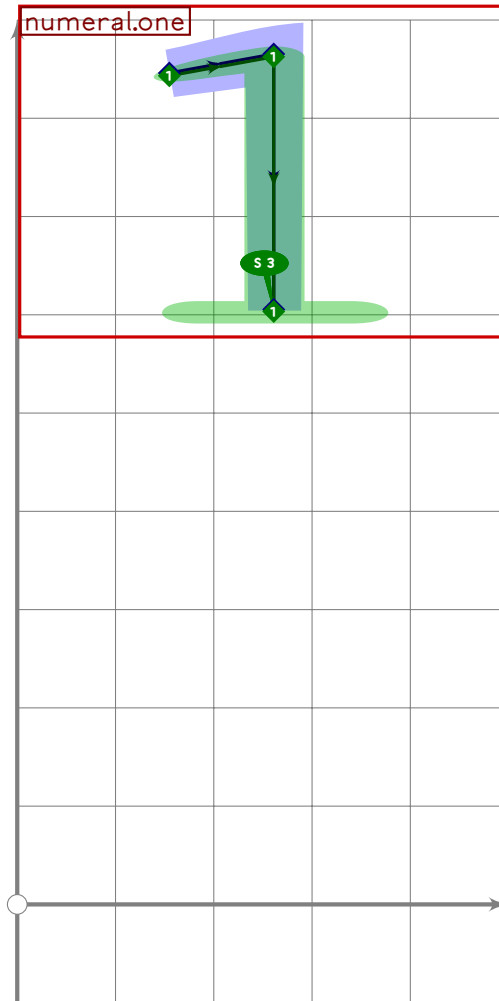
```

U+00B8
tsuku.cedilla

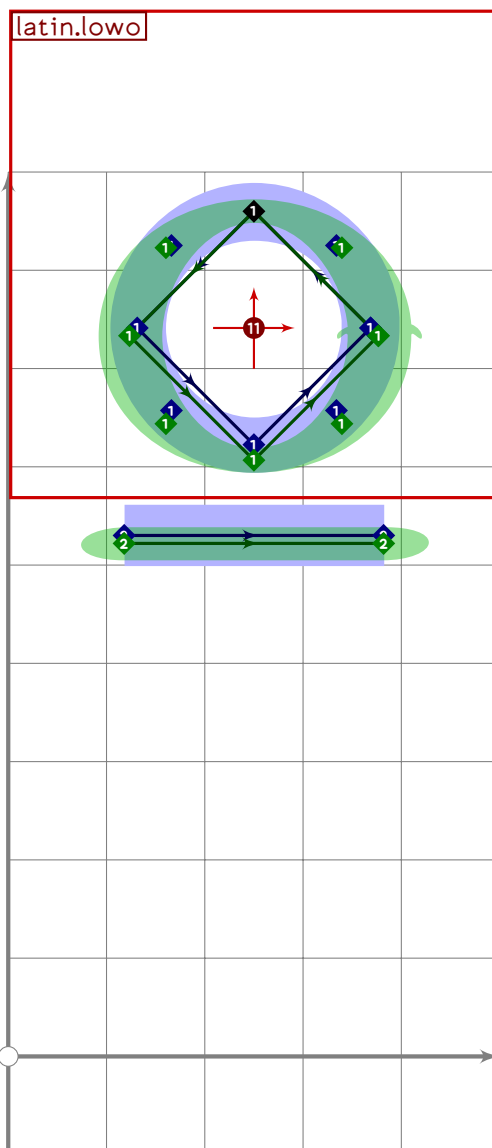
00



```
955 % naked cedilla
956 begintsuglyph("cedilla",184);
957 tsu_accent.apply(latin.lowc;set_bosize(0,0))(tsu_accent.cedilla);
958 tsu_render;
959 endtsuglyph;
960
961 % WARNING, changing rescale setting
962 tsu_rescale_native_conditional;
```



```
963
964 begint Suglyph("uni00B9";185);
965   tsu_xform(identity yscaled 0.68 transformed tsu_xf.latin_one_super)(
966     numeral.one);
967   tsu_render;
968 endtsuglyph;
```



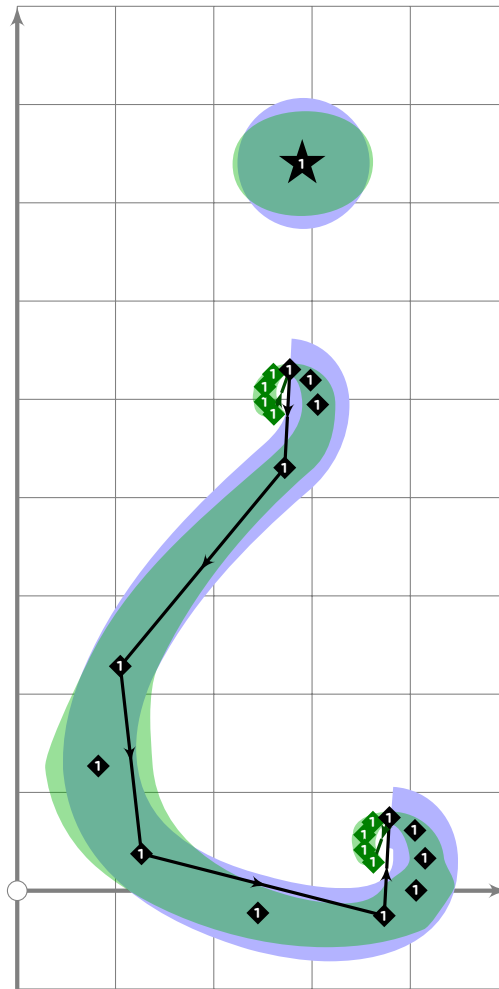
```

969
970 beginsuglyph("ordmasculine",186);
971   tsu_xform(tsu_xf.latin_one_super)(
972     latin.low;
973     push_stroke((260,-120)-(740,-120),(2,2)-(2,2)));
974   tsu_render;
975 endtsuglyph;
976
977 % WARNING, changing rescale setting
978 tsu_rescale_half;
979
980 beginsuglyph("guillemotright",187);
981   punct.guillemet_right;
982   tsu_render;
983 endtsuglyph;
984
985 % WARNING, changing rescale setting

```

[see page 382]


```
986 tsu_rescale_native_conditional;
987
```



```
988 % question mark
989 begintsuglyph("questiondown",191);
990 if tsu_pbrush_size>=(tsu_punct_size*0.5):
991     push_lcblob(fullcircle
992         xscaled ((tsu_punct_size+tsu_pbrush_size)*0.89)
993         yscaled ((tsu_punct_size+tsu_pbrush_size*tsu_pbrush_shape)*0.89)
994         rotated tsu_pbrush_angle
995         shifted (210,40)
996         rotatedaround ((250,390),180));
997 else:
998     push_stroke(fullcircle scaled tsu_punct_size shifted (210,40)
999         rotatedaround ((250,390),180),
1000         (1,1)..(2,2)..(2,2)..(1,1));
1001 if tsu_pbrush_size>=30:
1002     push_lcblob(get_strokep(0));
1003 fi;
1004 fi;
1005 r:=tsu_punct_size/2;
1006
```

```

1007   push_stroke((210,300){right}..(210,300-r){left}..
1008           (210,300+r)..(210+2.5*r,750)..
1009           tension 1.3..(210-2.5*r,750+r)..
1010           (210-2.5*r,750-r){right}..
1011           (210-2.5*r,750){left},
1012           (0.8,0.8)-(1,1)-(2,2)-(2,2)-(2,2)-(2,2)-(1,1)-(0.8,0.8));
1013   replace_strokep(0)(insert_nodes(oldp)(2.5)
1014           rotatedaround ((210,10),-3) rotatedaround ((250,390),180));
1015
1016   tsu__render;
1017 endtsuglyph;
1018
1019 _____
1020

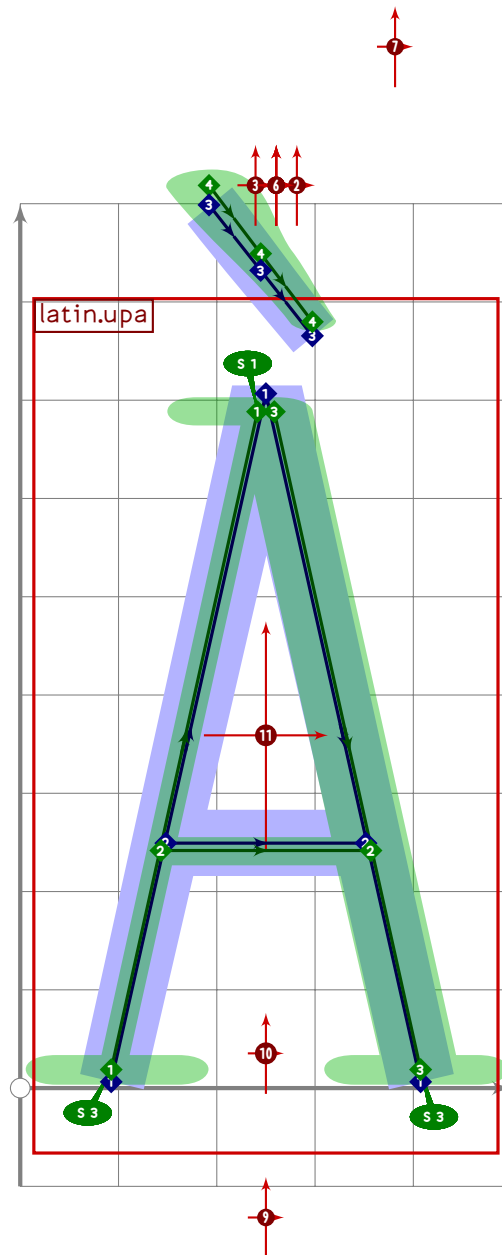
```

Accented Latin

```

1021 % ACCENTED LATIN
1022
1023 % WARNING, setting rescale
1024 tsu__rescale_half;
1025 tsu__accent.up_default_anchors;
1026

```



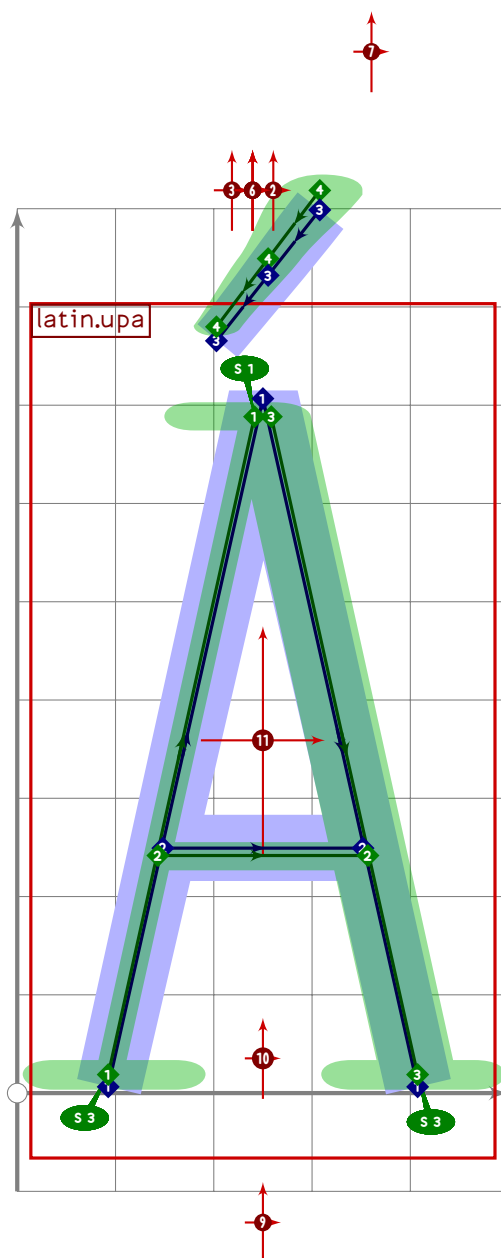
```

1027 % A with grave
1028 begintsuglyph("Agrave";192);
1029   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.grave);
1030   tsu_render;
1031 endtsuglyph;
1032

```

U+00C1
tsuku.Aacute

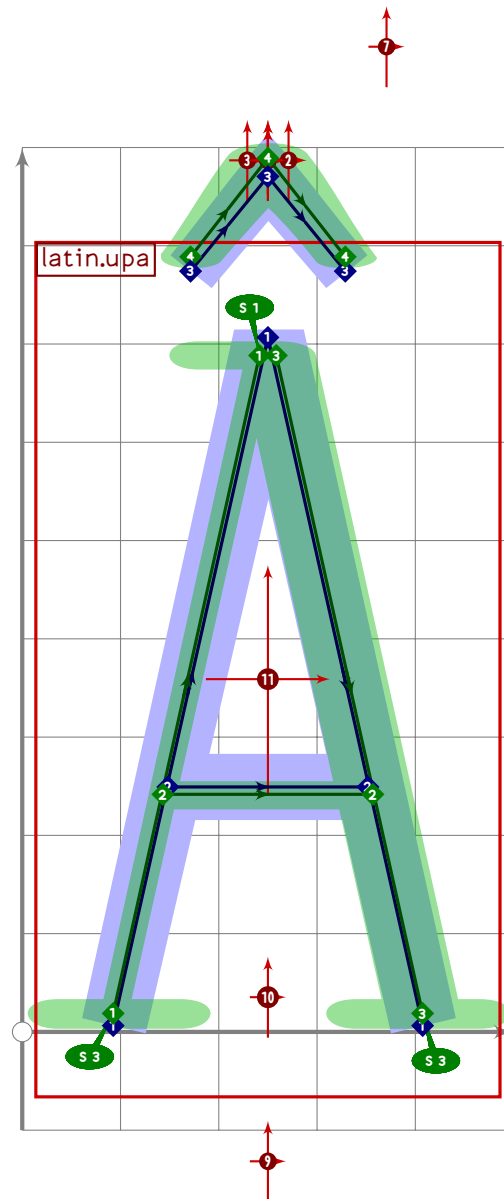
00



```

1033 % A with acute
1034 begintsuglyph("Aacute",193);
1035   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.acute);
1036   tsu_render;
1037 endtsuglyph;
1038

```



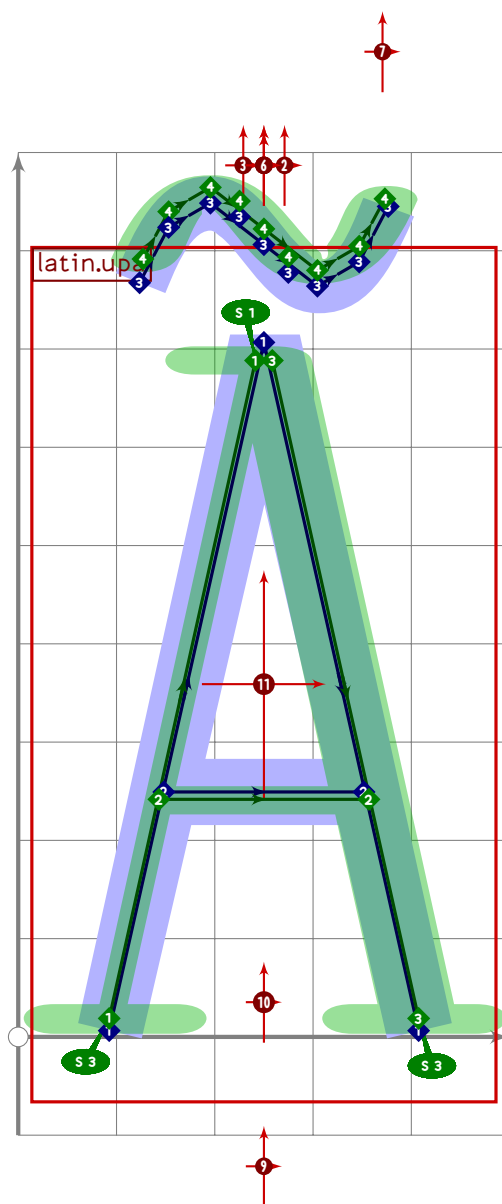
```

1039 % A with circumflex
1040 begintsuglyph("Acircumflex",194);
1041   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.circumflex);
1042   tsu_render;
1043 endtsuglyph;
1044

```

U+00C3
tsuku.Atilde

00



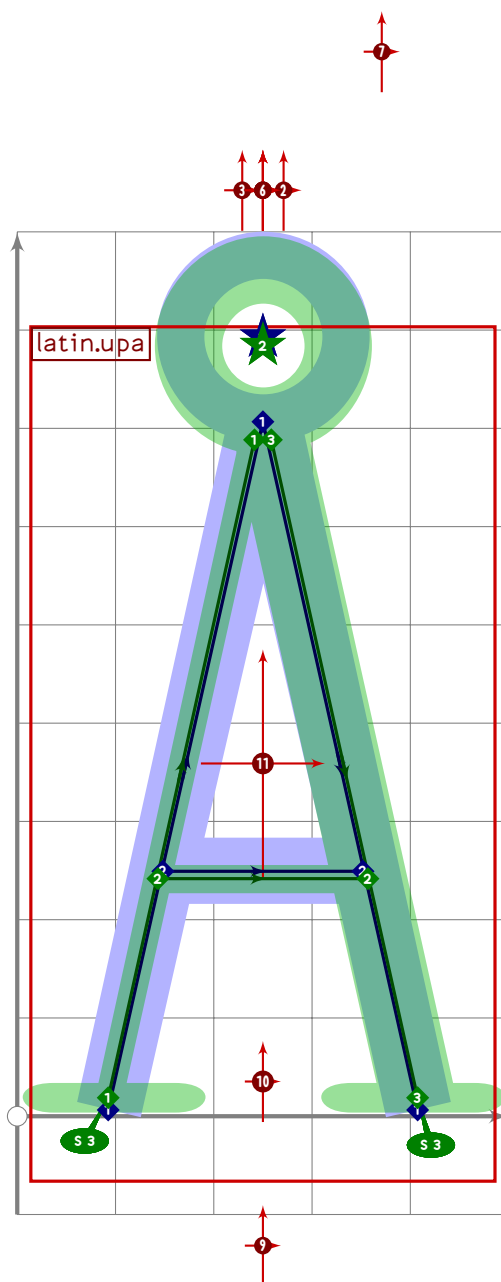
```

1045 % A with tilde
1046 begintsuglyph("Atilde",195);
1047   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.tilde);
1048   tsu_render;
1049 endtsuglyph;
1050

```



1056



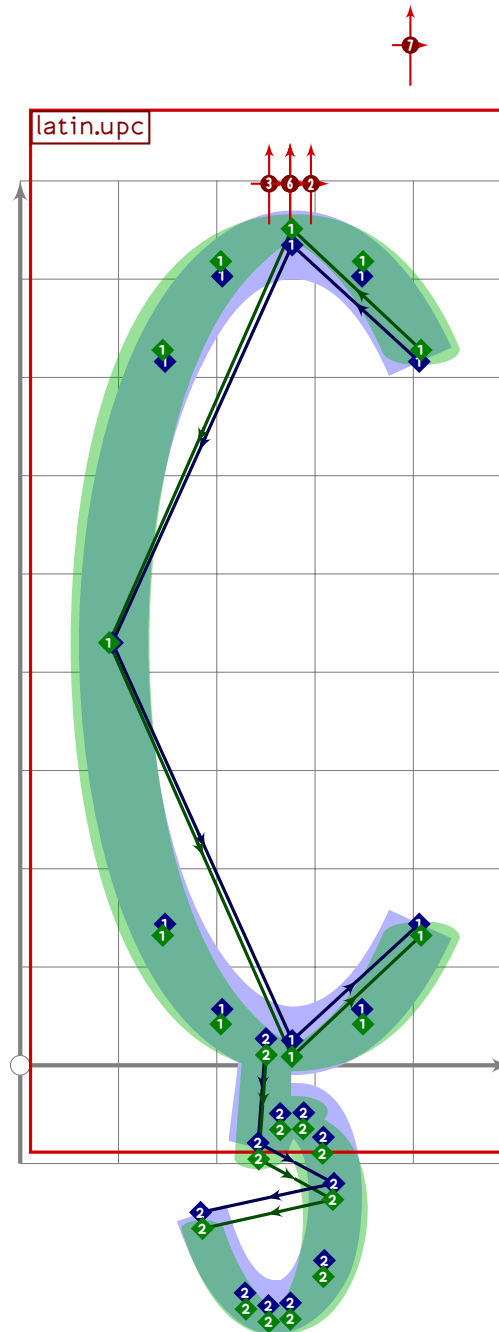
```

1057 % A with ring above
1058 begintsuglyph("Aring";197);
1059   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.ringabove);
1060   if do_alteration:
1061     set_boserif(-2,1,whatever);
1062   else:
1063     set_boserif(-1,1,whatever);
1064   fi;
1065   tsu_render;
1066 endtsuglyph;
1067
1068 % AE ligature
1069 begintsuglyph("AE";198);

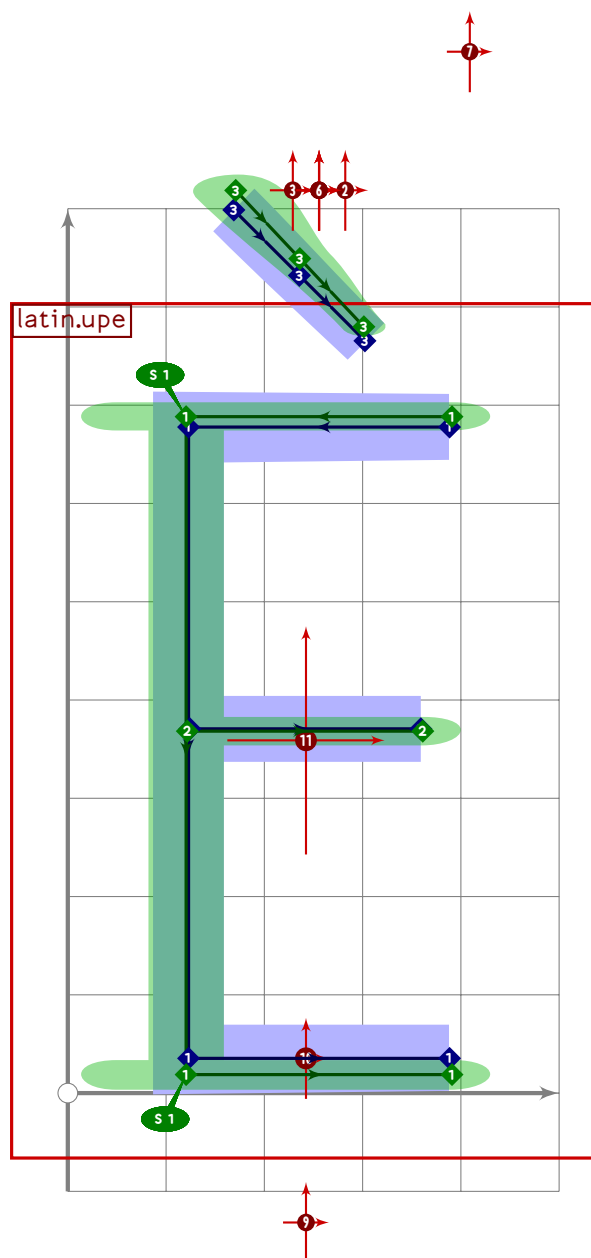
```

[see page 252]


```
1070 latin.upae;
1071 tsu_render;
1072 endtsuglyph;
1073
```



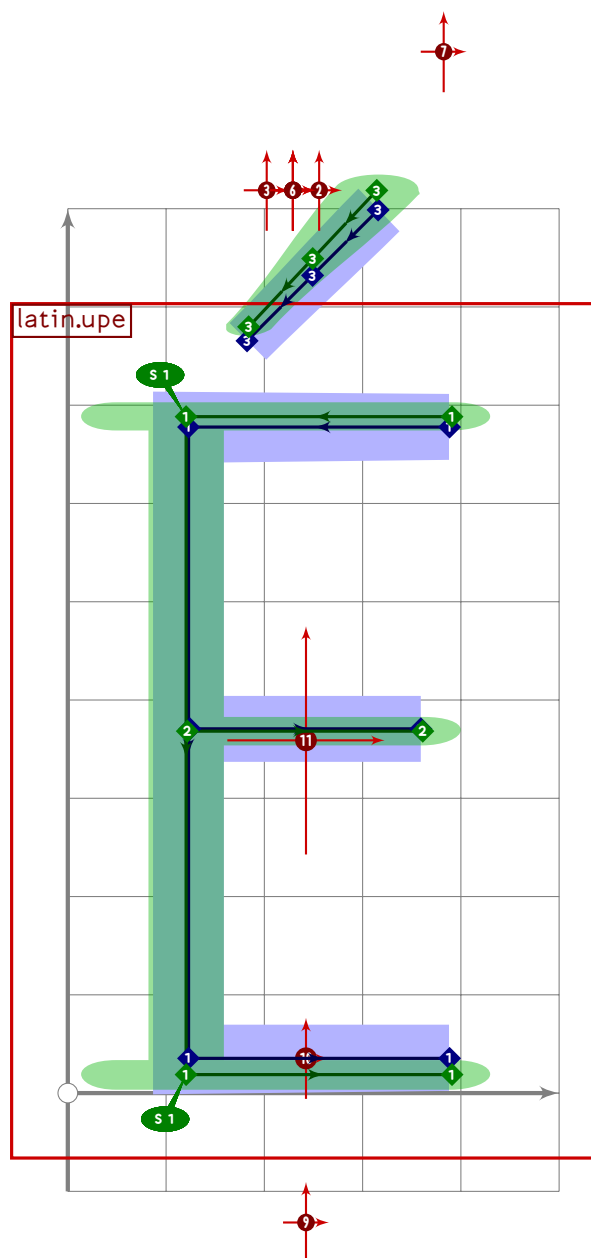
```
1074 % C with cedilla
1075 begint Suglyph("Ccedilla",199);
1076 tsu_accent.apply(latin.upc)(tsu_accent.cedilla);
1077 tsu_render;
1078 endtsuglyph;
1079
```



```

1080 % E with grave
1081 begintsuglyph("Egrave",200);
1082 tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.grave);
1083 tsu_render;
1084 endtsuglyph;
1085

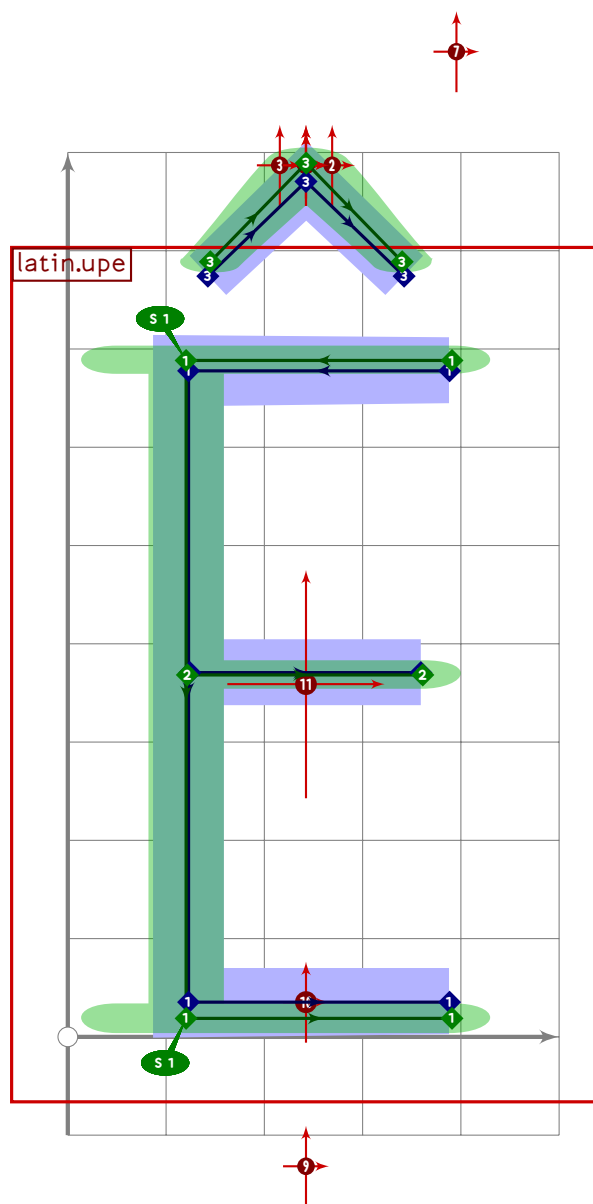
```



```

1086 % E with acute
1087 begintsuglyph("Eacute";201);
1088   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.acute);
1089   tsu_render;
1090 endtsuglyph;
1091

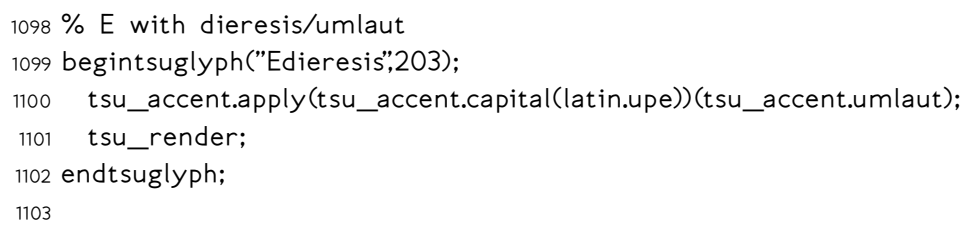
```



```

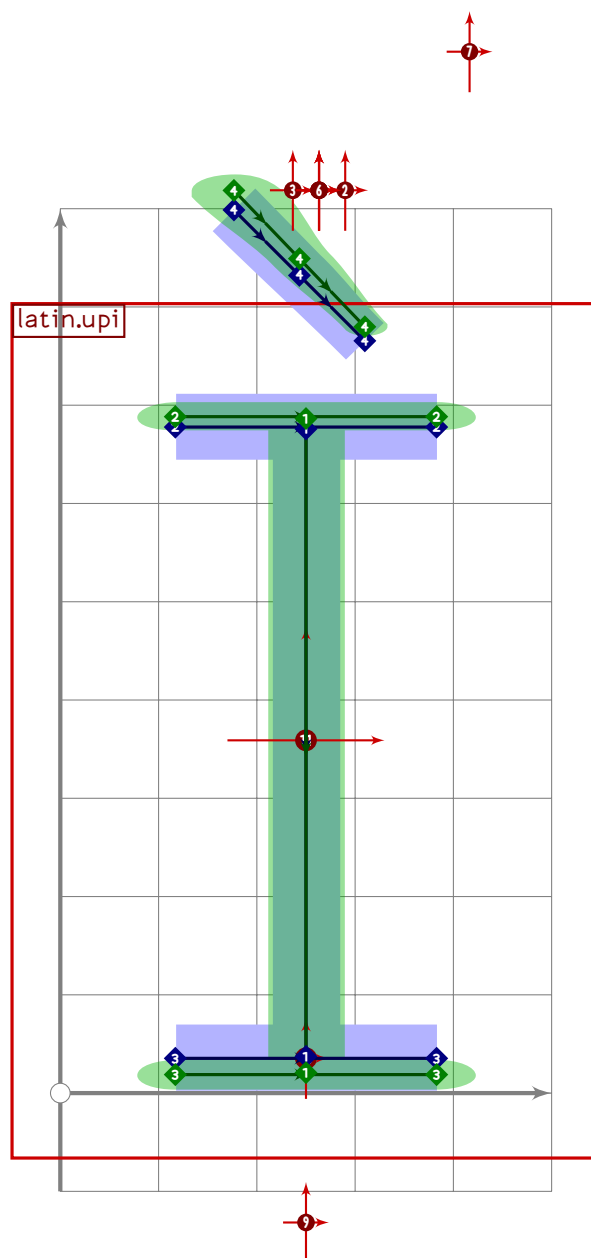
1092 % E with circumflex
1093 begint Suglyph("Ecircumflex";202);
1094   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.circumflex);
1095   tsu_render;
1096 endtsuglyph;
1097

```



U+00CC
tsuku.Igrave

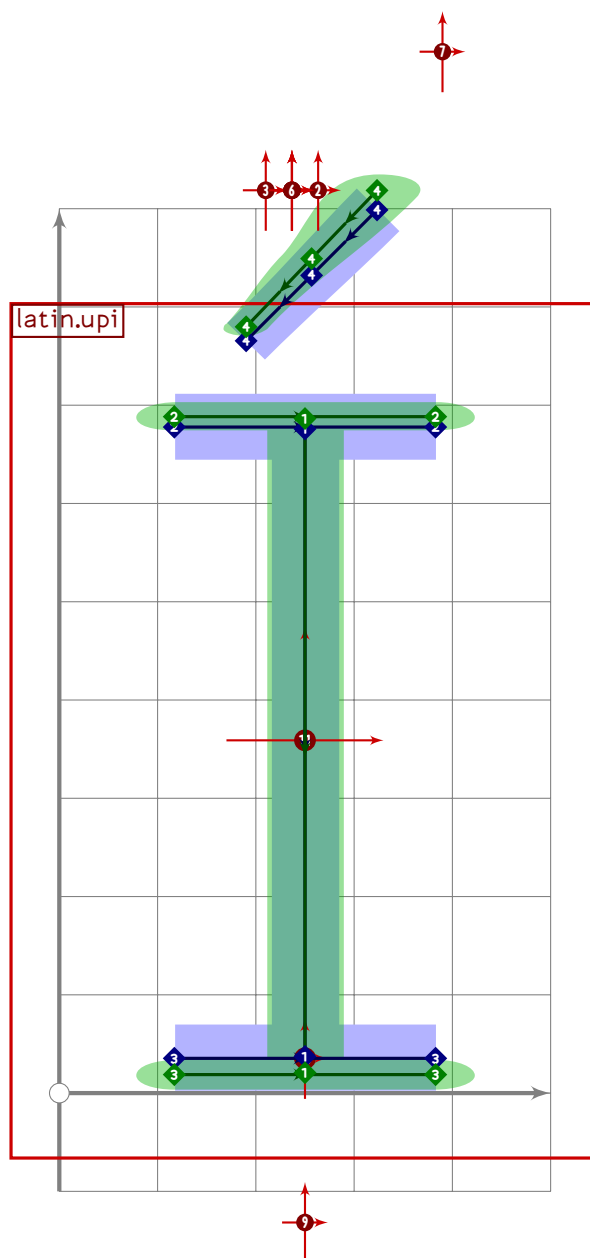
00



```

1104 % I with grave
1105 begintsuglyph("Igrave";204);
1106 tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.grave);
1107 tsu_render;
1108 endtsuglyph;
1109

```



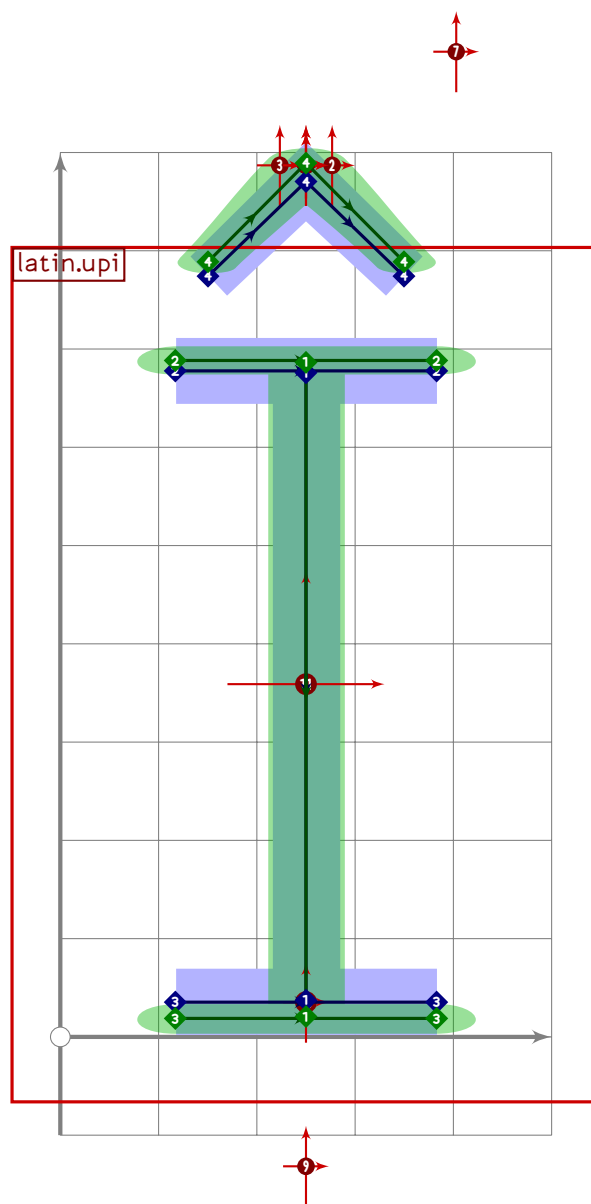
```

1110 % I with acute
1111 begintsuglyph("Iacute";205);
1112 tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.acute);
1113 tsu_render;
1114 endtsuglyph;
1115

```

U+00CE
tsuku.Icircumflex

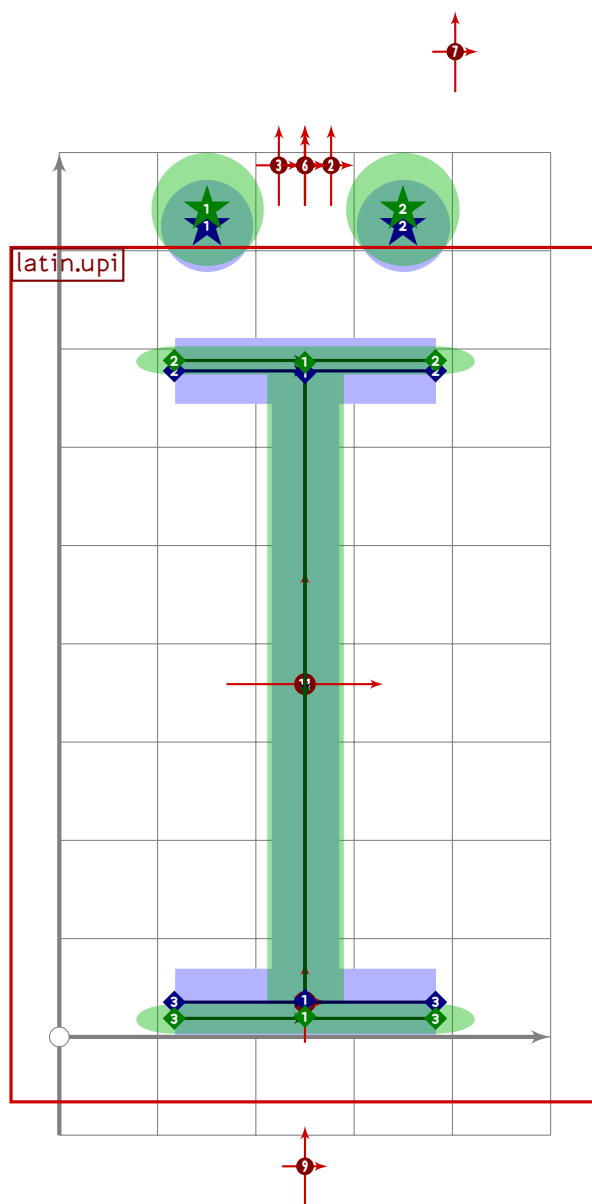
00



```

1116 % I with circumflex
1117 begintsuglyph("Icircumflex";206);
1118   tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.circumflex);
1119   tsu_render;
1120 endtsuglyph;
1121

```

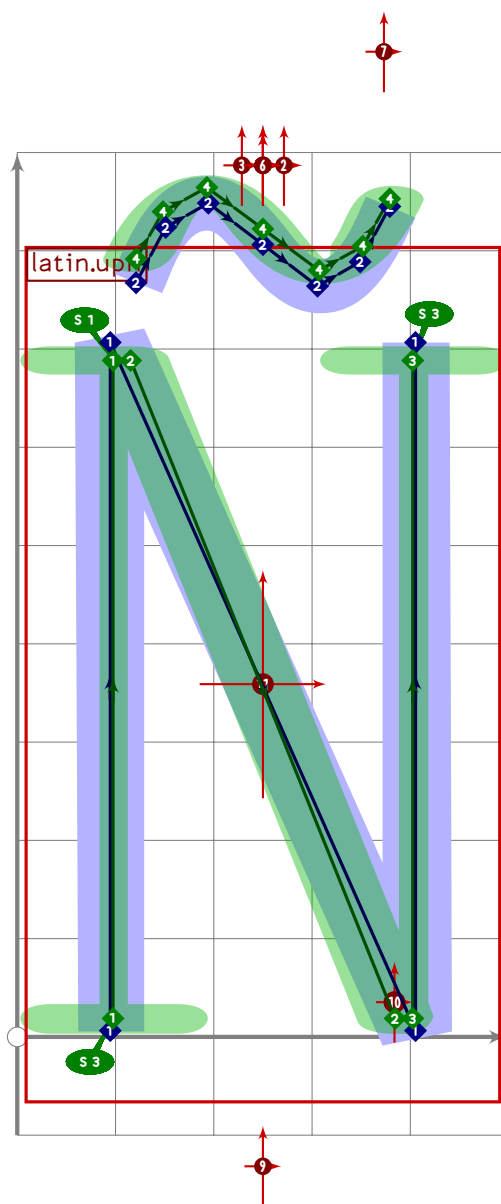



```

1122 % I with dieresis/umlaut
1123 begintsuglyph("Idieresis";207);
1124 tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.umlaut);
1125 tsu_render;
1126 endtsuglyph;
1127
1128 % uppercase Icelandic Eth
1129 begintsuglyph("Eth";208);
1130 latin.upeth;
1131 tsu_render;
1132 endtsuglyph;
1133

```

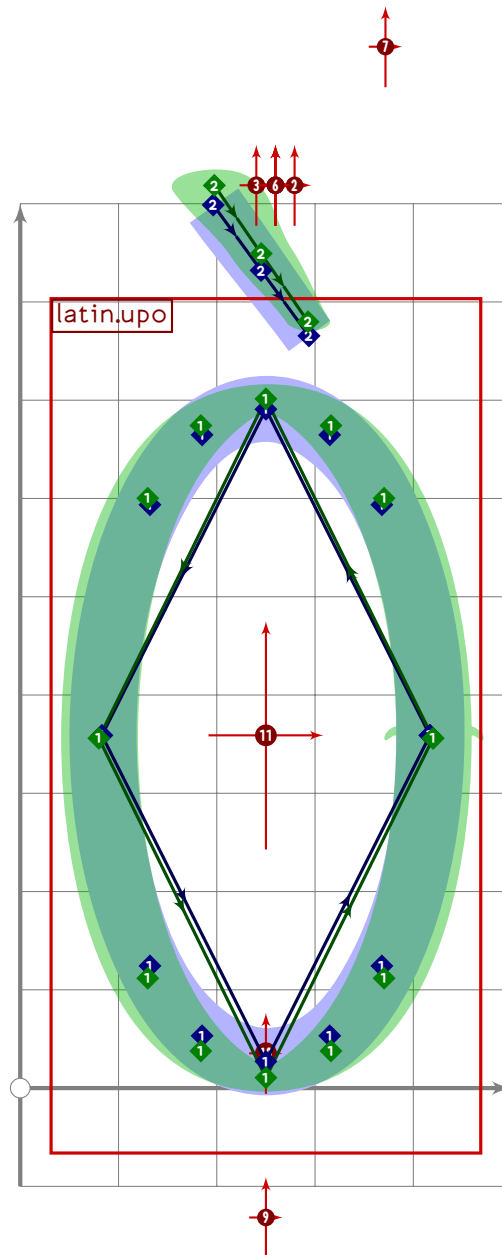
[see page 258]



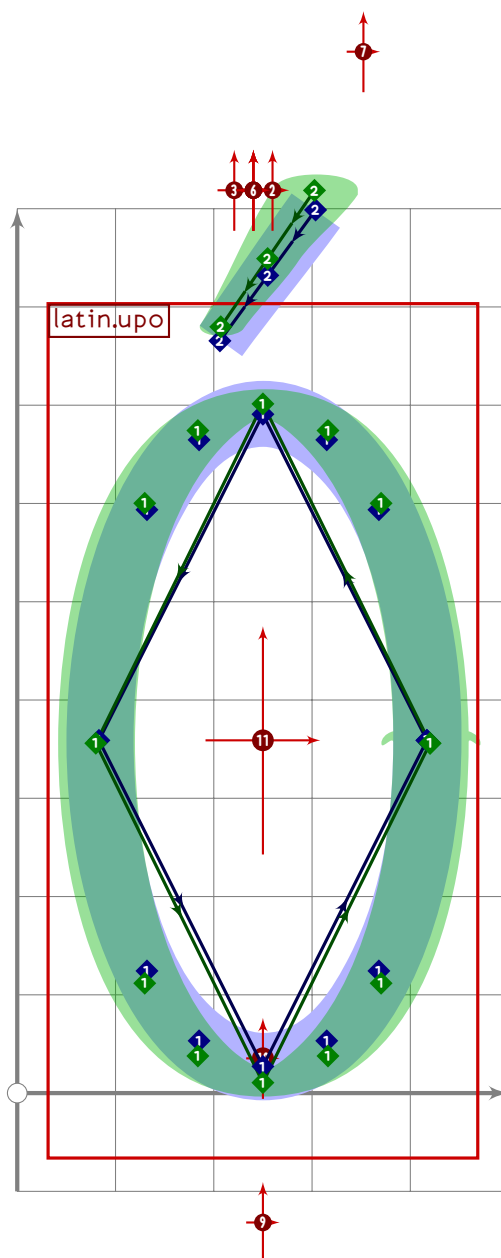
```

1134 % N with tilde
1135 begintsuglyph("Ntilde",209);
1136   tsu_accent.apply(tsu_accent.capital(latin.upn))(tsu_accent.tilde);
1137   tsu_render;
1138 endtsuglyph;
1139

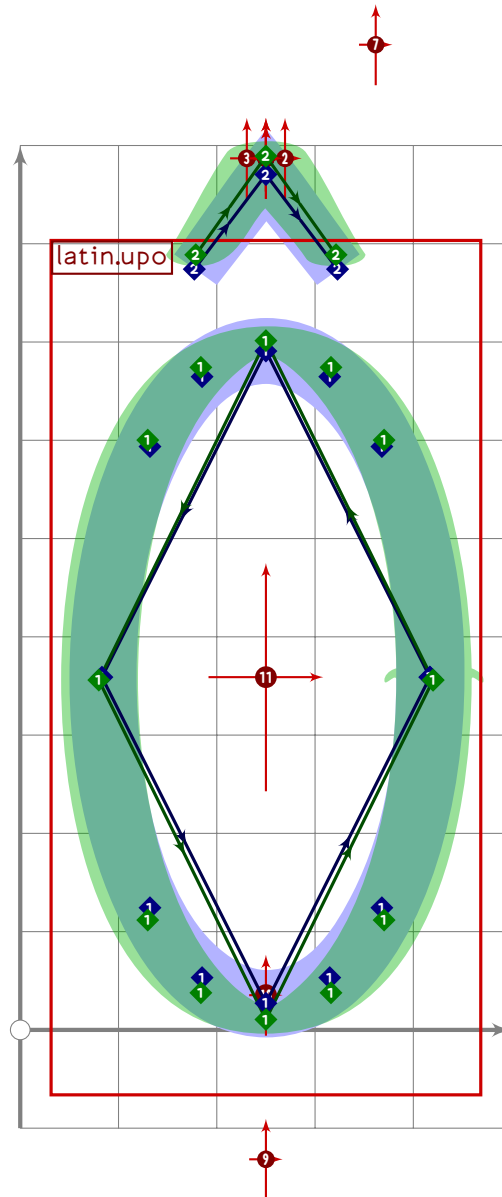
```



979



980



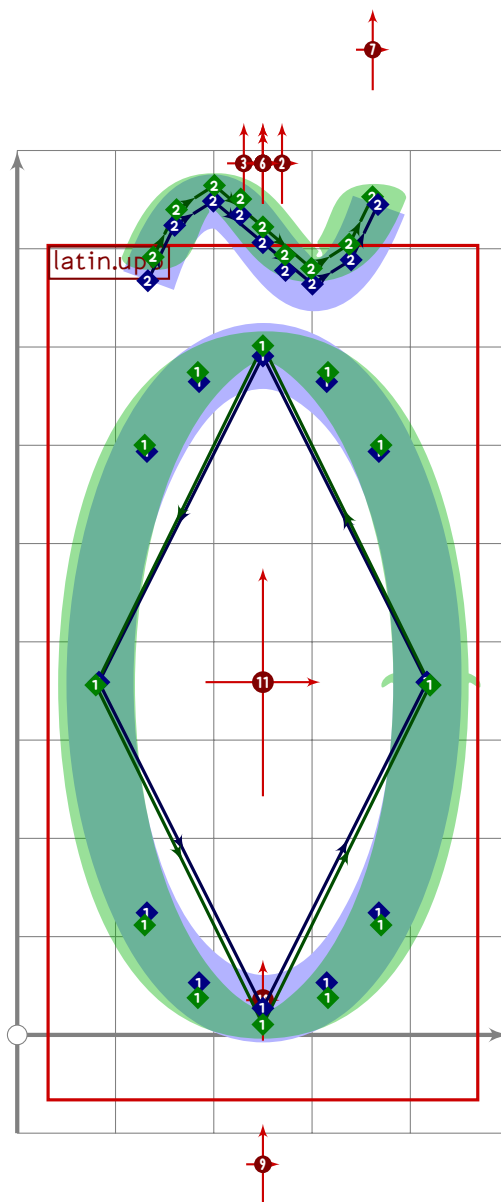
```

1152 % O with circumflex
1153 begint Suglyph("Ocircumflex",212);
1154   tsu_accent.apply(tsu_accent.capital(latin.upo))(tsu_accent.circumflex);
1155   tsu_render;
1156 endtsuglyph;
1157

```

U+00D5
tsuku.Otilde

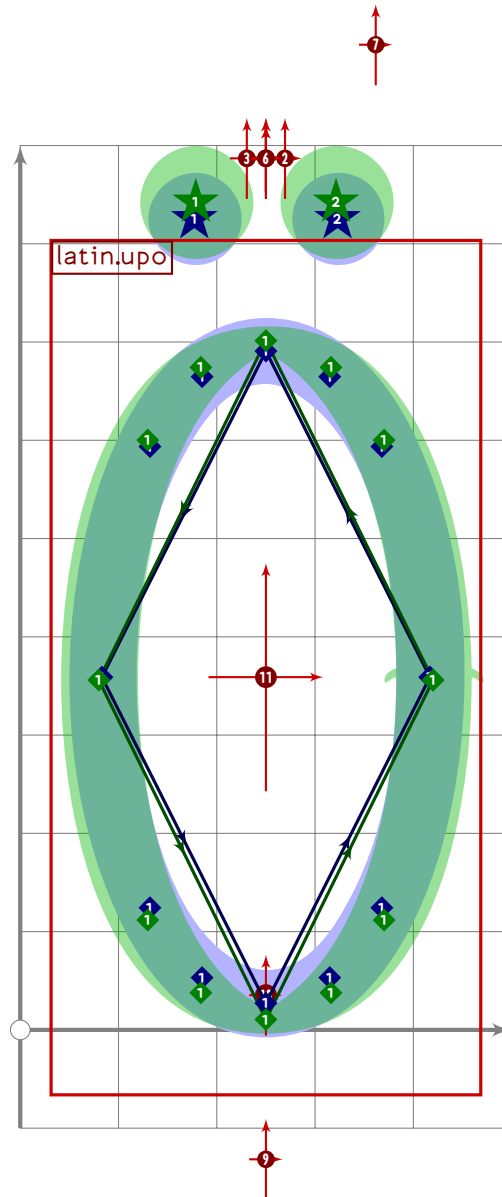
00



```

1158 % O with tilde
1159 begintsuglyph("Otilde",213);
1160   tsu_accent.apply(tsu_accent.capital(latin.upo))(tsu_accent.tilde);
1161   tsu_render;
1162 endtsuglyph;
1163

```



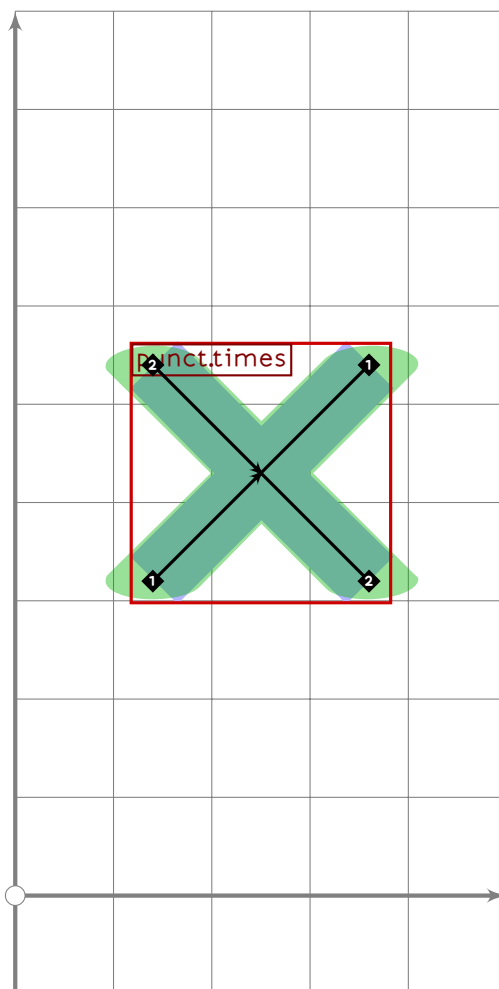
```

1164 % O with dieresis/umlaut
1165 begintsuglyph("Odieresis";214);
1166   tsu_accent.apply(tsu_accent.capital(latin.upo))(tsu_accent.umlaut);
1167   tsu_render;
1168 endtsuglyph;
1169
1170 % times
1171 tsu_accent.clear_default_anchors;
1172 tsu_rescale_native_conditional;

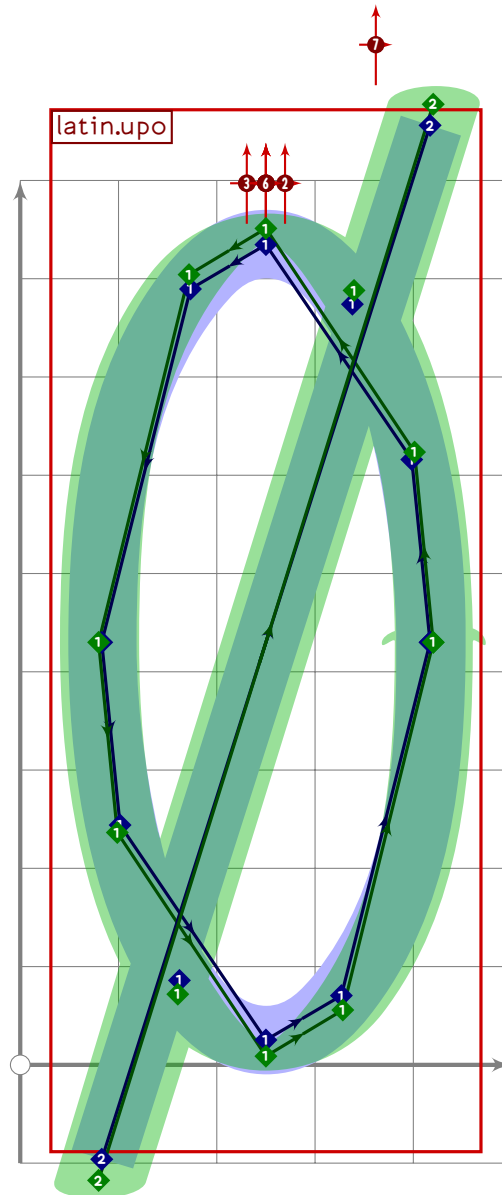
```

U+00D7
tsuku.multiply

00



```
1173 beginsuglyph("multiply";215);
1174   punct.times(ascii_punct_xf);
1175   tsu_render;
1176 endsuglyph;
1177 tsu_rescale_half;
1178 tsu_accent.up_default_anchors;
1179
```

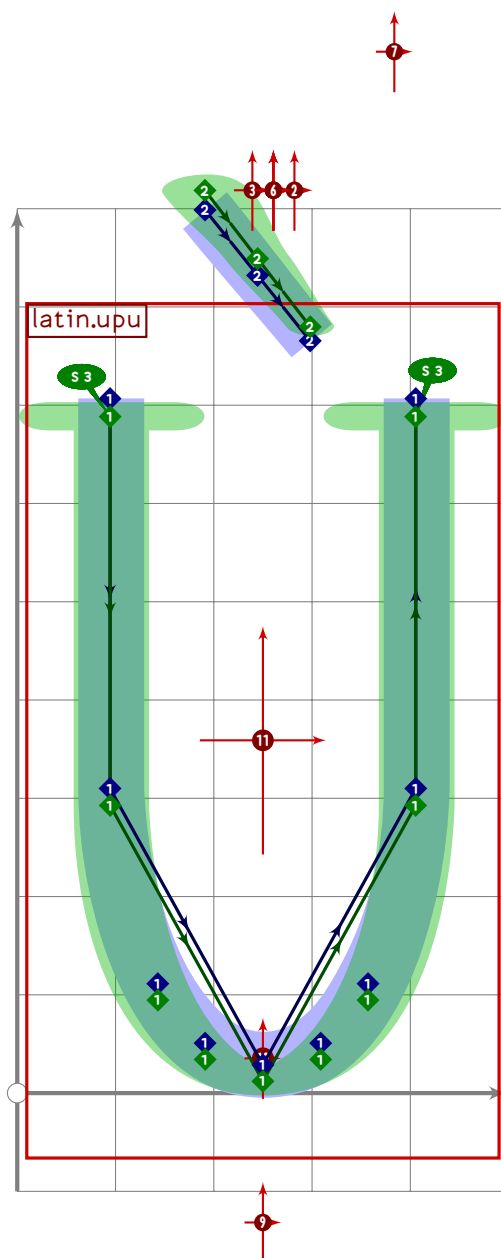
```

1180 % O with stroke
1181 begintsuglyph("Oslash";216);
1182 tsu_accent.apply(latin.upo)(tsu_accent.slash);
1183 replace_stroke(-1)(insert_nodes(oldp)(0.3,1.3,2.3,3.3));
1184 replace_strokeq(-1)(insert_nodes(oldq)(0.3,1.3,2.3,3.3));
1185 tsu_render;
1186 endtsuglyph;
1187

```

U+00D9
tsuku.Ugrave

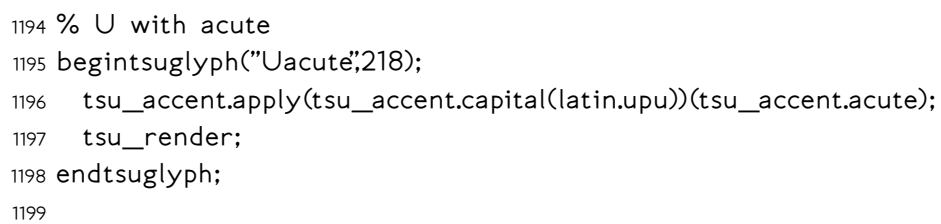
00



```

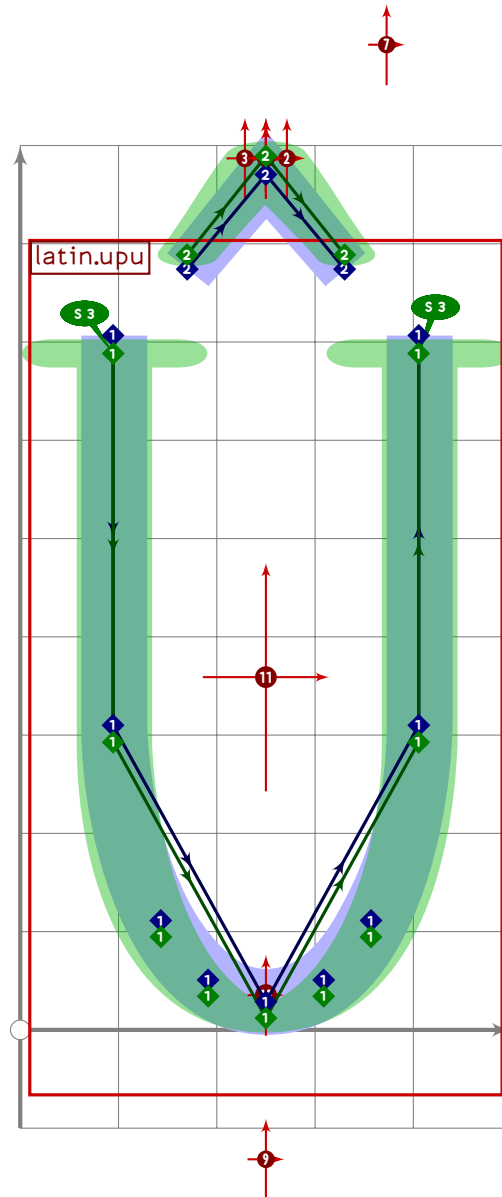
1188 % U with grave
1189 begintsuglyph("Ugrave";217);
1190 tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.grave);
1191 tsu_render;
1192 endtsuglyph;
1193

```



U+00DB
tsuku.Ucircumflex

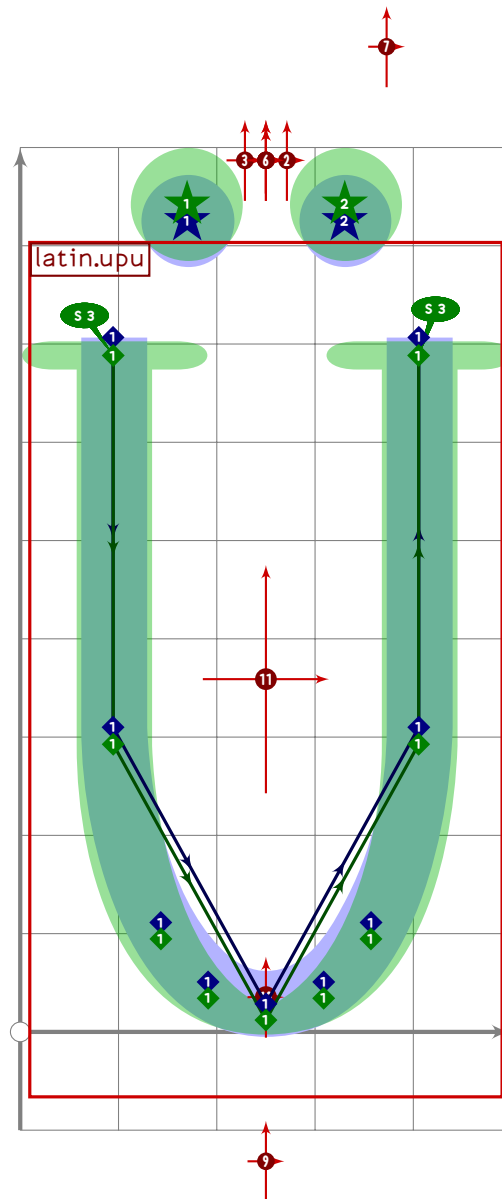
00



```

1200 % U with circumflex
1201 begint Suglyph("Ucircumflex",219);
1202   tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.circumflex);
1203   tsu_render;
1204 endtsuglyph;
1205

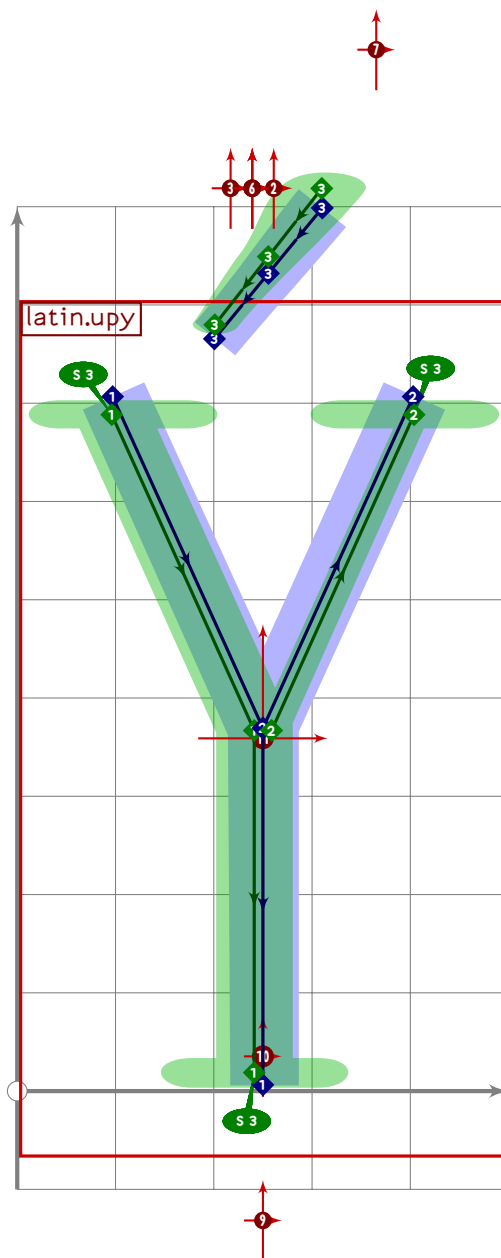
```



```

1206 % U with dieresis/umlaut
1207 begintsuglyph("Udieresis";220);
1208   tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.umlaut);
1209   tsu_render;
1210 endtsuglyph;
1211

```



```

1212 % Y with acute
1213 begintsuglyph("Yacute";221);
1214   tsu_accent.apply(tsu_accent.capital(latin.upy))(tsu_accent.acute);
1215   tsu_render;
1216 endtsuglyph;
1217
1218 % uppercase Thorn
1219 begintsuglyph("Thorn";222);
1220   latin.upthorn;
1221   tsu_render;
1222 endtsuglyph;
1223
1224 tsu_accent.low_default_anchors;
1225

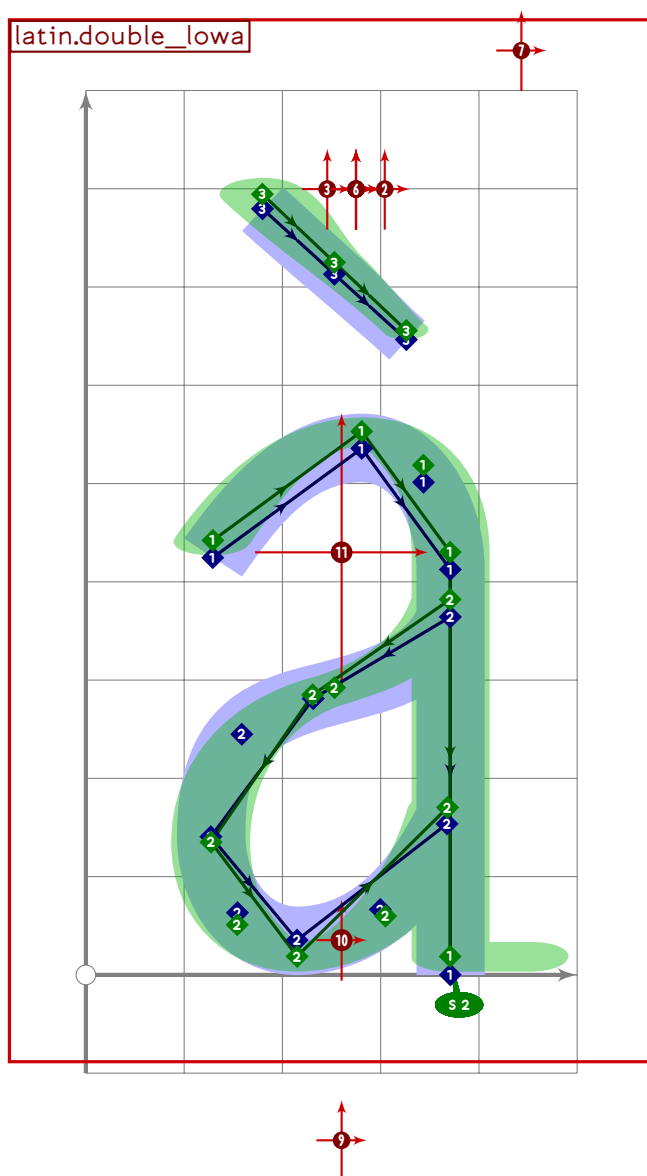
```

[see page 283]

[see page 301]

00

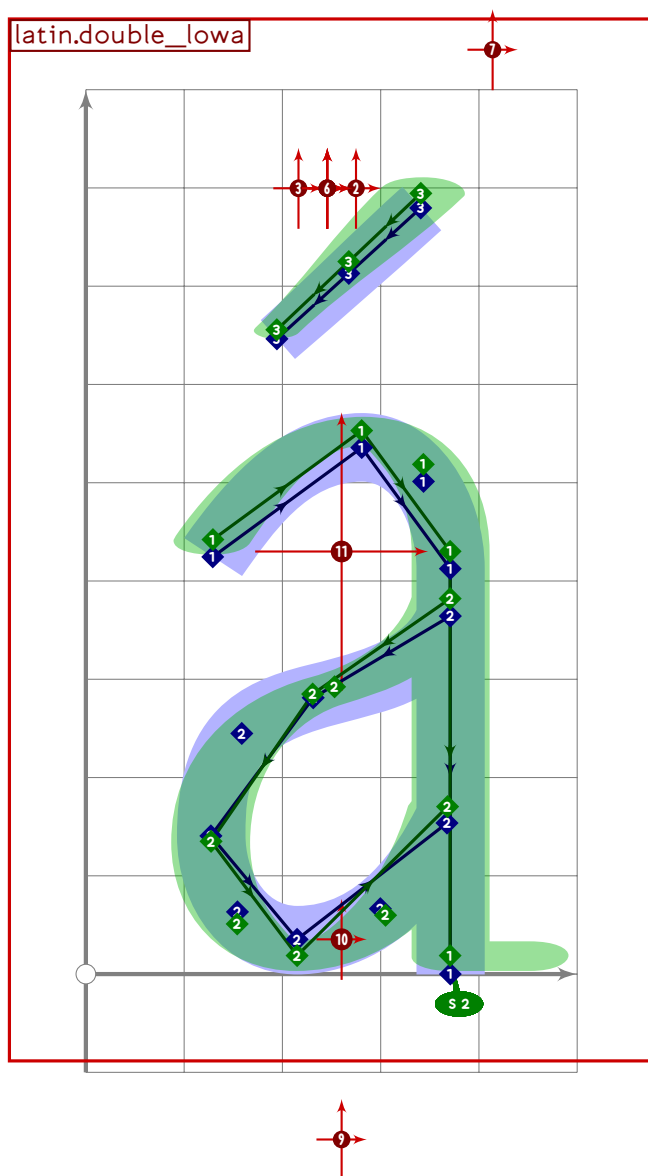
```
1226 % eszett
1227 begintsuglyph("germandbls",223);
1228 latin.loweszett;
1229 tsu_render;
1230 endtsuglyph;
1231
```



```
1232 % a with grave
1233 begintsuglyph("agrave",224);
1234 tsu_accent.apply(latin.low_a)(tsu_accent.grave);
1235 tsu_render;
1236 endtsuglyph;
1237
```

U+00E1
tsuku.aacute

00



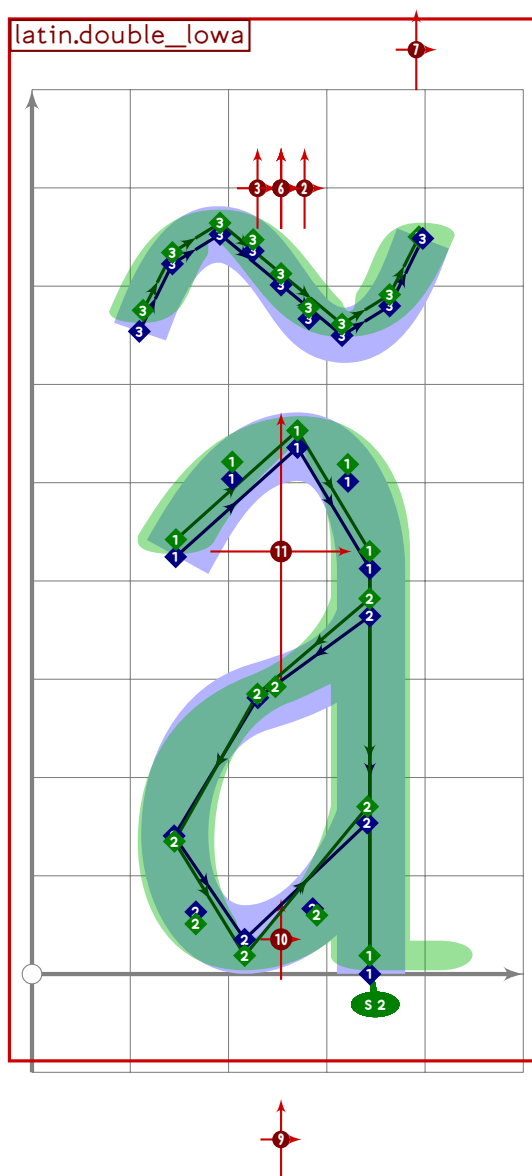
```

1238 % a with acute
1239 begint Suglyph("acute";225);
1240   tsu_accent.apply(latin.lowa)(tsu_accent.acute);
1241   tsu_render;
1242 endtsuglyph;
1243

```


U+00E3
tsuku.atilde

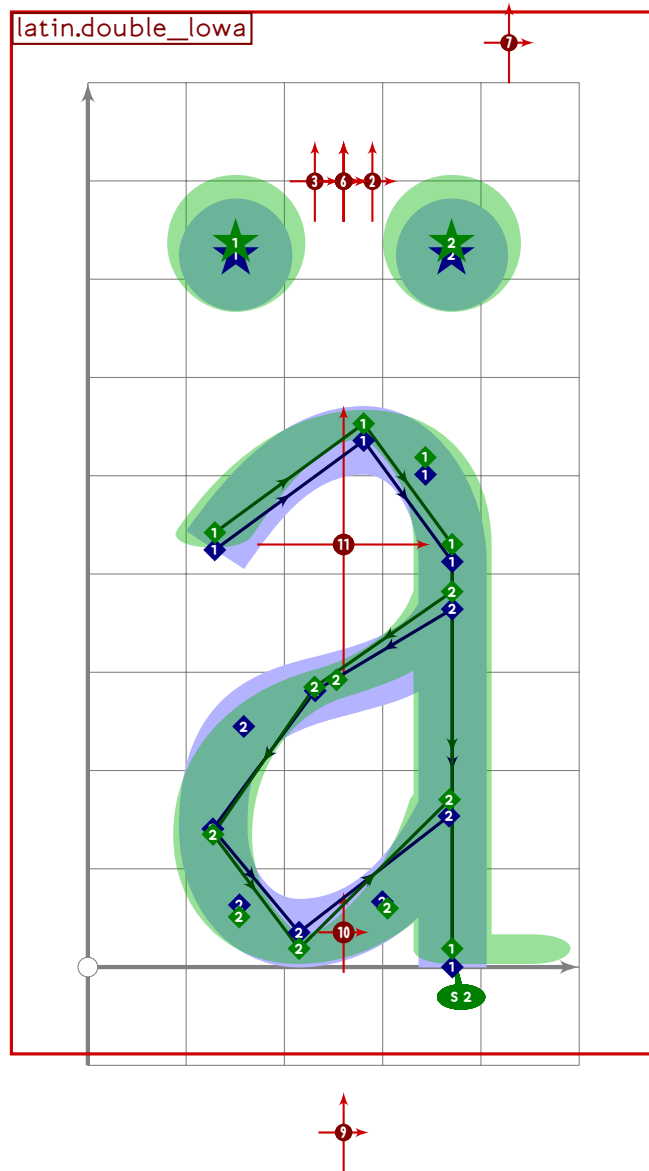
00



```

1250 % a with tilde
1251 begintsuglyph("atilde";227);
1252   tsu_accent.apply(latin.lowa)(tsu_accent.tilde);
1253   tsu_render;
1254 endtsuglyph;
1255

```



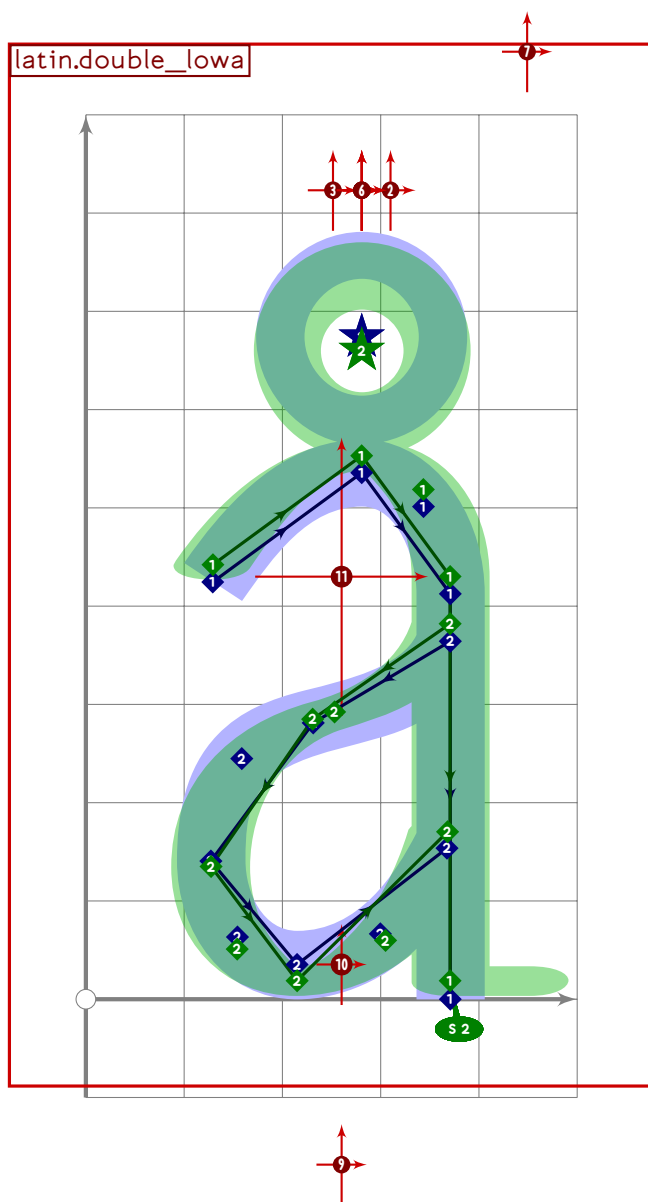
```

1256 % a with dieresis/umlaut
1257 begintsuglyph("adieresis";228);
1258   tsu_accent.apply(latin.lowa)(tsu_accent.umlaut);
1259   tsu_render;
1260 endtsuglyph;
1261

```

U+00E5
tsuku.aring

00

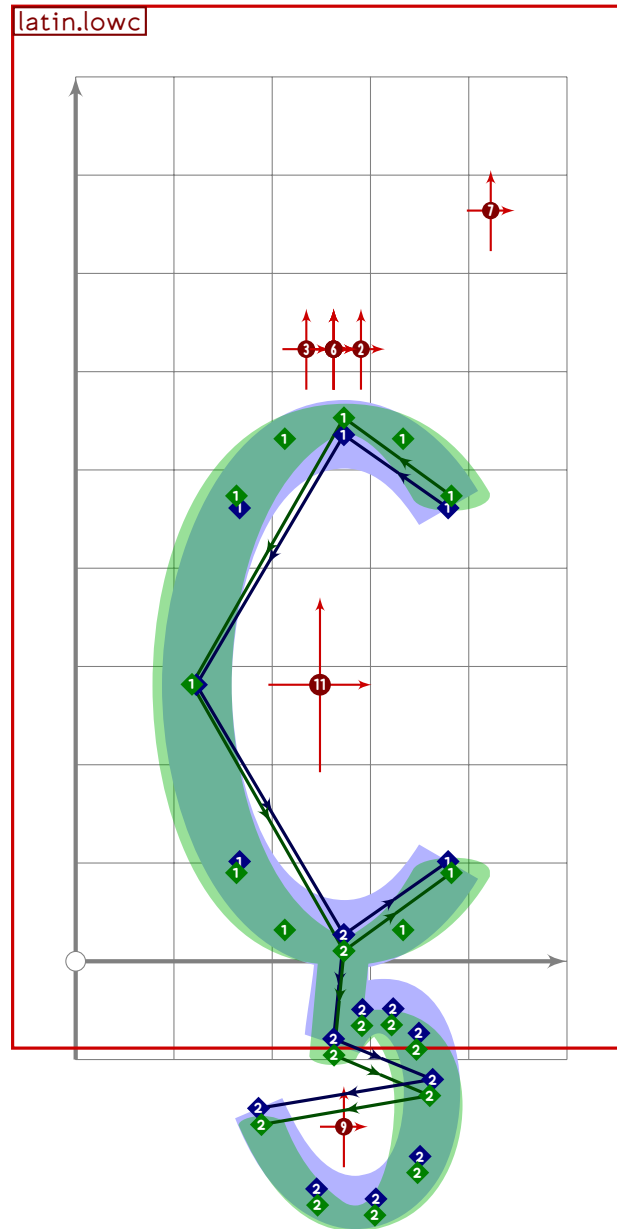


```

1262 % a with ring above
1263 begintsuglyph("aring",229);
1264   tsu_accent.apply(latin.low_a)(tsu_accent.ringabove);
1265   tsu_render;
1266 endtsuglyph;
1267
1268 % ae ligature
1269 begintsuglyph("ae",230);
1270   latin.low_ae;
1271   tsu_render;
1272 endtsuglyph;
1273

```

[see page 294]

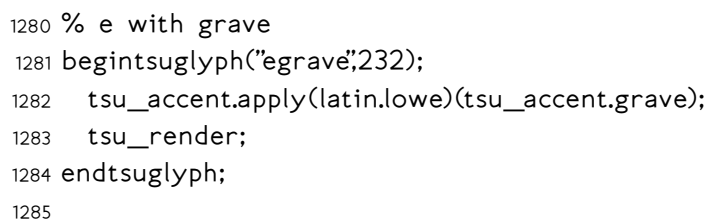


```

1274 % c with cedilla
1275 begintsuglyph("ccedilla";231);
1276   tsu_accent.apply(latin.lowc)(tsu_accent.cedilla);
1277   tsu_render;
1278 endtsuglyph;
1279

```

00

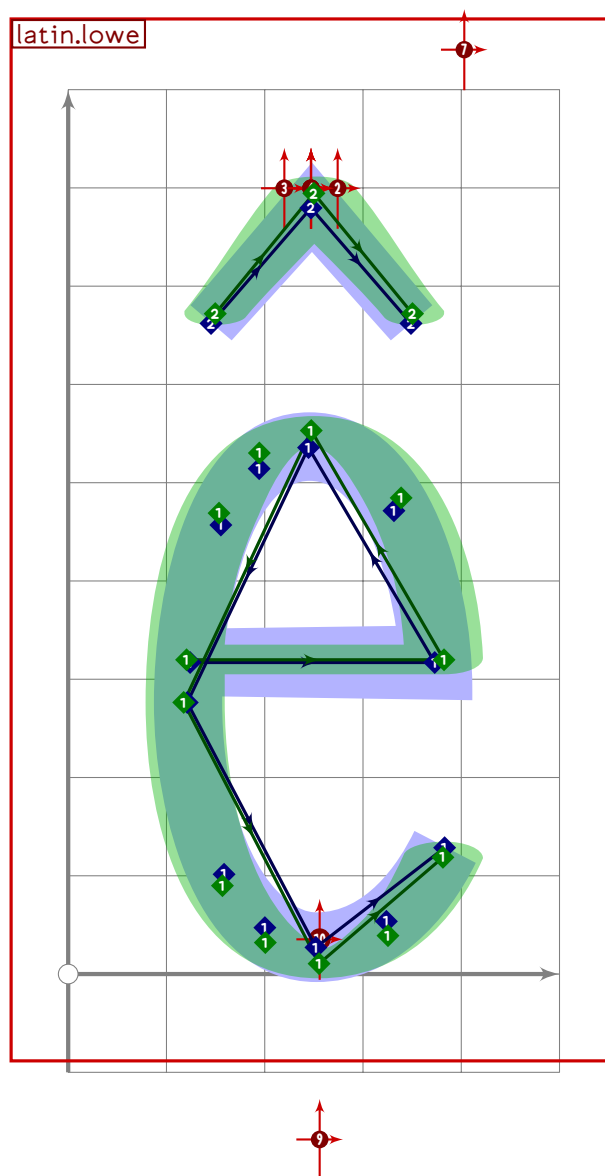




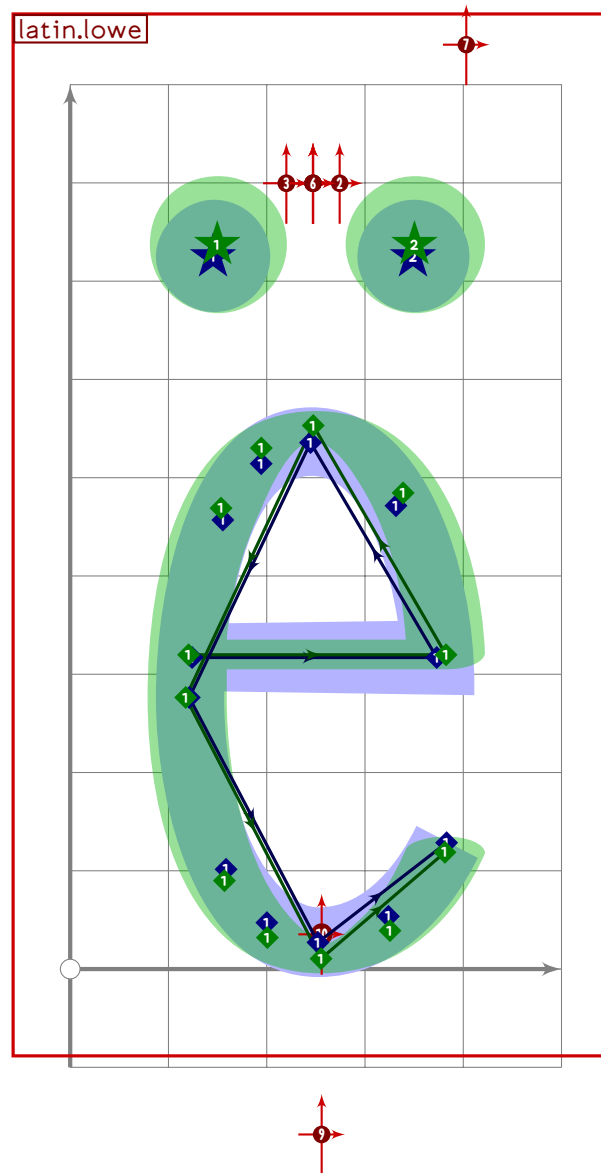
1291

U+00EA
tsuku.ecircumflex

00



```
1292 % e with circumflex
1293 begintsuglyph("ecircumflex";234);
1294   tsu_accent.apply(latin.lowe)(tsu_accent.circumflex);
1295   tsu_render;
1296 endtsuglyph;
1297
```

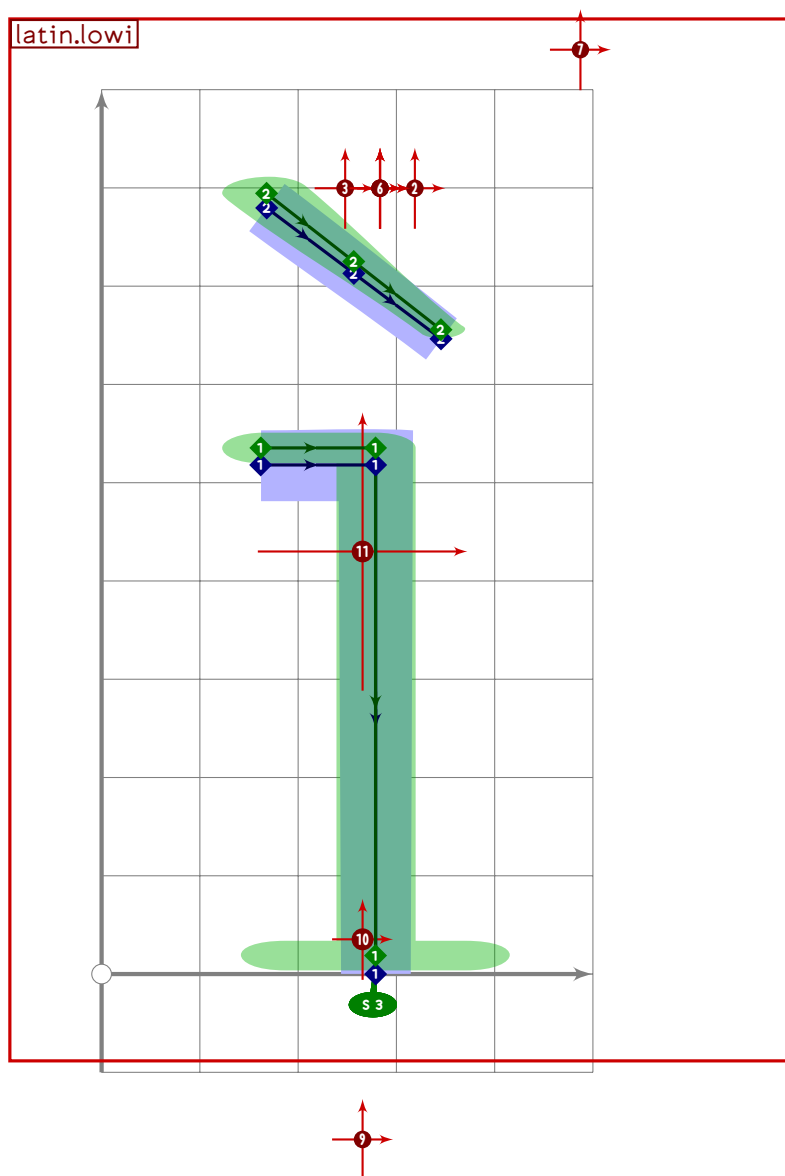
```

1298 % e with dieresis/umlaut
1299 begintsuglyph("edieresis";235);
1300   tsu_accent.apply(latin.loewe)(tsu_accent.umlaut);
1301   tsu_render;
1302 endtsuglyph;
1303

```

U+00EC
tsuku.igrave

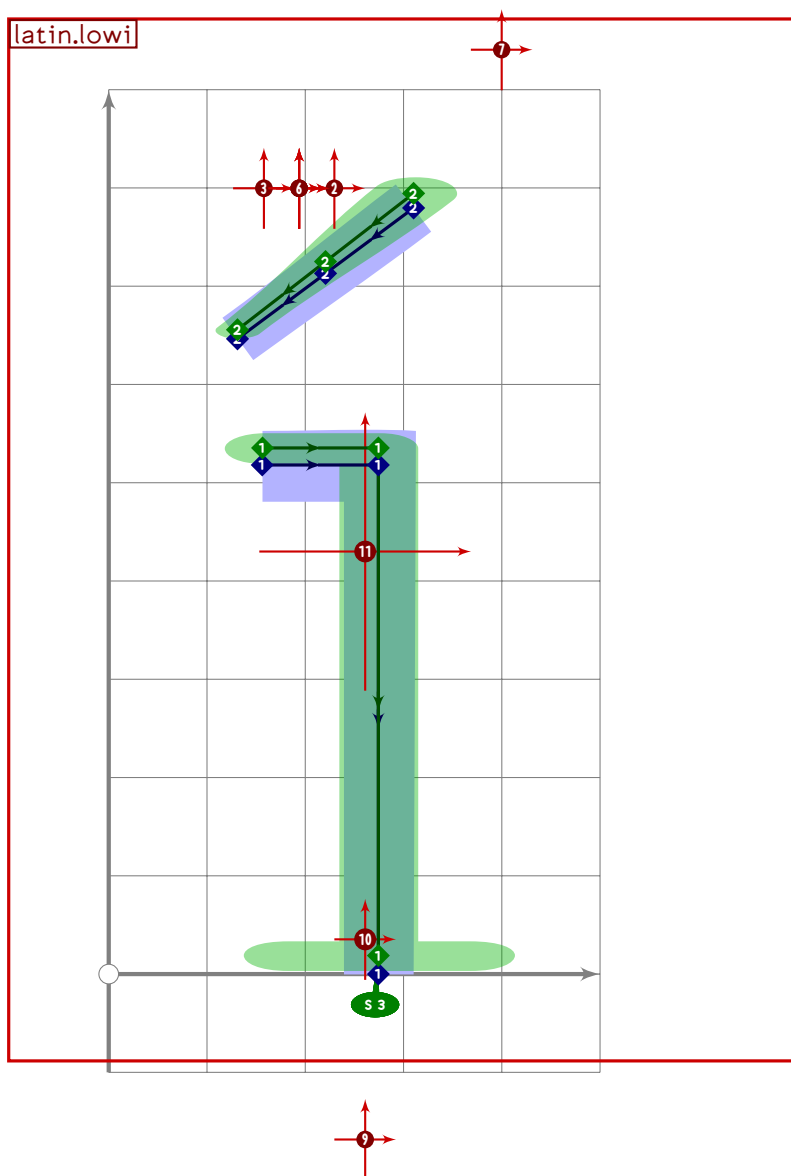
00



```

1304 % i with grave
1305 begintsuglyph("igrave",236);
1306   tsu_accent.apply(
1307     tsu_xform(identity shifted (70,0))(latin.lowi;
1308       tsu_accent.shift_anchors(true)((0,0)));
1309   pop_lcblob;
1310   )(tsu_accent.grave);
1311   tsu_render;
1312 endsuglyph;
1313

```



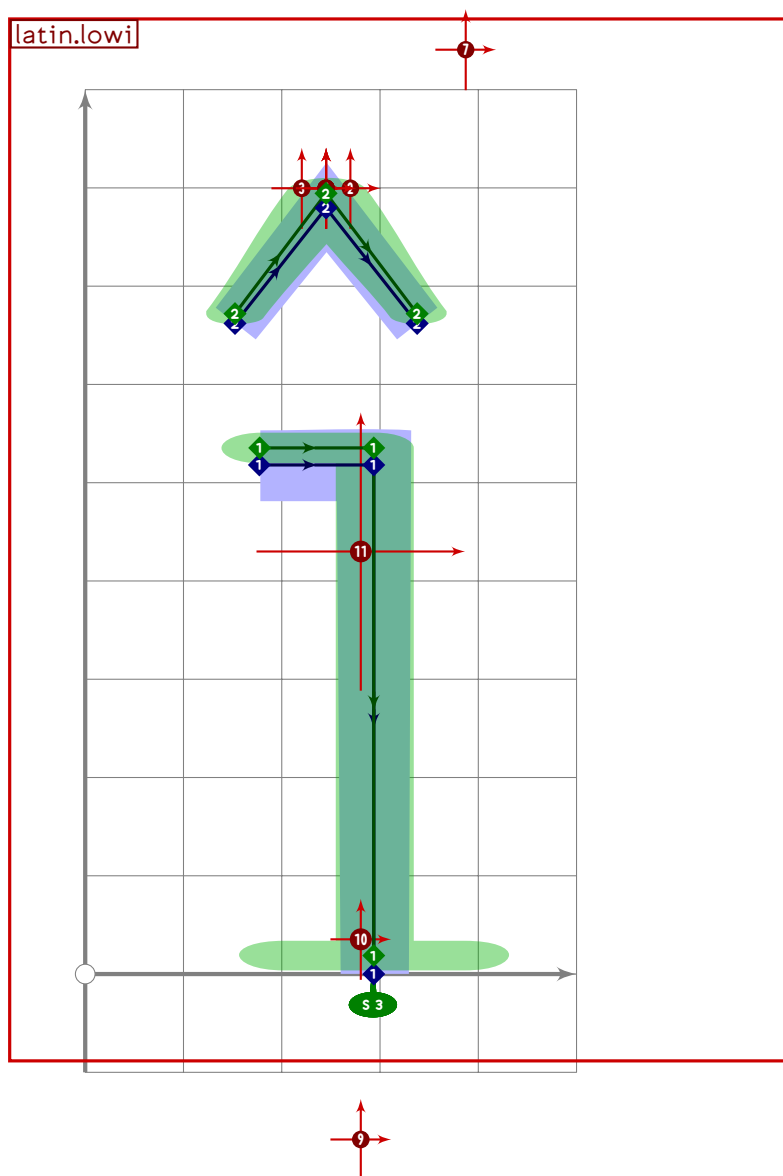
```

1314 % i with acute
1315 begint Suglyph("iacute";237);
1316   tsu_accent.apply(latin.lowi;pop_lcblob)(tsu_accent.acute);
1317   tsu_render;
1318 endtsuglyph;
1319

```

U+00EE
tsuku.icircumflex

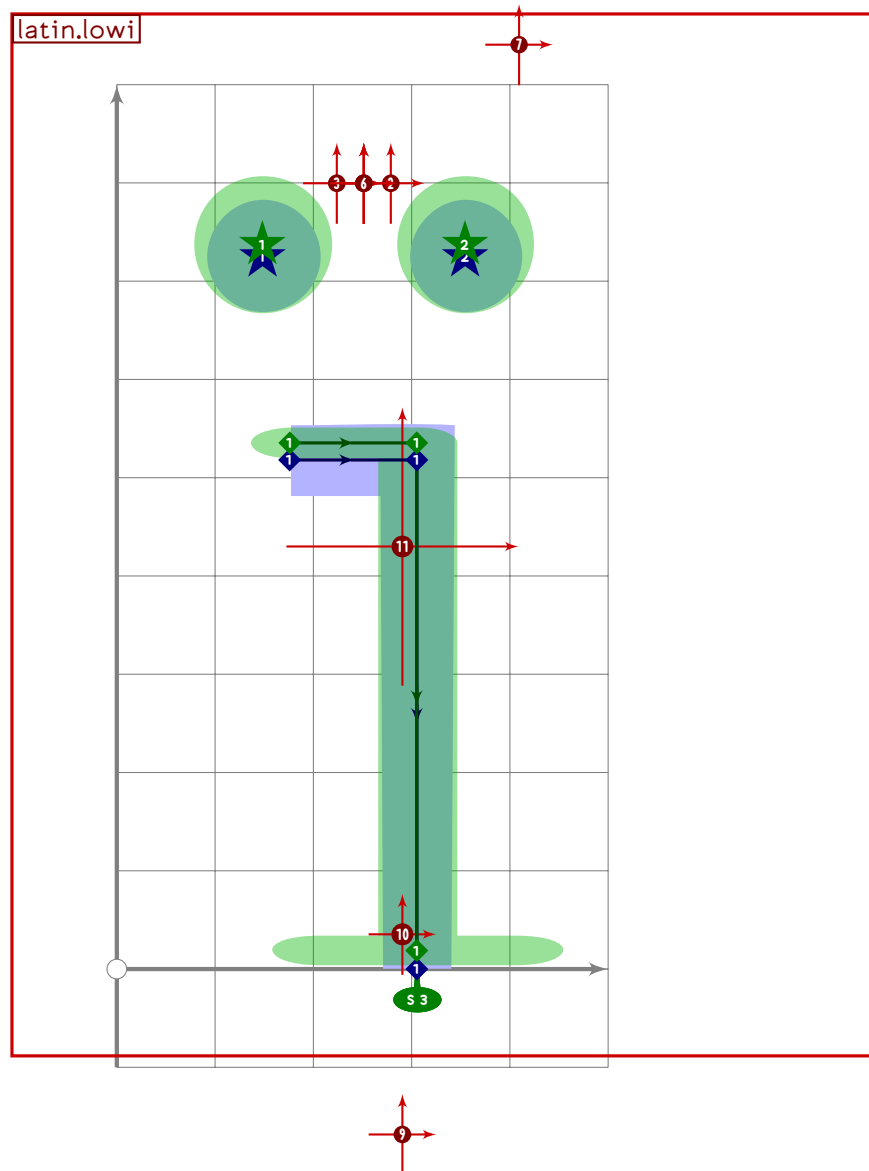
00



```

1320 % i with circumflex
1321 begintsuglyph("icircumflex";238);
1322   tsu_accent.apply(
1323     tsu_xform(identity shifted (70,0))(latin.lowi;
1324       tsu_accent.shift_anchors(true)((0,0)));
1325     pop_lcblob;
1326   )(tsu_accent.circumflex);
1327   tsu_render;
1328 endsuglyph;
1329

```



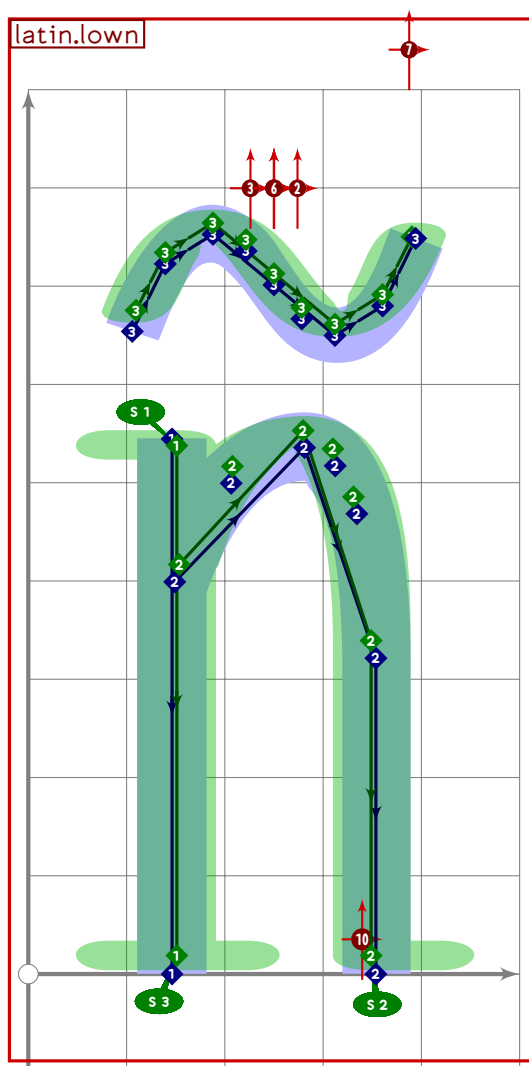
```

1330 % i with dieresis/umlaut
1331 begintsuglyph("idieresis";239);
1332   tsu_accent.apply(
1333     tsu_xform(identity shifted (70,0))(latin.lowi;
1334       tsu_accent.shift_anchors(true)((0,0)));
1335     pop_lcblob;
1336   )(tsu_accent.umlaut);
1337   tsu_render;
1338 endtsuglyph;
1339
1340 % lowercase Icelandic eth
1341 begintsuglyph("eth";240);
1342   latin.loweth;
1343   tsu_render;
1344 endtsuglyph;
1345

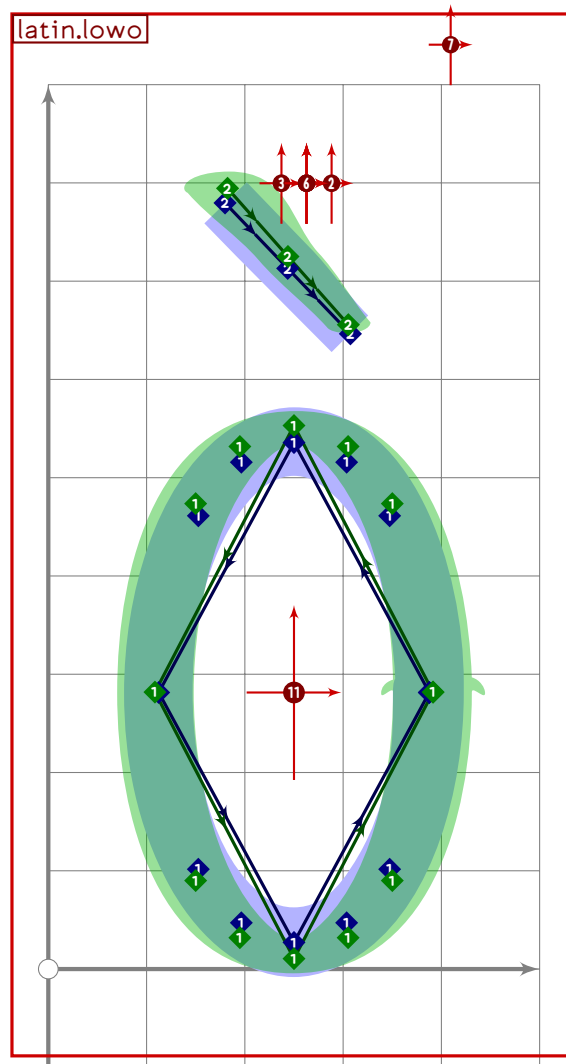
```

[see page 302]

00



1006



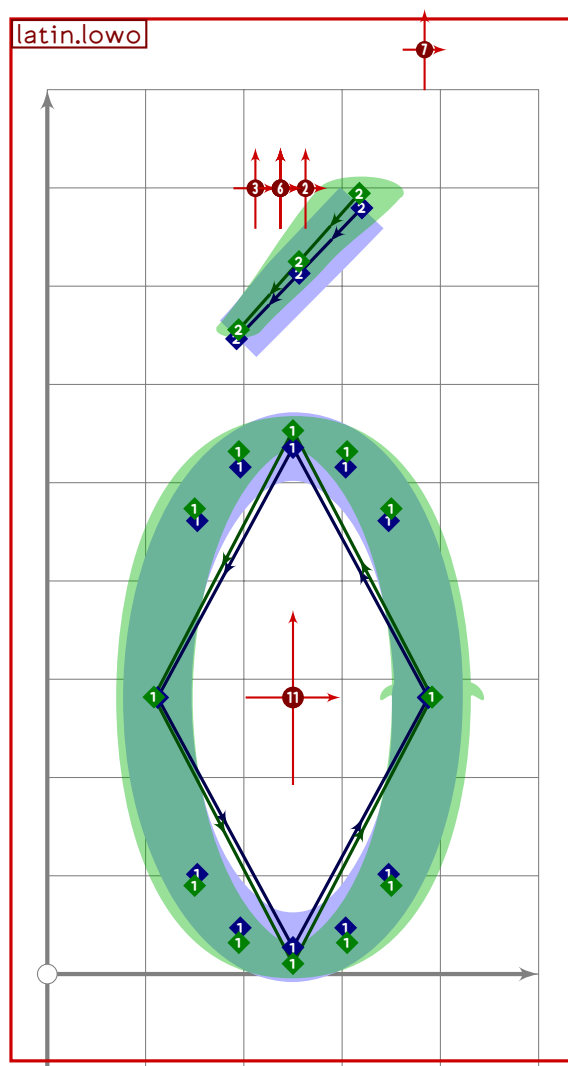
```

1352 % o with grave
1353 begintsuglyph("ograve",242);
1354   tsu_accent.apply(latin.low)(tsu_accent.grave);
1355   tsu_render;
1356 endsuglyph;
1357

```

U+00F3
tsuku.oacute

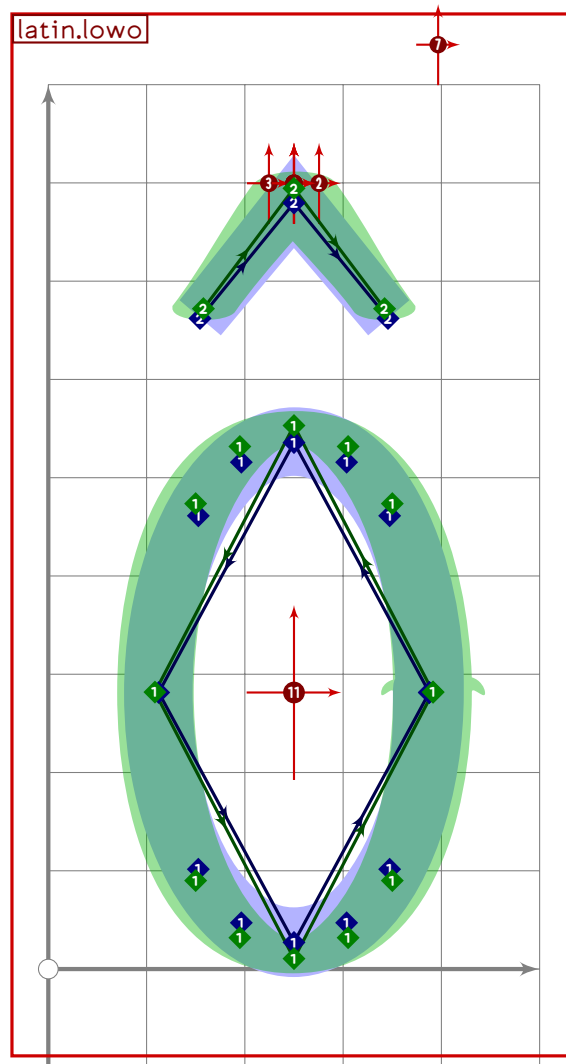
00



```

1358 % o with acute
1359 begint Suglyph("oacute",243);
1360   tsu_accent.apply(latin.low)(tsu_accent.acute);
1361   tsu_render;
1362 endtsuglyph;
1363

```

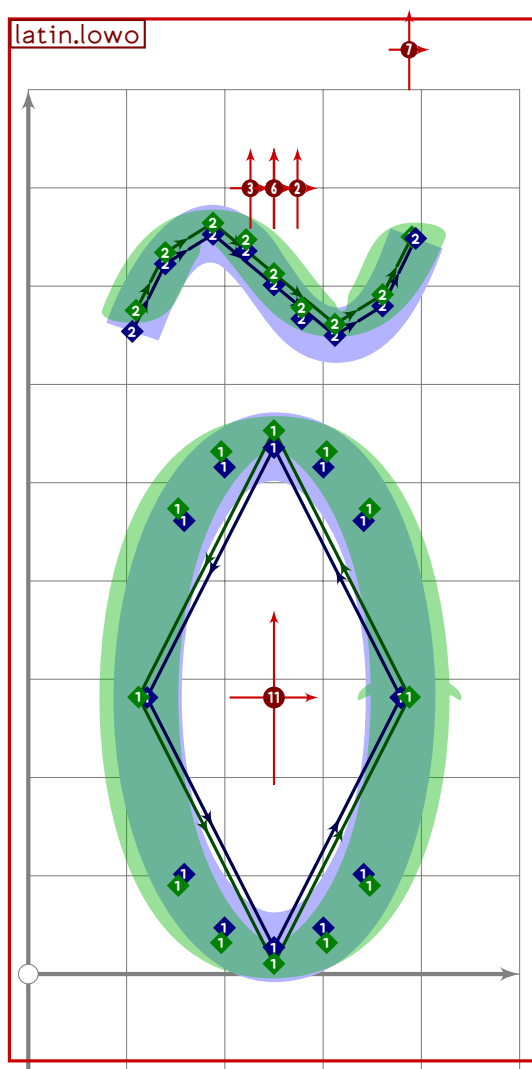
```

1364 % o with circumflex
1365 begint Suglyph("ocircumflex";244);
1366   tsu_accent.apply(latin.low)(tsu_accent.circumflex);
1367   tsu_render;
1368 endtsuglyph;
1369

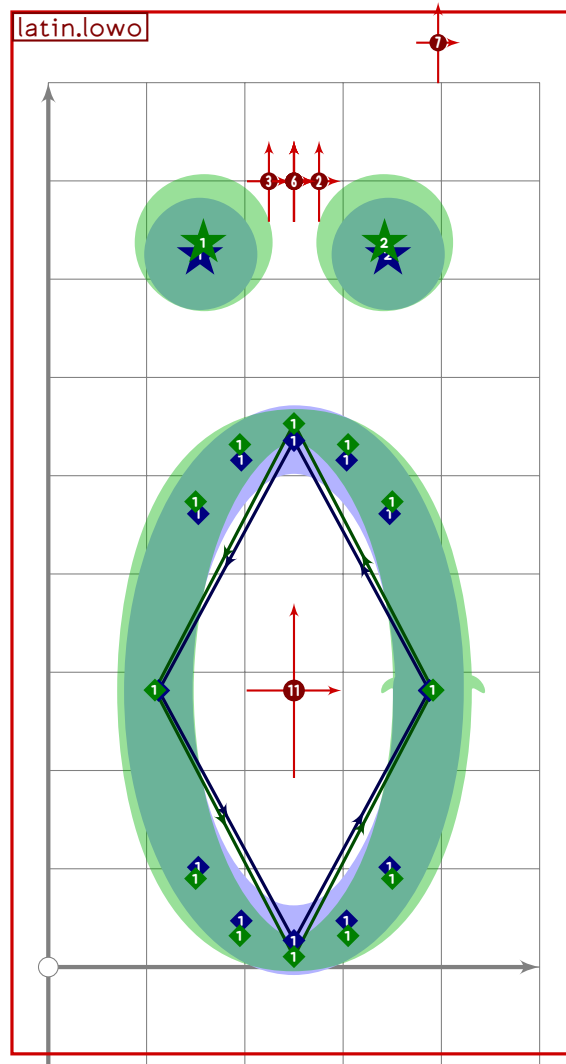
```

U+00F5
tsuku.otilde

00



```
1370 % o with tilde
1371 beginsuglyph("otilde",245);
1372 tsu_accent.apply(latin.lowo)(tsu_accent.tilde);
1373 tsu_render;
1374 endsuglyph;
1375
```



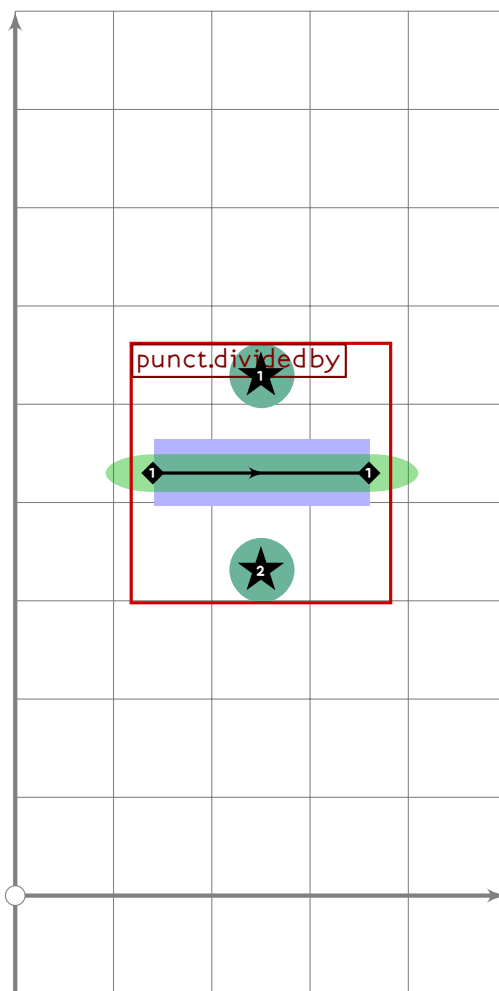
```

1376 % o with dieresis/umlaut
1377 begintsuglyph("odieresis",246);
1378   tsu_accent.apply(latin.low)(tsu_accent.umlaut);
1379   tsu_render;
1380 endsuglyph;
1381
1382 % division sign
1383 tsu_accent.clear_default_anchors;
1384 tsu_rescale_native_conditional;

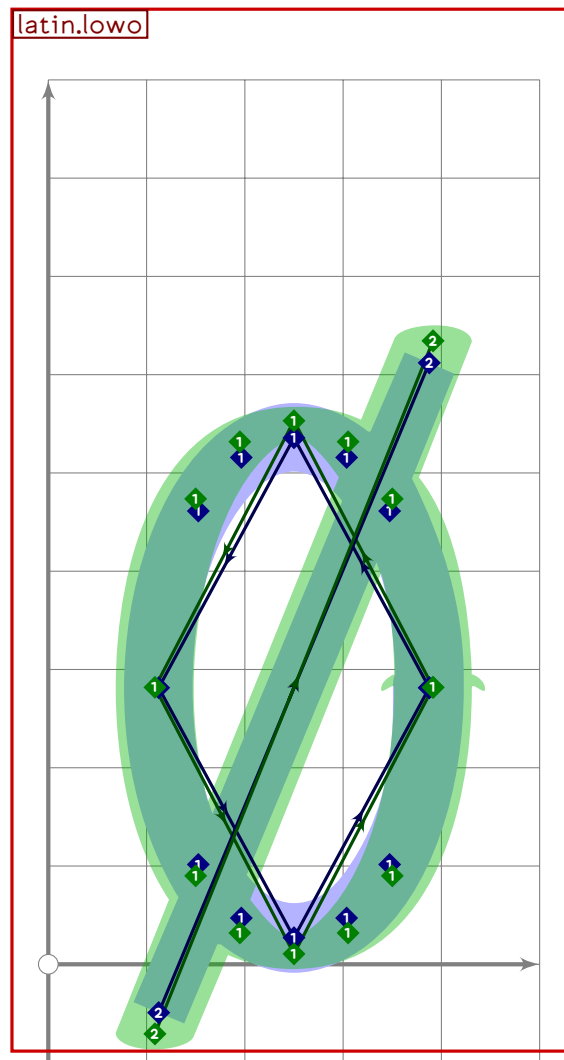
```

U+00F7
tsuku.divide

00



```
1385 beginsuglyph("divide",247);
1386   punct.dividedby(ascii_punct_xf);
1387   tsu_render;
1388 endsuglyph;
1389 tsu_rescale_half;
1390 tsu_accent.low_default_anchors;
1391
```



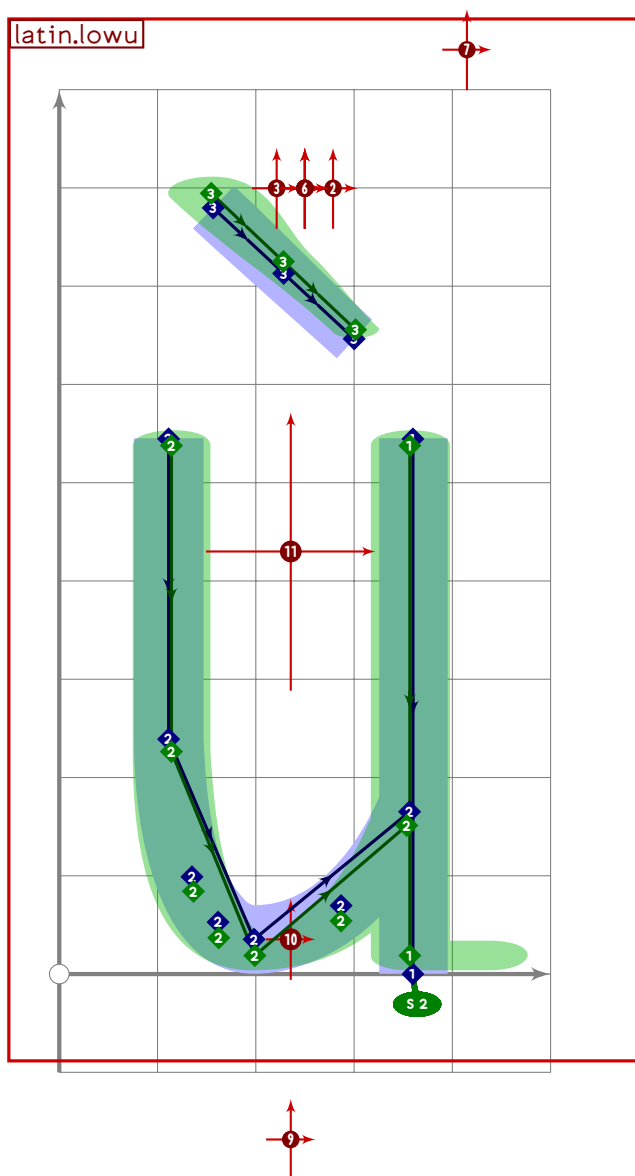
```

1392 % o with stroke
1393 begintsuglyph("oslash";248);
1394   tsu_accent.apply(latin.low o)(tsu_accent.slash);
1395   tsu_render;
1396 endtsuglyph;
1397

```

U+00F9
tsuku.ugrave

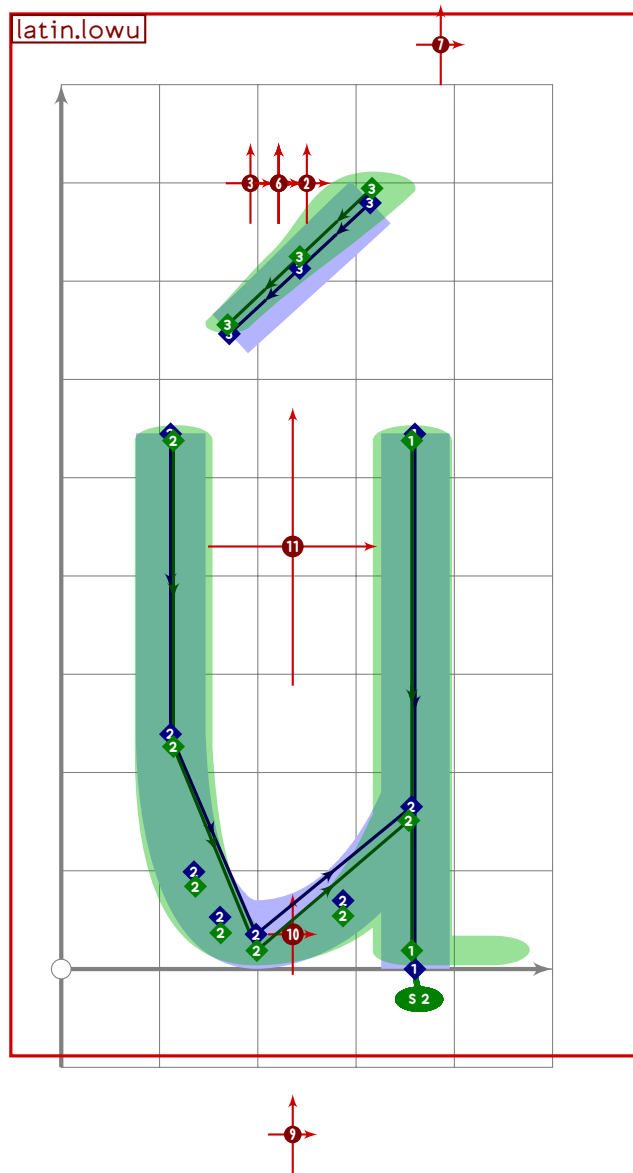
00



```

1398 % u with grave
1399 begintsuglyph("ugrave";249);
1400 tsu_accent.apply(latin.lowu)(tsu_accent.grave);
1401 tsu_render;
1402 endtsuglyph;
1403

```



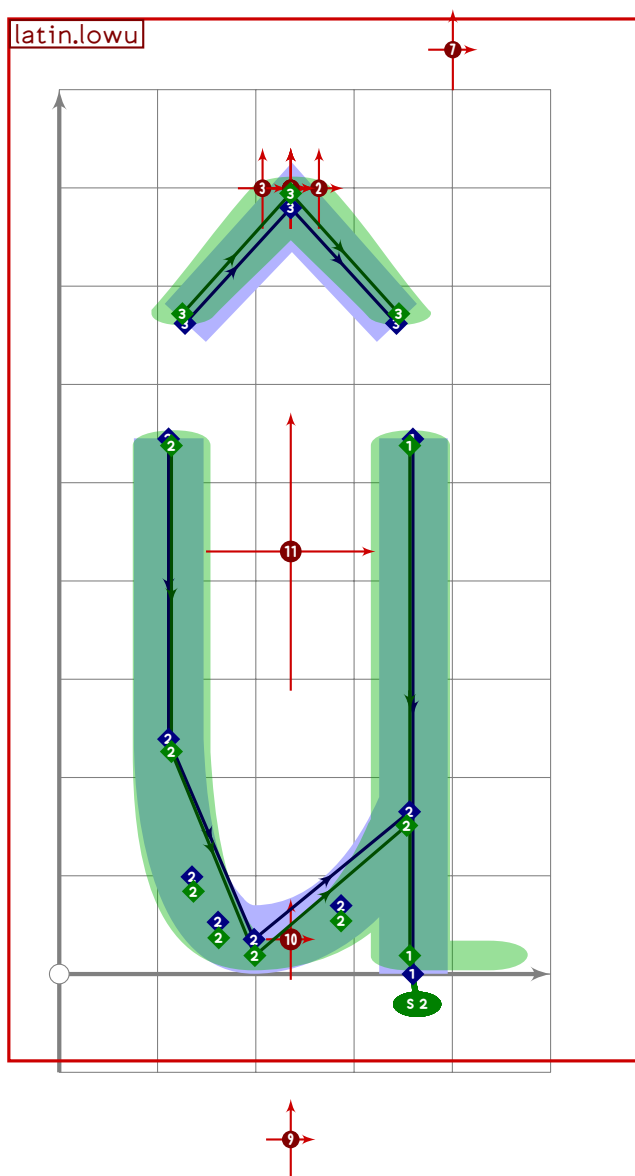
```

1404 % u with acute
1405 begintsuglyph("uacute";250);
1406   tsu_accent.apply(latin.lowu)(tsu_accent.acute);
1407   tsu_render;
1408 endtsuglyph;
1409

```

U+00FB
tsuku.ucircumflex

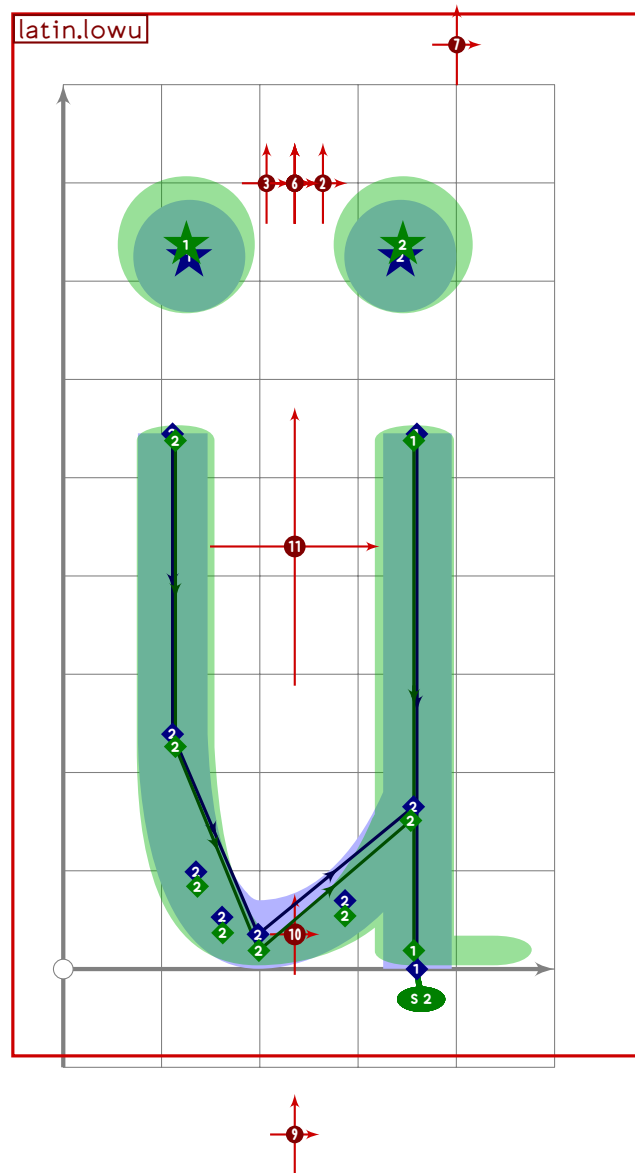
00



```

1410 % u with circumflex
1411 begint Suglyph("ucircumflex",251);
1412   tsu_accent.apply(latin.lowu)(tsu_accent.circumflex);
1413   tsu_render;
1414 endtsuglyph;
1415

```

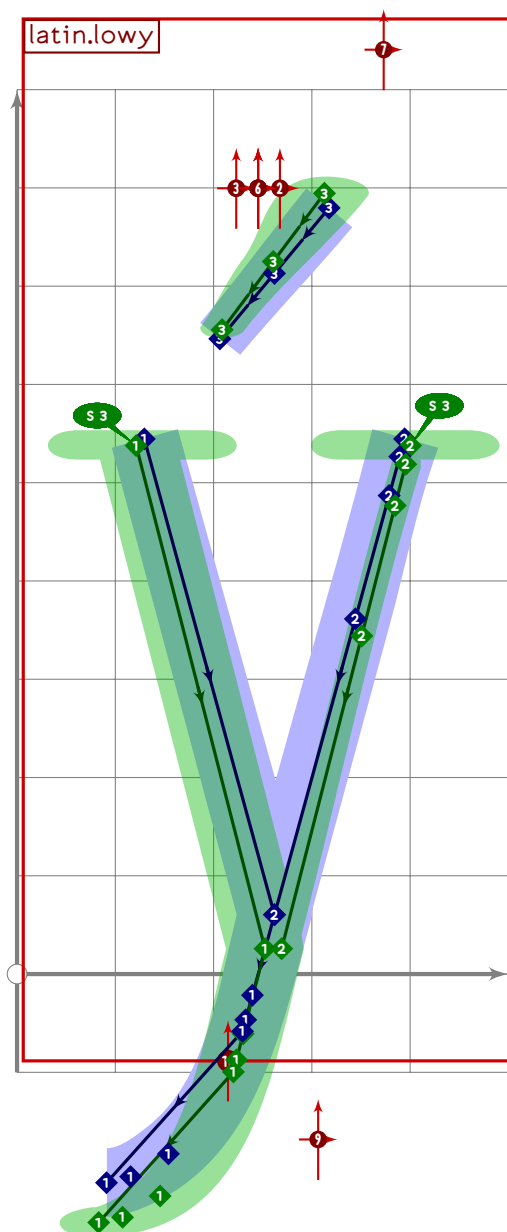
```

1416 % u with dieresis/umlaut
1417 begintsuglyph("udieresis";252);
1418   tsu_accent.apply(latin.lowu)(tsu_accent.umlaut);
1419   tsu_render;
1420 endtsuglyph;
1421

```

U+00FD
tsuku.yacute

00

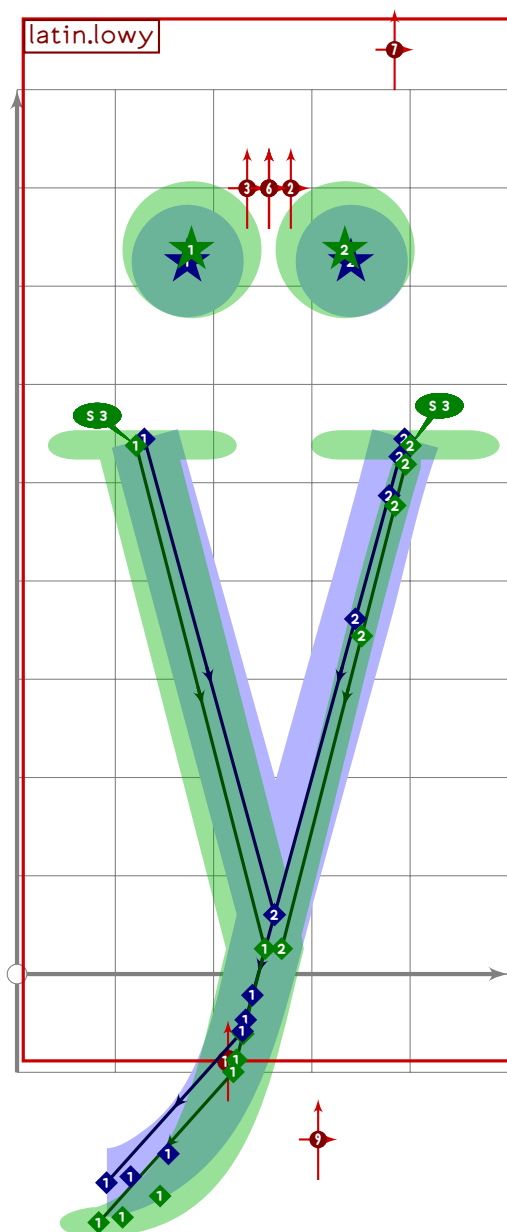


```

1422 % y with acute
1423 begintsuglyph("yacute";253);
1424   tsu_accent.apply(latin.lowy)(tsu_accent.acute);
1425   tsu_render;
1426 endtsuglyph;
1427
1428 % thorn
1429 begintsuglyph("thorn";254);
1430   latin.lowthorn;
1431   tsu_render;
1432 endtsuglyph;
1433

```

[see page 330]



```

1434 % y with dieresis/umlaut
1435 begintsuglyph("ydieresis",255);
1436 tsu_accent.apply(latin.lowy)(tsu_accent.umlaut);
1437 tsu_render;
1438 endtsuglyph;
1439
1440
1441
1442 endfont;
1443
1444

```

tsuku-01.mp

01

```
1 %
2 % Unicode page 01 (Latin Extended A) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---

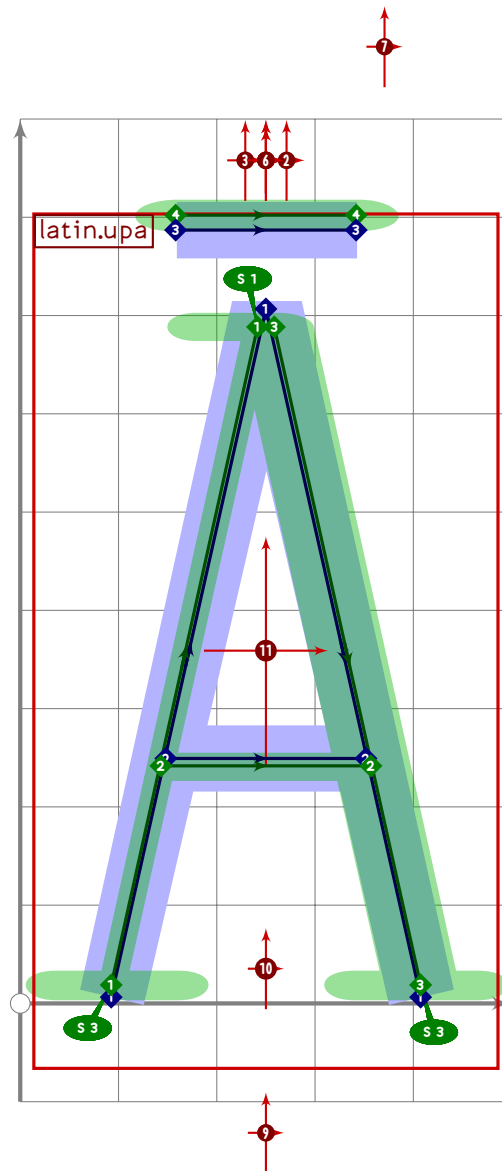

32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input accent.mp;
39 input latin.mp;
40 input ogonek.mp;
41 input punct.mp;
42
43 do_late_includes;
44
45 

---


46
```

Latin Extended A Uppercase

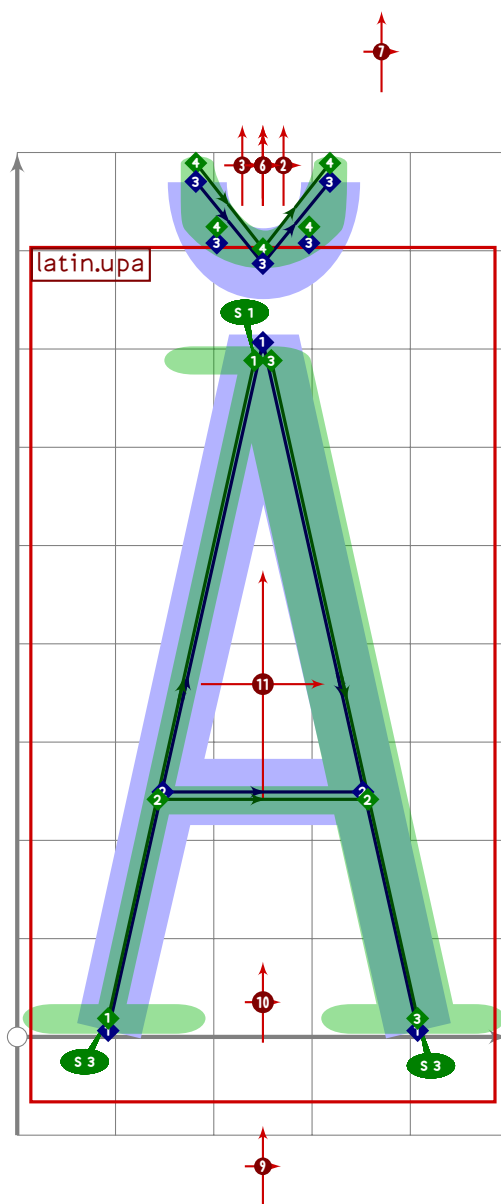
```
47 % LATIN EXTENDED A UPPERCASE
48
49 % note we define these out of code point sequence in order to simplify
50 % default accent anchor definitions
51
52 tsu_rescale_half;
53 sp:=0;
54 tsu_accent.up_default_anchors;
55
```



```

56 % A with macron
57 begintsuglyph("Amacron",0);
58   tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.macron);
59   tsu_render;
60 endtsuglyph;
61

```

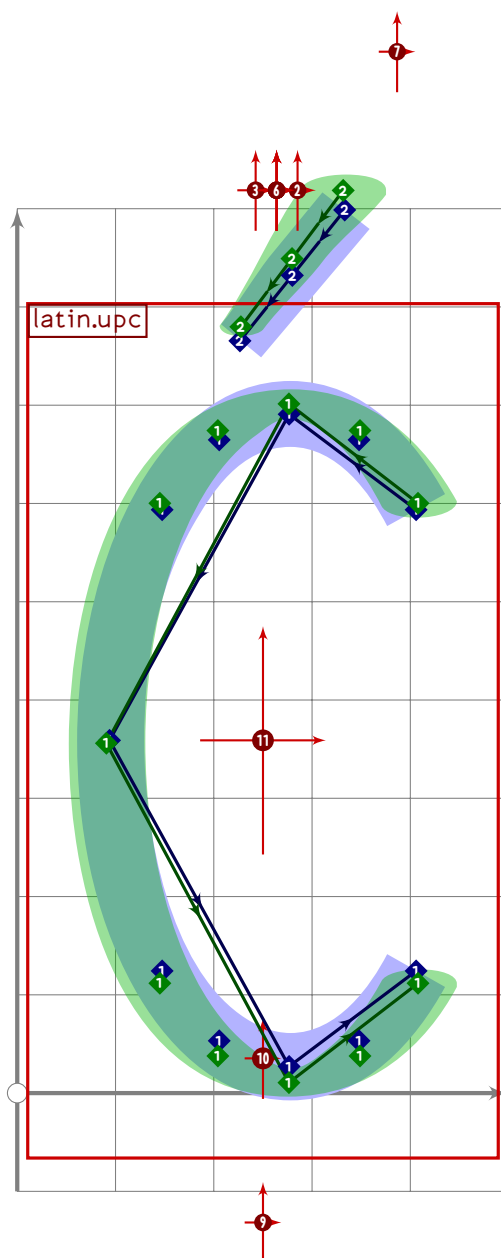


```

62 % A with breve
63 begintsuglyph("Abreve";2);
64 tsu_accent.apply(tsu_accent.capital(latin.upa))(tsu_accent.breve);
65 tsu_render;
66 endtsuglyph;
67
68 % A with ogonek
69 begintsuglyph("Aogonek";4);
70 latin.upaogonek;
71 tsu_render;
72 endtsuglyph;
73

```

[see page 351]

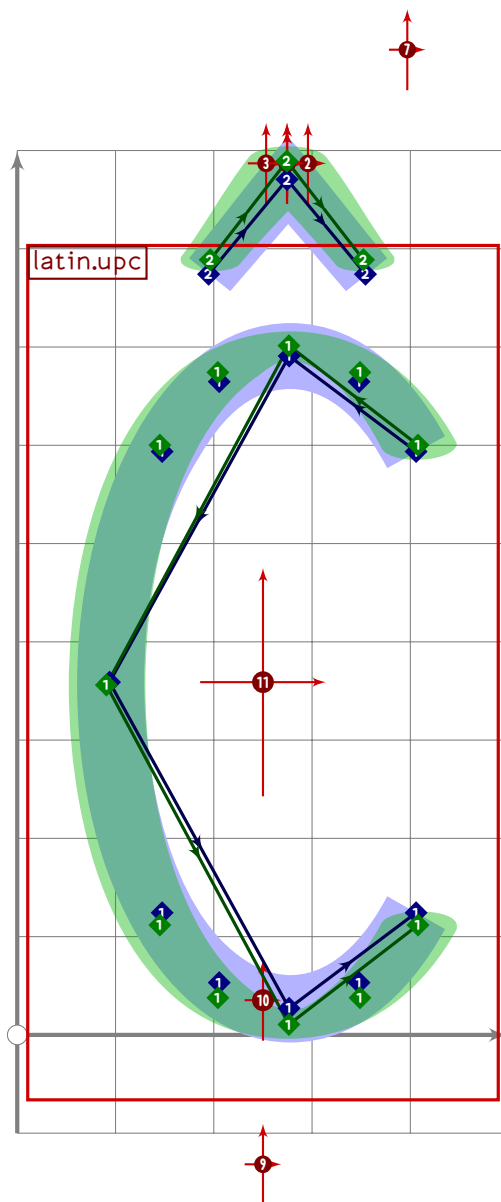


```

74 % C with acute
75 begint Suglyph("Cacute";6);
76   tsu_accent.apply(tsu_accent.capital(latin.upc))(tsu_accent.acute);
77   tsu_render;
78 endtsuglyph;
79

```

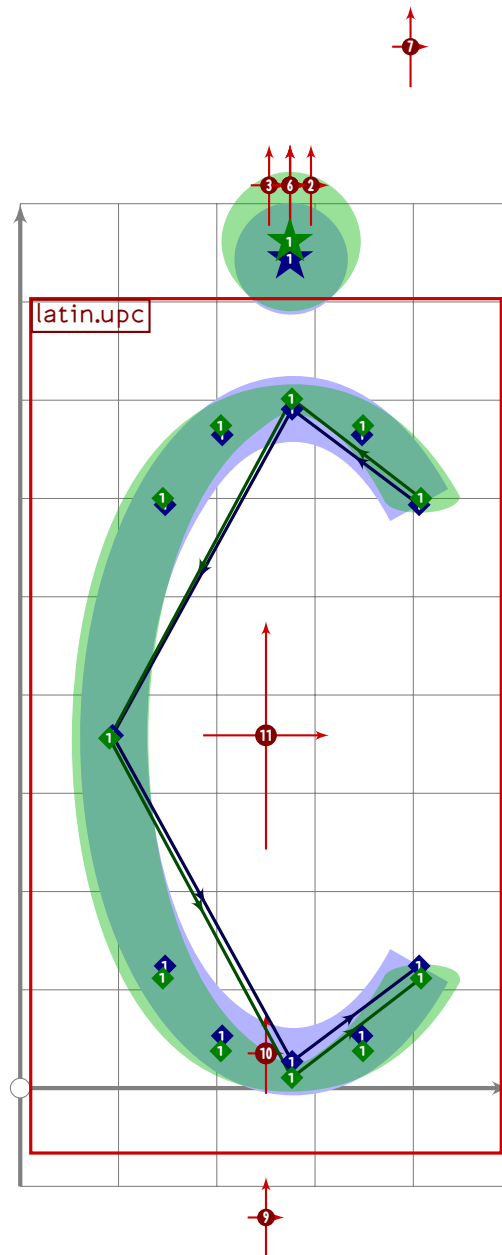
01



```

80 % C with circumflex
81 begint Suglyph("Ccircumflex",8);
82   tsu_accent.apply(tsu_accent.capital(latin.upc))(tsu_accent.circumflex);
83   tsu_render;
84 endtsuglyph;
85

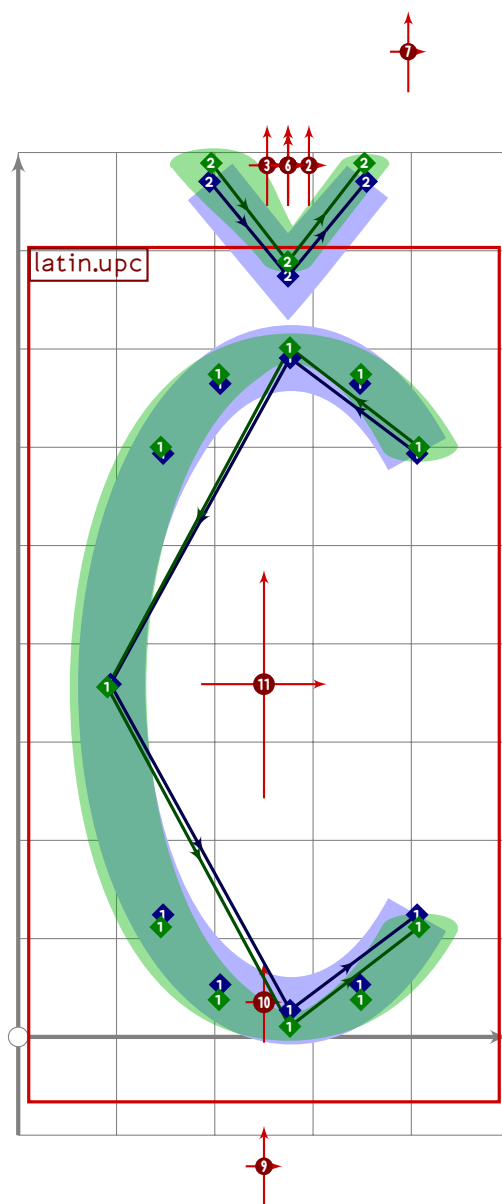
```

```

86 % C with dot above
87 begintsuglyph("Cdotaccent";10);
88   tsu_accent.apply(tsu_accent.capital(latin.upc))(tsu_accent.dotabove);
89   tsu_render;
90 endtsuglyph;
91

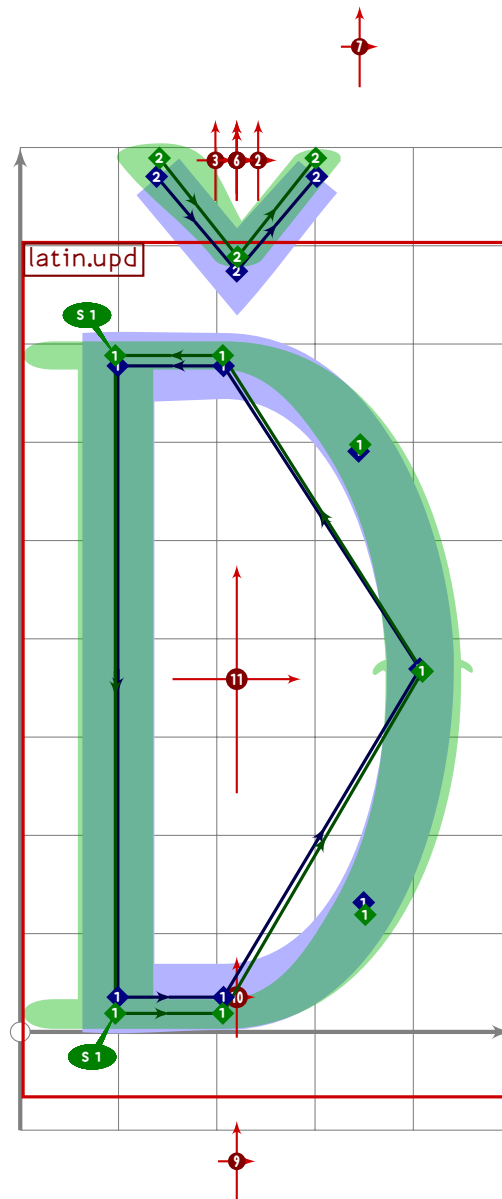
```



```

92 % C with caron
93 begintsuglyph("Ccaron";12);
94   tsu_accent.apply(tsu_accent.capital(latin.upc))(tsu_accent.caron);
95   tsu_render;
96 endtsuglyph;
97

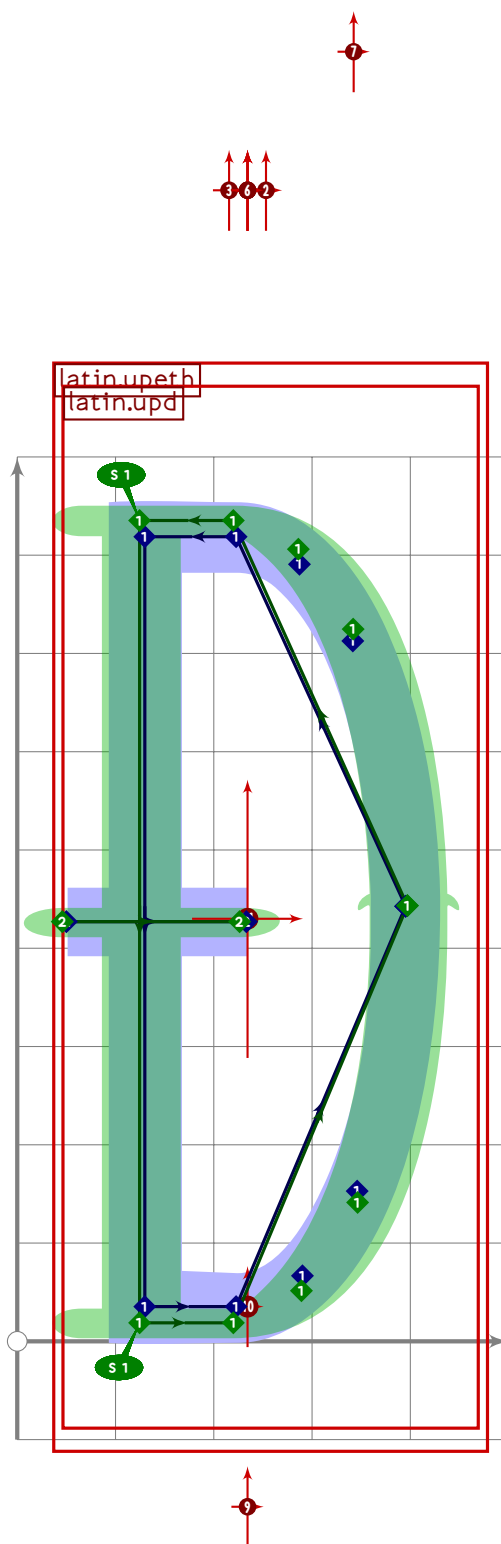
```



```

98 % D with caron
99 begintsuglyph("Dcaron";14);
100 tsu_accent.apply(tsu_accent.capital(latin.upd))(tsu_accent.caron);
101 tsu_render;
102 endtsuglyph;
103

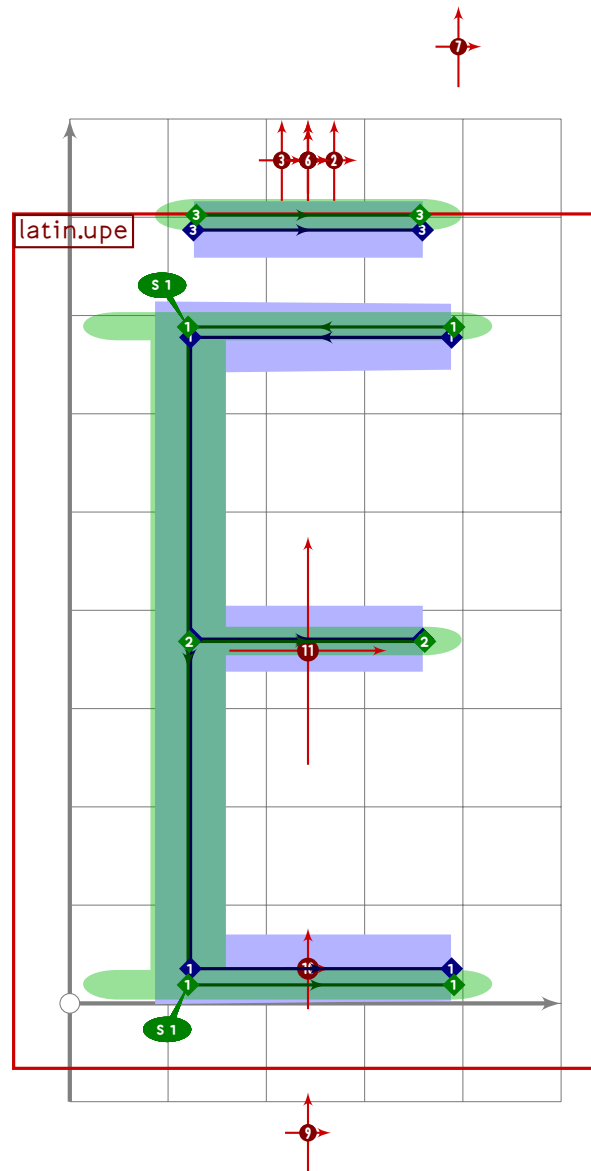
```



```

104 % D with stroke - same as capital Eth
105 begintsuglyph("Dcroat",16);
106 latin.upeth;
107 tsu_render;
108 endtsuglyph;
109

```

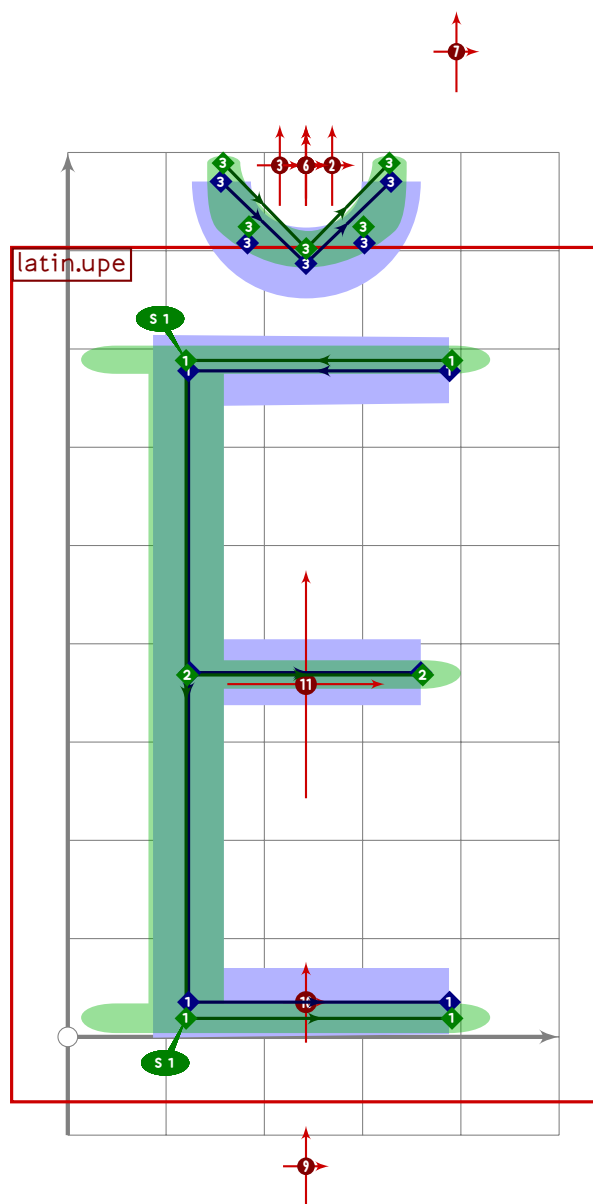


01

```

110 % E with macron
111 begintsuglyph("Emacron",18);
112   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.macron);
113   tsu_render;
114 endtsuglyph;
115

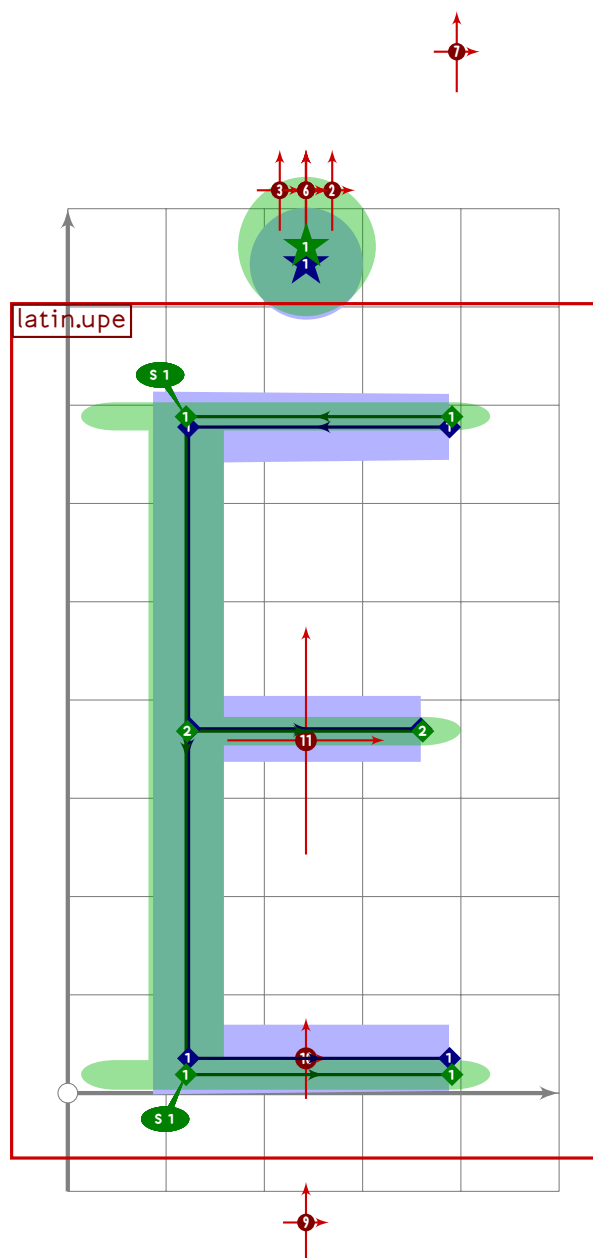
```



```

116 % E with breve
117 begintsuglyph("Ebreve";20);
118   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.breve);
119   tsu_render;
120 endtsuglyph;
121

```

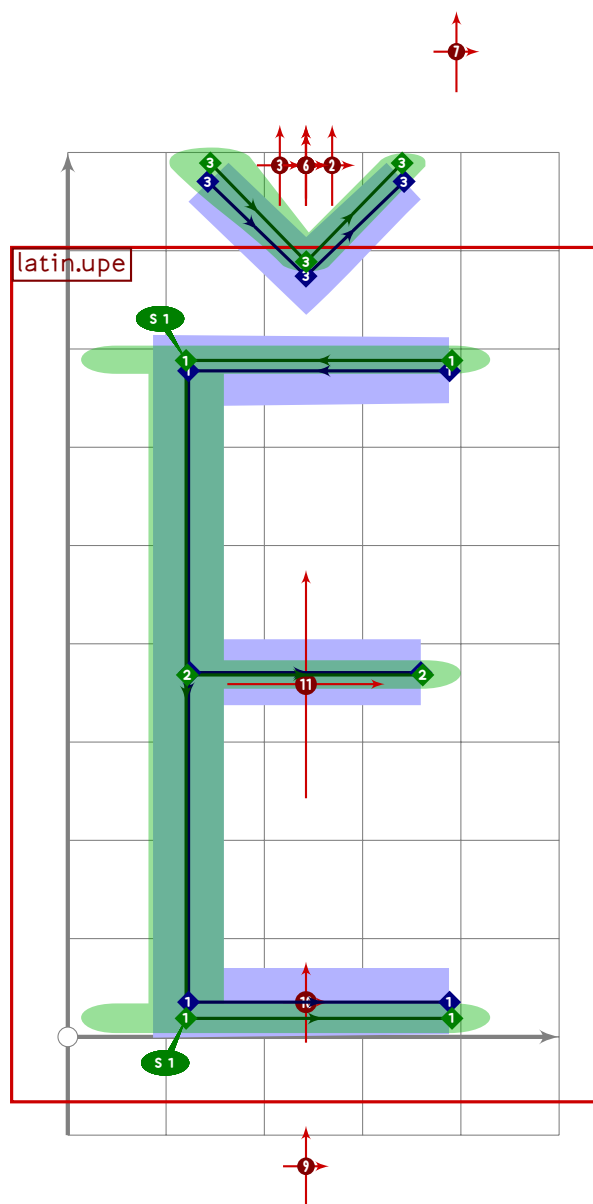


```

122 % E with dot
123 begintsuglyph("Edotaccent";22);
124   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.dotabove);
125   tsu_render;
126 endtsuglyph;
127
128 % E with ogonek
129 begintsuglyph("Eogonek";24);
130   latin.upeogonek;
131   tsu_render;
132 endtsuglyph;
133

```

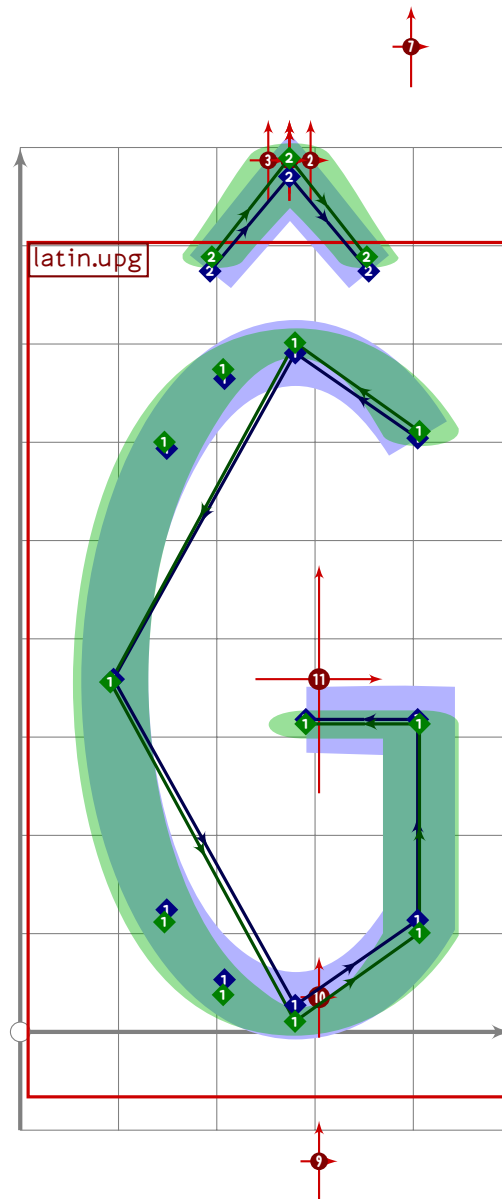
[see page 352]



```

134 % E with caron
135 begintsglyph("Ecaron",26);
136   tsu_accent.apply(tsu_accent.capital(latin.upe))(tsu_accent.caron);
137   tsu_render;
138 endtsuglyph;
139

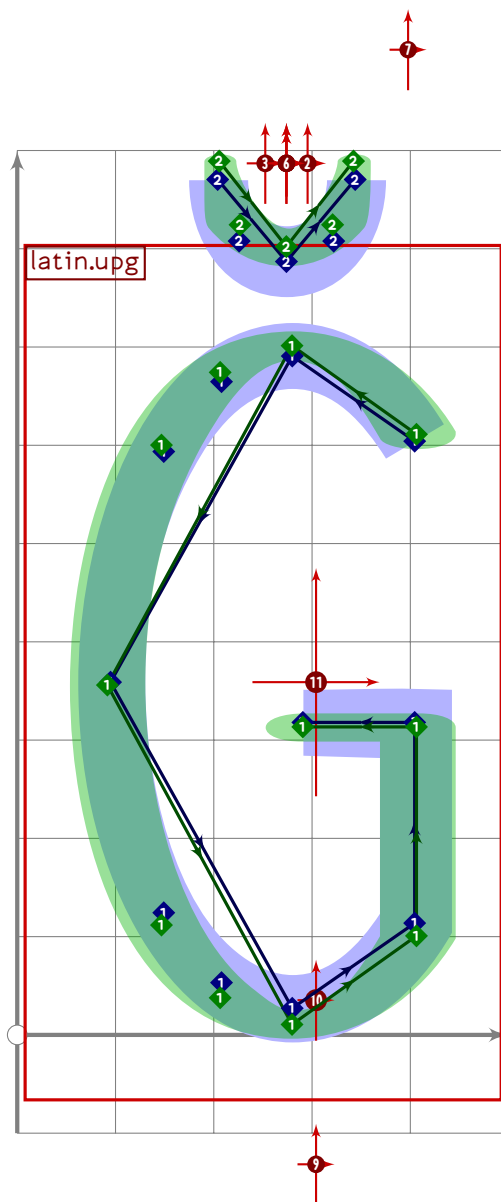
```

```

140 % G with circumflex
141 begint Suglyph("Gcircumflex",28);
142   tsu_accent.apply(tsu_accent.capital(latin.upg))(tsu_accent.circumflex);
143   tsu_render;
144 endtsuglyph;
145

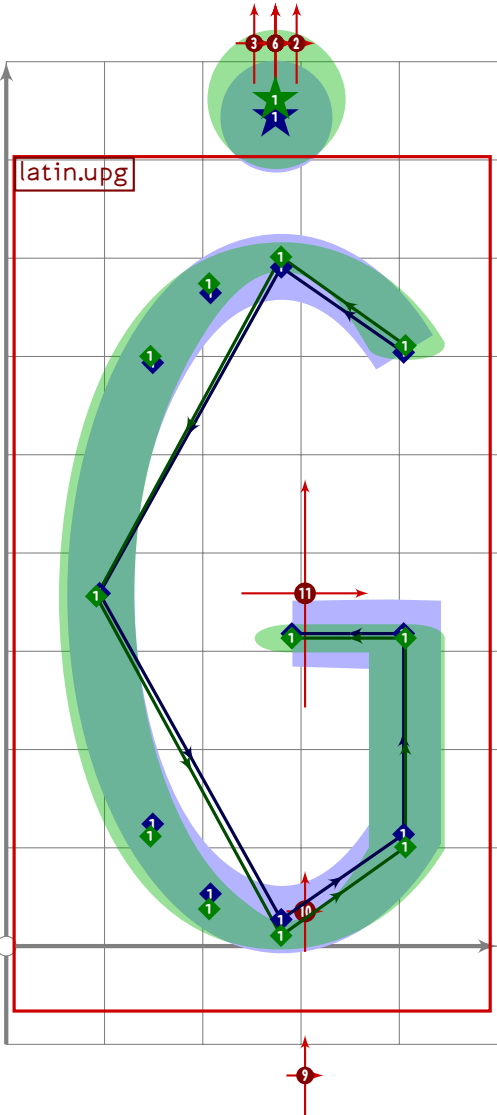
```



```

146 % G with breve
147 begintsuglyph("Gbreve";30);
148   tsu_accent.apply(tsu_accent.capital(latin.upg))(tsu_accent.breve);
149   tsu_render;
150 endtsuglyph;
151

```



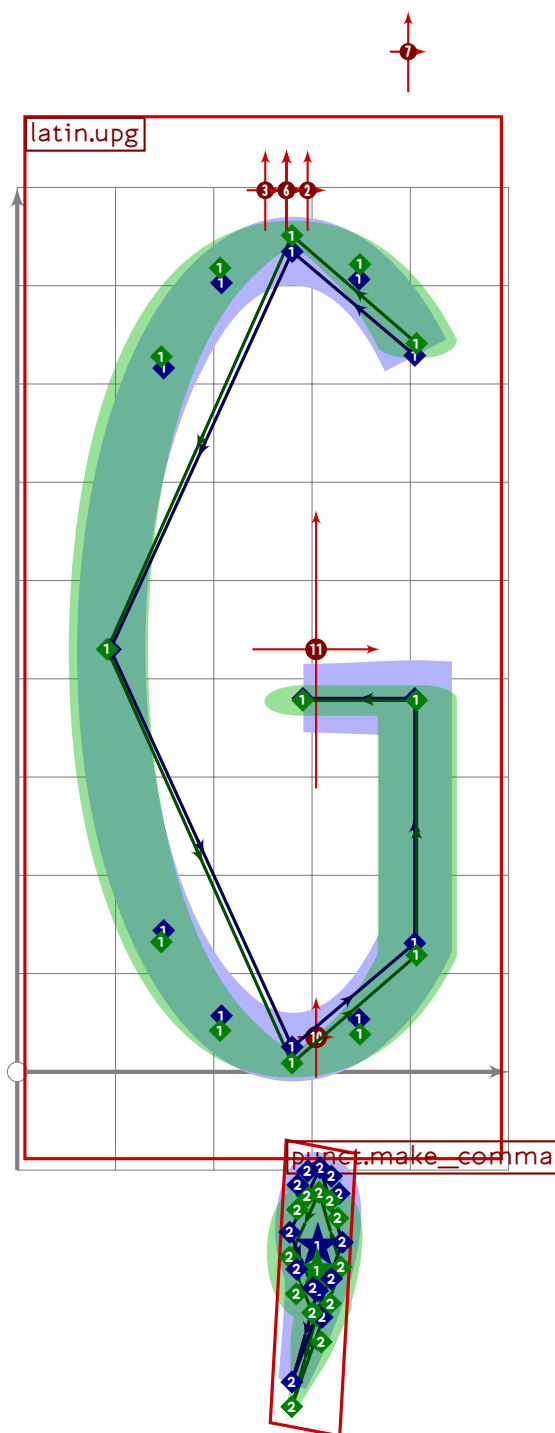
```

152 % G with dot
153 begintsuglyph("Gdotaccent";32);
154   tsu_accent.apply(tsu_accent.capital(latin.upg))(tsu_accent.dotabove);
155   tsu_render;
156 endsuglyph;
157

```

U+0122
tsuku.uni0122

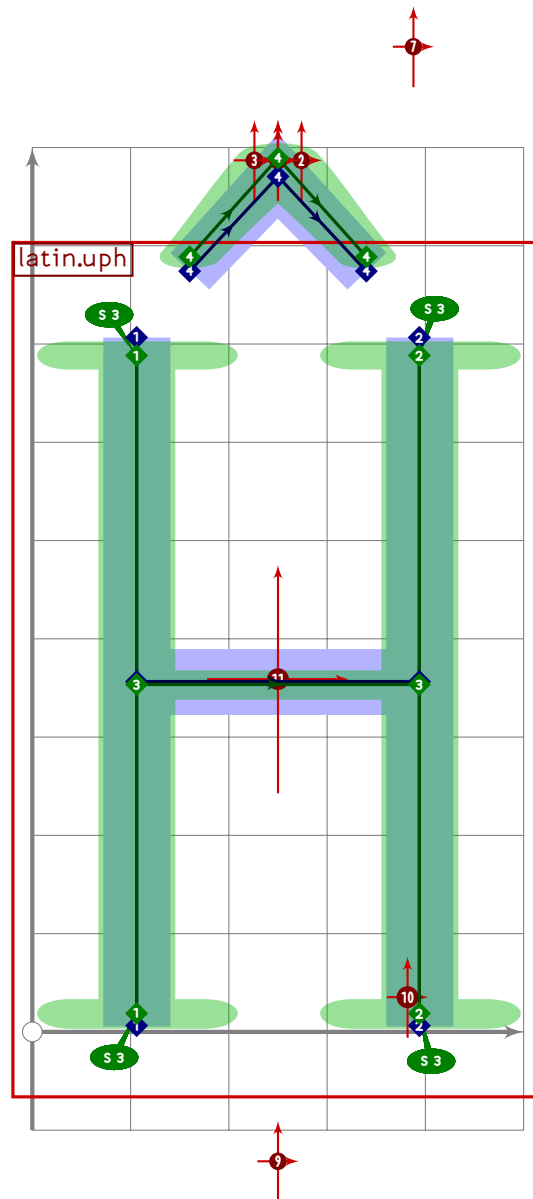
01



```

158 % G with comma below
159 begintsuglyph("uni0122";34);
160 tsu_accent.apply(latin.upg)(tsu_accent.commabelow);
161 tsu_render;
162 endtsuglyph;
163

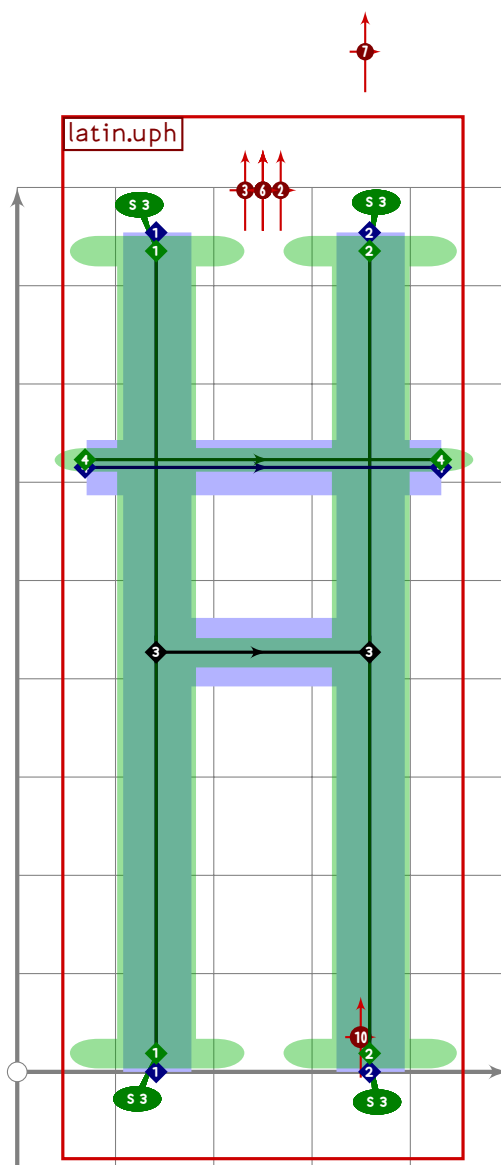
```



```

164 % H with circumflex
165 begint Suglyph("Hcircumflex",36);
166   tsu_accent.apply(tsu_accent.capital(latin.uph))(tsu_accent.circumflex);
167   tsu_render;
168 endtsuglyph;
169

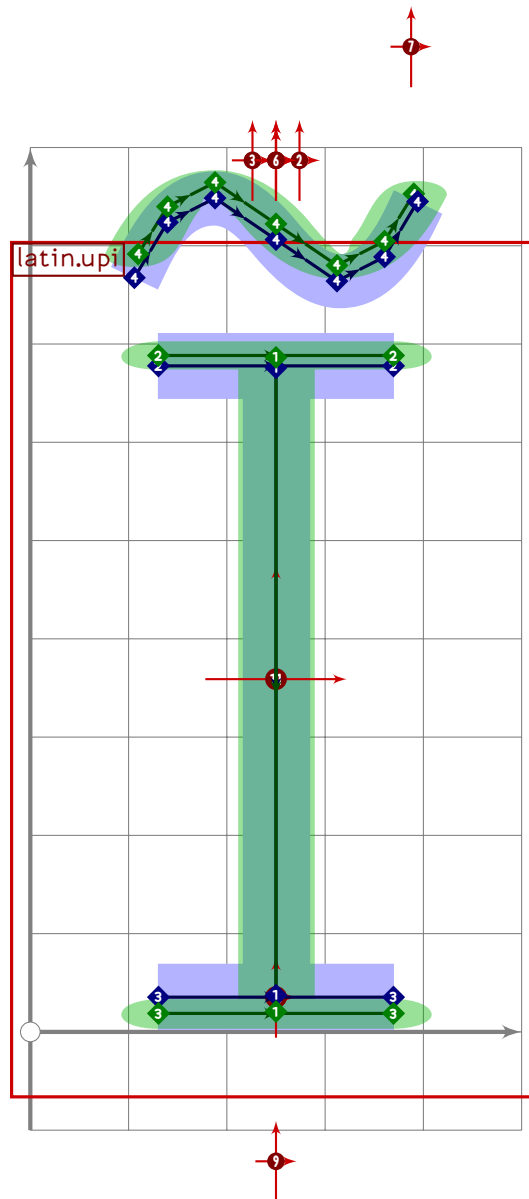
```



```

170 % H with bar
171 begintsuglyph("Hbar",38);
172   latin.uph;
173   push_stroke((100,vmetric(0.74))-(900,vmetric(0.74)),
174     (1.6,1.6)-(1.6,1.6));
175   set_bosize(0,80);
176   tsu_render;
177 endtsuglyph;
178

```

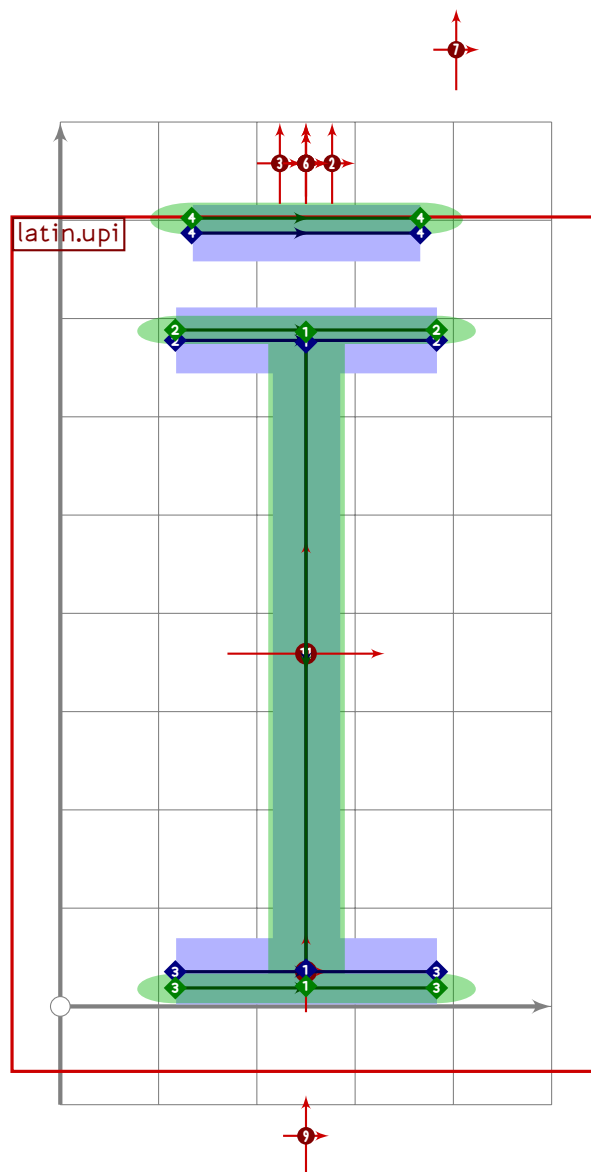


```

179 % I with tilde
180 begintzuglyph("Itilde";40);
181   tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.tilde);
182   tsu_render;
183 endtsuglyph;
184

```

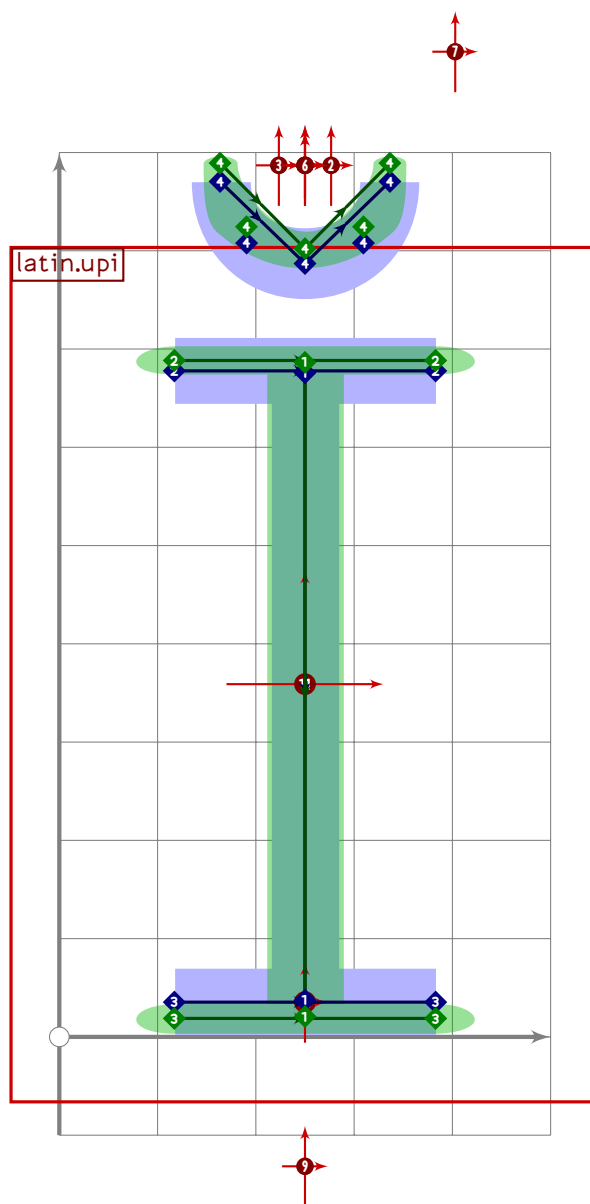
01



```

185 % I with macron
186 begintsuglyph("Imacron",42);
187   tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.macron);
188   tsu_render;
189 endsuglyph;
190

```

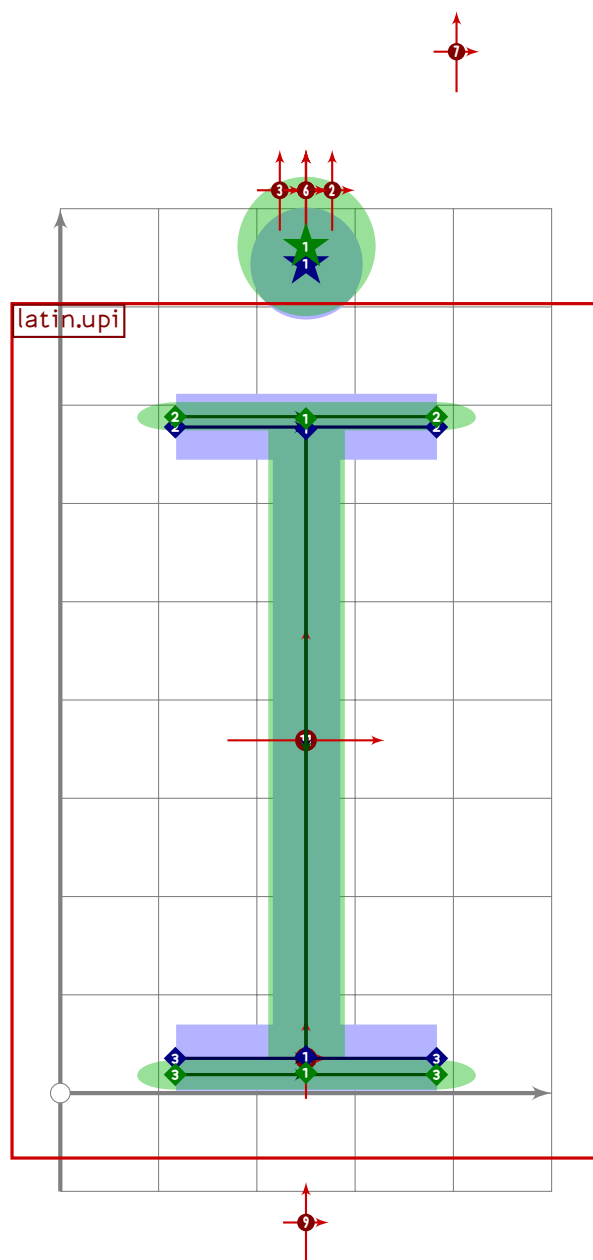
```

191 % I with breve
192 begintsuglyph("Ibreve";44);
193   tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.breve);
194   tsu_render;
195 endtsuglyph;
196
197 % I with ogonek
198 begintsuglyph("Iogonek";46);
199   latin.upiogonek;
200   tsu_render;
201 endtsuglyph;
202

```

[see page 353]

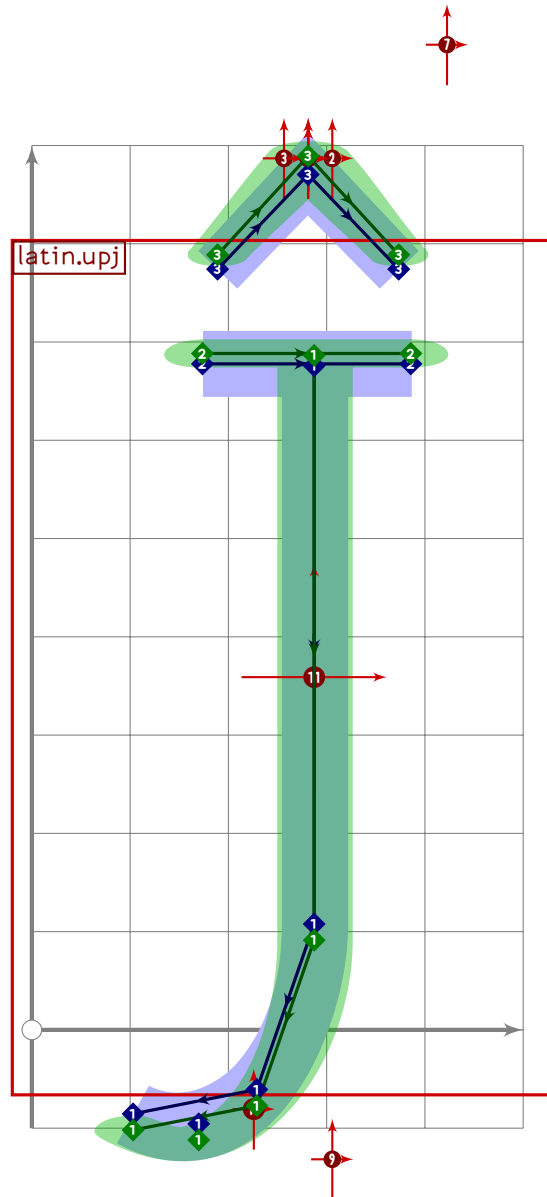
01



```

203 % I with dot
204 begintsuglyph("Idotaccent"48);
205   tsu_accent.apply(tsu_accent.capital(latin.upi))(tsu_accent.dotabove);
206   tsu_render;
207 endtsuglyph;
208

```

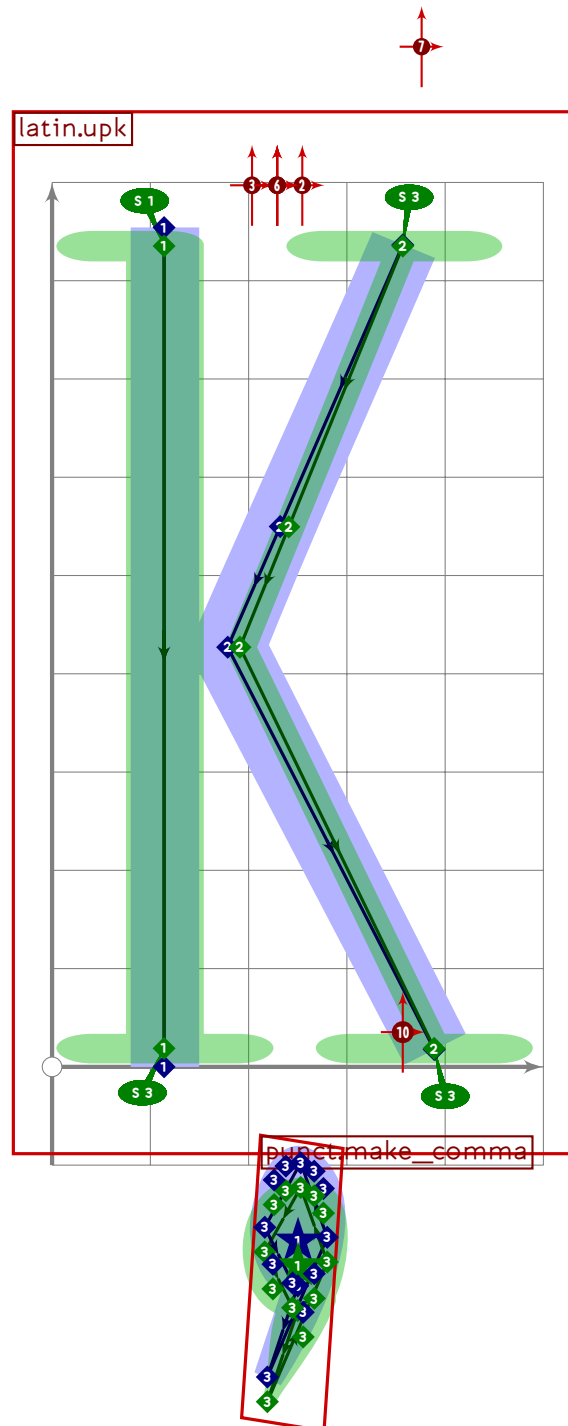


```

209 % J with circumflex
210 begintuglyph("Jcircumflex";52);
211   tsu_accent.apply(tsu_accent.capital(latin.upj))(tsu_accent.circumflex);
212   tsu_render;
213 endtuglyph;
214

```

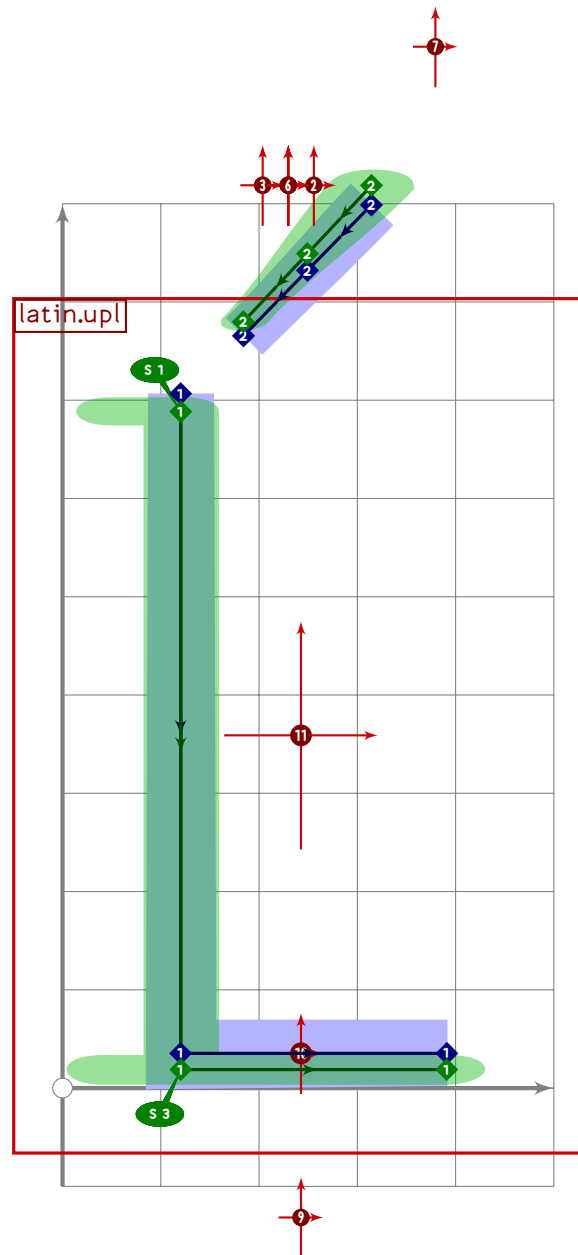
01



```

215 % K with comma below
216 begintsuglyph("uni0136",54);
217   tsu_accent.apply(latin.upk)(tsu_accent.commabelow);
218   tsu_render;
219 endtsuglyph;
220

```

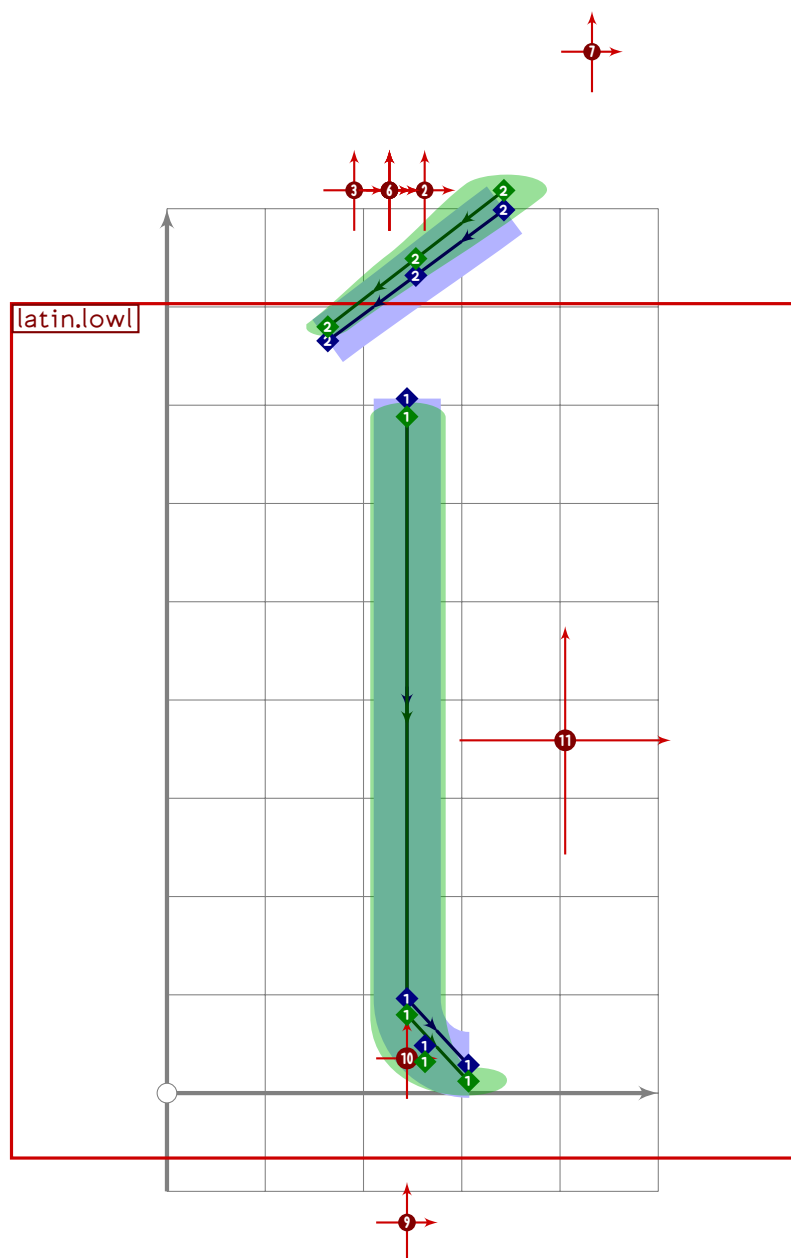


```

221 % L with acute
222 begintsuglyph("Lacute",57);
223   tsu_accent.apply(tsu_accent.capital(latin.upl))(tsu_accent.acute);
224   tsu_render;
225 endtsuglyph;
226

```

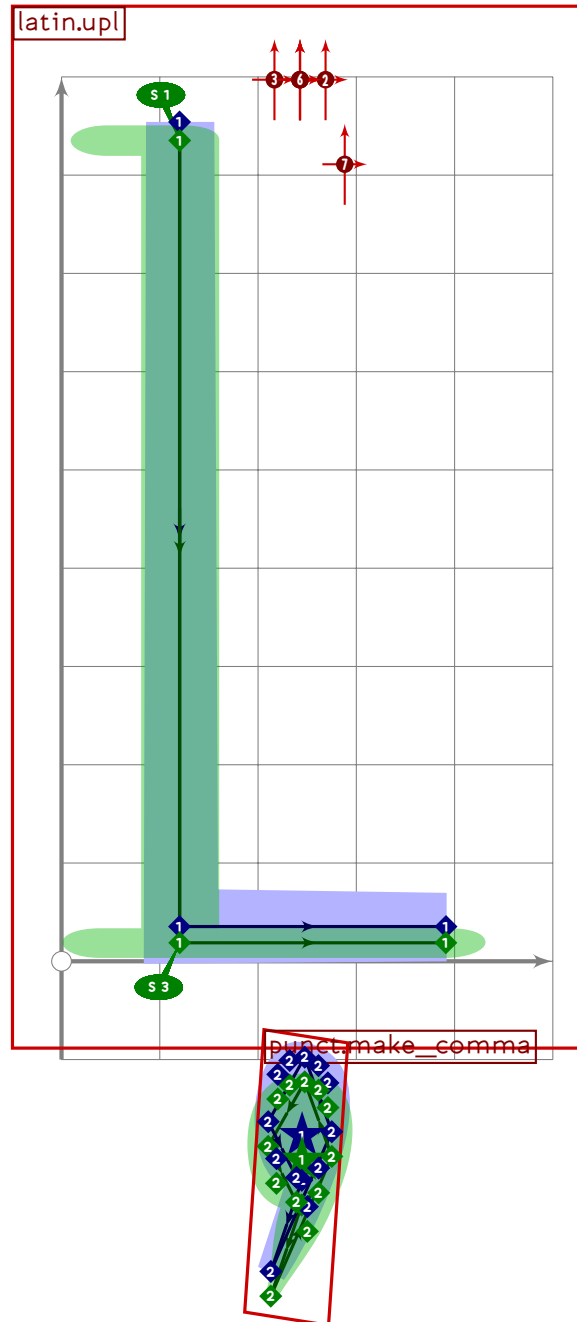
01



```

227 % l with acute
228 begintsuglyph("lacute",58);
229   tsu_accent.apply(tsu_accent.capital(latin.lowl))(tsu_accent.acute);
230   tsu_render;
231 endtsuglyph;
232

```



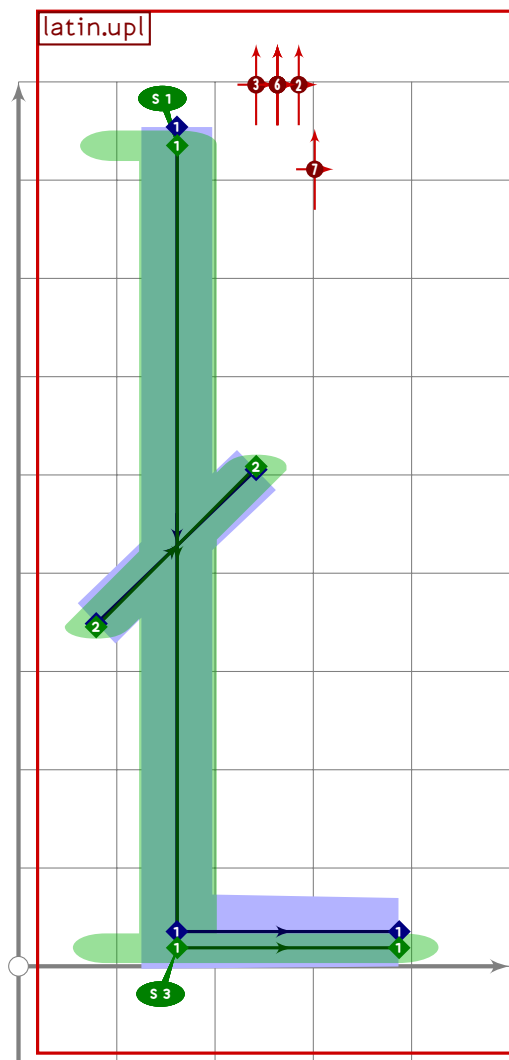
```

233 % L with comma below
234 begintsuglyph("uni013B";59);
235 tsu_accent.apply(latin.upl)(tsu_accent.commabelow);
236 tsu_render;
237 endtsuglyph;
238

```

U+0141
tsuku.Lslash

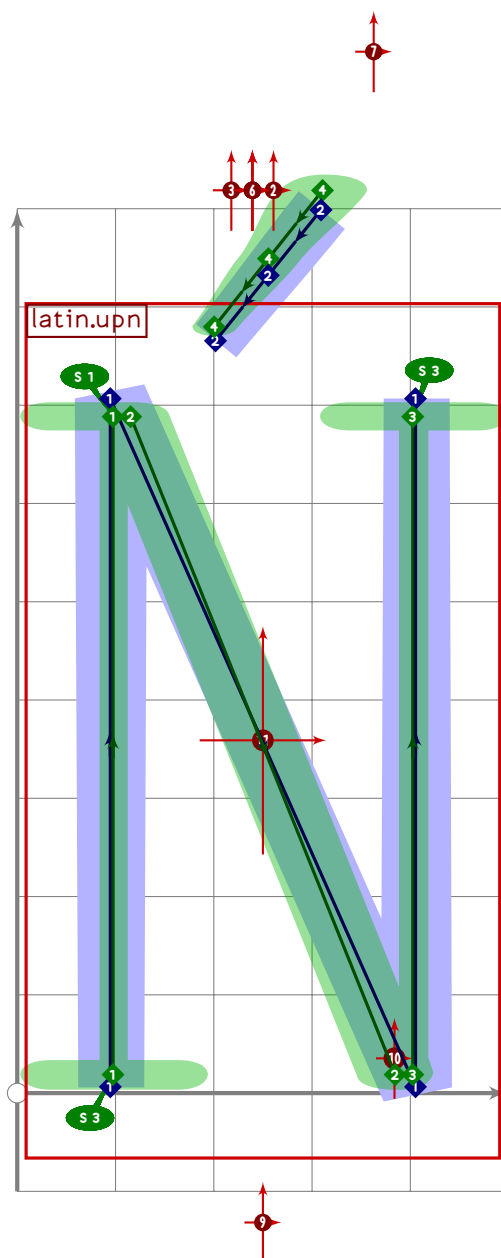
01



```

239 % L with slash
240 begintsuglyph("Lslash",65);
241   latin.upl;
242   push_stroke((160,vmetric(0.40))-(460,vmetric(0.60)),
243     (1.6,1.6)-(1.6,1.6));
244   set_bosize(0,80);
245   tsu_render;
246 endtsuglyph;
247

```

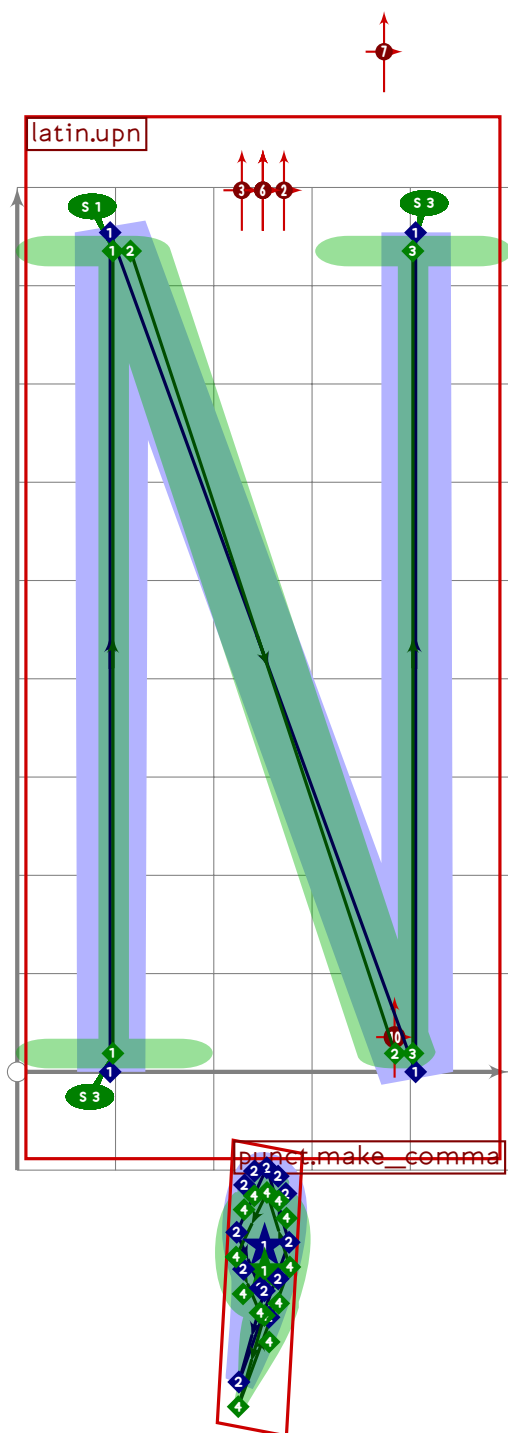



```

248 % N with acute
249 begintsuglyph("Nacute",67);
250 tsu_accent.apply(tsu_accent.capital(latin.upn))(tsu_accent.acute);
251 tsu_render;
252 endtsuglyph;
253

```

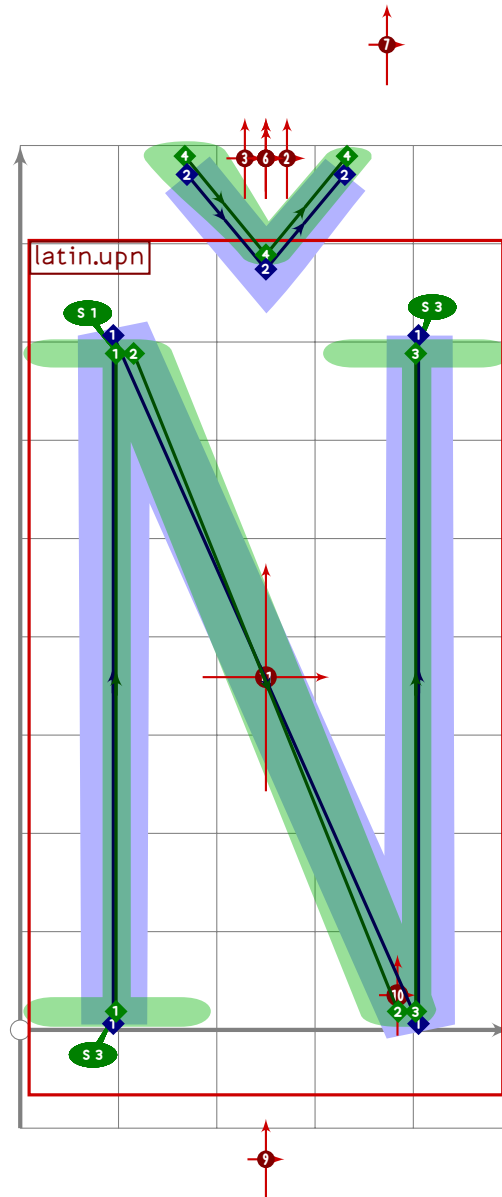
01



```

254 % N with comma below
255 begintsuglyph("uni0145",69);
256 tsu_accent.apply(latin.upn)(tsu_accent.commabelow);
257 tsu_render;
258 endtsuglyph;
259

```

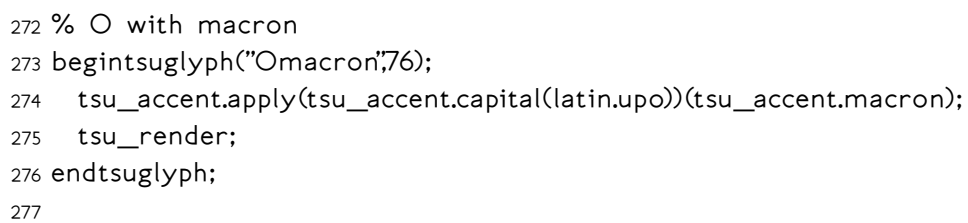


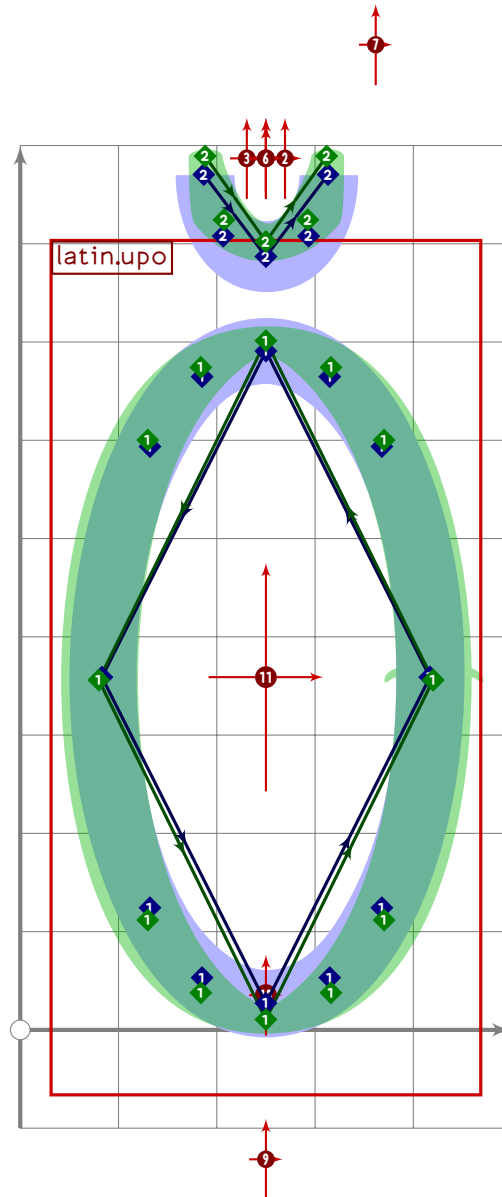
```

260 % N with caron
261 begintsuglyph("Ncaron",71);
262 tsu_accent.apply(tsu_accent.capital(latin.upn))(tsu_accent.caron);
263 tsu_render;
264 endtsuglyph;
265
266 % uppercase Eng
267 begintsuglyph("Eng",74);
268 latin.upeng;
269 tsu_render;
270 endtsuglyph;
271

```

[see page 273]



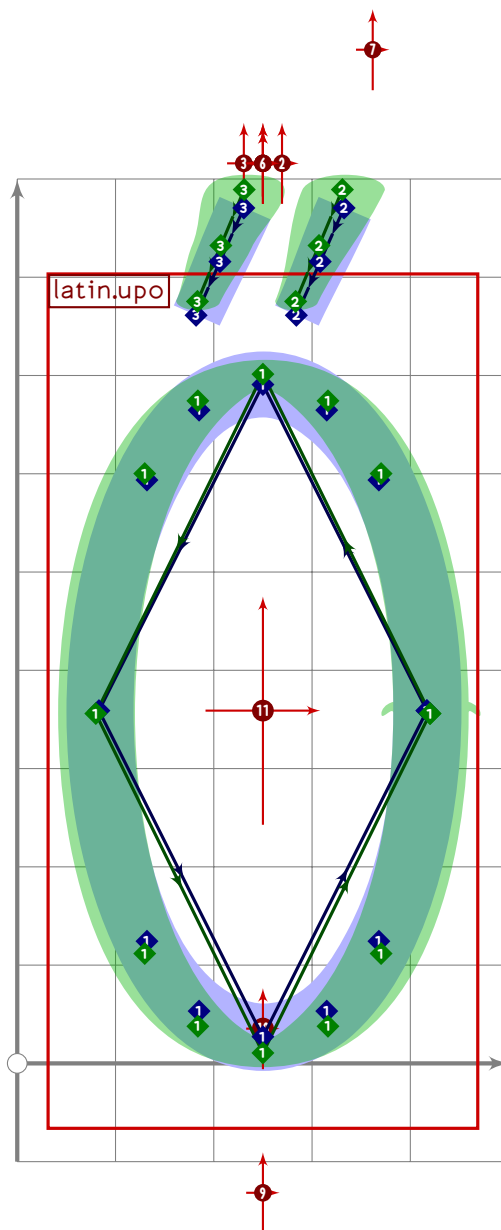


```

278 % O with breve
279 begintsuglyph("Obreve",78);
280   tsu_accent.apply(tsu_accent.capital(latin.upo))(tsu_accent.breve);
281   tsu_render;
282 endtsuglyph;
283

```

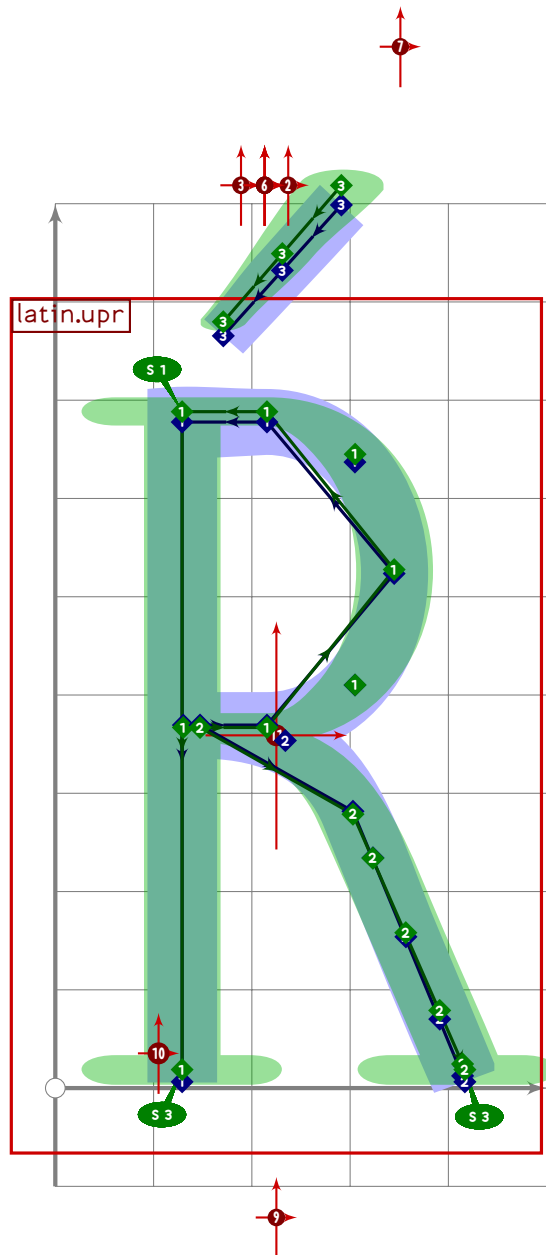
01



```

284 % Ö with Hungarian umlaut
285 begintsuglyph("Öhungarumlaut";80);
286 tsu_accent.apply(tsu_accent.capital(latin.upo))(tsu_accent.hungarian_umlaut);
287 tsu_render;
288 endtsuglyph;
289

```

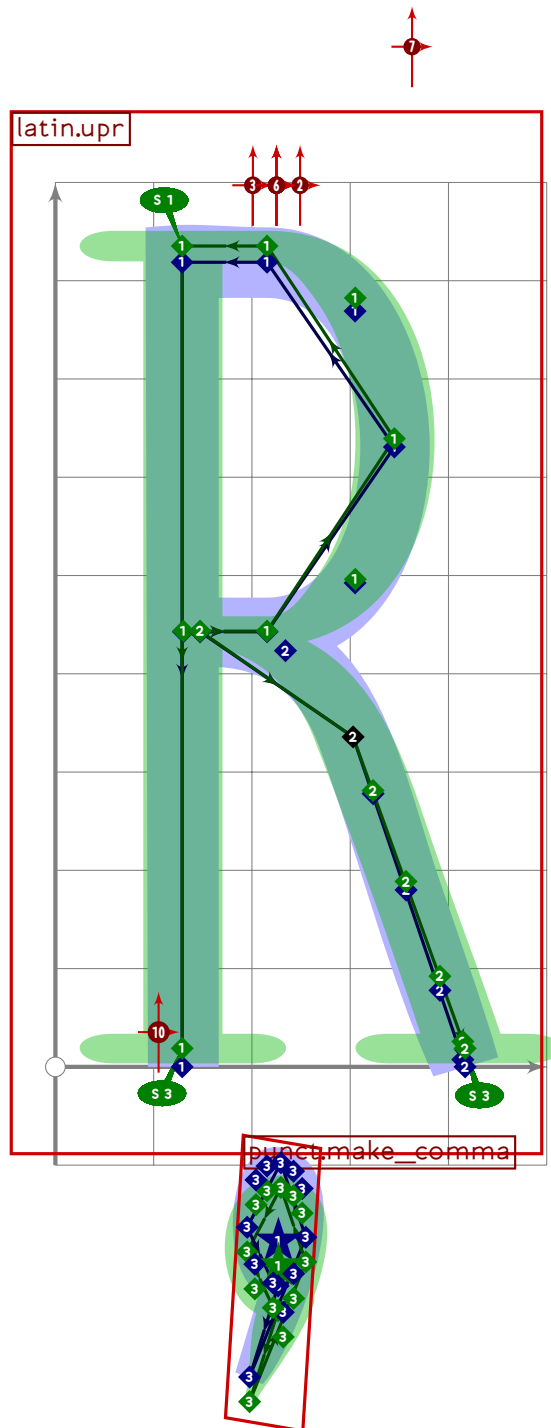


```

290 % R with acute
291 begintsuglyph("Racute";84);
292   tsu_accent.apply(tsu_accent.capital(latin.upr))(tsu_accent.acute);
293   tsu_render;
294 endtsuglyph;
295

```

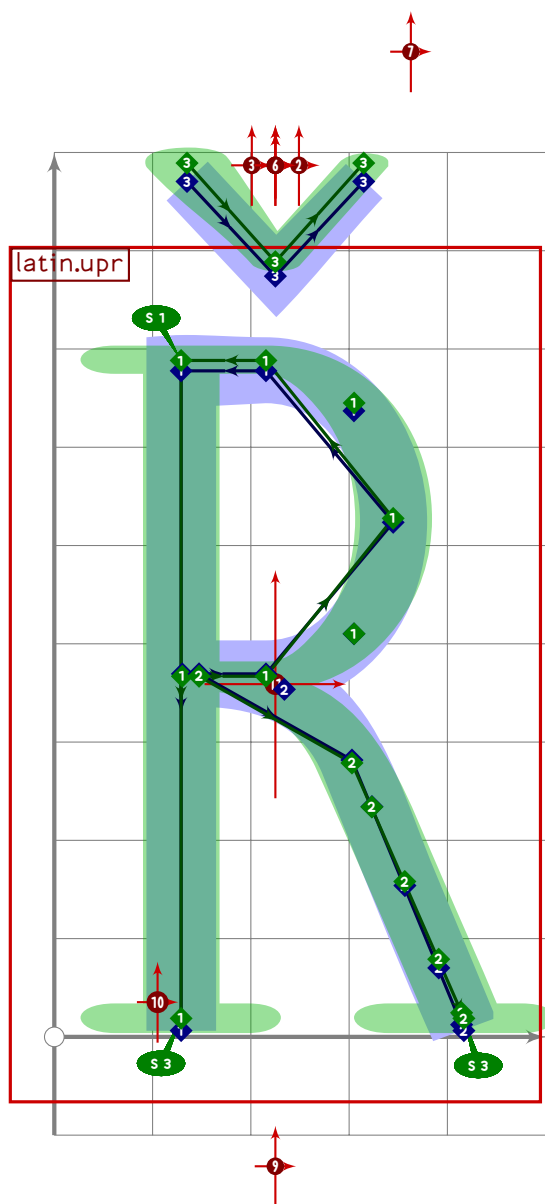
01



```

296 % R with comma below
297 begint Suglyph("uni0156",86);
298   tsu_accent.apply(latin.upr)(tsu_accent.commabelow);
299   tsu_render;
300 endtsuglyph;
301

```

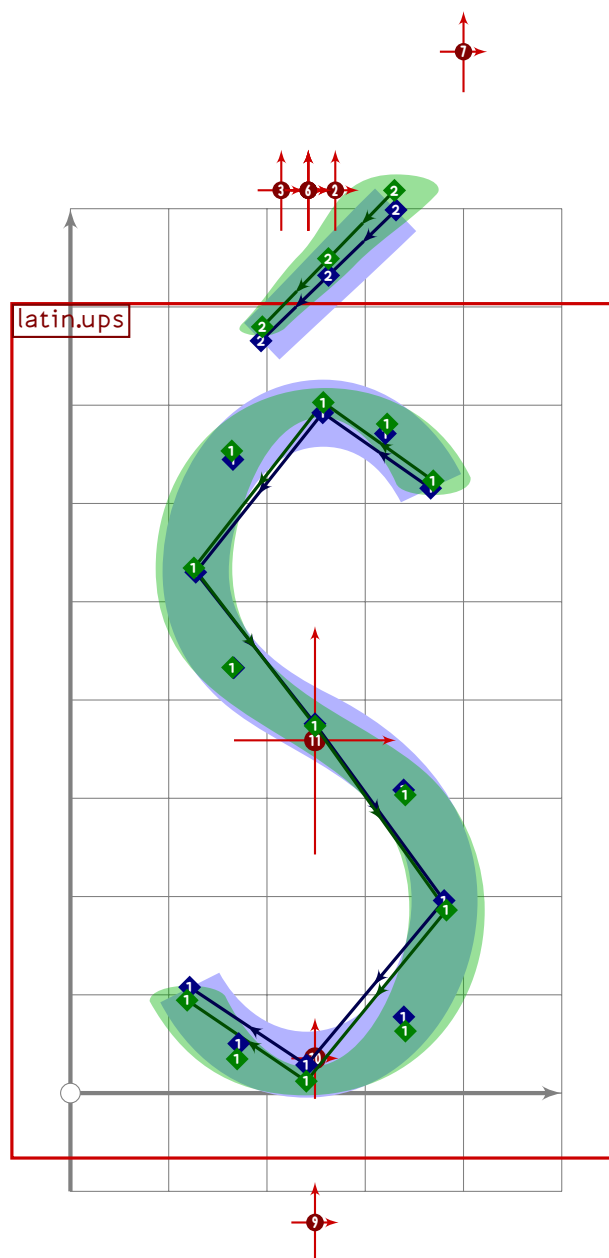



```

302 % R with caron
303 begintsuglyph("Rcaron";88);
304   tsu_accent.apply(tsu_accent.capital(latin.upr))(tsu_accent.caron);
305   tsu_render;
306 endtsuglyph;
307

```

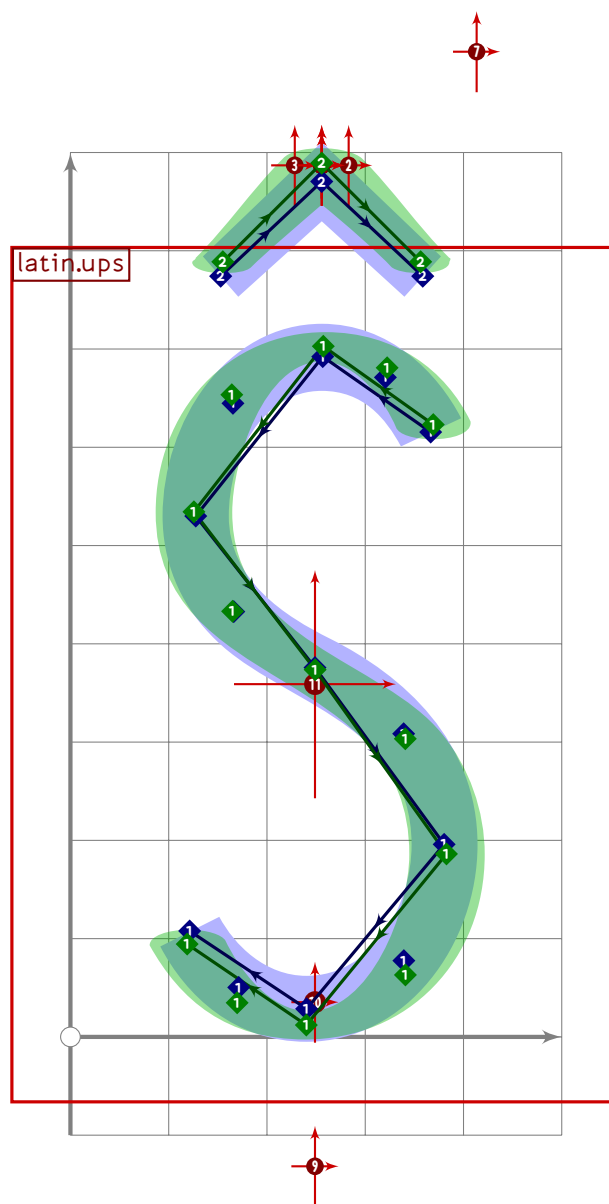
01



```

308 % S with acute
309 begint Suglyph("Sacute";90);
310   tsu_accent.apply(tsu_accent.capital(latin.ups))(tsu_accent.acute);
311   tsu_render;
312 endtsuglyph;
313

```

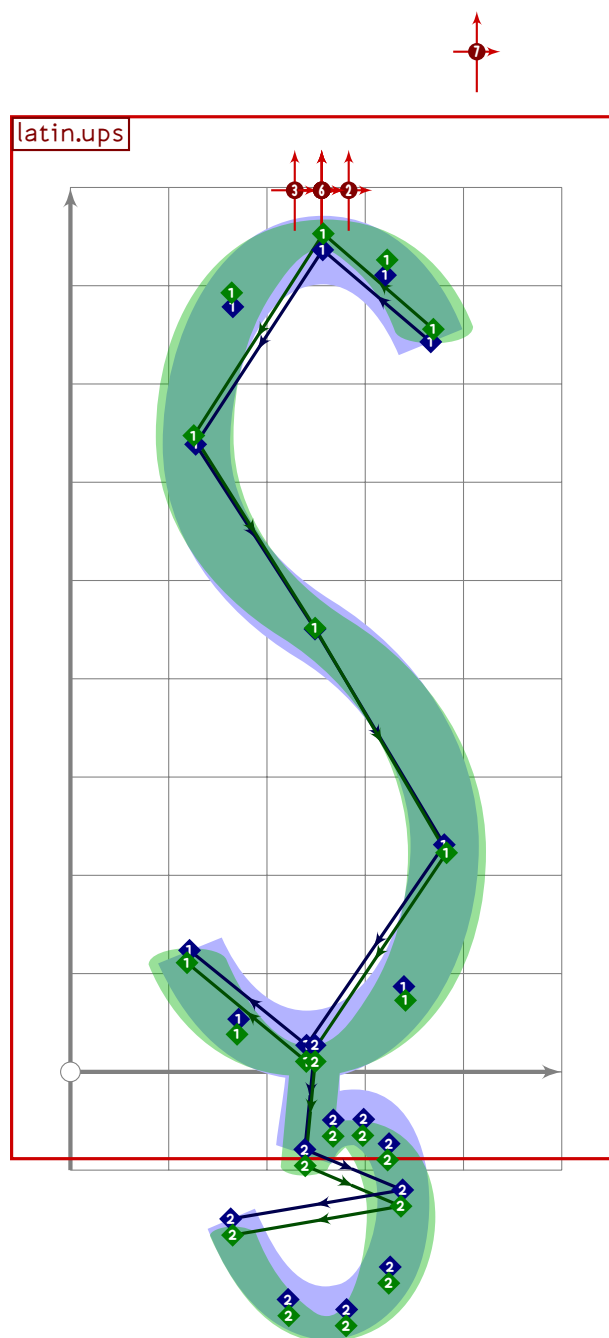


```

314 % S with circumflex
315 begint Suglyph("Scircumflex";92);
316   tsu_accent.apply(tsu_accent.capital(latin.ups))(tsu_accent.circumflex);
317   tsu_render;
318 endtsuglyph;
319

```

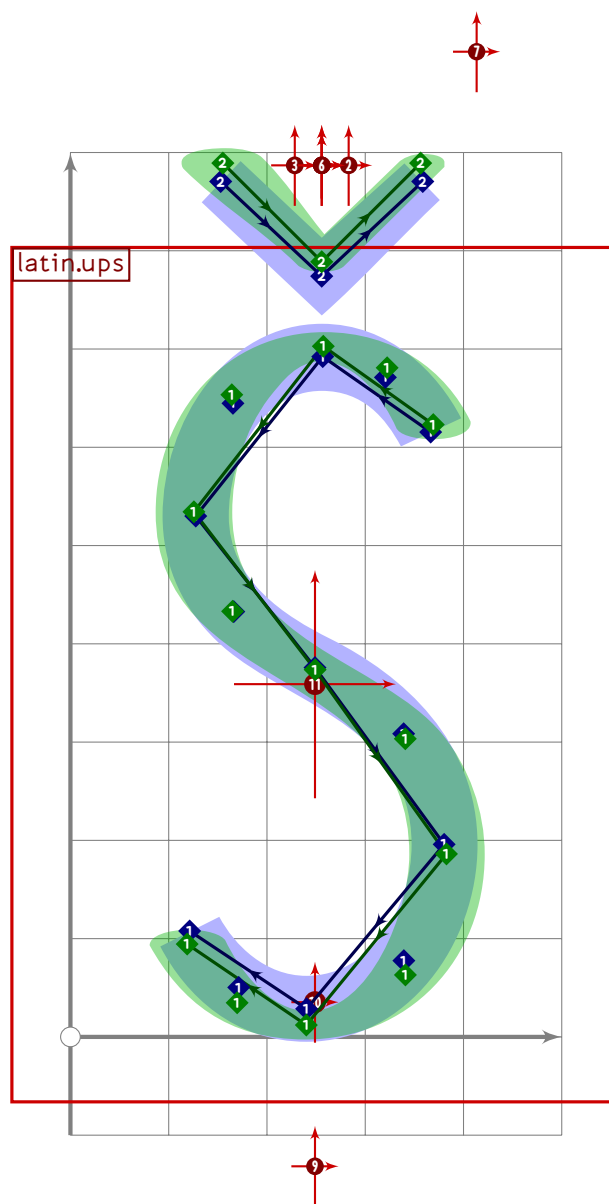
01



```

320 % S with cedilla
321 begintsuglyph("Scedilla";94);
322   tsu_accent.apply(latin.ups)(tsu_accent.cedilla);
323   tsu_render;
324 endtsuglyph;
325

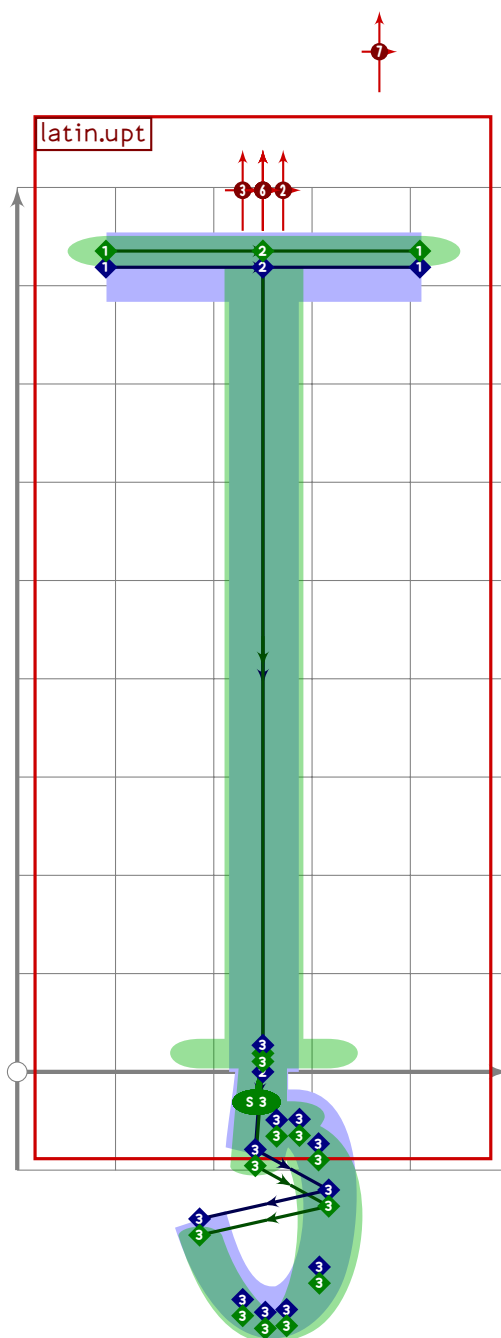
```



```

326 % S with caron
327 begintsuglyph("Scaron",96);
328   tsu_accent.apply(tsu_accent.capital(latin.ups))(tsu_accent.caron);
329   tsu_render;
330 endtsuglyph;
331

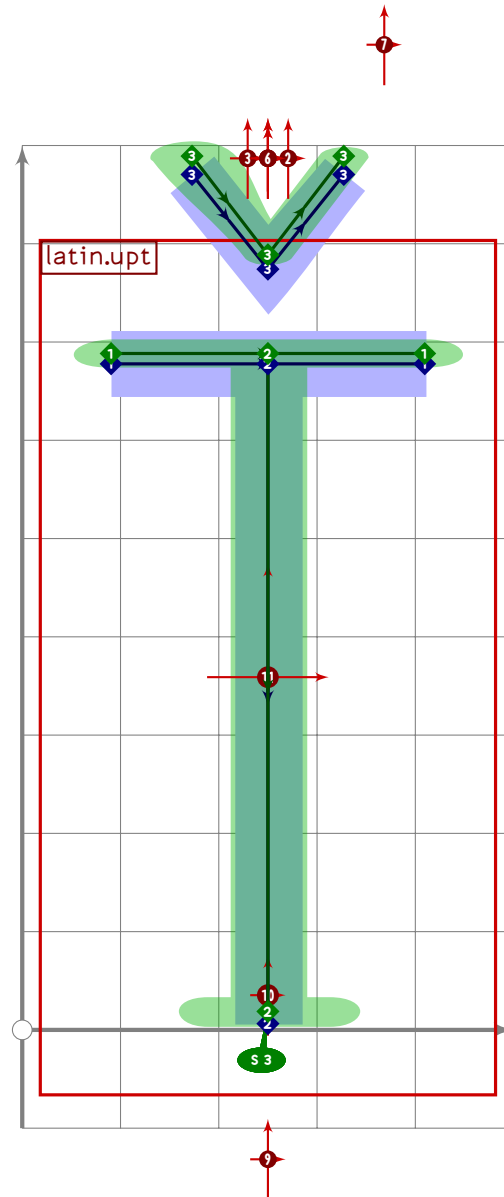
```



```

332 % T with cedilla [sic]
333 begint Suglyph("uni0162";98);
334   tsu_accent.apply(latin.upt)(tsu_accent.cedilla);
335   tsu_render;
336 endtsuglyph;
337

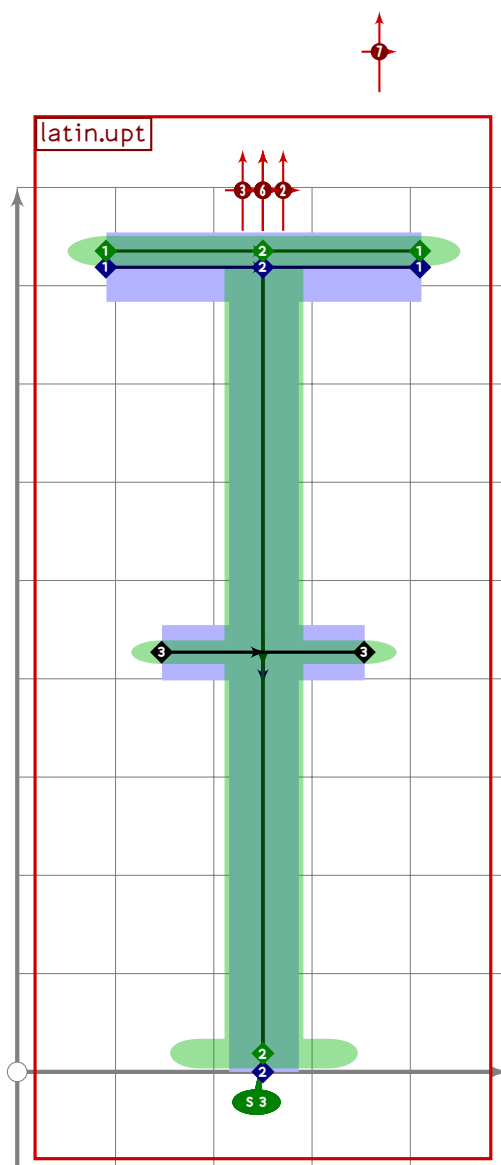
```



```

338 % T with caron
339 begintsuglyph("Tcaron",100);
340 tsu_accent.apply(tsu_accent.capital(latin.upt))(tsu_accent.caron);
341 tsu_render;
342 endtsuglyph;
343

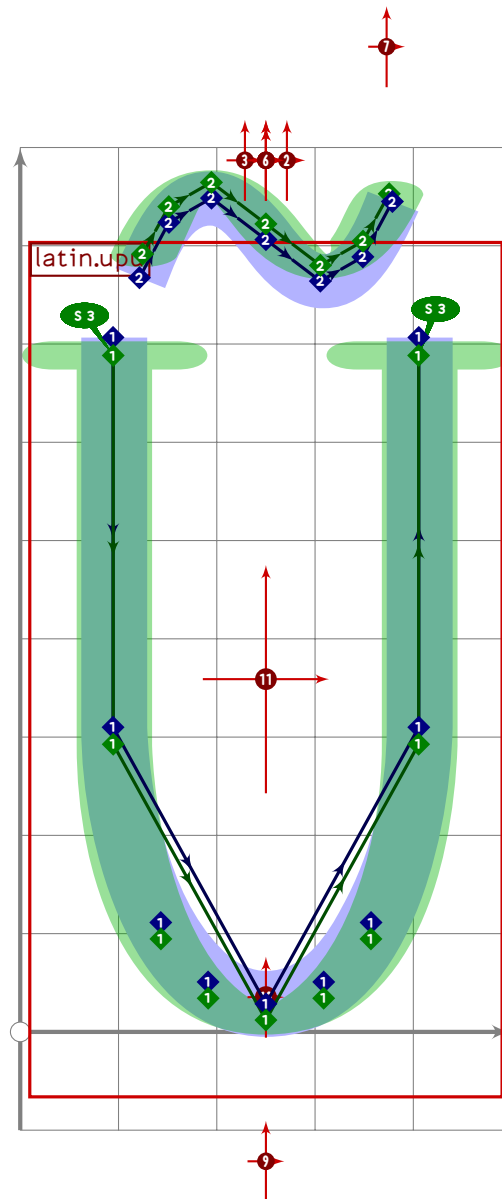
```



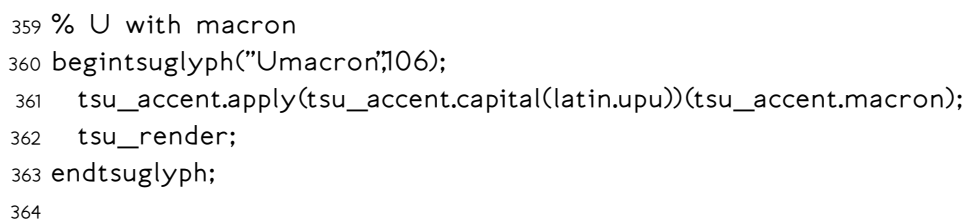
```

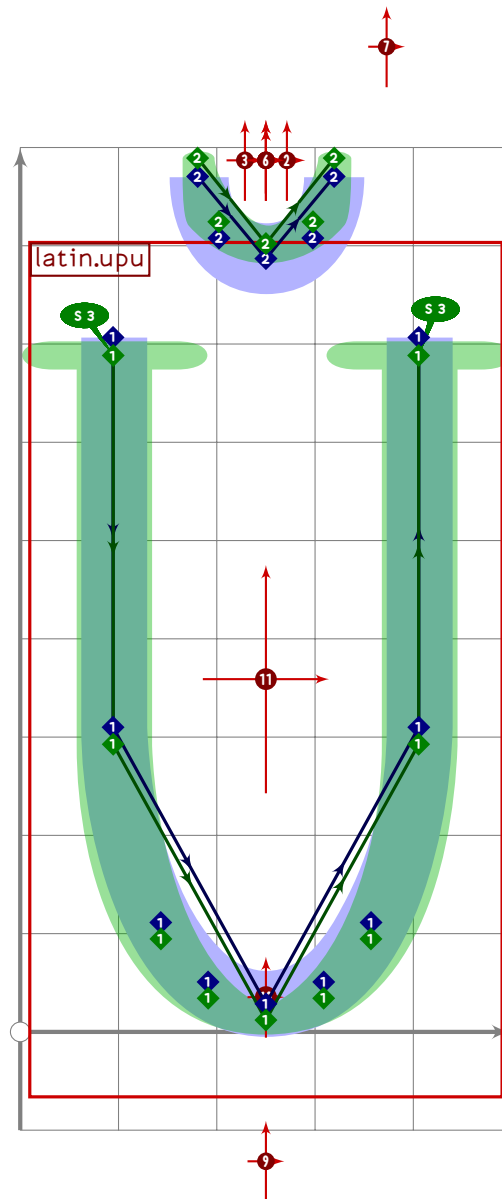
344 % T with bar
345 begintsuglyph("Tbar",102);
346 latin.upt;
347 push_stroke(((300,vmetric(0.5))-(700,vmetric(0.5)),
348   (1.6,1.6)-(1.6,1.6));
349 set_bosize(0,80);
350 tsu_render;
351 endsuglyph;
352

```

1065

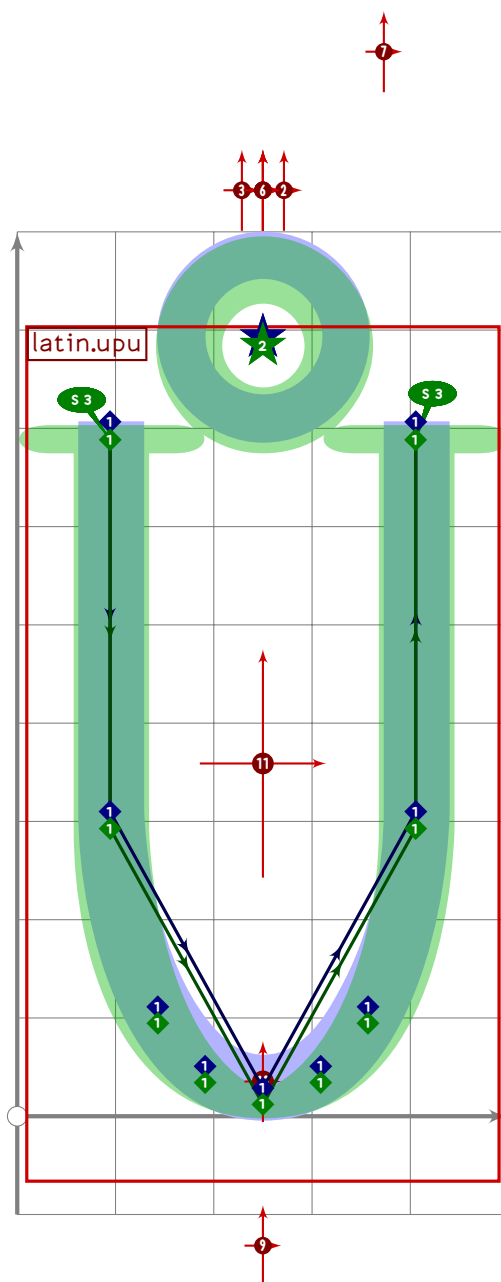




```

365 % U with breve
366 begintsuglyph("Ubreve",108);
367   tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.breve);
368   tsu_render;
369 endtsuglyph;
370

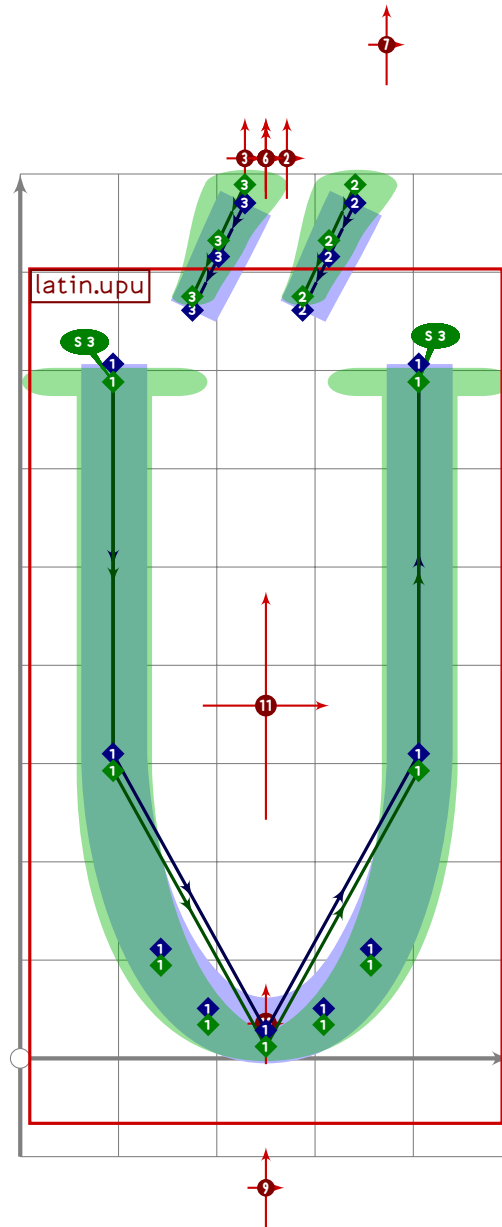
```



```

371 % U with ring above
372 begintsuglyph("Uring",110);
373     tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.ringabove);
374     tsu_render;
375 endtsuglyph;
376

```



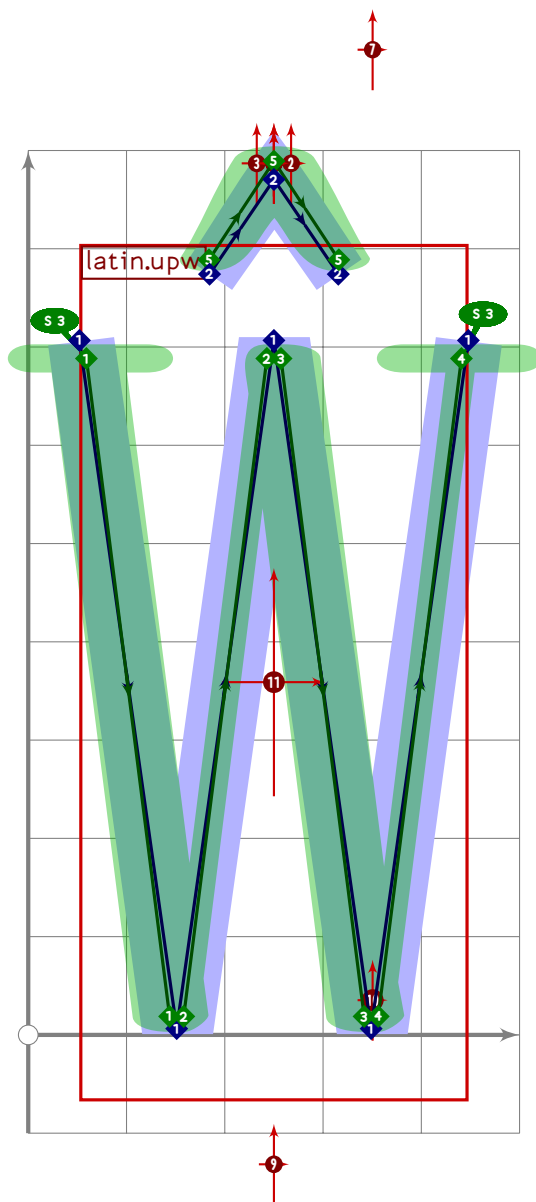
```

377 % U with Hungarian umlaut
378 begintsuglyph("Uhungarumlaut",112);
379 tsu_accent.apply(tsu_accent.capital(latin.upu))(tsu_accent.hungarian_umlaut);
380 tsu_render;
381 endtsuglyph;
382
383 % U with ogonek
384 begintsuglyph("Uogonek",114);
385 latin.upuogonek;
386 tsu_render;
387 endtsuglyph;
388

```

[see page 355]

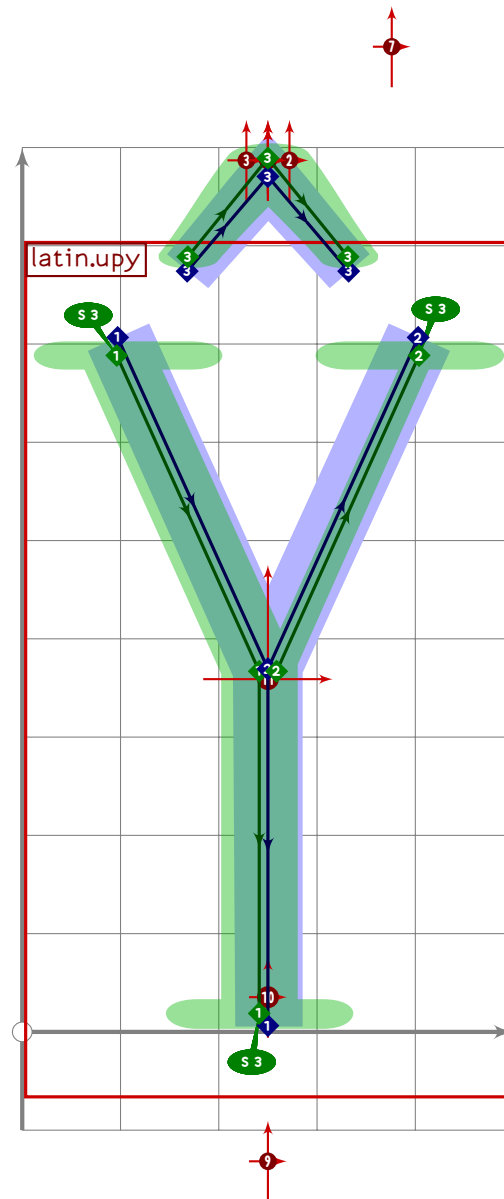
01



```

389 % W with circumflex
390 begintsglyph("Wcircumflex";116);
391   tsu_accent.apply(tsu_accent.capital(latin.upw))(tsu_accent.circumflex);
392   tsu_render;
393 endtsuglyph;
394

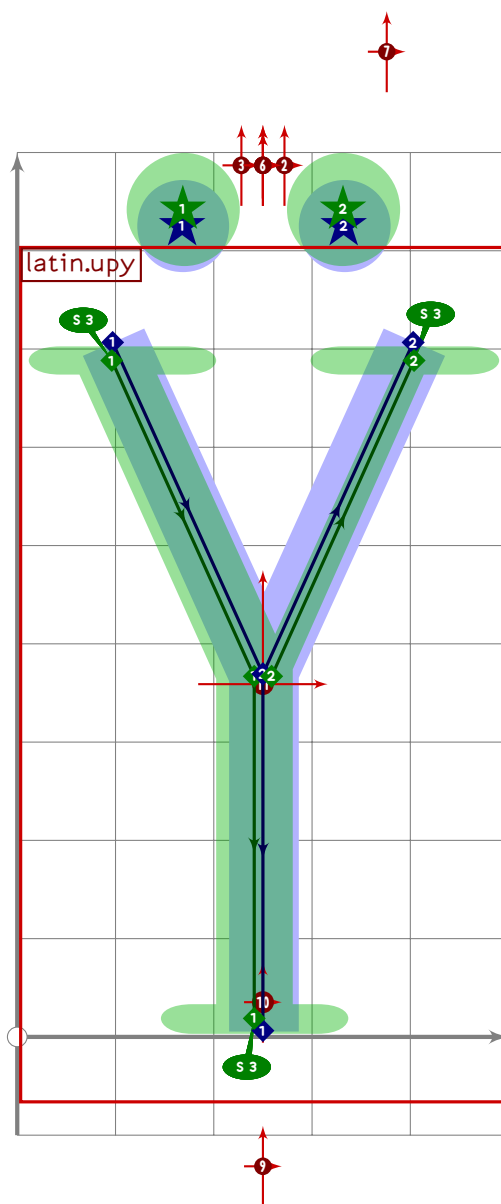
```



```

395 % Y with circumflex
396 begint Suglyph("Ycircumflex",118);
397   tsu_accent.apply(tsu_accent.capital(latin.upy))(tsu_accent.circumflex);
398   tsu_render;
399 endtsuglyph;
400

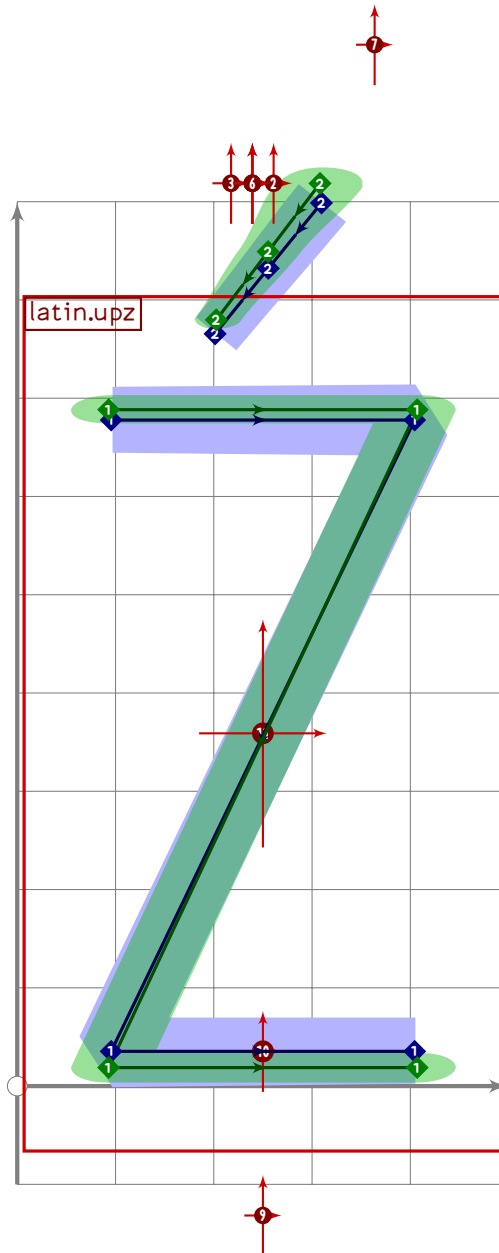
```



```

401 % Y with umlaut/dieresis
402 begintsuglyph("Ydieresis",120);
403   tsu_accent.apply(tsu_accent.capital(latin.upy))(tsu_accent.umlaut);
404   tsu_render;
405 endtsuglyph;
406

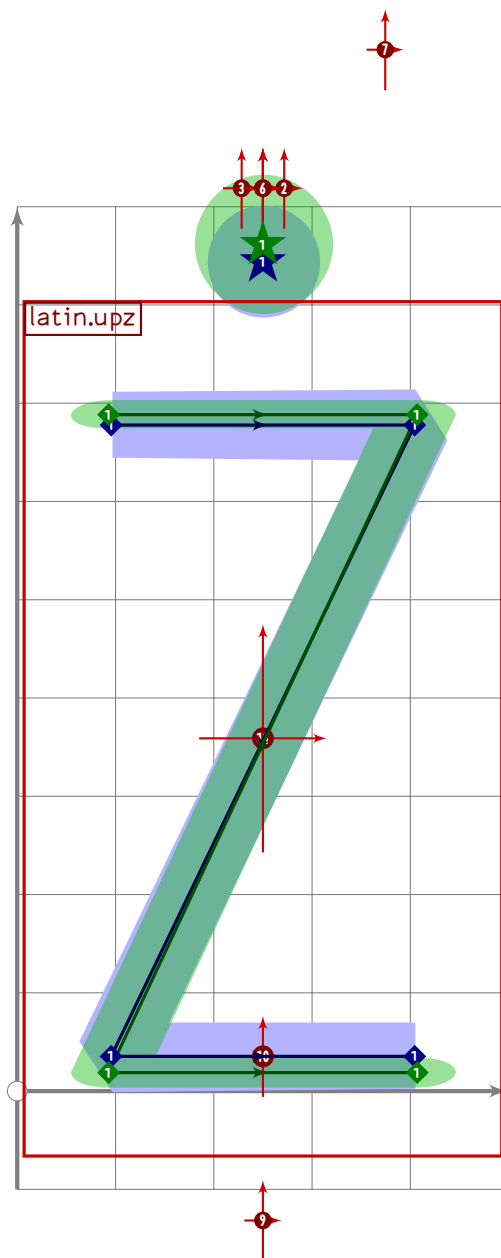
```

```

407 % Z with acute
408 begintsuglyph("Zacute";121);
409   tsu_accent.apply(tsu_accent.capital(latin.upz))(tsu_accent.acute);
410   tsu_render;
411 endtsuglyph;
412

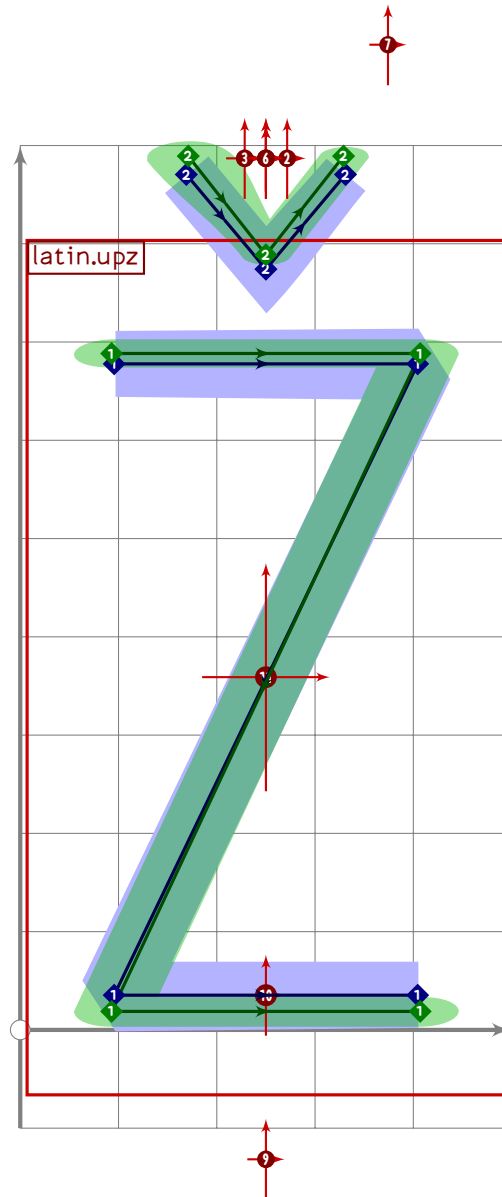
```



```

413 % Z with dot
414 begintsuglyph("Zdotaccent",123);
415   tsu_accent.apply(tsu_accent.capital(latin.upz))(tsu_accent.dotabove);
416   tsu_render;
417 endtsuglyph;
418

```



```

419 % Z with caron
420 begintsuglyph("Zcaron";125);
421   tsu_accent.apply(tsu_accent.capital(latin.upz))(tsu_accent.caron);
422   tsu_render;
423 endtsuglyph;
424
425
426

```

Latin Extended A Lowercase

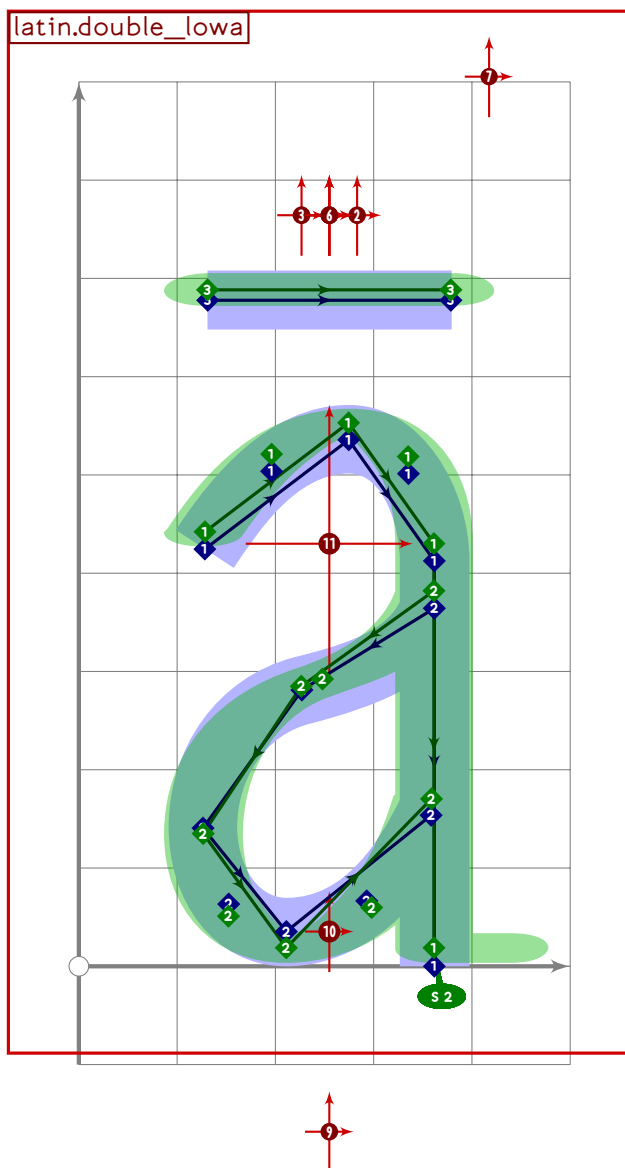
```

427 % LATIN EXTENDED A LOWERCASE
428
429 tsu_accent.low_default_anchors;
430

```

U+0101
tsuku.amacron

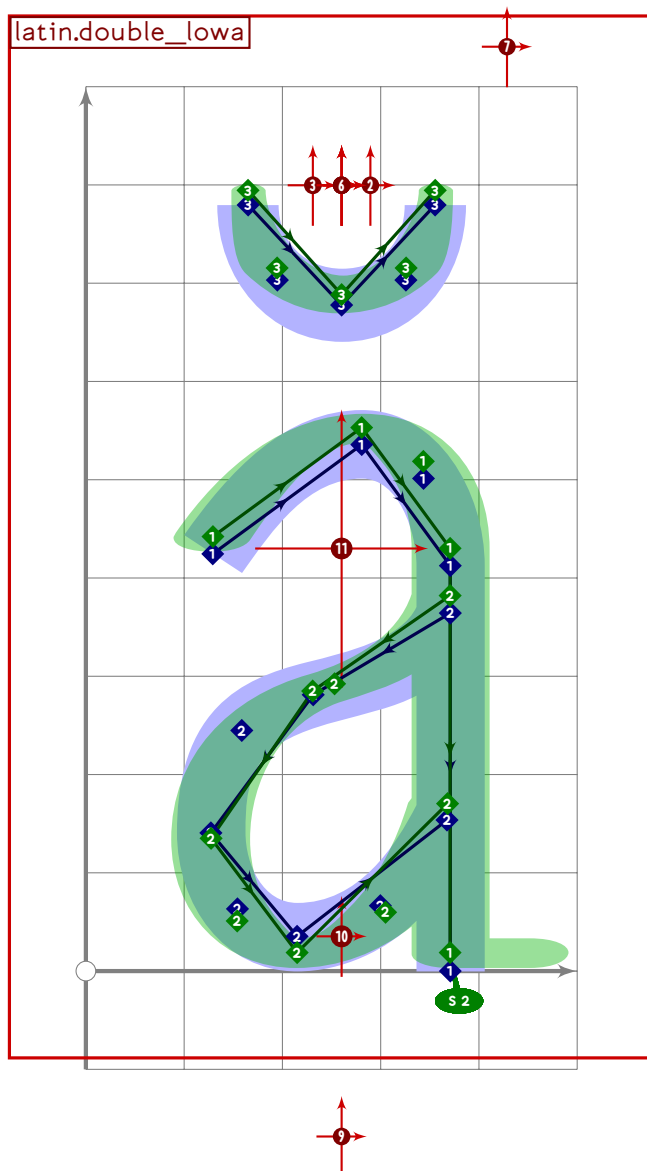
01



```

431 % a with macron
432 begintsuglyph("amacron",1);
433   tsu_accent.apply(latin.low_a)(tsu_accent.macron);
434   tsu_render;
435 endtsuglyph;
436

```



```

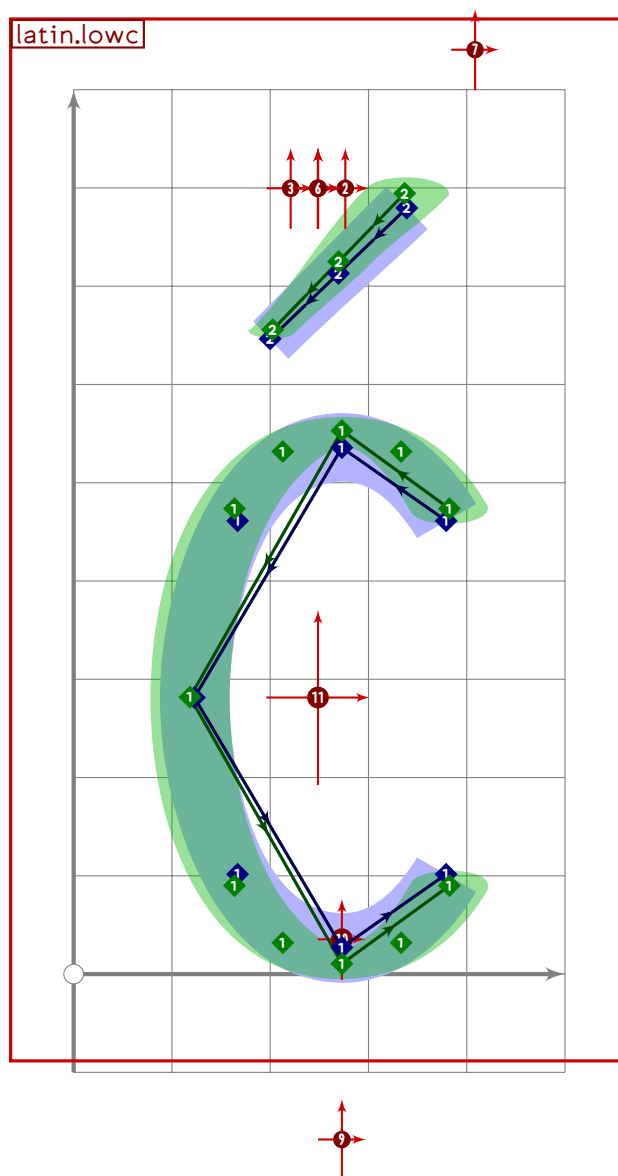
437 % a with breve
438 begintsuglyph("abreve";3);
439 tsu_accent.apply(latin.lowa)(tsu_accent.breve);
440 tsu_render;
441 endtsuglyph;
442
443 % a with ogonek
444 begintsuglyph("aogonek";5);
445 latin.lowaogonek;
446 tsu_render;
447 endtsuglyph;
448

```

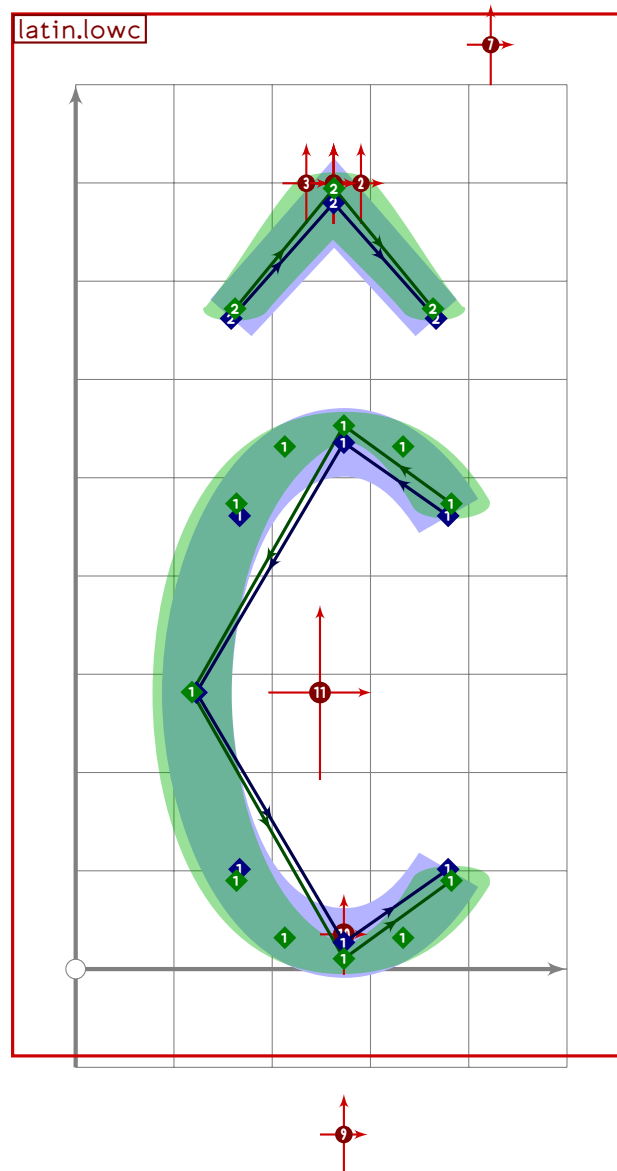
[see page 357]

U+0107
tsuku.cacute

01



```
449 % c with acute
450 begint Suglyph("cacute",7);
451   tsu_accent.apply(latin.lowc)(tsu_accent.acute);
452   tsu_render;
453 endtsuglyph;
454
```



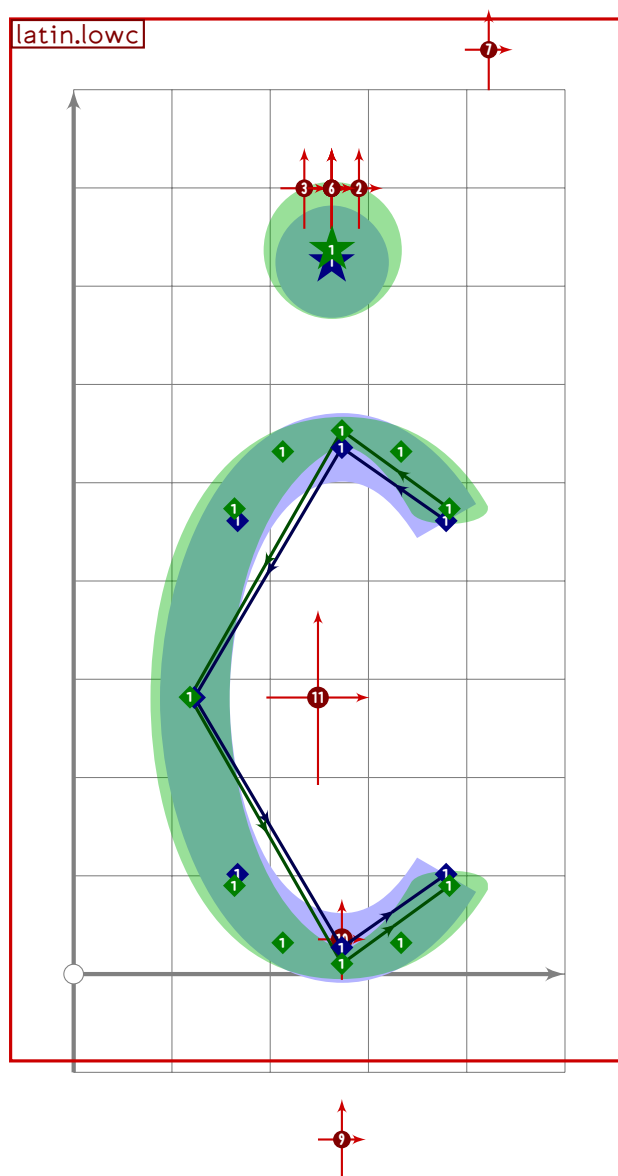
```

455 % c with circumflex
456 begint Suglyph("ccircumflex";9);
457   tsu_accent.apply(latin.lowc)(tsu_accent.circumflex);
458   tsu_render;
459 endtsuglyph;
460

```

U+010B
tsuku.cdottaccent

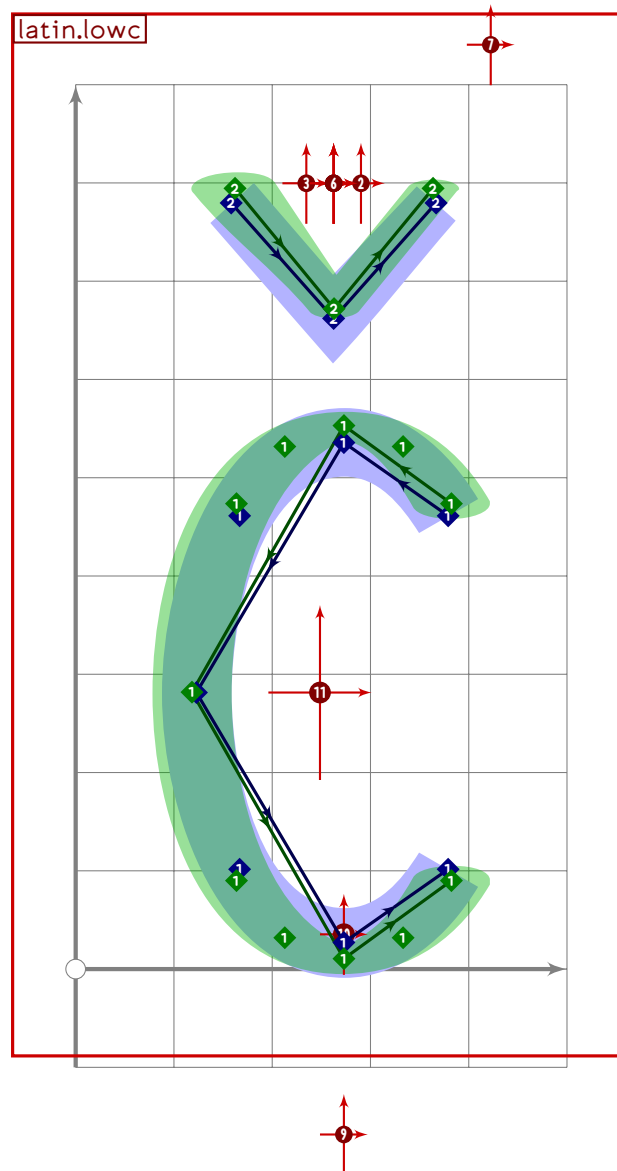
01



```

461 % c with dot above
462 begintsuglyph("cdottaccent",11);
463   tsu_accent.apply(latin.lowc)(tsu_accent.dotabove);
464   tsu_render;
465 endtsuglyph;
466

```

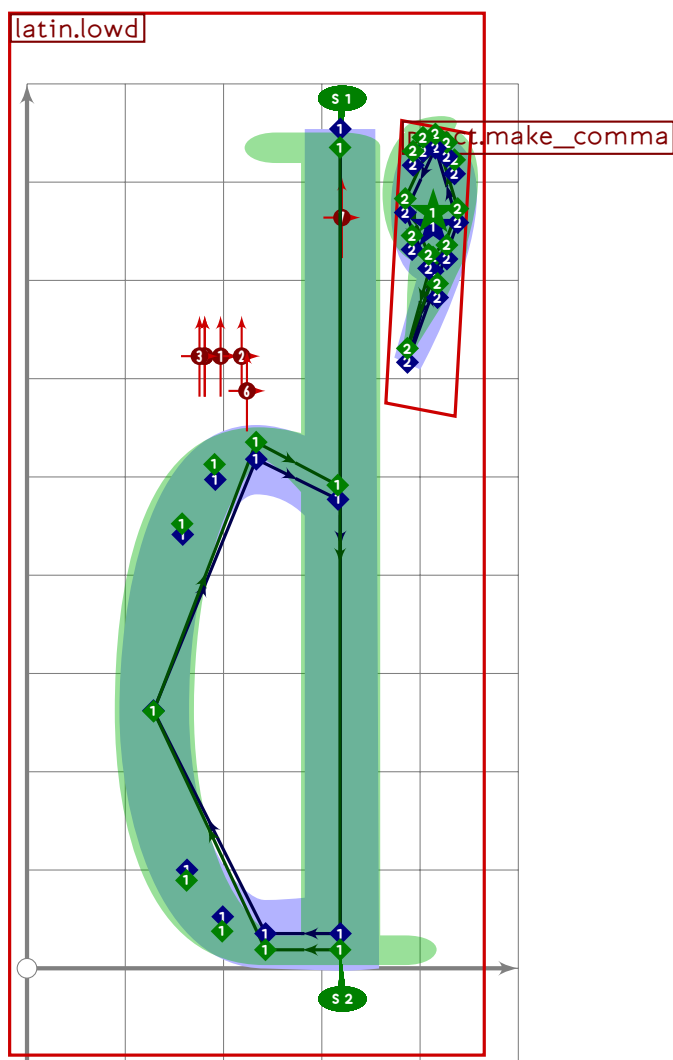
```

467 % c with caron
468 begintsuglyph("ccaron",13);
469   tsu_accent.apply(latin.lowc)(tsu_accent.caron);
470   tsu_render;
471 endtsuglyph;
472

```

U+010F
tsuku.dcaron

01



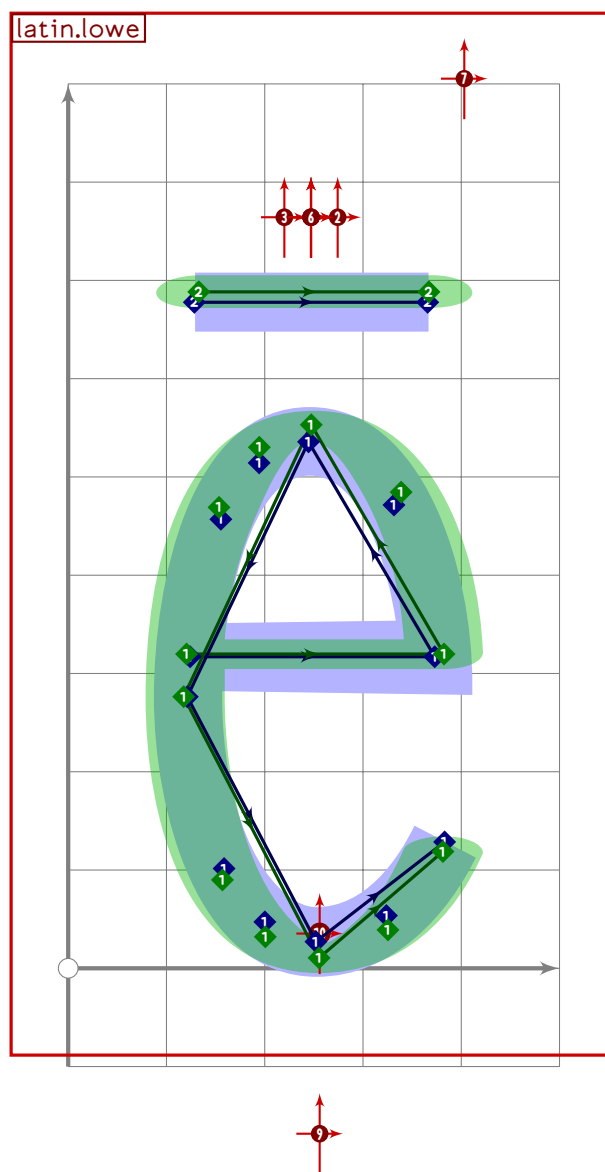
```

473 % d with caron apostrophe
474 begint Suglyph("dcaron",15);
475   tsu_accent.apply(latin.lowd)(tsu_accent.caron_comma);
476   tsu_render;
477 endtsuglyph;
478

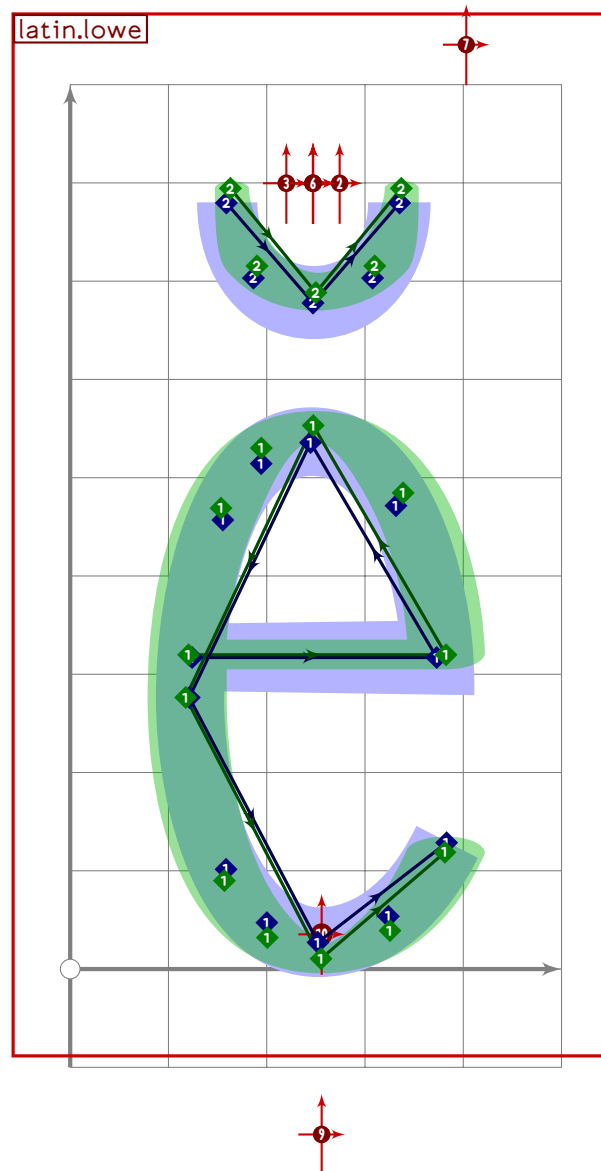
```


U+0113
tsuku.Emacron

01



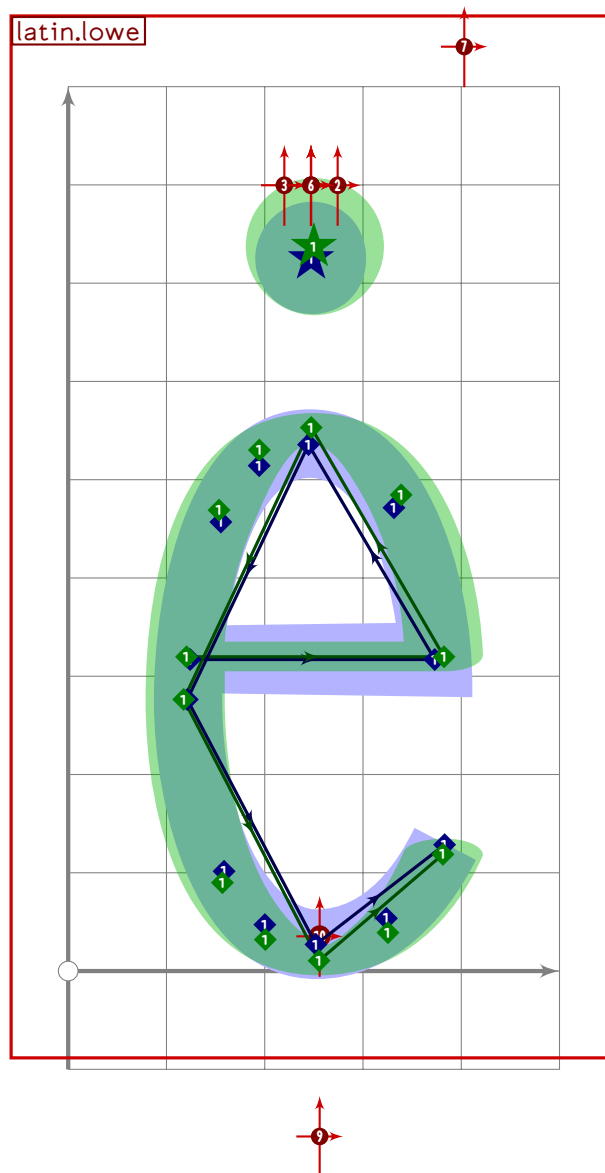
```
488 % e with macron
489 begintsuglyph("emacron",19);
490 tsu_accent.apply(latin.love)(tsu_accent.macron);
491 tsu_render;
492 endtsuglyph;
493
```



```

494 % e with breve
495 begintsuglyph("ebreve";21);
496   tsu_accent.apply(latin.lowe)(tsu_accent.breve);
497   tsu_render;
498 endtsuglyph;
499

```

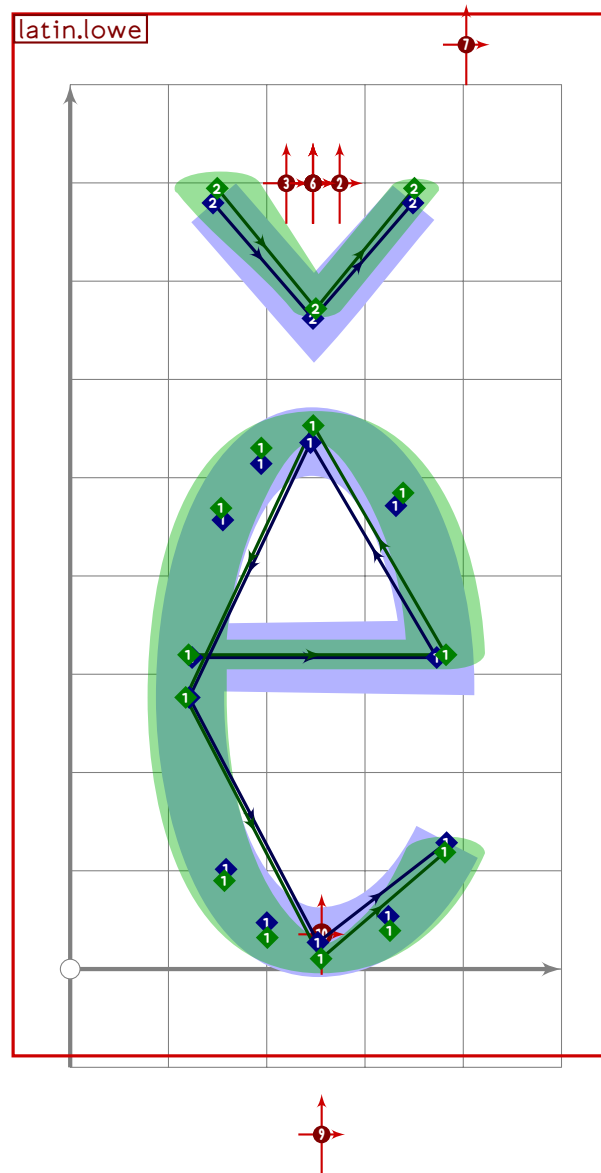


```

500 % e with dot
501 begintsuglyph("edotaccent";23);
502   tsu_accent.apply(latin.lowe)(tsu_accent.dotabove);
503   tsu_render;
504 endtsuglyph;
505
506 % e with ogonek
507 begintsuglyph("eogonek";25);
508   latin.loweogonek;
509   tsu_render;
510 endtsuglyph;
511

```

[see page 358]



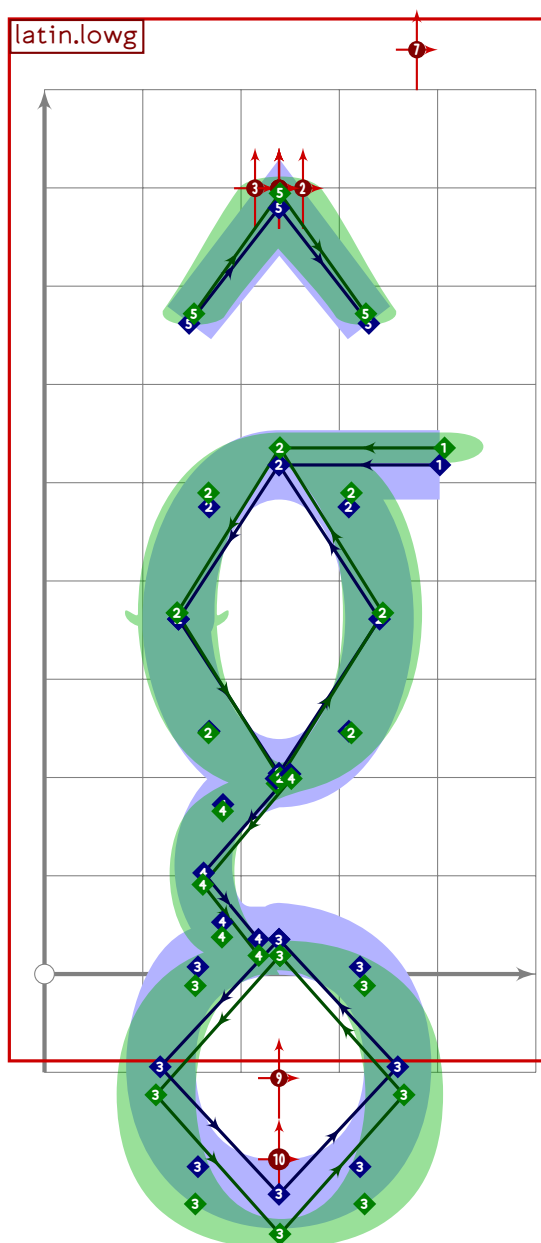
```

512 % e with caron
513 begintsuglyph("ecaron";27);
514   tsu_accent.apply(latin.lowe)(tsu_accent.caron);
515   tsu_render;
516 endtsuglyph;
517

```

U+011D
tsuku.gcircumflex

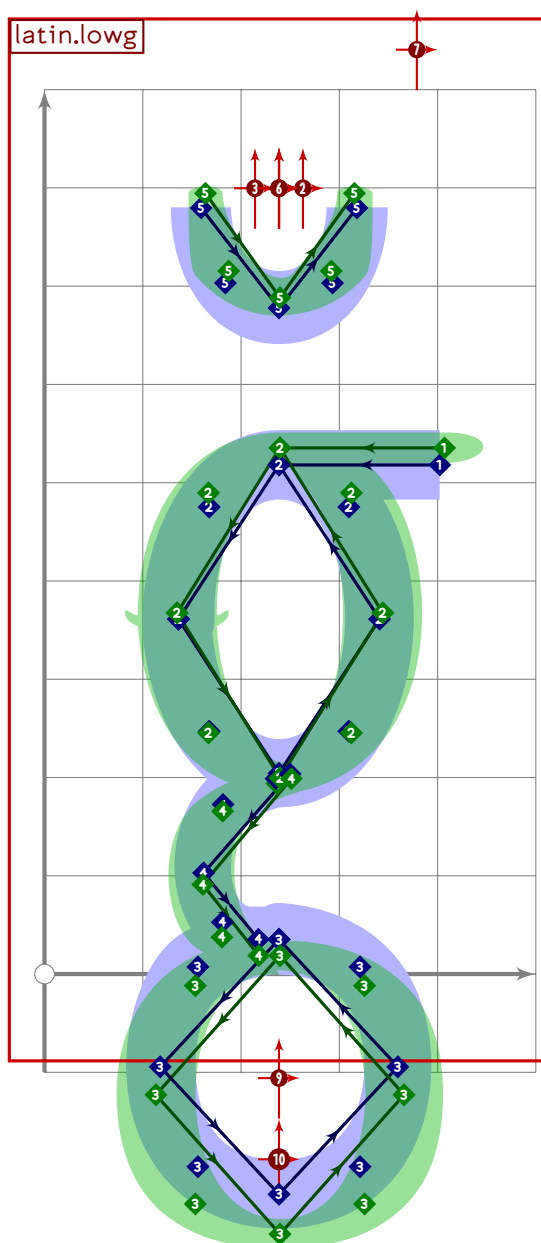
01



```

518 % g with circumflex
519 begintsuglyph("gcircumflex";29);
520 tsu_accent.apply(latin.lowg)(tsu_accent.circumflex);
521 tsu_render;
522 endsuglyph;
523

```

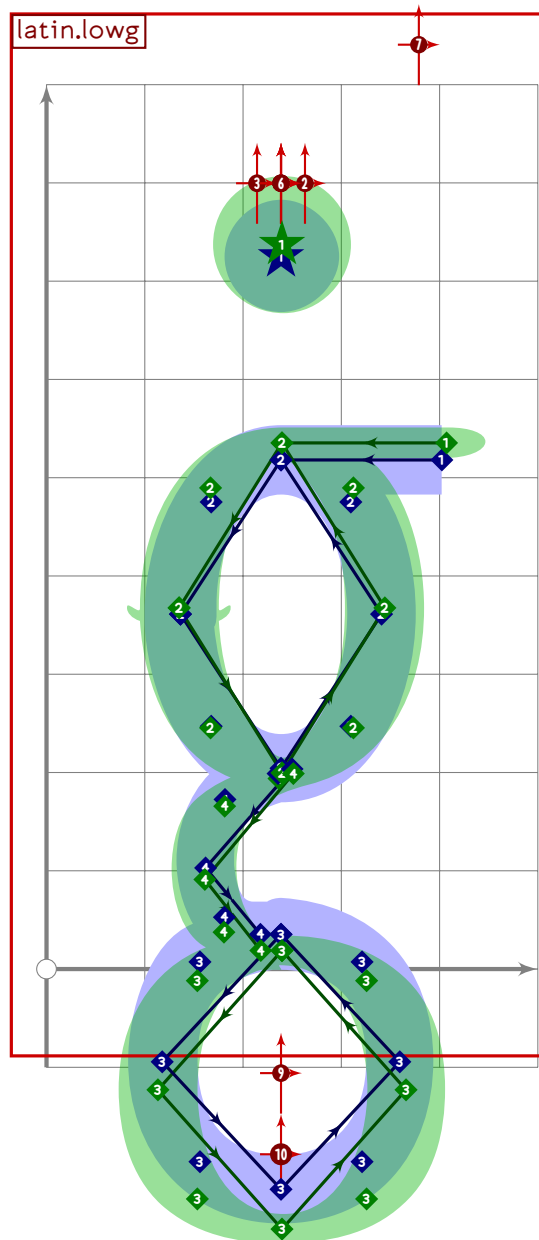
```

524 % g with breve
525 begintsuglyph("gbrevé";31);
526   tsu_accent.apply(latin.lowg)(tsu_accent.breve);
527   tsu_render;
528 endtsuglyph;
529

```

U+0121
tsuku.gdotaccent

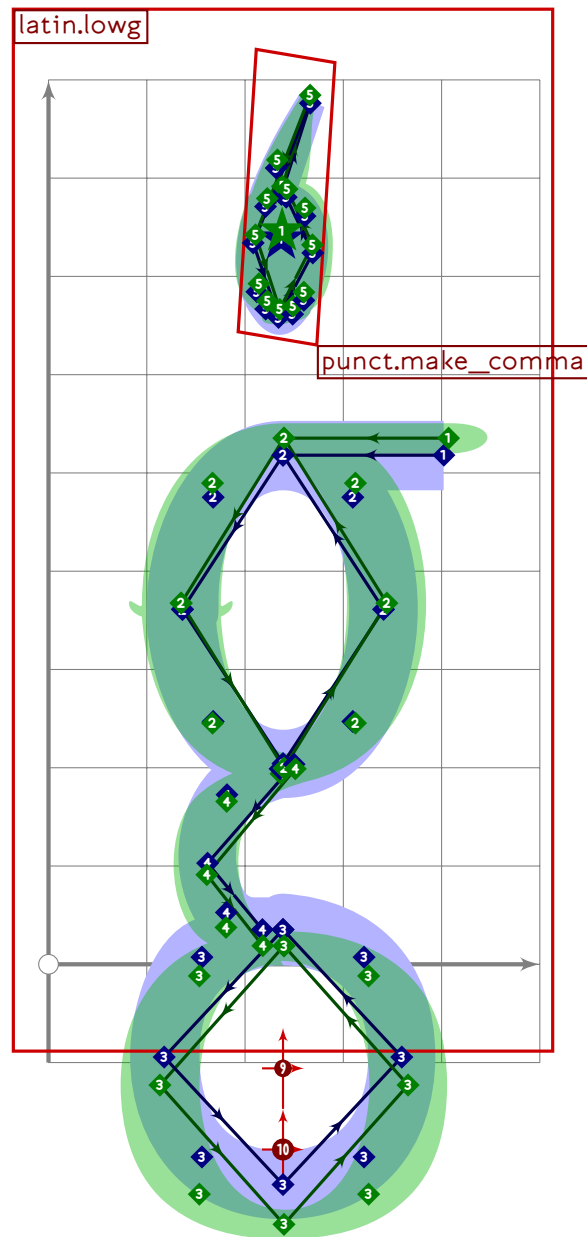
01



```

530 % g with dot
531 begintsuglyph("gdotaccent";33);
532   tsu_accent.apply(latin.lowg)(tsu_accent.dotabove);
533   tsu_render;
534 endtsuglyph;
535

```

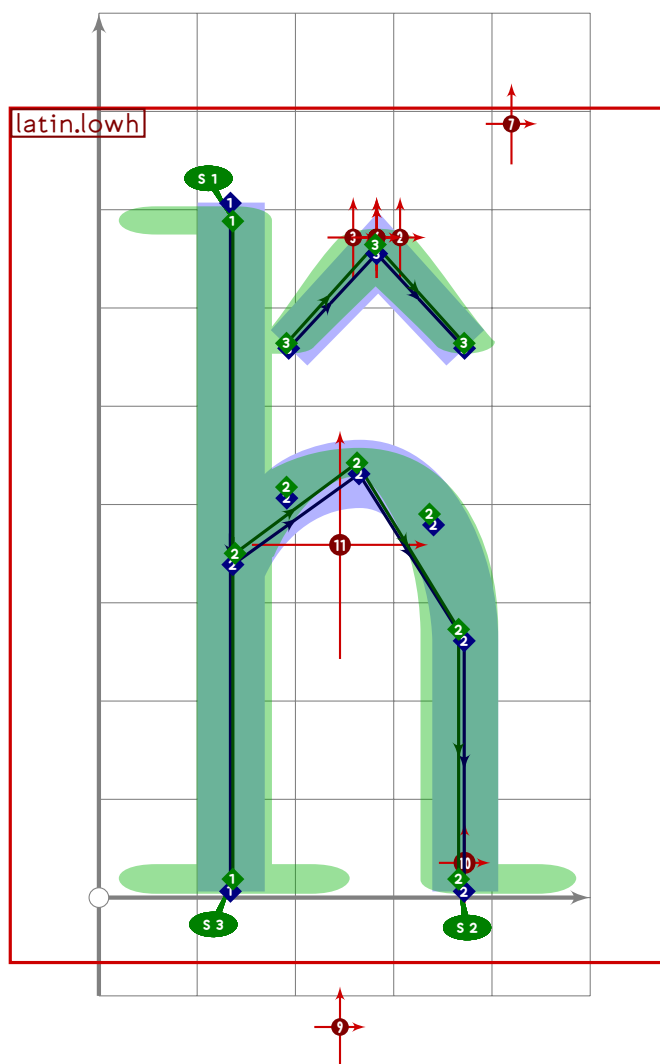


```

536 % g with comma upside-down above
537 begintsuglyph("uni0123",35);
538 tsu_accent.apply(latin.lowg)(tsu_accent.caron_comma);
539 tsu_render;
540 endtsuglyph;
541

```

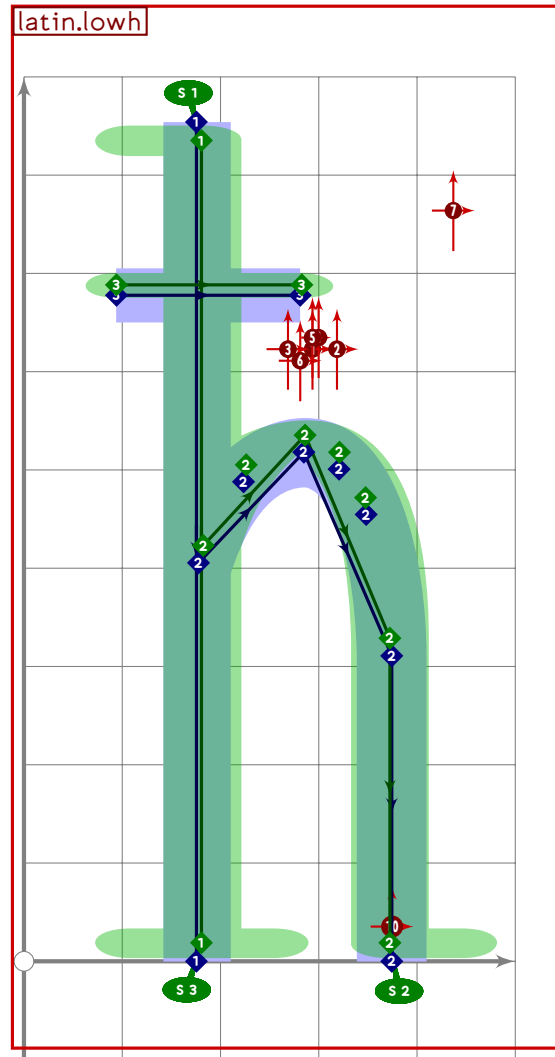
01



```

542 % h with circumflex
543 begintsuglyph("hcircumflex",37);
544   tsu_accent.apply(tsu_accent.capital(latin.lowh))(tsu_accent.circumflex);
545   tsu_render;
546 endtsuglyph;
547

```



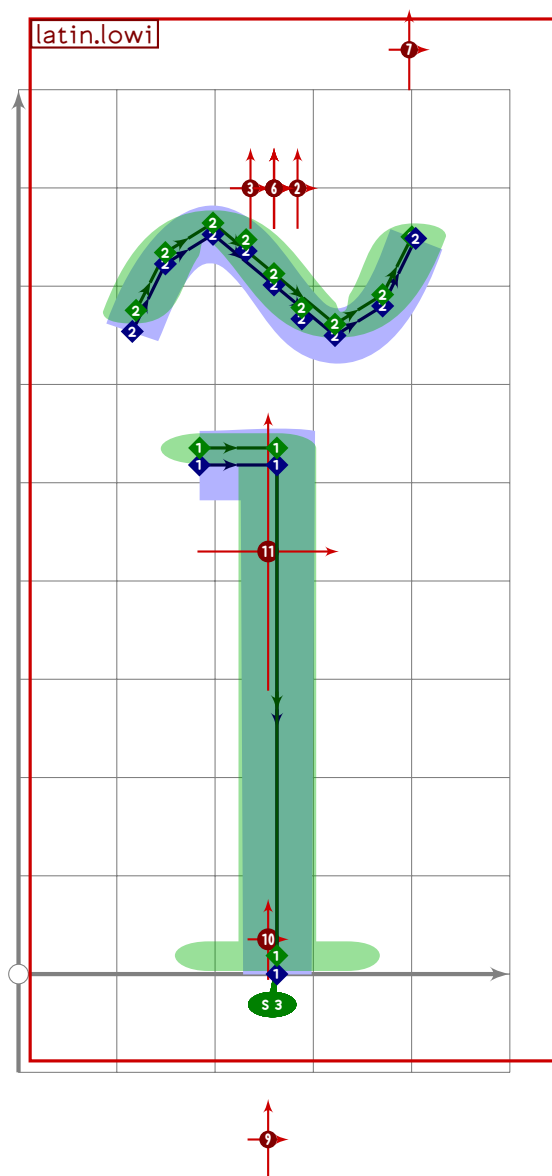
```

548 % h with bar
549 begint Suglyph("hbar",39);
550 latin.lowh;
551 push_stroke((220,vmetric(0.82))-(520,vmetric(0.82)),
552   (1.6,1.6)-(1.6,1.6));
553 set_bosize(0,80);
554 tsu_render;
555 endtsuglyph;
556

```

U+0129
tsuku.itilde

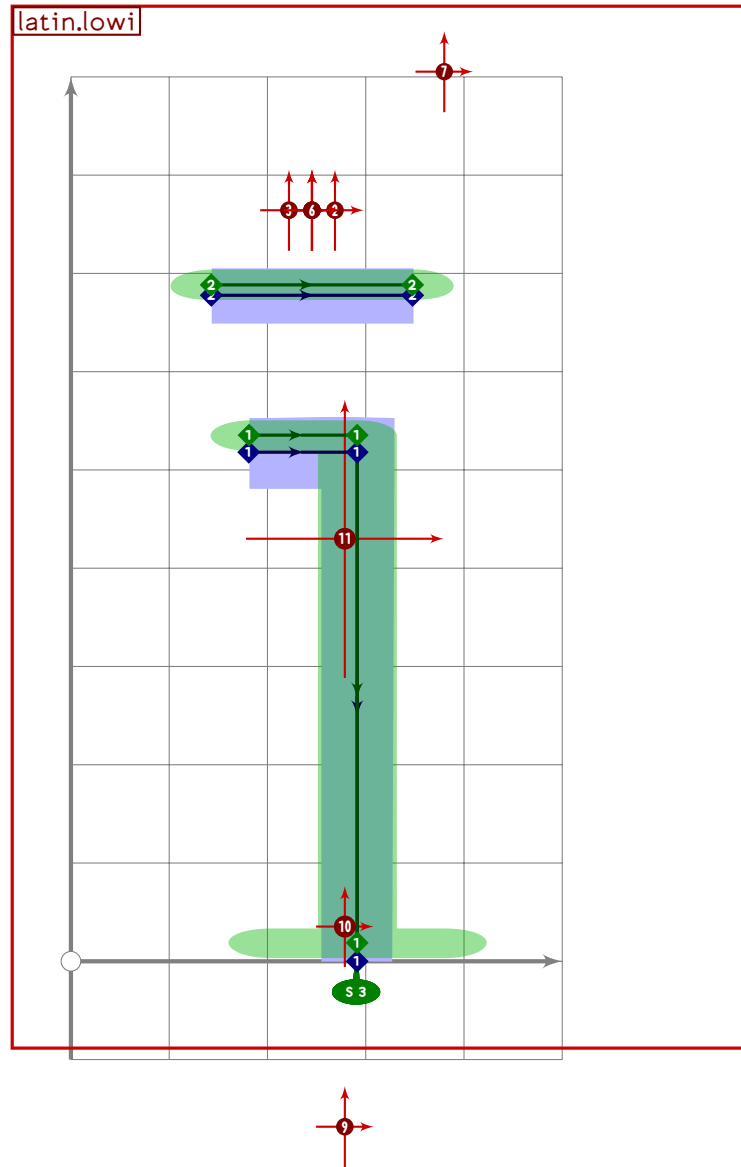
01



```

557 % i with tilde
558 begintsuglyph("itilde",41);
559   tsu_accent.apply(
560     tsu_xform(identity shifted (70,0))(latin.lowi;
561       tsu_accent.shift_anchors(true)((0,0)));
562     pop_lcblob;
563   )(tsu_accent.tilde);
564   tsu_render;
565 endtsuglyph;
566

```



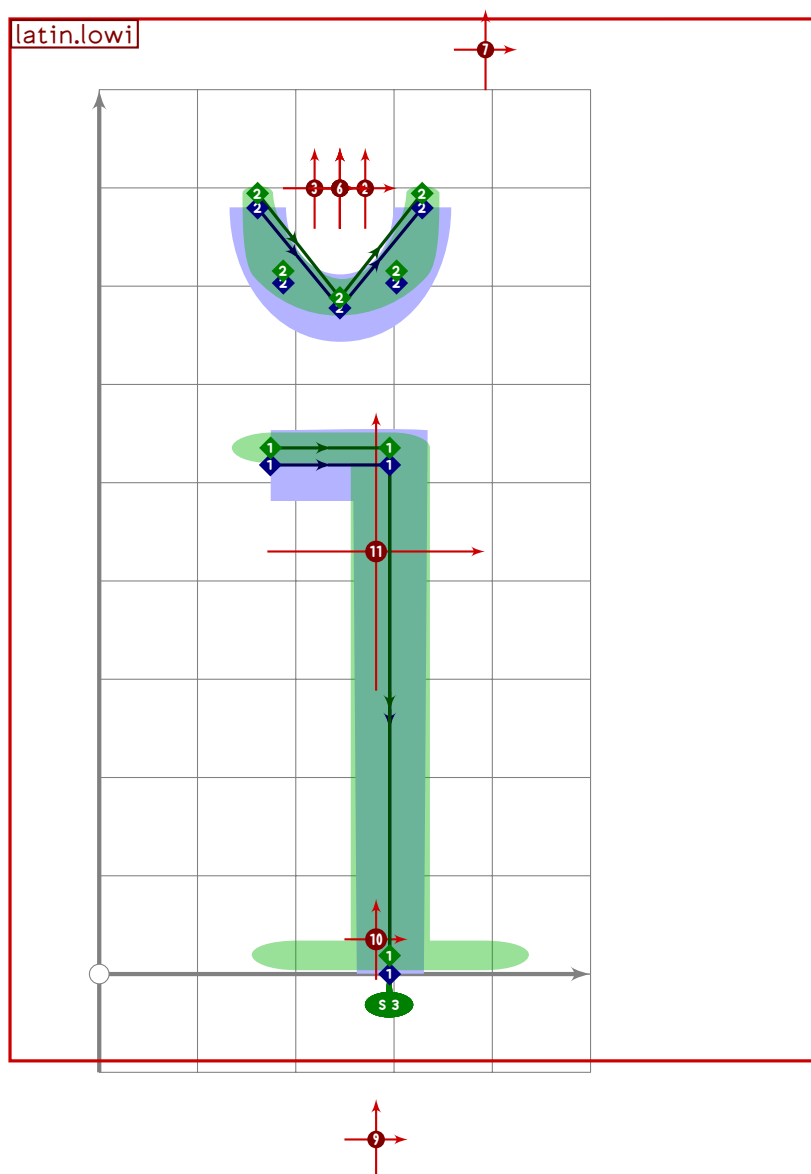
```

567 % i with macron
568 begintsuglyph("imacron";43);
569   tsu_accent.apply(
570     tsu_xform(identity shifted (70,0))(latin.lowi;
571       tsu_accent.shift_anchors(true)((0,0)));
572     pop_lcblob;
573   )(tsu_accent.macron);
574   tsu_render;
575 endtsuglyph;
576

```

U+012D
tsuku.ibreve

01

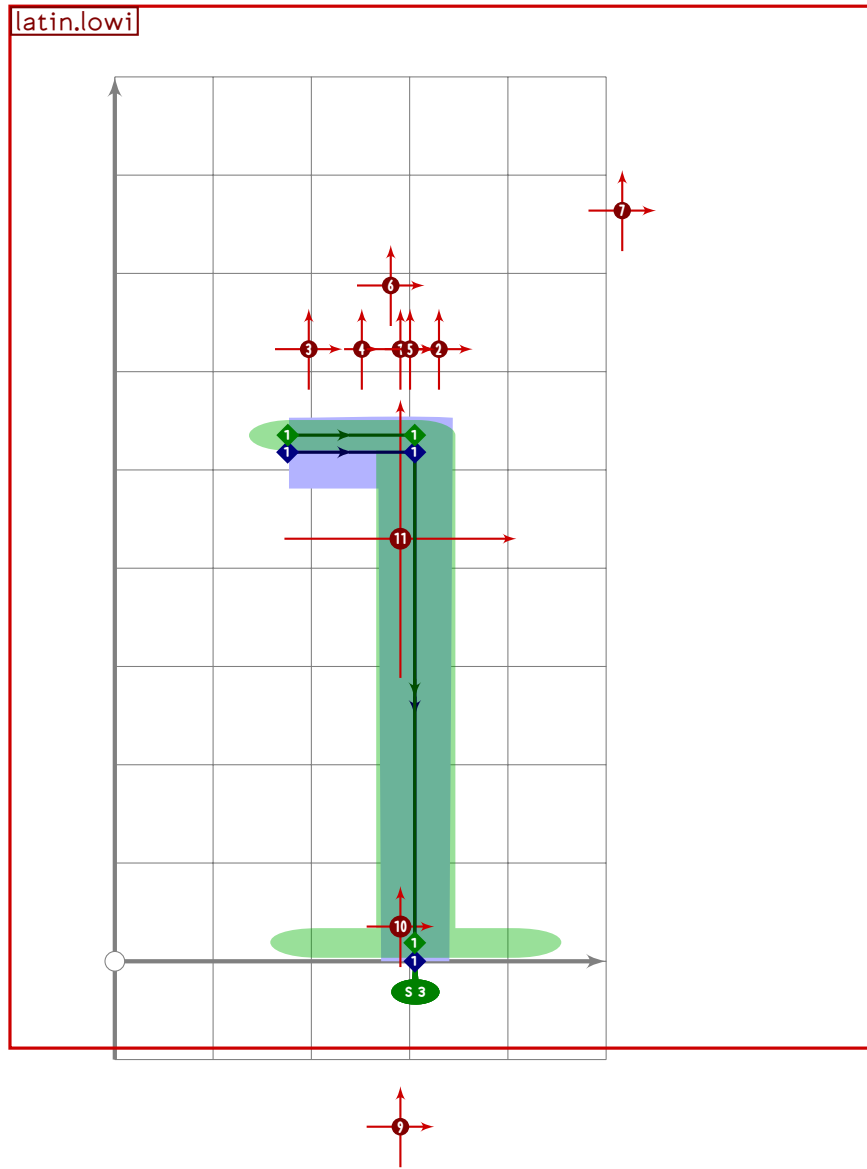


```

577 % i with breve
578 begintsuglyph("ibreve";45);
579   tsu_accent.apply(
580     tsu_xform(identity shifted (70,0))(latin.lowi;
581       tsu_accent.shift_anchors(true)((0,0)));
582     pop_lcblob;
583   )(tsu_accent.breve);
584   tsu_render;
585 endtsuglyph;
586
587 % i with ogonek
588 begintsuglyph("iogonek";47);
589   latin.lowiogonek;
590   tsu_render;
591 endtsuglyph;
592

```

[see page 359]



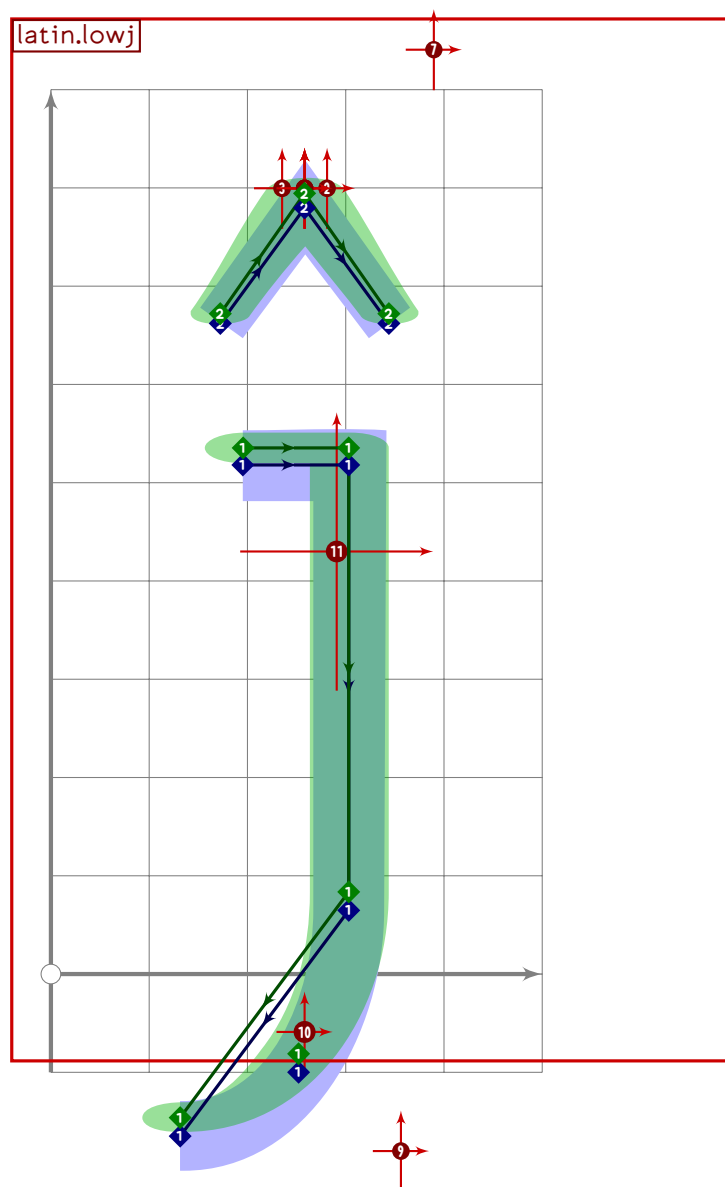
```

593 % i without dot
594 begintsuglyph("dotlessi",49);
595   tsu_xform(identity shifted (70,0))(latin.lowi;
596     tsu_accent.shift_anchors(true)((0,0)));
597   pop_lcblob;
598   tsu_render;
599 endtsuglyph;
600

```

U+0135
tsuku.jcircumflex

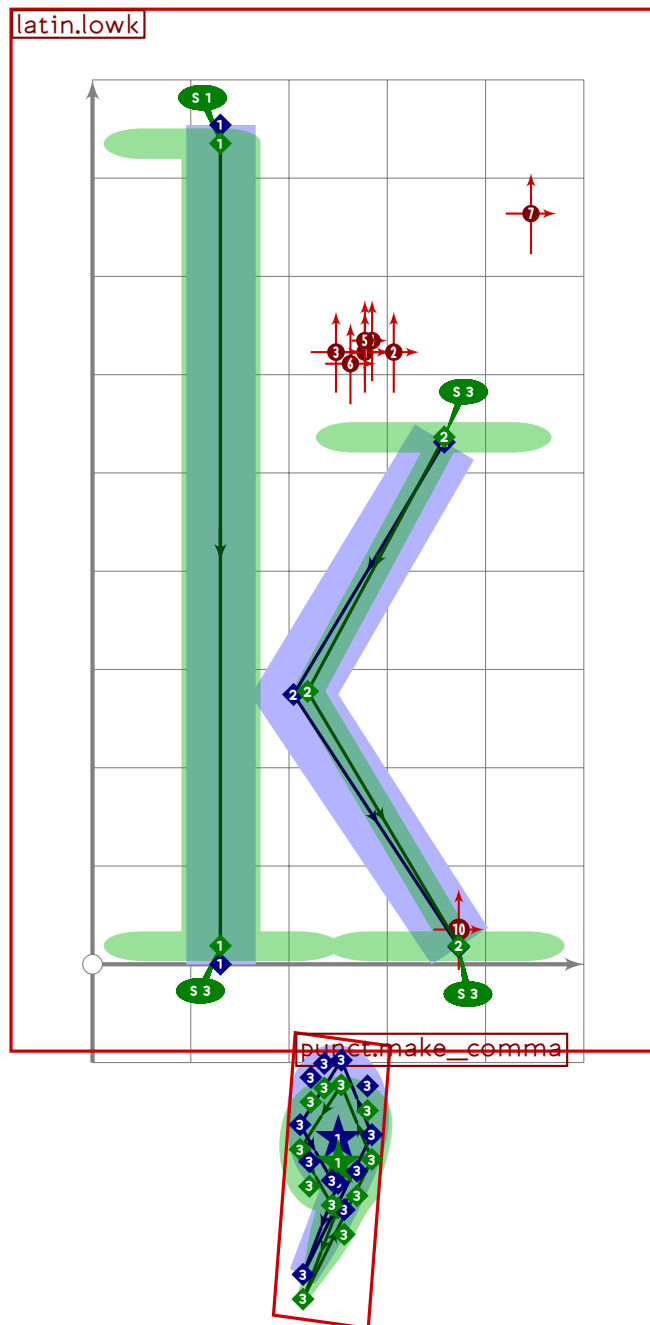
01



```

601 % j with circumflex
602 begintsuglyph("jcircumflex";53);
603   tsu_accent.apply(
604     tsu_xform(identity shifted (70,0))(latin.lowj;
605       tsu_accent.shift_anchors(true)((0,0)));
606     pop_lcblob;
607   )(tsu_accent.circumflex);
608   tsu_render;
609 endsuglyph;
610

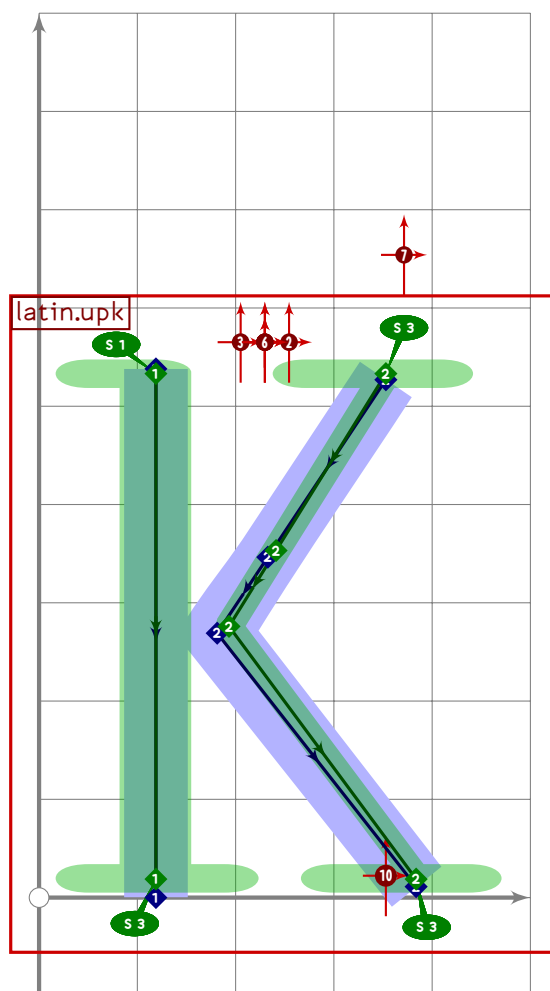
```



```

611 % k with comma below
612 begint Suglyph("uni0137";55);
613 tsu_accent.apply(latin.lowk)(tsu_accent.commabelow);
614 tsu_render;
615 endtsuglyph;
616

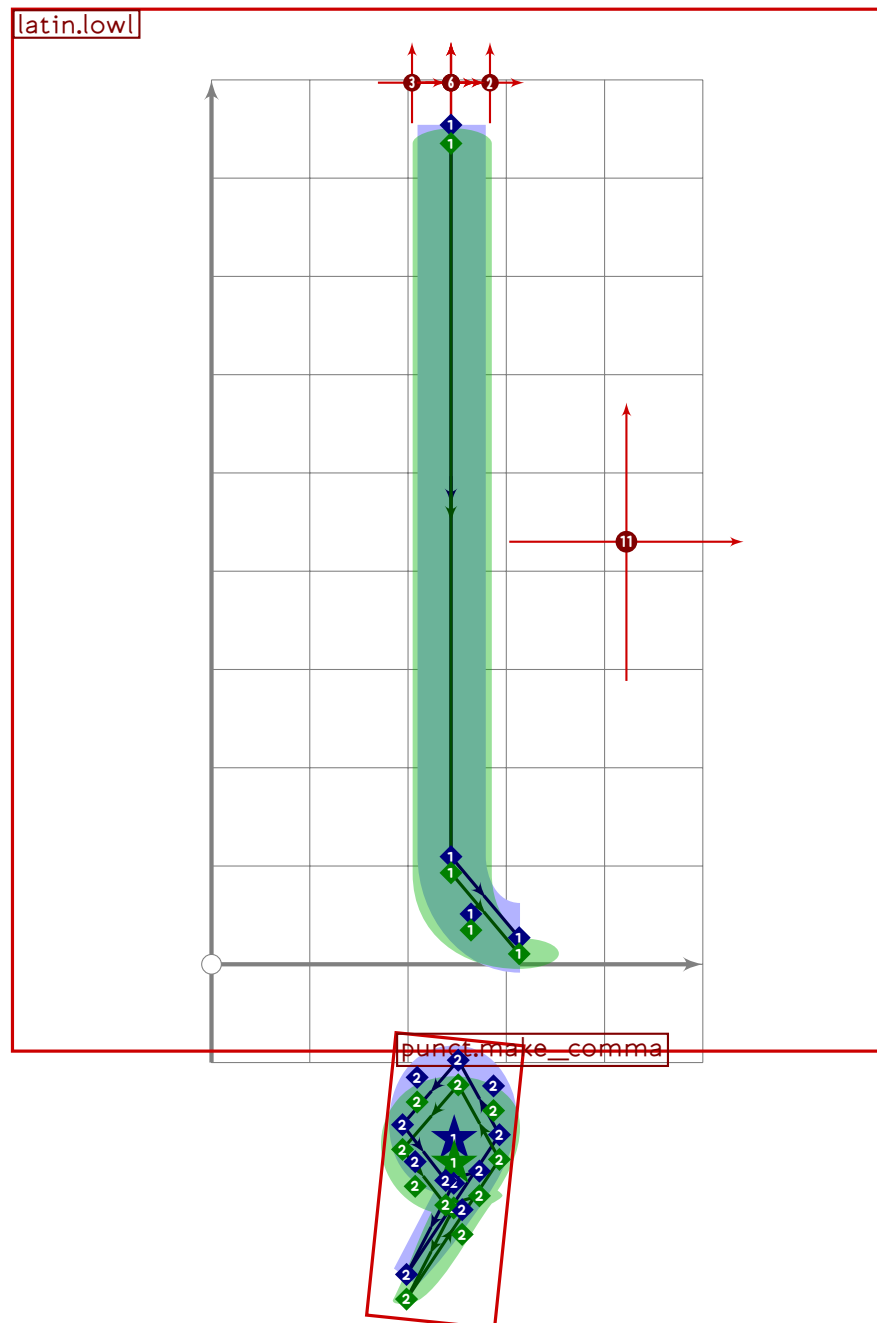
```



```

617 % Greenlandic k, which I'm interpreting as a squashed K
618 begintsuglyph("kgreenlandic";56);
619   tsu_xform(identity shifted (-500,latin_wide_low_v) xyscaled (0.92,0.63)
620     shifted (500,latin_wide_low_v))(latin.upk);
621   tsu_render;
622 endtsuglyph;
623

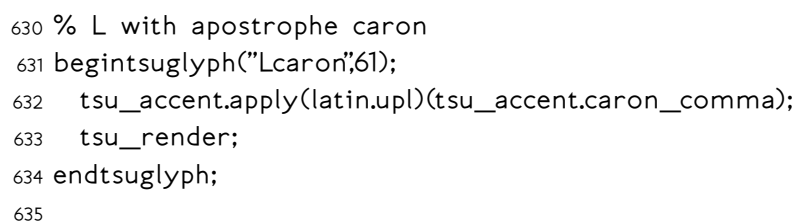
```

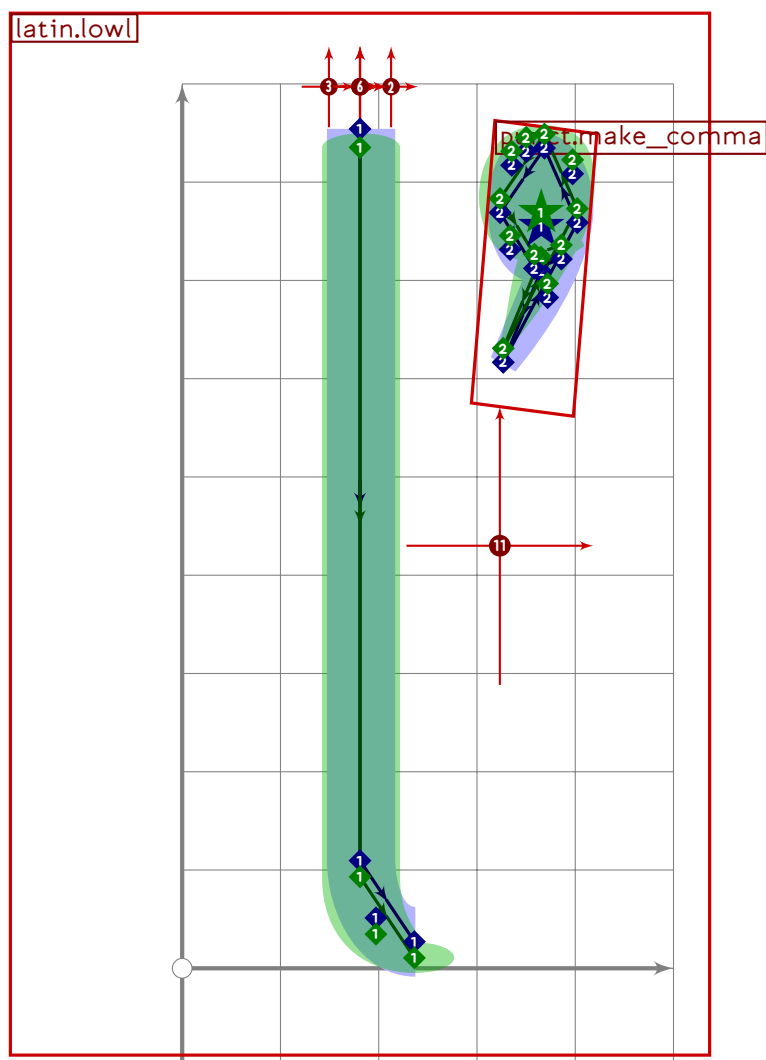


```

624 % l with comma below
625 begintsuglyph("uni013C",60);
626 tsu_accent.apply(latin.lowl)(tsu_accent.commabelow);
627 tsu_render;
628 endtsuglyph;
629

```





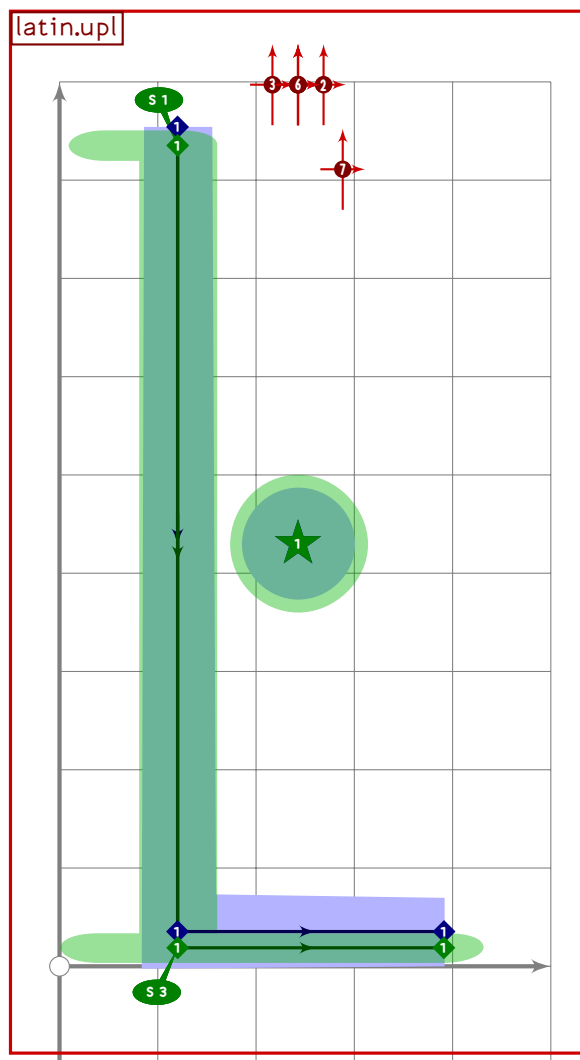
```

636 % l with apostrophe caron
637 begintsuglyph("lcaron",62);
638   tsu_accent.apply(latin.lowl)(tsu_accent.caron_comma);
639   tsu_render;
640 endtsuglyph;
641

```

U+013F
tsuku.Ldot

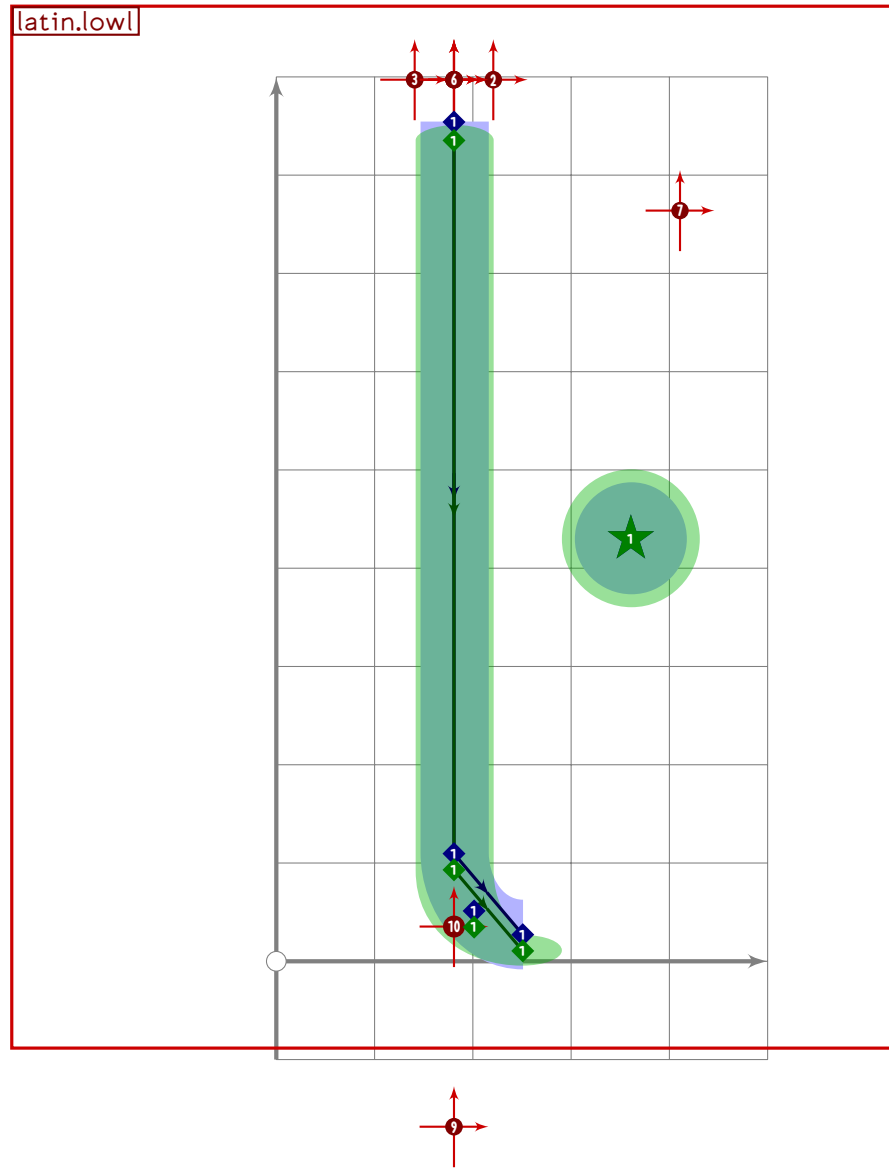
01



```

642 % L with dot
643 begintsuglyph("Ldot";63);
644   tsu_accent.apply(latin.upl)(tsu_accent.dotcentred);
645   tsu_render;
646 endtsuglyph;
647

```

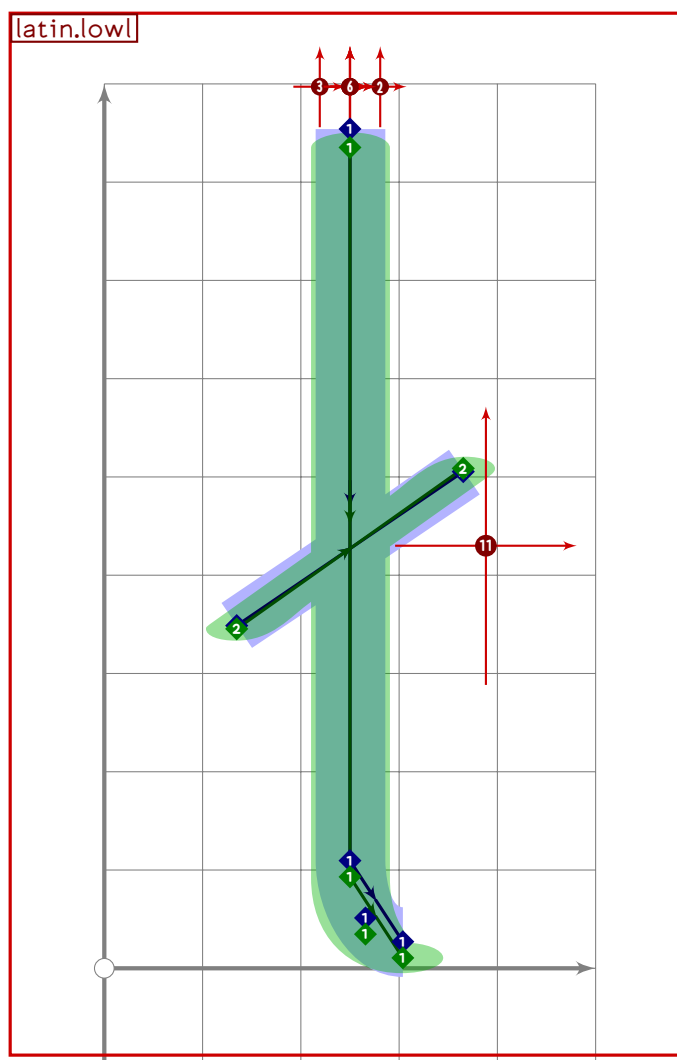
```

648 % l with dot
649 begintsuglyph("ldot",64);
650   tsu_accent.apply(tsu_xform(identity shifted (-120,0))
651     (latin.lowl;
652       tsu_accent.shift_anchors(true)((0,0)))(tsu_accent.dotcentred);
653   tsu_render;
654 endtsuglyph;
655

```

U+0142
tsuku.lslash

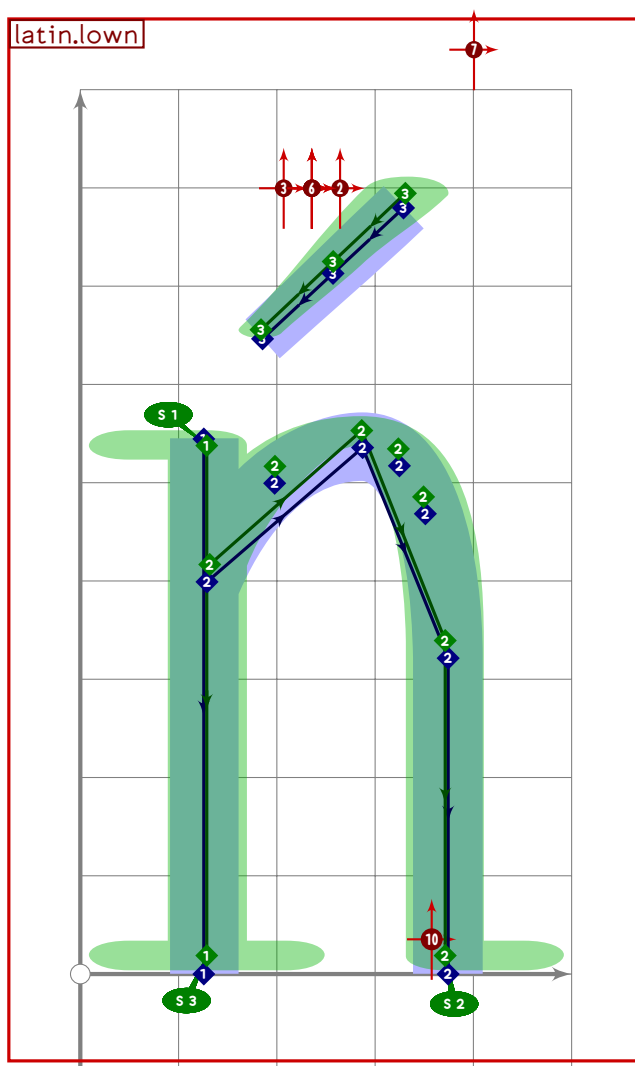
01



```

656 % l with slash
657 begintsuglyph("lslash",66);
658   latin.lowl;
659   push_stroke(((350,vmetric(0.40))-(650,vmetric(0.60)),
660     (1.6,1.6)-(1.6,1.6));
661   set_bosize(0,80);
662   tsu_render;
663 endtsuglyph;
664

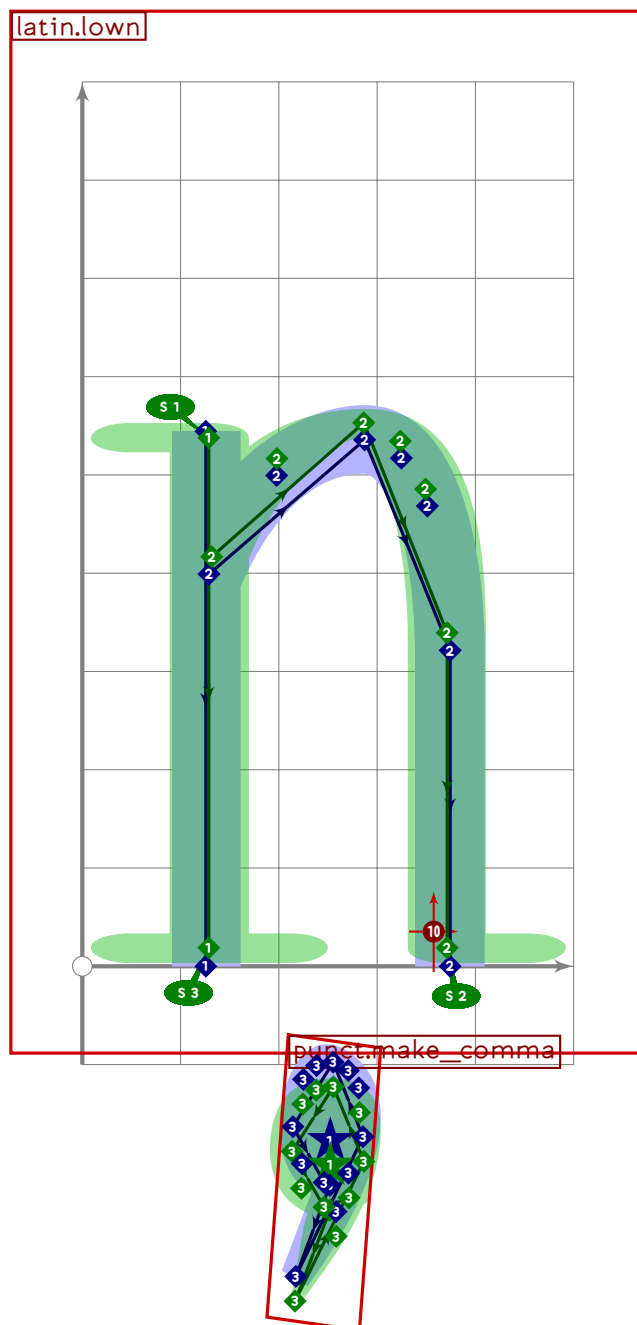
```



```

665 % n with acute
666 begint Suglyph("nacute",68);
667   tsu_accent.apply(latin.lown)(tsu_accent.acute);
668   tsu_render;
669 endtsuglyph;
670

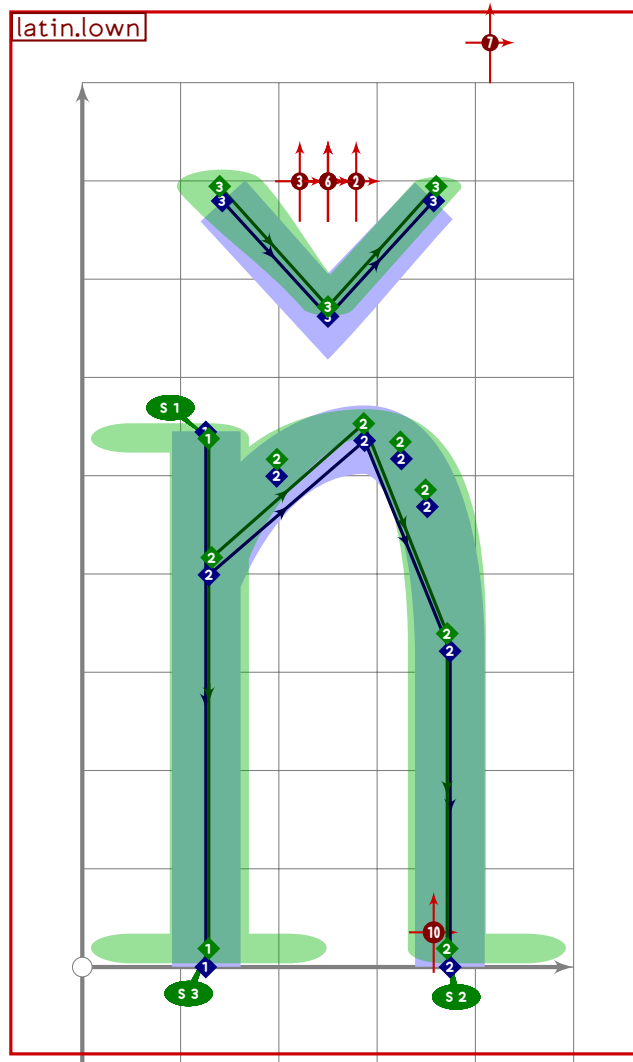
```



```

671 % n with comma below
672 begintsuglyph("uni0146;70);
673 tsu_accent.apply(latin.lown)(tsu_accent.commabelow);
674 tsu_render;
675 endtsuglyph;
676

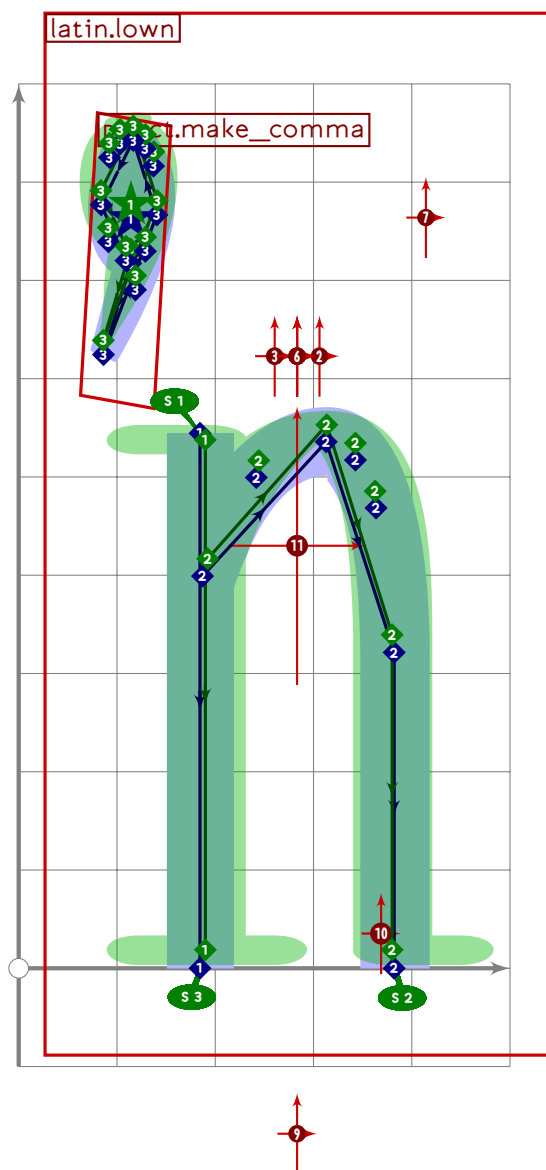
```



```

677 % n with caron
678 begintsuglyph("ncaron";72);
679 tsu_accent.apply(latin.lown)(tsu_accent.caron);
680 tsu_render;
681 endtsuglyph;
682

```

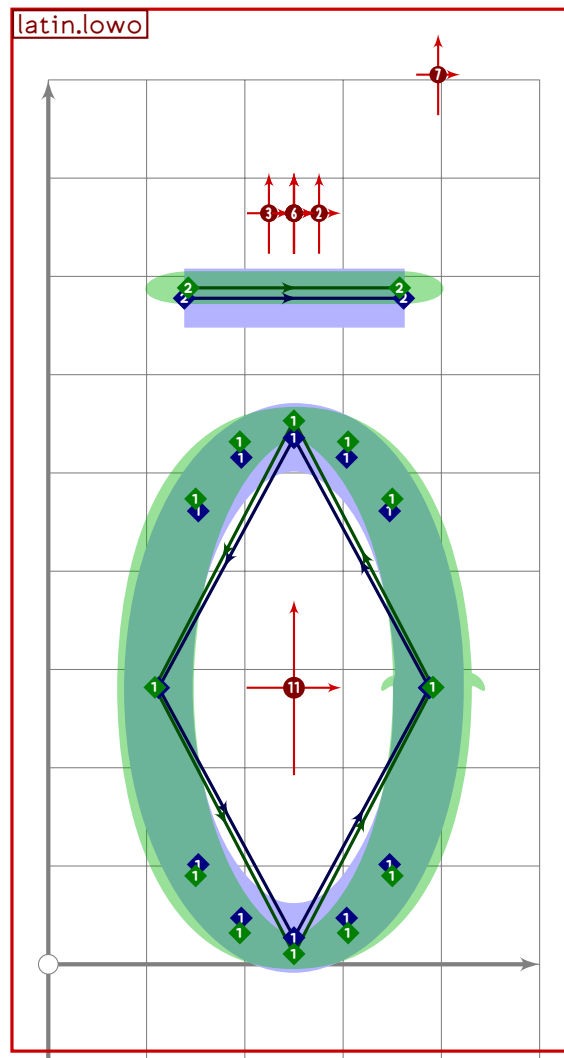


```

683 % n with apostrophe before
684 begintsuglyph("napostrophe",73);
685   tsu_xform(identity shifted (30,0))(latin.lown;
686     tsu_accent.shift_anchors(true)((0,0)));
687   punct.make_comma((230,vmetric(0.94)),0);
688   tsu_render;
689 endtsuglyph;
690
691 % lowercase eng
692 begintsuglyph("eng",75);
693   latin.loweng;
694   tsu_render;
695 endtsuglyph;
696

```

[see page 318]



01

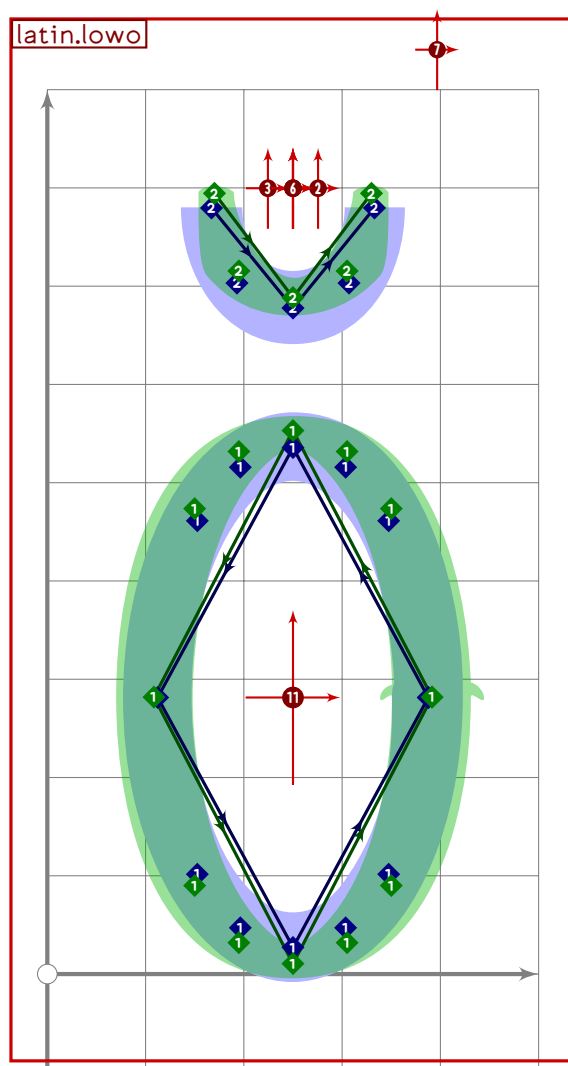
```

697 % o with macron
698 begintsuglyph("omacron",77);
699   tsu_accent.apply(latin.lowo)(tsu_accent.macron);
700   tsu_render;
701 endtsuglyph;
702

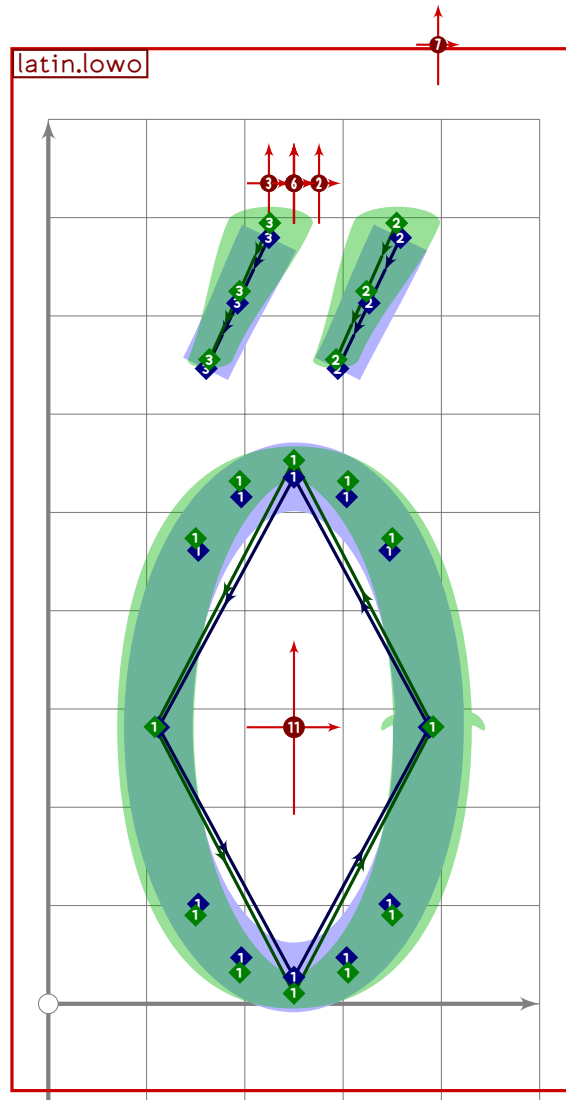
```

U+014F
tsuku.obreve

01



```
703 % o with breve
704 beginsuglyph("obreve",79);
705 tsu_accent.apply(latin.lowo)(tsu_accent.breve);
706 tsu_render;
707 endsuglyph;
708
```

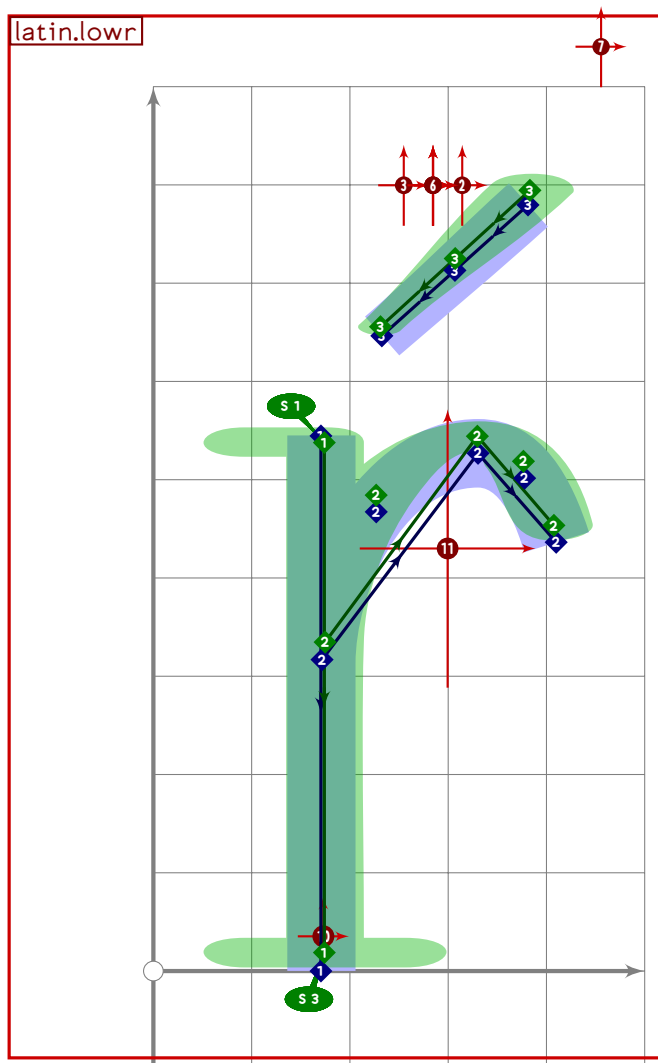
```

709 % o with hungarian umlaut
710 begint Suglyph("ohungarumlaut",81);
711   tsu_accent.apply(latin.lowo)(tsu_accent.hungarian_umlaut);
712   tsu_render;
713 endtsuglyph;
714

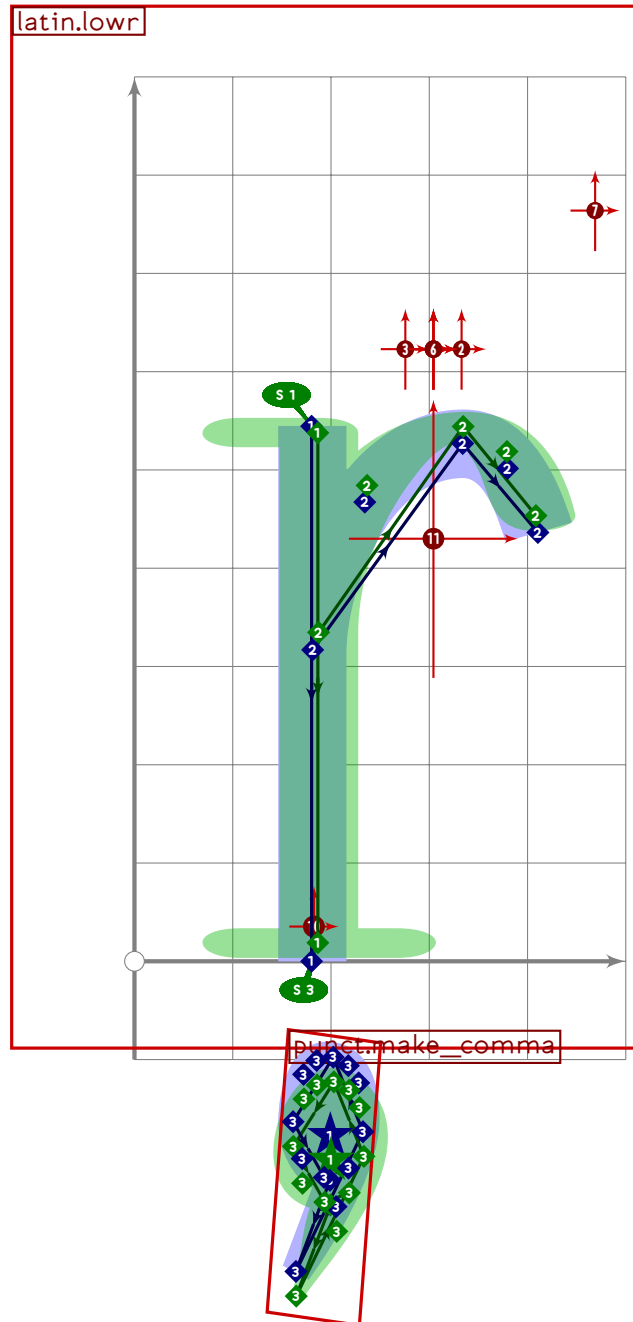
```

U+0155
tsuku.racute

01



```
715 % r with acute
716 begintuglyph("racut ;85);
717 tsu_accent.apply(latin.lowr)(tsu_accent.acute);
718 tsu_render;
719 endtsuglyph;
720
```



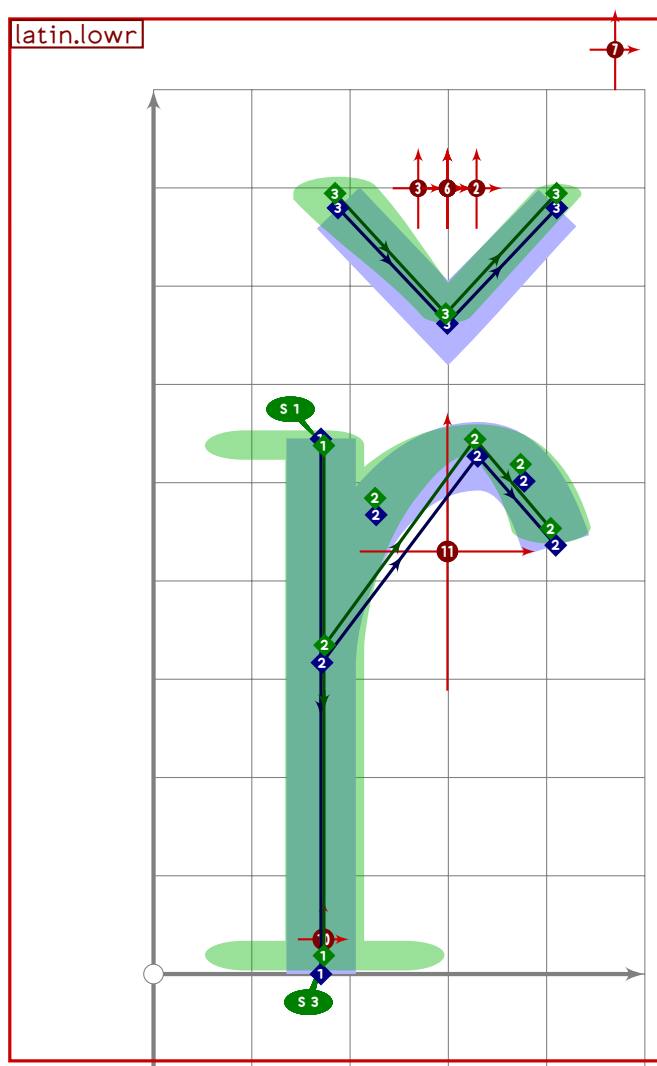
```

721 % r with comma below
722 begintsuglyph("uni0157";87);
723 tsu_accent.apply(latin.lowr)(tsu_accent.commabelow);
724 tsu_render;
725 endtsuglyph;
726

```

U+0159
tsuku.rcaron

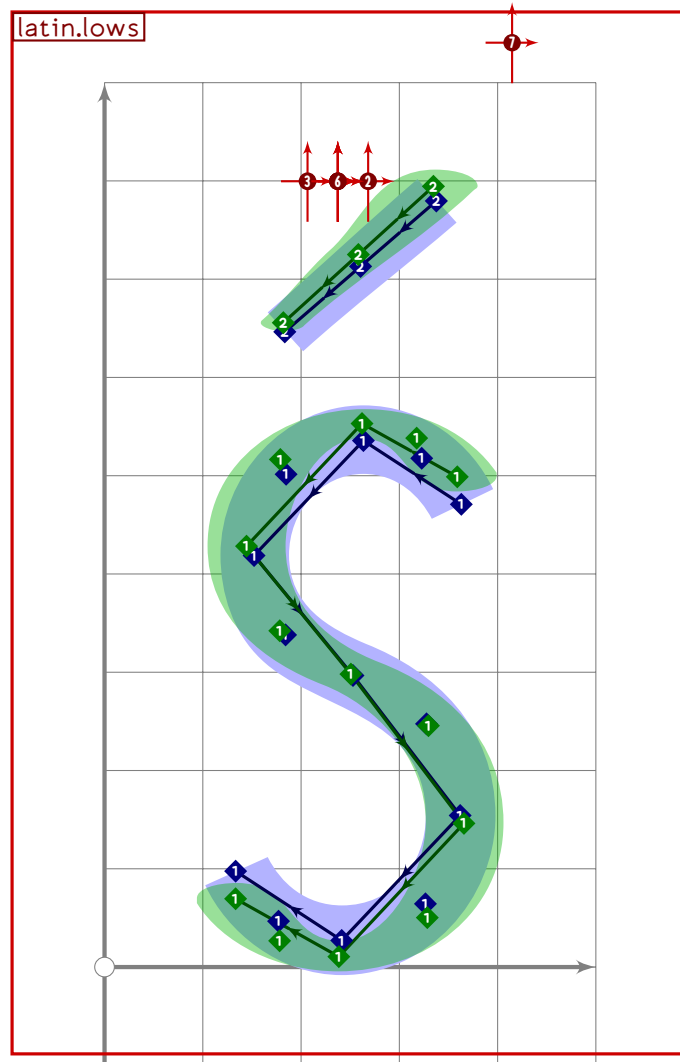
01



```

727 % r with caron
728 begintsuglyph("rcaron",89);
729 tsu_accent.apply(latin.lowr)(tsu_accent.caron);
730 tsu_render;
731 endtsuglyph;
732

```



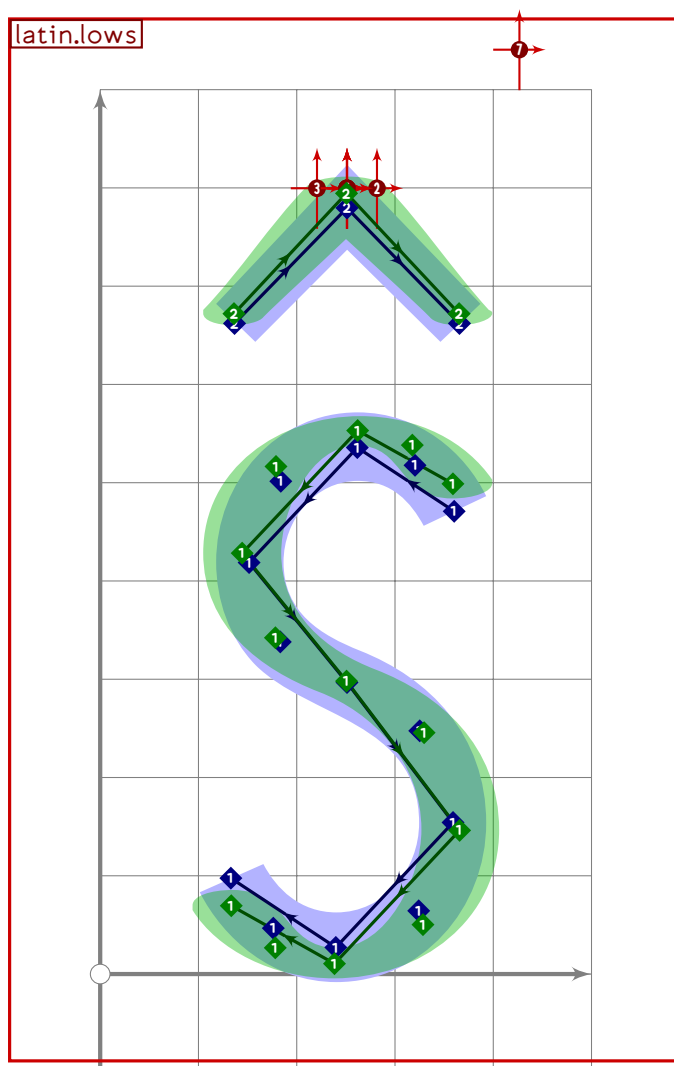
```

733 % s with acute
734 begintsuglyph("sacute";91);
735   tsu_accent.apply(latin.lows)(tsu_accent.acute);
736   tsu_render;
737 endtsuglyph;
738

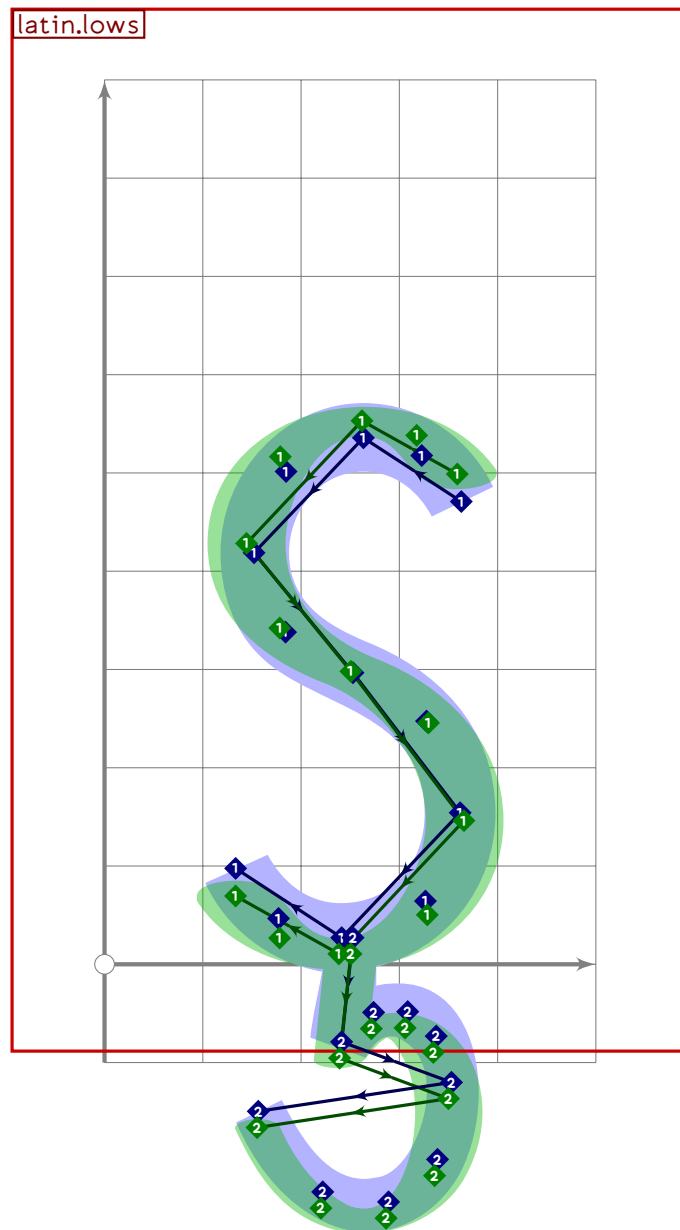
```

U+015D
tsuku.scircumflex

01



```
739 % s with circumflex
740 begintsuglyph("scircumflex",93);
741 tsu_accent.apply(latin.lows)(tsu_accent.circumflex);
742 tsu_render;
743 endtsuglyph;
744
```



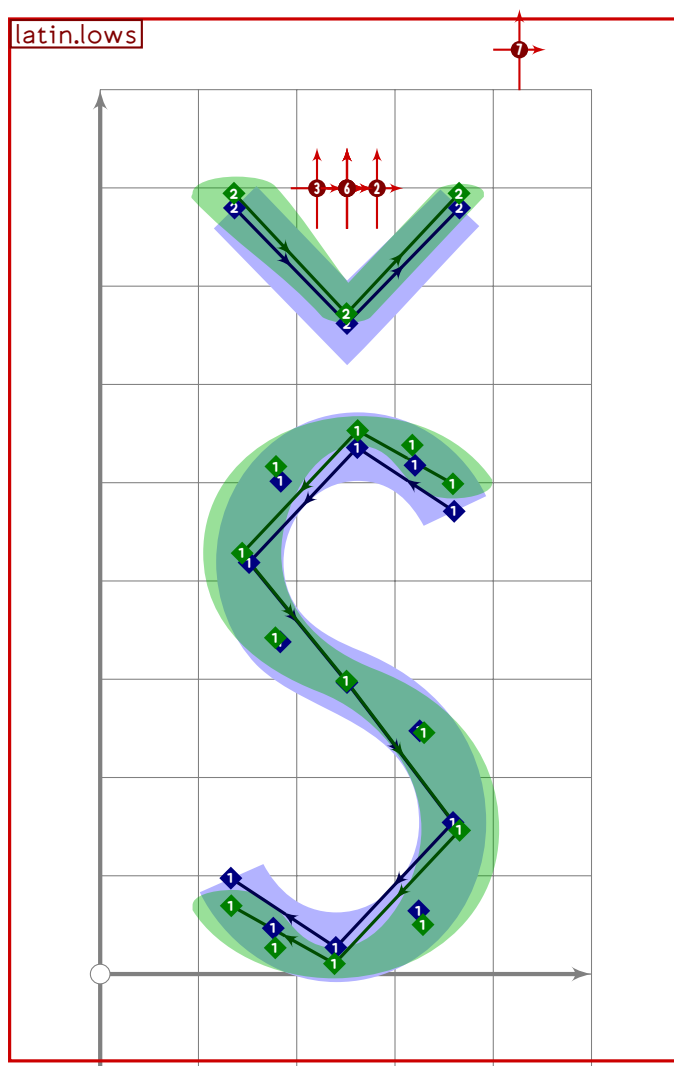
```

745 % s with cedilla
746 begintsuglyph("scedilla";95);
747   tsu_accent.apply(latin.lows)(tsu_accent.cedilla);
748   tsu_render;
749 endtsuglyph;
750

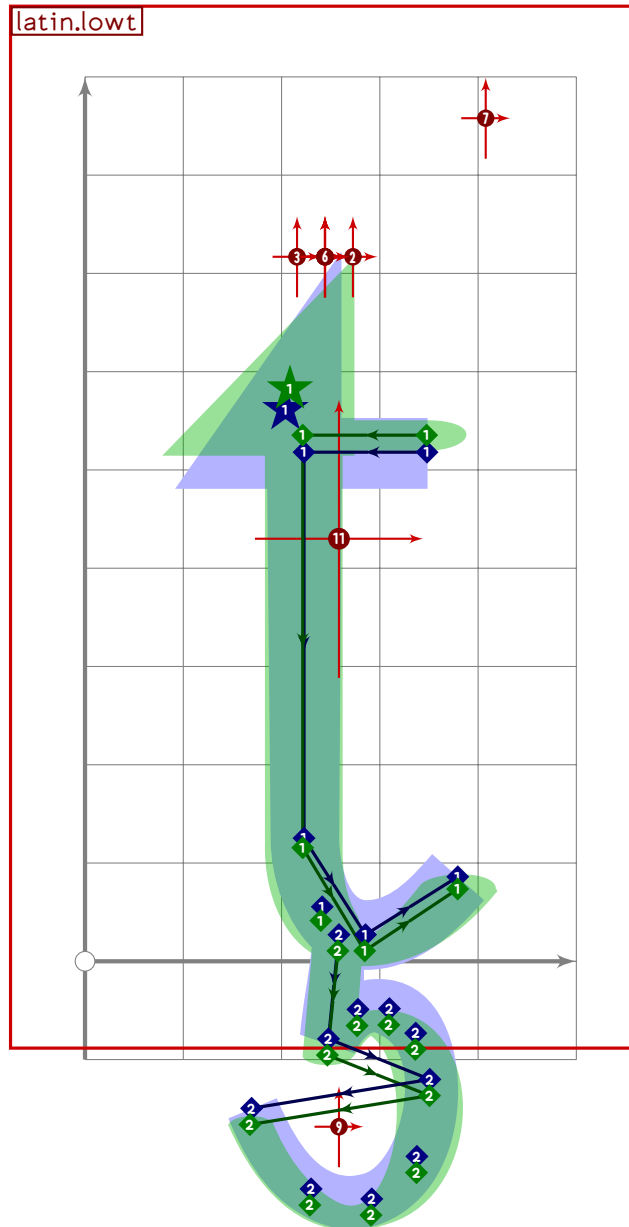
```

U+0161
tsuku.scaron

01



```
751 % s with caron
752 begintsuglyph("scaron",97);
753 tsu_accent.apply(latin.lows)(tsu_accent.caron);
754 tsu_render;
755 endsuglyph;
756
```

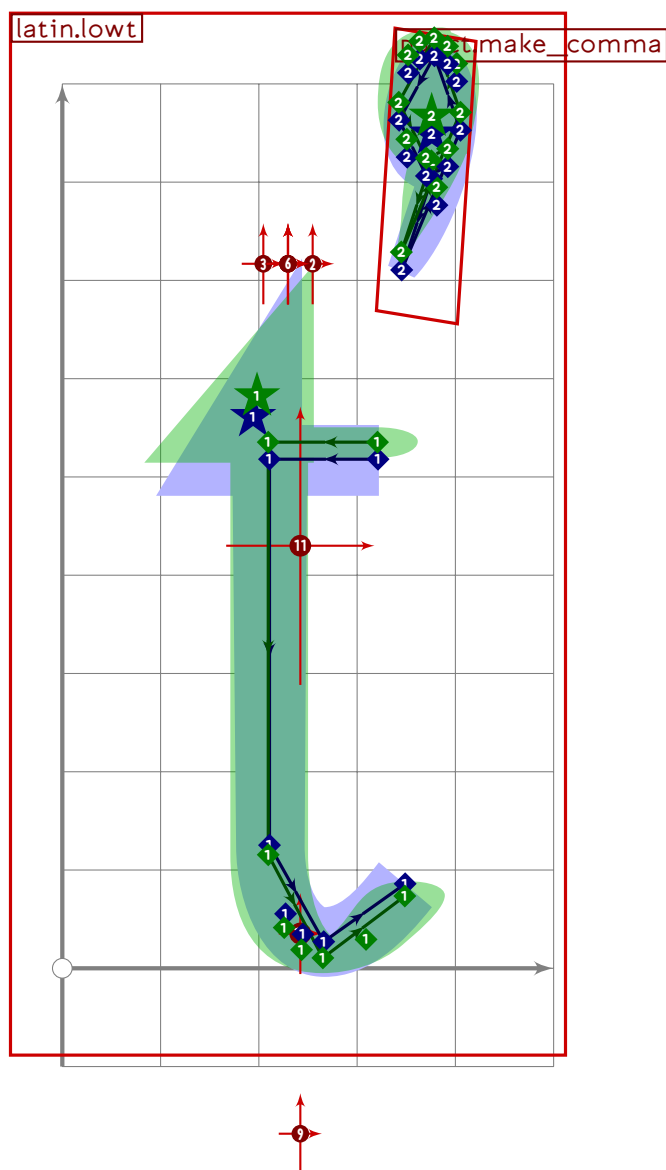
```

757 % t with cedilla [sic]
758 begintsuglyph("uni0163";99);
759   tsu_accent.apply(latin.lowt)(tsu_accent.cedilla);
760   tsu_render;
761 endtsuglyph;
762

```

U+0165
tsuku.tcaron

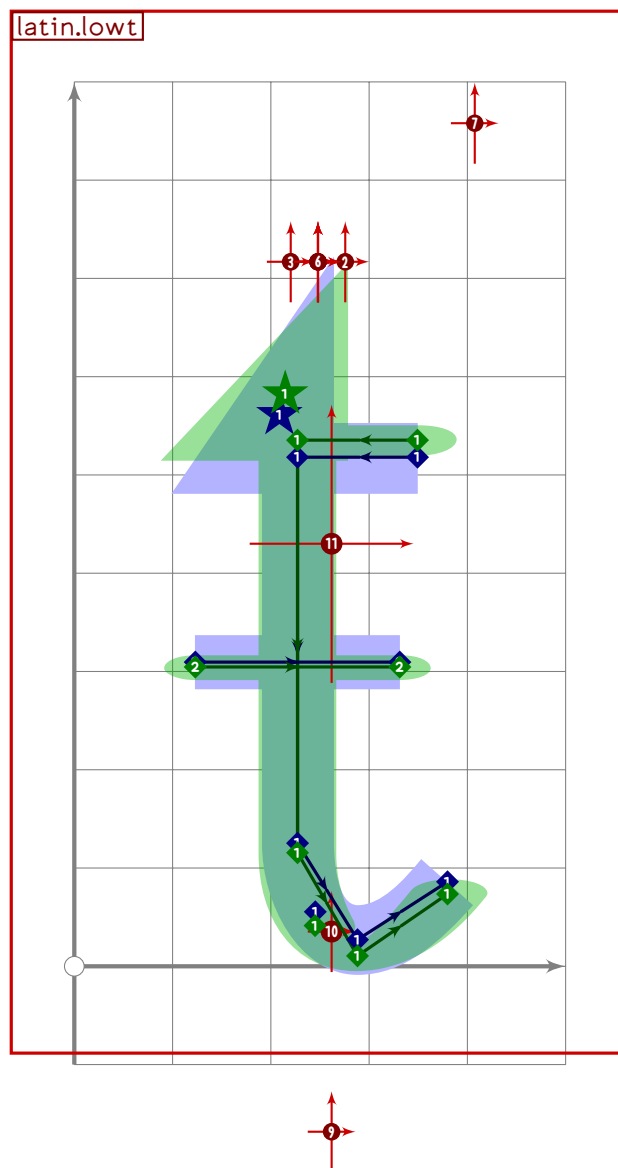
01



```

763 % t with apostrophe caron
764 begintsuglyph("tcaron",101);
765   tsu_accent.apply(latin.lowt)(tsu_accent.caron_comma);
766   tsu_render;
767 endtsuglyph;
768

```



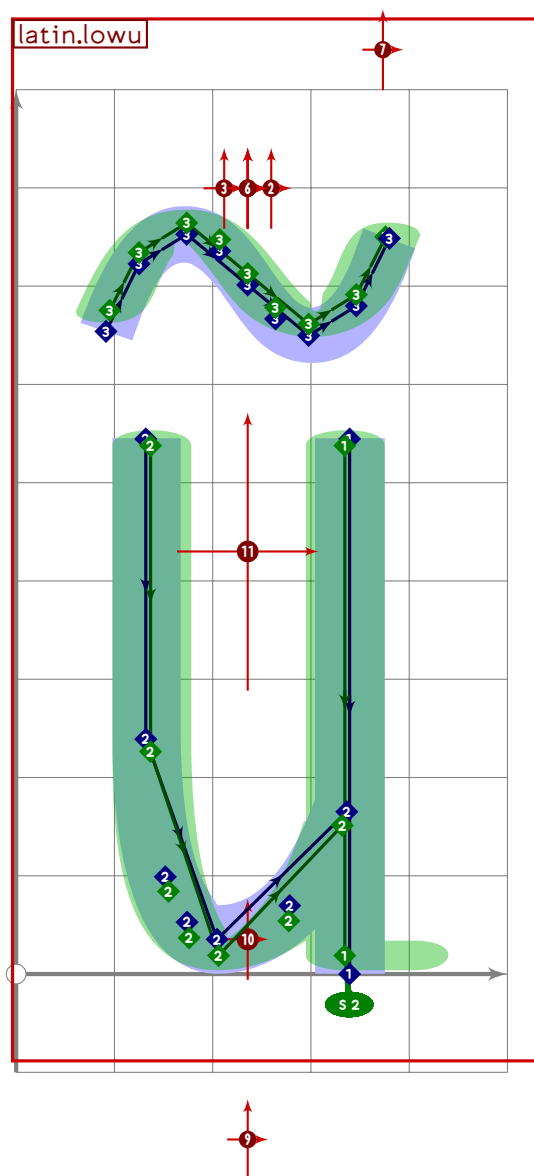
```

769 % t with bar
770 beginsuglyph("tbar";103);
771 latin.lowt;
772 push_stroke((320,vmetric(0.35))-(620,vmetric(0.35)),
773   (1.6,1.6)-(1.6,1.6));
774 set_bosize(0,80);
775 tsu_render;
776 endsuglyph;
777

```

U+0169
tsuku.utilde

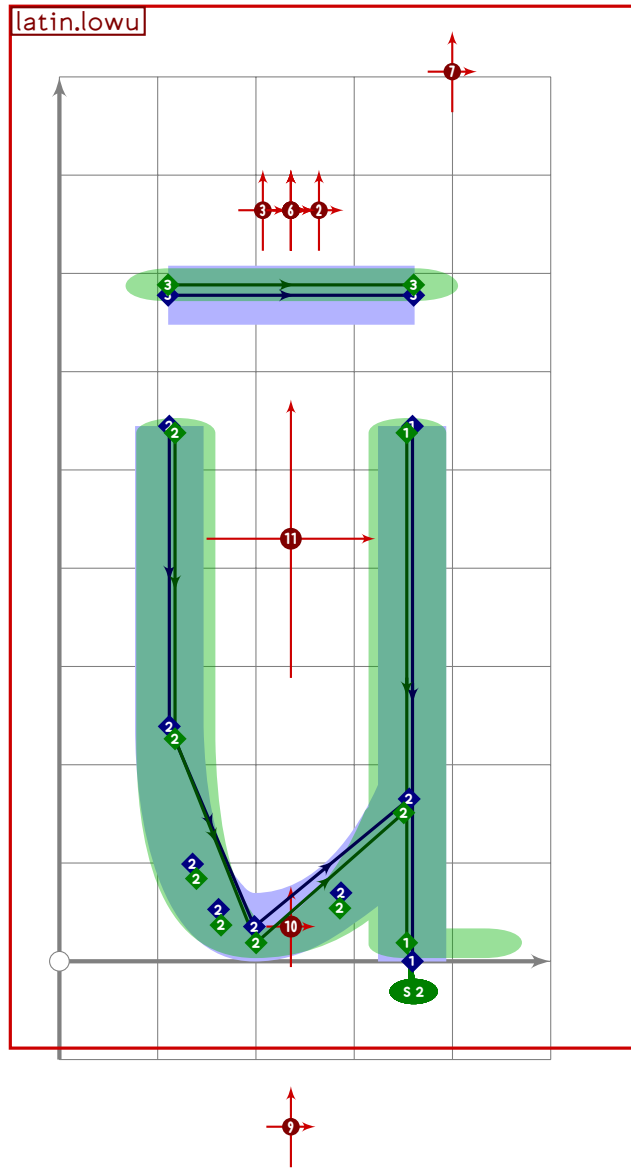
01



```

778 % u with tilde
779 begintsuglyph("utilde",105);
780   tsu_accent.apply(latin.lowu)(tsu_accent.tilde);
781   tsu_render;
782 endsuglyph;
783

```



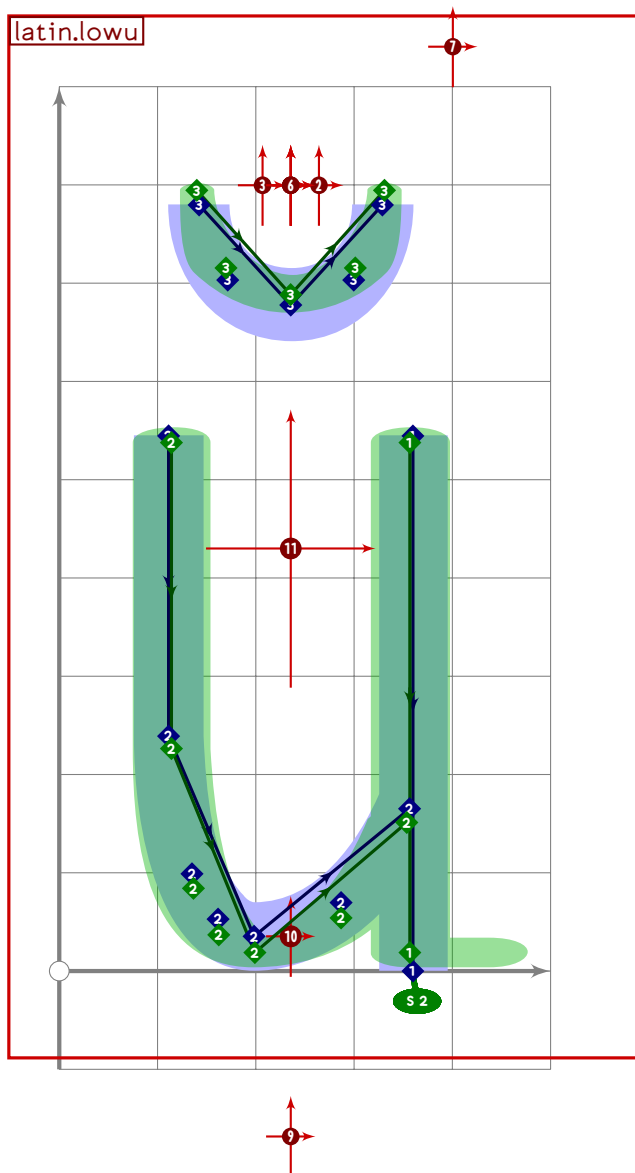
```

784 % u with macron
785 begintsuglyph("umacron",107);
786 tsu_accent.apply(latin.lowu)(tsu_accent.macron);
787 tsu_render;
788 endtsuglyph;
789

```

U+016D
tsuku.ubreve

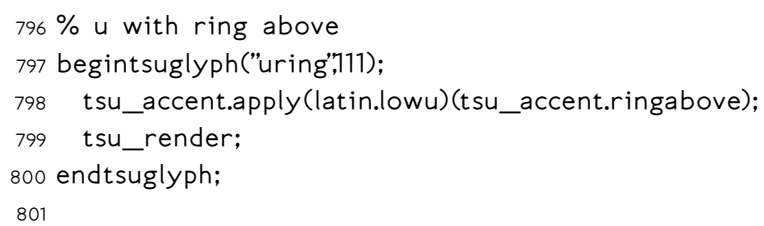
01

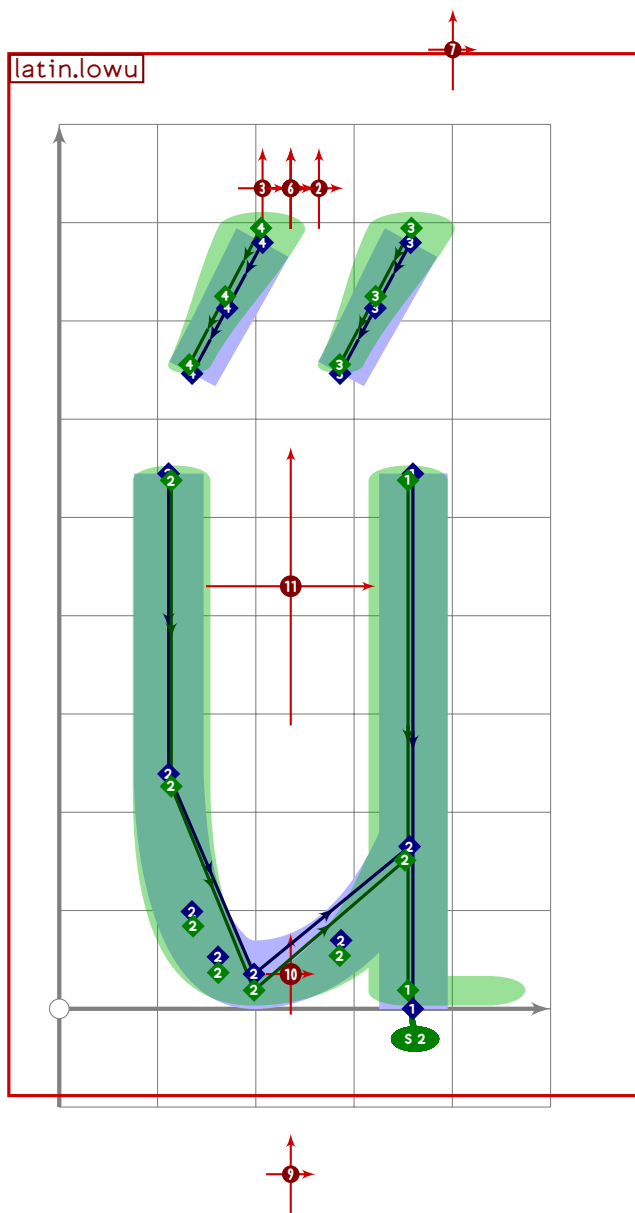


```

790 % u with breve
791 begintsuglyph("ubreve",109);
792   tsu_accent.apply(latin.lowu)(tsu_accent.breve);
793   tsu_render;
794 endtsuglyph;
795

```



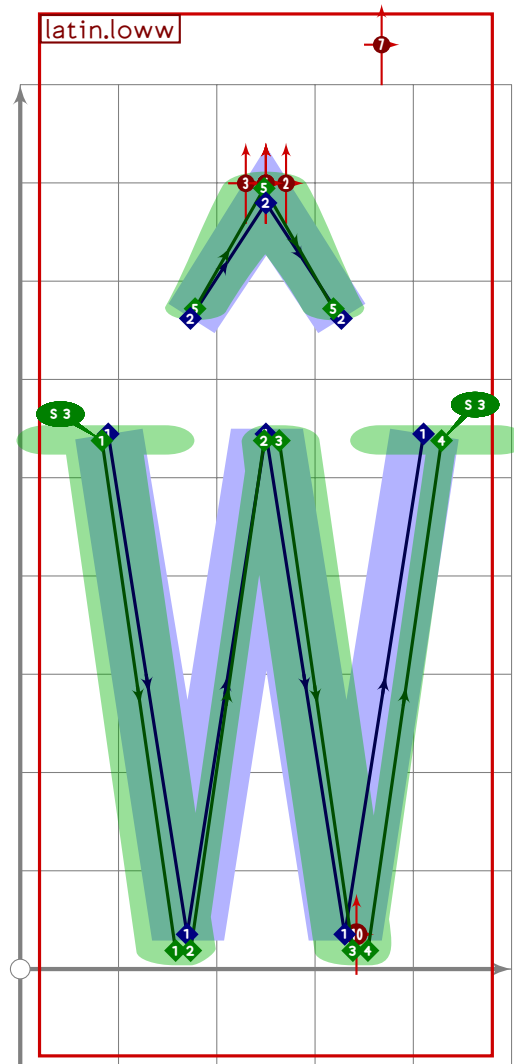


```

802 % u with Hungarian umlaut
803 begintsuglyph("uhungarumlaut",113);
804   tsu_accent.apply(latin.lowu)(tsu_accent.hungarian_umlaut);
805   tsu_render;
806 endtsuglyph;
807
808 % u with ogonek
809 begintsuglyph("uogonek",115);
810   latin.lowuogonek;
811   tsu_render;
812 endtsuglyph;
813

```

[see page 361]



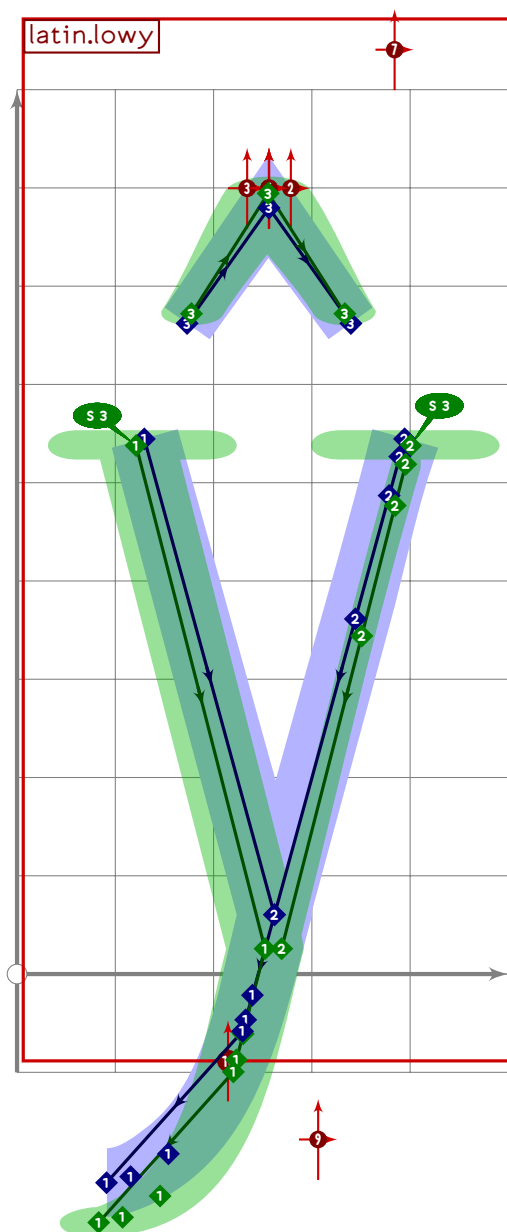
```

814 % w with circumflex
815 begint Suglyph("wcircumflex",117);
816 tsu_accent.apply(latin.loww)(tsu_accent.circumflex);
817 tsu_render;
818 endtsuglyph;
819

```

U+0177
tsuku.ycircumflex

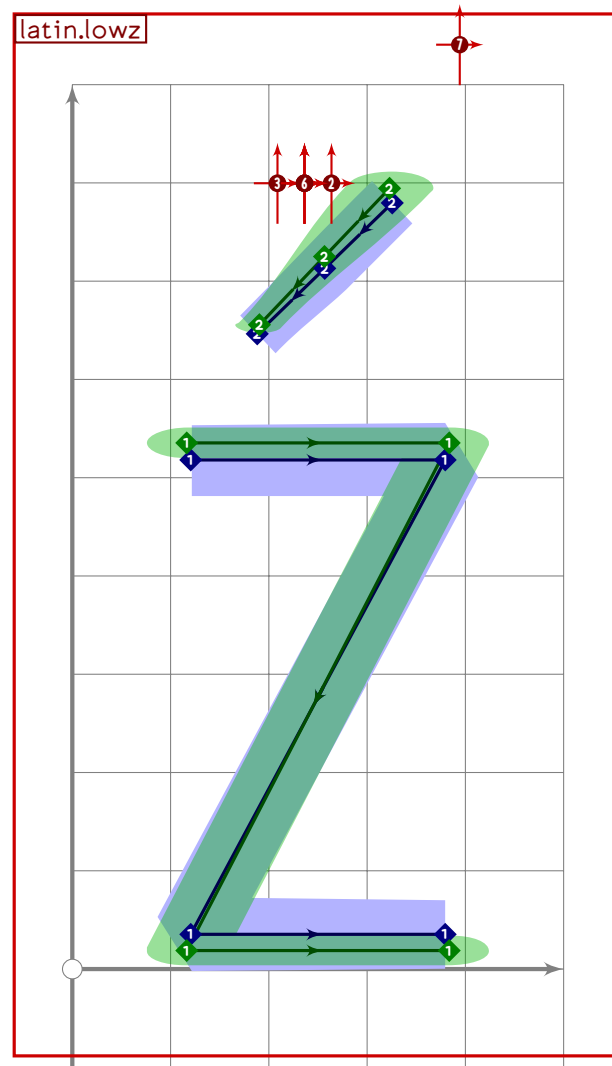
01



```

820 % y with circumflex
821 begintsuglyph("ycircumflex",119);
822 tsu_accent.apply(latin.lowy)(tsu_accent.circumflex);
823 tsu_render;
824 endtsuglyph;
825

```



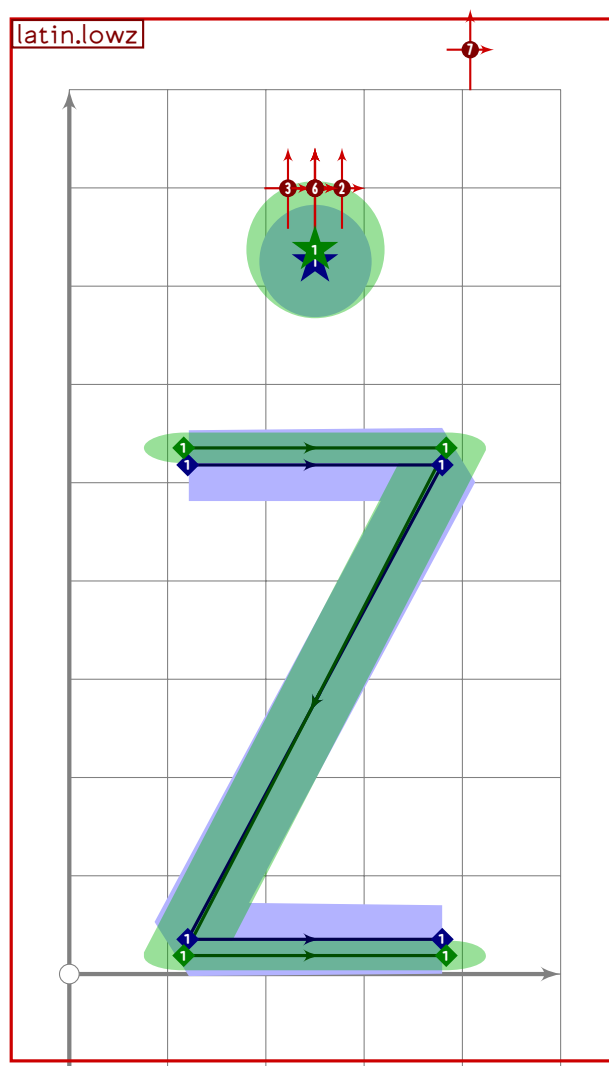
```

826 % z with acute
827 begintsuglyph("zacute",122);
828   tsu_accent.apply(latin.lowz)(tsu_accent.acute);
829   tsu_render;
830 endsuglyph;
831

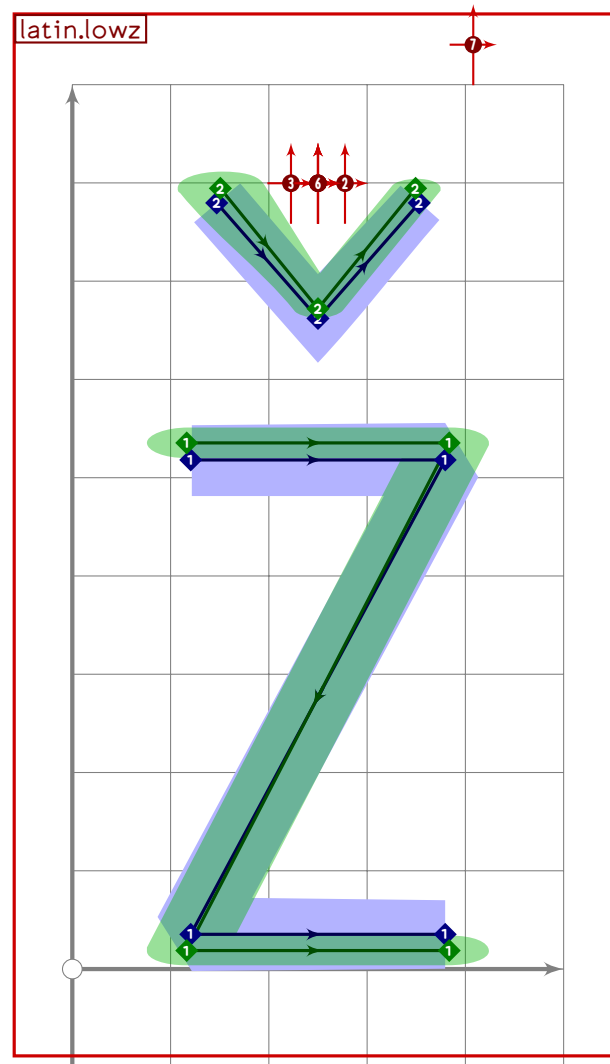
```

U+017C
tsuku.zdotaccent

01



```
832 % z with dot
833 beginsuglyph("zdotaccent",124);
834 tsu_accent.apply(latin.lowz)(tsu_accent.dotabove);
835 tsu_render;
836 endsuglyph;
837
```



```

838 % z with caron
839 begintsuglyph("zcaron",126);
840 tsu_accent.apply(latin.lowz)(tsu_accent.caron);
841 tsu_render;
842 endtsuglyph;
843
844 % long s
845 begintsuglyph("longs",127);
846 latin.lowlongs;
847 tsu_render;
848 endtsuglyph;
849
850
851

```

[see page 327]

Latin Extended A Other

```

852 % LATIN EXTENDED A OTHER
853
854 tsu_accent.clear_default_anchors;

```

```
855
856 % Dutch IJ ligature
857 begintsuglyph("IJ",50); [see page 266]
858 latin.upij;
859 tsu_render;
860 endtsuglyph;
861
862 % Dutch ij ligature
863 begintsuglyph("ij",51); [see page 311]
864 latin.lowij;
865 tsu_render;
866 endtsuglyph;
867
868 % OE ligature
869 begintsuglyph("OE",82); [see page 275]
870 latin.upoe;
871 tsu_render;
872 endtsuglyph;
873
874 % oe ligature
875 begintsuglyph("oe",83); [see page 320]
876 latin.lowoe;
877 tsu_render;
878 endtsuglyph;
879
880
881
882 endfont;
883
884
```

tsuku-02.mp

```
1 %
2 % Unicode page 02 (Spacing Modifier Letters) for Tsukurimashou
3 % Copyright (C) 2011, 2012, 2013 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---


32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input accent.mp;
39 input latin.mp;
40 input ogonek.mp;
41
42 do_late_includes;
43
44 

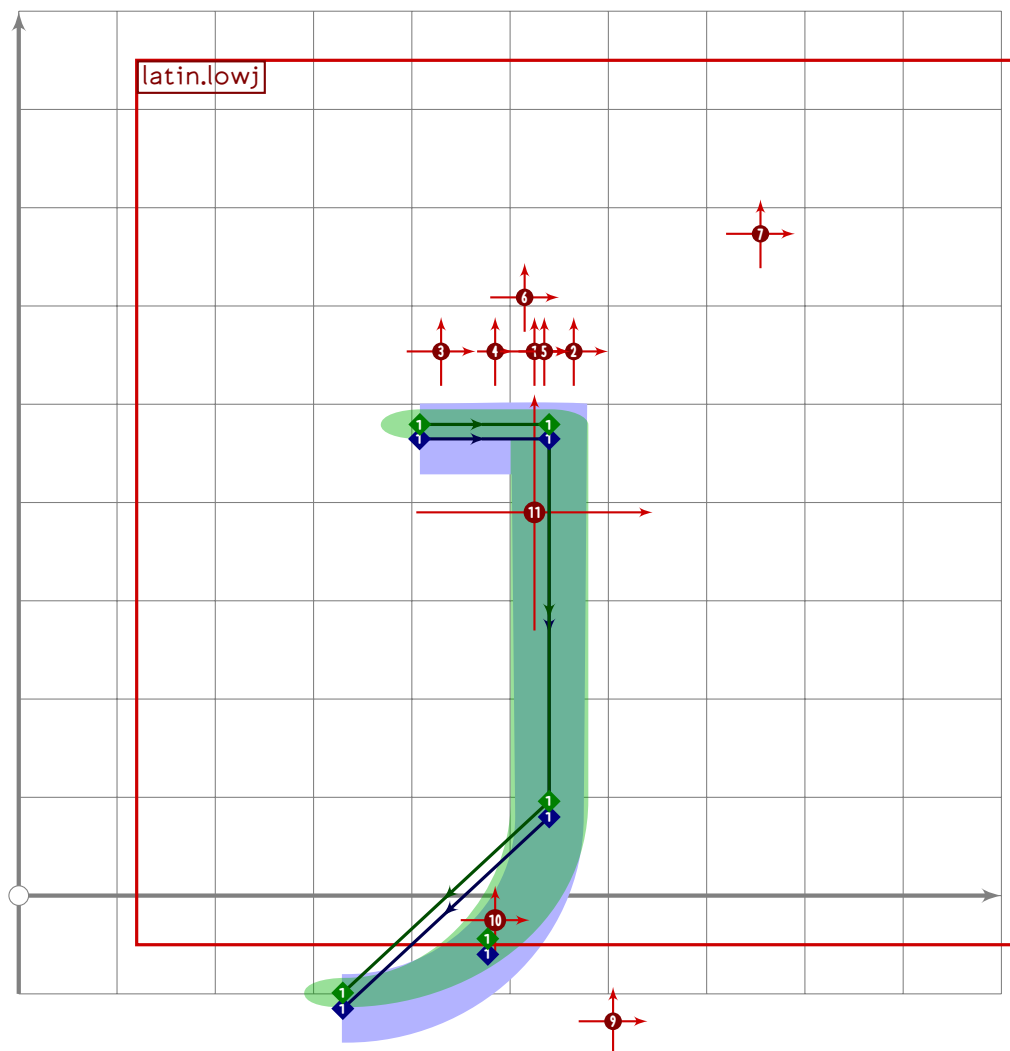
---


45
```

02

Latin Extended B

```
46 % LATIN EXTENDED B
47
48 tsu_accent.low_default_anchors;
49
```



```

50 % j without dot
51 begintsuglyph("uni0237";55);
52   tsu_xform(identity shifted (70,0))(latin.lowj;
53     tsu_accent.shift_anchors(true)((0,0)));
54   pop_lcblob;
55   tsu_render;
56 endtsuglyph;
57
58 tsu_accent.clear_default_anchors;
59
60
61

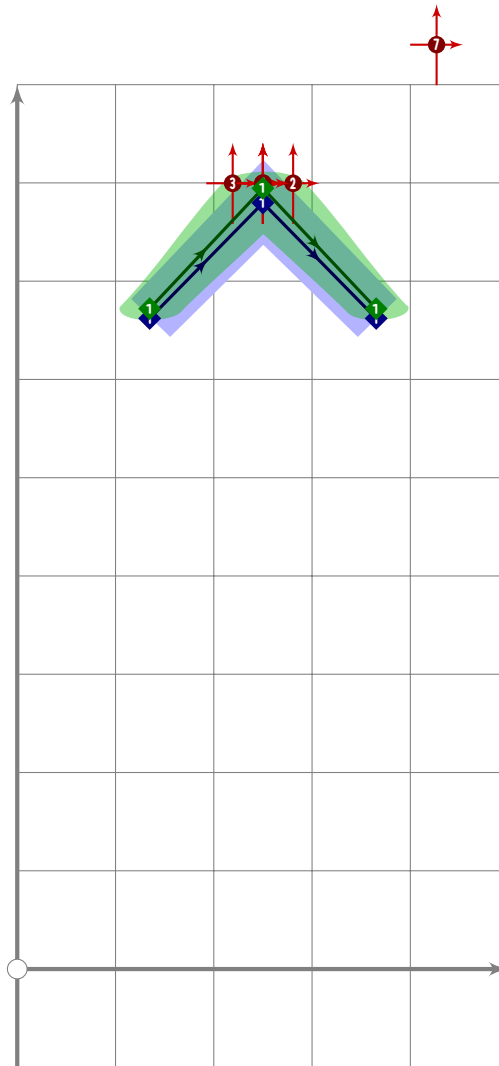
```

Spacing Modifier Letters

```

62 % SPACING MODIFIER LETTERS
63
64 tsu_rescale_half;
65

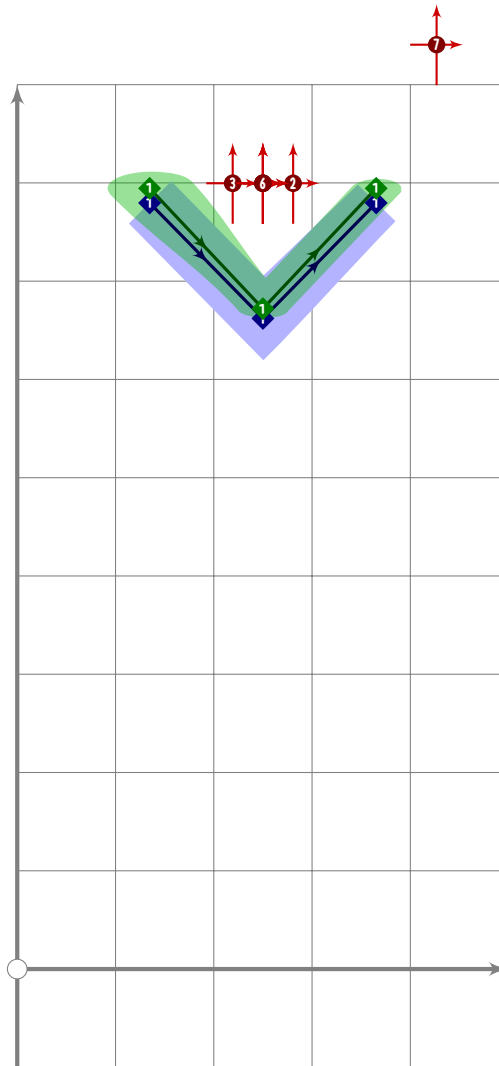
```

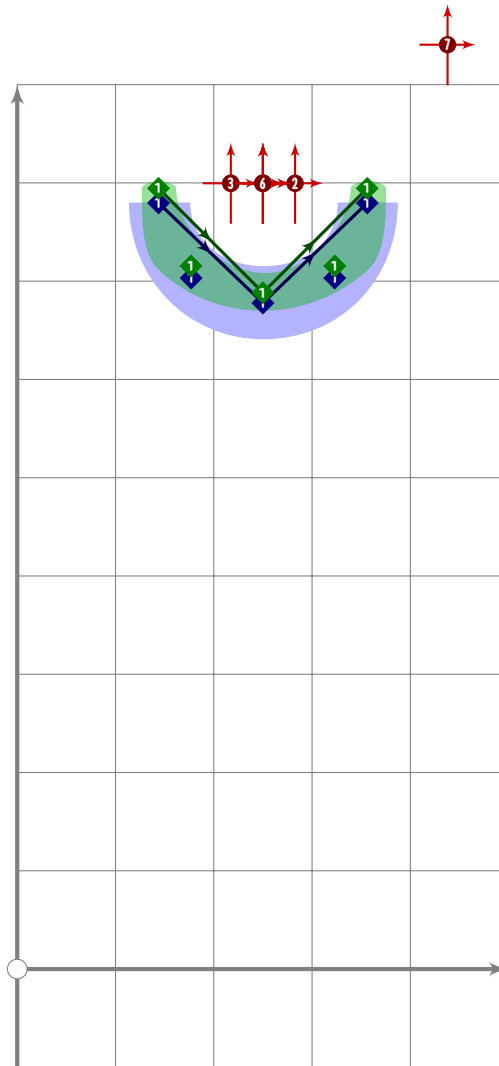
```
66 % circumflex accent
67 begintsuglyph("circumflex",198);
68 tsu_accent.apply()(tsu_accent.circumflex);
69 tsu_render;
70 endtsuglyph;
71
```

U+02C7
tsuku.caron

02



```
72 % caron
73 beginsuglyph("caron",199);
74 tsu_accent.apply()(tsu_accent.caron);
75 tsu_render;
76 endsuglyph;
77
```



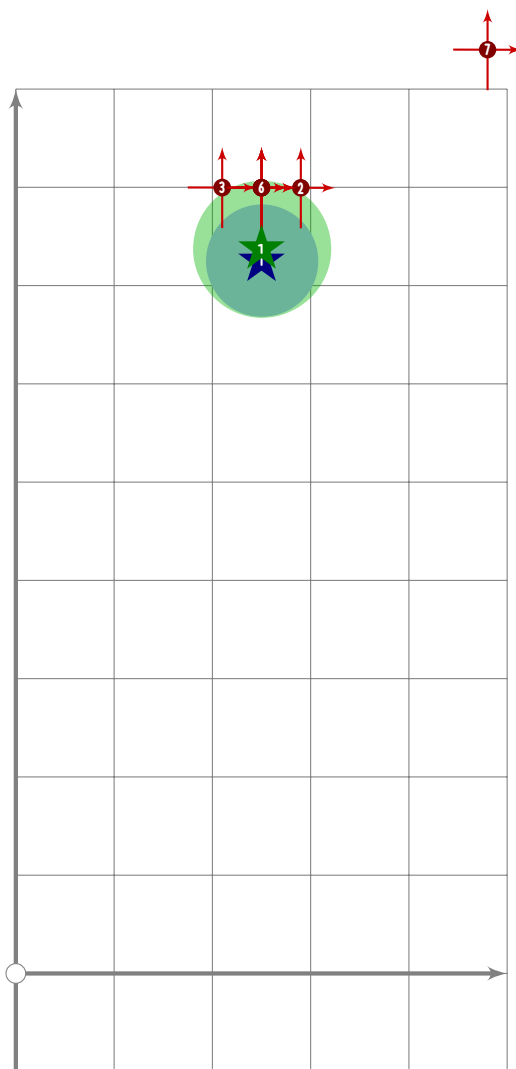
```

78 % breve
79 begintsuglyph("breve";216);
80 tsu_accent.apply()(tsu_accent.breve);
81 tsu_render;
82 endsuglyph;
83

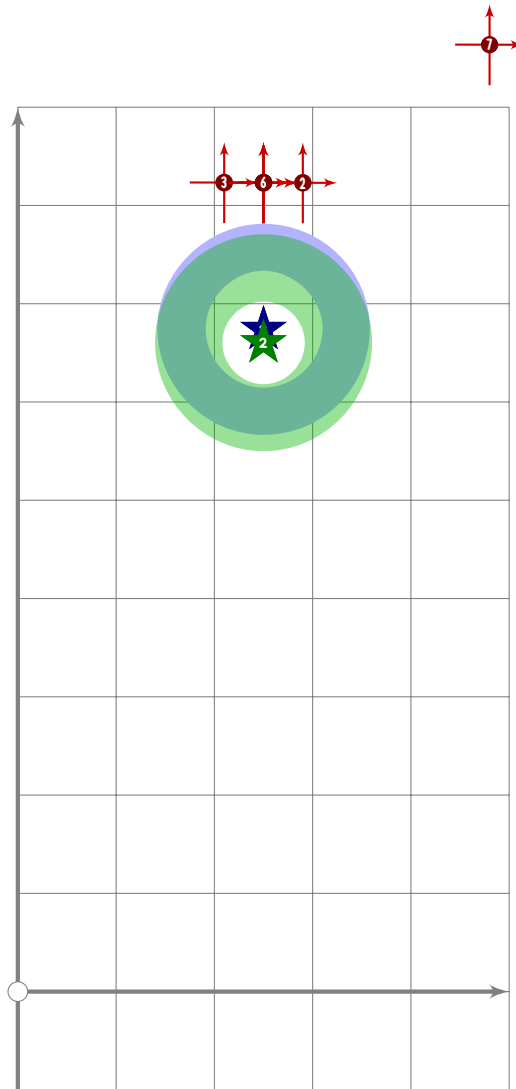
```

U+02D9
tsuku.dotaccent

02



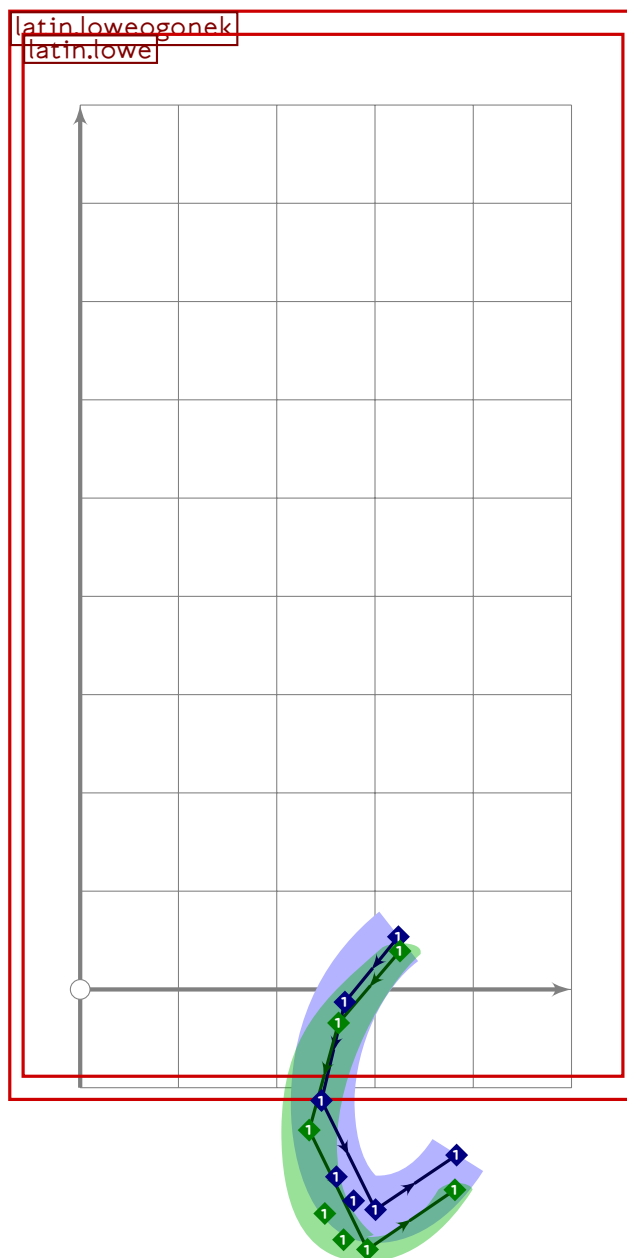
```
84 % dot above
85 beginsuglyph("dotaccent";217);
86 tsu_accent.apply()(tsu_accent.dotabove);
87 tsu_render;
88 endsuglyph;
89
```



```
90 % ring above
91 begint Suglyph("ring";218);
92   tsu_accent.apply()(tsu_accent.ringabove);
93   tsu_render;
94 endtsuglyph;
95
```

U+02DB
tsuku.ogonek

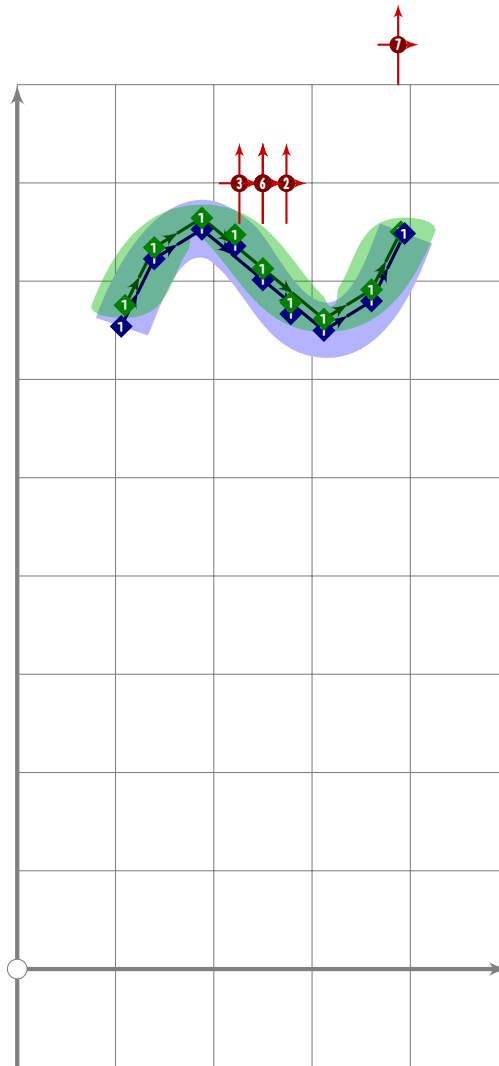
02



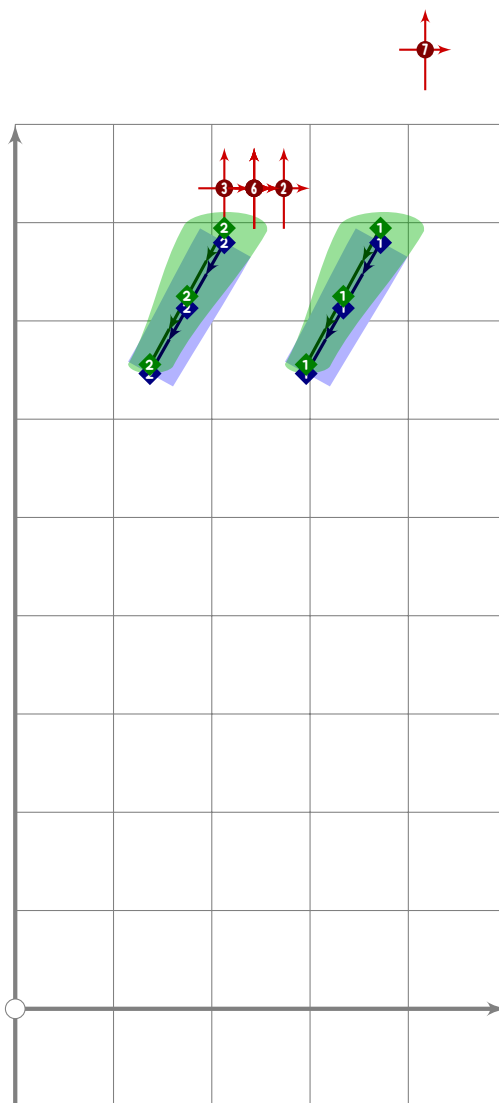
```

96 % ogonek
97 begintsuglyph("ogonek";219);
98 latin.loweogonek;
99 set_bosize(-1,0);
100 tsu_render;
101 endtsuglyph;
102

```



```
103 % small tilde
104 begintsuglyph("tilde";220);
105   tsu_accent.apply()(tsu_accent.tilde);
106   tsu_render;
107 endtsuglyph;
108
```



```

109 % double acute accent
110 begint Suglyph("hungarumlaut",221);
111   tsu_accent.apply()(tsu_accent.hungarian_umlaut);
112   tsu_render;
113 endtsuglyph;
114
115 _____
116
117 endfont;
118
119 _____

```


tsuku-03.mp

```
1 %
2 % Unicode page 03 (Combining Diacritical Marks) for Tsukurimashou
3 % Copyright (C) 2011, 2012, 2013 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---


32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input accent.mp;
39 input punct.mp;
40
41 do_late_includes;
42
43 

---

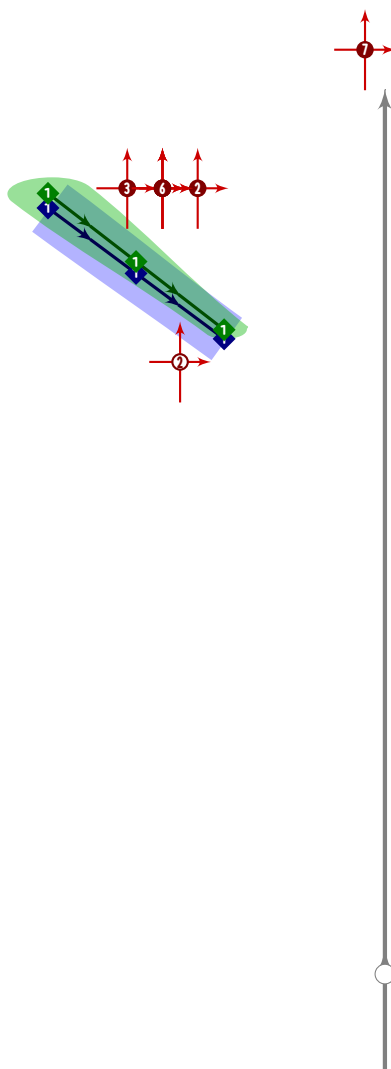

44
```

03

Combining Diacritical Marks

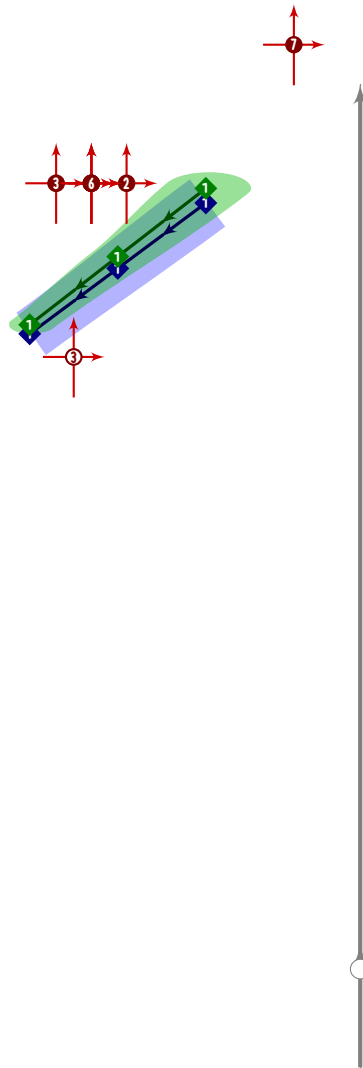
```
45 % COMBINING DIACRITICAL MARKS
46
47 tsu_rescale_combining_accent;
48
```

U+0300
tsuku.gravecomb

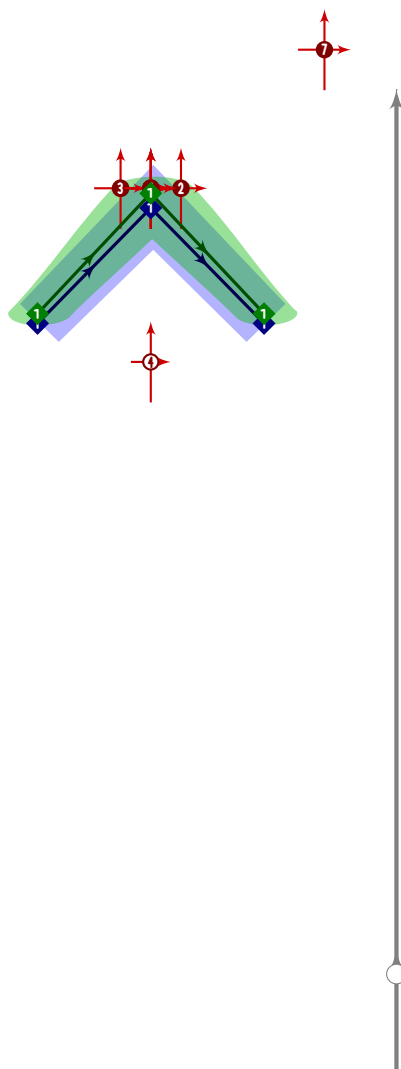


03

```
49 % grave accent
50 begint Suglyph("gravecomb";0);
51   tsu_accent.apply()(tsu_accent.grave);
52   push_anchor(-anc_grave,accent_default[anc_grave]);
53   tsu_render;
54 endtsuglyph;
55
```

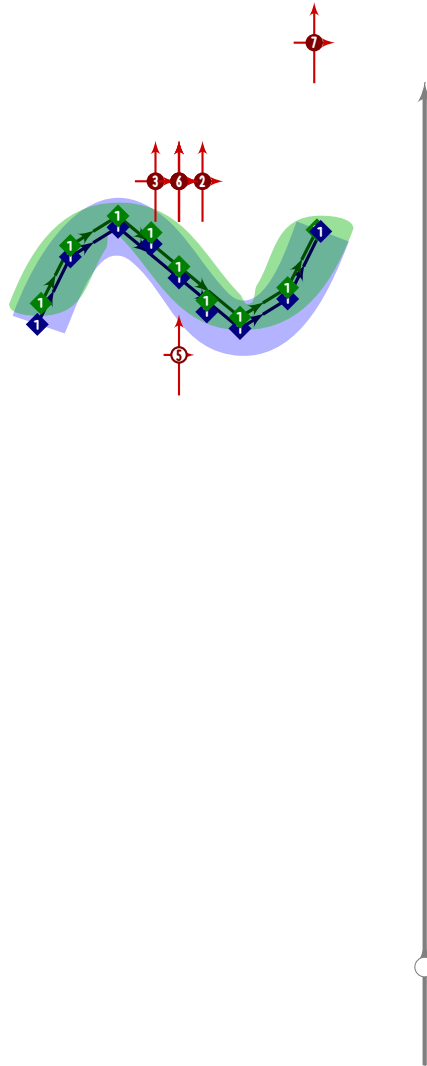


```
56 % acute accent
57 begintsuglyph("acutecomb",1);
58 tsu_accent.apply()(tsu_accent.acute);
59 push_anchor(-anc_acute,accent_default[anc_acute]);
60 tsu_render;
61 endtsuglyph;
62
```

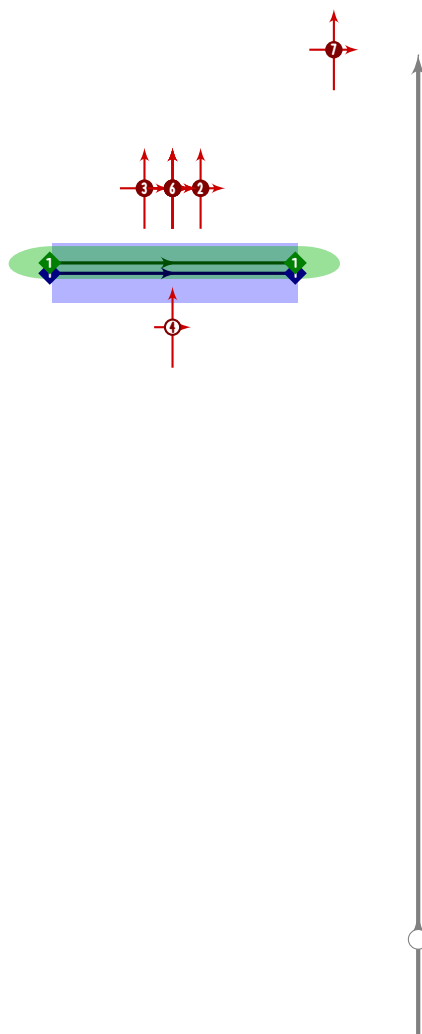


03

```
63 % circumflex accent
64 begint Suglyph("uni0302";2);
65   tsu_accent.apply()(tsu_accent.circumflex);
66   push_anchor(-anc_wide,accent_default[anc_wide]);
67   tsu_render;
68 endtsuglyph;
69
```

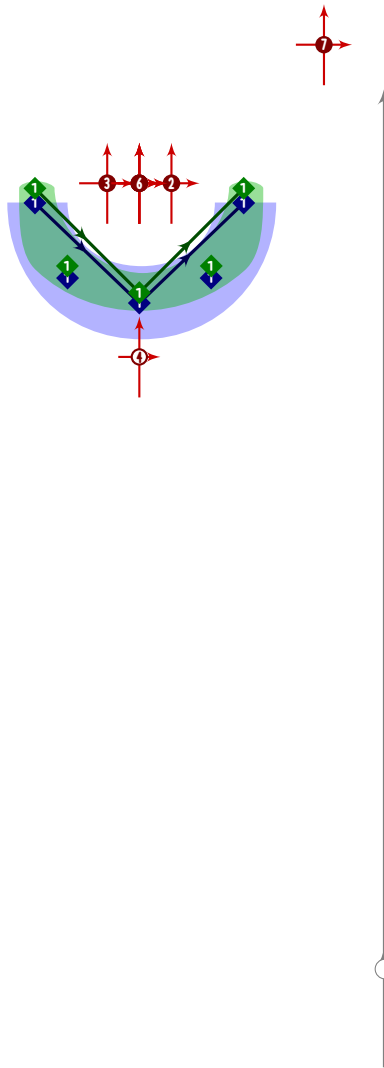


```
70 % tilde accent
71 begint Suglyph("tildecomb",3);
72 tsu_accent.apply()(tsu_accent.tilde);
73 push_anchor(-anc_tilde,accent_default[anc_tilde]);
74 tsu_render;
75 endtsuglyph;
76
```

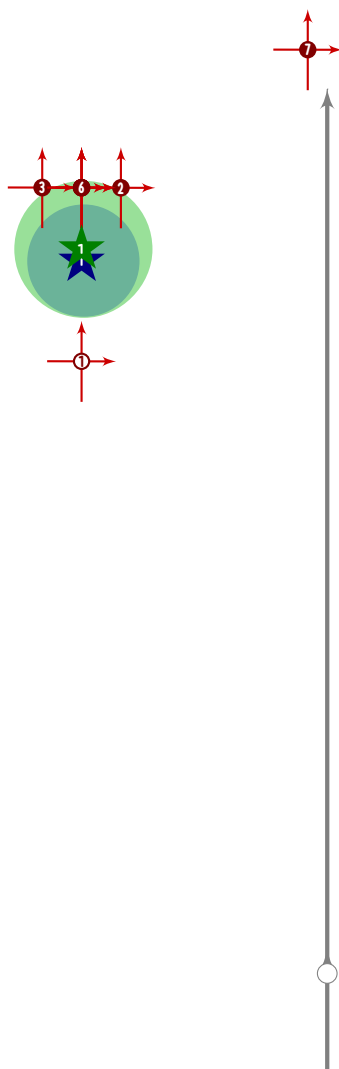


03

```
77 % macron
78 begintsuglyph("uni0304"4);
79   tsu_accent.apply()(tsu_accent.macron);
80   push_anchor(-anc_wide,accent_default[anc_wide]);
81   tsu_render;
82 endtsuglyph;
83
```

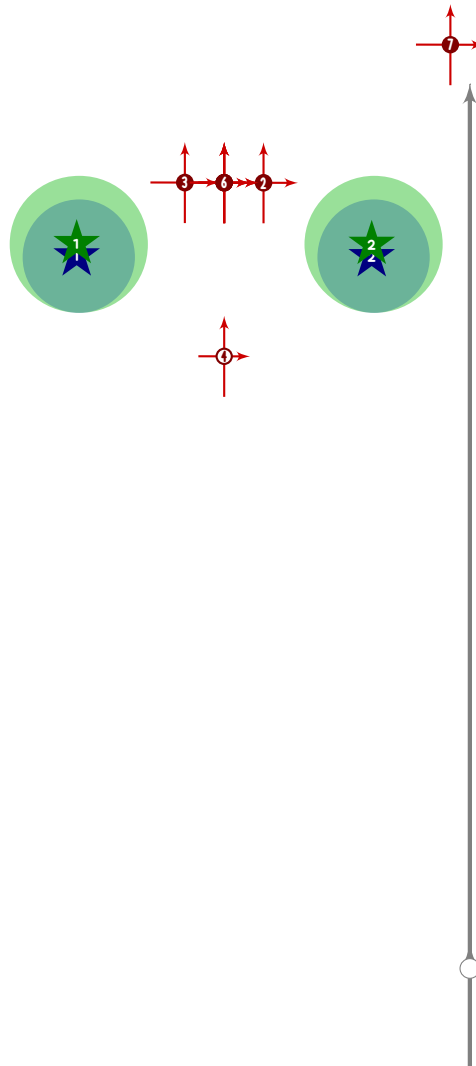


```
84 % breve
85 begintsuglyph("uni0306",6);
86 tsu_accent.apply()(tsu_accent.breve);
87 push_anchor(-anc_wide,accent_default[anc_wide]);
88 tsu_render;
89 endtsuglyph;
90
```



03

```
91 % dot above
92 begint Suglyph("uni0307";7);
93   tsu_accent.apply()(tsu_accent.dotabove);
94   push_anchor(-anc_upper,accent_default[anc_upper]);
95   tsu_render;
96 endtsuglyph;
97
```

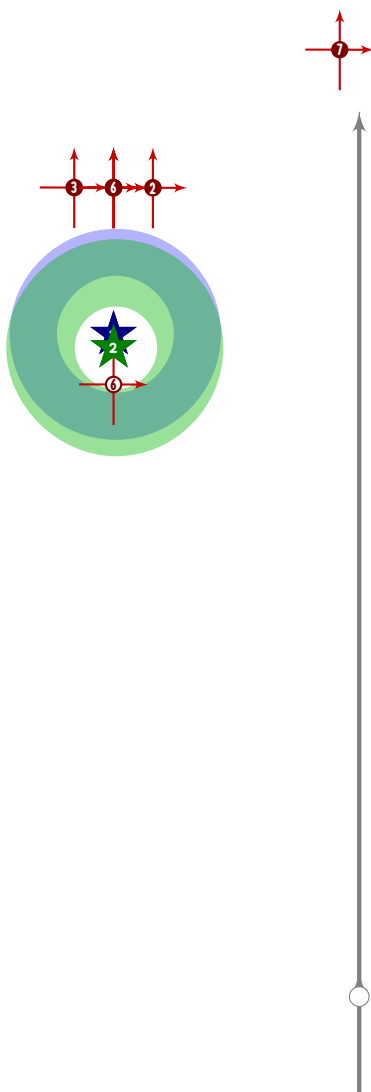



```

98 % umlaut/diaeresis
99 begintsuglyph("uni0308";8);
100 tsu_accent.apply()(tsu_accent.umlaut);
101 push_anchor(-anc_wide,accent_default[anc_wide]);
102 tsu_render;
103 endtsuglyph;
104
105 % 0309;hookabovecomb;COMBINING HOOK ABOVE
106

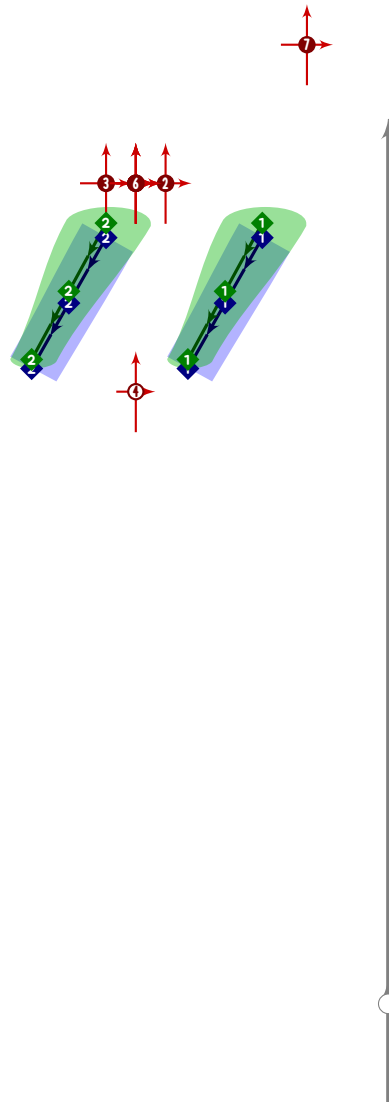
```

U+030A
tsuku.uni030A



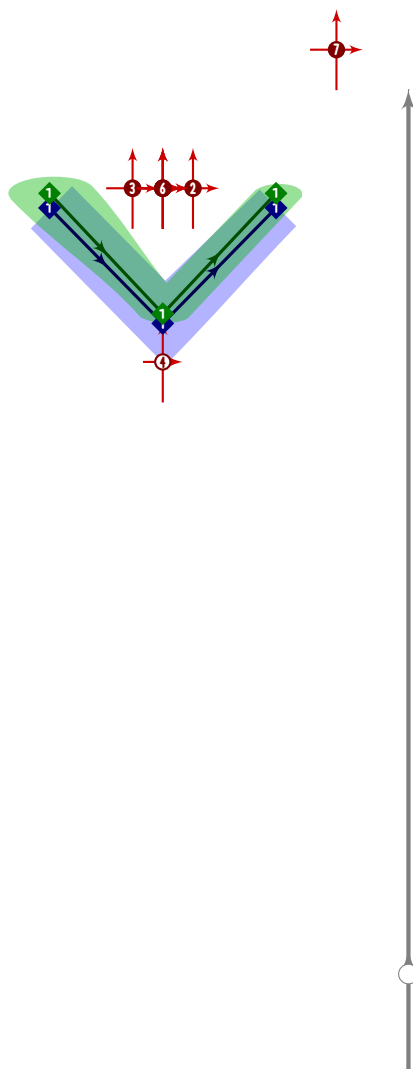
03

```
107 % ring above
108 begintsuglyph("uni030A";10);
109   tsu_accent.apply()(tsu_accent.ringabove);
110   push_anchor(-anc_ring,accent_default[anc_ring]);
111   tsu_render;
112 endtsuglyph;
113
```



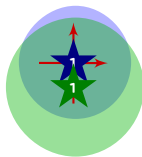
```
114 % double acute/hungarian umlaut
115 begintsuglyph("uni030B",11);
116 tsu_accent.apply()(tsu_accent.hungarian_umlaut);
117 push_anchor(-anc_wide,accent_default[anc_wide]);
118 tsu_render;
119 endtsuglyph;
120
```

U+030C
tsuku.uni030C



03

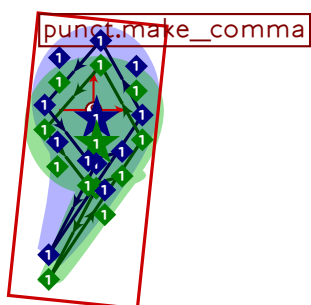
```
121 % caron/hacek
122 begint Suglyph("uni030C",12);
123   tsu_accent.apply()(tsu_accent.caron);
124   push_anchor(-anc_wide,accent_default[anc_wide]);
125   tsu_render;
126 endtsuglyph;
127
```



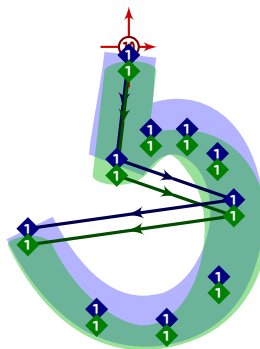
```
128 % dot below
129 begintsuglyph("dotbelowcomb";35);
130 tsu_accent.apply()(tsu_accent.dotbelow);
131 push_anchor(-anc_lower,accent_default[anc_lower]);
132 tsu_render;
133 endsuglyph;
134
```

U+0326
tsuku.uni0326

03



```
135 % comma below
136 begintsuglyph("uni0326";38);
137   tsu_accent.apply()(tsu_accent.commabelow);
138   push_anchor(-anc_lower,accent_default[anc_lower]);
139   tsu_render;
140 endtsuglyph;
141
```



```

142 % cedilla
143 begint Suglyph("uni0327",39);
144   tsu_accent.apply()(tsu_accent.cedilla);
145   push_anchor(-anc_lower_connect,accent_default[anc_lower_connect]);
146   tsu_render;
147 endtsuglyph;
148
149 _____
150
151 endfont;
152
153 _____

```

tsuku-20.mp

```
1 %
2 % Unicode page 20 (Punctuation) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---


32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input punct.mp;
39
40 do_late_includes;
41
42 

---

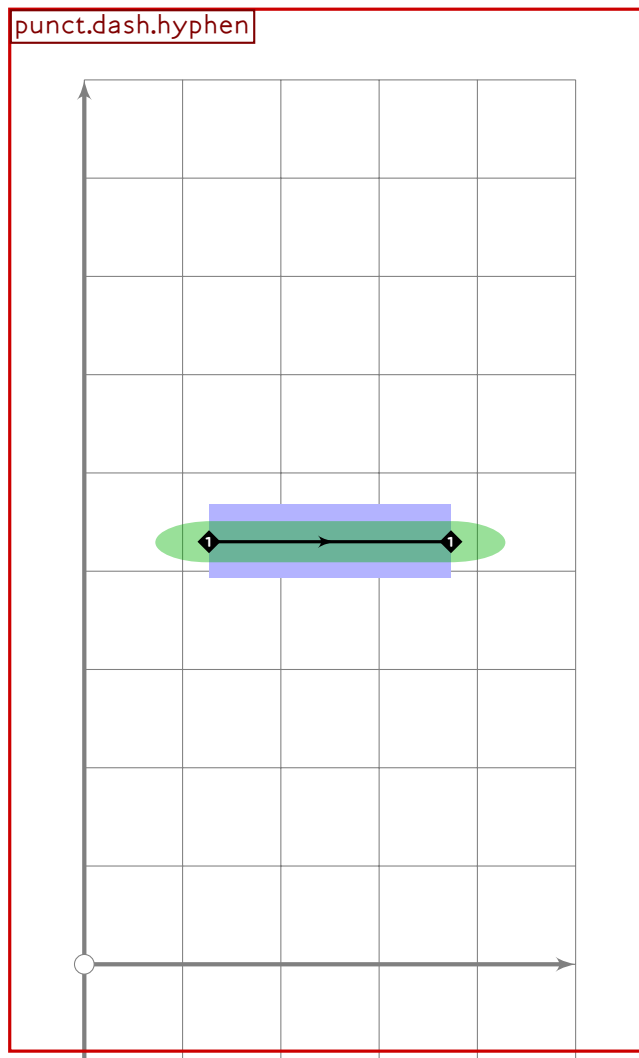

43
```

20

General Punctuation

```
44 % GENERAL PUNCTUATION
45
46 % WARNING changing rescale setting
47 tsu_rescale_half;
48
49 % hyphen
50 begintsuglyph("uni2010",16);
51   punct.dash.hyphen;
52   tsu_render;
53 endtsuglyph;
54
```

[see page 377]

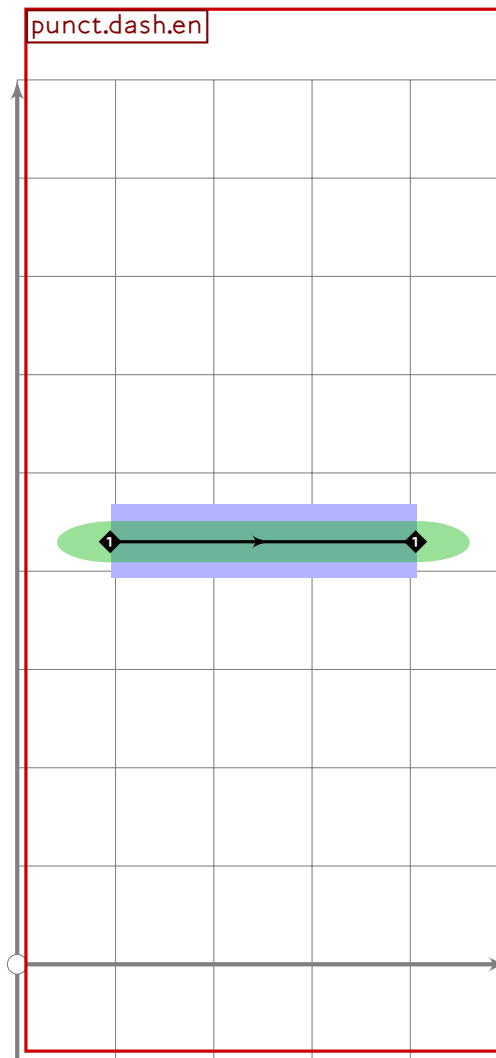


```

55 % non-breaking hyphen
56 begintsuglyph("uni2011",17);
57   punct.dash.hyphen;
58   tsu_render;
59 endtsuglyph;
60
61 % figure dash
62 begintsuglyph("figuredash",18);
63   punct.dash.en;
64   tsu_render;
65 endtsuglyph;
66

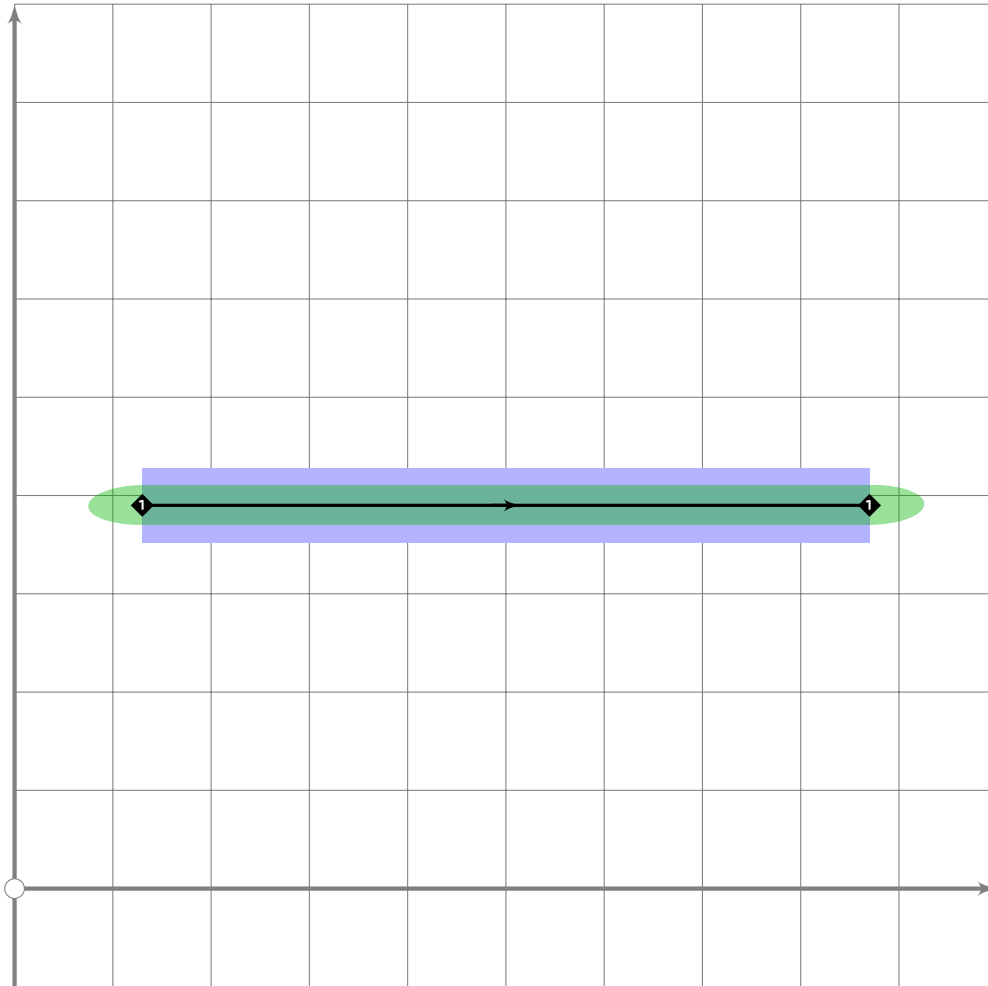
```

[see page 376]



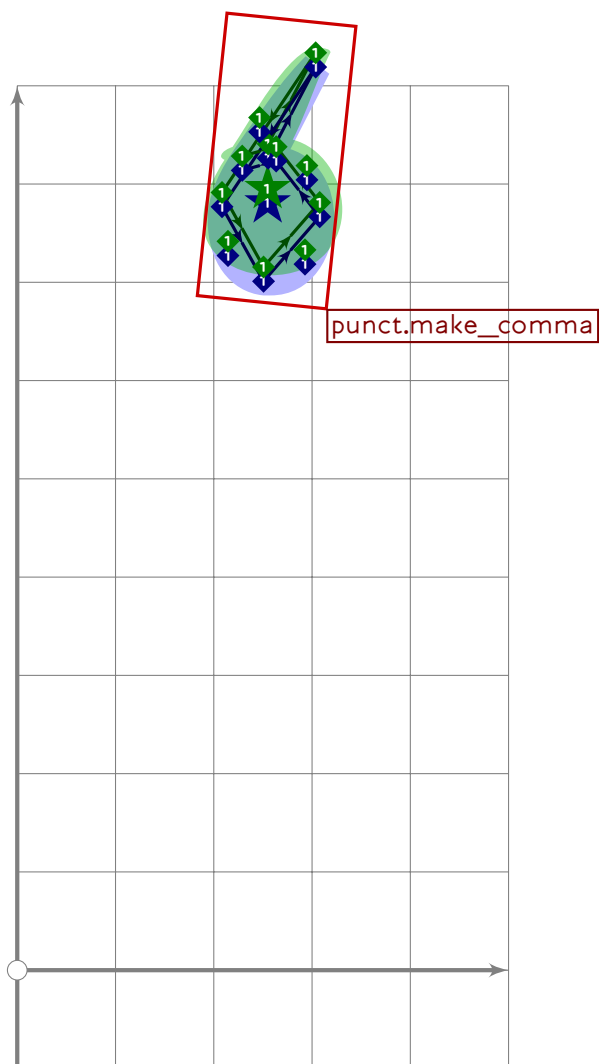
```
67 % en dash
68 begintsuglyph("endash",19);
69   punct.dash.en;
70   tsu_render;
71 endtsuglyph;
72
73 % WARNING changing rescale setting
74 tsu_rescale_full;
75
76 % em dash
77 begintsuglyph("emdash",20);
78   punct.dash.em;
79   tsu_render;
80 endtsuglyph;
81
```

[see page 375]



```
82 % horizontal bar
83 begintsuglyph("uni2015",21);
84   push_stroke(((130,390)-(870,390),(2,2)-(2,2)));
85   tsu_render;
86 endtsuglyph;
87
88 % WARNING changing rescale setting
89 tsu_rescale_half;
90
```

U+2018
tsuku.quoteleft



20

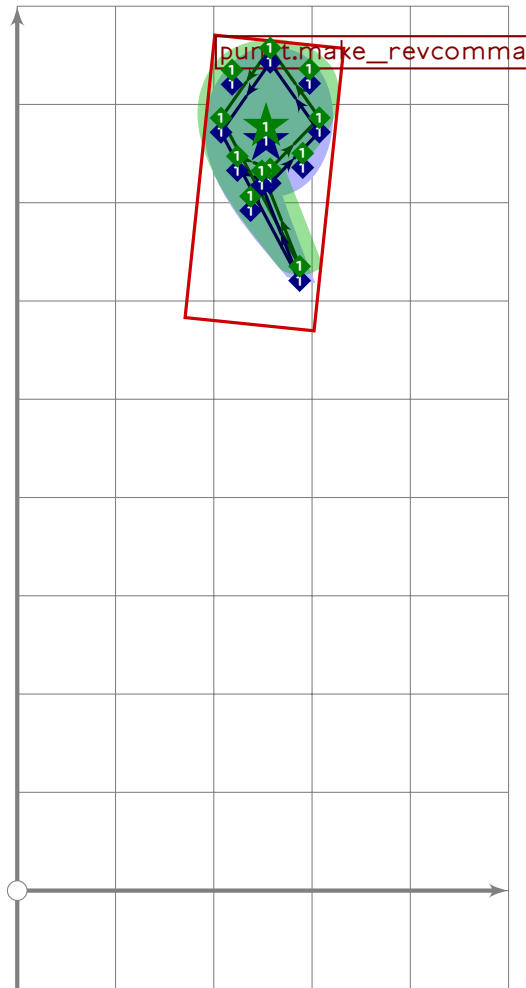
```
91 % high-6
92 begintsuglyph("quoteleft";24);
93   punct.make_comma((520,vmetric(0.94)),180);
94   tsu_render;
95 endtsuglyph;
96
```



```
97 % high-9
98 begintsuglyph("quoteright";25);
99   punct.make_comma((480,vmetric(0.94)),0);
100   tsu_render;
101 endsuglyph;
102
```

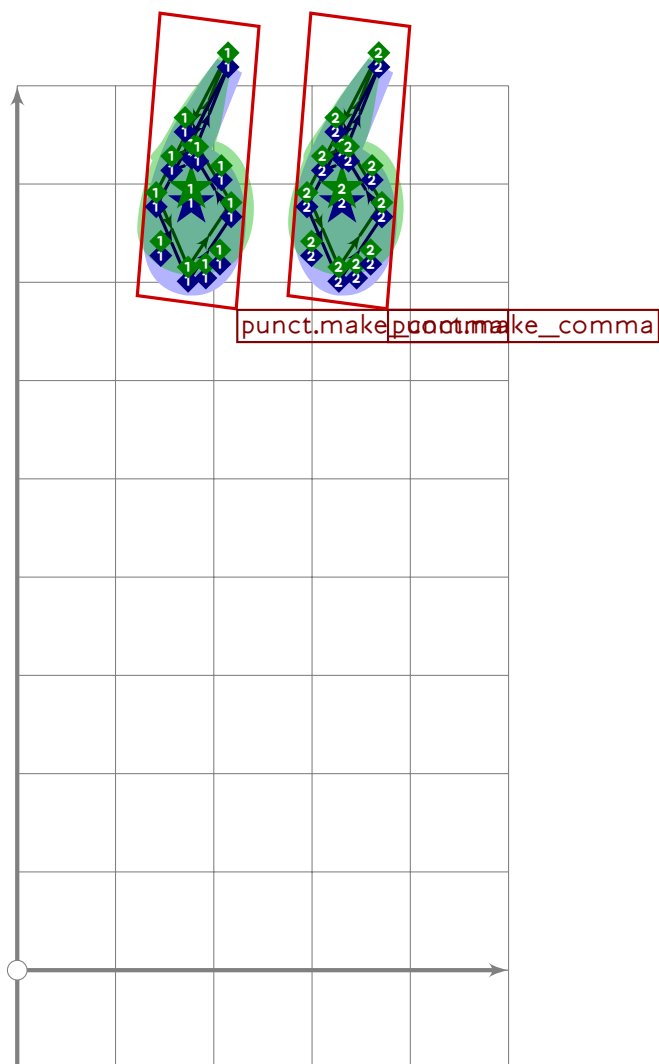


```
103 % low-9
104 begintsuglyph("quotesinglbase",26);
105   punct.make_comma((520,vmetric(0.03)),0);
106   tsu_render;
107 endtsuglyph;
108
```



```
109 % high-rev-9
110 begintsuglyph("quotereversed";27);
111   punct.make_revcomma((520,ymetric(0.94)),0);
112   tsu_render;
113 endtsuglyph;
114
```

U+201C
tsuku.quotedblleft

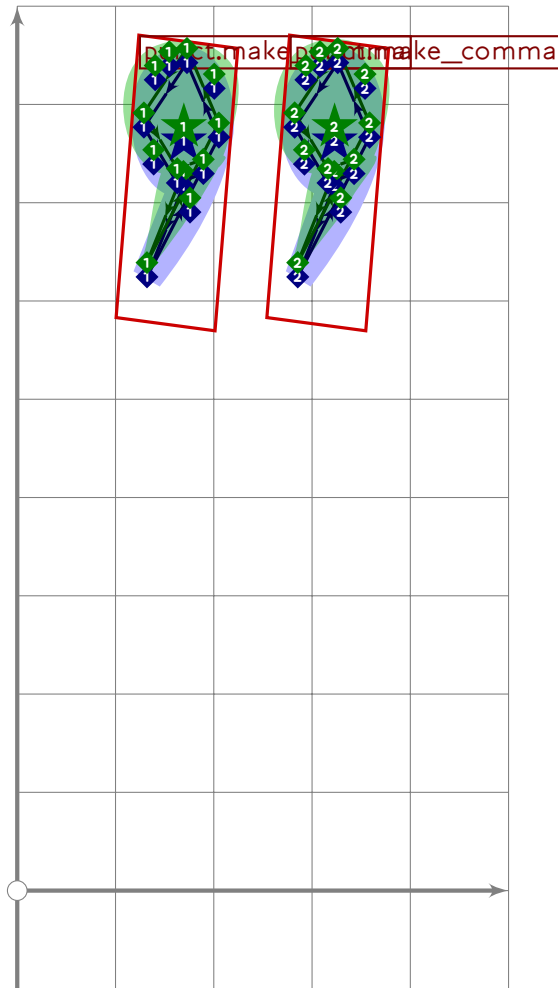


20

```

115 % high-66
116 begintsuglyph("quotedblleft";28);
117   punct.make_comma((520-tsu_punct_size,vmetric(0.94)),180);
118   punct.make_comma((520+tsu_punct_size,vmetric(0.94)),180);
119   tsu_render;
120 endsuglyph;
121

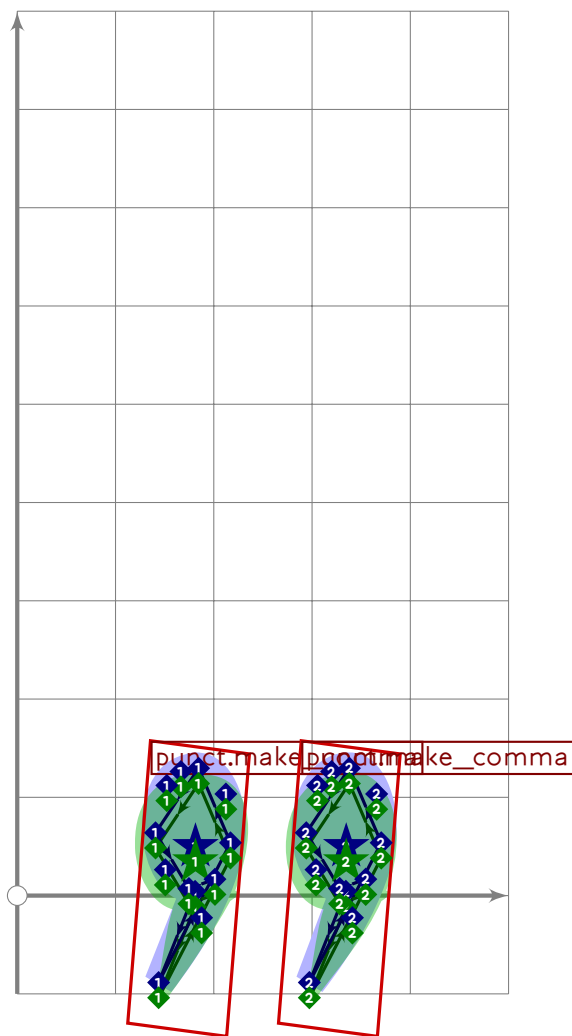
```

```

122 % high-99
123 beginsuglyph("quotedblright",29);
124   punct.make_comma((480-tsu_punct_size,vmetric(0.94)),0);
125   punct.make_comma((480+tsu_punct_size,vmetric(0.94)),0);
126   tsu_render;
127 endsuglyph;
128

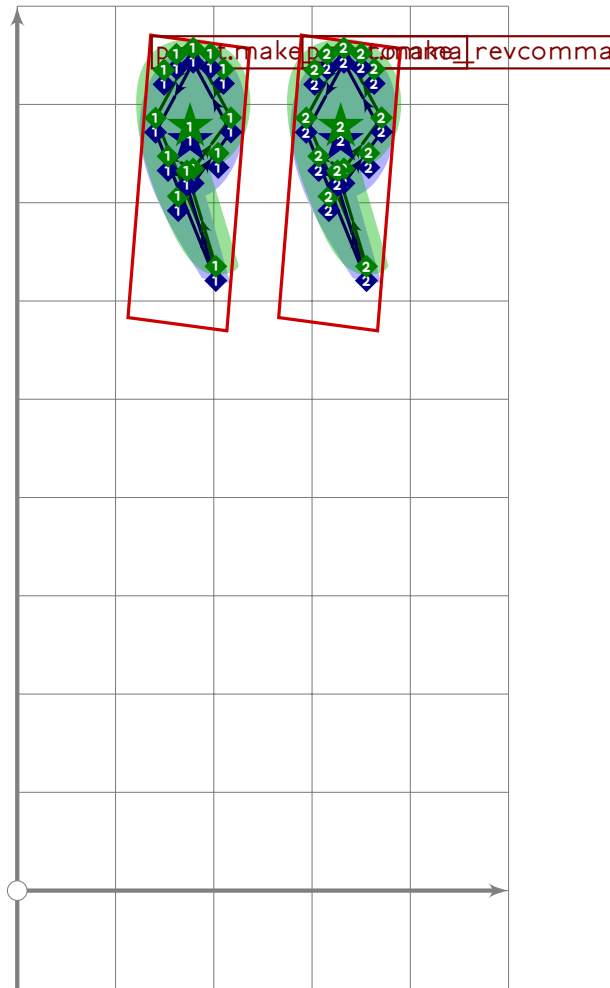
```



```

129 % low-99
130 begintsuglyph("quotedblbase",30);
131 punct.make_comma((520-tsu_punct_size,vmetric(0.03)),0);
132 punct.make_comma((520+tsu_punct_size,vmetric(0.03)),0);
133 tsu_render;
134 endtsuglyph;
135

```



```

136 % high-rev-99
137 begintsuglyph("quotedblreversed",31);
138 punct.make_revcomma((520-tsu_punct_size,vmetric(0.94)),0);
139 punct.make_revcomma((520+tsu_punct_size,vmetric(0.94)),0);
140 tsu_render;
141 endtsuglyph;
142
143 % WARNING changing rescale setting
144 tsu_rescale_native_narrow;
145
146 vardef dagger_spur =
147   if sharp_corners:
148     dagger_x:=(tsu_punct_size-60)*1.25;
149     if dagger_x<12: dagger_x:=15; fi;
150     (4,mincho*30){curl 0}..
151     (0.5[(0,mincho*20),(dagger_x,222-mincho*72)]+mincho*(-74))..
152     {curl 1}(dagger_x,222-mincho*72)-(0,200)-
153     (-dagger_x,222-mincho*72){curl 1}..
154     (0.5[(0,mincho*20),(-dagger_x,222-mincho*72)]+mincho*(74))..
155     {curl 0}(-4,mincho*30)-cycle
156   else:

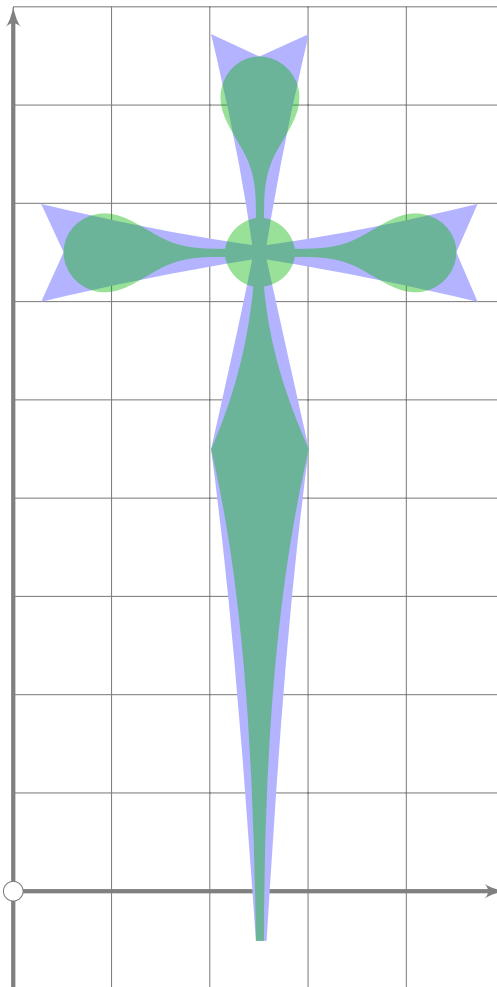
```

U+2020
tsuku.dagger

```

157 dagger_x:=tsu_punct_size-60;
158 if dagger_x<12: dagger_x:=15; fi;
159 (4,mincho*30){curl 0}..
160 (0.5[(0,mincho*20),(dagger_x,160)]+mincho*(-74))..
161 (dagger_x,160)..(0,200)..(-dagger_x,160)..
162 (0.5[(0,mincho*20),(-dagger_x,160)]+mincho*(74))..
163 {curl 0}(-4,mincho*30)-cycle
164 fi
165 enddef;
166

```



```

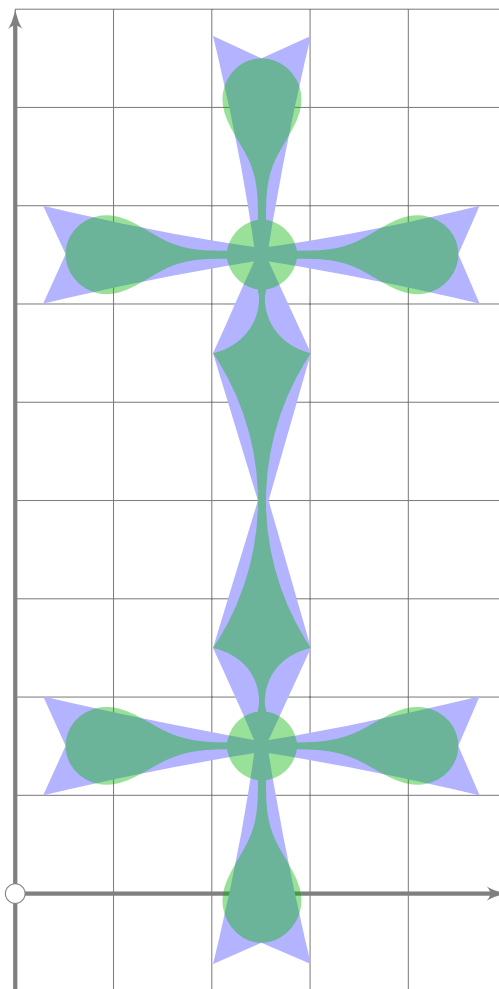
167 % dagger
168 begintsuglyph("dagger",32);
169 begingroup
170 save tsx;
171 transform tsx;
172
173 tsx:=tsu_slant_xform;
174
175 dangerousFill (dagger_spur rotated 90 shifted (250,650)
176 transformed tsx);
177 dangerousFill (dagger_spur shifted (250,650)

```

```

178     transformed tsx);
179     dangerousFill (dagger_spur rotated -90 shifted (250,650)
180     transformed tsx);
181     dangerousFill (fullcircle scaled (20*mincho*50) shifted (250,650)
182     transformed tsx);
183
184     x1=x5=246;
185     x3=250-(tsu_punct_size-60)*1.25;
186     x2=x4=0.5[x1,x3];
187     x6=x10=500-x1;
188     x7=x9=500-x2;
189     x8=500-x3;
190     x11=x12=0.4[250,x3];
191     x13=x14=500-x11;
192
193     y1=y10=650;
194     y2=y9=550;
195     y3=y8=450;
196     y4=y7=250;
197     y5=y6=-50;
198     y11=y14=535;
199     y12=y13=280;
200
201     dangerousFill (interpath(mincho,
202     z1-z2-z3-z4-z5-z6-z7-z8-z9-z10-cycle,
203     z1{curl 1}..z11.{curl 1}z3{curl 1}..z12.{curl 0}z5-
204     z6{curl 0}..z13.{curl 1}z8{curl 1}..z14.{curl 1}z10-cycle)
205     transformed tsx);
206     endgroup;
207     endtsuglyph;
208

```



```

209 % double dagger
210 begintsuglyph("daggerdbl";33);
211 begingroup
212     save x,y,tsx;
213     numeric x[],y[];
214     transform tsx;
215
216     tsx:=tsu_slant_xform;
217
218     dangerousFill (dagger_spur rotated 90 shifted (250,650)
219         transformed tsx);
220     dangerousFill (dagger_spur shifted (250,650)
221         transformed tsx);
222     dangerousFill (dagger_spur rotated -90 shifted (250,650)
223         transformed tsx);
224     dangerousFill (fullcircle scaled (20+mincho*50) shifted (250,650)
225         transformed tsx);
226     dangerousFill (dagger_spur rotated -90 shifted (250,150)
227         transformed tsx);
228     dangerousFill (dagger_spur rotated 180 shifted (250,150)
229         transformed tsx);

```

```

230    dangerousFill (dagger_spur rotated 90 shifted (250,150)
231        transformed tsx);
232    dangerousFill (fullcircle scaled (20*mincho*50) shifted (250,150)
233        transformed tsx);
234
235    x1=x4=x7=246;
236    x3=x5=250-(tsu_punct_size-60)*1.25;
237    x2=x6=0.5[x1,x3];
238    x8=x11=x14=500-x1;
239    x9=x13=500-x2;
240    x10=x12=500-x3;
241
242    y1=y14=650-mincho*30;
243    y3=y12=550;
244    y2=y13=0.5[y1,y3];
245    y4=y11=400;
246    y5=y10=800-y3;
247    y6=y9=800-y2;
248    y7=y8=800-y1;
249
250    x15=x16=x2+7*mincho;
251    x17=x18=500-x15;
252
253    y15=y18=y2-20*mincho;
254    y16=y17=800-y15;
255
256    dangerousFill (interpath(mincho,
257        z1-z2-z3-z4-z5-z6-z7-z8-z9-z10-z11-z12-z13-z14-cycle,
258        z1{curl 1}..z15..{curl 1}z3{curl 1}..z4..
259        {curl 1}z5{curl 1}..z16..{curl 1}z7-
260        z8{curl 1}..z17..{curl 1}z10{curl 1}..z11..
261        {curl 1}z12{curl 1}..z18..{curl 1}z14-cycle)
262        transformed tsx);
263    endgroup;
264    endtsuglyph;
265
266    % WARNING changing rescale setting
267    tsu_rescale_full;
268
269    % euro symbol
270    begintugsuglyph("Euro",172);
271    punct.euro;
272    tsu_render;
273    endtsuglyph;
274
275    _____
276
277    endfont;

```

[see page 379]

278

279

tsuku-21.mp

```
1 %
2 % Unicode page 21 (Symbols) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---

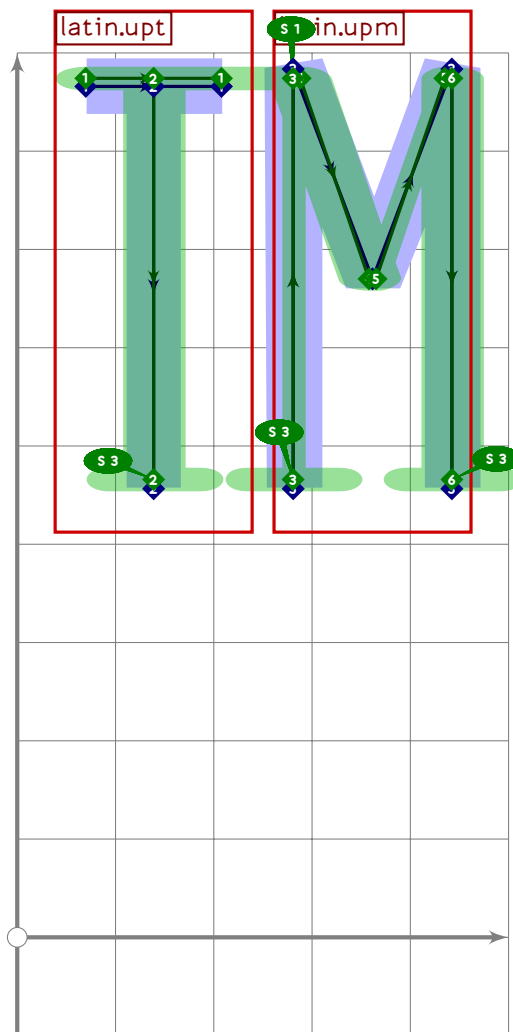

32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input latin.mp;
39 input punct.mp;
40
41 do_late_includes;
42
43 

---


44
```

Symbols Required By Mes-1

```
45 % SYMBOLS REQUIRED BY MES-1
46
47 % WARNING changing rescale setting
48 tsu_rescale_half;
49
```



```

50 % trademark symbol
51 begintsuglyph("trademark";34);
52 tsu_xform(identity scaled 0.5 shifted (0,400))(latin.upt);
53 numeric x[],y[];
54 tsu_xform(identity scaled 0.5 shifted (500,400))(latin.upm);
55 tsu_render;
56 endtsuglyph;
57
58 % ohm (resistance unit) symbol
59 begintsuglyph("uni2126";38);
60 punct.ohm;
61 tsu_render;
62 endtsuglyph;
63
64 % Note: 0x5B through 0x5E, which are x/8 fractions, are assembled by the
65 % assemble-font script
66
67 % WARNING changing rescale setting
68 tsu_rescale_full;
69

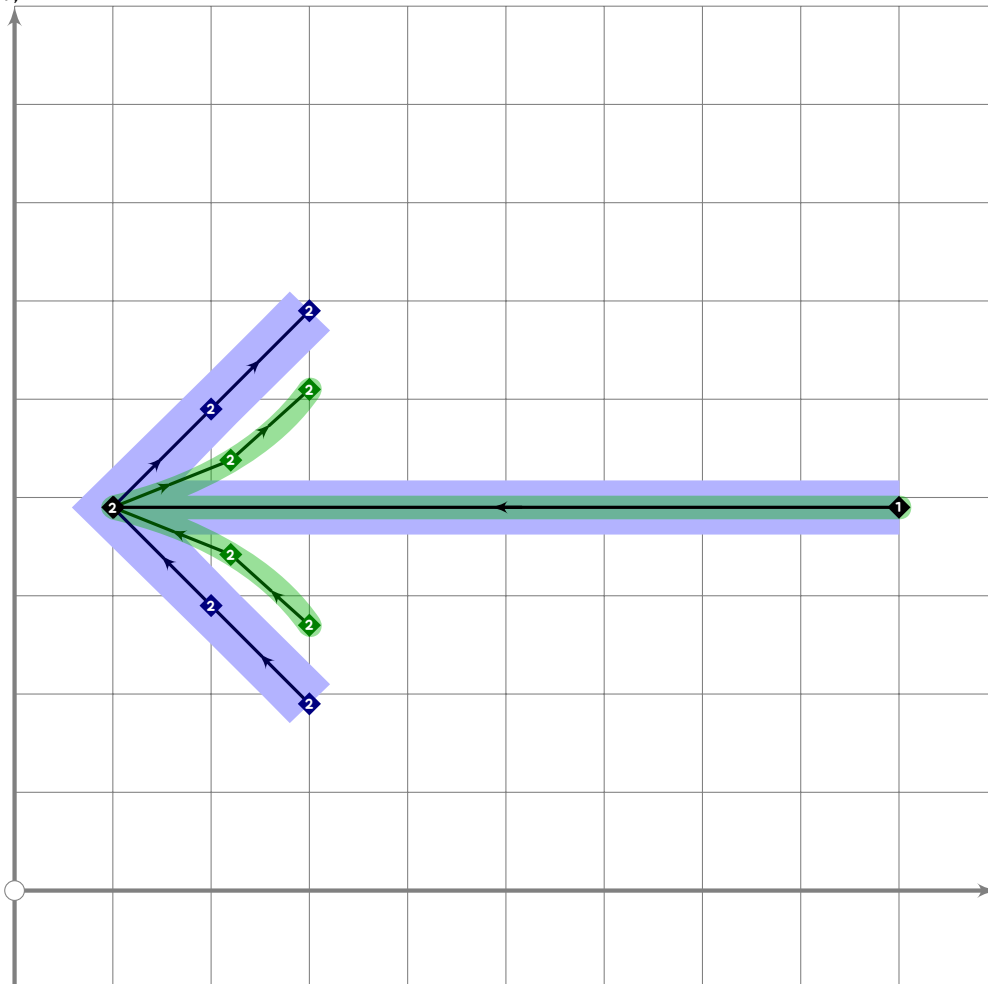
```

[see page 387]

```

70 vardef arrow(expr rot) =
71   push_stroke(((−4,0)−(3,99,0))
72     scaled tsu_punct_size rotated rot shifted centre_pt,
73     (1,6,1,6)−(1,6,1,6));
74   set_boalternate(0);
75   set_bosize(0,80);
76   push_stroke(((2,2)..((3,1)+(0.2*mincho*(−1,−1)))..
77     {curl 1}(4,0){curl 1}..
78     ((3,−1)+(0.2*mincho*(−1,1)))..(2,−2))
79     xyscaled (1,1−0.4*mincho)
80     scaled tsu_punct_size rotated rot shifted centre_pt,
81     (1,6,1,6)−(1,6,1,6)−(1,6,1,6)−(1,6,1,6)−(1,6,1,6));
82   set_botip(0,2,1);
83   set_boalternate(0);
84   set_bosize(0,80);
85 enddef;

```

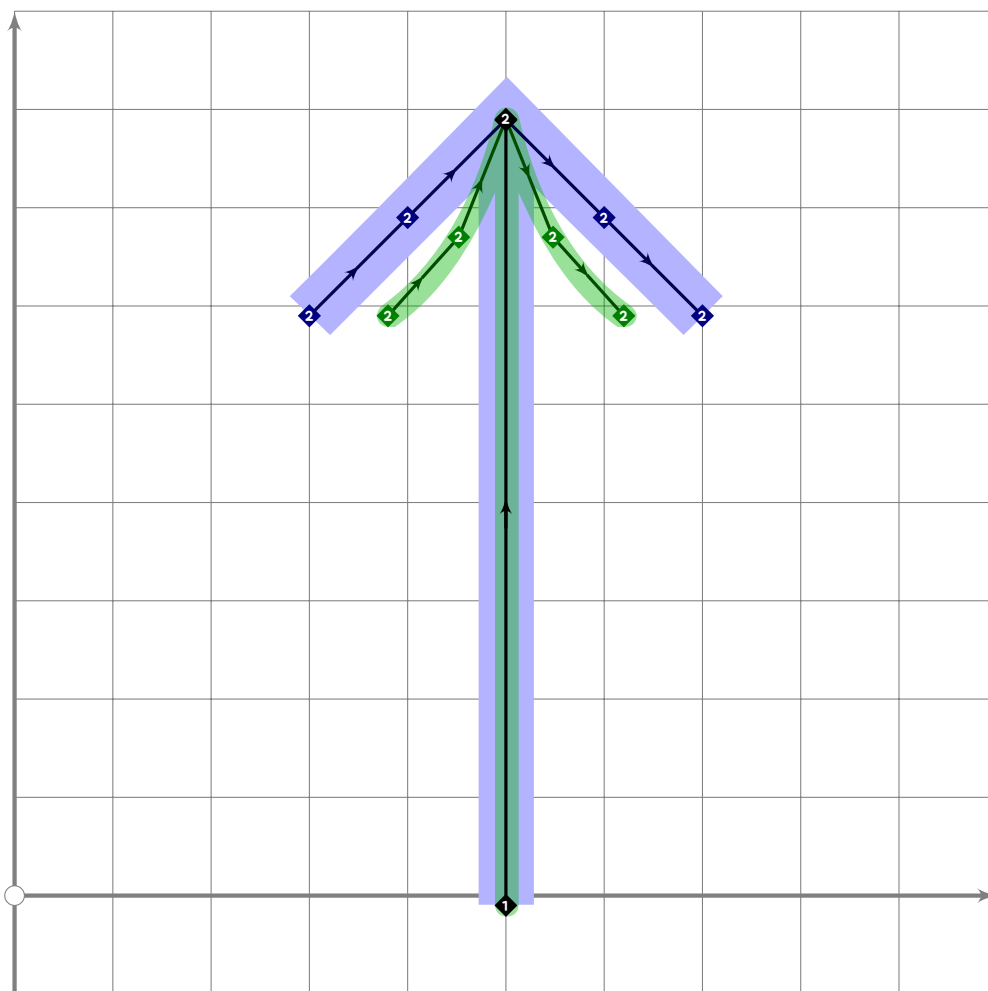


```

86
87 begint Suglyph("arrowleft",144);
88   arrow(180);
89   tsu_render;
90 endtsuglyph;

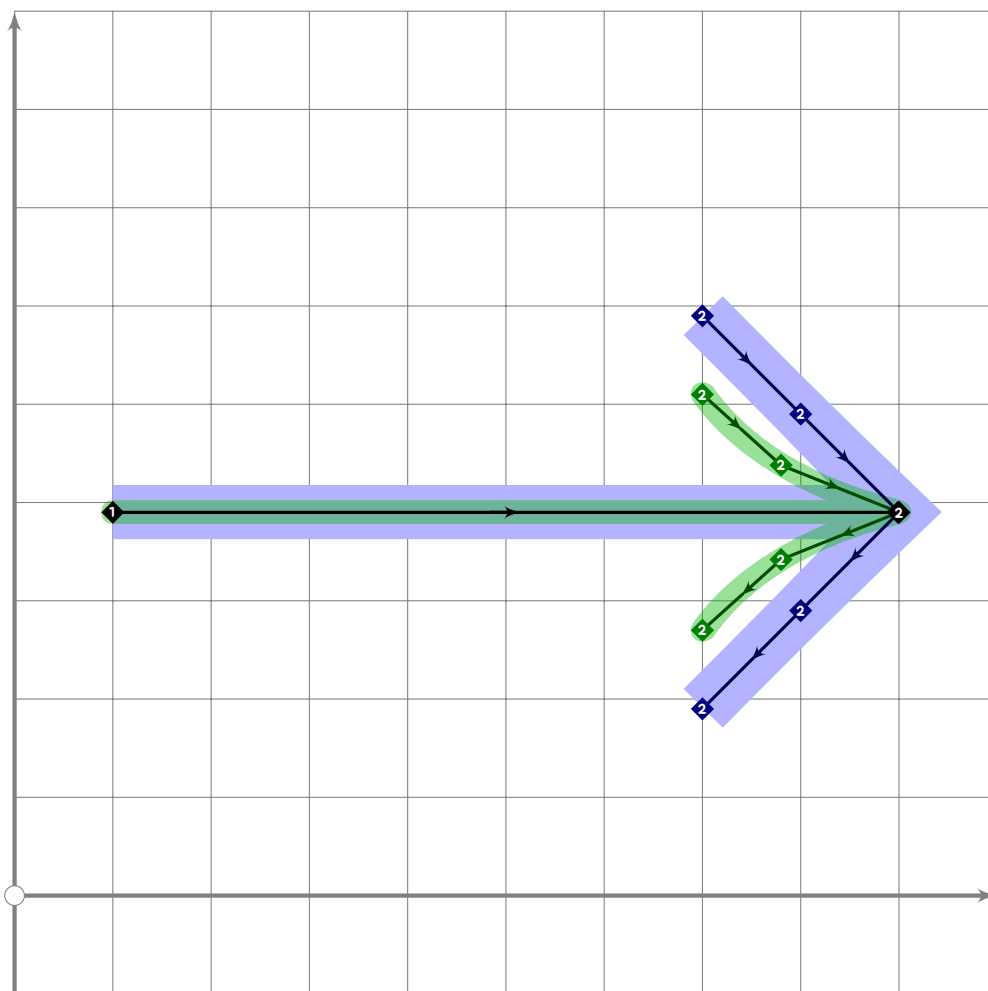
```

U+2191
tsuku.arrowup



21

```
91  
92 begintsuglyph("arrowup";145);  
93   arrow(90);  
94   tsu_render;  
95 endsuglyph;
```

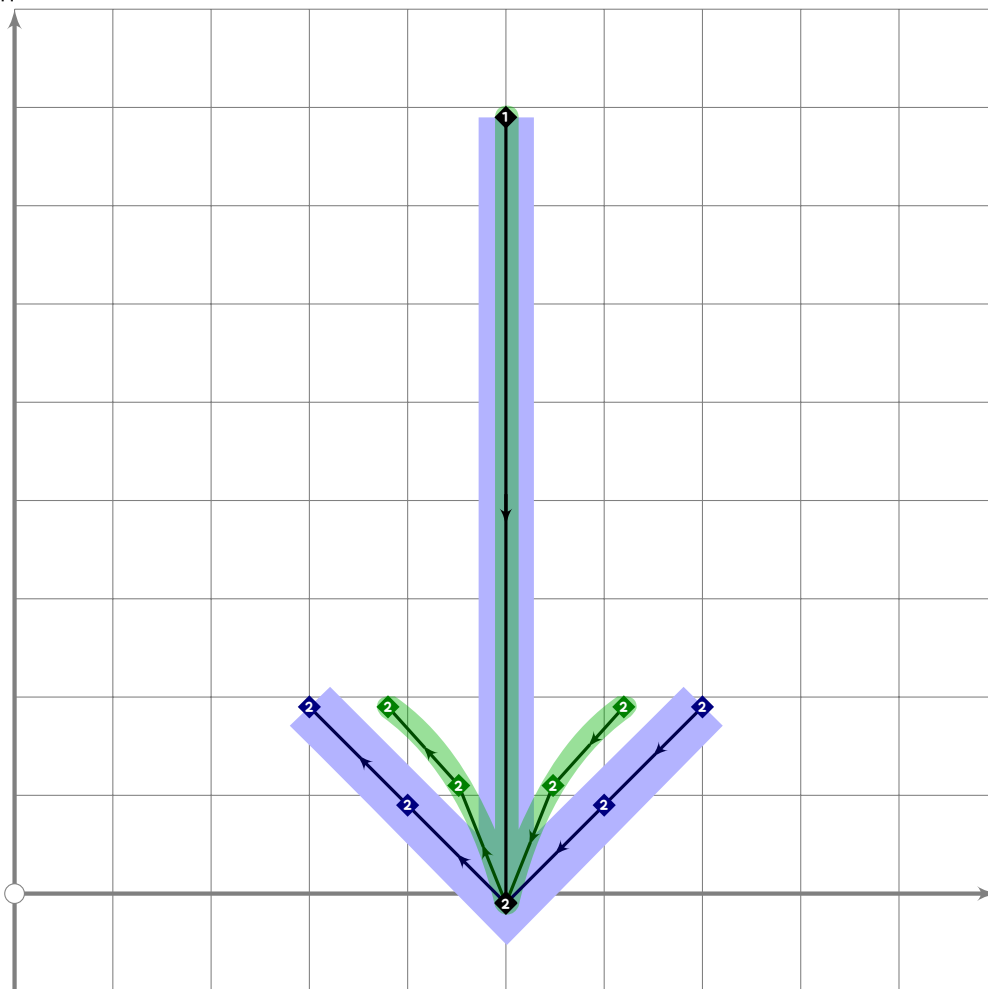


```

96
97 begint Suglyph("arrowright",146);
98   arrow(0);
99   tsu_render;
100 endtsuglyph;

```

U+2193
tsuku.arrowdown



21

```
101  
102 begintsuglyph("arrowdown",147);  
103   arrow(270);  
104   tsu_render;  
105 endtsuglyph;  
106  
107 _____  
108  
109 endfont;  
110  
111 _____
```

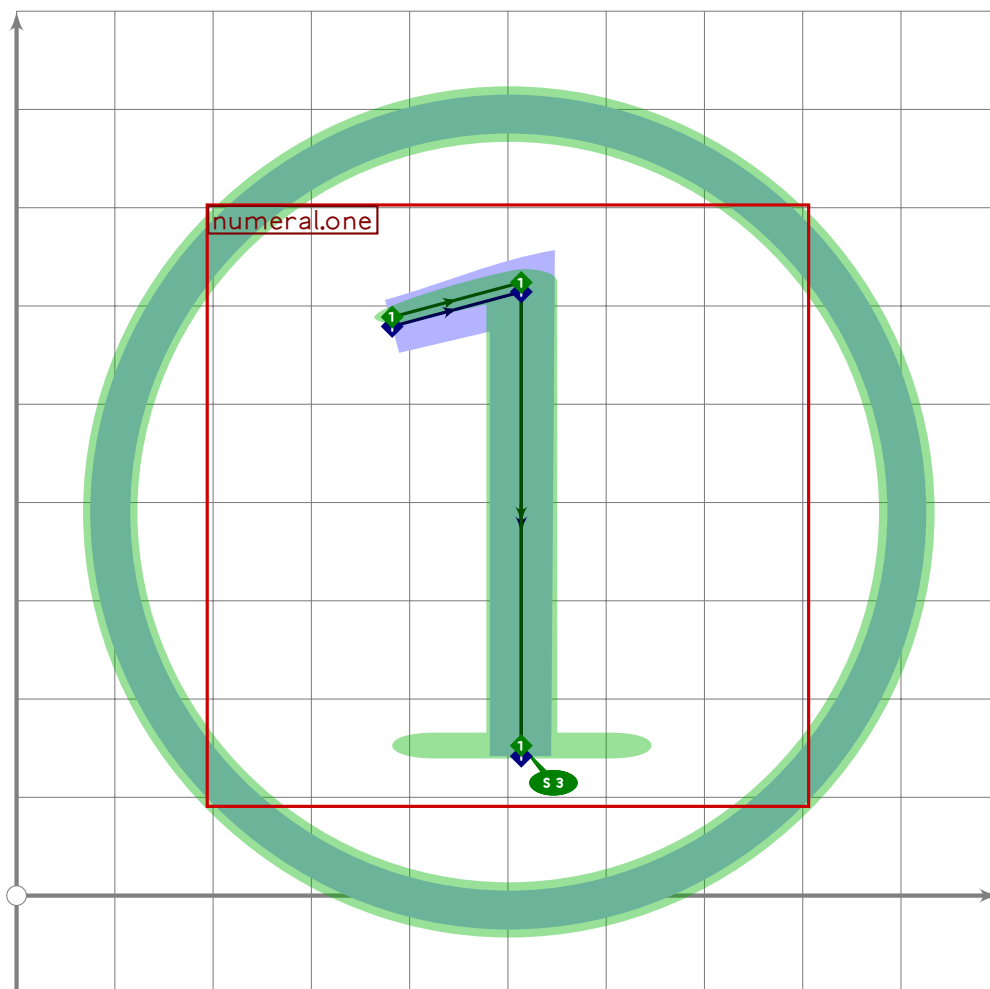
tsuku-24.mp

```
1 %
2 % Unicode page 24 (Enclosed Numerics) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31
32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input enclosed.mp;
39 input latin.mp;
40 input numerals.mp;
41
42 do_late_includes;
43
44
45
```

Circled Numerals

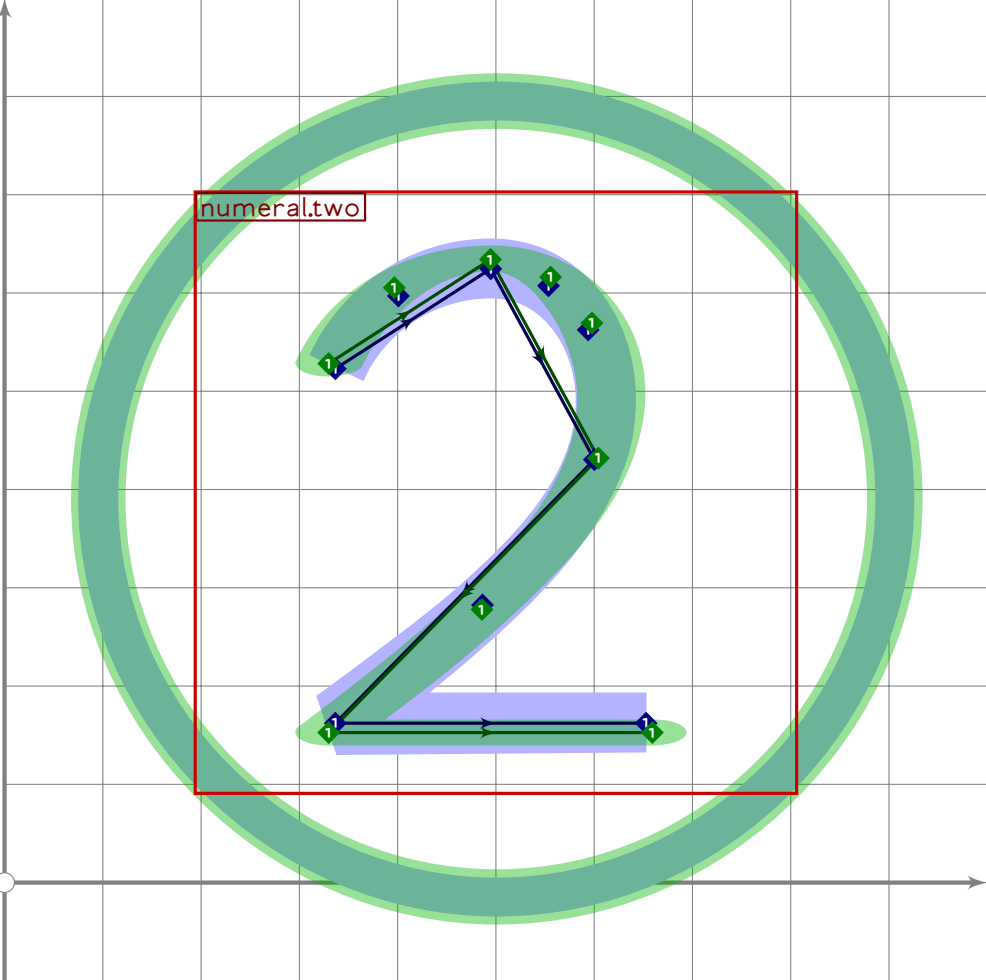
```
46 % CIRCLED NUMERALS
47
```

U+2460
tsuku.uni2460



24

```
48 % 1
49 begint Suglyph("uni2460";96);
50   circle.single;
51   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.one);
52   tsu_render;
53 endtsuglyph;
54
```

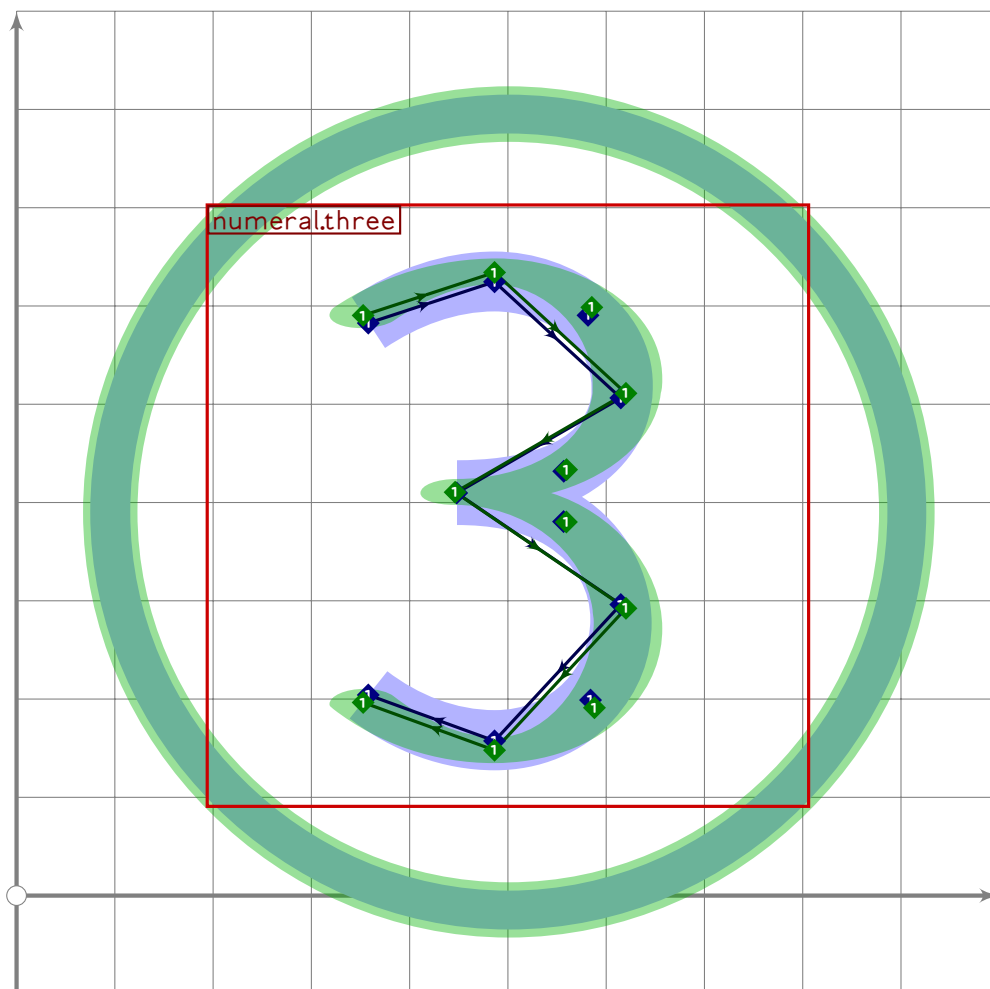



```

55 % 2
56 begintsuglyph("uni2461";97);
57   circle.single;
58   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.two);
59   tsu_render;
60 endtsuglyph;
61

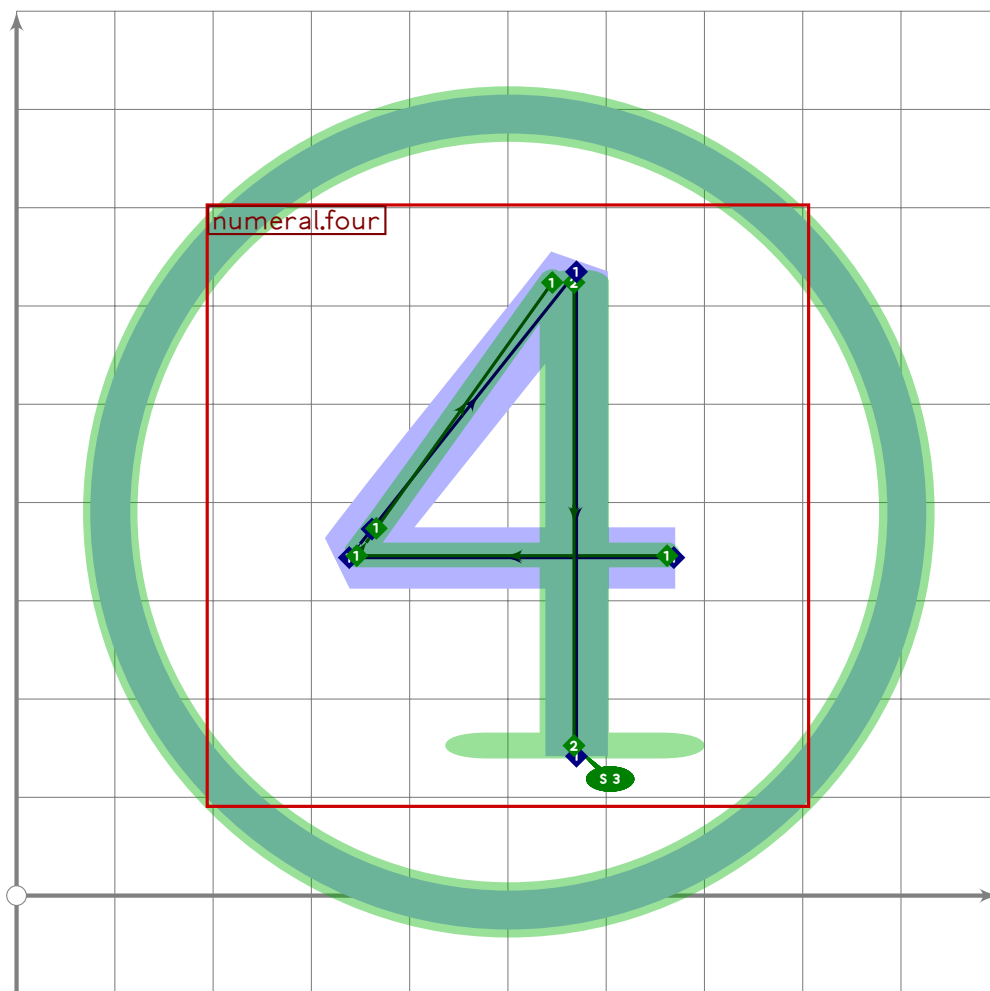
```

U+2462
tsuku.uni2462



24

```
62 % 3
63 begint Suglyph("uni2462";98);
64   circle.single;
65   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.three);
66   tsu_render;
67 endtsuglyph;
68
```

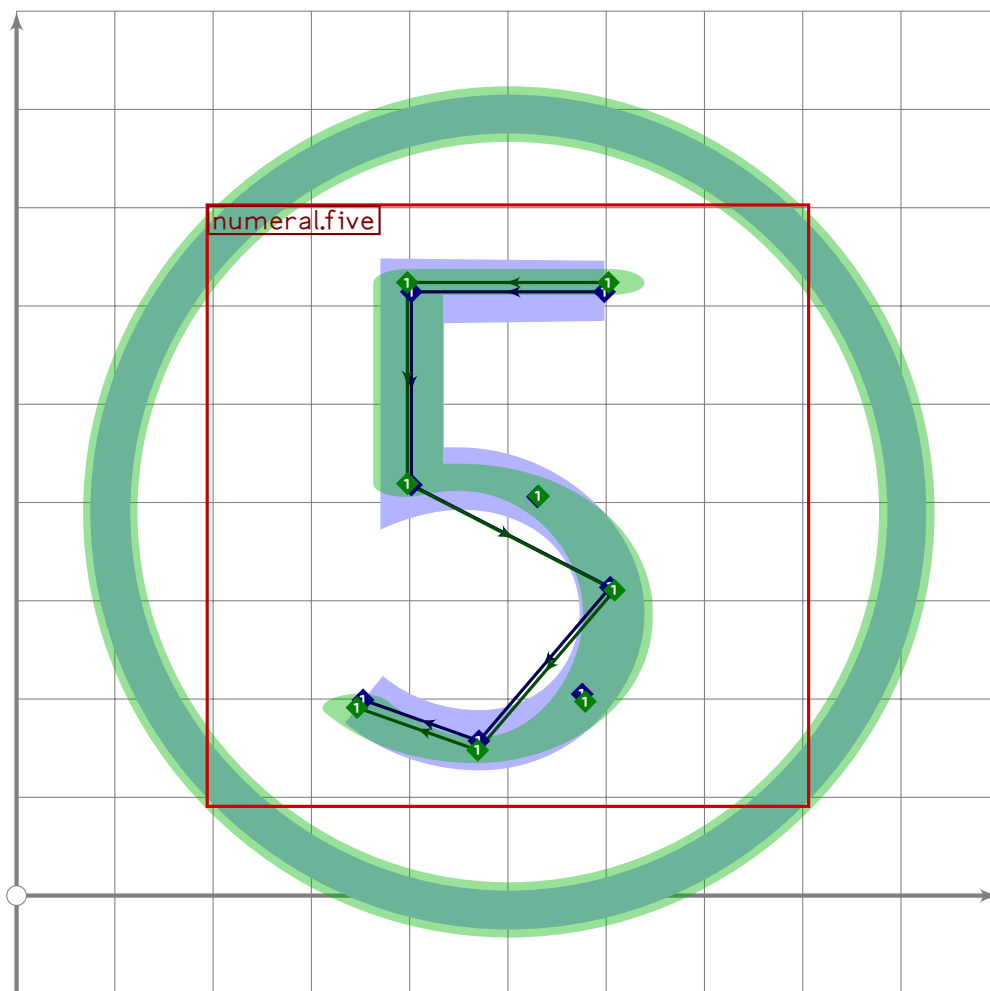


```

69 % 4
70 begint Suglyph("uni2463";99);
71   circle.single;
72   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.four);
73   tsu_render;
74 endtsuglyph;
75

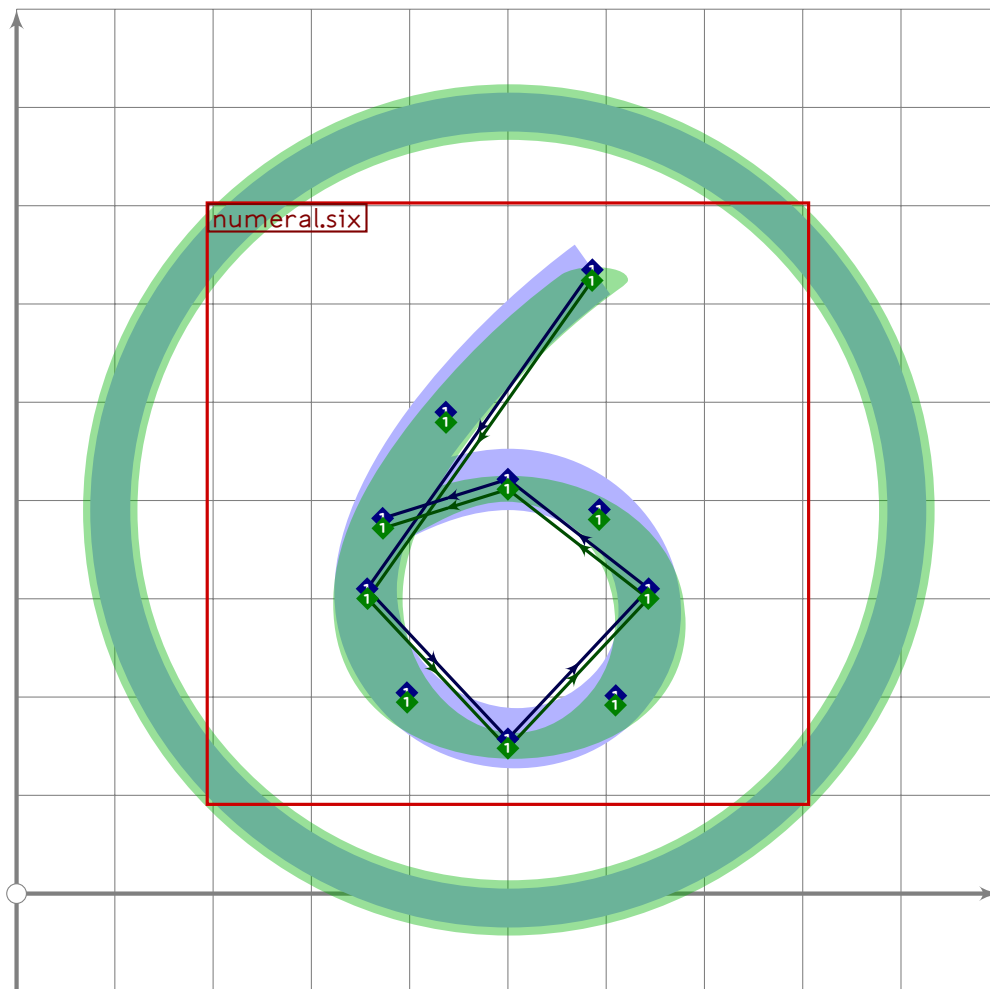
```

U+2464
tsuku.uni2464



24

```
76 % 5
77 begint Suglyph("uni2464",100);
78   circle.single;
79   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.five);
80   tsu_render;
81 endtsuglyph;
82
```

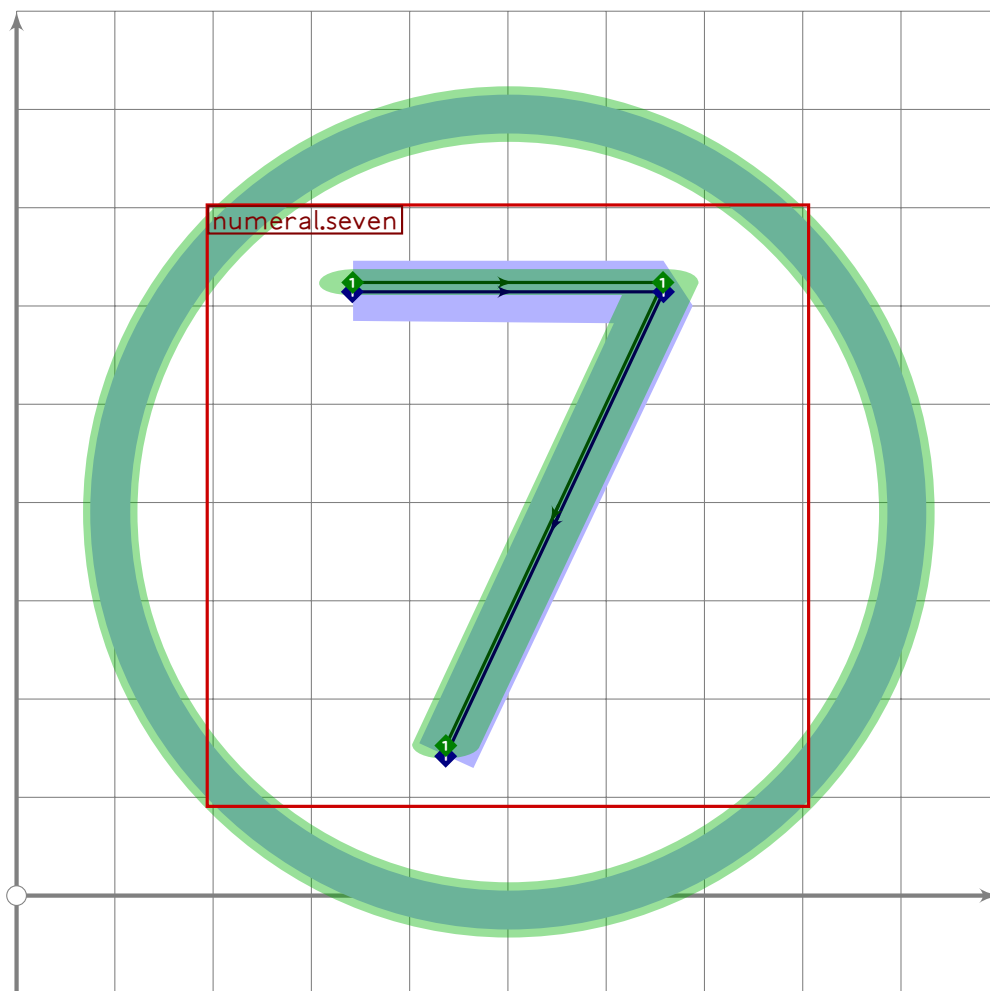


```

83 % 6
84 begint Suglyph("uni2465",101);
85   circle.single;
86   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.six);
87   tsu_render;
88 endtsuglyph;
89

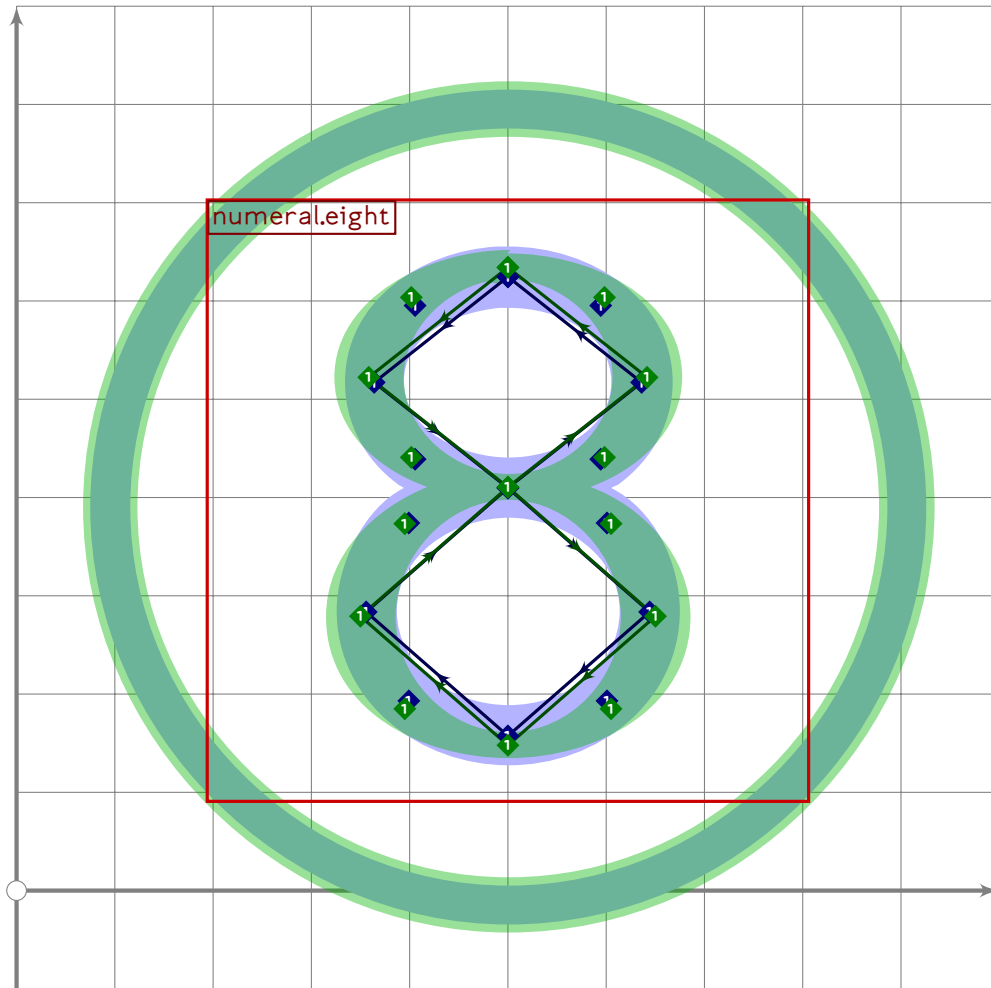
```

U+2466
tsuku.uni2466



24

```
90 % 7
91 begint Suglyph("uni2466",102);
92   circle.single;
93   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.seven);
94   tsu_render;
95 endtsuglyph;
96
```

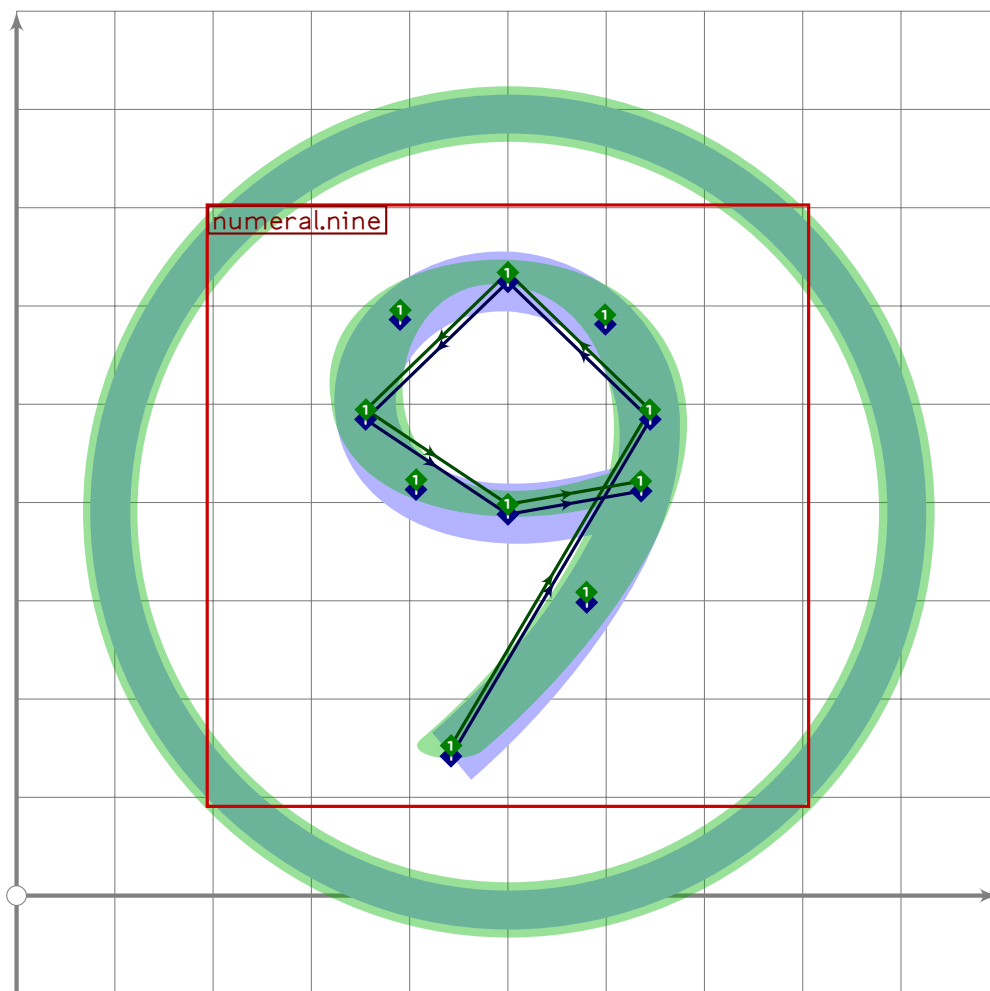


```

97 % 8
98 begintsuglyph("uni2467",103);
99   circle.single;
100   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.eight);
101   tsu_render;
102 endtsuglyph;
103

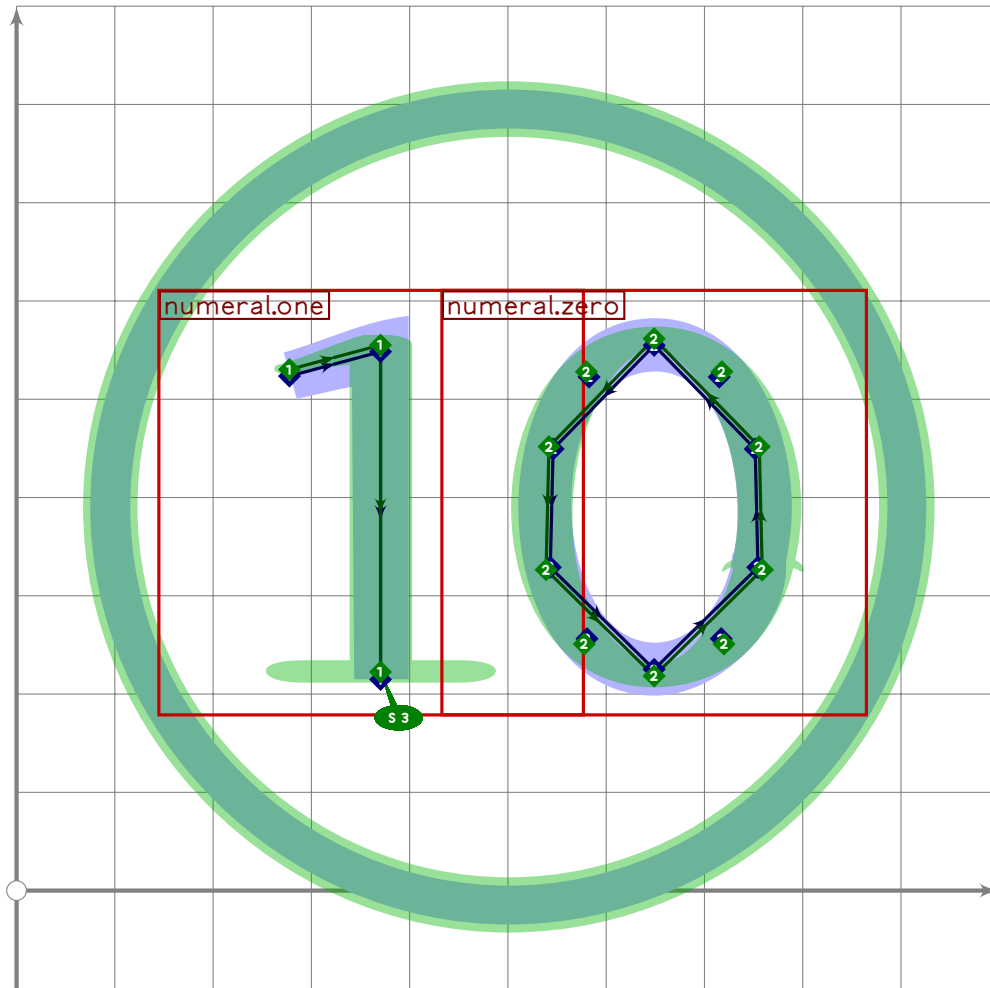
```

U+2468
tsuku.uni2468



24

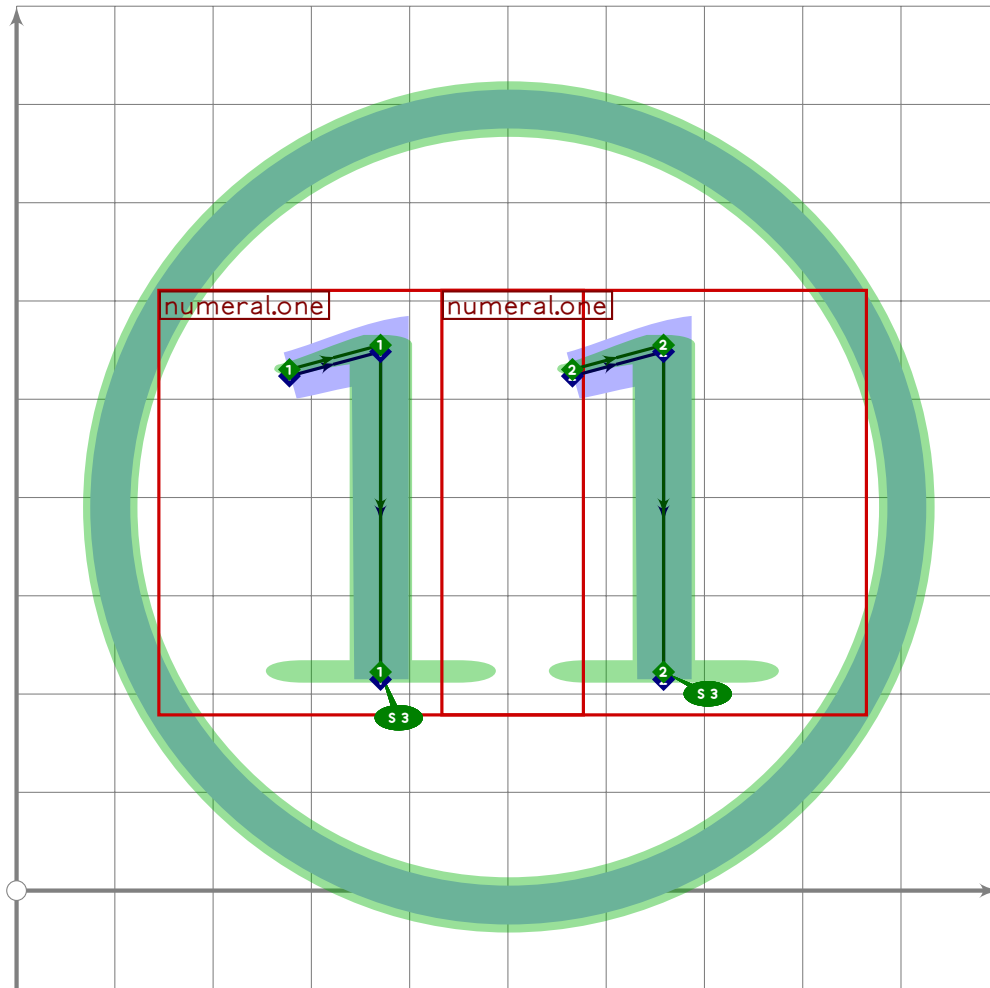
```
104 % 9
105 begintsuglyph("uni2468",104);
106   circle.single;
107   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.nine);
108   tsu_render;
109 endtsuglyph;
110
```

```

111 % 10
112 begintuglyph("uni2469",105);
113   circle.single;
114   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
115   numeric x[],y[];
116   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.zero);
117   tsu_render;
118 endtuglyph;
119

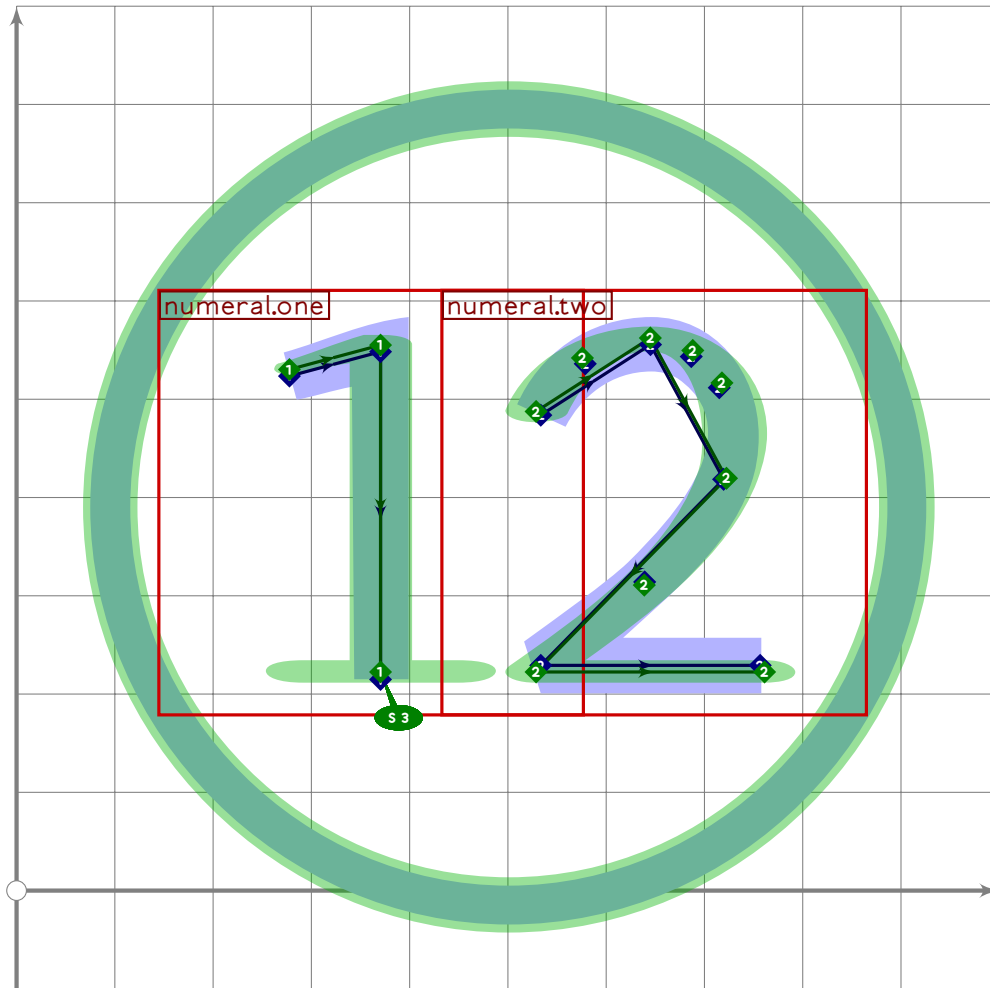
```



```

120 % 11
121 begintuglyph("uni246A",106);
122   circle.single;
123   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
124   numeric x[],y[];
125   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.one);
126   tsu_render;
127 endtuglyph;
128

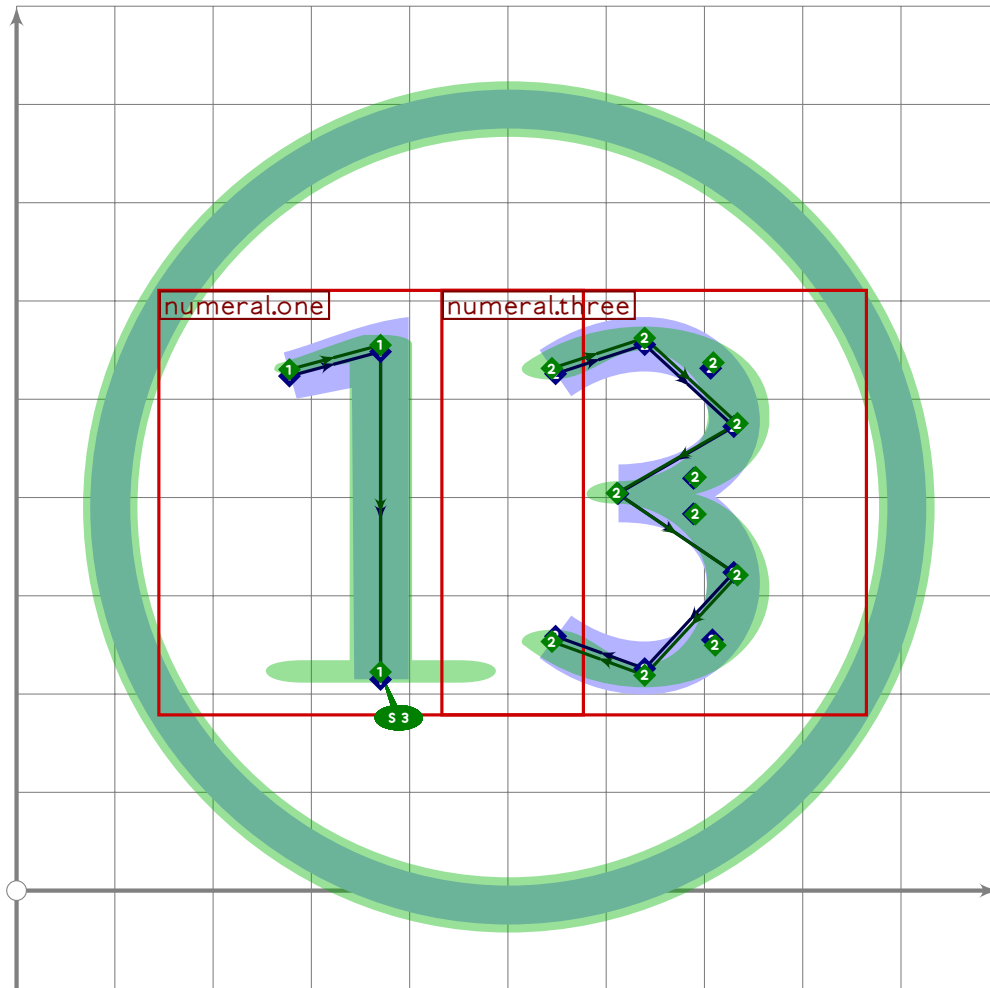
```



```

129 % 12
130 begint Suglyph("uni246B",107);
131   circle.single;
132   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
133   numeric x[],y[];
134   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.two);
135   tsu_render;
136 endtsuglyph;
137

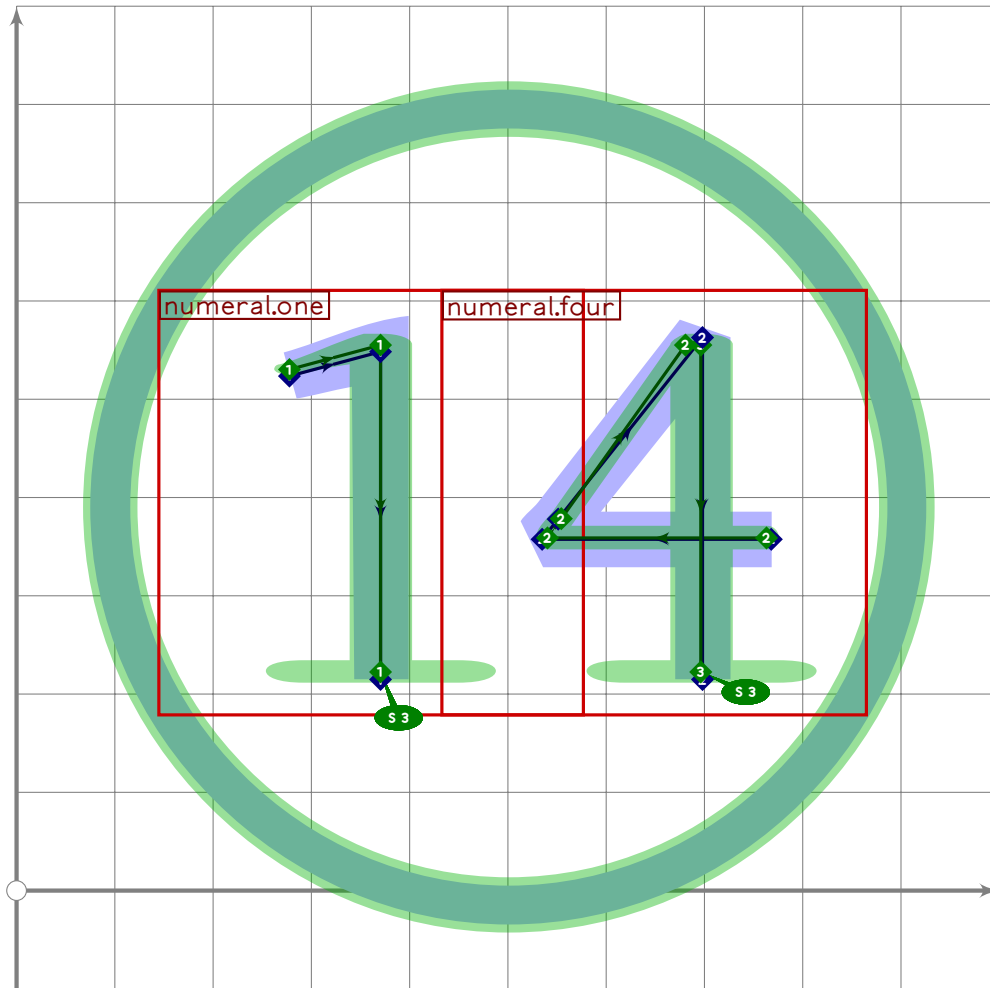
```



```

138 % 13
139 begint Suglyph("uni246C",108);
140 circle.single;
141 tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
142 numeric x[],y[];
143 tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.three);
144 tsu_render;
145 endtsuglyph;
146

```

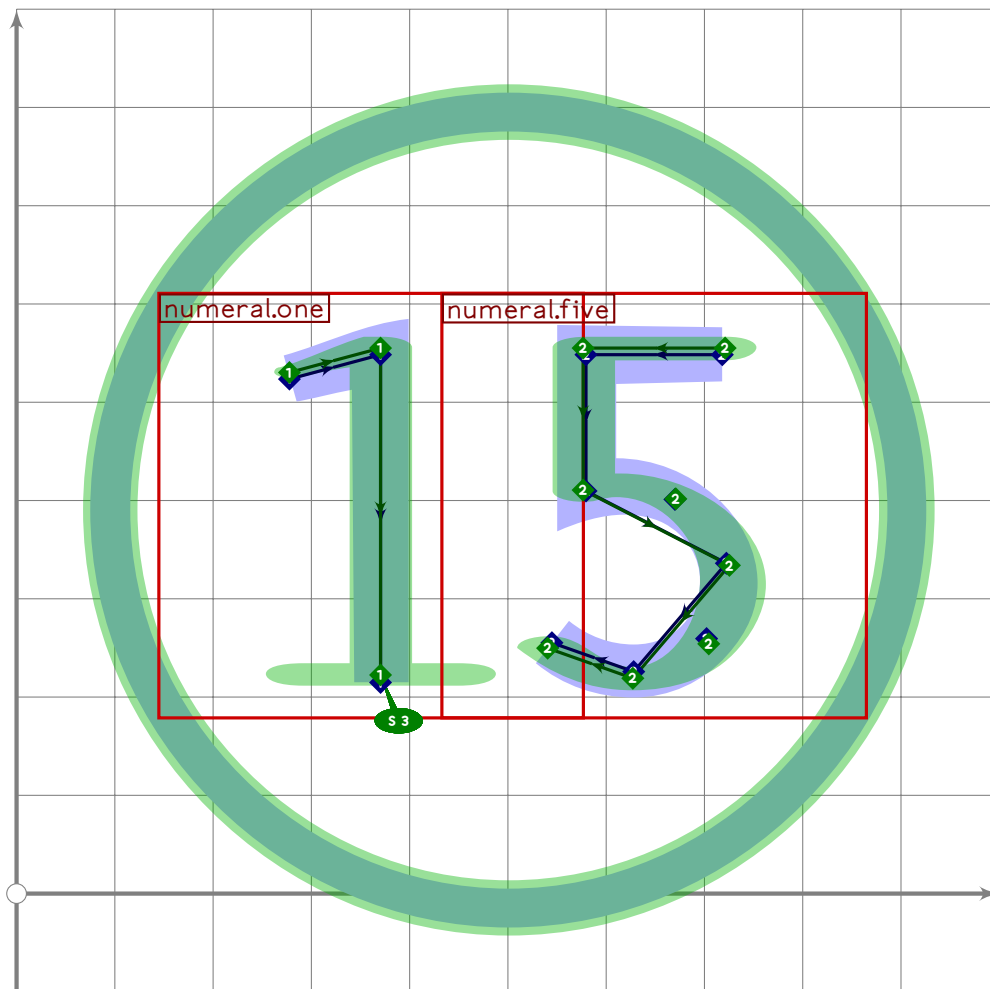


```

147 % 14
148 begintsuglyph("uni246D";109);
149   circle.single;
150   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
151   numeric x[],y[];
152   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.four);
153   tsu_render;
154 endtsuglyph;
155

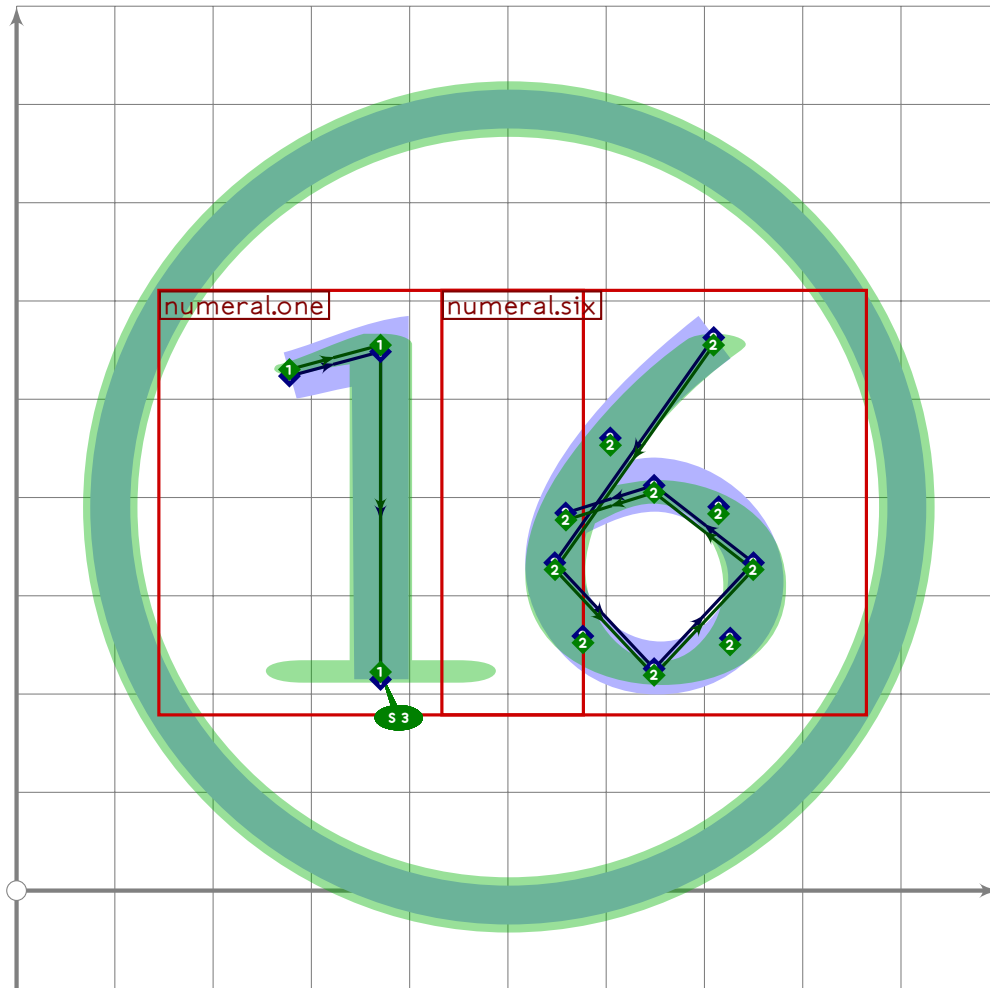
```

U+246E
tsuku.uni246E



24

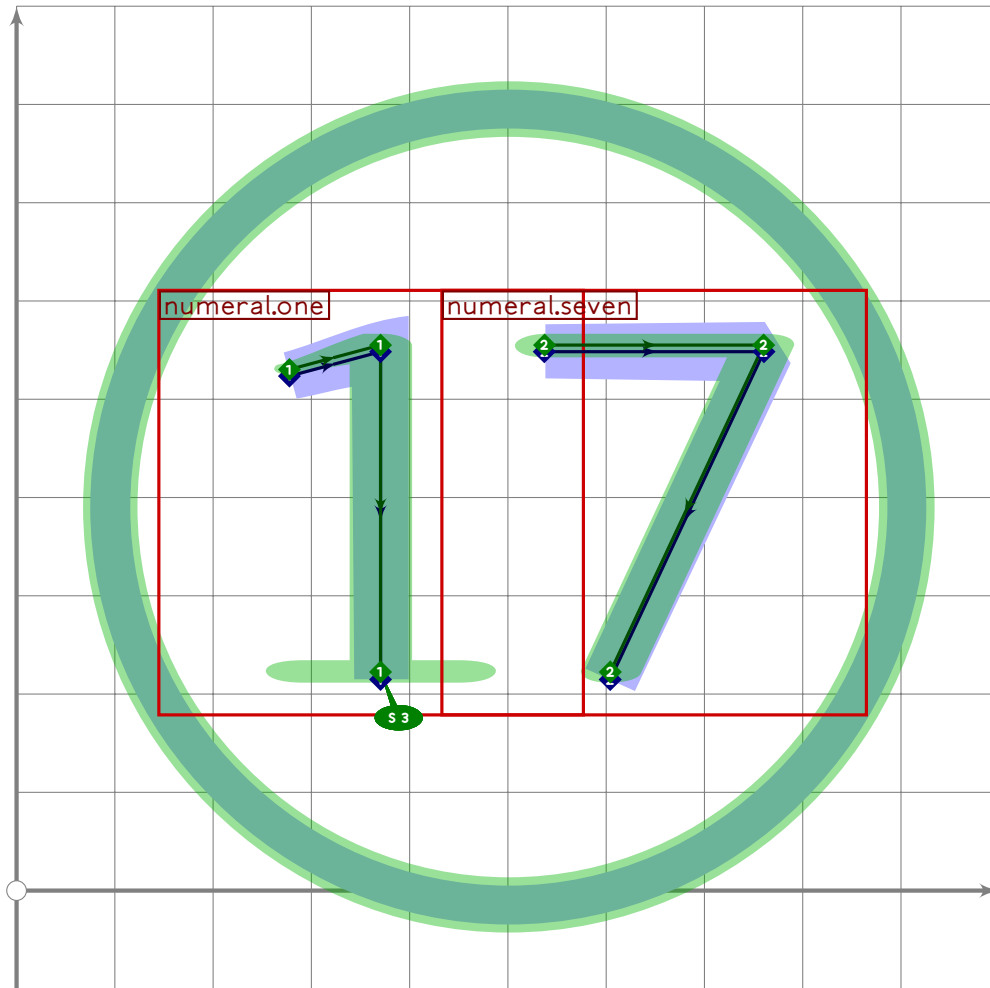
```
156 % 15
157 beginsuglyph("uni246E";110);
158 circle.single;
159 tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
160 numeric x[],y[];
161 tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.five);
162 tsu_render;
163 endsuglyph;
164
```



```

165 % 16
166 begintuglyph("uni246F";11);
167   circle.single;
168   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
169   numeric x[],y[];
170   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.six);
171   tsu_render;
172 endtsuglyph;
173

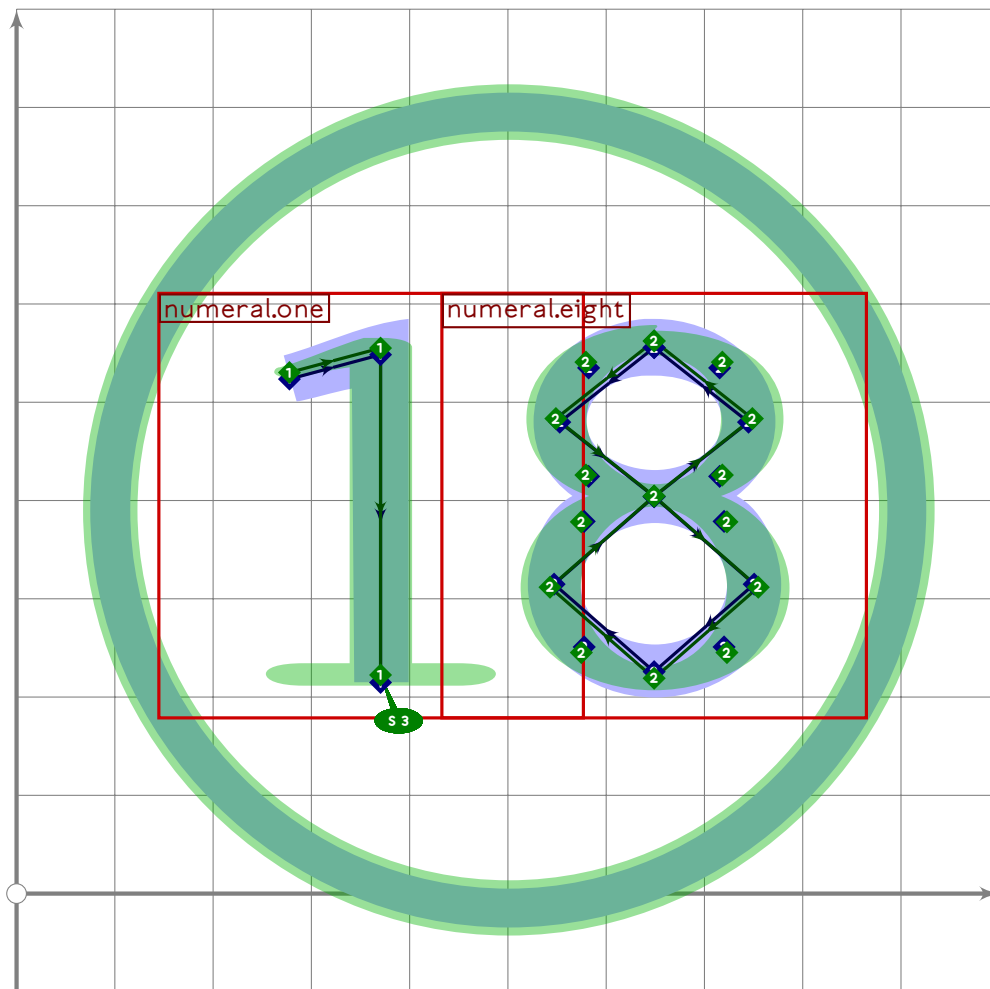
```



```

174 % 17
175 begint Suglyph("uni2470",12);
176   circle.single;
177   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
178   numeric x[],y[];
179   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.seven);
180   tsu_render;
181   endtsuglyph;
182

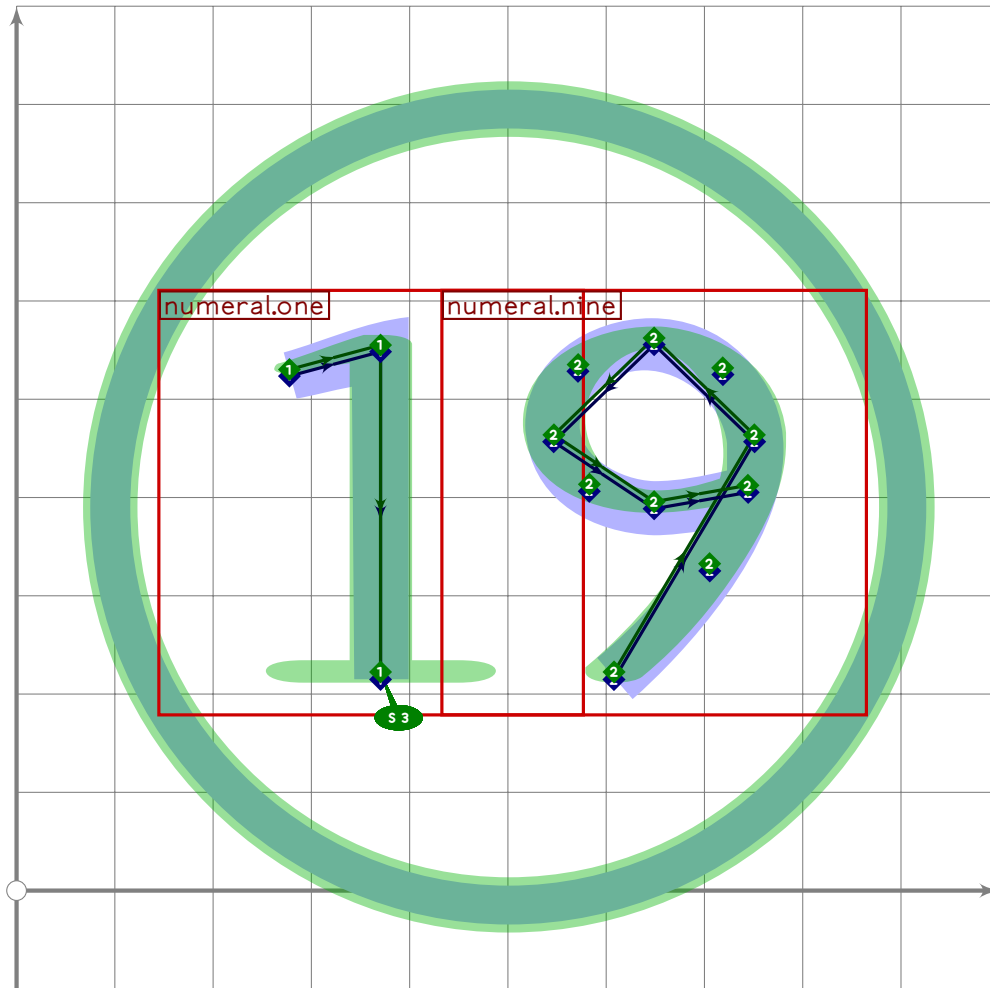
```

```

183 % 18
184 begint Suglyph("uni2471",113);
185   circle.single;
186   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
187   numeric x[],y[];
188   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.eight);
189   tsu_render;
190 endtsuglyph;
191

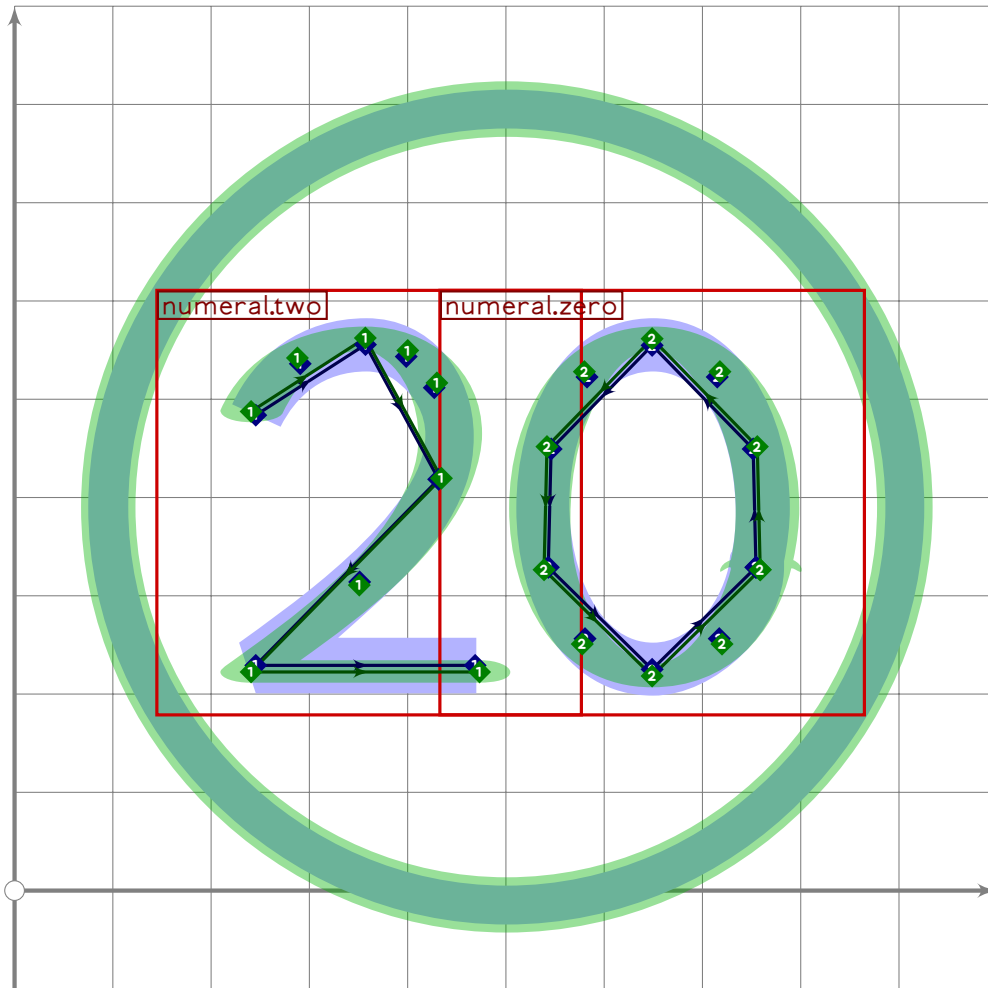
```



```

192 % 19
193 begint Suglyph("uni2472",114);
194   circle.single;
195   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
196   numeric x[],y[];
197   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.nine);
198   tsu_render;
199 endtsuglyph;
200

```



```

201 % 20
202 begintsuglyph("uni2473",115);
203   circle.single;
204   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.two);
205   numeric x[],y[];
206   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.zero);
207   tsu_render;
208 endtsuglyph;
209
210
211

```

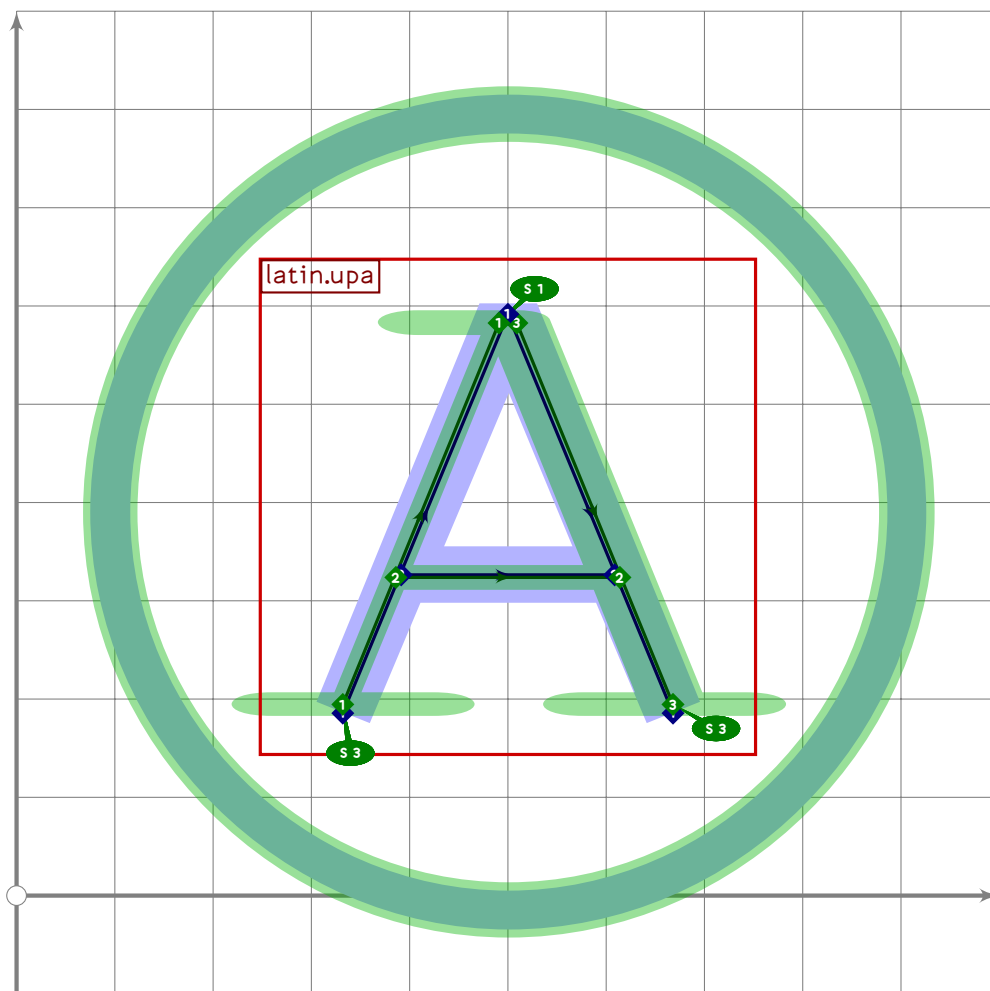
Circled Latin And Zero

```

212 % CIRCLED LATIN AND ZERO
213

```

U+24B6
tsuku.uni24B6

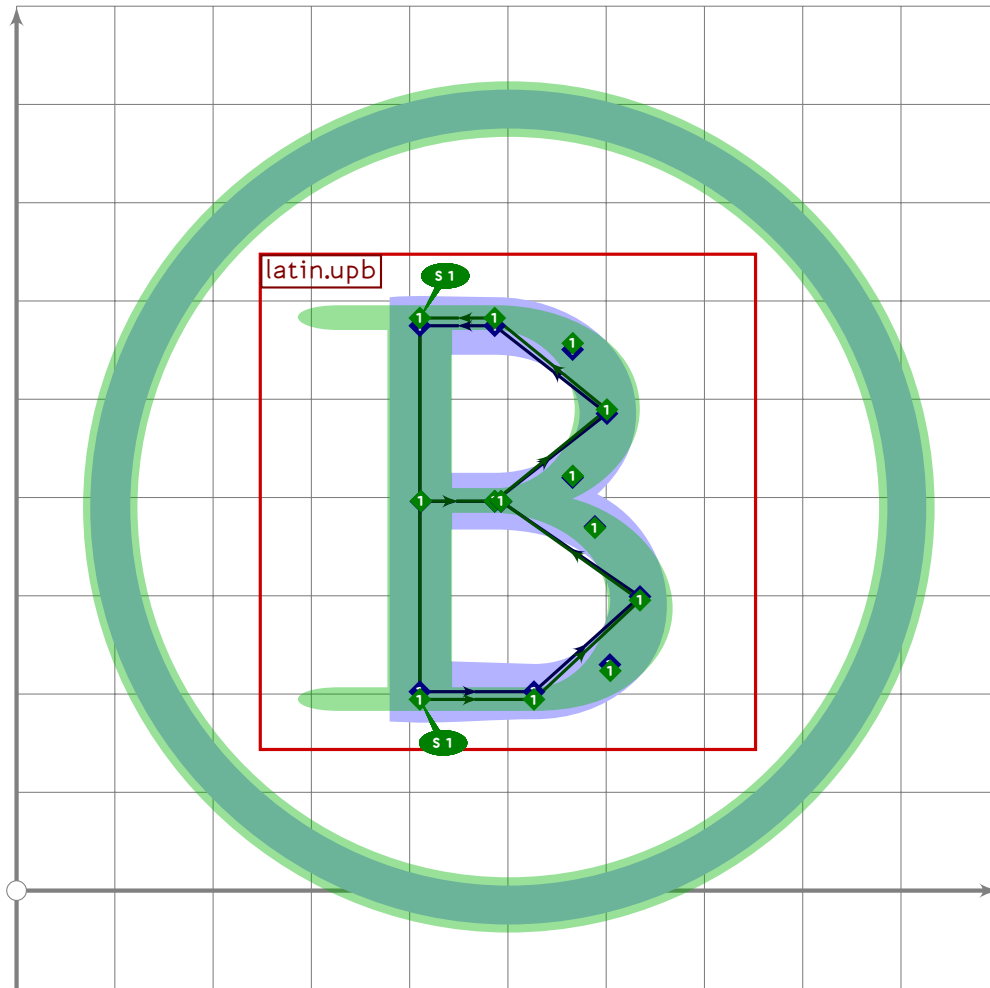


24

```

214 % A
215 begint Suglyph("uni24B6",182);
216   circle.single;
217   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upa);
218   tsu_render;
219 endtsuglyph;
220

```

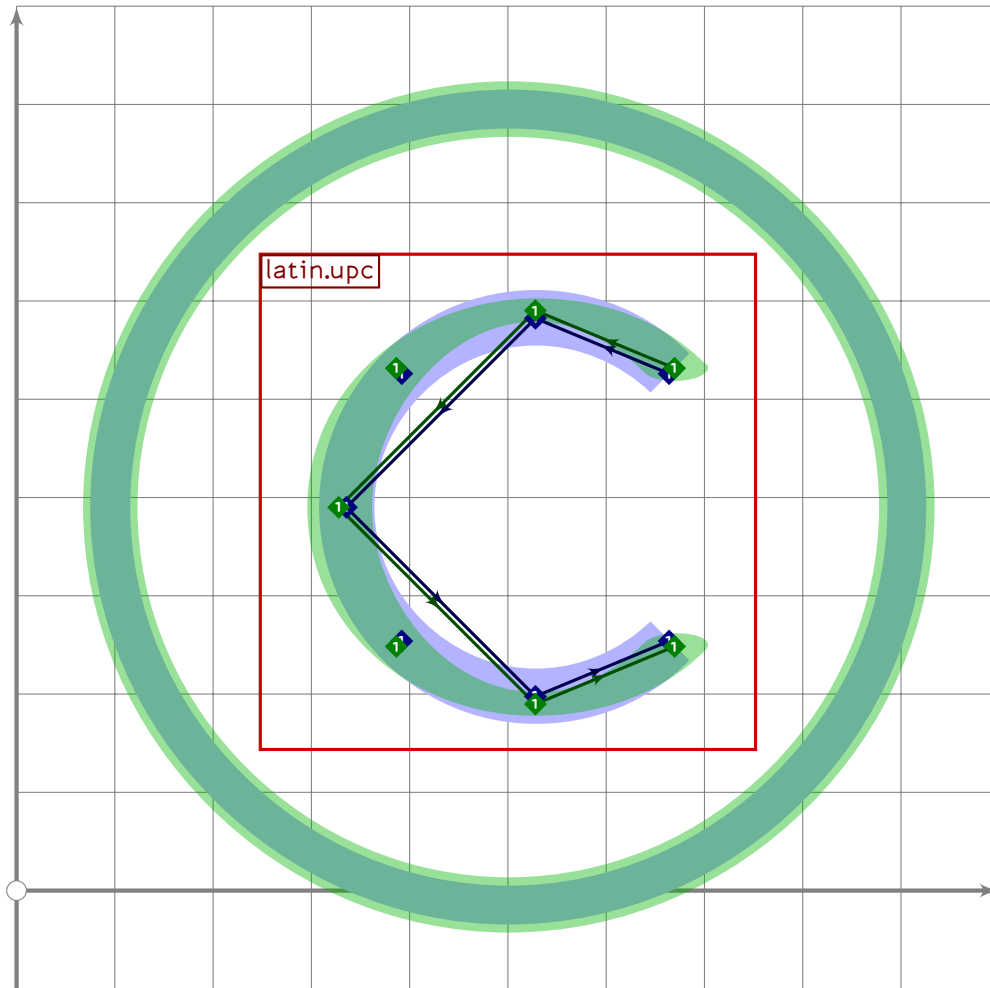


```

221 % B
222 begintsuglyph("uni24B7",183);
223   circle.single;
224   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upb);
225   tsu_render;
226 endtsuglyph;
227

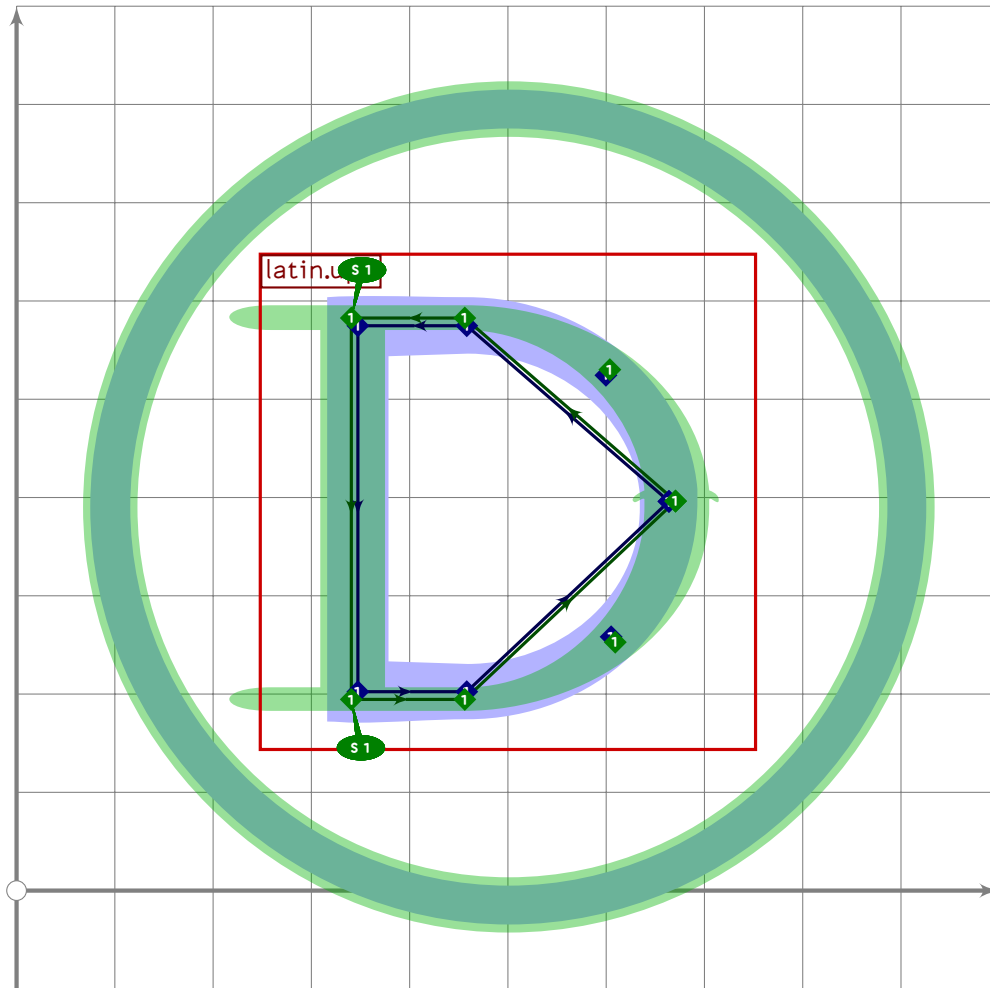
```

U+24B8
tsuku.uni24B8



24

```
228 % C
229 beginsuglyph("uni24B8",184);
230   circle.single;
231   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upc);
232   tsu_render;
233 endsuglyph;
234
```

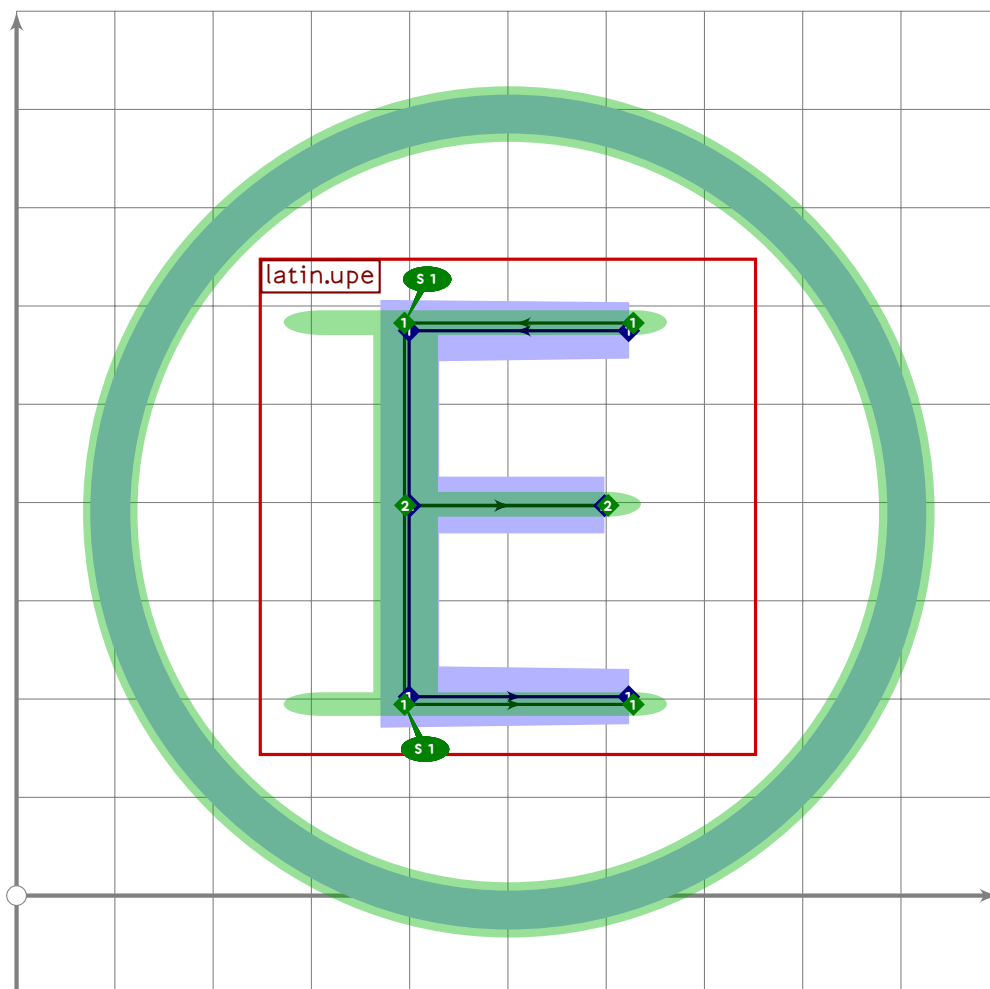


```

235 % D
236 begintsuglyph("uni24B9",185);
237   circle.single;
238   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upd);
239   tsu__render;
240 endtsuglyph;
241

```

U+24BA
tsuku.uni24BA

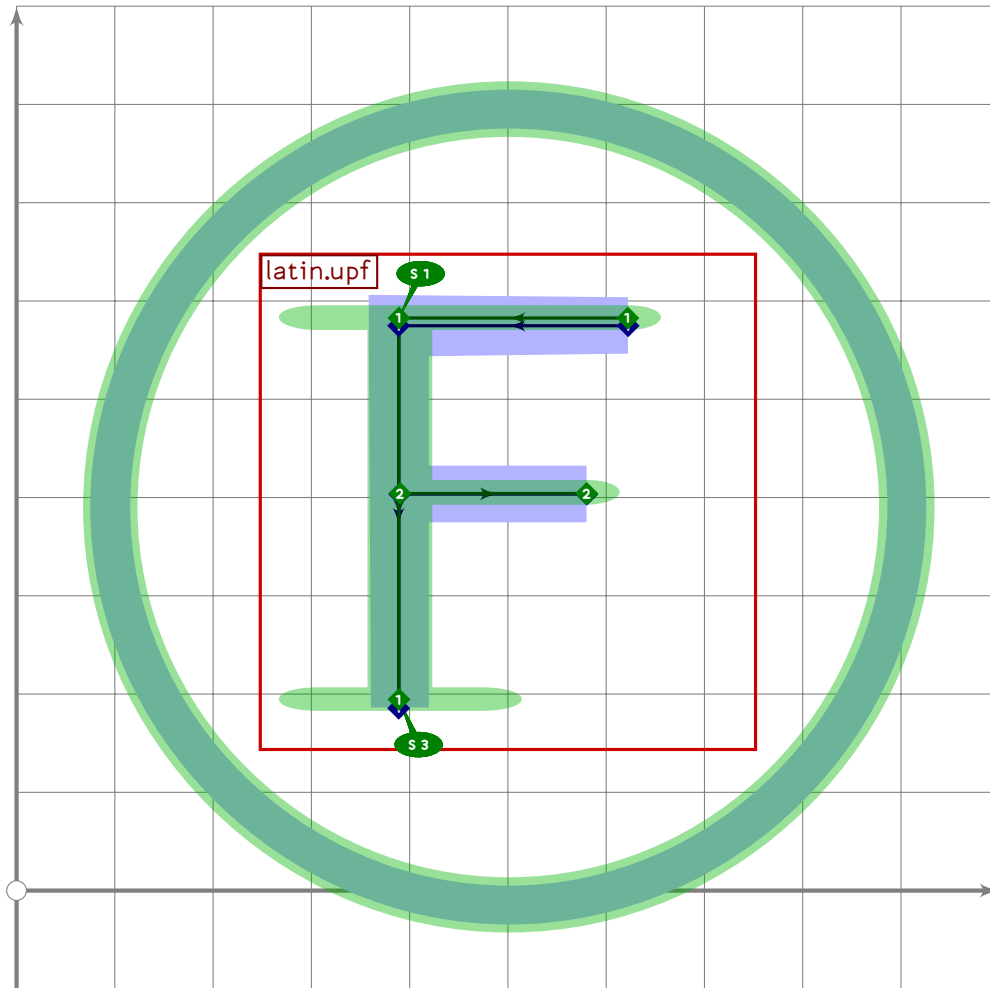


24

```

242 % E
243 begint Suglyph("uni24BA",186);
244   circle.single;
245   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upe);
246   tsu_render;
247 endtsuglyph;
248

```

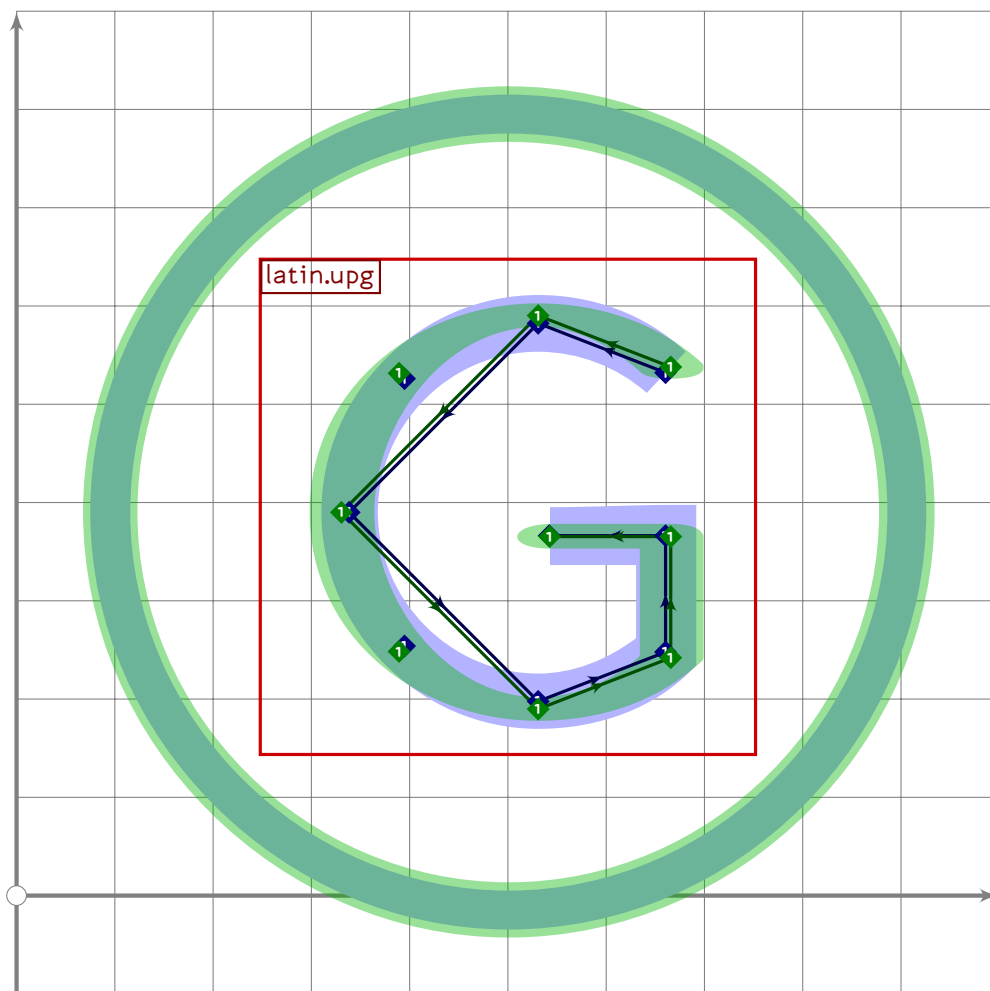



```

249 % F
250 begint Suglyph("uni24BB",187);
251   circle.single;
252   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upf);
253   tsu_render;
254 endtsuglyph;
255

```

U+24BC
tsuku.uni24BC

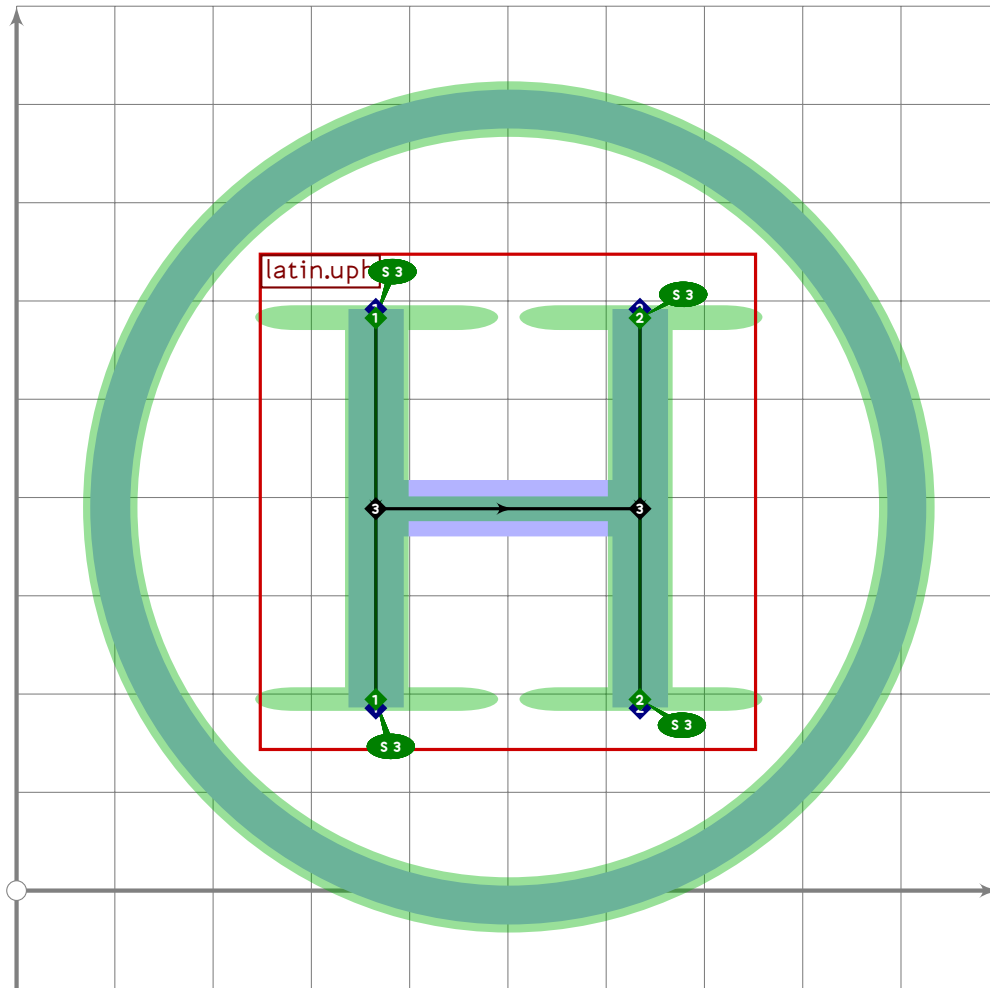


24

```

256 % G
257 begintsuglyph("uni24BC",188);
258   circle.single;
259   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upg);
260   tsu_render;
261 endtsuglyph;
262

```

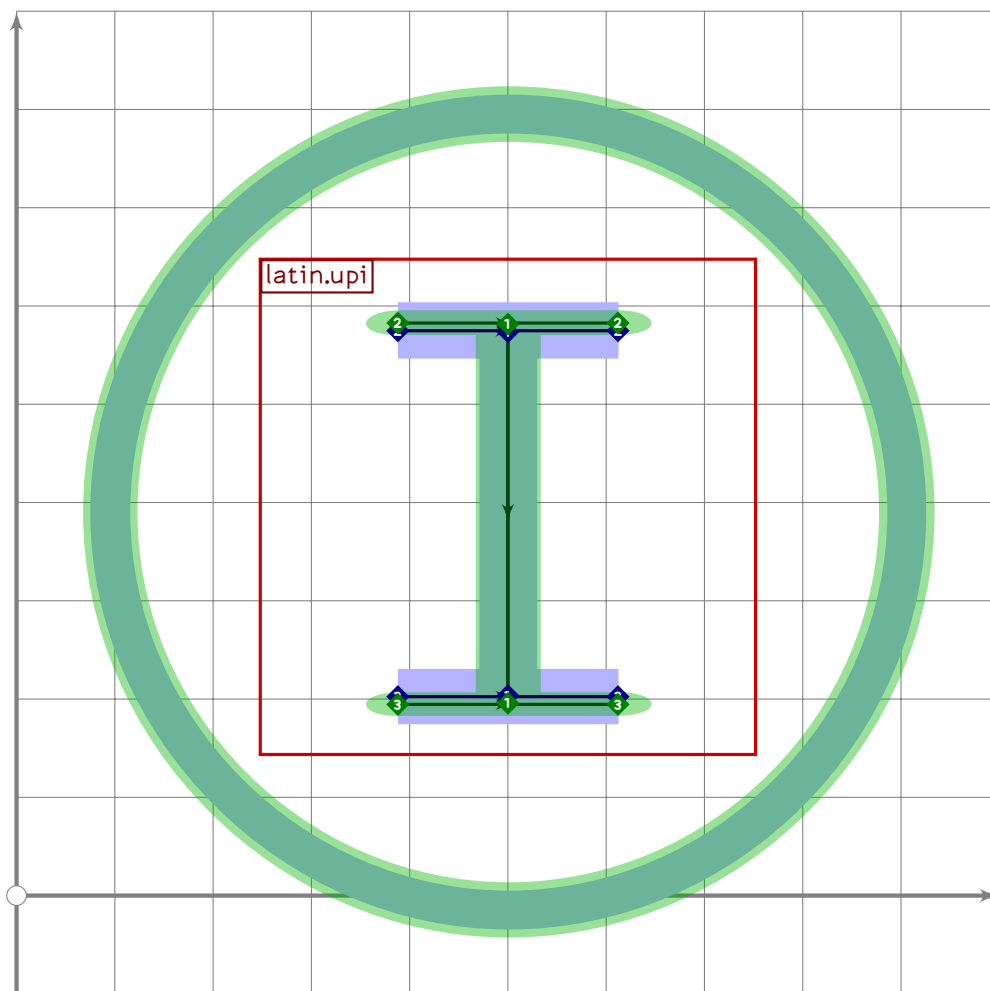


```

263 % H
264 begintsuglyph("uni24BD";189);
265   circle.single;
266   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.uph);
267   tsu_render;
268 endtsuglyph;
269

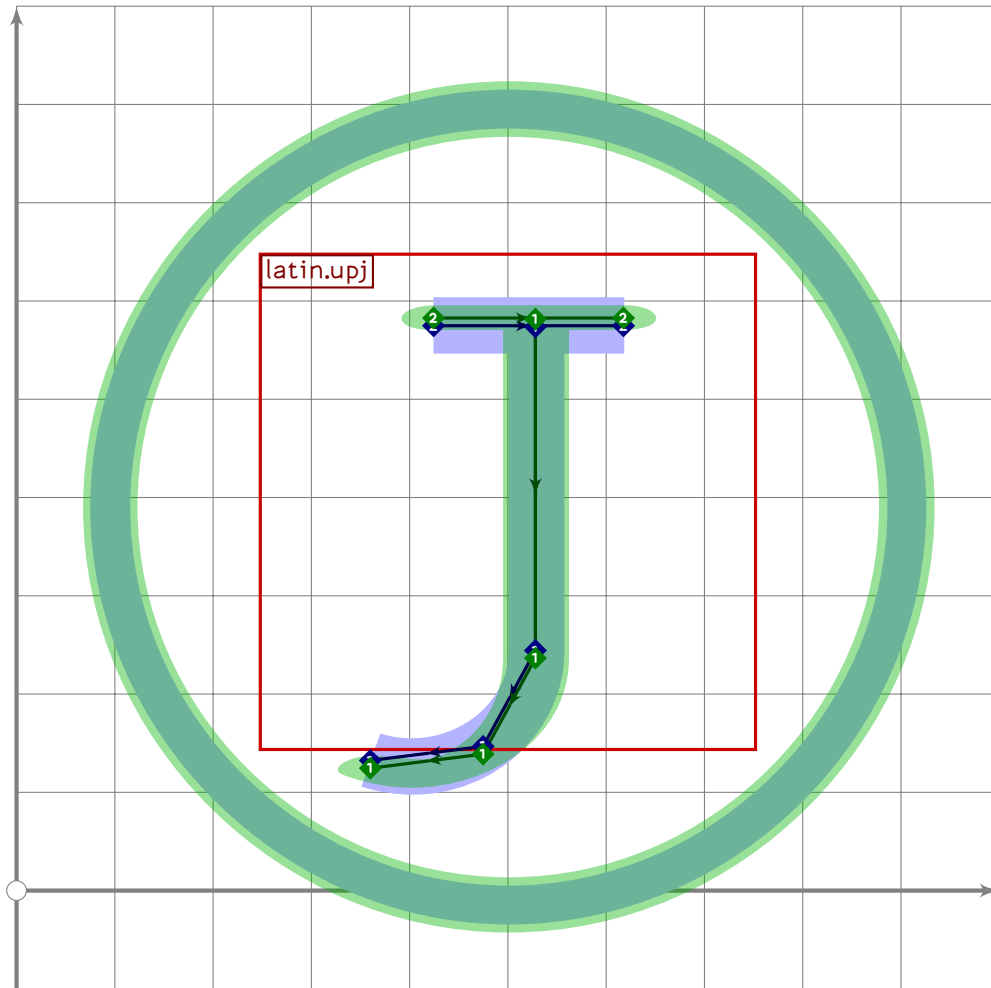
```

U+24BE
tsuku.uni24BE



24

```
270 % I
271 begintsuglyph("uni24BE";190);
272   circle.single;
273   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upi);
274   tsu_render;
275 endtsuglyph;
276
```

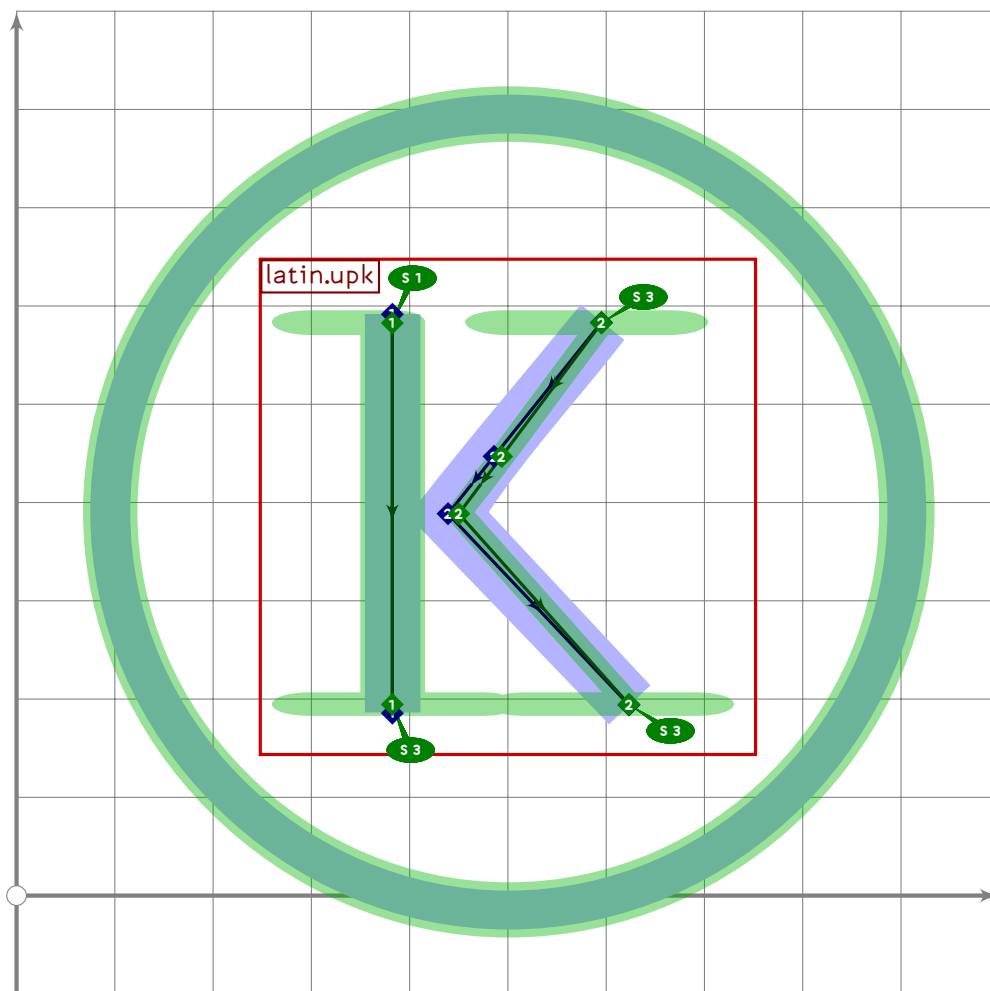


```

277 % J
278 begint Suglyph("uni24BF";191);
279   circle.single;
280   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upj);
281   tsu_render;
282 endtsuglyph;
283

```

U+24C0
tsuku.uni24C0

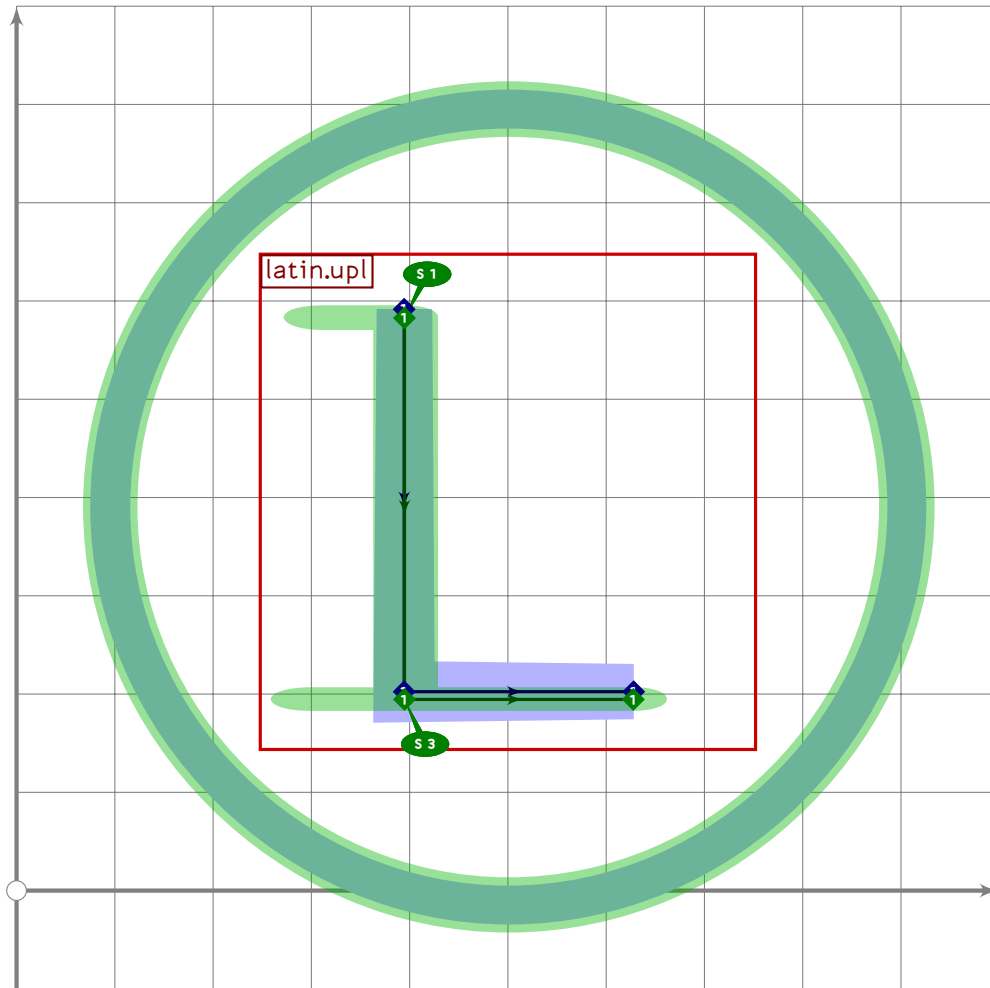


24

```

284 % K
285 begintuglyph("uni24C0";192);
286   circle.single;
287   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upk);
288   tsu_render;
289 endtuglyph;
290

```

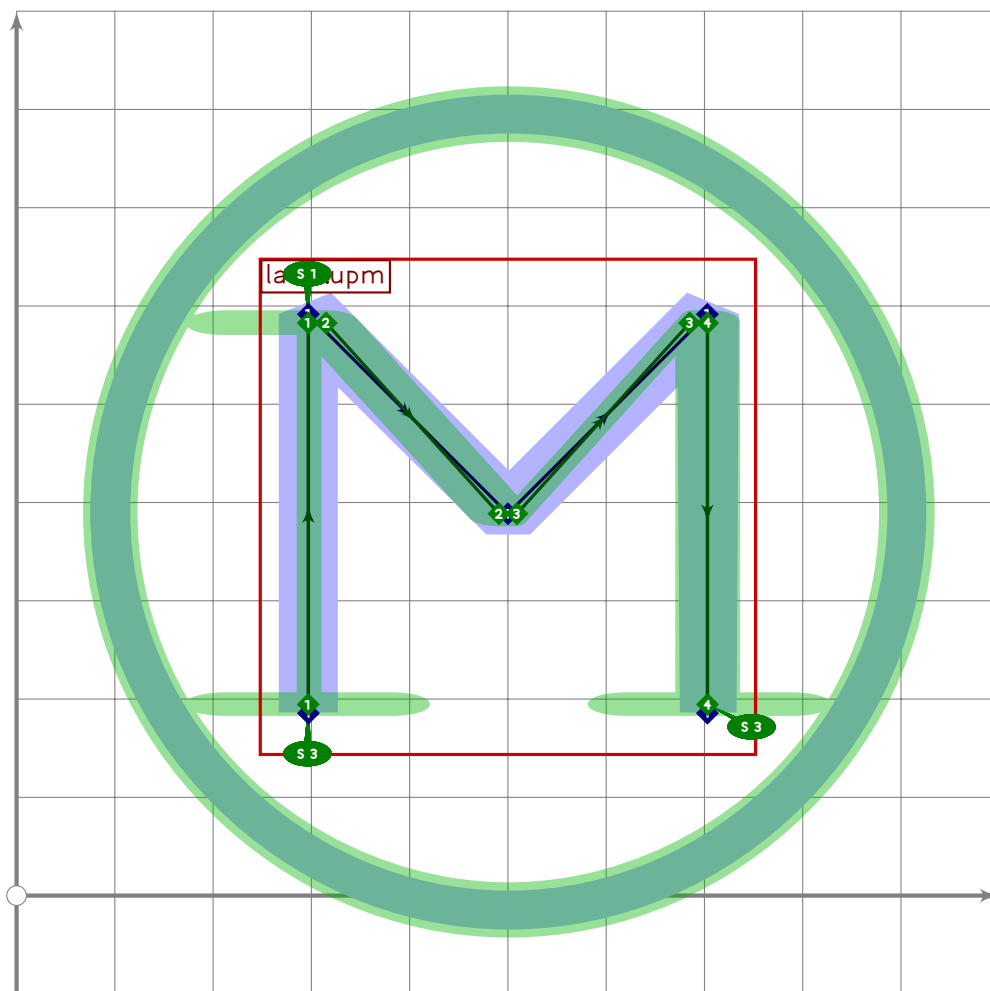


```

291 % L
292 begint Suglyph("uni24C1",193);
293   circle.single;
294   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upl);
295   tsu_render;
296 endtsuglyph;
297

```

U+24C2
tsuku.uni24C2

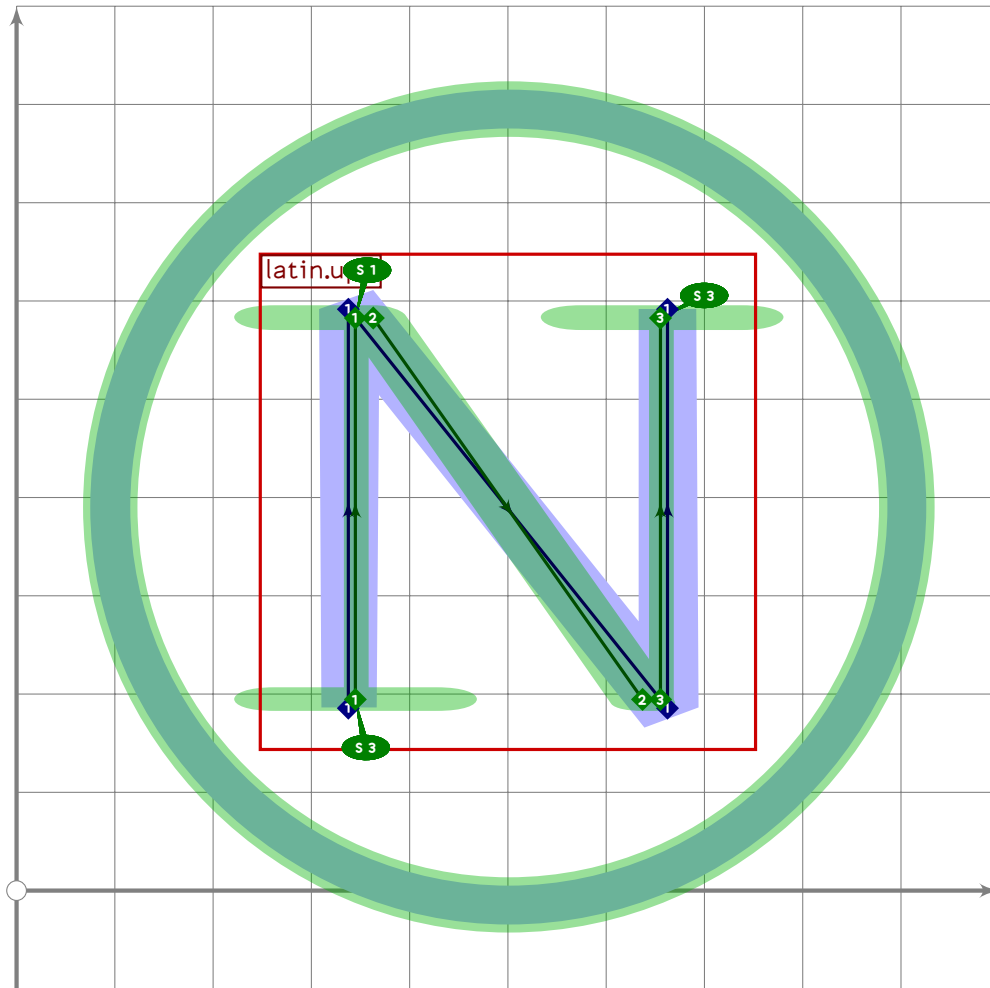


24

```

298 % M
299 begintsuglyph("uni24C2";194);
300 circle.single;
301 tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upm);
302 tsu_render;
303 endtsuglyph;
304

```

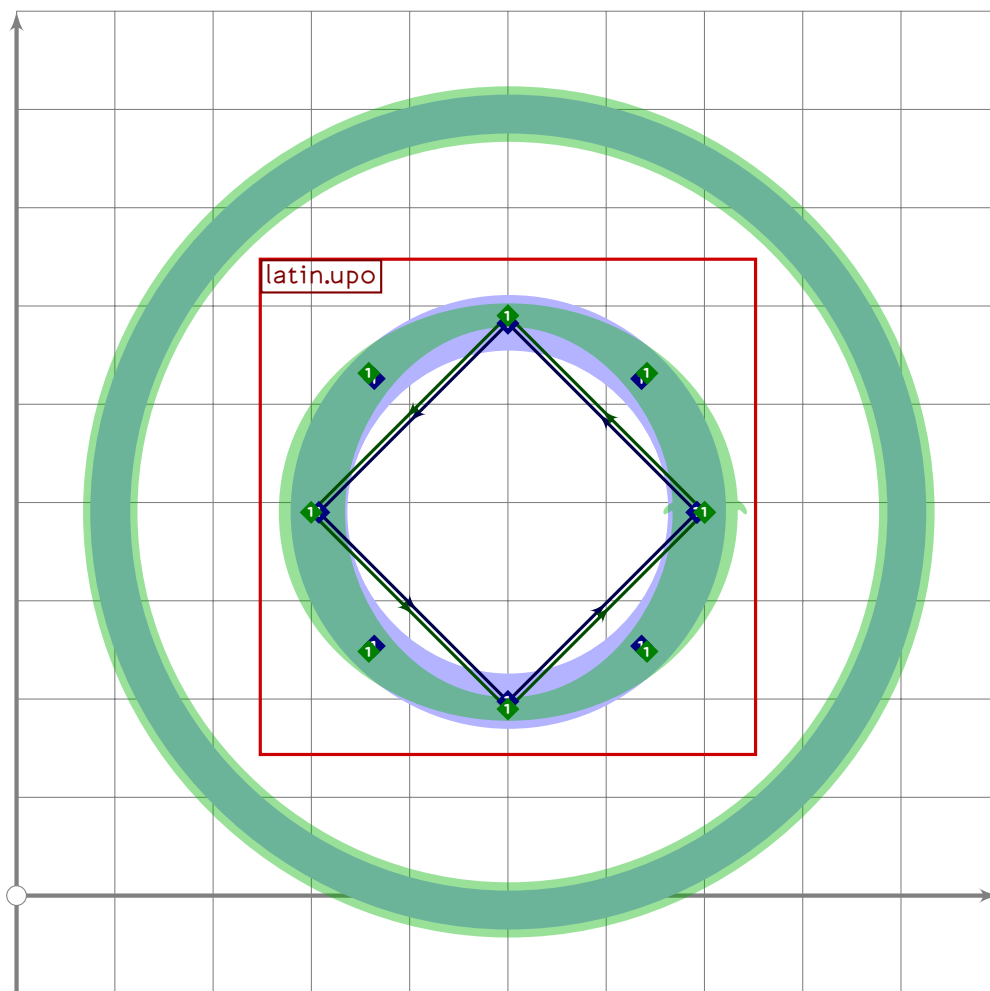



```

305 % N
306 begint Suglyph("uni24C3";195);
307   circle.single;
308   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upn);
309   tsu_render;
310 endtsuglyph;
311

```

U+24C4
tsuku.uni24C4

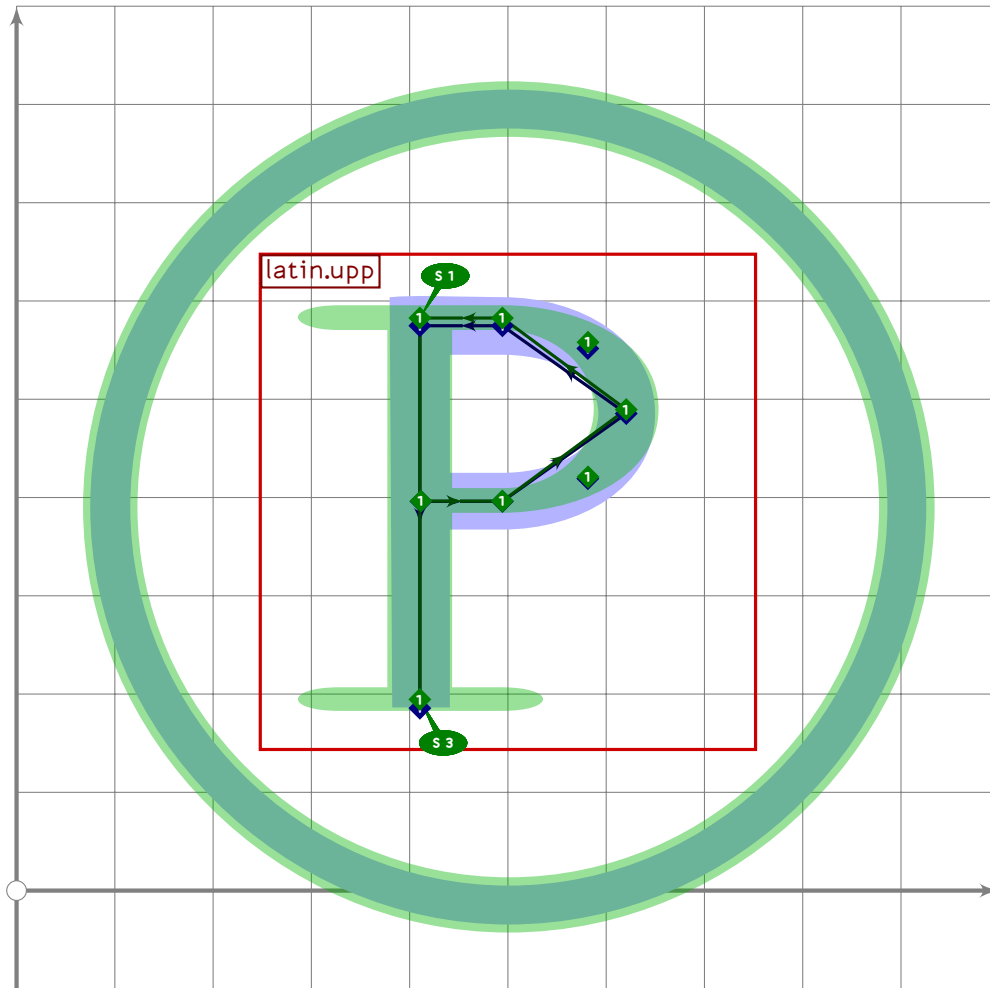


24

```

312 % O
313 begintsuglyph("uni24C4";196);
314   circle.single;
315   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upo);
316   tsu_render;
317 endtsuglyph;
318

```

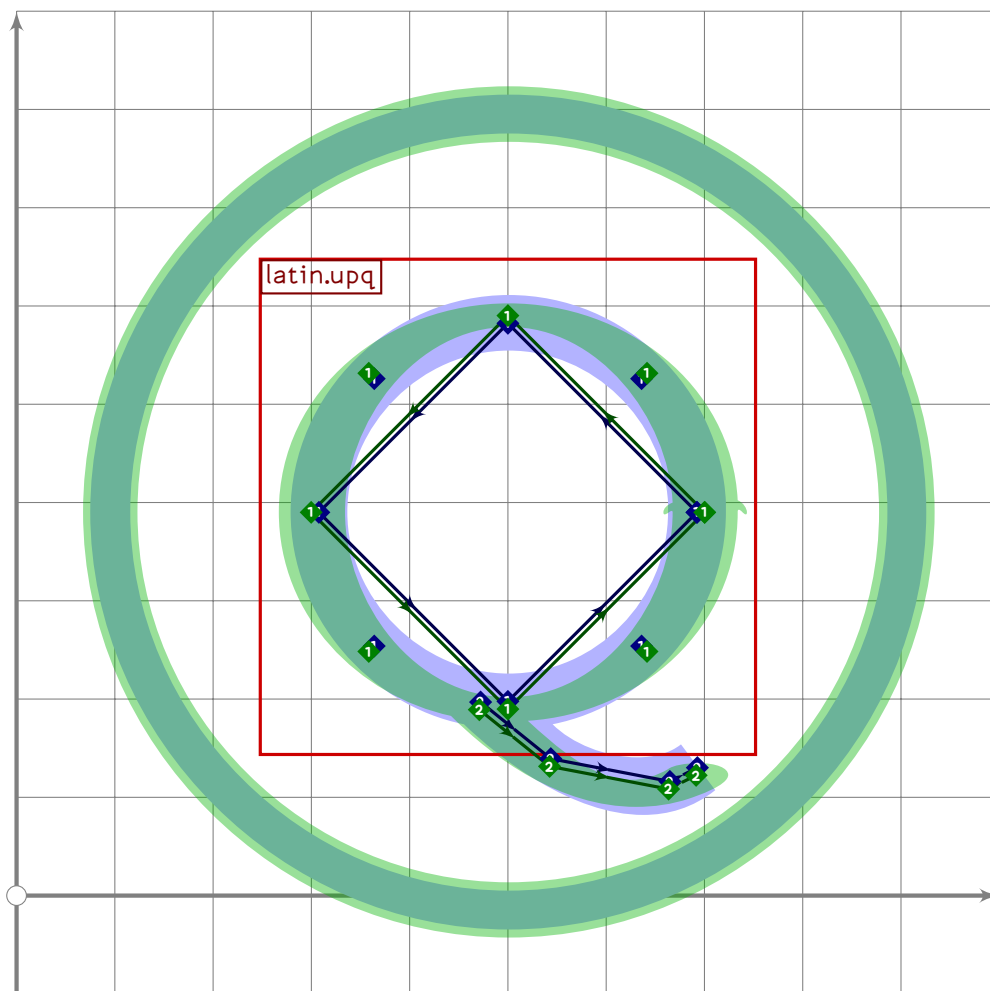


```

319 % P
320 begint Suglyph("uni24C5";197);
321   circle.single;
322   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upp);
323   tsu_render;
324 endtsuglyph;
325

```

U+24C6
tsuku.uni24C6

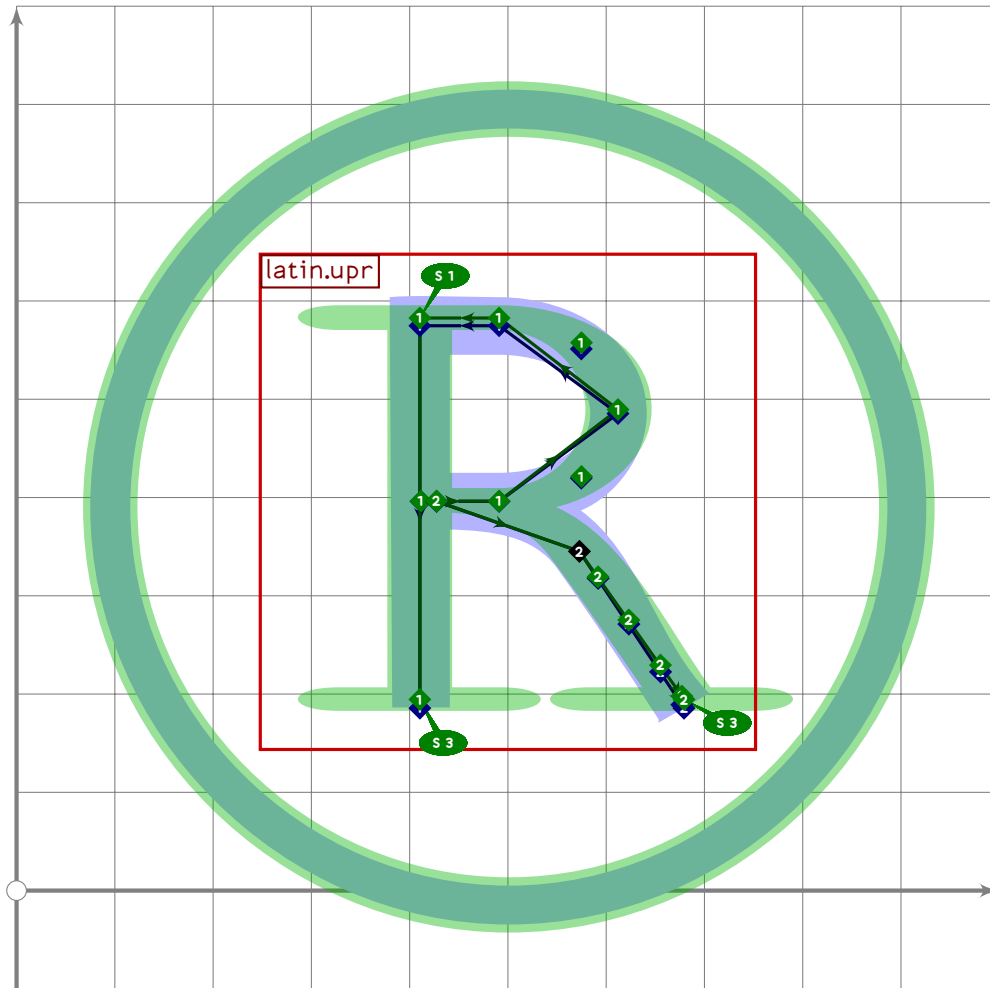


24

```

326 % Q
327 begint Suglyph("uni24C6";198);
328   circle.single;
329   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upq);
330   tsu_render;
331 endtsuglyph;
332

```

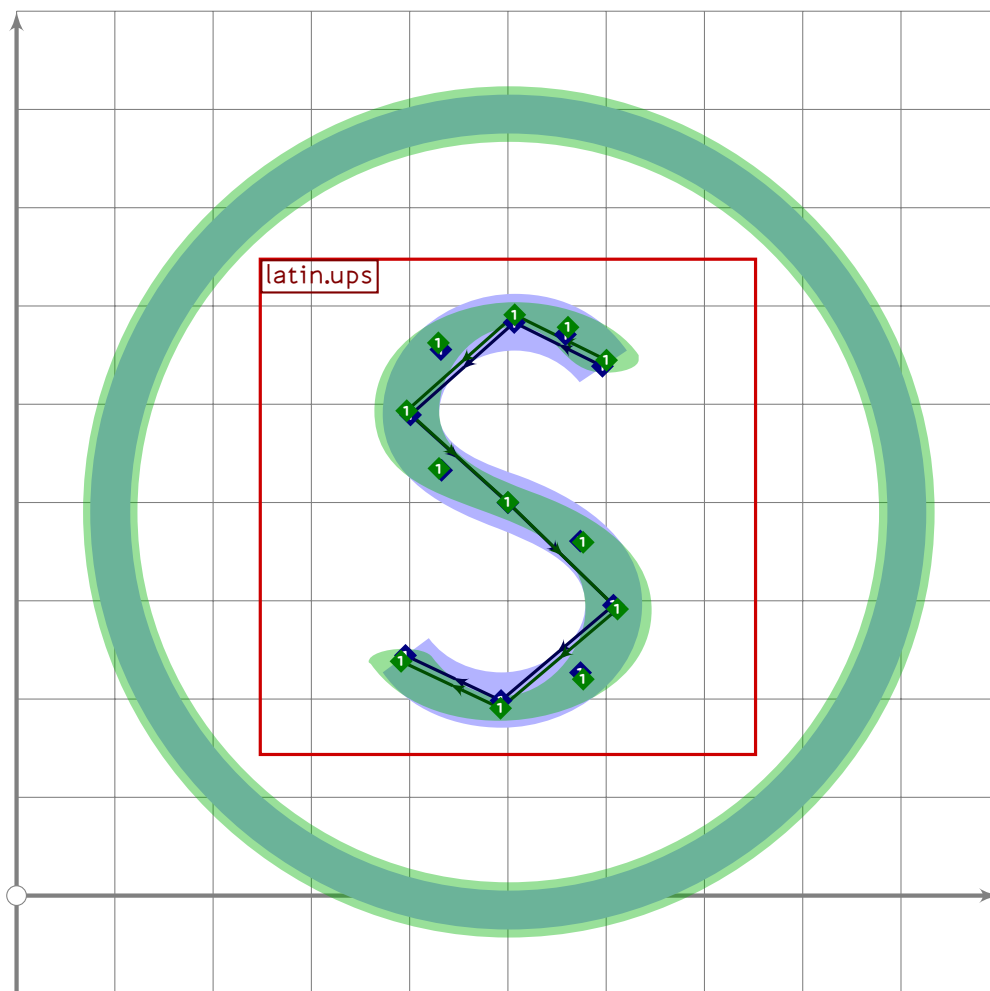


```

333 % R
334 begint Suglyph("uni24C7";199);
335   circle.single;
336   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upr);
337   tsu_render;
338 endtsuglyph;
339

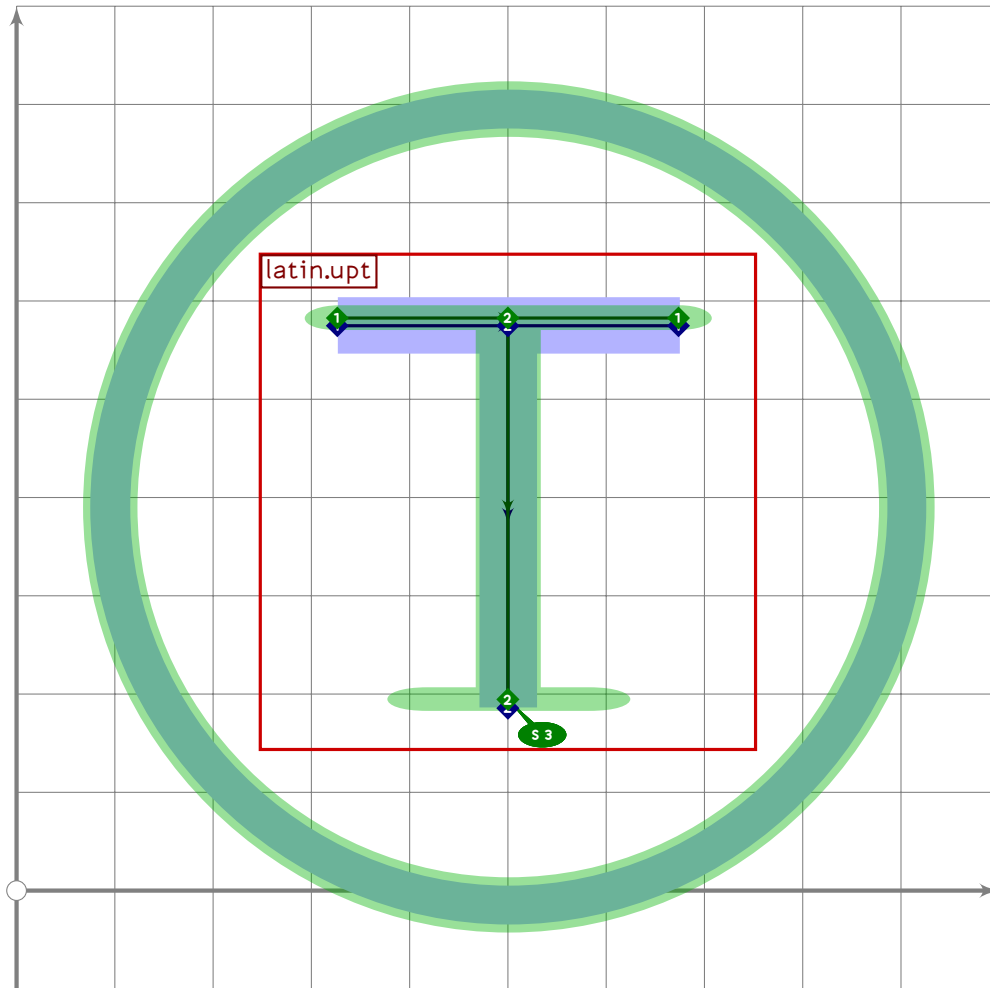
```

U+24C8
tsuku.uni24C8



24

```
340 % S
341 begint Suglyph("uni24C8";200);
342   circle.single;
343   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.ups);
344   tsu_render;
345 endtsuglyph;
346
```

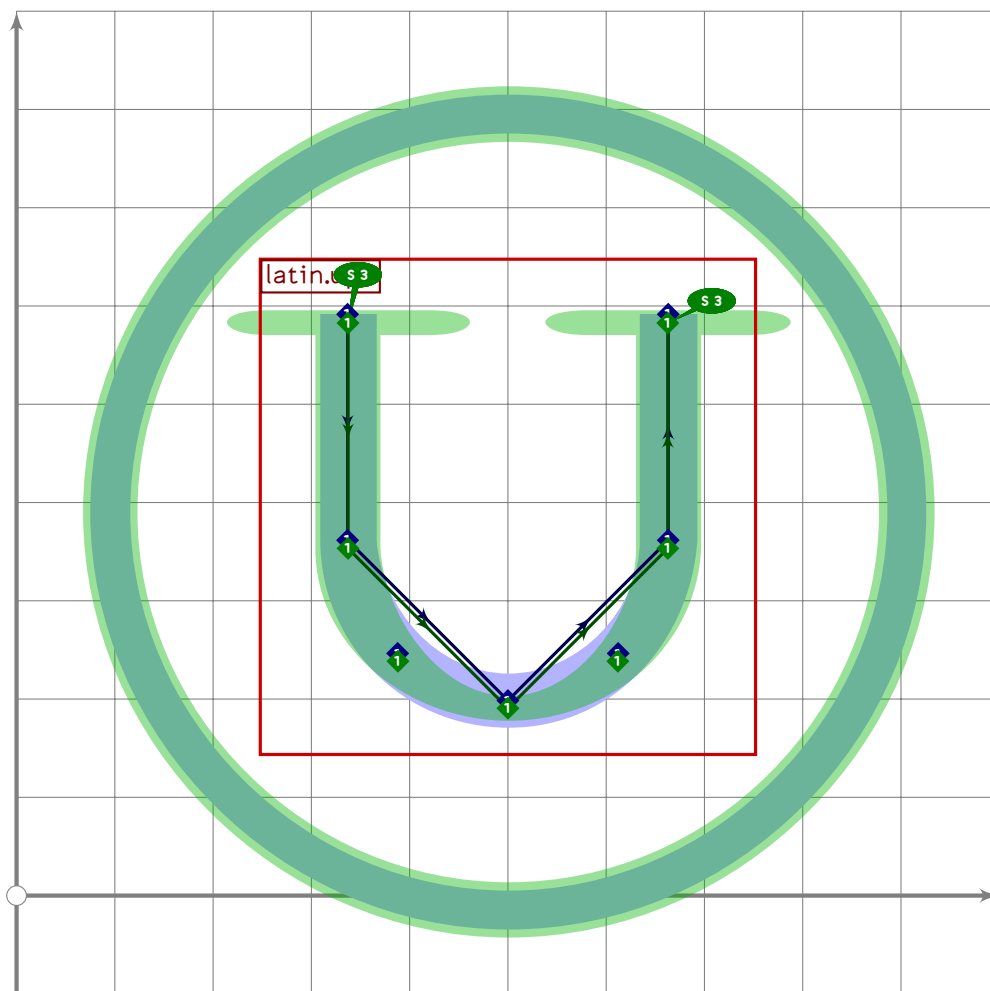


```

347 % T
348 begint Suglyph("uni24C9";201);
349   circle.single;
350   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upt);
351   tsu_render;
352 endtsuglyph;
353

```

U+24CA
tsuku.uni24CA

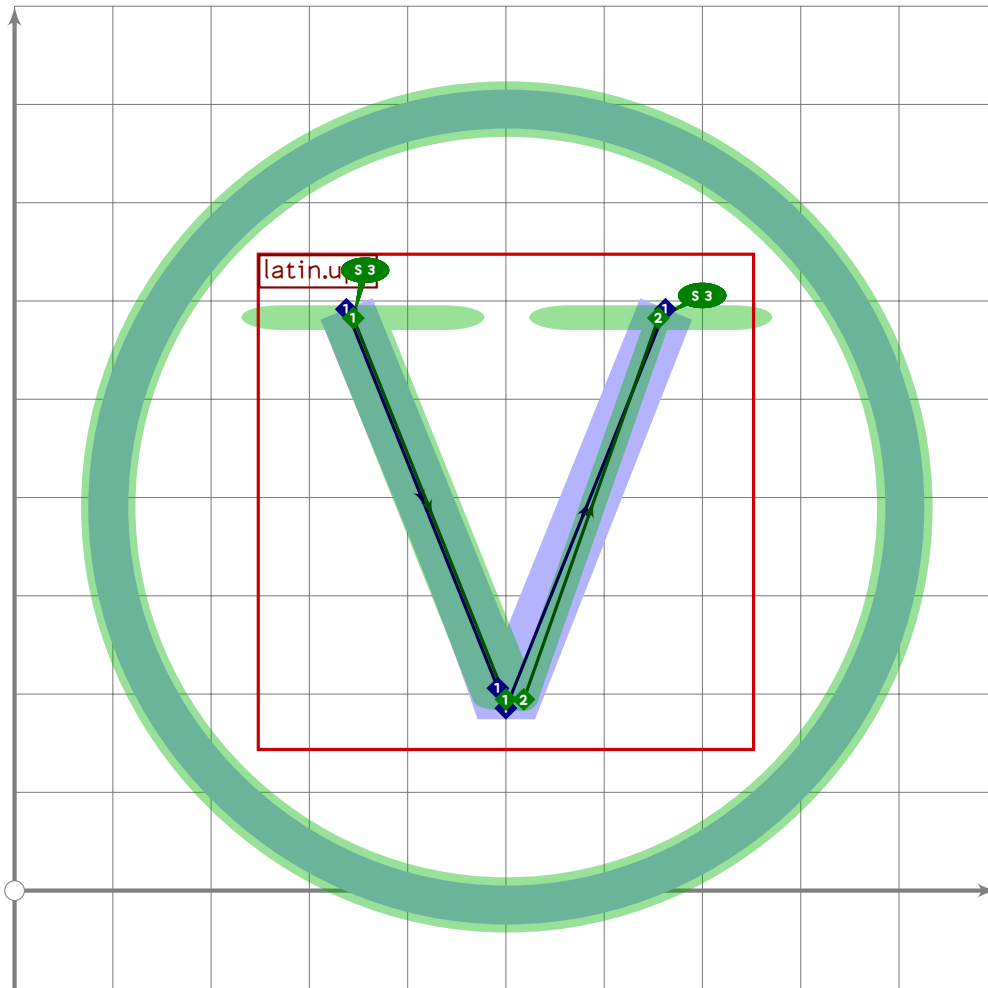


24

```

354 % U
355 begint Suglyph("uni24CA";202);
356   circle.single;
357   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upu);
358   tsu_render;
359 endtsuglyph;
360

```

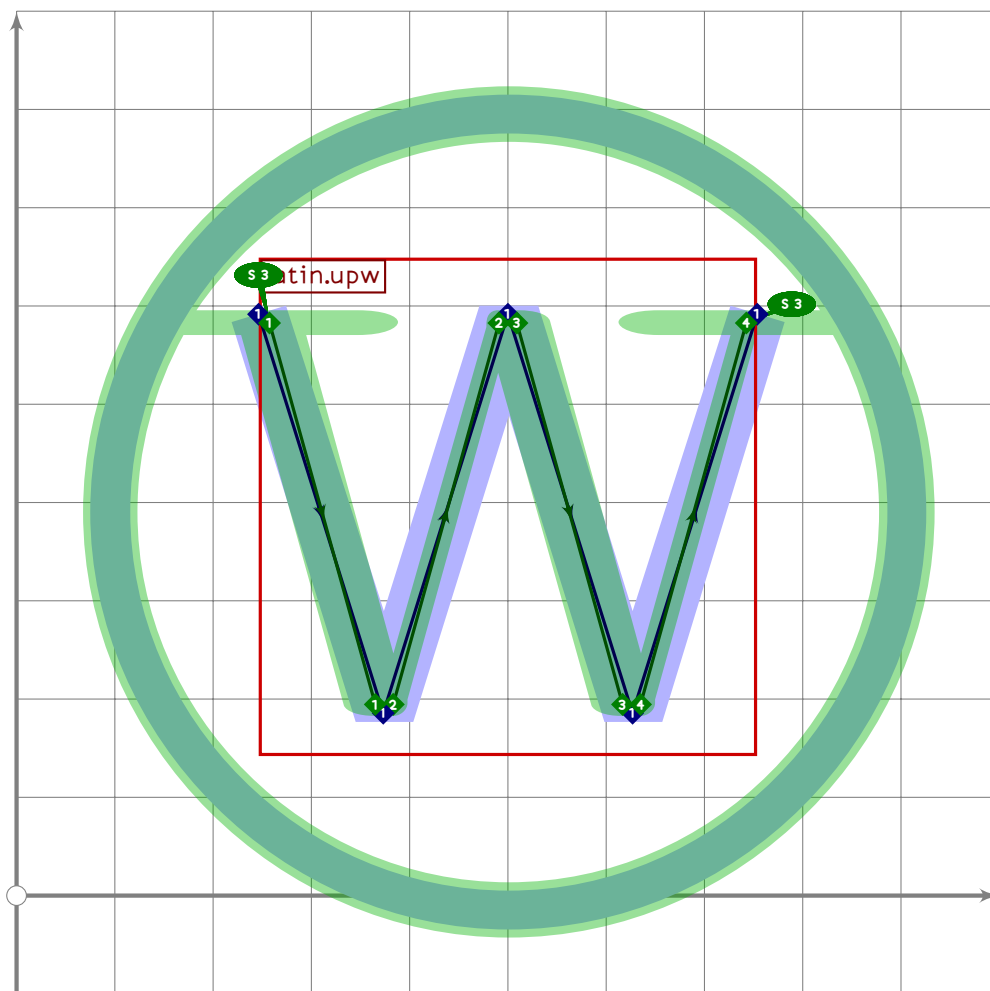



```

361 % V
362 begint Suglyph("uni24CB";203);
363   circle.single;
364   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upv);
365   tsu_render;
366 endtsuglyph;
367

```

U+24CC
tsuku.uni24CC

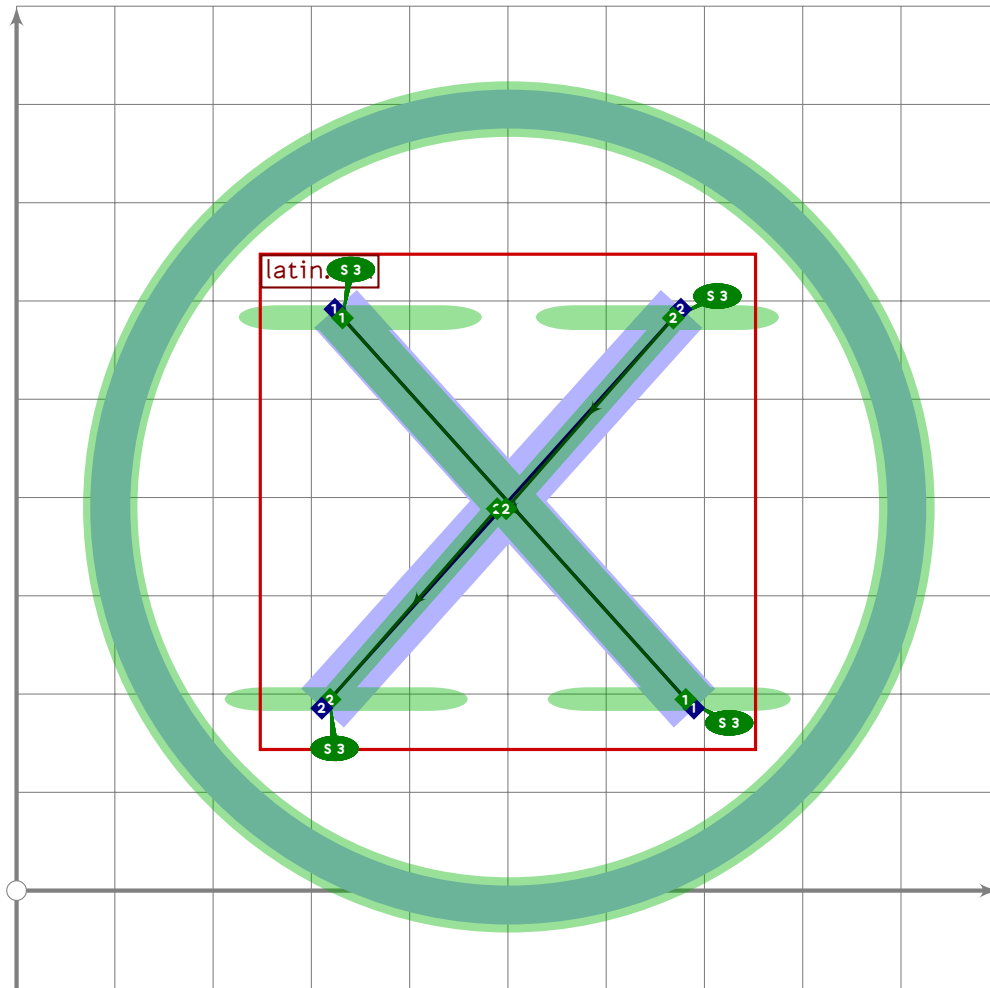


24

```

368 % W
369 begintsuglyph("uni24CC";204);
370   circle.single;
371   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upw);
372   tsu_render;
373 endtsuglyph;
374

```

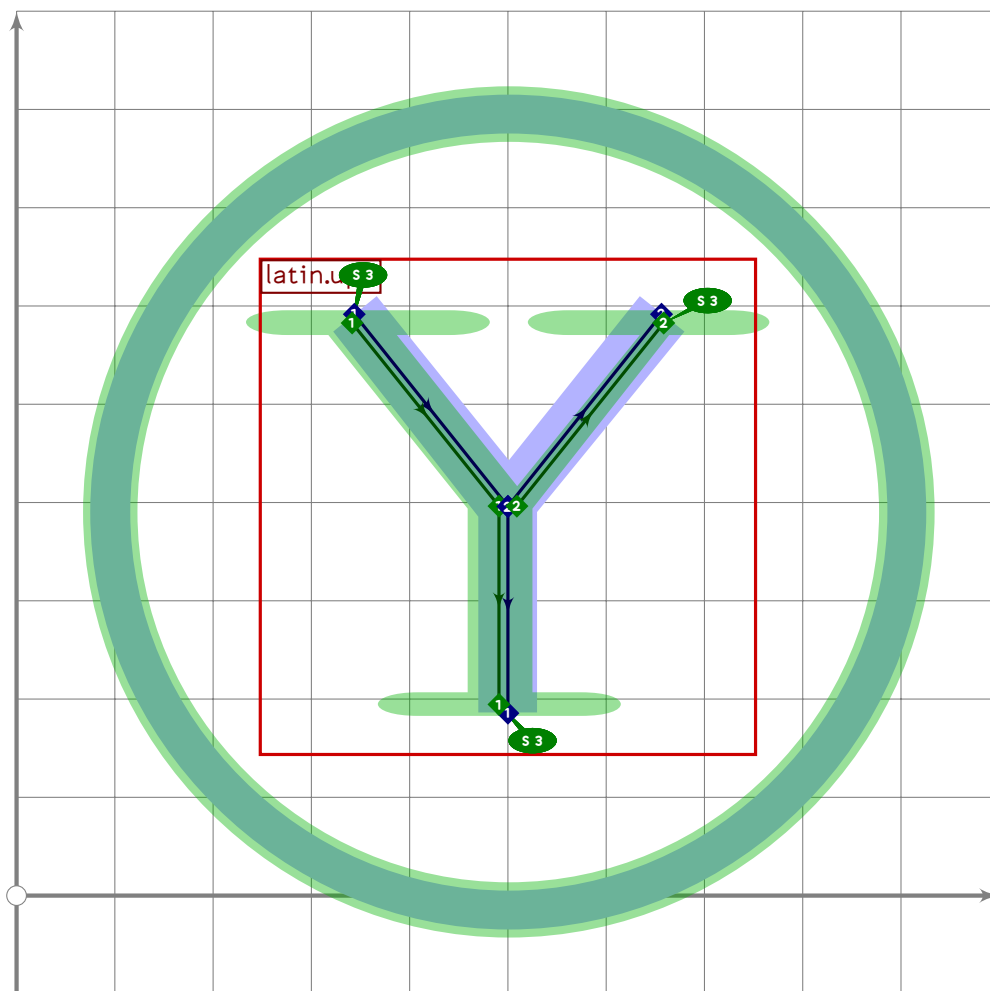


```

375 % X
376 begint Suglyph("uni24CD",205);
377   circle.single;
378   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upx);
379   tsu_render;
380 endtsuglyph;
381

```

U+24CE
tsuku.uni24CE

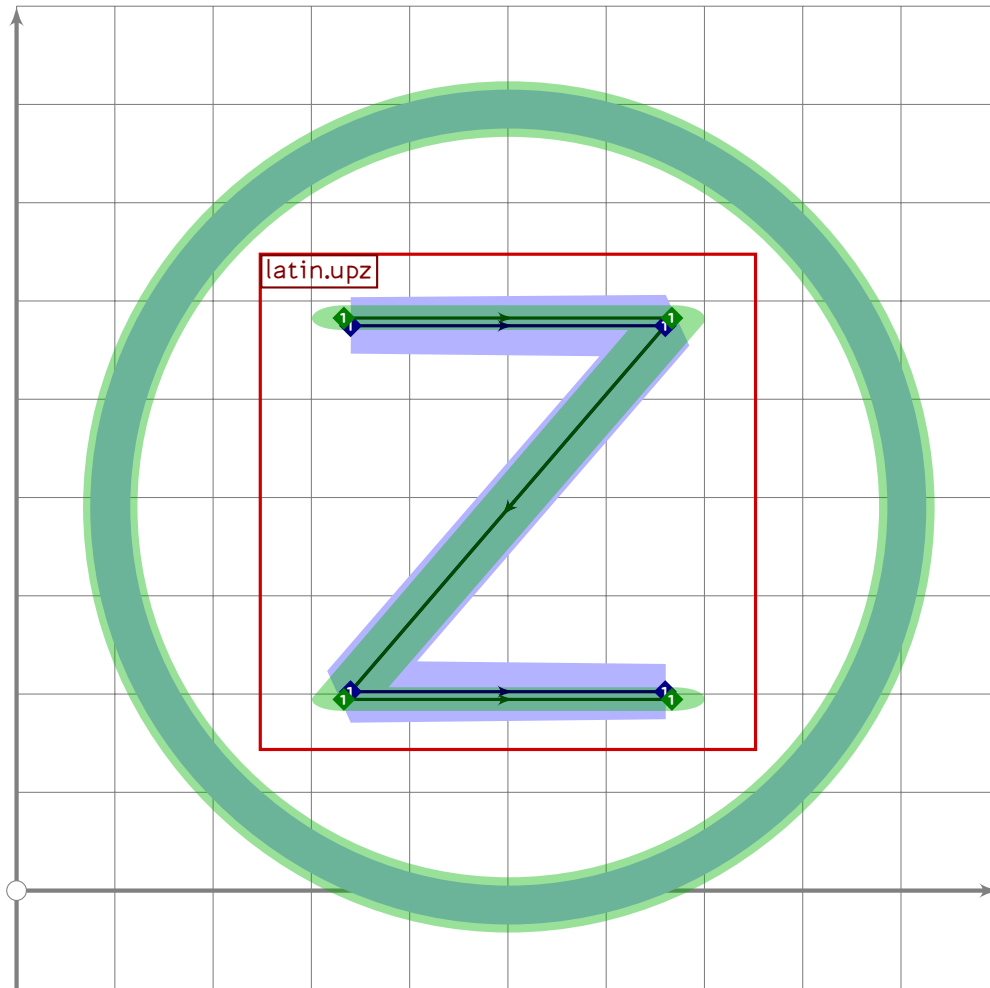


24

```

382 % Y
383 begint Suglyph("uni24CE";206);
384   circle.single;
385   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upy);
386   tsu_render;
387 endtsuglyph;
388

```

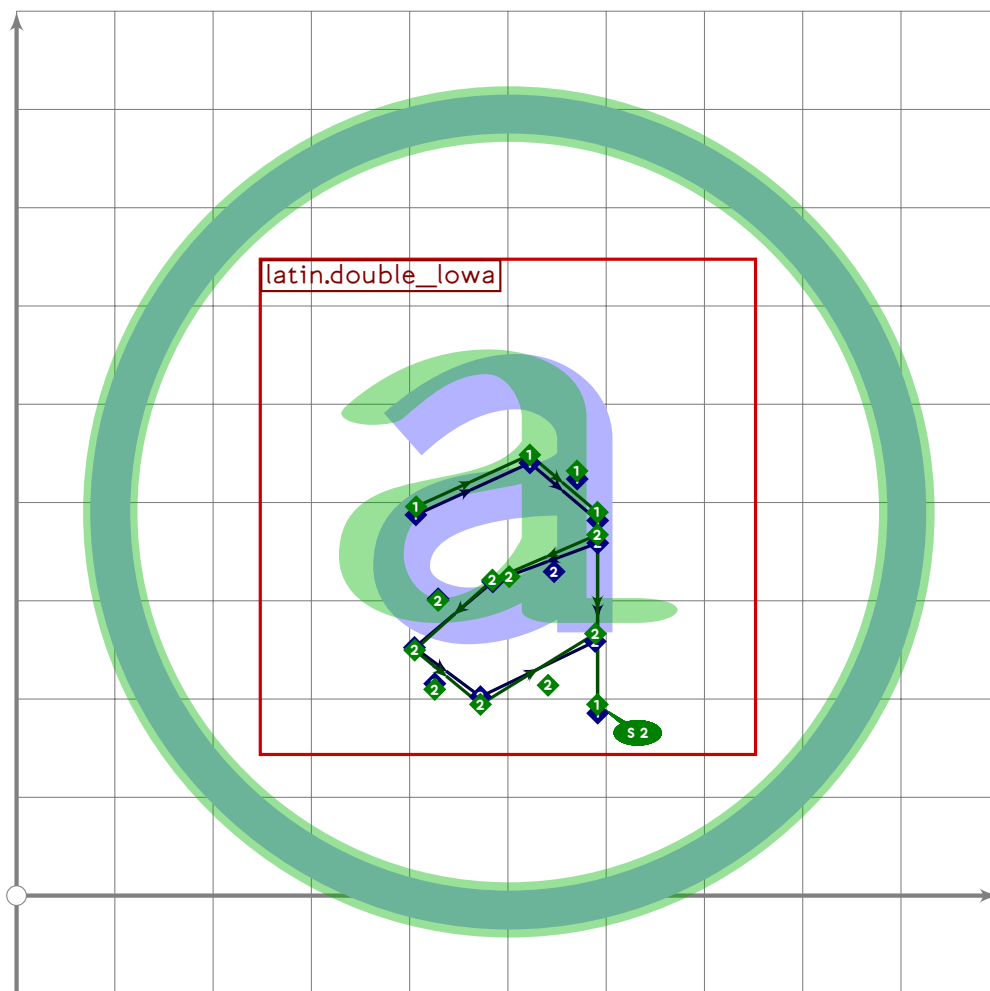


```

389 % Z
390 begint Suglyph("uni24CF";207);
391   circle.single;
392   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.upz);
393   tsu_render;
394 endtsuglyph;
395

```

U+24D0
tsuku.uni24D0

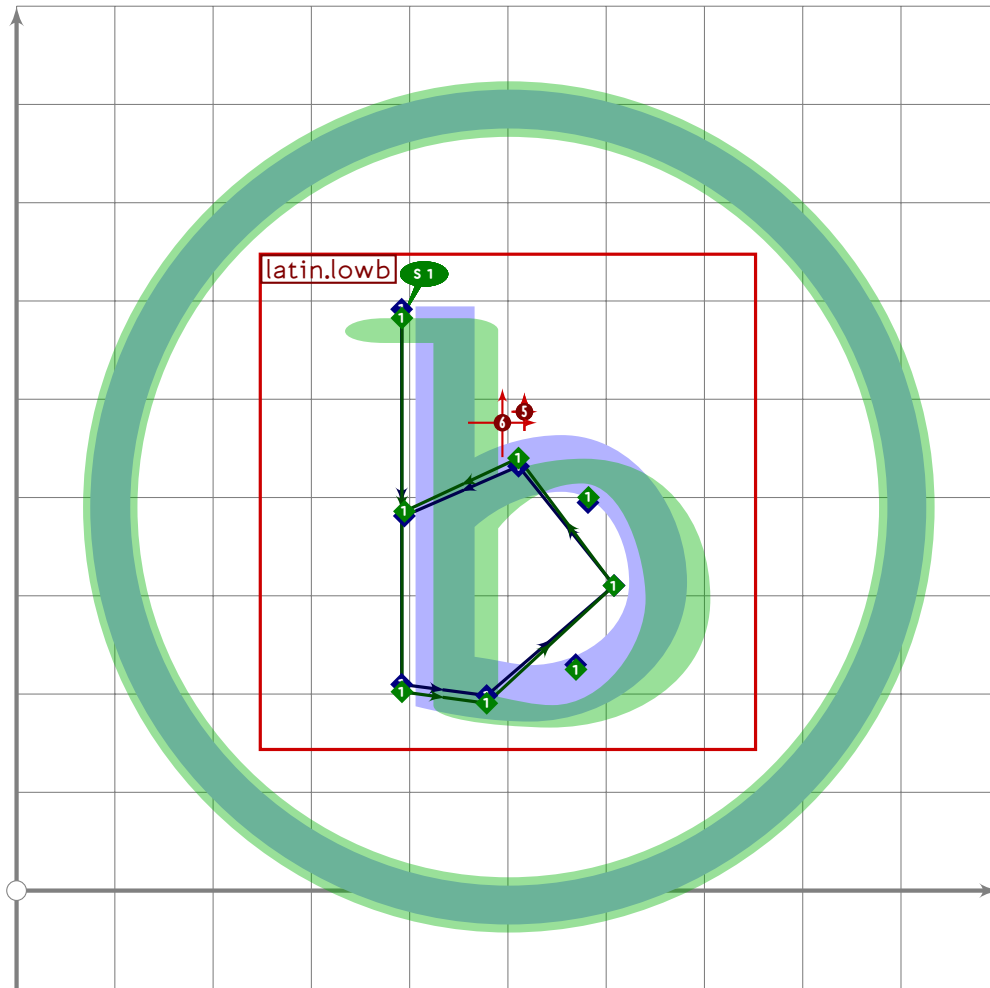


24

```

396 % a
397 begint Suglyph("uni24D0";208);
398   circle.single;
399   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.low_a);
400   tsu_render_in_circle(tsu_xf.cbound);
401 endtsuglyph;
402

```

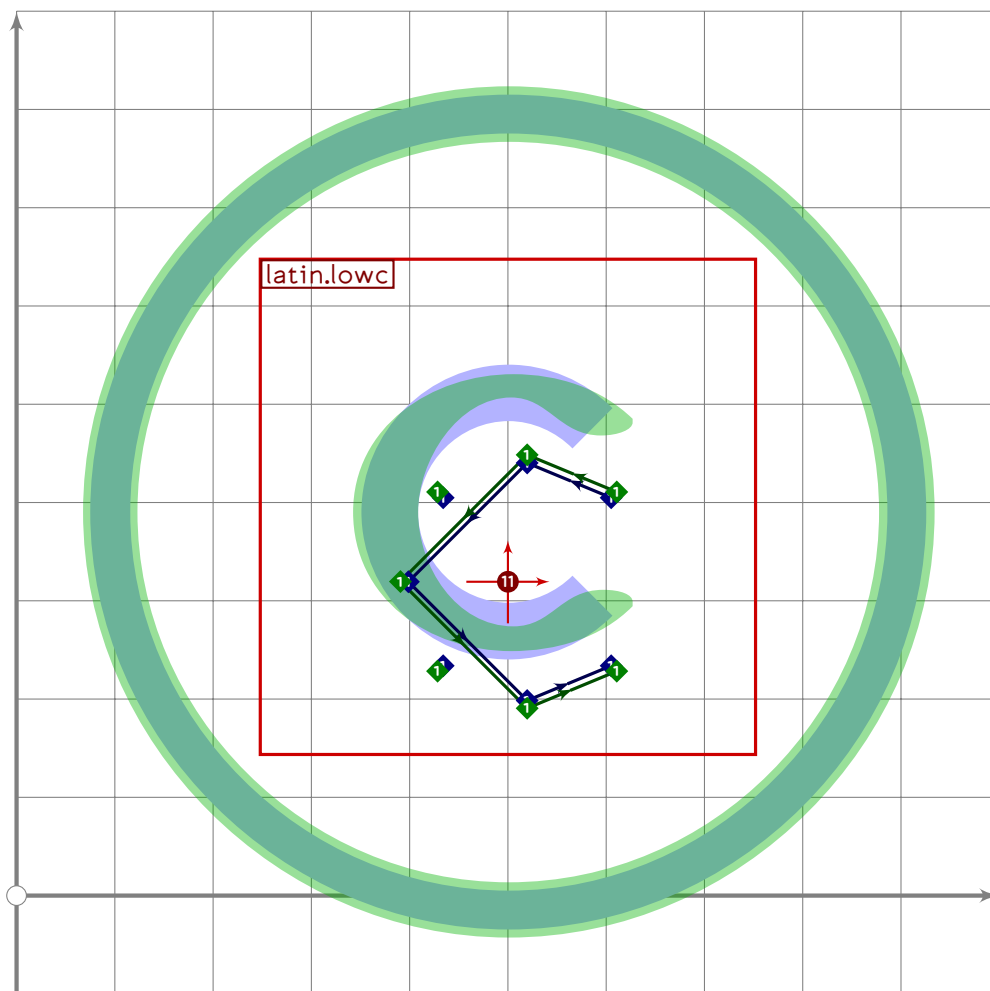


```

403 % b
404 begint Suglyph("uni24D1",209);
405   circle.single;
406   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowb);
407   tsu_render_in_circle(tsu_xf.cbound);
408 endtsuglyph;
409

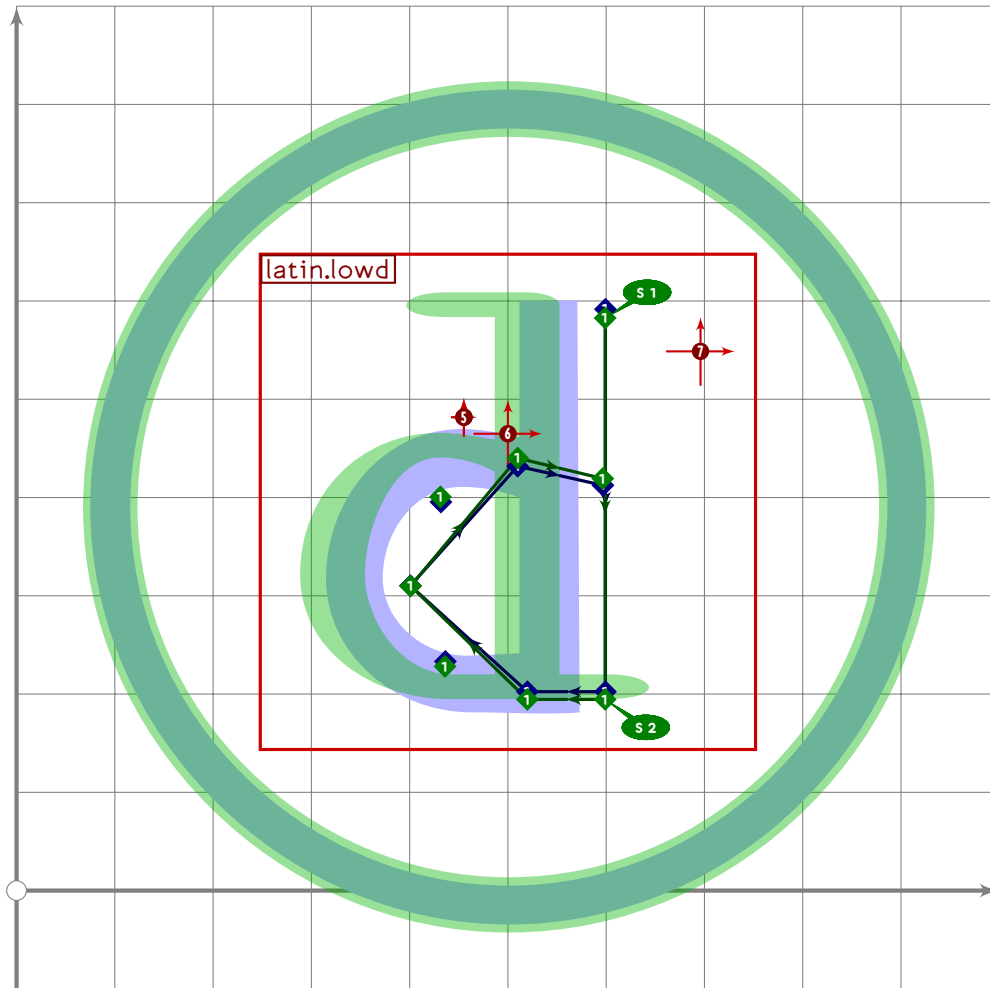
```

U+24D2
tsuku.uni24D2



24

```
410 % c
411 begint Suglyph("uni24D2";210);
412   circle.single;
413   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowc);
414   tsu_render_in_circle(tsu_xf.cbound);
415 endtsuglyph;
416
```

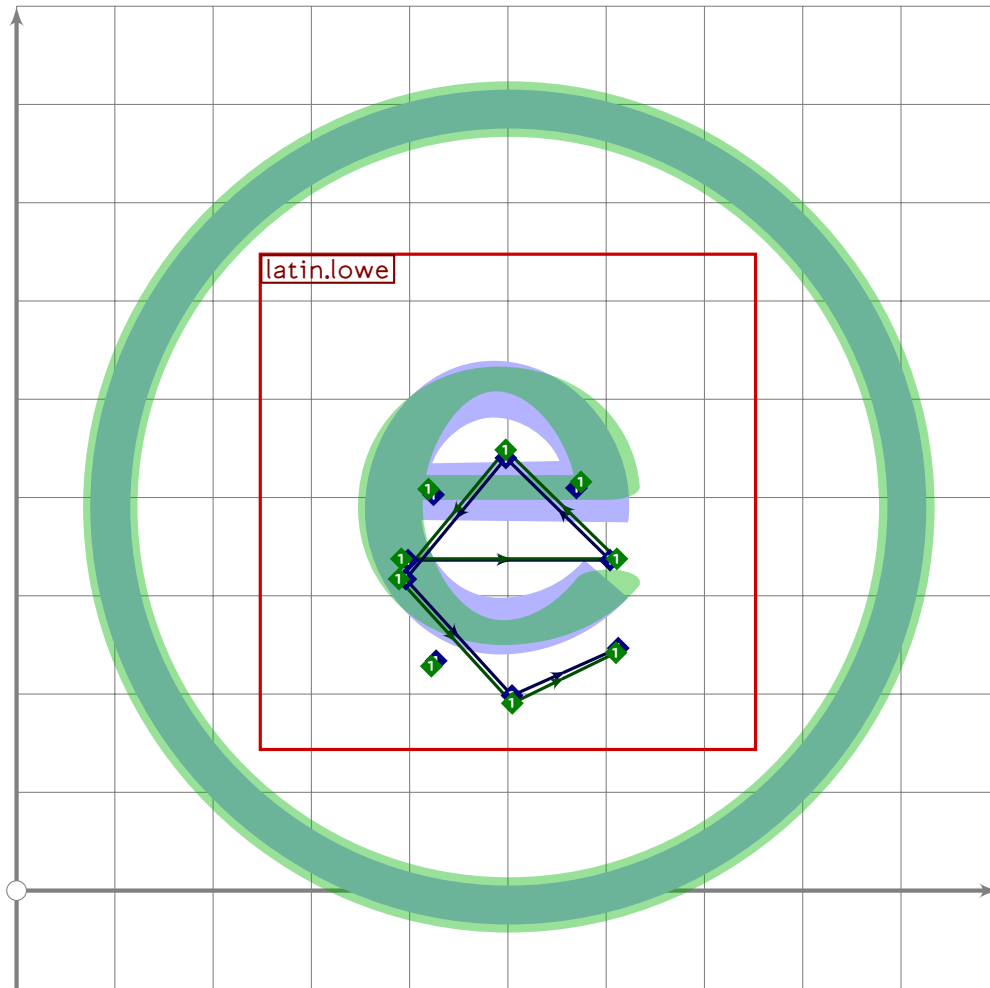



```

417 % d
418 begint Suglyph("uni24D3";211);
419   circle.single;
420   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowd);
421   tsu_render_in_circle(tsu_xf.cbound);
422 endtsuglyph;
423

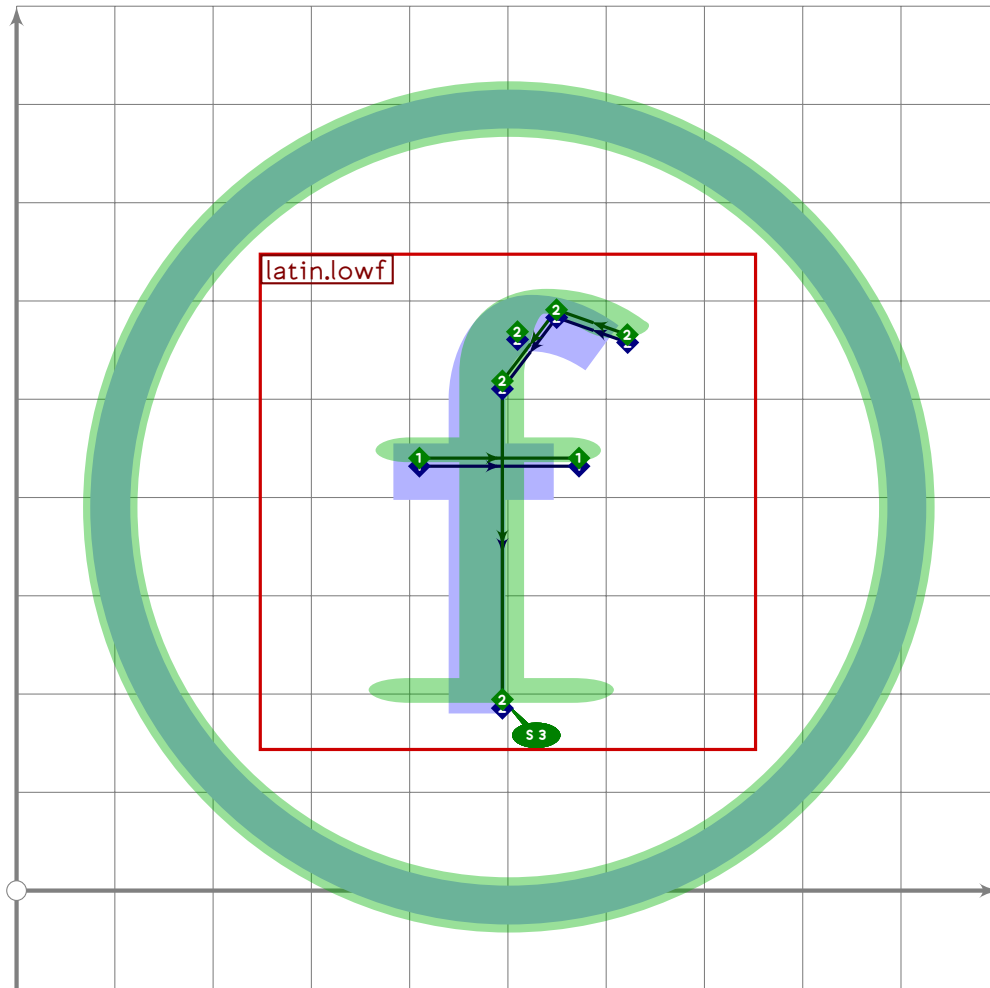
```

U+24D4
tsuku.uni24D4



24

```
424 % e
425 begint Suglyph("uni24D4";212);
426   circle.single;
427   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowe);
428   tsu_render_in_circle(tsu_xf.cbound);
429 endtsuglyph;
430
```

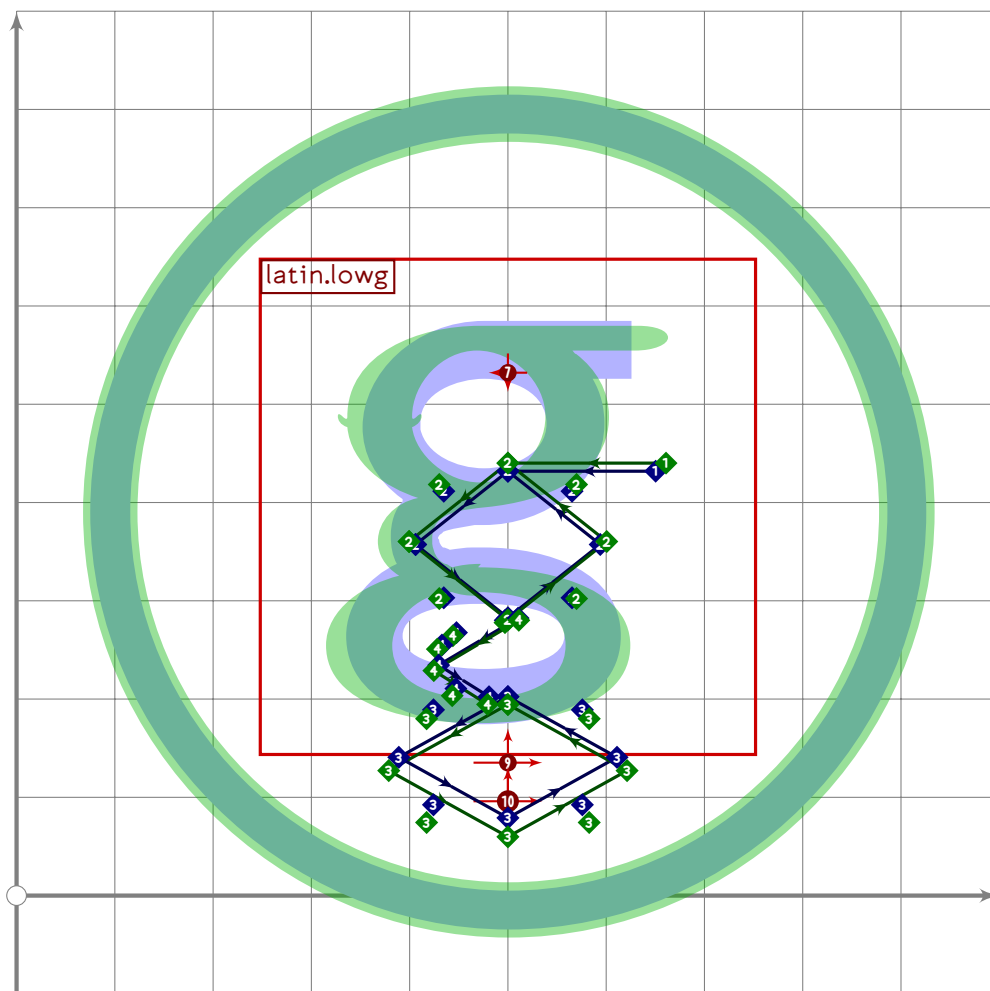


```

431 % f
432 begint Suglyph("uni24D5";213);
433   circle.single;
434   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowf);
435   tsu_render_in_circle(tsu_xf.cbound);
436 endtsuglyph;
437

```

U+24D6
tsuku.uni24D6

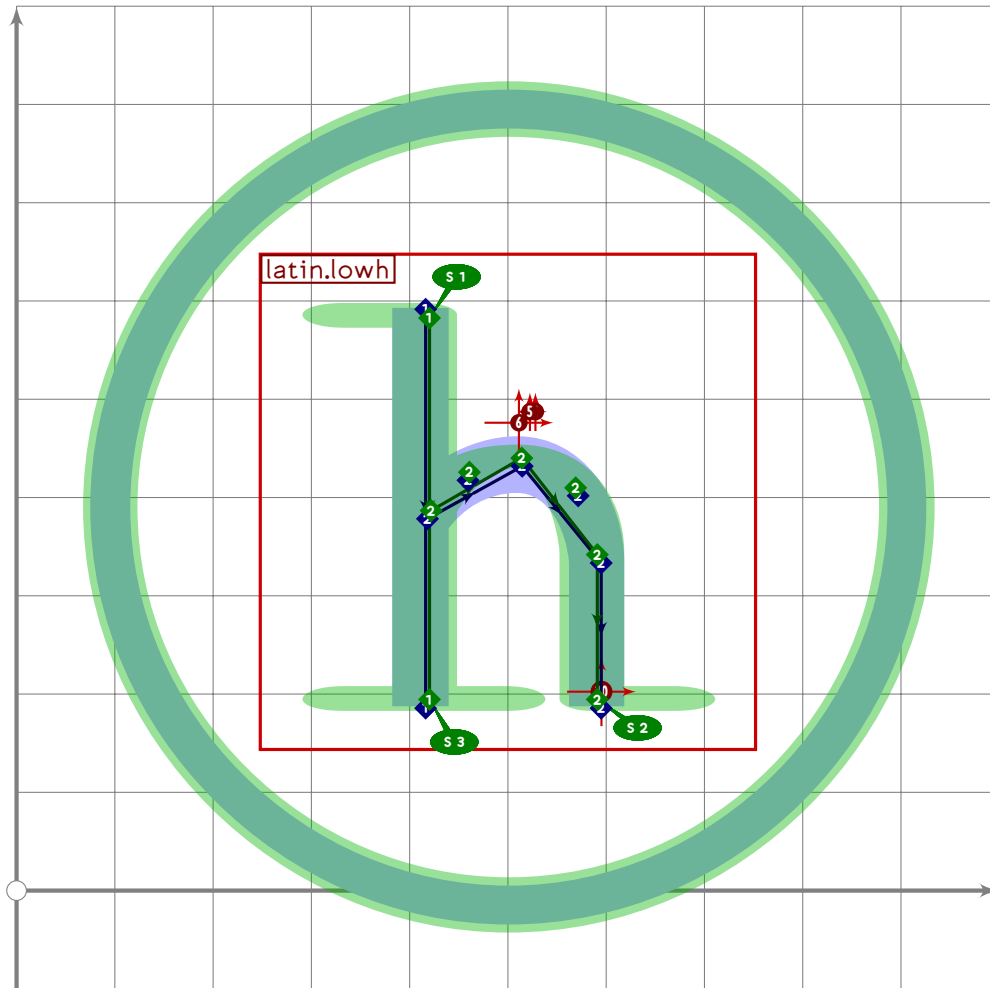


24

```

438 % g
439 begintsuglyph("uni24D6";214);
440   circle.single;
441   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowg);
442   tsu_render_in_circle(tsu_xf.cbound);
443 endtsuglyph;
444

```

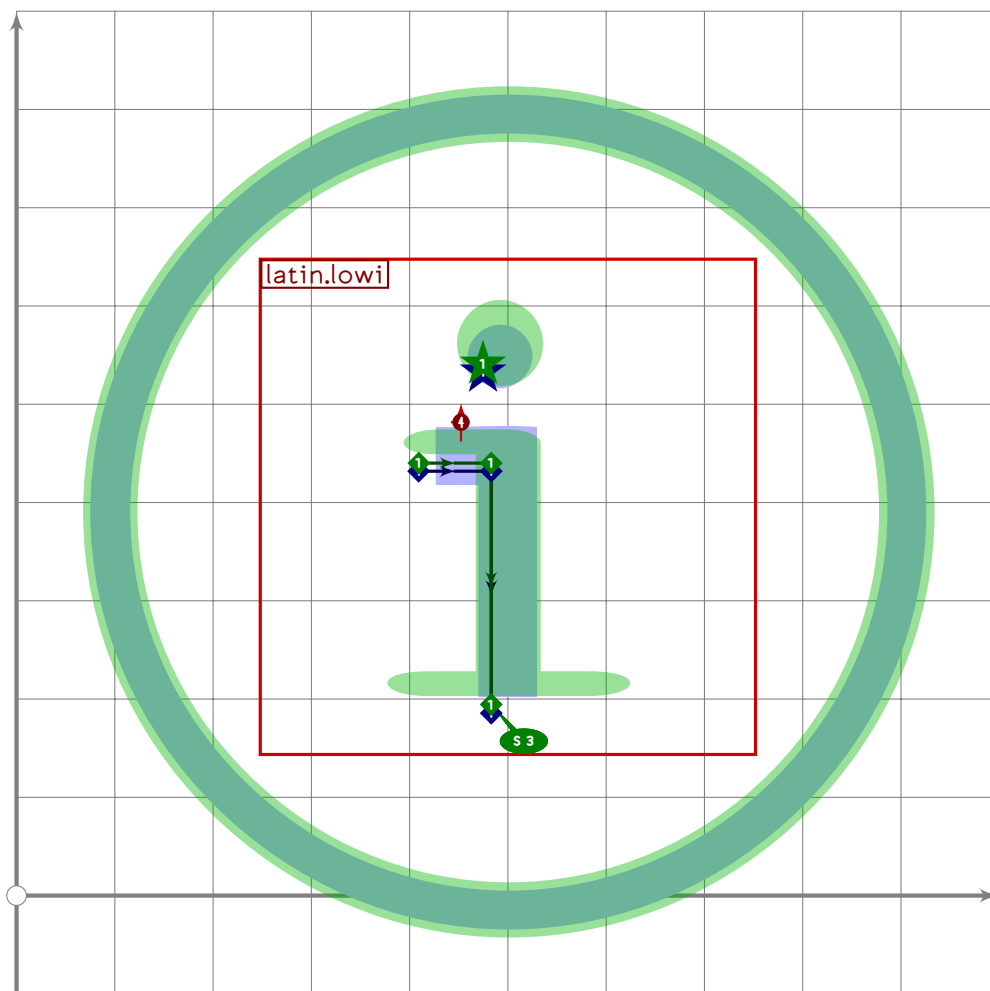


```

445 % h
446 begint Suglyph("uni24D7";215);
447   circle.single;
448   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowh);
449   tsu_render_in_circle(tsu_xf.cbound);
450 endtsuglyph;
451

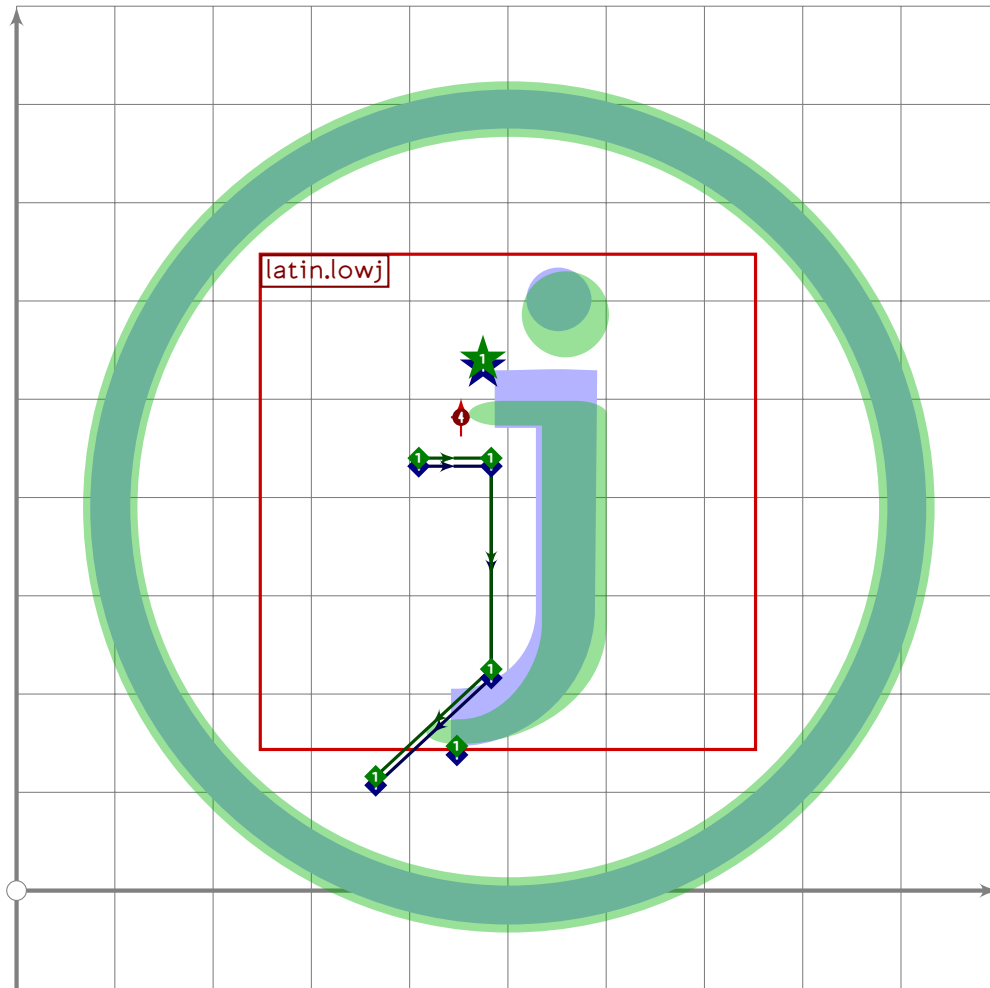
```

U+24D8
tsuku.uni24D8



24

```
452 % i
453 begint Suglyph("uni24D8";216);
454   circle.single;
455   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowi);
456   tsu_render_in_circle(tsu_xf.cbound);
457 endtsuglyph;
458
```

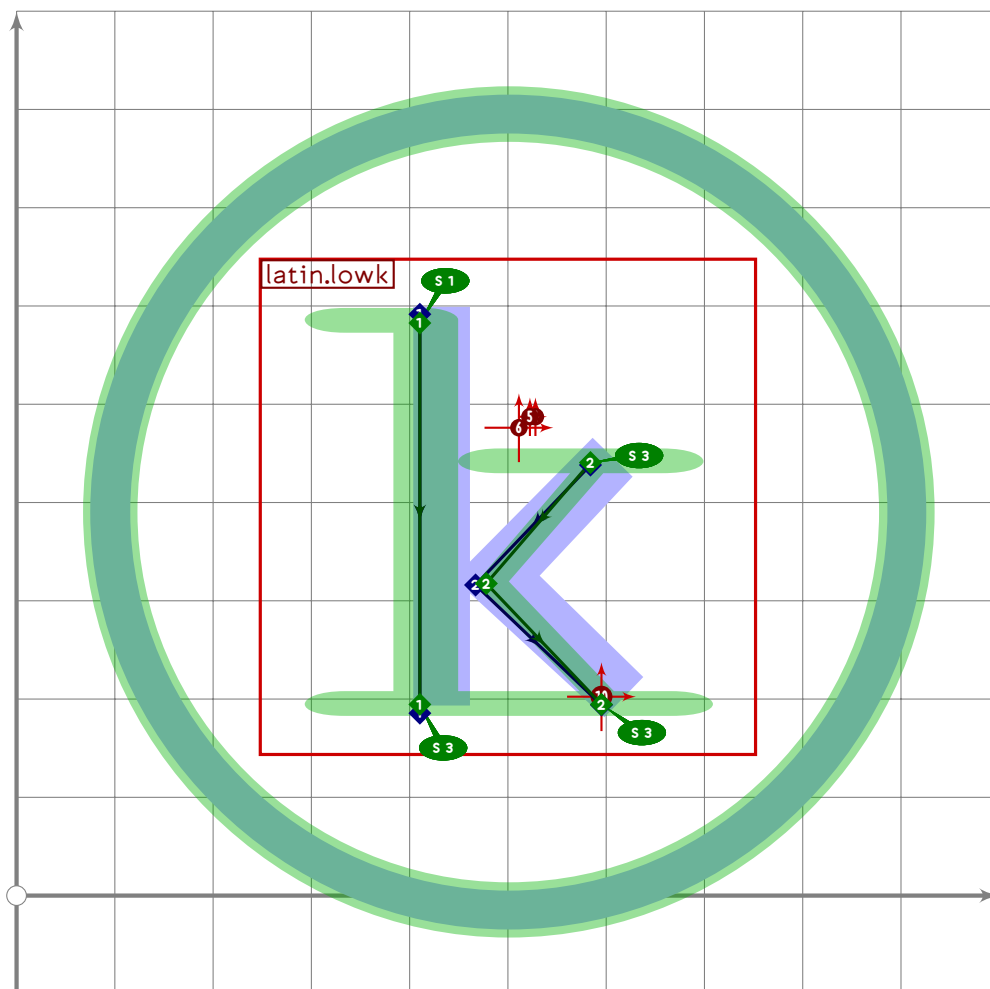


```

459 % j
460 begint Suglyph("uni24D9";217);
461   circle.single;
462   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowj);
463   tsu_render_in_circle(tsu_xf.cbound);
464 endtsuglyph;
465

```

U+24DA
tsuku.uni24DA

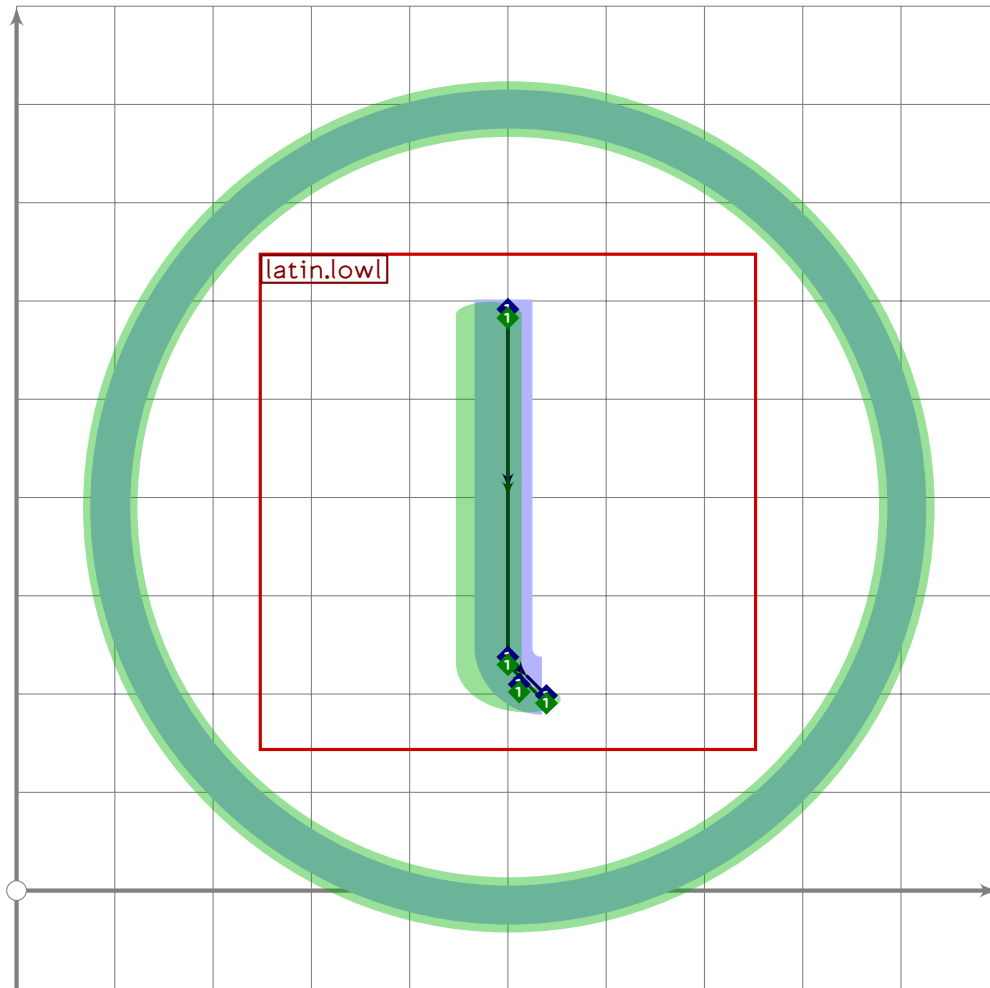


24

```

466 % k
467 begintuglyph("uni24DA";218);
468   circle.single;
469   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowk);
470   tsu_render_in_circle(tsu_xf.cbound);
471 endtuglyph;
472

```

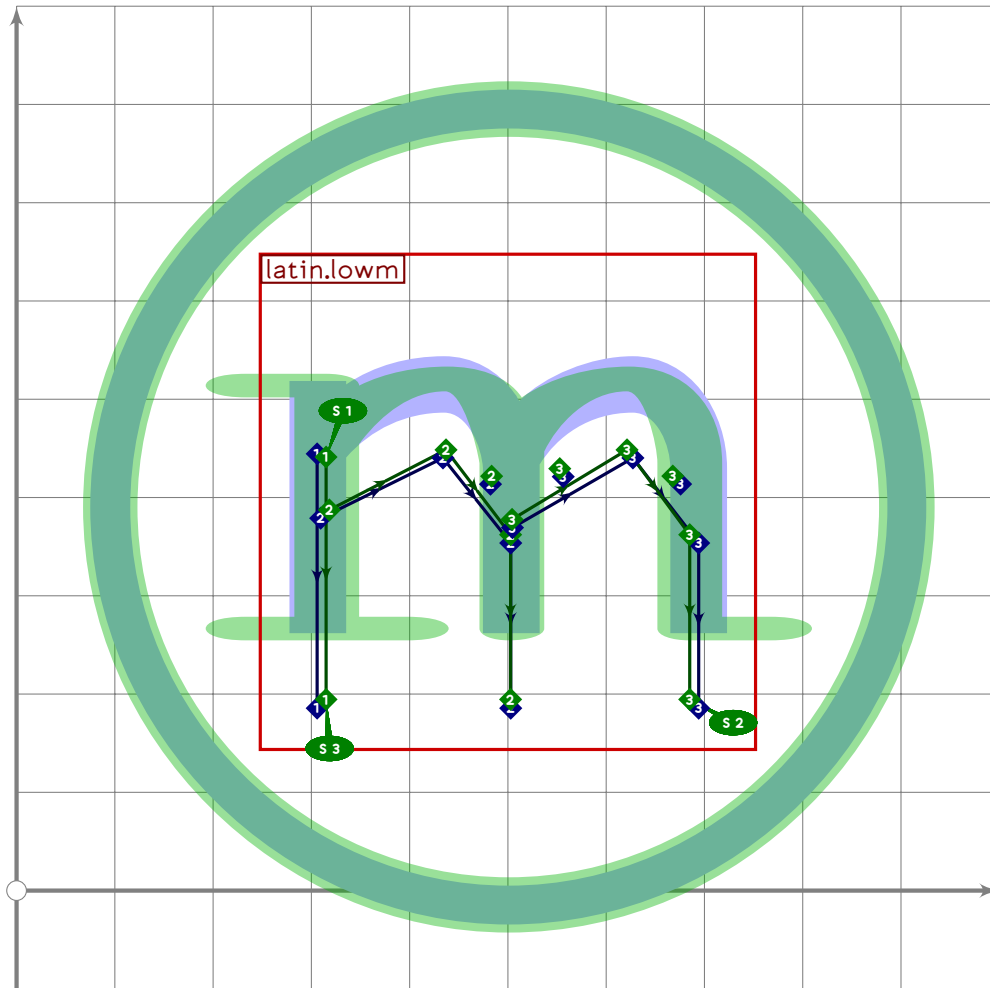



```

473 % l
474 begintsuglyph("uni24DB";219);
475   circle.single;
476   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowl);
477   tsu_render_in_circle(tsu_xf.cbound);
478 endtsuglyph;
479

```

U+24DC
tsuku.uni24DC

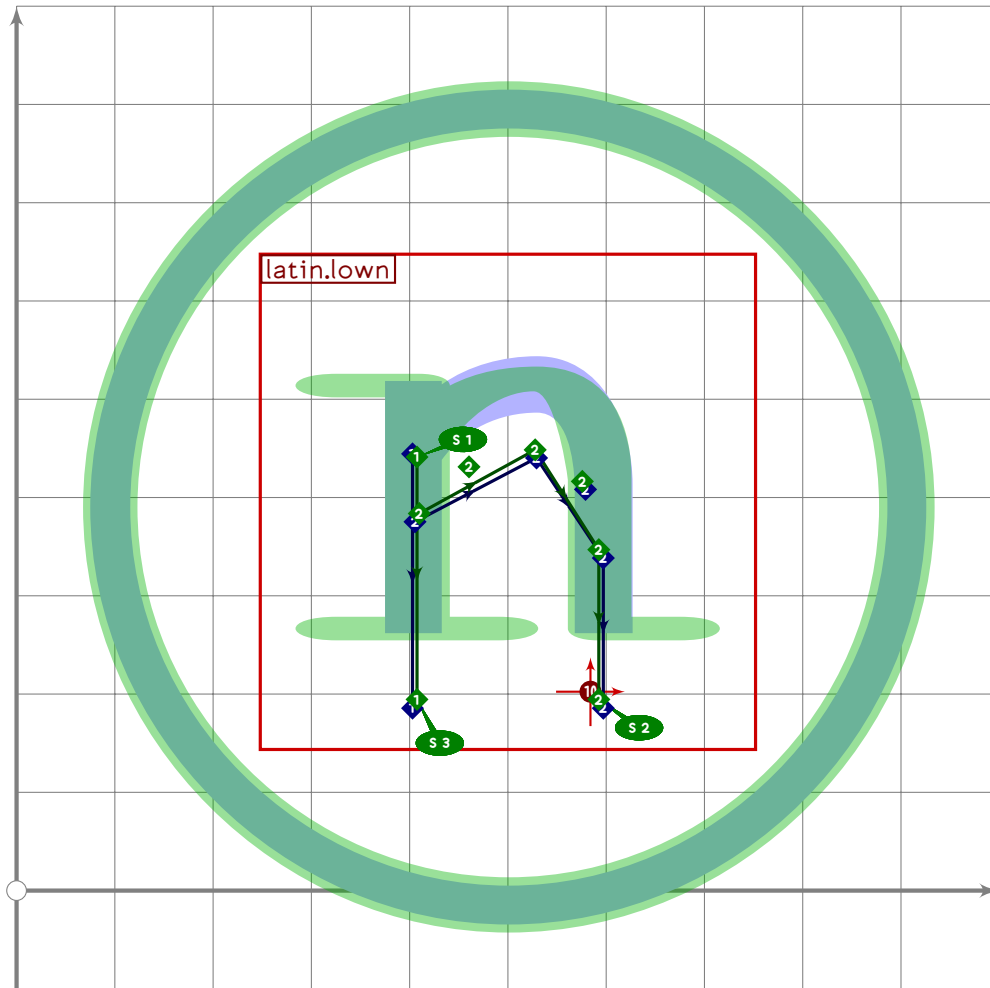


24

```

480 % m
481 begint Suglyph("uni24DC",220);
482   circle.single;
483   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowm);
484   tsu_render_in_circle(tsu_xf.cbound);
485 endtsuglyph;
486

```

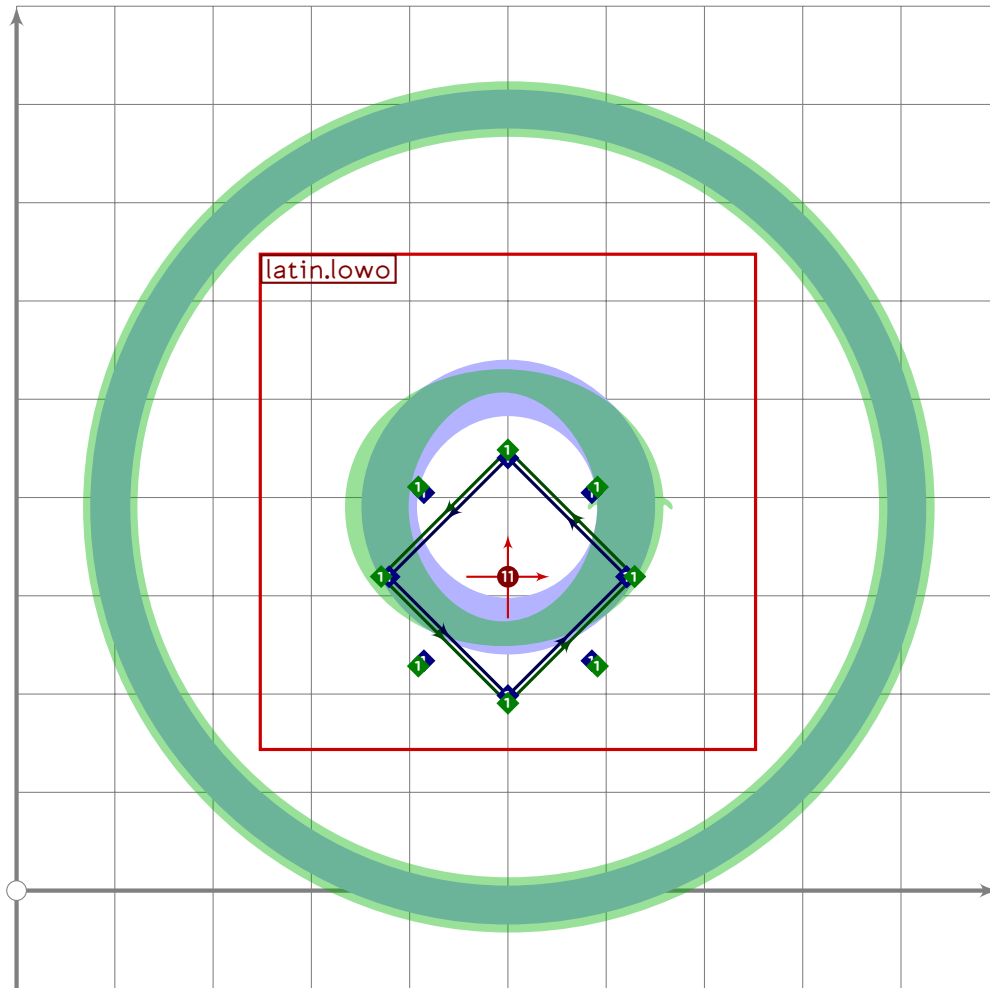


```

487 % n
488 begint Suglyph("uni24DD";221);
489   circle.single;
490   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lown);
491   tsu_render_in_circle(tsu_xf.cbound);
492 endtsuglyph;
493

```

U+24DE
tsuku.uni24DE

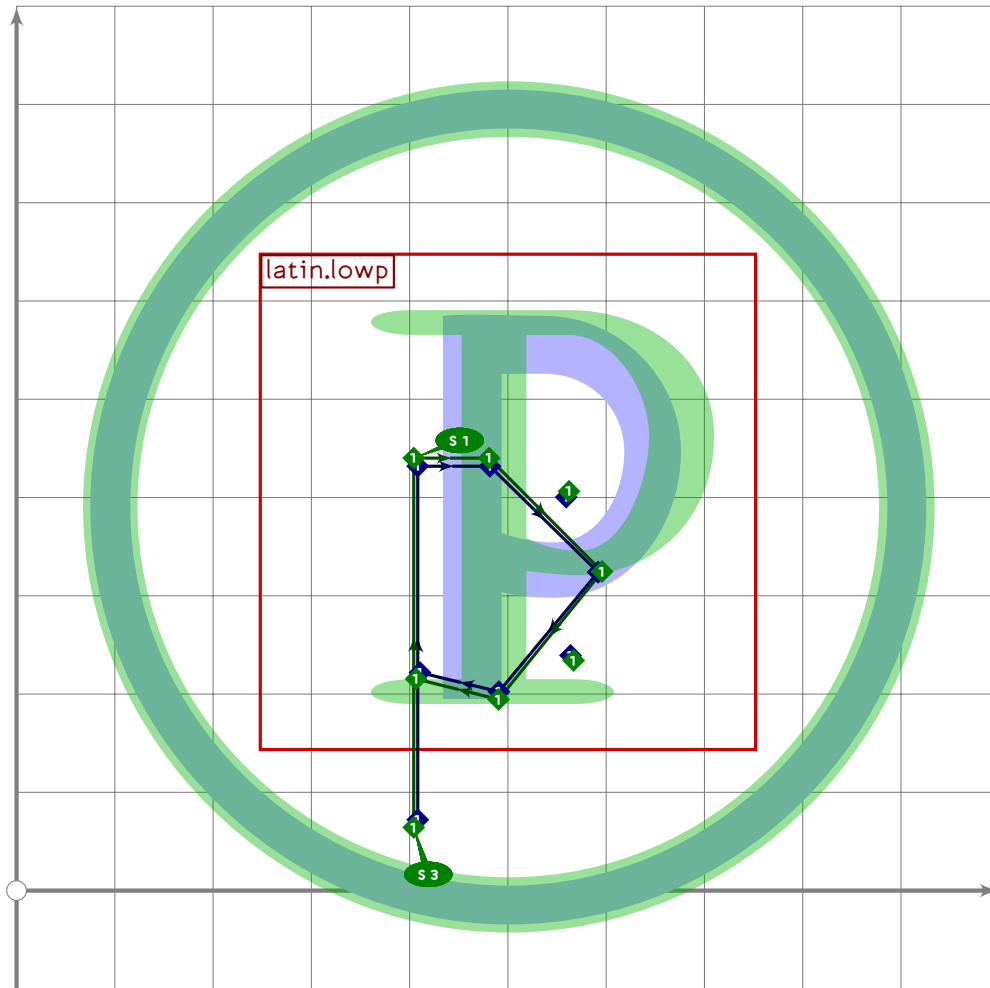


24

```

494 % o
495 begintsuglyph("uni24DE";222);
496   circle.single;
497   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowo);
498   tsu_render_in_circle(tsu_xf.cbound);
499 endtsuglyph;
500

```

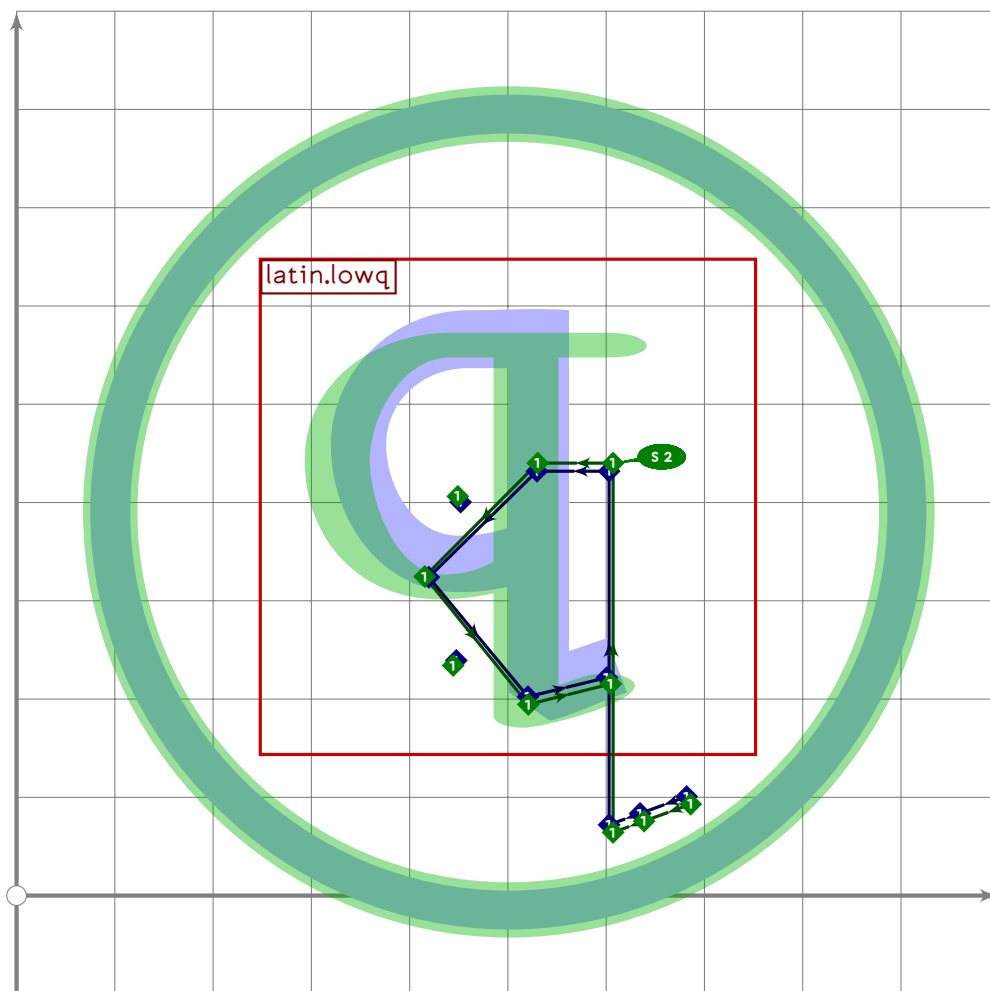


```

501 % p
502 begint Suglyph("uni24DF";223);
503   circle.single;
504   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowp);
505   tsu_render_in_circle(tsu_xf.cbound);
506 endtsuglyph;
507

```

U+24E0
tsuku.uni24E0

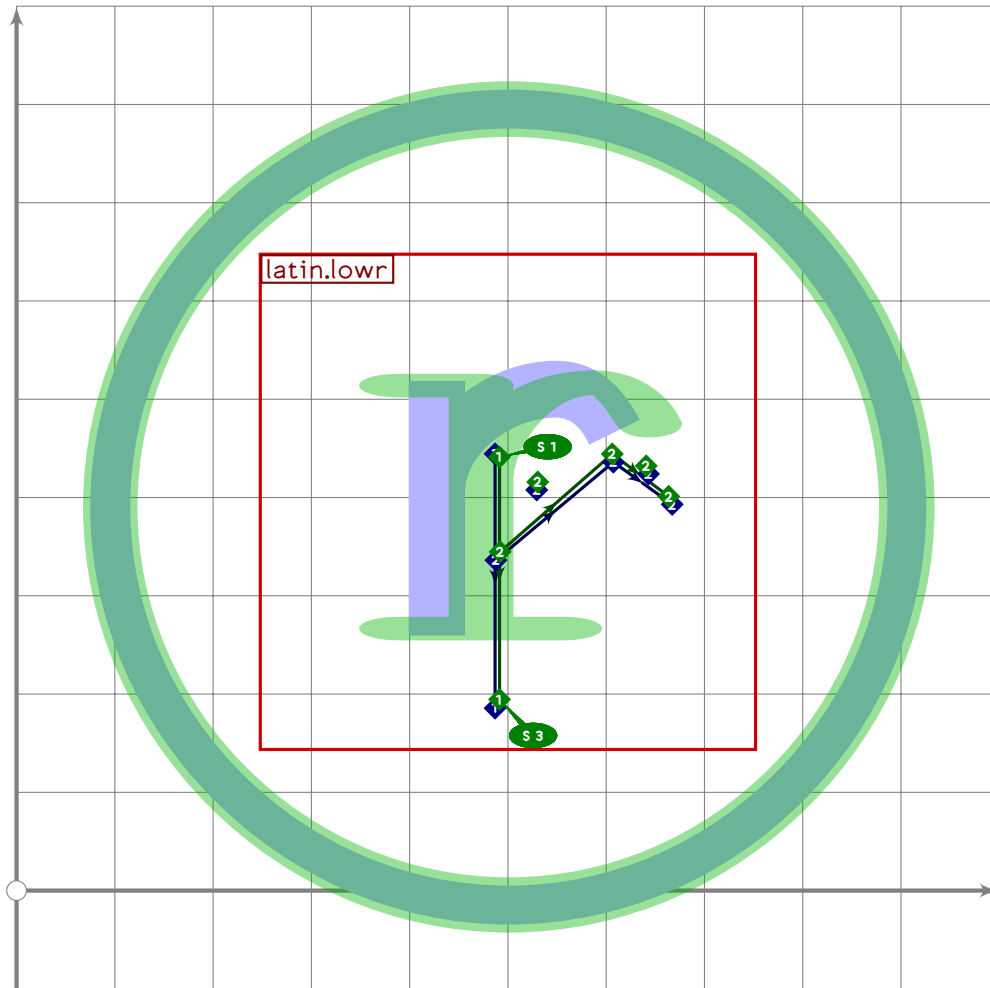


24

```

508 % q
509 begint Suglyph("uni24E0",224);
510   circle.single;
511   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowq);
512   tsu_render_in_circle(tsu_xf.cbound);
513 endtsuglyph;
514

```

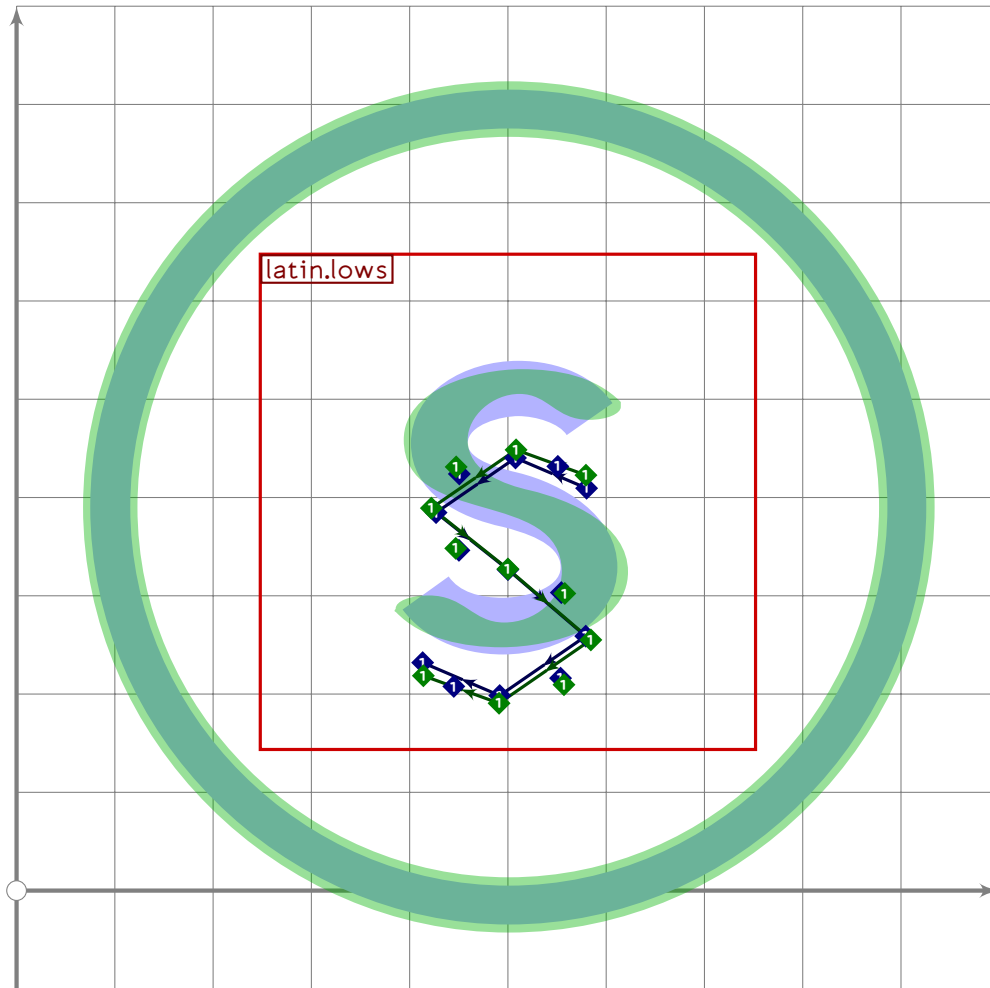


```

515 % r
516 begint Suglyph("uni24E1",225);
517   circle.single;
518   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowr);
519   tsu_render_in_circle(tsu_xf.cbound);
520 endtsuglyph;
521

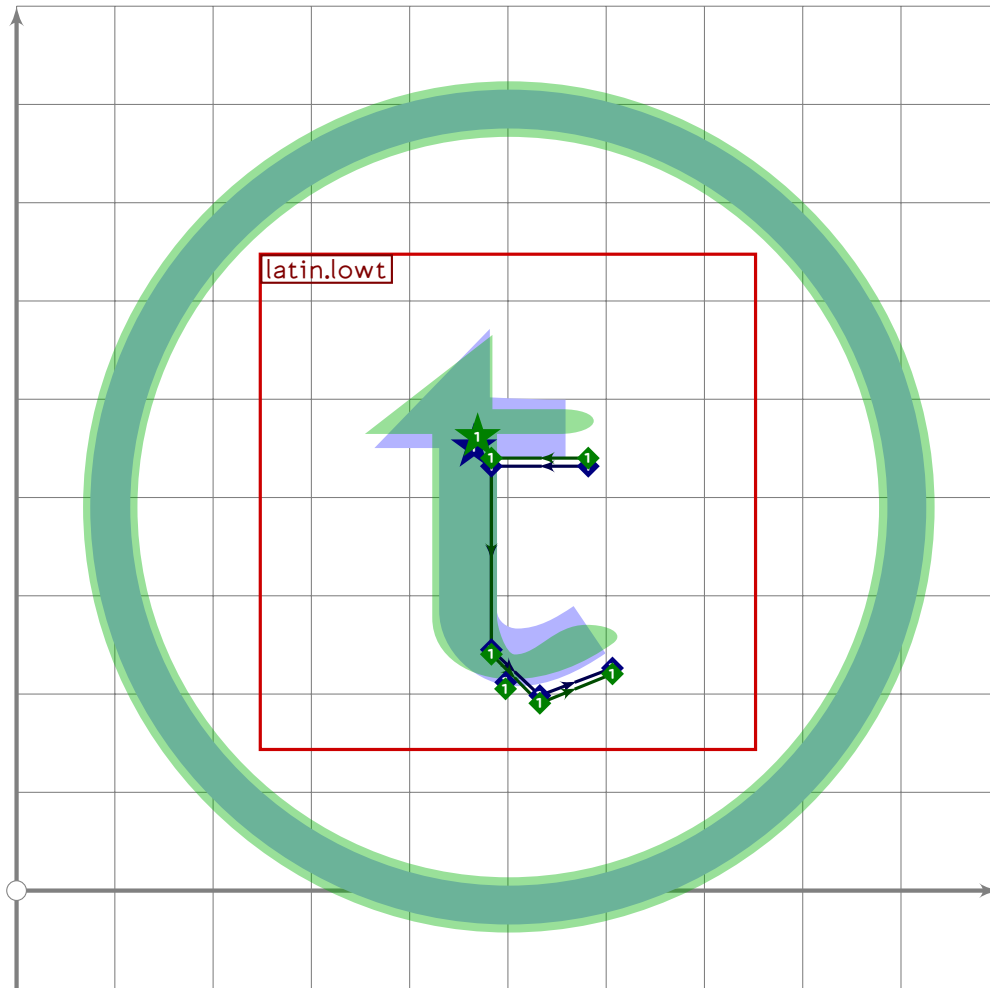
```

U+24E2
tsuku.uni24E2



24

```
522 % s
523 begint Suglyph("uni24E2";226);
524   circle.single;
525   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lows);
526   tsu_render_in_circle(tsu_xf.cbound);
527 endtsuglyph;
528
```

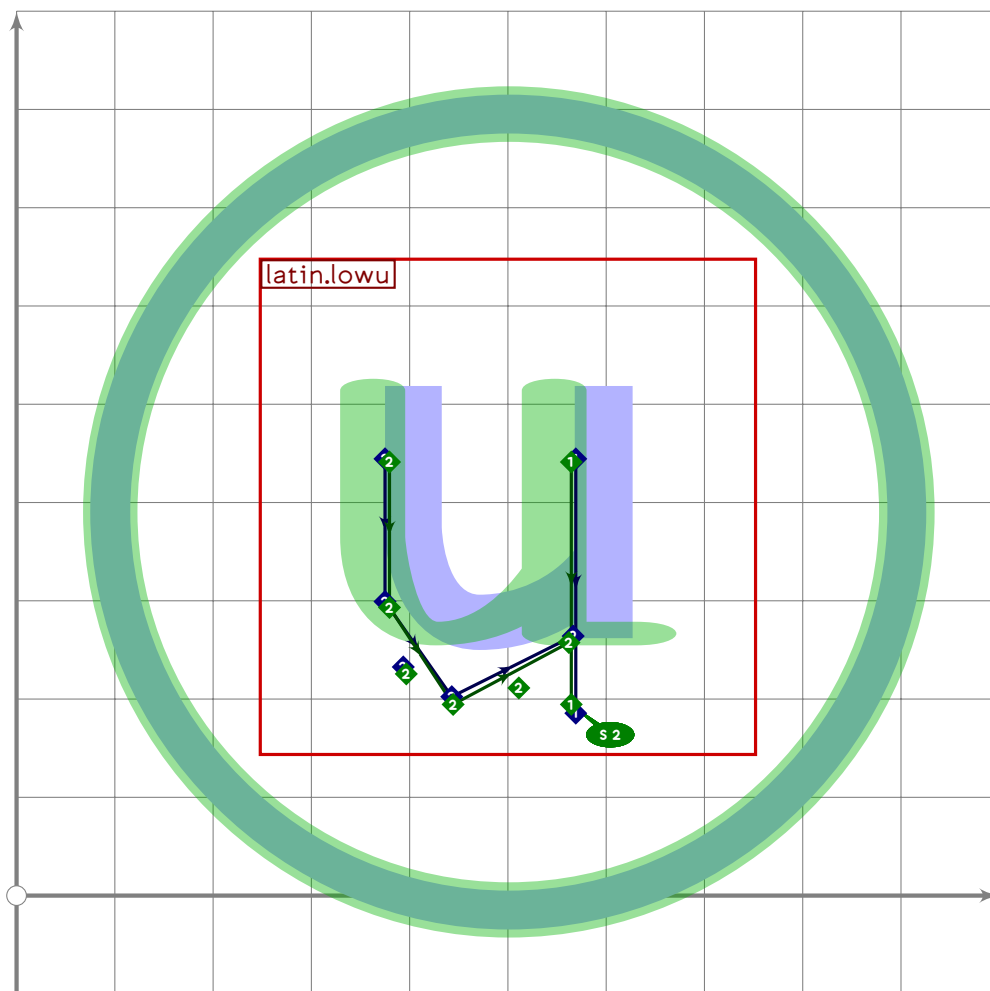



```

529 % t
530 begint Suglyph("uni24E3",227);
531   circle.single;
532   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowt);
533   tsu_render_in_circle(tsu_xf.cbound);
534 endtsuglyph;
535

```

U+24E4
tsuku.uni24E4

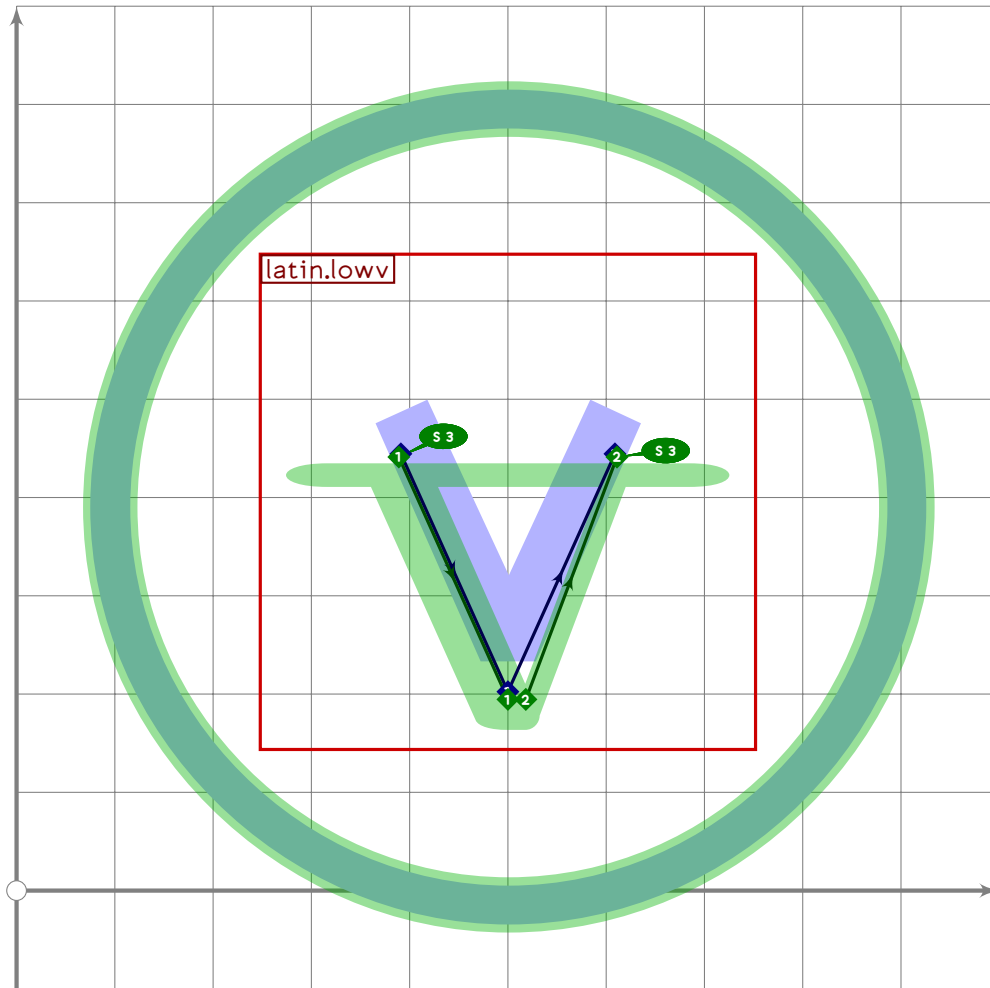


24

```

536 % u
537 begint Suglyph("uni24E4",228);
538   circle.single;
539   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowu);
540   tsu_render_in_circle(tsu_xf.cbound);
541 endtsuglyph;
542

```

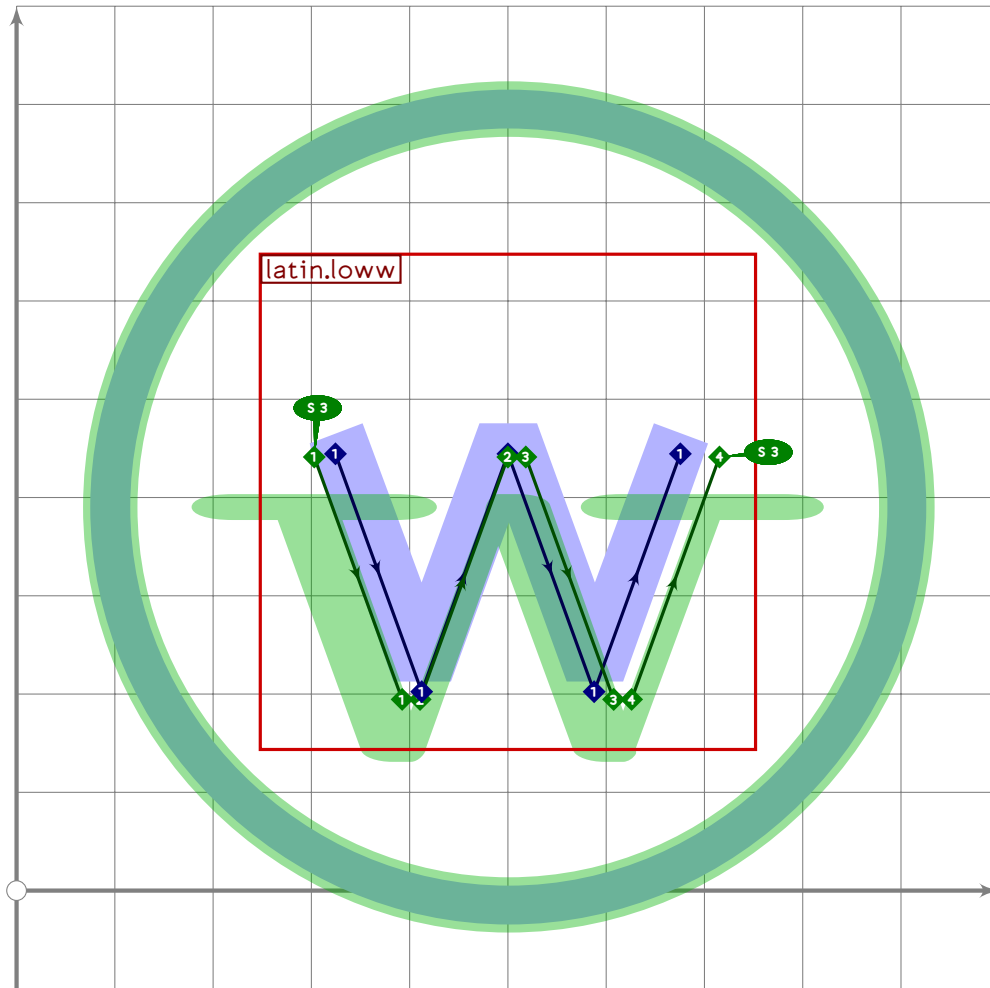


```

543 % v
544 begint Suglyph("uni24E5",229);
545   circle.single;
546   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowv);
547   tsu_render_in_circle(tsu_xf.cbound);
548 endtsuglyph;
549

```

U+24E6
tsuku.uni24E6

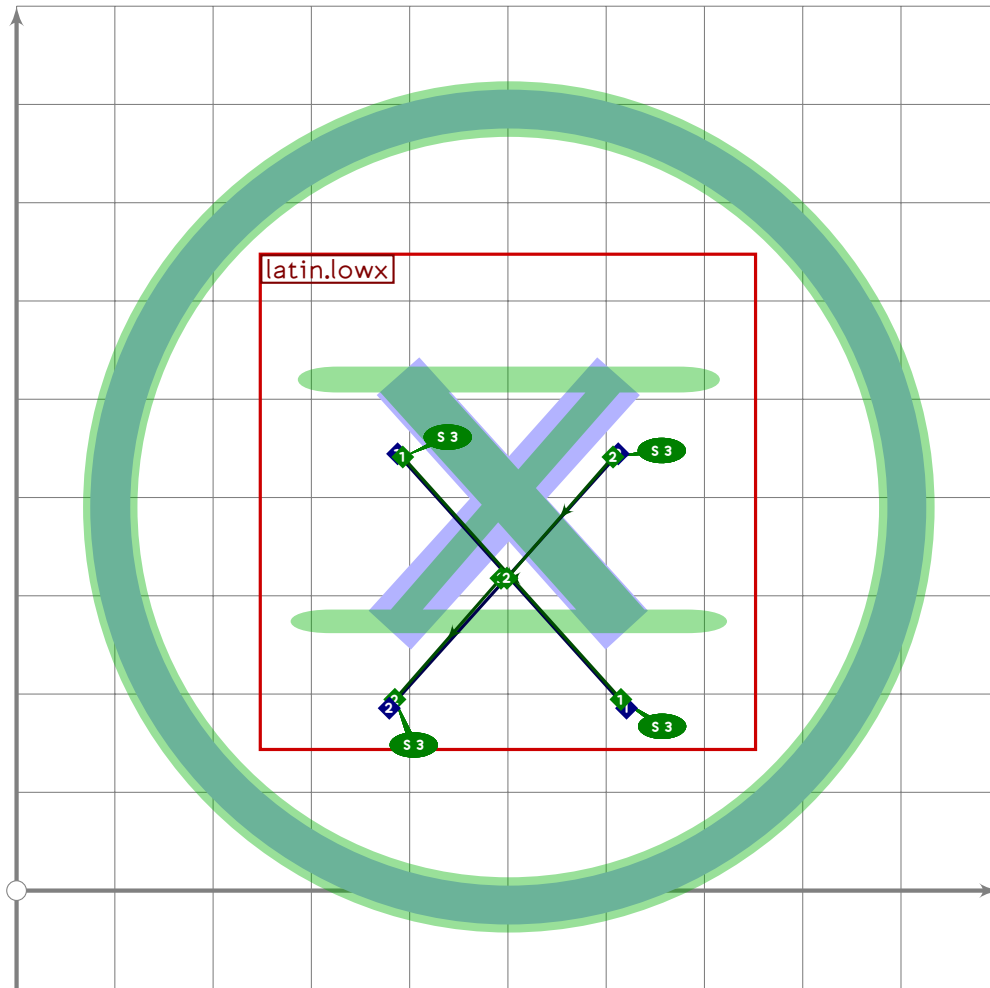


24

```

550 % w
551 begint Suglyph("uni24E6",230);
552   circle.single;
553   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.loww);
554   tsu_render_in_circle(tsu_xf.cbound);
555 endtsuglyph;
556

```

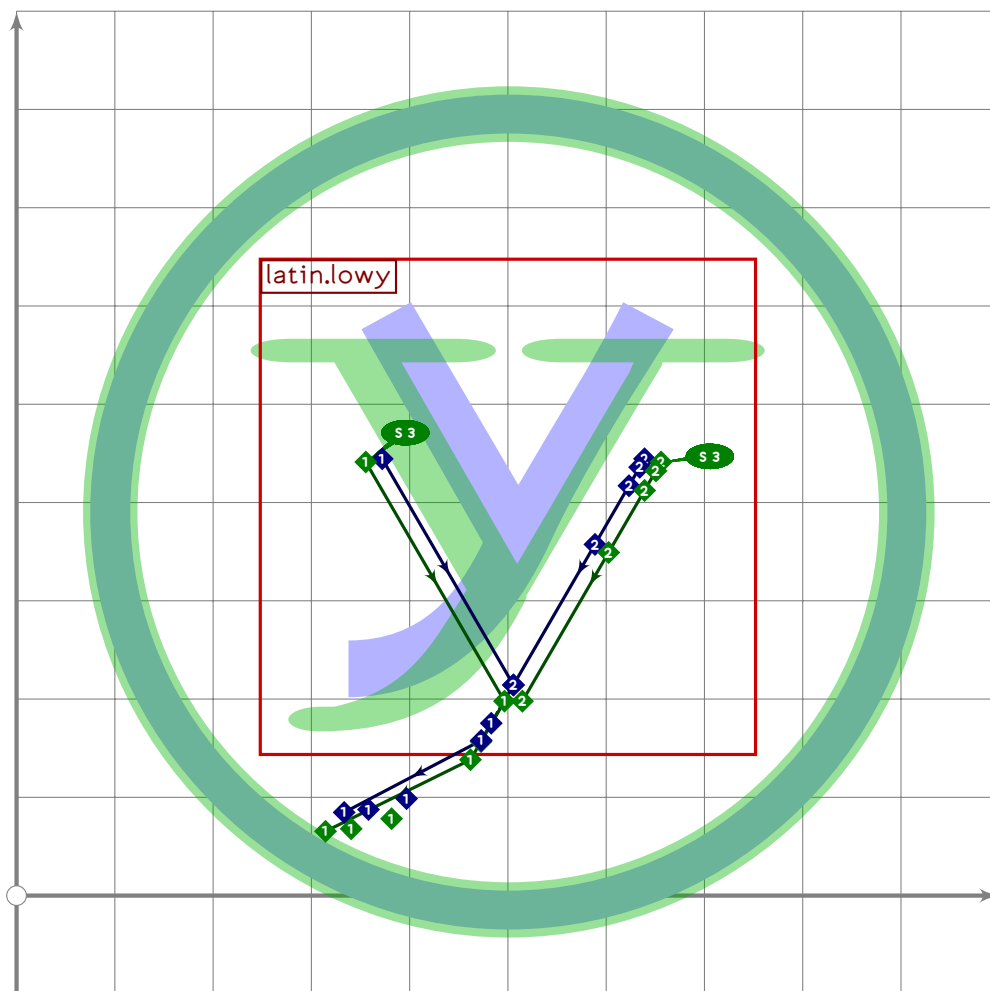


```

557 % x
558 begint Suglyph("uni24E7";231);
559   circle.single;
560   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowx);
561   tsu_render_in_circle(tsu_xf.cbound);
562 endtsuglyph;
563

```

U+24E8
tsuku.uni24E8

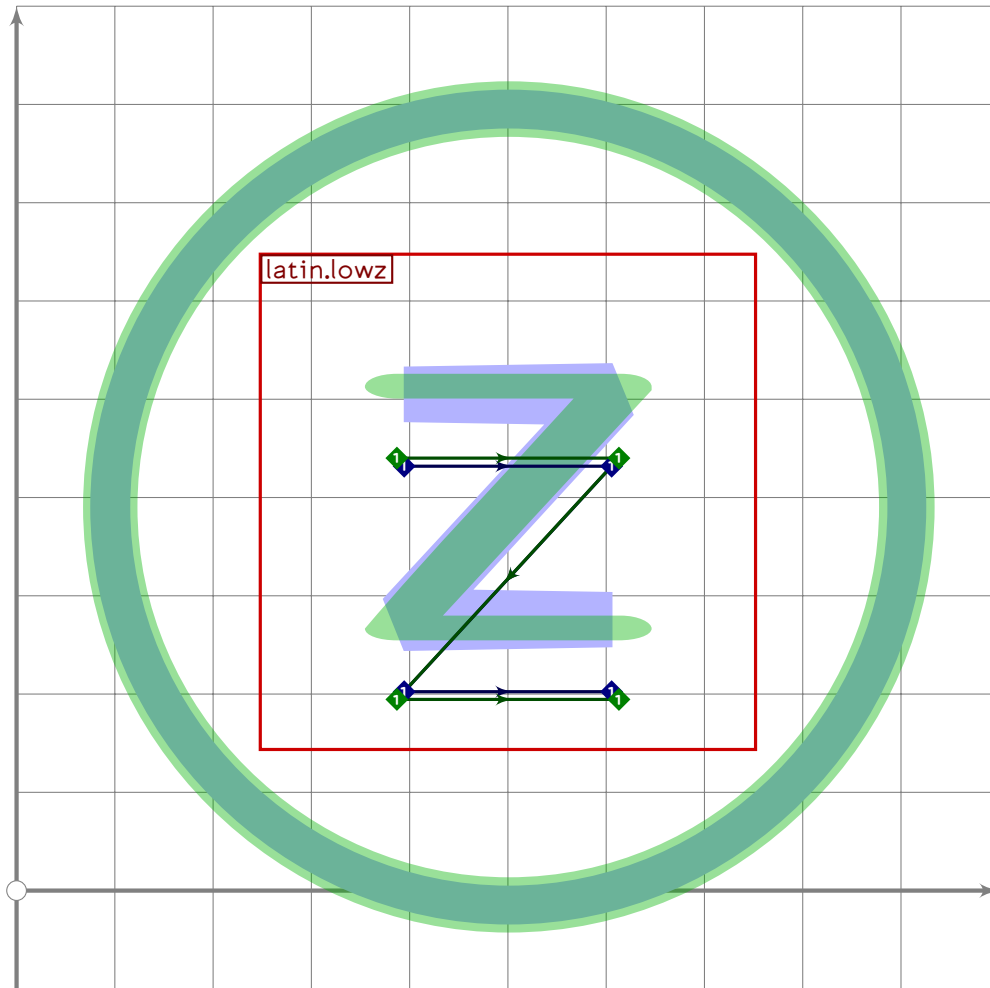


24

```

564 % y
565 begint Suglyph("uni24E8",232);
566   circle.single;
567   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowy);
568   tsu_render_in_circle(tsu_xf.cbound);
569 endtsuglyph;
570

```

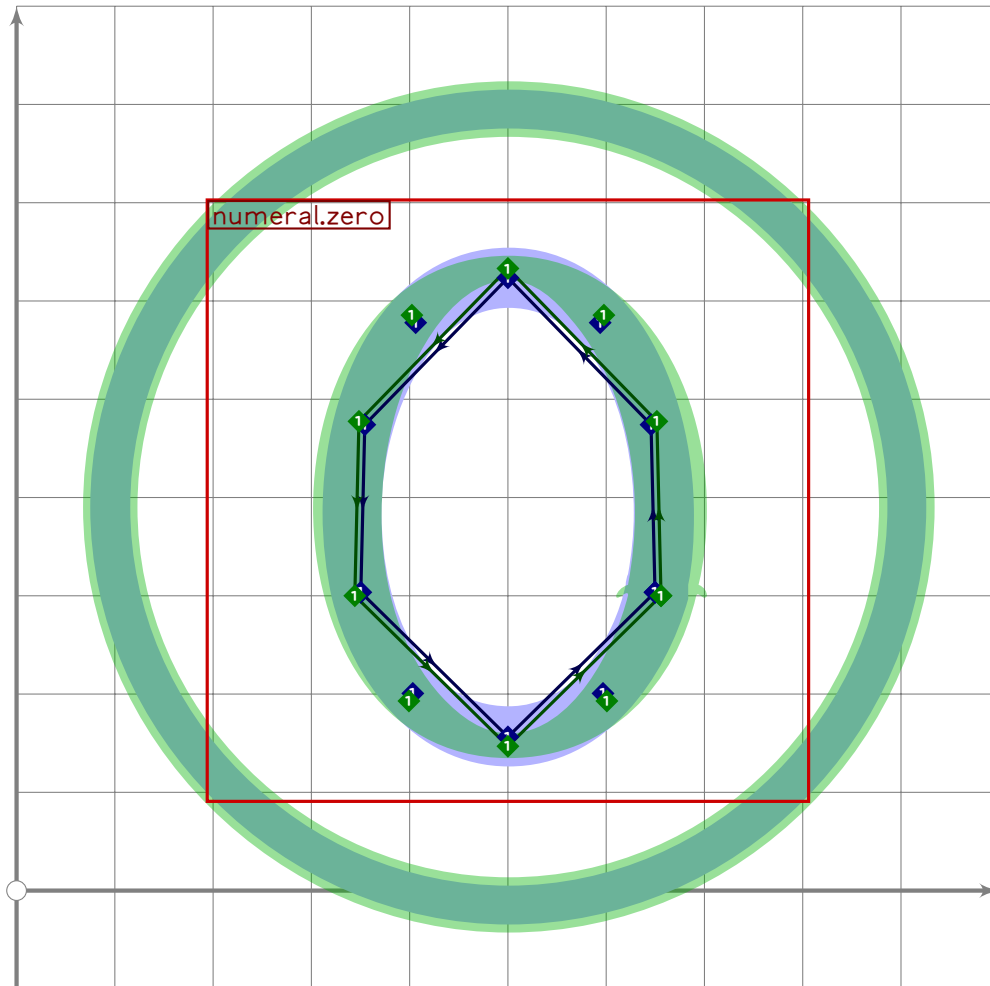


```

571 % z
572 begint Suglyph("uni24E9",233);
573   circle.single;
574   tsu_xform(tsu_xf.cletter shifted tsu_xf.circ_slant_shift)(latin.lowz);
575   tsu_render_in_circle(tsu_xf.cbound);
576 endtsuglyph;
577

```

U+24EA
tsuku.uni24EA

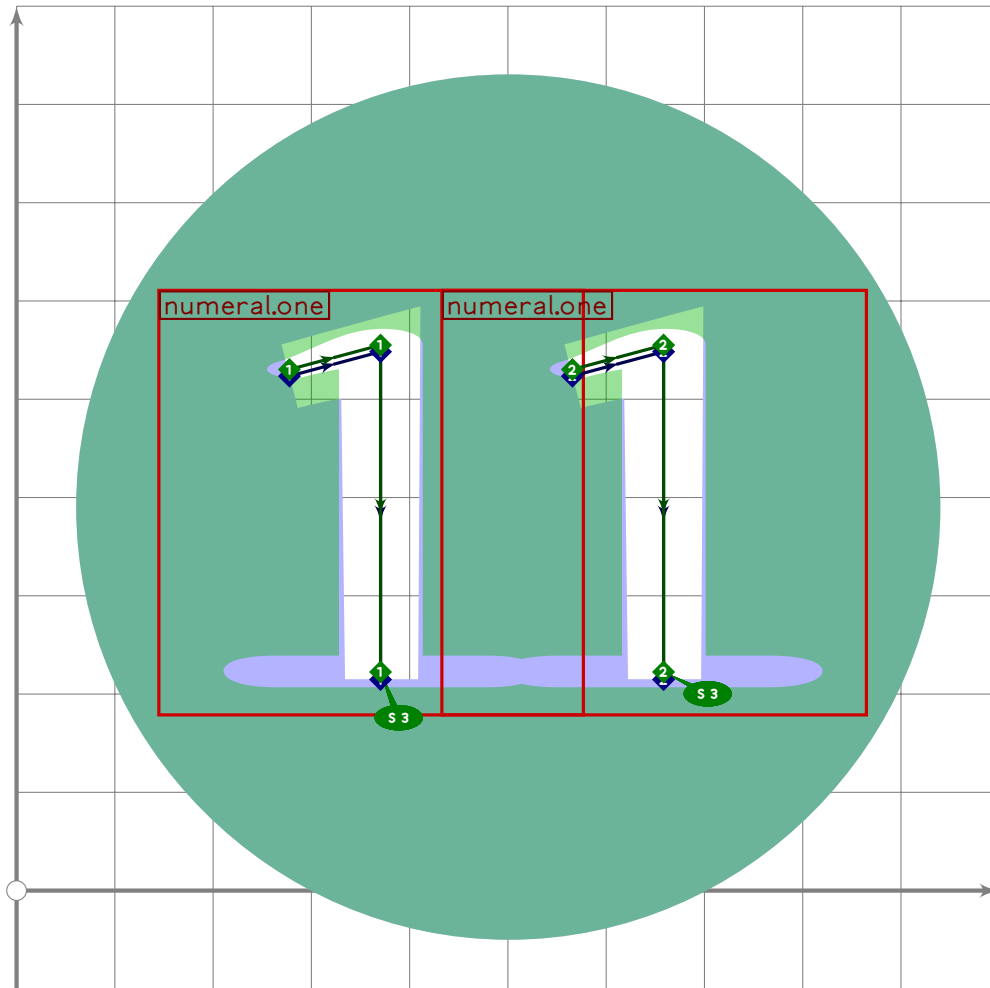


24

```
578 % 0
579 begintsuglyph("uni24EA";234);
580   circle.single;
581   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.zero);
582   tsu_render;
583 endtsuglyph;
584
585
586
```

Inverted Circled Numerals

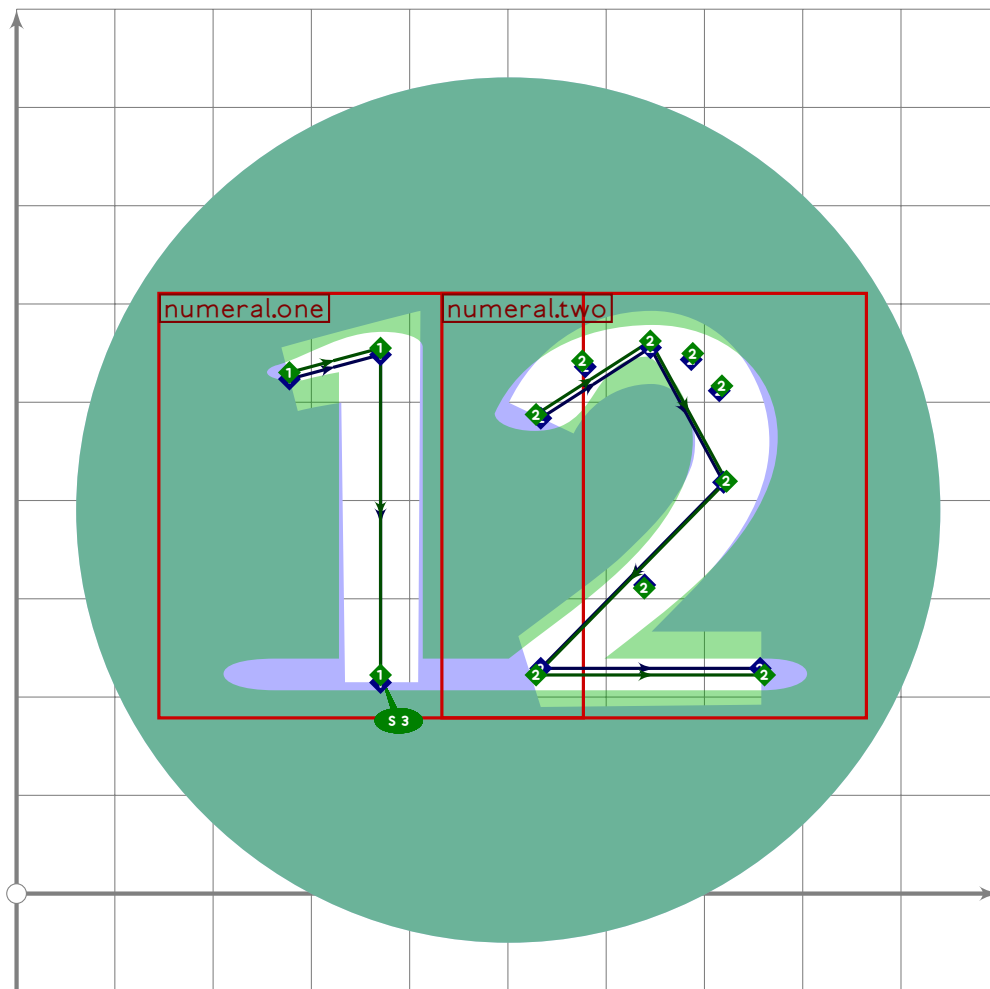
```
587 % INVERTED CIRCLED NUMERALS
588
```

```

589 % 11
590 % BACKGROUND 25CF
591 begint Suglyph("uni24EB";235);
592   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
593   numeric x[],y[];
594   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.one);
595   i:=0; forever: exitif find_stroke(i)<1;
596     set_bosize(i,107); i:=i+1; endfor;
597   tsu_render;
598 endtsuglyph;
599

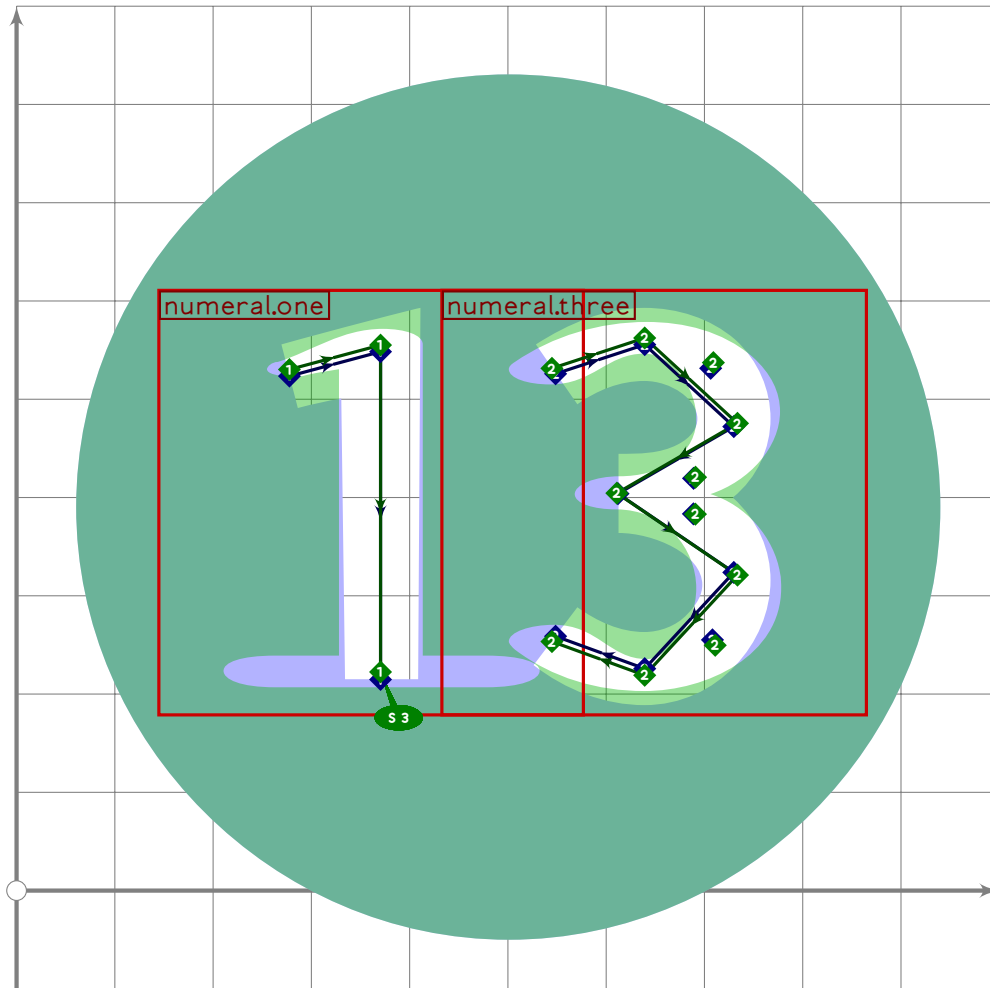
```



```

600 % 12
601 % BACKGROUND 25CF
602 begint Suglyph("uni24EC";236);
603   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
604   numeric x[],y[];
605   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.two);
606   i:=0; forever: exitif find_stroke(i)<1;
607     set_bosize(i,107); i:=i-1; endfor;
608   tsu_render;
609 endtsuglyph;
610

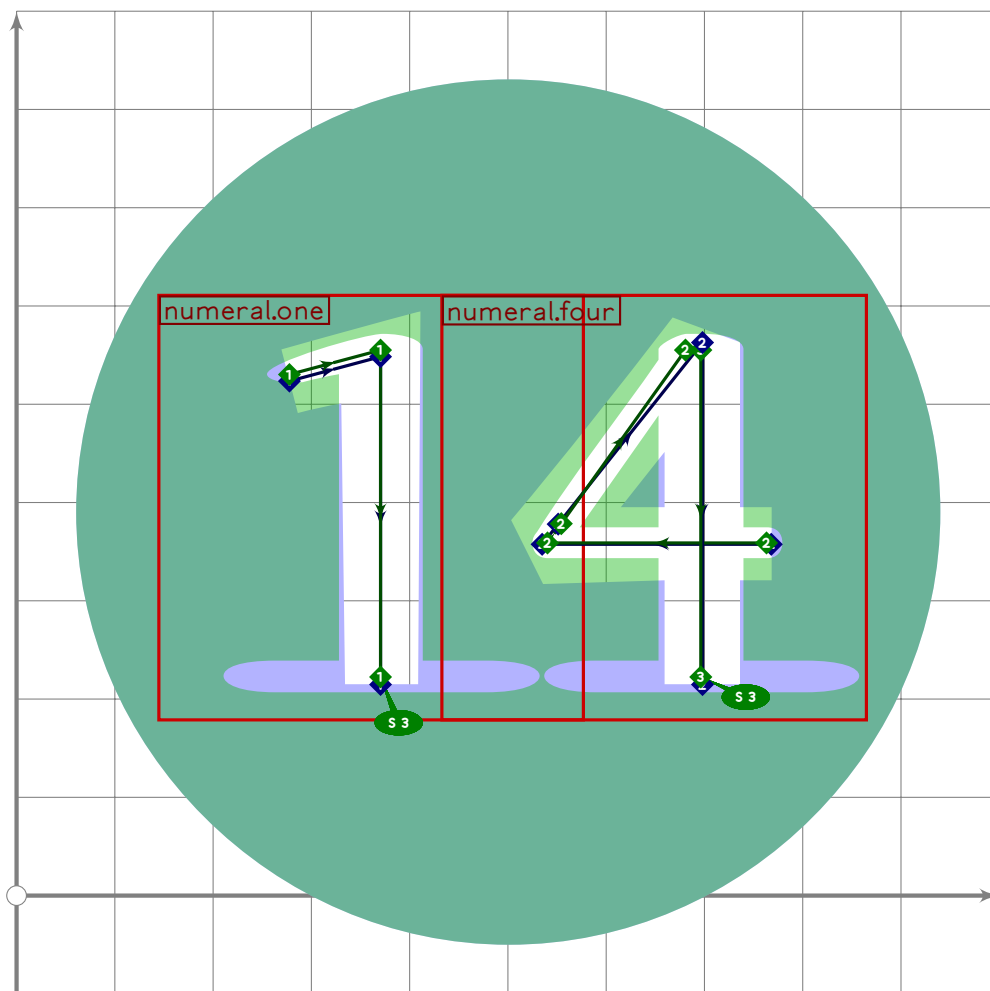
```



```

611 % 13
612 % BACKGROUND 25CF
613 begint Suglyph("uni24ED";237);
614   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
615   numeric x[],y[];
616   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.three);
617   i:=0; forever: exitif find_stroke(i)<1;
618     set_bosize(i,107); i:=i-1; endfor;
619   tsu_render;
620 endtsuglyph;
621

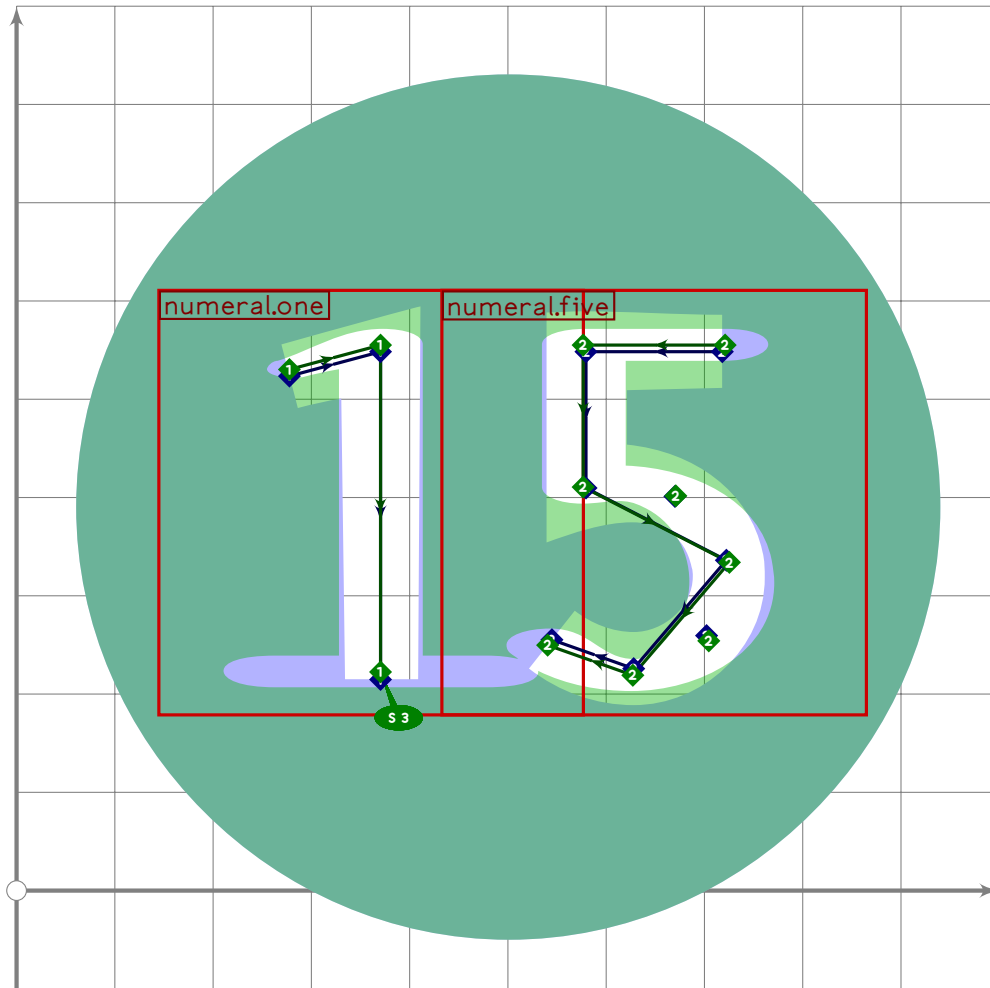
```



```

622 % 14
623 % BACKGROUND 25CF
624 begint Suglyph("uni24EE";238);
625   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
626   numeric x[],y[];
627   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.four);
628   i:=0; forever: exitif find_stroke(i)<1;
629     set_bosize(i,107); i:=i+1; endfor;
630   tsu_render;
631 endtsuglyph;
632

```

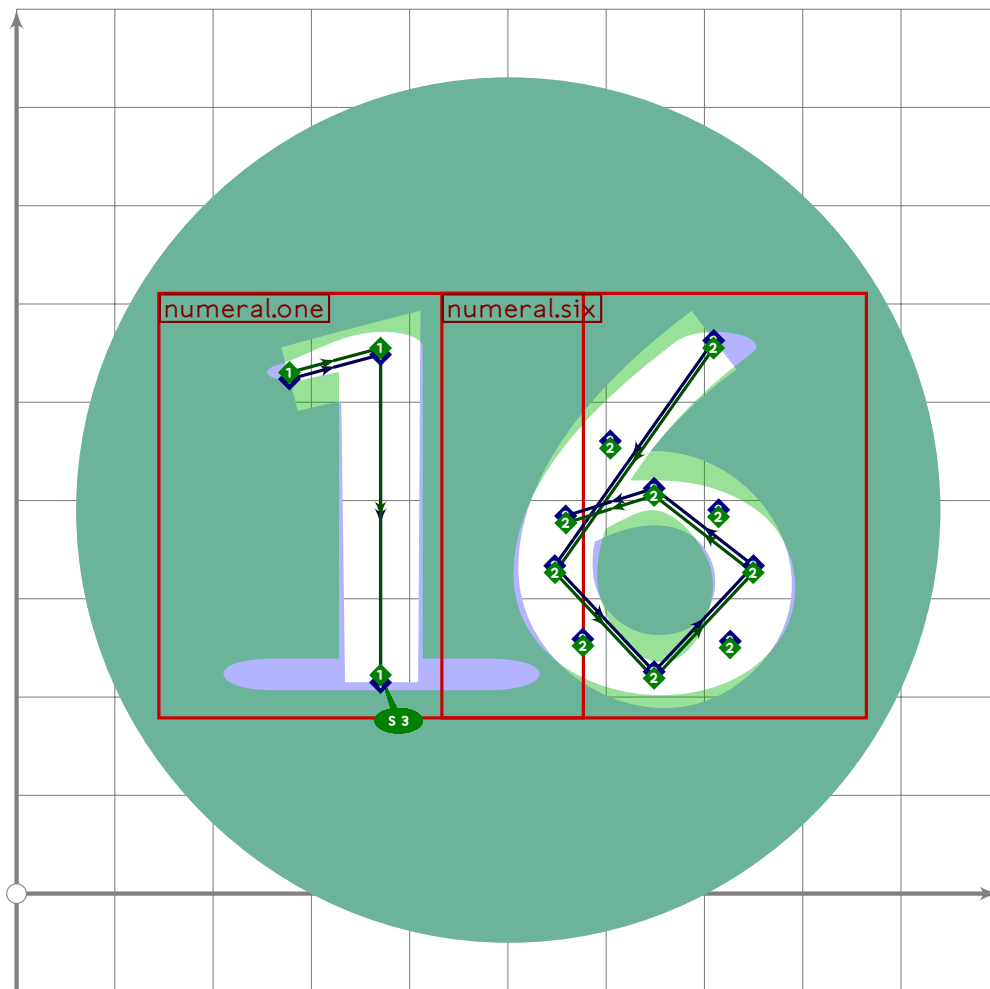


```

633 % 15
634 % BACKGROUND 25CF
635 begint Suglyph("uni24EF";239);
636   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
637   numeric x[],y[];
638   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.five);
639   i:=0; forever: exitif find_stroke(i)<1;
640     set_bosize(i,107); i:=i-1; endfor;
641   tsu_render;
642 endtsuglyph;
643

```

U+24F0
tsuku.uni24F0

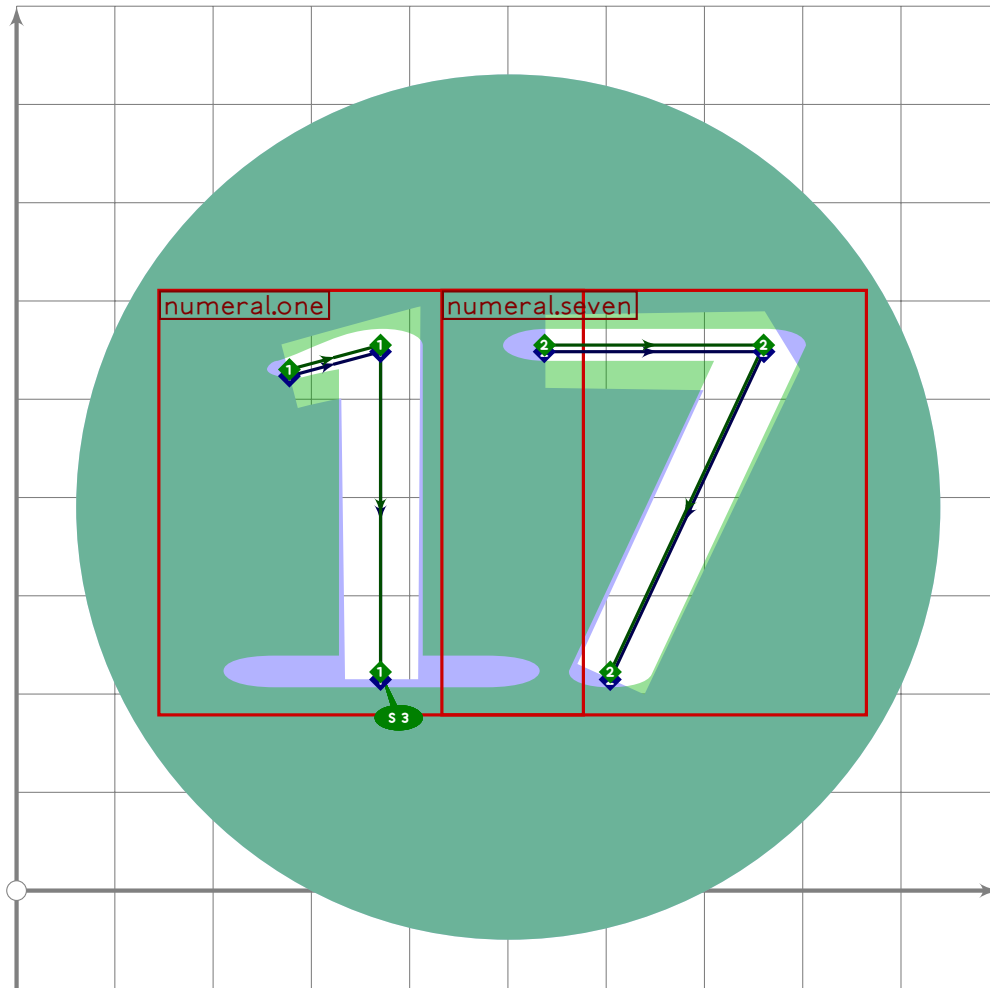


24

```

644 % 16
645 % BACKGROUND 25CF
646 begint Suglyph("uni24F0";240);
647   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
648   numeric x[],y[];
649   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.six);
650   i:=0; forever: exitif find_stroke(i)<1;
651     set_bosize(i,107); i:=i-1; endfor;
652   tsu_render;
653 endtsuglyph;
654

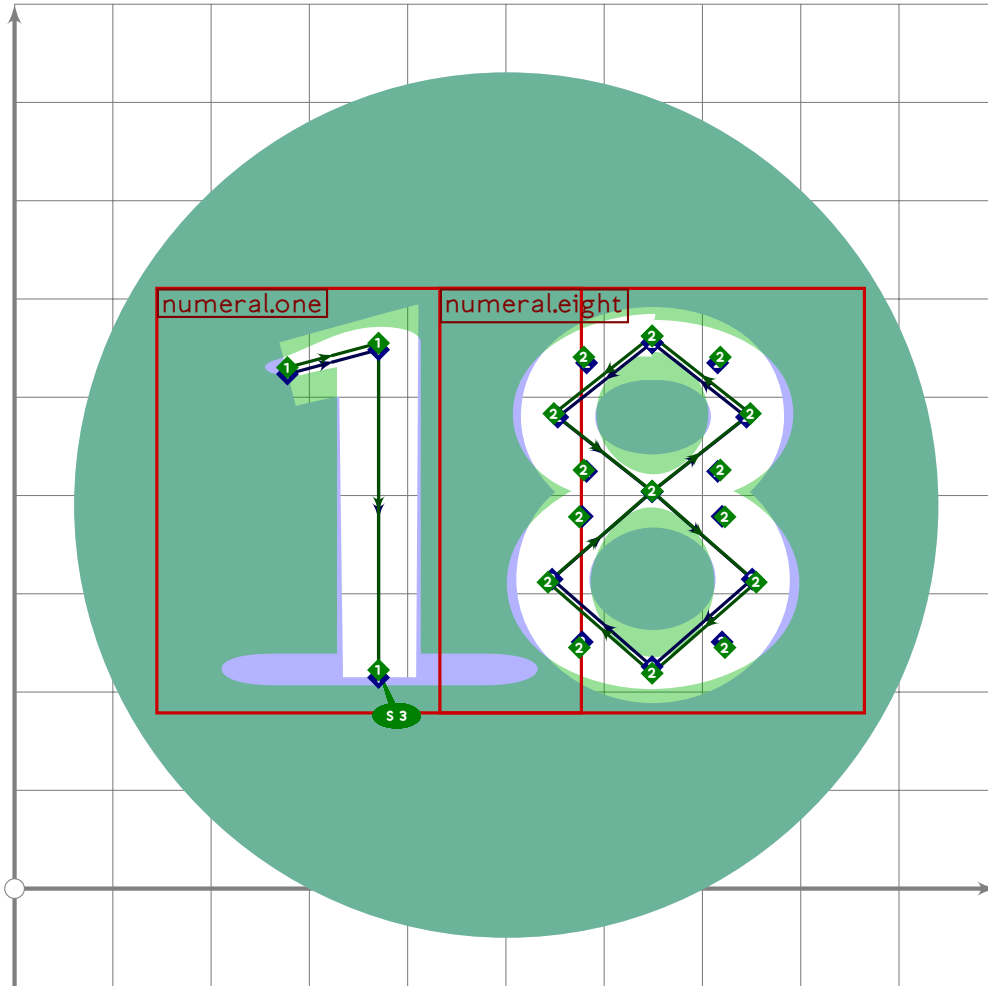
```



```

655 % 17
656 % BACKGROUND 25CF
657 begint Suglyph("uni24F1",241);
658   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
659   numeric x[],y[];
660   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.seven);
661   i:=0; forever: exitif find_stroke(i)<1;
662     set_bosize(i,107); i:=i+1; endfor;
663   tsu_render;
664 endtsuglyph;
665

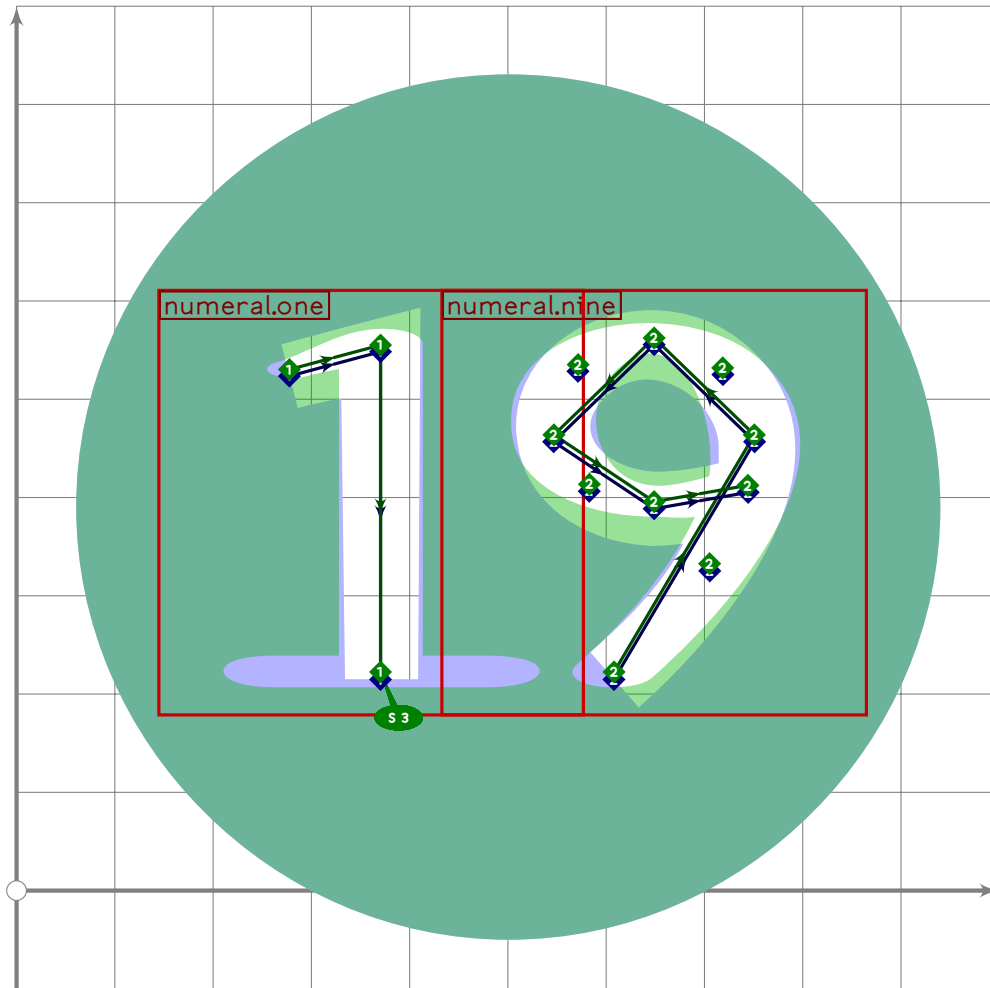
```



```

666 % 18
667 % BACKGROUND 25CF
668 begint Suglyph("uni24F2";242);
669   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
670   numeric x[],y[];
671   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.eight);
672   i:=0; forever: exitif find_stroke(i)<1;
673     set_bosize(i,107); i:=i-1; endfor;
674   tsu_render;
675 endtsuglyph;
676

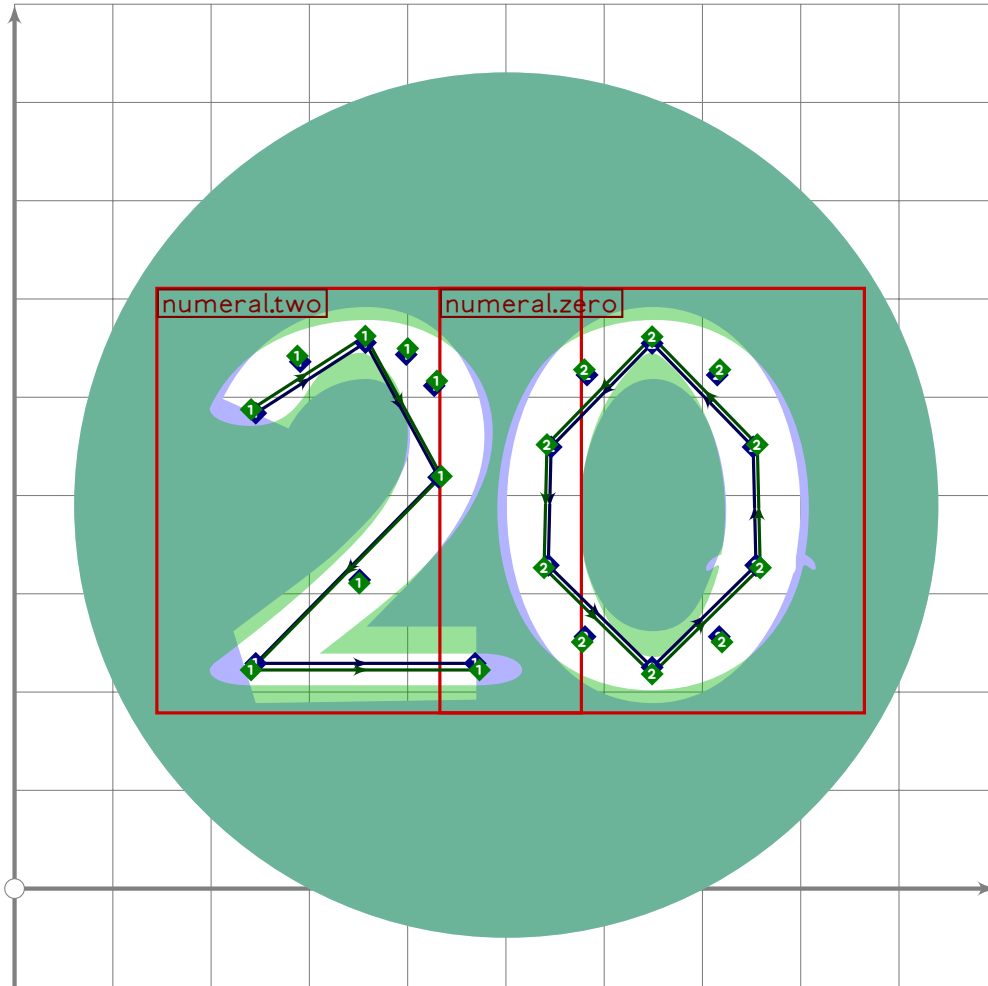
```

```

677 % 19
678 % BACKGROUND 25CF
679 begint Suglyph("uni24F3";243);
680   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
681   numeric x[],y[];
682   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.nine);
683   i:=0; forever: exitif find_stroke(i)<1;
684     set_bosize(i,107); i:=i-1; endfor;
685   tsu_render;
686 endtsuglyph;
687

```



```

688 % 20
689 % BACKGROUND 25CF
690 begint Suglyph("uni24F4",244);
691   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.two);
692   numeric x[],y[];
693   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.zero);
694   i:=0; forever: exitif find_stroke(i)<1;
695     set_bosize(i,107); i:=i-1; endfor;
696   tsu_render;
697 endtsuglyph;
698
699
700

```

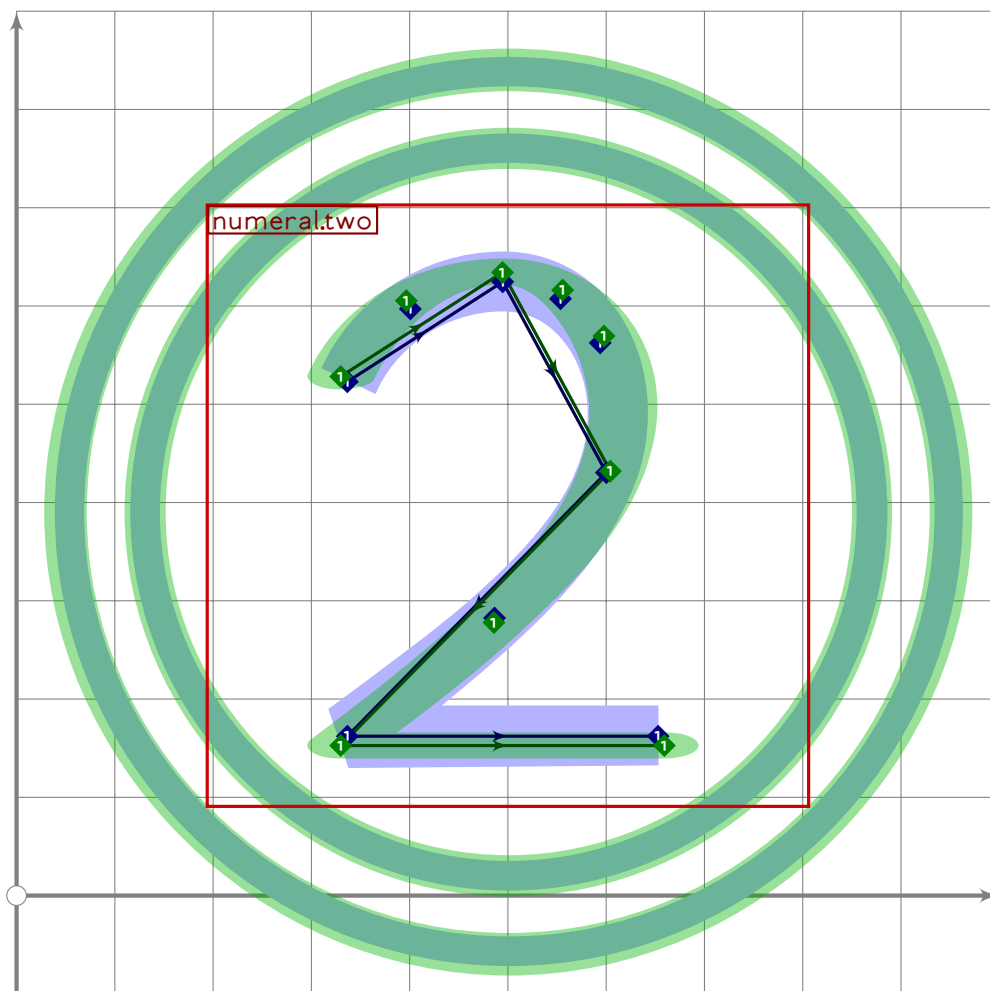
Doubly Circled Numerals

```

701 % DOUBLY CIRCLED NUMERALS
702

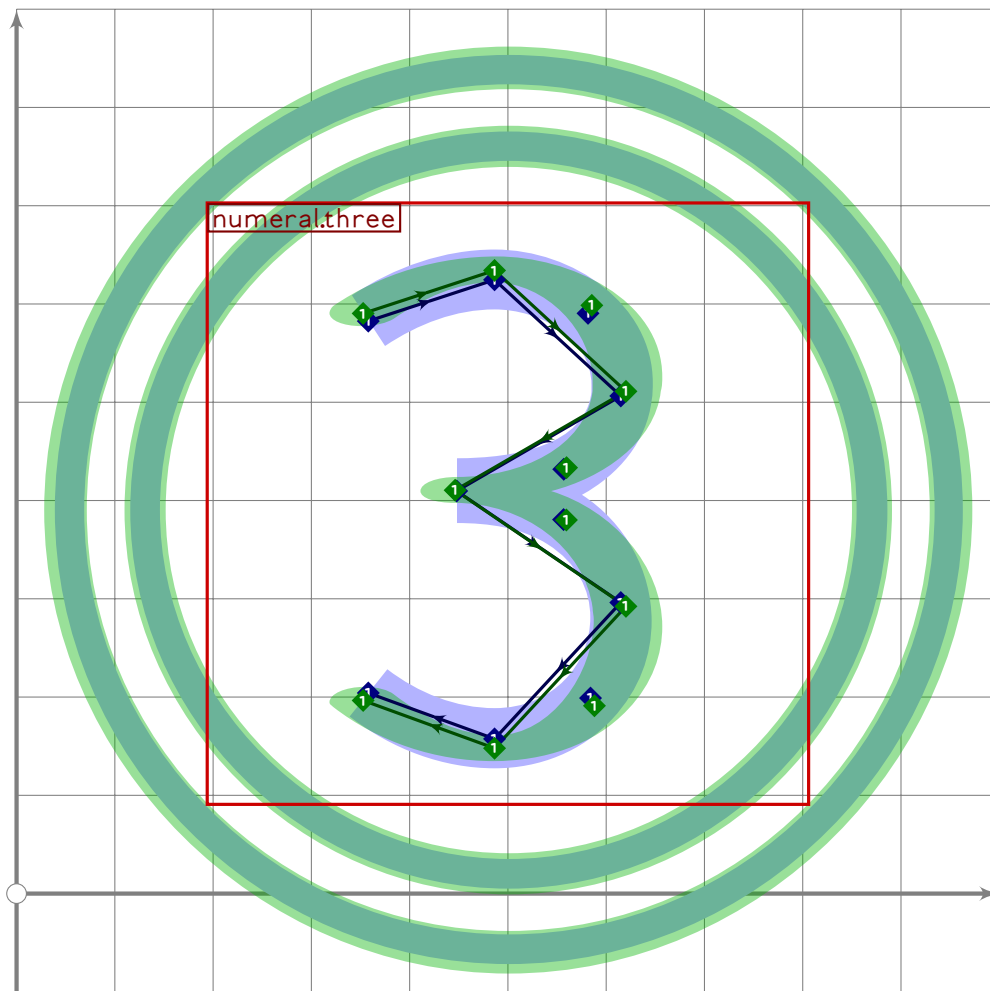
```


U+24F6
tsuku.uni24F6



24

```
710 % 2
711 begintsuglyph("uni24F6";246);
712   circle.double;
713   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.two);
714   tsu_render;
715 endtsuglyph;
716
```

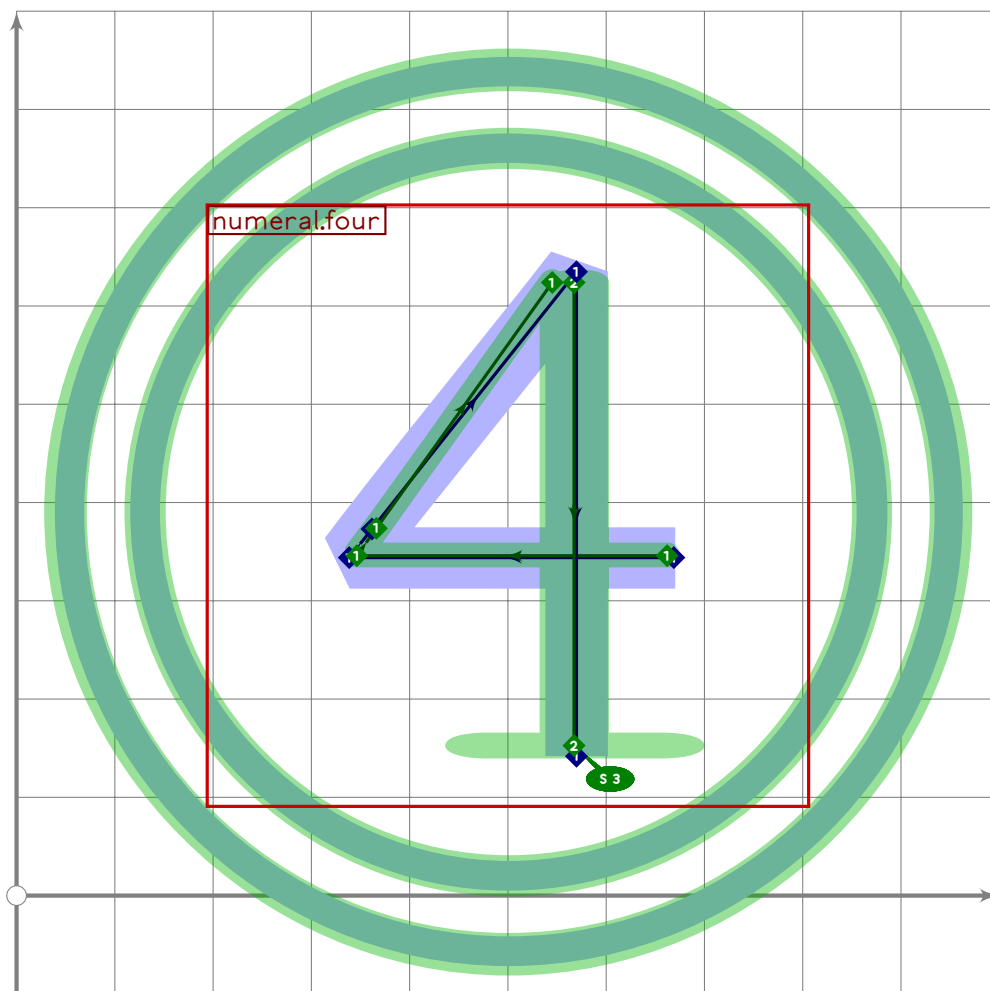


```

717 % 3
718 begintsuglyph("uni24F7";247);
719   circle.double;
720   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.three);
721   tsu_render;
722 endtsuglyph;
723

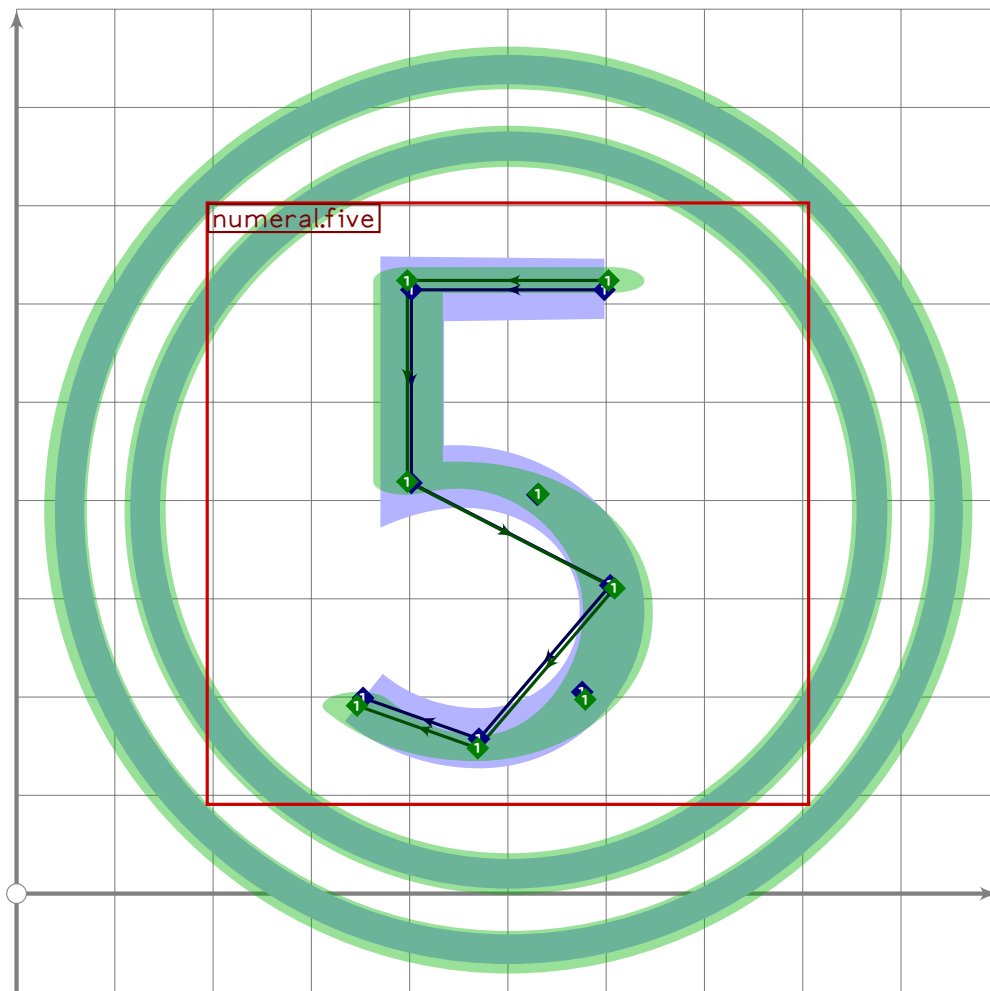
```

U+24F8
tsuku.uni24F8



24

```
724 % 4
725 begintsuglyph("uni24F8",248);
726   circle.double;
727   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.four);
728   tsu_render;
729 endtsuglyph;
730
```

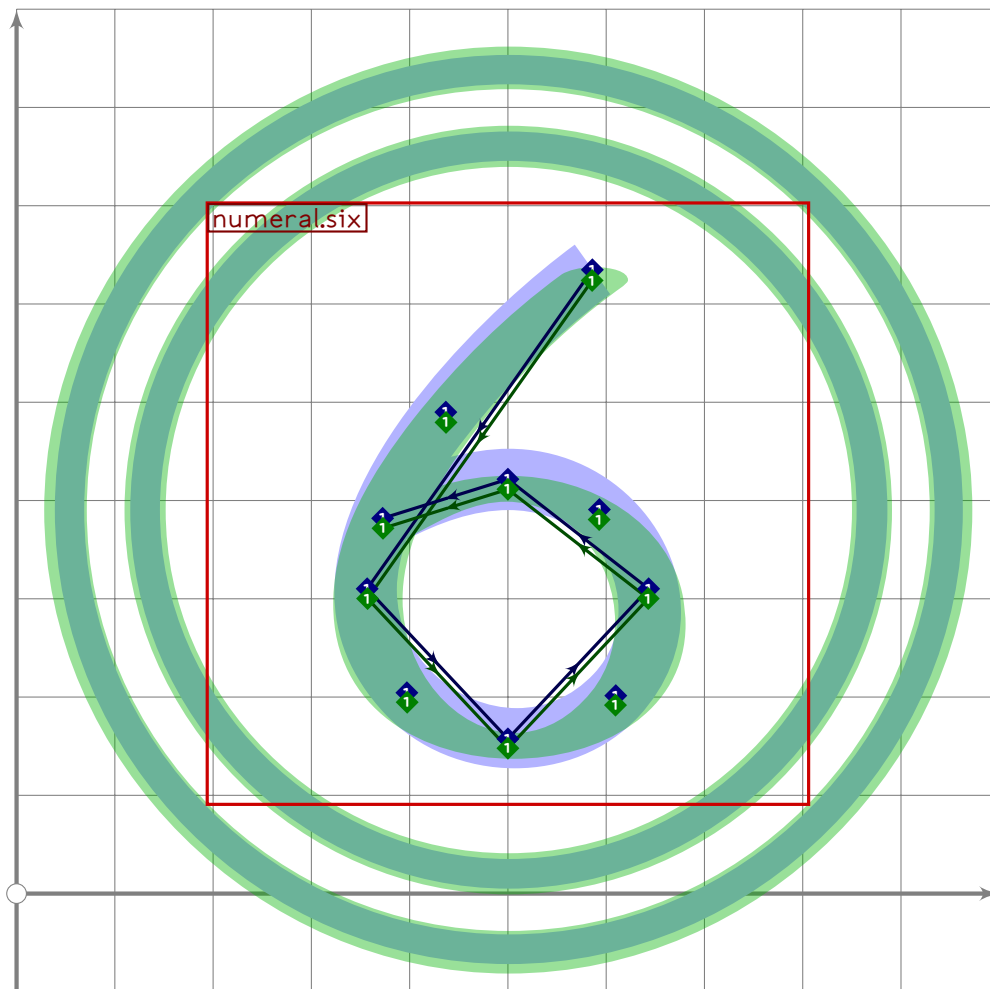


```

731 % 5
732 begint Suglyph("uni24F9",249);
733   circle.double;
734   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.five);
735   tsu_render;
736 endtsuglyph;
737

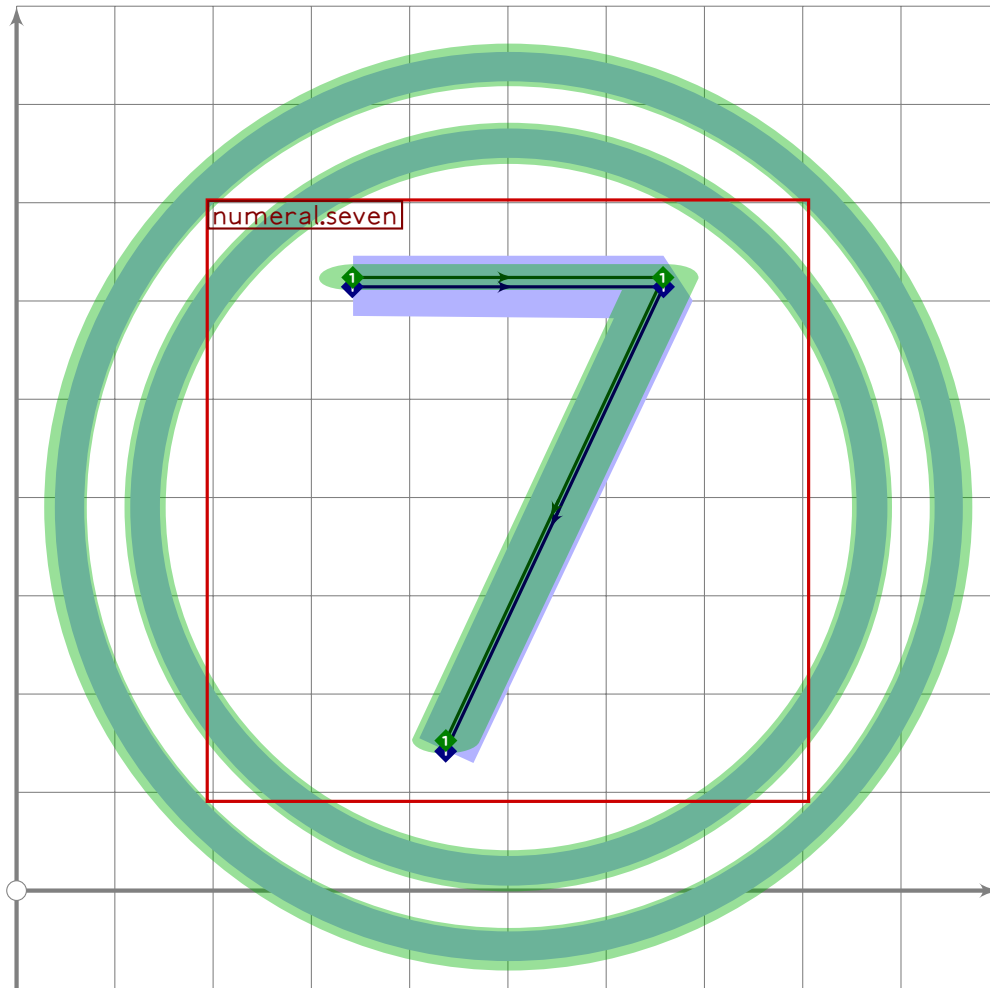
```

U+24FA
tsuku.uni24FA



24

```
738 % 6
739 begint Suglyph("uni24FA",250);
740   circle.double;
741   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.six);
742   tsu_render;
743 endtsuglyph;
744
```

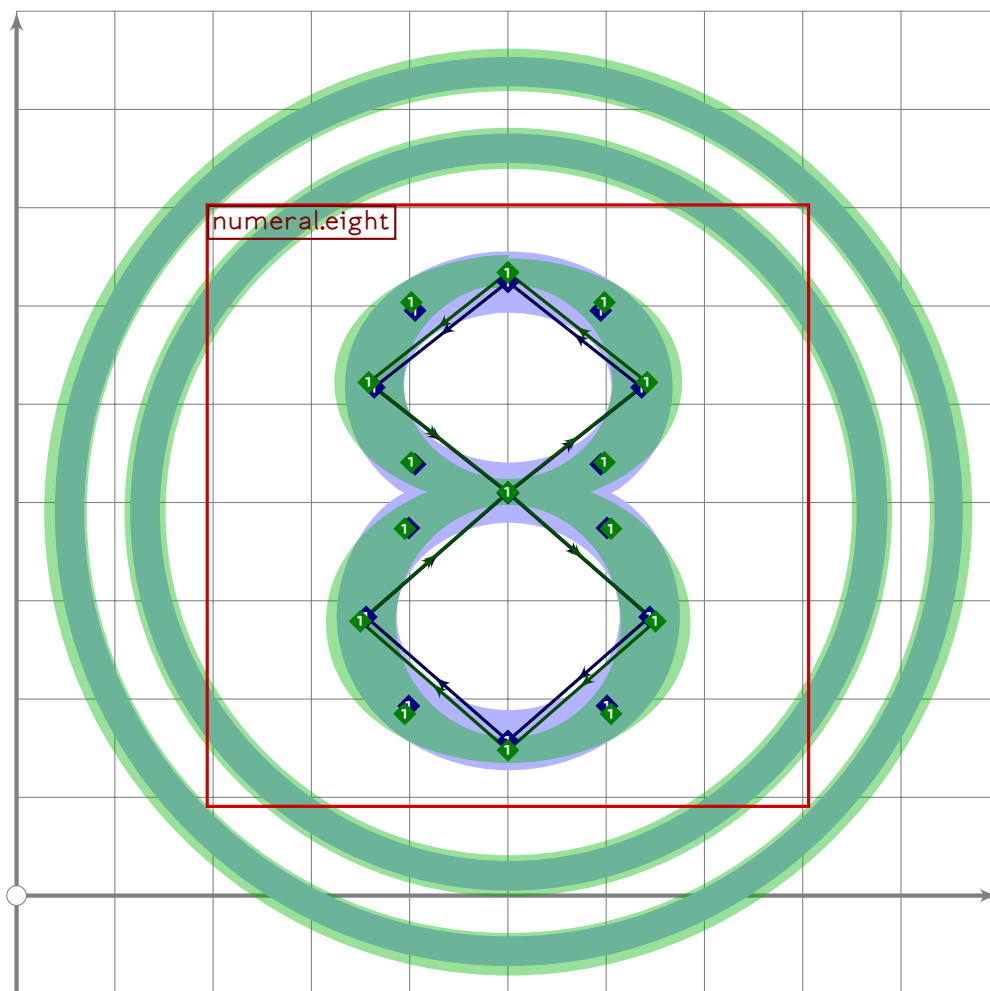



```

745 % 7
746 begint Suglyph("uni24FB",251);
747   circle.double;
748   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.seven);
749   tsu_render;
750 endtsuglyph;
751

```

U+24FC
tsuku.uni24FC

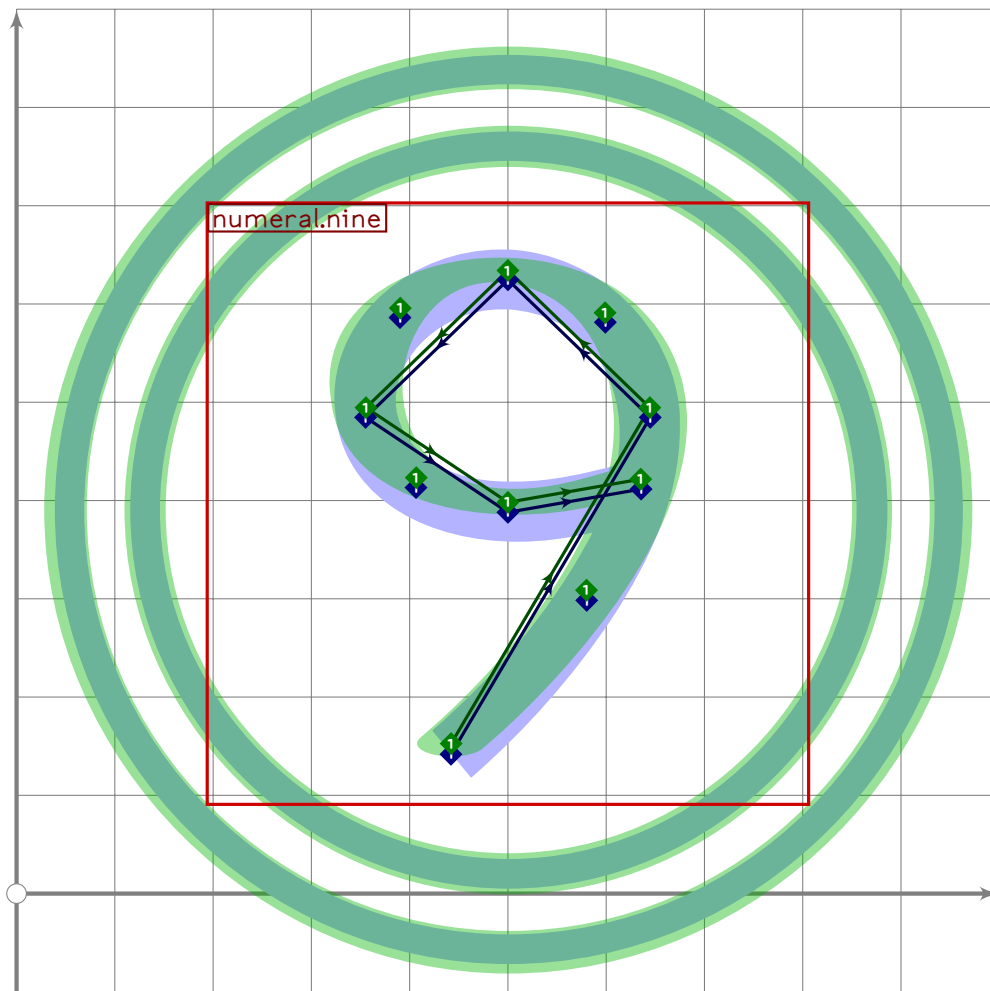


24

```

752 % 8
753 begint Suglyph("uni24FC";252);
754   circle.double;
755   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.eight);
756   tsu_render;
757 endtsuglyph;
758

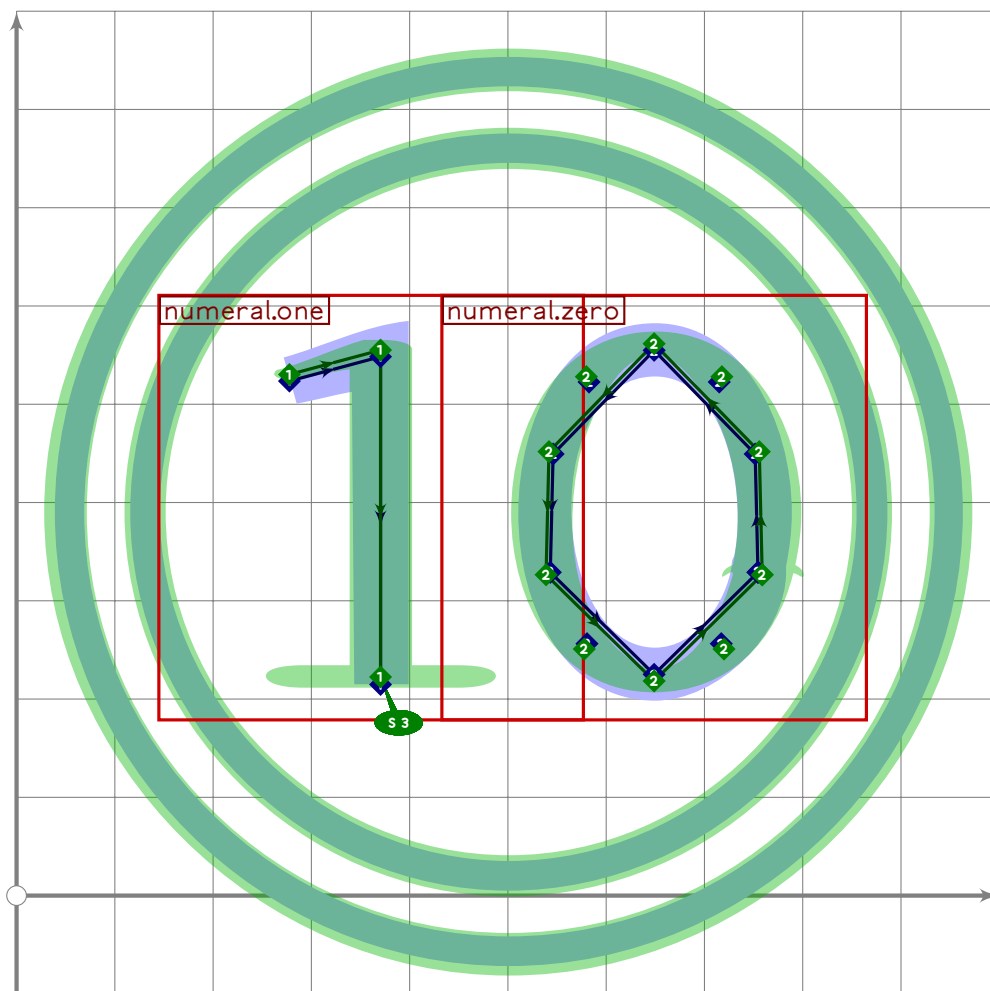
```



```

759 % 9
760 begint Suglyph("uni24FD";253);
761   circle.double;
762   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.nine);
763   tsu_render;
764 endtsuglyph;
765

```



```

766 % 10
767 begint Suglyph("uni24FE",254);
768   circle.double;
769   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
770   numeric x[],y[];
771   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.zero);
772   tsu_render;
773 endtsuglyph;
774
775
776

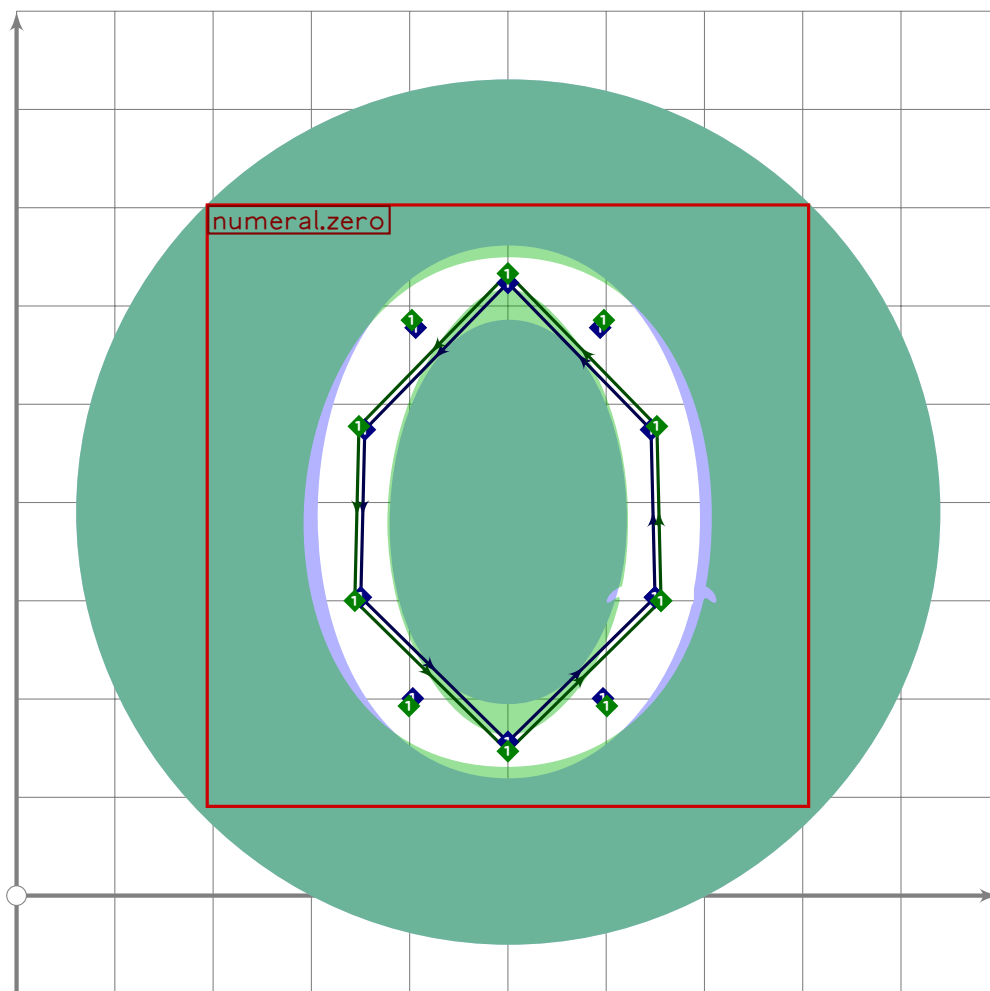
```

One More Inverted Circled Numeral

```

777 % ONE MORE INVERTED CIRCLED NUMERAL
778

```



```

779 % 9
780 % BACKGROUND 25CF
781 begint Suglyph("uni24FF";255);
782   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.zero);
783   i:=0; forever: exitif find_stroke(i)<1;
784     set_bosize(i,107); i:=i-1; endfor;
785   tsu_render;
786 endtsuglyph;
787
788
789
790 endfont;
791
792

```

tsuku-25.mp

```
1 %
2 % Unicode page 25 (Geometric Shapes) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---

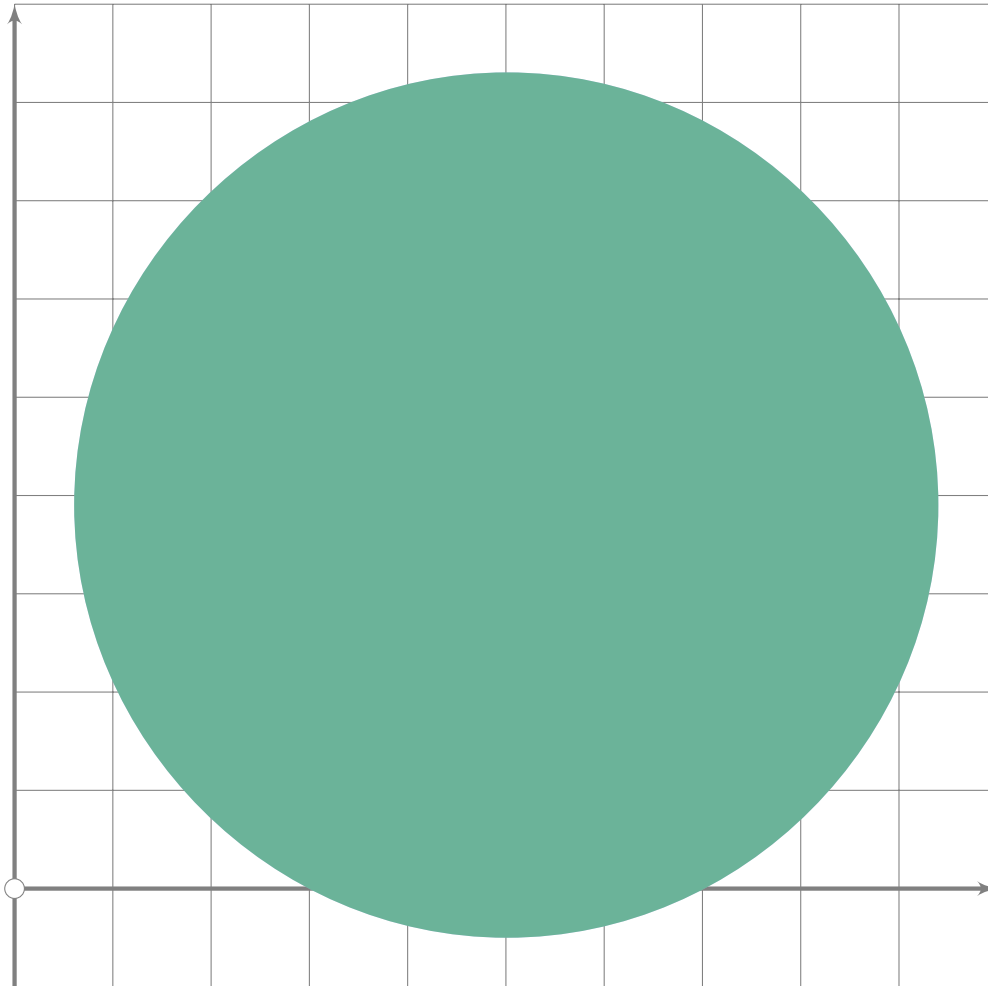

32
33 beginfont
34
35 % AUTODEPS
36
37 do_late_includes;
38
39 

---


40
```

Geometric Shapes

```
41 % GEOMETRIC SHAPES
42
```



```

43 % black circle - used as background for inverted dingbats
44 begintsuglyph("uni25CF";207);
45   Fill fullcircle scaled 880 shifted centre_pt;
46 endtsuglyph;
47
48 _____
49
50 endfont;
51
52 _____

```

tsuku-26.mp

```
1 %
2 % Unicode page 26 (Misc. Symbols) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---

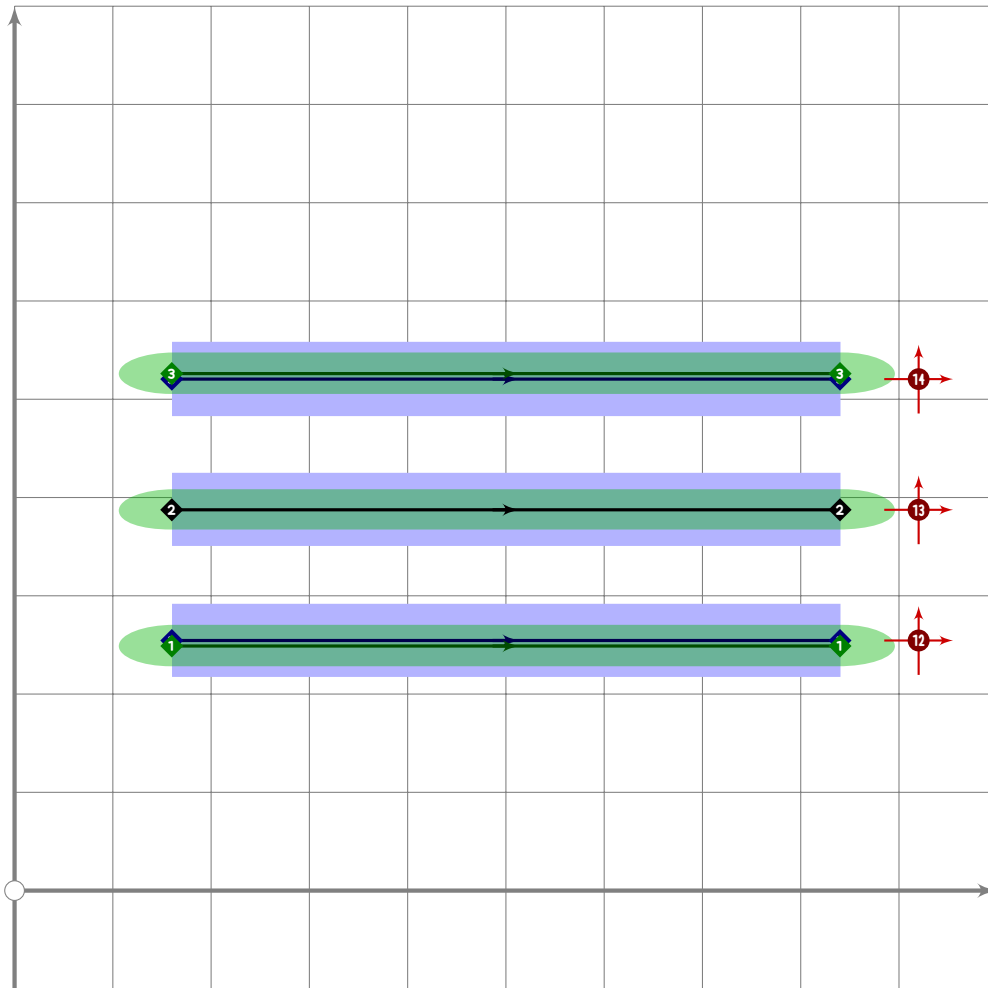

32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input iching.mp;
39
40 do_late_includes;
41
42 

---


43
```

I Ching

44 % I CHING

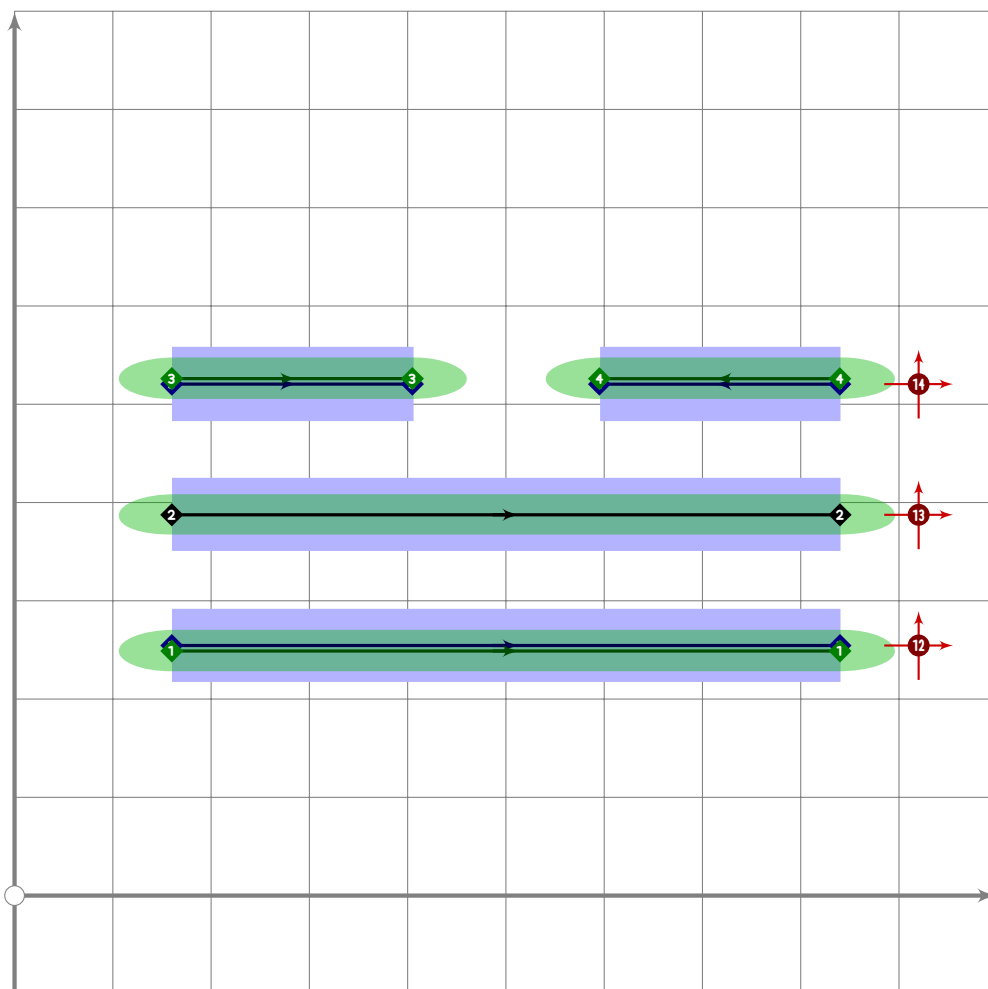


```

45
46 begint Suglyph("ichingtri1",48);
47   iching.line(1,3,1);
48   iching.line(2,3,1);
49   iching.line(3,3,1);
50   tsu_render;
51 endsuglyph;

```

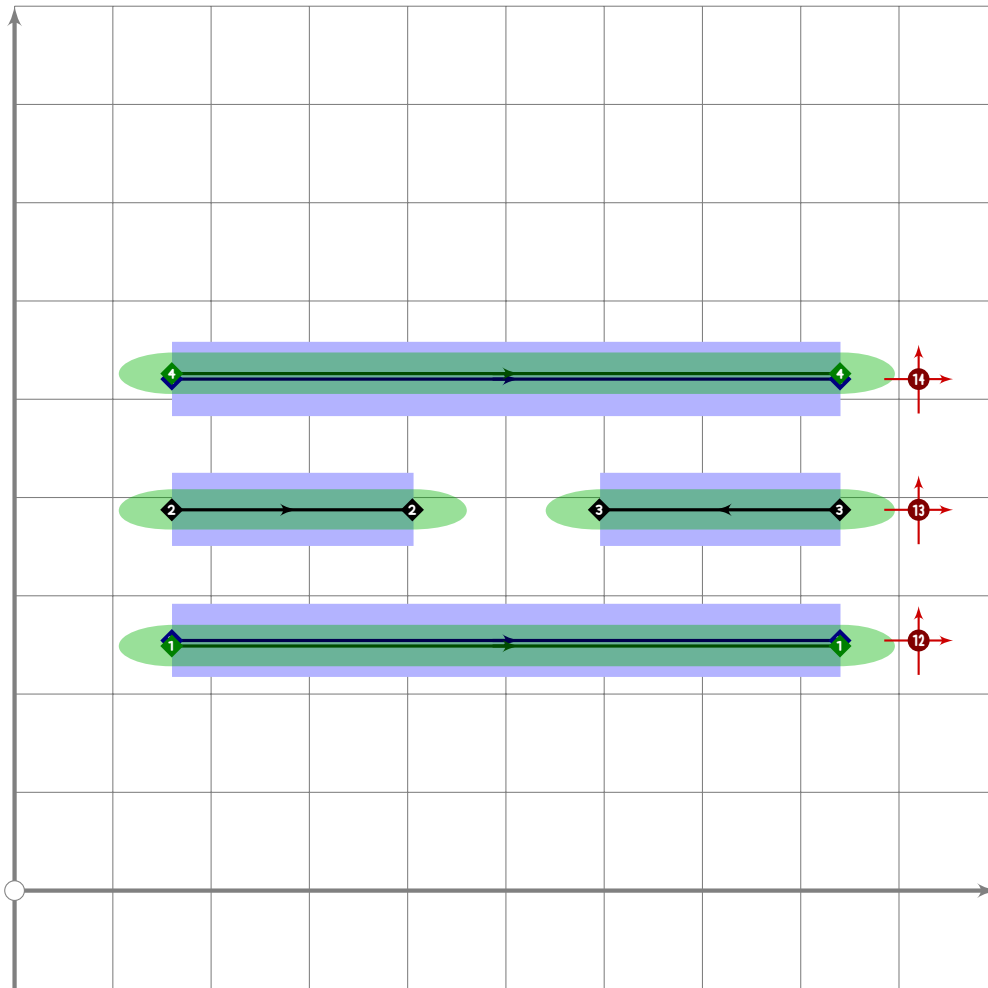
U+2631
tsuku.ichingtri2



```

52
53 begint Suglyph("ichingtri2",49);
54   iching.line(1,3,1);
55   iching.line(2,3,1);
56   iching.line(3,3,0);
57   tsu_render;
58 endtsuglyph;

```

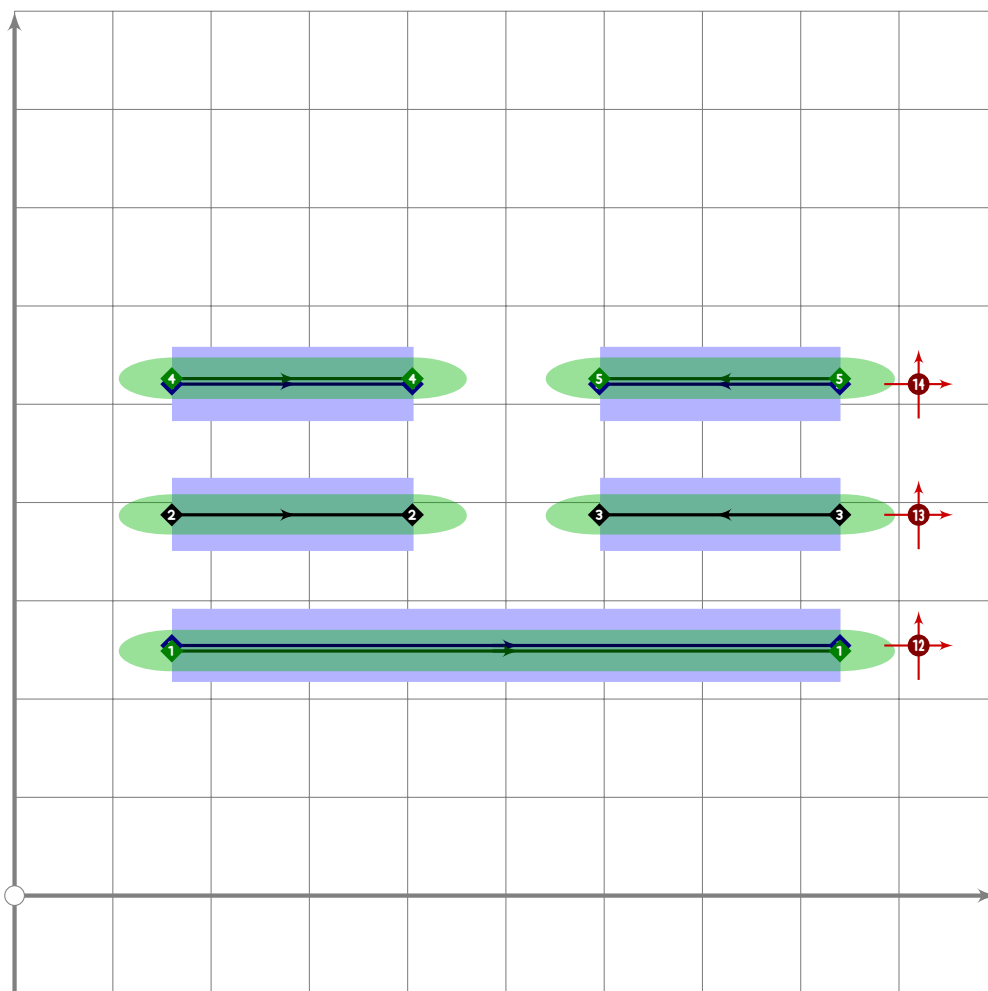


```

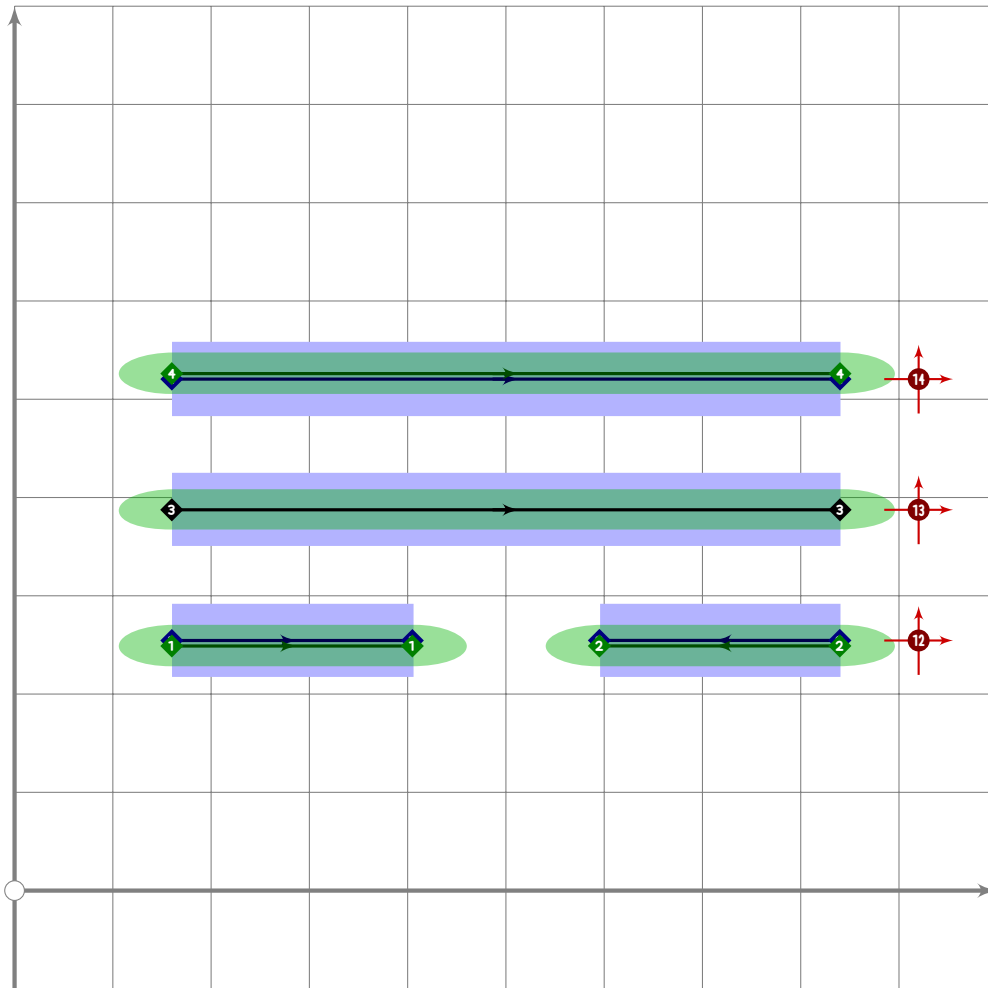
59
60 begint Suglyph("ichingtri3",50);
61   iching.line(1,3,1);
62   iching.line(2,3,0);
63   iching.line(3,3,1);
64   tsu_render;
65 endtsuglyph;

```

U+2633
tsuku.ichingtri4



```
66  
67 begint Suglyph("ichingtri4",51);  
68  iching.line(1,3,1);  
69  iching.line(2,3,0);  
70  iching.line(3,3,0);  
71  tsu_render;  
72 endsuglyph;
```

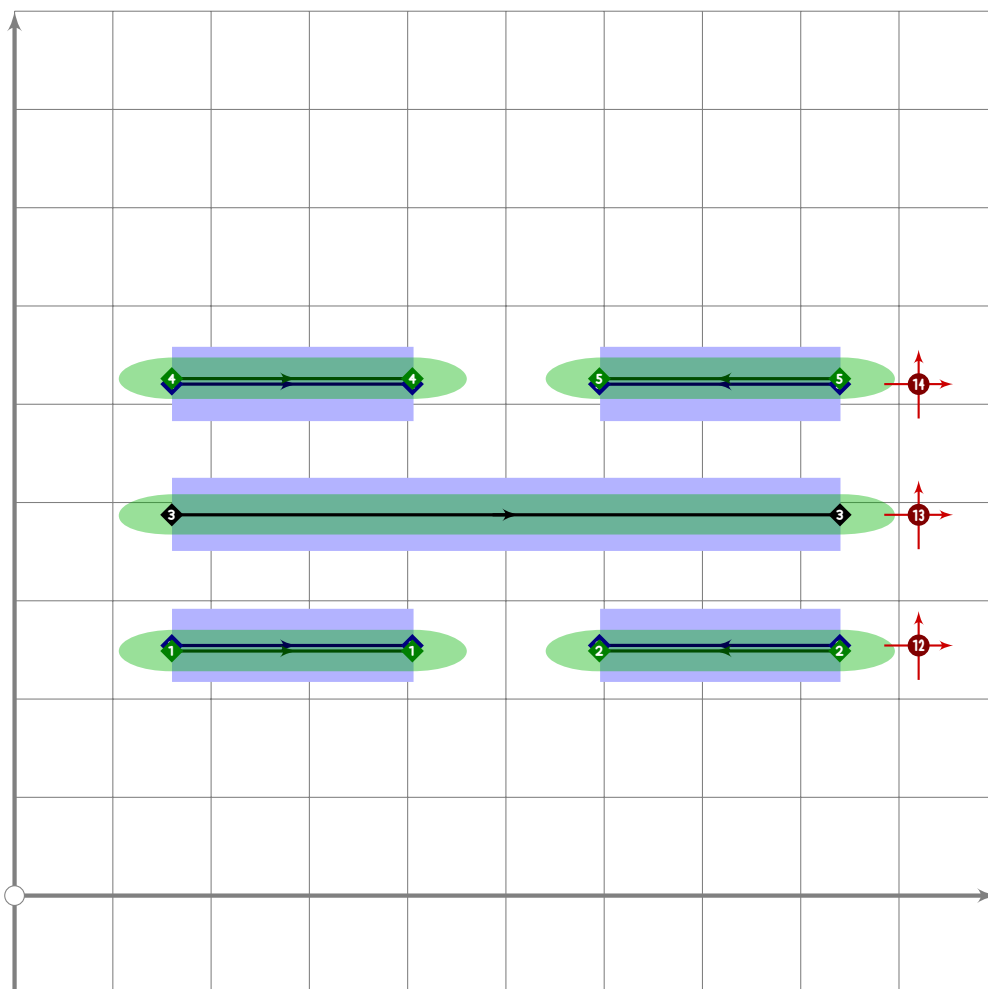


```

73
74 begint Suglyph("ichingtri5",52);
75   iching.line(1,3,0);
76   iching.line(2,3,1);
77   iching.line(3,3,1);
78   tsu_render;
79 endtsuglyph;

```

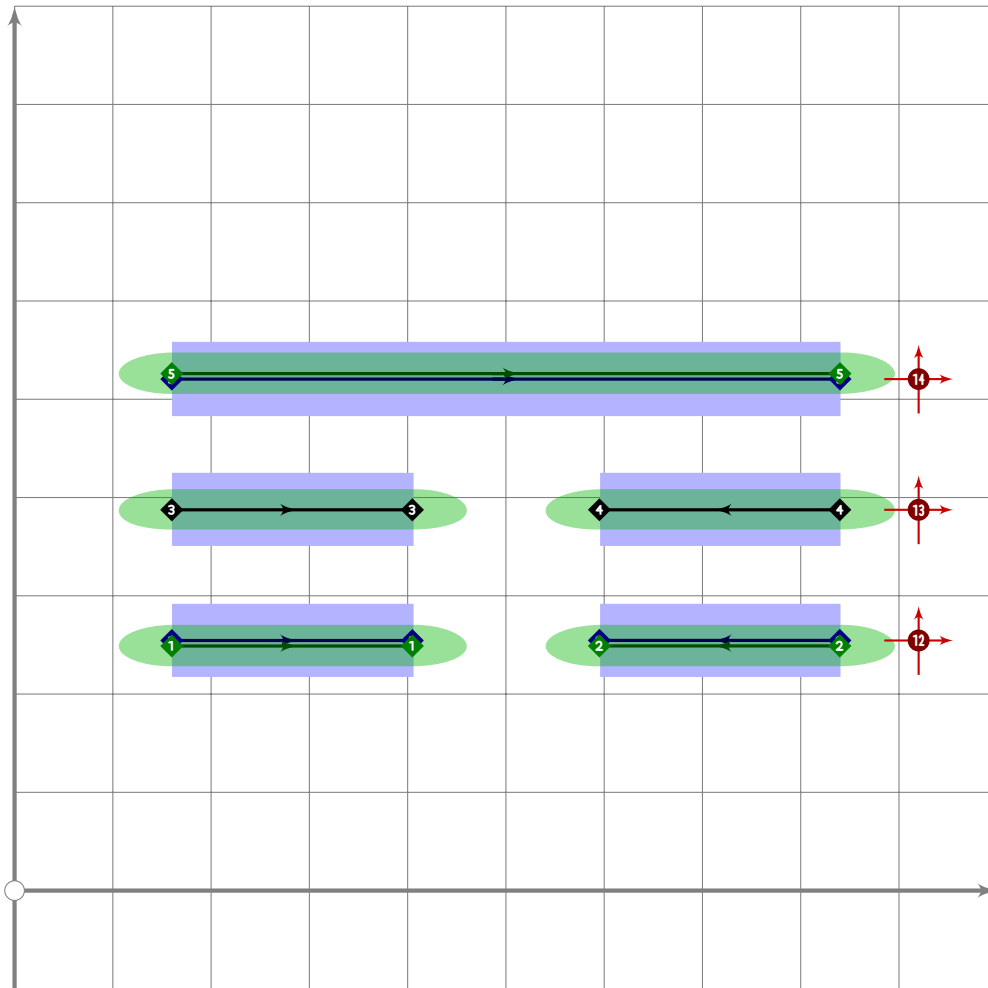
U+2635
tsuku.ichingtri6



```

80
81 begintruglyph("ichingtri6",53);
82  iching.line(1,3,0);
83  iching.line(2,3,1);
84  iching.line(3,3,0);
85  tsu_render;
86 endtsuglyph;

```

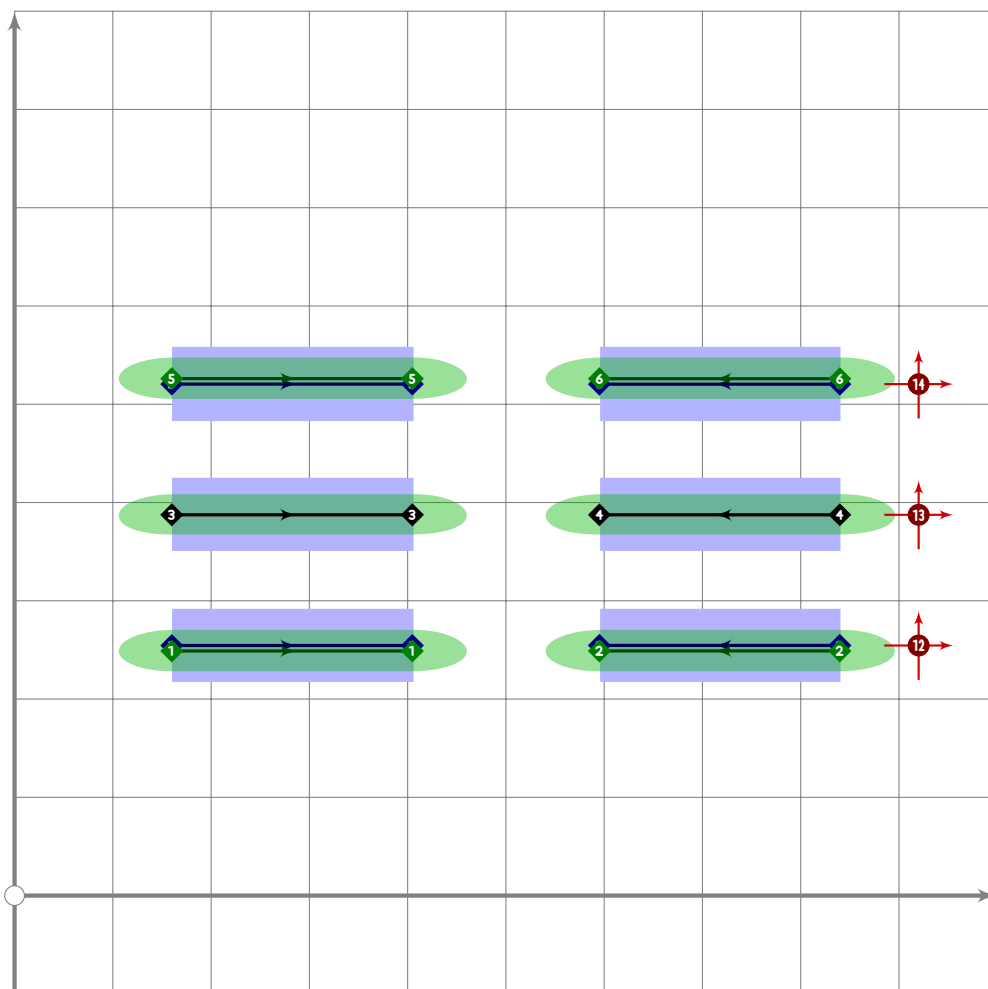


```

87
88 begint Suglyph("ichingtri7",54);
89   iching.line(1,3,0);
90   iching.line(2,3,0);
91   iching.line(3,3,1);
92   tsu_render;
93 endtsuglyph;

```

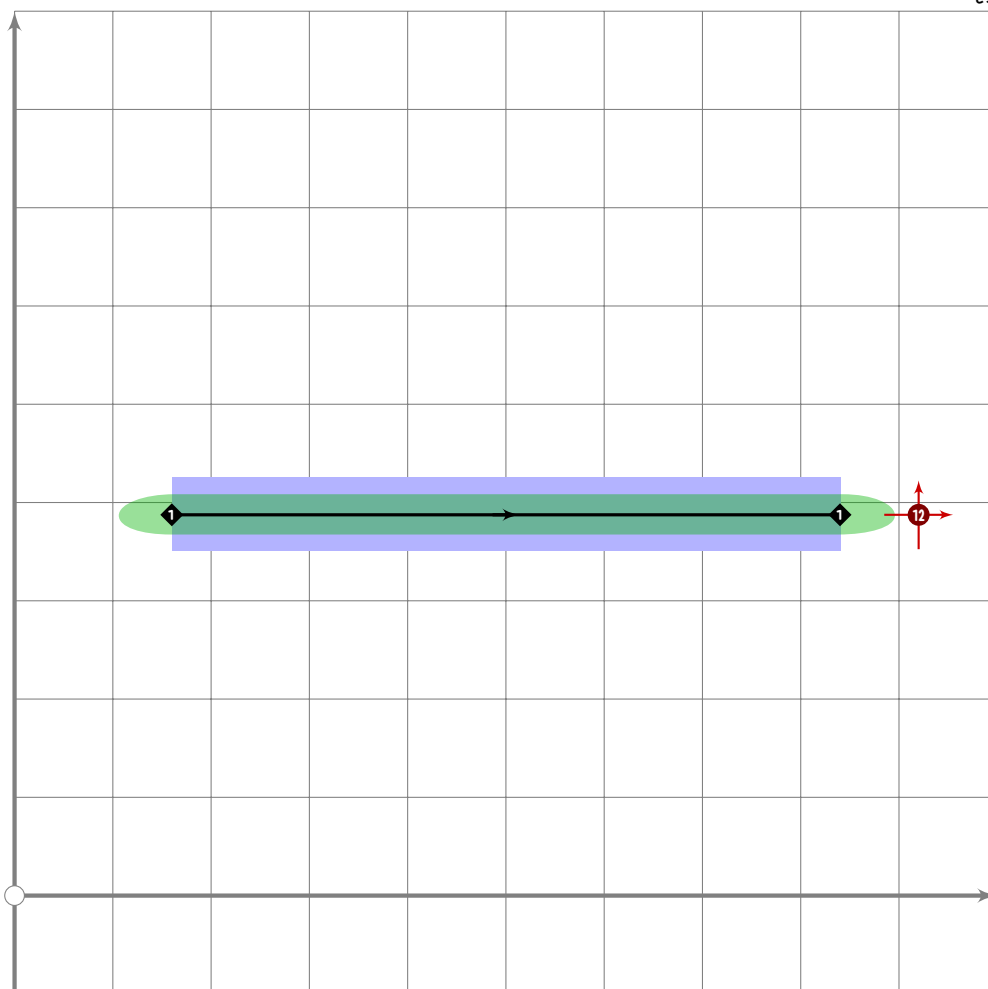
U+2637
tsuku.ichingtri8



```

94
95 begintruglyph("ichingtri8",55);
96   iching.line(1,3,0);
97   iching.line(2,3,0);
98   iching.line(3,3,0);
99   tsu_render;
100 endtuglyph;

```

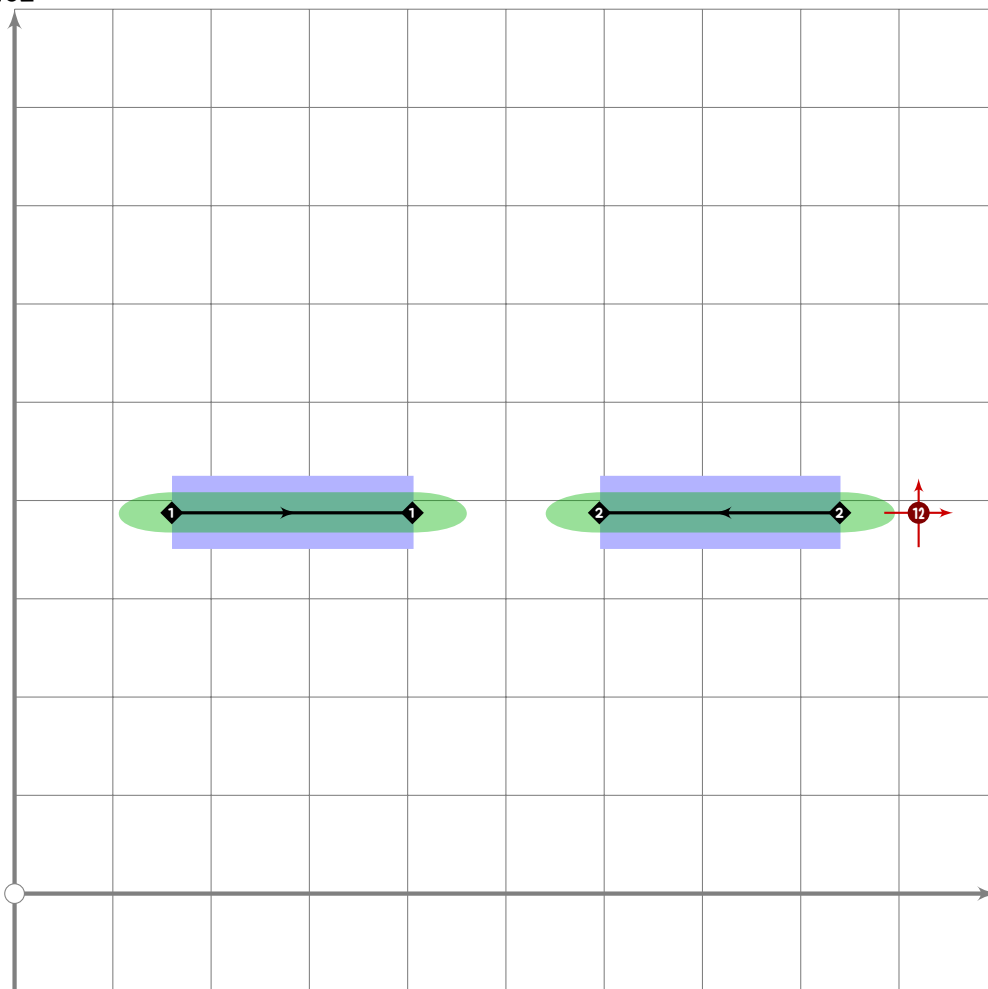



```

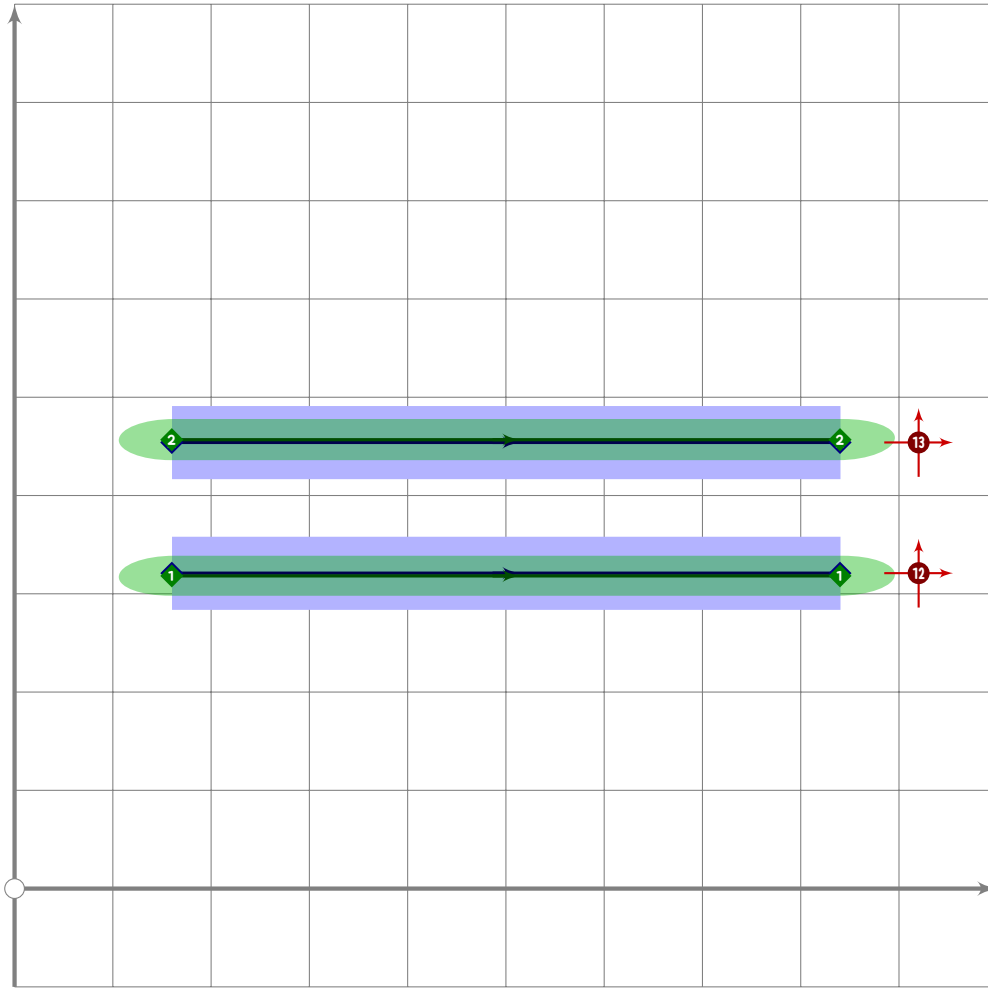
101
102 beginsuglyph("ichingmono1",138);
103   iching.line(1,1,1);
104   tsu_render;
105 endsuglyph;

```

U+268B
tsuku.ichingmono2



```
106
107 begint Suglyph("ichingmono2",139);
108   iching.line(1,1,0);
109   tsu_render;
110 endtsuglyph;
```

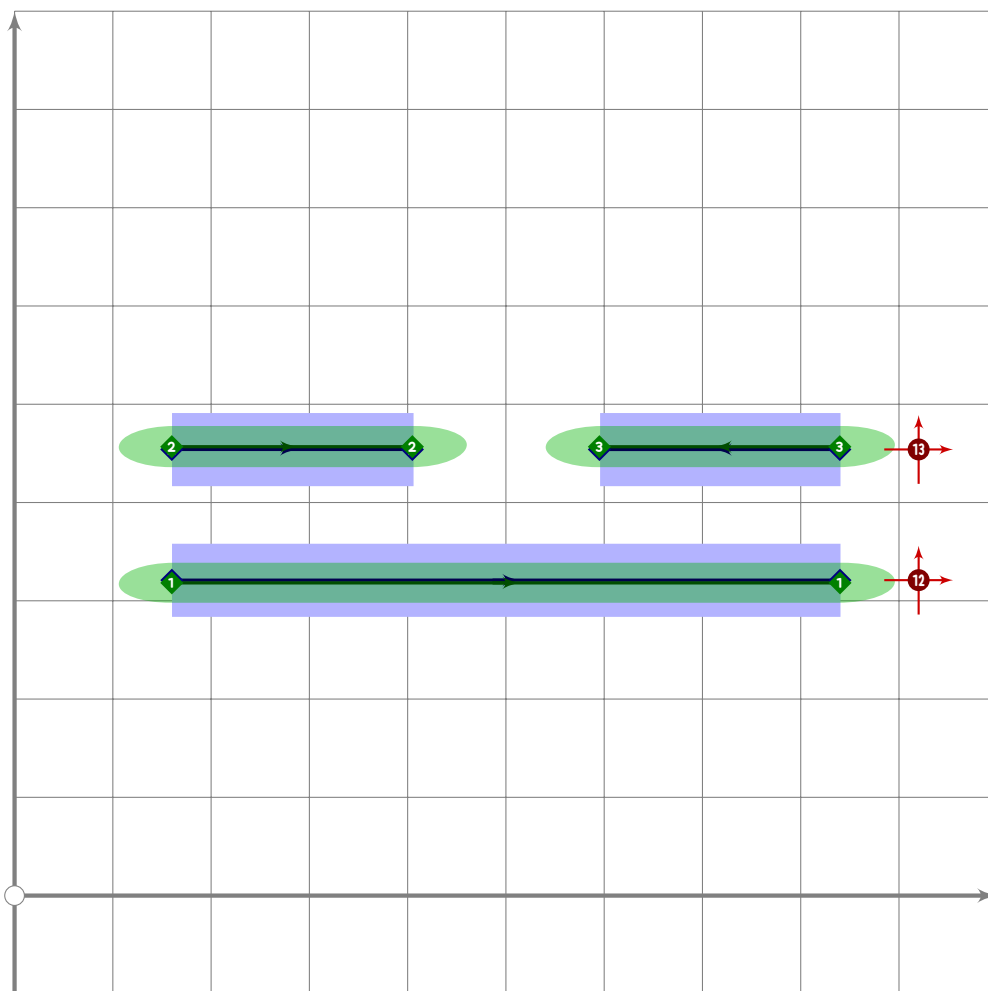


```

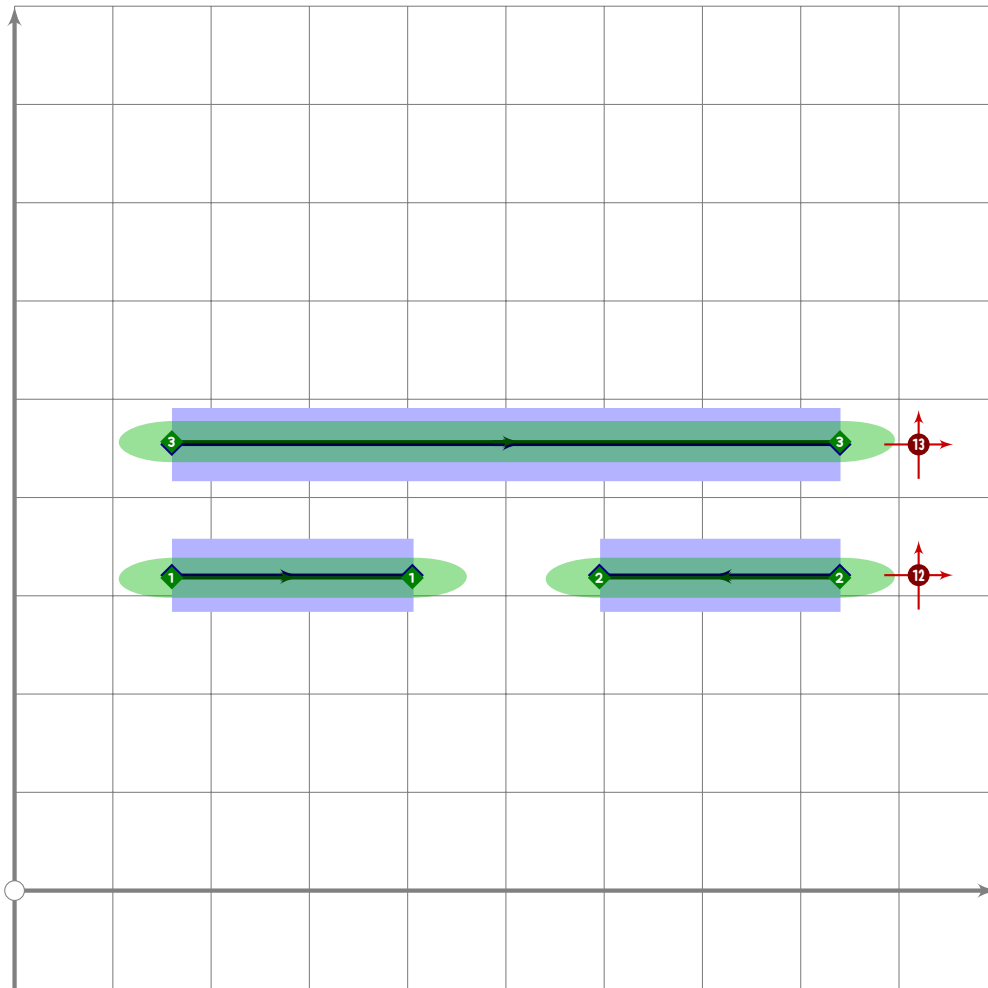
111
112 begint Suglyph("ichingdi1",140);
113   iching.line(1,2,1);
114   iching.line(2,2,1);
115   tsu_render;
116 endtsuglyph;

```

U+268D
tsuku.ichingdi2



```
117
118 begintsuglyph("ichingdi2",141);
119   iching.line(1,2,1);
120   iching.line(2,2,0);
121   tsu_render;
122 endtsuglyph;
```

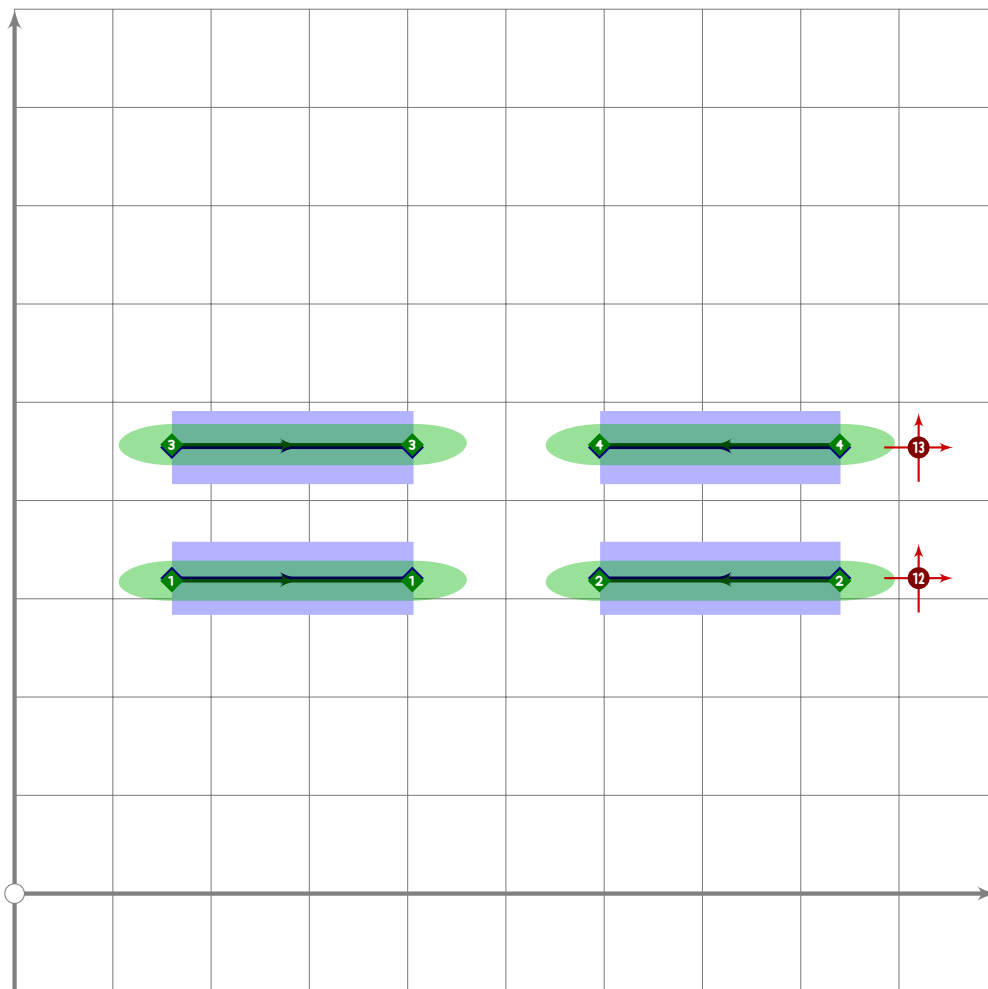


```

123
124 begintsuglyph("ichingdi3",142);
125   iching.line(1,2,0);
126   iching.line(2,2,1);
127   tsu_render;
128 endtsuglyph;

```

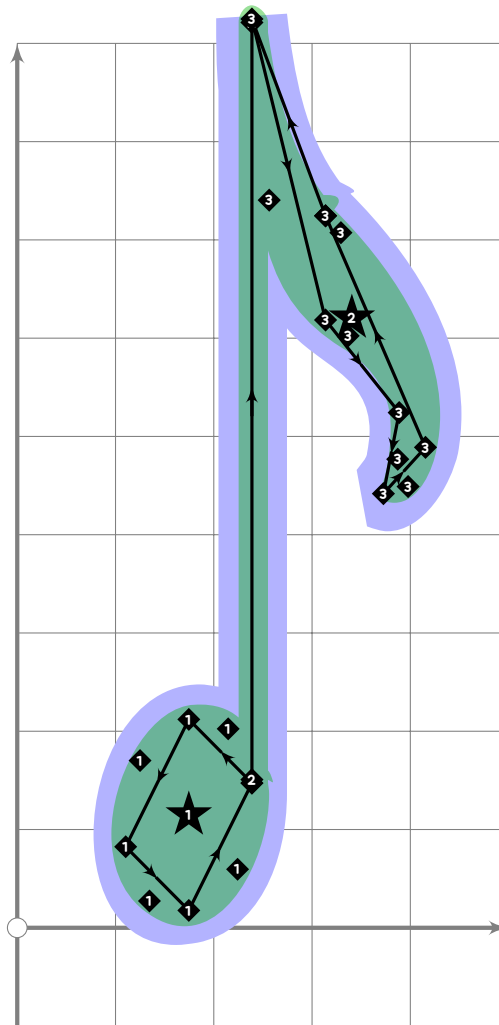
U+268F
tsuku.ichingdi4



```

129
130 begint Suglyph("ichingdi4",143);
131   iching.line(1,2,0);
132   iching.line(2,2,0);
133   tsu_render;
134 endtsuglyph;
135
136
137
138 % musical eighth note, required for MES-1
139 tsu_rescale_half;

```



```

140 begintsuglyph("musicalnote";106);
141   push_stroke((500,150)..(380,205)..(260,95)..(380,40)..cycle,
142     (1,6,1,6)-(1,4,1,4)-(1,4,1,4)-(1,4,1,4)-cycle);
143   set_boalternate(0);
144   push_stroke((500,153)-(500,807),(1,6,1,6)-(1,6,1,6));
145   set_boalternate(0);
146   push_stroke((640,640)..{curl 1}{(500,810){down}}..(640,550)..(780,470)..
147     {curl 1}{(750,400){curl 1}{(830,440)..cycle,
148       (1,3,1,3)-(1,6,1,6)-(1,3,1,3)-(1,3,1,3)-(1,1)-(1,3,1,3));
149   set_botip(0,1,0);
150   set_botip(0,4,0);
151   set_boalternate(0);
152   if tsu_pbrush_size>=30:
153     push_lcblob(get_stroke(-2));
154     push_lcblob(get_stroke(0));
155   fi;
156   tsu_render;
157 endtsuglyph;
158
159
```

160

161 endfont;

162

163

tsuku-27.mp

```
1 %
2 % Unicode page 27 (Zapfian Dingbats) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---

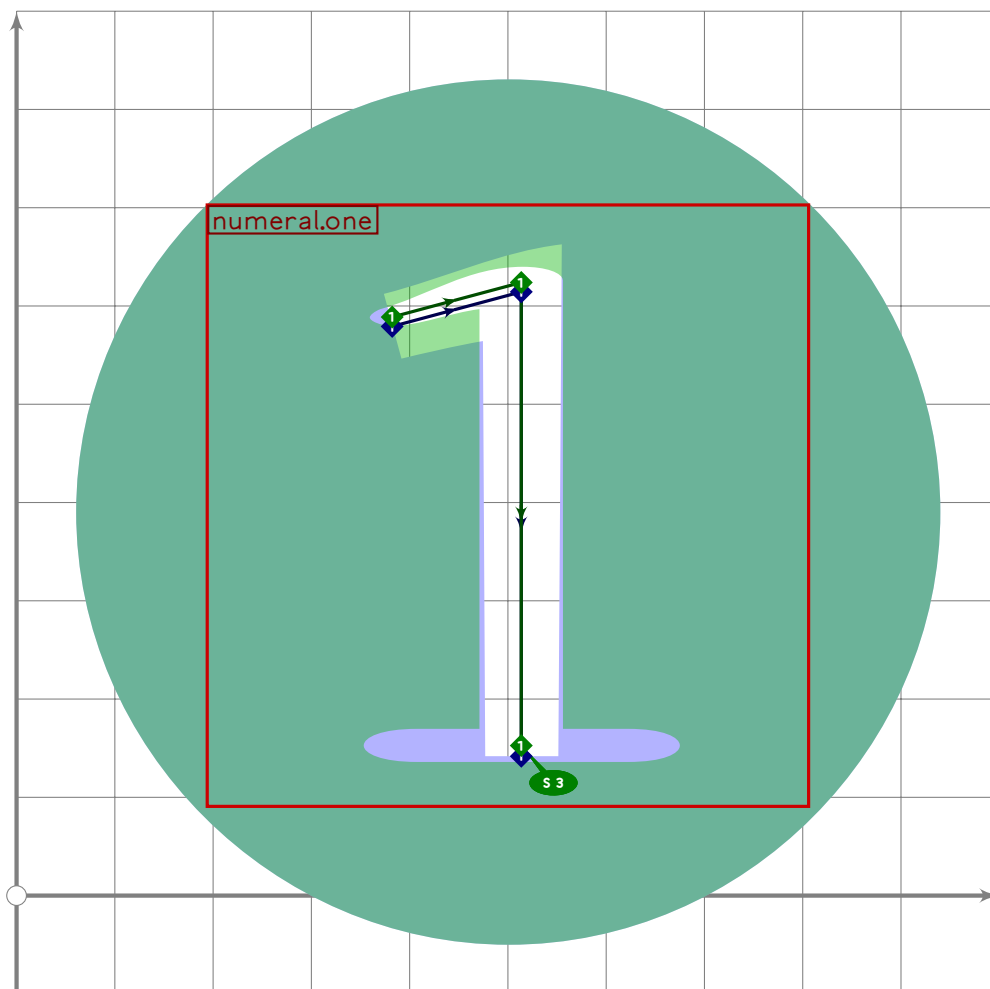

32
33 beginfont
34
35 input latin-intro.mp;
36
37 % AUTODEPS
38 input enclosed.mp;
39 input numerals.mp;
40
41 do_late_includes;
42
43 

---


44
```

Inverted Circled Numerals

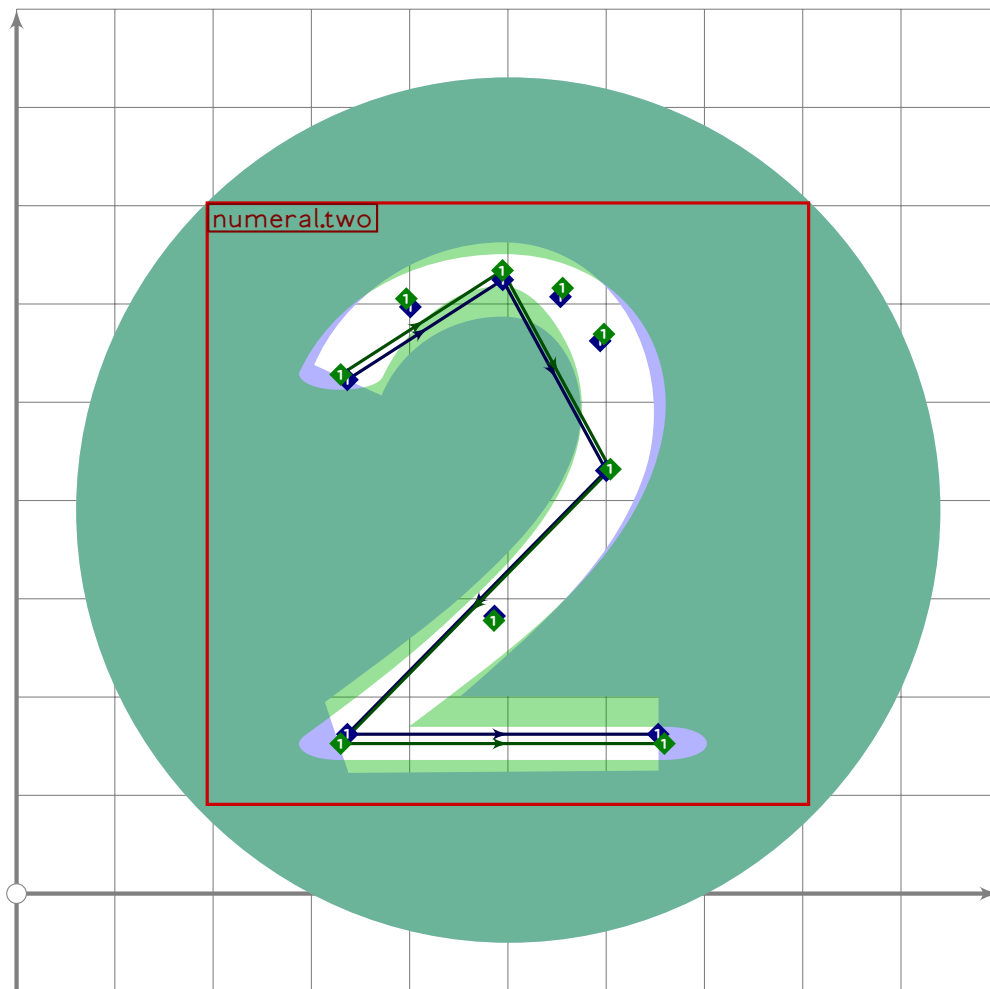
```
45 % INVERTED CIRCLED NUMERALS
46
```



```

47 % 1
48 % BACKGROUND 25CF
49 begint Suglyph("uni2776",118);
50   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.one);
51   i:=0; forever: exitif find_stroke(i)<1;
52     set_bosize(i,107); i:=i+1; endfor;
53   tsu_render;
54 endtsuglyph;
55

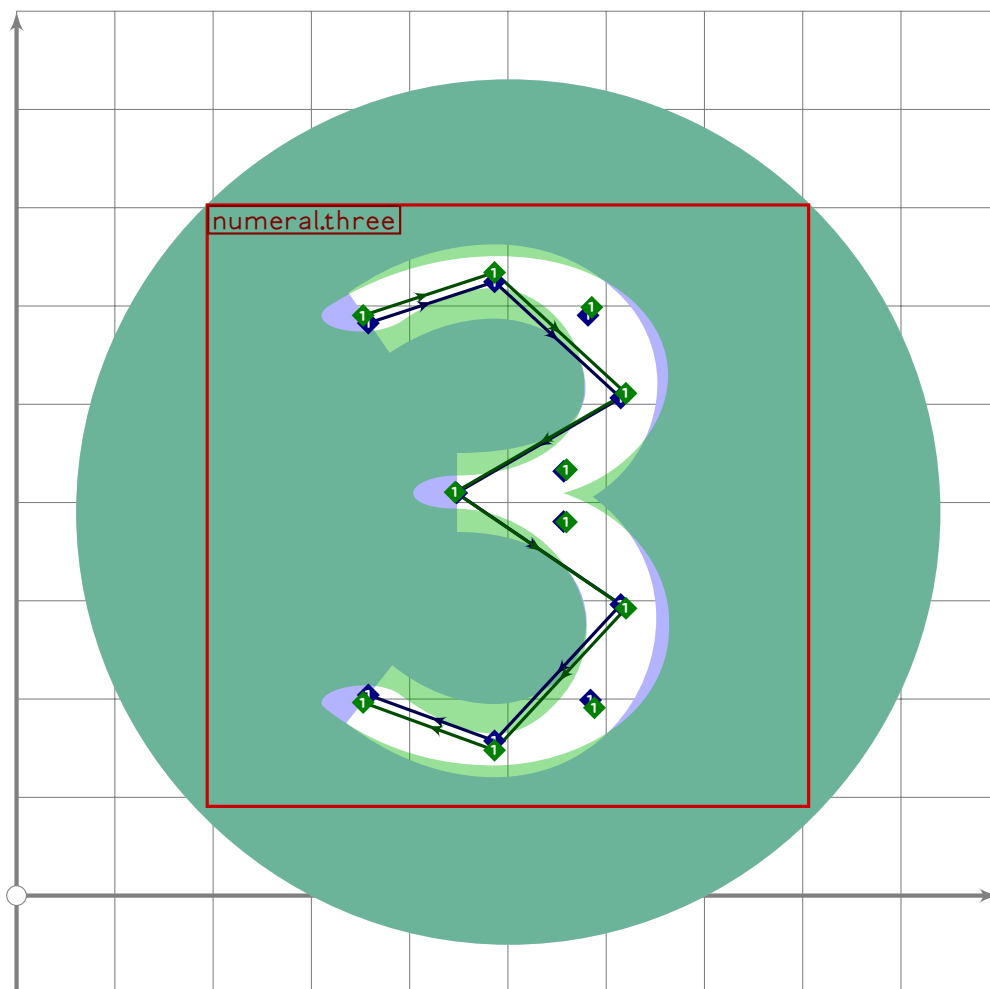
```



```

56 % 2
57 % BACKGROUND 25CF
58 begint Suglyph("uni2777";19);
59   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.two);
60   i:=0; forever: exitif find_stroke(i)<1;
61     set_bosize(i,107); i:=i-1; endfor;
62   tsu_render;
63 endtsuglyph;
64

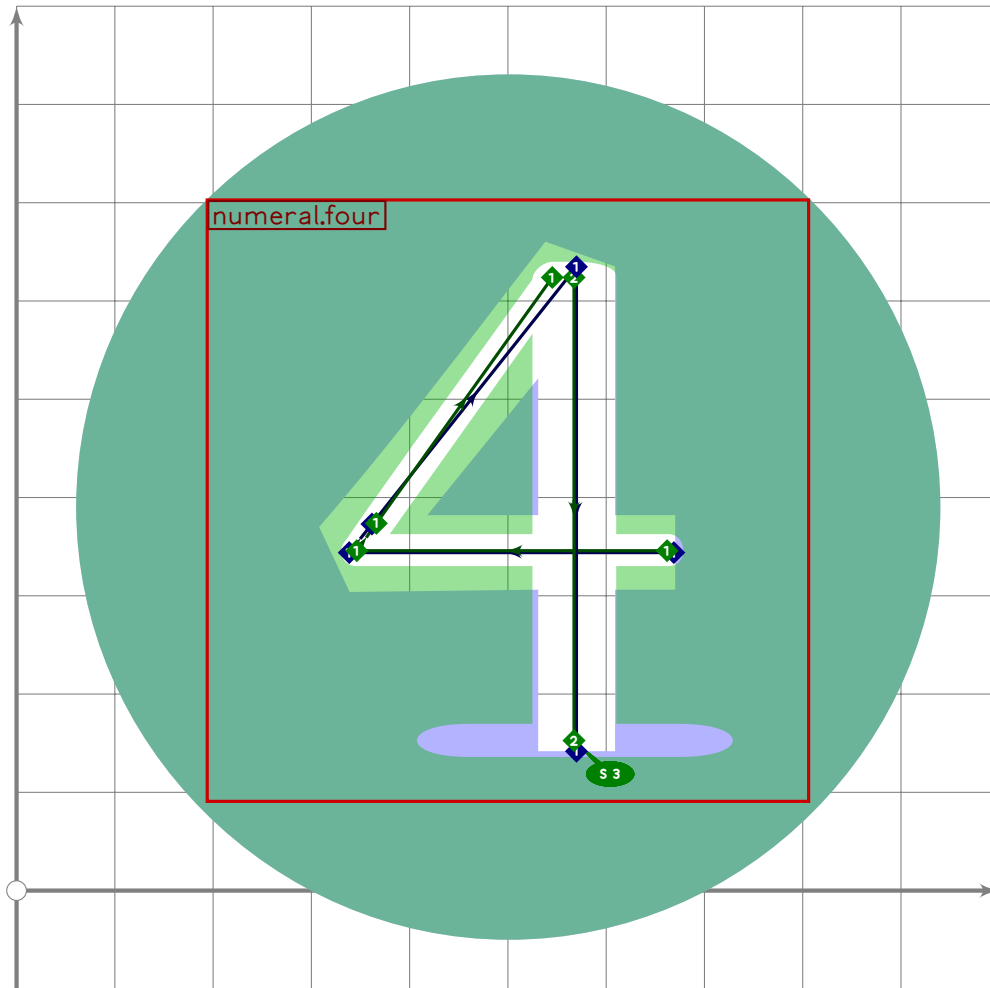
```



```

65 % 3
66 % BACKGROUND 25CF
67 begintsuglyph("uni2778";120);
68   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.three);
69   i:=0; forever: exitif find_stroke(i)<1;
70     set_bosize(i,107); i:=i-1; endfor;
71   tsu_render;
72 endtsuglyph;
73

```

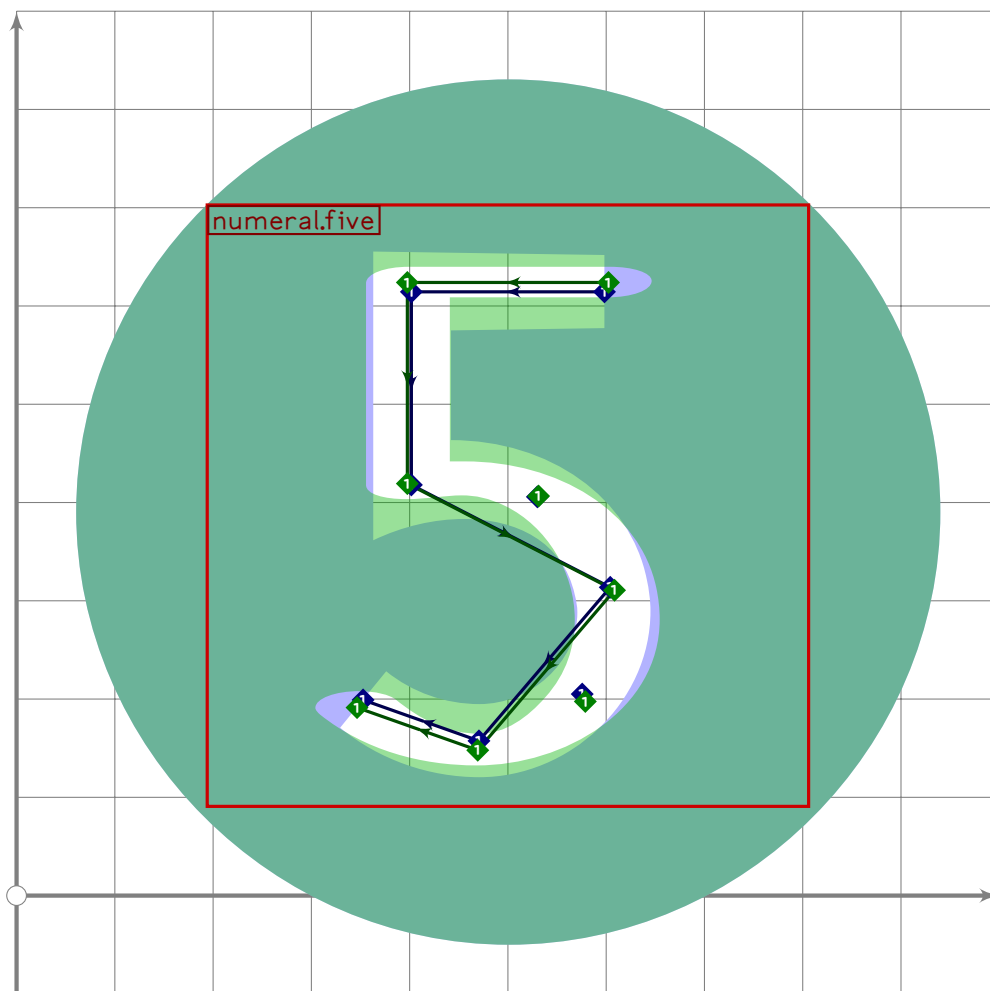


```

74 % 4
75 % BACKGROUND 25CF
76 begint Suglyph("uni2779",121);
77   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.four);
78   i:=0; forever: exitif find_stroke(i)<1;
79     set_bosize(i,107); i:=i-1; endfor;
80   tsu_render;
81 endtsuglyph;
82

```

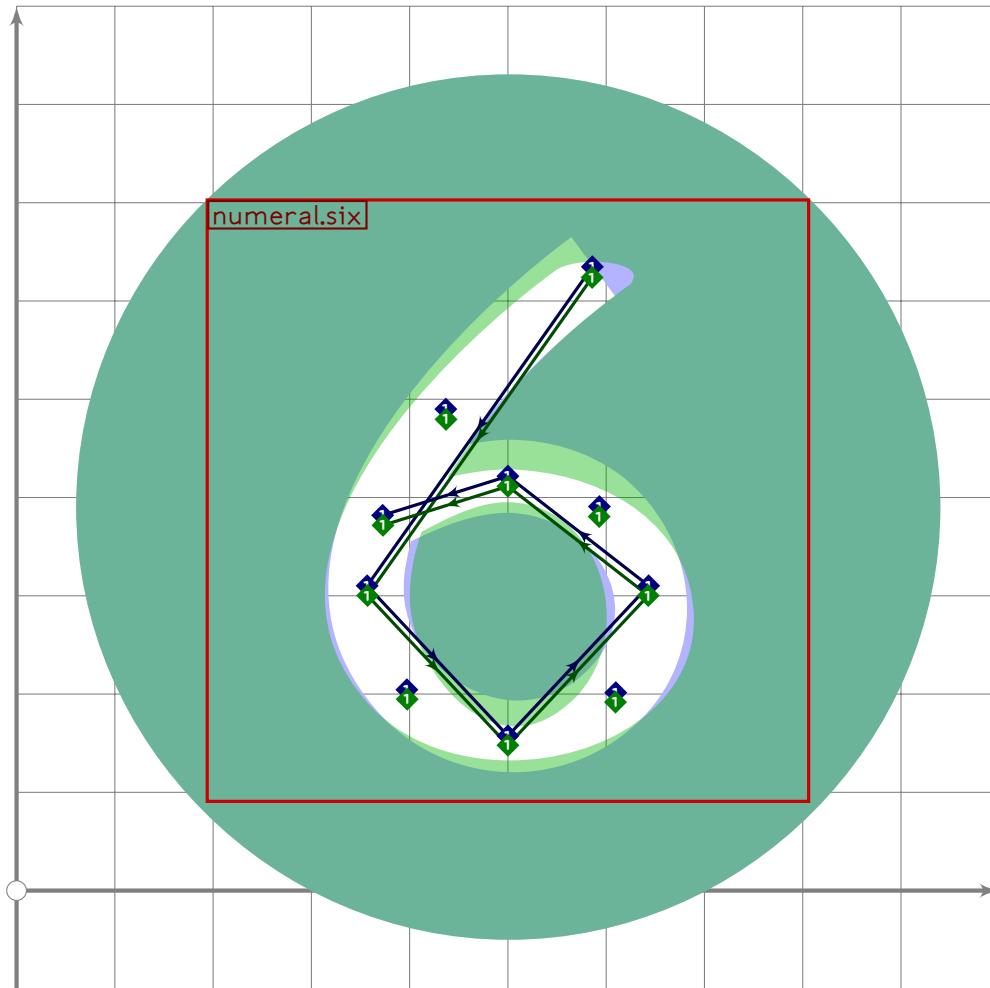
U+277A
tsuku.uni277A



```

83 % 5
84 % BACKGROUND 25CF
85 begint Suglyph("uni277A",122);
86   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.five);
87   i:=0; forever: exitif find_stroke(i)<1;
88     set_bosize(i,107); i:=i-1; endfor;
89   tsu_render;
90 endtsuglyph;
91

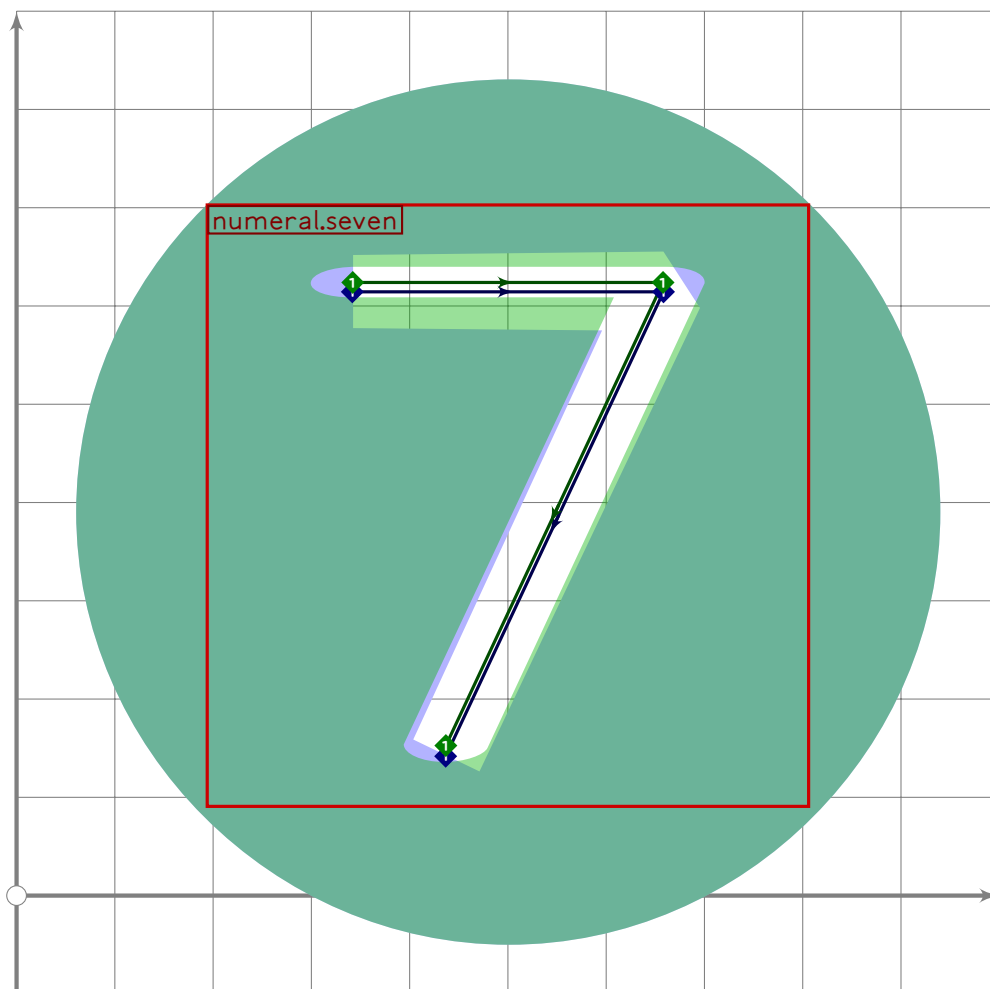
```



```

92 % 6
93 % BACKGROUND 25CF
94 begintsuglyph("uni277B",123);
95   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.six);
96   i:=0; forever: exitif find_stroke(i)<1;
97     set_bosize(i,107); i:=i-1; endfor;
98   tsu_render;
99 endtsuglyph;
100

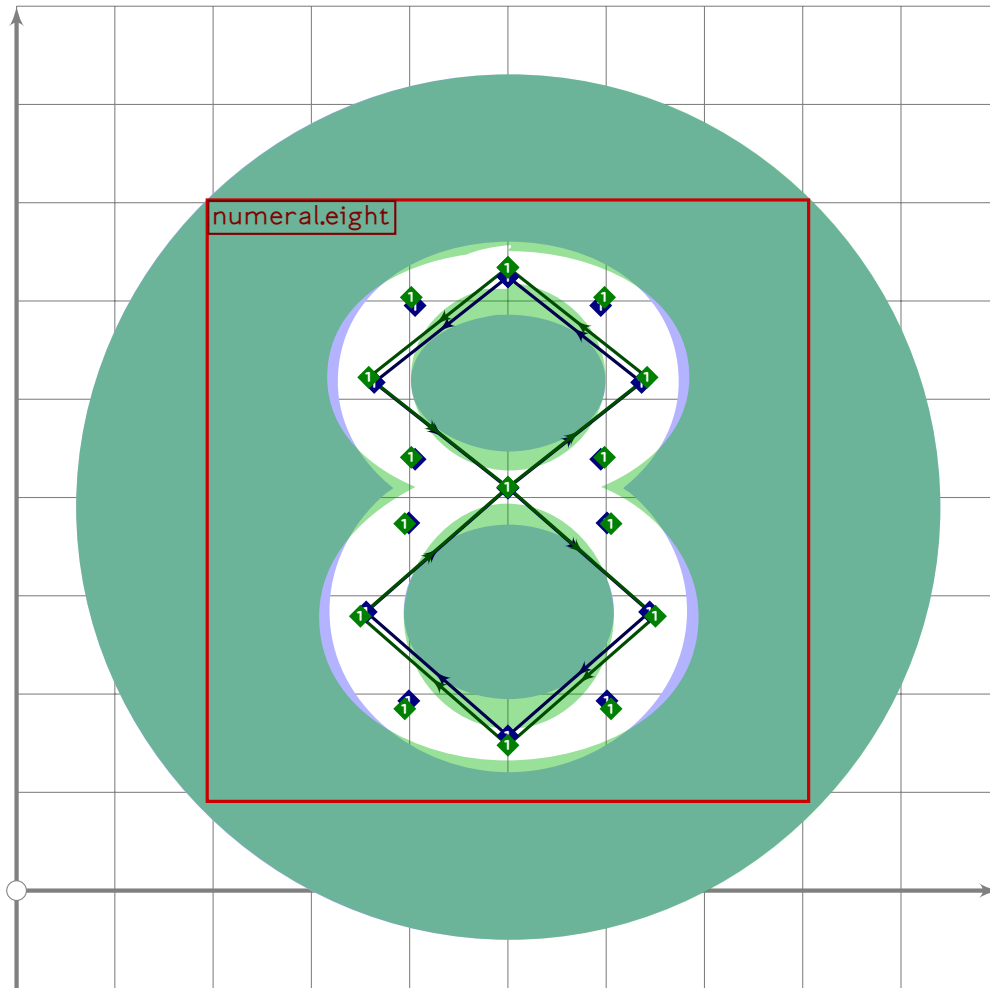
```



```

101 % 7
102 % BACKGROUND 25CF
103 begint Suglyph("uni277C";124);
104   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.seven);
105   i:=0; forever: exitif find_stroke(i)<1;
106     set_bosize(i,107); i:=i+1; endfor;
107   tsu_render;
108 endtsuglyph;
109

```

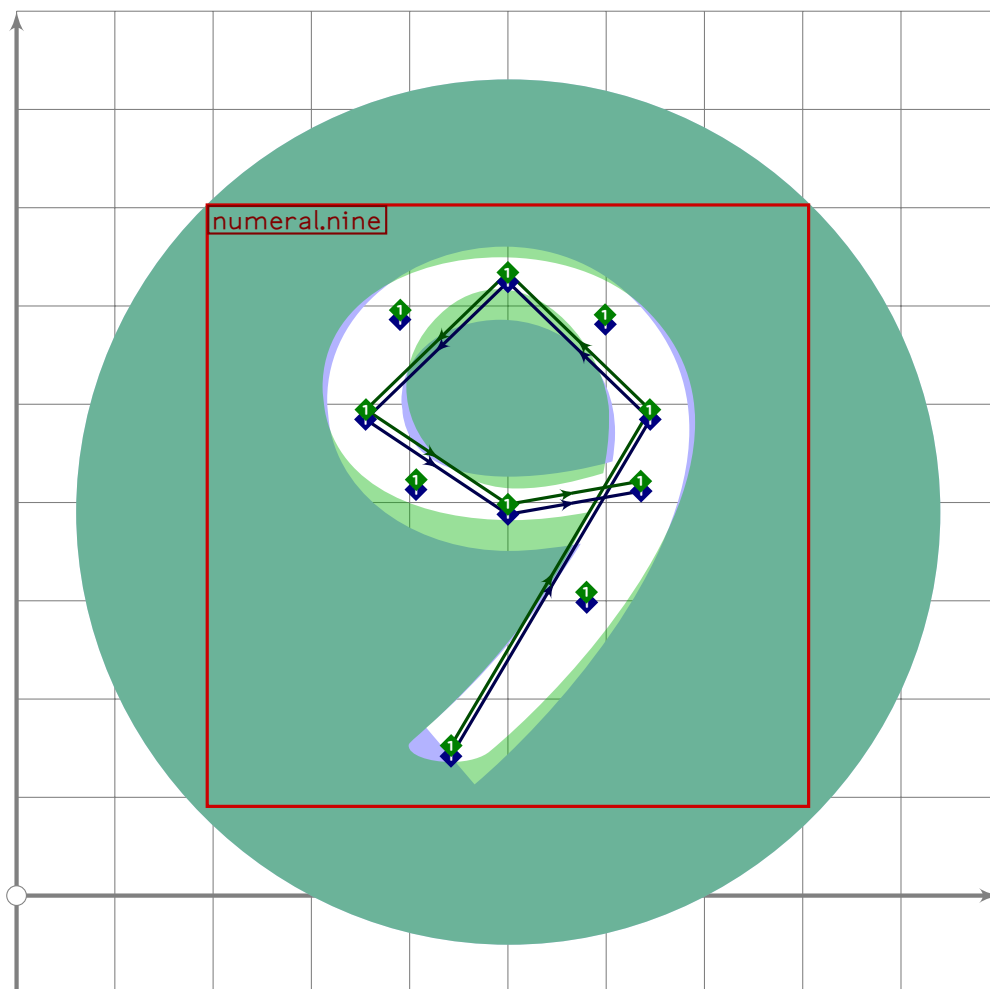



```

110 % 8
111 % BACKGROUND 25CF
112 begintsuglyph("uni277D";125);
113   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numera.eight);
114   i:=0; forever: exitif find_stroke(i)<1;
115     set_bosize(i,107); i:=i-1; endfor;
116   tsu_render;
117 endtsuglyph;
118

```

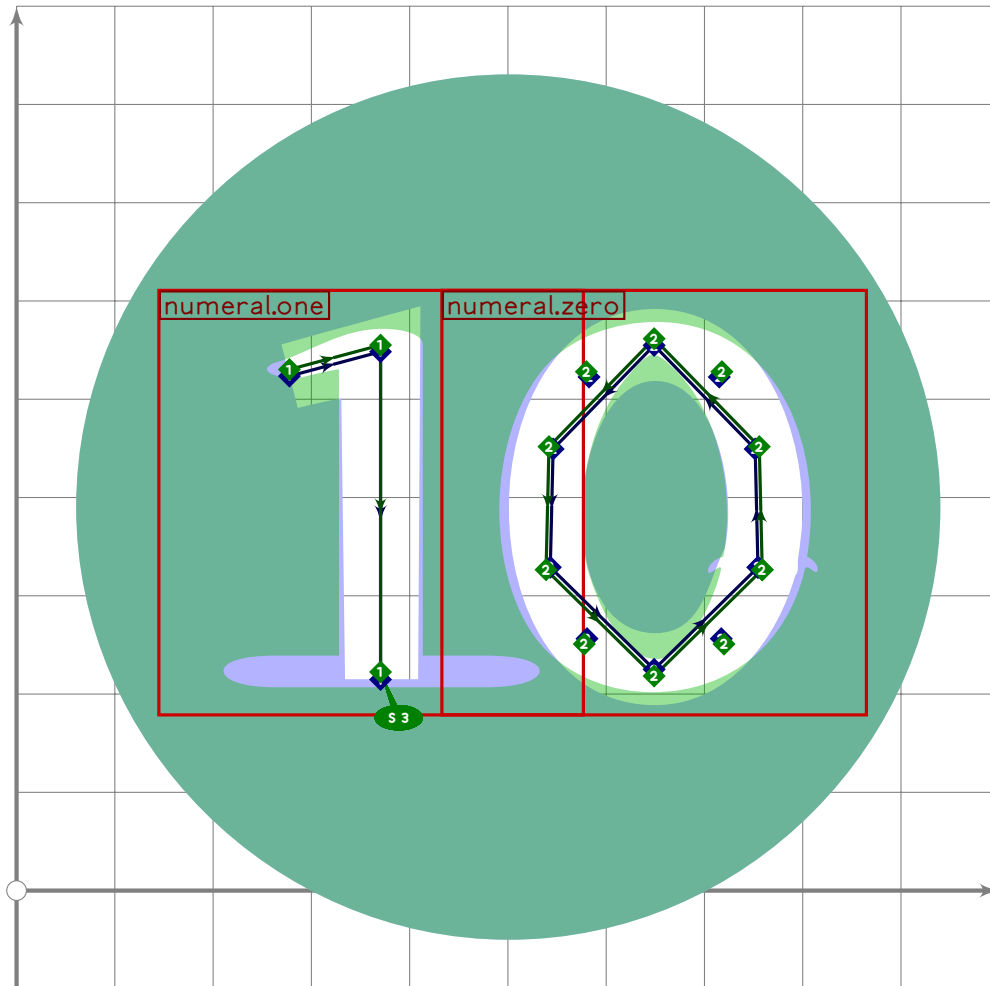
U+277E
tsuku.uni277E



```

119 % 9
120 % BACKGROUND 25CF
121 begint Suglyph("uni277E";126);
122   tsu_xform(tsu_xf.circled shifted tsu_xf.circ_slant_shift)(numeral.nine);
123   i:=0; forever: exitif find_stroke(i)<1;
124     set_bosize(i,107); i:=i-1; endfor;
125   tsu_render;
126 endtsuglyph;
127

```



```

128 % 10
129 % BACKGROUND 25CF
130 begintsuglyph("uni277F";127);
131   tsu_xform(tsu_xf.ctwo.left shifted tsu_xf.circ_slant_shift)(numeral.one);
132   numeric x[],y[];
133   tsu_xform(tsu_xf.ctwo.right shifted tsu_xf.circ_slant_shift)(numeral.zero);
134   i:=0; forever: exitif find_stroke(i)<1;
135     set_bosize(i,107); i:=i-1; endfor;
136   tsu_render;
137 endtsuglyph;
138
139
140
141 endfont;
142
143

```

tsuku-2e.mp

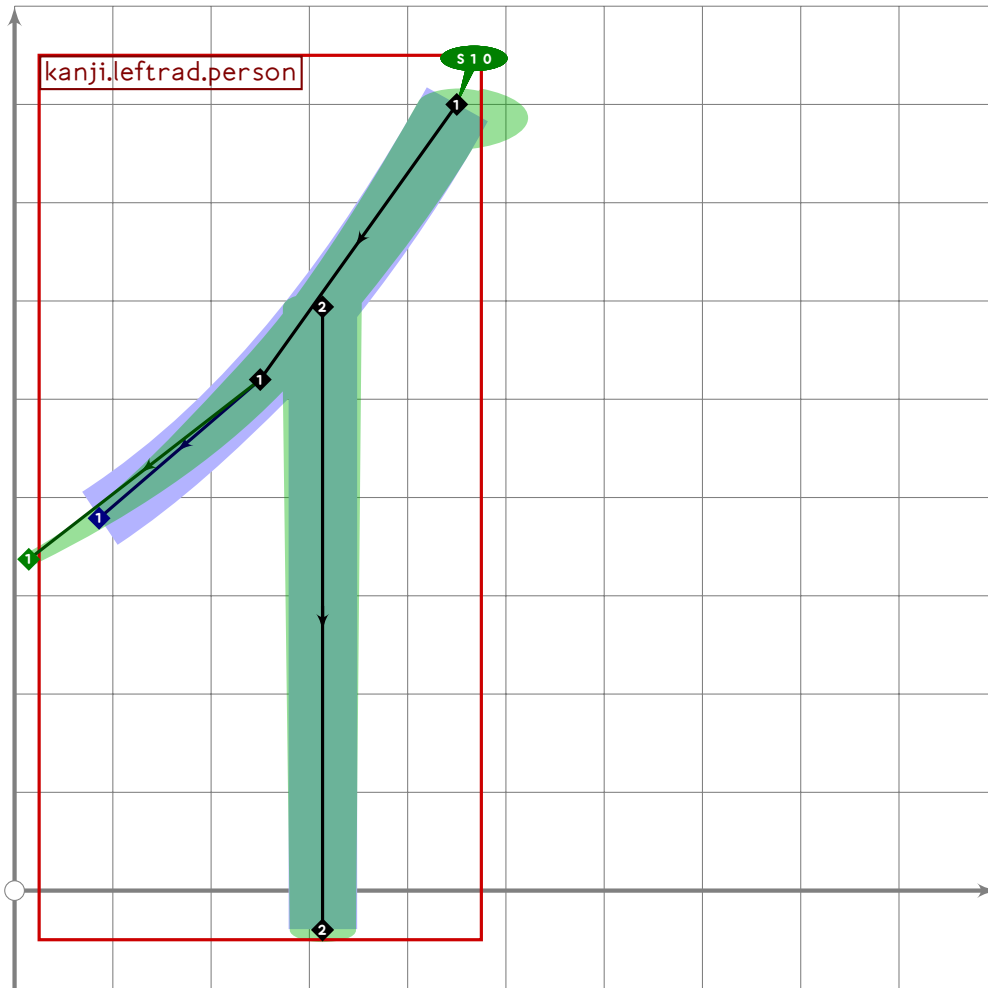
```
1 %
2 % Unicode page 2E (Radicals Supplement) for Tsukurimashou
3 % Copyright (C) 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---


32
33 beginfont
34
35 % AUTODEPS
36 input bottomrad.mp;
37 input buildkanji.mp;
38 input gradefive.mp;
39 input gradefour.mp;
40 input gradenine.mp;
41 input gradeone.mp;
42 input gradethree.mp;
43 input gradetwo.mp;
44 input leftrad.mp;
45 input radical.mp;
46 input rightrad.mp;
47 input toprad.mp;
48
49 do_late_includes;
50
51 

---


52
```

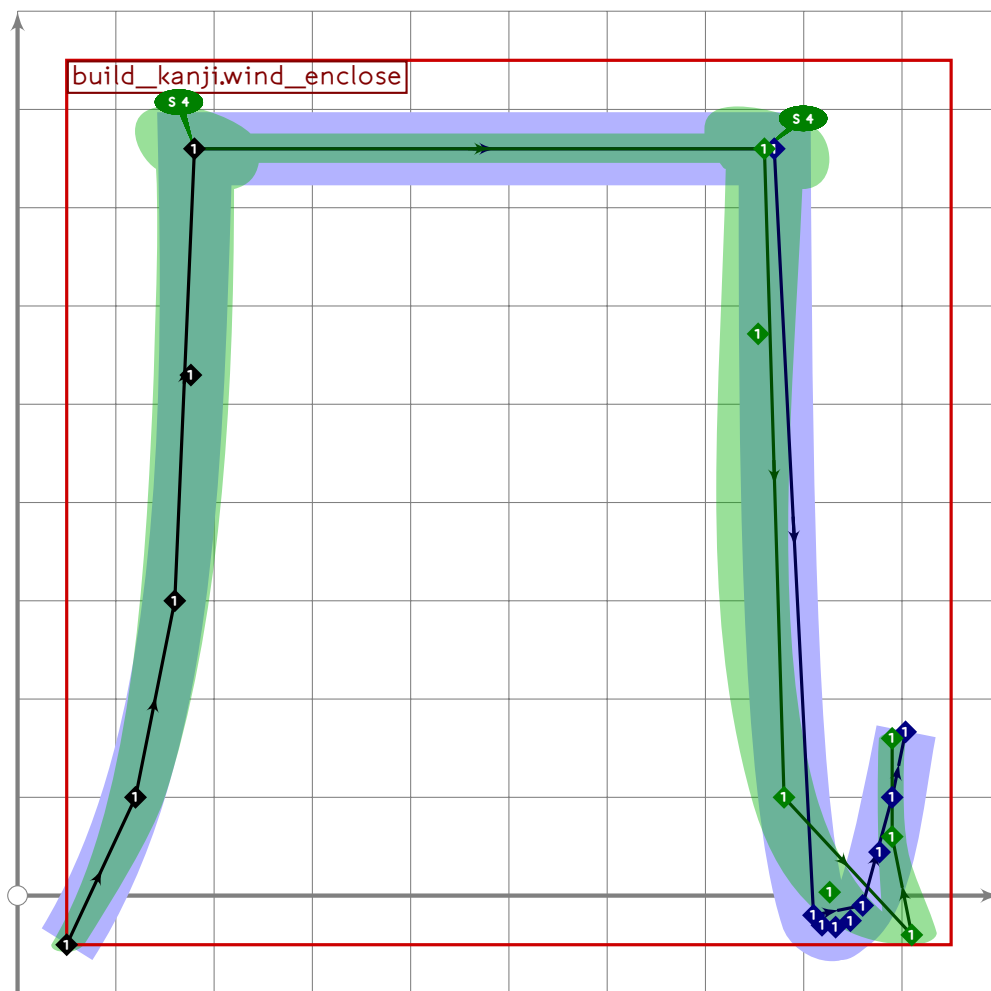


```

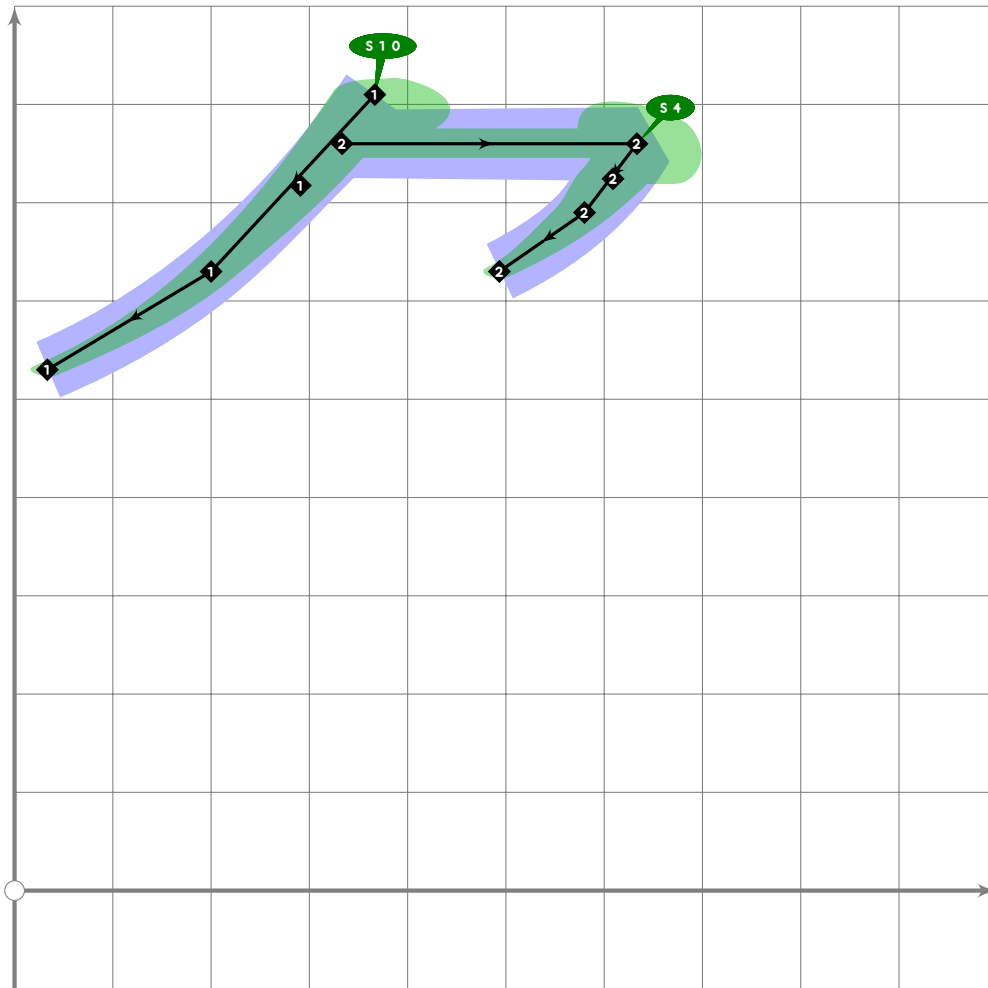
55 % hito/jin "person" as radical
56 begintsuglyph("uni2E85";133);
57   tsu_xform(identity xscaled 0.5)(kanji.leftrad.person);
58   tsu_render;
59 endtsuglyph;
60

```

U+2E87
tsuku.uni2E87



```
61 % Unicode calls it "table"  
62 begintsuglyph("uni2E87";135);  
63   build_kanji.wind_enclose();  
64   tsu_render;  
65 endsuglyph;  
66
```

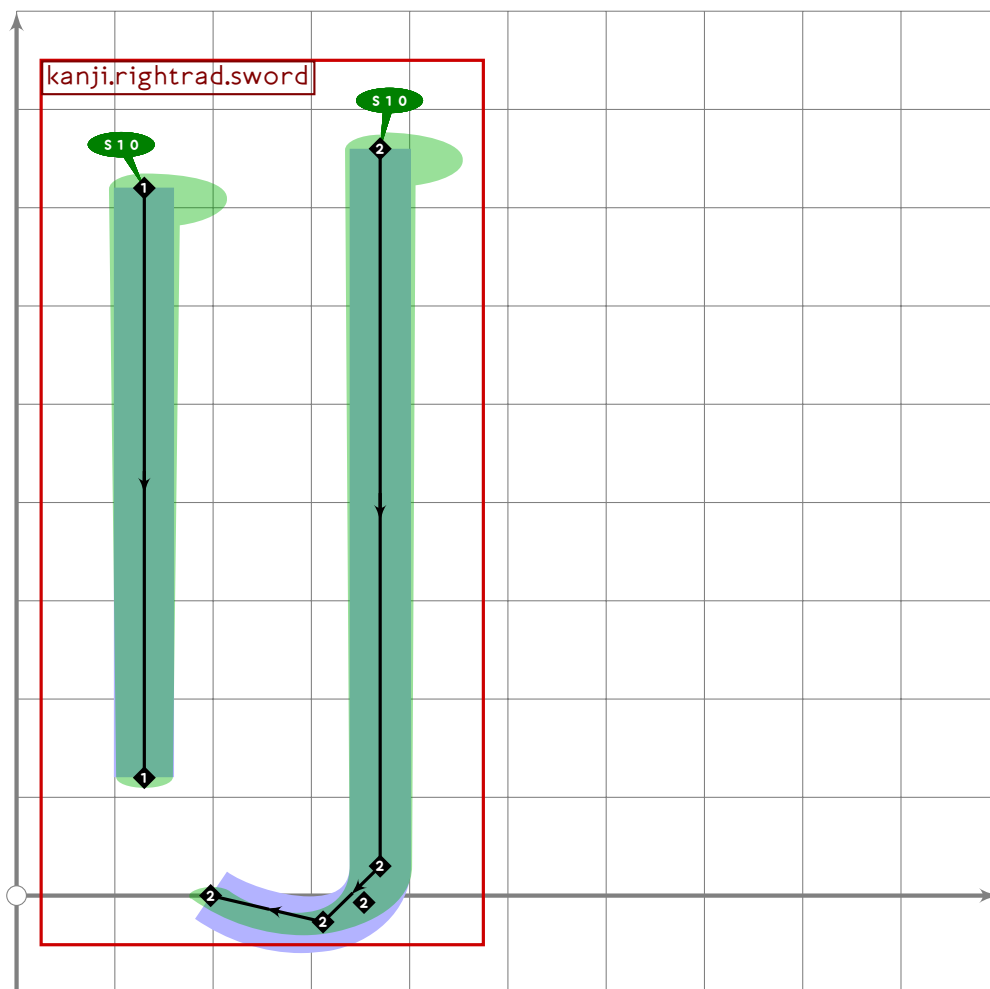


```

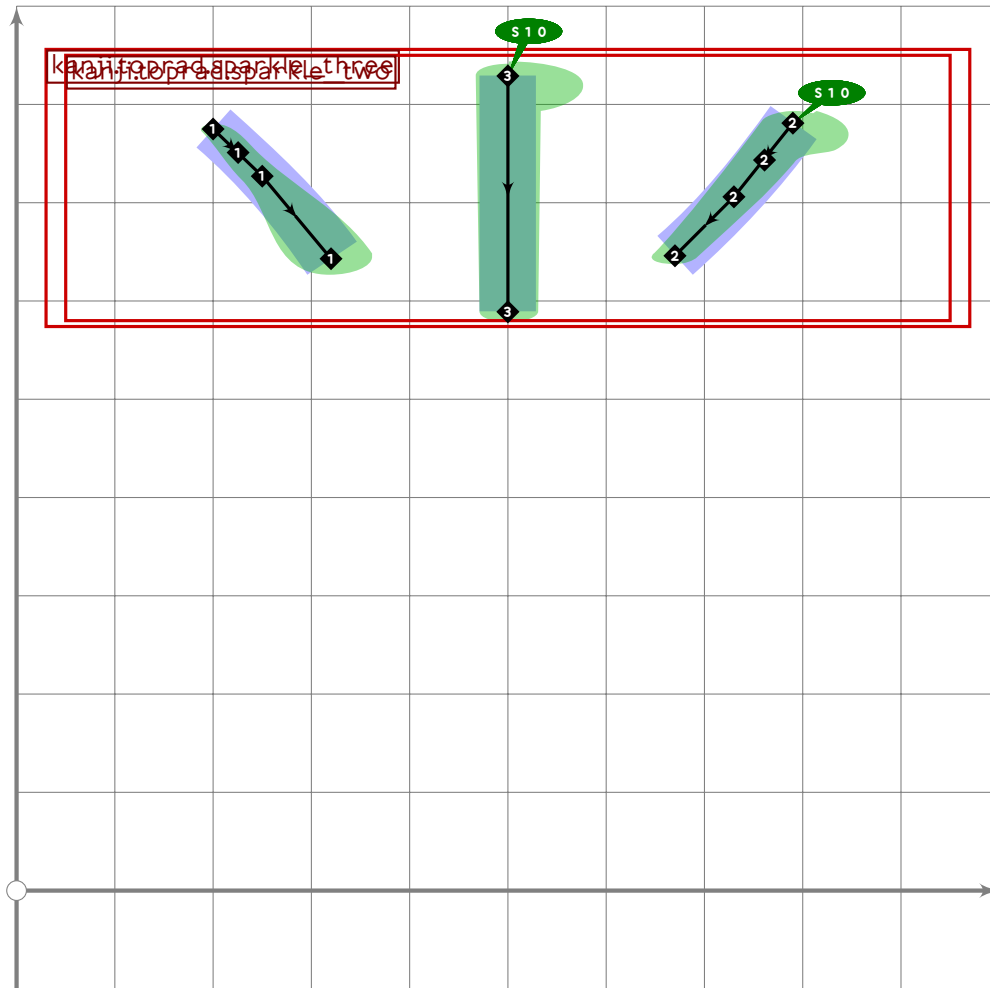
67 % Unicode calls it "knife one"
68 begintsuglyph("uni2E88",136);
69   build_kanji.attach_fishhook(0.8)(
70     perl_structure:=perl_structure&"eids._2";
71     push_stroke((200,0)-(200,800)-(800,800),
72       (1.5,1.5)-(1.6,1.6)-(1.6,1.6));
73     set_bosize(0,0));
74   tsu_render;
75 endtsuglyph;
76

```

U+2E89
tsuku.uni2E89



```
77 % tou "sword radical"
78 begintsuglyph("uni2E89";137);
79   tsu_xform(identity xscaled 0.5)(kanji.rightrad.sword);
80   tsu_render;
81 endtsuglyph;
82
```

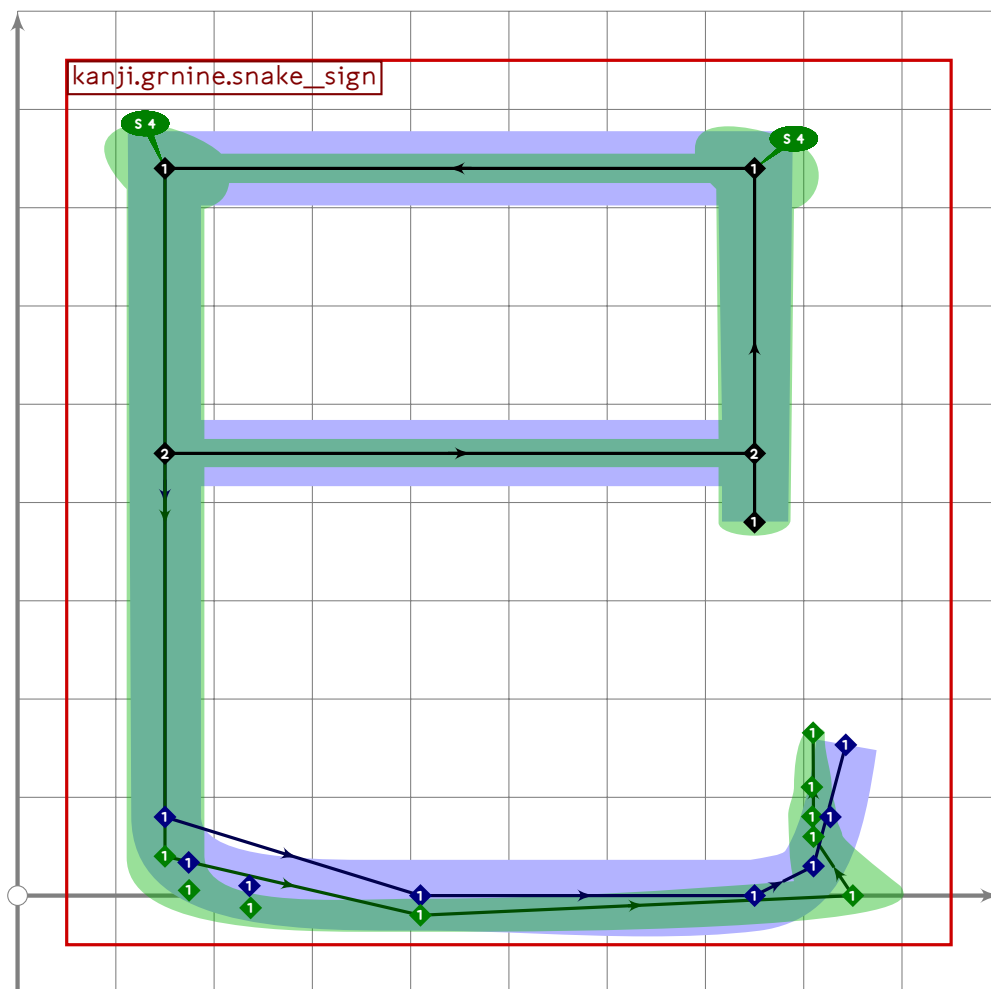



```

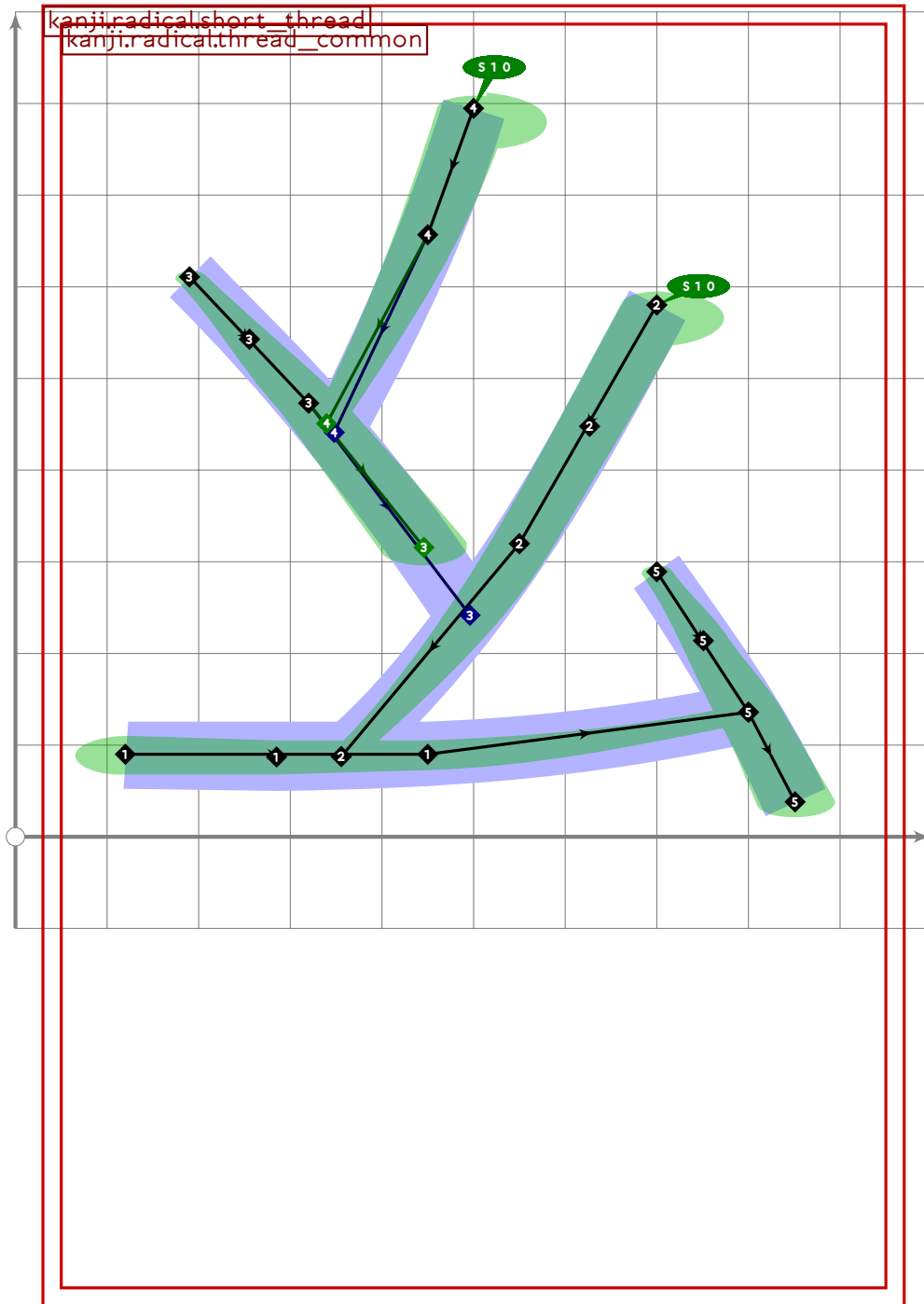
83 % Unicode calls it "small one"
84 begintsuglyph("uni2E8C",140);
85   build_kanji.tb(620,80)
86     (kanji.toprad.sparkle_three)
87     ();
88   tsu_render;
89 endtsuglyph;
90

```

U+2E92
tsuku.uni2E92



```
91 % shi/mi "snake zodiac sign"  
92 begintsuglyph("uni2E92",146);  
93   kanji.grnine.snake_sign;  
94   tsu_render;  
95 endtsuglyph;  
96
```

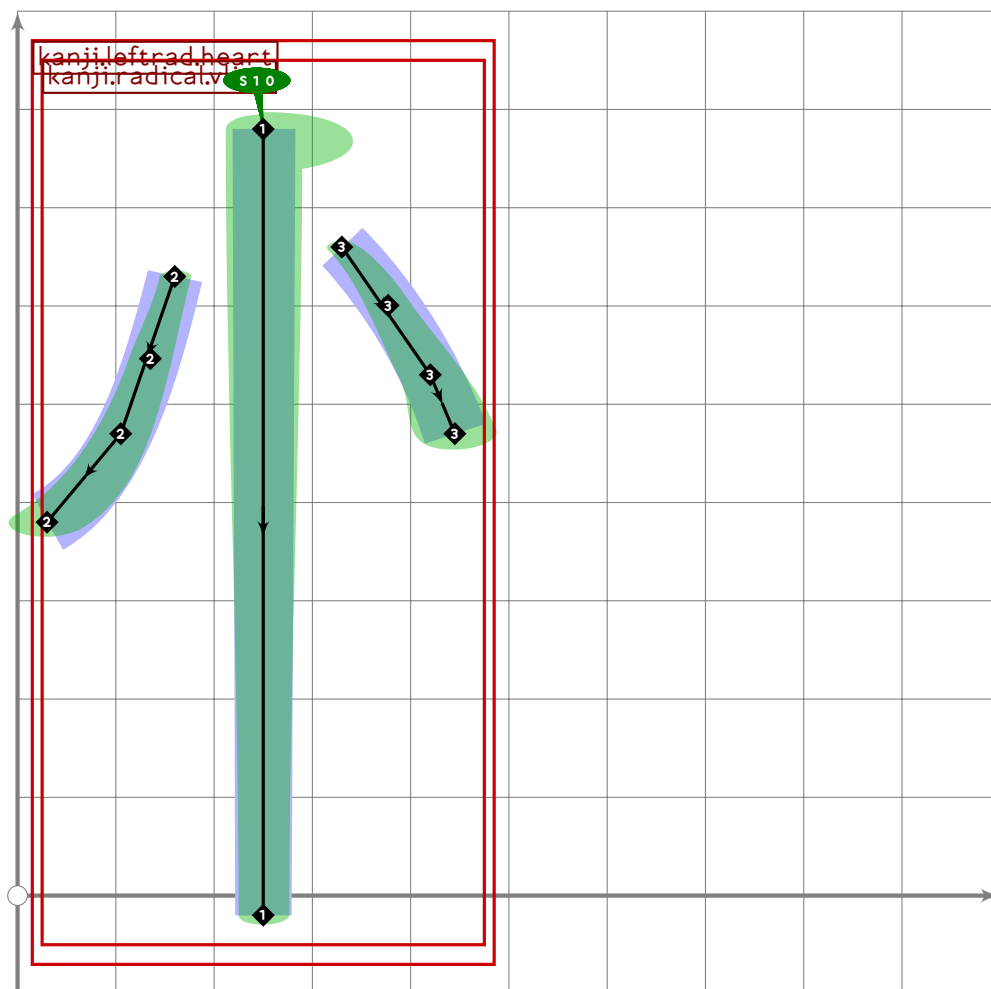


```

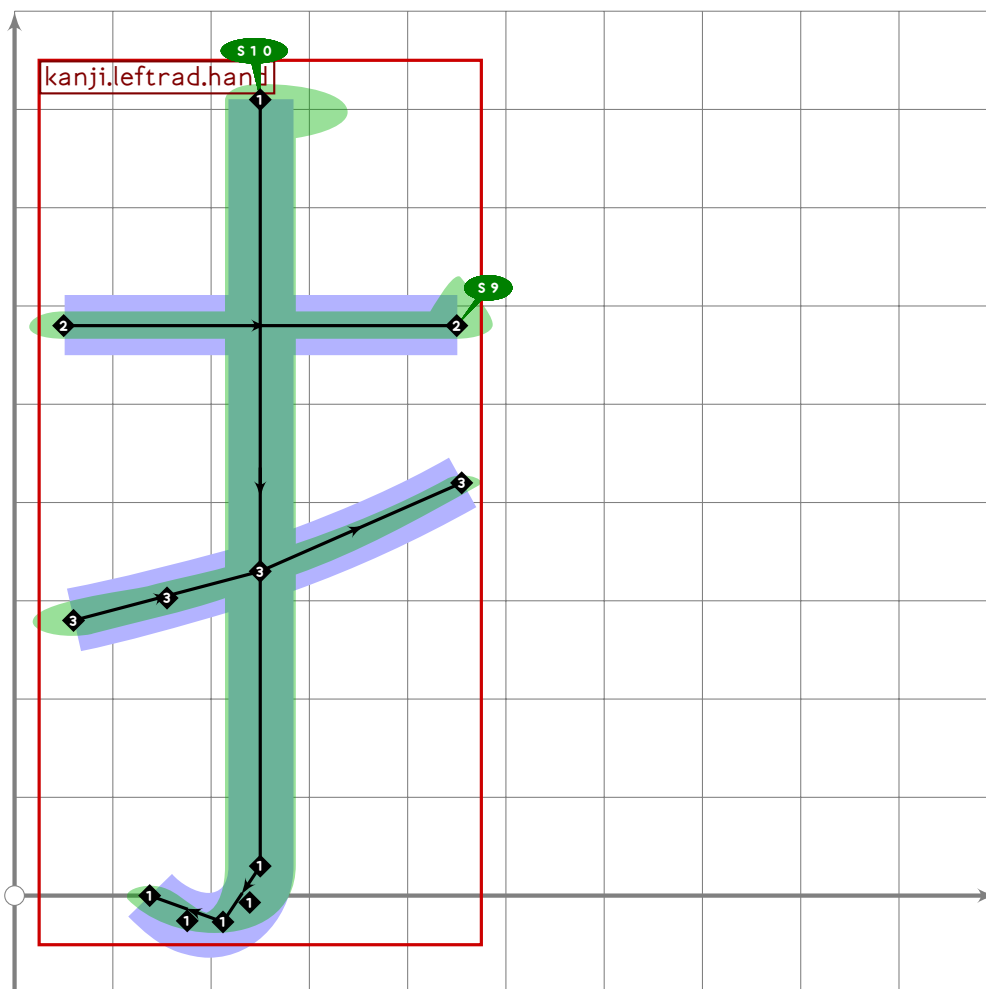
97 % you/chiisai "short thread radical"
98 begintsuglyph("uni2E93",147);
99 kanji.radical.short_thread;
100 tsu_render;
101 endtsuglyph;
102

```

U+2E96
tsuku.uni2E96



```
103 % left radical version of "heart"  
104 begintsuglyph("uni2E96",150);  
105   tsu_xform(identity xscaled 0.5)(kanji.leftrad.heart);  
106   tsu_render;  
107 endsuglyph;  
108
```



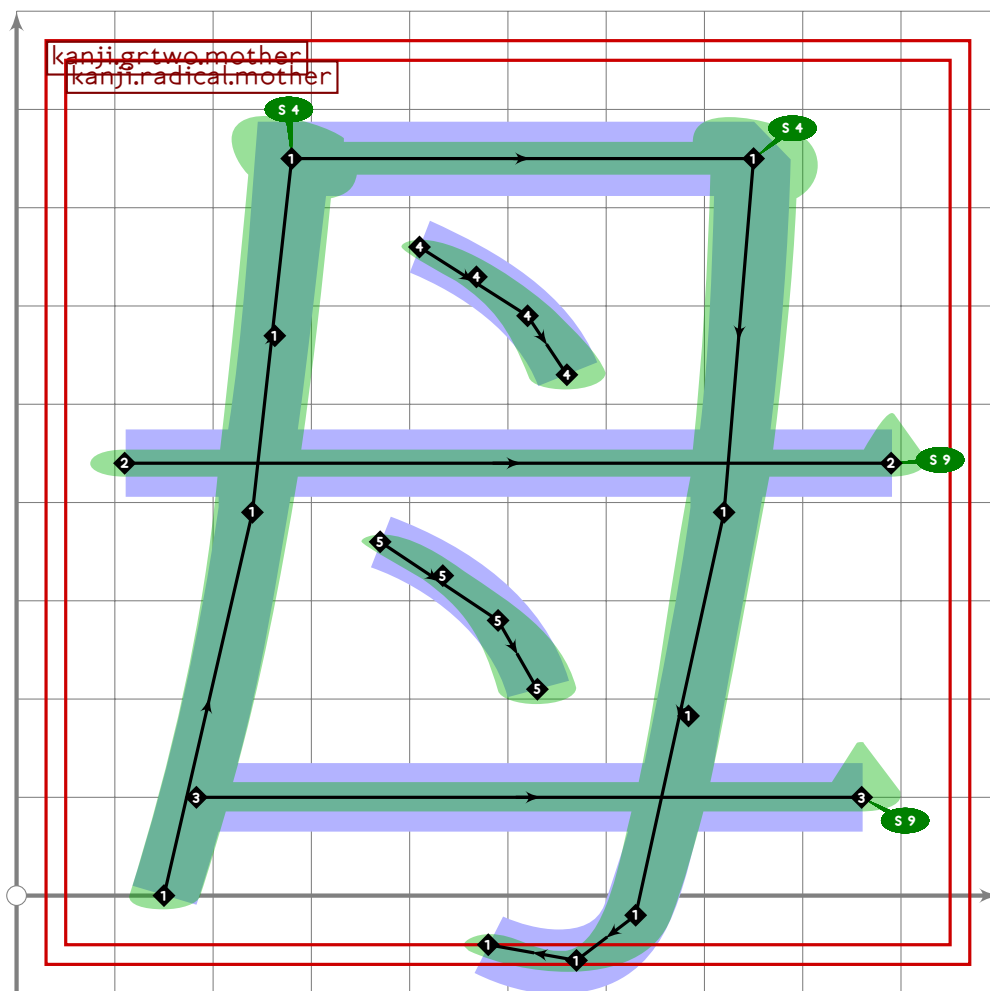
```

109 % hand radical
110 begintsuglyph("uni2E98";152);
111   tsu_xform(identity xscaled 0.5)(kanji.leftrad.hand);
112   tsu_render;
113 endtsuglyph;
114
115 % special form with straight left side
116 begintsuglyph("uni2E9D";157);
117   kanji.bottomrad.moon;
118   tsu_render;
119 endtsuglyph;
120

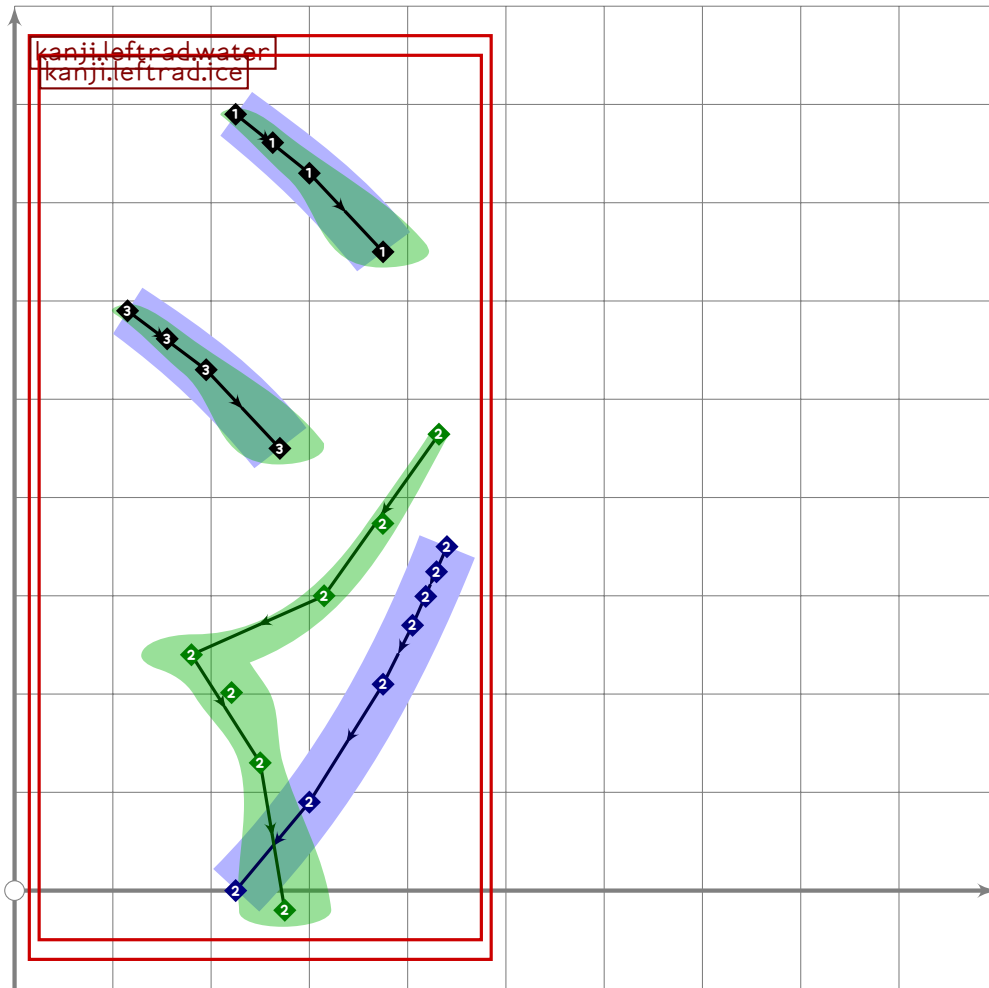
```

[see page 667]

U+2E9F
tsuku.uni2E9F



```
121 % bo/haha "mother"  
122 beginsuglyph("uni2E9F";159);  
123   kanji.grtwo.mother;  
124   tsu_render;  
125 endsuglyph;  
126
```

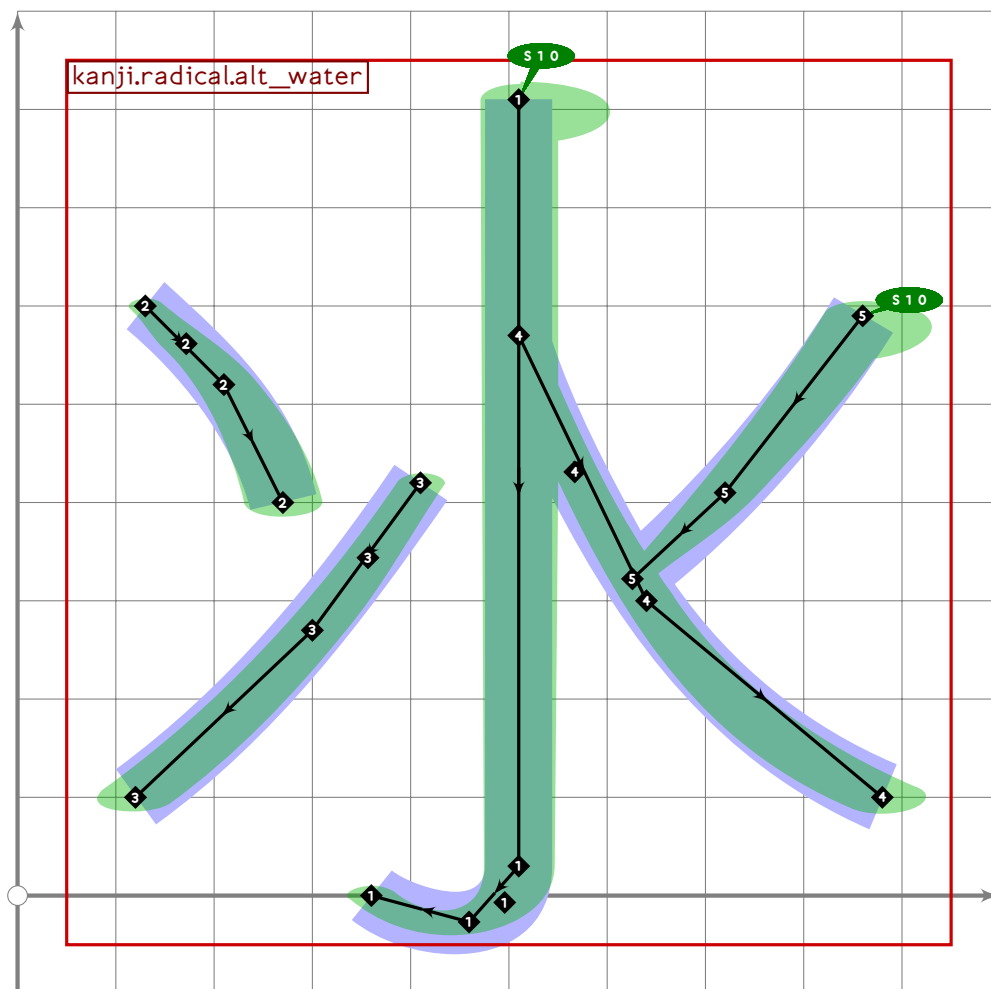


```

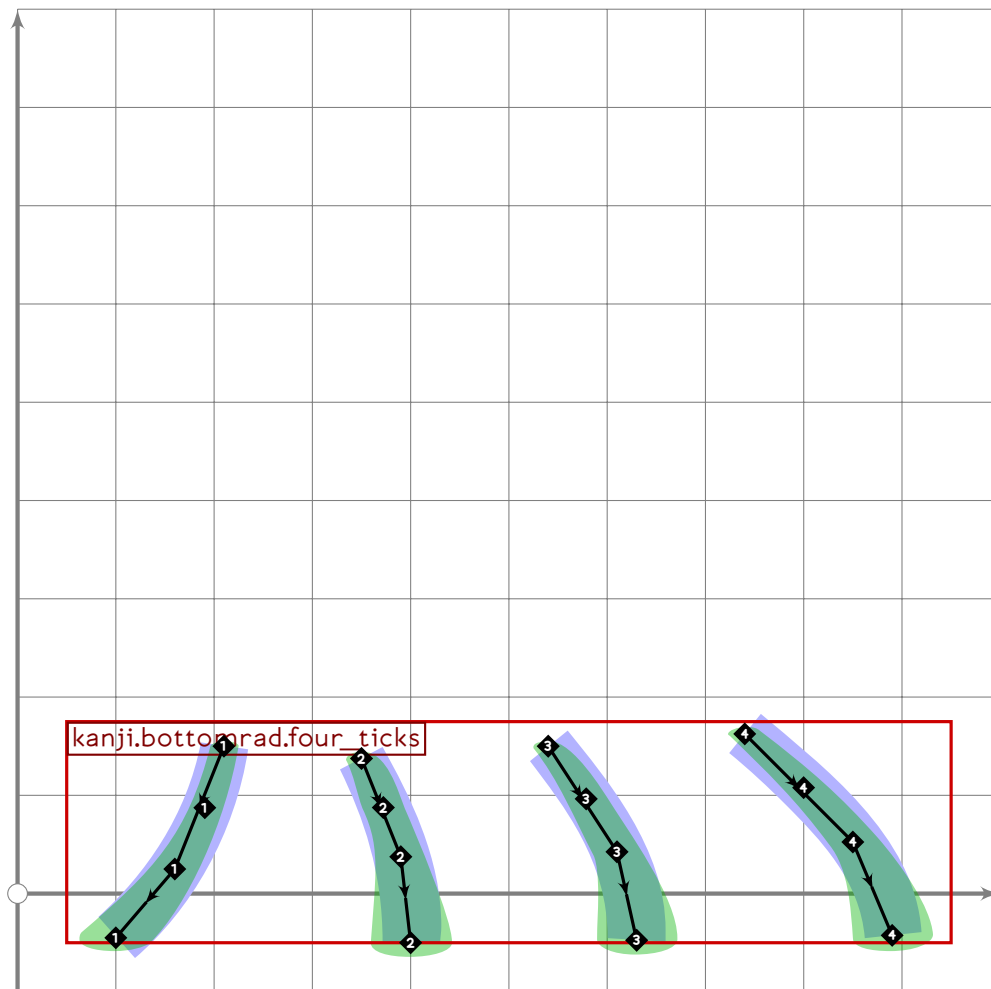
127 % extra "water side radical"
128 begintsuglyph("uni2EA1",161);
129   tsu_xform(identity xscaled 0.5)(kanji.leftrad.water);
130   tsu_render;
131 endtsuglyph;
132

```

U+2EA2
tsuku.uni2EA2



```
133 % water radical variant
134 begintsuglyph("uni2EA2";162);
135   kanji.radical.alt_water;
136   tsu_render;
137 endsuglyph;
138
```

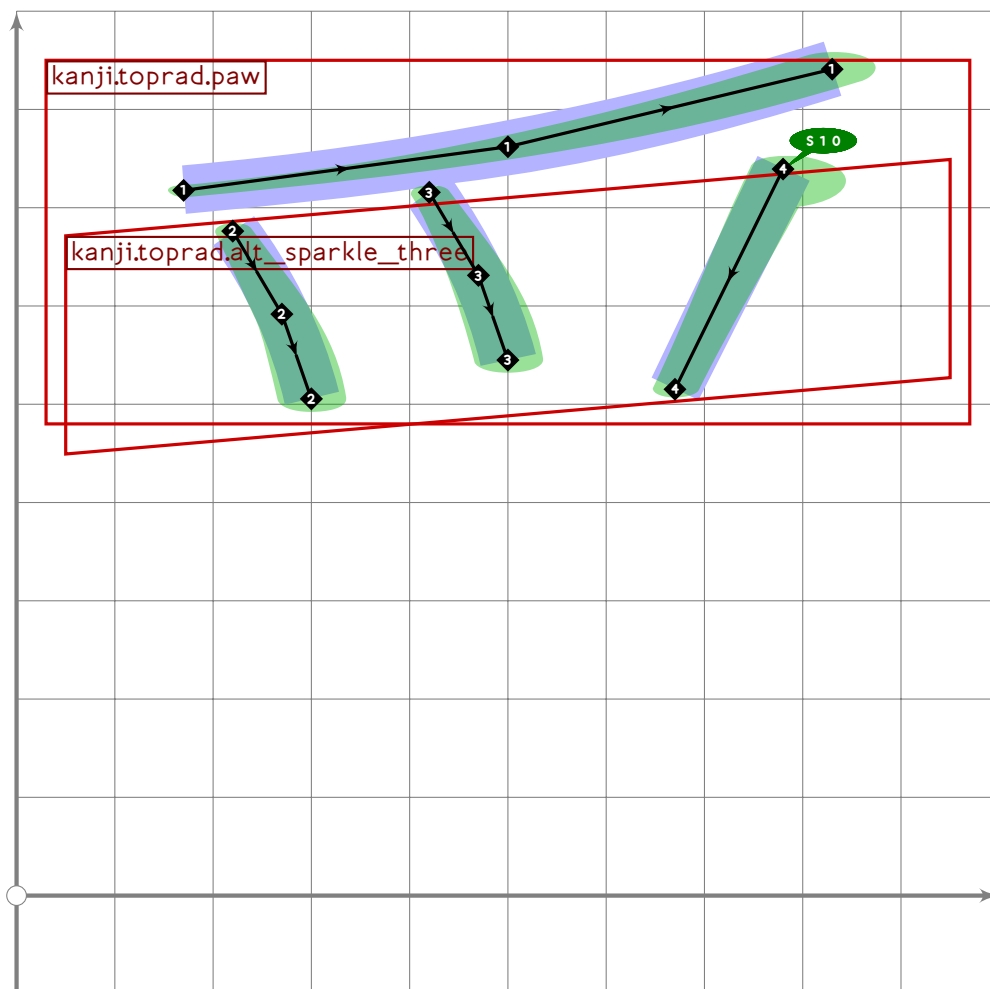



```

139 % Unicode calls it "fire"
140 begintsuglyph("uni2EA3",163);
141   build_kanji.tb(190,-30)
142   ()
143   (kanji.bottomrad.four_ticks);
144   tsu_render;
145 endtsuglyph;
146

```

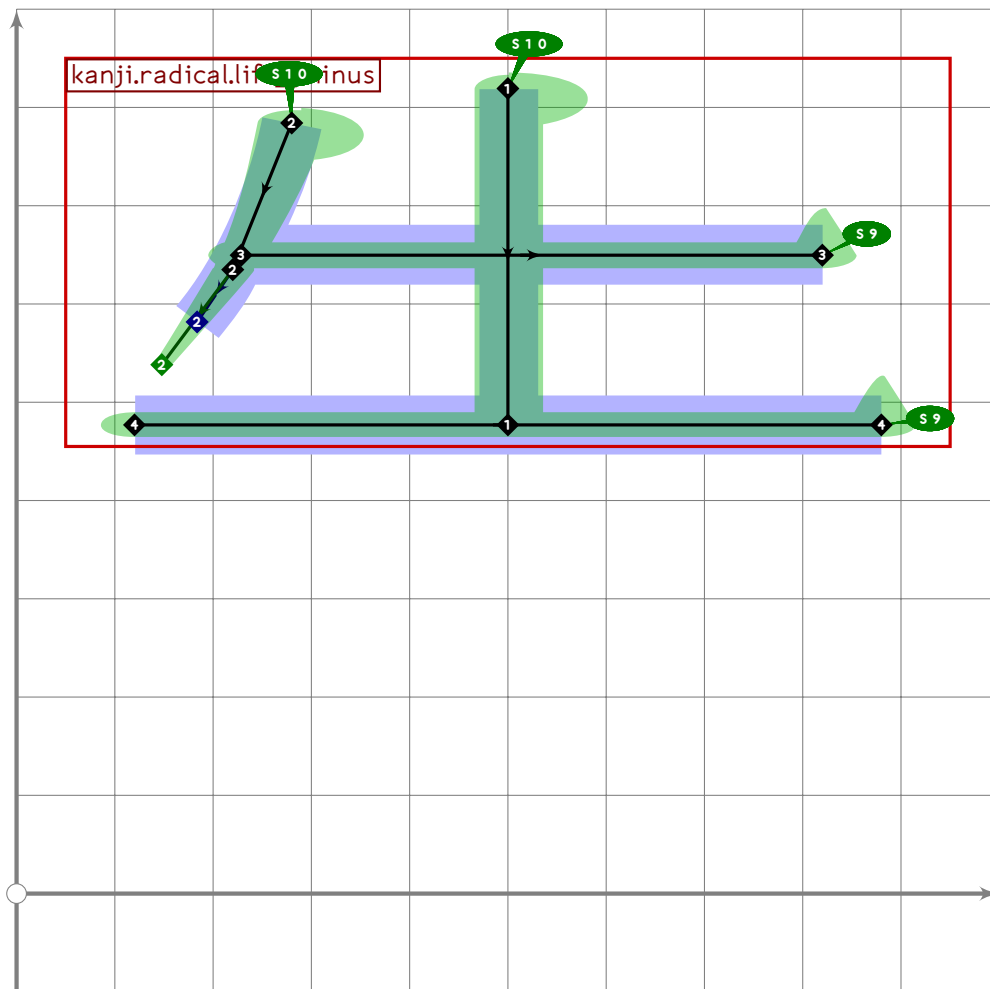
U+2EA4
tsuku.uni2EA4



```

147 % Unicode calls it "paw one"
148 begintsuglyph("uni2EA4",164);
149   build_kanji.tb(480,0)
150     (kanji.toprad.paw)
151   ();
152   tsu_render;
153 endtsuglyph;
154

```

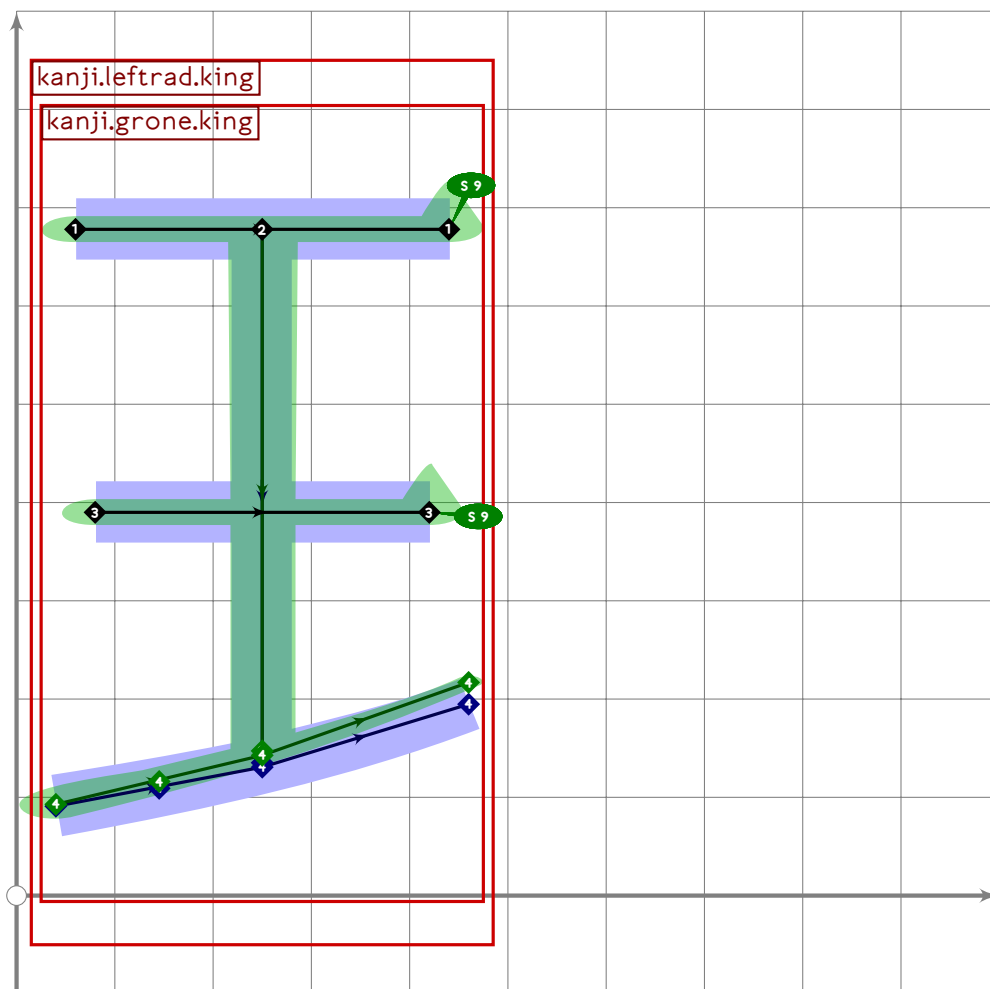


```

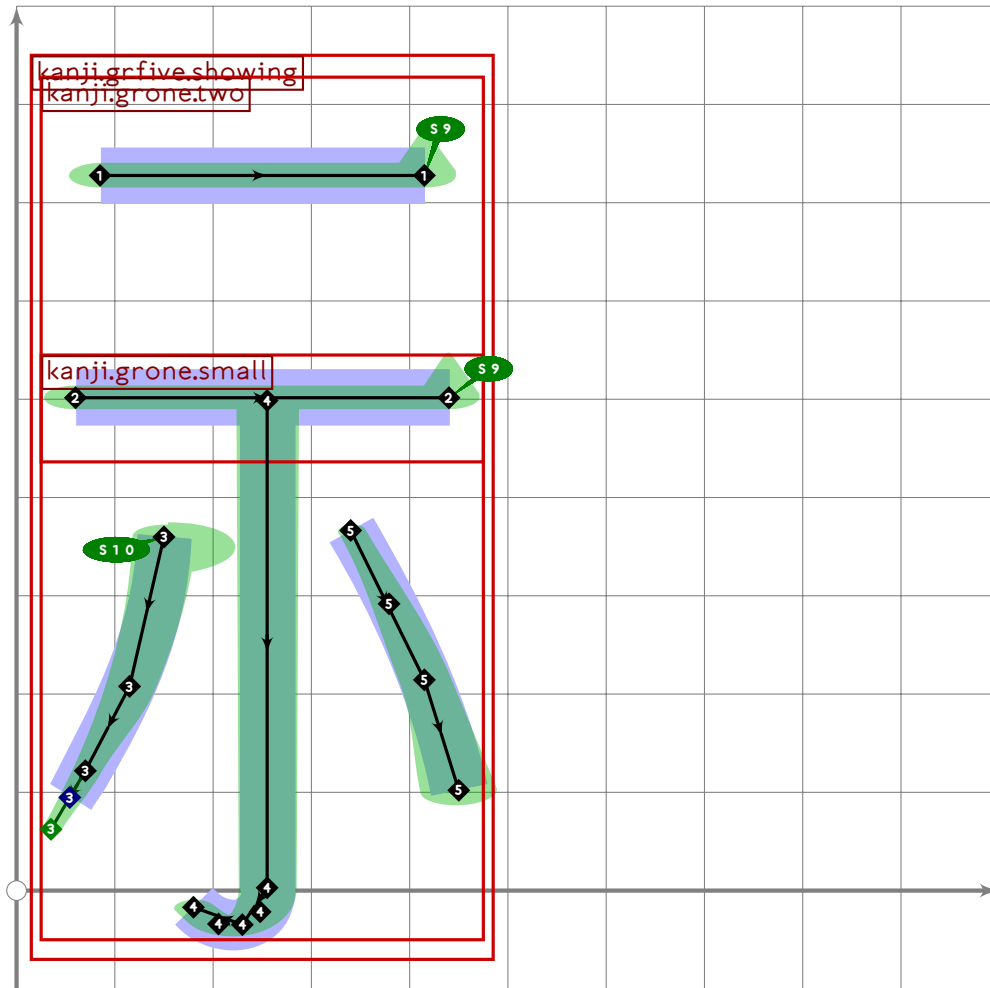
155 % Unicode calls it "cow"
156 begintsuglyph("uni2EA7",167);
157   build_kanji.tb(440,-30)
158     (kanji.radical.life_minus)
159   ();
160   tsu_render;
161 endtsuglyph;
162

```

U+2EA9
tsuku.uni2EA9



```
163 % Unicode calls it "jade"
164 begintsuglyph("uni2EA9";169);
165 tsu_xform(identity xscaled 0.5)(kanji.leftrad.king);
166 tsu_render;
167 endsuglyph;
168
```

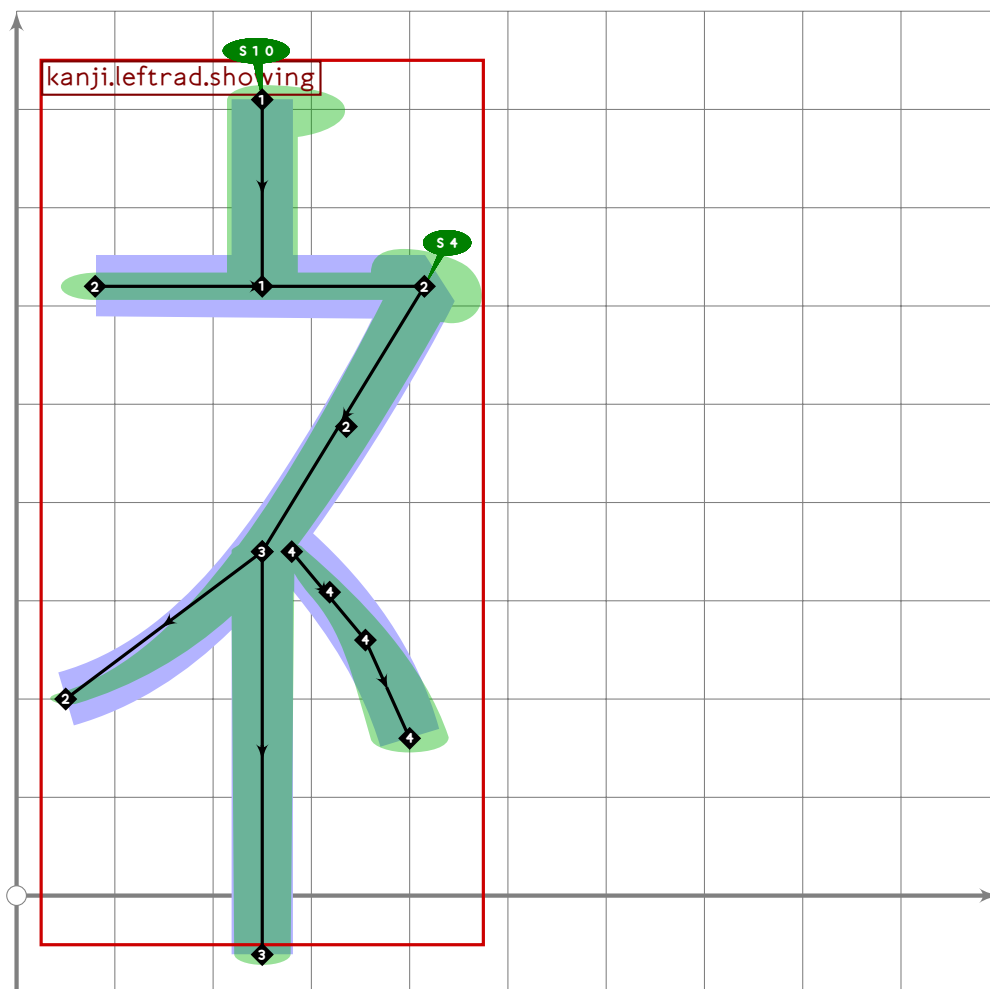


```

169 % Unicode calls it "spirit one"
170 begintsuglyph("uni2EAC",172);
171   tsu_xform(identity xscaled 0.5)(kanji.grfive.showing);
172   tsu_render;
173 endsuglyph;
174

```

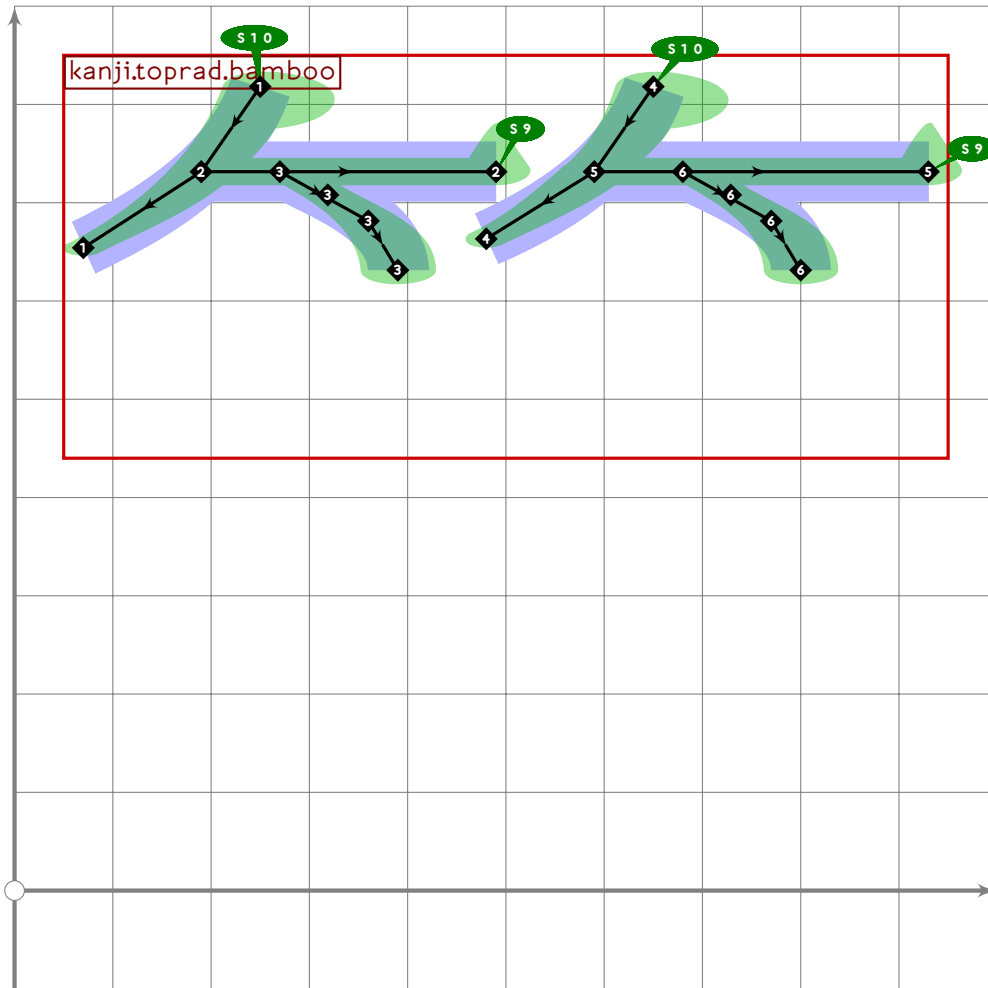
U+2EAD
tsuku.uni2EAD



```

175 % Unicode calls it "spirit two"
176 begintsuglyph("uni2EAD",173);
177   tsu_xform(identity xscaled 0.5)(kanji.leftrad.showing);
178   tsu_render;
179 endtsuglyph;
180

```

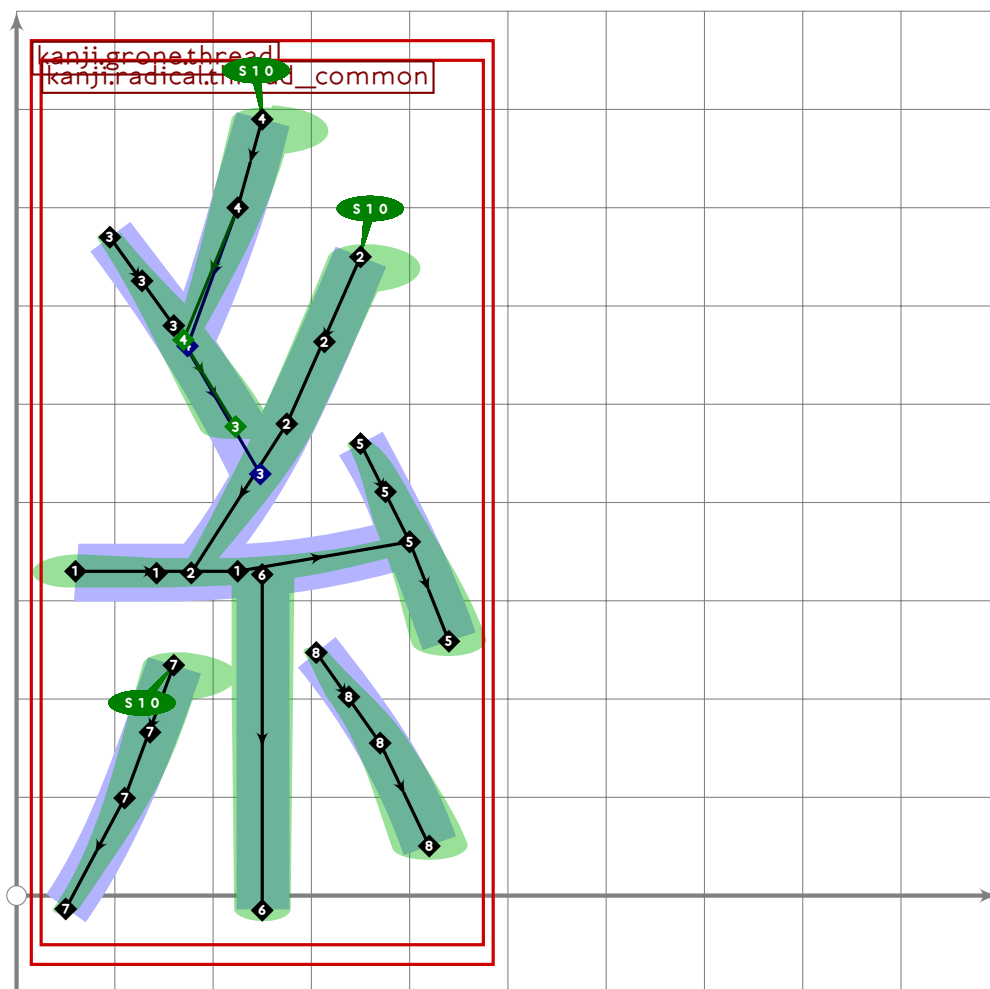


```

181 % "bamboo" top radical
182 begintsuglyph("uni2EAE";174);
183   build_kanji.tb(540,200)
184     (kanji.toprad.bamboo)
185   ();
186   tsu_render;
187 endtsuglyph;
188

```

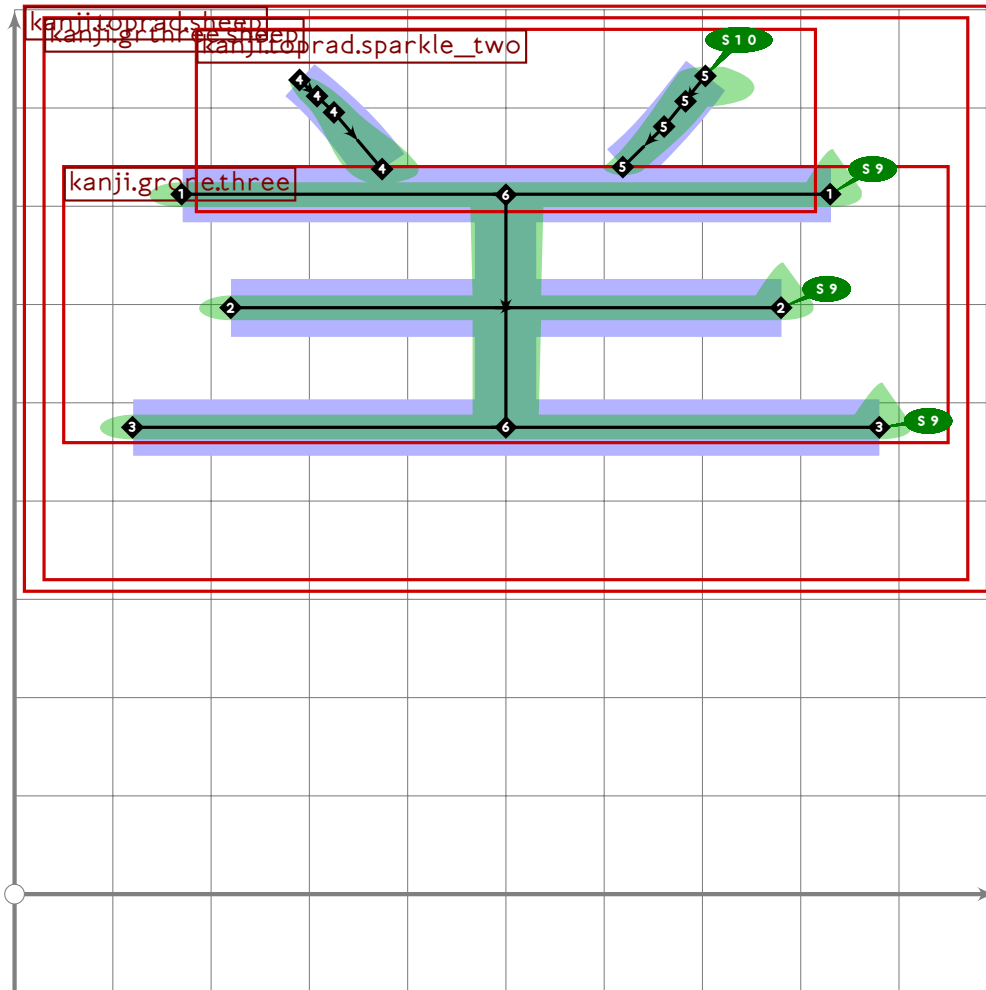
U+2EAF
tsuku.uni2EAF



```

189 % Unicode calls it "silk"
190 begintsuglyph("uni2EAF",175);
191   tsu_xform(identity xscaled 0.5)
192     (build_kanji.lift_skirt(300,60)(kanji.grone.thread));
193   tsu_render;
194 endtsuglyph;
195

```

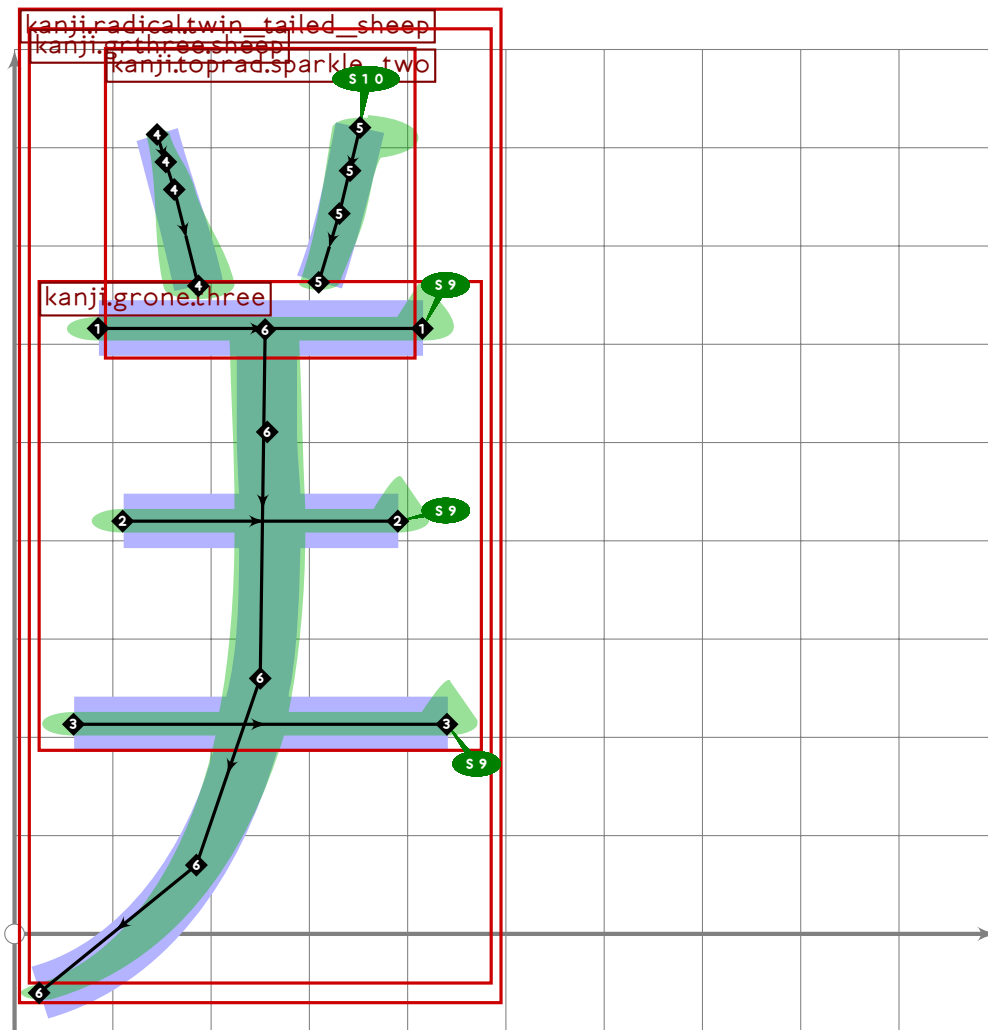



```

196 % "sheep" (ram) top radical
197 begintsuglyph("uni2EB7",183);
198   build_kanji.tb(420,200)
199     (kanji.toprad.sheep)
200   ();
201   tsu_render;
202 endtsuglyph;
203

```

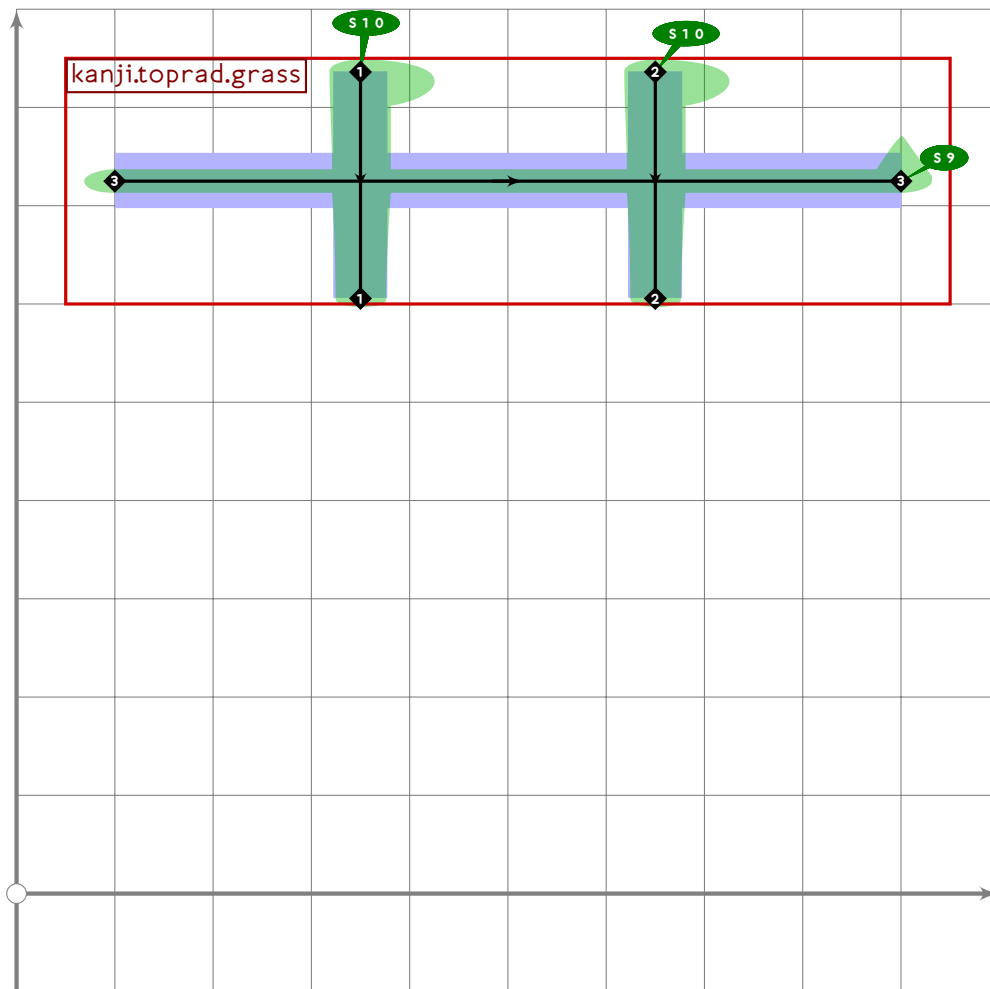
U+2EB8
tsuku.uni2EB8



```

204 % "sheep" left-side radical
205 begintsuglyph("uni2EB8",184);
206   tsu_xform(identity xscaled 0.5)
207     (kanji.radical.twin_tailed_sheep;
208       pop_stroke);
209   tsu_render;
210 endtsuglyph;
211

```

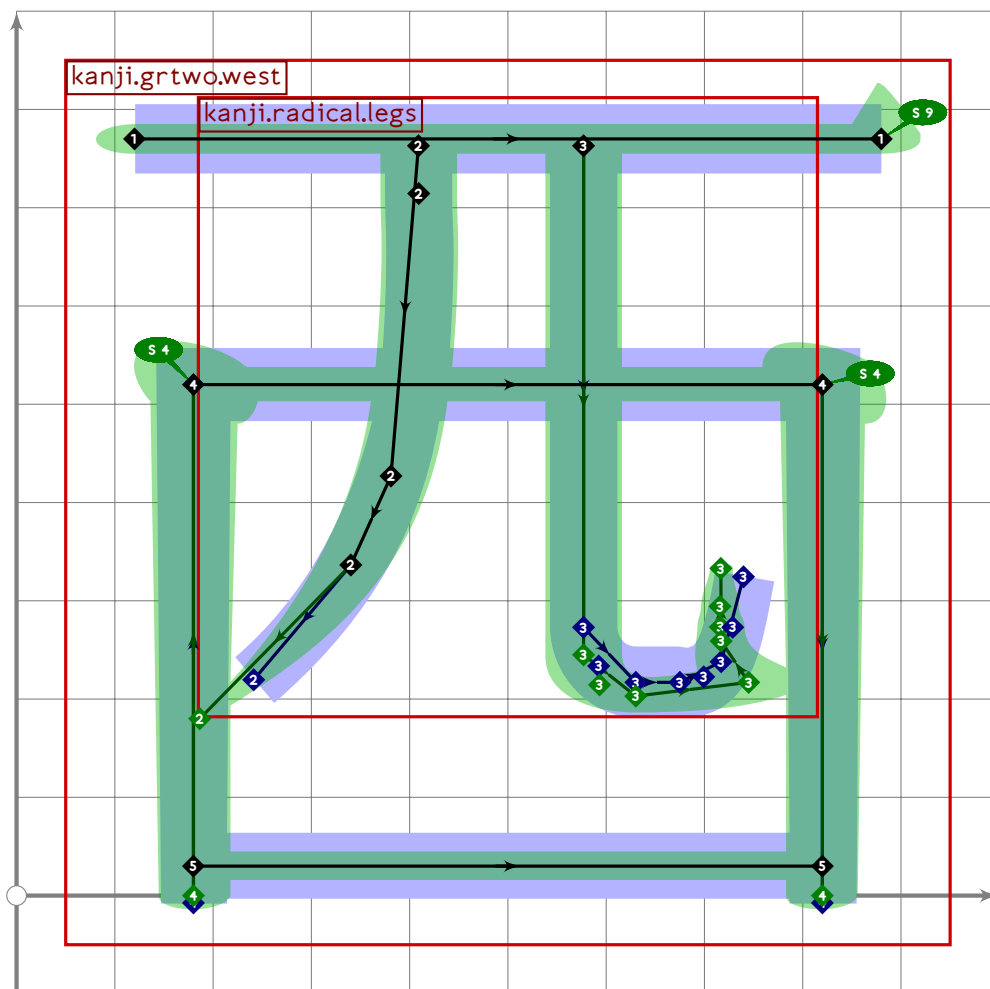


```

212 % Japanese form of "grass" top radical
213 begintsuglyph("uni2EBE";190);
214   build_kanji.tb(600,0)
215     (kanji.toprad.grass)
216   ();
217   tsu_render;
218 endtsuglyph;
219

```

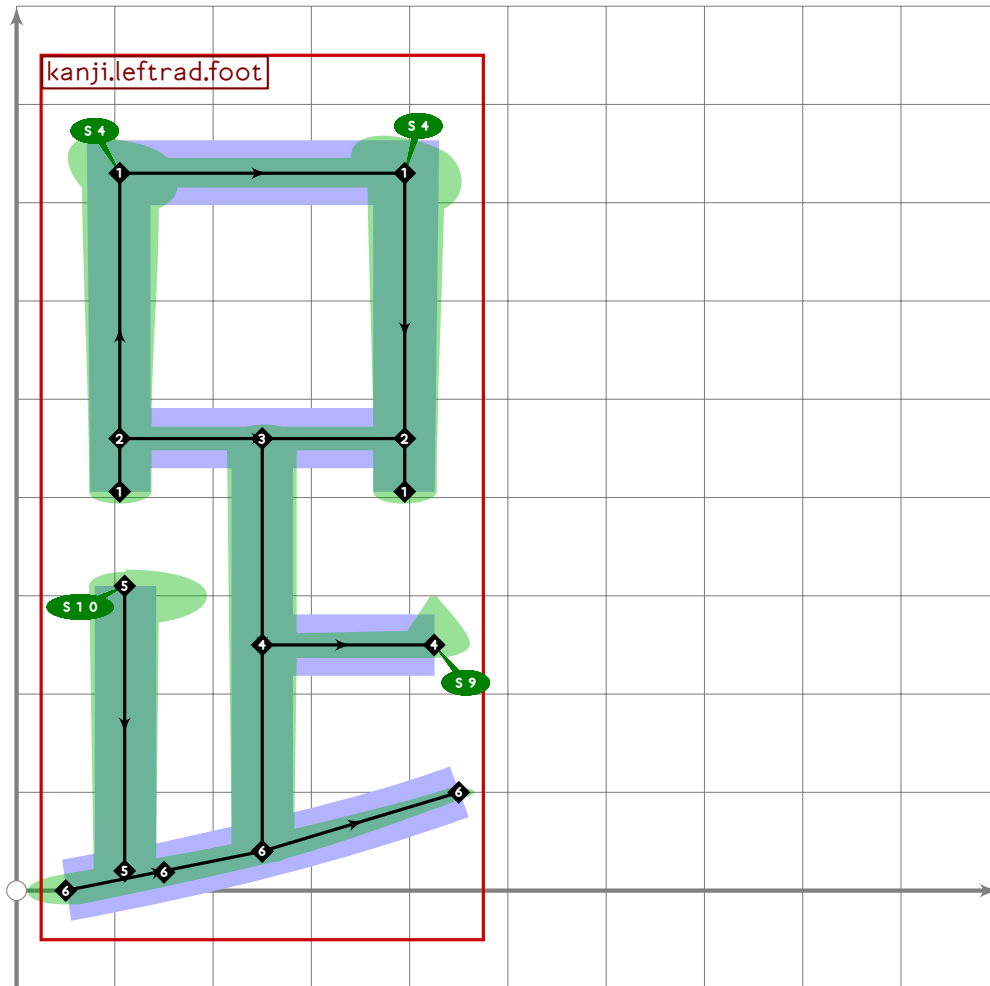
U+2EC4
tsuku.uni2EC4



```

220 % sai/nishi "West" or "Spain"
221 begintuglyph("uni2EC4";196);
222   kanji.grtwo.west;
223   tsu_render;
224 endtuglyph;
225

```

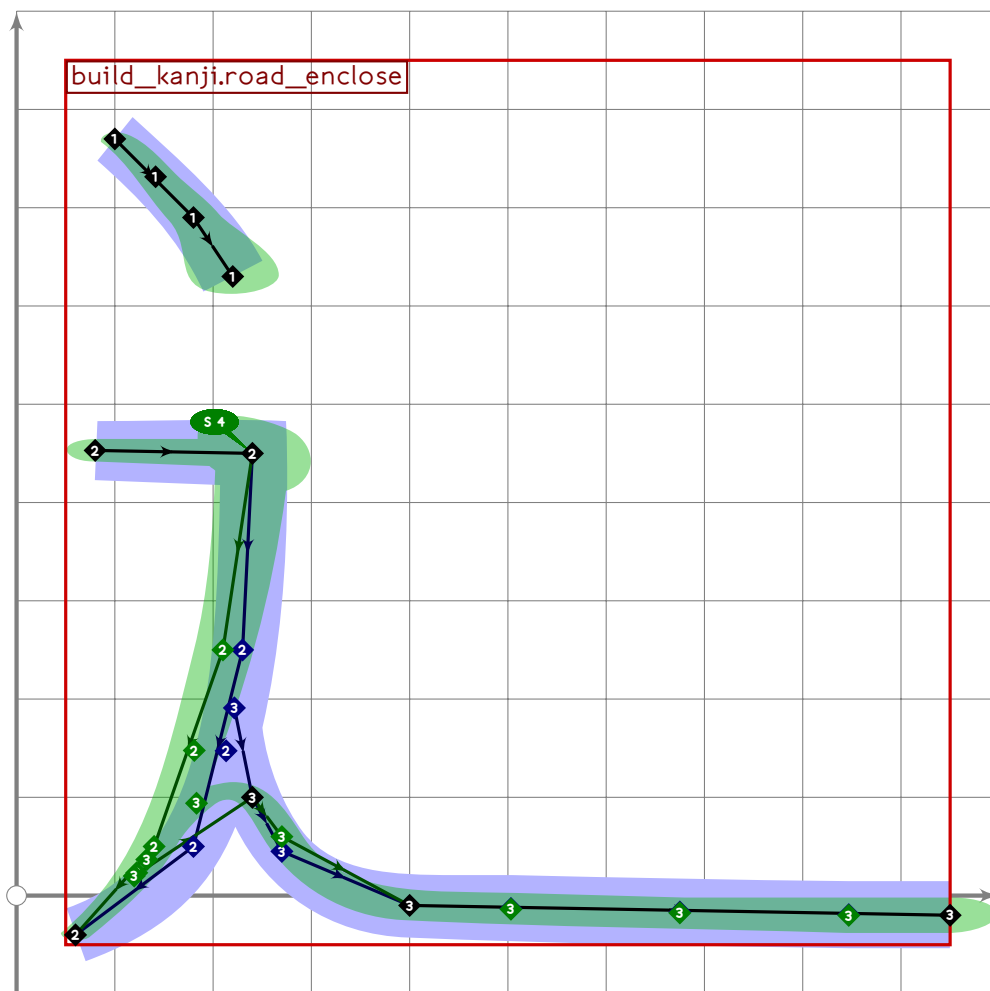


```

226 % foot radical
227 begintsuglyph("uni2ECA";202);
228   tsu_xform(identity xscaled 0.5)(kanji.leftrad.foot);
229   tsu_render;
230 endtsuglyph;
231

```

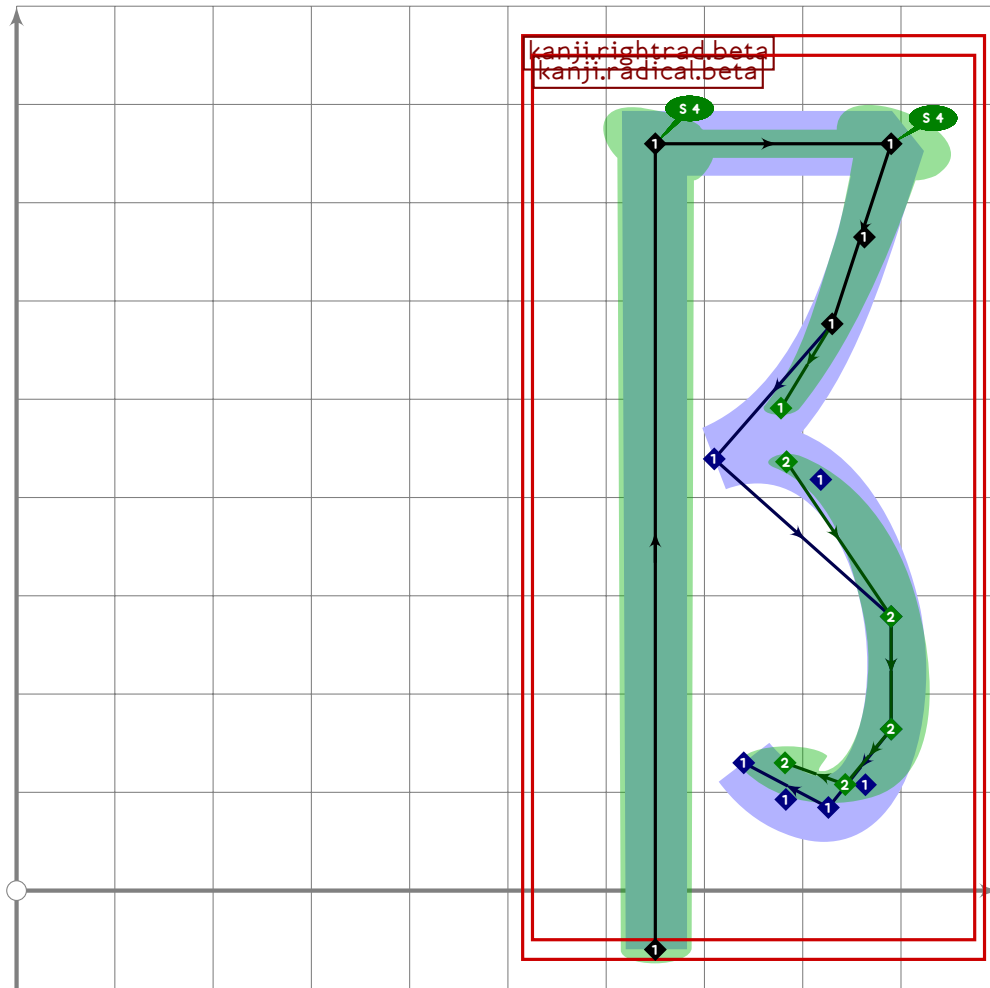
U+2ECC
tsuku.uni2ECC



```

232 % Unicode calls it "simplified walk"
233 begintsuglyph("uni2ECC";204);
234   build_kanji.road_enclose();
235   tsu_render;
236 endtsuglyph;
237

```

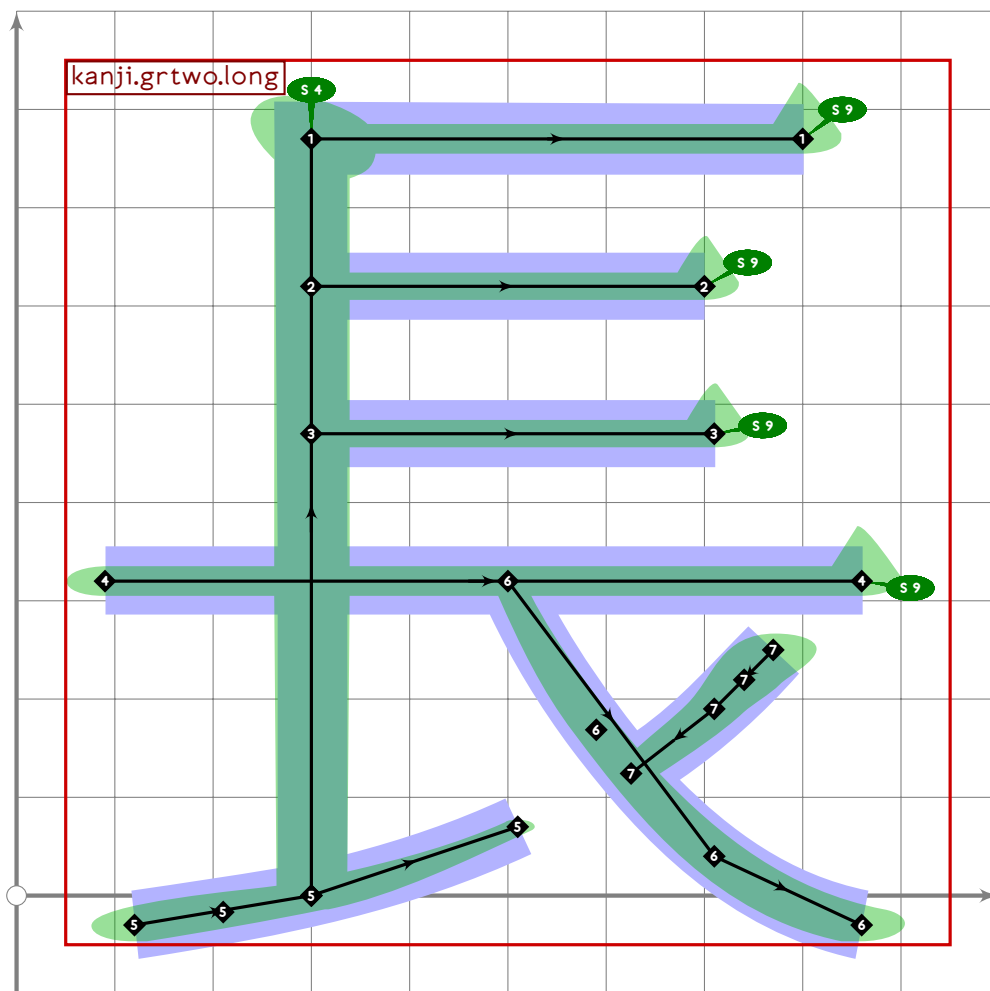


```

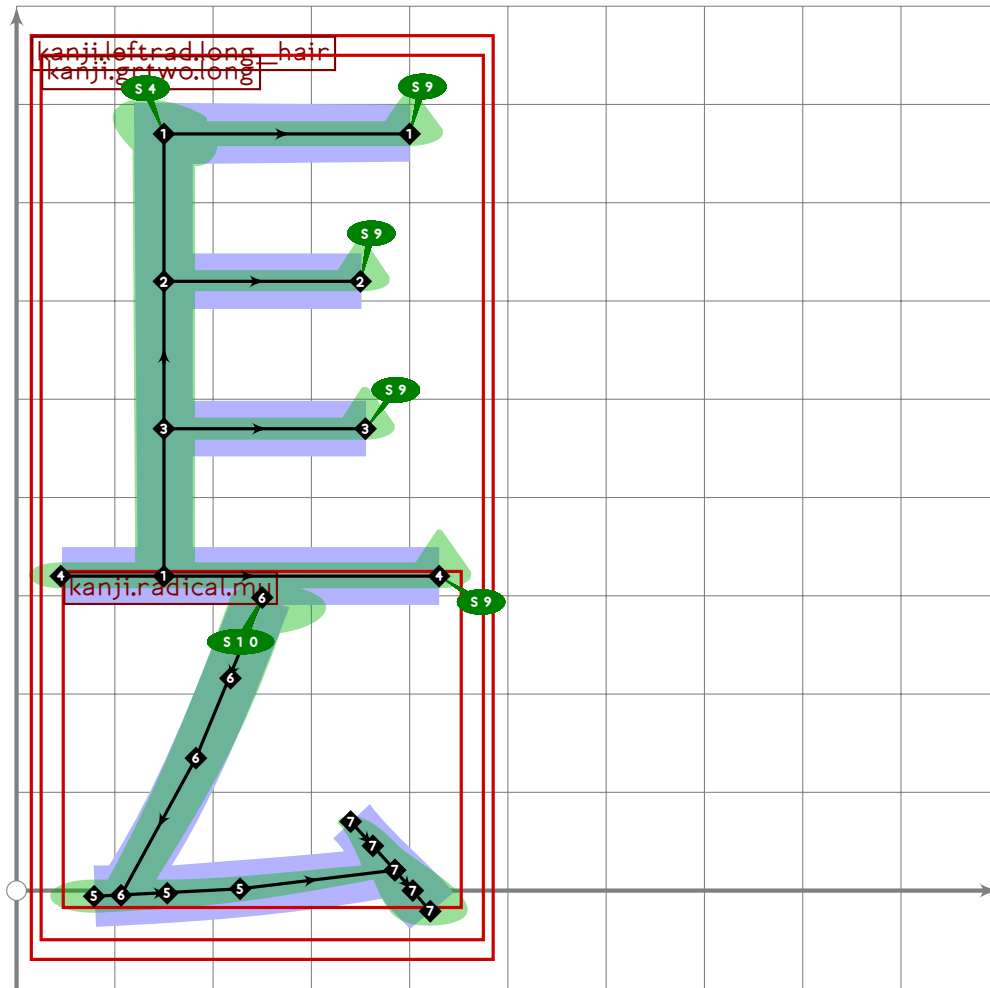
238 % Unicode calls it "city"
239 begint Suglyph("uni2ECF";207);
240   tsu_xform(identity xscaled 0.5 shifted (500,0))
241     (kanji.rightrad.beta);
242   tsu_render;
243 endtsuglyph;
244

```

U+2ED1
tsuku.uni2ED1



```
245 % chou/naga "long"  
246 begintsuglyph("uni2ED1";209);  
247   kanji.grtwo.long;  
248   tsu_render;  
249 endtsuglyph;  
250
```

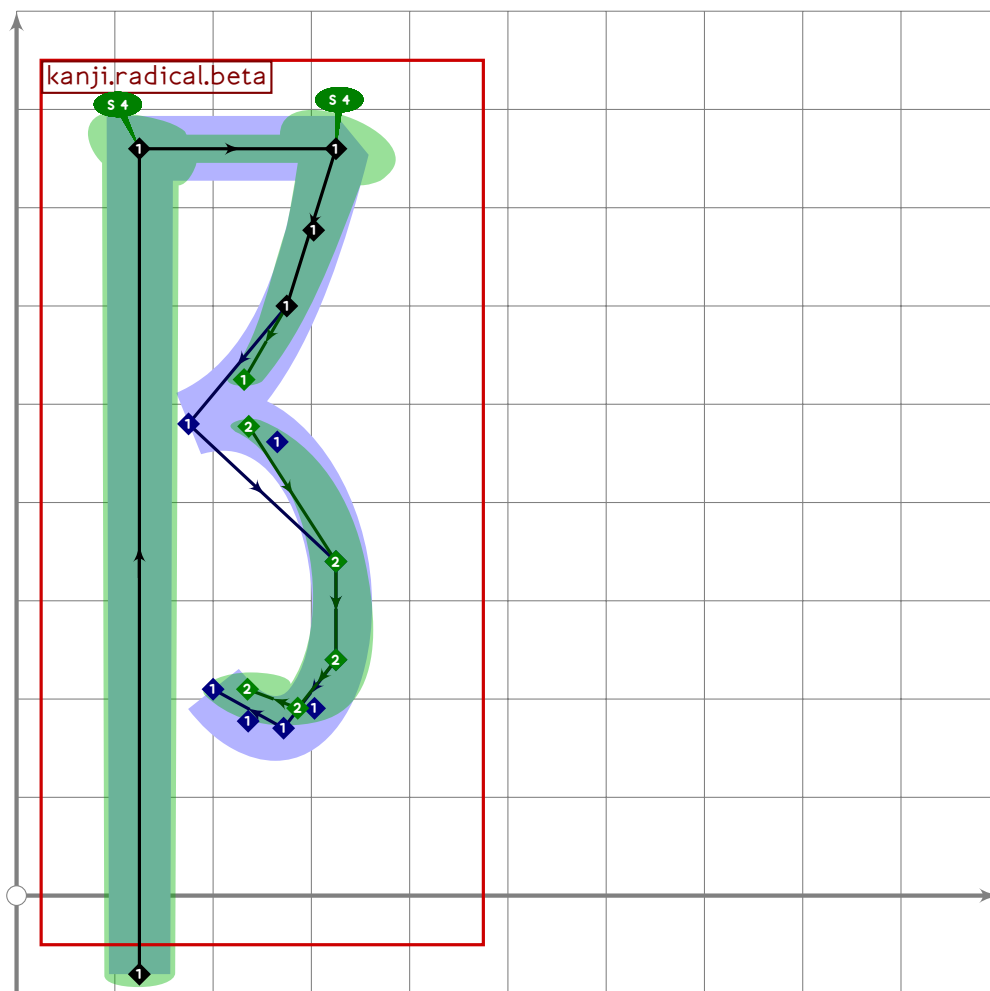



```

251 % Unicode calls it "long two"
252 begintsuglyph("uni2ED2";210);
253   tsu_xform(identity xscaled 0.5)(kanji.leftrad.long_hair);
254   tsu_render;
255 endtsuglyph;
256

```

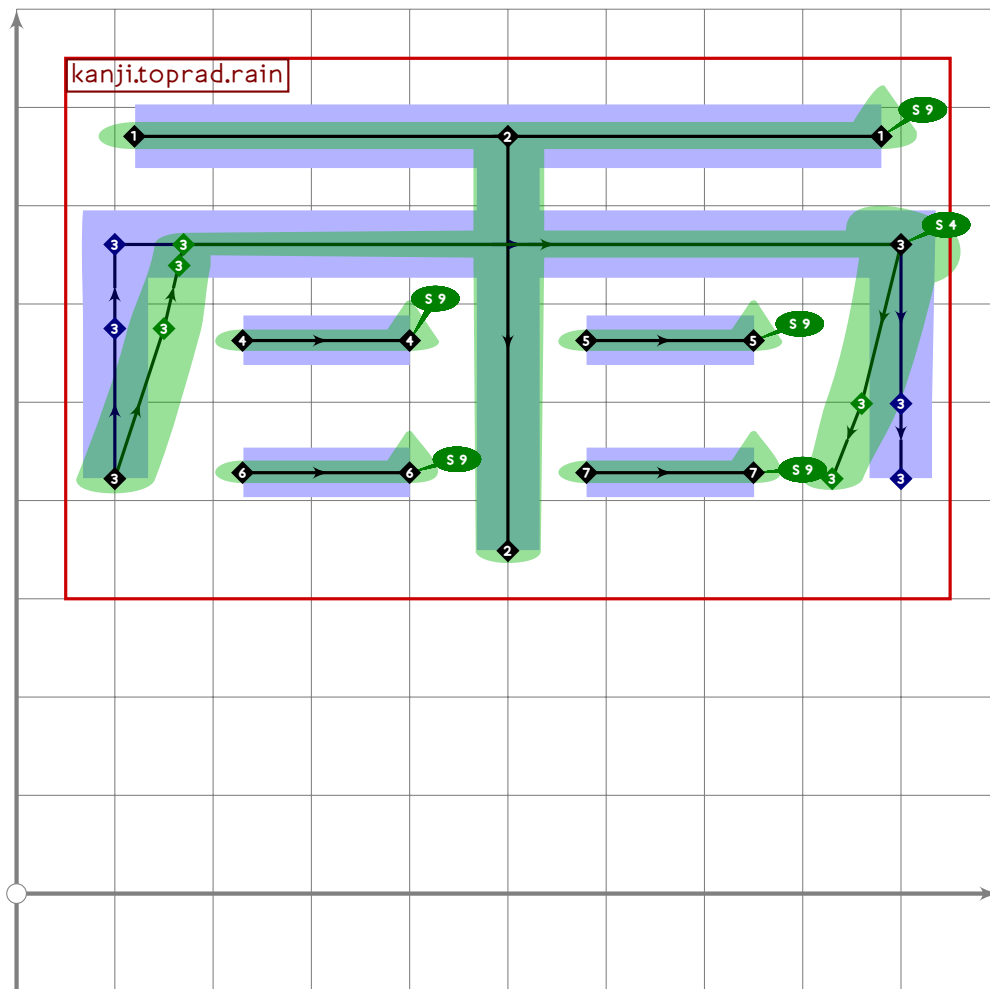
U+2ED6
tsuku.uni2ED6



```

257 % Unicode calls it "mound two"
258 begintsuglyph("uni2ED6";214);
259   tsu_xform(identity xscaled 0.5)
260     (kanji.radical.beta);
261   tsu_render;
262 endtsuglyph;
263

```

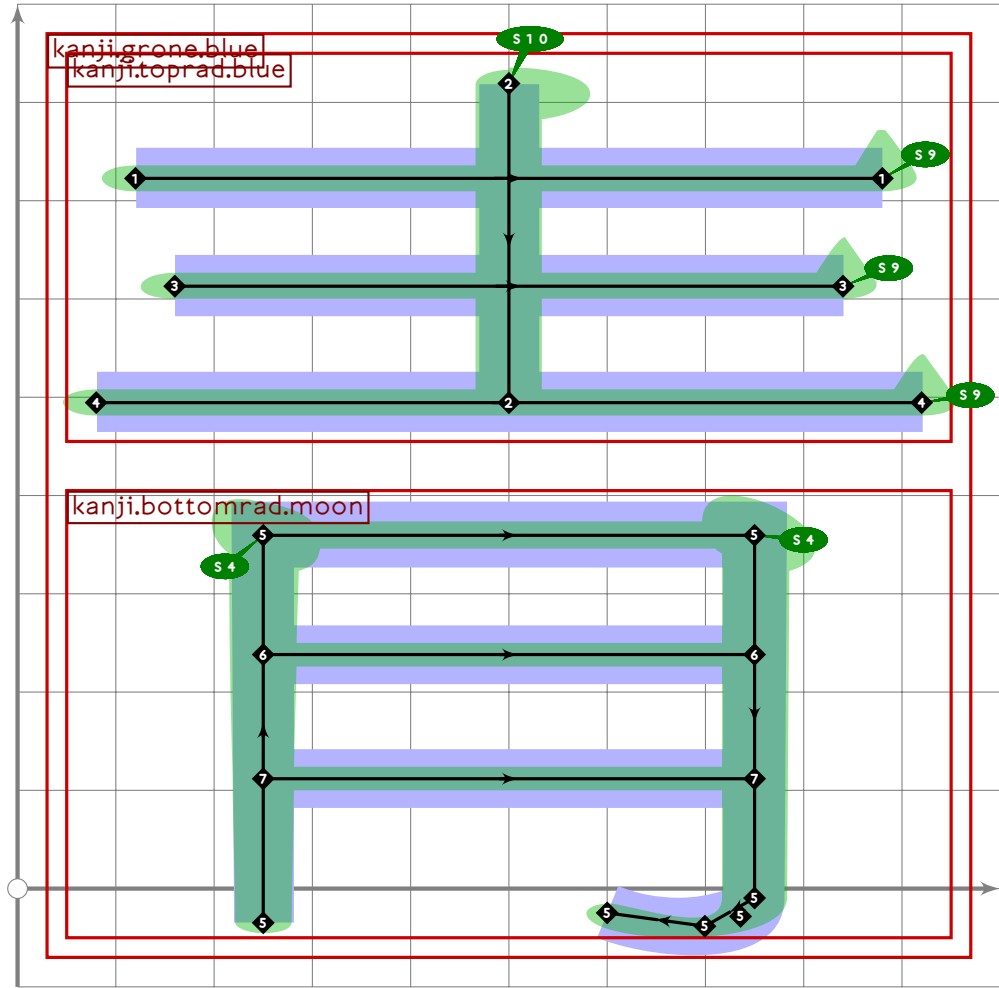


```

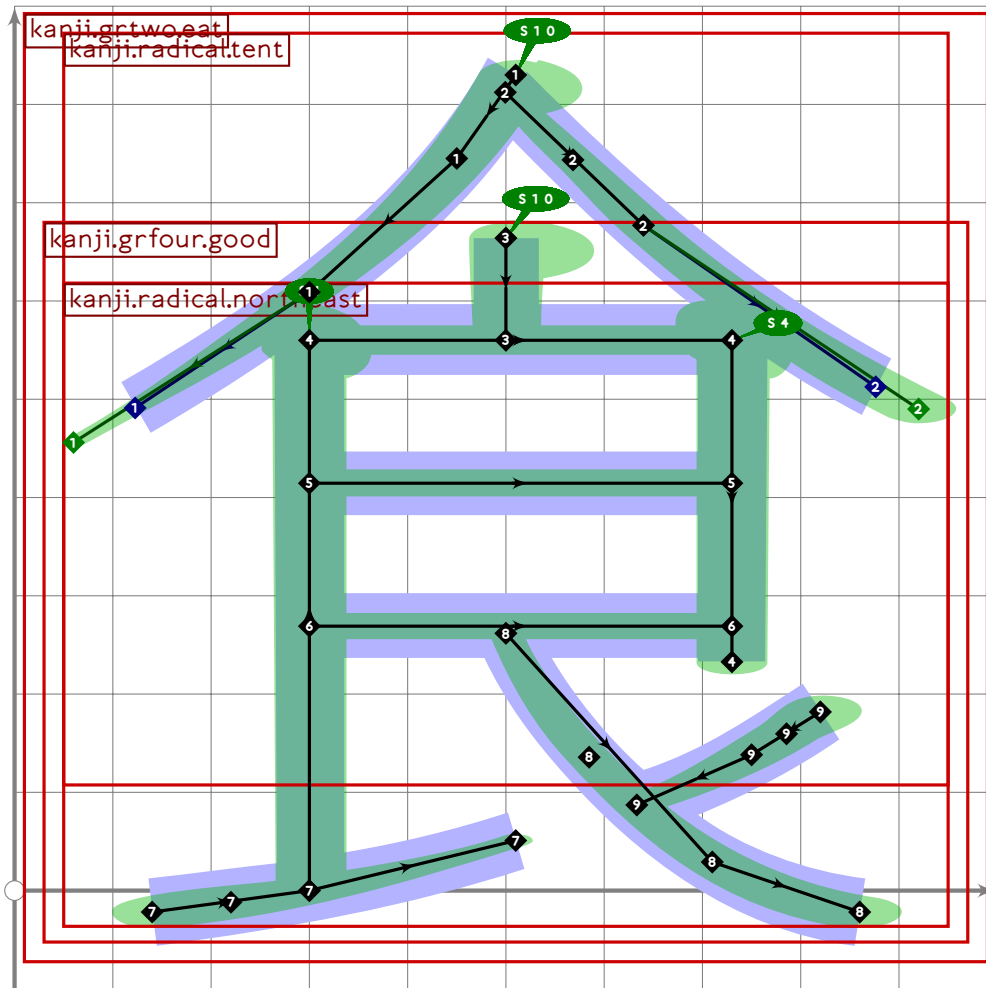
264 % "rain" top radical
265 begintsuglyph("uni2ED7";215);
266   build_kanji.tb(300,0)
267     (kanji.toprad.rain)
268   ();
269   tsu_render;
270 endtsuglyph;
271

```

U+2ED8
tsuku.uni2ED8



```
272 % ao "blue"  
273 begintsuglyph("uni2ED8";216);  
274   kanji.grone.blue;  
275   tsu_render;  
276 endtsuglyph;  
277
```

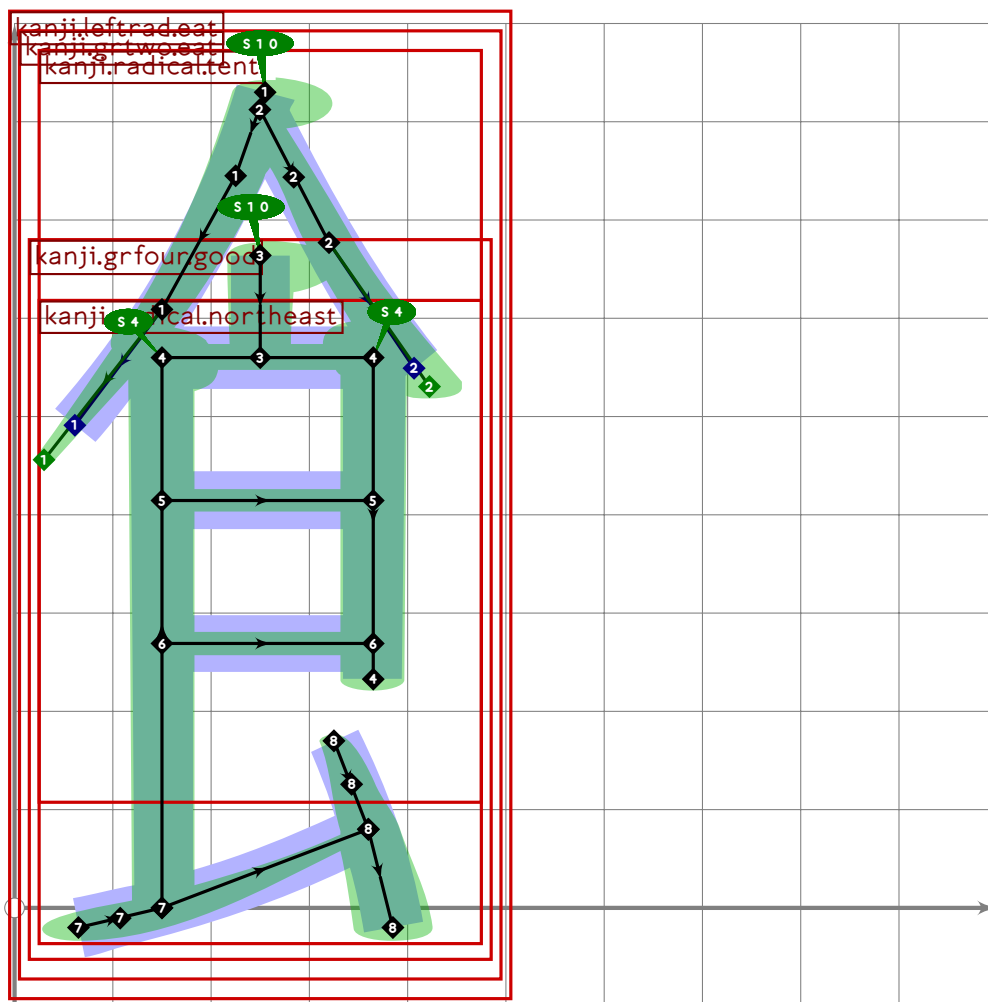


```

278 % shoku/ta "eat"
279 begintsuglyph("uni2EDD",221);
280   kanji.grtwo.eat;
281   tsu_render;
282 endtsuglyph;
283

```

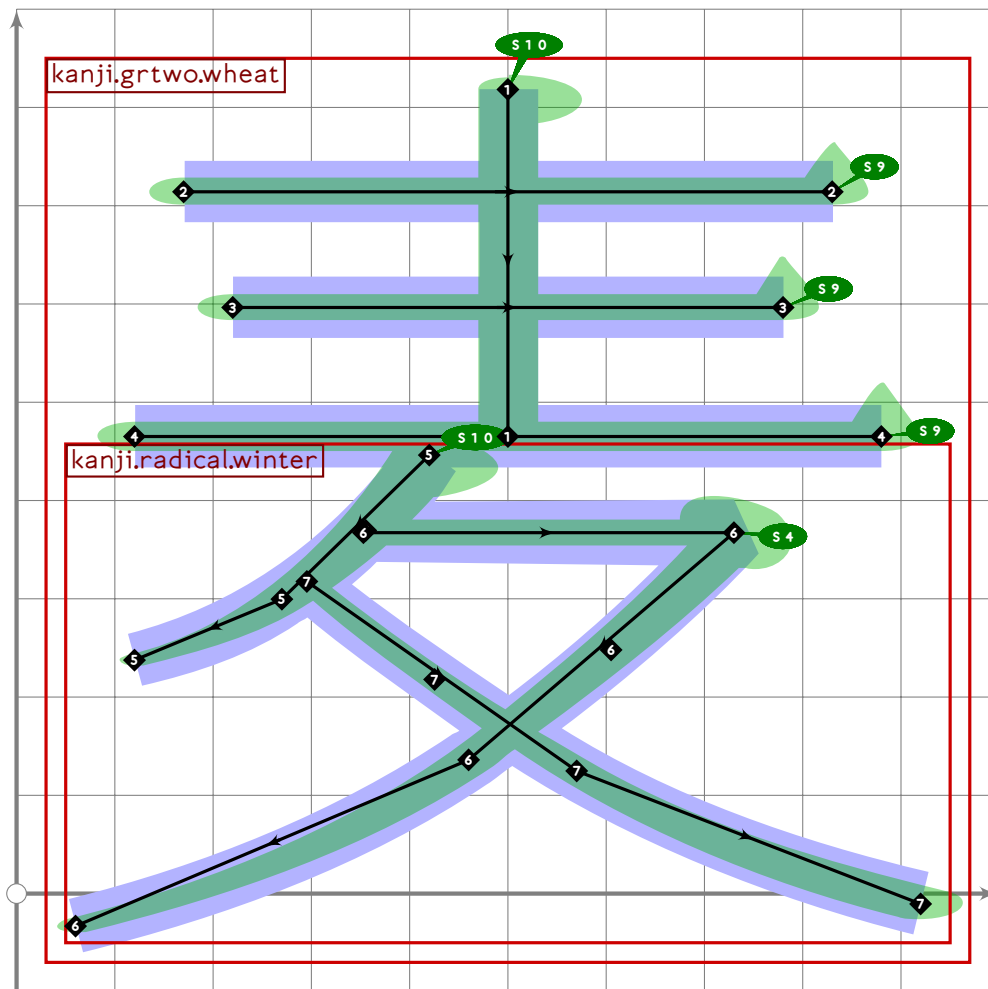
U+2EDF
tsuku.uni2EDF



```

284 % simplified "eat" for use as radical
285 begintsuglyph("uni2EDF";223);
286 tsu_xform(identity xscaled 0.5)(kanji.leftrad.eat);
287 tsu_render;
288 endtsuglyph;
289

```

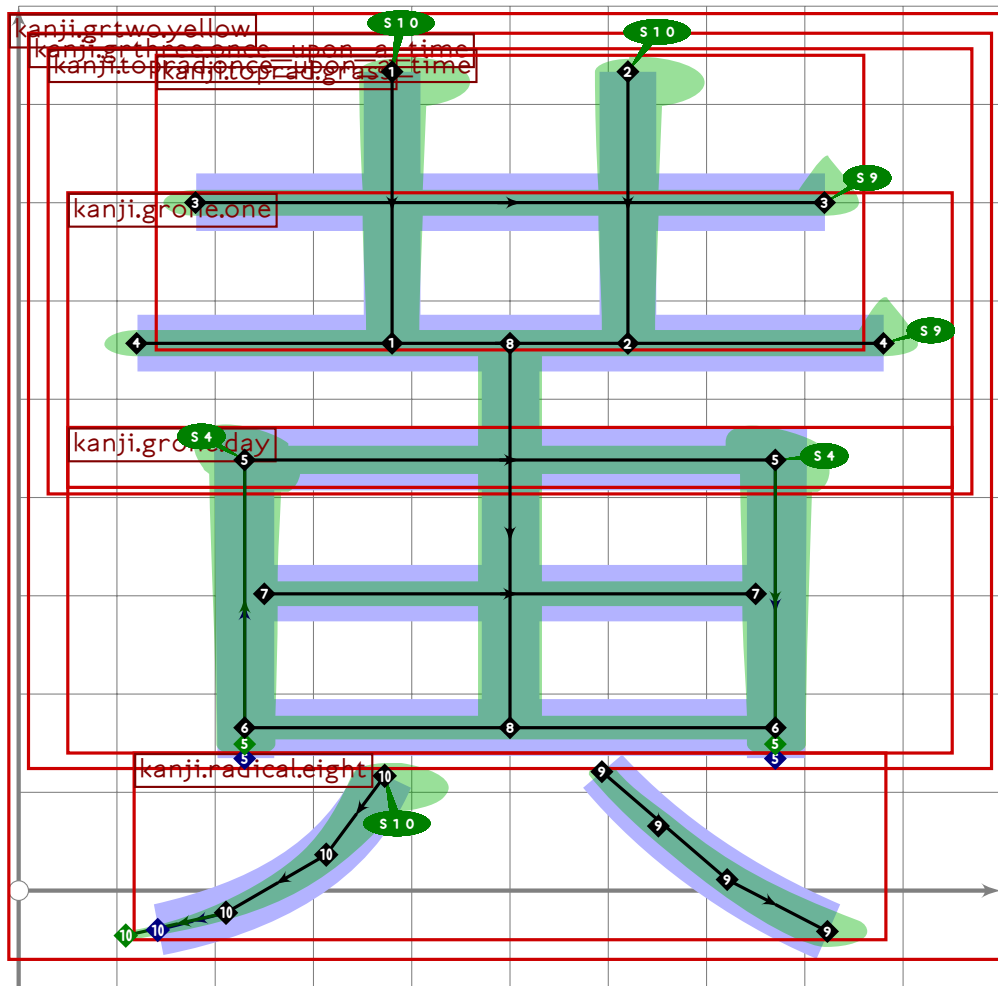


```

290 % baku/mugi "wheat"
291 begintsuglyph("uni2EE8",232);
292   kanji.grtwo.wheat;
293   tsu_render;
294 endtsuglyph;
295

```

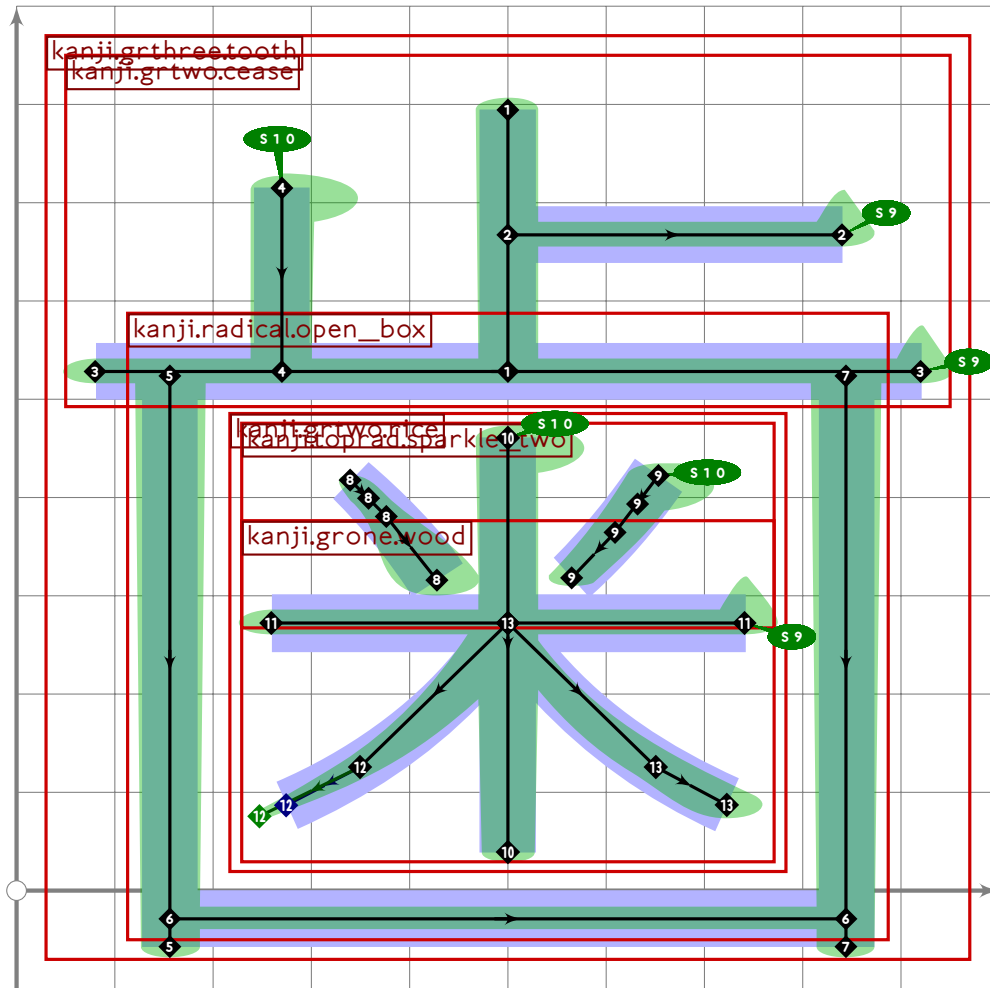
U+2EE9
tsuku.uni2EE9



```

296 % kou/ki "yellow"
297 begintsuglyph("uni2EE9";233);
298   kanji.grtwo.yellow;
299   tsu_render;
300 endtsuglyph;
301

```

```

302 % shi/ha "tooth"
303 begintsuglyph("uni2EED";237);
304   kanji.grthree.tooth;
305   tsu_render;
306 endtsuglyph;
307
308
309
310 endfont;
311
312

```

tsuku-2f.mp

```
1 %
2 % Unicode page 2F (Radicals and IDCs) for Tsukurimashou
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 

---


32
33 beginfont
34
35 % AUTODEPS
36 input bottomrad.mp;
37 input buildkanji.mp;
38 input gradeeight.mp;
39 input gradefive.mp;
40 input gradefour.mp;
41 input gradenine.mp;
42 input gradeone.mp;
43 input gradesix.mp;
44 input gradethree.mp;
45 input gradetwo.mp;
46 input leftrad.mp;
47 input radical.mp;
48 input rightrad.mp;
49 input toprad.mp;
50
51 do_late_includes;
52
53 

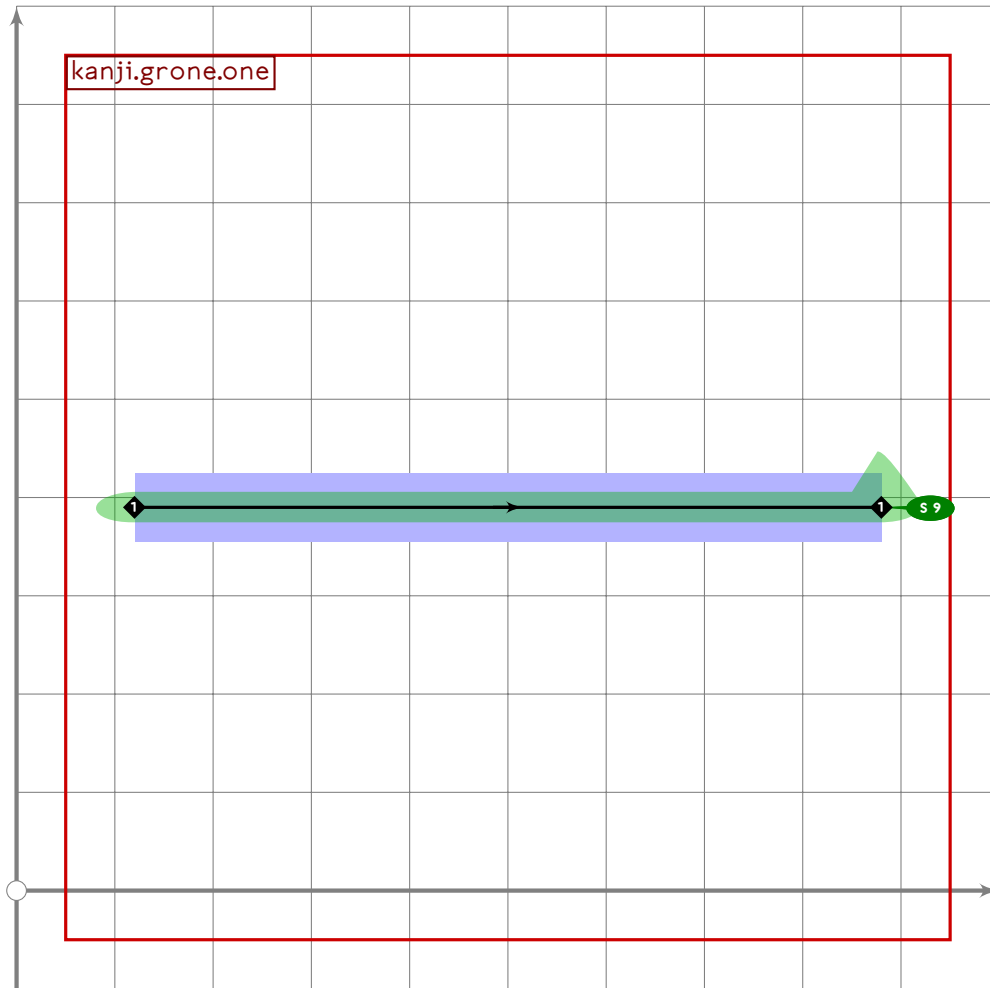
---


54
```

Kangxi Radicals

2F

```
55 % KANGXI RADICALS
56
```

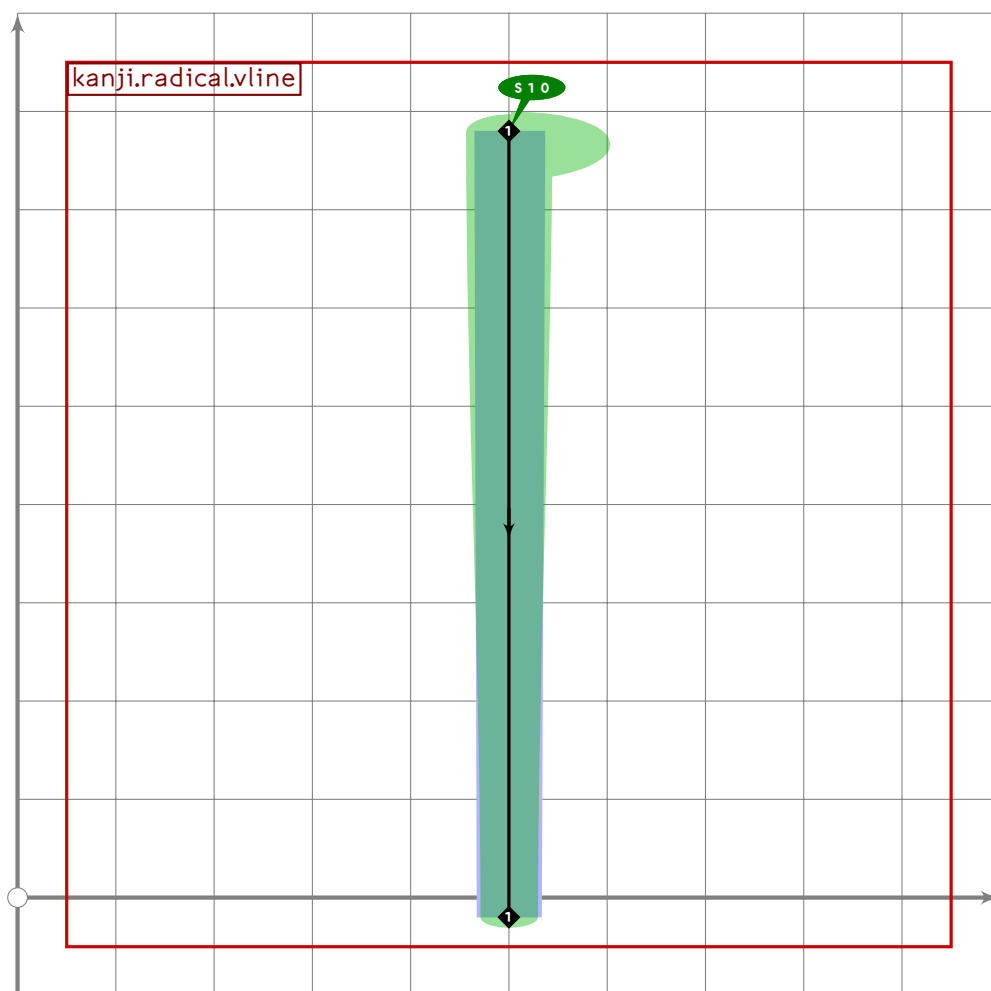


```

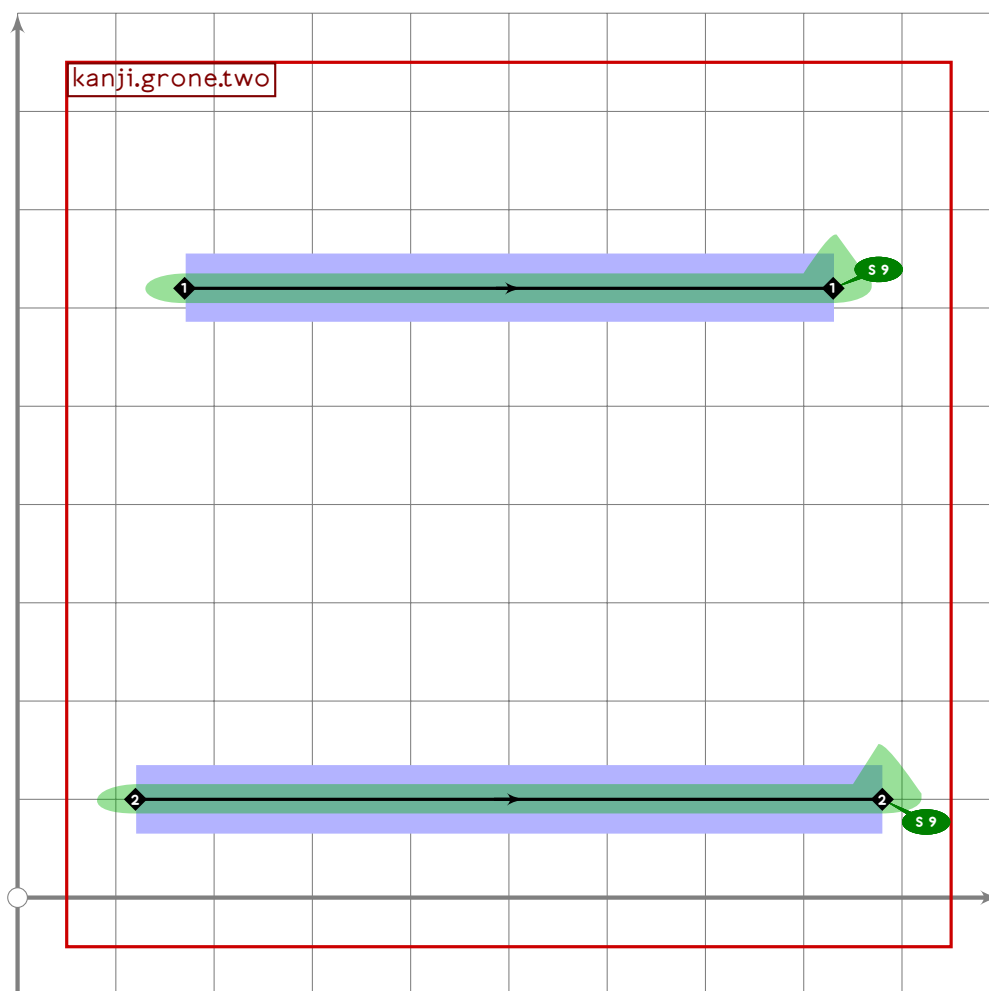
57 % ichi/hito "one"
58 begint Suglyph("uni2F00";0);
59   kanji.grone.one;
60   tsu_render;
61 endtsuglyph;
62

```

U+2F01
tsuku.uni2F01



```
63 % extra "vertical line"
64 begintsuglyph("uni2F01";1);
65   kanji.radical.vline;
66   tsu_render;
67 endsuglyph;
68
```

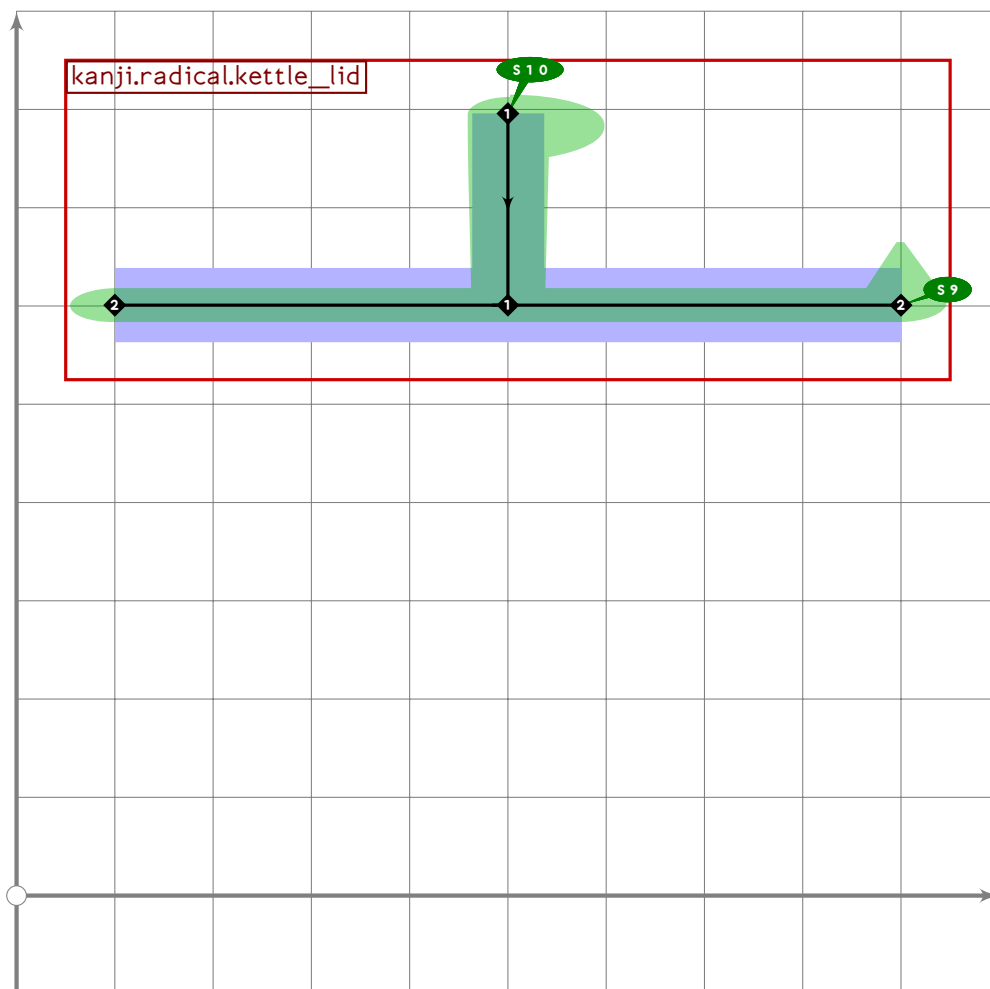


```

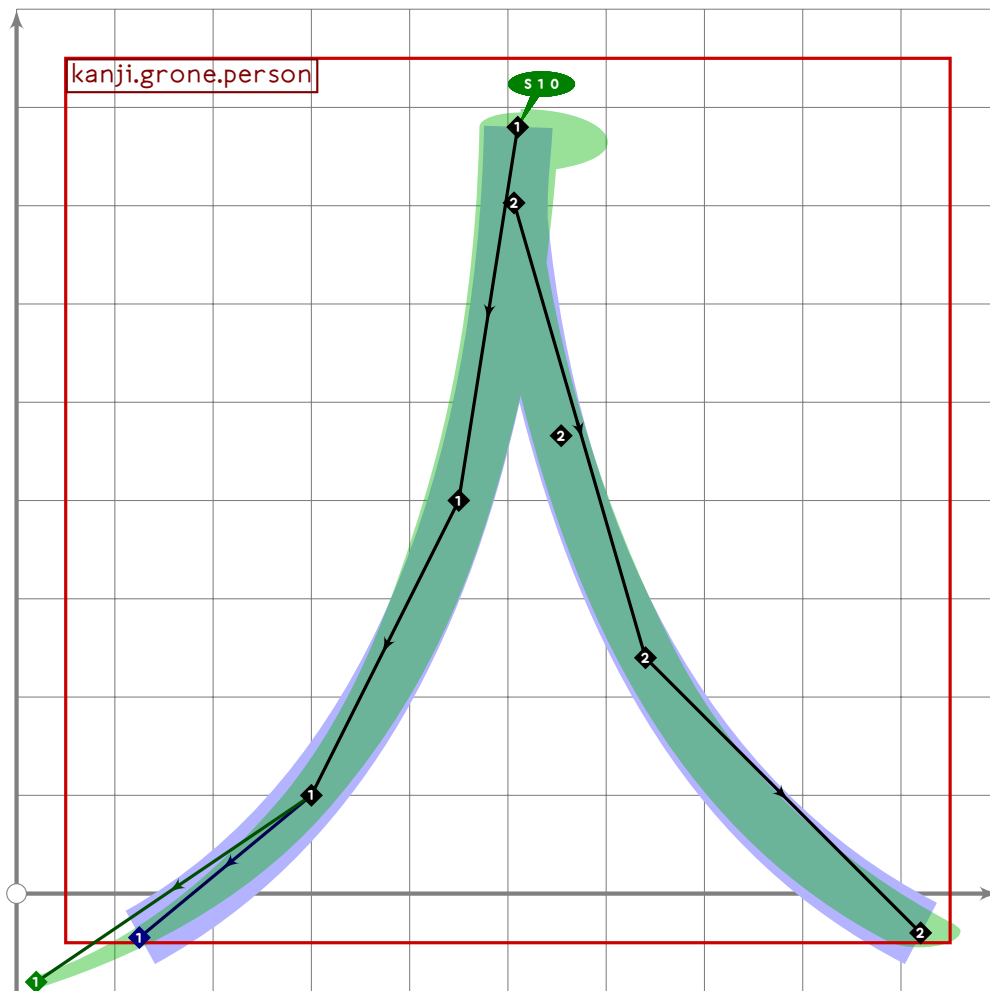
69 % ni/futa "two"
70 begintsuglyph("uni2F06",6);
71   kanji.grone.two;
72   tsu_render;
73 endtsuglyph;
74

```

U+2F07
tsuku.uni2F07



```
75 % "kettle lid radical"  
76 begintsuglyph("uni2F07";7);  
77   build_kanji.tb(500;50)  
78     (kanji.radical.kettle_lid)  
79     ();  
80   tsu_render;  
81 endtsuglyph;  
82
```

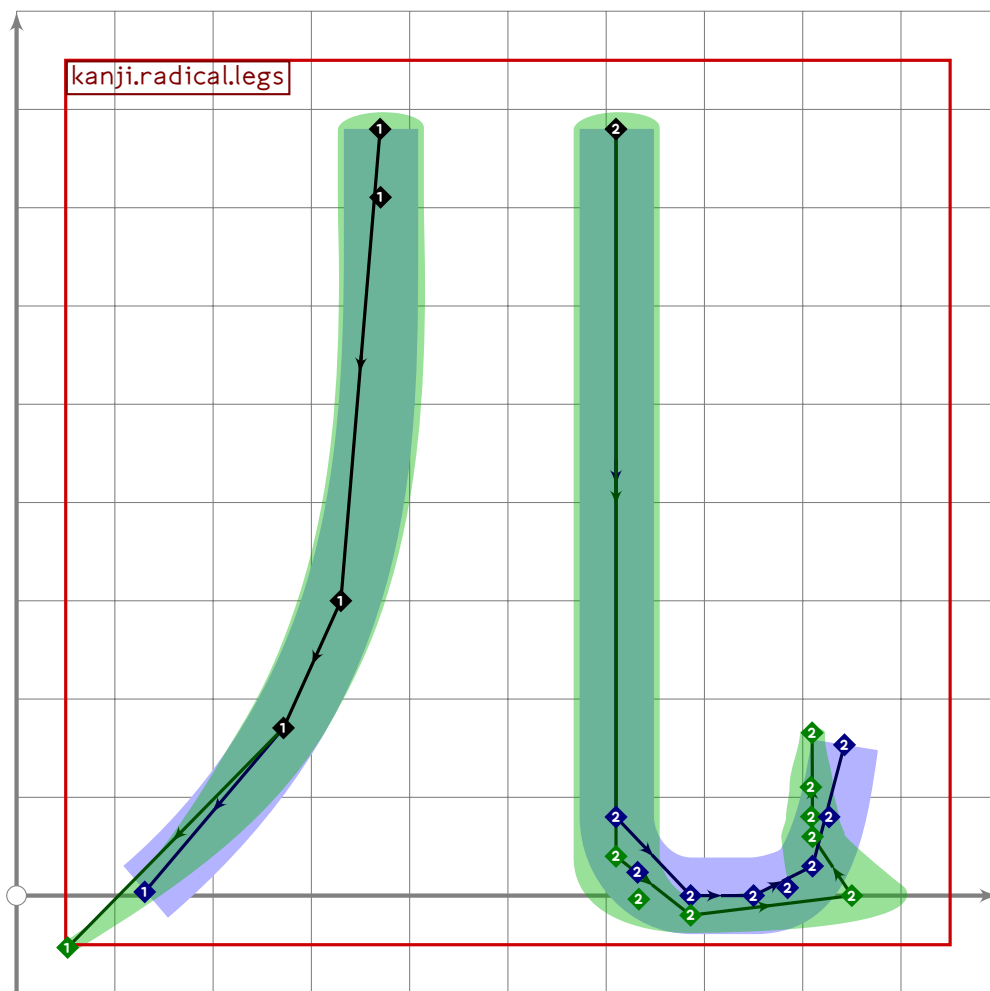


```

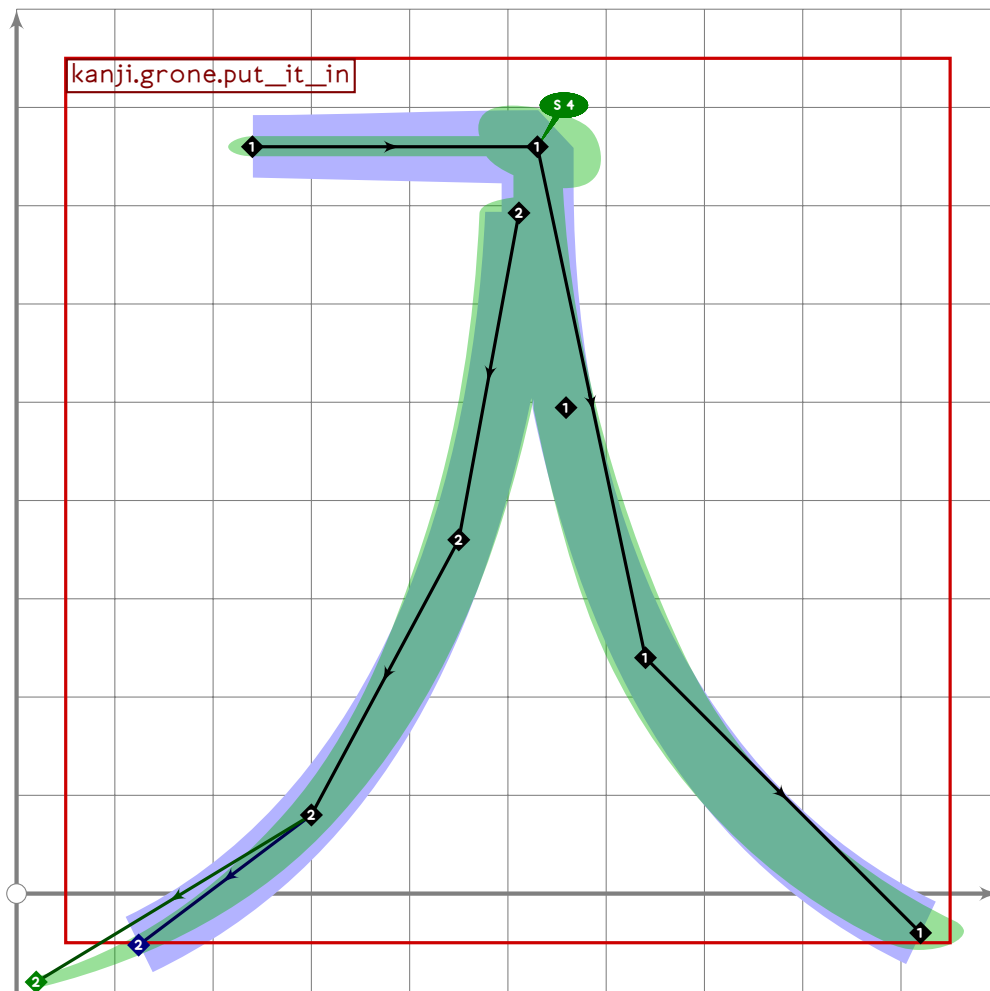
83 % hito/jin "person"
84 begintsuglyph("uni2F08",8);
85   kanji.grone.person;
86   tsu_render;
87 endtsuglyph;
88

```

U+2F09
tsuku.uni2F09



```
89 % legs radical
90 begintsuglyph("uni2F09";9);
91   kanji.radical.legs;
92   tsu_render;
93 endtsuglyph;
94
```

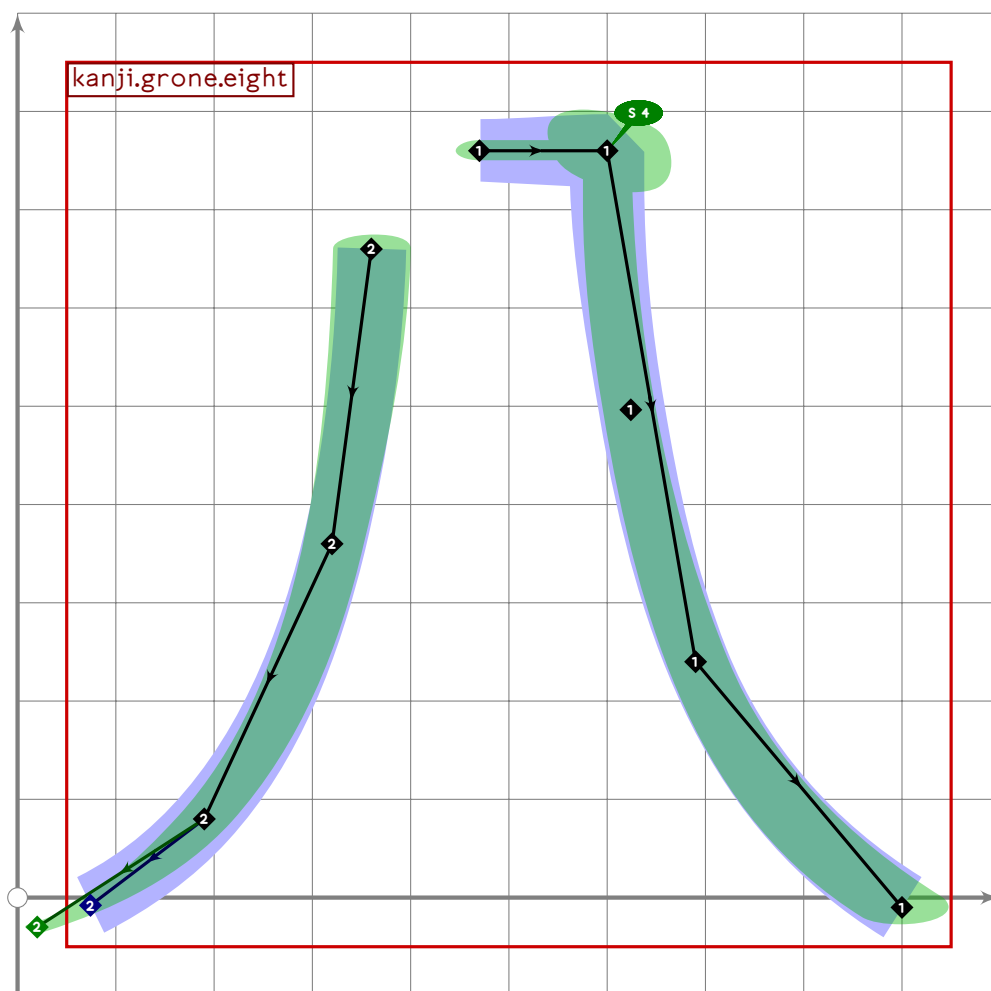



```

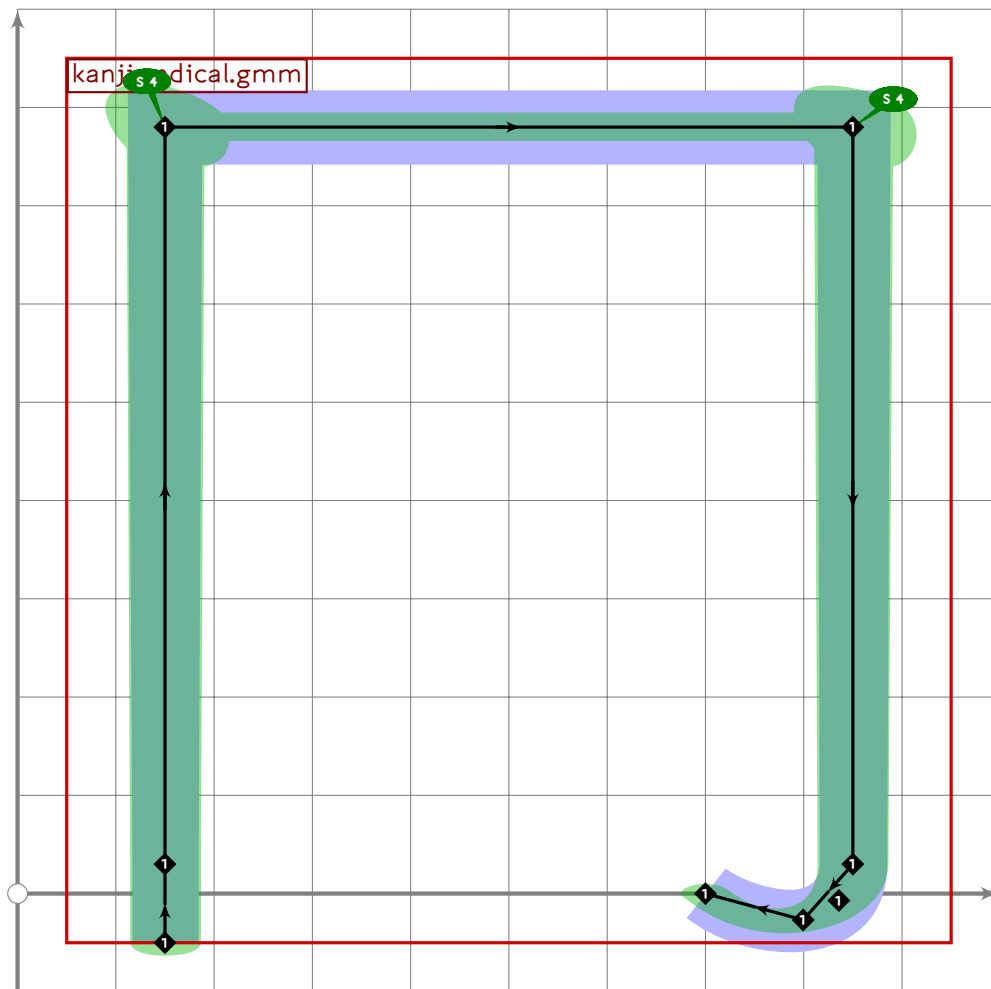
95 % hai/i "put it in"
96 beginsuglyph("uni2F0A";10);
97   kanji.grone.put_it_in;
98   tsu_render;
99 endsuglyph;
100

```

U+2F0B
tsuku.uni2F0B



```
101 % hachi/ya "eight"
102 begintsuglyph("uni2F0B";11);
103   kanji.grone.eight;
104   tsu_render;
105 endtsuglyph;
106
```

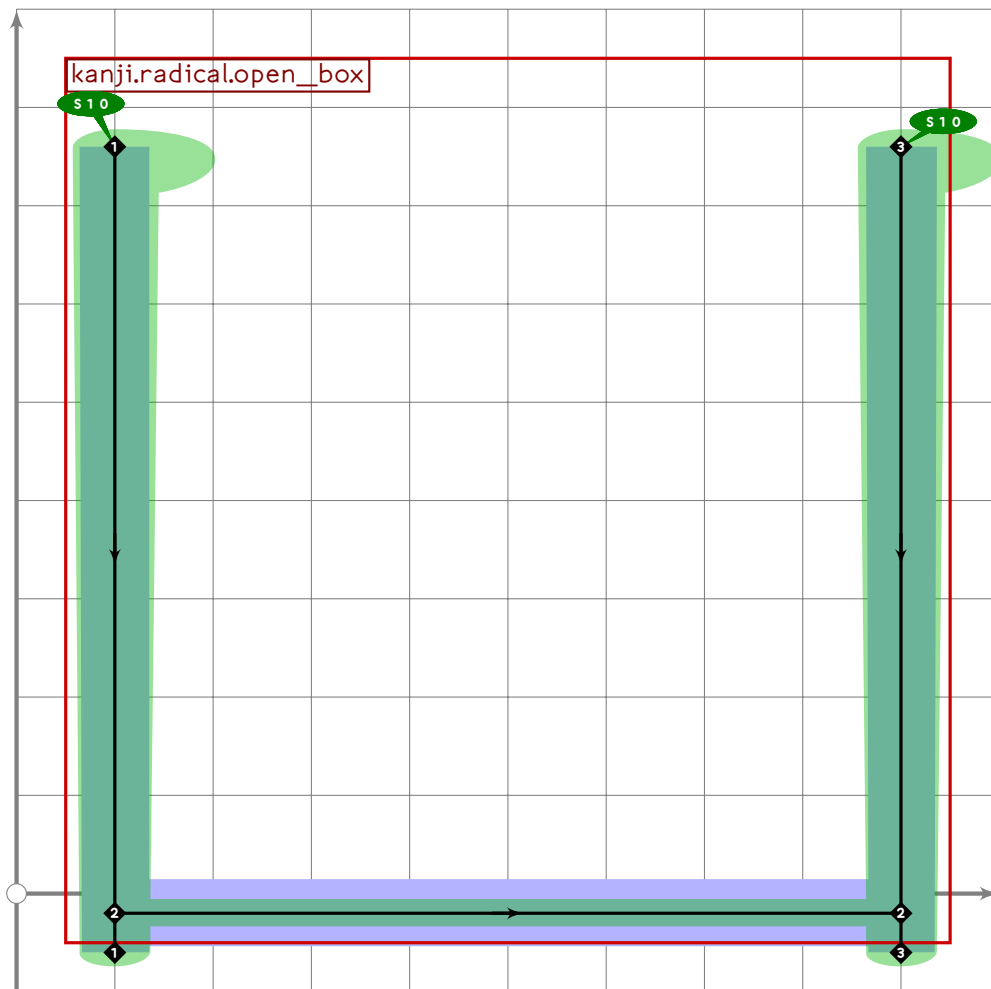


```

107 % George Michael's Moustache
108 begint Suglyph("uni2F0C",12);
109   kanji.radical.gmm;
110   tsu_render;
111 endtsuglyph;
112

```

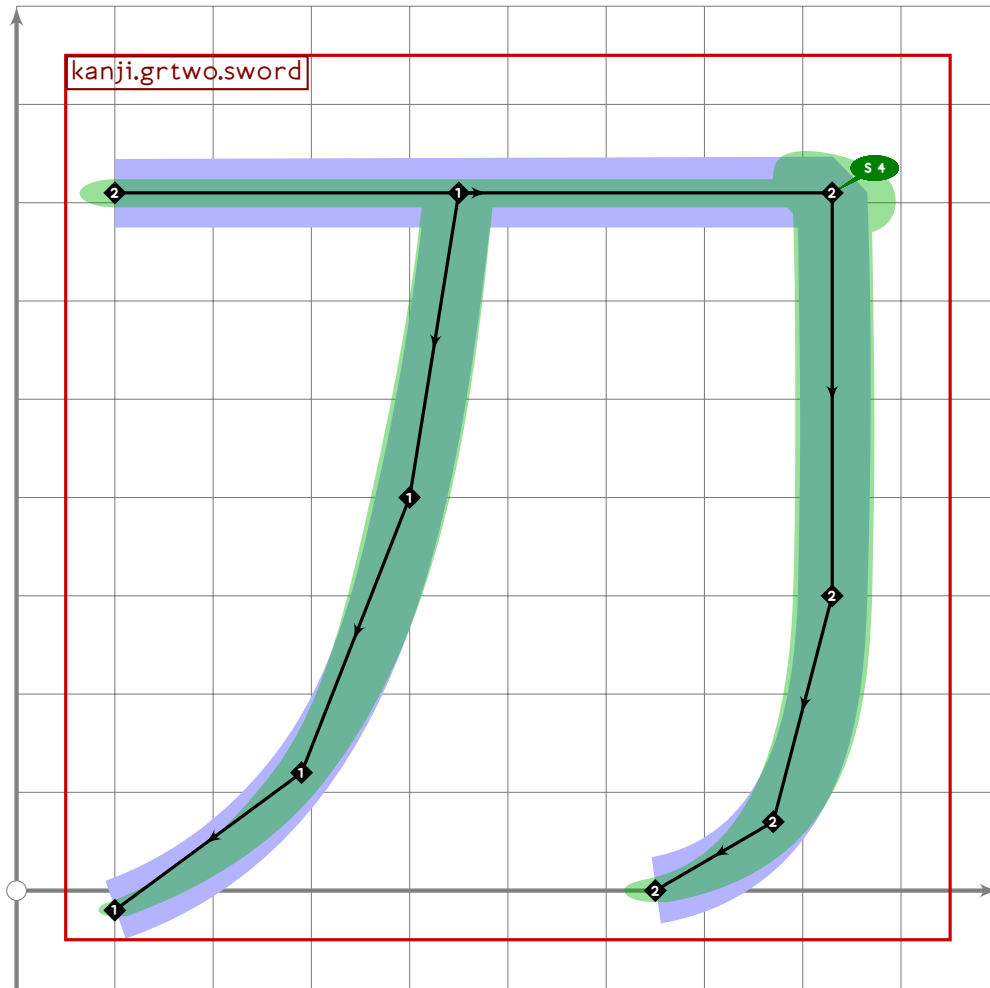
U+2F10
tsuku.uni2F10



```

113 % kan "open box radical"
114 begintsuglyph("uni2F10",16);
115   kanji.radical.open_box;
116   tsu_render;
117 endtsuglyph;
118

```

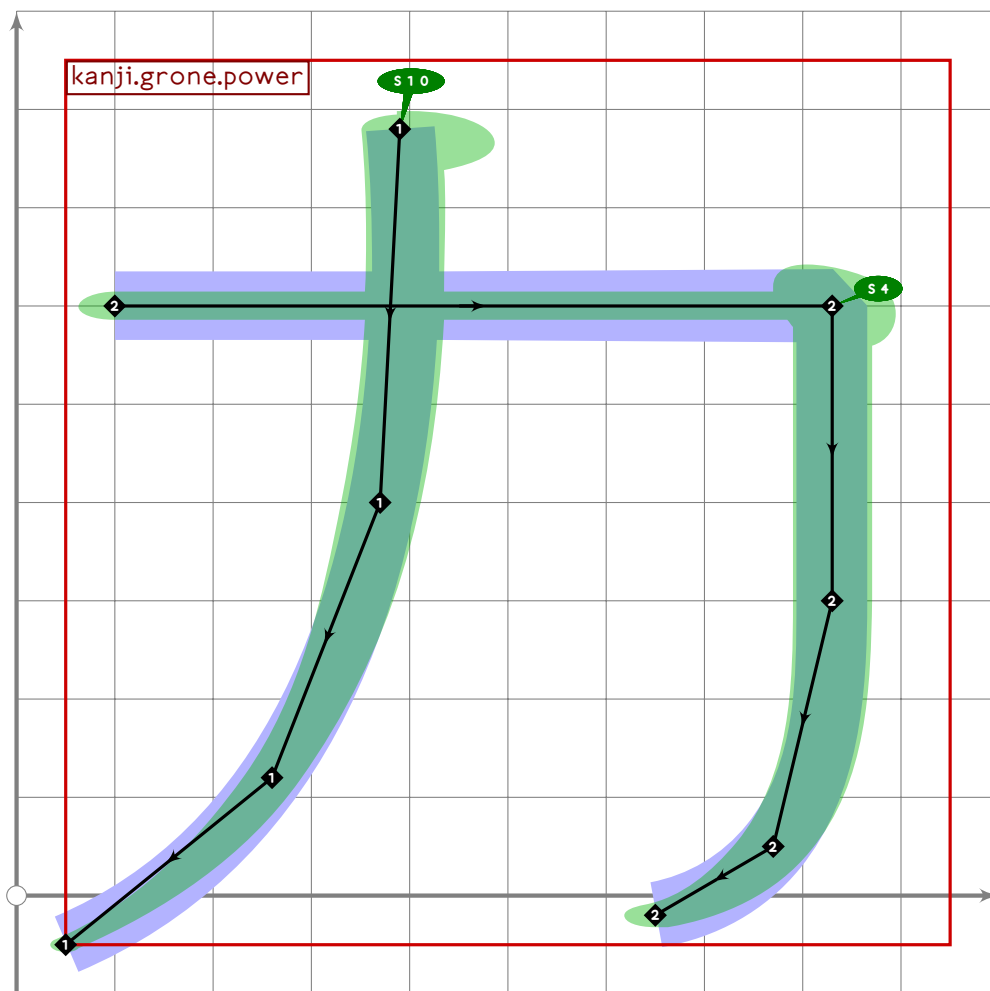


```

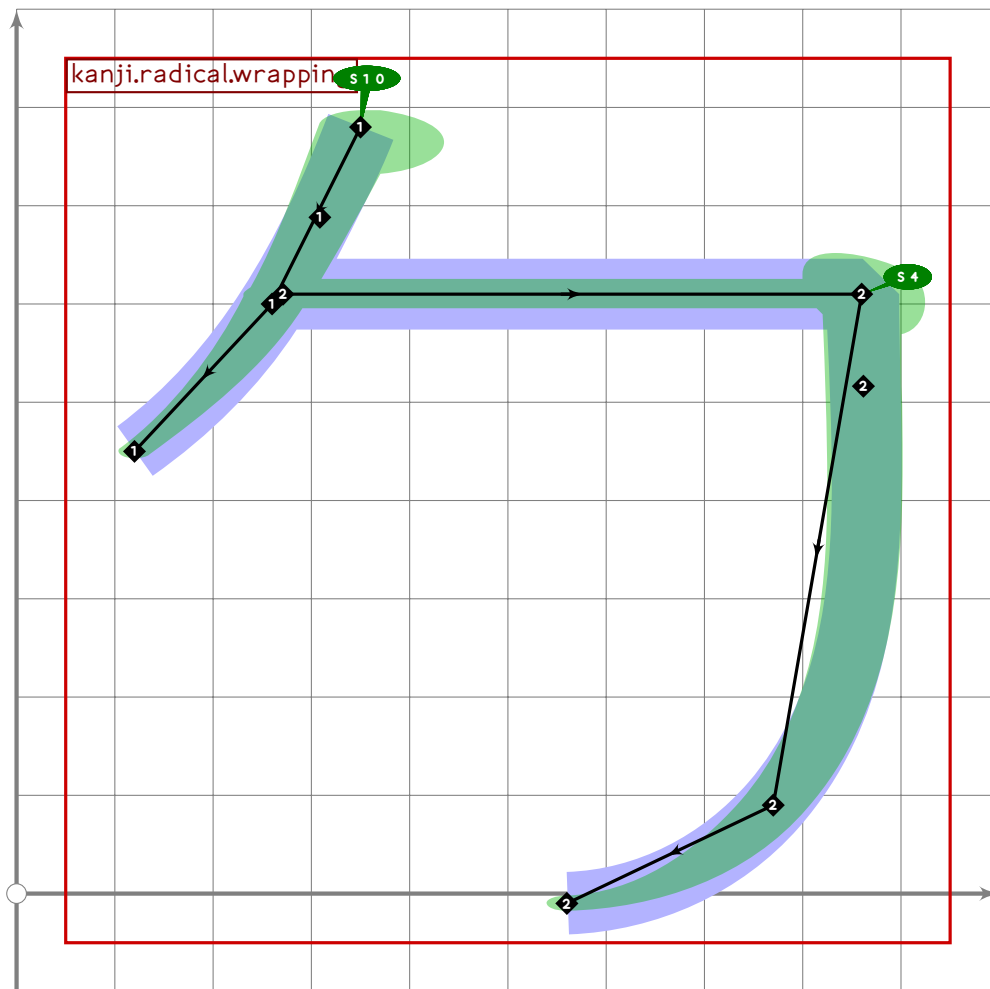
119 % tou/katana "sword"
120 beginsuglyph("uni2F11";17);
121   kanji.grtwo.sword;
122   tsu_render;
123 endsuglyph;
124

```

U+2F12
tsuku.uni2F12



```
125 % ryoku "power", as in Koizumi Itsuki has teh "chounouryoku"  
126 begintsuglyph("uni2F12",18);  
127   kanji.grone.power;  
128   tsu_render;  
129 endtsuglyph;  
130
```

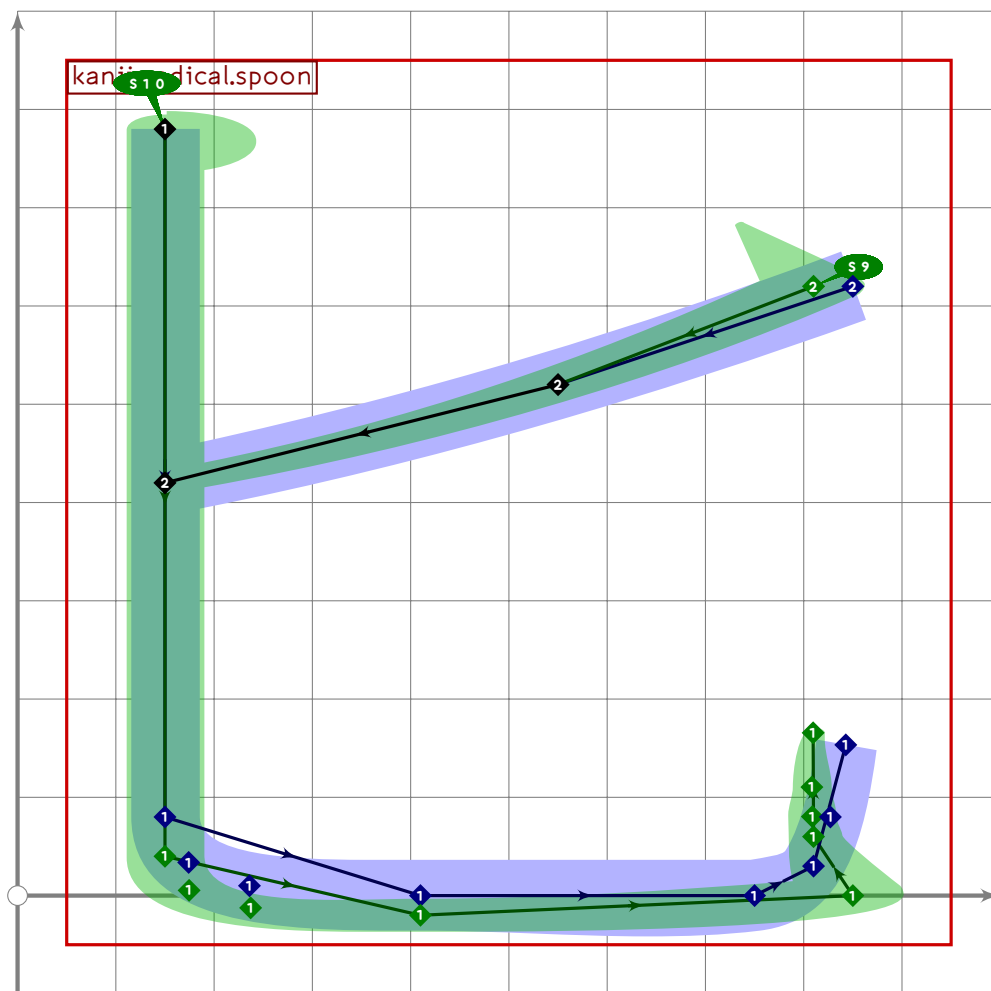


```

131 % hou/tsutsu "wrapping radical"
132 begint Suglyph("uni2F13",19);
133   kanji.radical.wrapping;
134   tsu_render;
135 endtsuglyph;
136

```

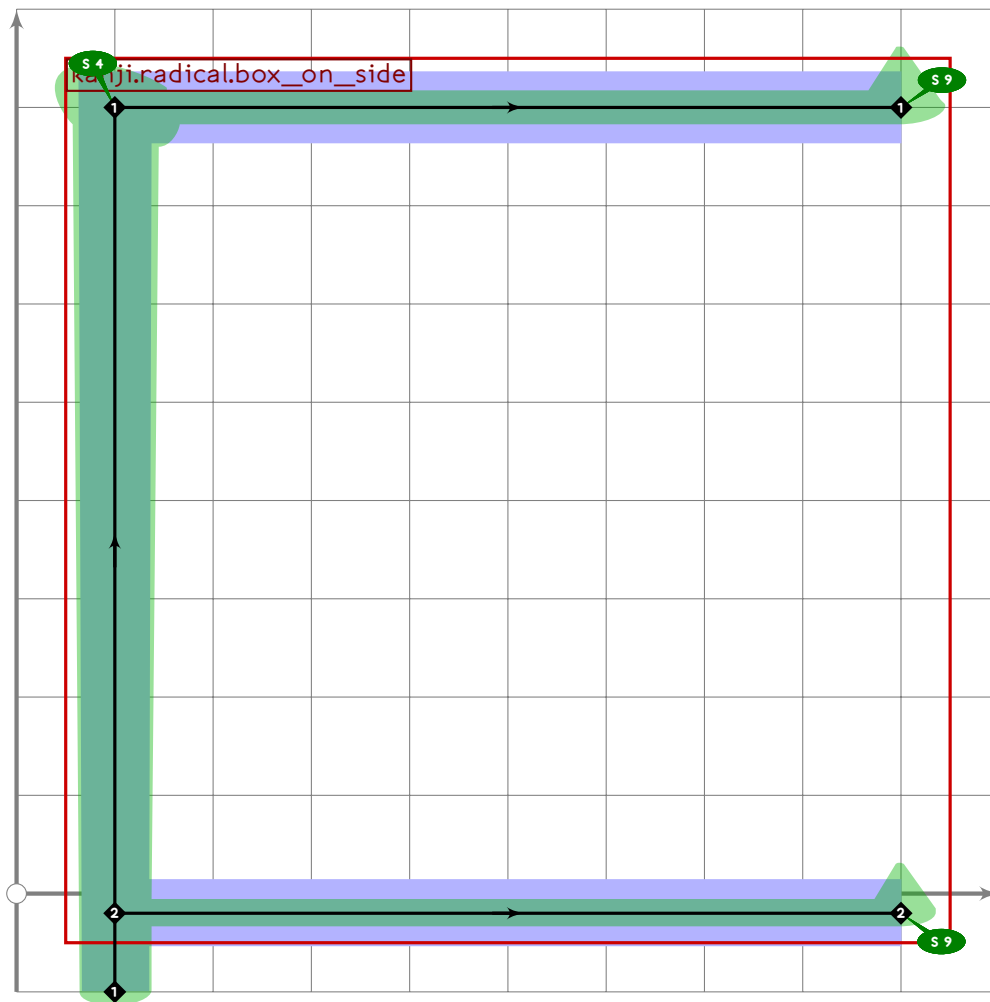
U+2F14
tsuku.uni2F14



```

137 % hi/saji "spoon"
138 begintsuglyph("uni2F14";20);
139   kanji.radical.spoon;
140   tsu_render;
141 endtsuglyph;
142

```

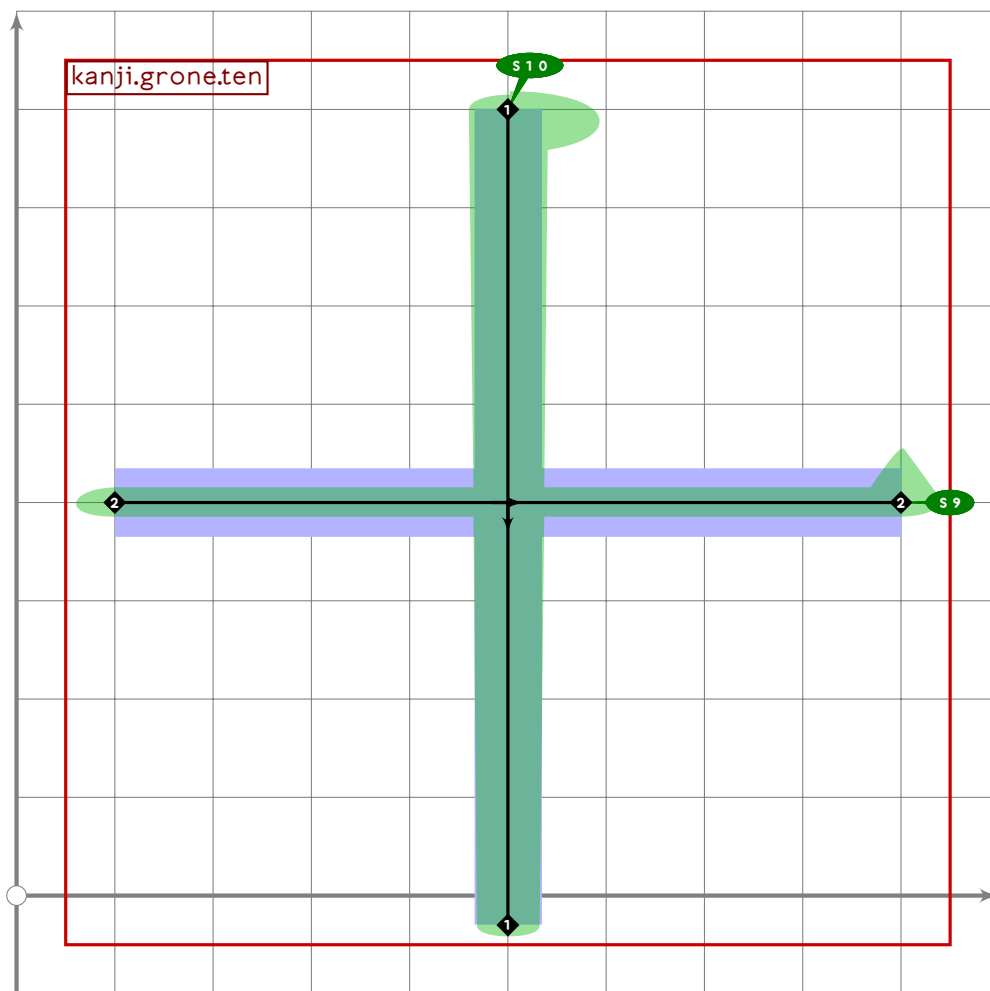



```

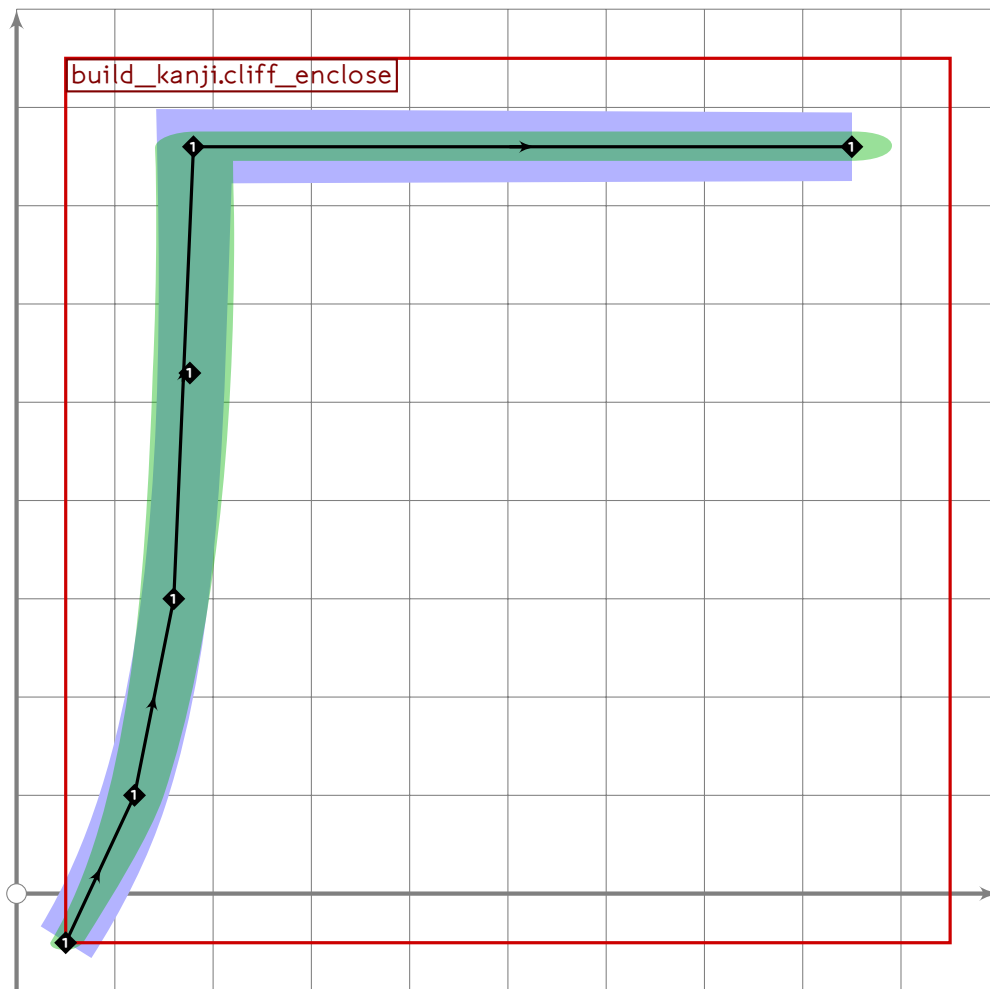
143 % hou/hakogamae "box on side radical"
144 begintsuglyph("uni2F15";21);
145   kanji.radical.box_on_side;
146   tsu_render;
147 endtsuglyph;
148

```

U+2F17
tsuku.uni2F17



```
149 % juu/too "ten"  
150 begintsuglyph("uni2F17",23);  
151   kanji.grone.ten;  
152   tsu_render;  
153 endsuglyph;  
154
```

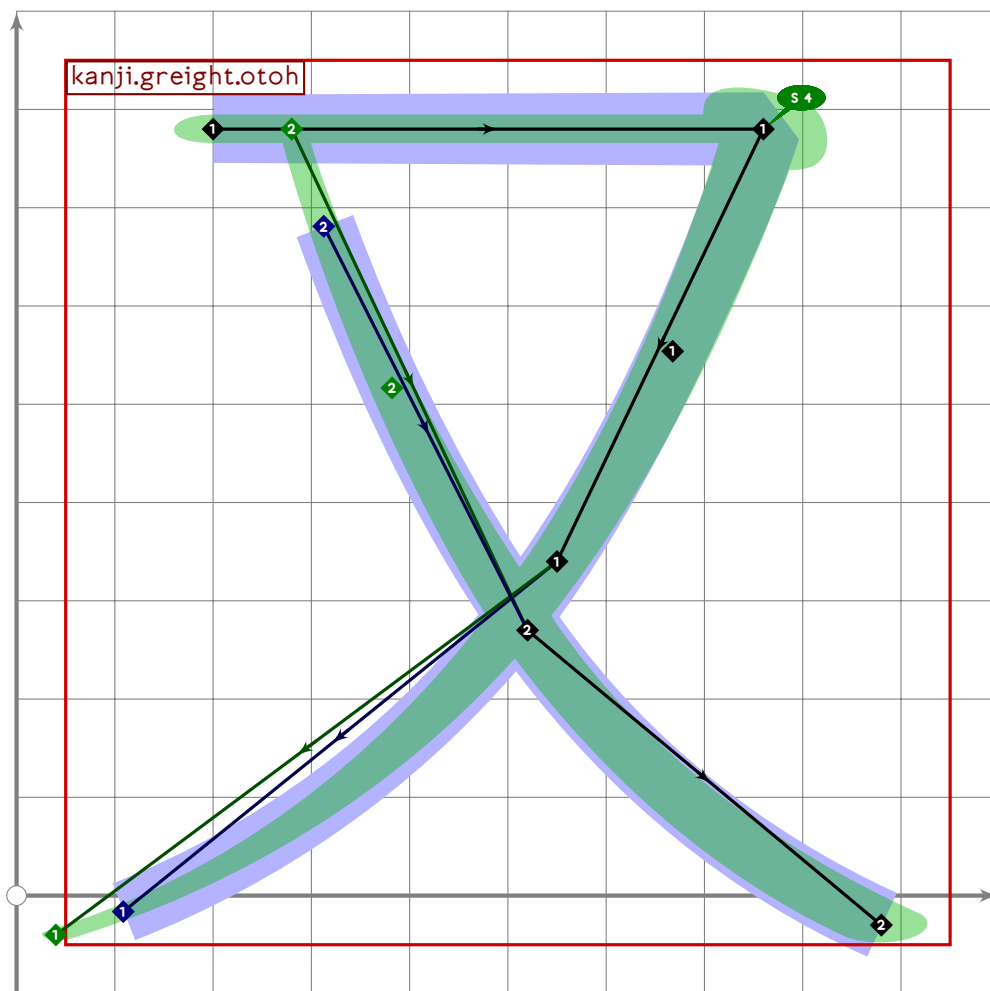


```

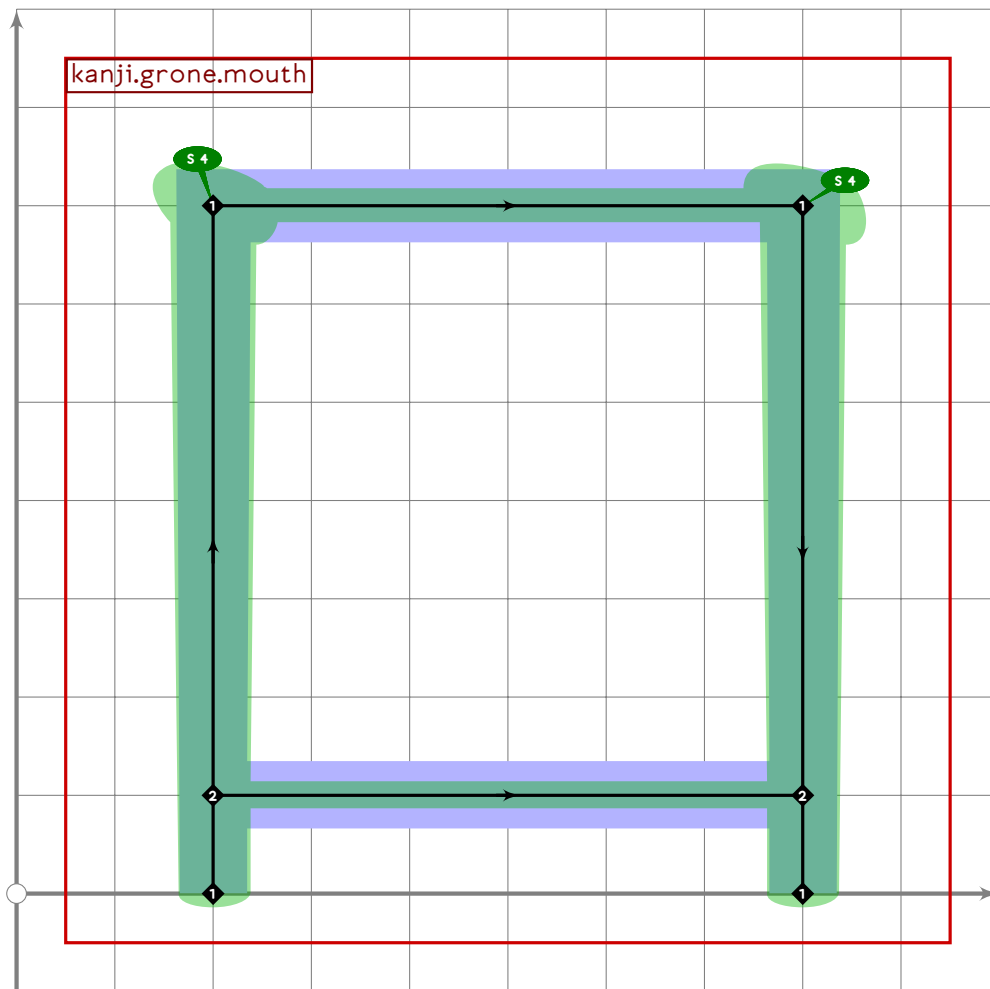
155 % karigane "cliff radical"
156 begintsuglyph("uni2F1A",26);
157   build_kanji.cliff_enclose();
158   tsu_render;
159 endtsuglyph;
160

```

U+2F1C
tsuku.uni2F1C



```
161 % yuu/mata "on the other hand"  
162 begintsuglyph("uni2F1C";28);  
163   kanji.greight.otoh;  
164   tsu_render;  
165 endtsuglyph;  
166
```

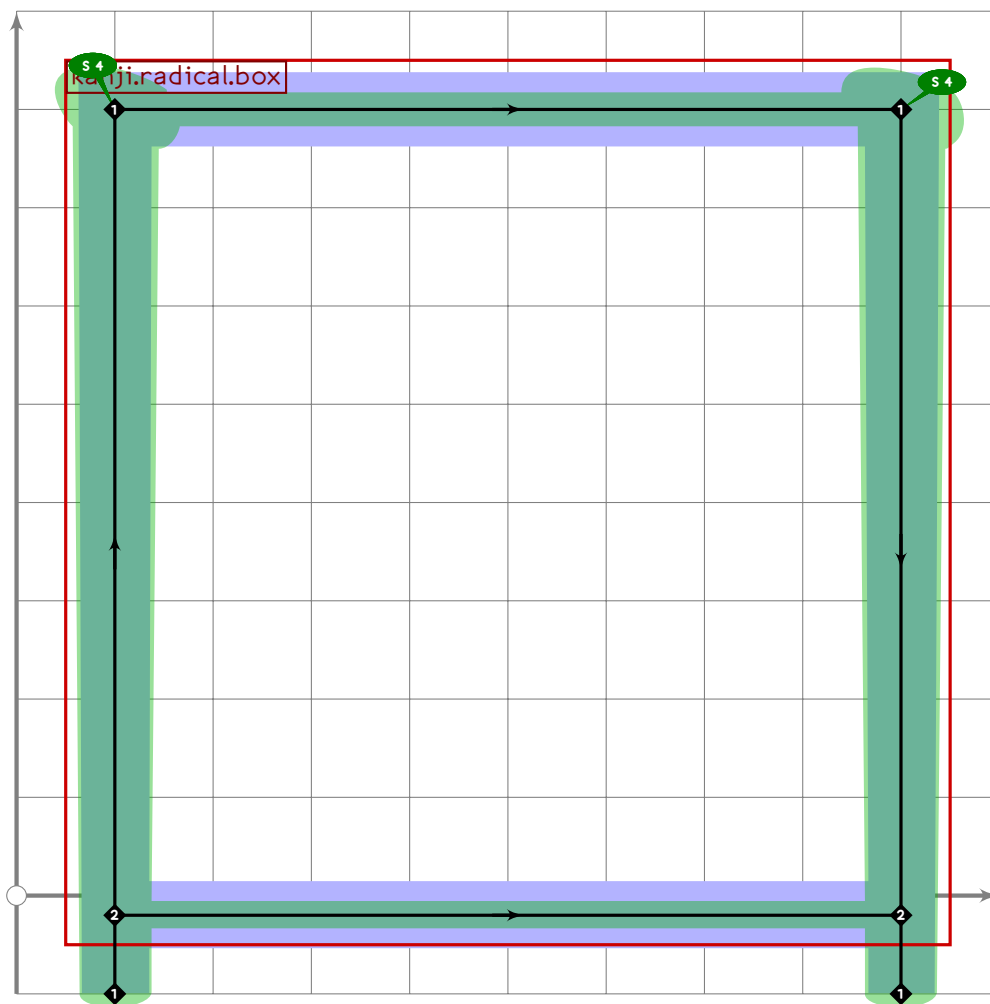


```

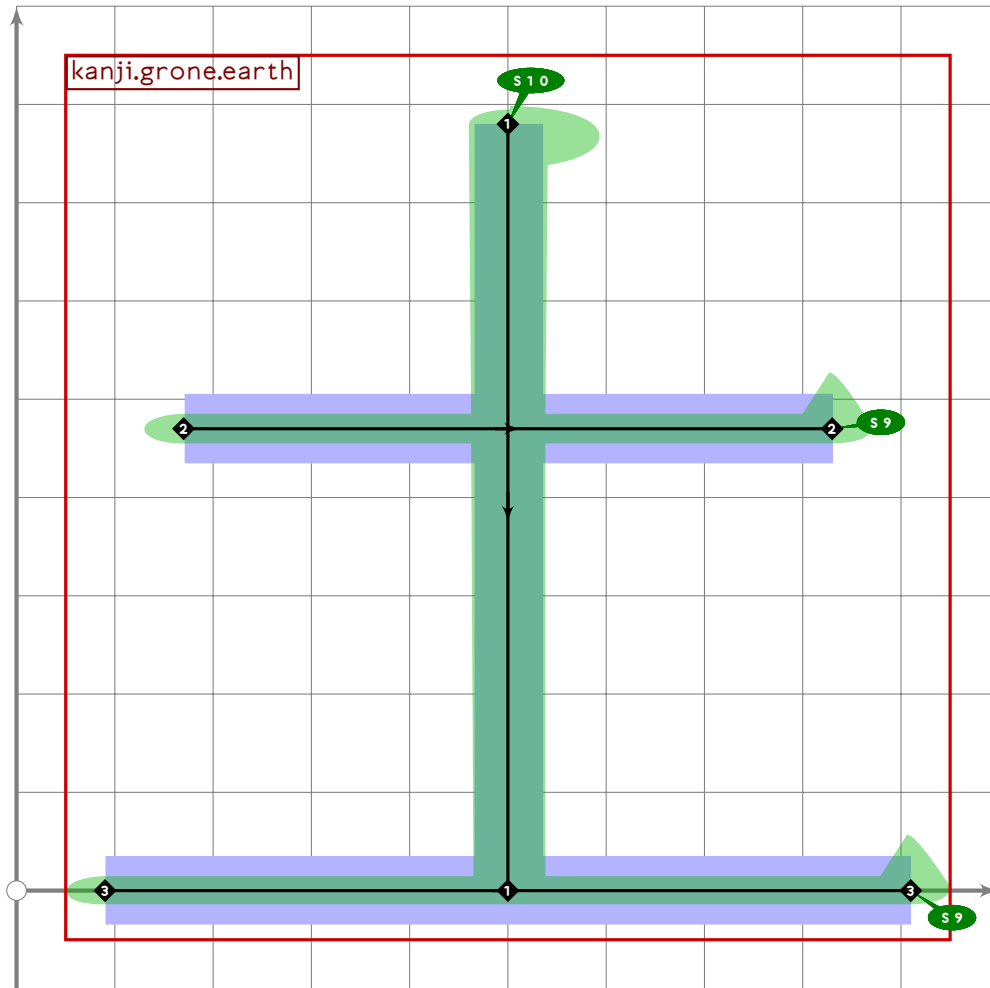
167 % kou/kuchi "mouth"
168 begintsuglyph("uni2F1D";29);
169   kanji.grone.mouth;
170   tsu_render;
171 endtsuglyph;
172

```

U+2F1E
tsuku.uni2F1E

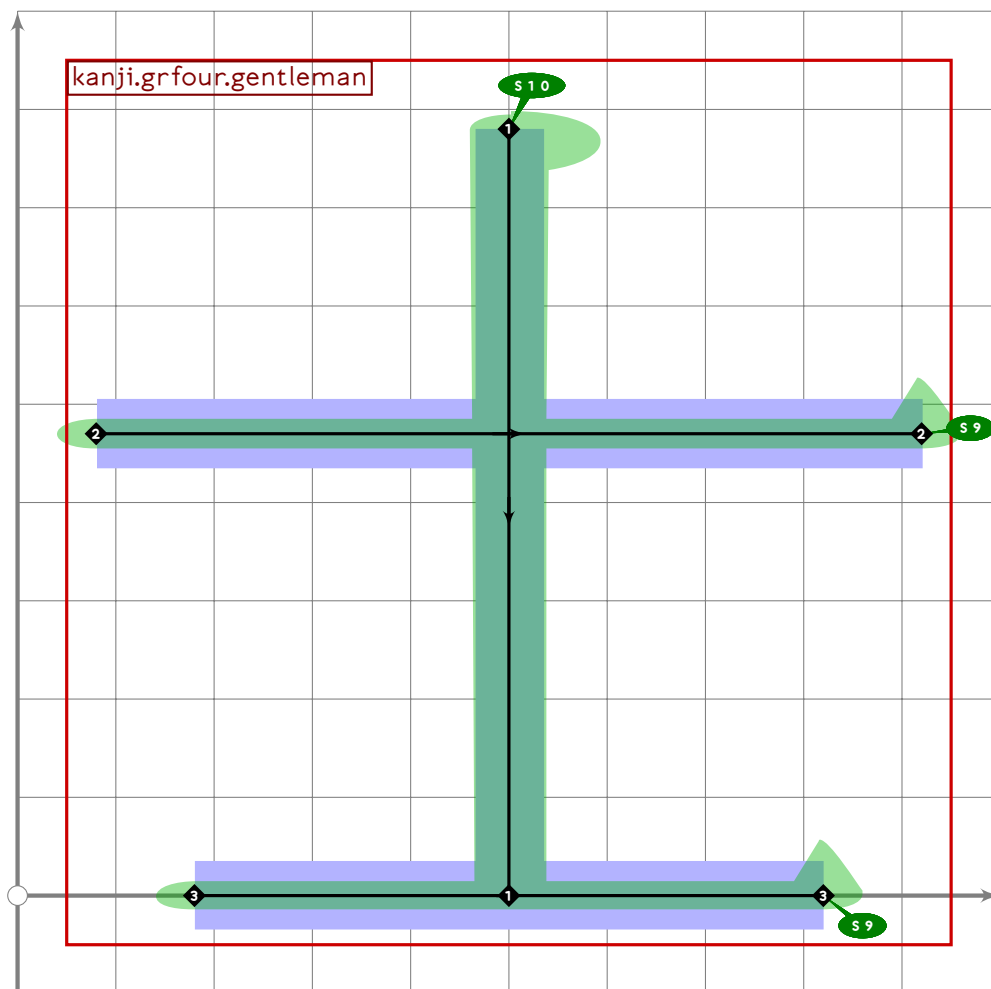


```
173 % box radical
174 begint Suglyph("uni2F1E";30);
175   kanji.radical.box;
176   tsu_render;
177 endtsuglyph;
178
```

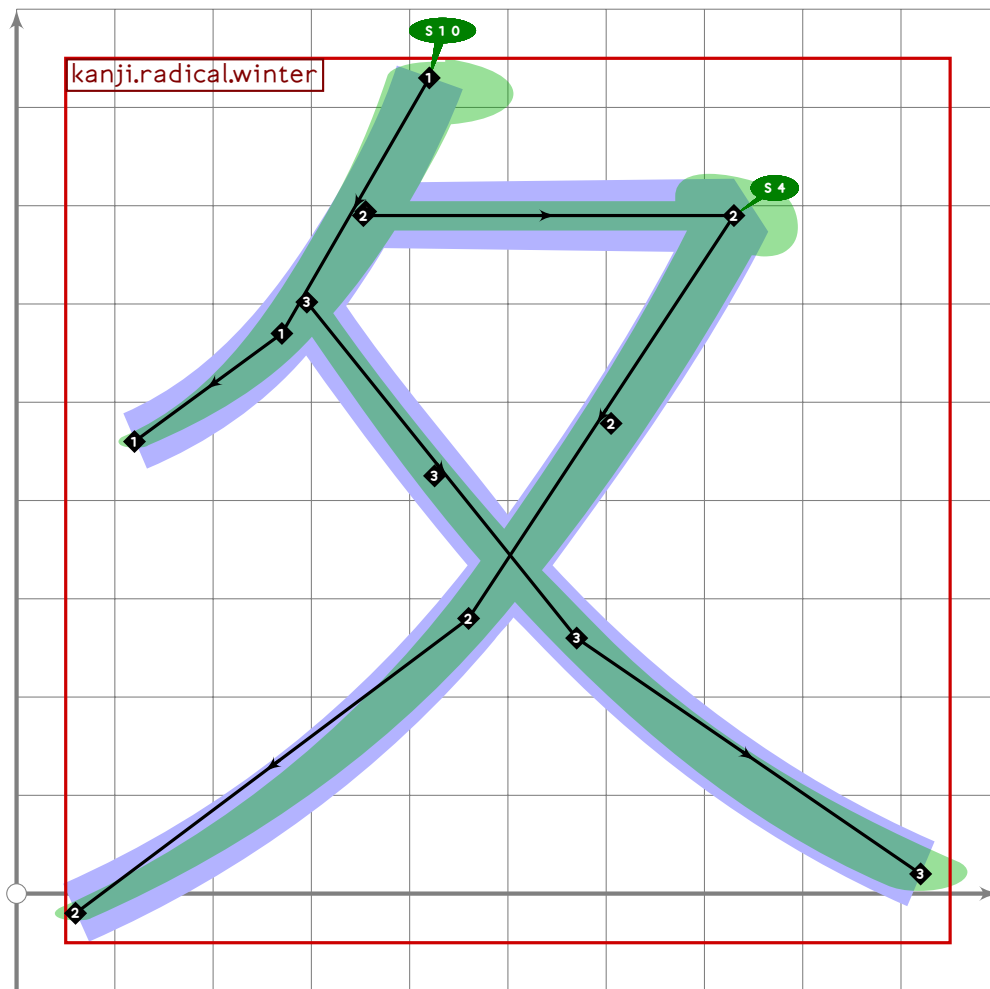


```
179 % tsuchi/do "earth"  
180 beginsuglyph("uni2F1F",31);  
181   kanji.grone.earth;  
182   tsu_render;  
183 endsuglyph;  
184
```

U+2F20
tsuku.uni2F20



```
185 % shi "gentleman" ("samurai" radical)
186 begintsuglyph("uni2F20",32);
187   kanji.grfour.gentleman;
188   tsu_render;
189 endtsuglyph;
190
```

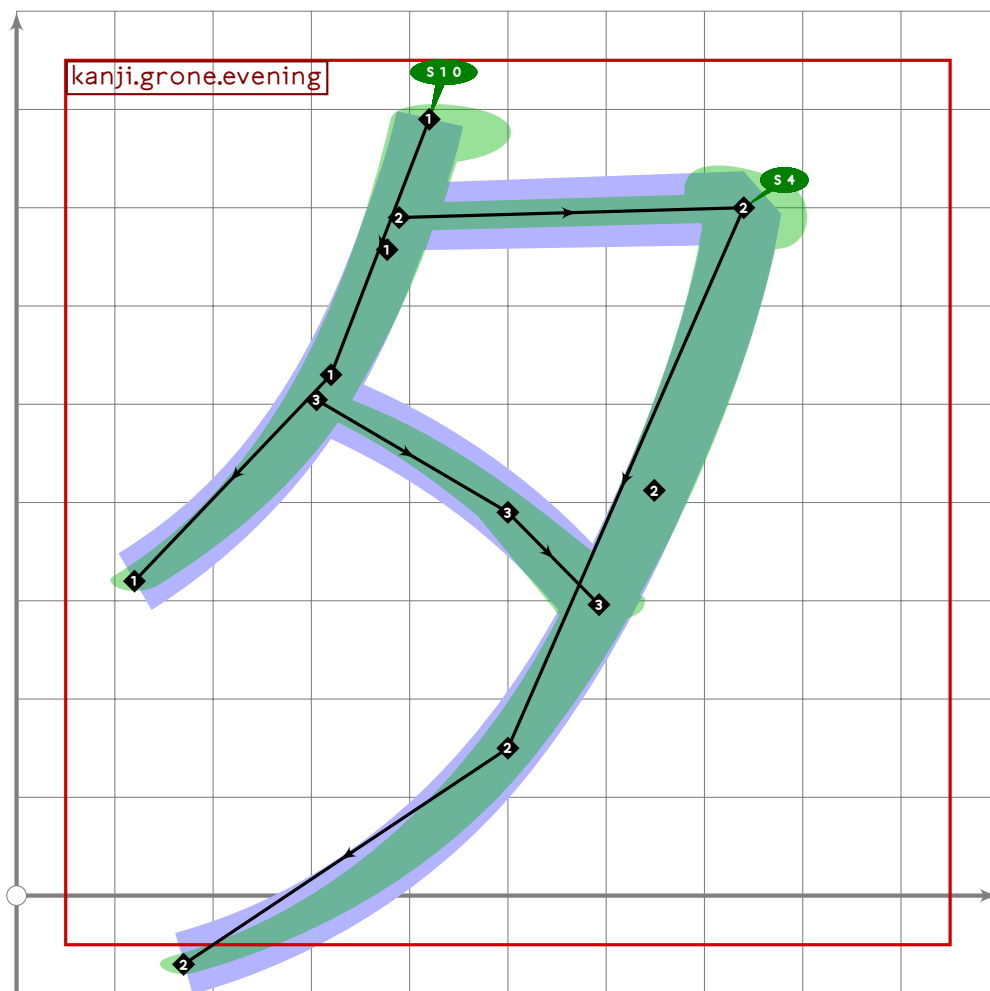



```

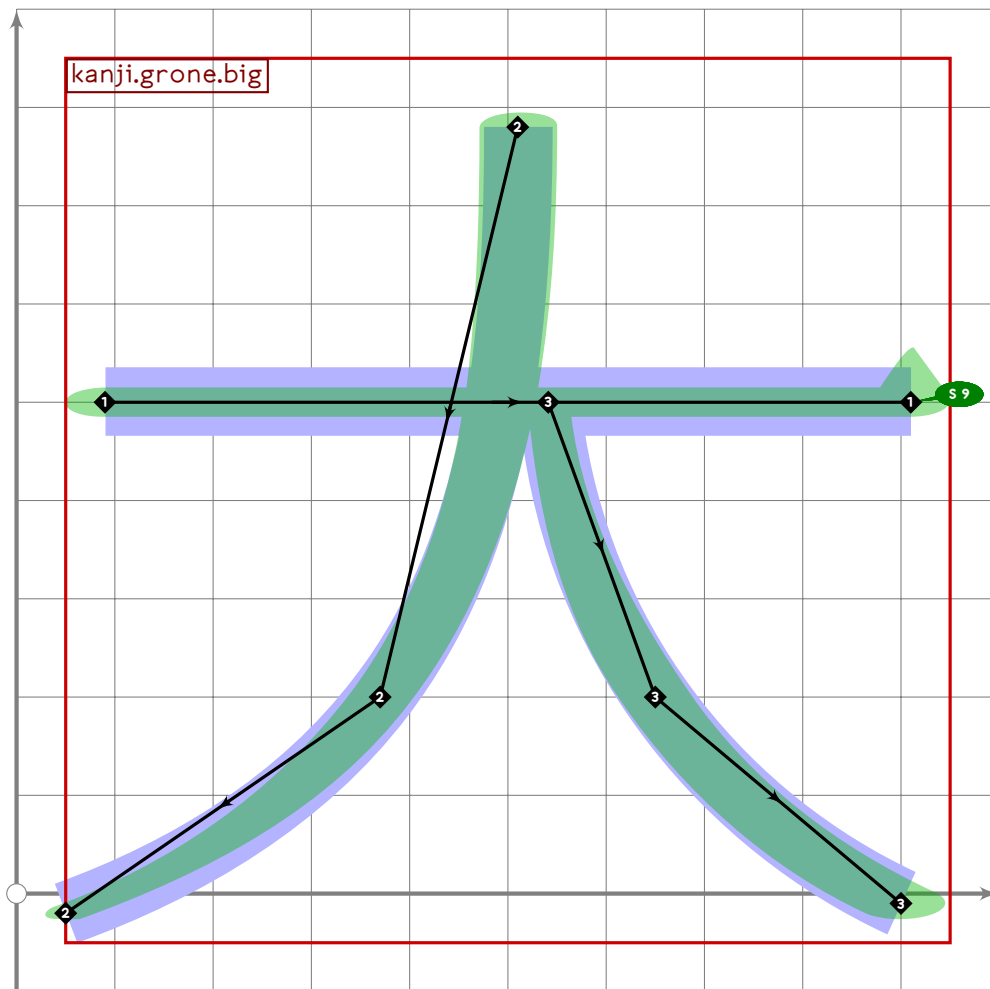
191 % chi/shuu "winter radical"
192 begintsuglyph("uni2F21";33);
193   kanji.radical.winter;
194   tsu_render;
195 endtsuglyph;
196

```

U+2F23
tsuku.uni2F23



```
197 % yuu/seki "evening"  
198 begintsuglyph("uni2F23",35);  
199   kanji.grone.evening;  
200   tsu_render;  
201 endtsuglyph;  
202
```

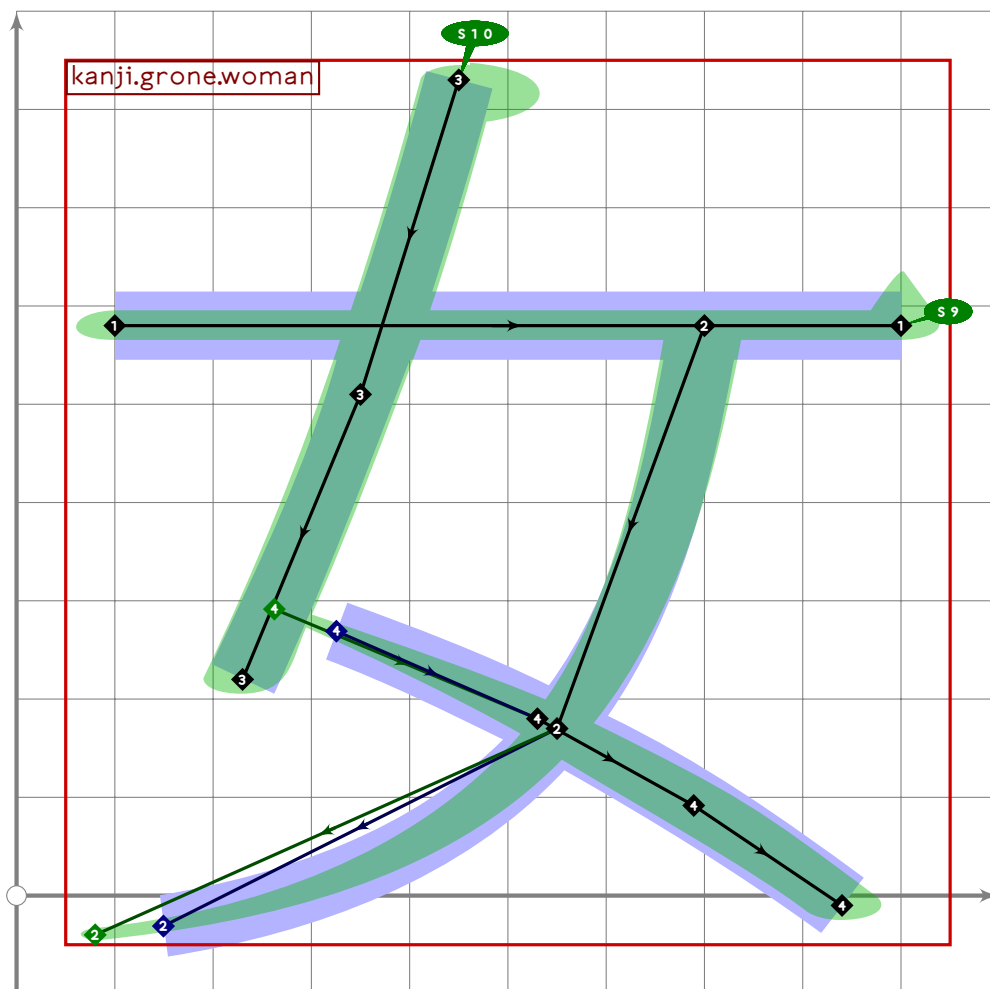


```

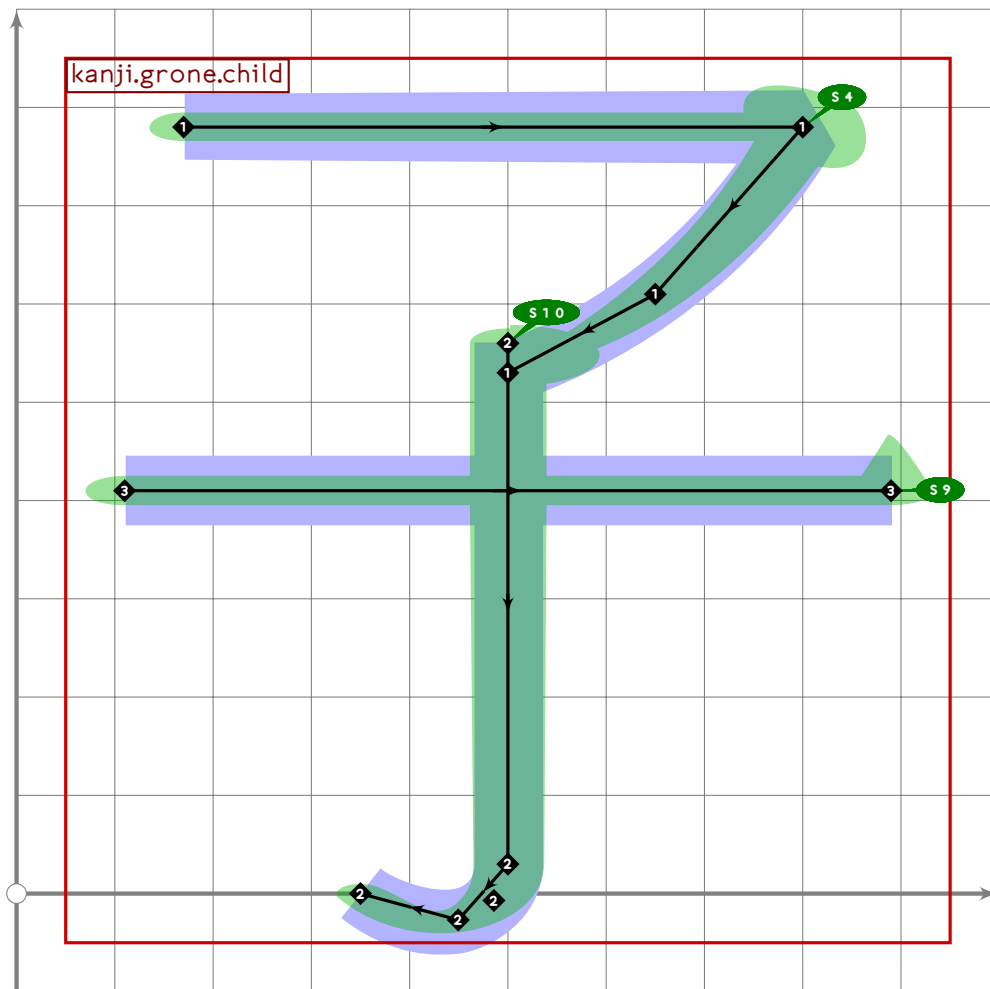
203 % dai/oo "big"
204 begintsuglyph("uni2F24",36);
205   kanji.grone.big;
206   tsu_render;
207 endtsuglyph;
208

```

U+2F25
tsuku.uni2F25



```
209 % jo/onna "woman"
210 begintsuglyph("uni2F25",37);
211   kanji.grone.woman;
212   tsu_render;
213 endtsuglyph;
214
```

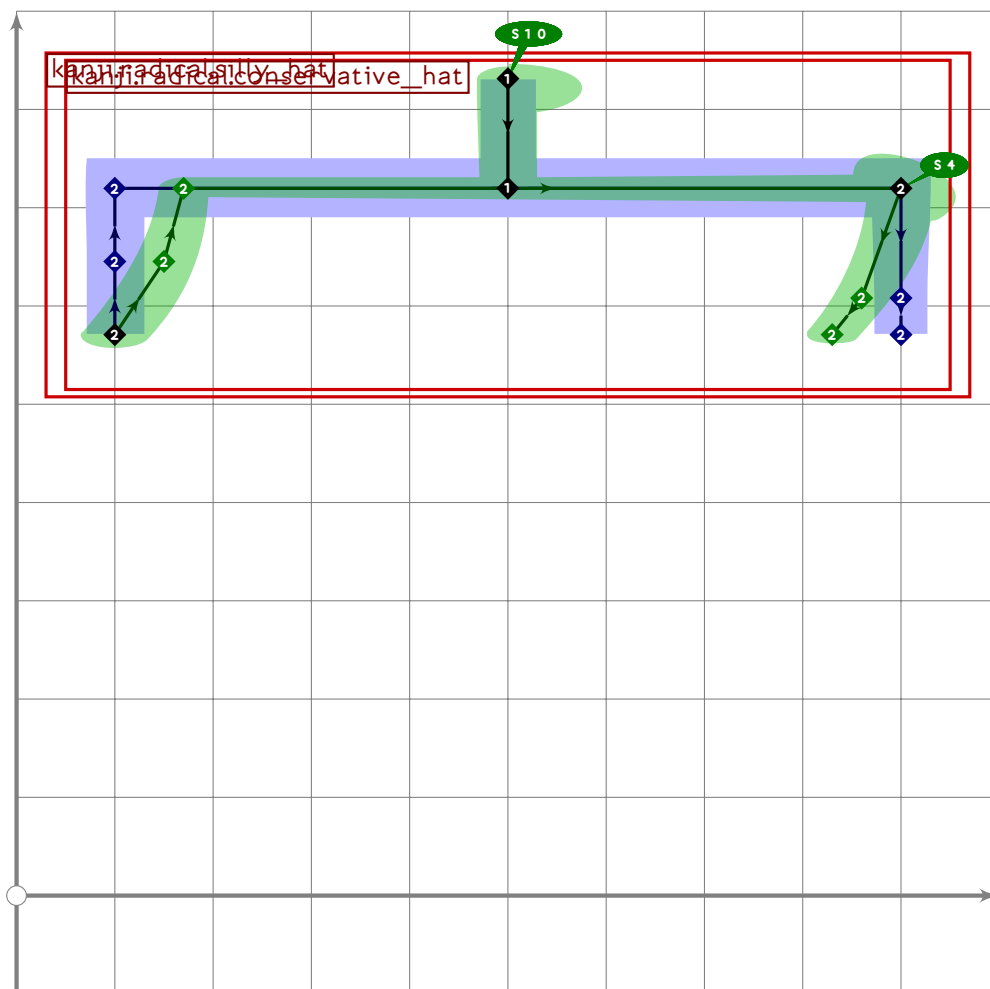


```

215 % ko "child"
216 begint Suglyph("uni2F26",38);
217   kanji.grone.child;
218   tsu_render;
219 endtsuglyph;
220

```

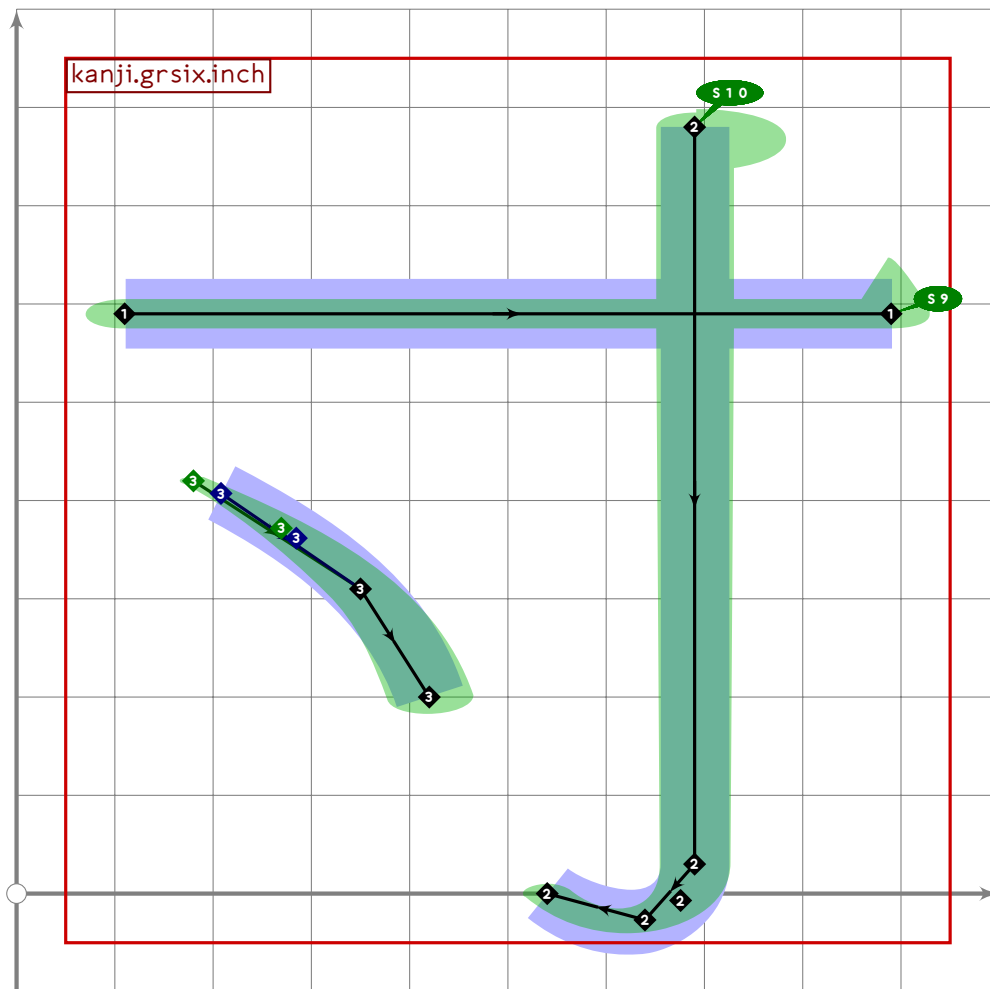
U+2F27
tsuku.uni2F27



```

221 % silly hat radical
222 begintsuglyph("uni2F27";39);
223   build_kanji.tb(500;30)
224     (kanji.radical.silly_hat)
225   ();
226   tsu_render;
227 endtsuglyph;
228

```

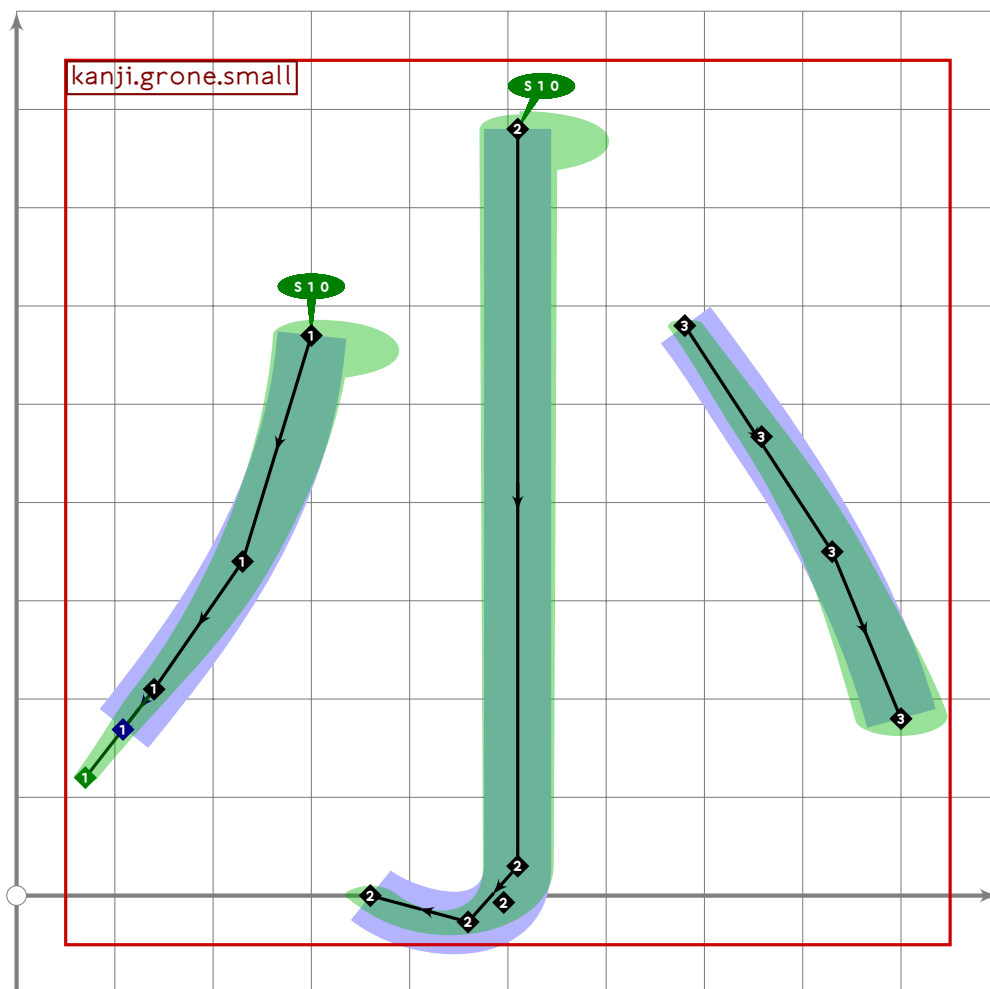


```

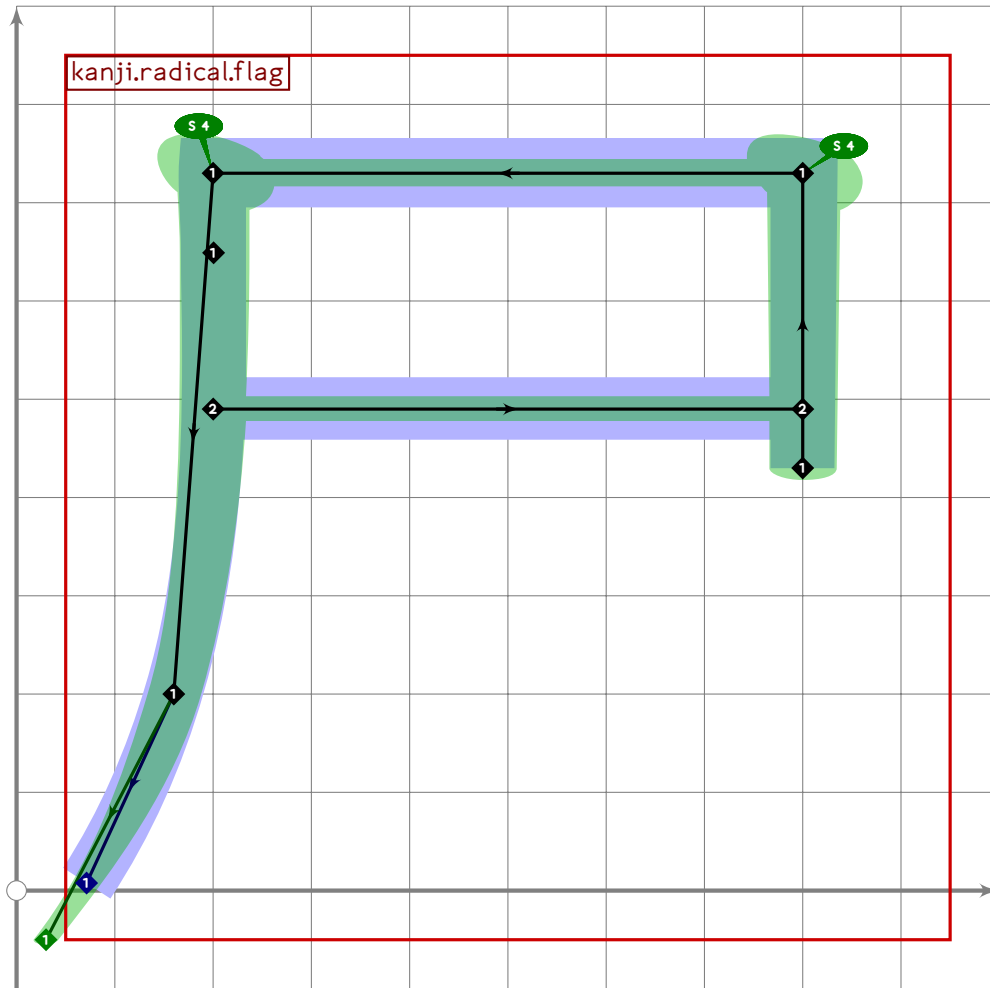
229 % su/miki "inch"; also often a radical
230 begint Suglyph("uni2F28";40);
231   kanji.grsix.inch;
232   tsu_render;
233 endtsuglyph;
234

```

U+2F29
tsuku.uni2F29



```
235 % shuu/chii "small"  
236 begintsuglyph("uni2F29";41);  
237   kanji.grone.small;  
238   tsu_render;  
239 endtsuglyph;  
240
```

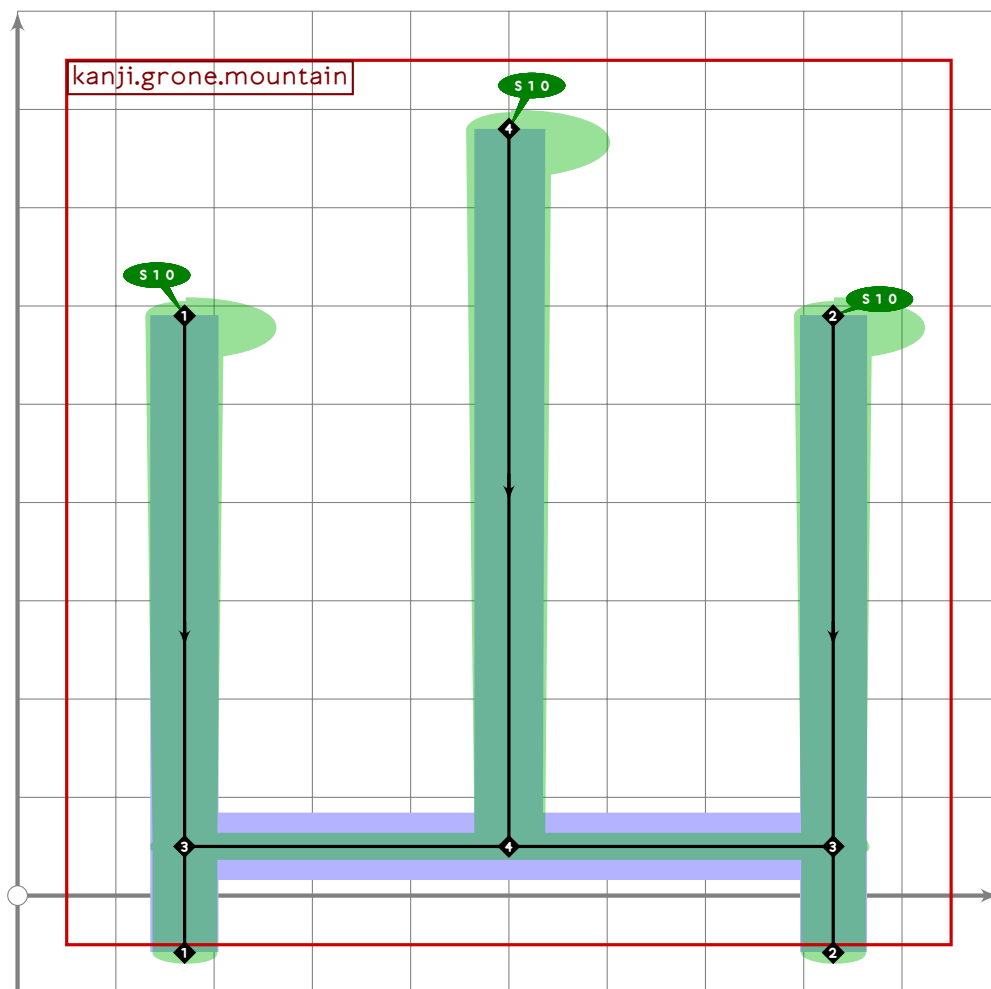



```

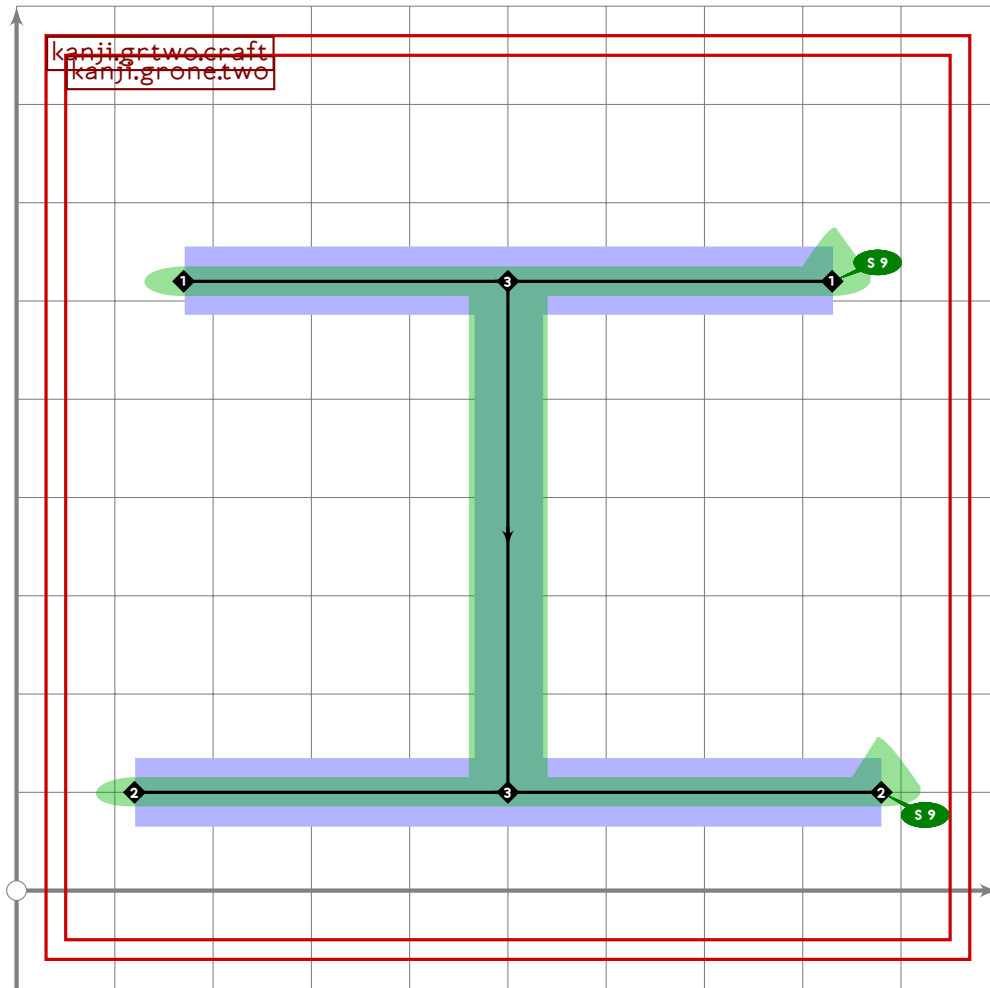
241 % shi/katahiro "corpse" or "flag radial"
242 begintsuglyph("uni2F2B";43);
243   kanji.radical.flag;
244   tsu_render;
245 endtsuglyph;
246

```

U+2F2D
tsuku.uni2F2D



```
247 % yama/san "mountain"
248 begintsuglyph("uni2F2D";45);
249   kanji.grone.mountain;
250   tsu_render;
251 endtsuglyph;
252
```

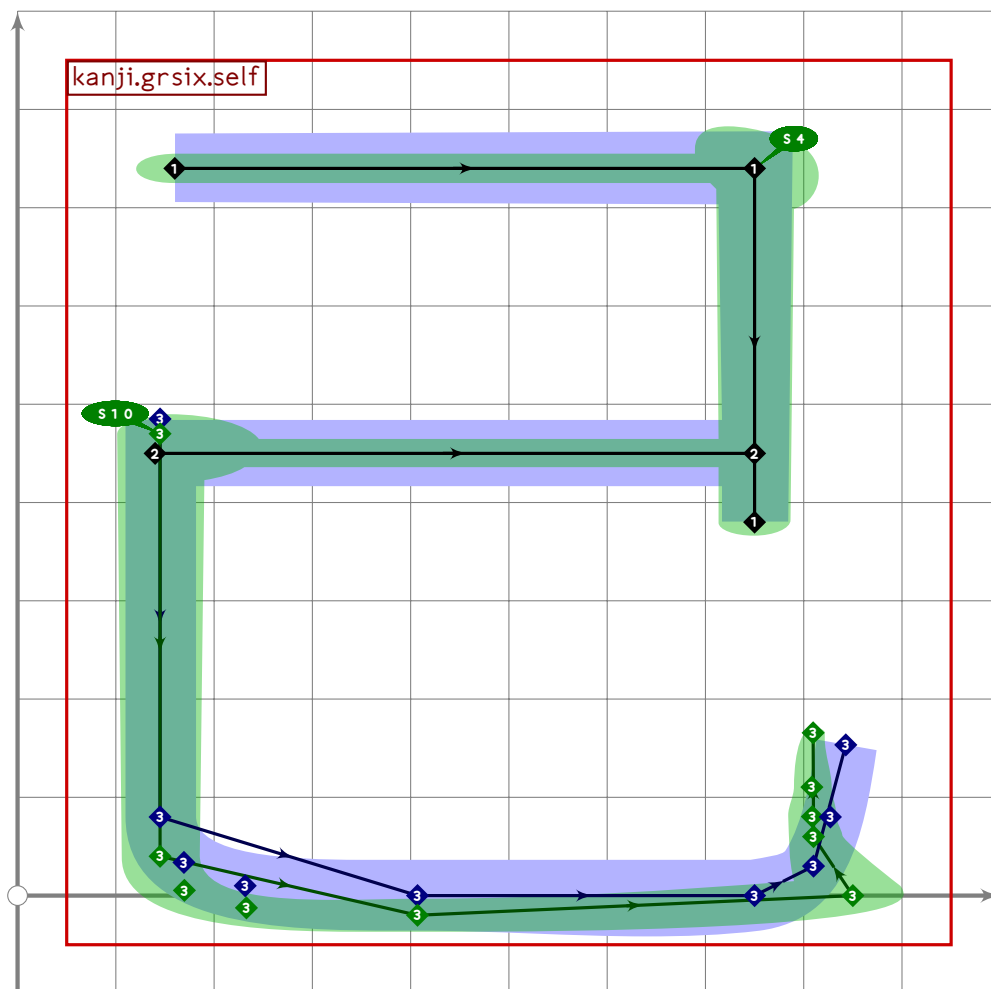


```

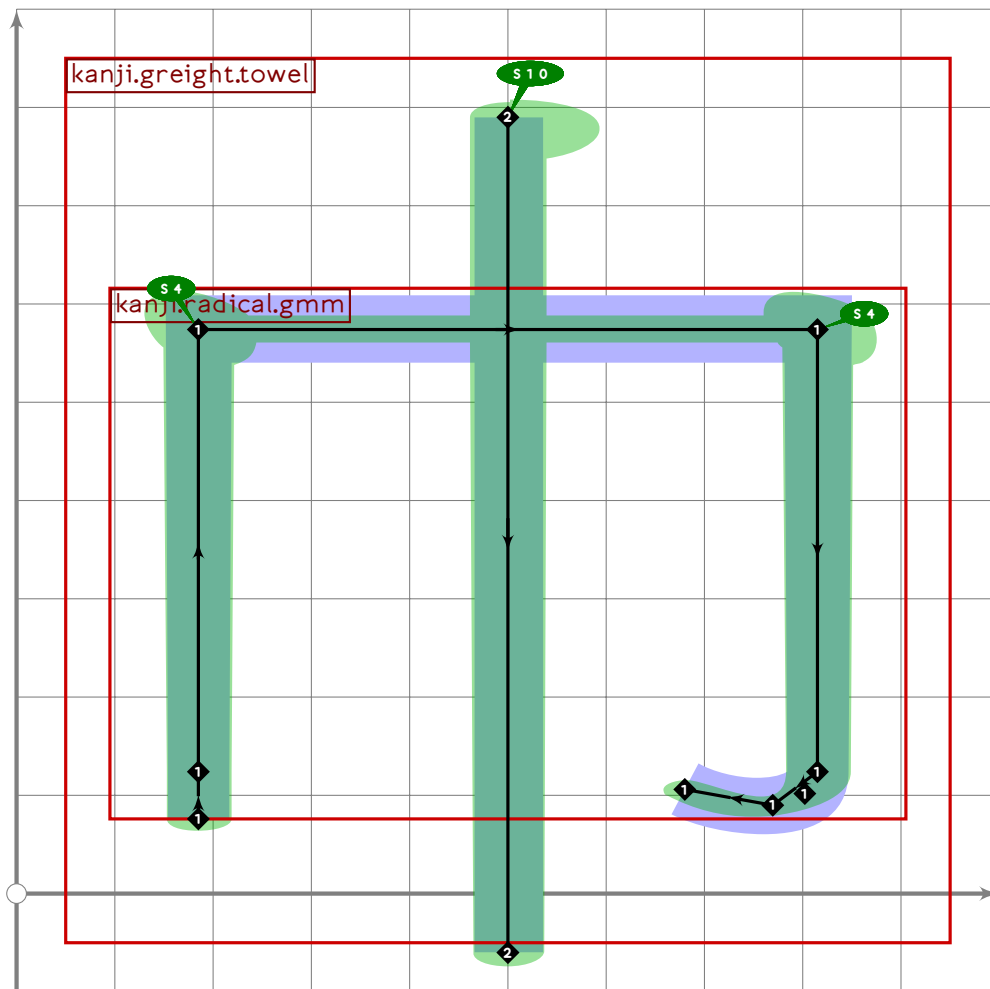
253 % takumi "craft"
254 beginsuglyph("uni2F2F";47);
255   kanji.grt.two.craft;
256   tsu_render;
257 endsuglyph;
258

```

U+2F30
tsuku.uni2F30



```
259 % ko/ki "self" (dict. says also "snake" but almost no words use it that way)
260 beginsuglyph("uni2F30";48);
261   kanji.grsix.self;
262   tsu_render;
263 endtsuglyph;
264
```

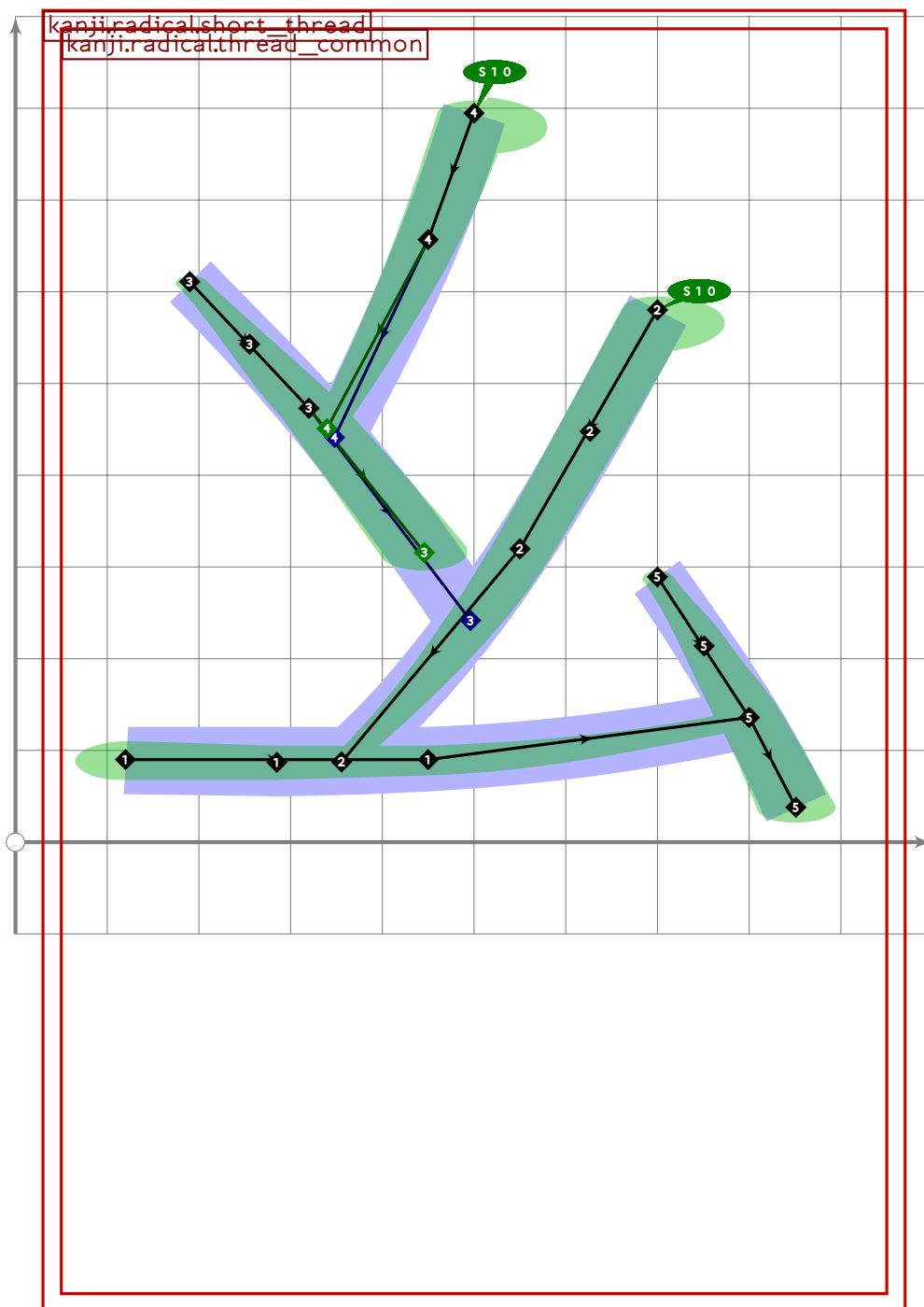


```

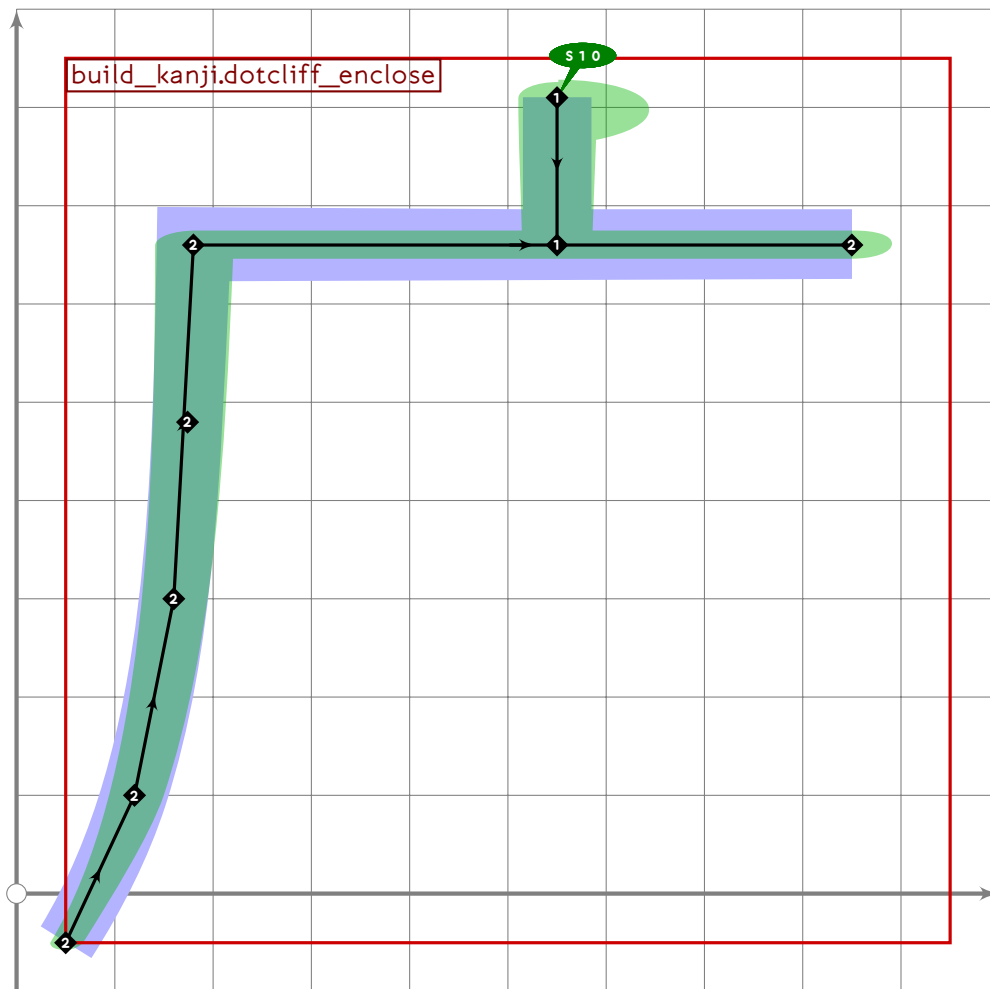
265 % kin/oo/aba "towel" or "hanging scroll"
266 begintsuglyph("uni2F31";49);
267   kanji.greight.towel;
268   tsu_render;
269 endtsuglyph;
270

```

U+2F33
tsuku.uni2F33



```
271 % you/chiisai "short thread radical"  
272 begintsuglyph("uni2F33";51);  
273   kanji.radical.short_thread;  
274   tsu_render;  
275 endsuglyph;  
276
```

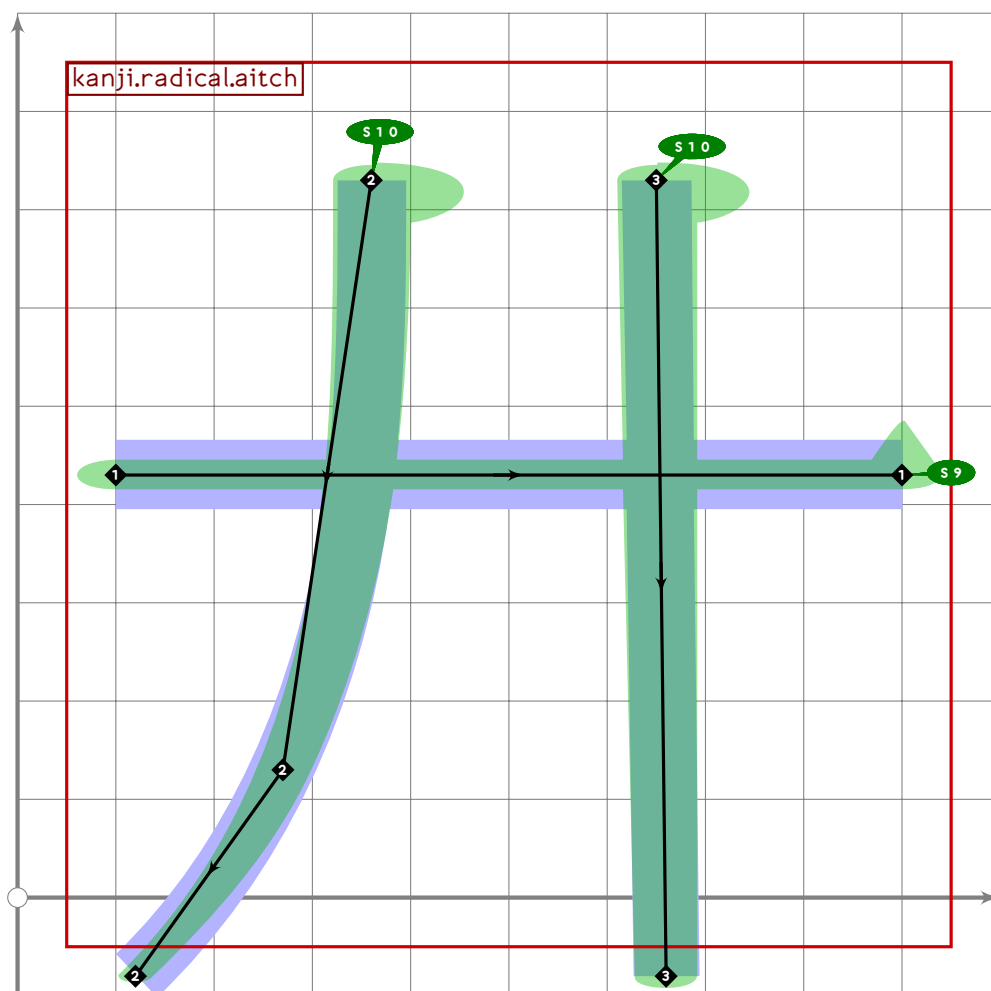


```

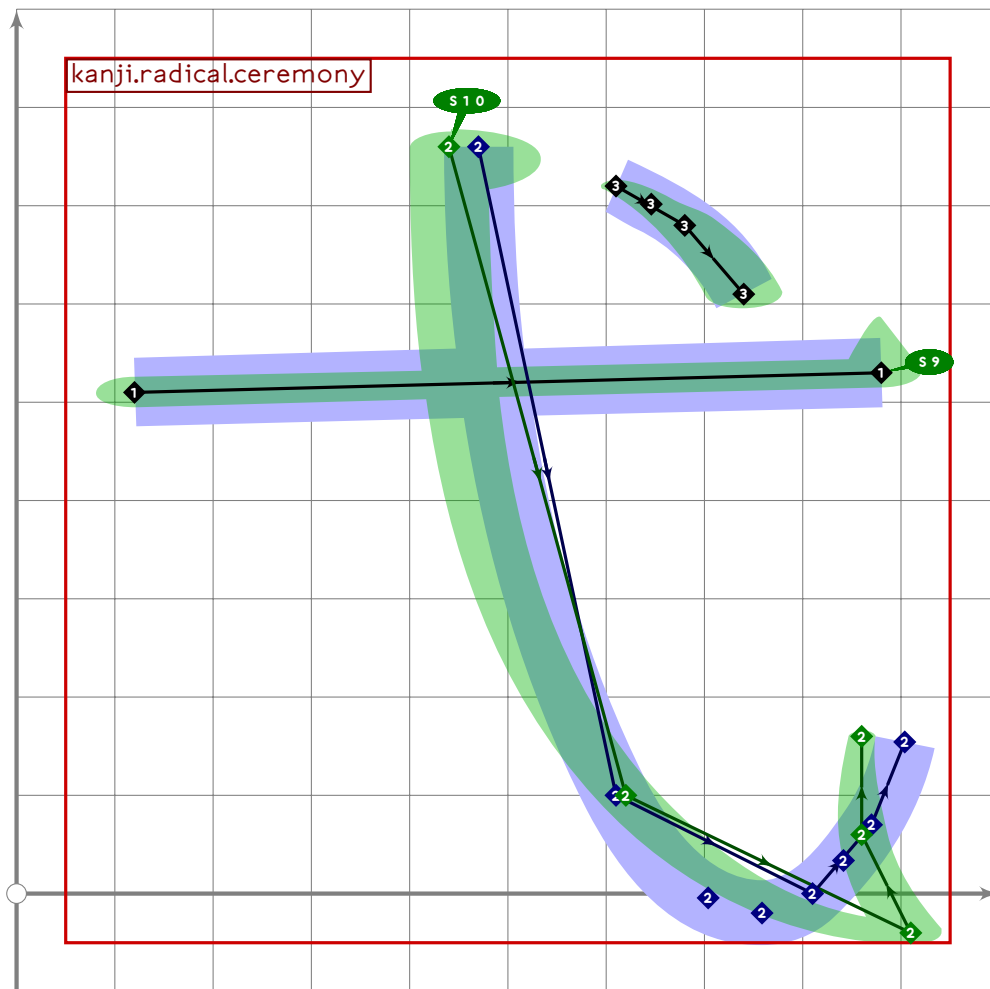
277 % madare "dotted cliff radical"
278 begintsuglyph("uni2F34";52);
279   build_kanji.dotcliff_enclose();
280   tsu_render;
281 endtsuglyph;
282

```

U+2F36
tsuku.uni2F36



```
283 % extra
284 begintsuglyph("uni2F36",54);
285   kanji.radical.aitch;
286   tsu_render;
287 endtsuglyph;
288
```

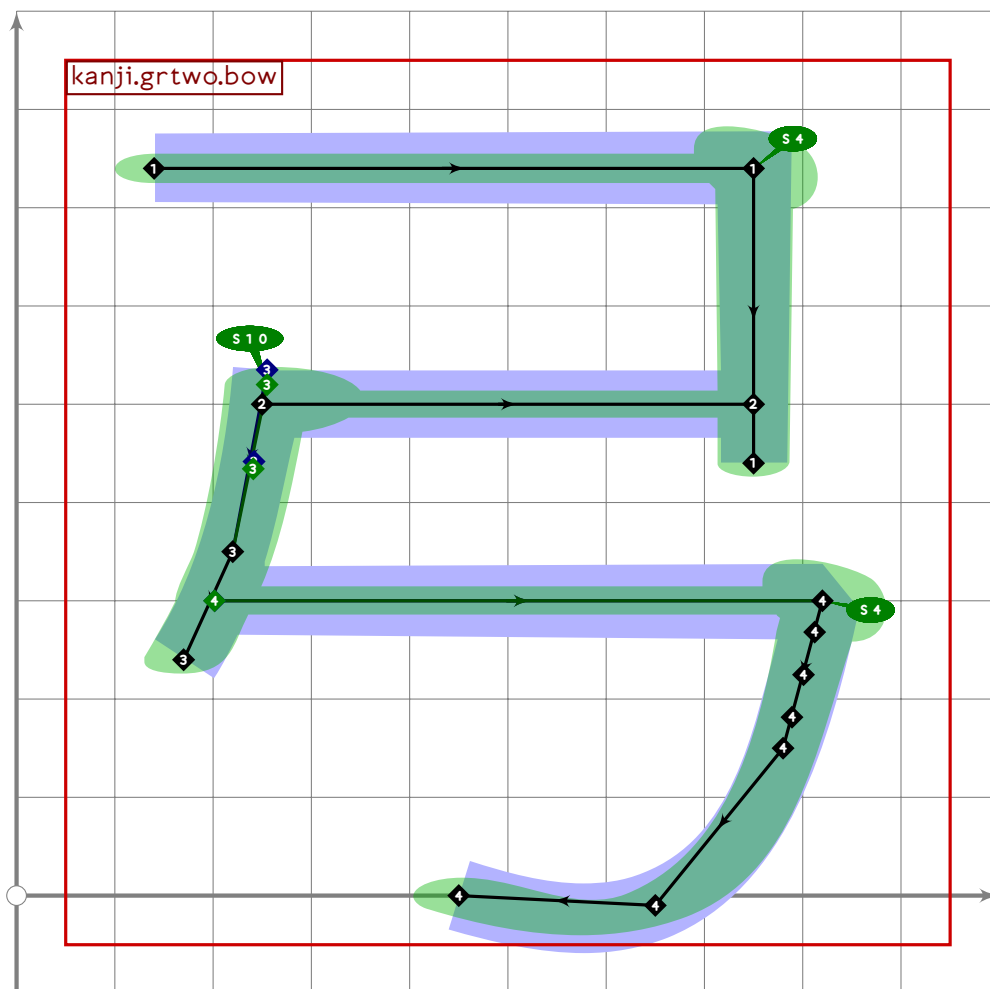



```

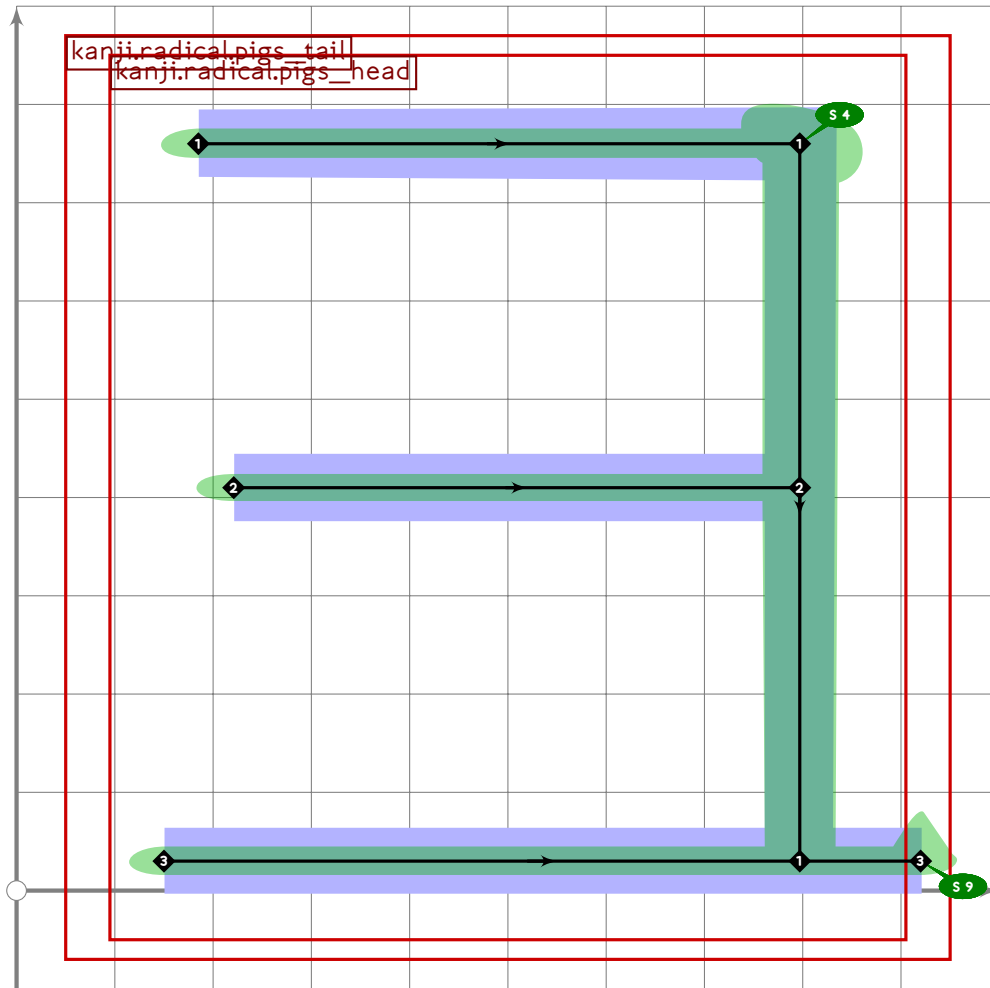
289 % yoku/iguromi "ceremony radical"
290 begintsuglyph("uni2F37",55);
291   kanji.radical.ceremony;
292   tsu_render;
293 endtsuglyph;
294

```

U+2F38
tsuku.uni2F38



```
295 % kyuuyumi "bow" (projectile weapon)
296 begintsuglyph("uni2F38",56);
297   kanji.grtwo.bow;
298   tsu_render;
299 endtsuglyph;
300
```

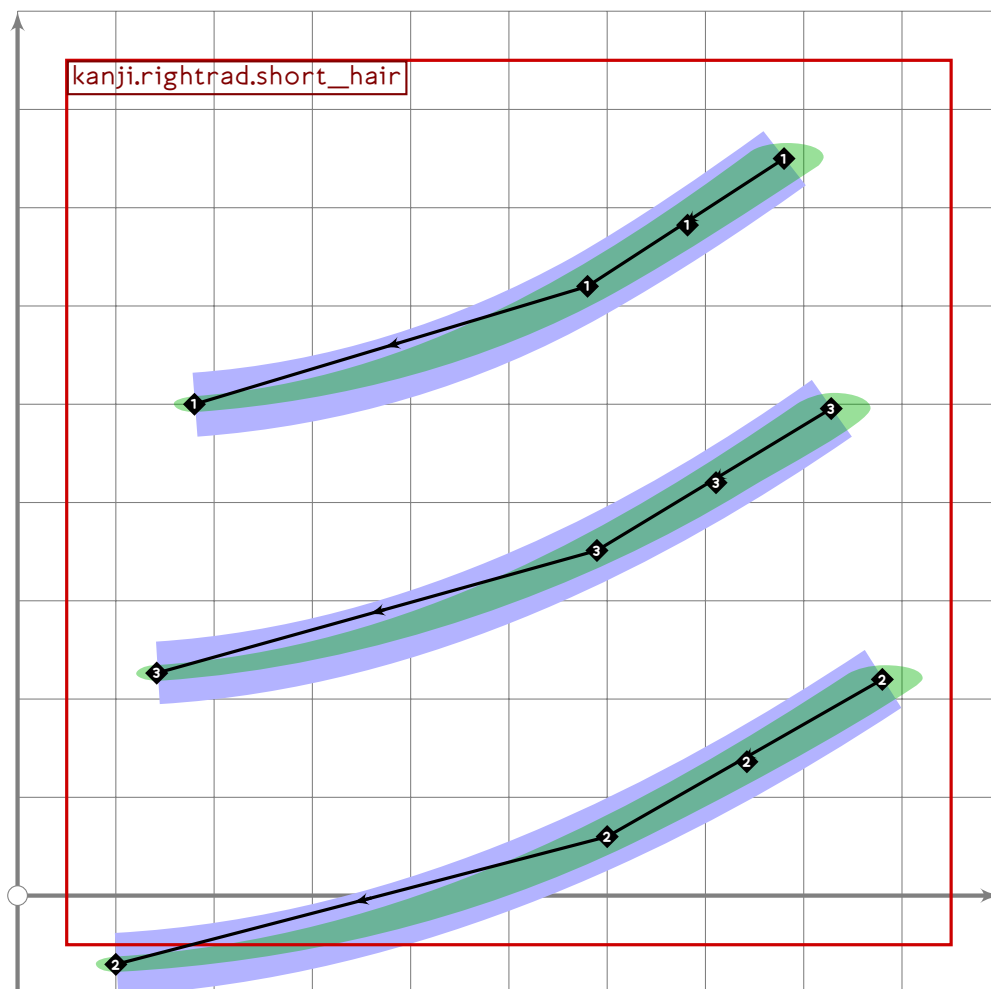


```

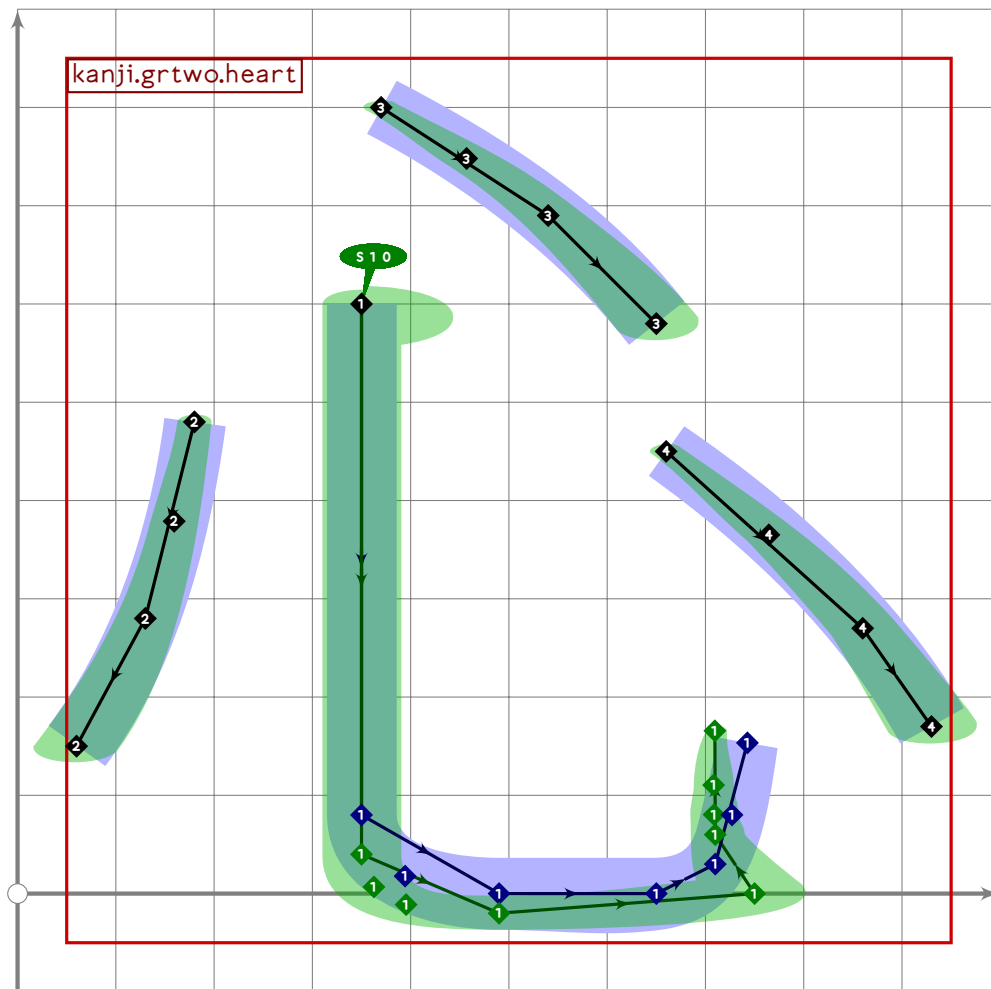
301 % needed for lots of other things, rare by itself
302 beginsuglyph("uni2F39",57);
303   kanji.radical.pigs_tail;
304   tsu_render;
305 endsuglyph;
306

```

U+2F3A
tsuku.uni2F3A



```
307 % san "short hair radical"
308 begintsuglyph("uni2F3A",58);
309   kanji.rightrad.short_hair;
310   tsu_render;
311 endtsuglyph;
312
```

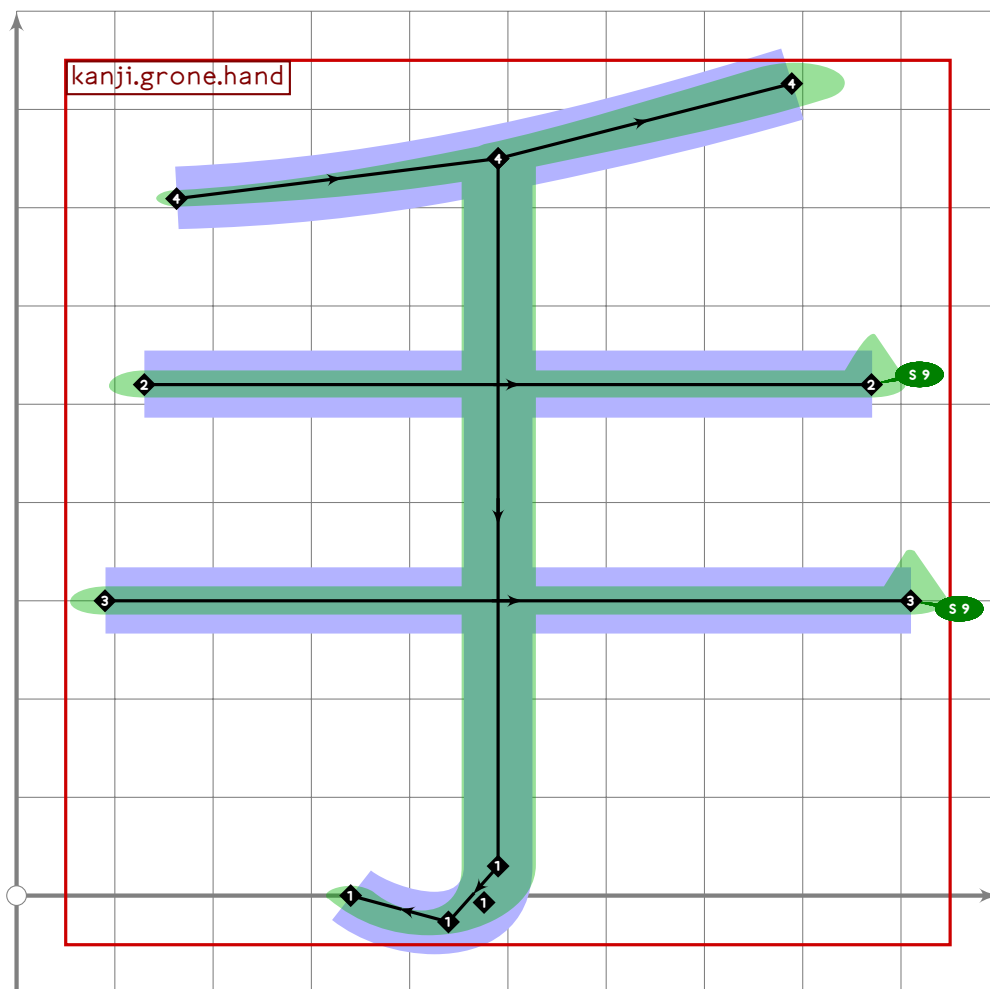


```

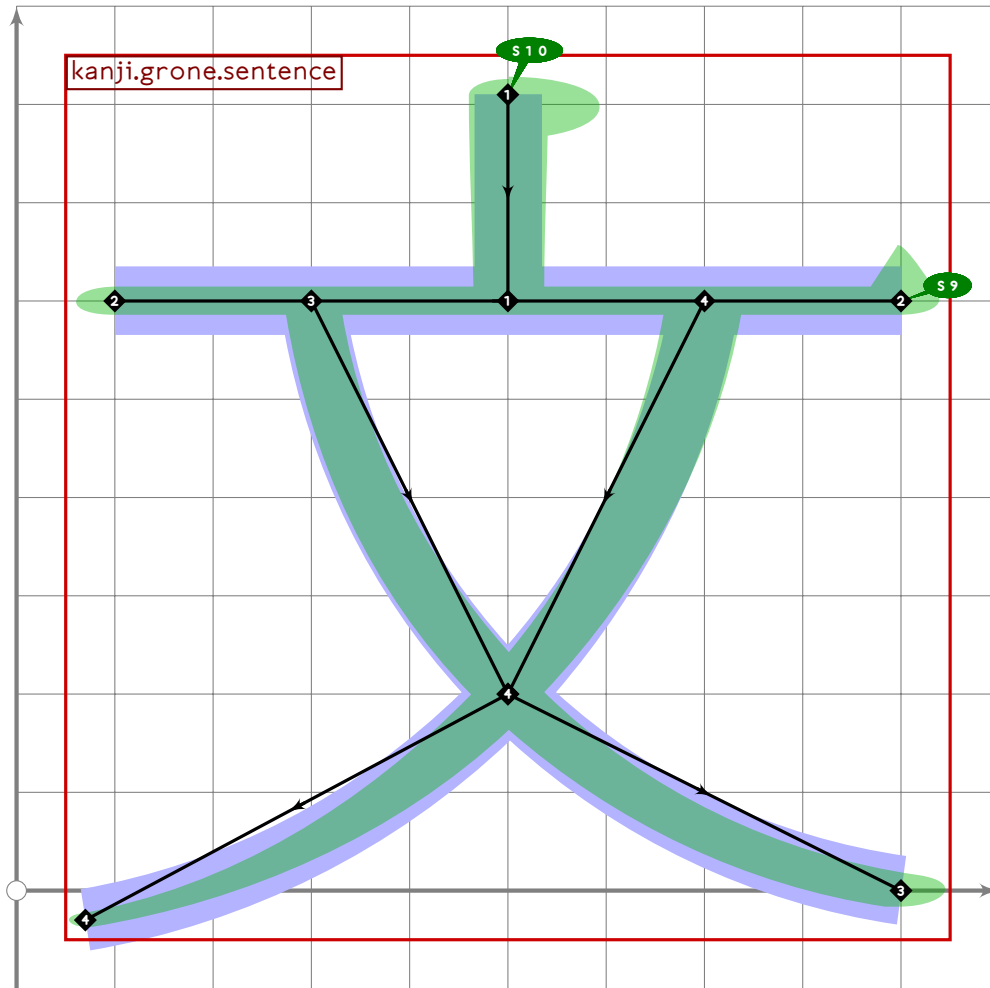
313 % shin/kokoro "heart"
314 begintsuglyph("uni2F3C",60);
315 kanji.grtwo.heart;
316 tsu_render;
317 endtsuglyph;
318

```

U+2F3F
tsuku.uni2F3F



```
319 % te "hand"
320 begintsuglyph("uni2F3F";63);
321   kanji.grone.hand;
322   tsu_render;
323 endtsuglyph;
324
```

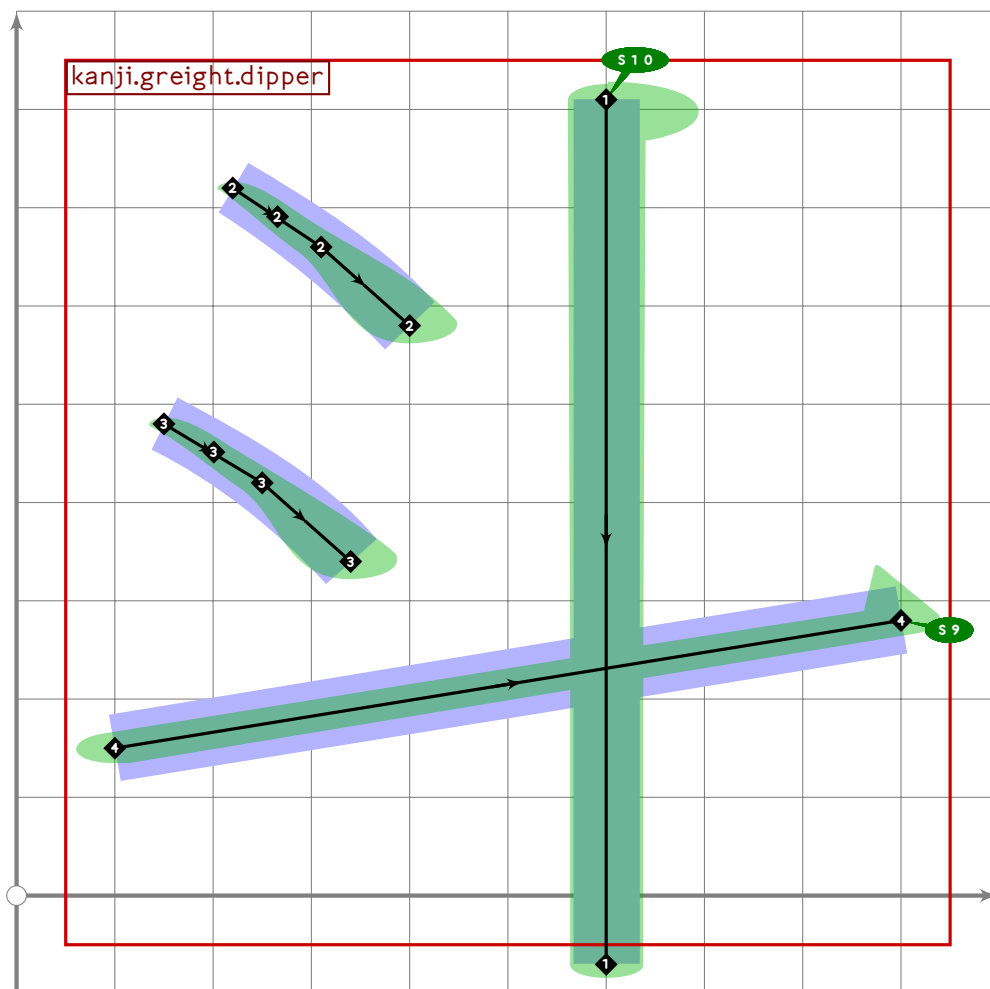


```

325 % bun/fumi "sentence"
326 begintsuglyph("uni2F42",66);
327   kanji.grone.sentence;
328   tsu_render;
329 endtsuglyph;
330

```

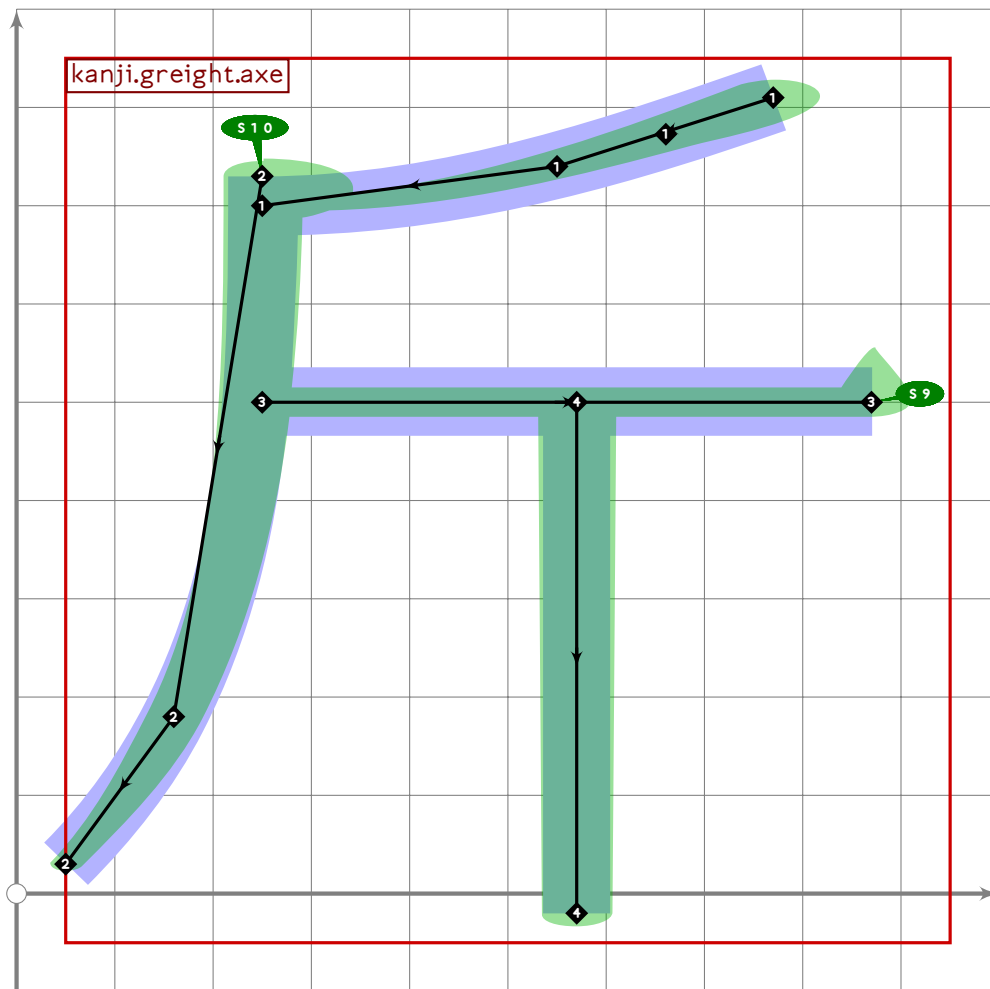
U+2F43
tsuku.uni2F43



```

331 % to/masu "dipper"
332 begintsuglyph("uni2F43",67);
333   kanji.greight.dipper;
334   tsu_render;
335 endtsuglyph;
336

```

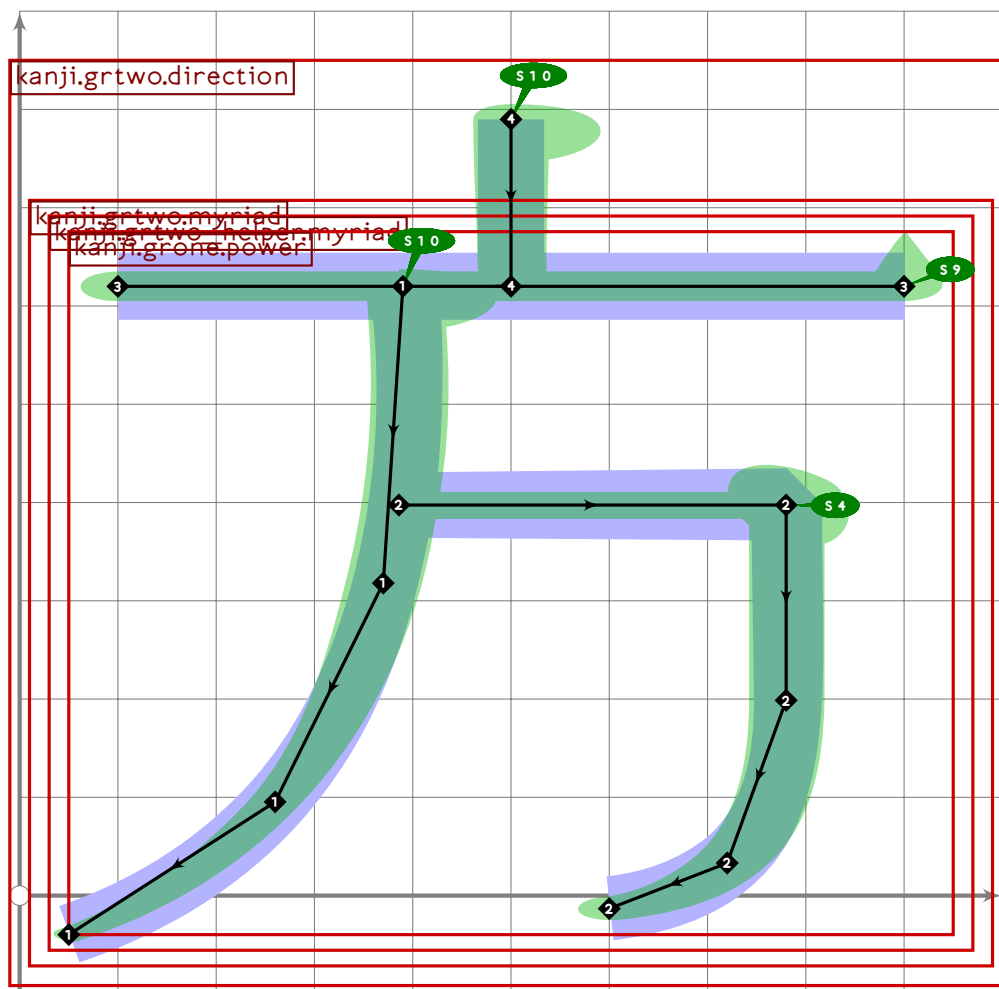



```

337 % kin/ono "axe"
338 begintsuglyph("uni2F44";68);
339   kanji.greight.axe;
340   tsu_render;
341 endtsuglyph;
342

```

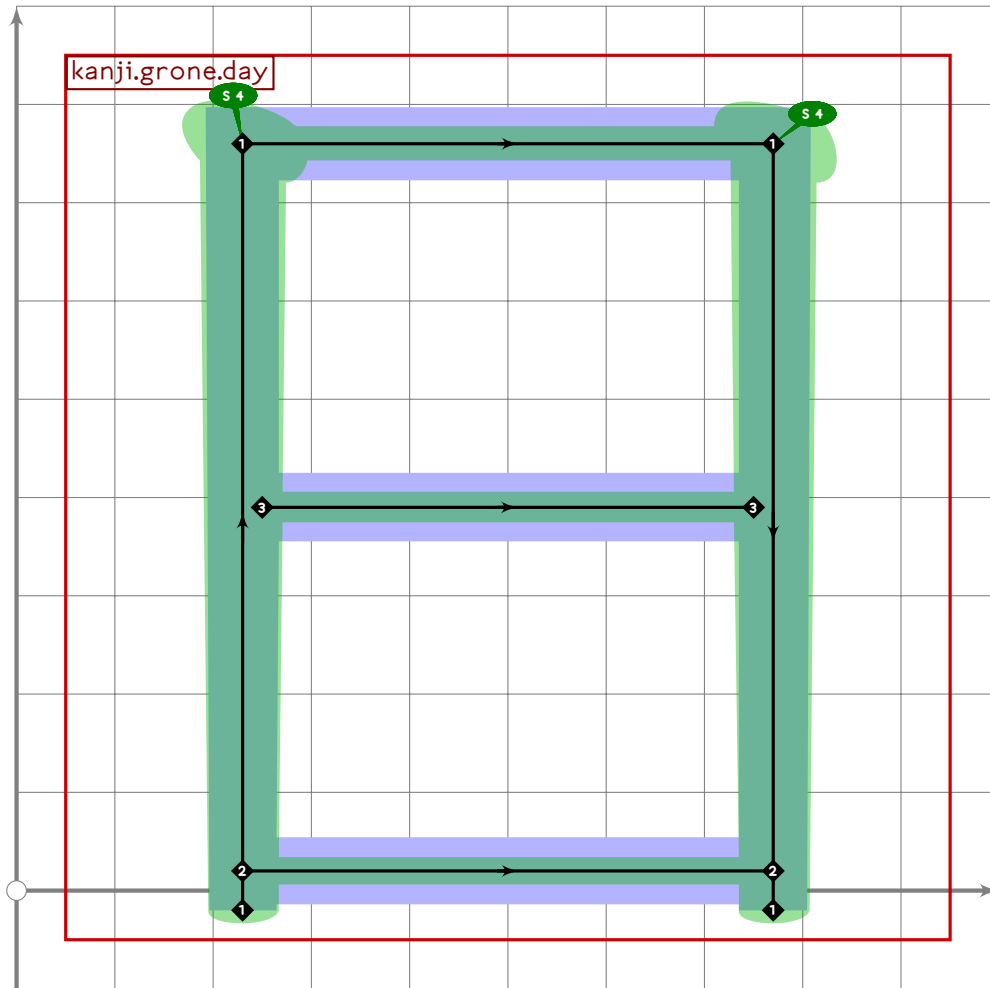
U+2F45
tsuku.uni2F45



```

343 % hou/kata "direction" or "how to do it"
344 beginsuglyph("uni2F45",69);
345   kanji.grtwo.direction;
346   tsu_render;
347 endsuglyph;
348

```

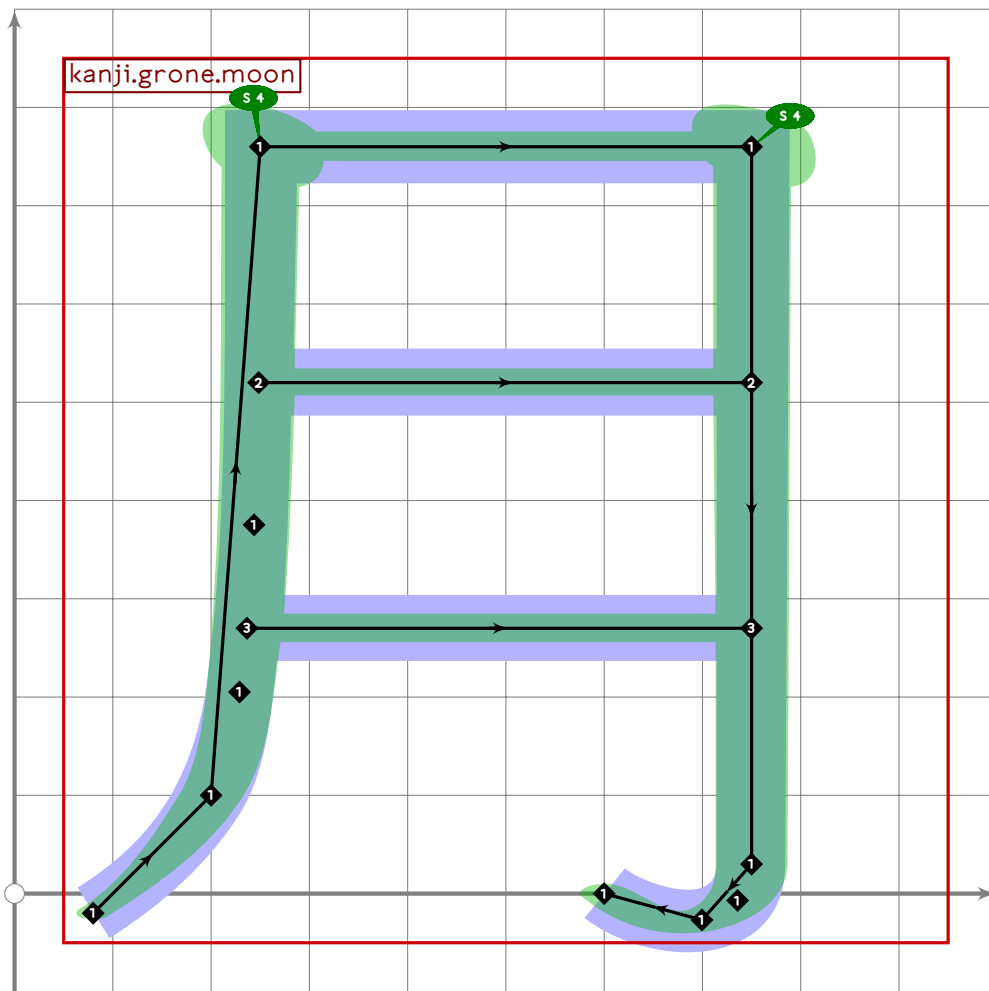


```

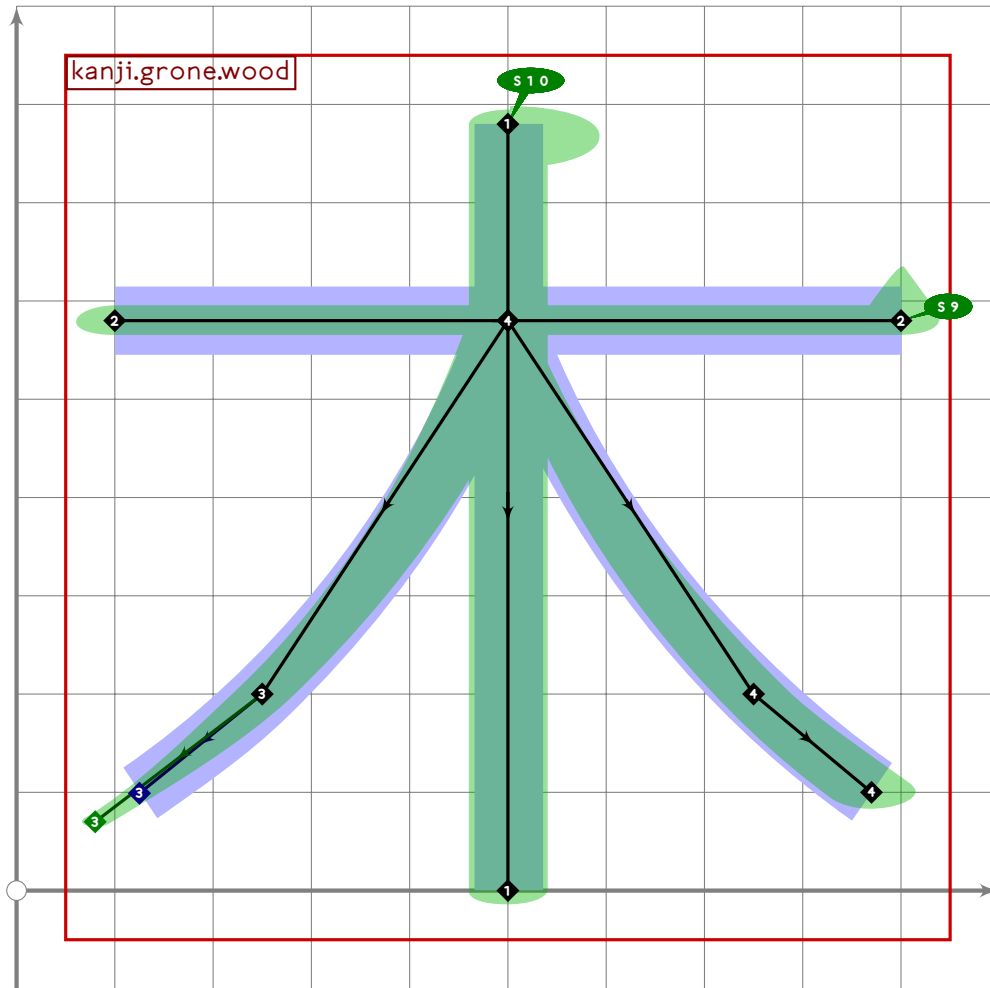
349 % hi/nichi "day"
350 begint Suglyph("uni2F47";71);
351   kanji.grone.day;
352   tsu_render;
353 endtsuglyph;
354

```

U+2F49
tsuku.uni2F49



```
355 % tsuki/getsu "moon"
356 begint Suglyph("uni2F49",73);
357   kanji.grone.moon;
358   tsu_render;
359 endt Suglyph;
360
```

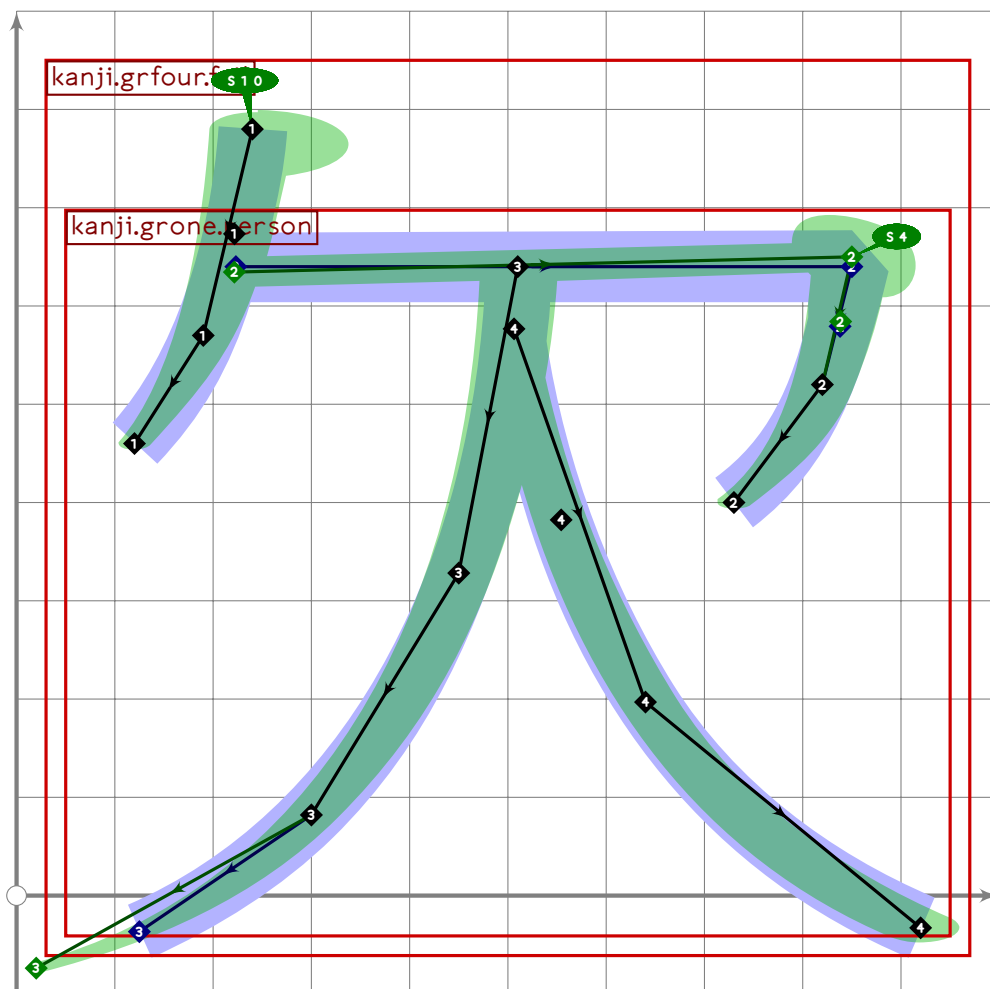


```

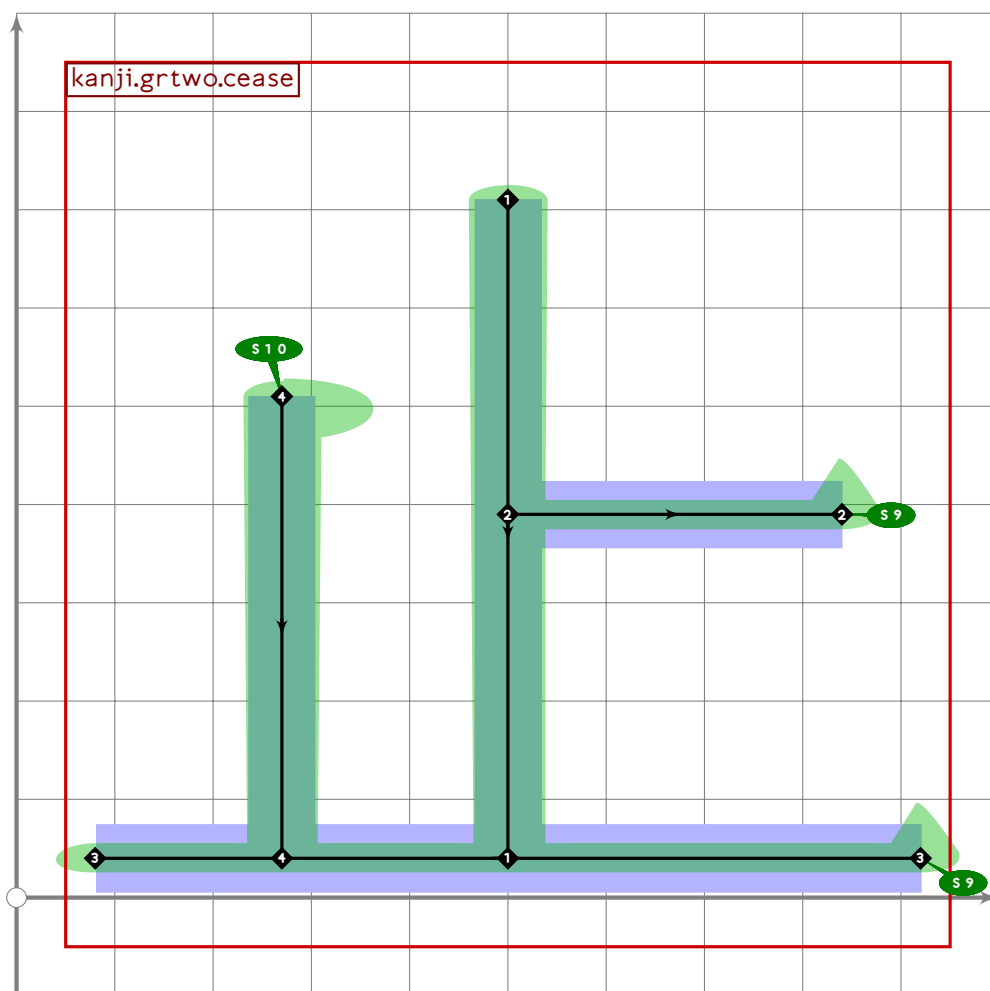
361 % ki "wood"
362 begintsuglyph("uni2F4A",74);
363   kanji.grone.wood;
364   tsu_render;
365 endtsuglyph;
366

```

U+2F4B
tsuku.uni2F4B



```
367 % ketsu/ka/akubi "fail" or "yawn"  
368 begint Suglyph("uni2F4B",75);  
369 kanji.grfour.fail;  
370 tsu_render;  
371 endtsuglyph;  
372
```

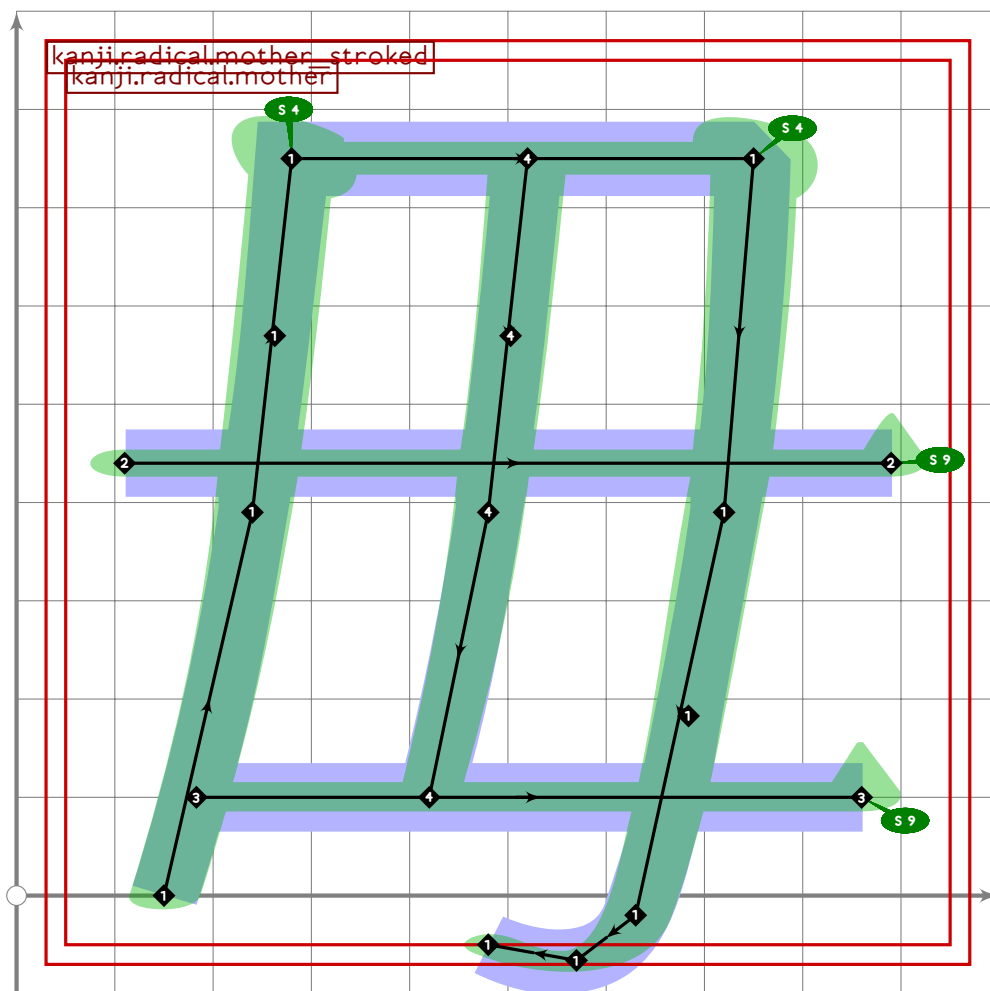


```

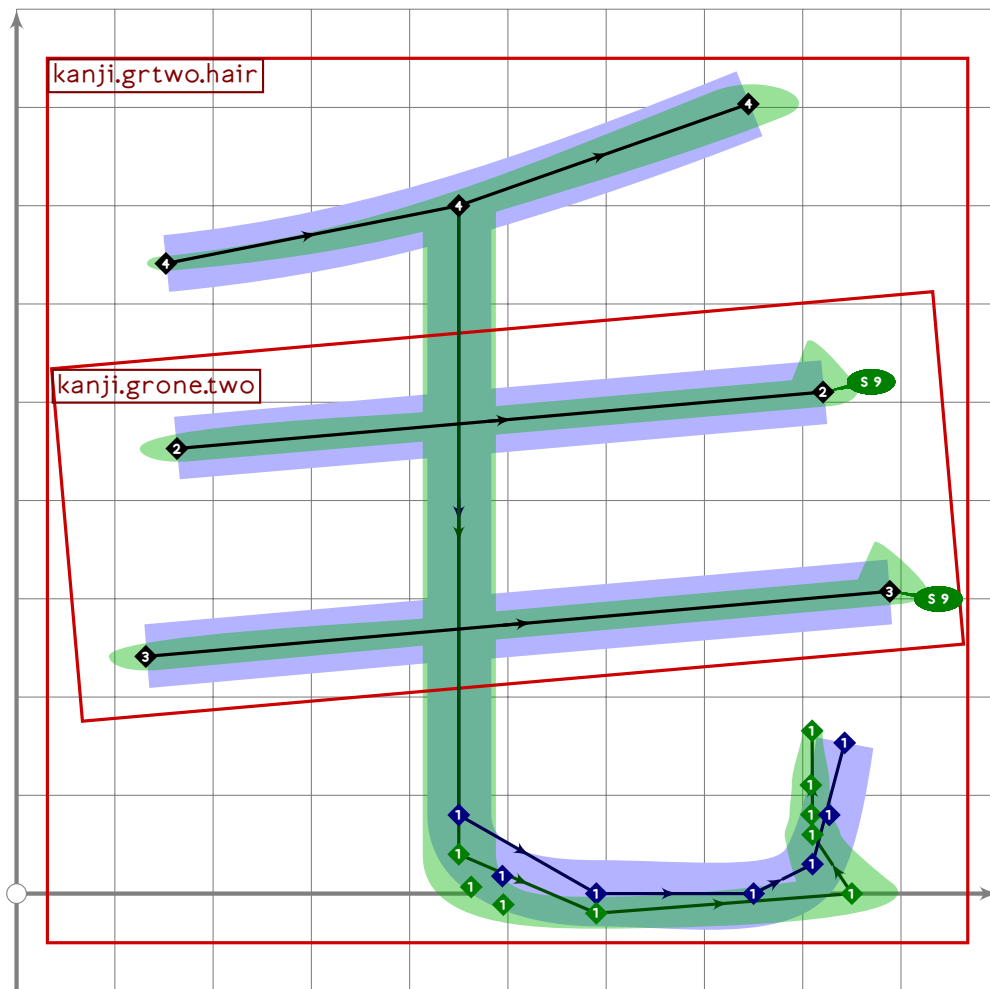
373 % shi/toma "stop"
374 begintsuglyph("uni2F4C";76);
375   kanji.grtwo.cease;
376   tsu_render;
377 endtsuglyph;
378

```

U+2F4F
tsuku.uni2F4F



```
379 % extra: mother radical, stroked version
380 begintsuglyph("uni2F4F";79);
381   kanji.radical.mother_stroked;
382   tsu_render;
383 endtsuglyph;
384
```

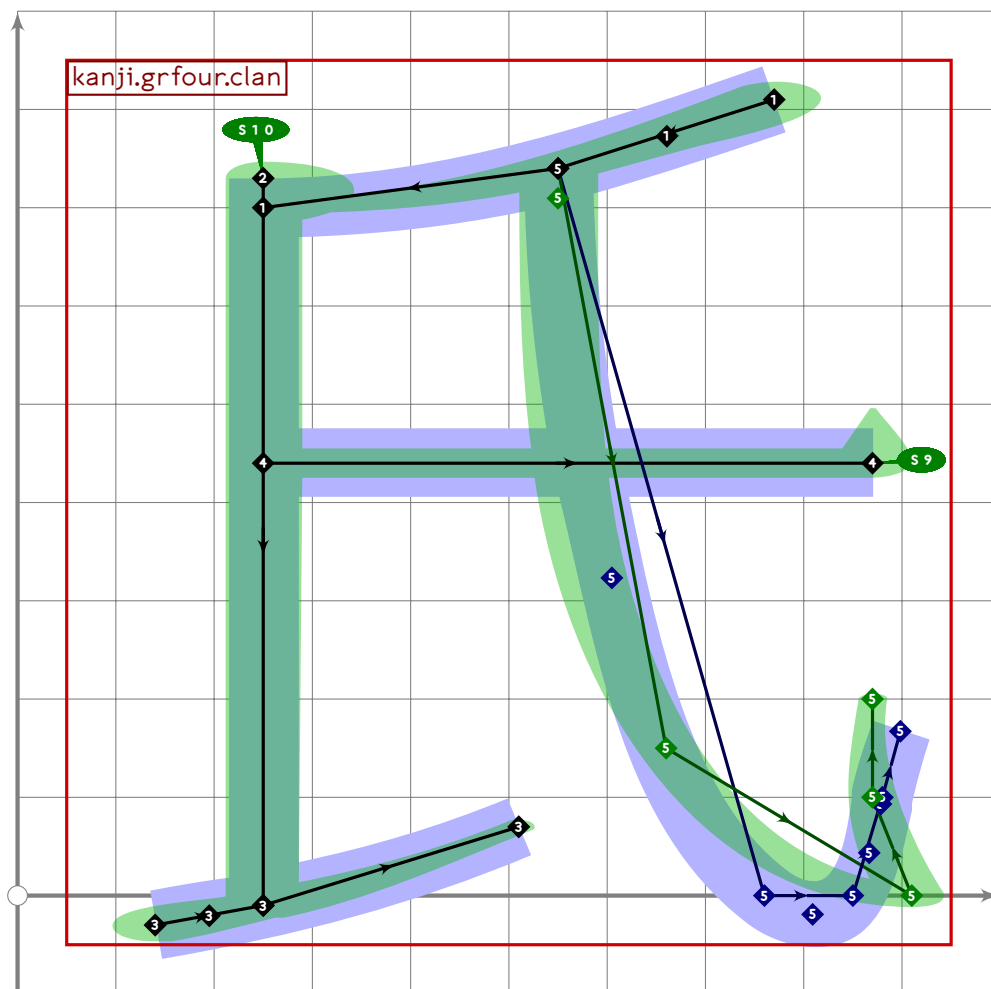



```

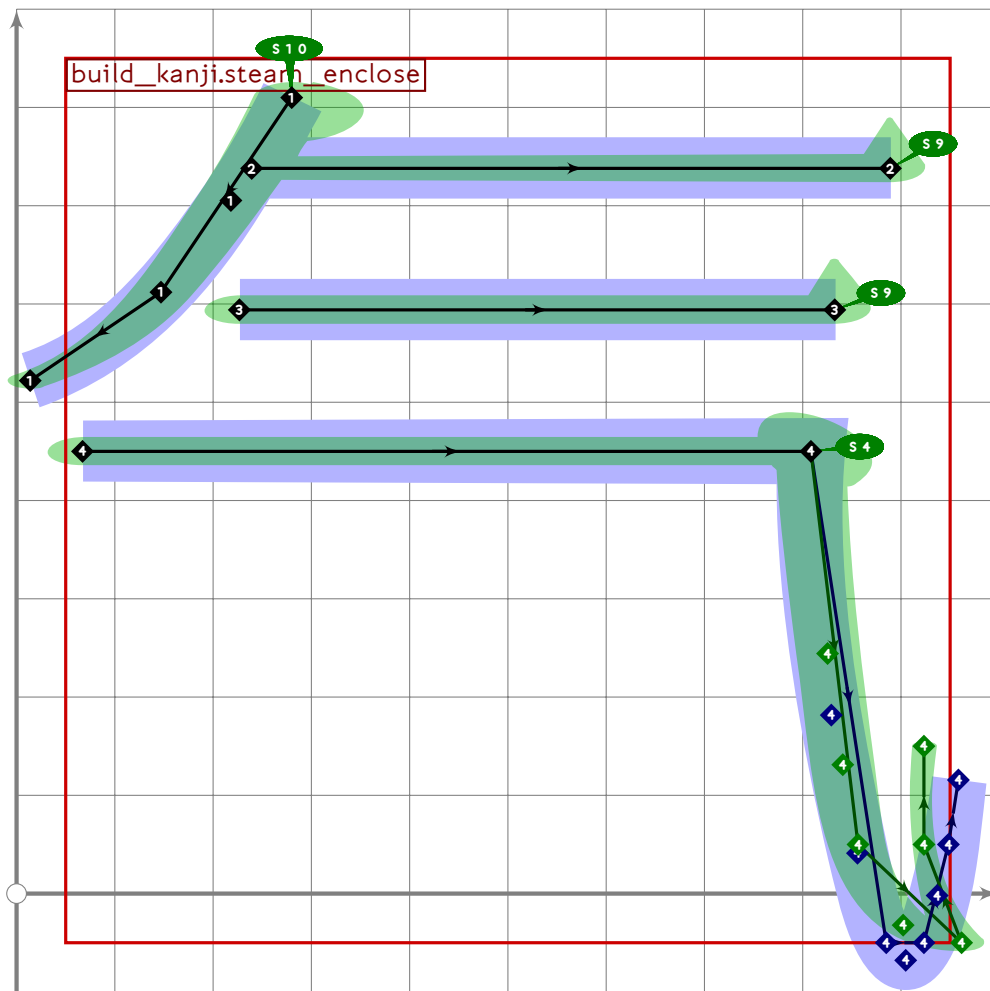
385 % mou/ke "hair"
386 begintsuglyph("uni2F51";81);
387   kanji.grtwo.hair;
388   tsu_render;
389 endtsuglyph;
390

```

U+2F52
tsuku.uni2F52



```
391 % shi/uji "clan"  
392 begint Suglyph("uni2F52";82);  
393   kanji.grfour.clan;  
394   tsu_render;  
395 endtsuglyph;  
396
```

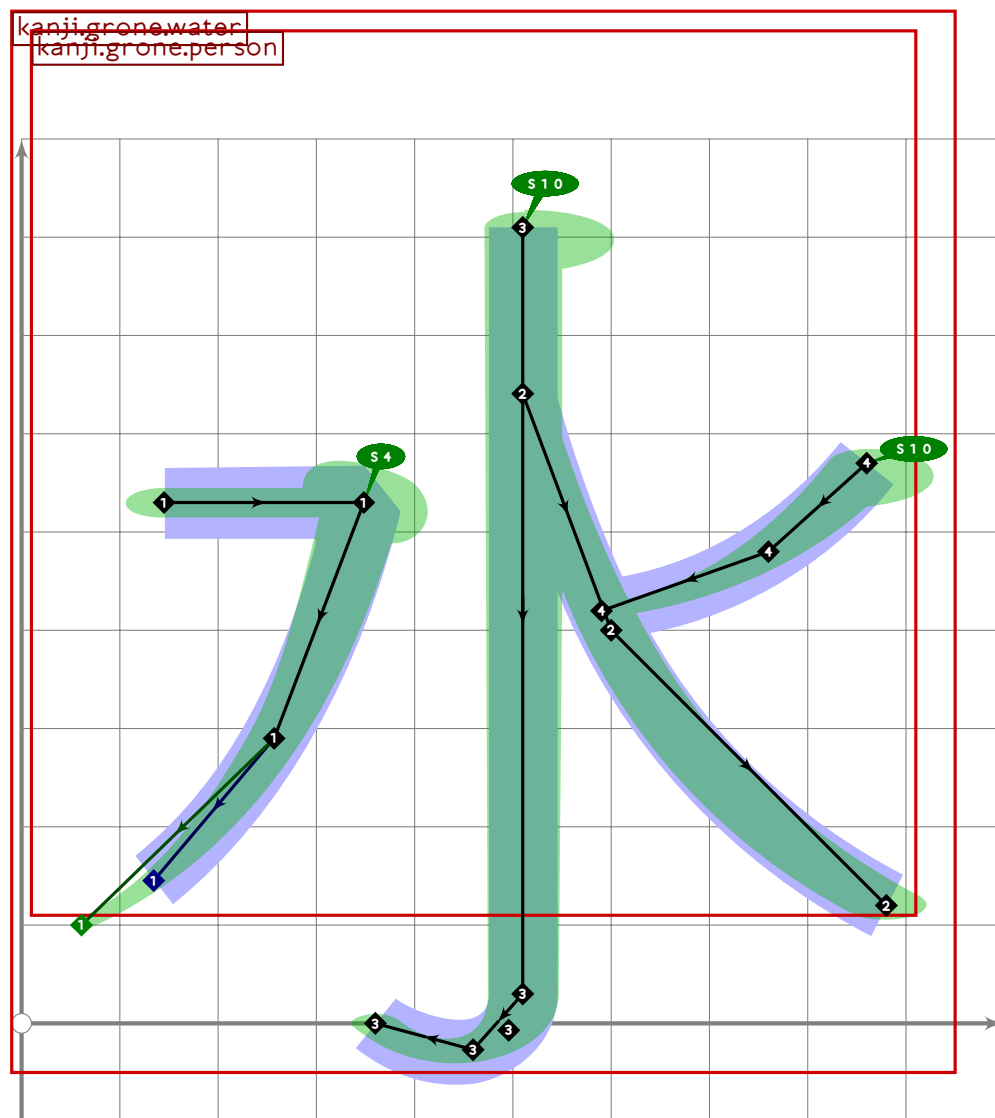


```

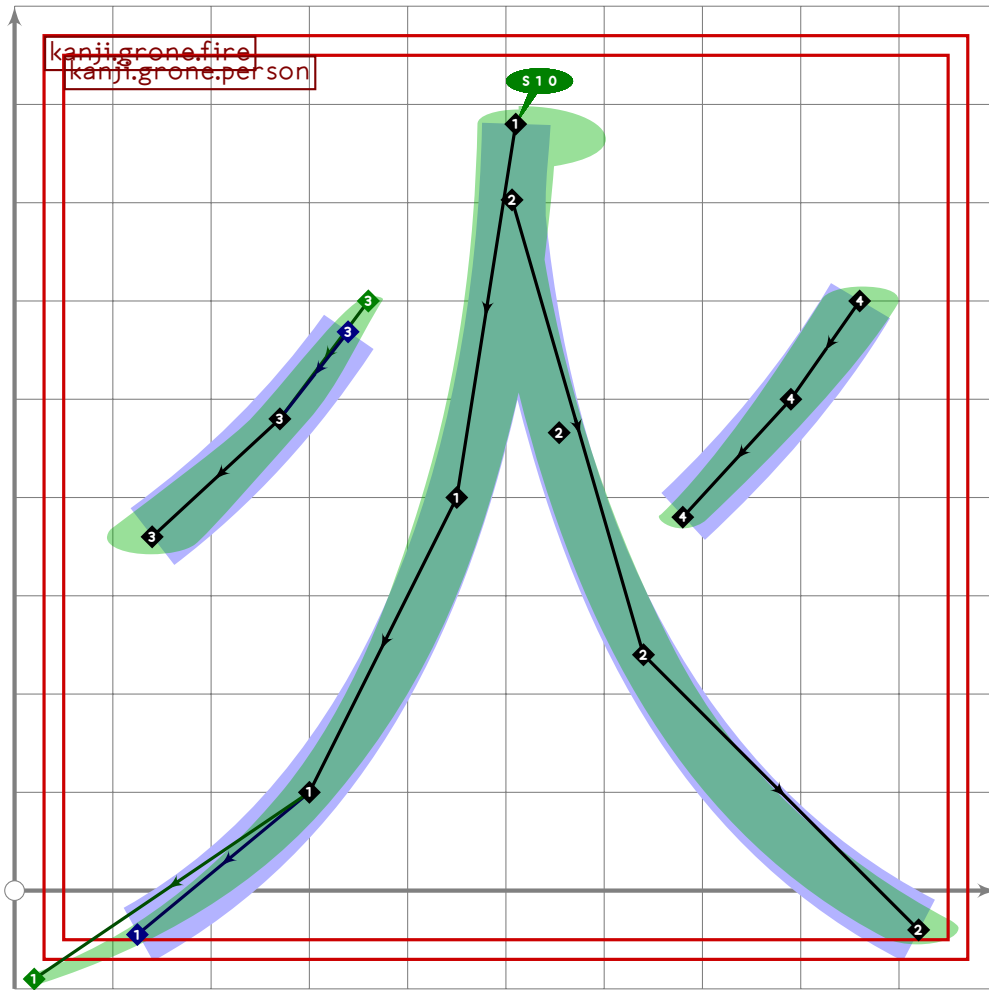
397 % sei/tada/machi "correct"
398 begintsuglyph("uni2F53",83);
399   build_kanji.steam_enclose((700,400))();
400   tsu_render;
401 endtsuglyph;
402

```

U+2F54
tsuku.uni2F54

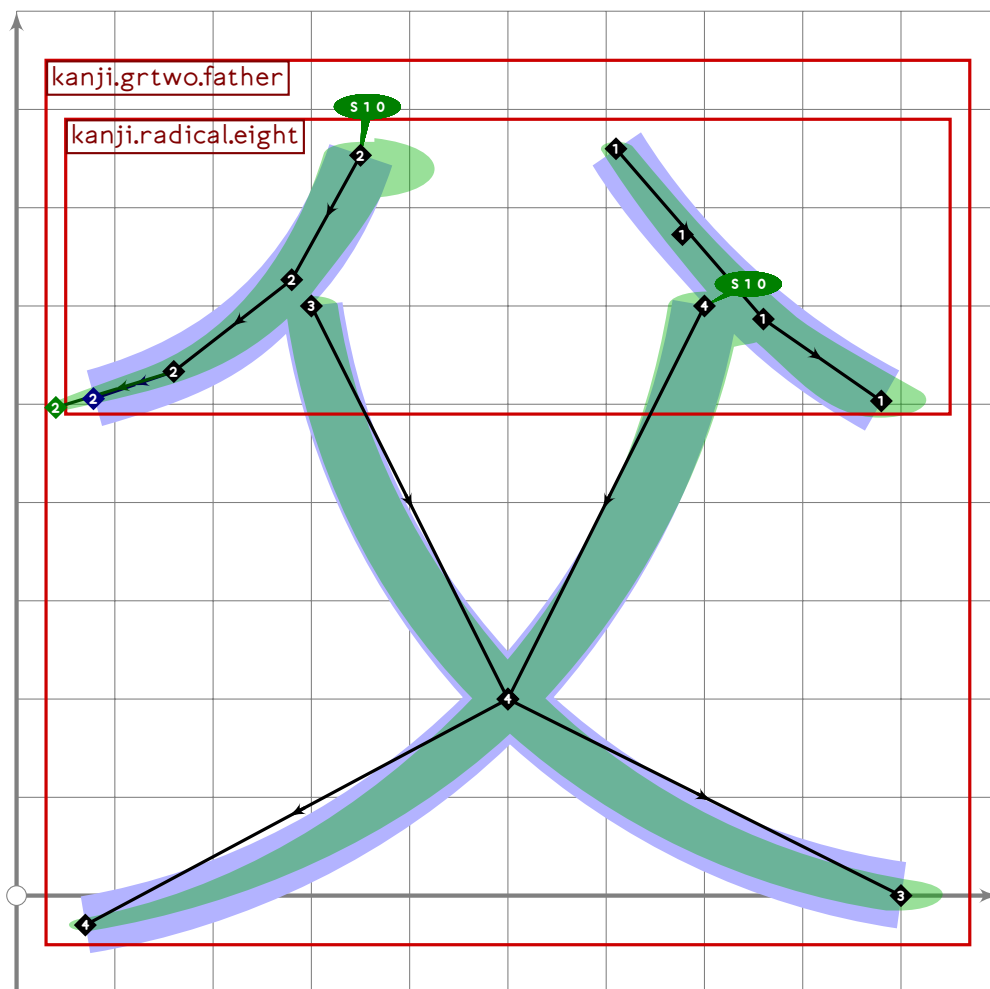


```
403 % sui/mizu "water"  
404 begintsuglyph("uni2F54";84);  
405   kanji.grone.water;  
406   tsu_render;  
407 endtsuglyph;  
408
```

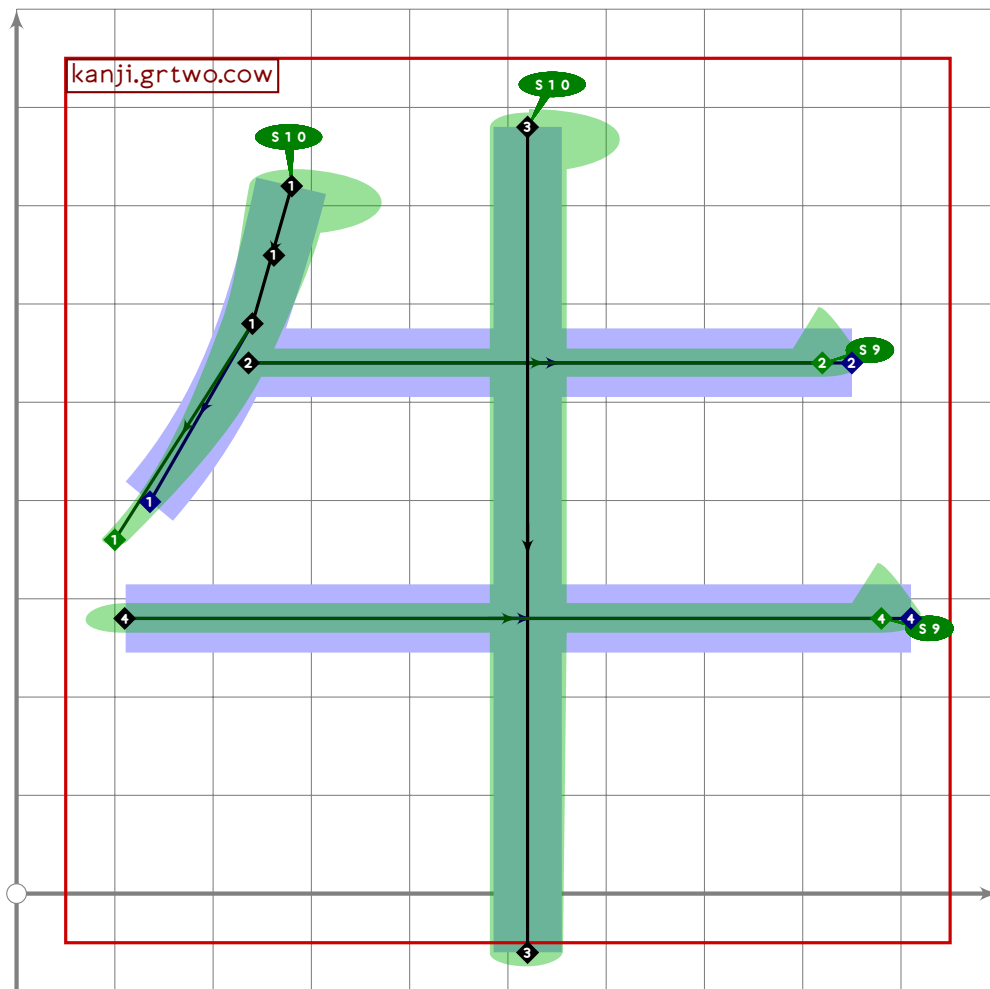


```
409 % hi/ka "fire"  
410 begintsuglyph("uni2F55",85);  
411   kanji.grone.fire;  
412   tsu_render;  
413 endsuglyph;  
414
```

U+2F57
tsuku.uni2F57



```
415 % chichi "father"
416 begintsuglyph("uni2F57";87);
417   kanji.grtwo.father;
418   tsu_render;
419 endtsuglyph;
420
```

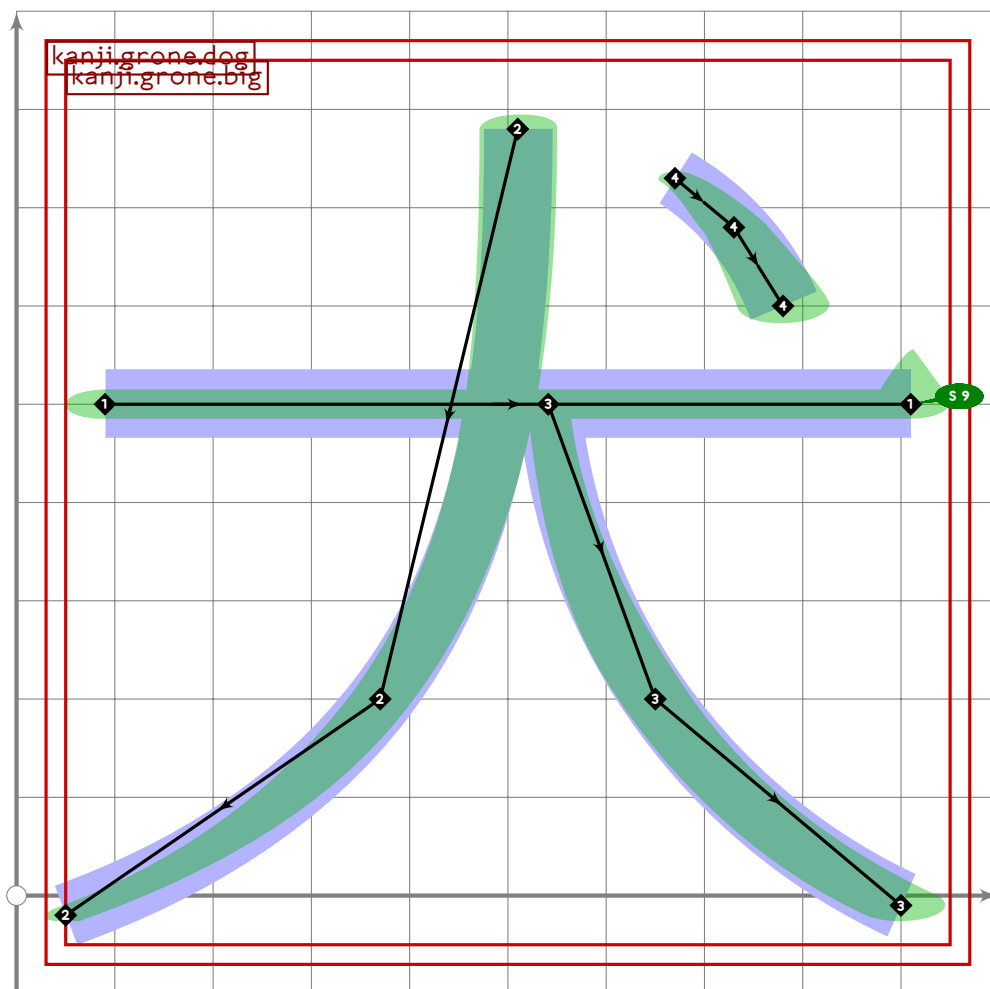


```

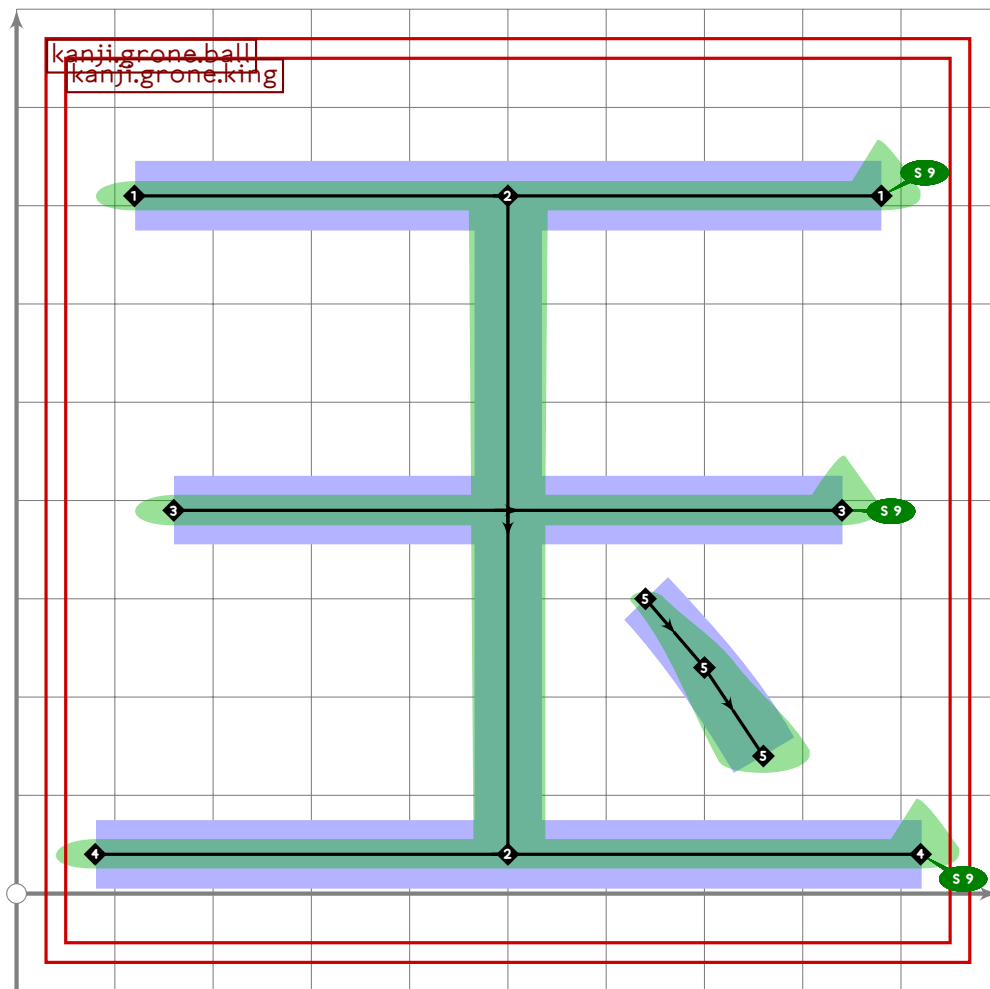
421 % kyuuu/ushi "cow"
422 begintsuglyph("uni2F5C";92);
423   kanji.grtwo.cow;
424   tsu_render;
425 endtsuglyph;
426

```

U+2F5D
tsuku.uni2F5D



```
427 % inu "dog"  
428 begintsuglyph("uni2F5D";93);  
429   kanji.grone.dog;  
430   tsu_render;  
431 endtsuglyph;  
432
```

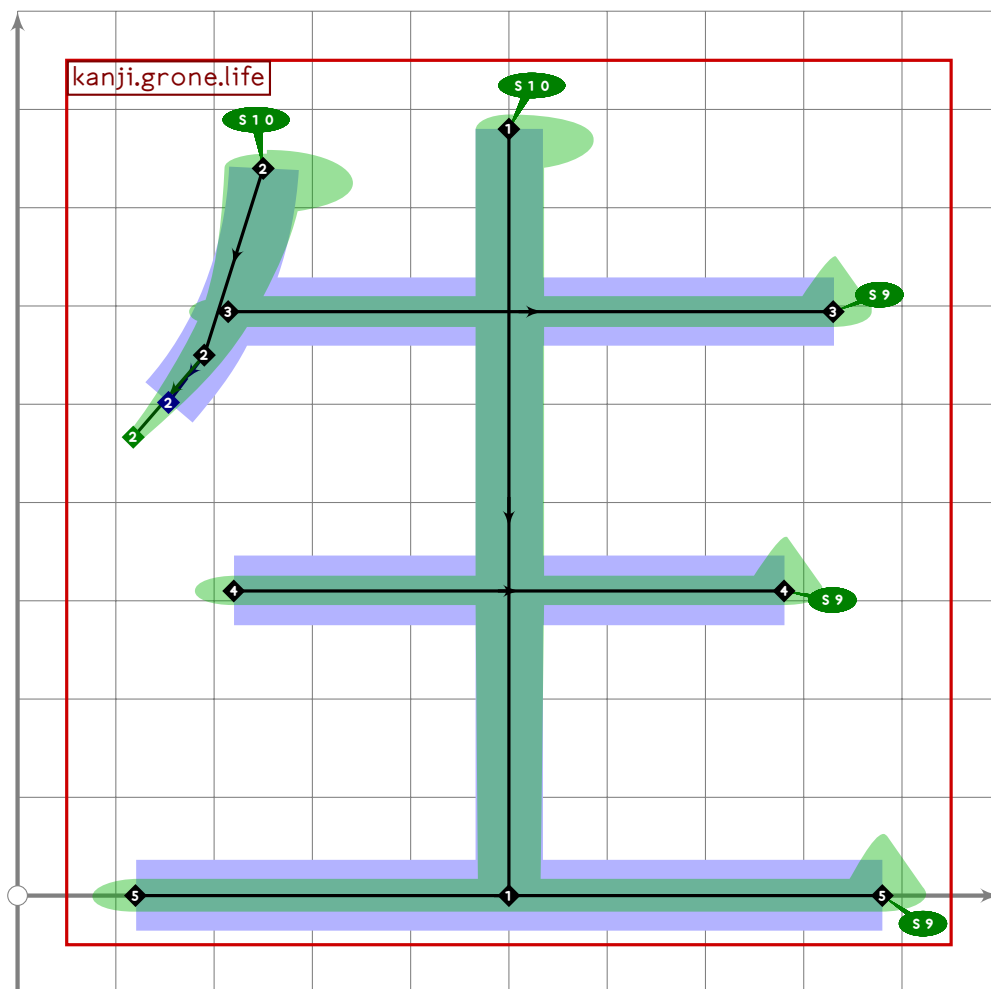



```

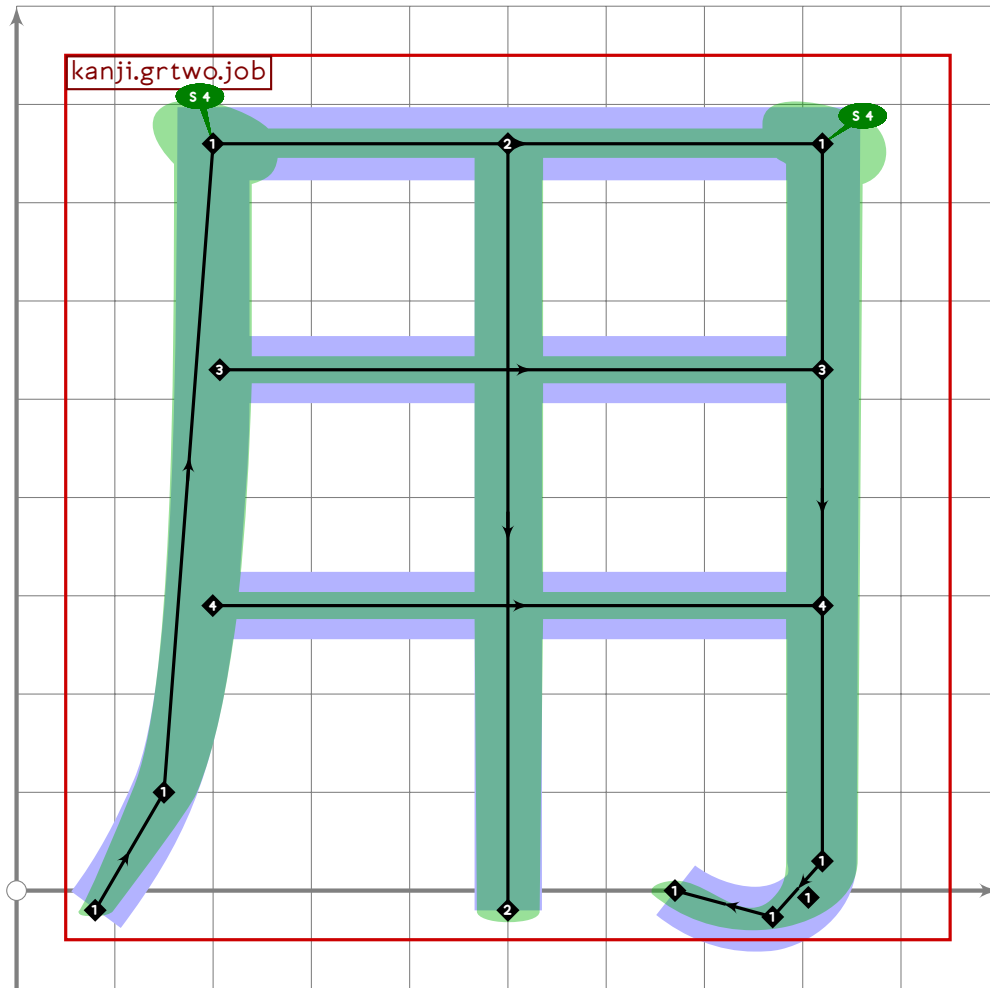
433 % gyoku/tama "ball" or "precious"
434 begint Suglyph("uni2F5F";95);
435   kanji.grone.ball;
436   tsu_render;
437 endtsuglyph;
438

```

U+2F63
tsuku.uni2F63



```
439 % sei/ki "life"  
440 begintsuglyph("uni2F63";99);  
441   kanji.grone.life;  
442   tsu_render;  
443 endtsuglyph;  
444
```

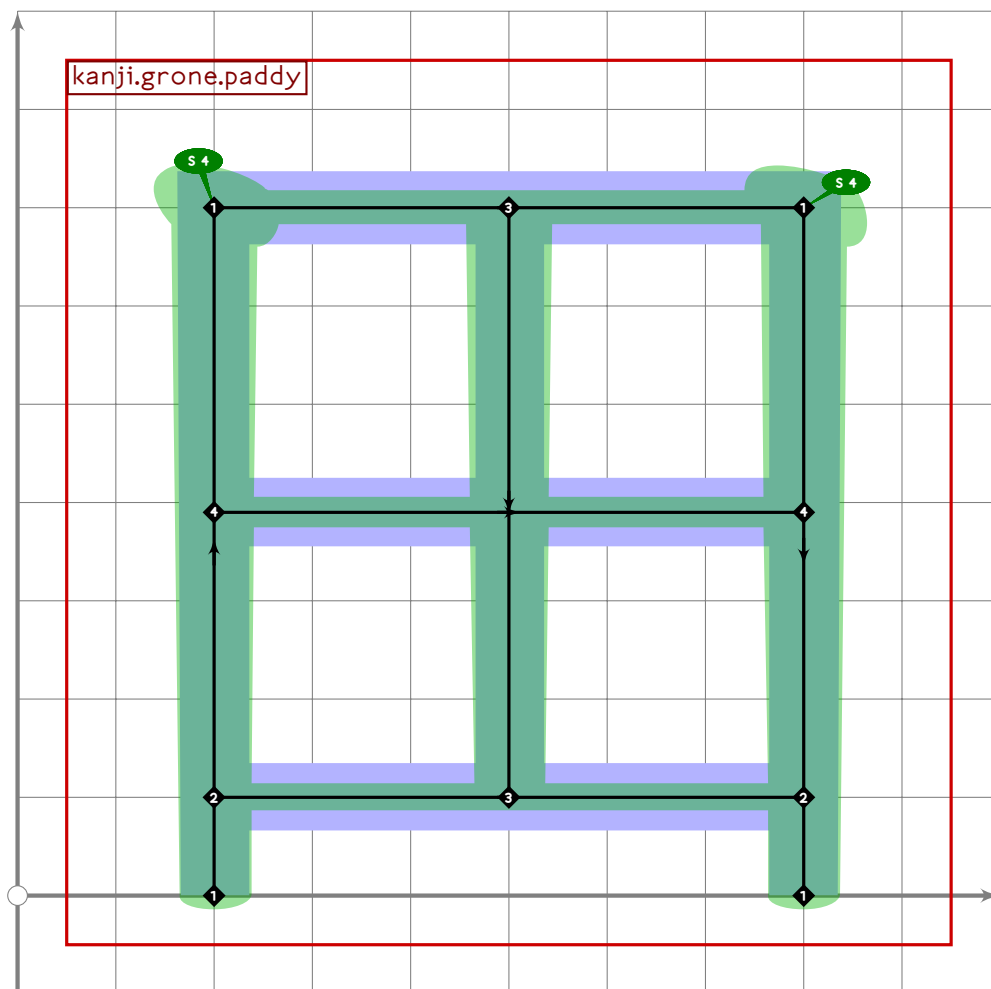


```

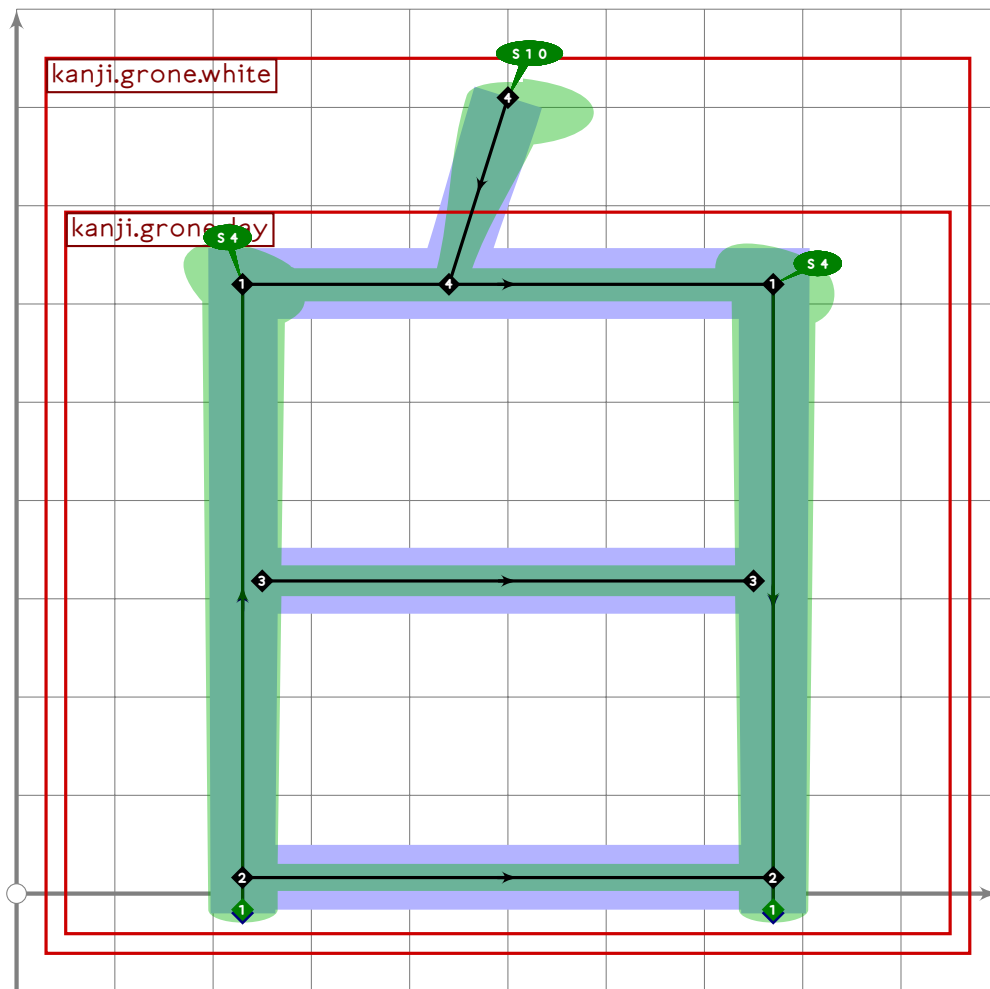
445 % you/mochi "job"
446 begintsuglyph("uni2F64";100);
447   kanji.grtwo.job;
448   tsu_render;
449 endtsuglyph;
450

```

U+2F65
tsuku.uni2F65



```
451 % ta "rice paddy"  
452 begintsuglyph("uni2F65";101);  
453   kanji.grone.paddy;  
454   tsu_render;  
455 endtsuglyph;  
456
```

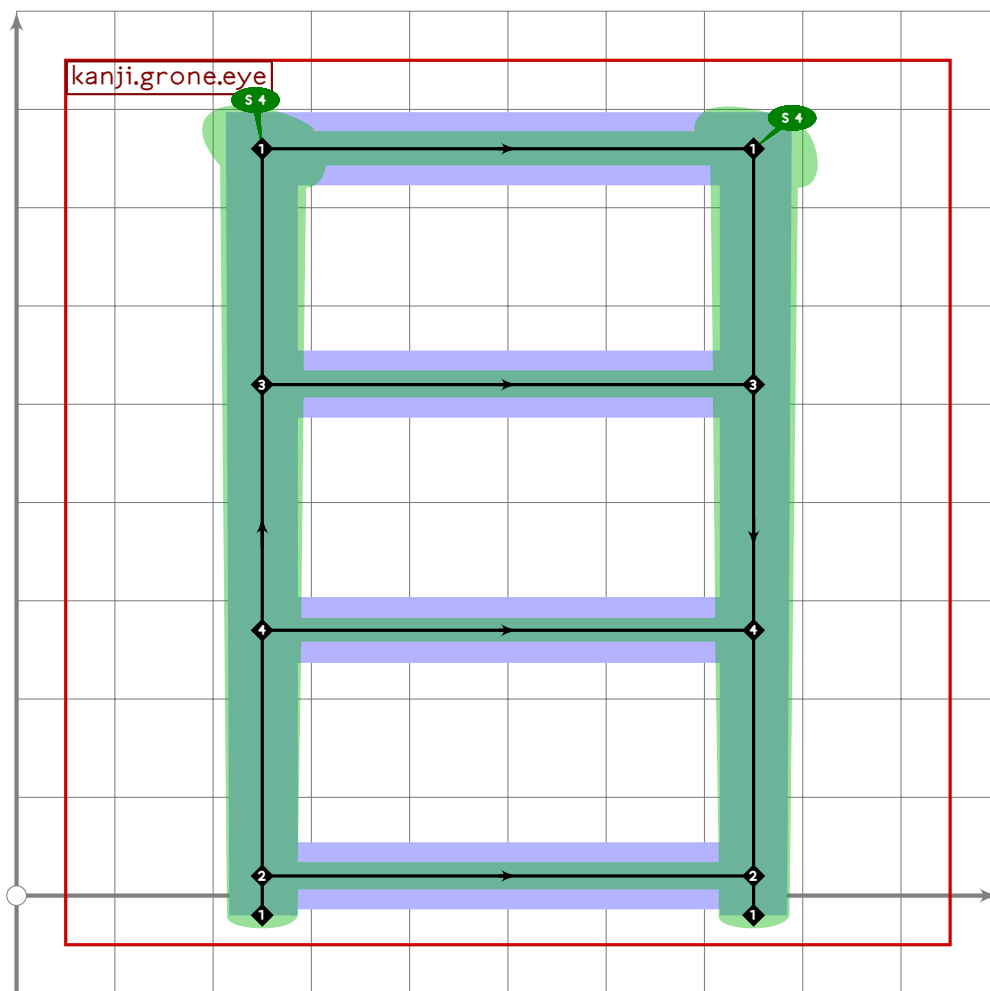


```

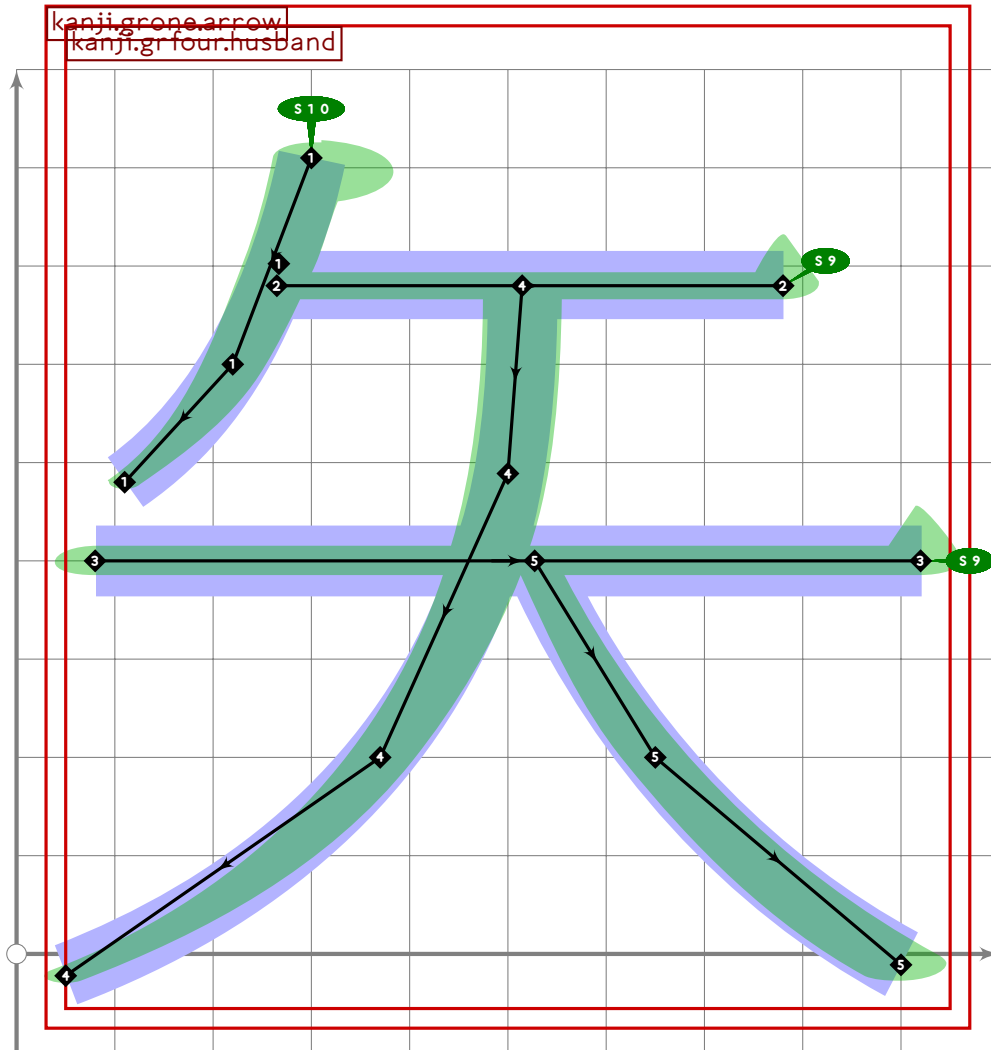
457 % shiro "white"
458 begintsuglyph("uni2F69",105);
459   kanji.grone.white;
460   tsu_render;
461 endtsuglyph;
462

```

U+2F6C
tsuku.uni2F6C



```
463 % moku/me "eye"  
464 begintsuglyph("uni2F6C";108);  
465   kanji.grone.eye;  
466   tsu_render;  
467 endtsuglyph;  
468
```

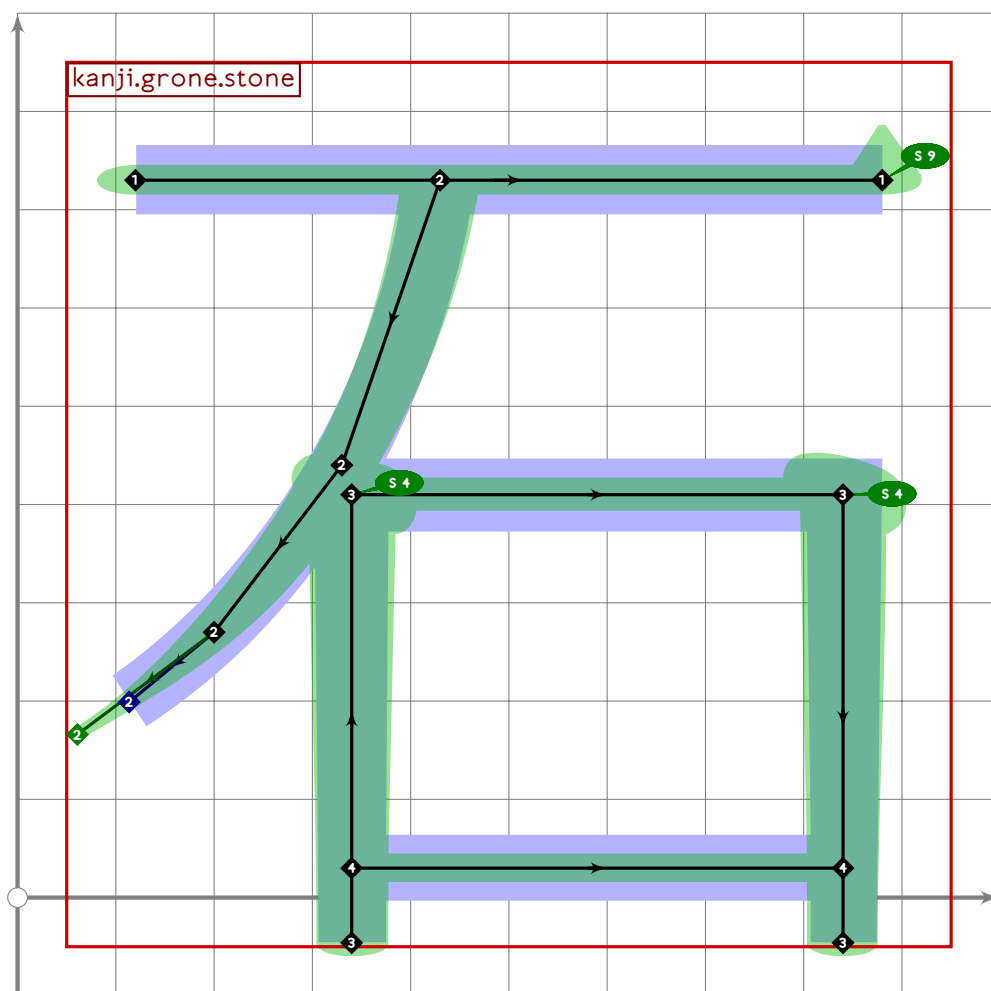


```

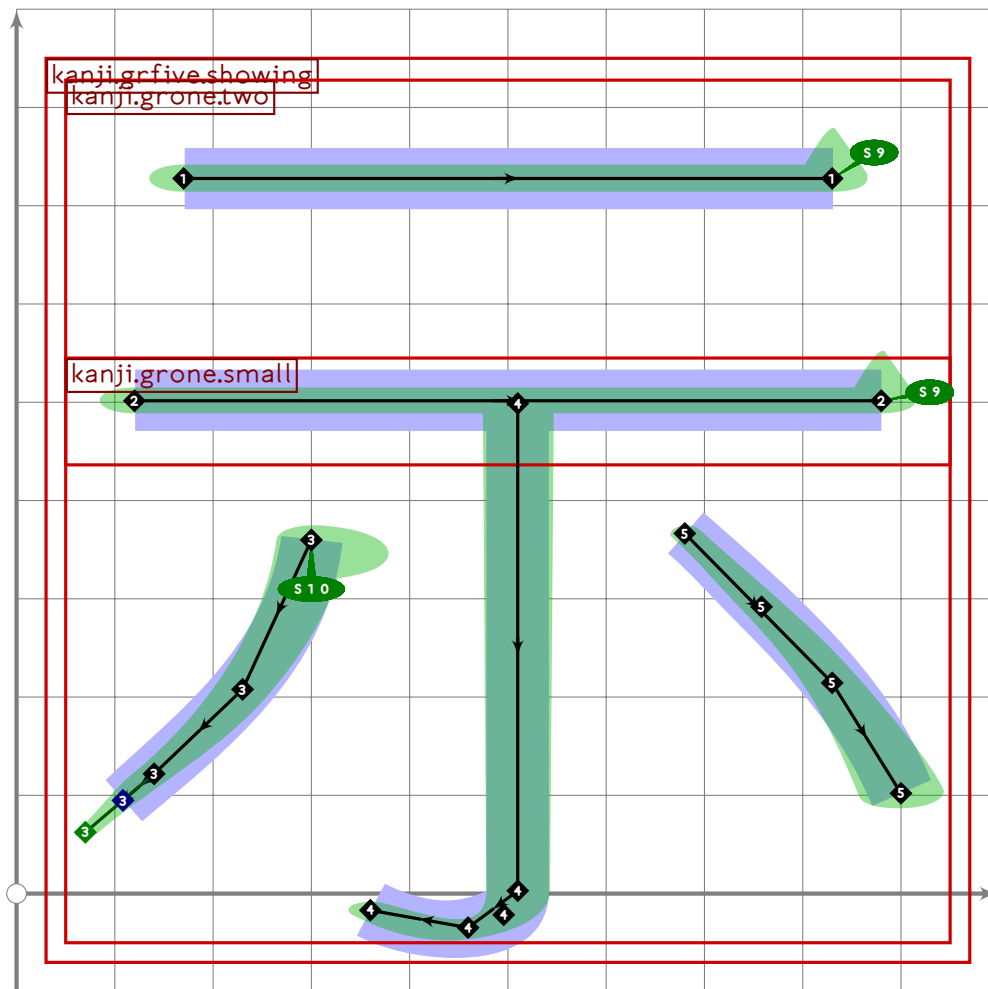
469 % shi/ya "arrow"
470 begintsuglyph("uni2F6E",110);
471   kanji.grtwo.arrow;
472   tsu_render;
473 endtsuglyph;
474

```

U+2F6F
tsuku.uni2F6F



```
475 % seki/ishi "stone"  
476 begintsuglyph("uni2F6F",111);  
477   kanji.grone.stone;  
478   tsu_render;  
479 endtsuglyph;  
480
```

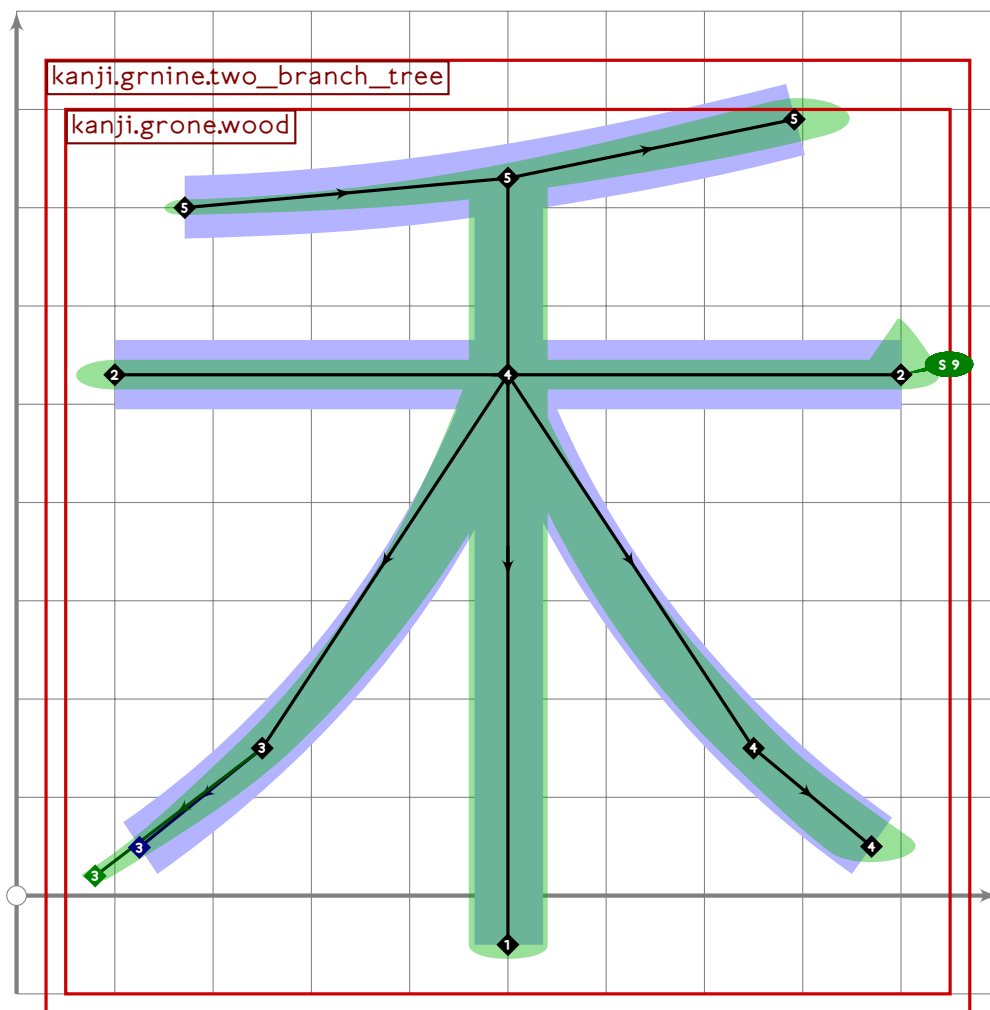



```

481 % ji/shime "show" (also older radical form)
482 begintsuglyph("uni2F70",112);
483   kanji.grfive.showing;
484   tsu_render;
485 endtsuglyph;
486

```

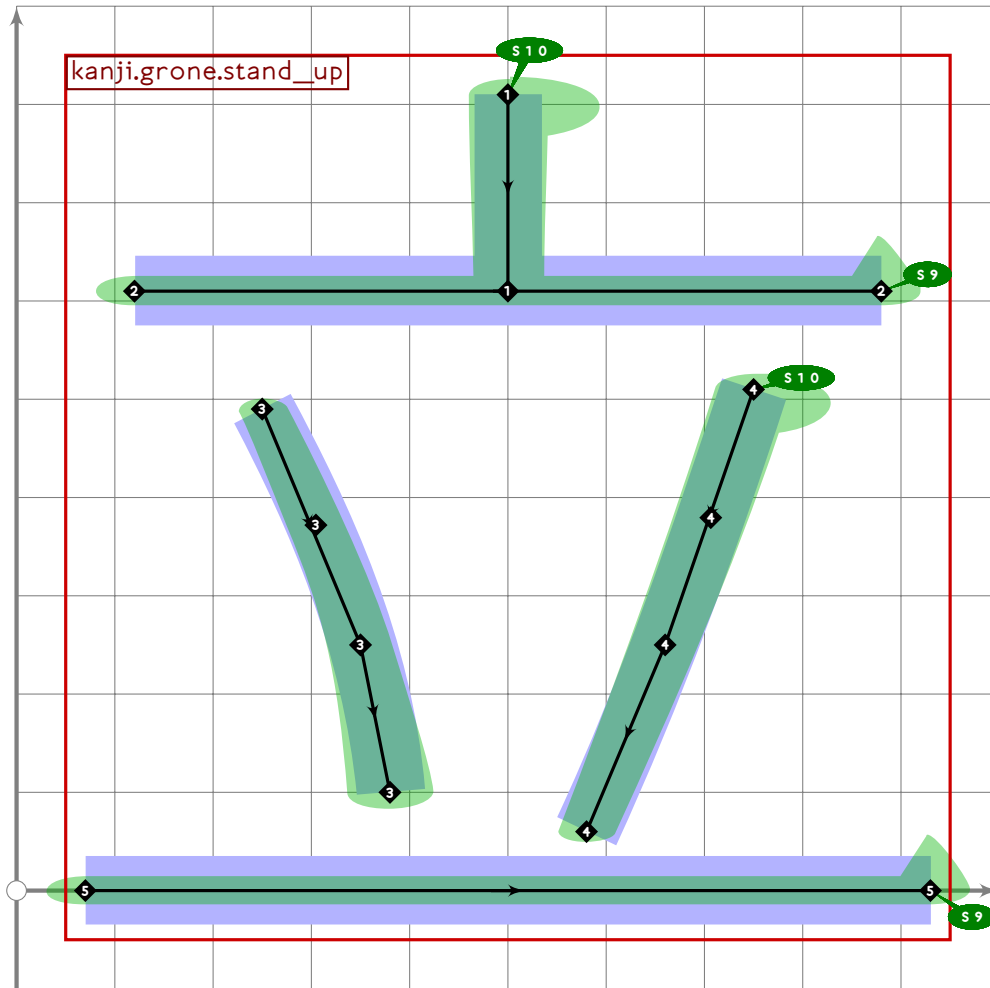
U+2F72
tsuku.uni2F72



```

487 % ka/ine little meaning by itself, called "two-branch tree" as a radical
488 begint Suglyph("uni2F72";114);
489   kanji.grnine.two_branch_tree;
490   tsu_render;
491 endtsuglyph;
492

```

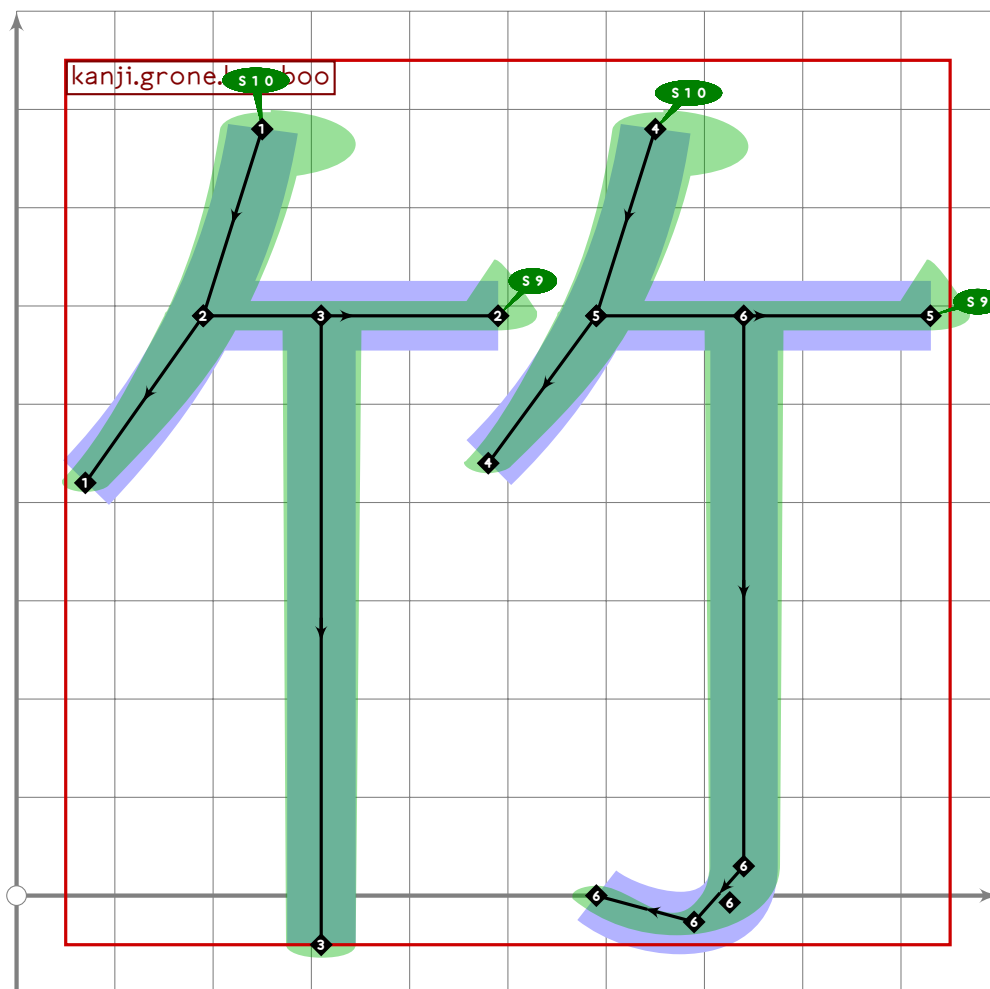


```

493 % ta "stand up"
494 begintsuglyph("uni2F74";116);
495   kanji.grone.stand_up;
496   tsu_render;
497 endtsuglyph;
498

```

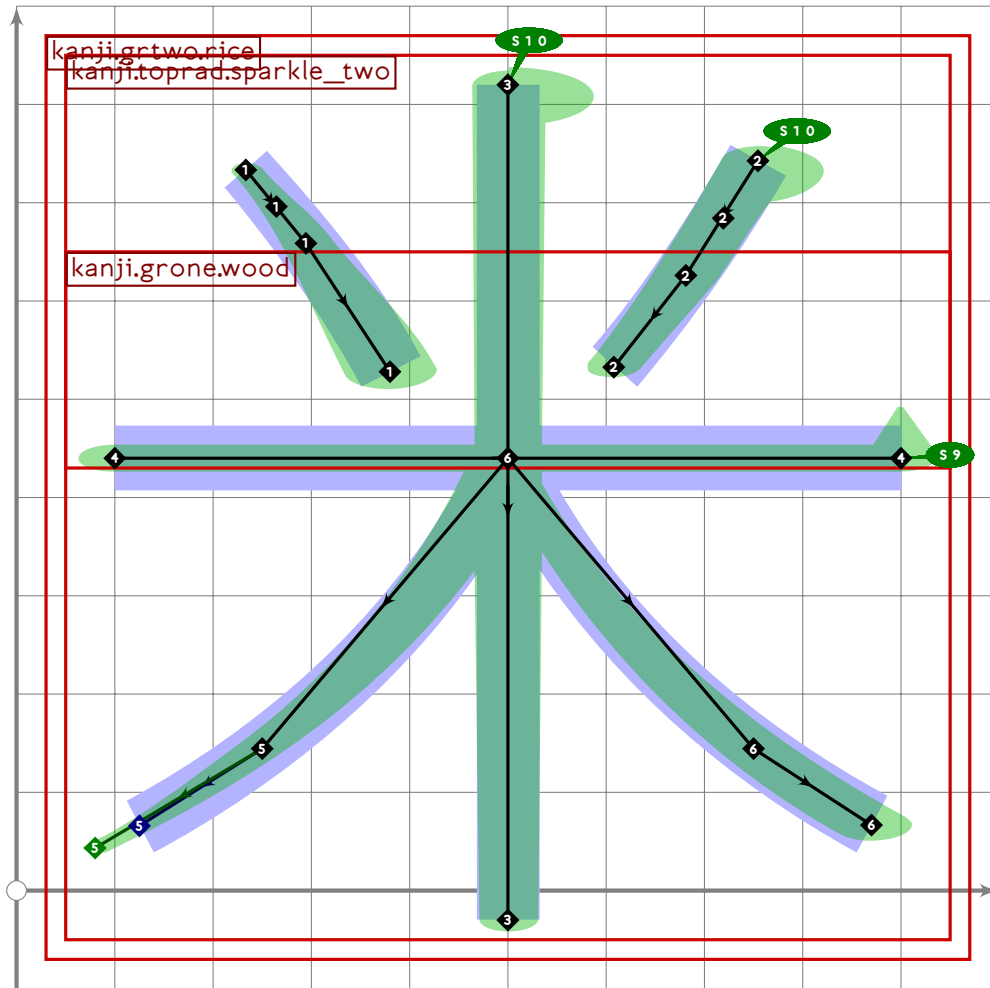
U+2F75
tsuku.uni2F75



```

499 % chiku/take "bamboo"
500 begintsuglyph("uni2F75",117);
501   kanji.grone.bamboo;
502   tsu_render;
503 endtsuglyph;
504

```

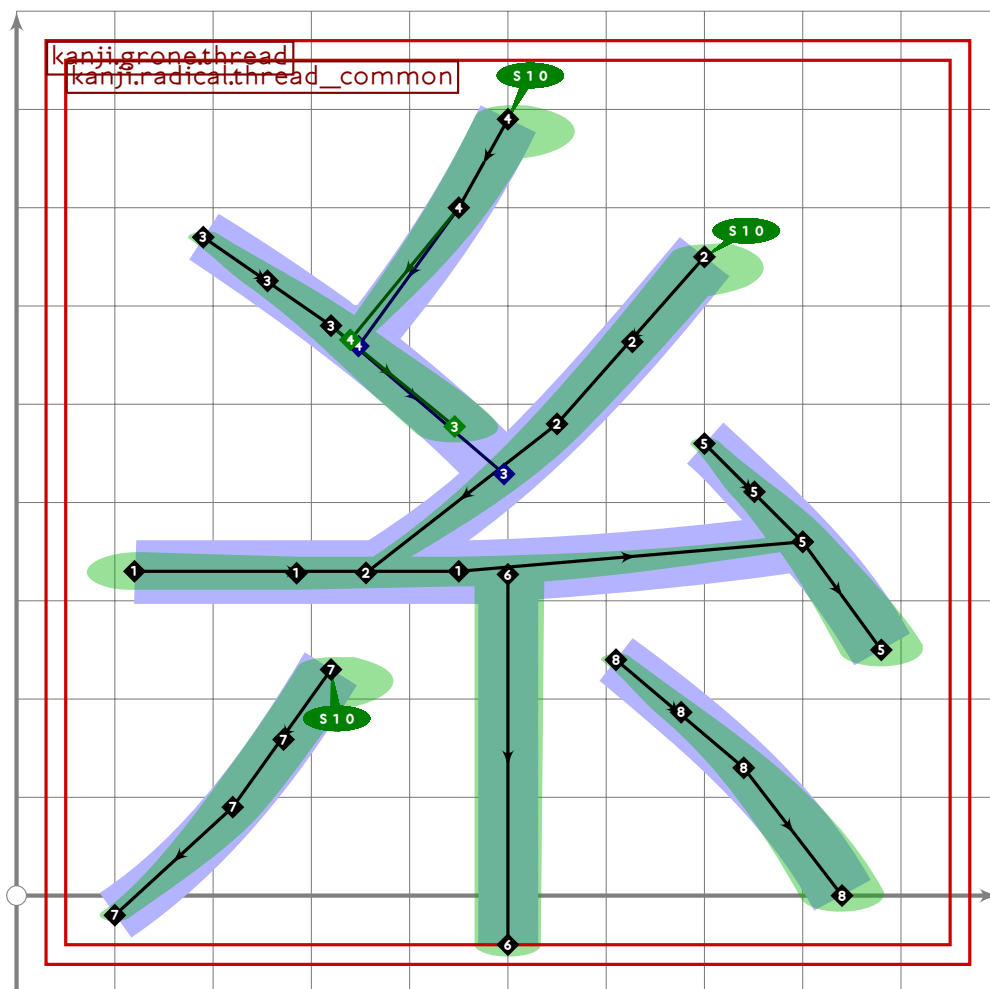


```

505 % bei/kome "rice", also "USA" and "metre"
506 begintsuglyph("uni2F76",118);
507   kanji.grtwo.rice;
508   tsu_render;
509 endsuglyph;
510

```

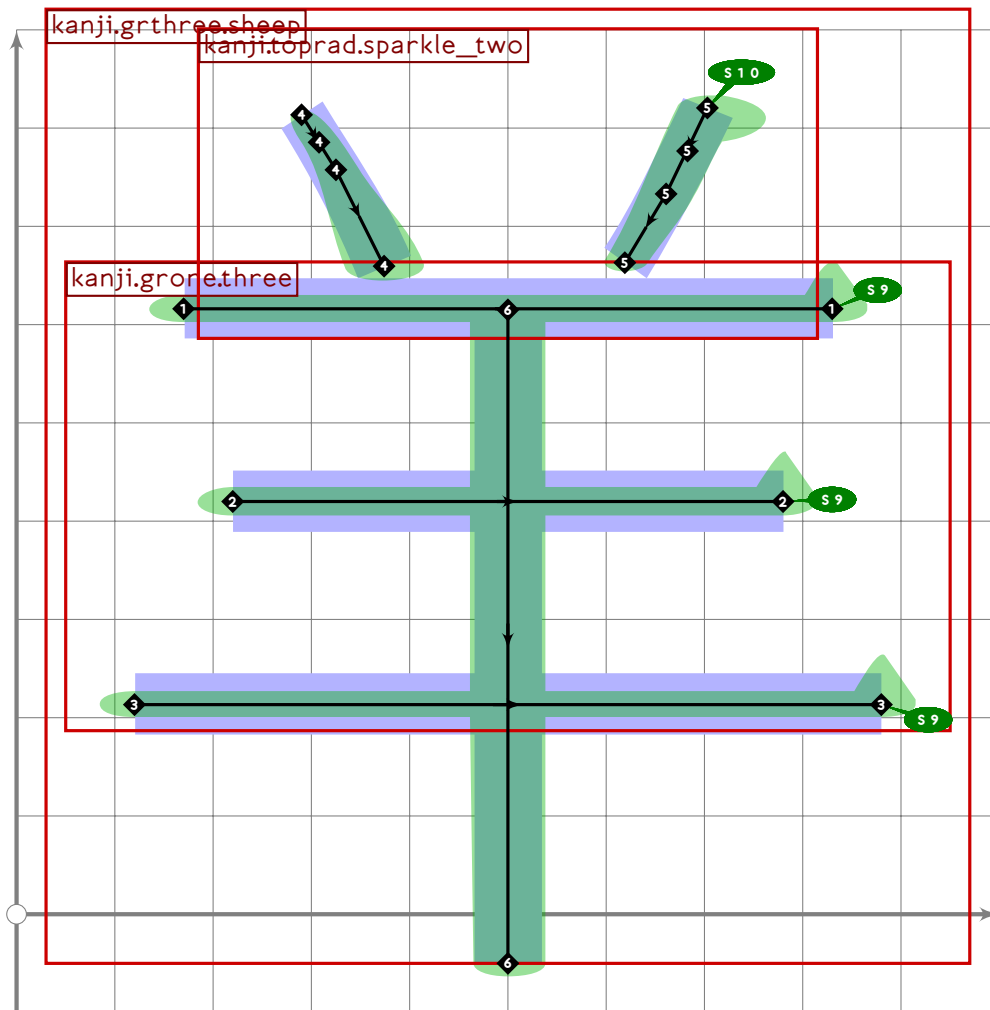
U+2F77
tsuku.uni2F77



```

511 % shi/ito "thread"
512 beginsuglyph("uni2F77";119);
513   kanji.grone.thread;
514   tsu_render;
515 endsuglyph;
516

```

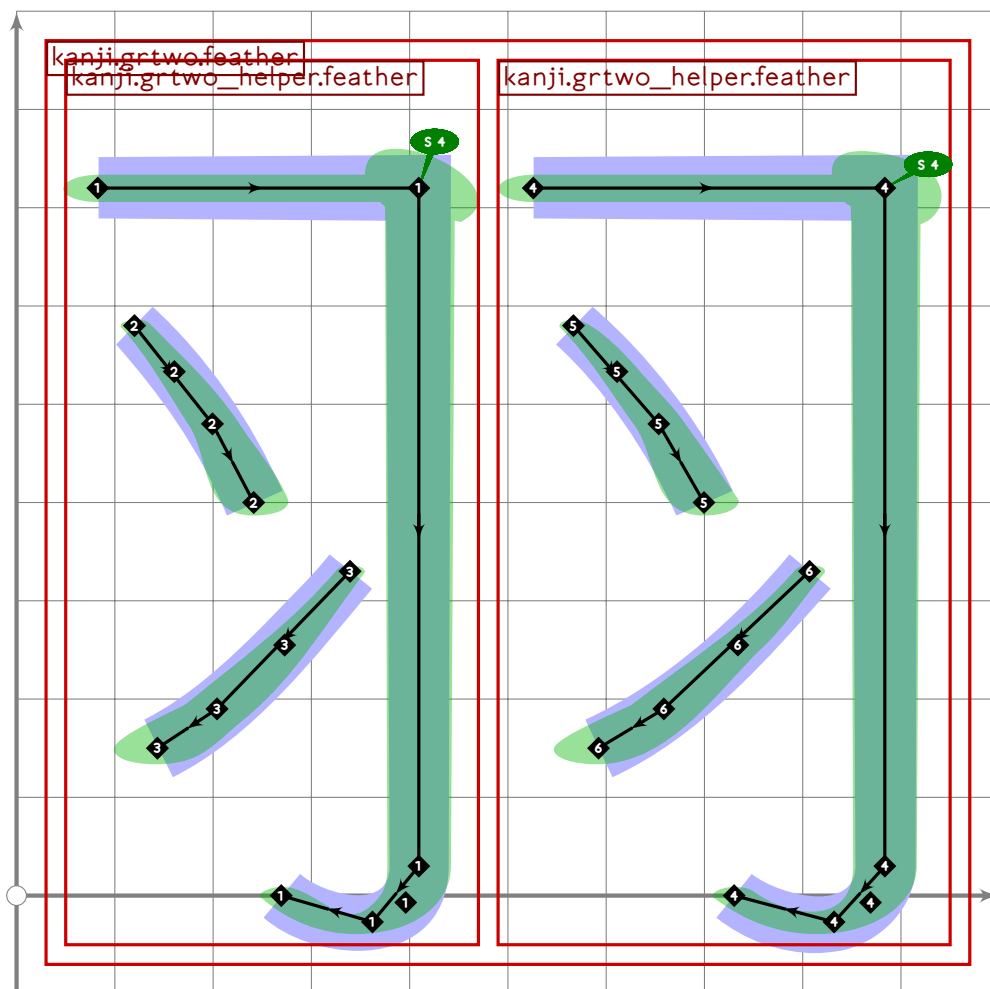


```

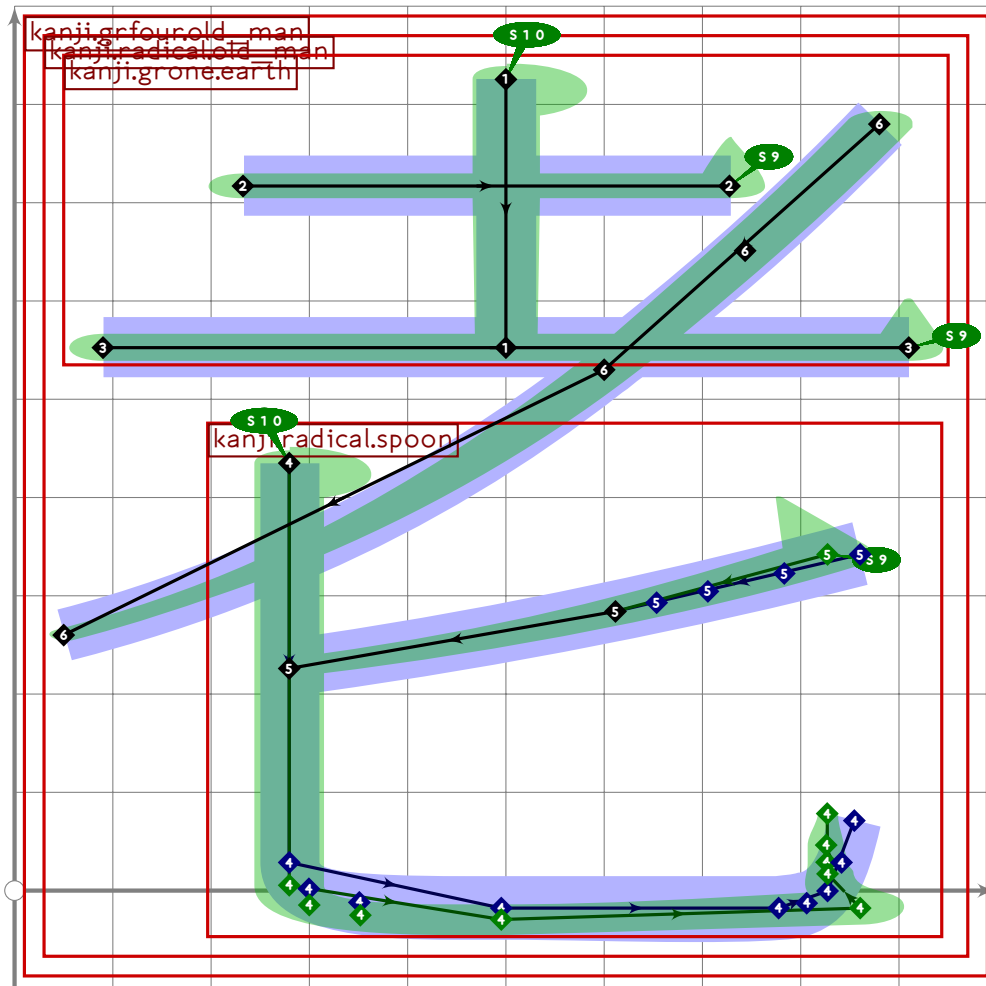
517 % you/hitsuji "sheep"
518 begintsuglyph("uni2F7A",122);
519 kanji.grthree.sheep;
520 tsu_render;
521 endtsuglyph;
522

```

U+2F7B
tsuku.uni2F7B



```
523 % u/hane "feather"  
524 begint Suglyph("uni2F7B",123);  
525   kanji.grtwo.feather;  
526   tsu_render;  
527 endtsuglyph;  
528
```

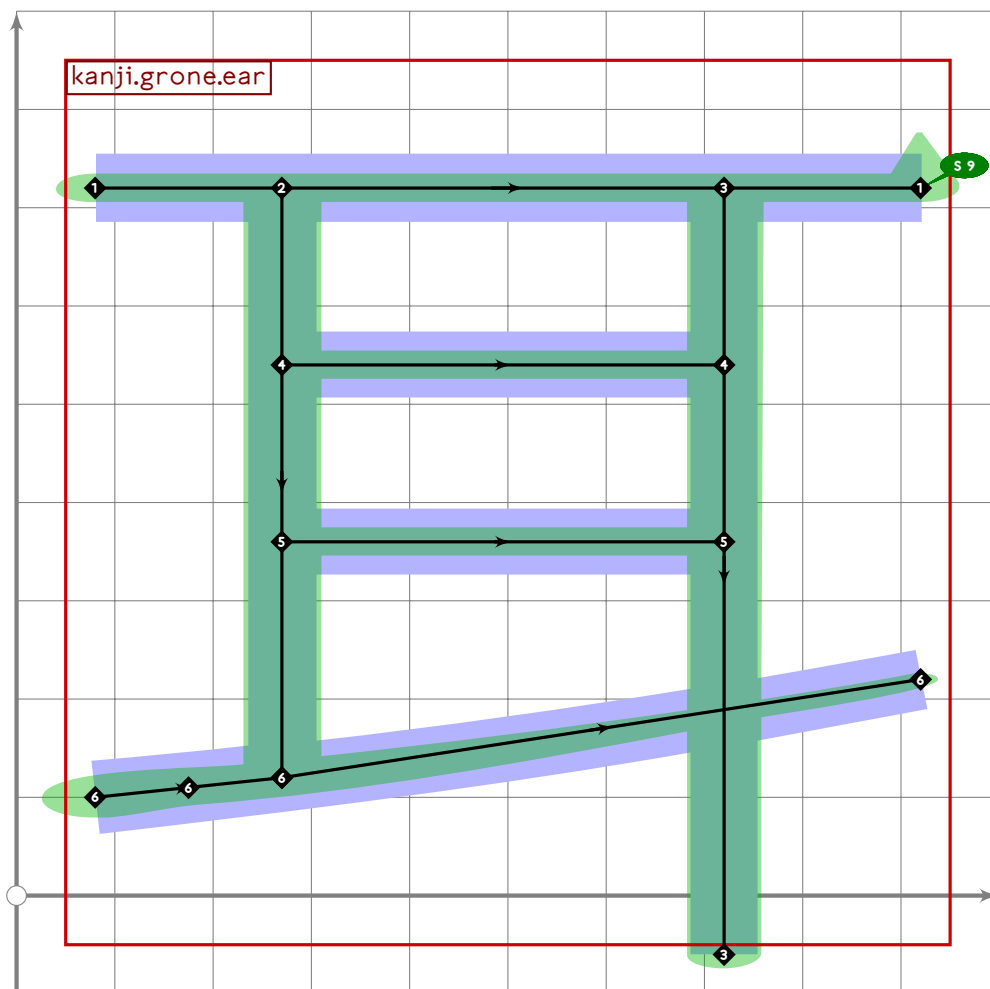



```

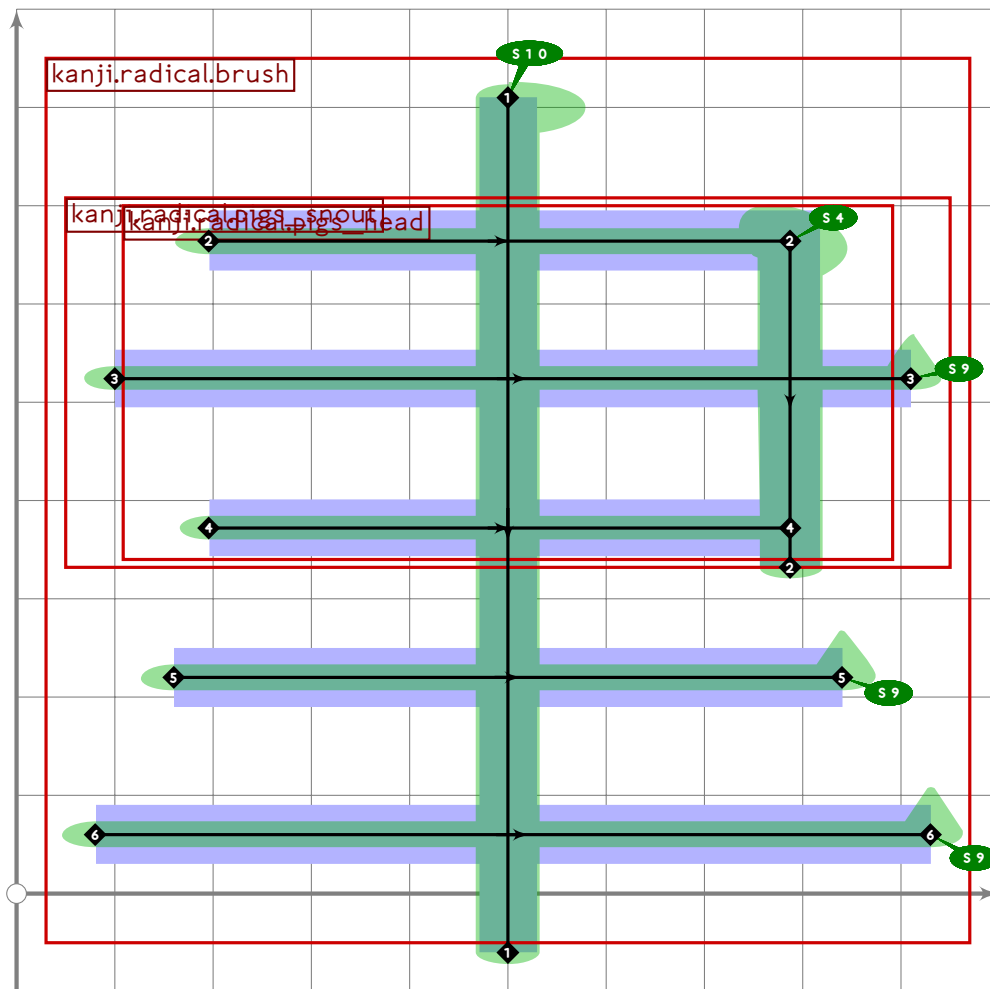
529 % rou/o "old man"
530 begintsuglyph("uni2F7C";124);
531   kanji.grfour.old_man;
532   tsu_render;
533 endsuglyph;
534

```

U+2F7F
tsuku.uni2F7F



```
535 % ken/mi "ear"
536 begint Suglyph("uni2F7F",127);
537   kanji.grone.ear;
538   tsu_render;
539 endt Suglyph;
540
```

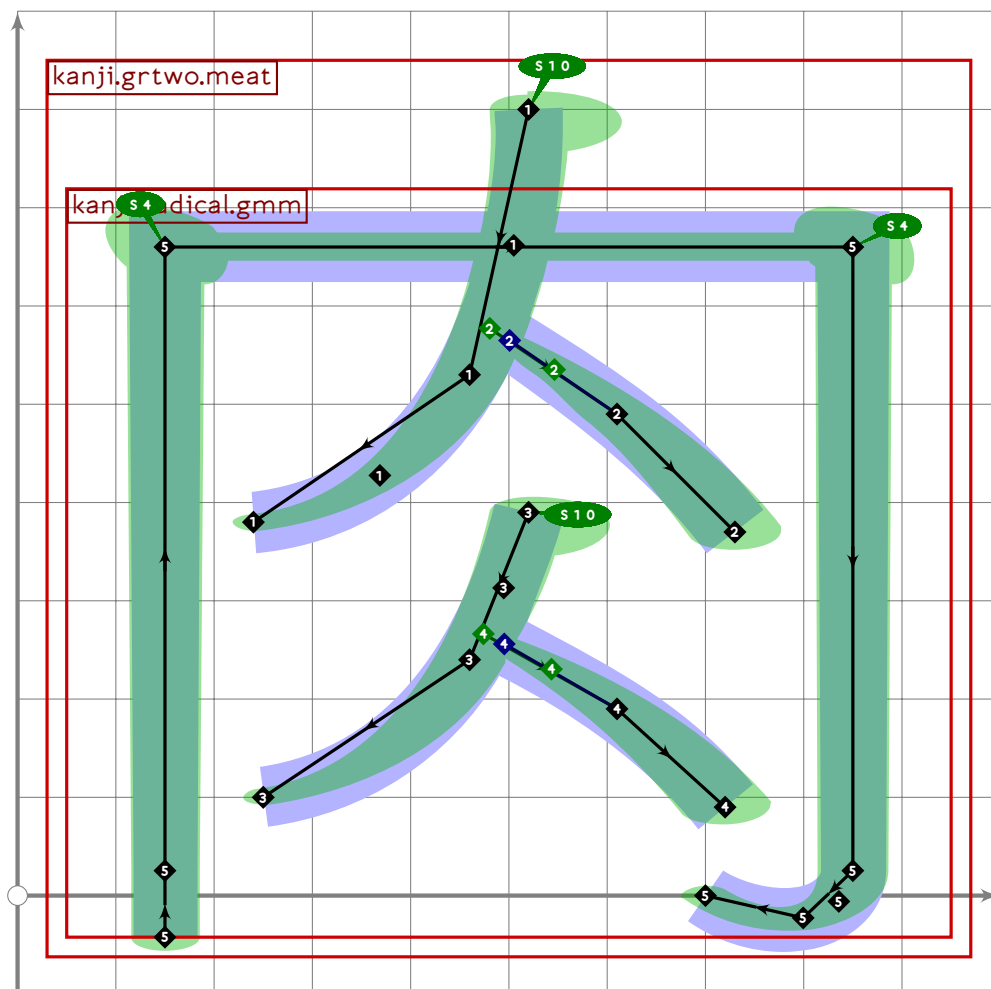


```

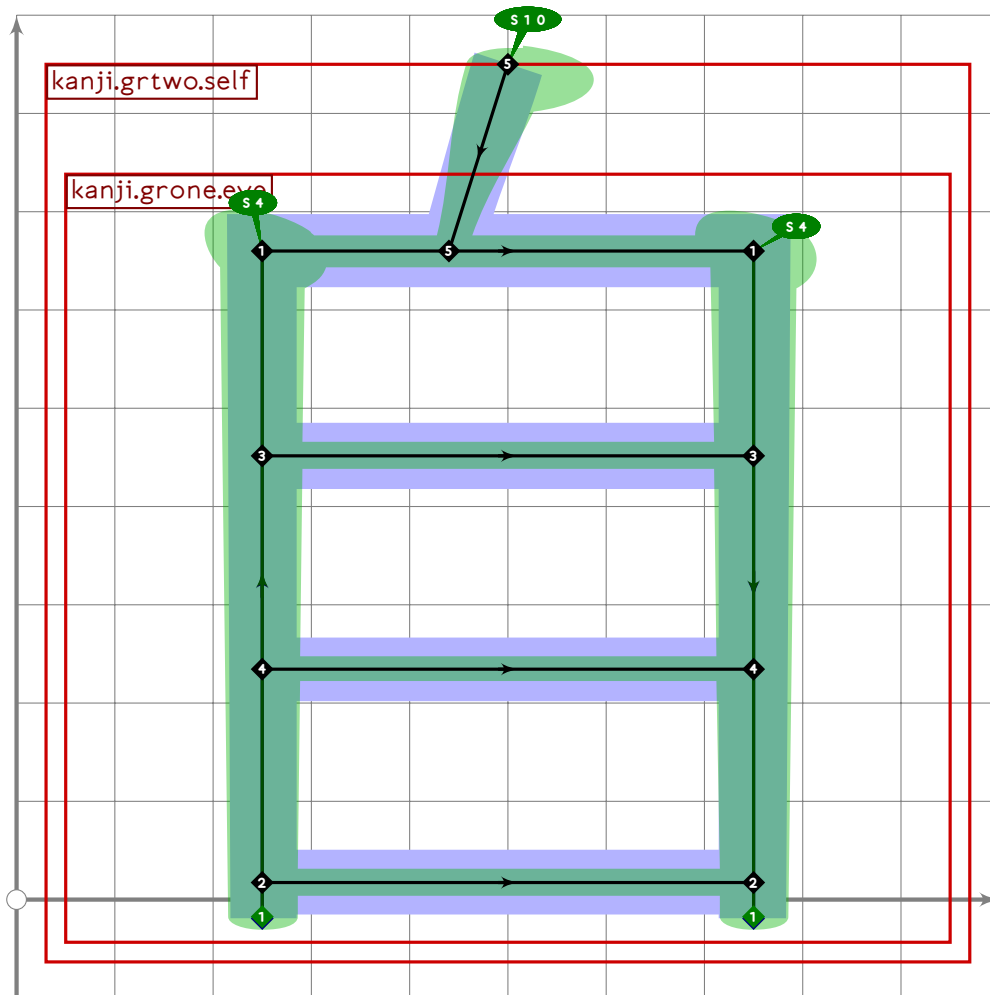
541 % brush radical
542 begintsuglyph("uni2F80",128);
543   kanji.radical.brush;
544   tsu_render;
545 endtsuglyph;
546

```

U+2F81
tsuku.uni2F81



```
547 % niku "meat"  
548 begintsuglyph("uni2F81",129);  
549   kanji.grtwo.meat;  
550   tsu_render;  
551 endtsuglyph;  
552
```

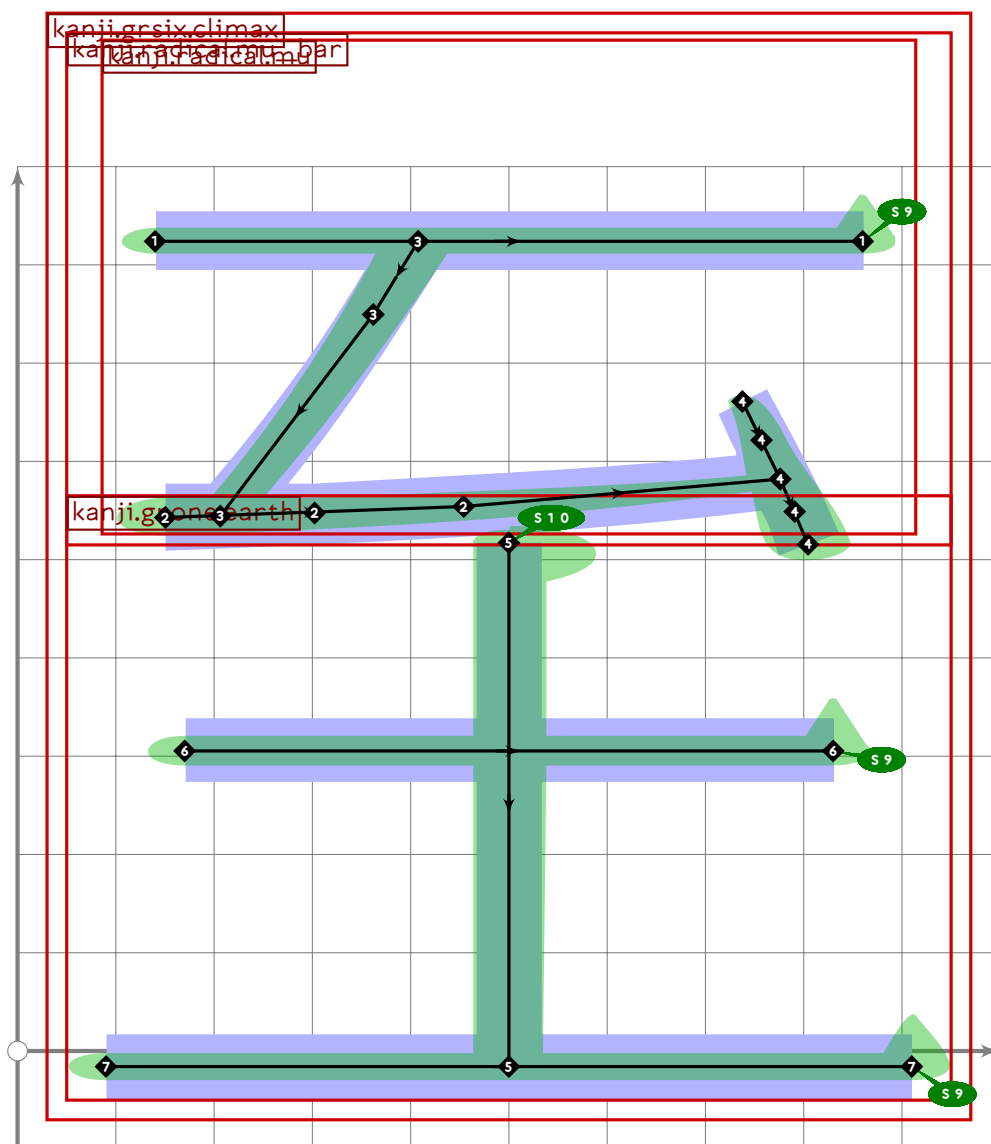


```

553 % ji as in jibun "self"
554 begintsuglyph("uni2F83";131);
555   kanji.grtwo.self;
556   tsu_render;
557 endtsuglyph;
558

```

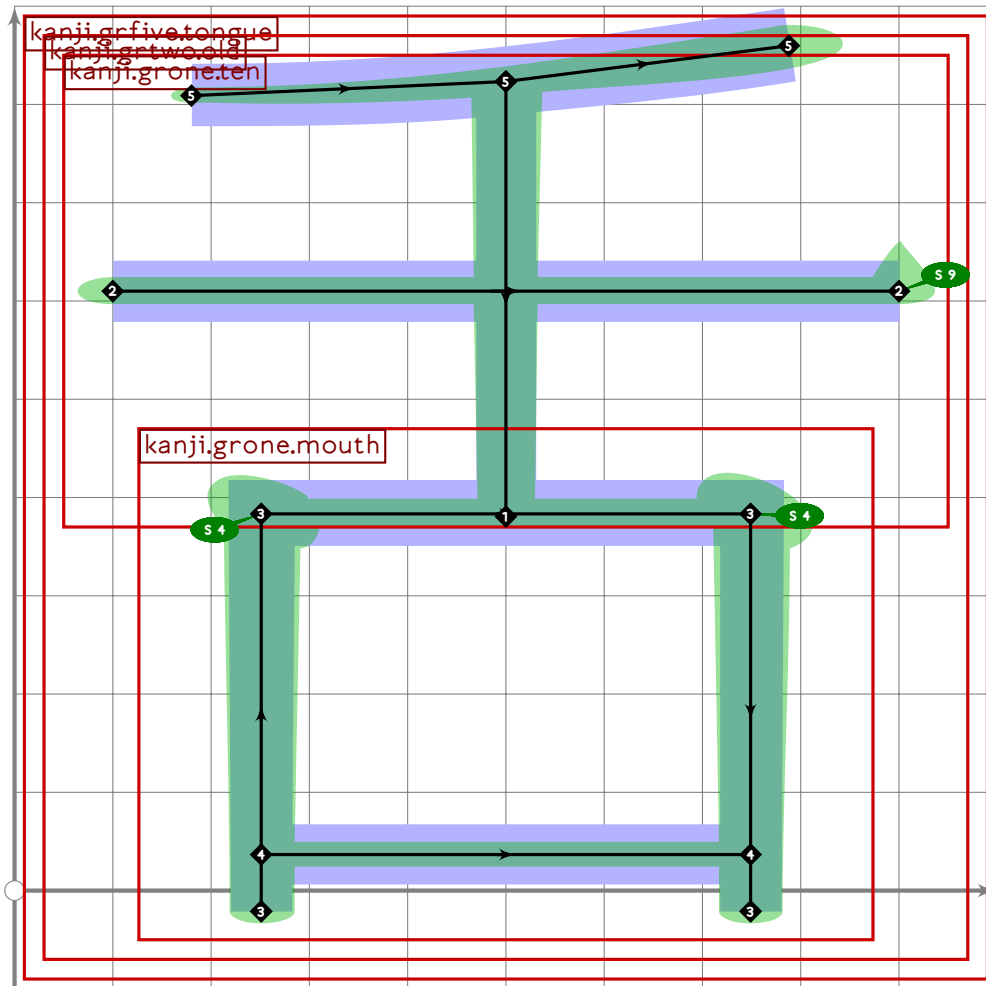
U+2F84
tsuku.uni2F84



```

559 % shi/ita "climax"
560 begint Suglyph("uni2F84";132);
561   kanji.grsix.climax;
562   tsu_render;
563 endtsuglyph;
564

```

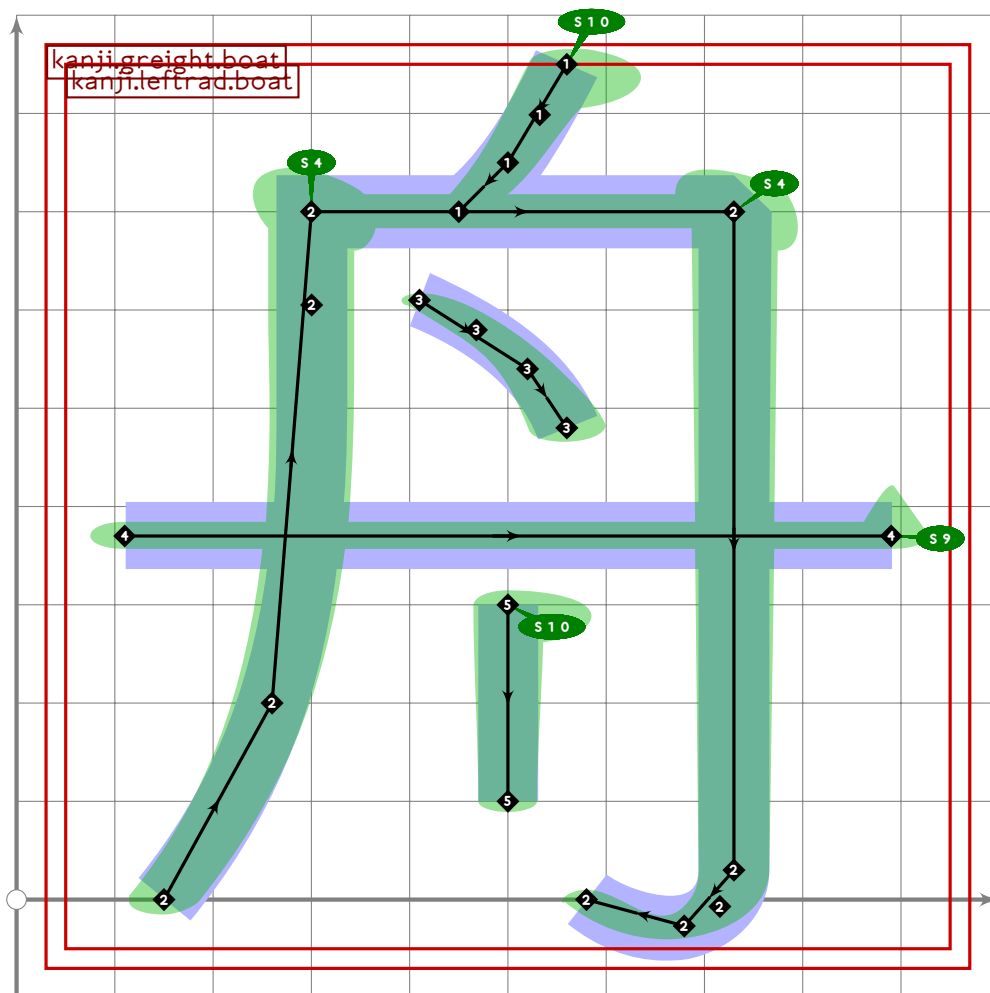


```

565 % zetsu/shita "tongue"
566 begintsuglyph("uni2F86",134);
567   kanji.grfive.tongue;
568   tsu_render;
569 endtsuglyph;
570

```

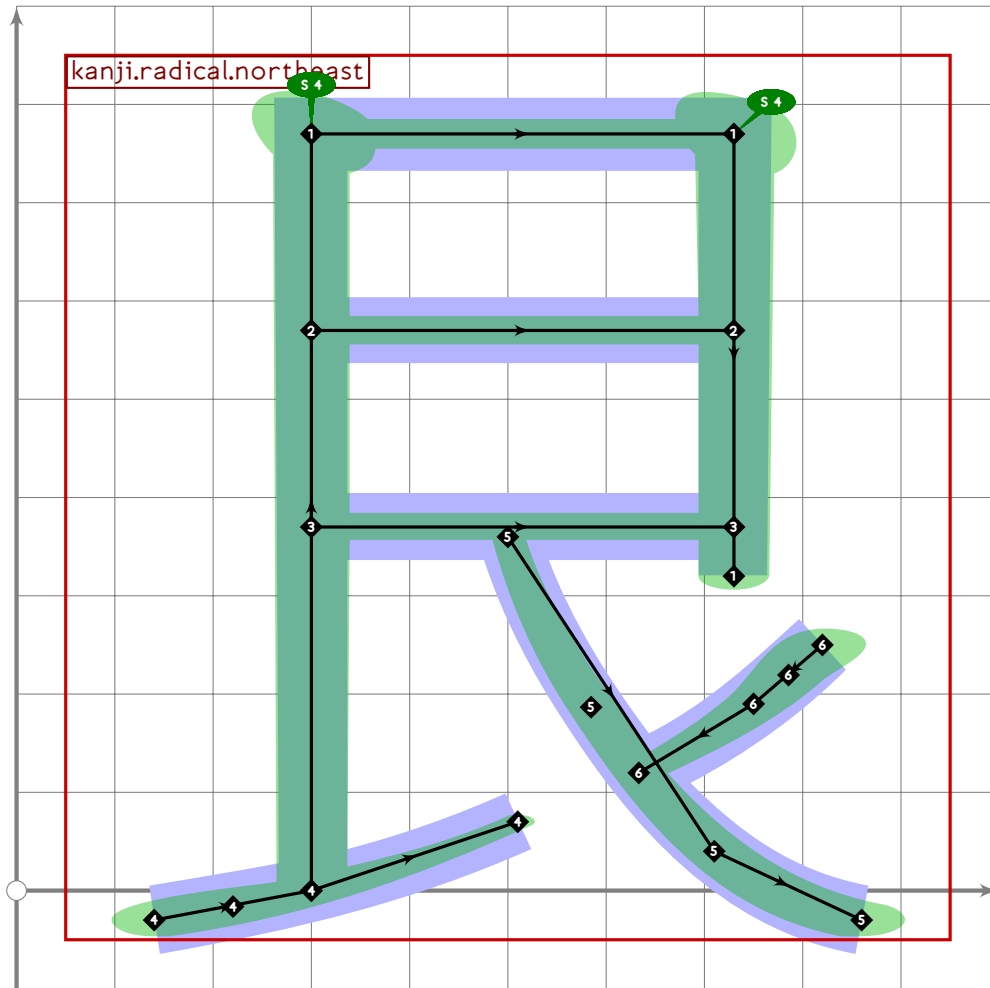
U+2F88
tsuku.uni2F88



```

571 % shuu/fune "boat"
572 begintsuglyph("uni2F88",136);
573   kanji.greight.boat;
574   tsu_render;
575 endtsuglyph;
576

```

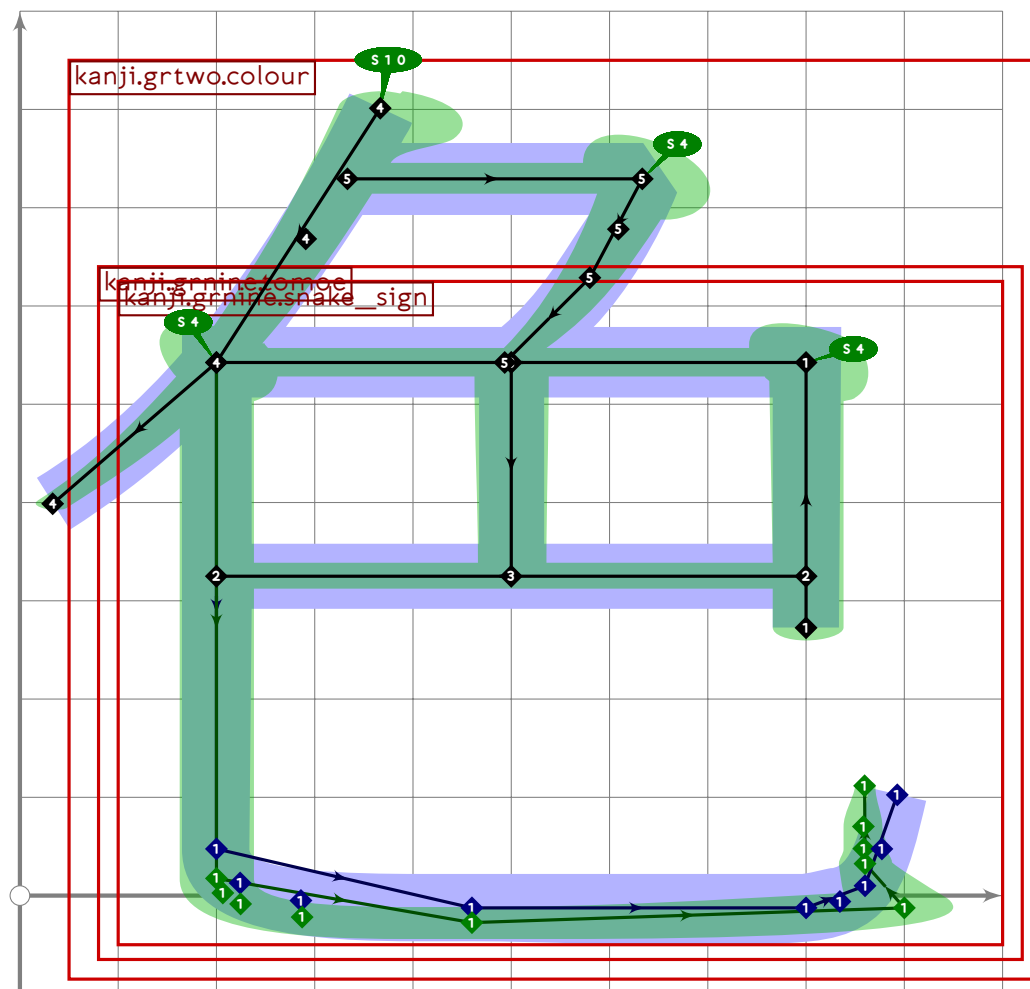



```

577 % kon/ushitora "northeast"
578 begintsuglyph("uni2F89";137);
579   kanji.radical.northeast;
580   tsu_render;
581 endtsuglyph;
582

```

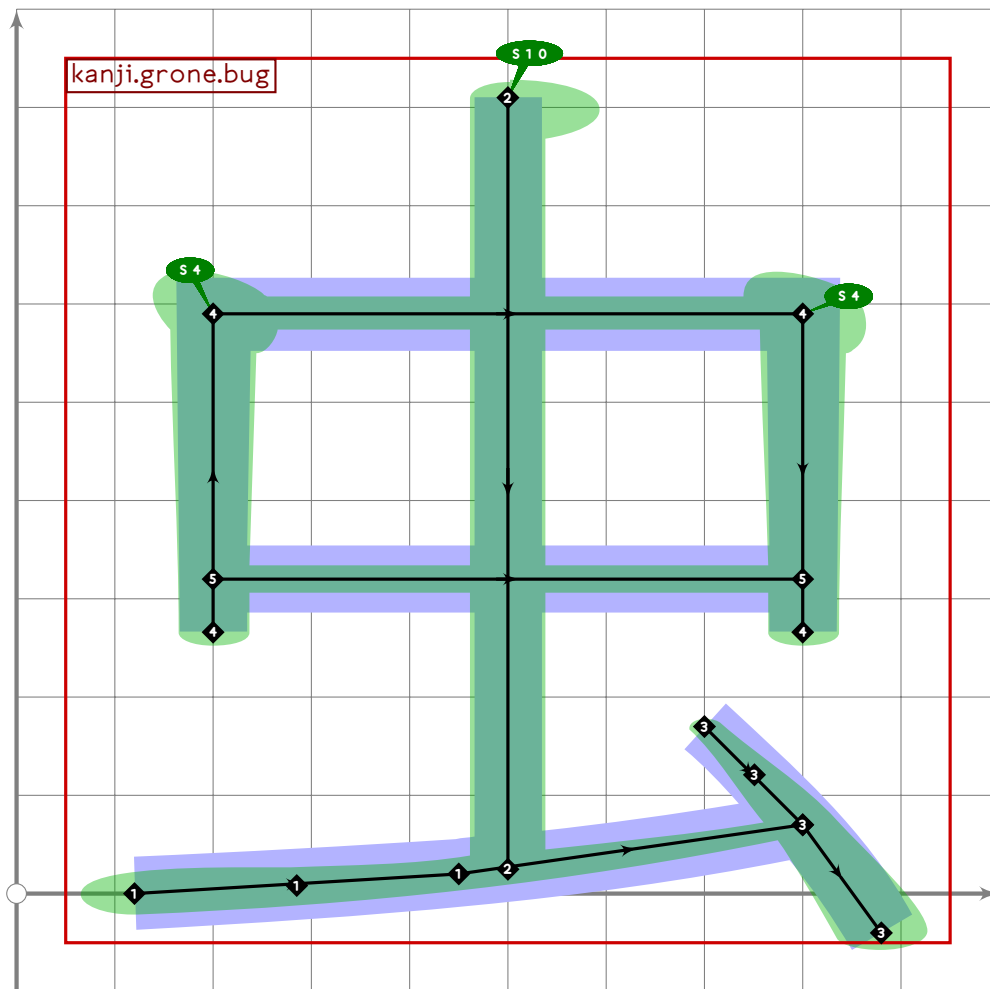
U+2F8A
tsuku.uni2F8A



```

583 % shoku/iro "colour"
584 begintsuglyph("uni2F8A";138);
585   kanji.grtwo.colour;
586   tsu_render;
587 endtsuglyph;
588

```

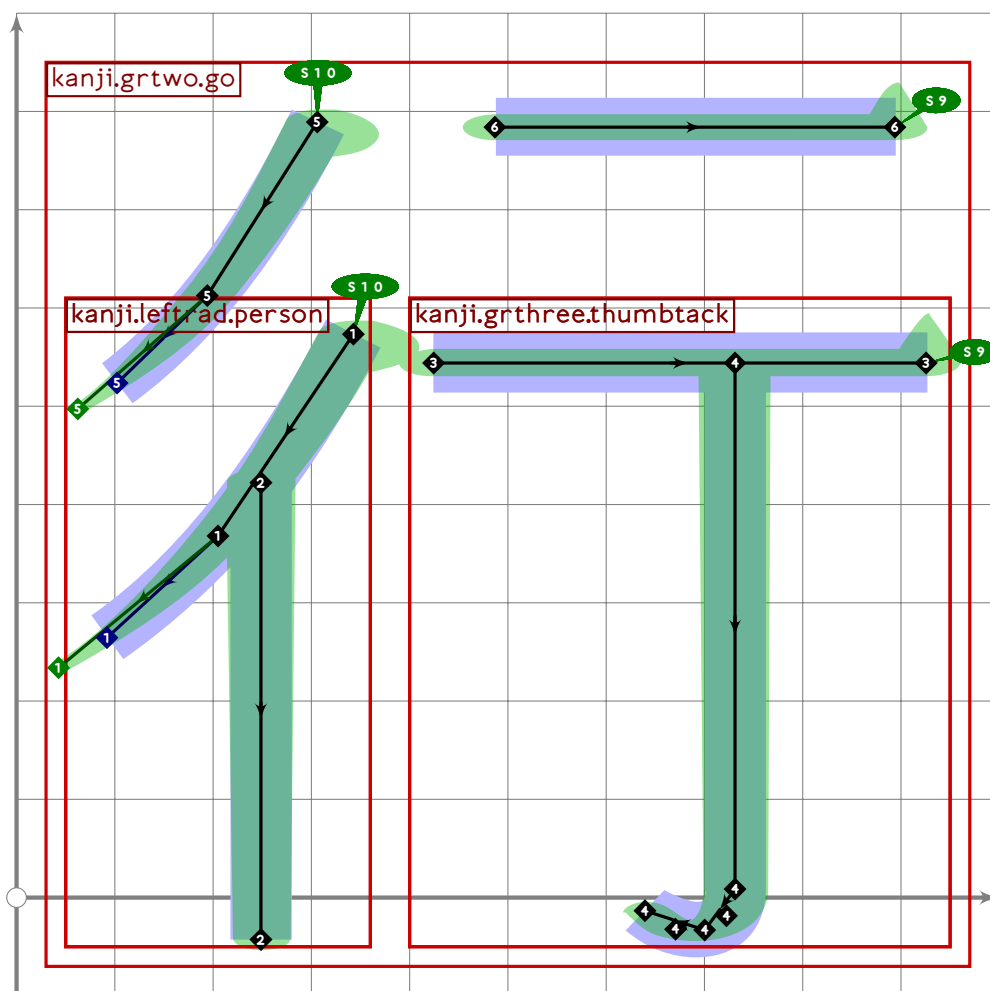


```

589 % mushi "bug"
590 begintsuglyph("uni2F8D";141);
591   kanji.grone.bug;
592   tsu_render;
593 endtsuglyph;
594

```

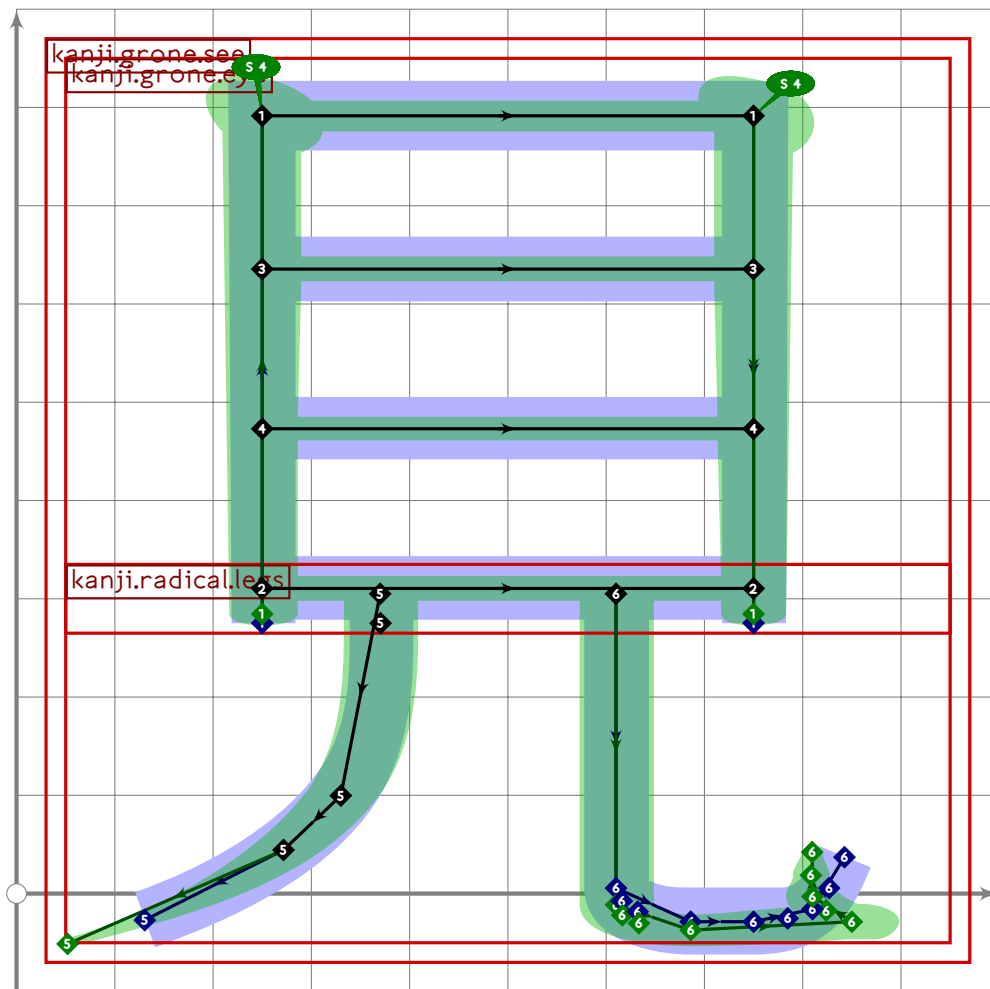
U+2F8F
tsuku.uni2F8F



```

595 % kou/i(ku) "go"
596 begintsuglyph("uni2F8F";143);
597   kanji.grtwo.go;
598   tsu_render;
599 endtsuglyph;
600

```

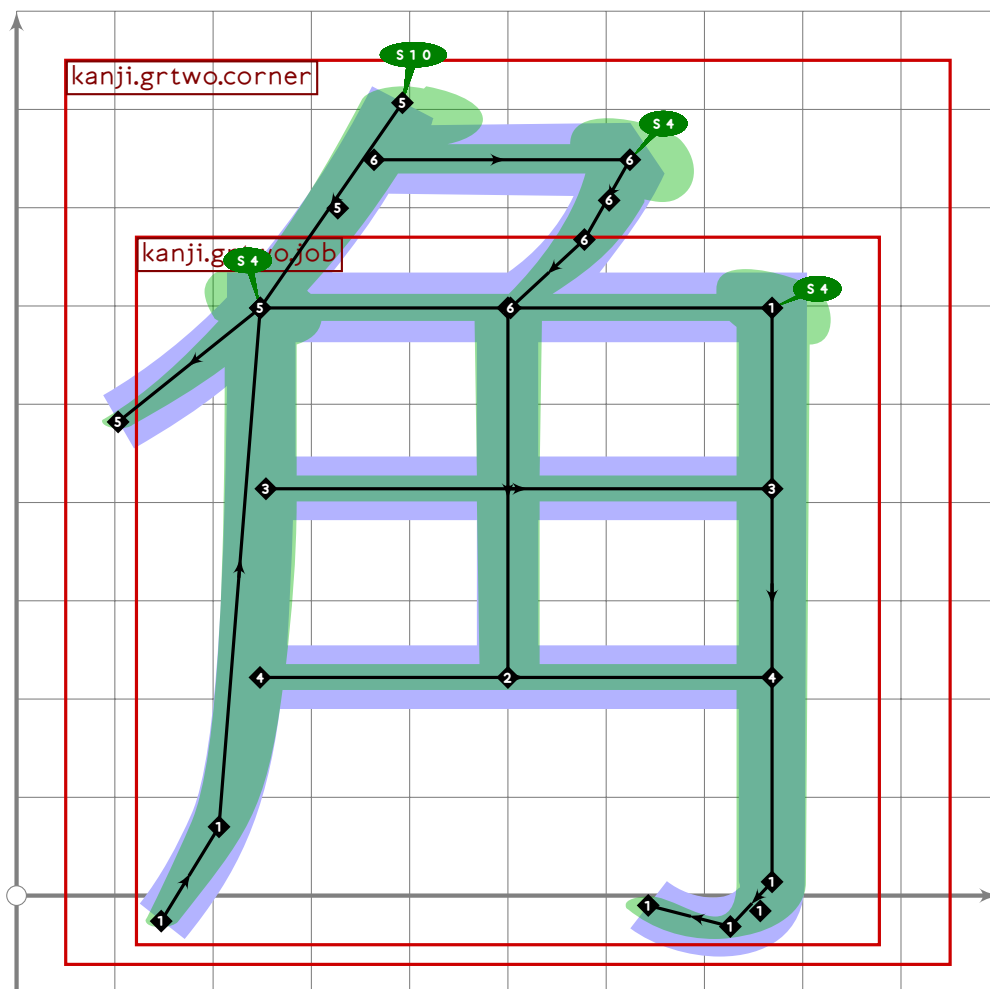


```

601 % ken/mi "see"
602 begintsuglyph("uni2F92",146);
603   kanji.grone.see;
604   tsu_render;
605 endtsuglyph;
606

```

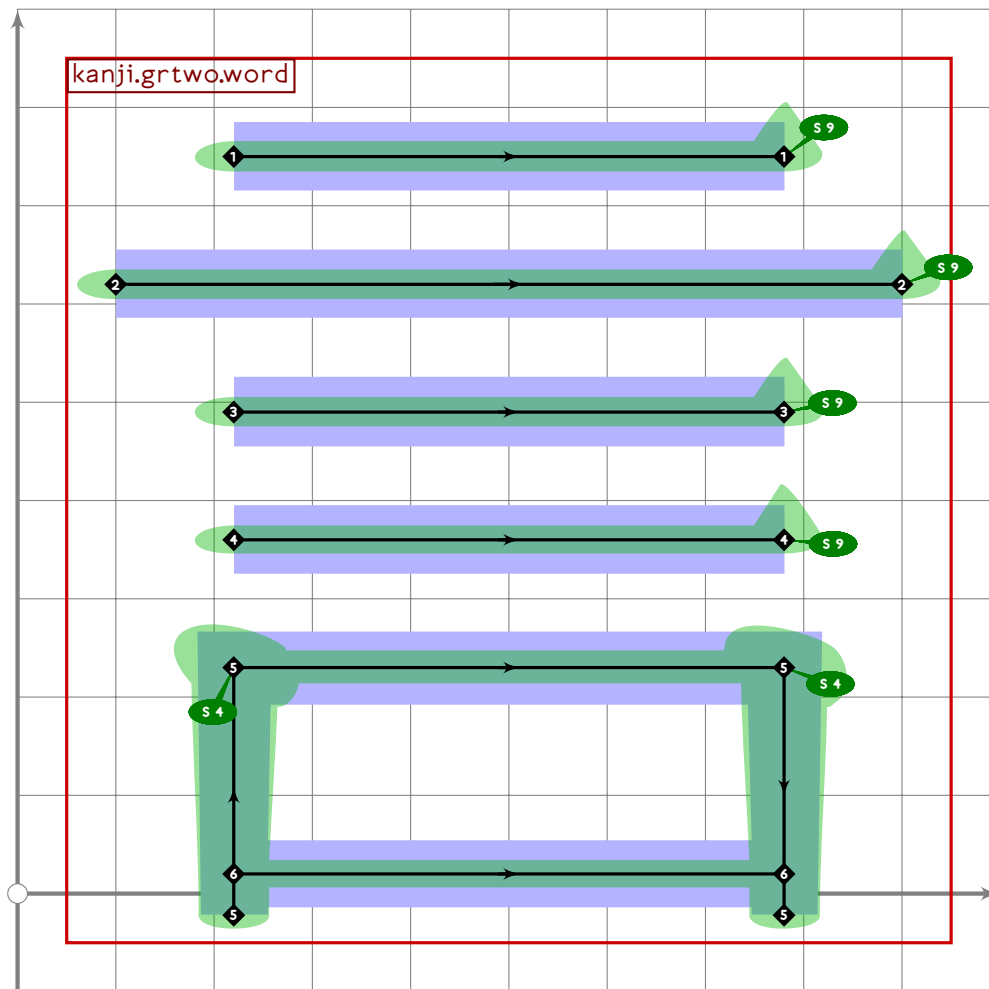
U+2F93
tsuku.uni2F93



```

607 % kaku/kado "corner"
608 begintsuglyph("uni2F93",147);
609   kanji.grtwo.corner;
610   tsu_render;
611 endtsuglyph;
612

```

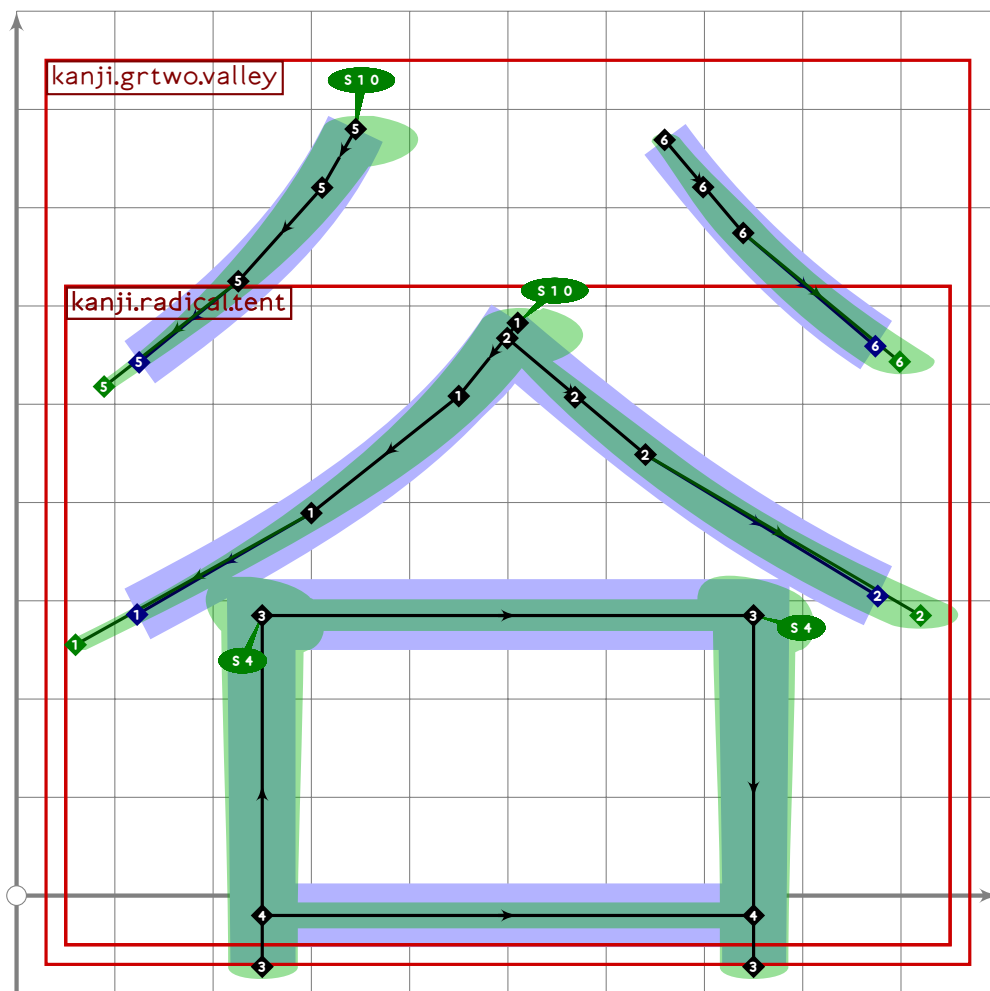


```

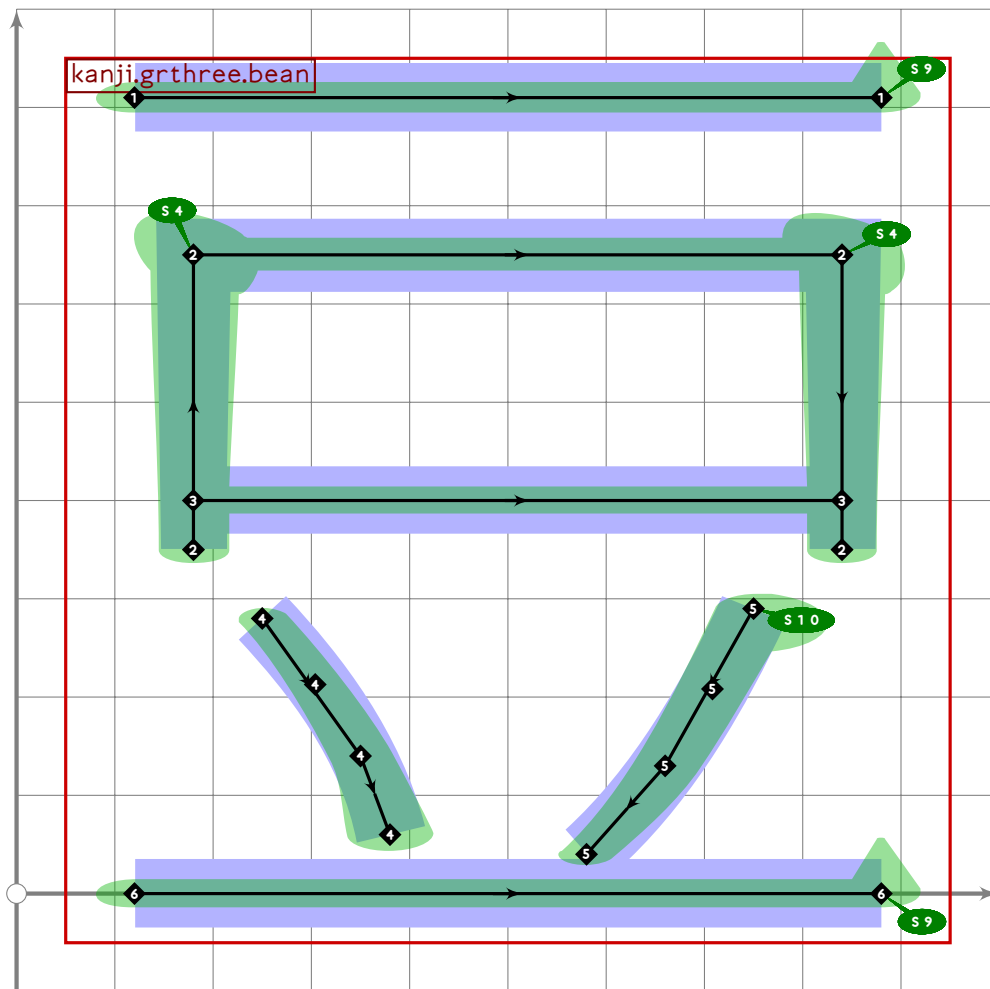
613 % gen/i "word"
614 begintsuglyph("uni2F94";148);
615   kanji.grtwo.word;
616   tsu_render;
617 endtsuglyph;
618

```

U+2F95
tsuku.uni2F95



```
619 % koku/tani "valley"  
620 begintsuglyph("uni2F95",149);  
621   kanji.grtwo.valley;  
622   tsu_render;  
623 endsuglyph;  
624
```

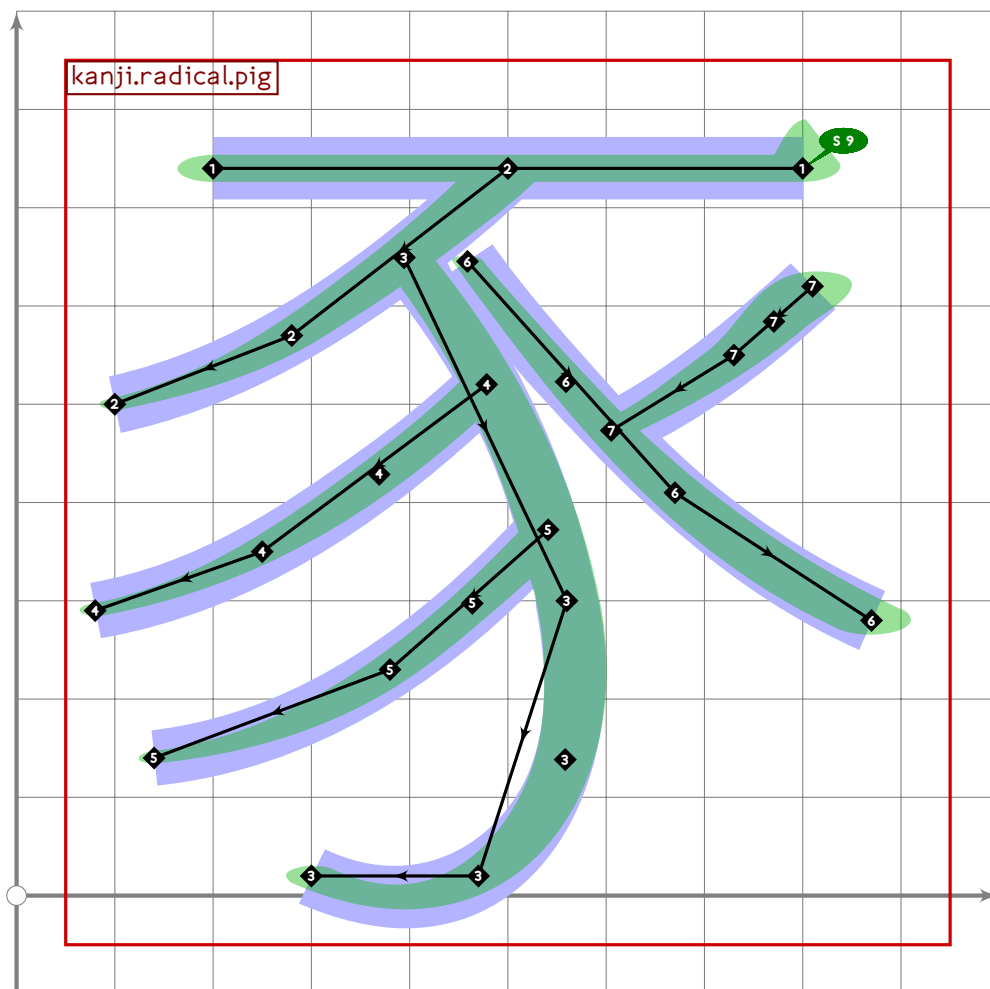



```

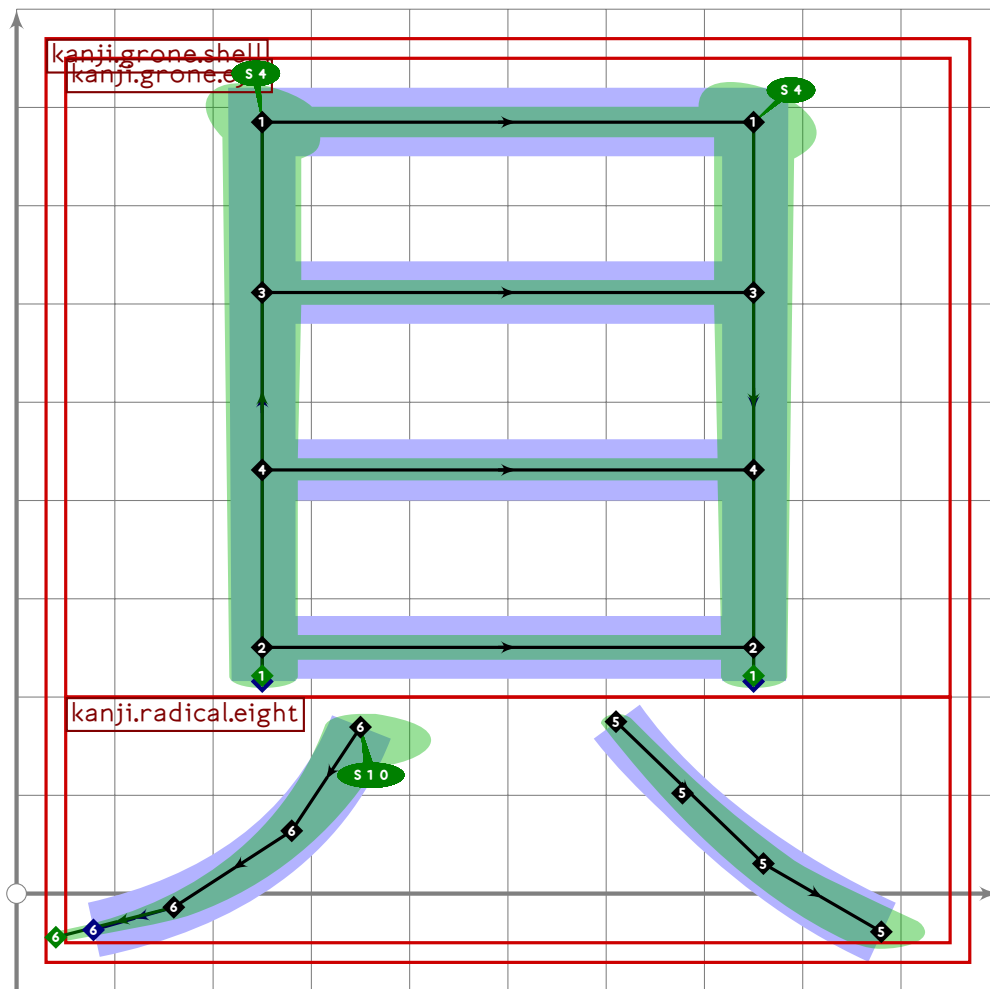
625 % tou/mame "bean"
626 begintsuglyph("uni2F96",150);
627   kanji.grthree.bean;
628   tsu_render;
629 endtsuglyph;
630

```

U+2F97
tsuku.uni2F97



```
631 % inoko "pig" radical
632 begintsuglyph("uni2F97";151);
633   kanji.radical.pig;
634   tsu_render;
635 endtsuglyph;
636
```

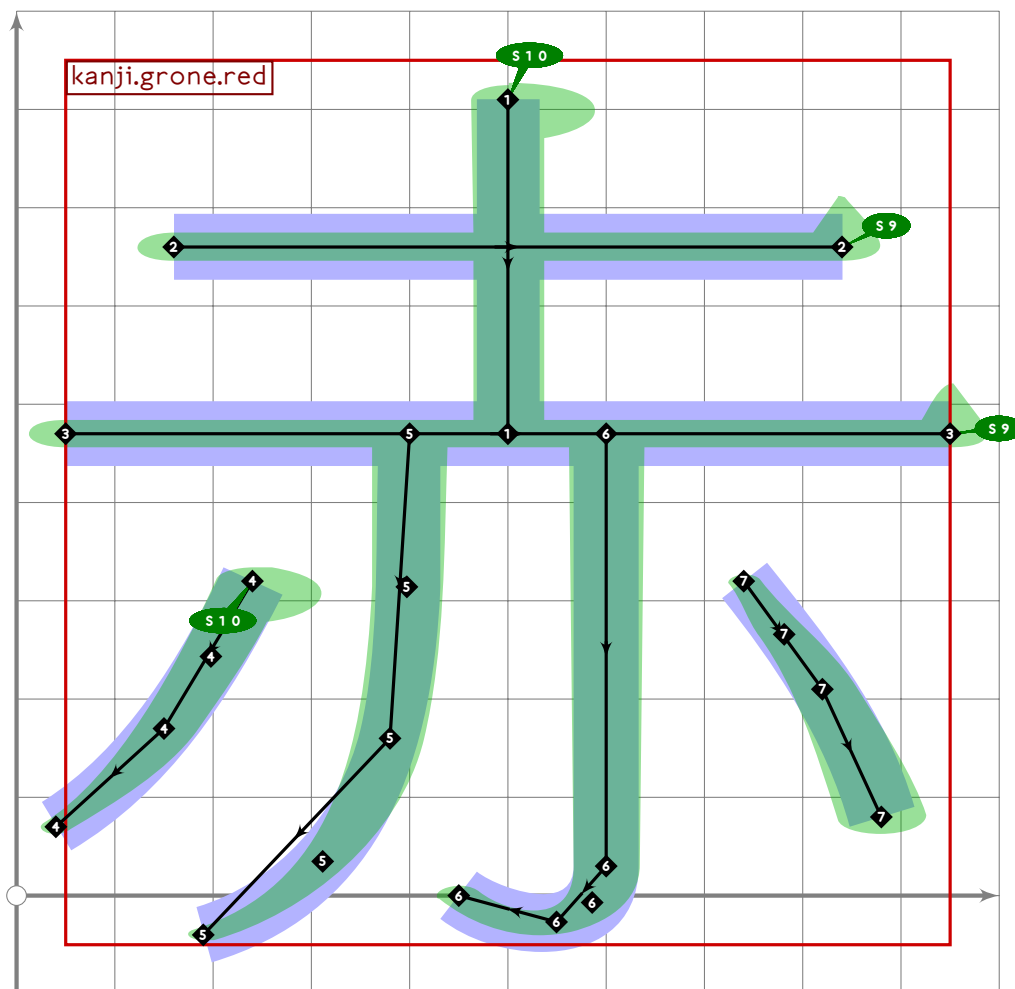


```

637 % bai/kai "shellfish"
638 begintsuglyph("uni2F99",153);
639   kanji.grone.shell;
640   tsu_render;
641   endtsuglyph;
642

```

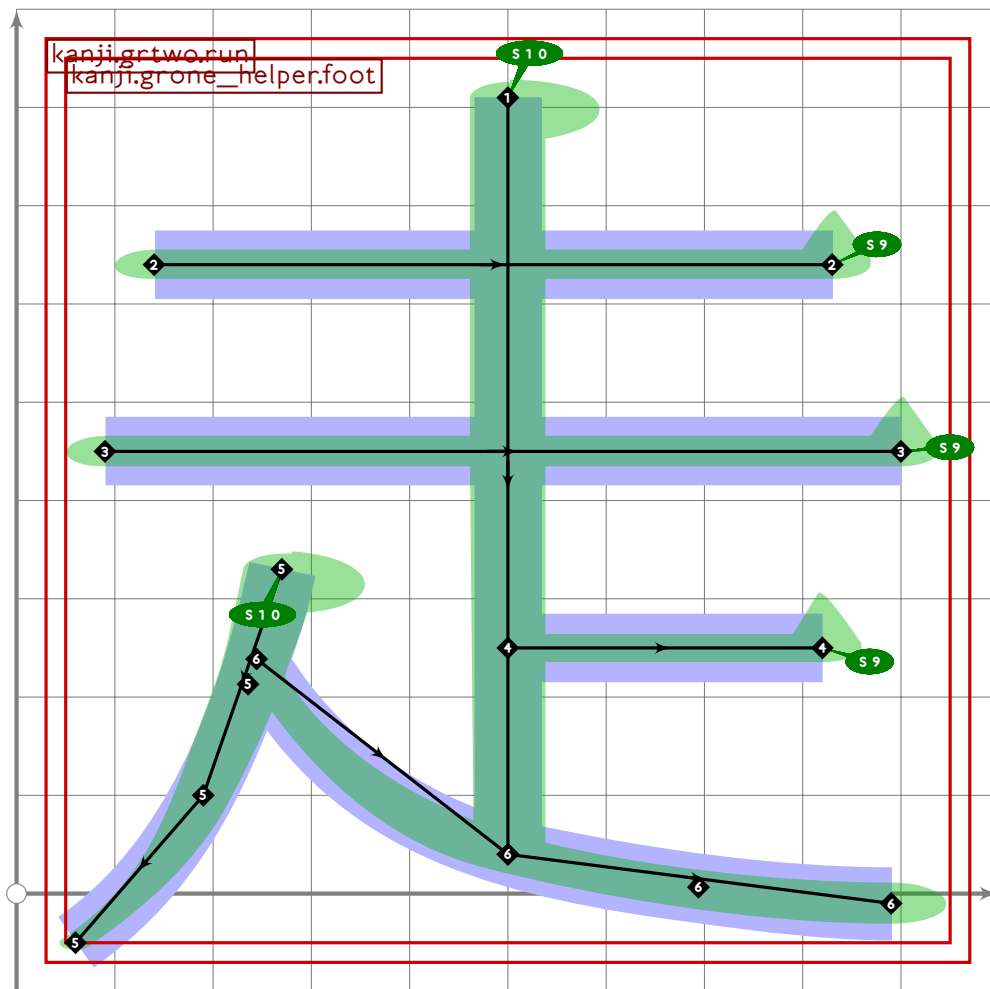
U+2F9A
tsuku.uni2F9A



```

643 % aka/seki "red"
644 begintsuglyph("uni2F9A",154);
645   kanji.grone.red;
646   tsu_render;
647 endtsuglyph;
648

```

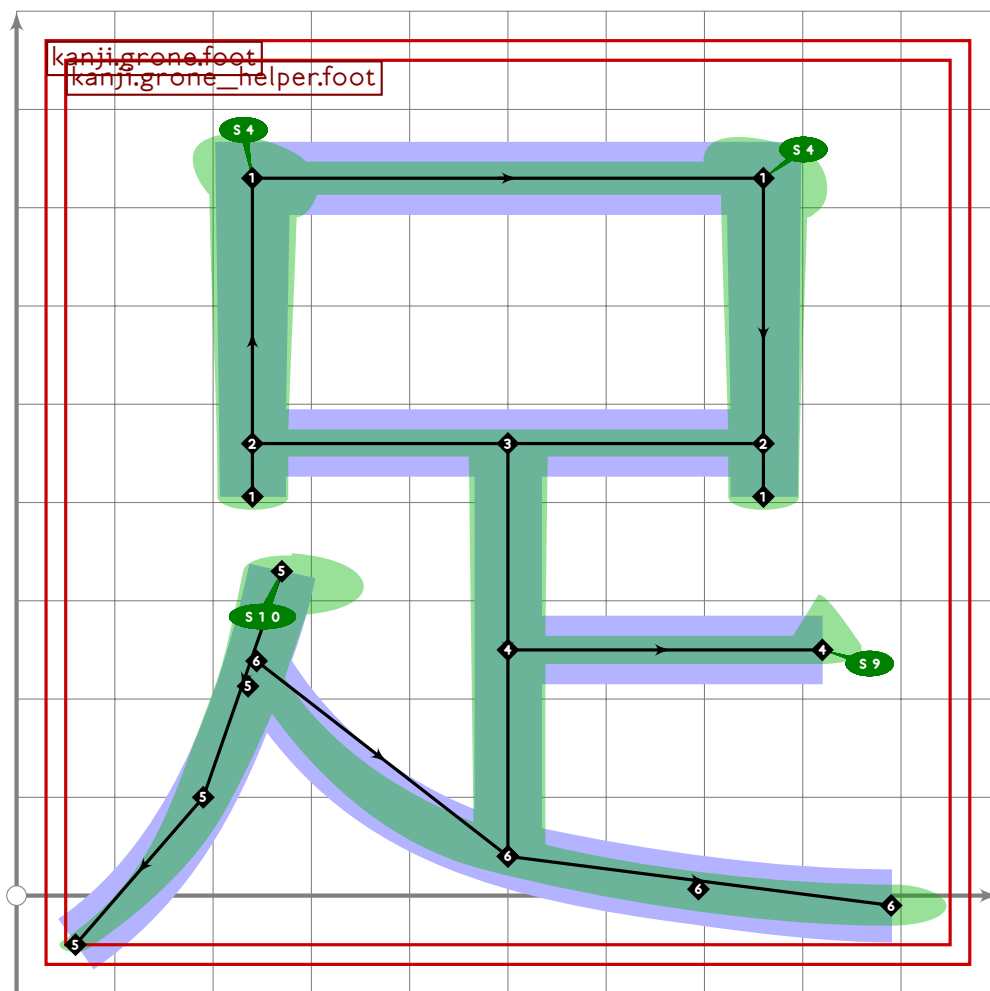


```

649 % sou/hasi "run"
650 begint Suglyph("uni2F9B",155);
651   kanji.grtwo.run;
652   tsu_render;
653 endtsuglyph;
654

```

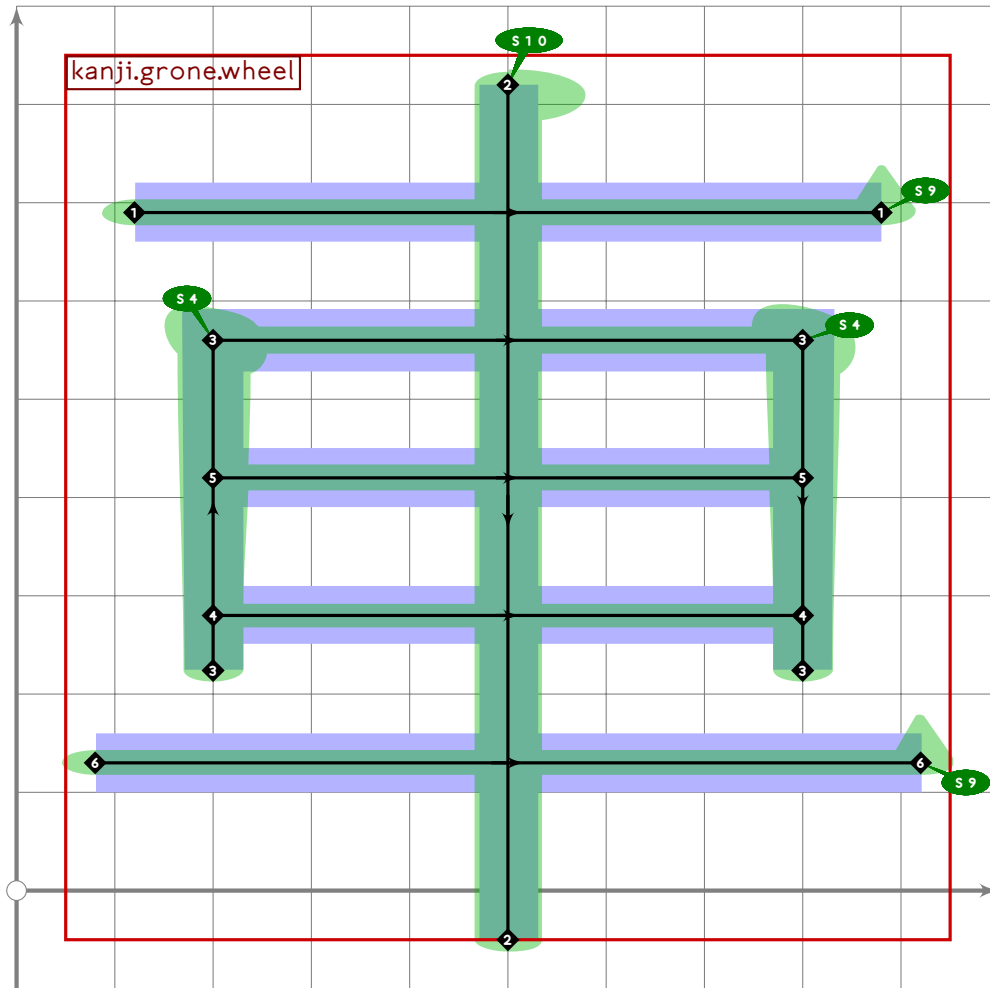
U+2F9C
tsuku.uni2F9C



```

655 % ashi/soku "foot"
656 begintsuglyph("uni2F9C";156);
657   kanji.grone.foot;
658   tsu_render;
659 endtsuglyph;
660

```

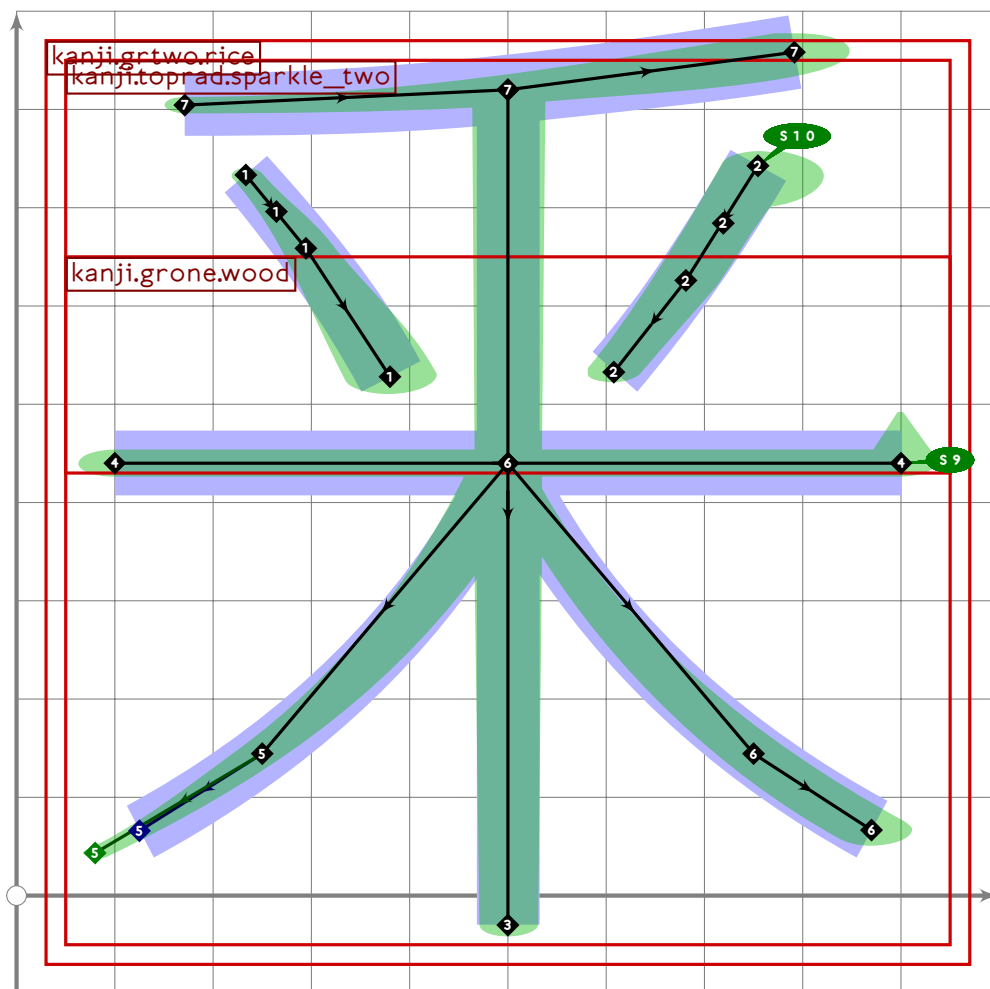


```

661 % kuruma "car/wheel"
662 begint Suglyph("uni2F9E";158);
663   kanji.grone.wheel;
664   tsu_render;
665 endtsuglyph;
666

```

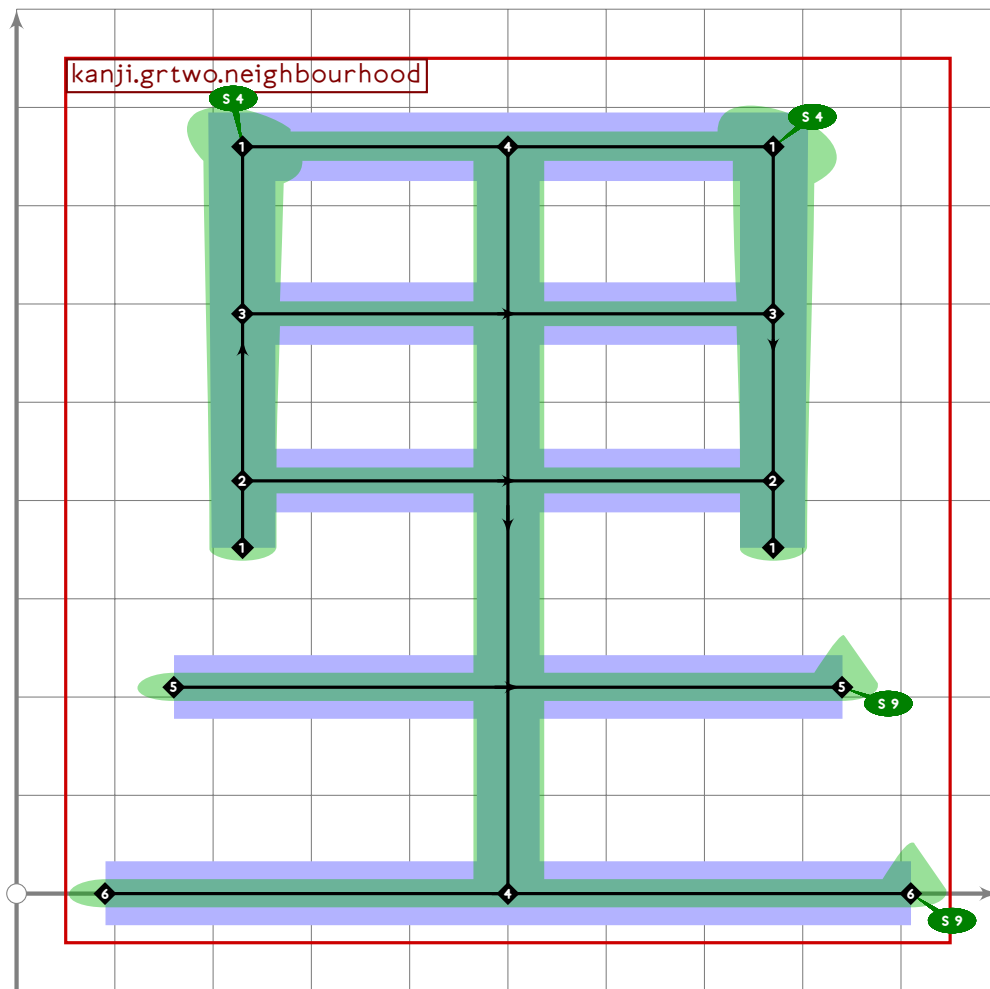
U+2FA4
tsuku.uni2FA4



```

667 % han/irodori "separate" or "divide" but mostly "topped rice radical"
668 begintsuglyph("uni2FA4",164);
669   build_kanji.add_beret(kanji.grtwo.rice);
670   tsu_render;
671 endsuglyph;
672

```

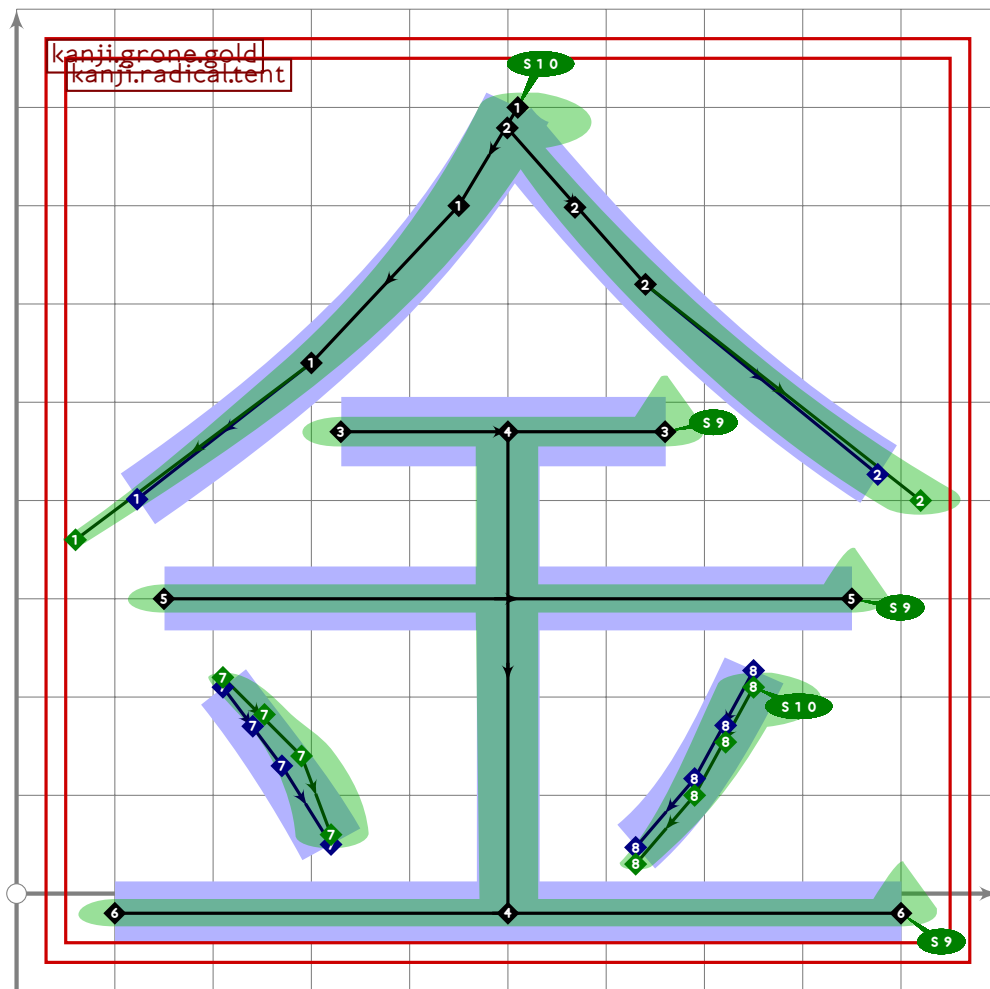



```

673 % ri/sato, multiple meanings including 3.929km and "neighbourhood"
674 begintsuglyph("uni2FA5",165);
675   kanji.grtwo.neighbourhood;
676   tsu_render;
677 endtsuglyph;
678

```

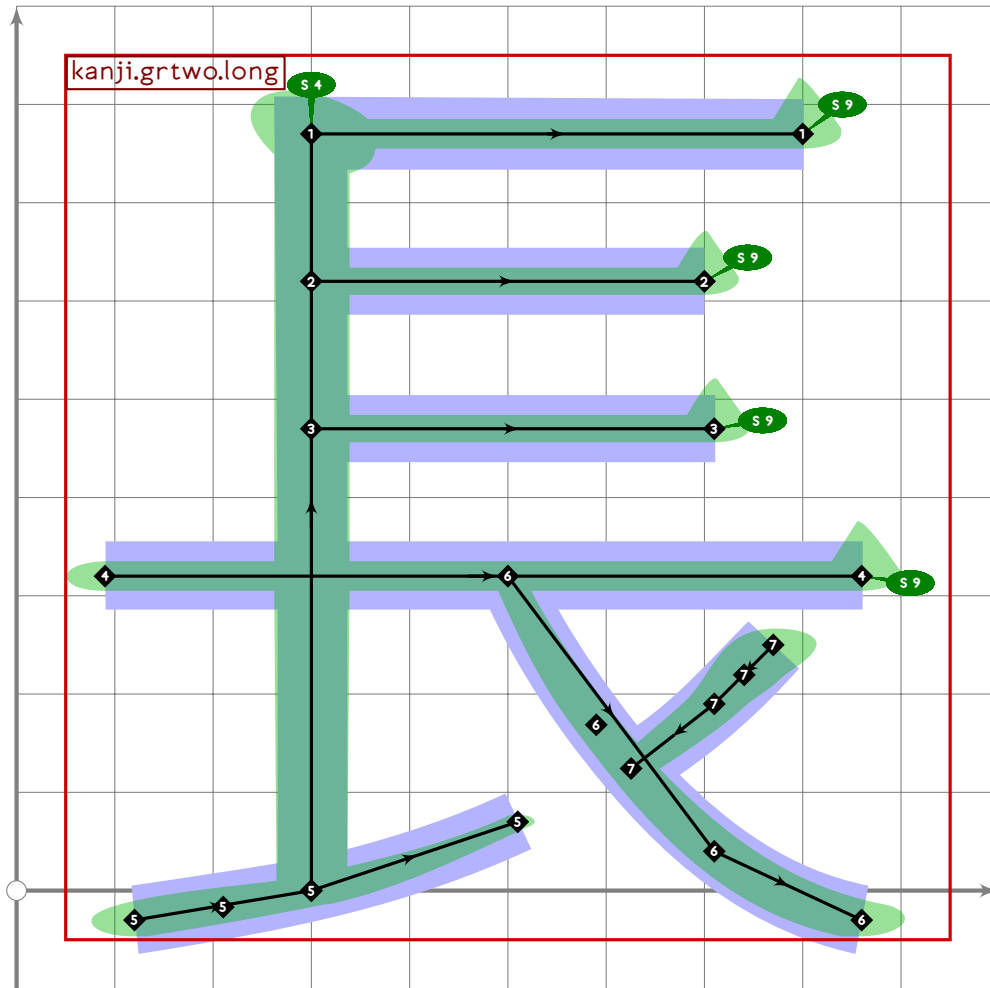
U+2FA6
tsuku.uni2FA6



```

679 % kane/kin "gold"
680 begintsuglyph("uni2FA6",166);
681   kanji.grone.gold;
682   tsu_render;
683 endtsuglyph;
684

```

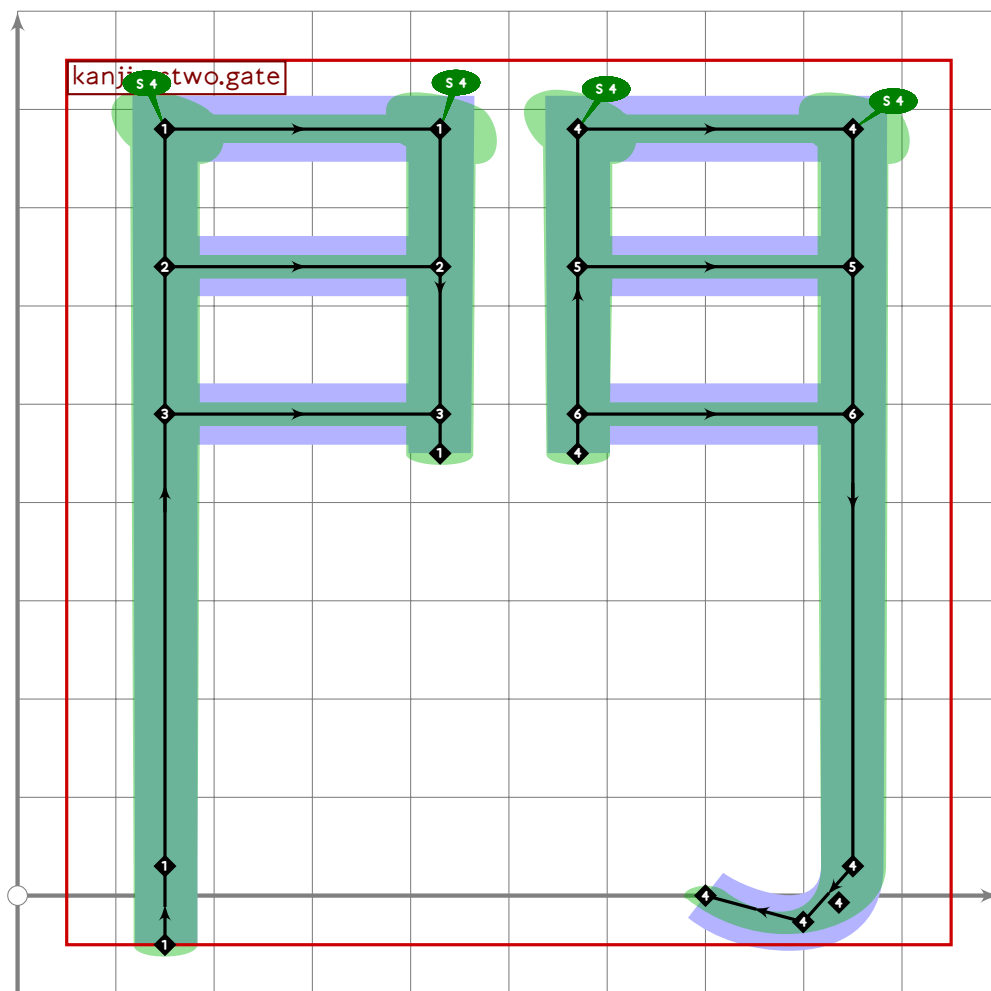


```

685 % chou/naga "long"
686 begintsuglyph("uni2FA7",167);
687   kanji.grtwo.long;
688   tsu_render;
689 endtsuglyph;
690

```

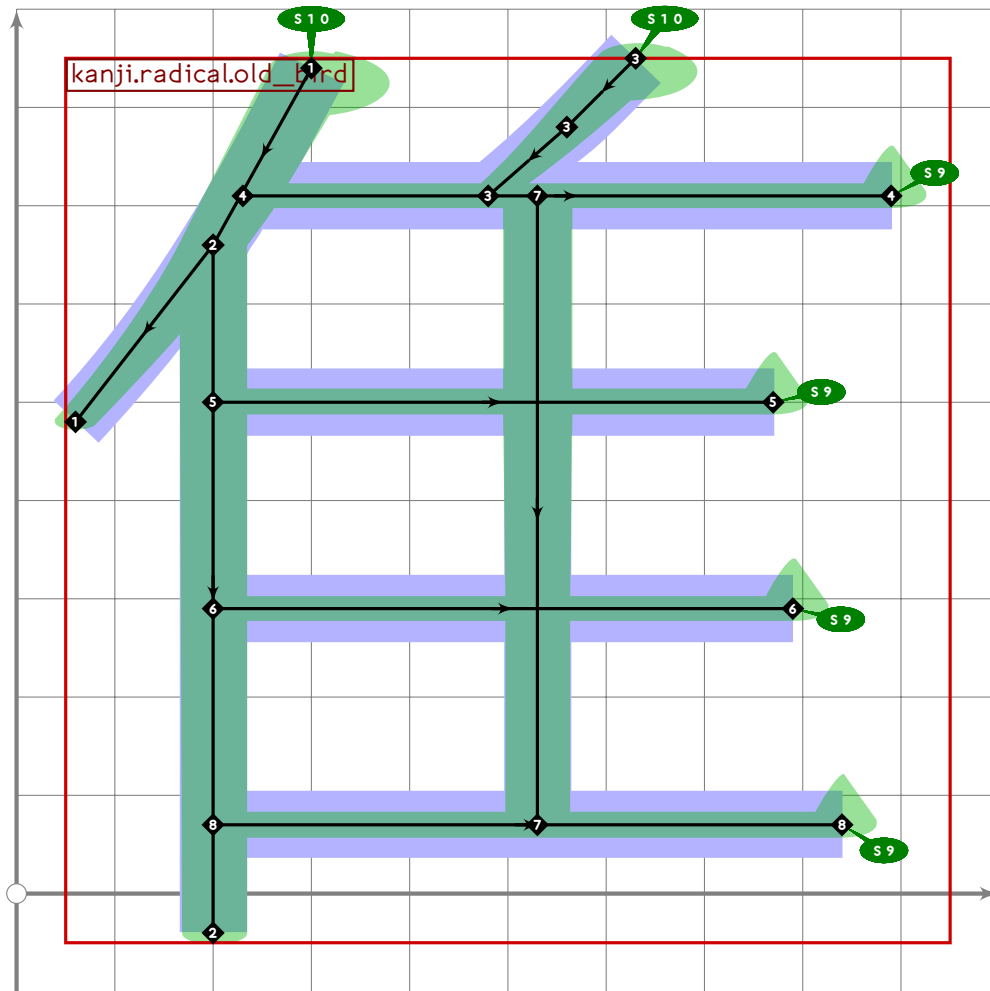
U+2FA8
tsuku.uni2FA8



```

691 % mon/kado "gate"
692 begintsuglyph("uni2FA8",168);
693   kanji.grtwo.gate;
694   tsu_render;
695 endtsuglyph;
696

```

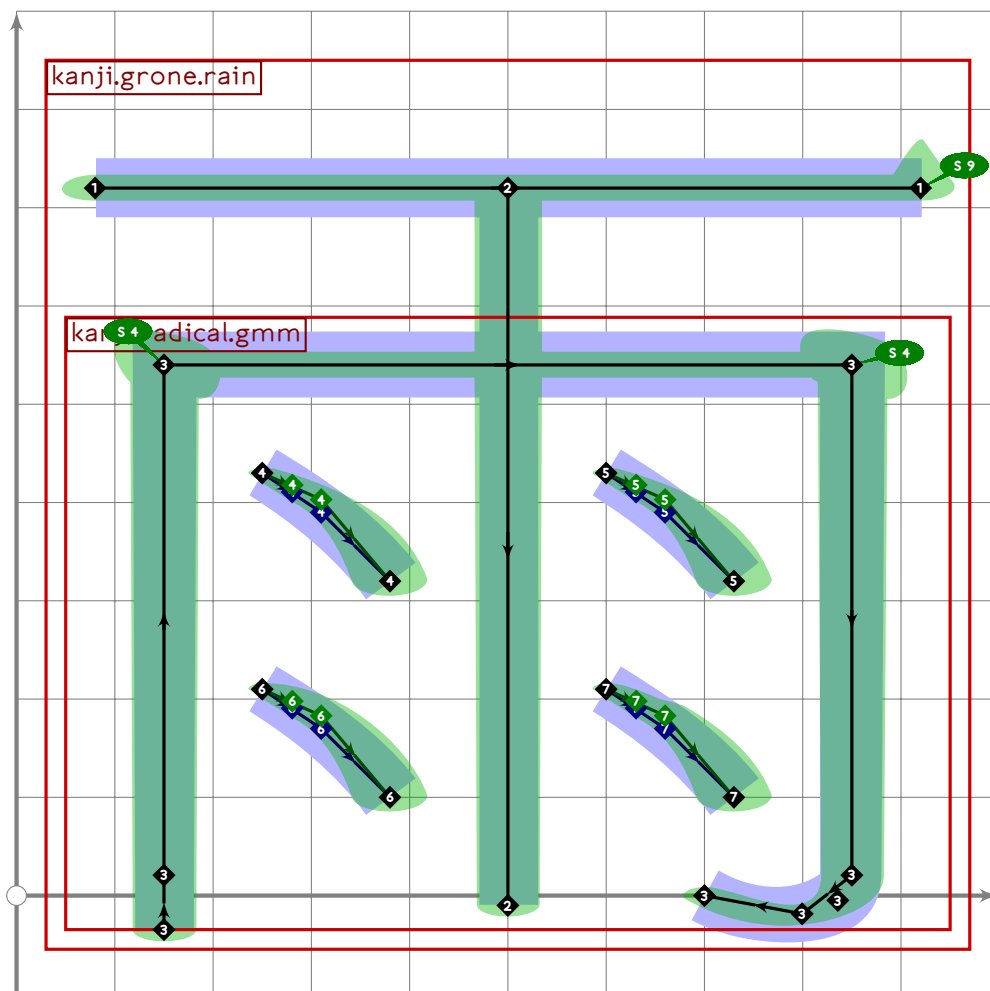


```

697 % sai/tori "old bird" radical
698 begintsuglyph("uni2FAB",171);
699 kanji.radical.old_bird;
700 tsu_render;
701 endtsuglyph;
702

```

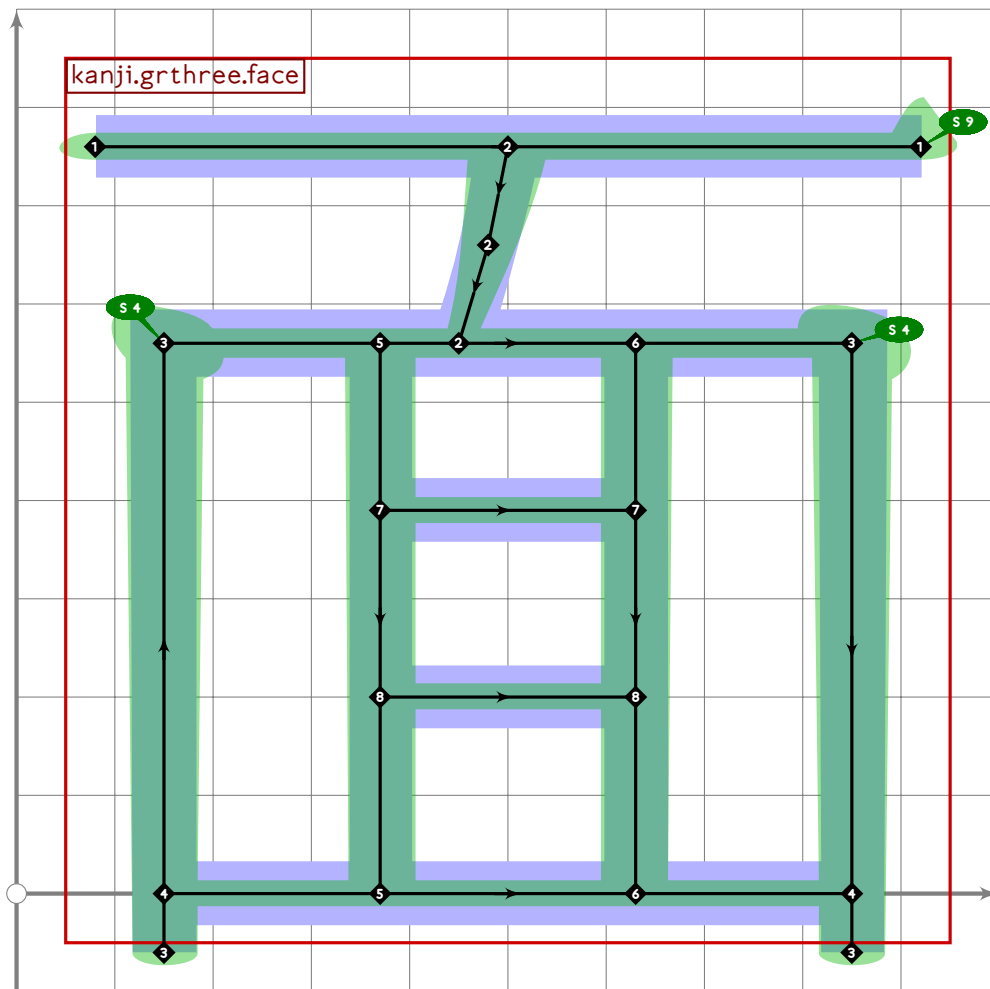
U+2FAC
tsuku.uni2FAC



```

703 % u/ame "rain"
704 begintsuglyph("uni2FAC";172);
705   kanji.grone.rain;
706   tsu_render;
707 endtsuglyph;
708

```

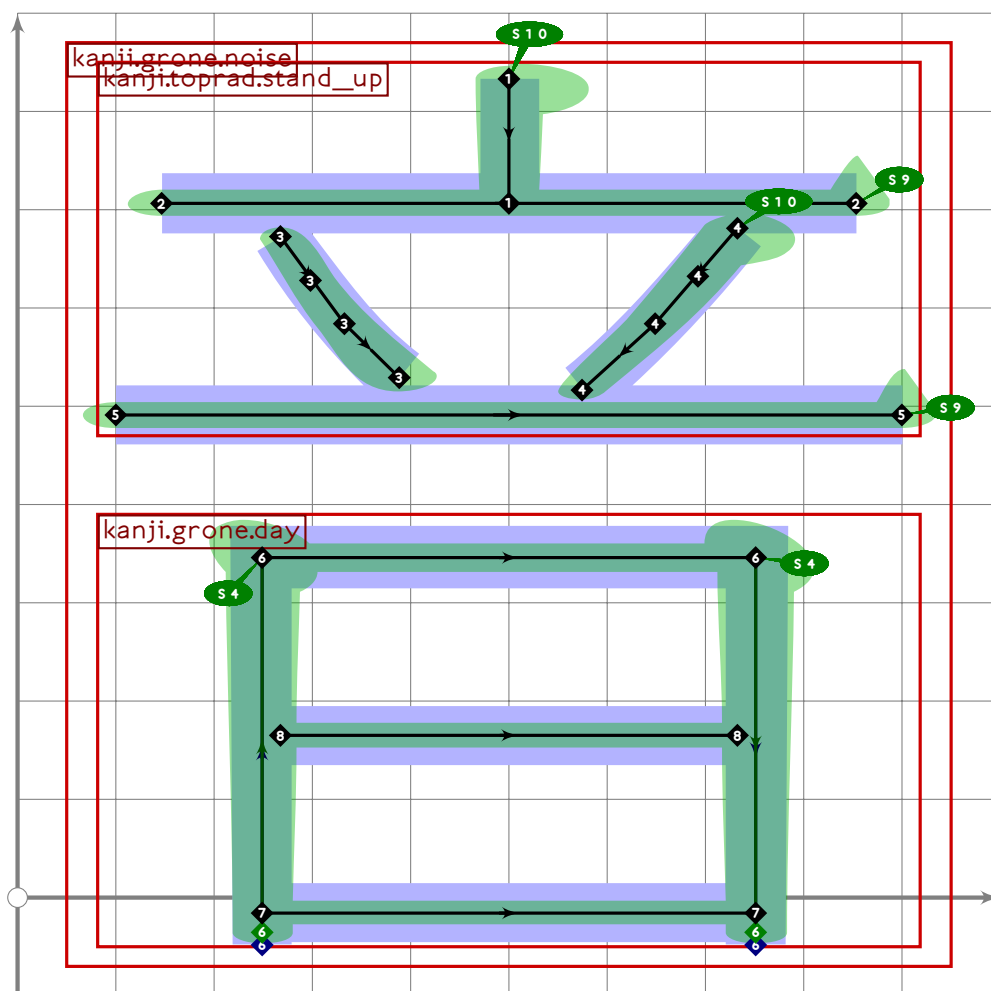


```

709 % men/omo "face"
710 begint Suglyph("uni2FAF";175);
711   kanji.grthree.face;
712   tsu_render;
713 endtsuglyph;
714

```

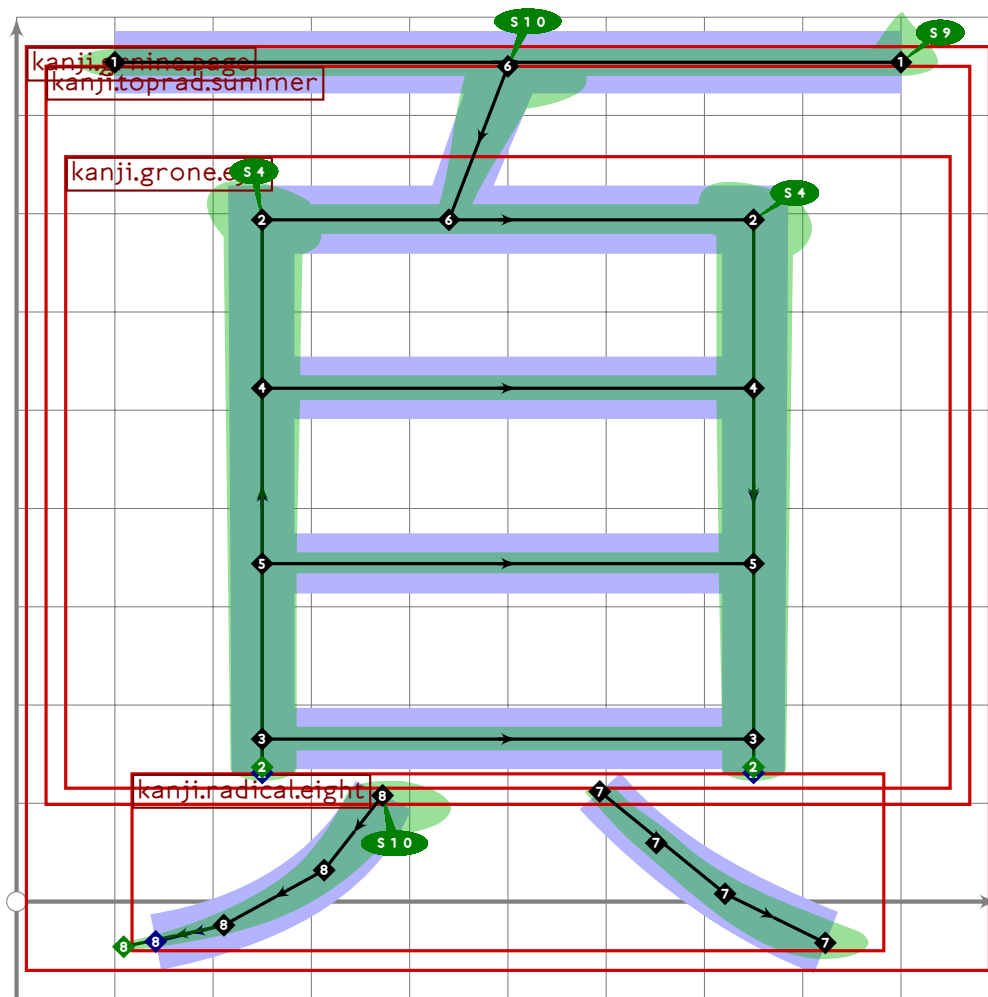
U+2FB3
tsuku.uni2FB3



```

715 % oto/on "noise"
716 begintsuglyph("uni2FB3",179);
717   kanji.grone.noise;
718   tsu_render;
719 endtsuglyph;
720

```

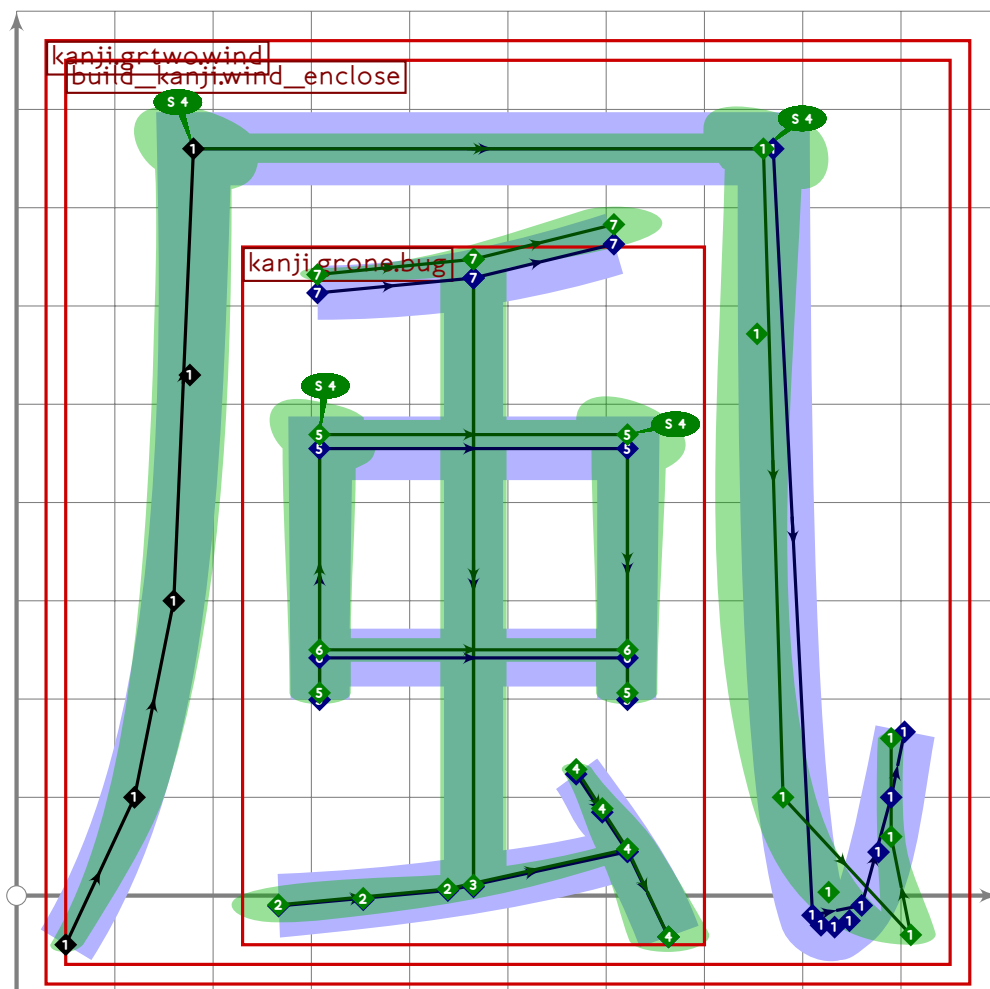



```

721 % ketsu/peeji "page"
722 begintsuglyph("uni2FB4",180);
723   kanji.grnine.page;
724   tsu_render;
725 endtsuglyph;
726

```

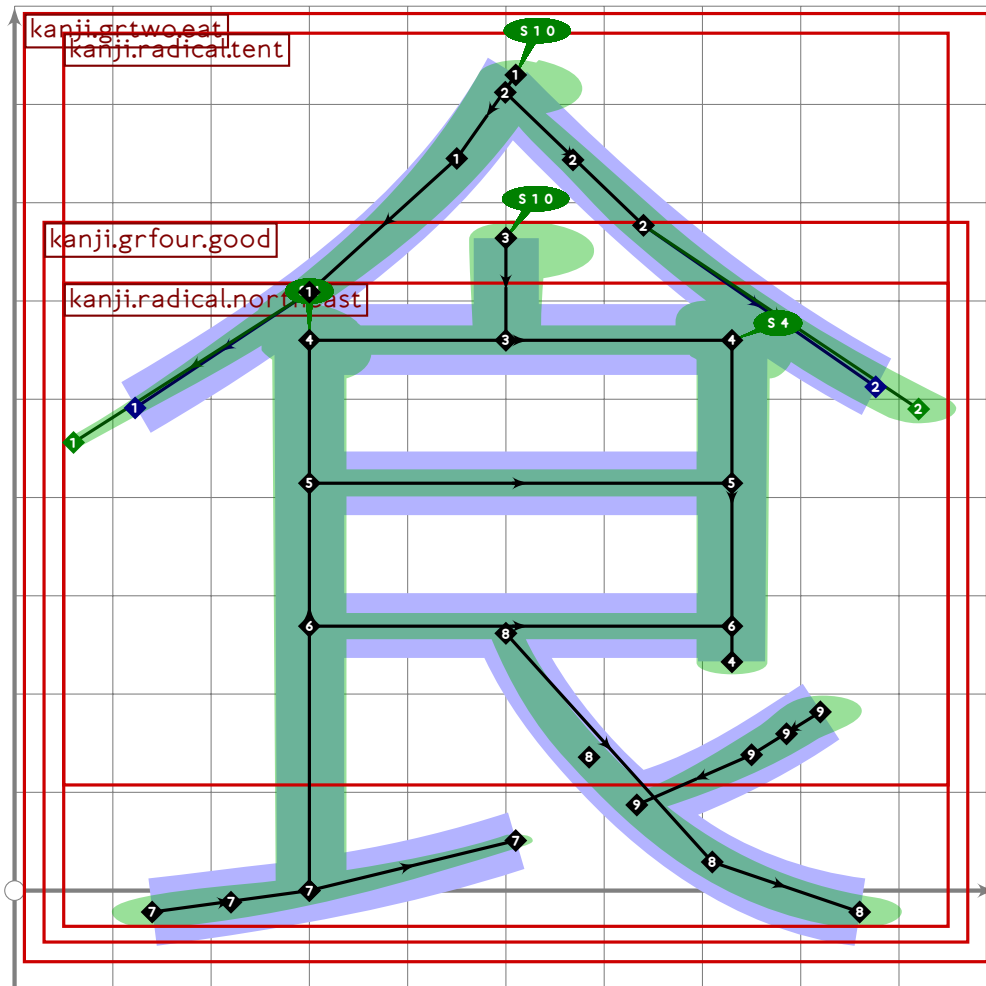
U+2FB5
tsuku.uni2FB5



```

727 % fuu/kaze "wind"
728 begintsuglyph("uni2FB5",181);
729   kanji.grtwo.wind;
730   tsu_render;
731 endtsuglyph;
732

```

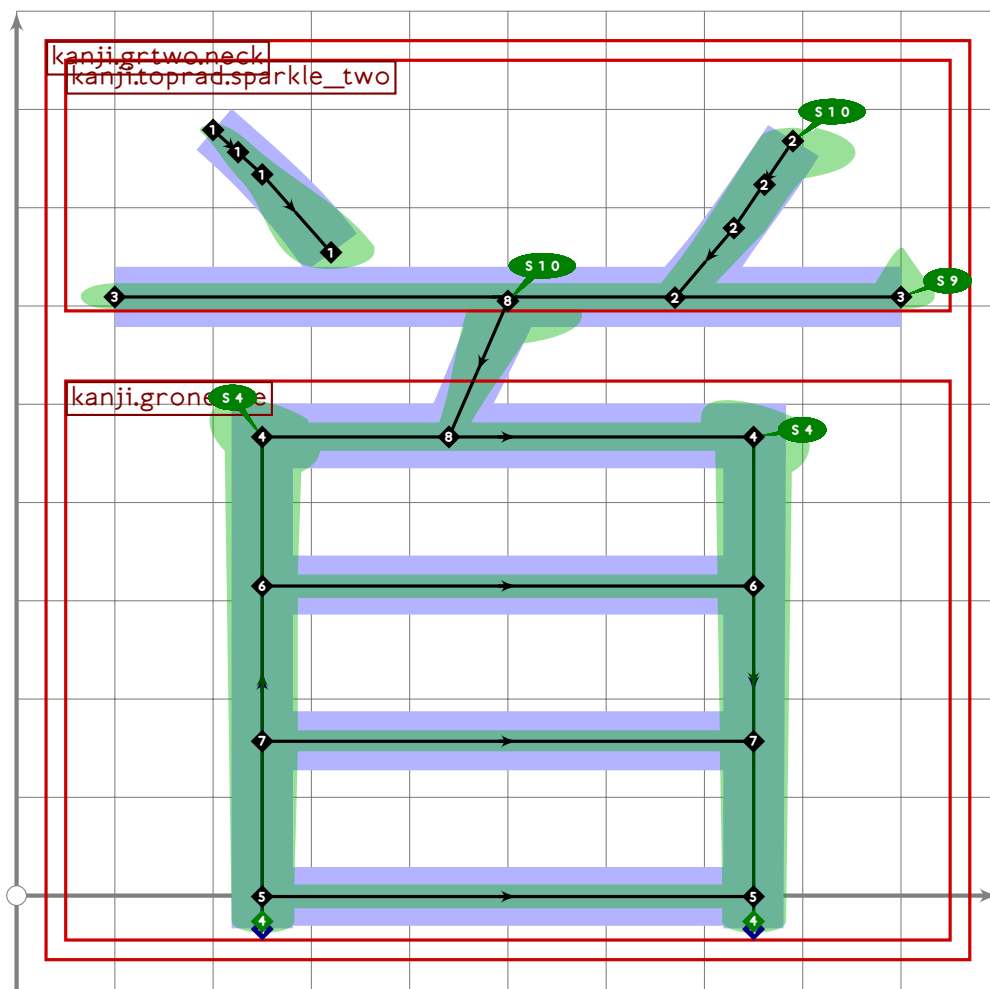


```

733 % shoku/ta "eat"
734 begintsuglyph("uni2FB7",183);
735   kanji.grtwo.eat;
736   tsu_render;
737 endtsuglyph;
738

```

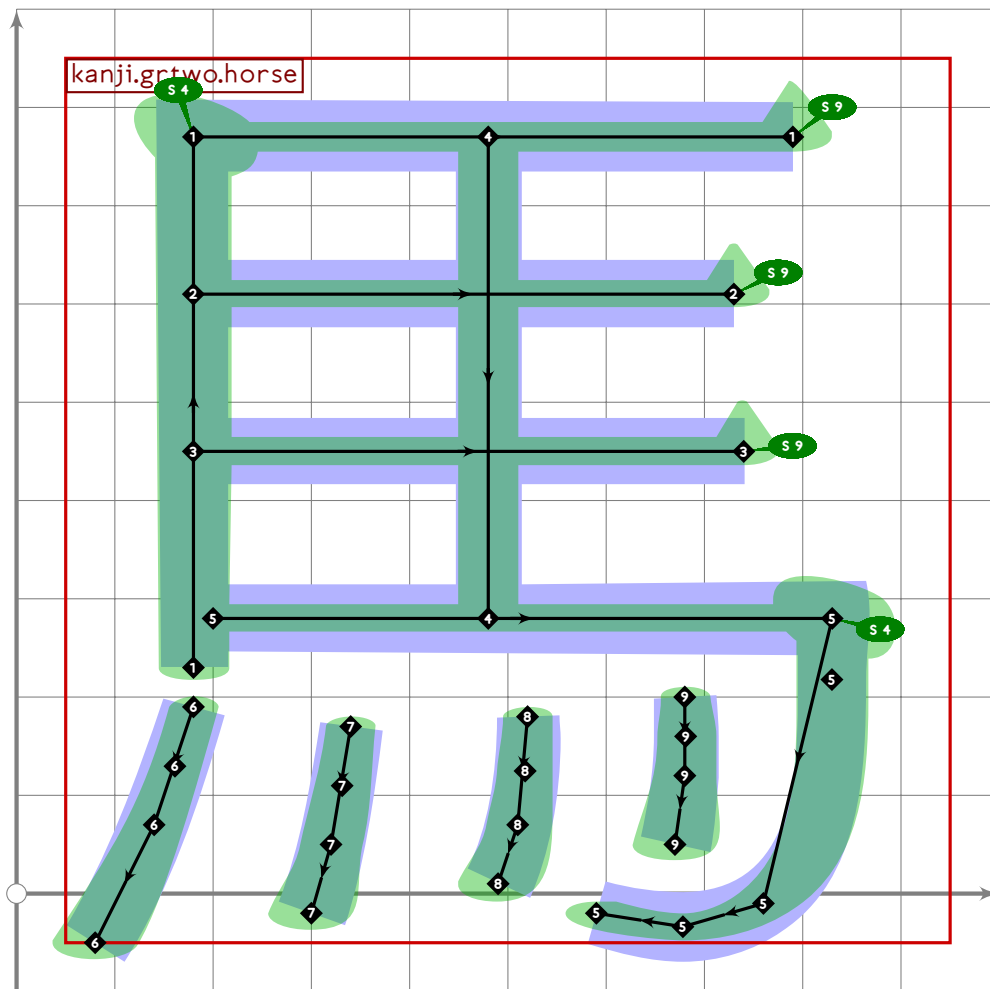
U+2FB8
tsuku.uni2FB8



```

739 % shu/kubi "neck"
740 begintsuglyph("uni2FB8",184);
741   kanji.grtwo.neck;
742   tsu_render;
743 endtsuglyph;
744

```

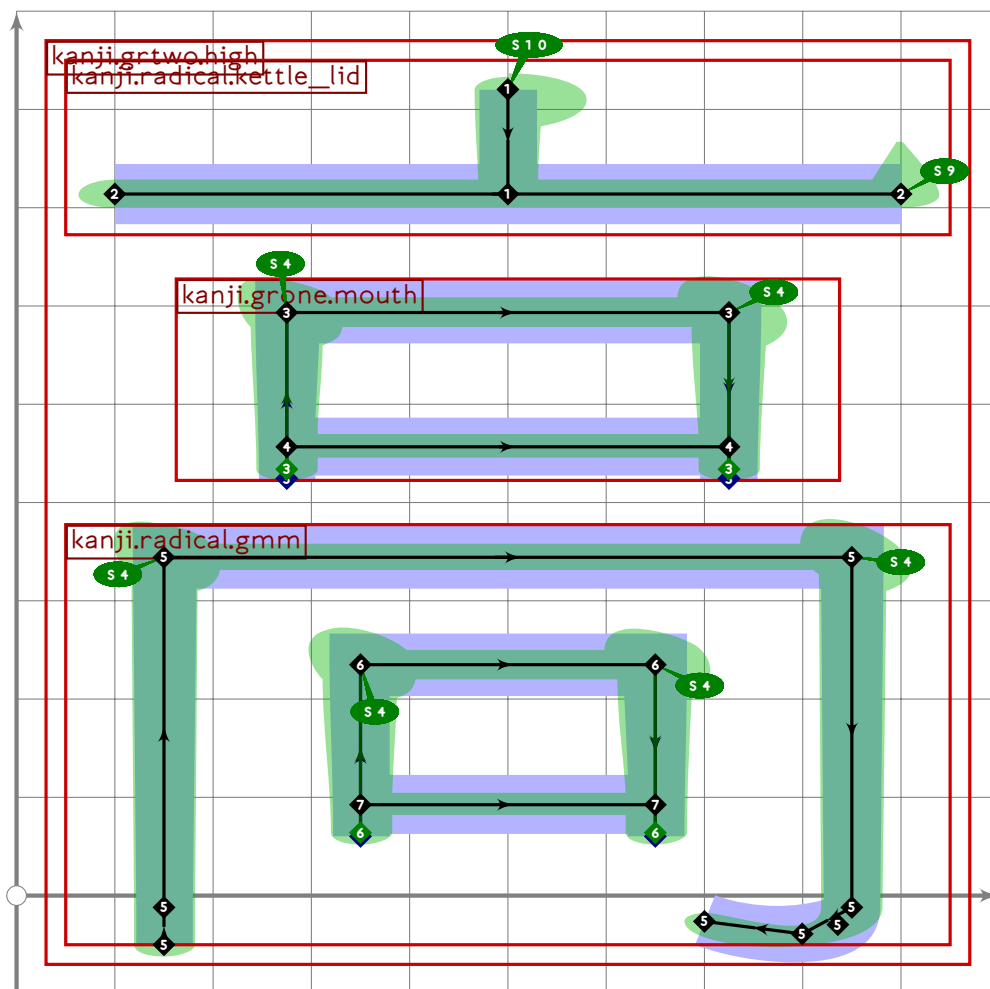


```

745 % ba/uma "horse"
746 begintsuglyph("uni2FBA",186);
747   kanji.grtwo.horse;
748   tsu_render;
749 endtsuglyph;
750

```

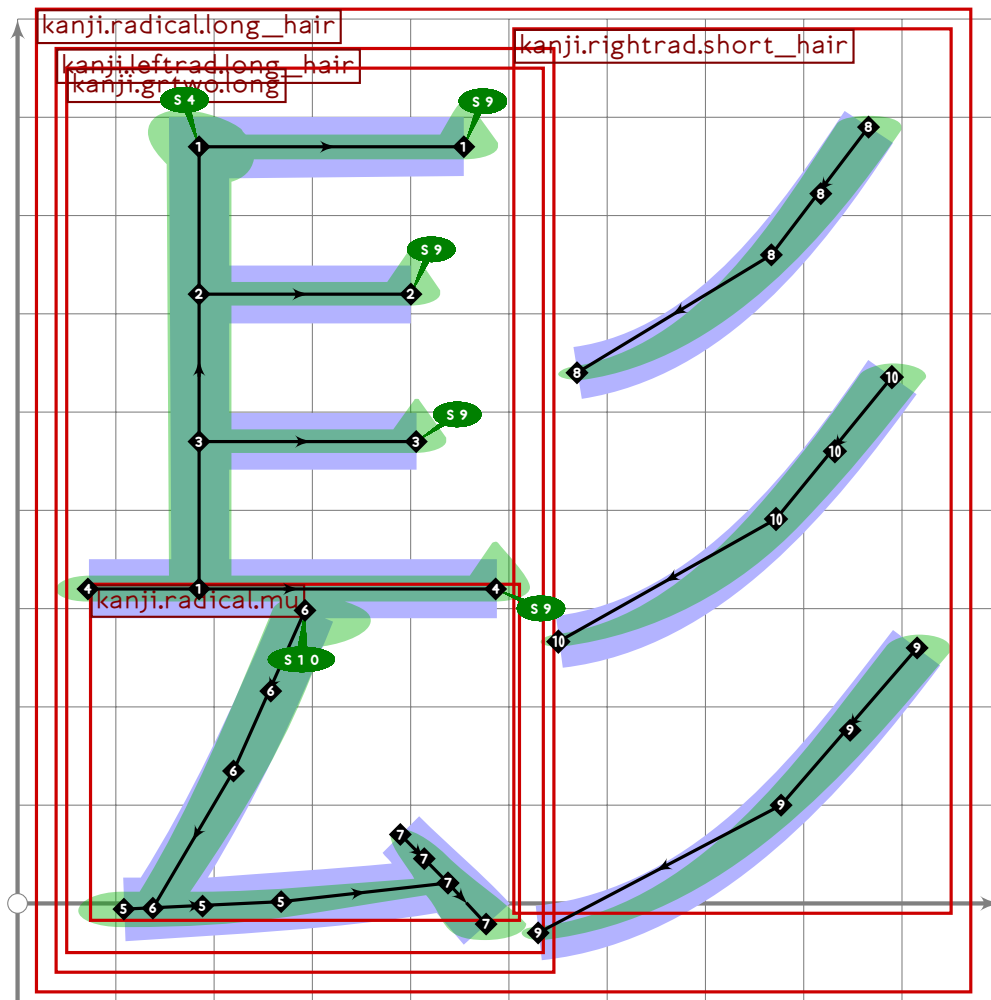
U+2FBC
tsuku.uni2FBC



```

751 % kou/taka "high"
752 begintsuglyph("uni2FBC",188);
753   kanji.grtwo.high;
754   tsu_render;
755 endtsuglyph;
756

```

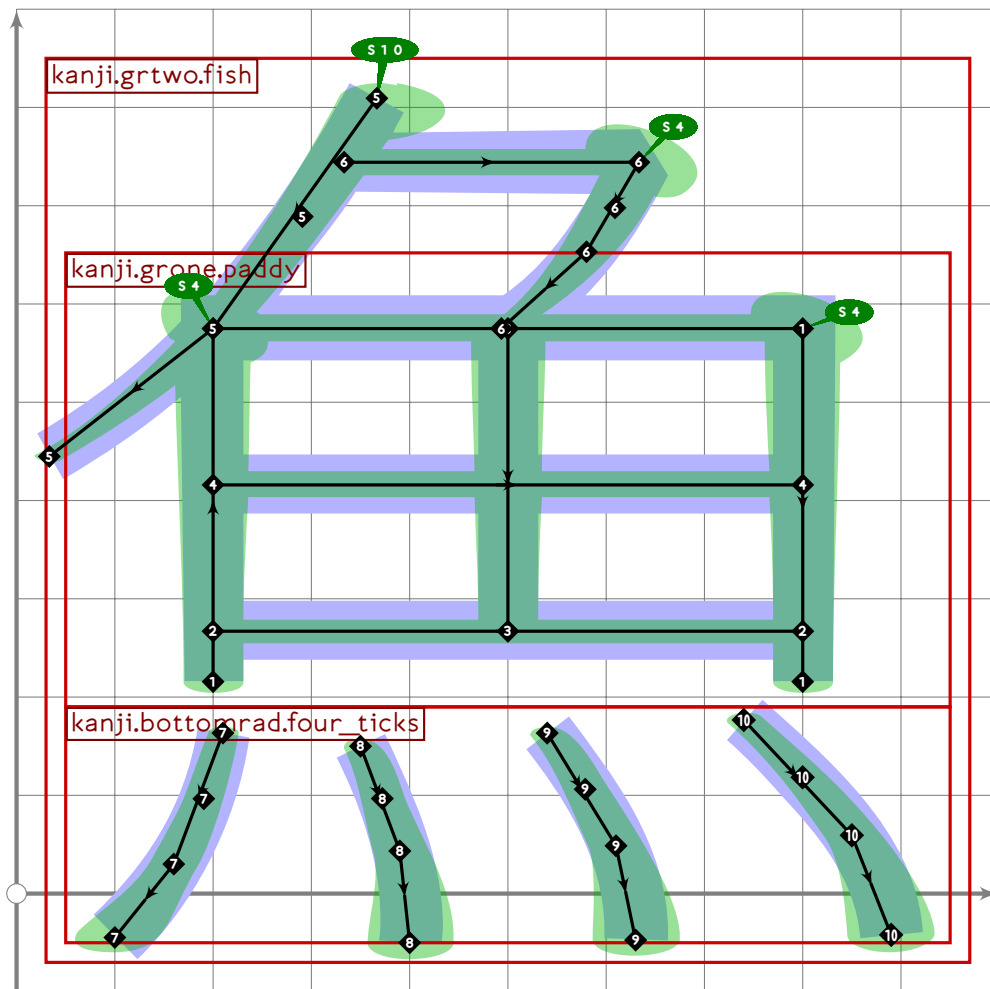


```

757 % hyuu/kamigashira "long hair radical"
758 begintsuglyph("uni2FBD",189);
759   kanji.radical.long_hair;
760   tsu_render;
761 endtsuglyph;
762

```

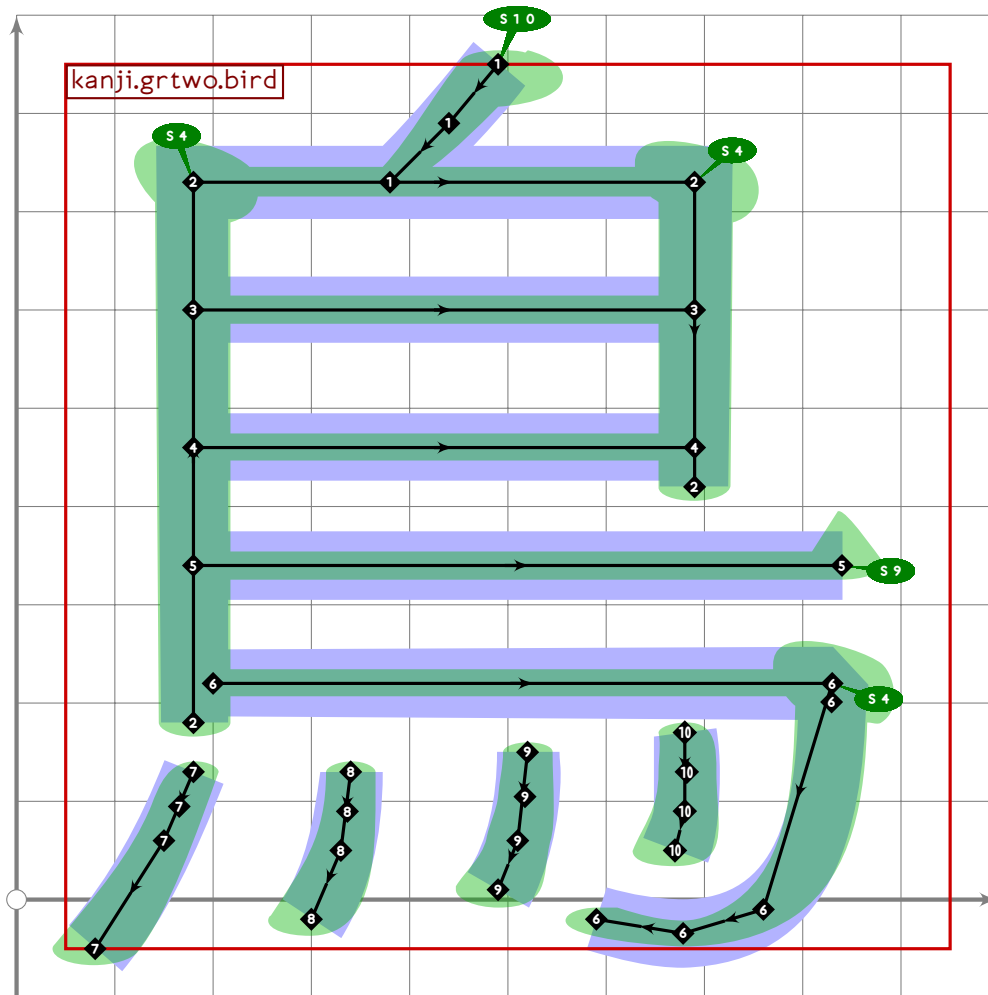
U+2FC2
tsuku.uni2FC2



```

763 % gyo/sakana "fish"
764 begintsuglyph("uni2FC2";194);
765   kanji.grtwo.fish;
766   tsu_render;
767 endsuglyph;
768

```

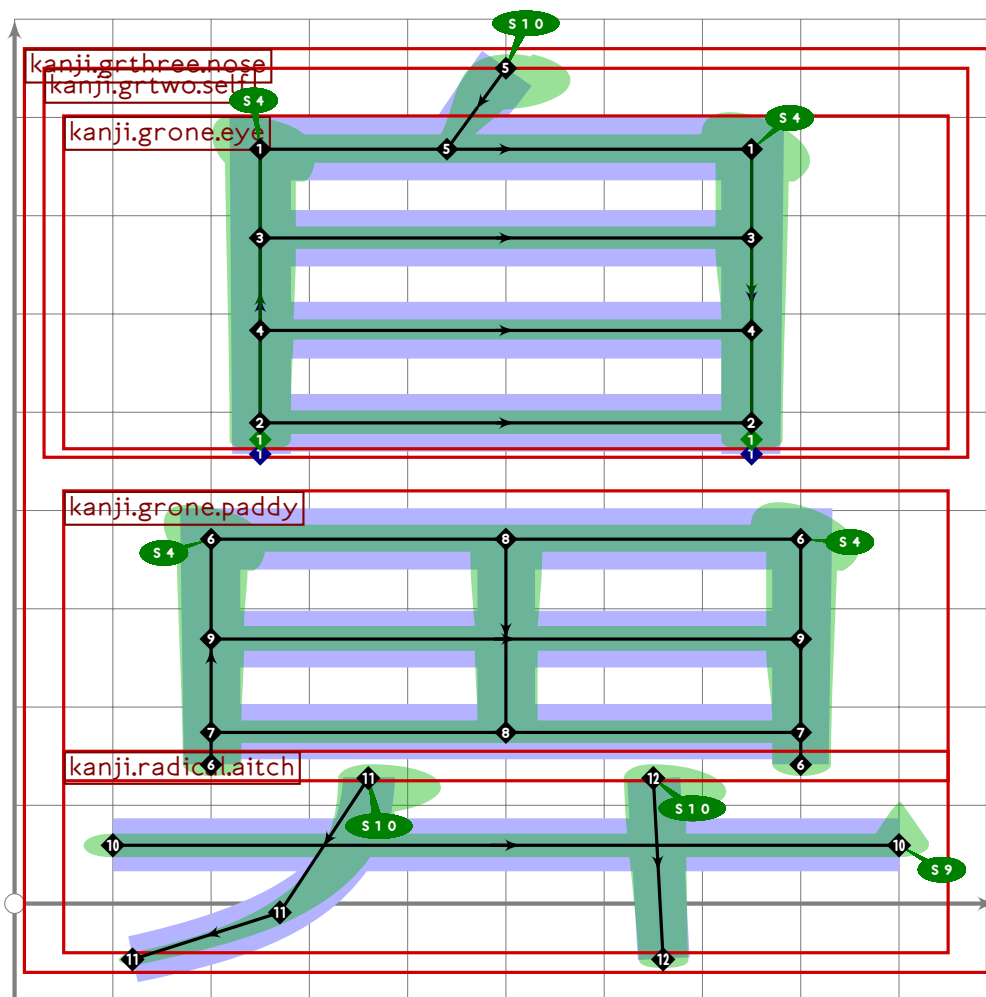



```

769 % chou/tori "bird"
770 begintuglyph("uni2FC3";195);
771   kanji.grtwo.bird;
772   tsu_render;
773 endtsuglyph;
774

```

U+2FD0
tsuku.uni2FD0



```

775 % bi/hana "nose"
776 begintsuglyph("uni2FD0";208);
777   kanji.grthree.nose;
778   tsu_render;
779 endtsuglyph;
780
781
782
```

Ideographic Description Characters

```

783 % IDEOGRAPHIC DESCRIPTION CHARACTERS
784
785 numeric idc_corners;
786
787 vardef idc_horiz(expr v,ha,hb) =
788   for h:=ha upto hb:
789     if h<hb: idc_corners[h][v].r:=1; fi;
790     if h>ha: idc_corners[h][v].l:=1; fi;
791   endfor;
792 enddef;
793
```

```

794 vardef idc_vert(expr h,va,vb) =
795   for v:=va upto vb:
796     if v<vb: idc_corners[h][v].d:=1; fi;
797     if v>va: idc_corners[h][v].u:=1; fi;
798   endfor;
799 enddef;
800
801 vardef idc_rect(expr ur,ll) =
802   idc_horiz(ypart ur,xpart ur,xpart ll);
803   idc_vert(xpart ur,ypart ll,ypart ur);
804   idc_vert(xpart ll,ypart ll,ypart ur);
805   idc_horiz(ypart ll,xpart ur,xpart ll);
806 enddef;
807
808 transform idc_drawxf;
809 (-1,1) transformed idc_drawxf=(50,50);
810 (97,1) transformed idc_drawxf=(950,50);
811 (97,97) transformed idc_drawxf=(950,850);
812
813 vardef idc_render =
814   begingroup
815     save glyph;
816     path glyph;
817     for h:=0 upto 6:
818       for v:=0 upto 6:
819         if (known idc_corners[h][v].l) or (known idc_corners[h][v].r)
820           or (known idc_corners[h][v].u) or (known idc_corners[h][v].d):
821           if fine_idcs:
822             glyph:=(
823               (-1,1)-if known idc_corners[h][v].d: (-1,2.5)-(-1,2.5)- fi
824               (1,1)-if known idc_corners[h][v].r: (2.5,1)-(2.5,-1)- fi
825               (1,-1)-if known idc_corners[h][v].u: (1,2.5)-(-1,2.5)- fi
826               (-1,-1)-if known idc_corners[h][v].l: (-2.5,-1)-(-2.5,1)- fi
827               cycle) shifted ((h,v) scaled 16);
828             dangerousFill glyph transformed idc_drawxf;
829             if known idc_corners[h][v].d:
830               glyph:=((-1,5.5)-(-1,10.5)-(1,10.5)-(1,5.5)-cycle)
831               shifted ((h,v) scaled 16);
832             dangerousFill glyph transformed idc_drawxf;
833             fi;
834             if known idc_corners[h][v].r:
835               glyph:=((5.5,-1)-(5.5,1)-(10.5,1)-(10.5,-1)-cycle)
836               shifted ((h,v) scaled 16);
837             dangerousFill glyph transformed idc_drawxf;
838             fi;
839           else:
840             glyph:=(
841               (-2,2)-if known idc_corners[h][v].d: (-2,6)-(-2,6)- fi

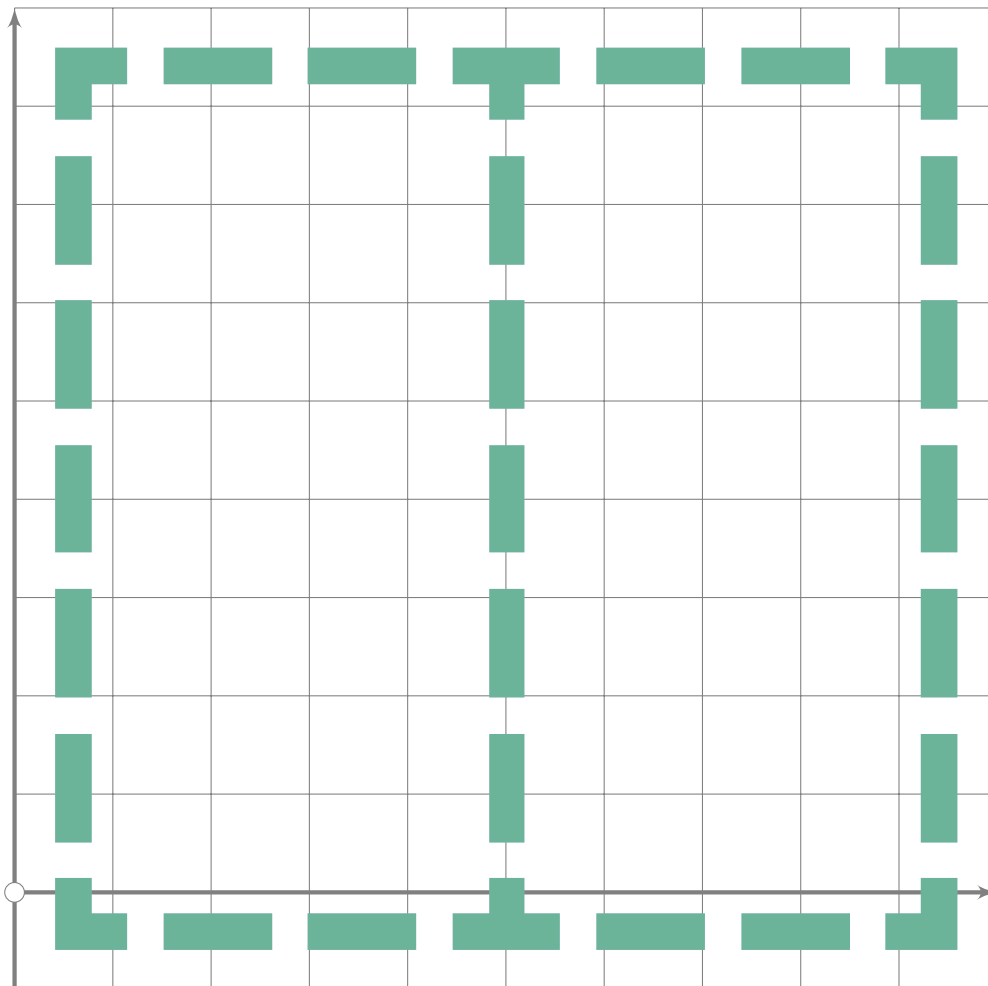
```

U+2FF0
tsuku.uni2FF0

```

842         (2,2)-if known idc_corners[h][v].r: (6,2)-(6,2)- fi
843         (2,2)-if known idc_corners[h][v].u: (2,6)-(-2,6)- fi
844         (-2,2)-if known idc_corners[h][v].l: (-6,2)-(-6,2)- fi
845         cycle) shifted ((h,v) scaled 16);
846         dangerousFill glyph transformed idc_drawxf;
847     fi;
848 fi;
849 idc_corners[h][v].l:=whatever;
850 idc_corners[h][v].r:=whatever;
851 idc_corners[h][v].u:=whatever;
852 idc_corners[h][v].d:=whatever;
853 endfor;
854 endfor;
855 endgroup;
856 enddef;
857

```



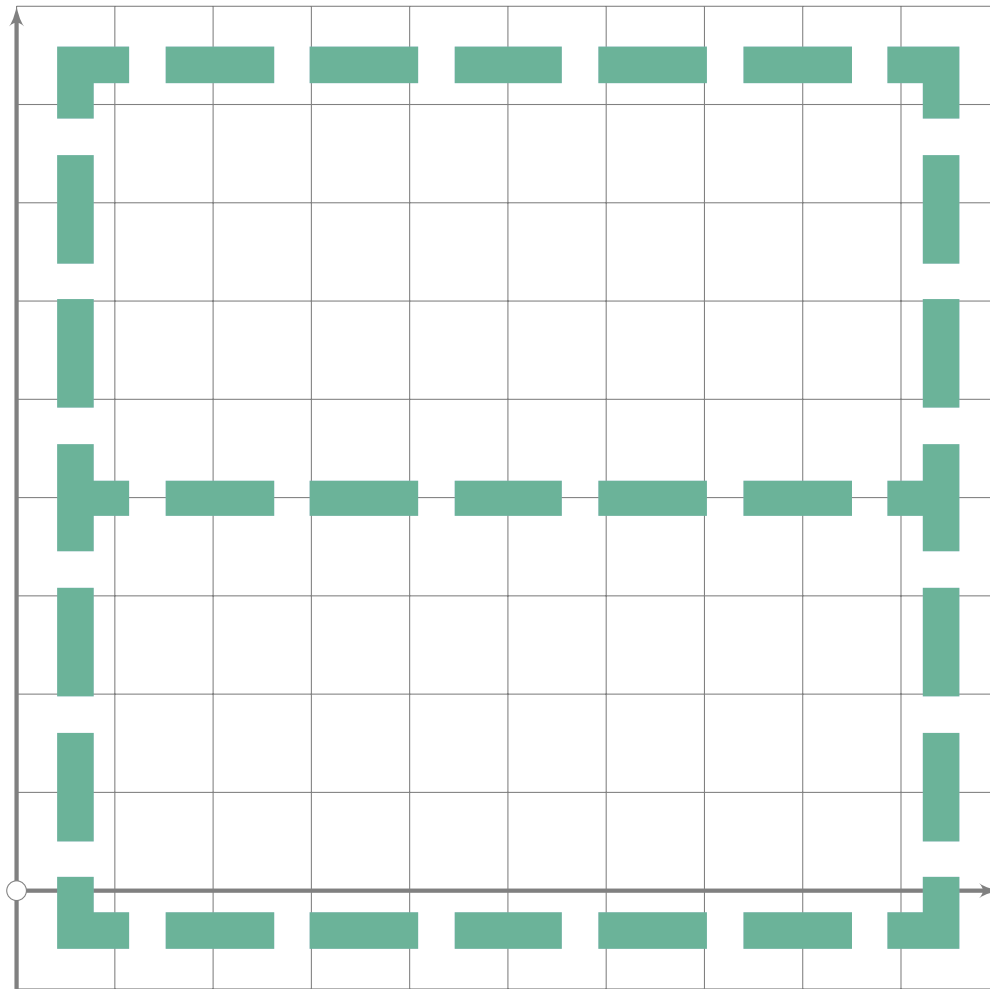
```

858 % left to right
859 begintsuglyph("uni2FF0",240);
860 idc_rect((0,6),(6,0));
861 idc_vert(3,0,6);
862 idc_render;

```

863 endtsuglyph;

864



865 % above to below

866 begintsuglyph("uni2FF1";241);

867 idc_rect((0,6),(6,0));

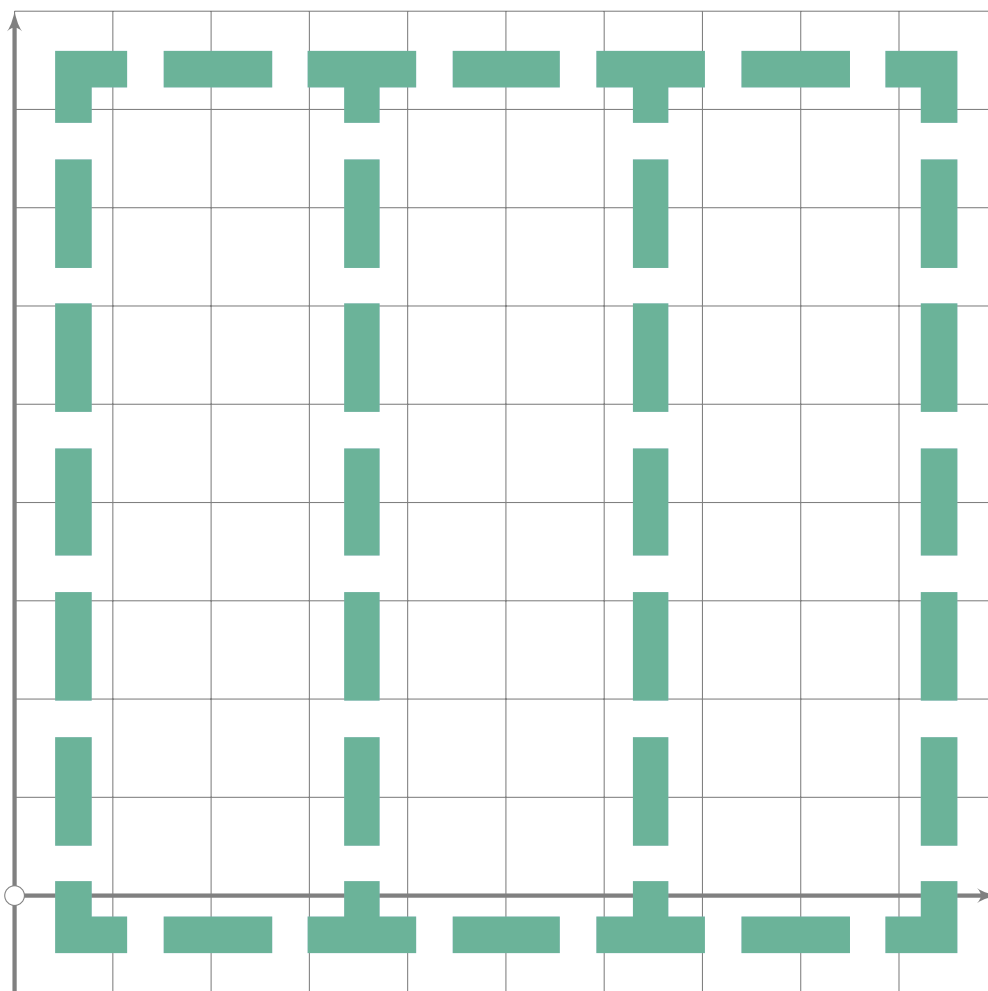
868 idc_horiz(3,0,6);

869 idc_render;

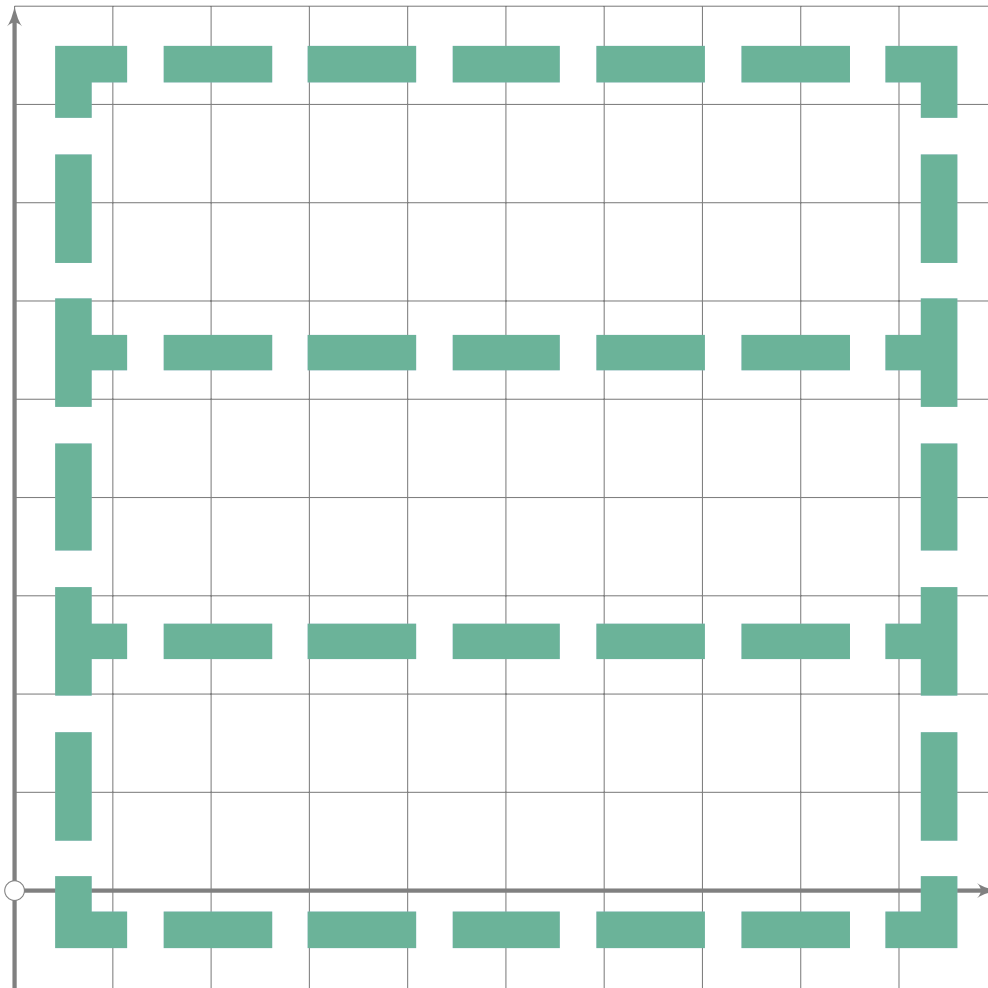
870 endtsuglyph;

871

U+2FF2
tsuku.uni2FF2



```
872 % left to middle to right
873 begintsuglyph("uni2FF2",242);
874   idc_rect((0,6),(6,0));
875   idc_vert(2,0,6);
876   idc_vert(4,0,6);
877   idc_render;
878 endtsuglyph;
879
```

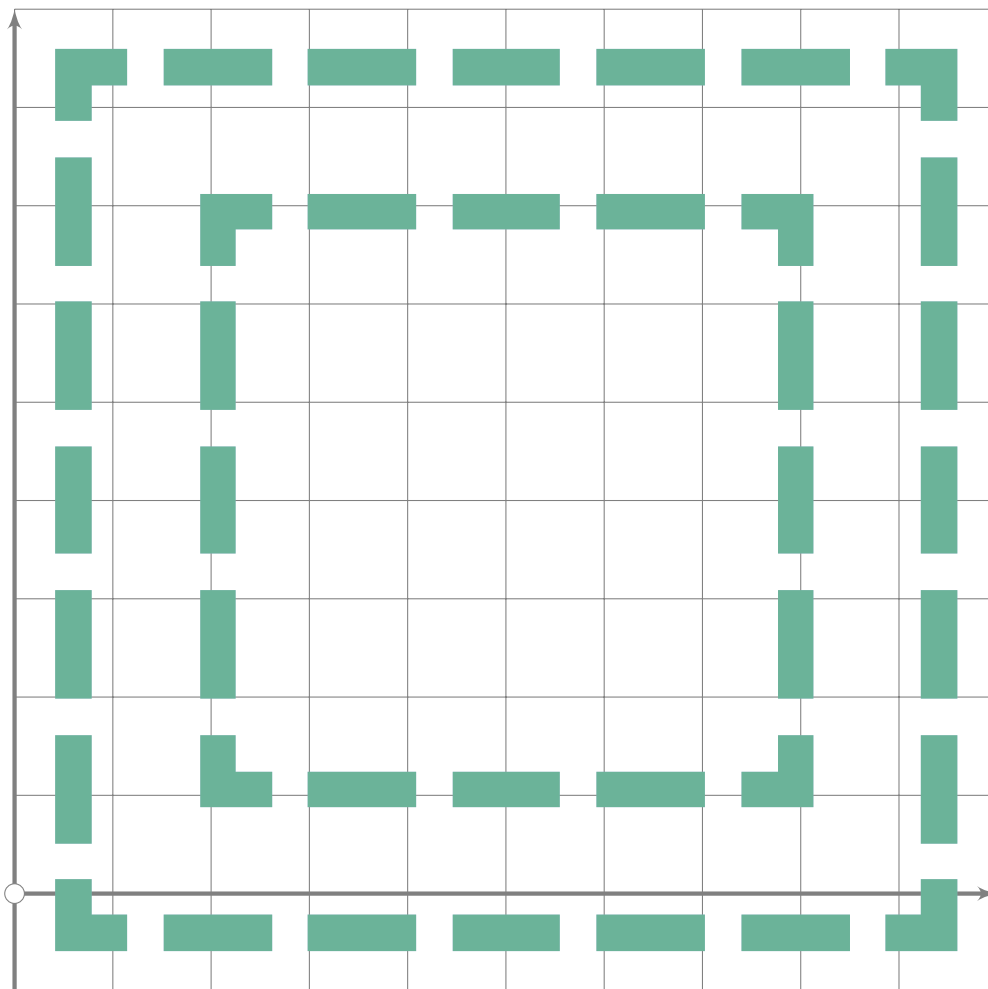


```

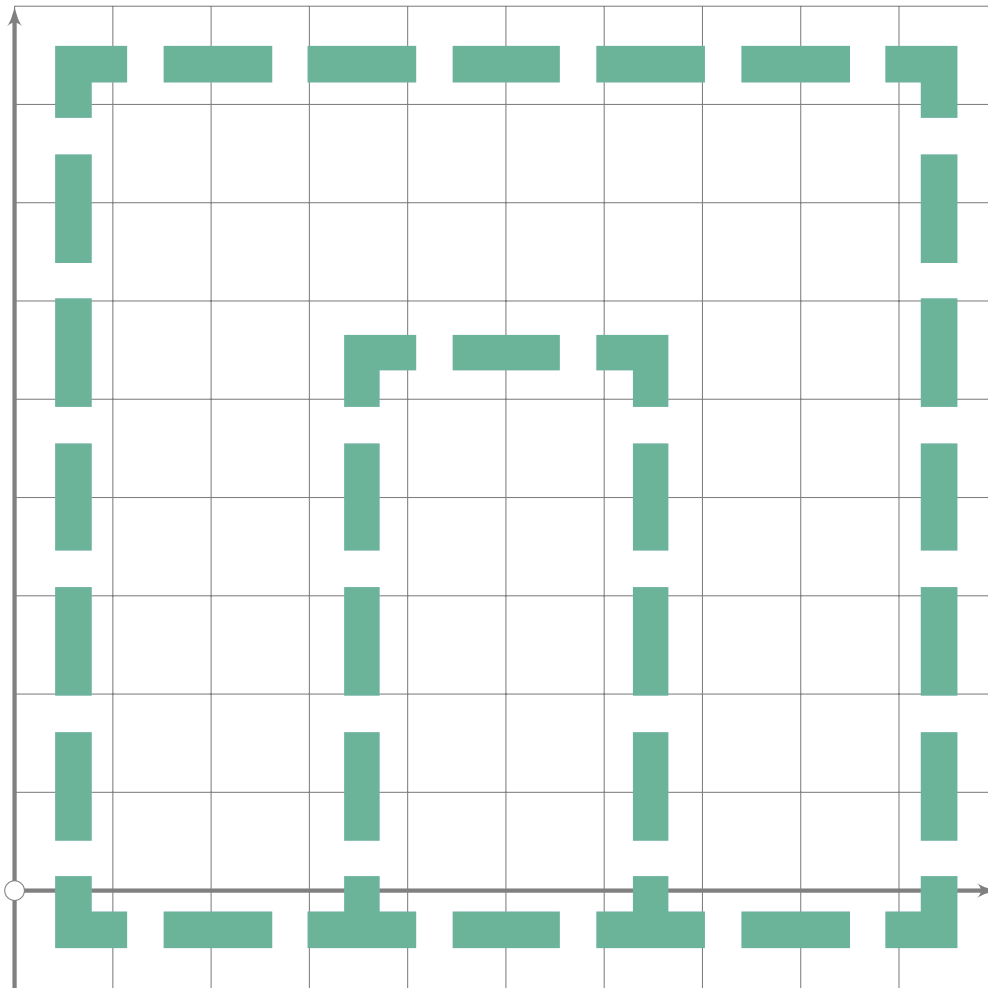
880 % above to middle to below
881 begint Suglyph("uni2FF3",243);
882   idc_rect((0,6),(6,0));
883   idc_horiz(2,0,6);
884   idc_horiz(4,0,6);
885   idc_render;
886 endtsuglyph;
887

```

U+2FF4
tsuku.uni2FF4



```
888 % full surround
889 begint Suglyph("uni2FF4",244);
890   idc_rect((0,6),(6,0));
891   idc_rect((1,5),(5,1));
892   idc_render;
893 endtsuglyph;
894
```

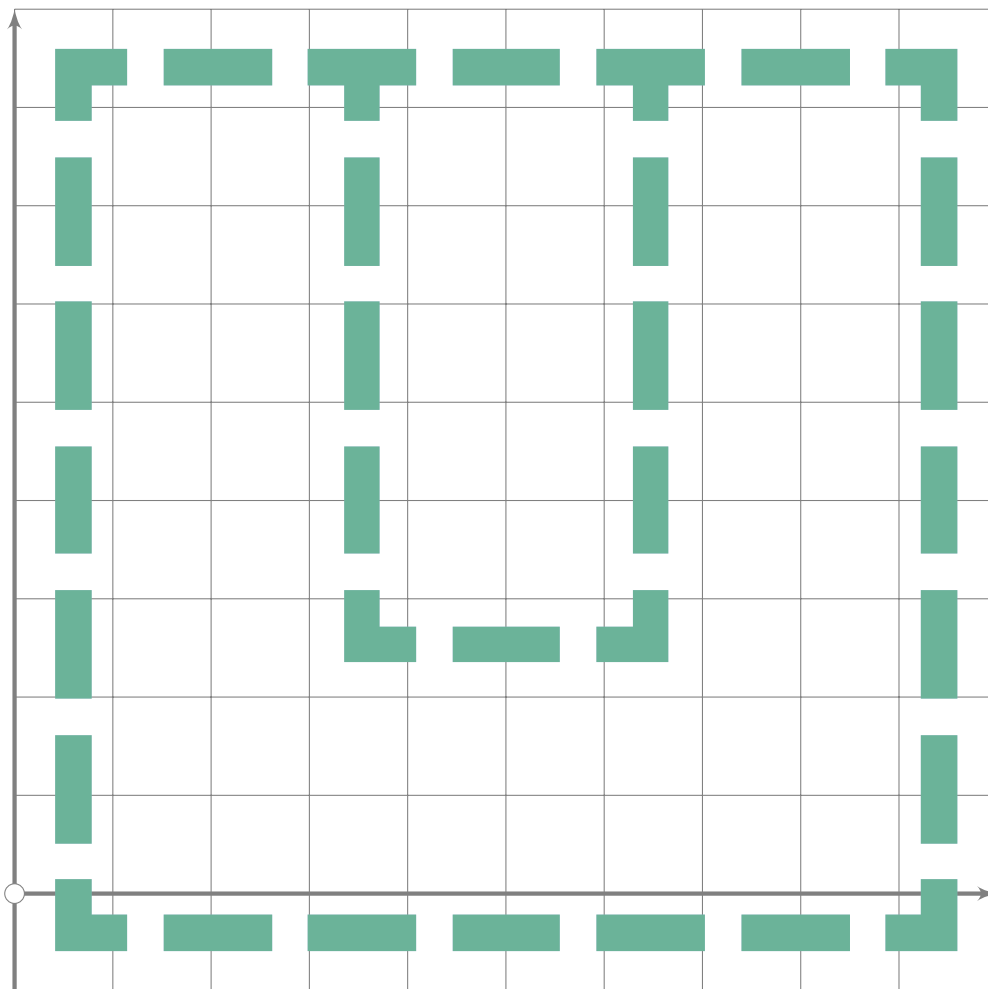



```

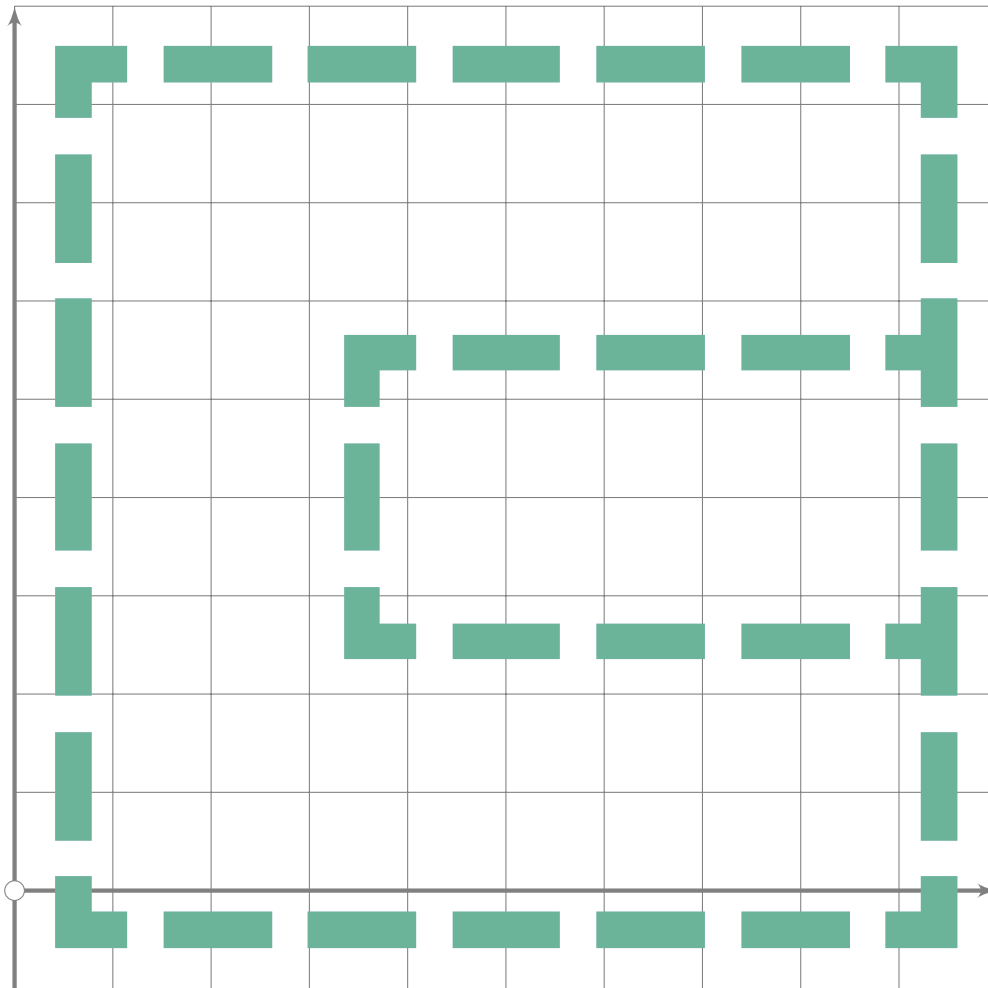
895 % surround from above
896 begint Suglyph("uni2FF5",245);
897   idc_rect((0,6),(6,0));
898   idc_rect((2,4),(4,0));
899   idc_render;
900 endtsuglyph;
901

```

U+2FF6
tsuku.uni2FF6



```
902 % surround from below
903 begint Suglyph("uni2FF6",246);
904   idc_rect((0,6),(6,0));
905   idc_rect((2,6),(4,2));
906   idc_render;
907 endtsuglyph;
908
```

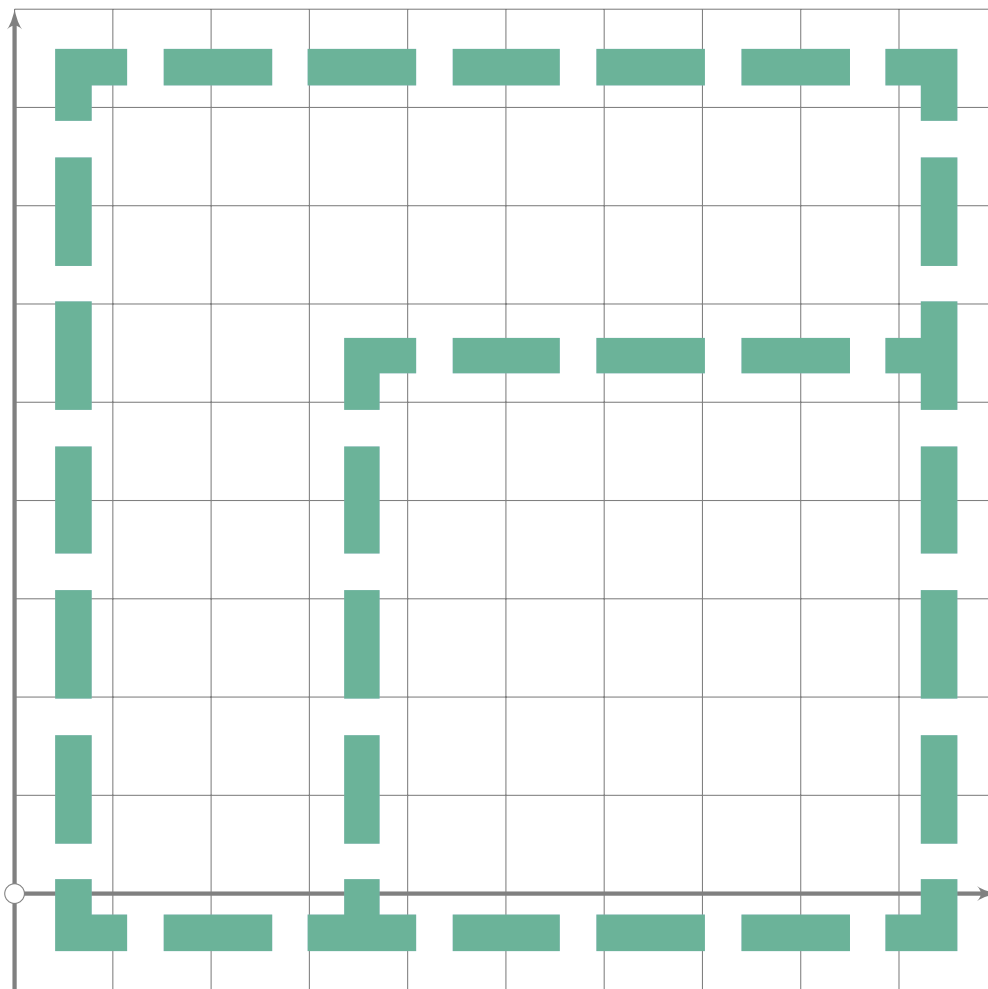


```

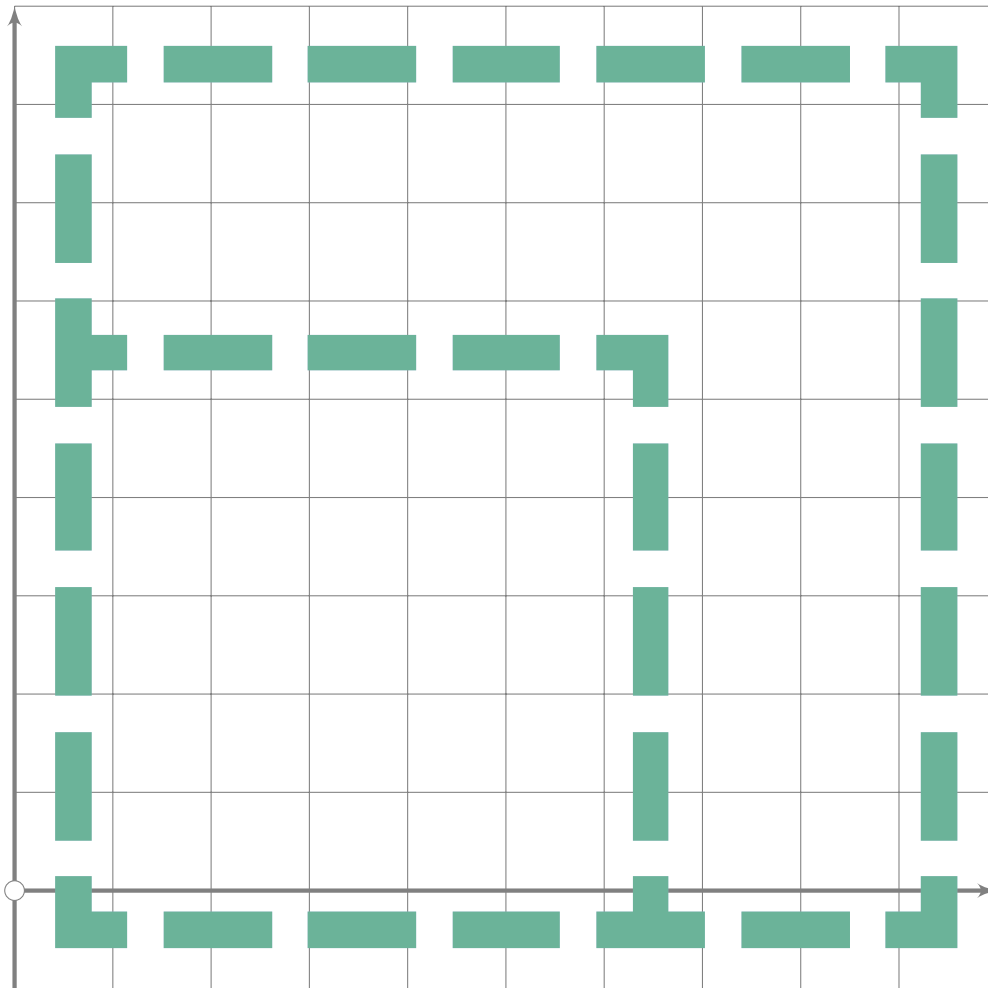
909 % surround from left
910 begint Suglyph("uni2FF7";247);
911   idc_rect((0,6),(6,0));
912   idc_rect((2,4),(6,2));
913   idc_render;
914 endtsuglyph;
915

```

U+2FF8
tsuku.uni2FF8



```
916 % surround from upper left
917 begint Suglyph("uni2FF8",248);
918   idc_rect((0,6),(6,0));
919   idc_rect((2,4),(6,0));
920   idc_render;
921 endtsuglyph;
922
```

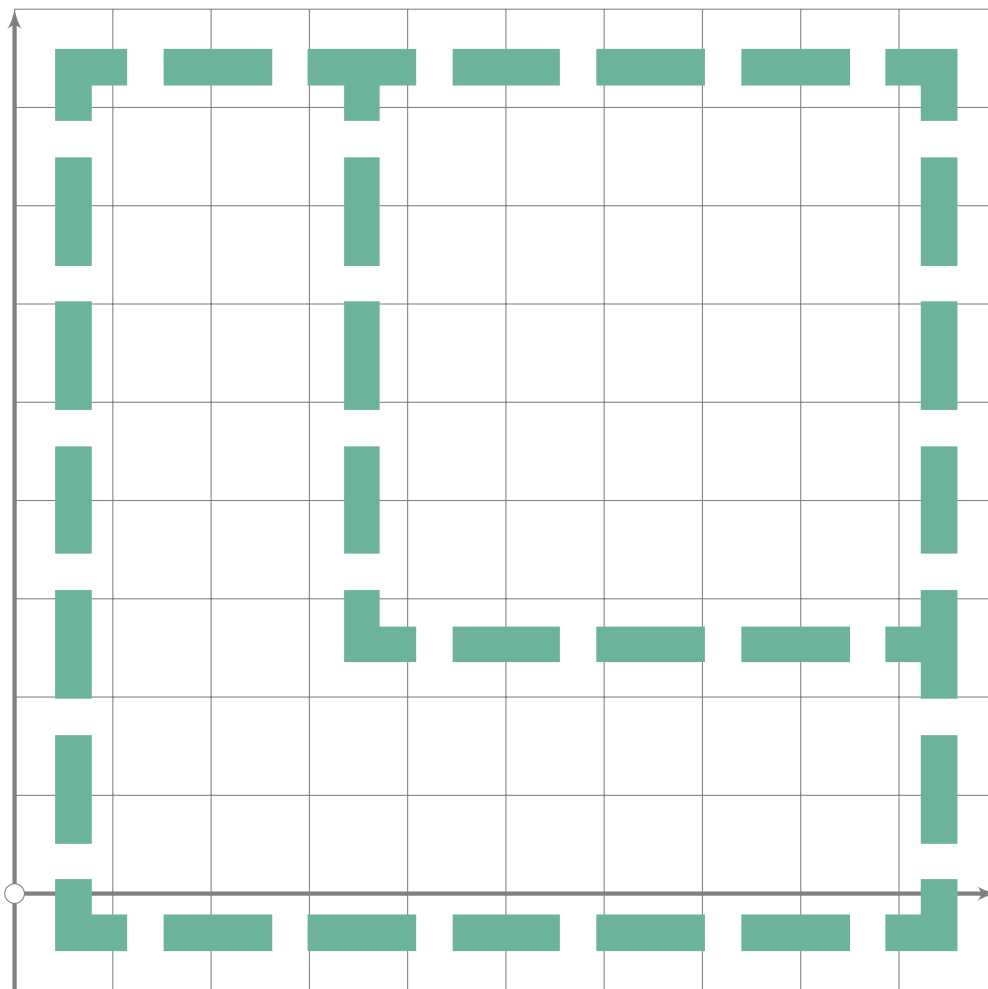


```

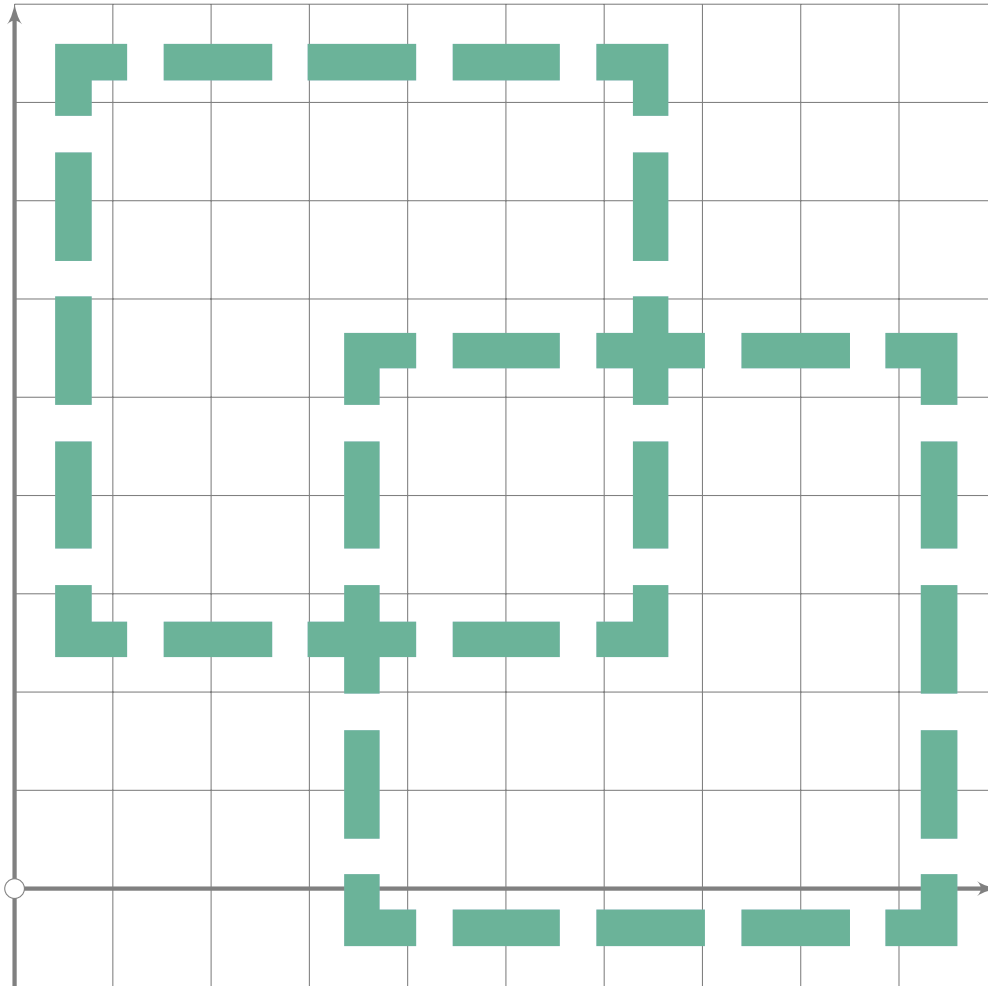
923 % surround from upper right
924 begint Suglyph("uni2FF9",249);
925   idc_rect((0,6),(6,0));
926   idc_rect((0,4),(4,0));
927   idc_render;
928 endtsuglyph;
929

```

U+2FFA
tsuku.uni2FFA



```
930 % surround from lower left
931 begint Suglyph("uni2FFA",250);
932   idc_rect((0,6),(6,0));
933   idc_rect((2,6),(6,2));
934   idc_render;
935 endtsuglyph;
936
```



```

937 % overlaid
938 begintsuglyph("uni2FFB",251);
939   idc_rect((0,6),(4,2));
940   idc_rect((2,4),(6,0));
941   idc_render;
942 endtsuglyph;
943
944
945
946 endfont;
947
948

```