

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

2013年3月7日

March 7, 2013

Proofs and pretty-printed source code for Tsukurimashou
Copyright © 2011, 2012 Matthew Skala

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, version 3.

As a special exception, if you create a document which uses this font, and embed this font or unaltered portions of this font into the document, this font does not by itself cause the resulting document to be covered by the GNU General Public License. This exception does not however invalidate any other reasons why the document might be covered by the GNU General Public License. If you modify this font, you may extend this exception to your version of the font, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

Contents

I Infrastructure	13
preintro.mp	15
Infrastructure	15
Font Parameter Defaults	16
tsuku-bk.mp	18
tsuku-kg.mp	19
tsuku-mg.mp	20
tsuku-mi.mp	21
tsuku-ps.mp	22
tsuku-bq.mp	23
tsuku-dq.mp	24
tsuku-el.mp	25
tsuku-eq.mp	26
tsuku-lw.mp	27
intro.mp	28
fntbase.mp	46
General Library Functions	46
Prefix And Suffix Handling	53
A Module That Finds An Envelope Of A Path Drawn With A Pen	55
Postscript Font Generation	67
obstack.mp	89
Object Stack Data	89
Object Stack Methods	90
frac-intro.mp	95
latin-intro.mp	97
accent.mp	101
bcircle.mp	112
buildkanji.mp	115
dakuten.mp	131
enclosed.mp	132
genjimon.mp	134
hiragana.mp	146
Hiragana Vowels	146
Hiragana Kakikukeko/Gagigugego	151
Hiragana Sashisuseso/Zajizuzezo	155
Hiragana Tachitsuteto/Dajizudedo	161

Hiragana Naninuneno	166
Hiragana Hahifuheho/Babibubebo/Papipupepo	171
Hiragana Mamimumemo	176
Hiragana Yayuyo	182
Hiragana Rarirurero	184
Hiragana Wawiwewo/N/Iteration	190
iching.mp	198
katakana.mp	200
Katakana Vowels	200
Katakana Kakikukeko/Gagigugego	204
Katakana Sashisuseso/Zajizuzezo	209
Katakana Tachitsuteto/Dajizudedo	214
Katakana Naninuneno	219
Katakana Hahifuheho/Babibubebo/Papipupepo	224
Katakana Mamimumemo	230
Katakana Yayuyo	234
Katakana Rarirurero	237
Katakana Wawiwewo/N/Iteration	243
latin.mp	249
numerals.mp	338
ogonek.mp	349
punct.mp	361
serif.mp	403
 II Shared kyouiku kanji	 409
gradeone.mp	411
gradetwo.mp	478
gradethree.mp	551
gradefour.mp	590
gradefive.mp	619
gradesix.mp	631
 III Other shared kanji	 641
bottomrad.mp	643
leftrad.mp	646
radical.mp	654
rightrad.mp	689
toprad.mp	693
gradeeight.mp	698

gradenine.mp	732
rare.mp	759

IV U+0000 to U+2FFF	795
tsuku-00.mp	797
Ascii	797
Latin-1 Extra Characters	891
Accented Latin	912
tsuku-01.mp	970
Latin Extended A Uppercase	970
Latin Extended A Lowercase	1025
Latin Extended A Other	1083
tsuku-02.mp	1085
Latin Extended B	1085
Spacing Modifier Letters	1086
tsuku-03.mp	1095
Combining Diacritical Marks	1095
tsuku-20.mp	1110
General Punctuation	1110
tsuku-21.mp	1127
Symbols Required By Mes-1	1127
tsuku-24.mp	1133
Circled Numerals	1133
Circled Latin And Zero	1153
Inverted Circled Numerals	1206
Doubly Circled Numerals	1216
One More Inverted Circled Numeral	1226
tsuku-25.mp	1228
Geometric Shapes	1228
tsuku-26.mp	1230
I Ching	1230
tsuku-27.mp	1247
Inverted Circled Numerals	1247
tsuku-2e.mp	1258
Cjk Radicals Supplement	1258
tsuku-2f.mp	1295
Kangxi Radicals	1295
Ideographic Description Characters	1415

V	U+3000 to U+4DFF	1429
	tsuku-30.mp	1431
	Ideographic Symbols And Punctuation	1431
	Hiragana	1451
	Katakana	1496
	tsuku-31.mp	1543
	Phonetic Extensions For Ainu	1543
	tsuku-32.mp	1560
	Circled Numerals	1560
	Circled Katakana	1590
	tsuku-34.mp	1638
	tsuku-4d.mp	1639
	I Ching	1639
VI	U+4E00 to U+61FF	1705
	tsuku-4e.mp	1707
	tsuku-4f.mp	1744
	tsuku-50.mp	1798
	tsuku-51.mp	1808
	tsuku-52.mp	1820
	tsuku-53.mp	1850
	tsuku-54.mp	1873
	tsuku-55.mp	1885
	tsuku-56.mp	1891
	tsuku-57.mp	1898
	tsuku-58.mp	1905
	tsuku-59.mp	1911
	tsuku-5a.mp	1924
	tsuku-5b.mp	1926
	tsuku-5c.mp	1957
	tsuku-5d.mp	1981
	tsuku-5e.mp	1989
	tsuku-5f.mp	2024
	tsuku-60.mp	2069
	tsuku-61.mp	2118
VII	U+6200 to U+75FF	2125
	tsuku-62.mp	2127
	tsuku-63.mp	2143

tsuku-65.mp	2149
tsuku-66.mp	2165
tsuku-67.mp	2184
tsuku-68.mp	2199
tsuku-69.mp	2206
tsuku-6a.mp	2212
tsuku-6b.mp	2216
tsuku-6c.mp	2225
tsuku-6d.mp	2275
tsuku-6e.mp	2288
tsuku-6f.mp	2299
tsuku-70.mp	2304
tsuku-71.mp	2309
tsuku-72.mp	2311
tsuku-73.mp	2320
tsuku-74.mp	2321
tsuku-75.mp	2325

VIII U+7600 to U+89FF	2337
tsuku-76.mp	2339
tsuku-77.mp	2346
tsuku-78.mp	2356
tsuku-79.mp	2358
tsuku-7a.mp	2369
tsuku-7b.mp	2376
tsuku-7c.mp	2389
tsuku-7d.mp	2392
tsuku-7f.mp	2408
tsuku-80.mp	2413
tsuku-81.mp	2421
tsuku-82.mp	2426
tsuku-83.mp	2457
tsuku-84.mp	2469
tsuku-85.mp	2474
tsuku-86.mp	2476
tsuku-88.mp	2477
tsuku-89.mp	2482

IX	U+8A00 to U+9FFF	2487
	tsuku-8a.mp	2489
	tsuku-8b.mp	2544
	tsuku-8c.mp	2547
	tsuku-8d.mp	2555
	tsuku-8e.mp	2559
	tsuku-8f.mp	2564
	tsuku-90.mp	2576
	tsuku-91.mp	2595
	tsuku-92.mp	2606
	tsuku-93.mp	2610
	tsuku-95.mp	2613
	tsuku-96.mp	2630
	tsuku-97.mp	2652
	tsuku-98.mp	2656
	tsuku-99.mp	2667
	tsuku-9a.mp	2671
	tsuku-9b.mp	2675
	tsuku-9c.mp	2676
	tsuku-9e.mp	2678
	tsuku-9f.mp	2681
X	U+A000 to U+10FFFF	2683
	tsuku-f7.mp	2685
	Latin Small Caps	2685
	tsuku-ff.mp	2712
	Full-Width Forms	2712
	Half-Width Punctuation	2738
	Half-Width Katakana	2741
	tsuku-1f1.mp	2805
	Squared Latin	2805
	Inverse Circled Latin	2831
	Inverse Squared Latin	2857
	tsuku-200.mp	2884
	tsuku-21c.mp	2885
	tsuku-f17.mp	2886
	Combining Dots For I Ching	2886
	Miscellaneous	2895
	Tomoe Ornaments	2901

Heavy Metal Umlaut	2909
Genjimon	2926
tsuku-ff0.mp	2980
Fraction Numerators	2980
tsuku-ff1.mp	2987
Fraction Denominators	2987
 XI Jieubsida core	 2989
hangul.mp	2991
Jamo Combining Operations	2993
jamo-basic.mp	3001
Filler Jamo	3001
Sios/Cieuc/Chieuch Family	3001
Kiyeok	3004
Nieun	3005
Tikeut	3007
Rieul	3009
Mieum	3010
Pieup	3011
Sios	3012
Ieung	3012
Cieuc	3013
Chieuch	3014
Khieukh	3015
Thieuth	3016
Phieuph	3017
Hieuh	3019
Mixed Tails	3020
Vowels	3021
jamo-extra.mp	3030
Pansios	3033
Yesieung	3033
Yeorinhieuh	3034
Chitueum And Ceongchieum Variants	3036
Kapyeoun Variants	3037
hglextb.mp	3038
Hangul Extension B	3038
Hangul Jungseong (Vowel) Jamo Extension B	3038
Hangul Jongseong (Tail) Jamo Extension B	3061

jieub-bt.mp	3111
jieub-do.mp	3112
jieub-sm.mp	3113
hglpage.mp	3114
jieub-11.mp	3116
Hangul Choseong (Lead) Jamo	3116
Hangul Jungseong (Vowel) Jamo	3211
Hangul Jongseong (Tail) Jamo	3282
jieub-31.mp	3371
Hangul Compatibility Jamo	3371
jieub-a9.mp	3465
Hangul Choseong (Lead) Jamo Extended A	3465
jieub-ac.mp	3495
 XII Jieubsida alternates	 3549
jieub-ff2.mp	3551
Hangul Jungseong (Vowel) Jamo	3551
Hangul Jungseong (Vowel) Jamo Extension B	3622
jieub-ff3.mp	3646
Hangul Choseong (Lead) Jamo	3646
jieub-ff4.mp	3771
Hangul Choseong (Lead) Jamo	3771
jieub-ff5.mp	3896
Hangul Choseong (Lead) Jamo	3896
jieub-ff6.mp	4021
Hangul Choseong (Lead) Jamo	4021
jieub-ff7.mp	4146
Hangul Choseong (Lead) Jamo	4146
Hangul Choseong (Lead) Jamo Extended A	4241
 XIII TsuIta	 4271
tsuita-common.mp	4273
tsuita-at.mp	4284
tsuita-so.mp	4285
Additional Proofs	4287
 XIV Blackletter Lolita	 4341
bll.mp	4343

bll-co.mp	4348
pentacross.mp	4349
Utilities For Pentagrams And Crosses	4349
bll-f5c.mp	4351
Pentagrams	4351

Volume II

Shared kyouiku kanji

gradeone.mp

ONE

gradetwo.mp

TWO

gradethree.mp

THRE

gradefour.mp

FOUR

gradefive.mp

FIVE

gradesix.mp

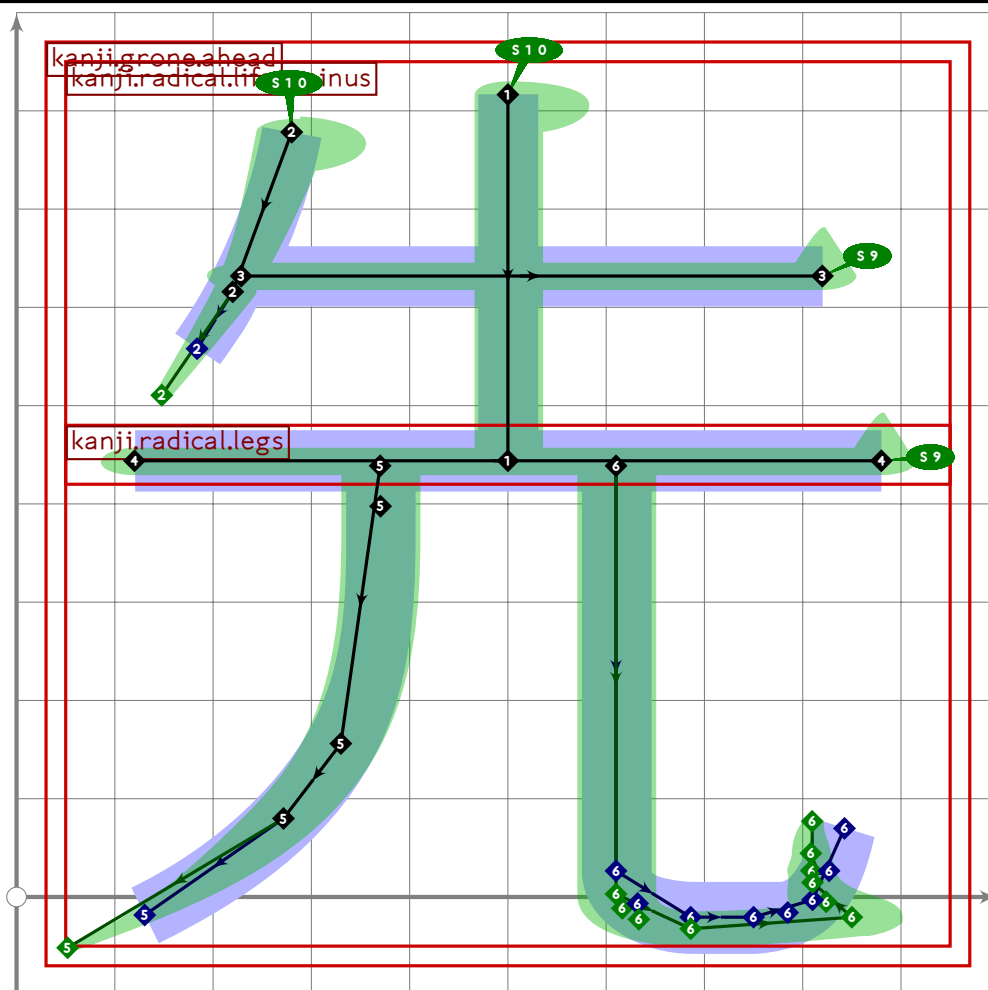
SIX

gradeone.mp

ONE

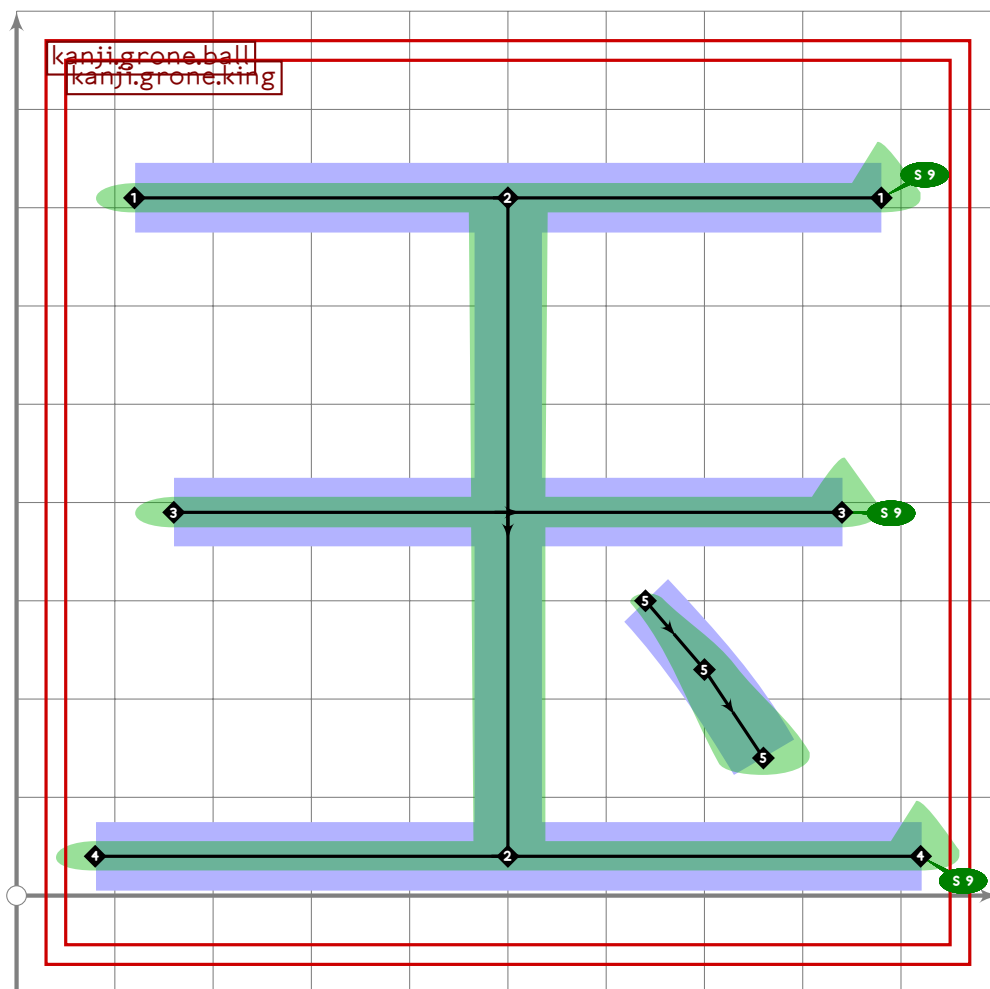
```
1 %
2 % Grade One kanji used on more than one page
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
```

```
30
31 inclusion_lock(gradeone);
32
33
```



```
34
35 vardef kanji.grone.ahead =
36   push_pbox_toexpand("kanji.grone.ahead");
37   build_kanji.tb(450,60)
38     (kanji.radical.life_minus)
39     (kanji.radical.legs);
40   expand_pbox;
41 enddef;
```

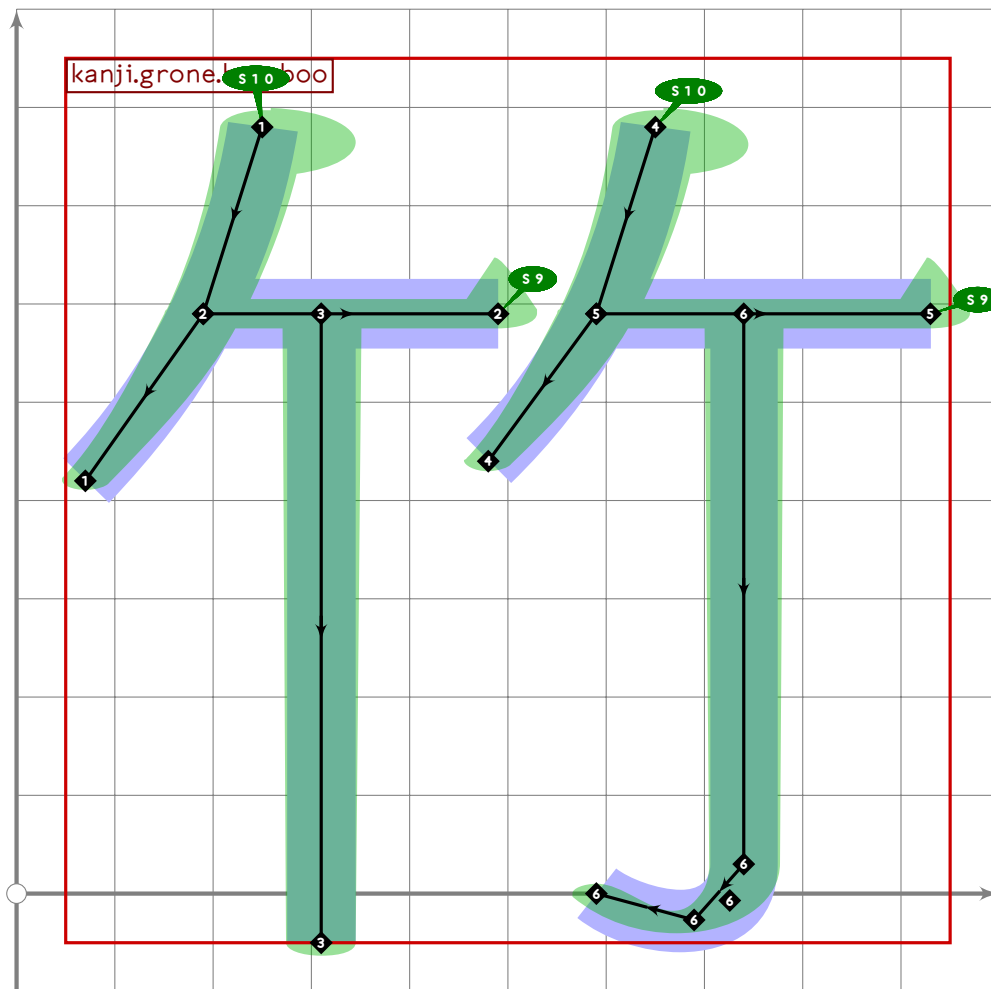
ONE



```

42
43 vardef kanji.grone.ball =
44   push_pbox_toexpand("kanji.grone.ball");
45   kanji.grone.king;
46   push_stroke((640,300)..(700,230)..(760,140),
47     (1,1)-(14,14)-(18,18));
48   expand_pbox;
49 enddef;

```

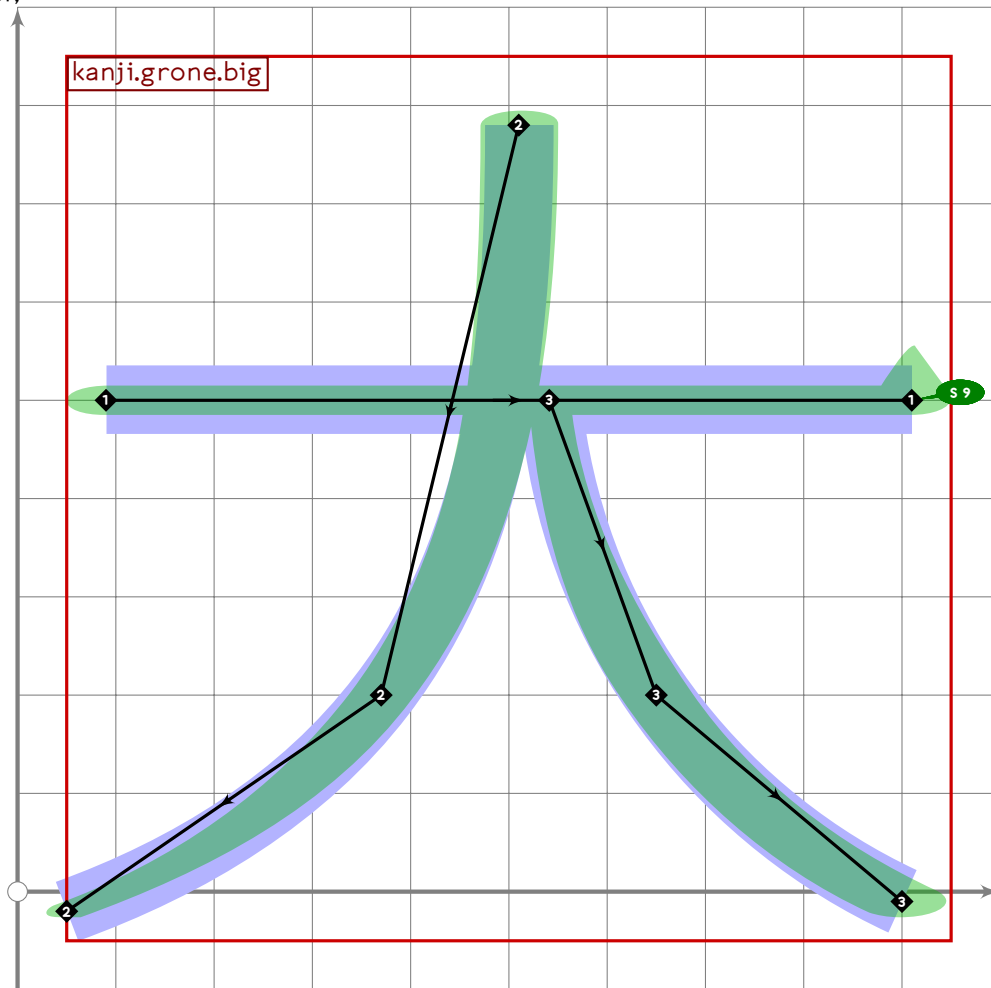
```

50
51 vardef kanji.grone.bamboo =
52   push_pbox_toexpand("kanji.grone.bamboo");
53   push_stroke((250,780)..(190,590)..(70,420),
54     (1.7,1.7)-(1.6,1.6)-(1.2,1.2));
55   set_boserif(0,0,10);
56   push_stroke((190,590)-(490,590),
57     (1.6,1.6)-(1.6,1.6));
58   set_boserif(0,1,9);
59   push_stroke((310,590)-(310,-50),
60     (1.6,1.6)-(1.5,1.5));
61   push_stroke((650,780)..(590,590)..(480,440),
62     (1.7,1.7)-(1.6,1.6)-(1.2,1.2));
63   set_boserif(0,0,10);
64   push_stroke((590,590)-(930,590),
65     (1.6,1.6)-(1.6,1.6));
66   set_boserif(0,1,9);
67   push_stroke((740,590),
68     (1.6,1.6));
69   build_kanji.add_jtail(0);
70   expand_pbox;

```

ONE

71 enddef;



72

73 vardef kanji.grone.big =

74 push_pbox_toexpand("KANJI.GRONE.BIG");

75 push_stroke((90,500)-(910,500),

76 (1.6,1.6)-(1.6,1.6));

77 set_boserif(0,19);

78 push_stroke((510,780){down}..(370,200)..{curl 0.5}(50,-20),

79 (1.6,1.6)-(1.4,1.4)-(1.1,1.1));

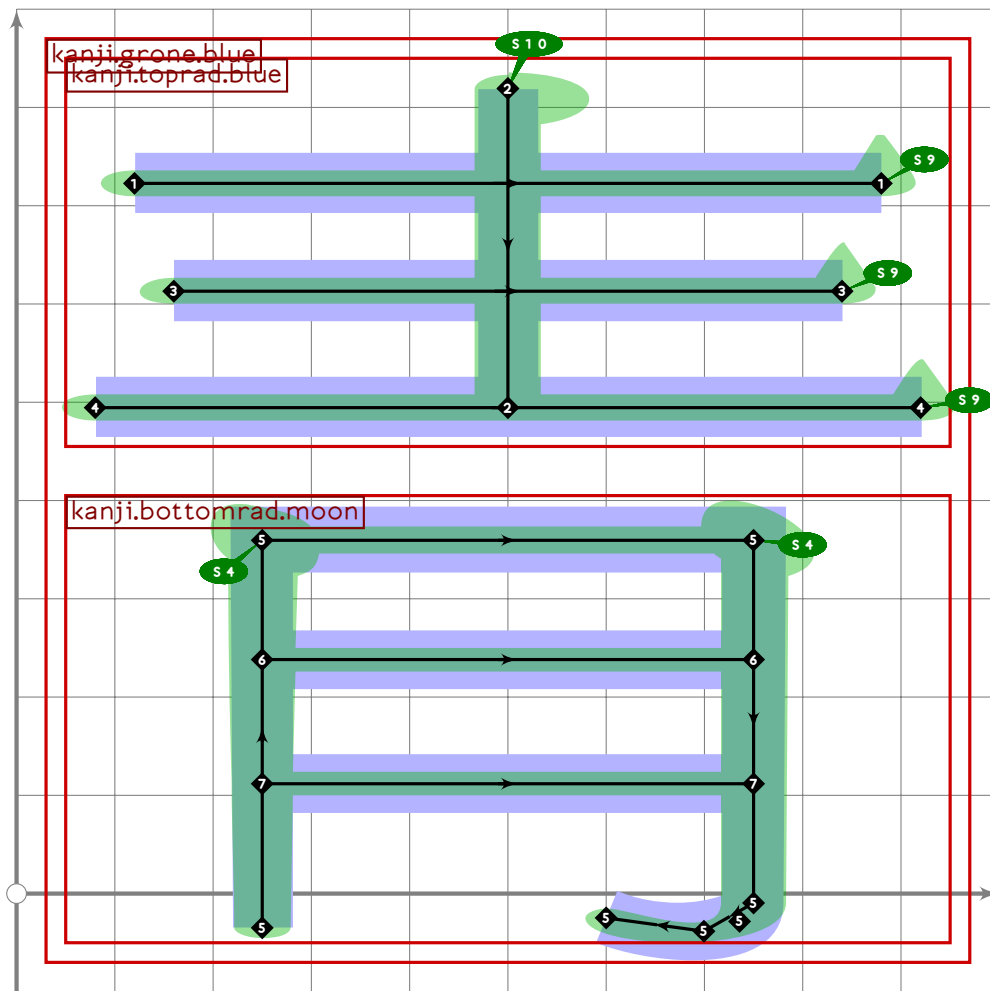
80 push_stroke(((get_stroke(-1) intersectionpoint get_stroke(0))+(50,0))..

81 (650,200)..(900,-10),

82 (1.1,1.1)-(1.5,1.5)-(1.7,1.7));

83 expand_pbox;

84 enddef;



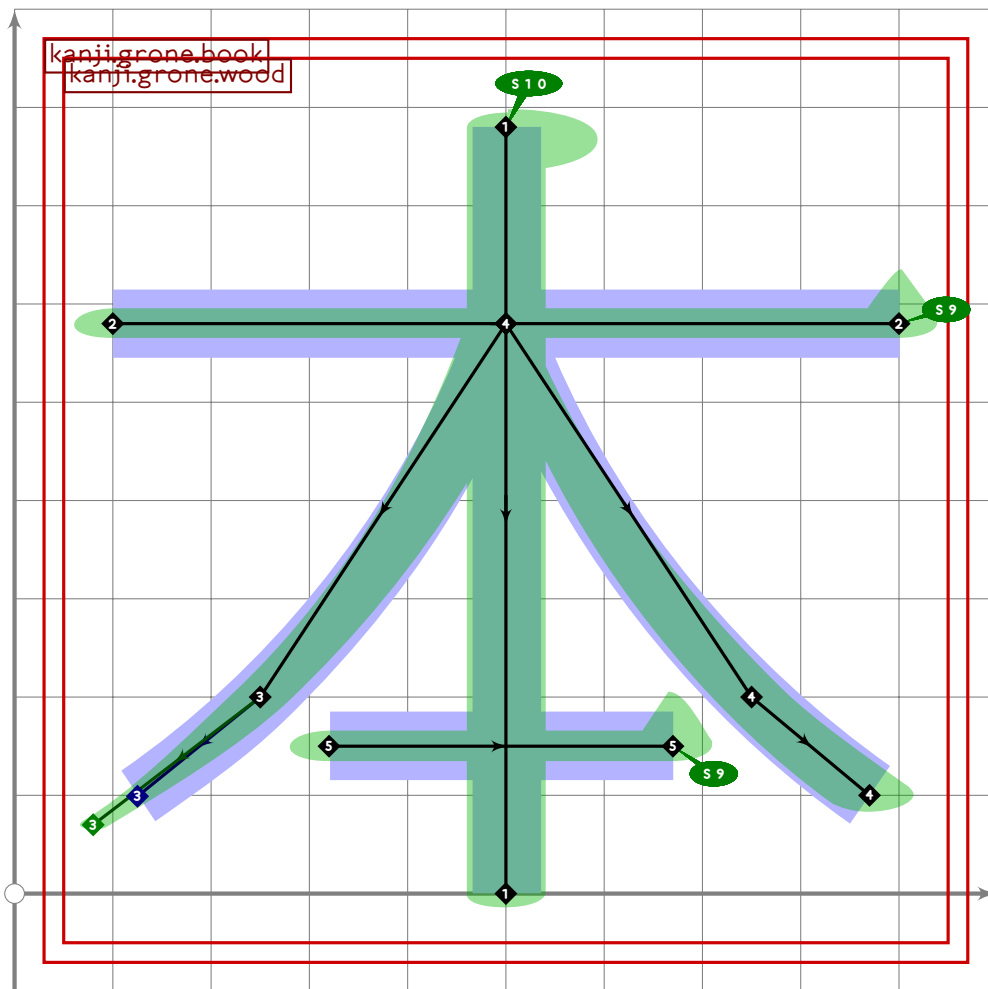
```

85
86 vardef kanji.grone.blue =
87   push_pbox_toexpand("kanji.grone.blue");
88   build_kanji.level(build_kanji.tb(430,-50)
89     (kanji.toprad.blue)
90     (kanji.bottomrad.moon));
91   expand_pbox;
92 enddef;

```

U+672C
tsuku.uni672C

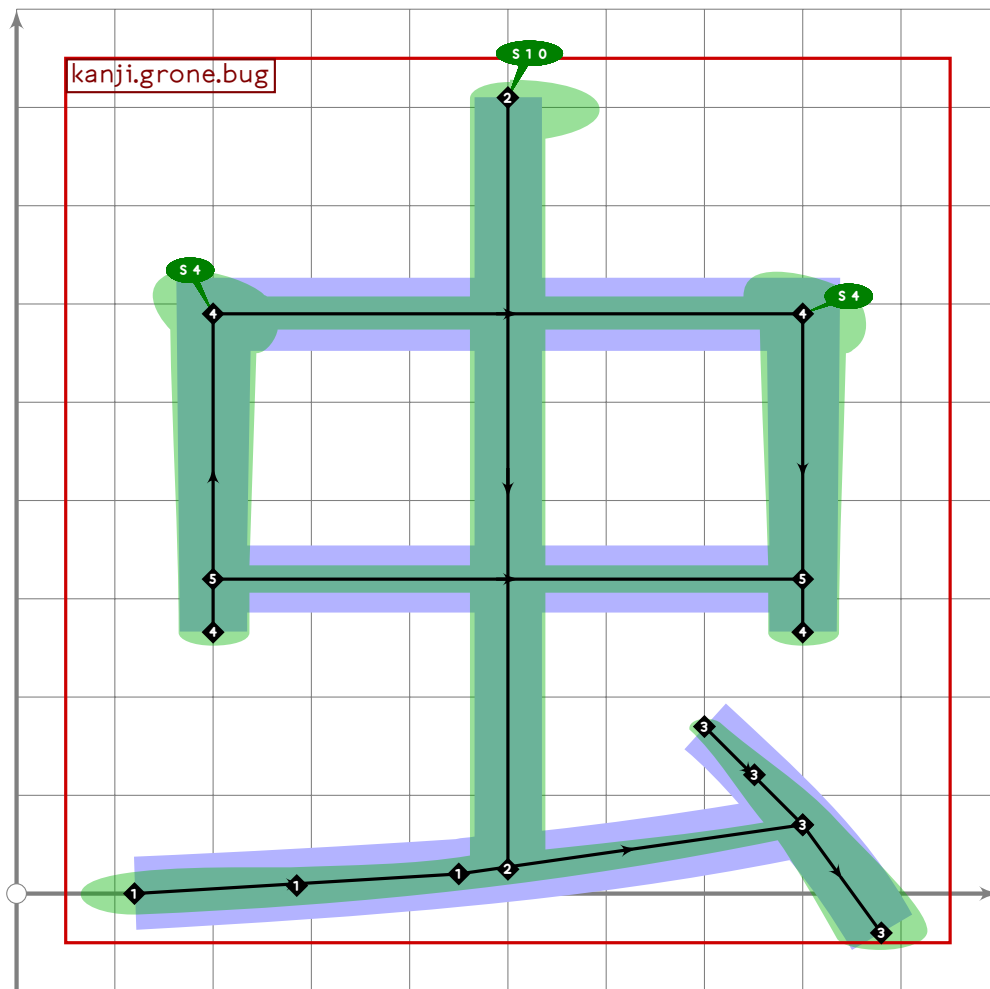
ONE



```

93
94 vardef kanji.grone.book =
95   push_pbox__toexpand("kanji.grone.book");
96   kanji.grone.wood;
97   push_stroke((320,150)–(670,150),
98     (1.6,1.6)–(1.6,1.6));
99   set_boserif(0,1,9);
100   expand_pbox;
101 enddef;

```



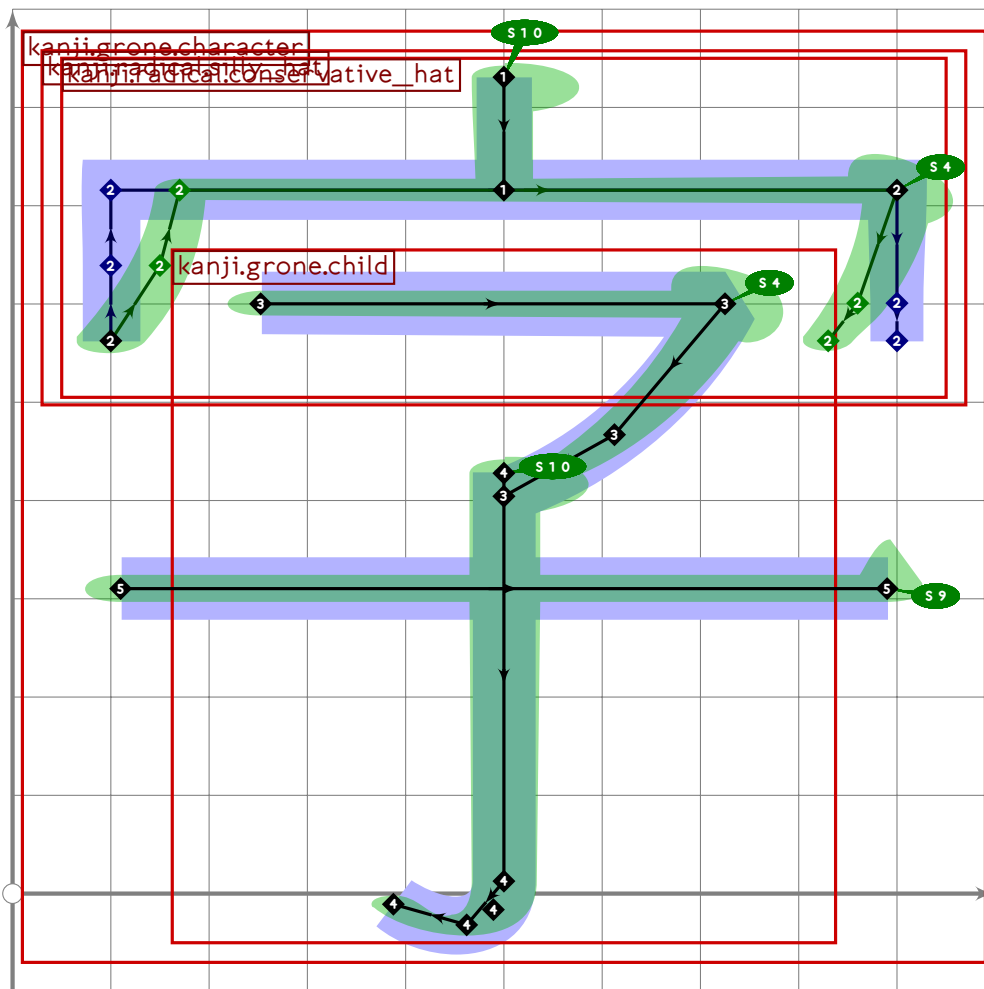
```

102
103 vardef kanji.grone.bug =
104   push_pbox_toexpand("kanji.grone.bug");
105   push_stroke((120,0)..tension 1.2..(450,20)..(800,70),
106     (2,2)-(1.7,1.7)-(1.2,1.2));
107   push_stroke(
108     (500,810)-(get_strokep(0) intersectionpoint ((500,1000)-(500,0))),
109     (1.6,1.6)-(1.5,1.5));
110   set_boserif(0,0,10);
111   push_stroke((700,170)..tension 1.3..(800,70)..(880,-40),
112     (1,1)-(1.5,1.5)-(1.8,1.8));
113   build_kanji.box((200,590),(800,320));
114   expand_pbox;
115 enddef;

```

U+5B57
tsuku.uni5B57

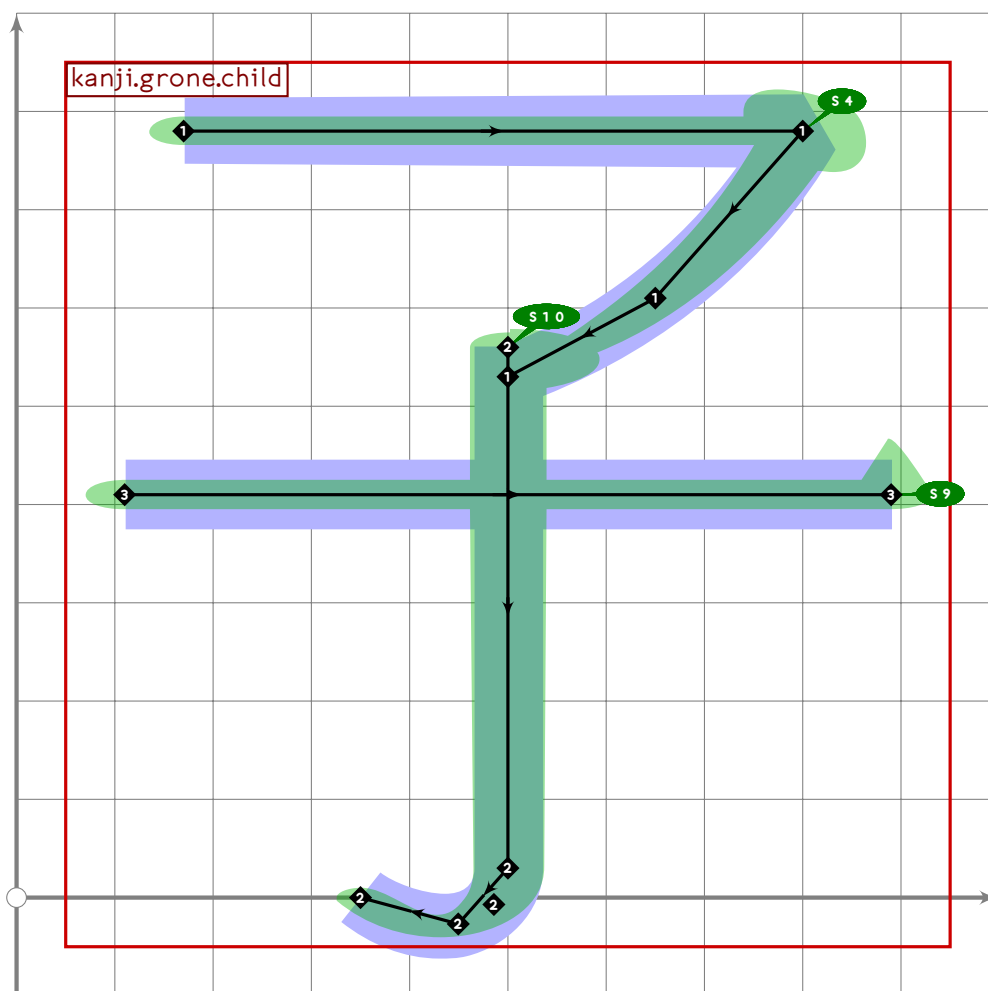
ONE



```

116
117 vardef kanji.grone.character =
118   push_pbox_toexpand("kanji.grone.character");
119   begingroup
120     save charsvp;
121     path charsvp;
122     build_kanji.tb(580,150)
123       (kanji.radical.silly_hat)
124       (build_kanji.sscale(xscaled 0.75)
125         (kanji.grone.child;
126           charsvp:=get_strokep(0);
127           replace_strokep(0)(charsvp));
128     endgroup;
129     expand_pbox;
130   enddef;

```

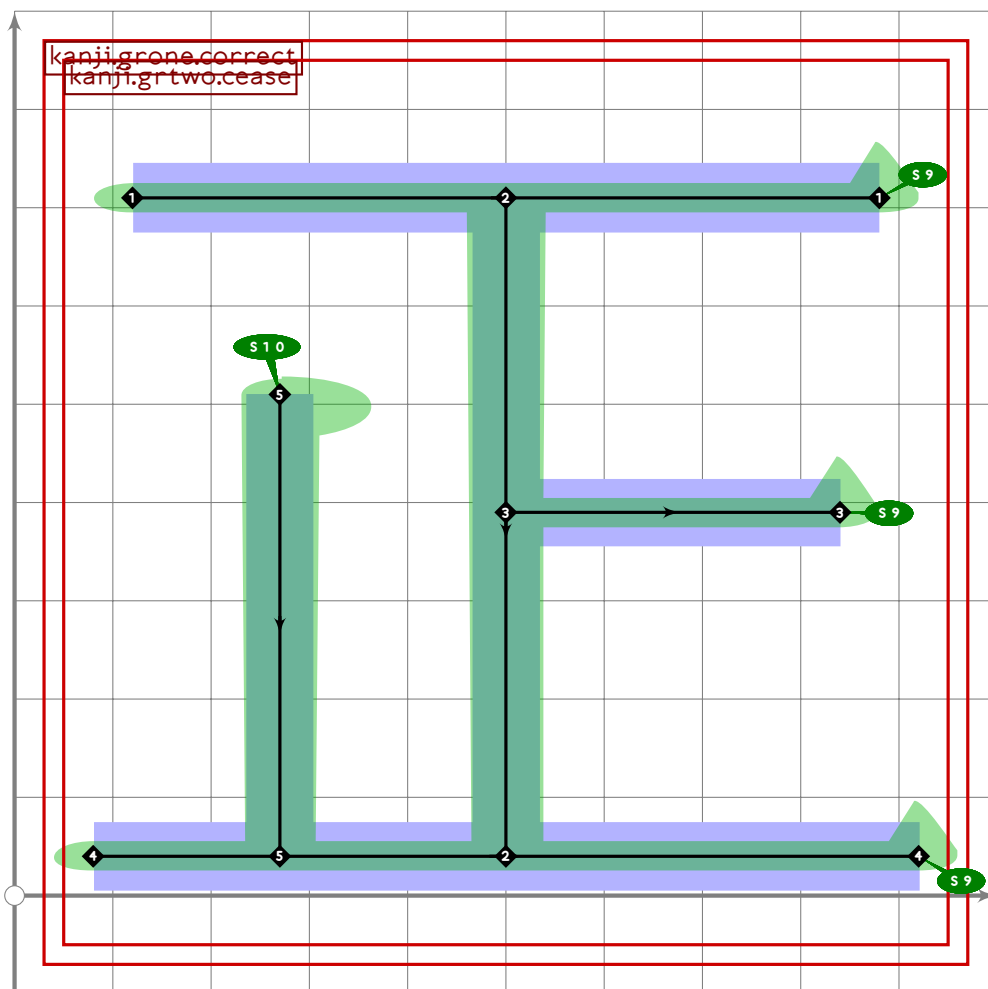


```

131
132 vardef kanji.grone.child =
133   push_pbox__toexpand("kanji.grone.child");
134   push_stroke((170,780)–(800,780)..(650,610)..(500,530),
135     (1.5,1.5)–(1.6,1.6)–(1.4,1.4)–(1,1));
136   set_boserif(0,14);
137   set_botip(0,1,0);
138   push_stroke((500,560),
139     (1.6,1.6));
140   build_kanji.add__jtail(0);
141   set_boserif(0,0,10);
142   push_stroke((110,410)–(890,410),
143     (1.6,1.6)–(1.6,1.6));
144   set_boserif(0,1,9);
145   expand__pbox;
146 enddef;

```

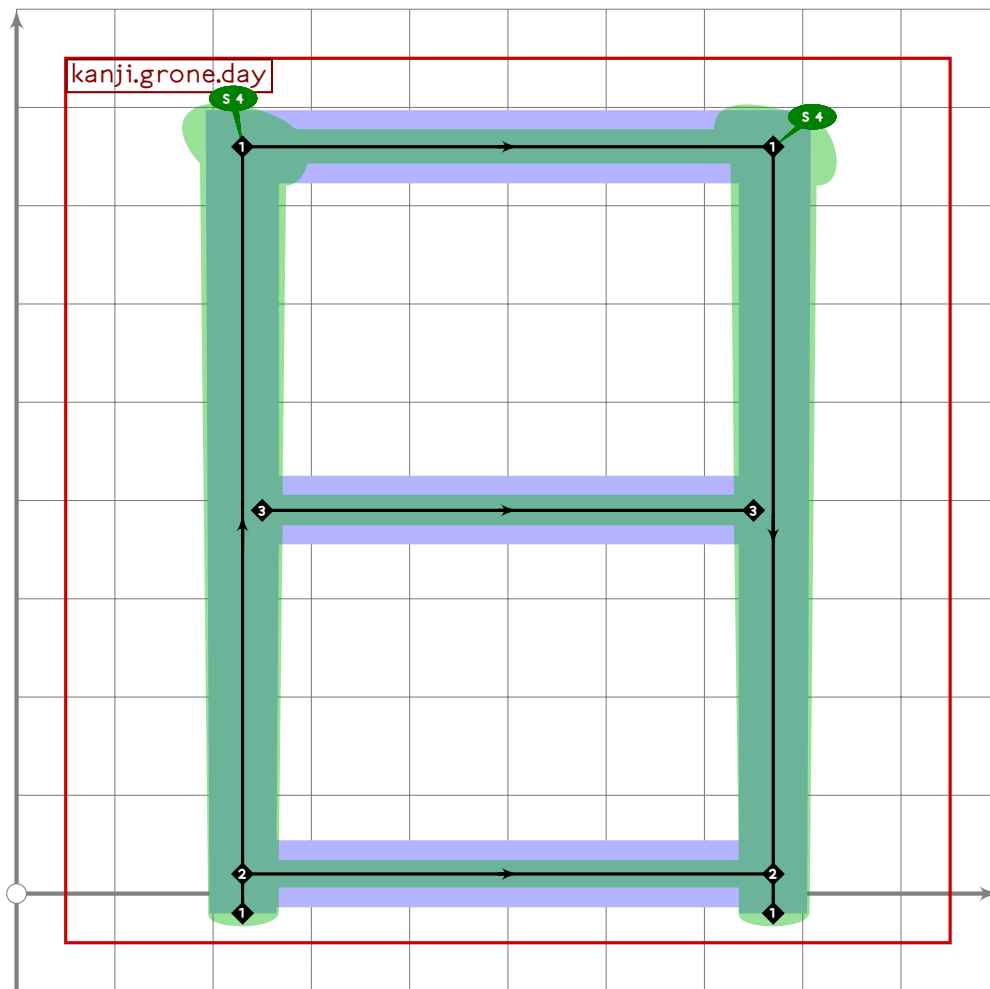
ONE



```

147
148 vardef kanji.grone.correct =
149   push_pbox_toexpand("kanji.grone.correct");
150   push_stroke((120,710)-(880,710),
151     (1.6,1.6)-(1.6,1.6));
152   set_boserif(0,1,9);
153   kanji.grtwo.cease;
154   expand_pbox;
155 enddef;

```

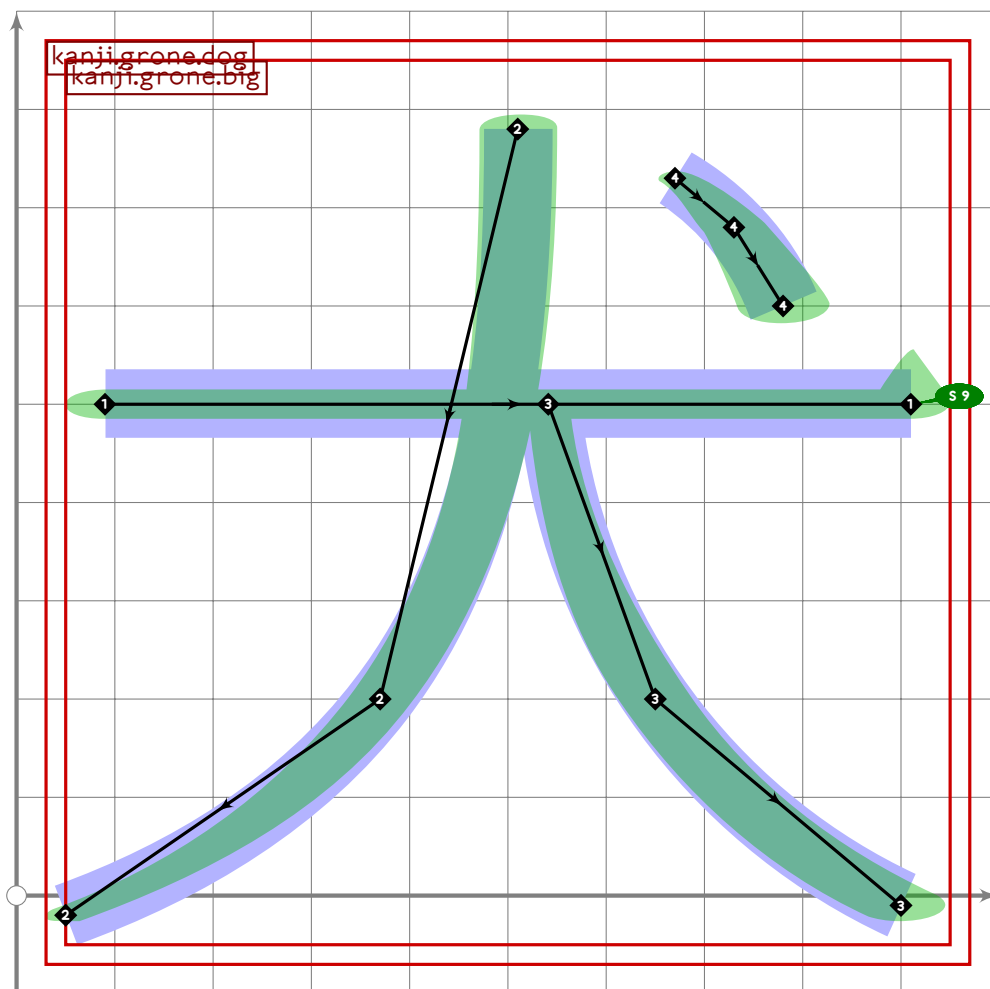
```

156
157 vardef kanji.grone.day =
158   push_pbox_toexpand("kanji.grone.day");
159   build_kanji.box((230,760),(770,20));
160   push_stroke((250,390)–(750,390),
161     (1.6,1.6)–(1.6,1.6));
162   expand_pbox;
163 enddef;

```

U+72AC
tsuku.uni72AC

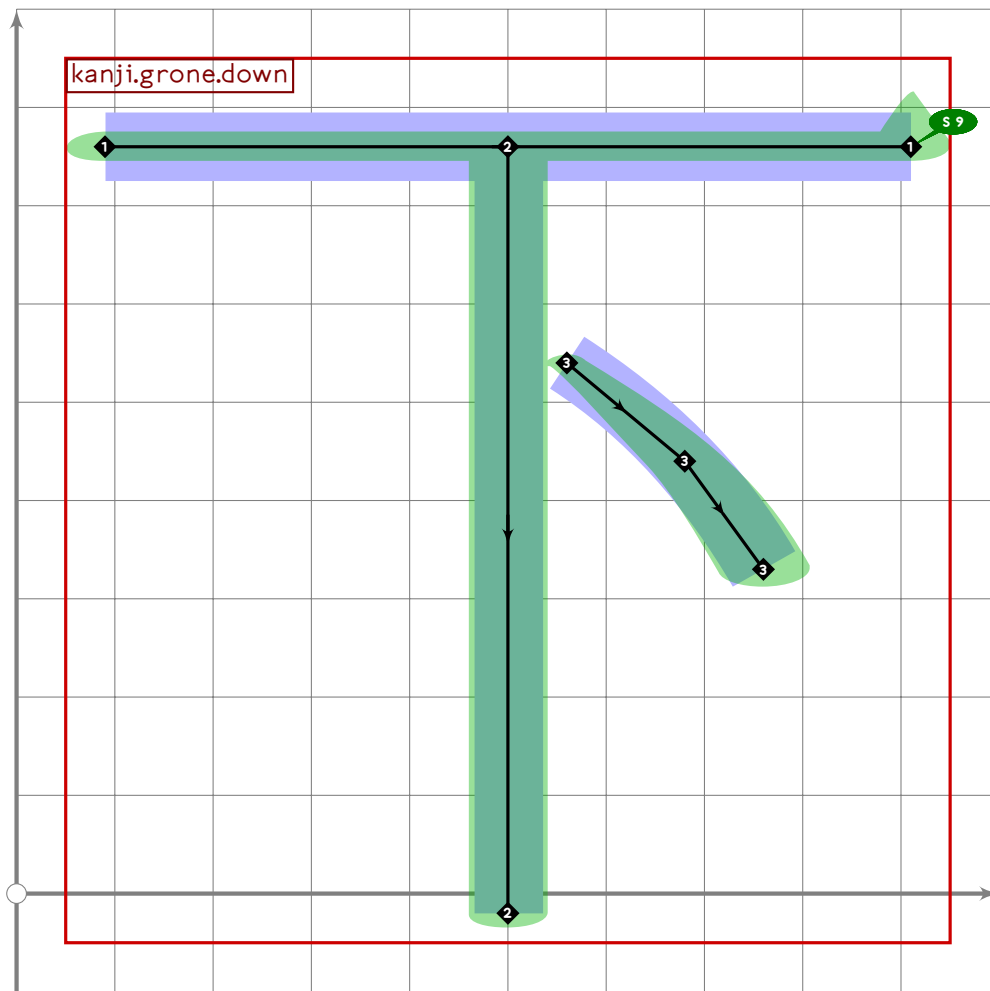
ONE



```

164
165 vardef kanji.grone.dog =
166   push_pbox__toexpand("kanji.grone.dog");
167   kanji.grone.big;
168   push_stroke((670,730)..(730,680)..(780,600),
169     (1,1)-(14,14)-(18,1.8));
170   expand_pbox;
171 enddef;

```

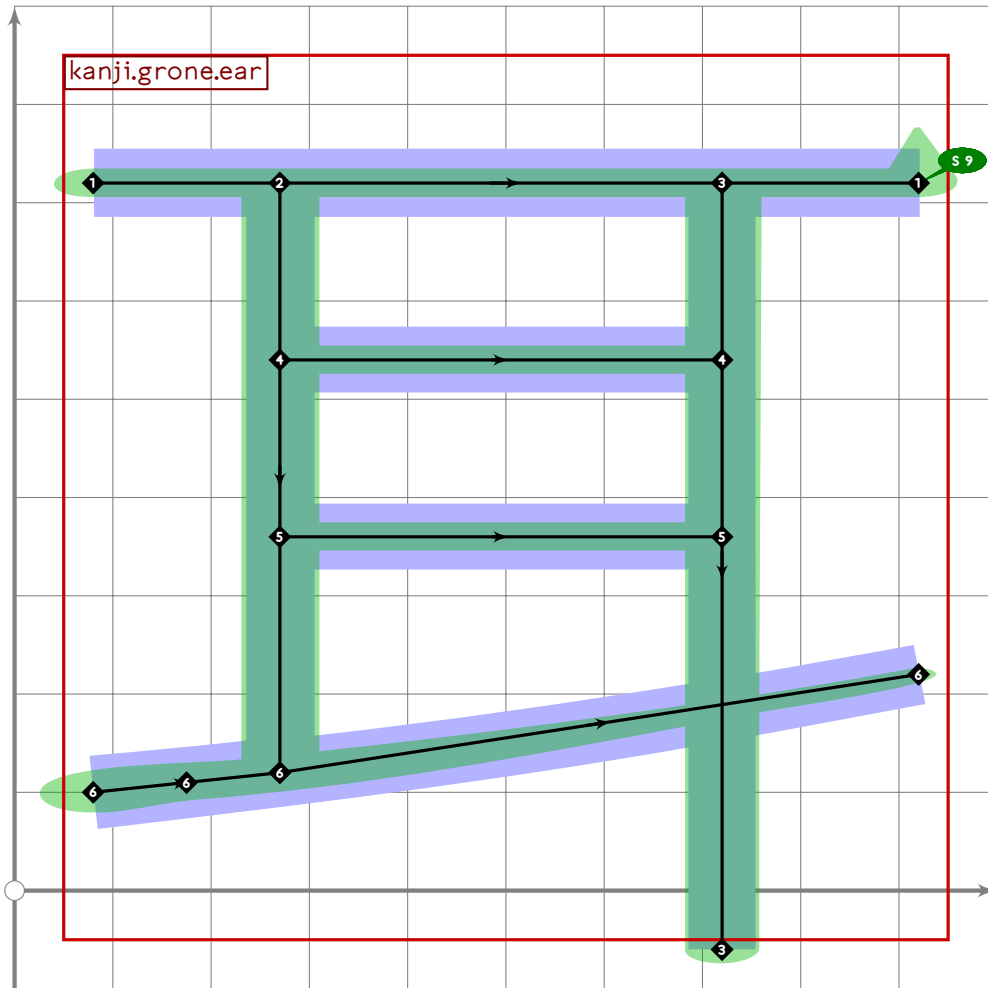


```

172
173 vardef kanji.grone.down =
174   push_pbox_toexpand("kanji.grone.down");
175   push_stroke((90,760)–(910,760),
176     (1.6,1.6)–(1.6,1.6));
177   set_boserif(0,1,9);
178   push_stroke((500,760)–(500,20),
179     (1.6,1.6)–(1.6,1.6));
180   push_stroke((560,540)..(680,440)..(760,330),
181     (1.1,1.1)–(1.6,1.6)–(1.8,1.8));
182   expand_pbox;
183 enddef;

```

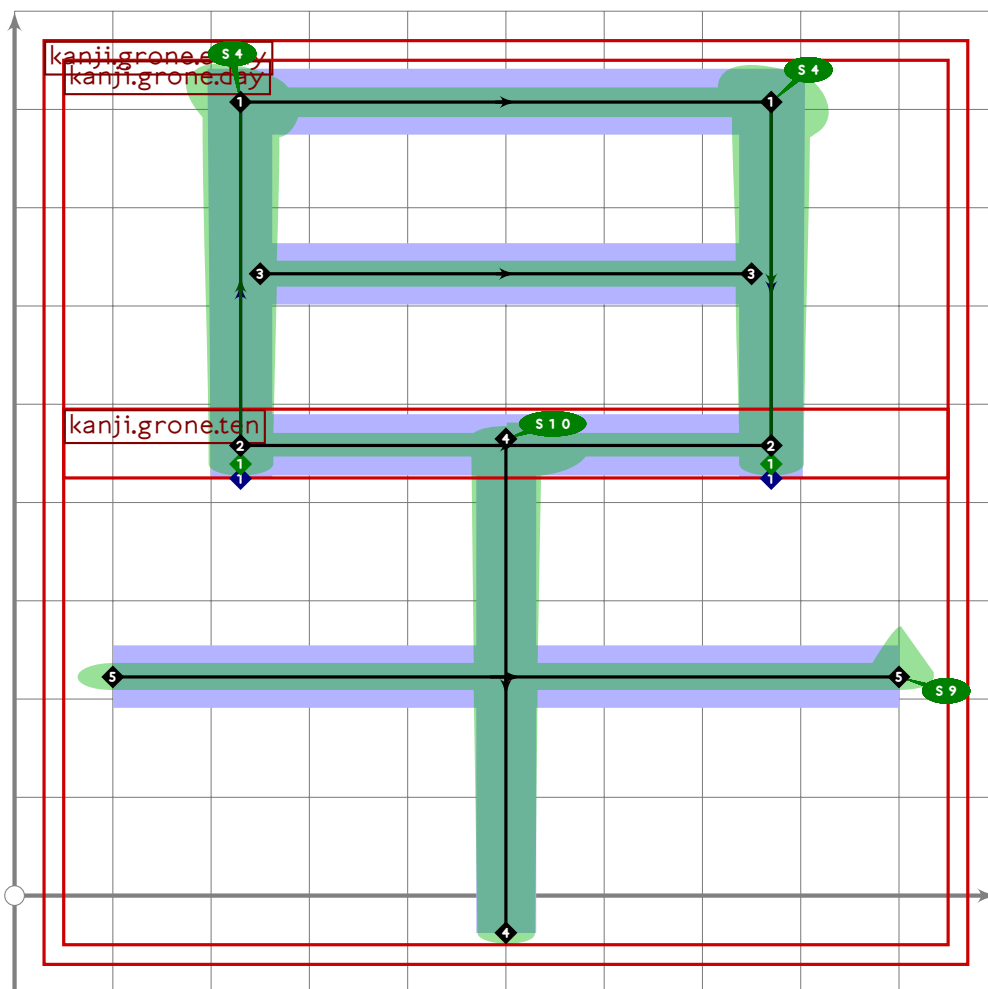
ONE



```

184
185 vardef kanji.grone.ear =
186   push_pbox_toexpand("kanji.grone.ear");
187   push_stroke((80,720)–(920,720),
188     (1.6,1.6)–(1.6,1.6));
189   set_boserif(0,1,9);
190   push_stroke((270,720)–(270,120),
191     (1.6,1.6)–(1.6,1.6));
192   push_stroke((720,720)–(720,60),
193     (1.6,1.6)–(1.5,1.5));
194   push_stroke((270,540)–(720,540),
195     (1.5,1.5)–(1.5,1.5));
196   push_stroke((270,360)–(720,360),
197     (1.5,1.5)–(1.5,1.5));
198   push_stroke((80,100)..tension 1.3..(270,120)..(920,220),
199     (2,2)–(1.7,1.7)–(1,1));
200   expand_pbox;
201 enddef;

```

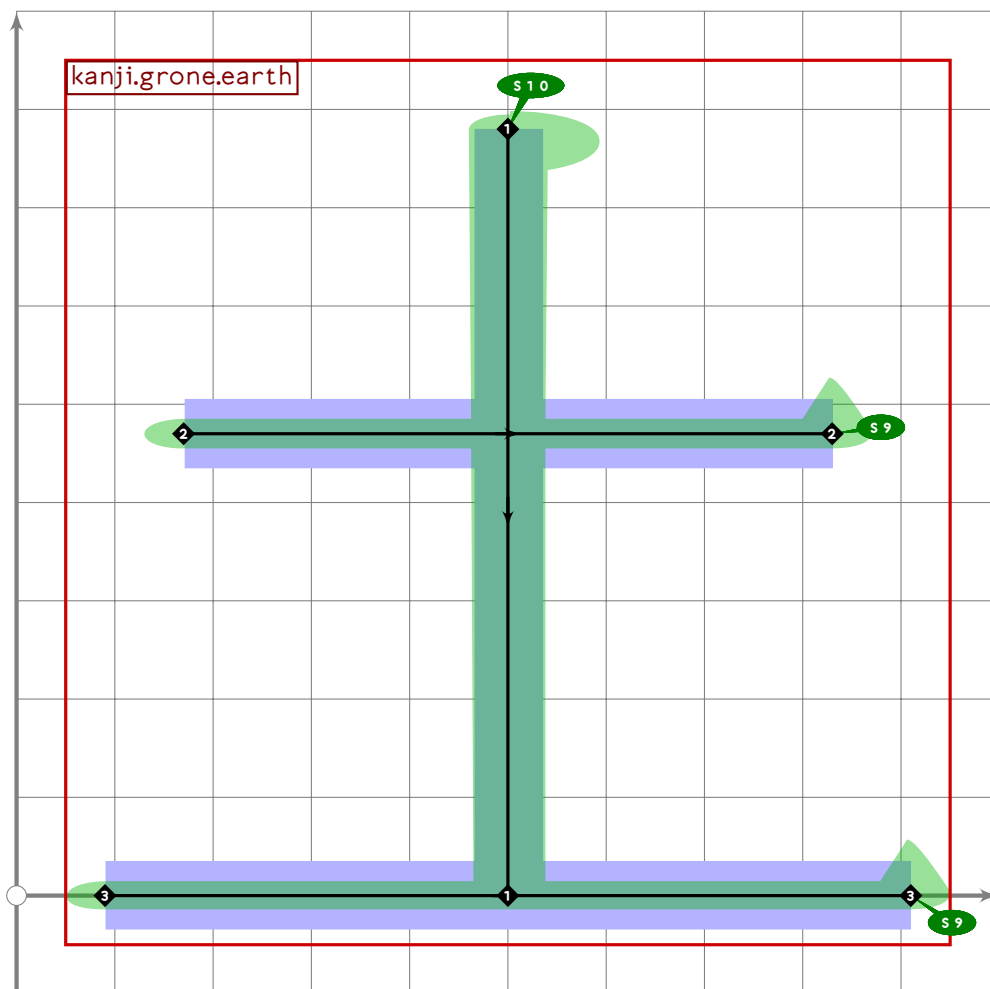


```

202
203 vardef kanji.grone.early =
204   push_pbox_toexpand("kanji.grone.early");
205   build_kanji.level(build_kanji.tb(460,70)
206     (kanji.grone.day)
207     (kanji.grone.ten));
208   set_boserif(0,0,whatever);
209   expand_pbox;
210 enddef;

```

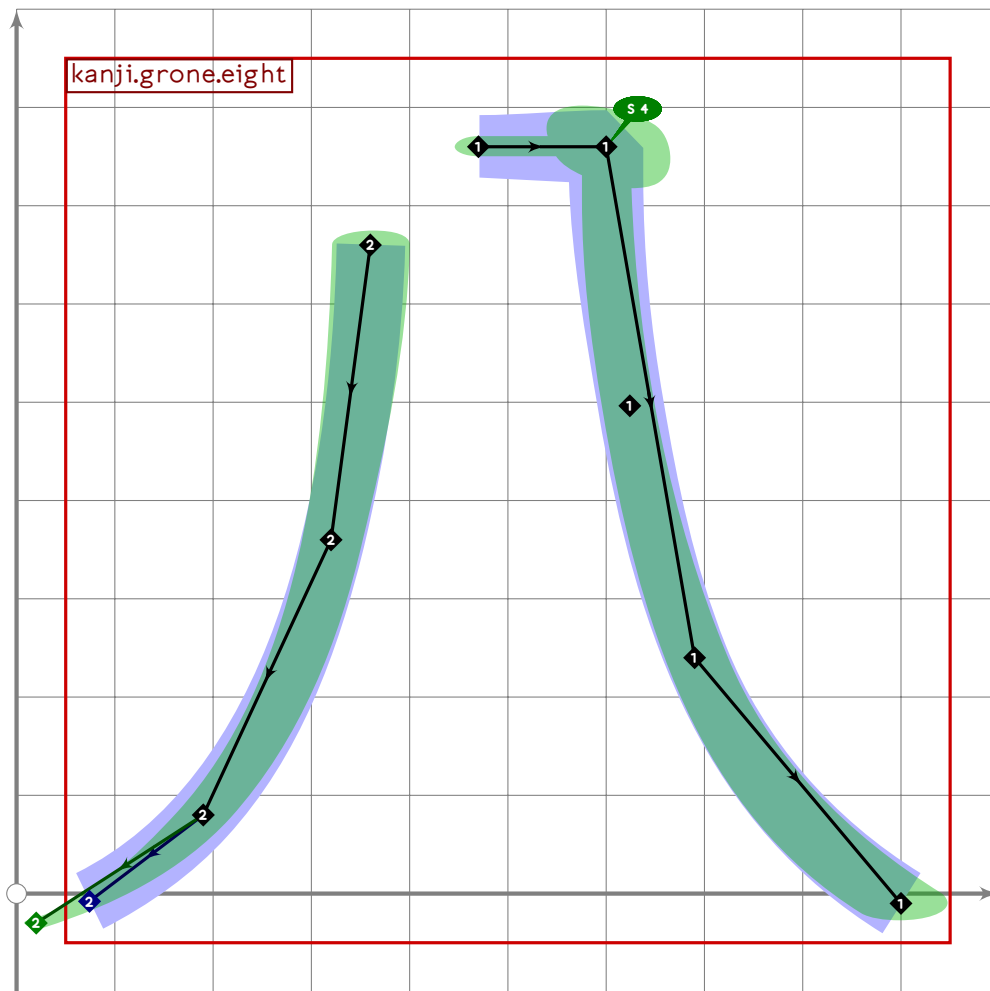
ONE



```

211
212 vardef kanji.grone.earth =
213   push_pbox_toexpand("kanji.grone.earth");
214   push_stroke((500,780)–(500,0),
215     (1.6,1.6)–(1.5,1.5));
216   set_boserif(0,0,10);
217   push_stroke((170,470)–(830,470),
218     (1.6,1.6)–(1.6,1.6));
219   set_boserif(0,1,9);
220   push_stroke((90,0)–(910,0),
221     (1.6,1.6)–(1.6,1.6));
222   set_boserif(0,1,9);
223   expand_pbox;
224 enddef;

```

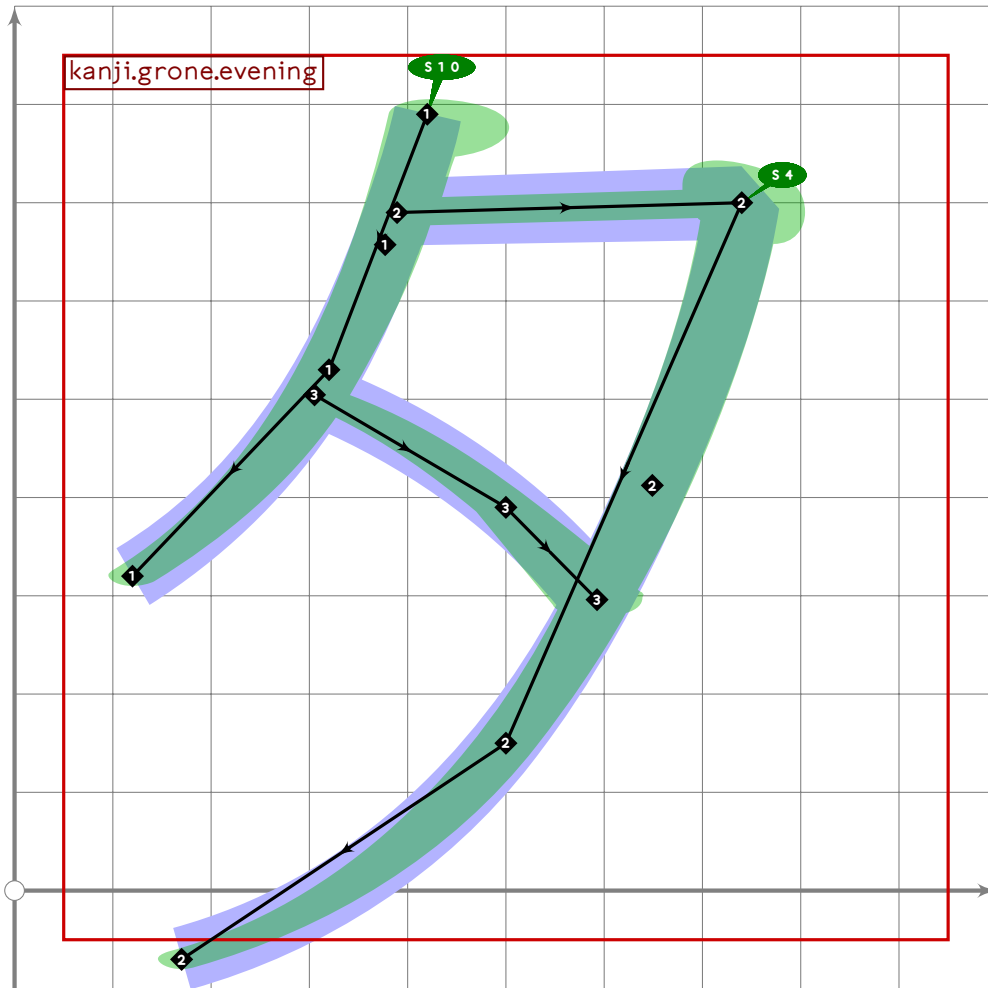


```

225
226 vardef kanji.grone.eight =
227   push_pbox_toexpand("kanji.grone.eight");
228   push_stroke((470,760)-(600,760)..tension 1.3..(690,240)..(900,-10),
229     (1.2,1.2)-(1.2,1.2)-(1.4,1.4)-(1.8,1.8));
230   set_botip(0,1,0);
231   set_boserif(0,1,4);
232   push_stroke((360,660)..(320,360)..(190,80)..(20,-30),
233     (1.6,1.6)-(1.4,1.4)-(1.3,1.3)-(0.88,0.88));
234   expand_pbox;
235 enddef;

```

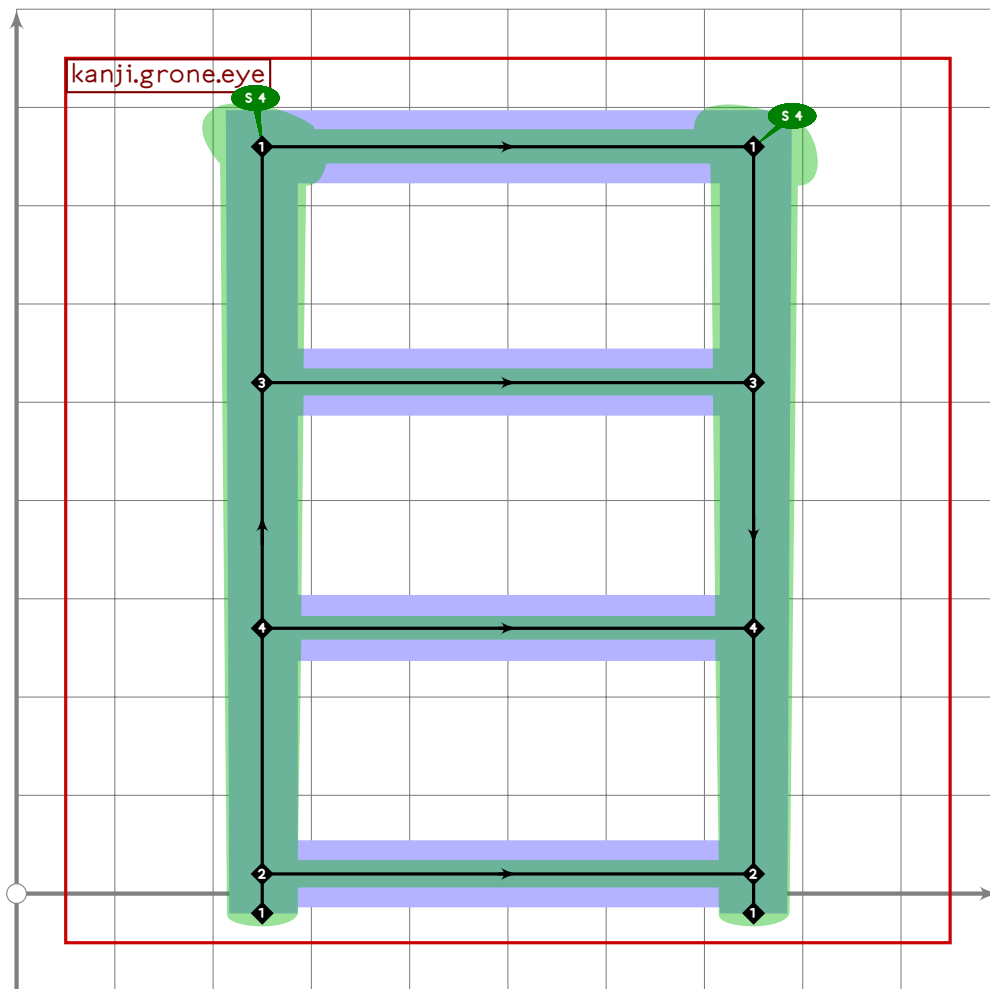
ONE



```

236
237 vardef kanji.grone.evening =
238   push_pbox_toexpand("kanji.grone.evening");
239   push_stroke((420,790)..tension 1.2..(320,530)..(120,320),
240     (1.6,1.6)–(1.5,1.5)–(1.2,1.2));
241   set_boserif(0,0,10);
242   push_stroke(
243     (get_stroke(0) intersectionpoint ((-infinity,690)–(infinity,690)))–
244     (740,700)..tension 1.2..(500,150)..(170,70),
245     (1.5,1.5)–(1.6,1.6)–(1.4,1.4)–(1.2,1.2));
246   set_botip(0,1,0);
247   set_boserif(0,1,4);
248   push_stroke(
249     (point 1.1 of get_stroke(-1))..(500,390)..(point 1.7 of get_stroke(0)),
250     (1.2,1.2)–(1.4,1.4)–(1.8,1.8));
251   expand_pbox;
252 enddef;

```

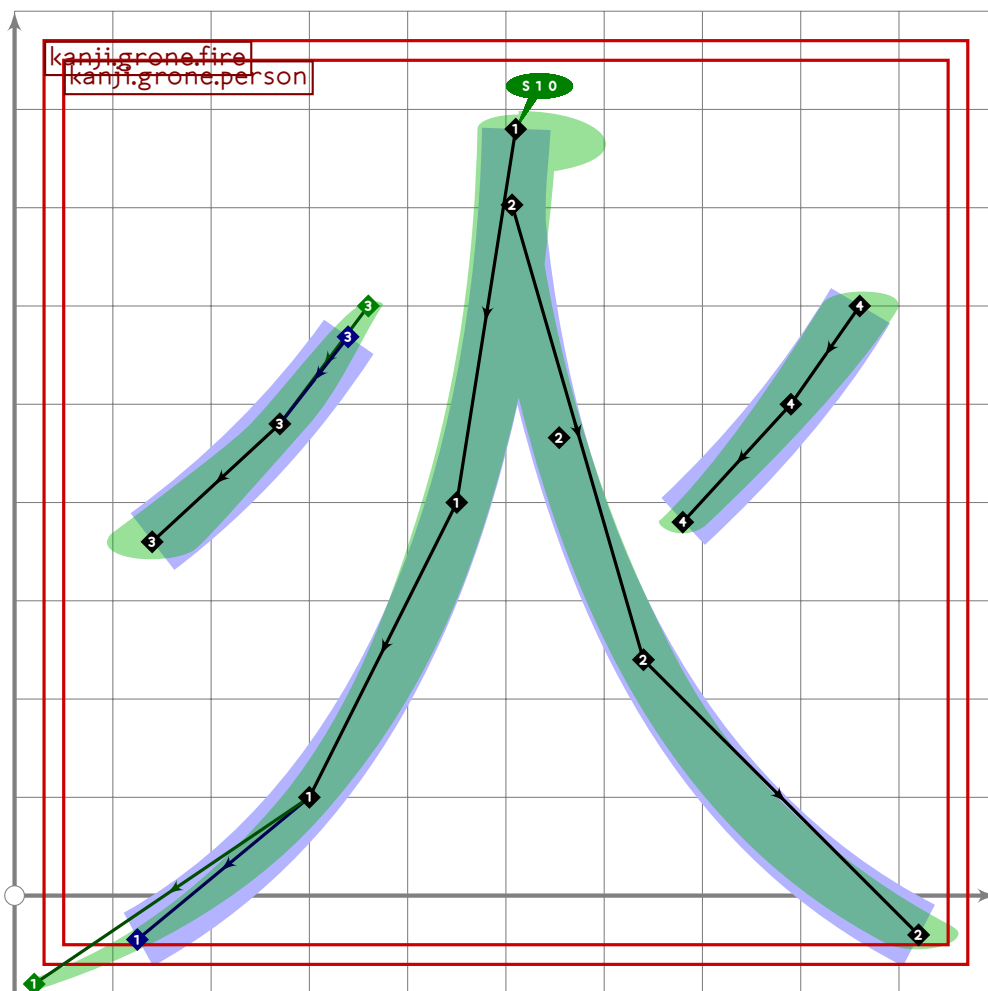



```

253
254 vardef kanji.grone.eye =
255   push_pbox_toexpand("kanji.grone.eye");
256   build_kanji.box((250,760),(750,20));
257   push_stroke((250,520)–(750,520),
258     (1.5,1.5)–(1.5,1.5));
259   push_stroke((250,270)–(750,270),
260     (1.4,1.4)–(1.4,1.4));
261   expand_pbox;
262 enddef;

```

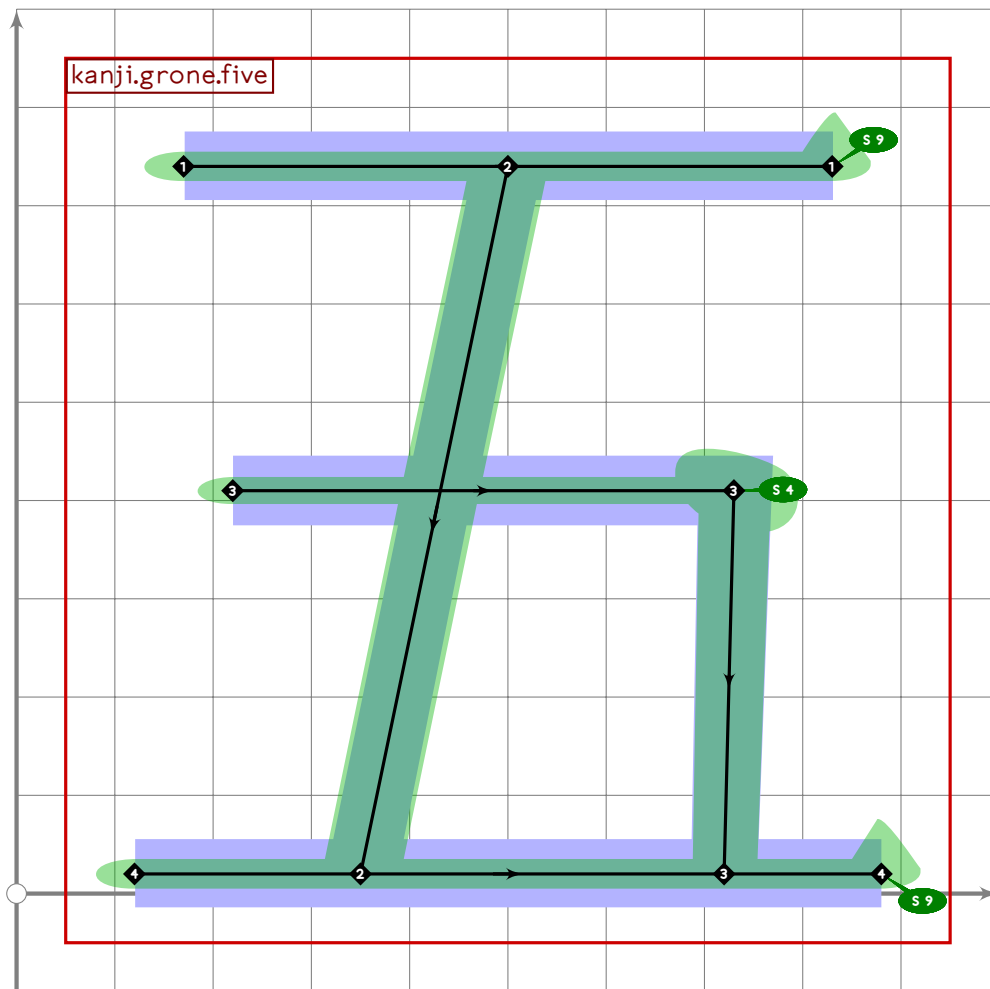
ONE



```

263
264 vardef kanji.grone.fire =
265   push_pbox__toexpand("kanji.grone.fire");
266   kanji.grone.person;
267   push_stroke((360,600)..(270,480)..(140,360),
268     (0.9,0.9)–(1.3,1.3)–(1.8,1.8));
269   push_stroke((860,600)..(790,500)..(680,380),
270     (1.6,1.6)–(1.4,1.4)–(1.2,1.2));
271   expand_pbox;
272 enddef;

```



```

273
274 vardef kanji.grone.five =
275   push_pbox_toexpand("kanji.grone.five");
276   push_stroke((170,740)–(830,740),
277     (1.6,1.6)–(1.6,1.6));
278   set_boserif(0,1,9);
279   push_stroke((500,740)–(350,20),
280     (1.6,1.6)–(1.6,1.6));
281   push_stroke((220,410)–(730,410)–(720,20),
282     (1.5,1.5)–(1.5,1.5)–(1.4,1.4));
283   set_boserif(0,1,4);
284   set_botip(0,1,1);
285   push_stroke((120,20)–(880,20),
286     (1.6,1.6)–(1.6,1.6));
287   set_boserif(0,1,9);
288   expand_pbox;
289 enddef;
290
291 vardef kanji.grone_helper.foot =
292   push_pbox_toexpand("kanji.grone_helper.foot");
293   push_stroke((270,330)..tension 1.3..(190,100)..(60,-50),

```

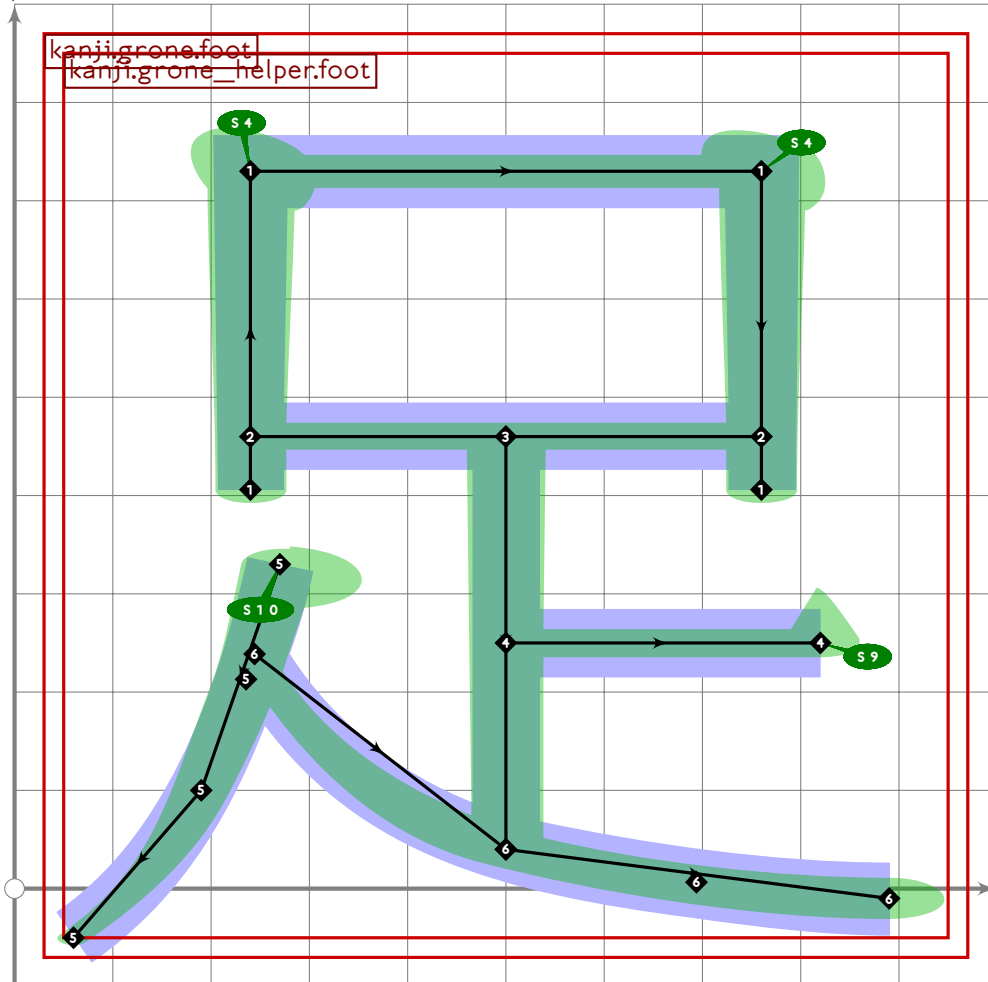
U+8DB3
tsuku.uni8DB3

ONE

```

294 (1.6,1.6)–(1.3,1.3)–(1,1));
295 set_boserif(0,0,10);
296 push_stroke((point 04 of get_strokep(0))..(500,40)..tension 1.5..(890,10),
297 (1,1)–(1.7,1.7)–(2,2));
298 expand_pbox;
299 enddef;

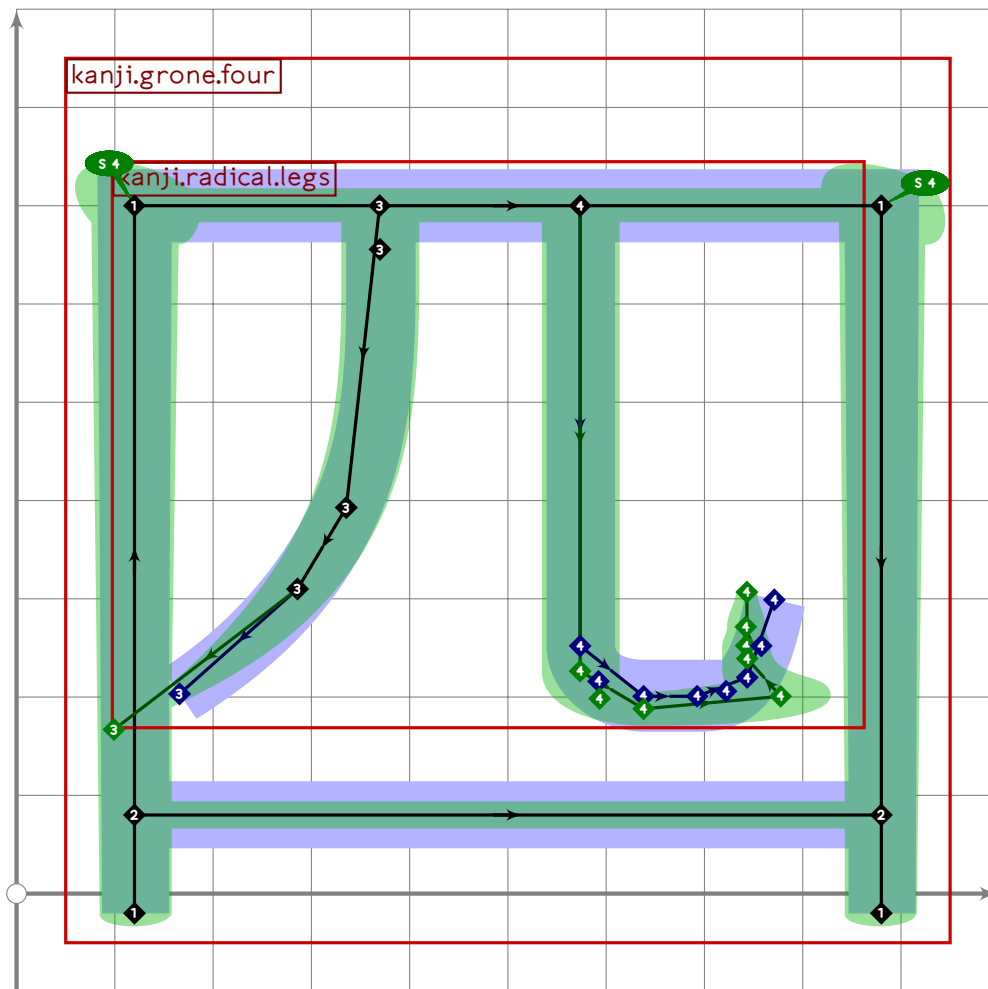
```



```

300
301 vardef kanji.grone.foot =
302   push_pbox_toexpand("kanji.grone.foot");
303   build_kanji.box((240,730),(760,460));
304   push_stroke((500,460)–(500,40),(1.6,1.6)–(1.5,1.5));
305   push_stroke((500,250)–(820,250),(1.5,1.5)–(1.6,1.6));
306   set_boserif(0,1,9);
307   kanji.grone_helper.foot;
308   expand_pbox;
309 enddef;

```

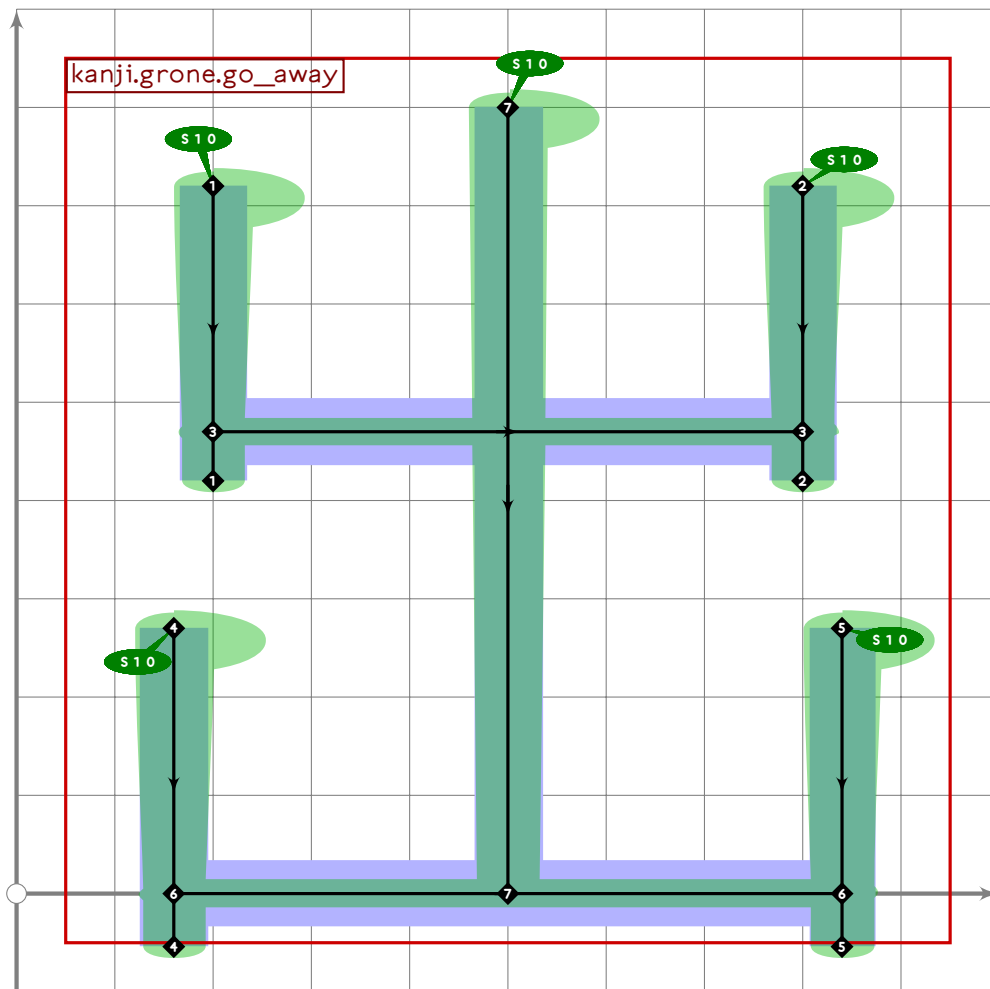


```

310
311 vardef kanji.grone.four =
312   push_pbox__toexpand("kanji.grone.four");
313   perl_structure:=perl_structure&"eids.u2FF4,u56D7,u513F";
314   build_kanji.box((120,700),(880,80));
315   tsu_xform
316     (identity shifted (-500,-780) xyscaled (0.85,0.64) shifted (480,700))
317     (kanji.radical.legs);
318   expand_pbox;
319 enddef;

```

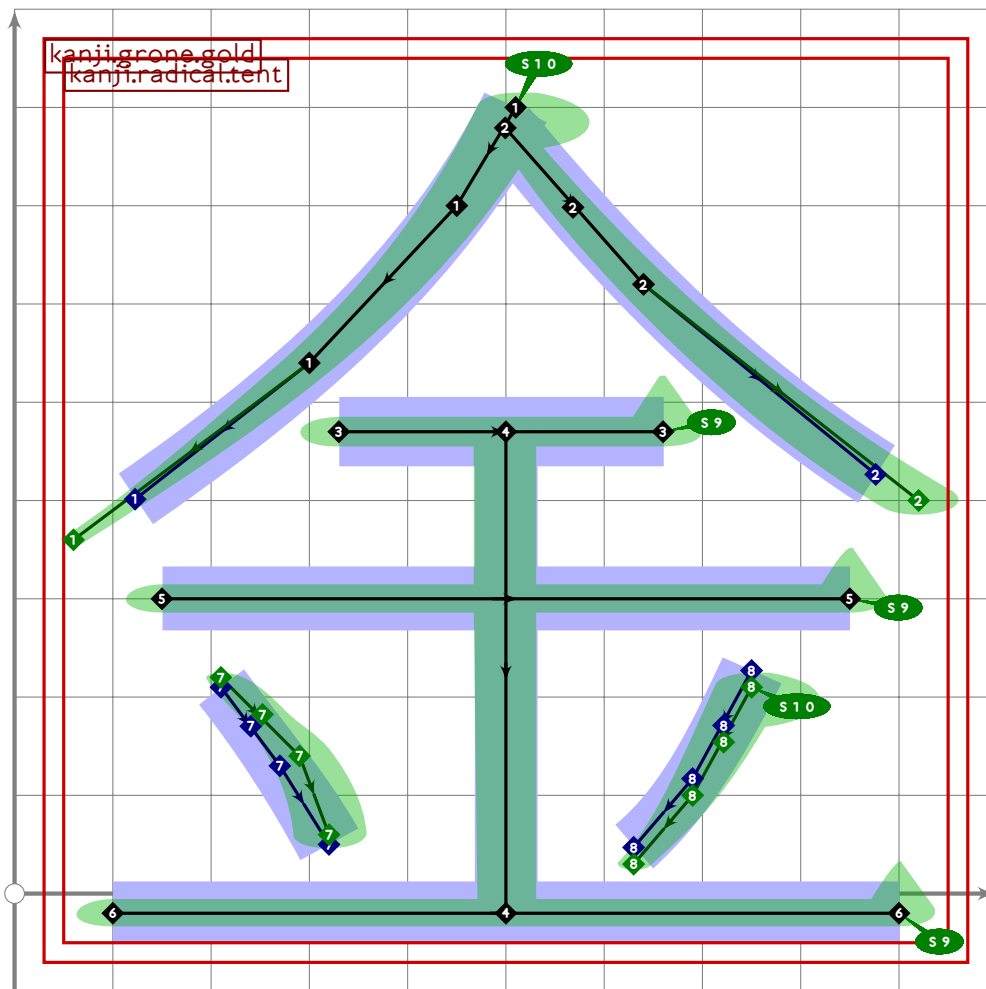
ONE



```

320
321 vardef kanji.grone.go_away =
322   push_pbox_toexpand("KANJI.GRONE.GO_AWAY");
323   build_kanji.cup((200,720),(800,470));
324   build_kanji.cup((160,270),(840,0));
325   push_stroke((500,800)-(500,0),
326     (1,6,1,6)-(1,4,1,4));
327   set_boserif(0,0,10);
328   expand_pbox;
329 enddef;

```

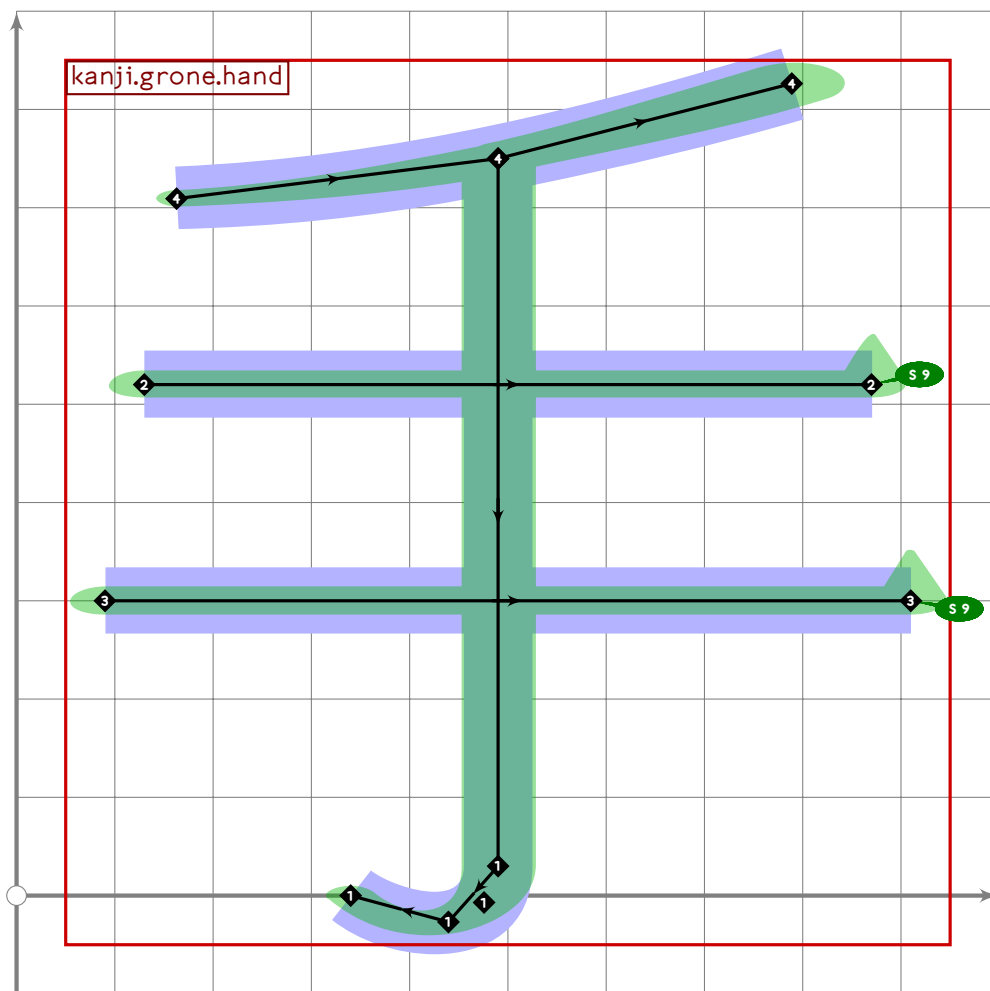


```

330
331 vardef kanji.grone.gold =
332   push_pbox_toexpand("kanji.grone.gold");
333   kanji.radical.tent;
334   push_stroke((500,470)-(500,20),(1.5,1.5)-(1.4,1.4));
335   push_stroke((150,300)-(850,300),(1.6,1.6)-(1.6,1.6));
336   set_boserif(0,1,9);
337   push_stroke((100,20)-(900,20),(1.6,1.6)-(1.6,1.6));
338   set_boserif(0,1,9);
339   push_stroke(((210,220)..tension 1.3..(270+20*mincho,140)..(320,60))
340     shifted ((1-mincho)*10*down),
341     (1,1)-(1.5,1.5)-(1.6,1.6));
342   push_stroke(((750,210)..tension 1.3..(690,100)..(630,30))
343     shifted ((1-mincho)*17*up),
344     (1.6,1.6)-(1.3,1.3)-(1,1));
345   set_boserif(0,0,10);
346   for i=-4 upto 0: set_bosize(i,93); endfor;
347   expand_pbox;
348 enddef;

```

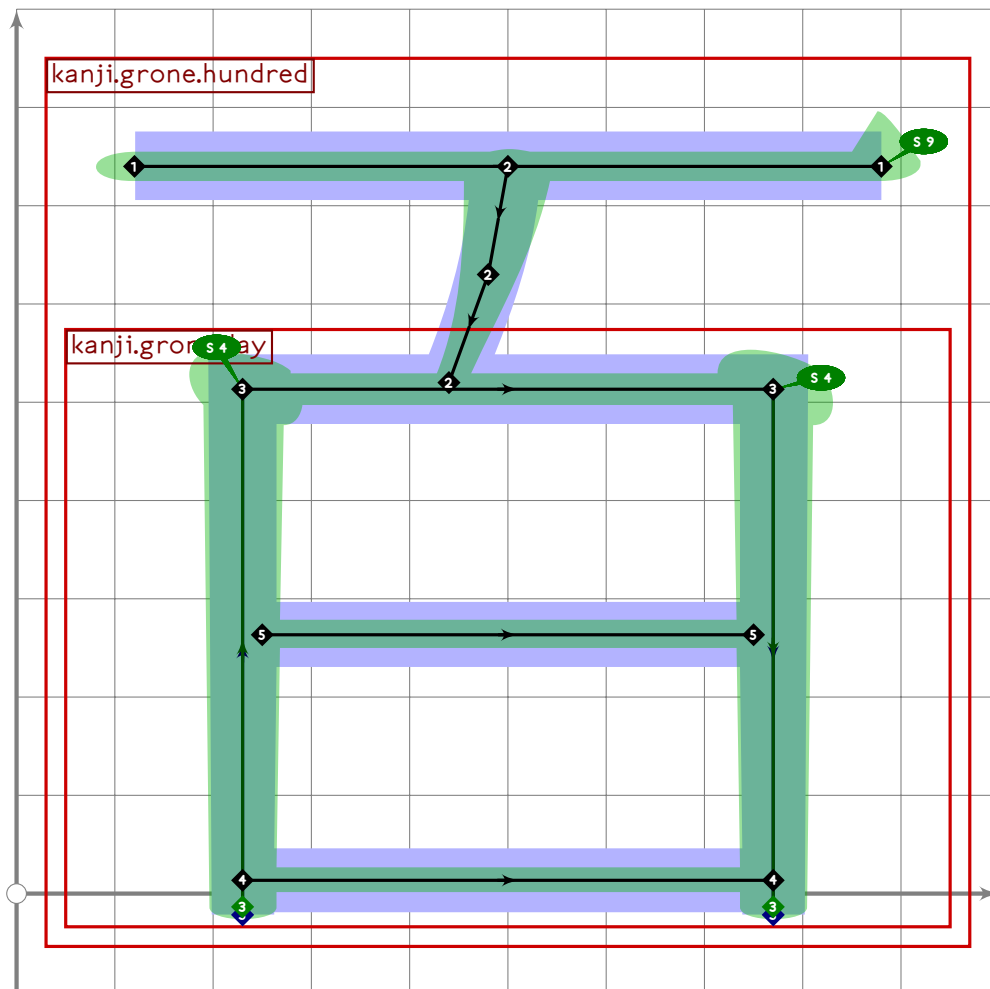
ONE



```

349
350 vardef kanji.grone.hand =
351   push_pbox_toexpand("kanji.grone.hand");
352   build_kanji.add_beret(
353     push_stroke((490,750),(1.6,1.6));
354     build_kanji.add_jtail(0);
355     push_stroke((130,520)-(870,520),(1.5,1.5)-(1.5,1.5));
356     set_boserif(0,1,9);
357     push_stroke((90,300)-(910,300),(1.5,1.5)-(1.5,1.5));
358     set_boserif(0,1,9);
359   );
360   expand_pbox;
361 enddef;

```

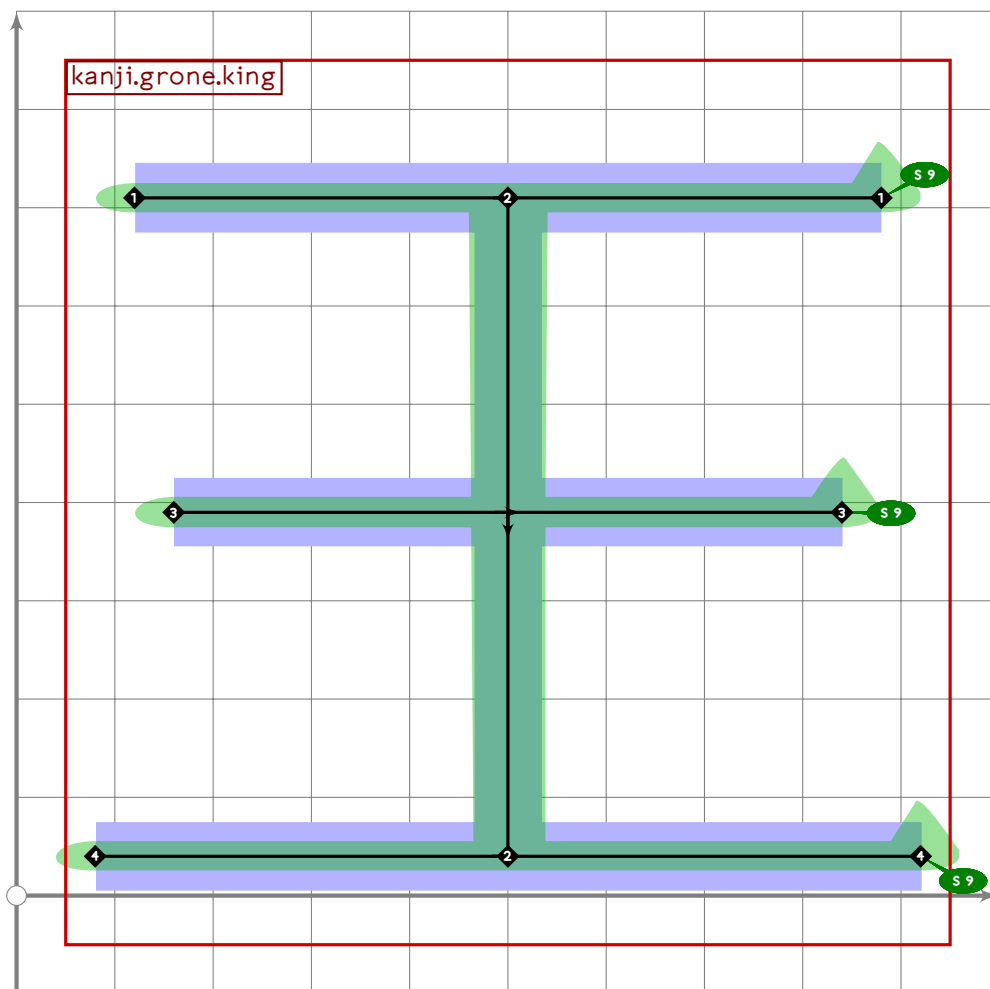



```

362
363 vardef kanji.grone.hundred =
364   push_pbox__toexpand("kanji.grone.hundred");
365   push_stroke((120,740)-(880,740),
366     (1.6,1.6)-(1.6,1.6));
367   set_boserif(0,1,9);
368   push_stroke((500,740)..(480,630)..(440,520),
369     (1.7,1.7)-(1.3,1.3)-(1,1));
370   tsu_xform(identity yscaled (520/770))(kanji.grone.day);
371   expand_pbox;
372 enddef;

```

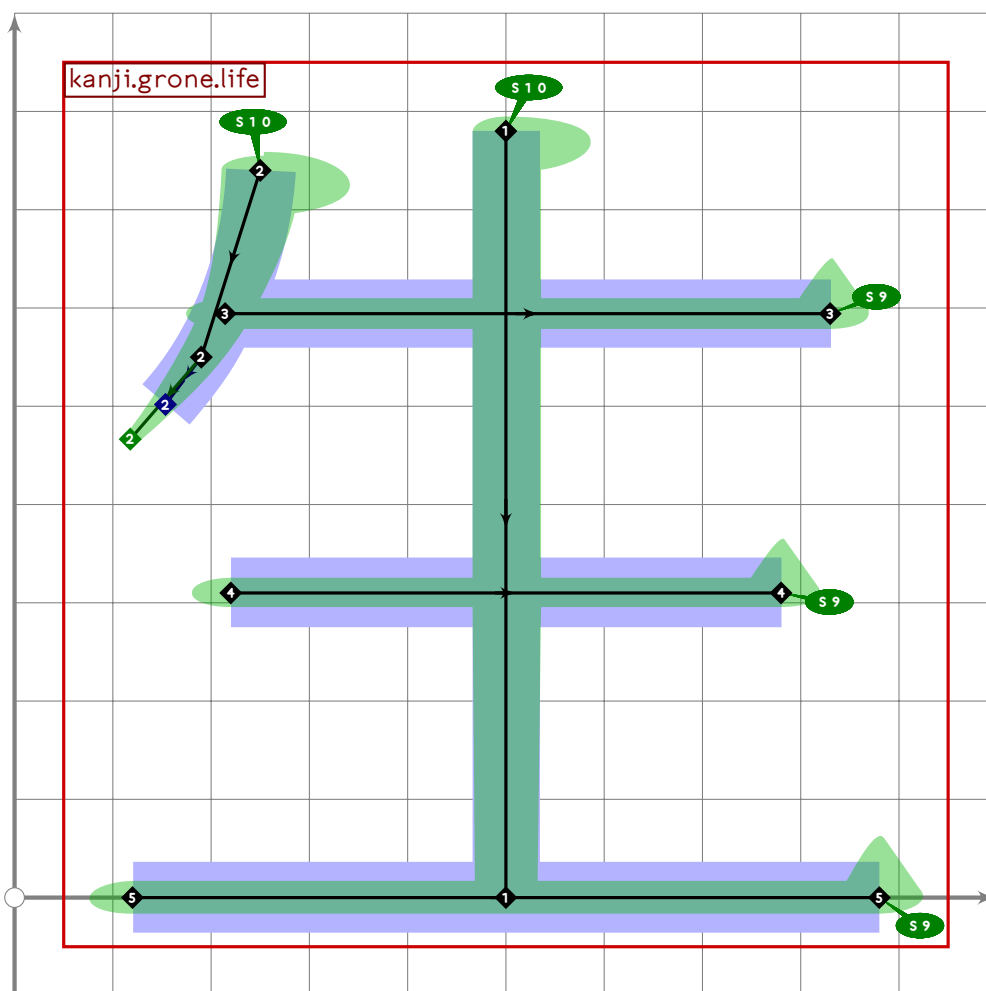
ONE



```

373
374 vardef kanji.grone.king =
375   push_pbox_toexpand("kanji.grone.king");
376   push_stroke((120,710)–(880,710),
377     (1.6,1.6)–(1.6,1.6));
378   set_boserif(0,1,9);
379   push_stroke((500,710)–(500,40),
380     (1.6,1.6)–(1.5,1.5));
381   push_stroke((160,390)–(840,390),
382     (1.6,1.6)–(1.6,1.6));
383   set_boserif(0,1,9);
384   push_stroke((80,40)–(920,40),
385     (1.6,1.6)–(1.6,1.6));
386   set_boserif(0,1,9);
387   expand_pbox;
388 enddef;

```

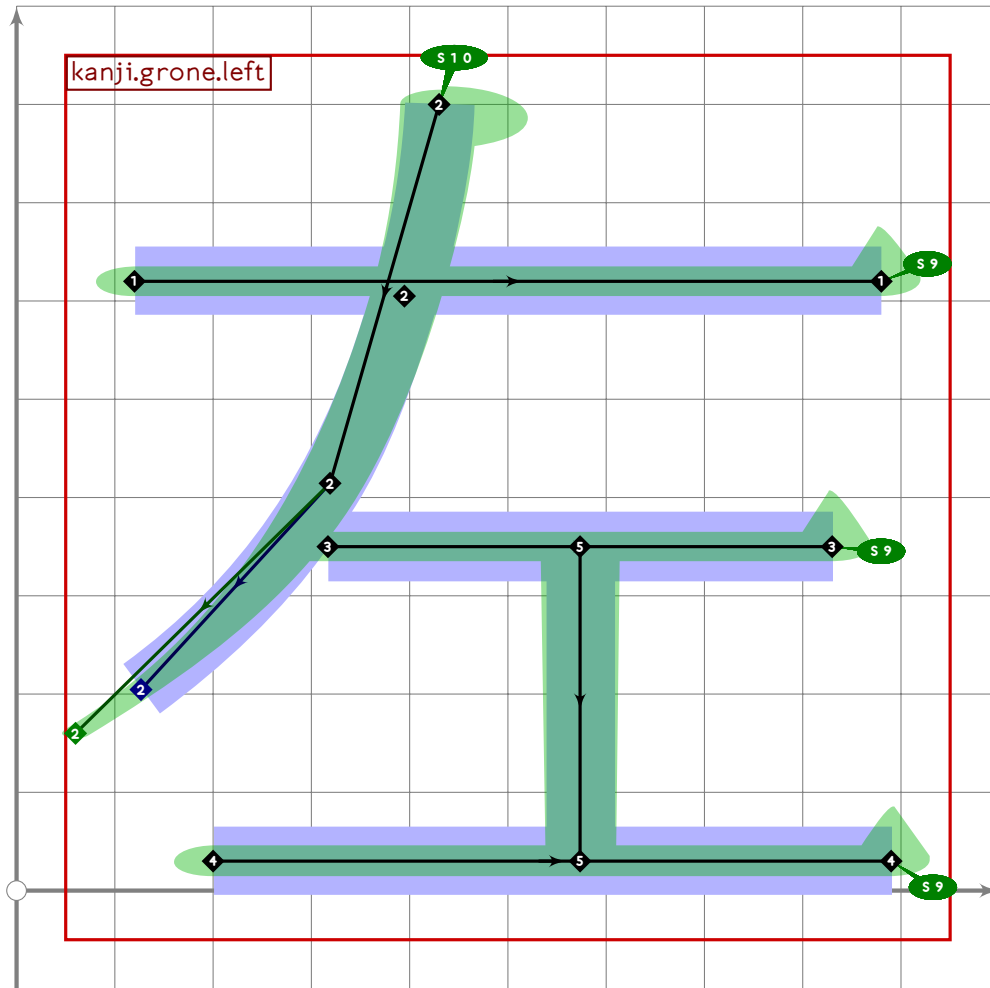


```

389
390 vardef kanji.grone.life =
391   push_pbox_toexpand("KANJI.GRONE.LIFE");
392   push_stroke((500,780)-(500,0),
393     (1.5,1.5)-(1.4,1.4));
394   set_boserif(0,0,10);
395   push_stroke((250,740)..(190,550)..(110,460),
396     (1.6,1.6)-(1.2,1.2)-(0.8,0.8));
397   set_boserif(0,0,10);
398   push_stroke((point 0.75 of get_stroke(0))-
399     (830,y part point 0.75 of get_stroke(0)),
400     (1.6,1.6)-(1.6,1.6));
401   set_boserif(0,1,9);
402   push_stroke((220,310)-(780,310),
403     (1.6,1.6)-(1.6,1.6));
404   set_boserif(0,1,9);
405   push_stroke((120,0)-(880,0),
406     (1.7,1.7)-(1.7,1.7));
407   set_boserif(0,1,9);
408   expand_pbox;
409 enddef;

```

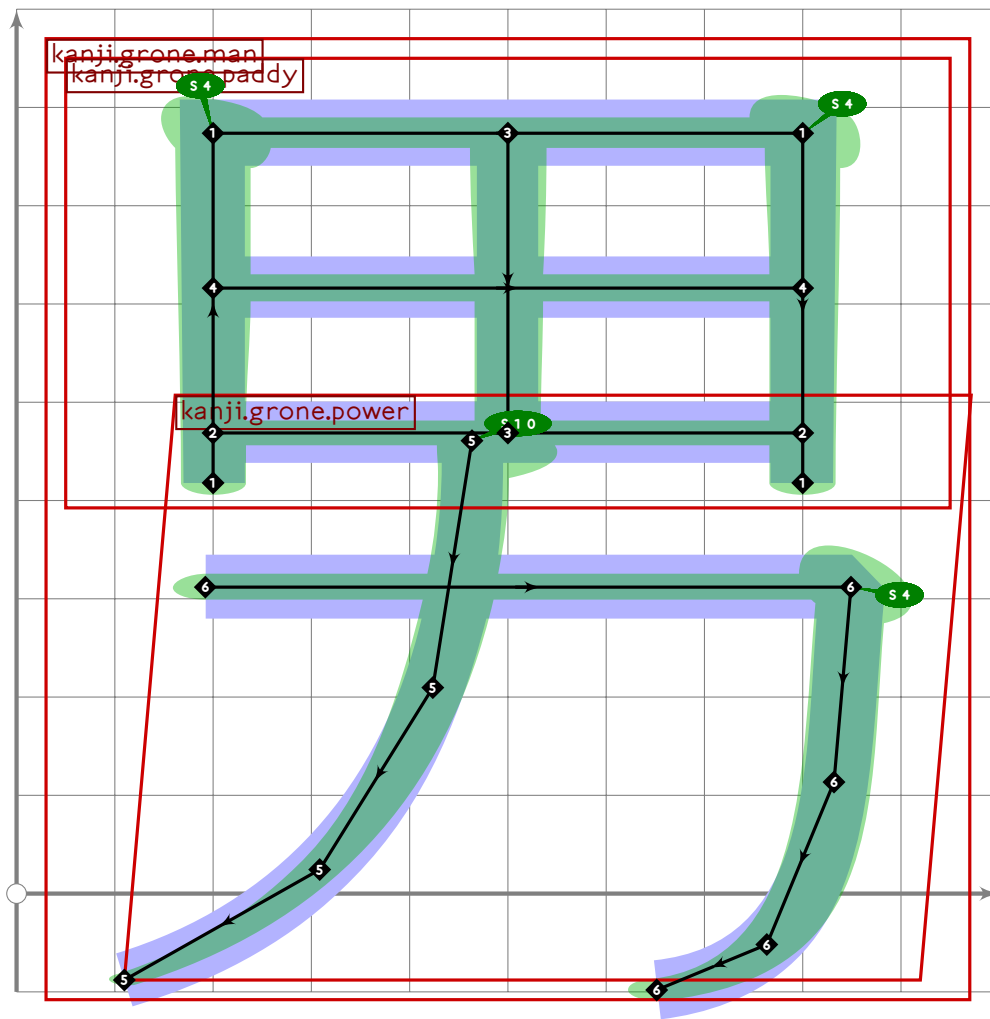
ONE



```

410
411 vardef kanji.grone.left =
412   push_pbox_toexpand("kanji.grone.left");
413   build_kanji.lean_to((430,160));
414   push_stroke(
415     (((0,350)-(1000,350)) intersectionpoint get_stroke(0))+(40,0)..
416     (830,350),
417     (1.6,1.6)-(1.6,1.6));
418   set_boserif(0,1,9);
419   push_stroke((200,30)..(890,30),
420     (1.6,1.6)-(1.6,1.6));
421   set_boserif(0,1,9);
422   push_stroke(
423     (point 0.5 of get_stroke(-1))-(xpart point 0.5 of get_stroke(-1),30),
424     (1.6,1.6)-(1.5,1.5));
425   expand_pbox;
426 enddef;

```



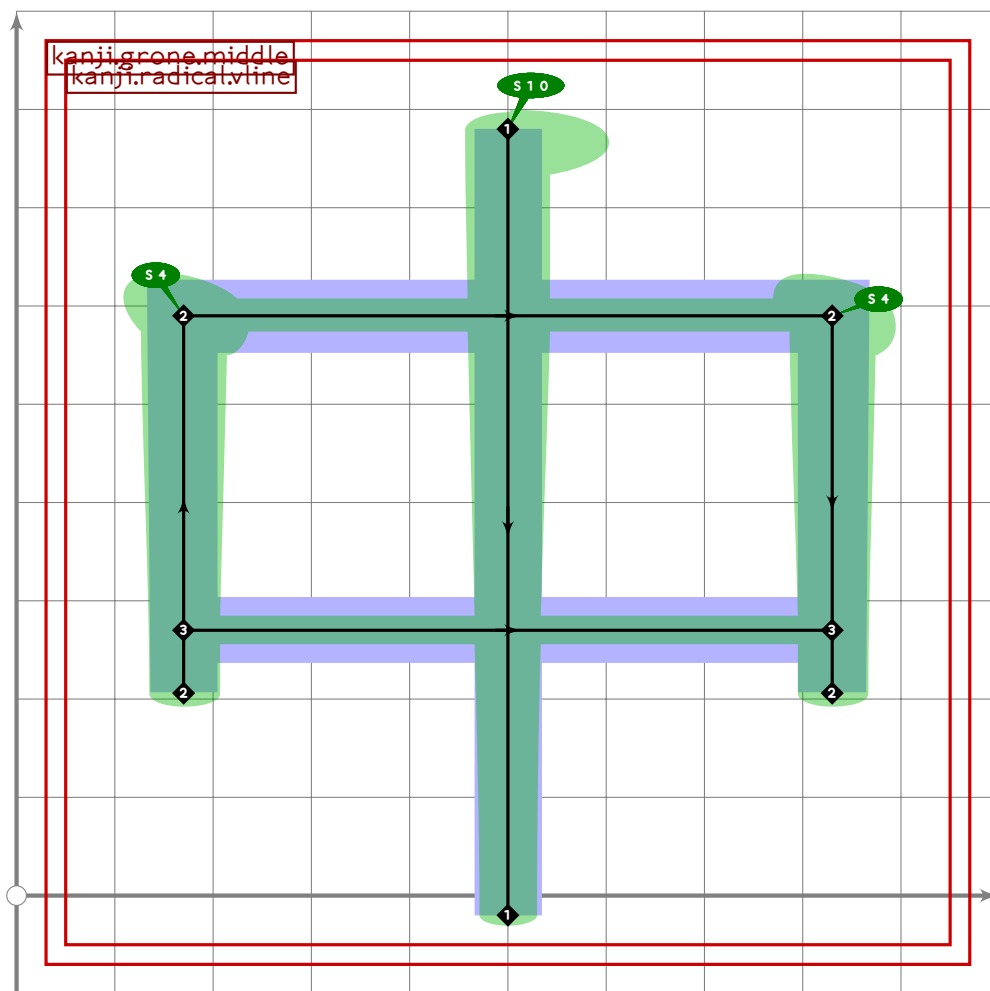
```

427
428 vardef kanji.grone.man =
429   push_pbox_toexpand("kanji.grone.man");
430   build_kanji.level(build_kanji.tb(430,75)
431     (kanji.grone.paddy)
432     (build_kanji.sscale(xyscaled (0.9,1.15) slanted 0.05 shifted (40,0))
433       (kanji.grone.power)));
434   replace_strokep(0)(oldp shifted (0,30));
435   expand_pbox;
436 enddef;

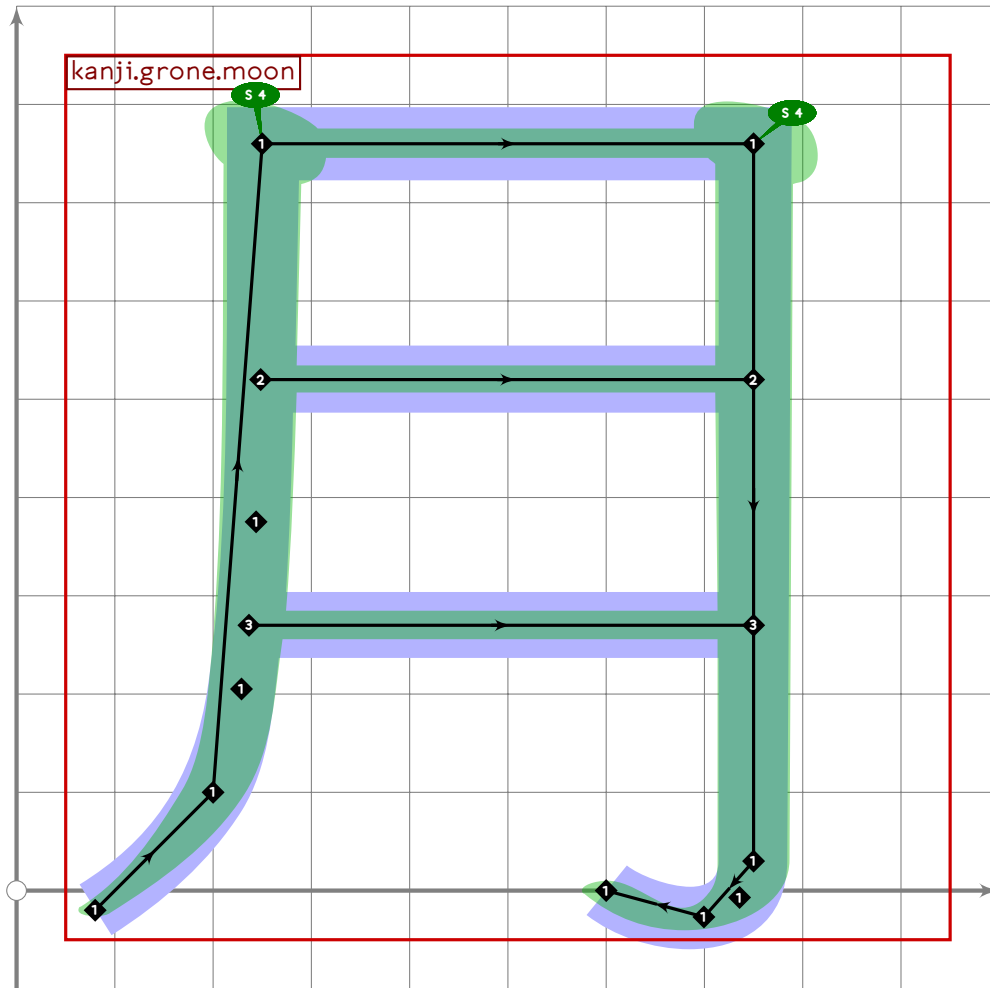
```

U+4E2D
tsuku.uni4E2D

ONE



```
437
438 vardef kanji.grone.middle =
439   push_pbox_toexpand("kanji.grone.middle");
440   kanji.radical.vline;
441   build_kanji.box((170,590),(830,270));
442   expand_pbox;
443 enddef;
```

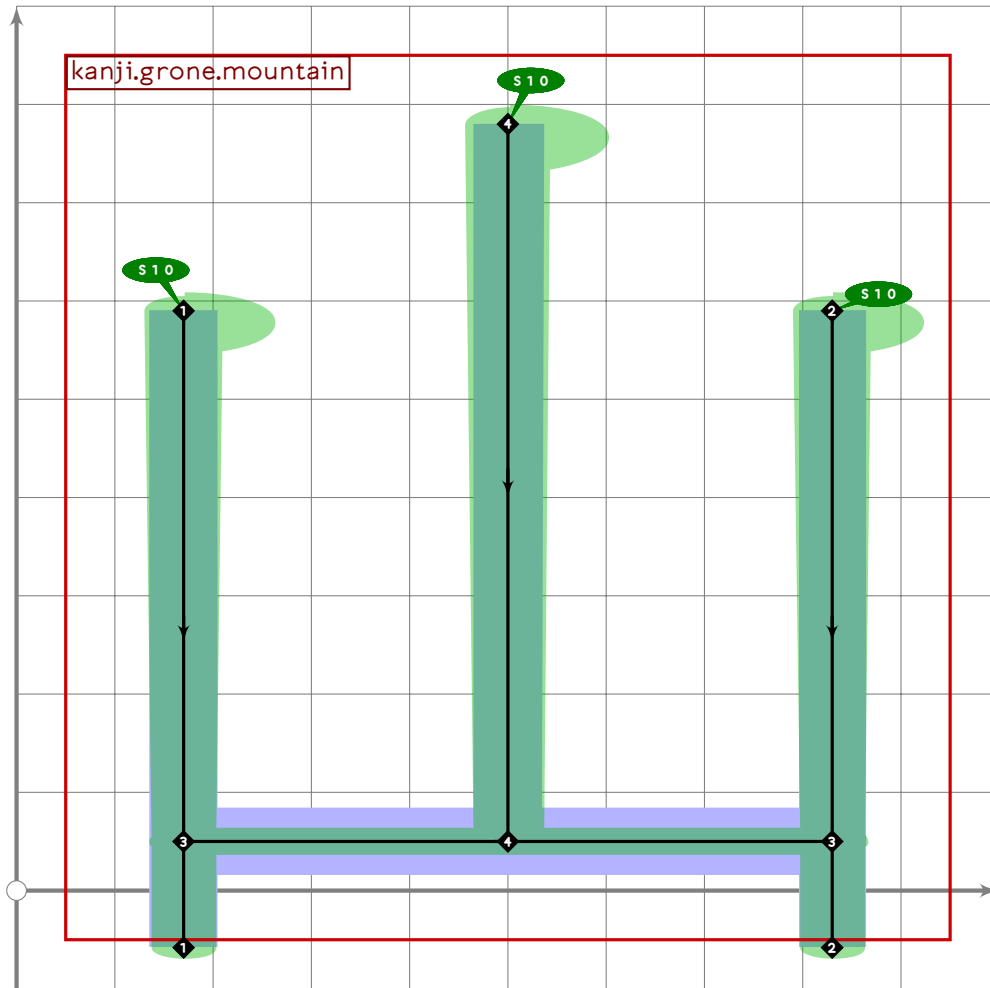


```

444
445 vardef kanji.grone.moon =
446   push_pbox_toexpand("kanji.grone.moon");
447   push_stroke((80,-20)..(200,100)...{up}(250,760)-(750,760),
448     (1,1)-(14,14)-(16,16)-(16,1.6));
449   build_kanji.add_jtail(0);
450   set_botip(0,2,1);
451   set_botip(0,3,1);
452   set_boserif(0,2,4);
453   set_boserif(0,3,4);
454   push_stroke(
455     (get_stroke(0) intersectionpoint ((0,520)-(1000,520)))-(750,520),
456     (1.5,1.5)-(1.5,1.5));
457   push_stroke(
458     (get_stroke(-1) intersectionpoint ((0,270)-(1000,270)))-(750,270),
459     (1.5,1.5)-(1.5,1.5));
460   expand_pbox;
461 enddef;

```

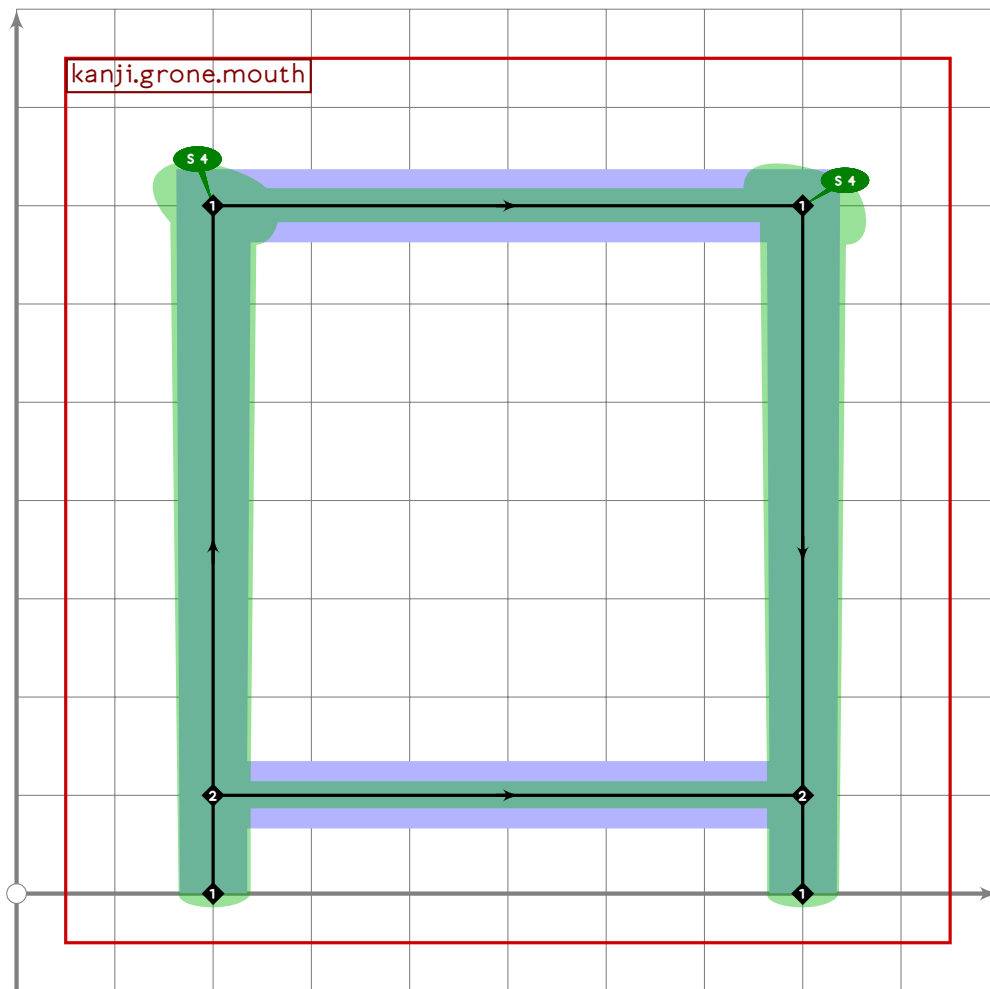
ONE



```

462
463 vardef kanji.grone.mountain =
464   push_pbox__toexpand("kanji.grone.mountain");
465   build_kanji.cup((170,590),(830,50));
466   push_stroke((500,780)-(500,50),
467     (1.7,1.7)-(1.5,1.5));
468   set_boserif(0,0,10);
469   expand_pbox;
470 enddef;

```

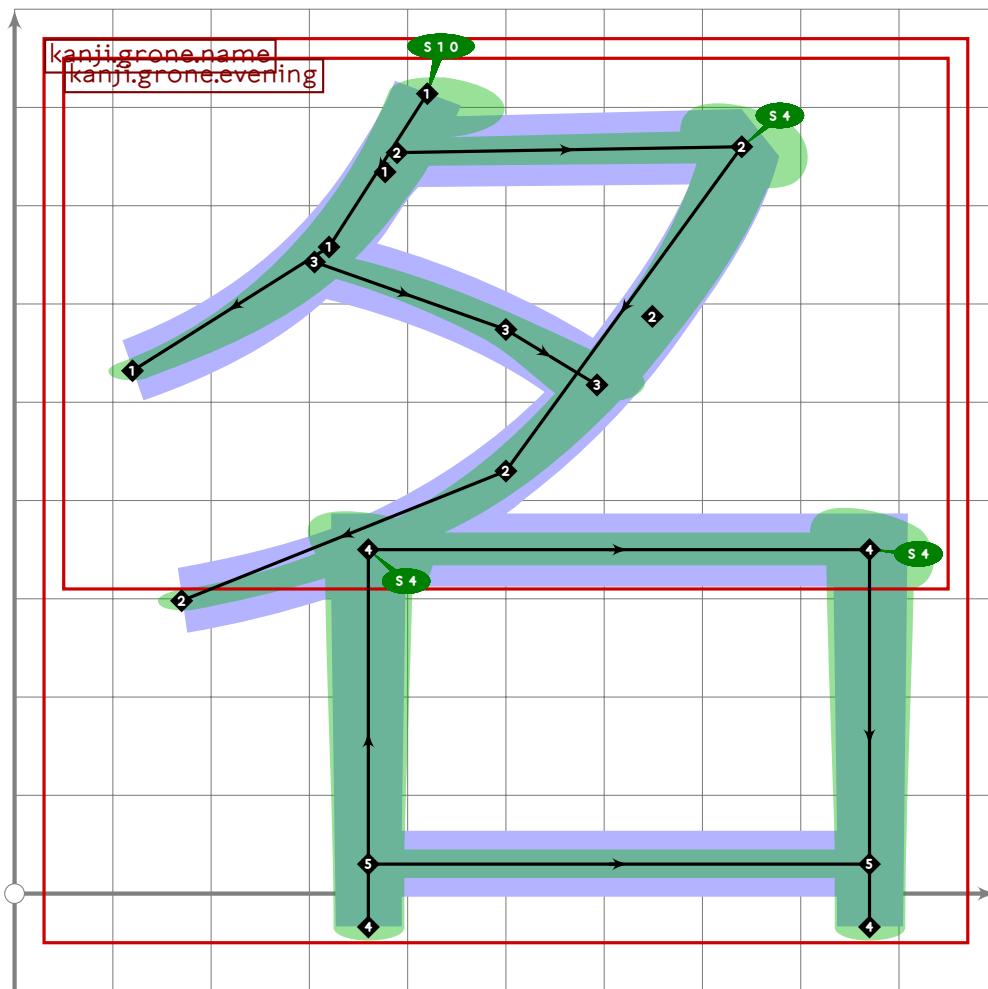
```

471
472 vardef kanji.grone.mouth =
473   push_pbox_toexpand("kanji.grone.mouth");
474   build_kanji.box((200,700),(800,100));
475   expand_pbox;
476 enddef;

```

U+540D
tsuku.uni540D

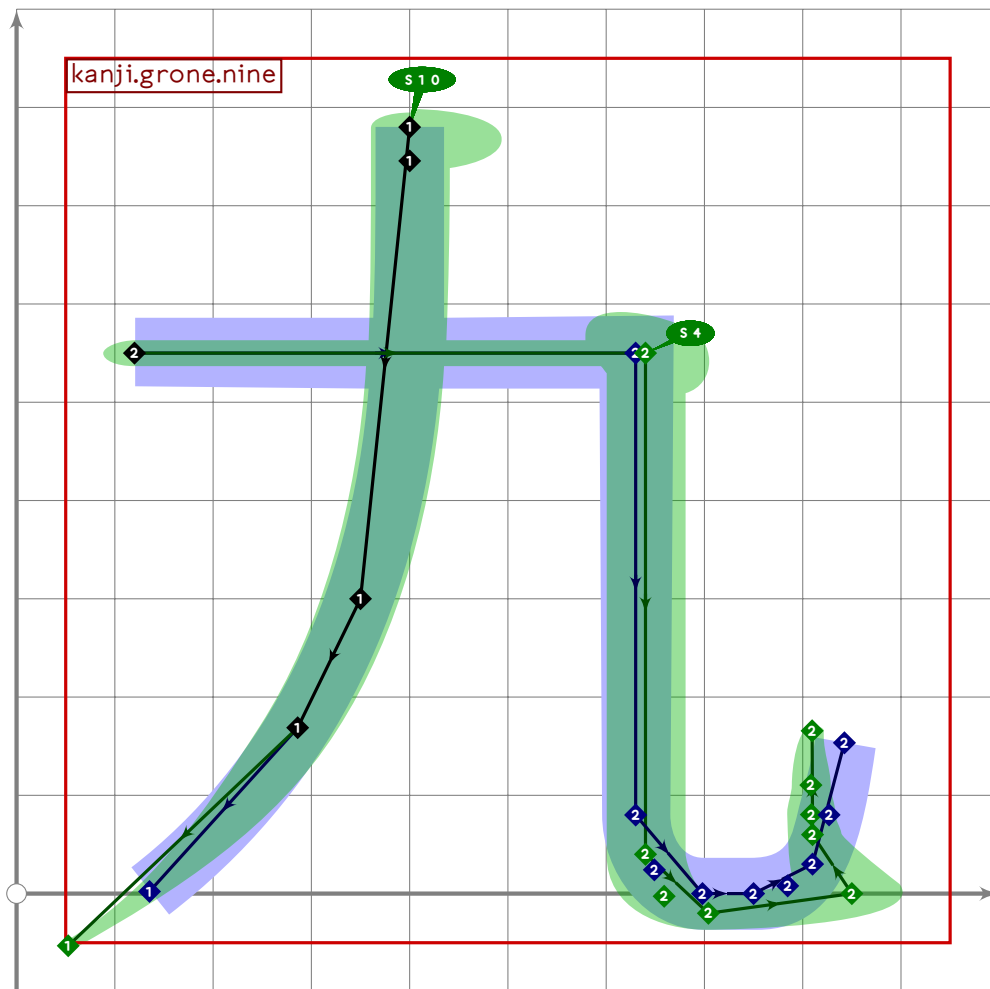
ONE



```

477
478 vardef kanji.grone.name =
479   push_pbox__toexpand("kanji.grone.name");
480   tsu_xform(identity shifted (-50,-850) yscaled 0.6 shifted (50,850))
481     (kanji.grone.evening);
482   set_bosize(-2,102);
483   set_bosize(-1,102);
484   set_bosize(0,102);
485   build_kanji.box((360,350),(870,30));
486   expand_pbox;
487 enddef;

```

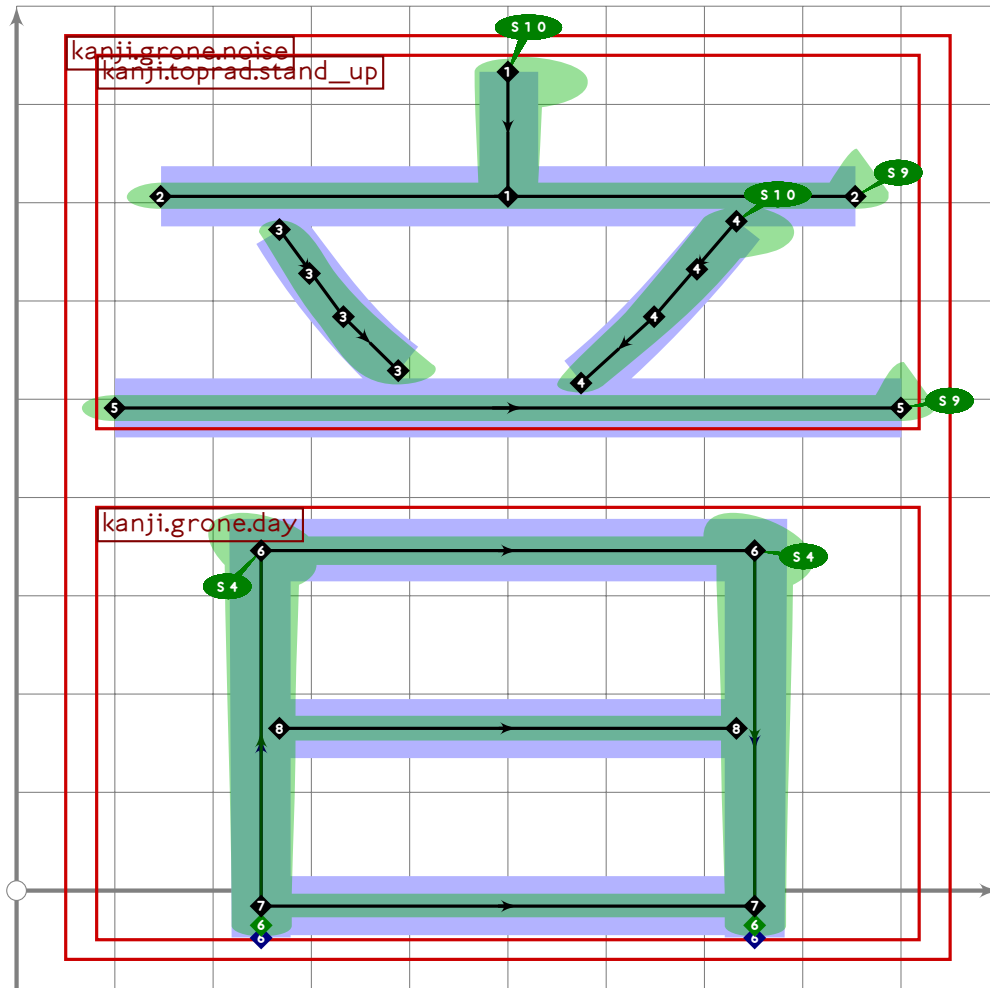


```

488
489 vardef kanji.grone.nine =
490   push_pbox_toexpand("kanji.grone.nine");
491   push_stroke((400,780){down}..(350,300)..(40,-60),
492     (1.6,1.6)-(1.6,1.6)-(1.6,1.6)-(0.8,0.7));
493   replace_strokep(0)(insert_nodes(olddp)(1.3));
494   set_boserif(0,0,10);
495   push_stroke((120,550)-(630+10*mincho,550),
496     (1.4,1.4)-(1.6,1.6));
497   build_kanji.add_ltail(0);
498   set_botip(0,1,1);
499   set_boserif(0,1,4);
500   expand_pbox;
501 enddef;

```

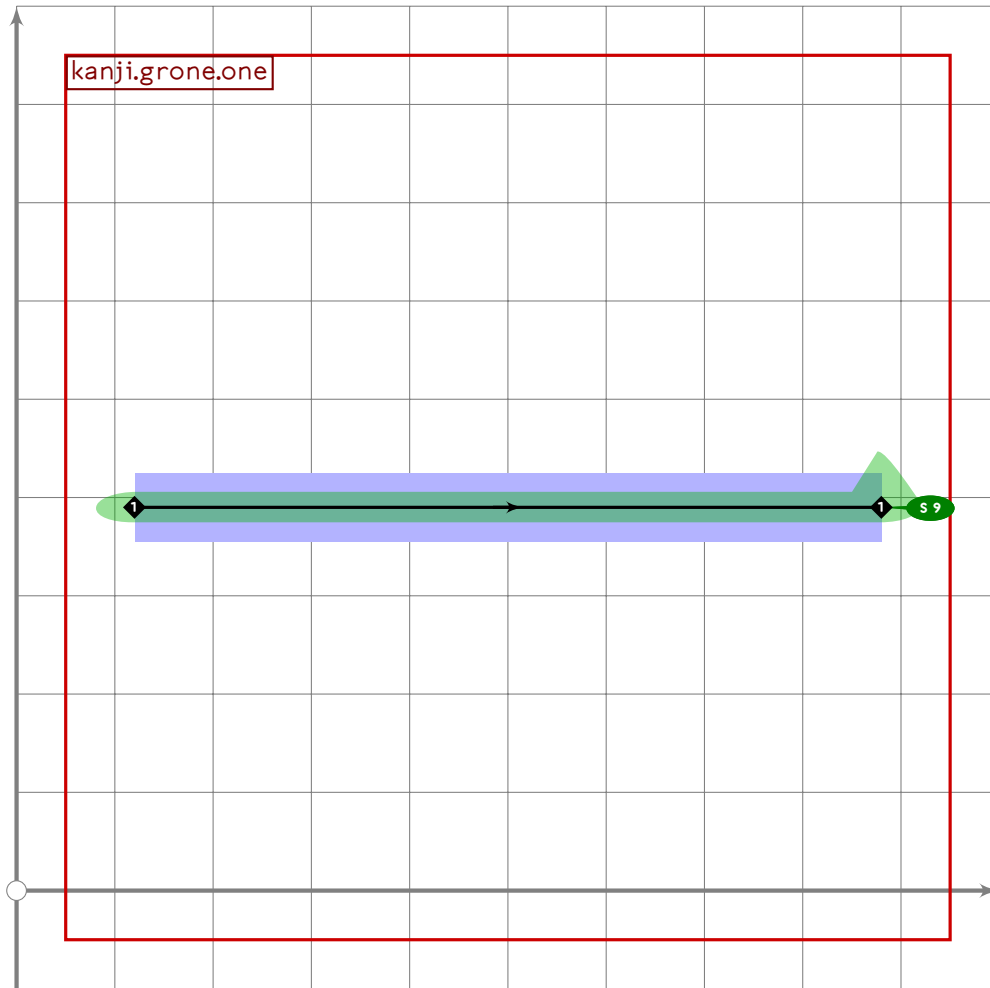
ONE



```

502
503 vardef kanji.grone.noise =
504   push_pbox_toexpand("kanji.grone.noise");
505   build_kanji.level(build_kanji.sscale(xscaled 0.93)(
506     build_kanji.tb(430,-80)
507       (kanji.toprad.stand_up)
508       (kanji.grone.day)));
509   expand_pbox;
510 enddef;

```

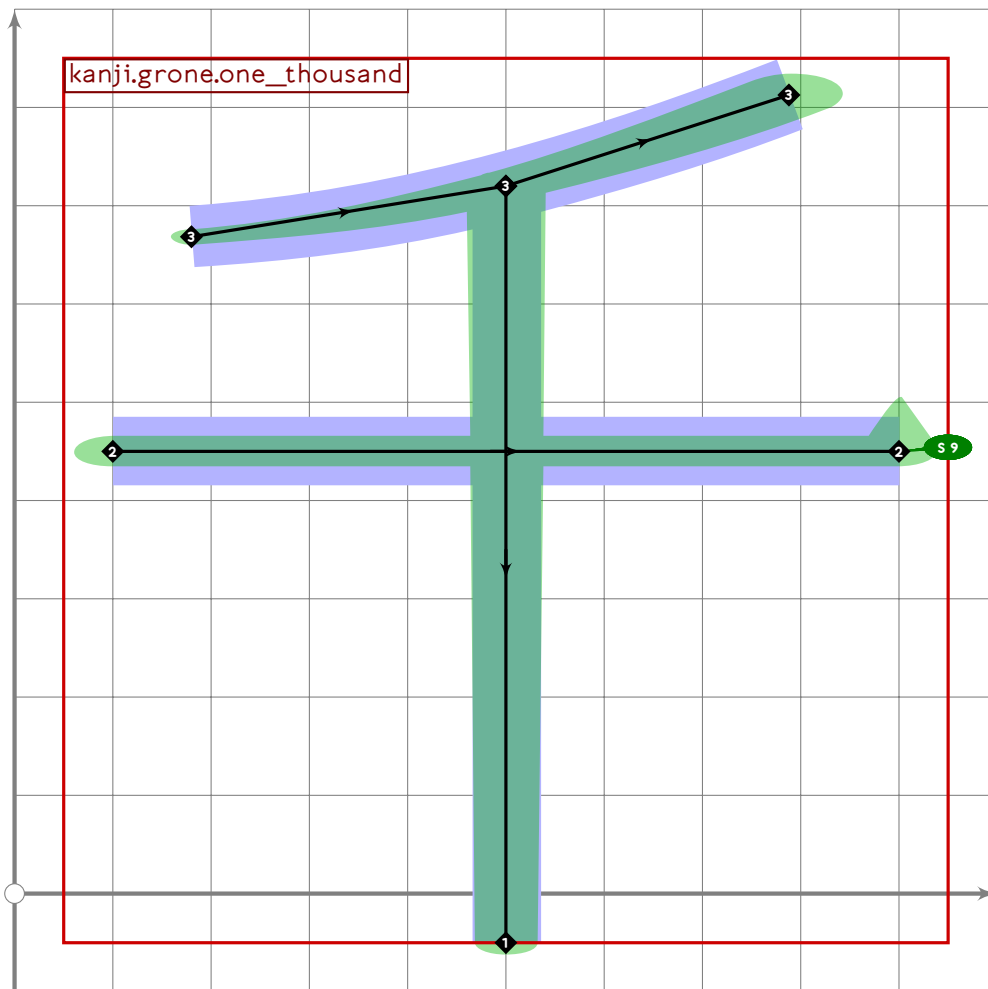


```

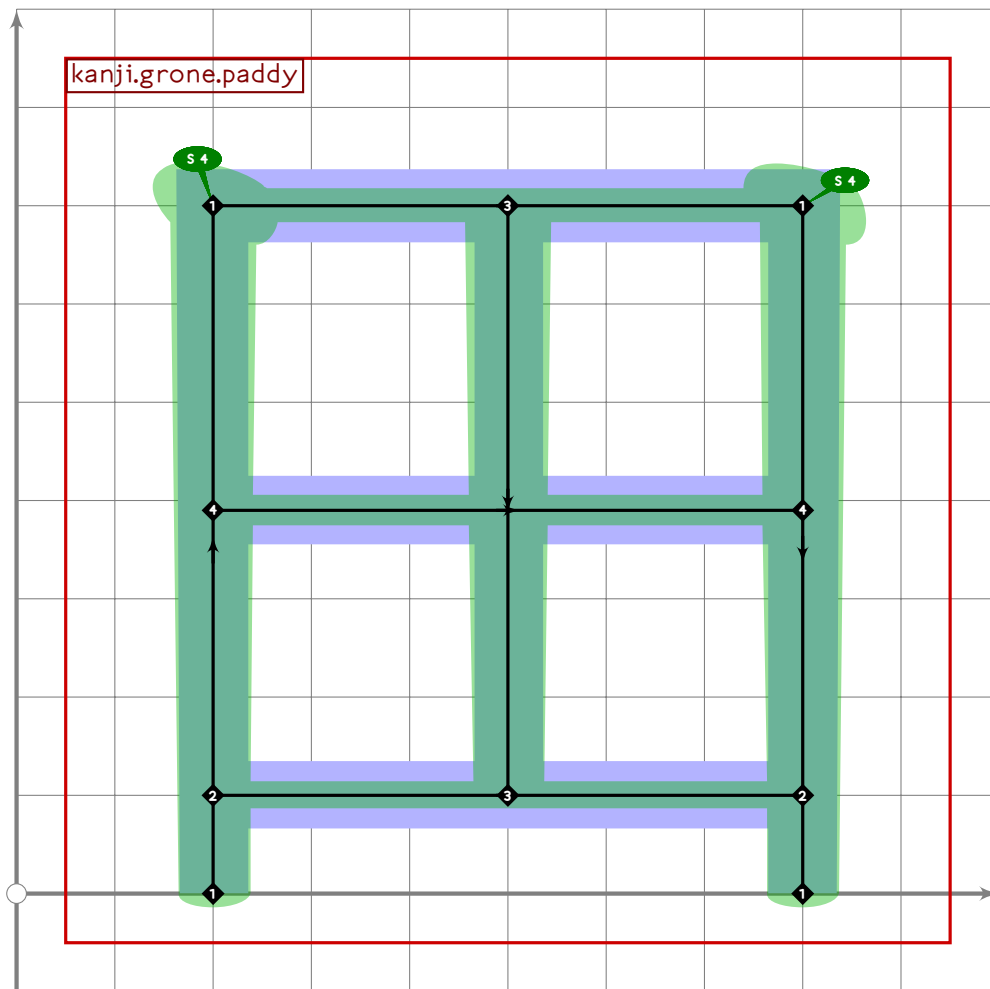
511
512 vardef kanji.grone.one =
513   push_pbox_toexpand("kanji.grone.one");
514   push_stroke((120,390)-(880,390),
515     (1.6,1.6)-(1.6,1.6));
516   set_boserif(0,1,9);
517   expand_pbox;
518 enddef;

```

ONE



```
519
520 vardef kanji.grone.one_thousand =
521   push_pbox_toexpand("kanji.grone.one_thousand");
522   build_kanji.add_beret(
523     push_stroke((500,720)–(500,50),(1.6,1.6)–(1.4,1.4));
524     push_stroke((100,450)–(900,450),(1.6,1.6)–(1.6,1.6));
525     set_boserif(0,19);
526   );
527   expand_pbox;
528 enddef;
```

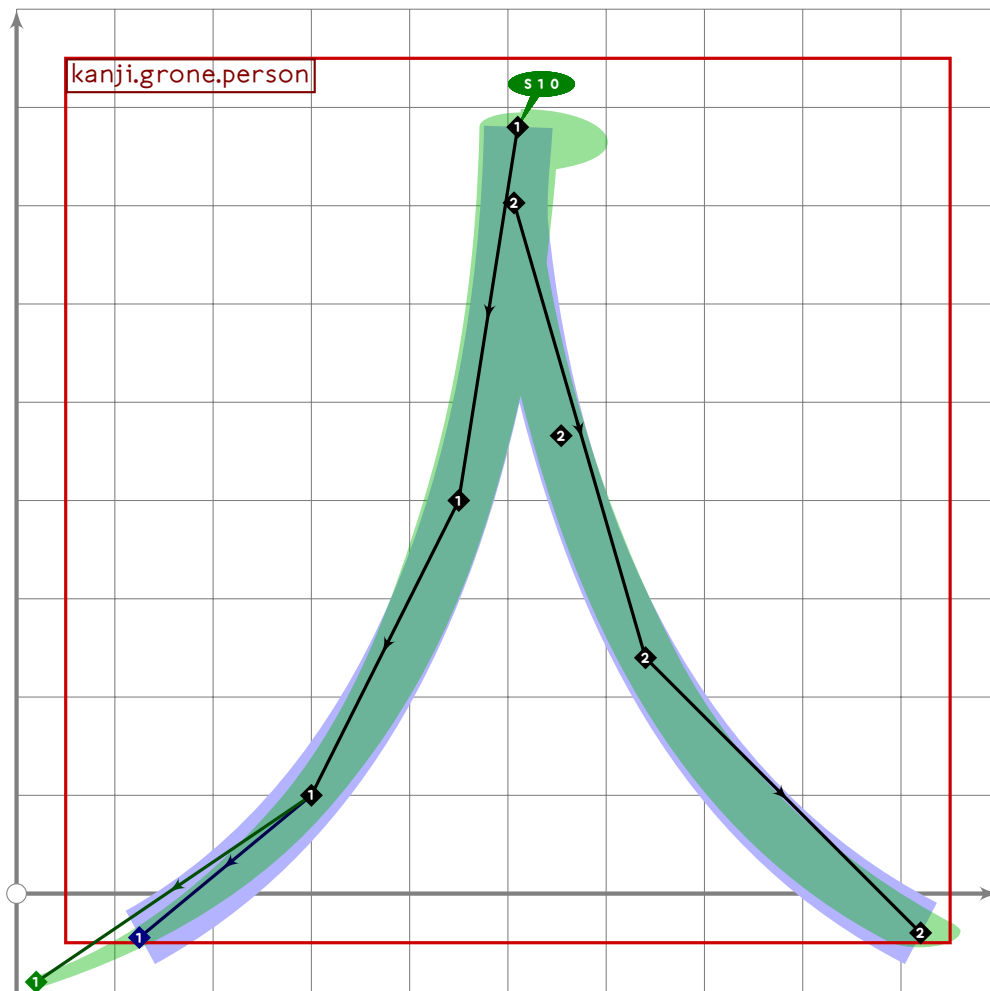


```

529
530 vardef kanji.grone.paddy =
531   push_pbox_toexpand("KANJI.GRONE.PADDY");
532   build_kanji.box((200,700),(800,100));
533   push_stroke((500,700)-(500,100),
534     (1.7,1.7)-(1.5,1.5));
535   push_stroke((200,390)-(800,390),
536     (1.6,1.6)-(1.6,1.6));
537   expand_pbox;
538 enddef;

```

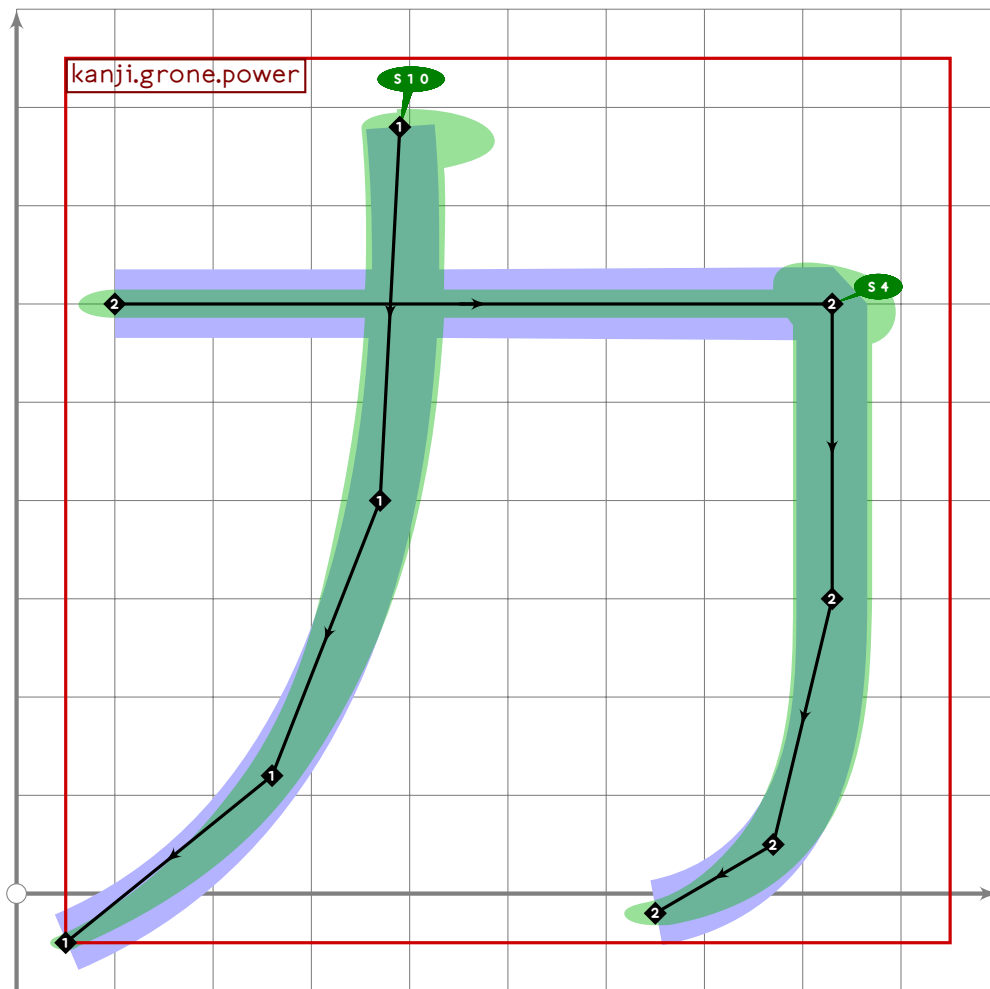
ONE



```

539
540 vardef kanji.grone.person =
541   push_pbox_toexpand("kanji.grone.person");
542   push_stroke((510,780)..(450,400)..(300,100)..(20,-90),
543     (1.6,1.6)-(1.5,1.5)-(1.3,1.3)-(0.85,0.85));
544   set_boserif(0,0,10);
545   push_stroke(
546     (point 0.2 of get_strokep(0))..tension 1.2..(640,240)..(920,-40),
547     (1.2,1.2)-(1.4,1.4)-(1.6,1.6));
548   expand_pbox;
549 enddef;

```

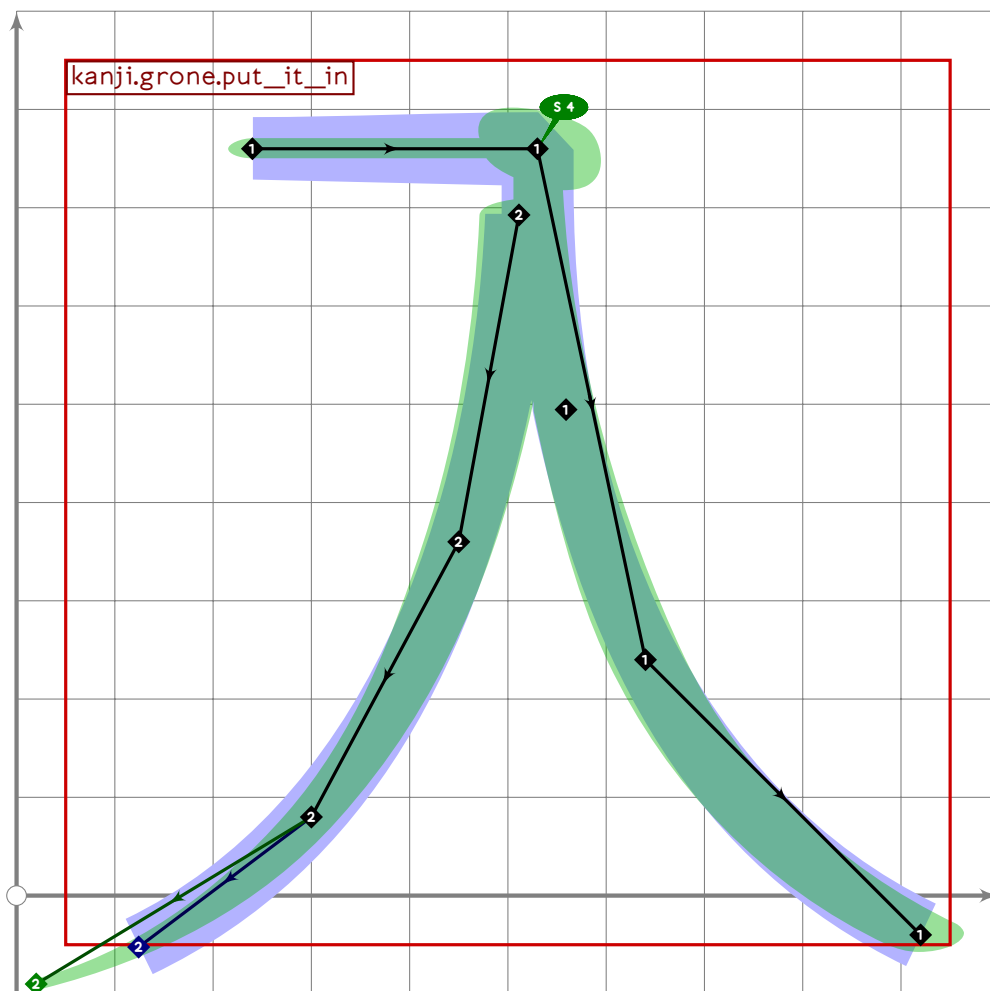



```

550
551 vardef kanji.grone.power =
552   push_pbox__toexpand("kanji.grone.power");
553   push_stroke((390,780)..(370,400)..(260,120)..(50,-50),
554     (1.6,1.6)-(1.6,1.6)-(1.3,1.3)-(1,1));
555   set_boserif(0,0,10);
556   push_stroke(
557     (100,600)-(830,600)..tension 1.1..(830,300)..(770,50)..(650,-20),
558     (1.5,1.5)-(1.6,1.6)-(1.6,1.6)-(1.6,1.6)-(1.4,1.4));
559   set_botip(0,1,0);
560   set_boserif(0,1,4);
561   expand_pbox;
562 enddef;

```

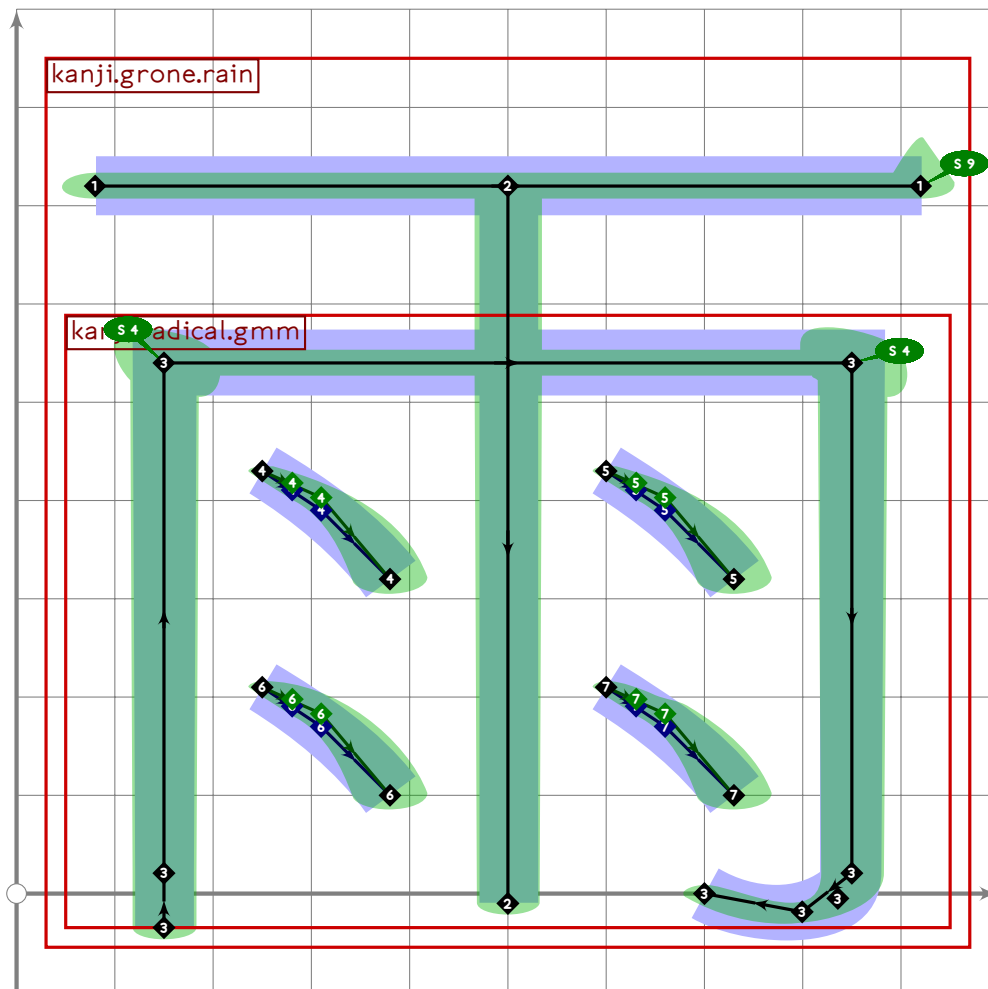
ONE



```

563
564 vardef kanji.grone.put_it_in =
565   push_pbox_toexpand("kanji.grone.put_it_in");
566   push_stroke((240,760)-(530,760)..tension 1.2..(640,240)..(920,-40),
567     (1.2,1.2)-(1.2,1.2)-(1.6,1.6)-(1.7,1.7));
568   set_botip(0,1,0);
569   set_boserif(0,1,4);
570   push_stroke(
571     ((-20,0)+point 1.14 of get_stroke(0))..(450,360)..(300,80)..(20,-90),
572     (1.6,1.6)-(1.5,1.5)-(1.3,1.3)-(0.85,0.85));
573   expand_pbox;
574 enddef;

```

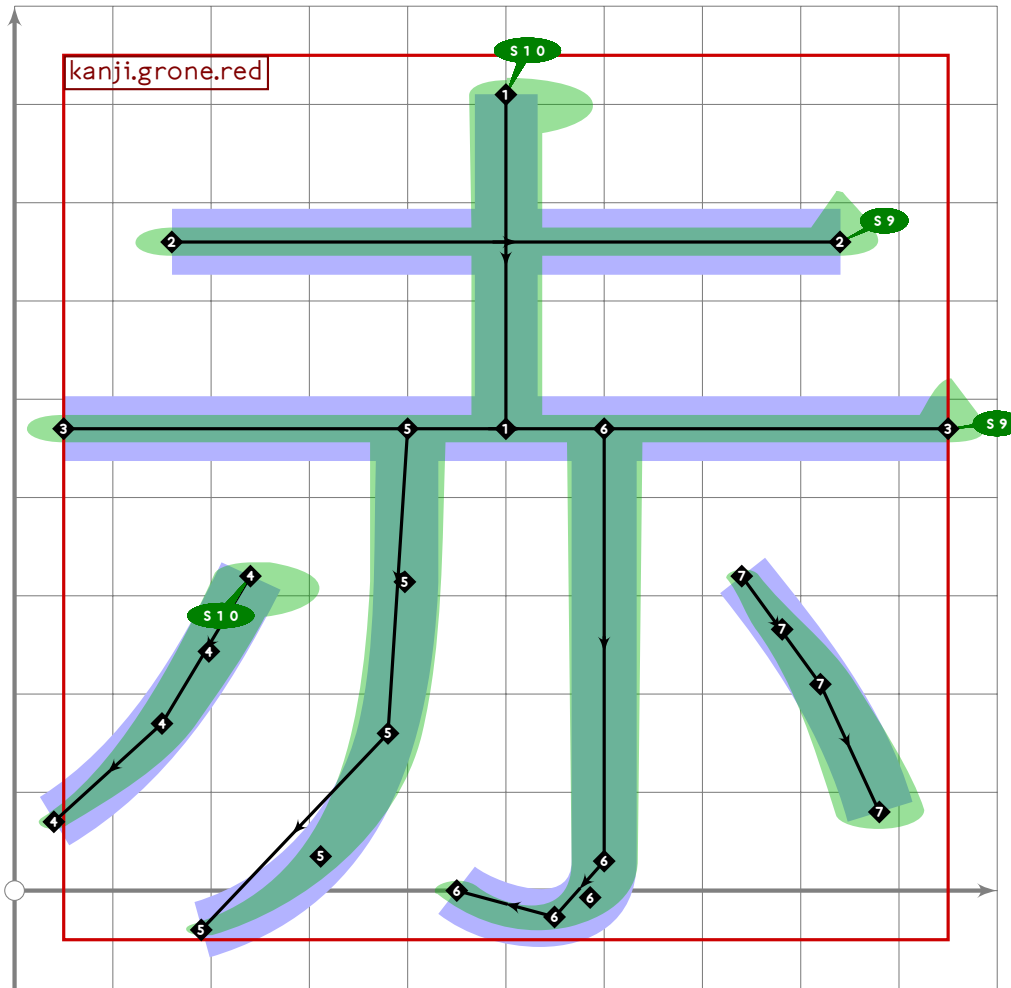


```

575
576 vardef kanji.grone.rain =
577   push_pbox_toexpand("kanji.grone.rain");
578   build_kanji.level(
579     push_stroke((80,720)-(920,720),(1.6,1.6)-(1.6,1.6));
580     set_boserif(0,19);
581     push_stroke((500,720)-(500,-10),(1.6,1.6)-(1.5,1.5));
582     tsu_xform(identity yscaled (540/780))(kanji.radical.gmm);
583     push_stroke((250,430)..tension 1.2..(310,390+13*mincho)..(380,320),
584       (1,1)-(1.4,1.4)-(1.7,1.7));
585     set_bosize(0,80);
586     push_stroke(get_strokep(0) shifted (350,0),get_strokeq(0));
587     set_bosize(0,80);
588     push_stroke(get_strokep(-1) shifted (0,-220),get_strokeq(-1));
589     set_bosize(0,80);
590     push_stroke(get_strokep(-2) shifted (350,-220),get_strokeq(-2));
591     set_bosize(0,80);
592   );
593   expand_pbox;
594 enddef;

```

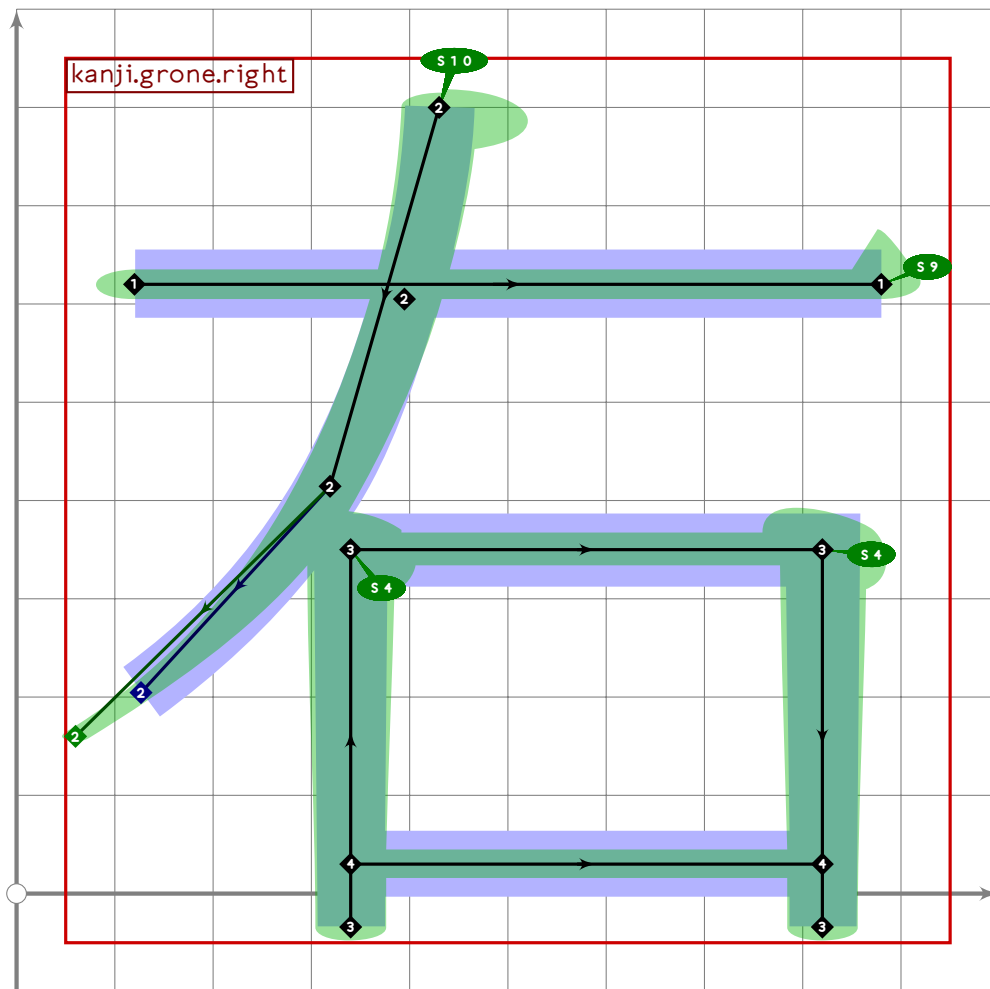
ONE



```

595
596 vardef kanji.grone.red =
597   push_pbox_toexpand("kanji.grone.red");
598   push_stroke((500,810)-(500,470),(1.6,1.6)-(1.5,1.5));
599   set_boserif(0,0,10);
600   push_stroke((160,660)-(840,660),(1.6,1.6)-(1.6,1.6));
601   set_boserif(0,1,9);
602   push_stroke((50,470)-(950,470),(1.6,1.6)-(1.6,1.6));
603   set_boserif(0,1,9);
604   push_stroke((240,320)..tension 1.3..(150,170)..(40,70),
605     (1.6,1.6)-(1.5,1.5)-(1,1));
606   set_boserif(0,0,10);
607   push_stroke((400,470){down}..tension 1.3..(380,160)..(190,-40),
608     (1.6,1.6)-(1.5,1.5)-(1,1));
609   push_stroke((600,470),(1.6,1.6));
610   build_kanji.add_jtail(0);
611   push_stroke((740,320)..tension 1.3..(820,210)..(880,80),
612     (1,1)-(1.5,1.5)-(1.8,1.8));
613   for i=-6 upto 0: set_bosize(i,94); endfor;
614   expand_pbox;
615 enddef;

```

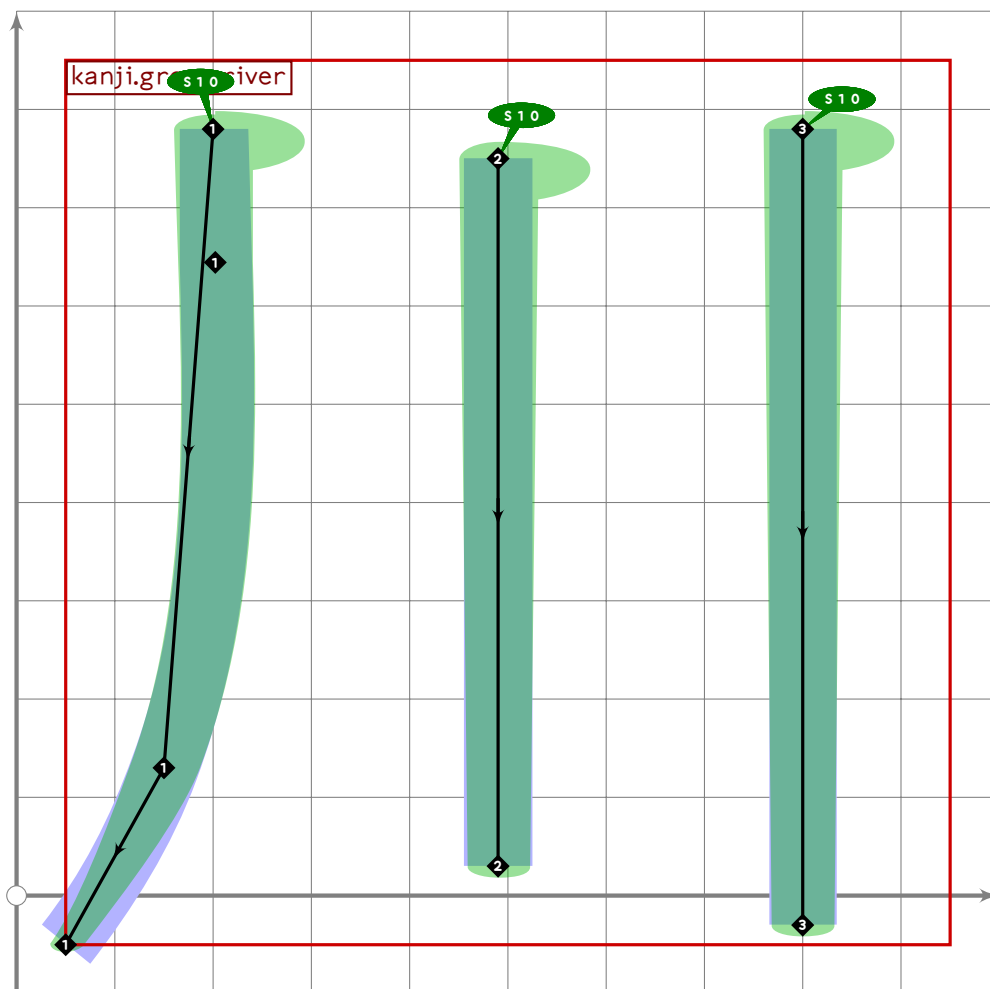


```

616
617 vardef kanji.grone.right =
618   push_pbox_toexpand("kanji.grone.right");
619   build_kanji.lean_to((430,160));
620   build_kanji.box((340,350),(820,30));
621   expand_pbox;
622 enddef;

```

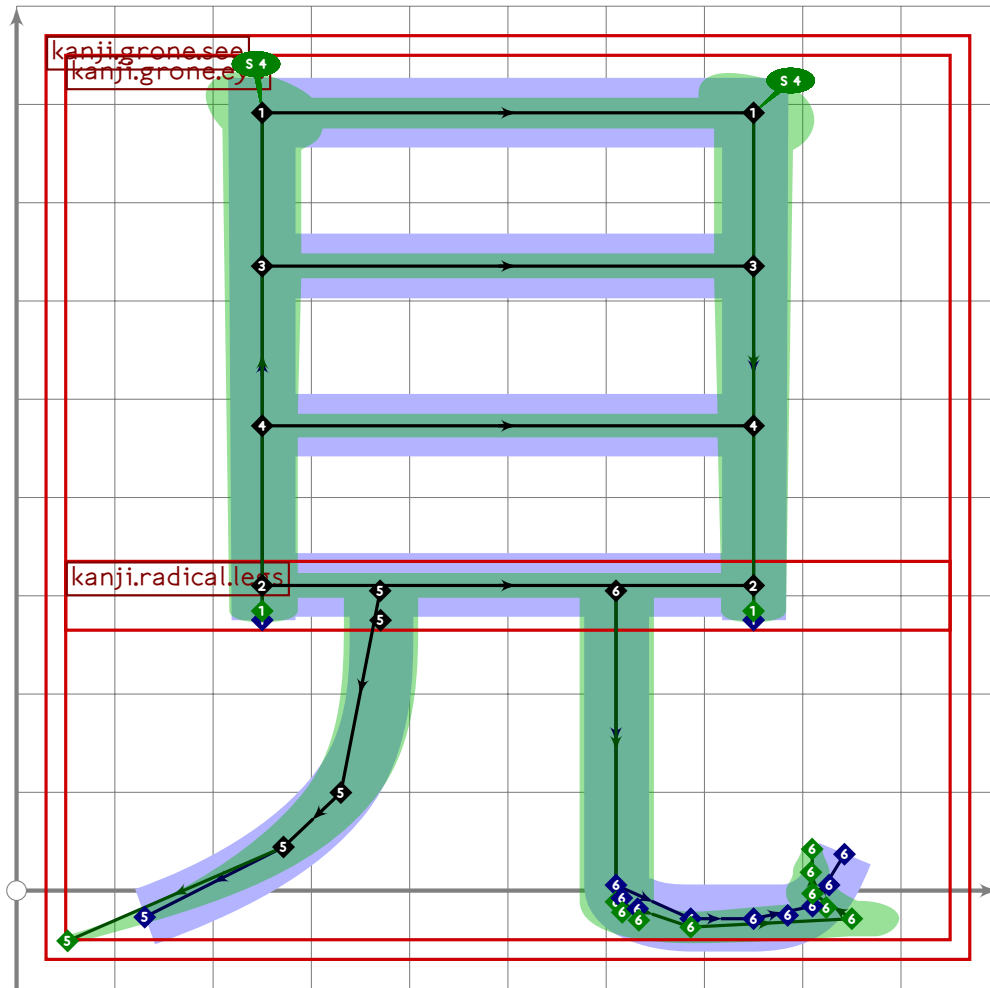
ONE



```

623
624 vardef kanji.grone.river =
625   push_pbox_toexpand("kanji.grone.river");
626   push_stroke((200,780){down}..(150,130)..(50,-50),
627     (1.6,1.6)-(1.5,1.5)-(1,1));
628   set_boserif(0,0,10);
629   push_stroke((490,750)-(490,30),
630     (1.6,1.6)-(1.4,1.4));
631   set_boserif(0,0,10);
632   push_stroke((800,780)-(800,-30),
633     (1.6,1.6)-(1.4,1.4));
634   set_boserif(0,0,10);
635   expand_pbox;
636 enddef;

```

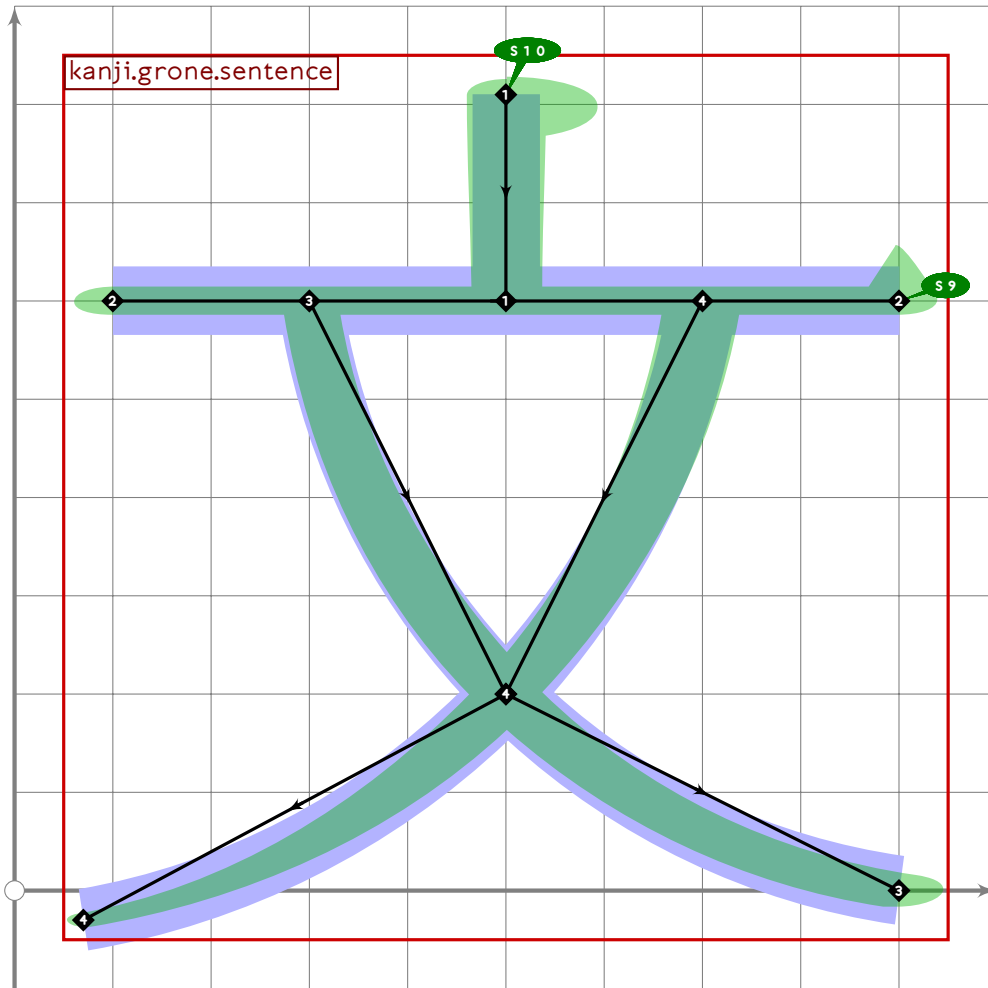


```

637
638 vardef kanji.grone.see =
639   push_pbox_toexpand("kanji.grone.see");
640   build_kanji.level(build_kanji.tb(300,70)
641     (kanji.grone.eye)
642     (kanji.radical.legs));
643   expand_pbox;
644 enddef;

```

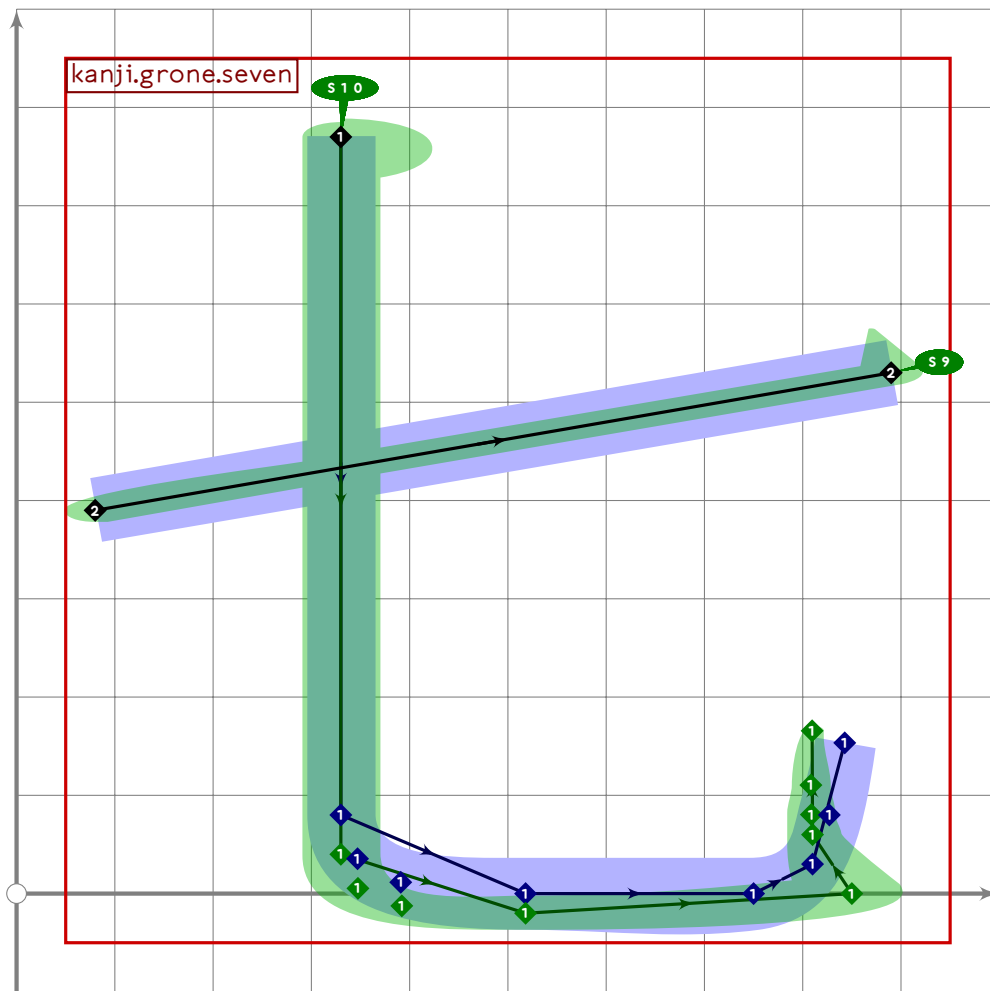
ONE



```

645
646 vardef kanji.grone.sentence =
647   push_pbox__toexpand("KANJI.GRONE.SENTENCE");
648   push_stroke((500,810)-(500,600),
649     (1.6,1.6)-(1.5,1.5));
650   set_boserif(0,0,10);
651   push_stroke((100,600)-(900,600),
652     (1.6,1.6)-(1.6,1.6));
653   set_boserif(0,1,9);
654   push_stroke((300,600)..(500,200)..(900,0),
655     (1.3,1.3)-(1.5,1.5)-(1.7,1.7));
656   push_stroke((700,600)..(500,200)..(70,-30),
657     (1.6,1.6)-(1.5,1.5)-(1,1));
658   expand_pbox;
659 enddef;

```

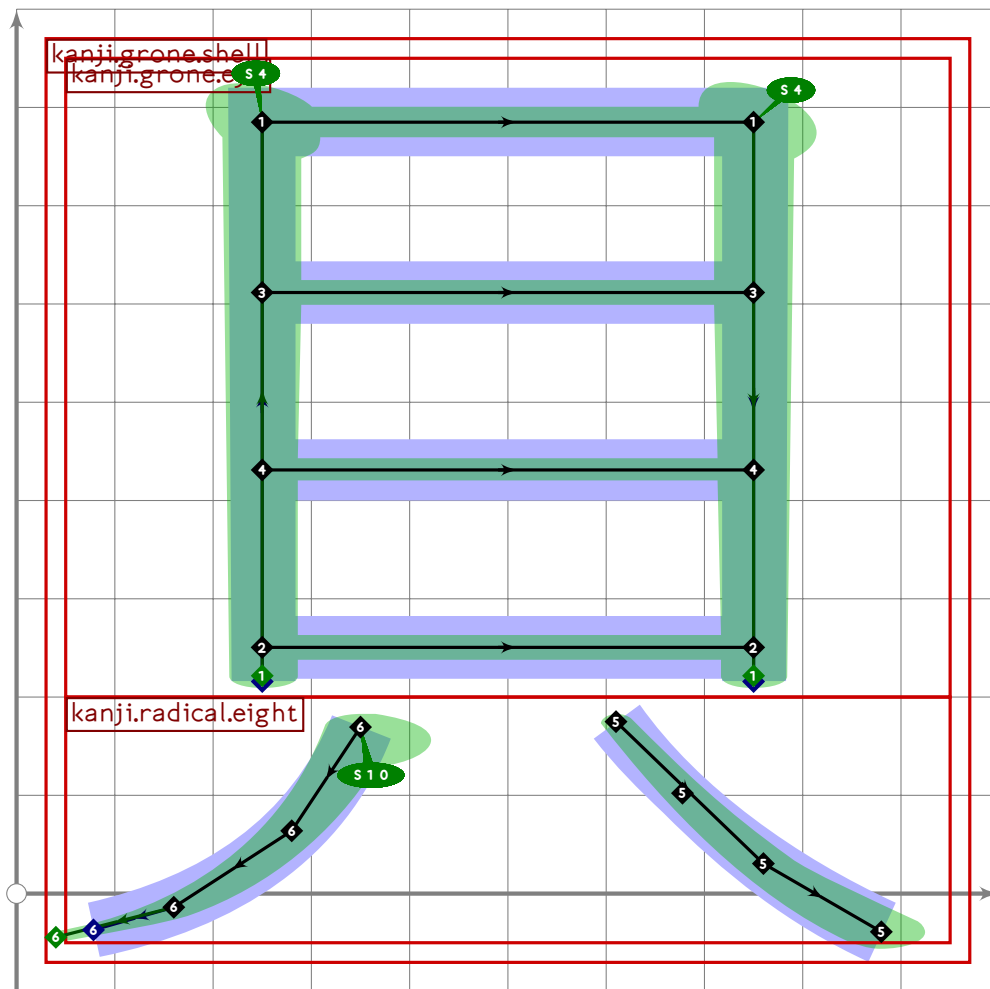
```

660
661 vardef kanji.grone.seven =
662   push_pbox_toexpand("kanji.grone.seven");
663   push_stroke((330,770),
664     (1,6,1,6));
665   build_kanji.add_ltail(0);
666   set_boserif(0,0,10);
667   push_stroke((80,390)-(890,530),
668     (1,4,1,4)-(1,4,1,4));
669   set_boserif(0,1,9);
670   expand_pbox;
671 enddef;

```

U+8C9D
tsuku.uni8C9D

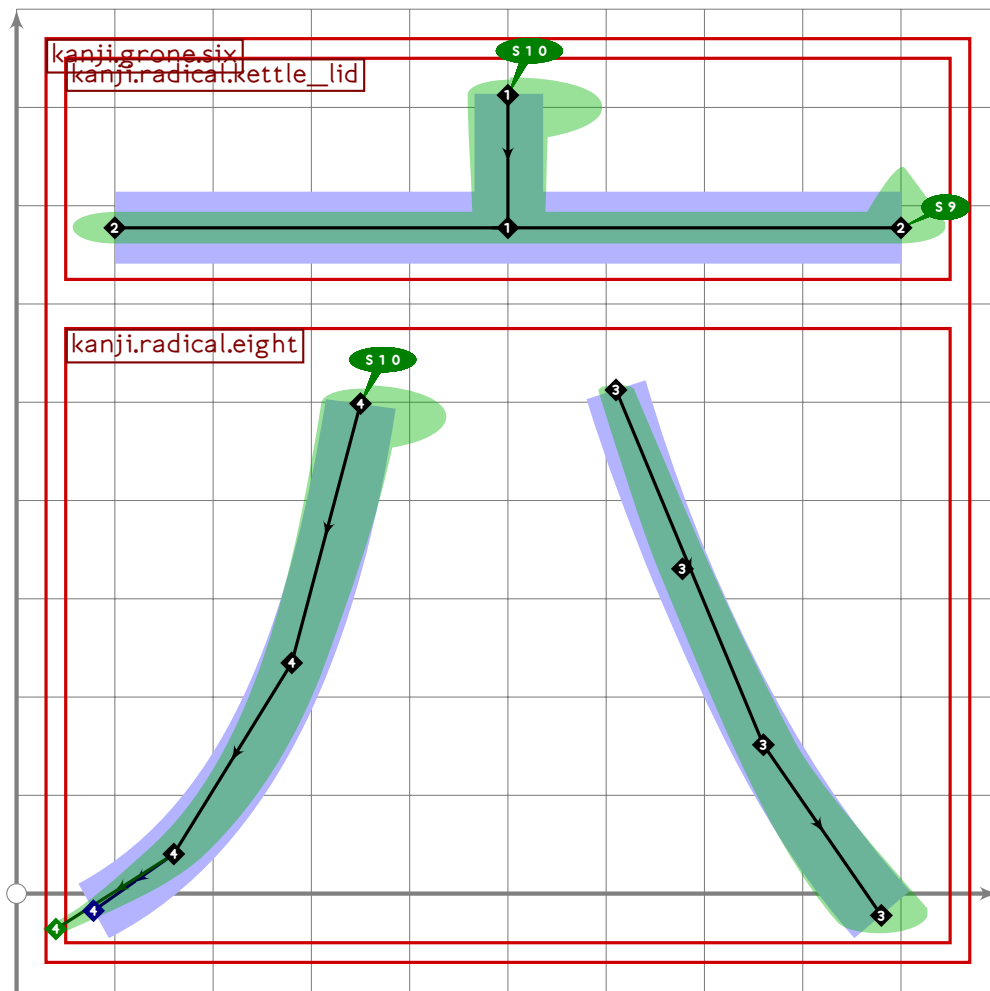
ONE



```

672
673 vardef kanji.grone.shell =
674   push_pbox_toexpand("kanji.grone.shell");
675   build_kanji.level(build_kanji.tb(200,0)
676     (kanji.grone.ey)
677     (kanji.radical.eight));
678   expand_pbox;
679 enddef;

```

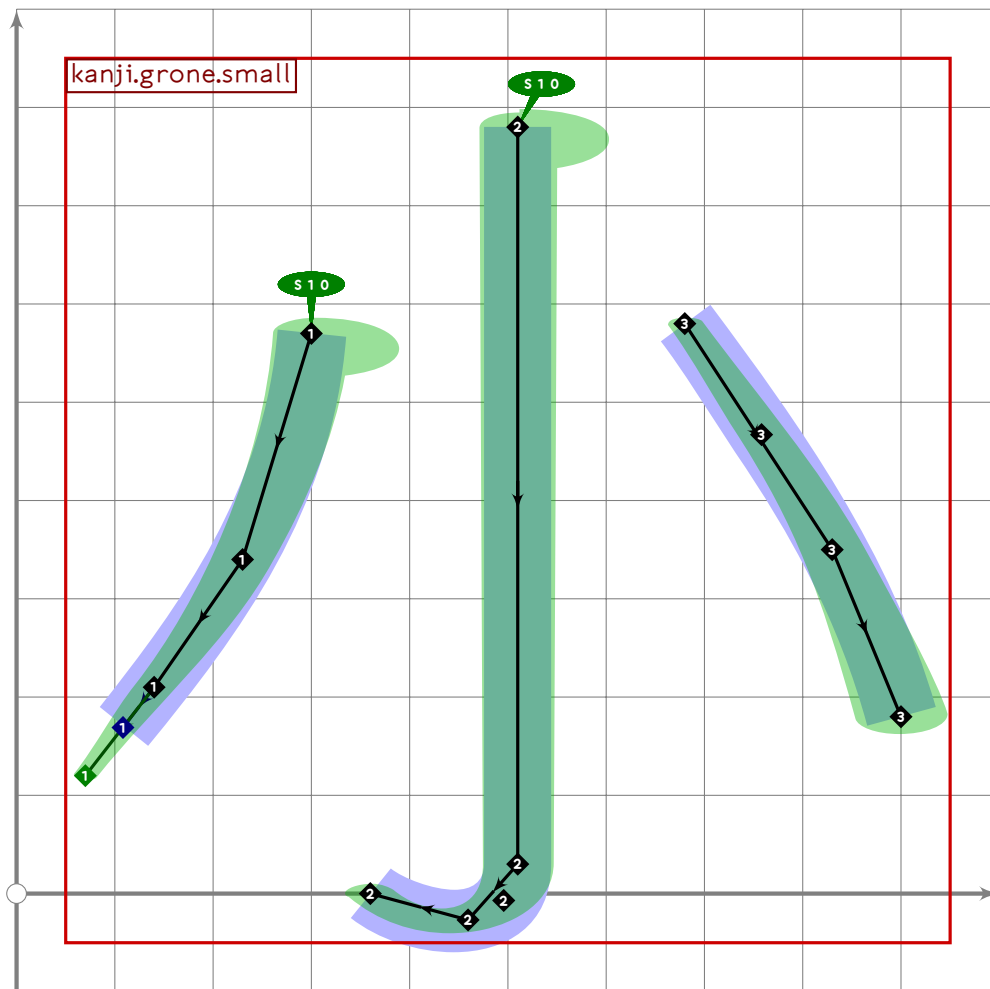


```

680
681 vardef kanji.grone.six =
682   push_pbox_toexpand("kanji.grone.six");
683   build_kanji.level(build_kanji.tb(600,-50)
684     (kanji.radical.kettle_lid)
685     (kanji.radical.eight));
686   expand_pbox;
687 enddef;

```

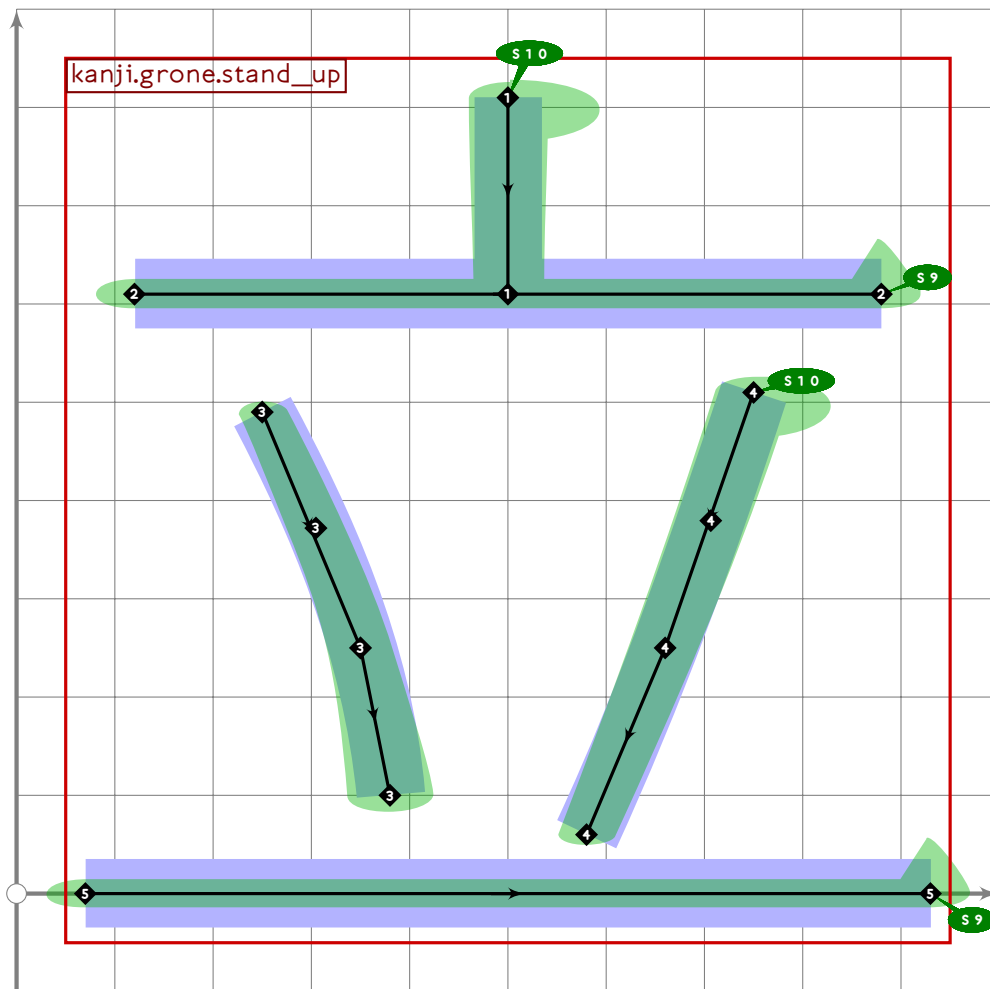
ONE



```

688
689 vardef kanji.grone.small =
690   push_pbox__toexpand("kanji.grone.small");
691   push_stroke((300,570)..(230,340)..(140,210)..(70,120),
692     (1.6,1.6)-(1.4,1.4)-(1.1,1.1)-(0.88,0.88));
693   set_boserif(0,0,10);
694   push_stroke((510,780),
695     (1.6,1.6));
696   set_boserif(0,0,10);
697   build_kanji.add_jtail(0);
698   push_stroke((680,580)..tension 1.3..(830,350)..(900,180),
699     (1,1)-(1.4,1.4)-(1.8,1.8));
700   expand_pbox;
701 enddef;

```

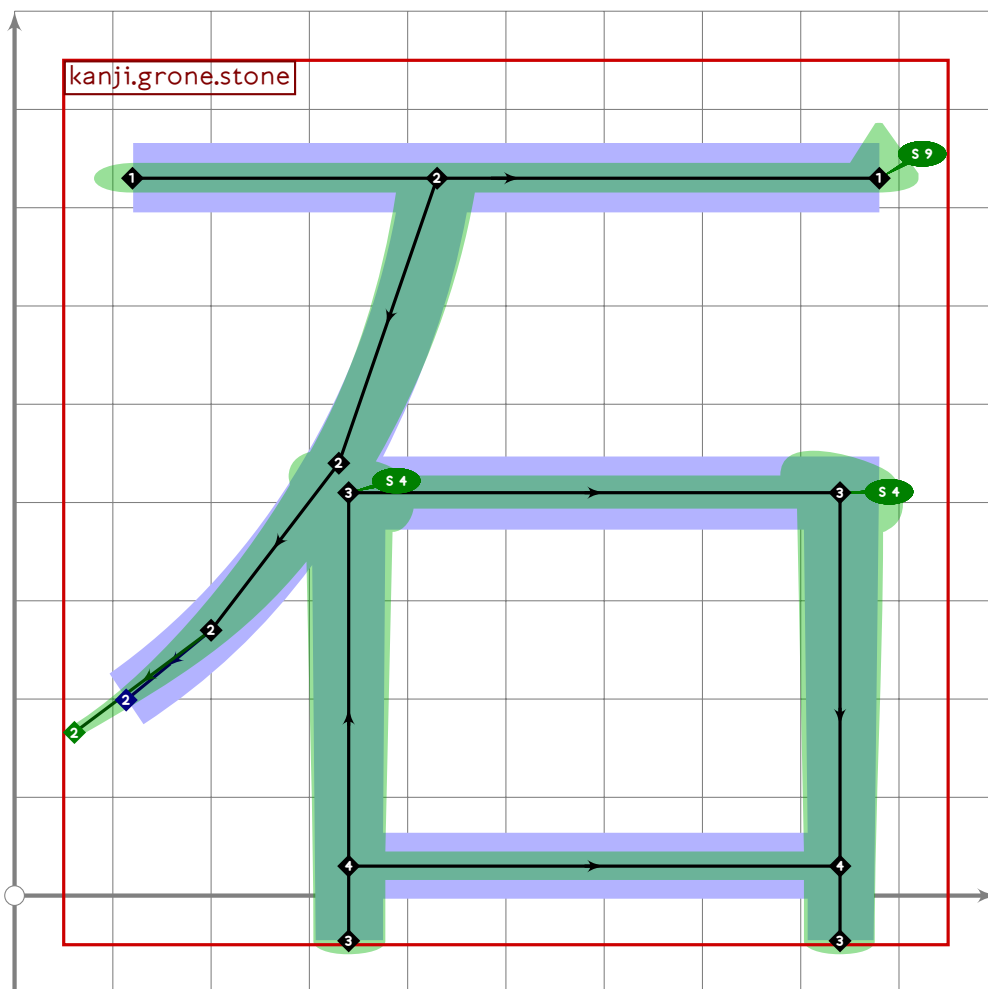


```

702
703 vardef kanji.grone.stand_up =
704   push_pbox_toexpand("kanji.grone.stand_up");
705   push_stroke((500,810)–(500,610),
706     (1.6,1.6)–(1.5,1.5));
707   set_boserif(0,0,10);
708   push_stroke((120,610)–(880,610),
709     (1.6,1.6)–(1.6,1.6));
710   set_boserif(0,1,9);
711   push_stroke((250,490)..tension 1.2..(350,250)..(380,100),
712     (1.2,1.2)–(1.4,1.4)–(1.7,1.7));
713   push_stroke((750,510)..tension 1.2..(660,250)..(580,60),
714     (1.6,1.6)–(1.5,1.5)–(1.3,1.3));
715   set_boserif(0,0,10);
716   push_stroke((70,0)–(930,0),
717     (1.6,1.6)–(1.6,1.6));
718   set_boserif(0,1,9);
719   expand_pbox;
720 enddef;

```

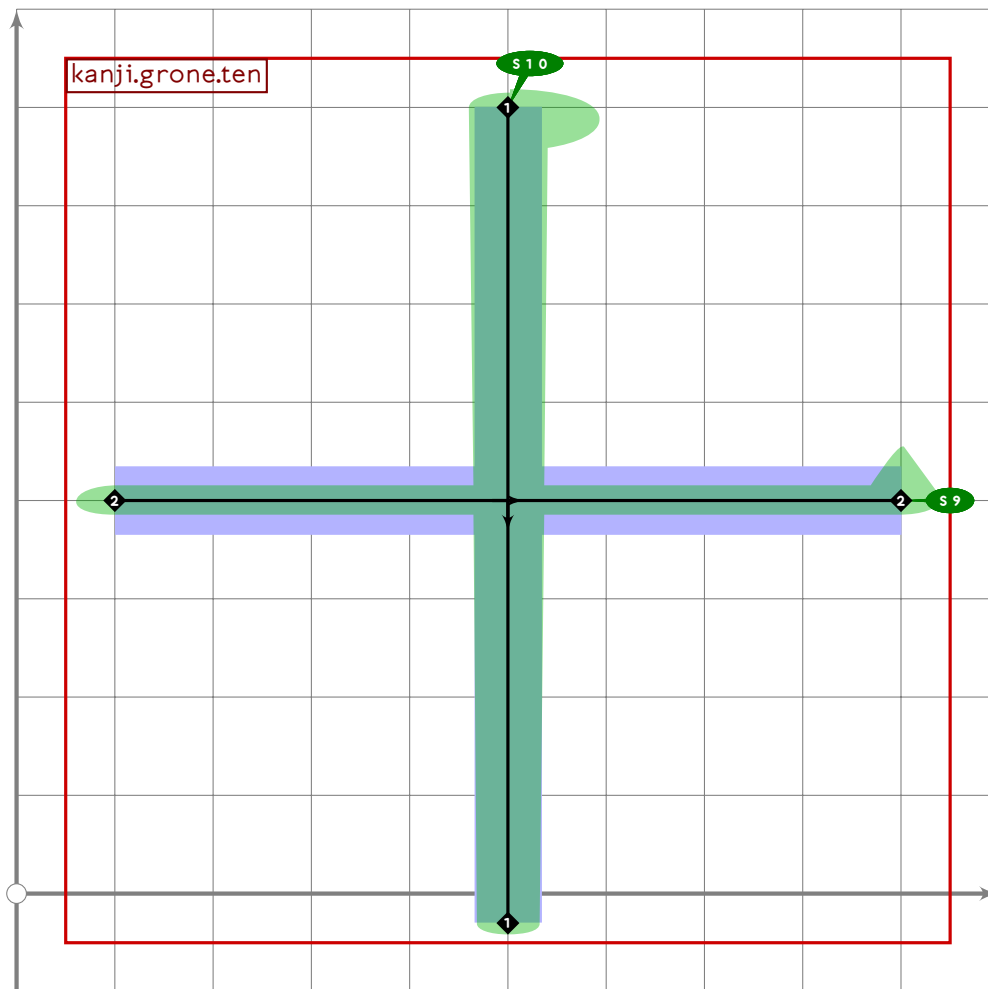
ONE



```

721
722 vardef kanji.grone.stone =
723   push_pbox_toexpand("kanji.grone.stone");
724   push_stroke((120,730)..(880,730),(1.6,1.6)–(1.6,1.6));
725   set_boserif(0,19);
726   push_stroke((430,730)..(330,440)..(200,270)..(50,160),
727     (1.6,1.6)–(1.5,1.5)–(1.3,1.3)–(0.8,0.8));
728   build_kanji.box((340,410),(840,30));
729   expand_pbox;
730 enddef;

```

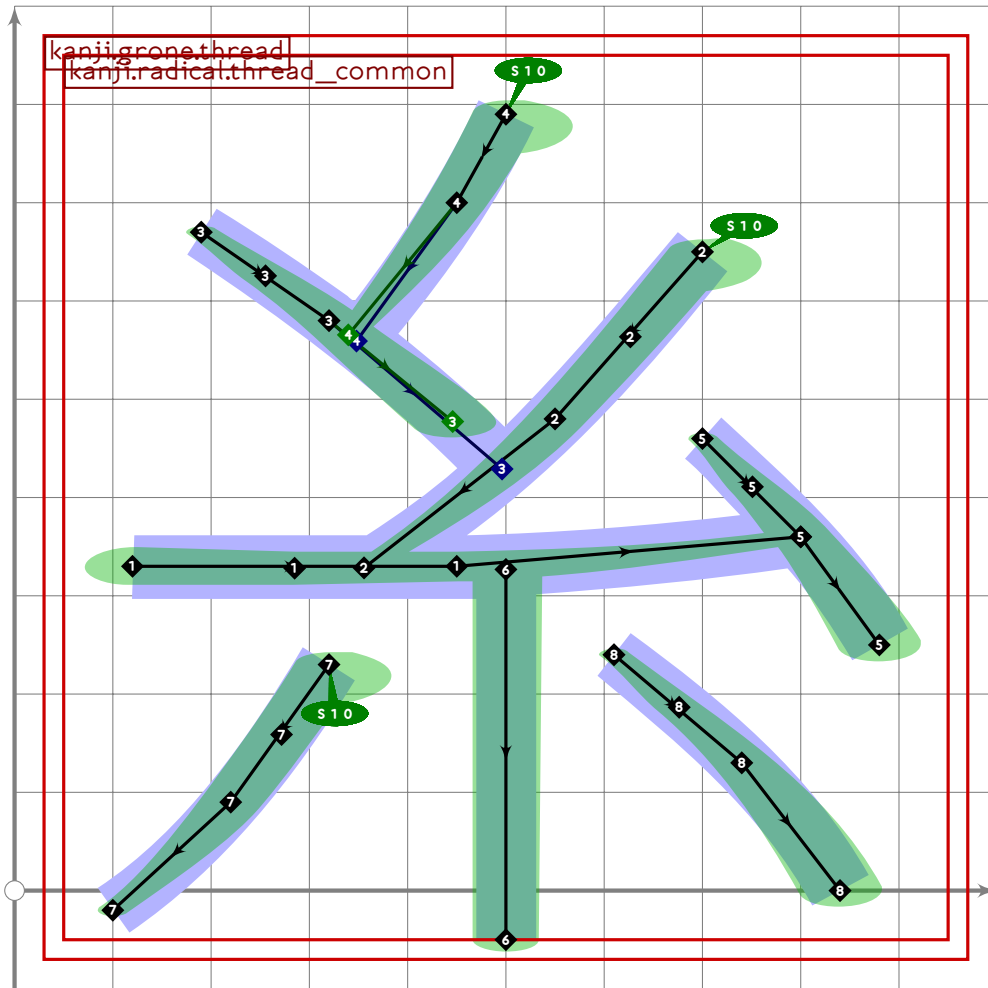


```

731
732 vardef kanji.grone.ten =
733   push_pbox_toexpand("kanji.grone.ten");
734   push_stroke((500,800)-(500,-30),(1.6,1.6)-(1.4,1.4));
735   set_boserif(0,0,10);
736   push_stroke((100,400)-(900,400),(1.6,1.6)-(1.6,1.6));
737   set_boserif(0,1,9);
738   expand_pbox;
739 enddef;

```

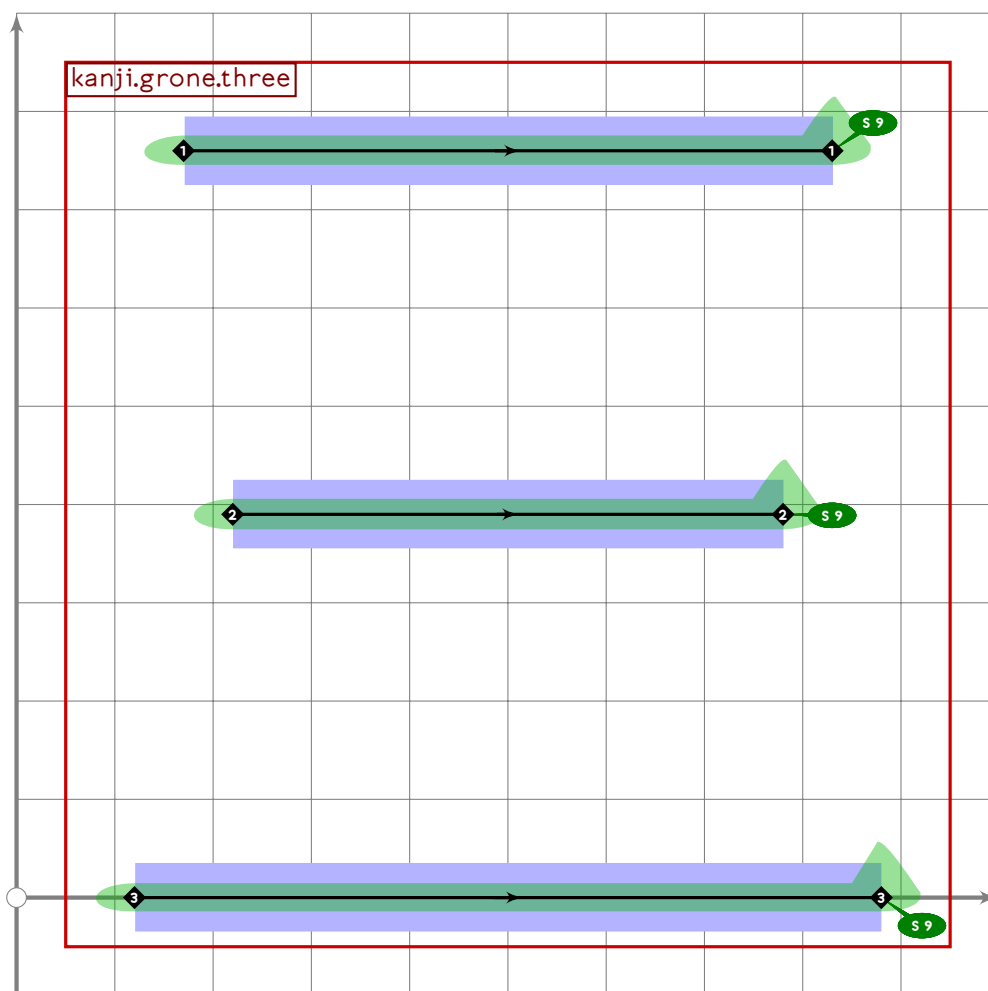
ONE



```

740
741 vardef kanji.grone.thread =
742   push_pbox_toexpand("kanji.grone.thread");
743   kanji.radical.thread_common;
744   push_stroke(
745     ((get_stroke(-4) intersectionpoint ((500,1000)-(500,0)))+(0,-5))
746     -(500,-50),
747     (1,6,1,6)-(1,5,1,5));
748   push_stroke((320,230)..tension 1.3..(220,90)..(100,-20),
749     (1,6,1,6)-(1,5,1,5)-(1,1));
750   set_boserif(0,0,10);
751   push_stroke((610,240)..tension 1.3..(740,130)..(840,0),
752     (1,1)-(1,5,1,5)-(1,8,1,8));
753   for i=-7 upto 0: set_bosize(i,90); endfor;
754   expand_pbox;
755 enddef;

```

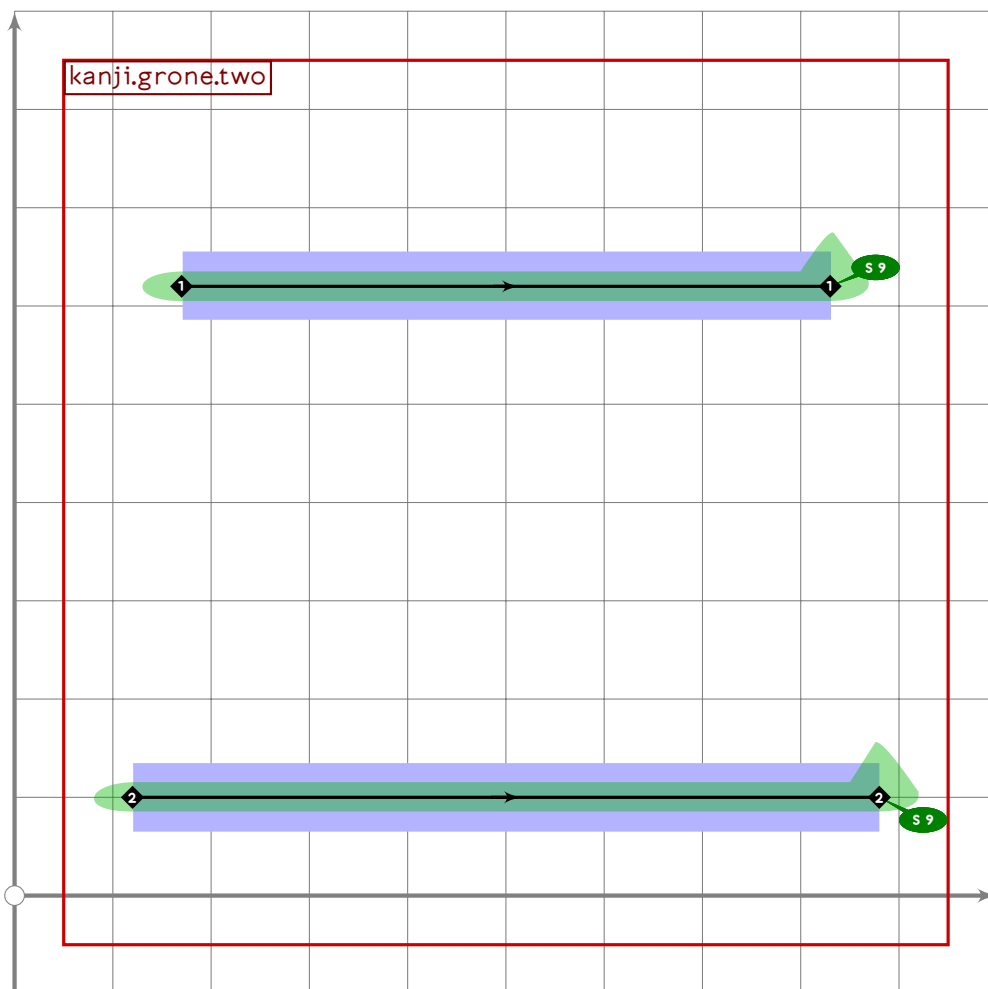
```

756
757 vardef kanji.grone.three =
758   push_pbox_toexpand("kanji.grone.three");
759   push_stroke((170,760)–(830,760),
760     (1,6,1,6)–(1,6,1,6));
761   set_boserif(0,1,9);
762   push_stroke((220,390)–(780,390),
763     (1,6,1,6)–(1,6,1,6));
764   set_boserif(0,1,9);
765   push_stroke((120,0)–(880,0),
766     (1,6,1,6)–(1,6,1,6));
767   set_boserif(0,1,9);
768   expand_pbox;
769 enddef;

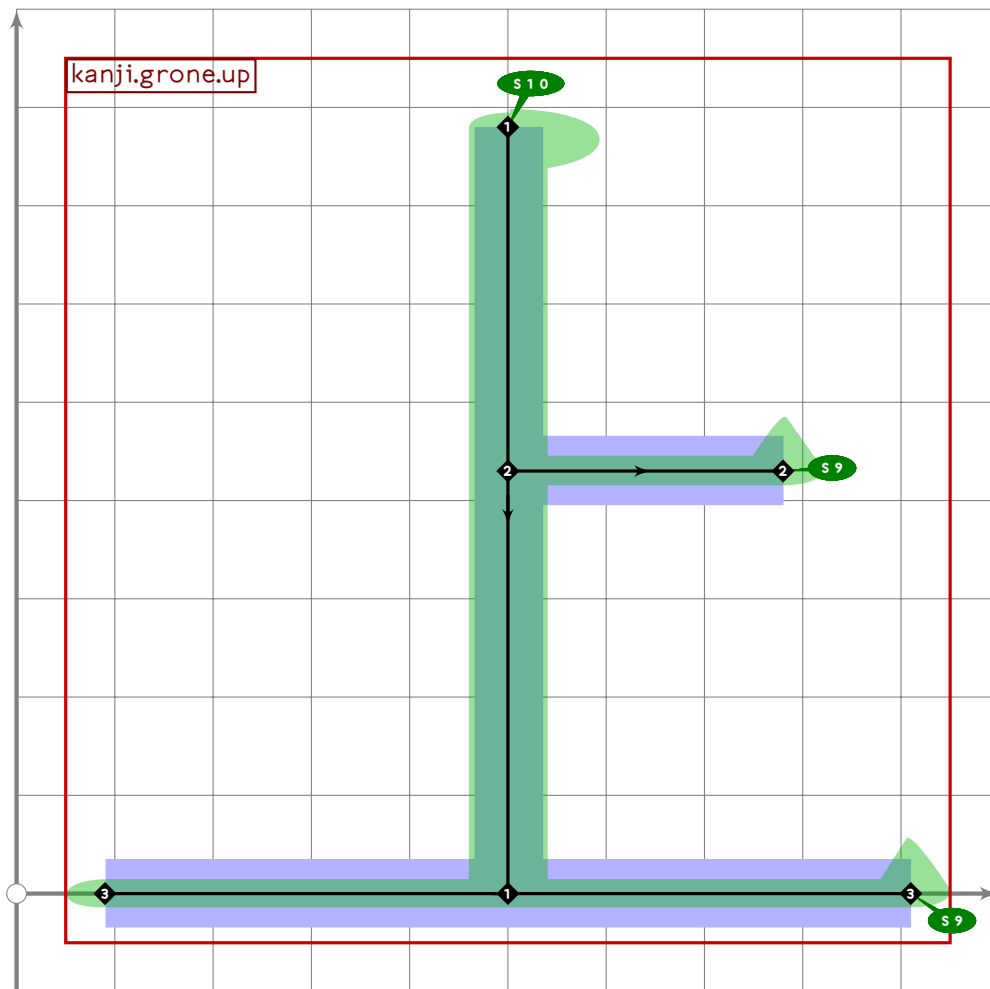
```

U+4E8C
tsuku.uni4E8C

ONE



```
770
771 vardef kanji.grone.two =
772   push_pbox_toexpand("KANJI.GRONE.TWO");
773   push_stroke((170,620)-(830,620),(1.6,1.6)-(1.6,1.6));
774   set_boserif(0,1,9);
775   push_stroke((120,100)-(880,100),(1.6,1.6)-(1.6,1.6));
776   set_boserif(0,1,9);
777   expand_pbox;
778 enddef;
```

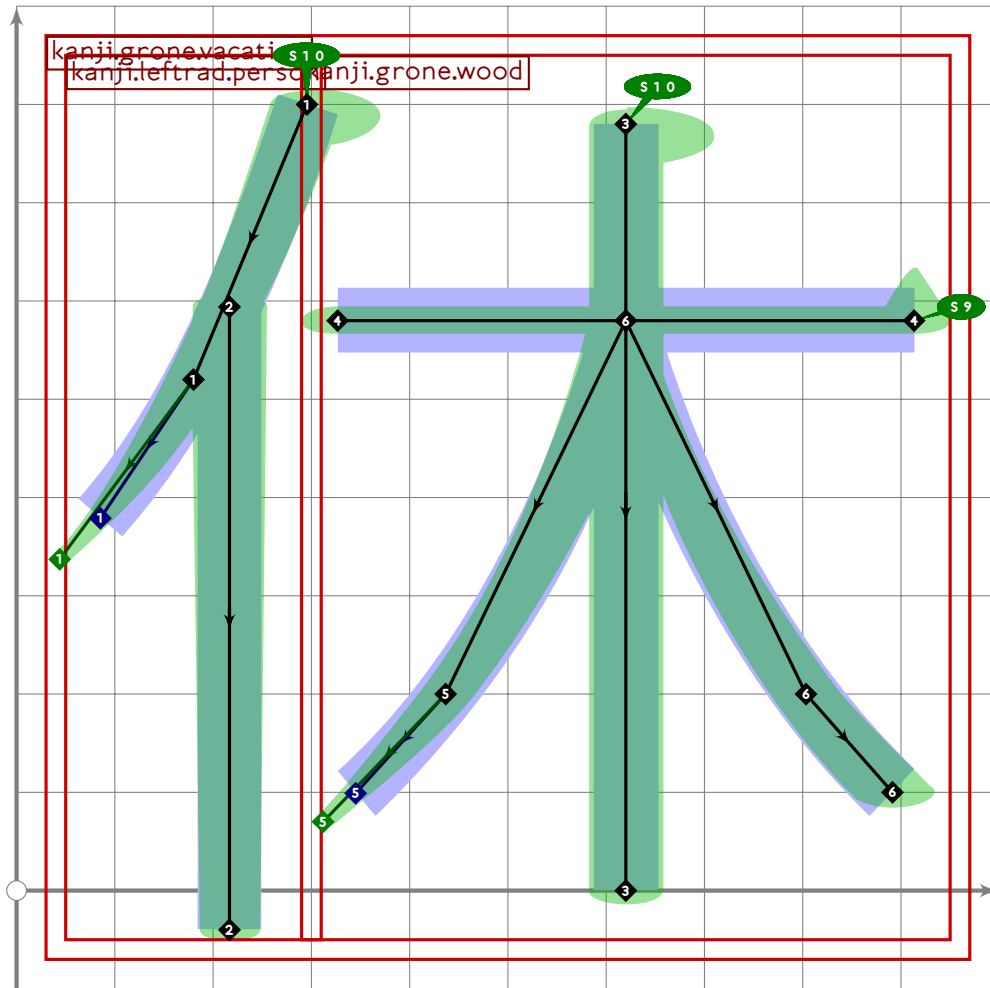


```

779
780 vardef kanji.grone.up =
781   push_pbox_toexpand("kanji.grone.up");
782   push_stroke((500,780)-(500,0),
783     (1.6,1.6)-(1.6,1.6));
784   set_boserif(0,0,10);
785   push_stroke((500,430)-(780,430),
786     (1.6,1.6)-(1.6,1.6));
787   set_boserif(0,1,9);
788   push_stroke((90,0)-(910,0),
789     (1.6,1.6)-(1.6,1.6));
790   set_boserif(0,1,9);
791   expand_pbox;
792 enddef;

```

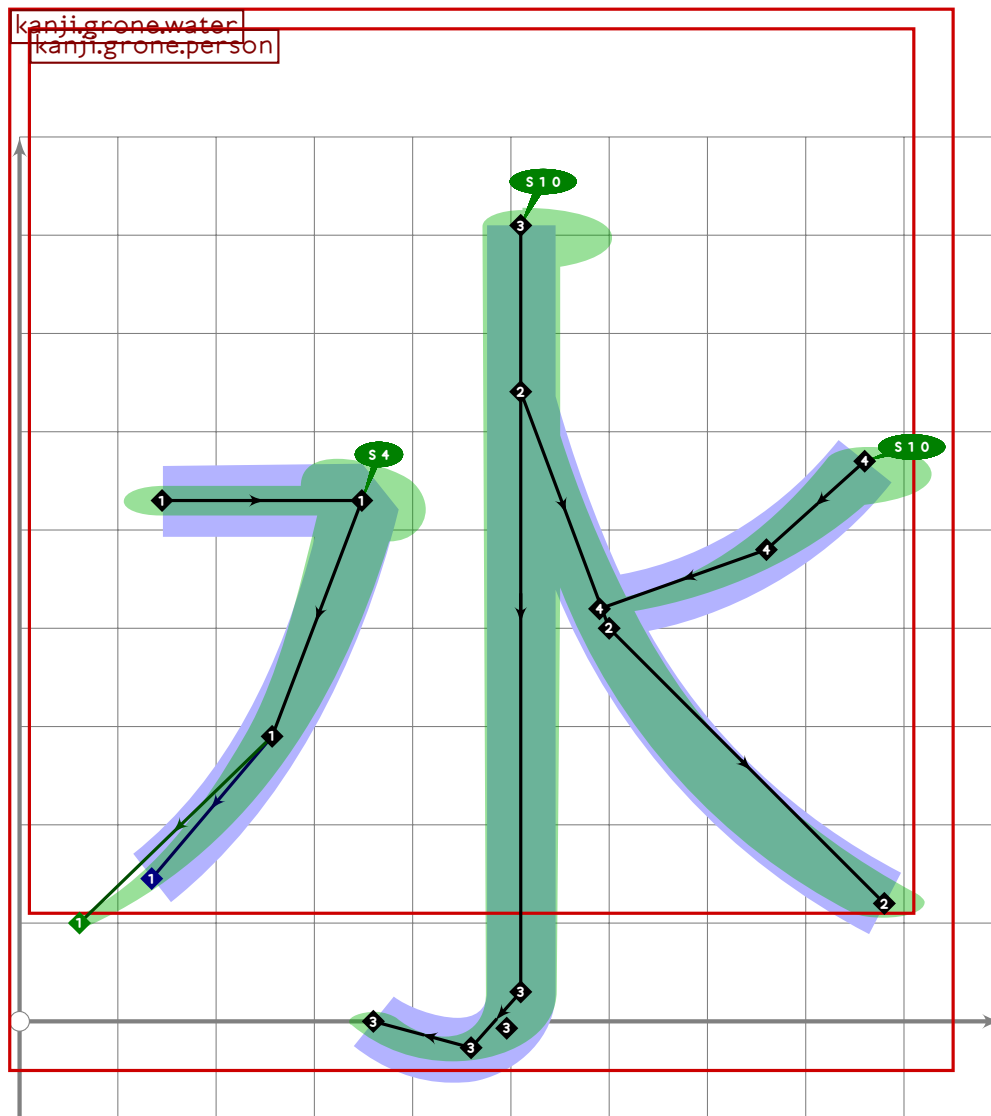
ONE



```

793
794 vardef kanji.grone.vacation =
795   push_pbox_toexpand("kanji.grone.vacation");
796   build_kanji.lr(300,20)
797     (kanji.leftrad.person)
798     (kanji.grone.wood);
799   expand_pbox;
800 enddef;

```



```

801
802 vardef kanji.grone.water =
803   push_pbox_toexpand("kanji.grone.water");
804   tsu_xform(identity shifted (-40,160))(kanji.grone.person);
805   replace_stroke(-1)((100,500)-
806     (subpath (xpart (oldp intersectiontimes
807       ((0,500)-(1000,500))),infinity) of oldp))
808     shifted (-250,0) xscaled 0.7 shifted (250,30));
809   replace_strokeq(-1)((1.6,1.6)-(1.6,1.6)-(1.3,1.3)-(0.85,0.85));
810   set_boserif(-1,0,whatever);
811   set_boserif(-1,1,4);
812   set_botip(-1,1,0);
813   push_stroke((510,810),(1.6,1.6));
814   build_kanji.add__jtail(0);
815   set_boserif(0,0,10);
816   replace_stroke(-1)(
817     subpath (xpart (oldp intersectiontimes get_stroke(0)),infinity)
818     of oldp);

```

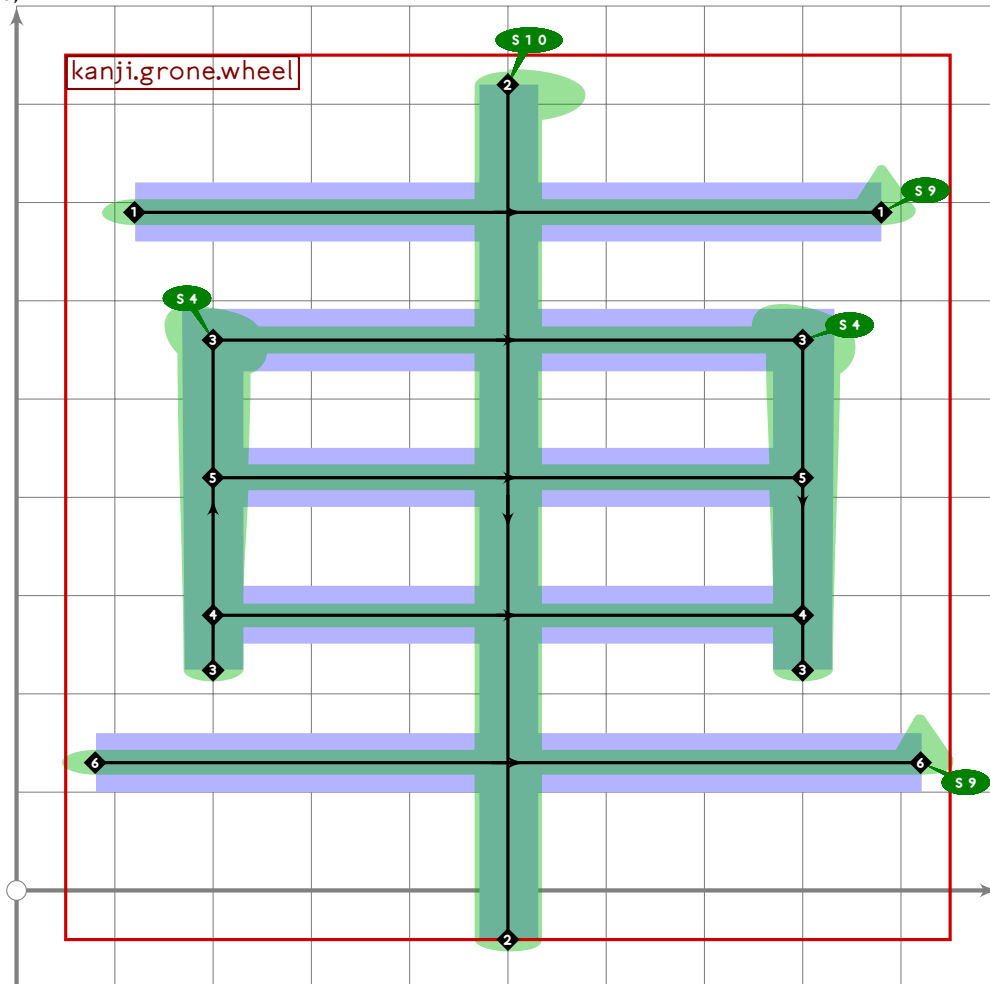
U+8ECA
tsuku.uni8ECA

ONE

```

819 push_stroke((860,570)..(760,480)..(point 0.9 of get_stroke(-1)),
820   (1.6,1.6)–(1.4,1.4)–(1,1));
821 set_boserif(0,0,10);
822 expand_pbox;
823 enddef;

```

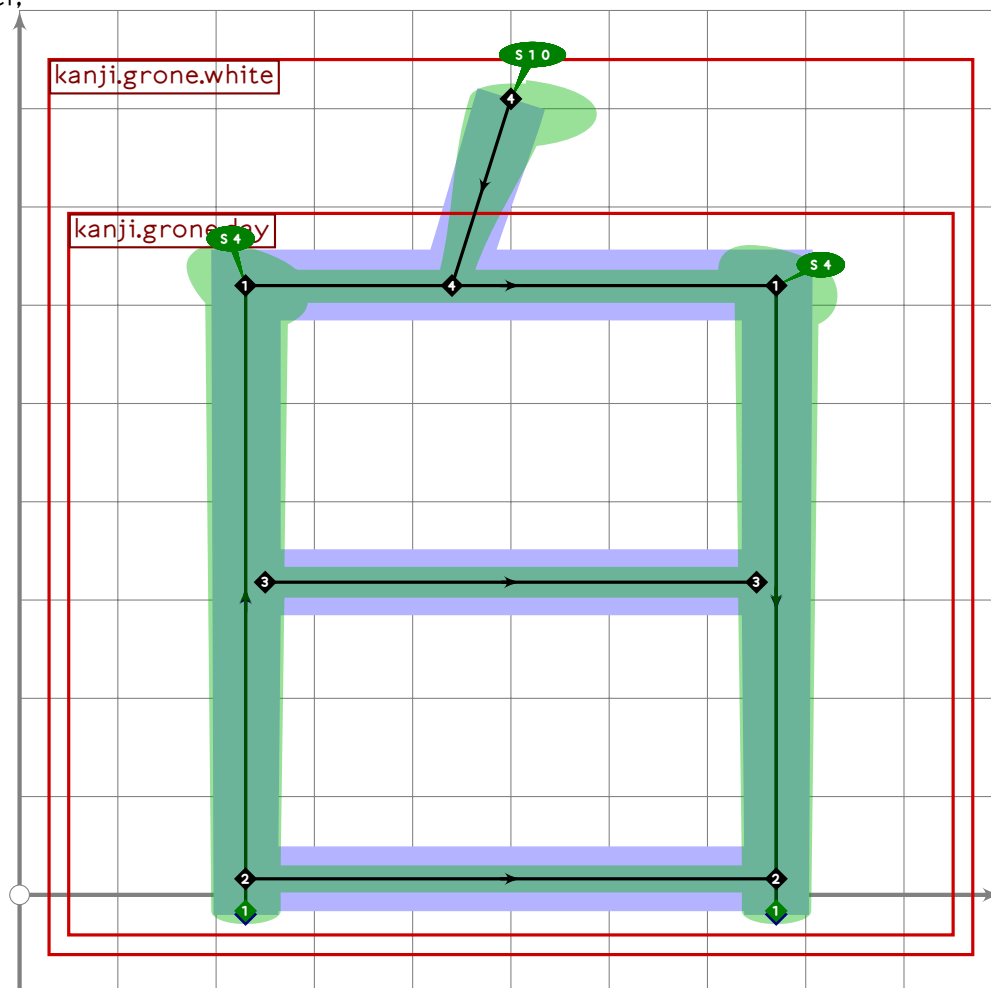


```

824
825 vardef kanji.grone.wheel =
826   push_pbox_toexpand("kanji.grone.wheel");
827   push_stroke((120,690)–(880,690),
828     (1.6,1.6)–(1.6,1.6));
829   set_boserif(0,1,9);
830   push_stroke((500,820)–(500,-50),
831     (1.6,1.6)–(1.6,1.6));
832   set_boserif(0,0,10);
833   build_kanji.box((200,560),(800,280));
834   push_stroke((200,420)–(800,420),
835     (1.6,1.6)–(1.6,1.6));
836   push_stroke((80,130)–(920,130),
837     (1.6,1.6)–(1.6,1.6));
838   set_boserif(0,1,9);
839   for i=-5 upto 0: set_bosize(i,85); endfor;

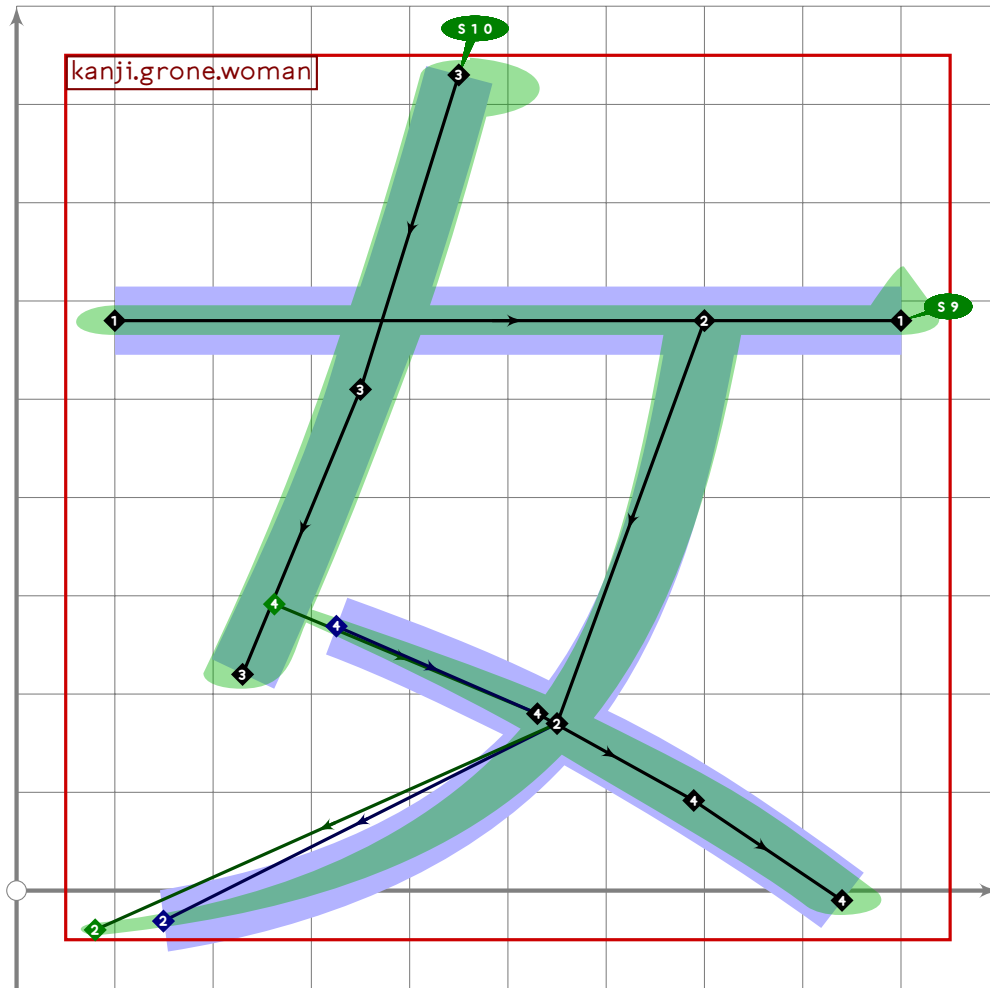
```

```
840 expand_pbox;
841 enddef;
```



```
842
843 vardef kanji.grone.white =
844   push_pbox_toexpand("kanji.grone.white");
845   build_kanji.attach_tick(620)(kanji.grone.day);
846   expand_pbox;
847 enddef;
```

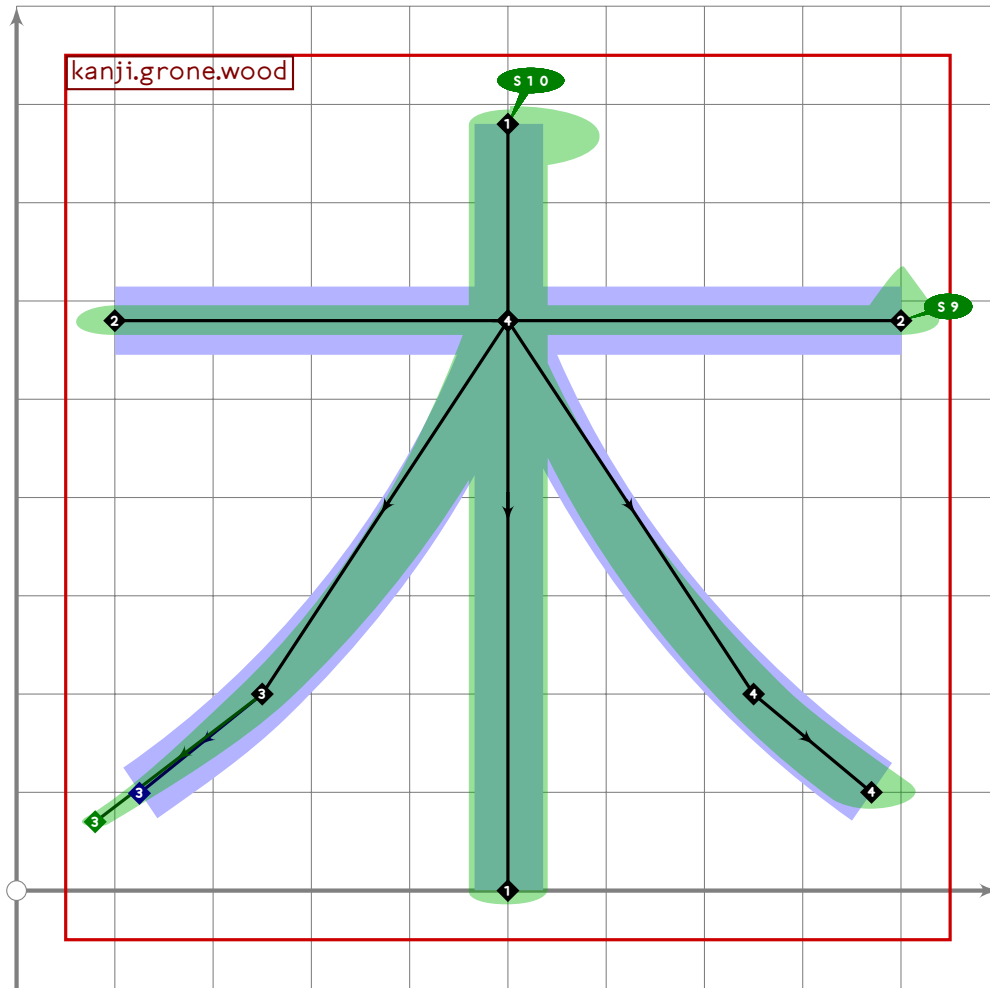
ONE



```

848
849 vardef kanji.grone.woman =
850   push_pbox_toexpand("kanji.grone.woman");
851   push_stroke((100,580)–(900,580),
852     (1.6,1.6)–(1.6,1.6));
853   set_boserif(0,19);
854   push_stroke((700,580){curl 0}..(550,170)..{curl 0.3}(80,-40),
855     (1.6,1.6)–(1.4,1.4)–(0.94,0.94));
856   push_stroke((450,830)..(350,510)..(230,220),
857     (1.6,1.6)–(1.6,1.6)–(1.6,1.6));
858   set_boserif(0,0,10);
859   push_stroke((point 1.75 of get_stroke(0))..(530,180)..(840,-10),
860     (0.85,0.85)–(1.5,1.5)–(1.8,1.8)–(1.6,1.6));
861   replace_stroke(0)(insert_nodes(oldp)(1.5));
862   expand_pbox;
863 enddef;

```

```

864
865 vardef kanji.grone.wood =
866   push_pbox_toexpand("kanji.grone.wood");
867   push_stroke((500,780)–(500,0),
868     (1.6,1.6)–(1.6,1.6));
869   set_boserif(0,0,10);
870   push_stroke((100,580)–(900,580),
871     (1.6,1.6)–(1.6,1.6));
872   set_boserif(0,1,9);
873   push_stroke((500,580)..(250,200)..(80,70),
874     (1.6,1.6)..(1.3,1.3)..(0.9,0.9));
875   push_stroke((500,580)..(750,200)..(870,100),
876     (1.1,1.1)..(1.5,1.5)..(1.7,1.7));
877   expand_pbox;
878 enddef;

```

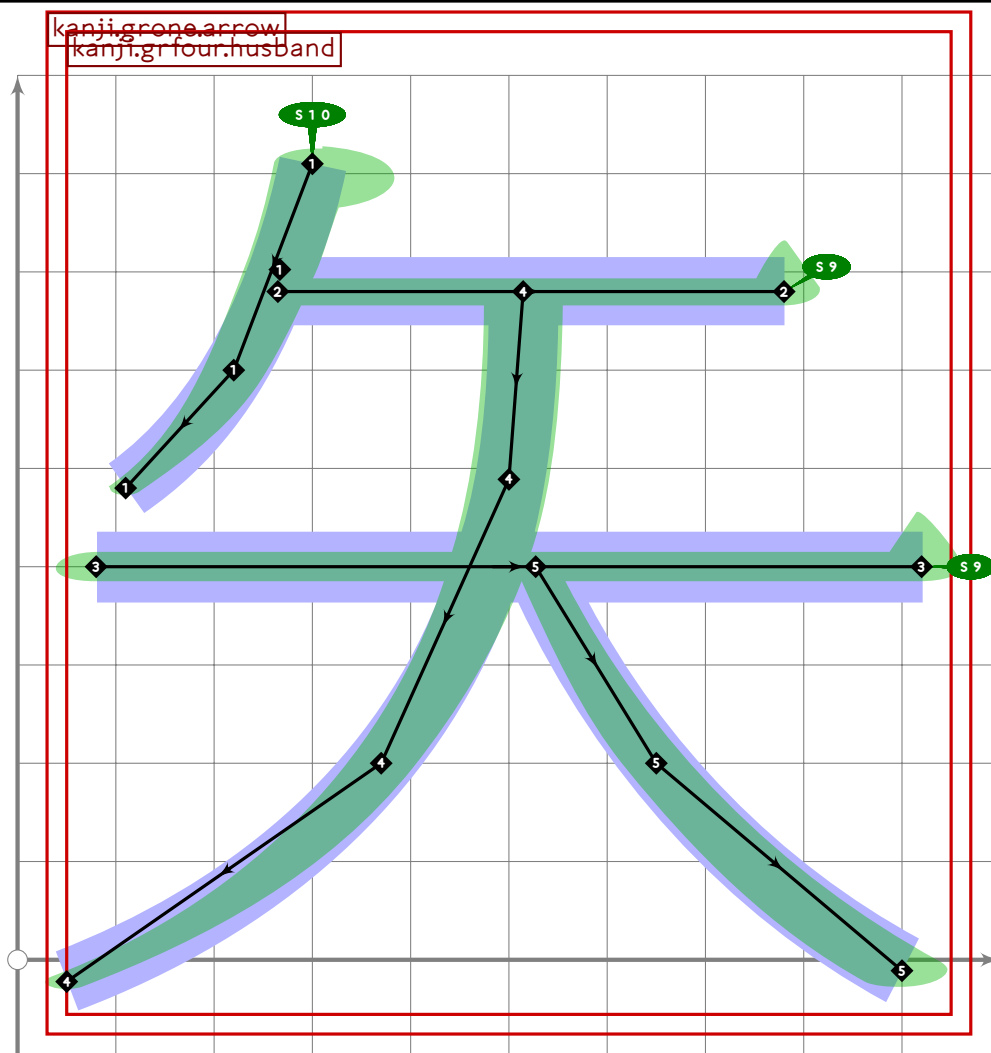
gradetwo.mp

```

1 %
2 % Grade Two kanji used on more than one page
3 % Copyright (C) 2011, 2012, 2013 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 inclusion_lock(gradetwo);
32
33

```

TWO



```

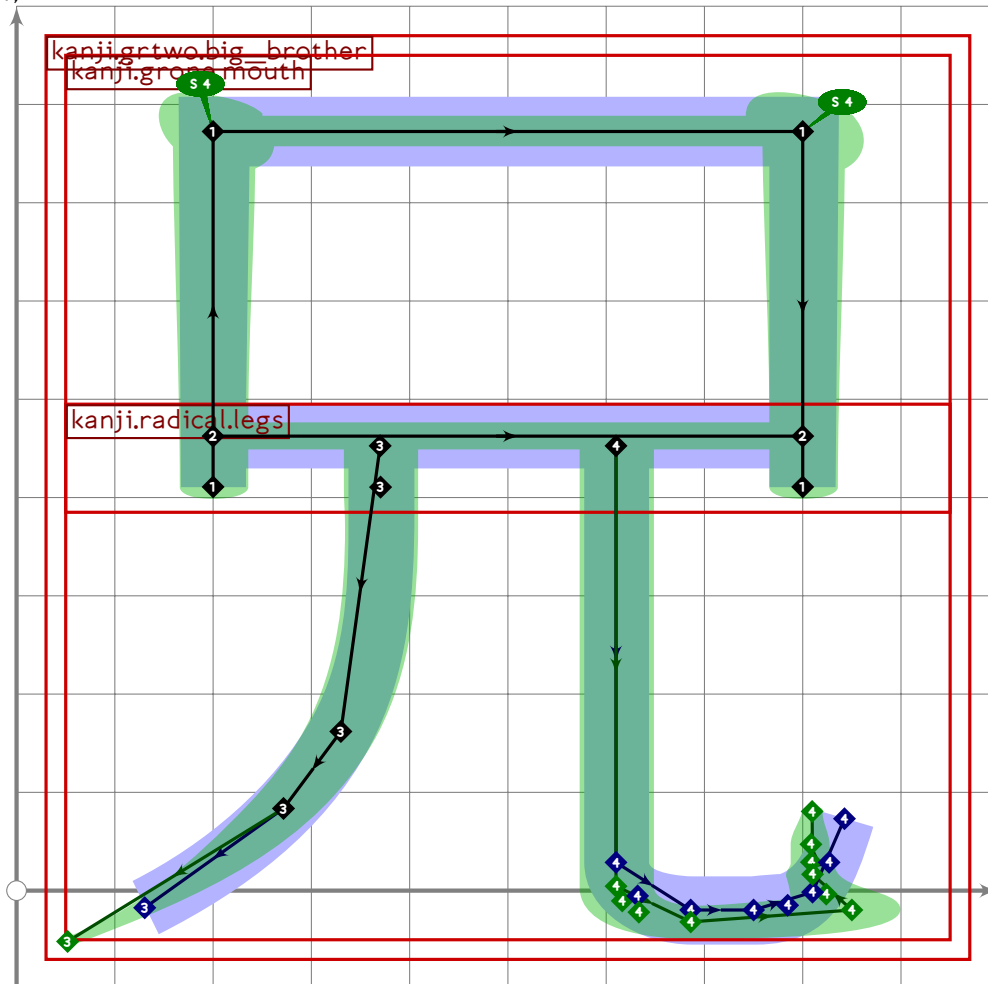
34
35 vardef kanji.grtwo.arrow =
36   push_pbox_toexpand("kanji.grone.arrow");
37   push_stroke((300,810)..tension 1.2..(220,600)..(110,480),
38     (1.6,1.6)-(1.4,1.4)-(1,1));
39   set_boserif(0,0,10);
40   tsu_xform(identity yscaled (400/360))(kanji.grfour.husband);
41   replace_stroke(-3)((100,680)-(780,680));
42   replace_stroke(-3)(subpath

```

```

43 (0.01*xpart (oldp intersectiontimes get_stroke(-4)),1) of oldp);
44 replace_stroke(-1)(subpath
45 (xpart (oldp intersectiontimes get_stroke(-3)),infinity) of oldp);
46 set_boserif(-1,0,whatever);
47 expand_pbox;
48 enddef;

```



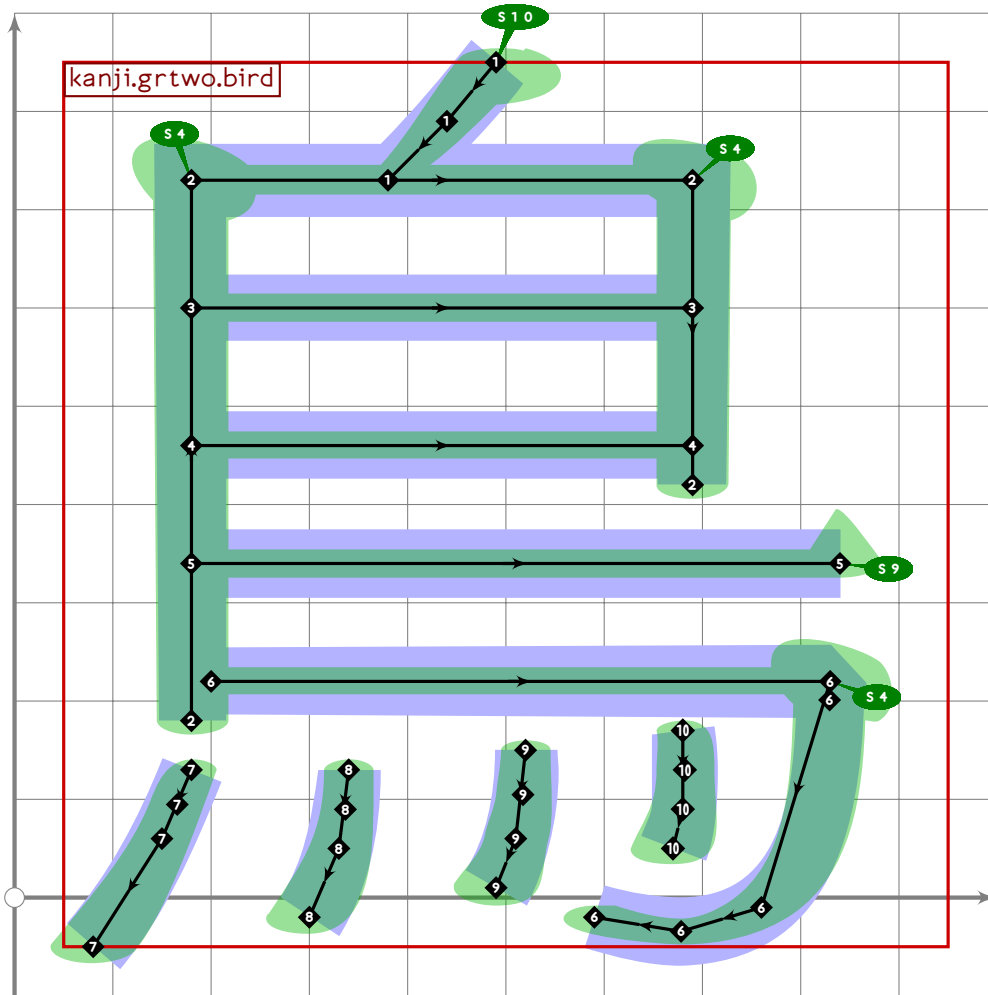
```

49
50 vardef kanji.grtwo.big_brother =
51   push_pbox_toexpand("kanji.grtwo.big_brother");
52   build_kanji.level(build_kanji.tb(440,110)
53     (kanji.grone.mouth)
54     (kanji.radical.legs));
55   expand_pbox;
56 enddef;

```

TWO

TWO



```

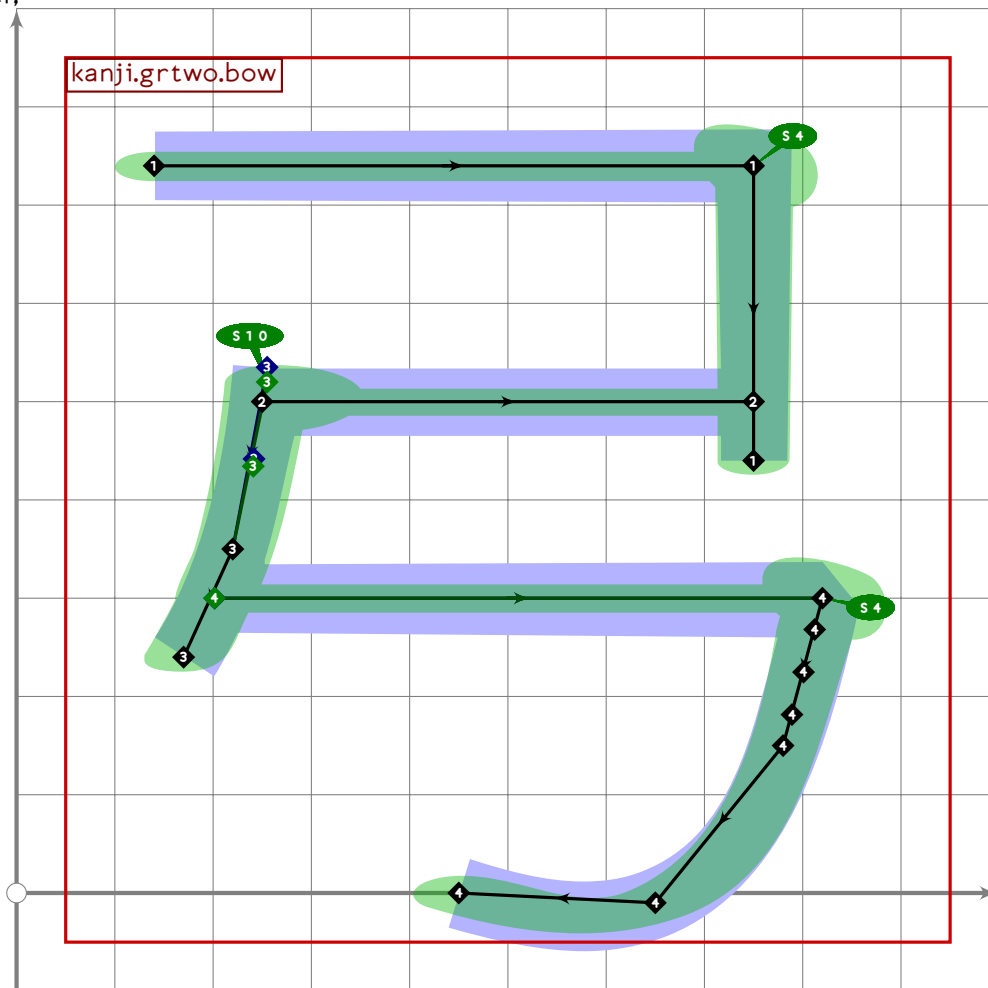
57
58 vardef kanji.grtwo.bird =
59   push_pbox_toexpand("kanji.grtwo.bird");
60   push_stroke((490,850){curl 0.1}..(440,790)..(380,730),
61     (1.6,1.6)–(1.4,1.4)–(1.1,1.1));
62   set_boserif(0,0,10);
63   push_stroke((180,180)–(180,730)–(690,730)–(690,420),
64     (1.5,1.5)–(1.6,1.6)–(1.6,1.6)–(1.5,1.5));
65   set_boserif(0,1,4);
66   set_boserif(0,2,4);
67   set_botip(0,1,1);
68   set_botip(0,2,1);
69   push_stroke((180,600)–(690,600),
70     (1.5,1.5)–(1.5,1.5));
71   push_stroke((180,460)–(690,460),
72     (1.5,1.5)–(1.5,1.5));
73   push_stroke((180,340)–(840,340),
74     (1.5,1.5)–(1.6,1.6));
75   set_boserif(0,1,9);
76   push_stroke((200,220)–(830,220){dir 268}..(760,-10){curl 0.2}(590,-20),
77     (1.5,1.5)–(1.5,1.5)–(1.5,1.5)–(1.5,1.5)–(1.4,1.4)–(1.2,1.2));

```

```

78 replace_stroke(0)(insert_nodes(oldp)((length oldp)-0.5));
79 set_boserif(0,14);
80 set_botip(0,1);
81 push_stroke((180,130)..tension 1.2..(150,60)..(80,-50),
82   (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
83 push_stroke((340,130)..tension 1.2..(330,50)..(300,-20),
84   (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
85 push_stroke((520,150)..tension 1.2..(510,60)..(490,10),
86   (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
87 push_stroke((680,170)..tension 1.2..(680,90)..(670,50),
88   (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
89 expand_pbox;
90 enddef;

```



```

91
92 vardef kanji.grtwo.bow =
93   push_pbox_toexpand("kanji.grtwo.bow");
94   push_stroke((140,740)-(750,740)-(750,440),
95     (1.6,1.6)-(1.6,1.6)-(1.5,1.5));
96   set_botip(0,1);
97   set_boserif(0,14);
98   push_stroke((250,500)-(750,500),

```

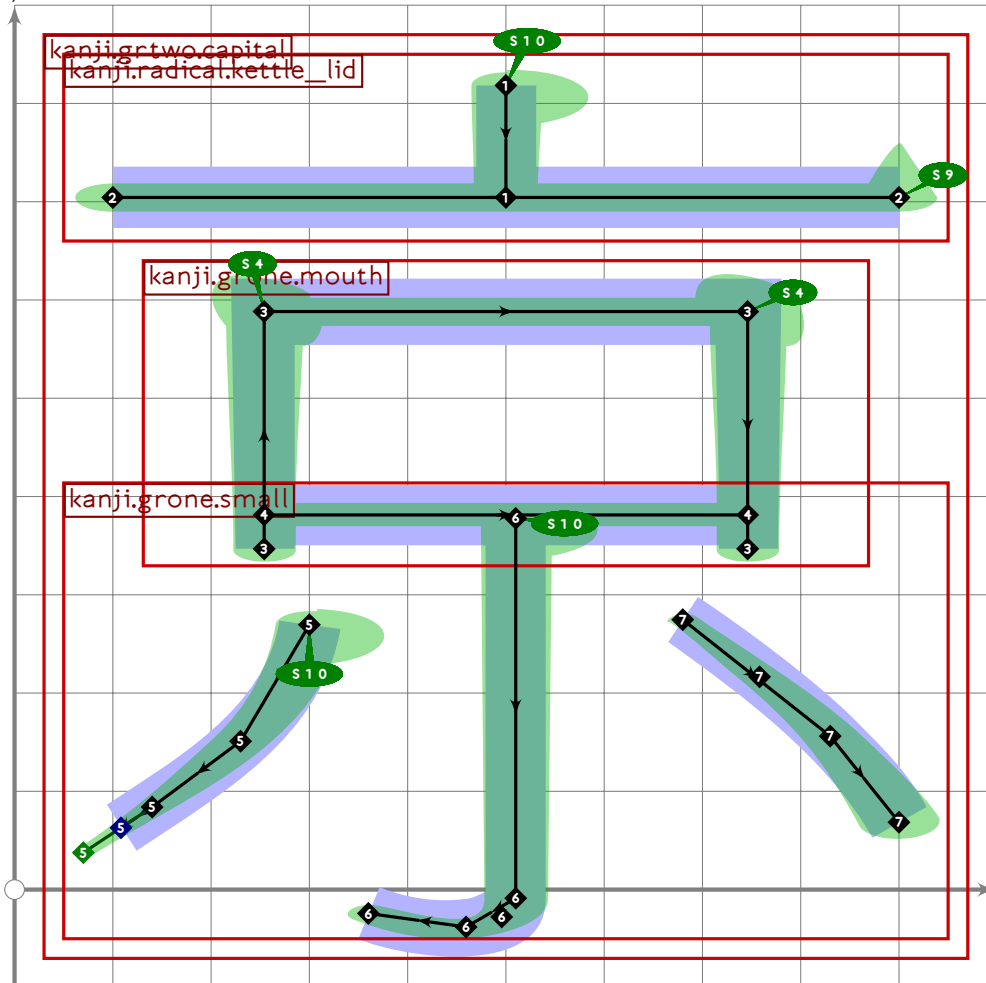
U+4EAC
tsuku.uni4EAC

TWO

```

99   (1.5,1.5)-(1.5,1.5));
100  push_stroke((255,535-15*mincho)..tension 1.2..(220,350)..(170,240),
101   (1.7,1.7)-(1.6,1.6)-(1.6,1.6));
102  set_boserif(0,0,10);
103  push_stroke((get_strokep(0) intersectionpoint ((0,300)-(1000,300)))-
104   (820,300)..tension 1.7..(780,150)..(650,-10)..{curl 0.1}(450,0),
105   (1.6,1.6)-(1.6,1.6)-(1.5,1.5)-(1.7,1.7)-(1.8,1.8));
106  set_botip(0,1,1);
107  set_boserif(0,1,4);
108  expand_pbox;
109 enddef;

```



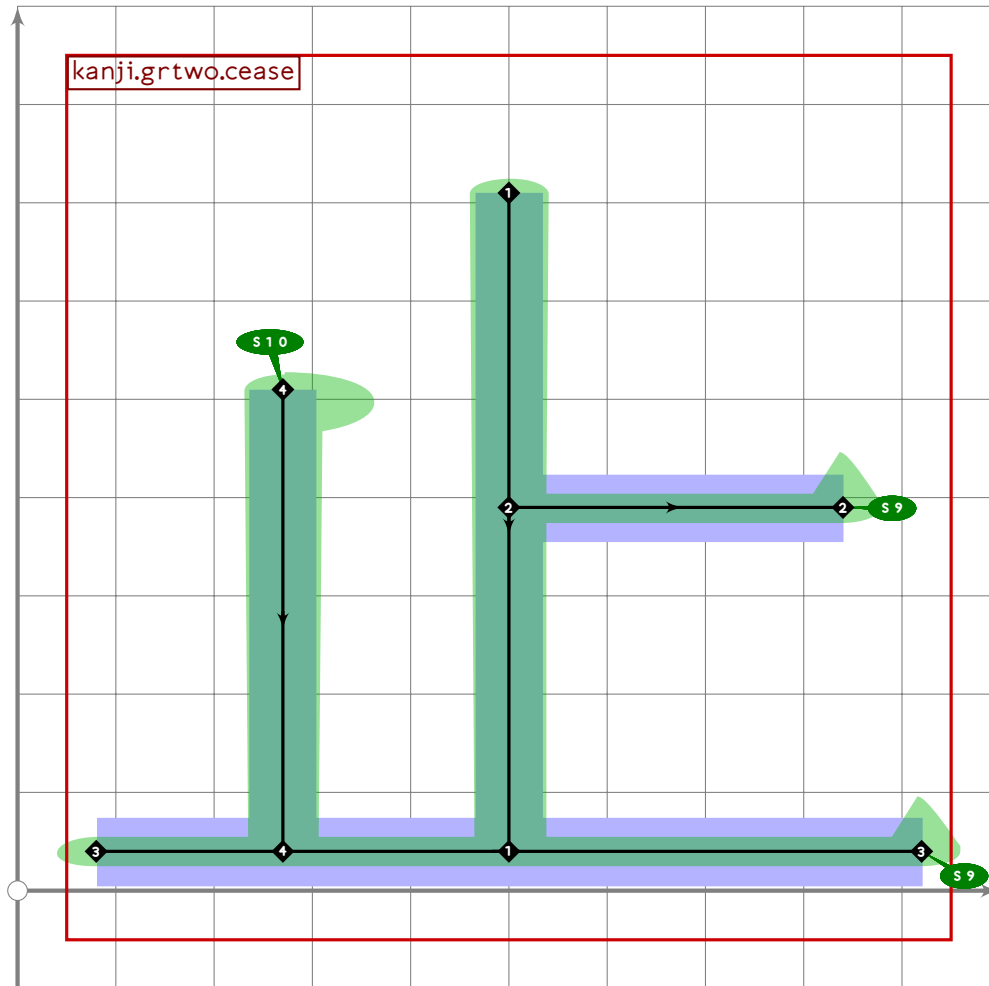
```

110
111 vardef kanji.grtwo.capital =
112   push_pbox_toexpand("kanji.grtwo.capital");
113   build_kanji.level(build_kanji.tb(650,20)
114     (kanji.radical.kettle_lid)
115     (build_kanji.tb(500,110)
116       (build_kanji.sscale(xscaled 0.82)(kanji.grone.mouth))
117       (kanji.grone.small)));
118   set_boserif(0,0,whatever);
119   expand_pbox;

```

120 endif;

121



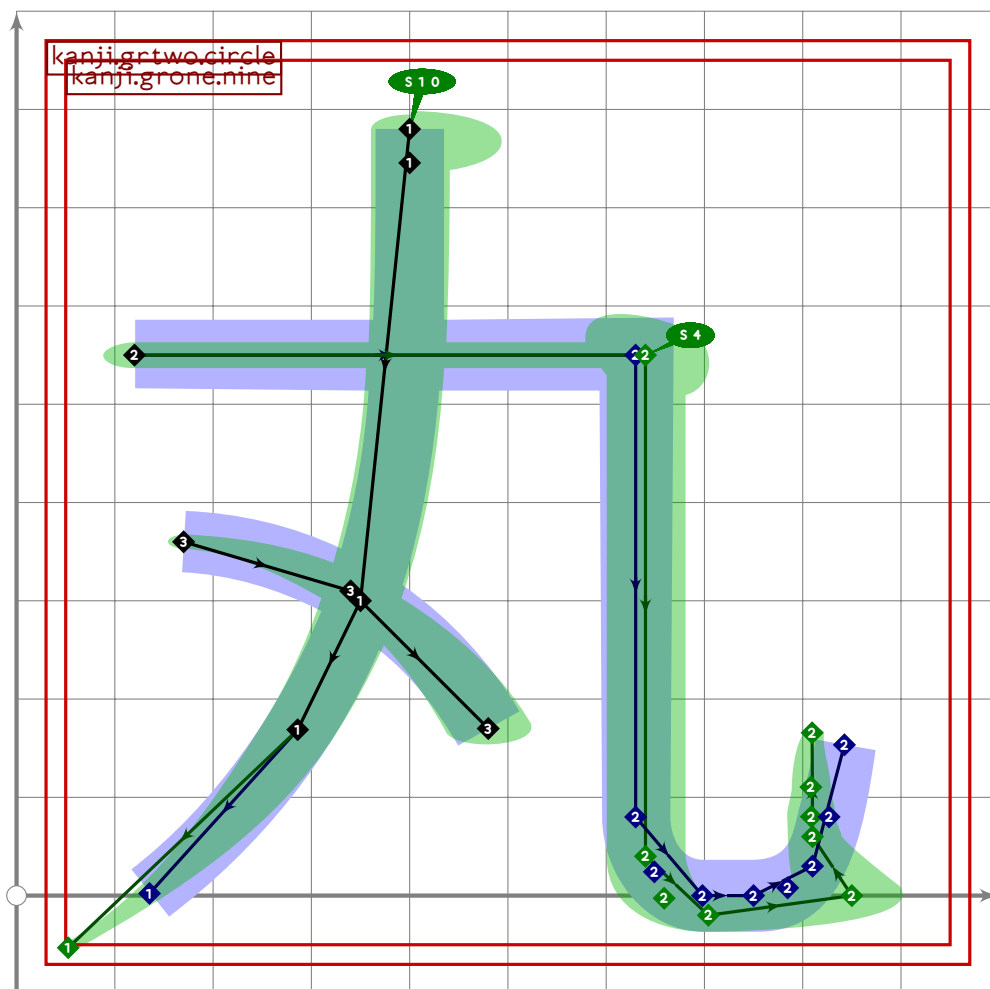
TWO

```

122 % can't use "stop," it is reserved by Metafont
123 vardef kanji.grtwo.cease =
124   push_pbox_toexpand("kanji.grtwo.cease");
125   push_stroke((500,710)–(500,40),(1.6,1.6)–(1.5,1.5));
126   push_stroke((500,390)–(840,390),(1.5,1.5)–(1.6,1.6));
127   set_boserif(0,1,9);
128   push_stroke((80,40)–(920,40),(1.6,1.6)–(1.6,1.6));
129   set_boserif(0,1,9);
130   push_stroke((270,510)–(270,40),(1.6,1.6)–(1.5,1.5));
131   set_boserif(0,0,10);
132   expand_pbox;
133 endif;
```

U+4E38
tsuku.uni4E38

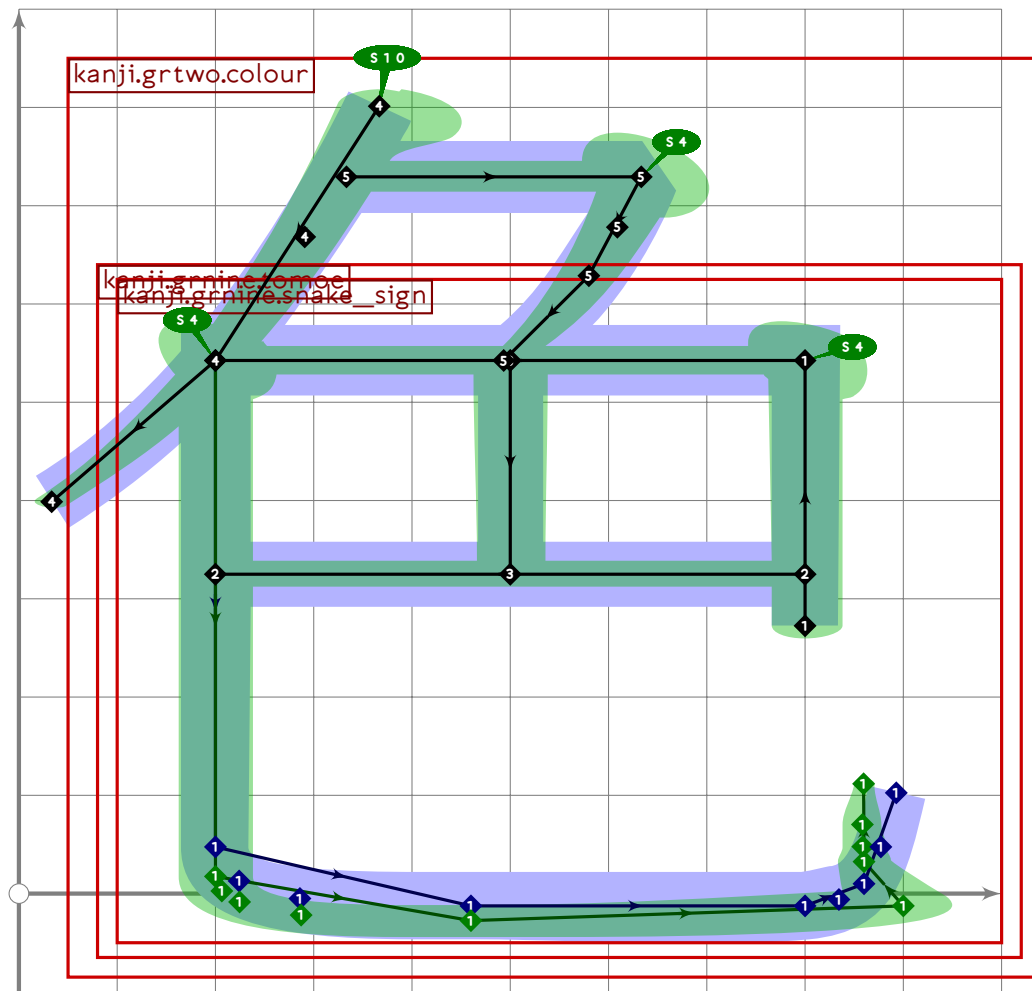
TWO



```

134
135 vardef kanji.grtwo.circle =
136   push_pbox_toexpand("kanji.grtwo.circle");
137   kanji.grone.nine;
138   push_stroke((170,360)..(340,310)..(480,170),
139     (1,1)–(14,14)–(17,17));
140   expand_pbox;
141 enddef;

```

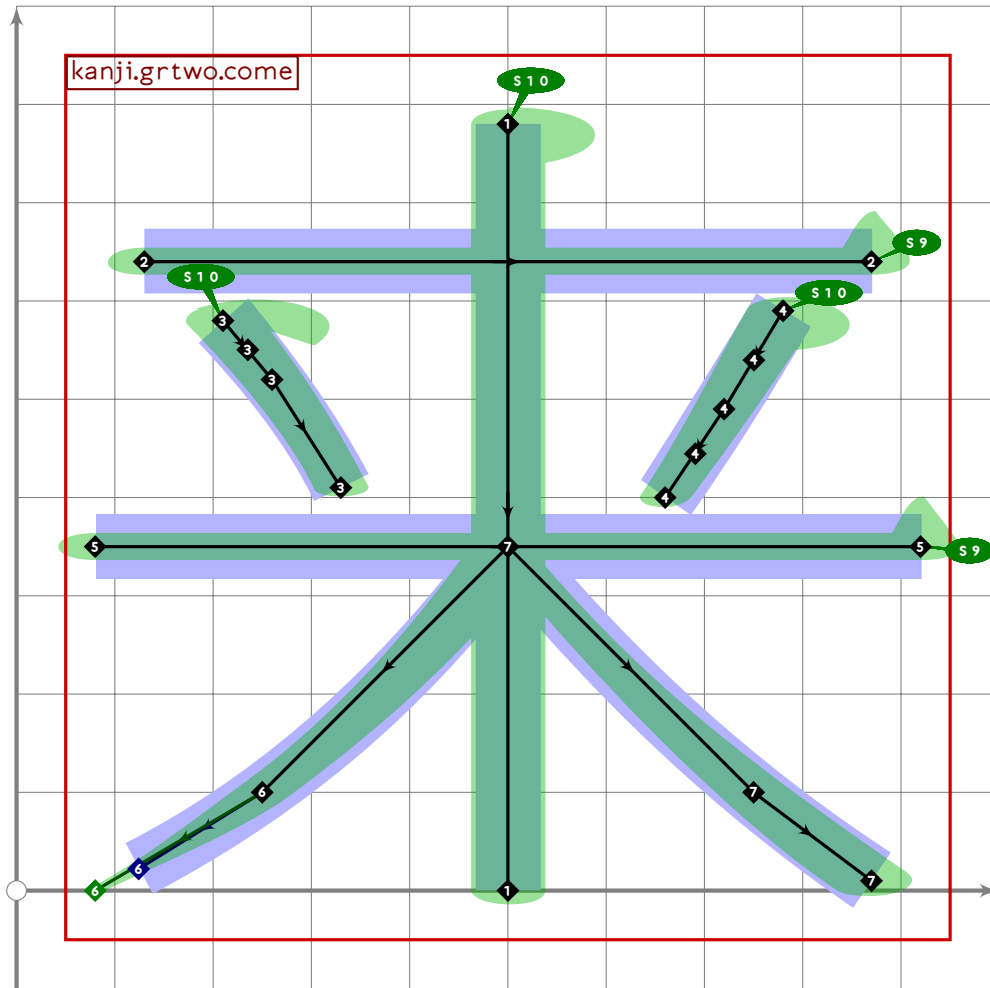
TWO

```

142
143 vardef kanji.grtwo.colour =
144   push_pbox_toexpand("kanji.grtwo.colour");
145   build_kanji.attach_fishhook(0.75)
146   (tsu_xform(identity shifted (50,0))(kanji.grnine.tomoe));
147   expand_pbox;
148 enddef;

```

TWO

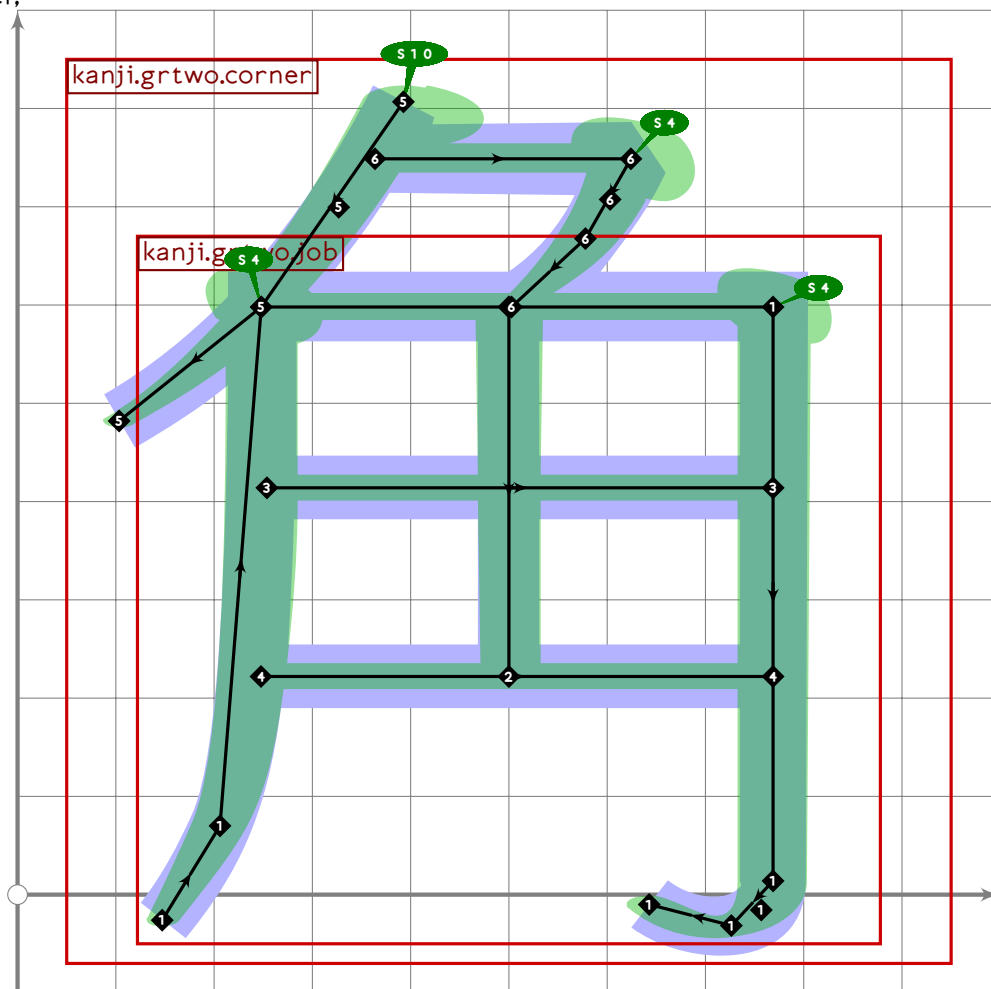


```

149
150 vardef kanji.grtwo.come =
151   push_pbox_toexpand("kanji.grtwo.come");
152   push_stroke((500,780)-(500,0),(1.6,1.6)-(1.6,1.6));
153   set_boserif(0,0,10);
154   push_stroke((130,640)-(870,640),(1.6,1.6)-(1.6,1.6));
155   set_boserif(0,1,9);
156   push_stroke((210,580)..tension 1.2..(260,520)..(330,410),
157     (1.6,1.6)-(1.5,1.5)-(1.3,1.3));
158   set_boserif(0,0,10);
159   push_stroke((780,590)..tension 1.2..(720,490)..(660,400),
160     (1.6,1.6)-(1.5,1.5)-(1.3,1.3));
161   set_boserif(0,0,10);
162   push_stroke((80,350)-(920,350),(1.6,1.6)-(1.6,1.6));
163   set_boserif(0,1,9);
164   push_stroke((500,350)..(250,100)..(80,0),
165     (1.6,1.6)..(1.3,1.3)..(0.9,0.9));
166   push_stroke((500,350)..(750,100)..(870,10),
167     (1.1,1.1)..(1.5,1.5)..(1.7,1.7));
168   for i=-6 upto 0: set_bosize(i,94); endfor;
169   expand_pbox;

```

170 endif;

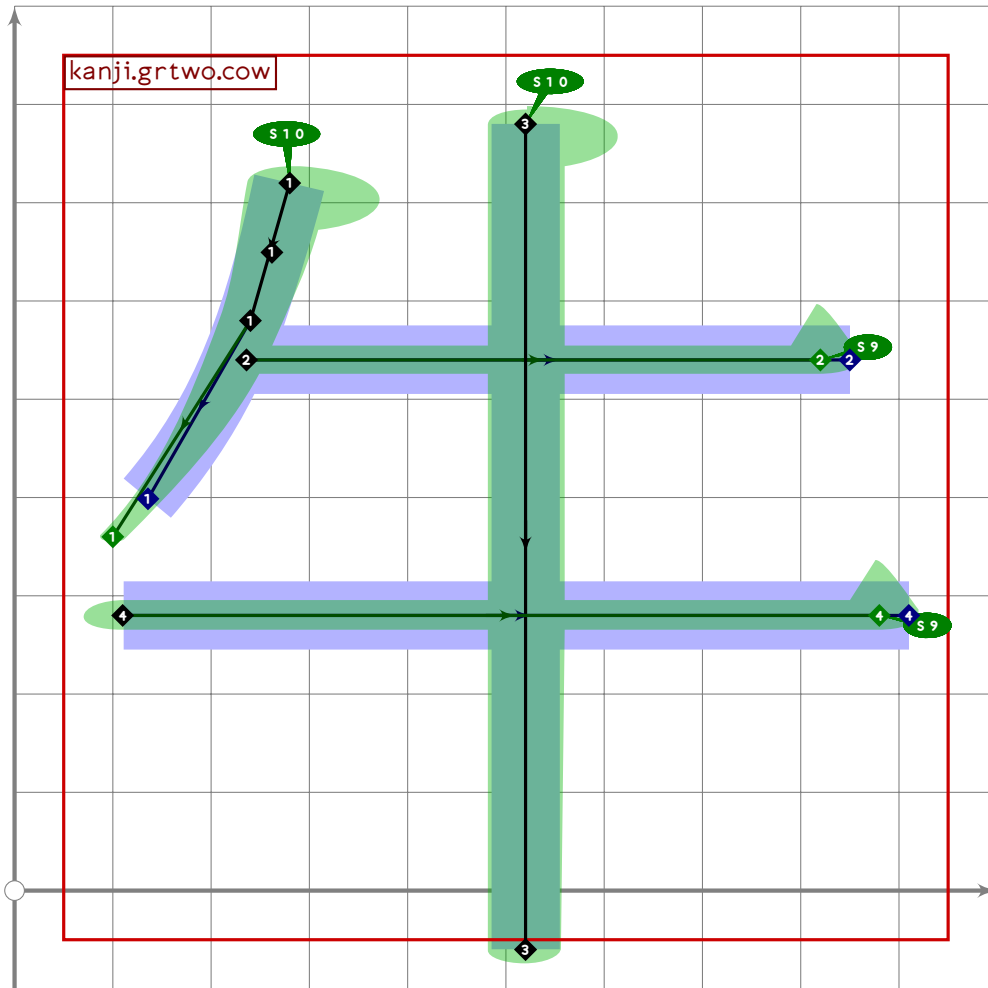


TWO

171

```
172 vardef kanji.grtwo.corner =
173   push_pbox_toexpand("kanji.grtwo.corner");
174   build_kanji.attach_fishhook(0.8)(
175     build_kanji.sscale(xscaled 0.84)(kanji.grtwo.job);
176     replace_stroke(-2)((500,760)-(500,290)));
177   expand_pbox;
178 endif;
```

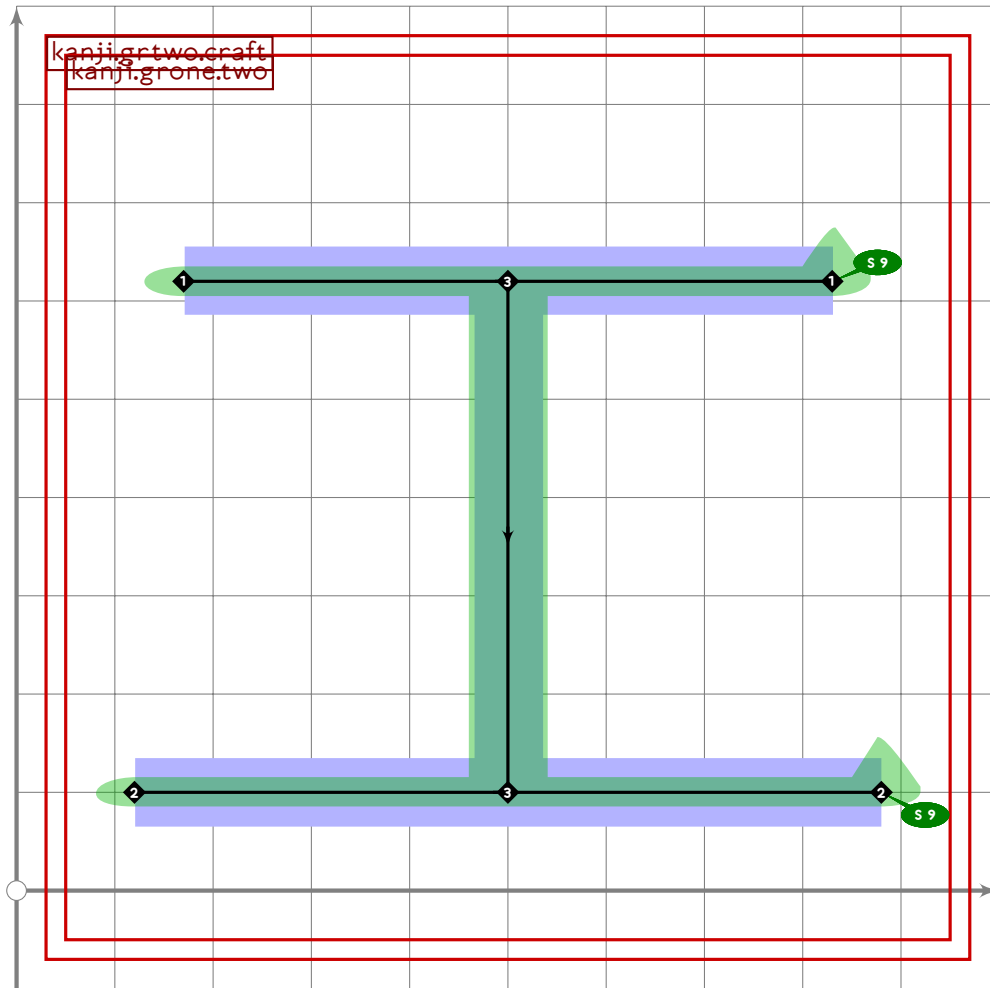
TWO



```

179
180 vardef kanji.grtwo.cow =
181   push_pbox_toexpand("kanji.grtwo.cow");
182   push_stroke((280,720)..tension 1.2..(240,580)..(100,360),
183     (1.7,1.7)–(1.4,1.4)–(0.9,0.9));
184   set_boserif(0,0,10);
185   push_stroke((((0,540)–(1000,540)) intersectionpoint
186     get_strokep(0))+(12,0)–(850–30*mincho,540),
187     (1.6,1.6)–(1.6,1.6));
188   set_boserif(0,1,9);
189   push_stroke((520,780)–(520,60),(1.6,1.6)–(1.5,1.5));
190   set_boserif(0,0,10);
191   push_stroke((110,280)–(910–30*mincho,280),(1.6,1.6)–(1.6,1.6));
192   set_boserif(0,1,9);
193   expand_pbox;
194 enddef;

```



TWO

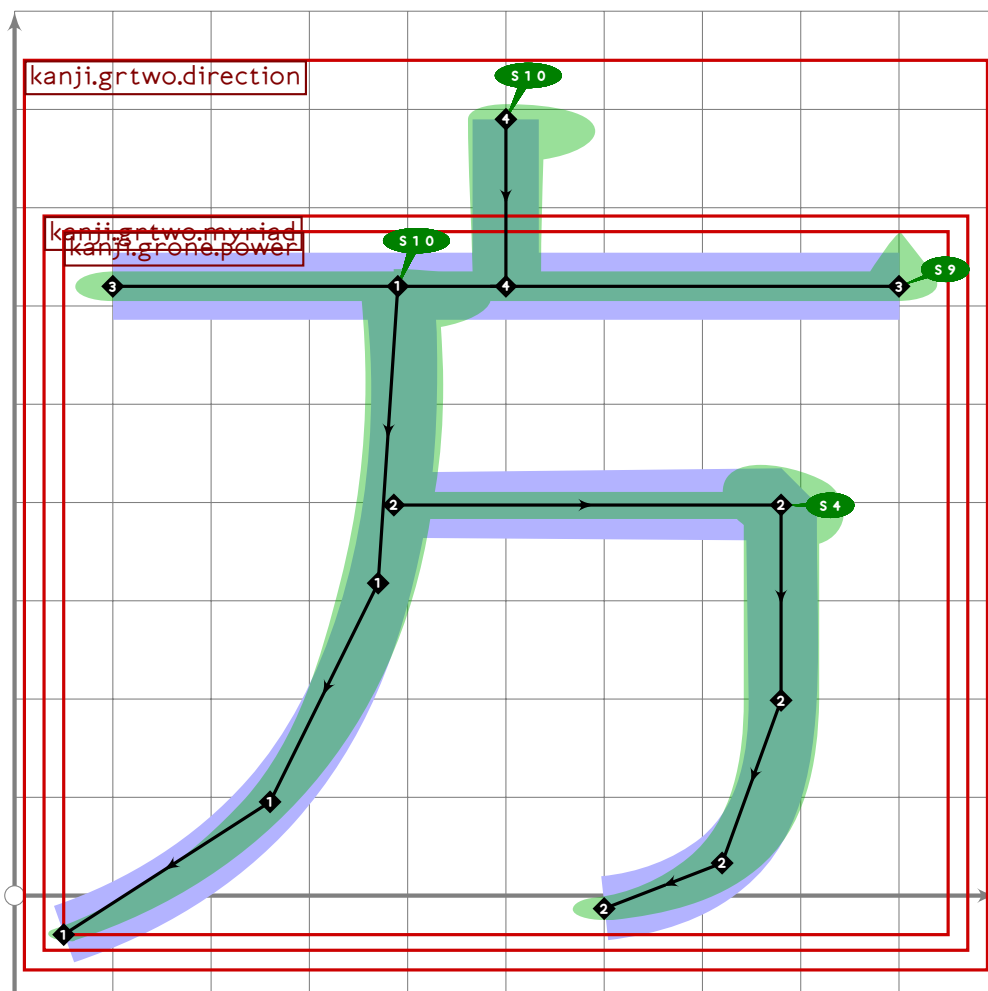
```

195
196 vardef kanji.grtwo.craft =
197   push_pbox_toexpand("kanji.grtwo.craft");
198   kanji.grone.two;
199   push_stroke((point 0.5 of get_stroke(-1))-(point 0.5 of get_stroke(0)),
200     (1.6,1.6)-(1.6,1.6));
201   expand_pbox;
202 enddef;

```

U+65B9
tsuku.uni65B9

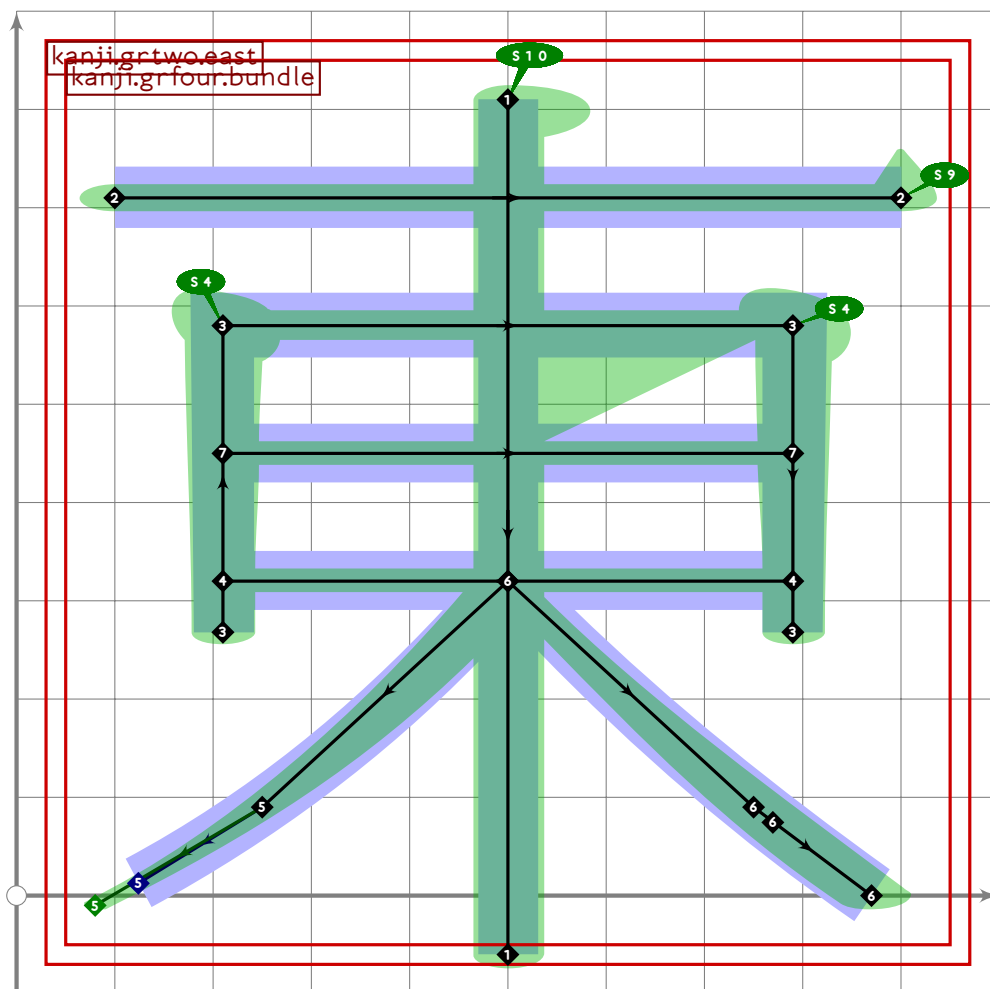
TWO



```

203
204 vardef kanji.grtwo.direction =
205   push_pbox__toexpand("kanji.grtwo.direction");
206   build_kanji.level(
207     tsu_xform(identity yscaled (620/780))
208     (kanji.grtwo.myriad);
209     push_stroke((500,790)..(500,620),(1.6,1.6)-(1.5,1.5));
210     set_boserif(0,0,10);
211   );
212   expand_pbox;
213 enddef;

```



TWO

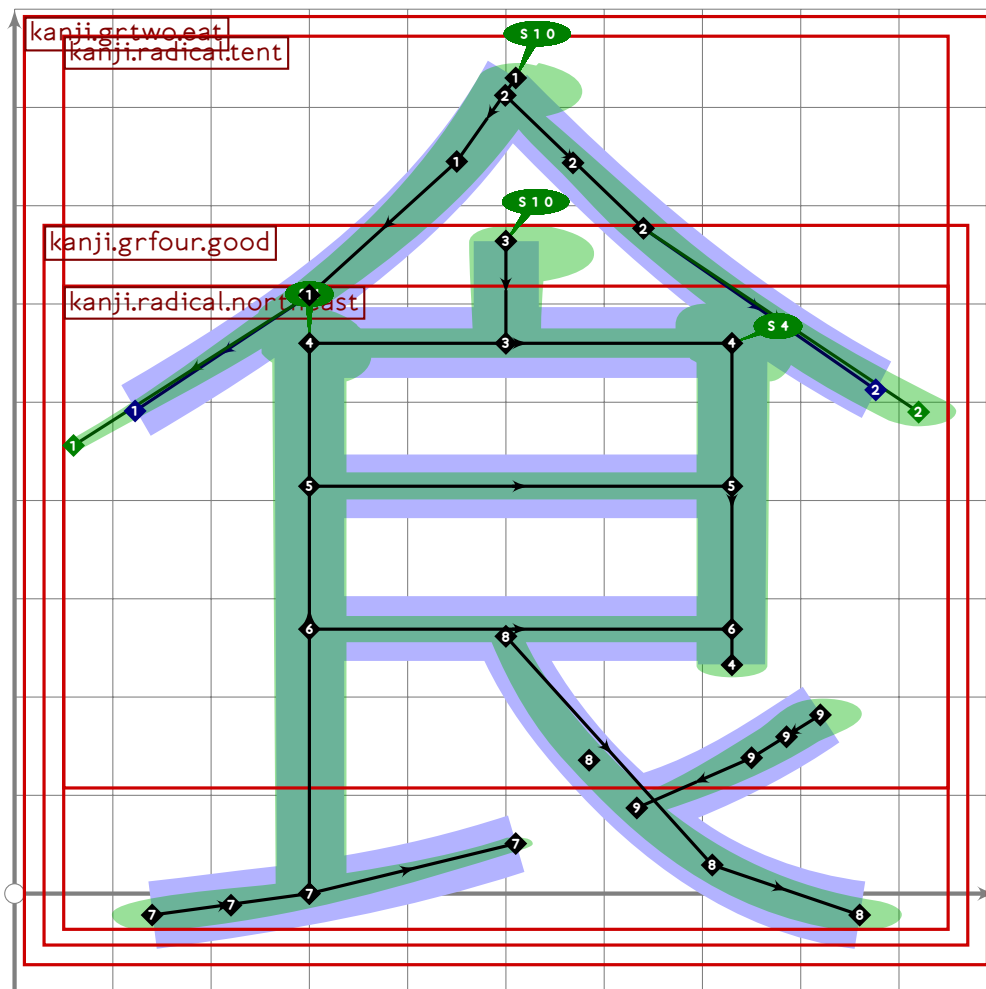
```

214
215 vardef kanji.grtwo.east =
216   push_pbox__toexpand("kanji.grtwo.east");
217   kanji.grfour.bundle;
218   push_stroke((210,450)-(790,450),(1.5,1.5)-(1.5,1.5));
219   set_bosize(0,get_bosize(-1));
220   expand_pbox;
221 enddef;

```

U+98DF
tsuku.uni98DF

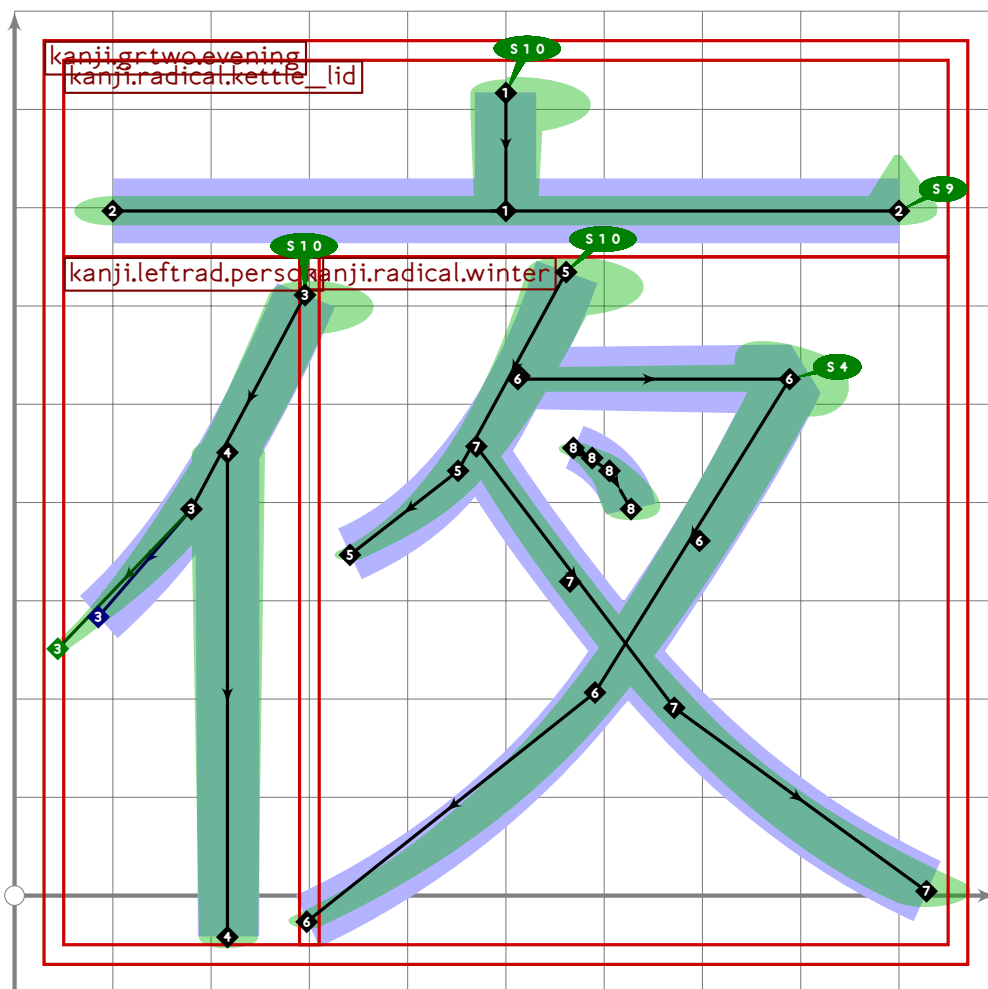
TWO



```

222
223 vardef kanji.grtwo.eat =
224   push_pbox_toexpand("kanji.grtwo.eat");
225   build_kanji.level(
226     tsu_xform(identity yscaled 0.85 shifted (0,150))
227     (kanji.radical.tent);
228   pop_stroke;
229   tsu_xform(identity yscaled 0.8)(kanji.grfour.good));
230   expand_pbox;
231 enddef;

```

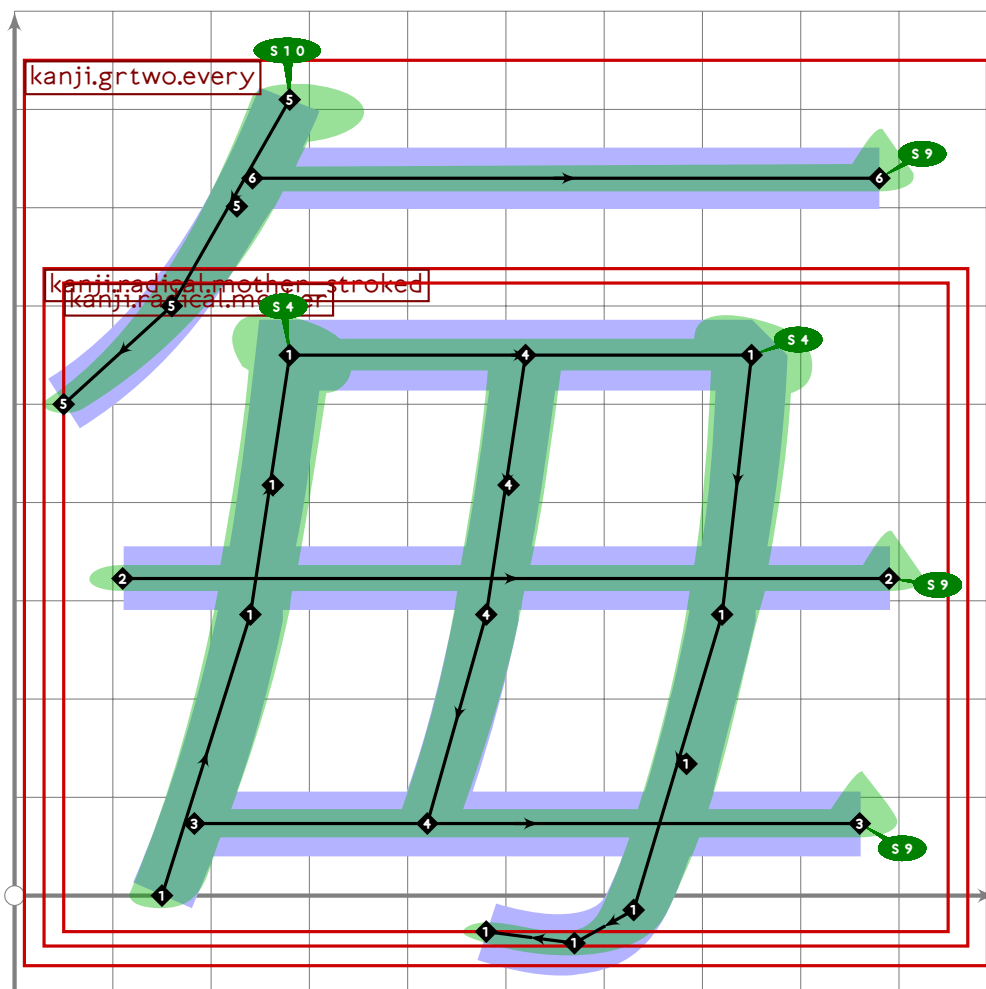
TWO

```

232
233 vardef kanji.grtwo.evening =
234   push_pbox__toexpand("kanji.grtwo.evening");
235   build_kanji.level(build_kanji.tb(650,0)
236     (kanji.radical.kettle_lid)
237     (build_kanji.lr(300,20)
238       (kanji.leftrad.person)
239       (kanji.radical.winter;
240         push_stroke(
241           (430,600)..tension 1.2..(480,570)..(510,520),
242           (1.1,1.1)-(1.4,1.4)-(1.6,1.6)))));
243   set_bosize(0,73);
244   expand_pbox;
245 enddef;

```

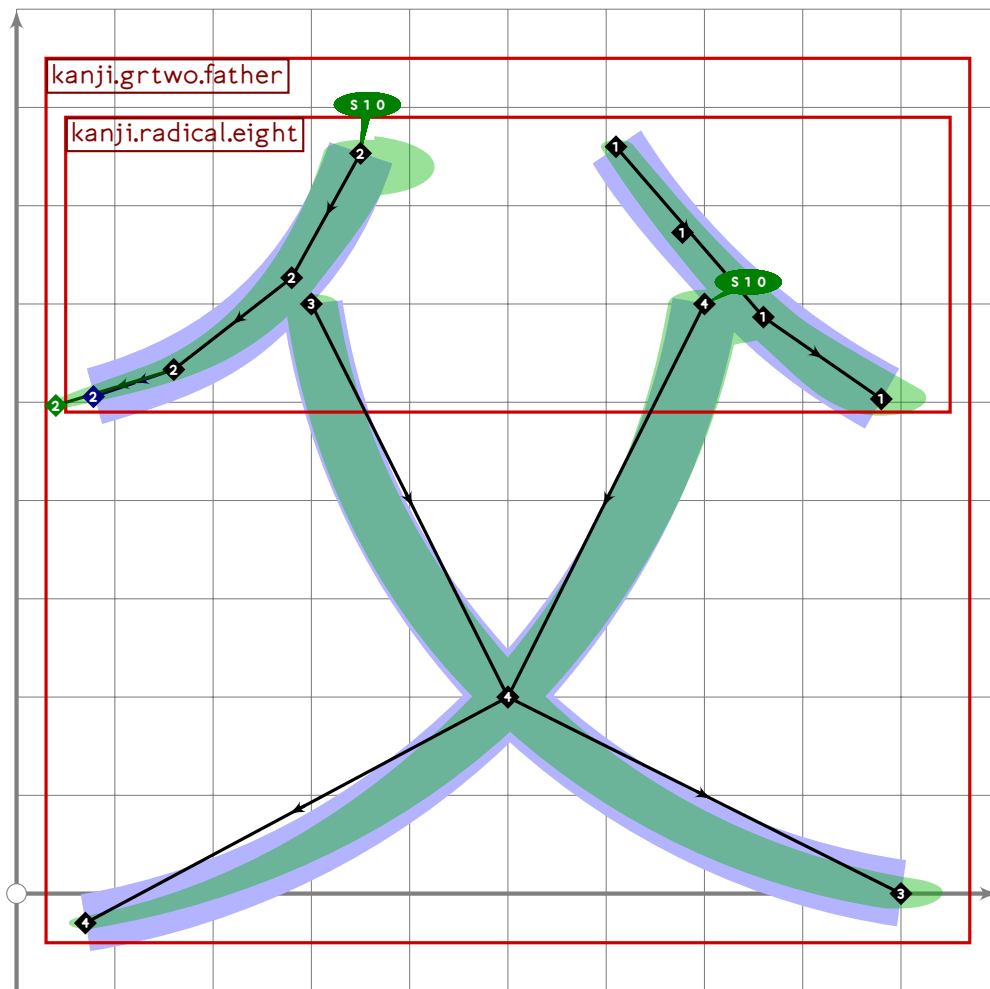
TWO



```

246
247 vardef kanji.grtwo.every =
248   push_pbox_toexpand("kanji.grtwo.every");
249   tsu_xform(identity yscaled (550/750))
250     (kanji.radical.mother_stroked);
251   push_stroke((280,810)..tension 1.2..(160,600)..(50,500),
252     (1.7,1.7)-(1.5,1.5)-(1.2,1.2));
253   set_boserif(0,0,10);
254   set_bosize(0,90);
255   push_stroke((get_strokep(0) intersectionpoint ((0,730)-(1000,730)))-
256     (880,730),
257     (1.5,1.5)-(1.6,1.6));
258   set_boserif(0,1,9);
259   set_bosize(0,90);
260   expand_pbox;
261 enddef;

```



TWO

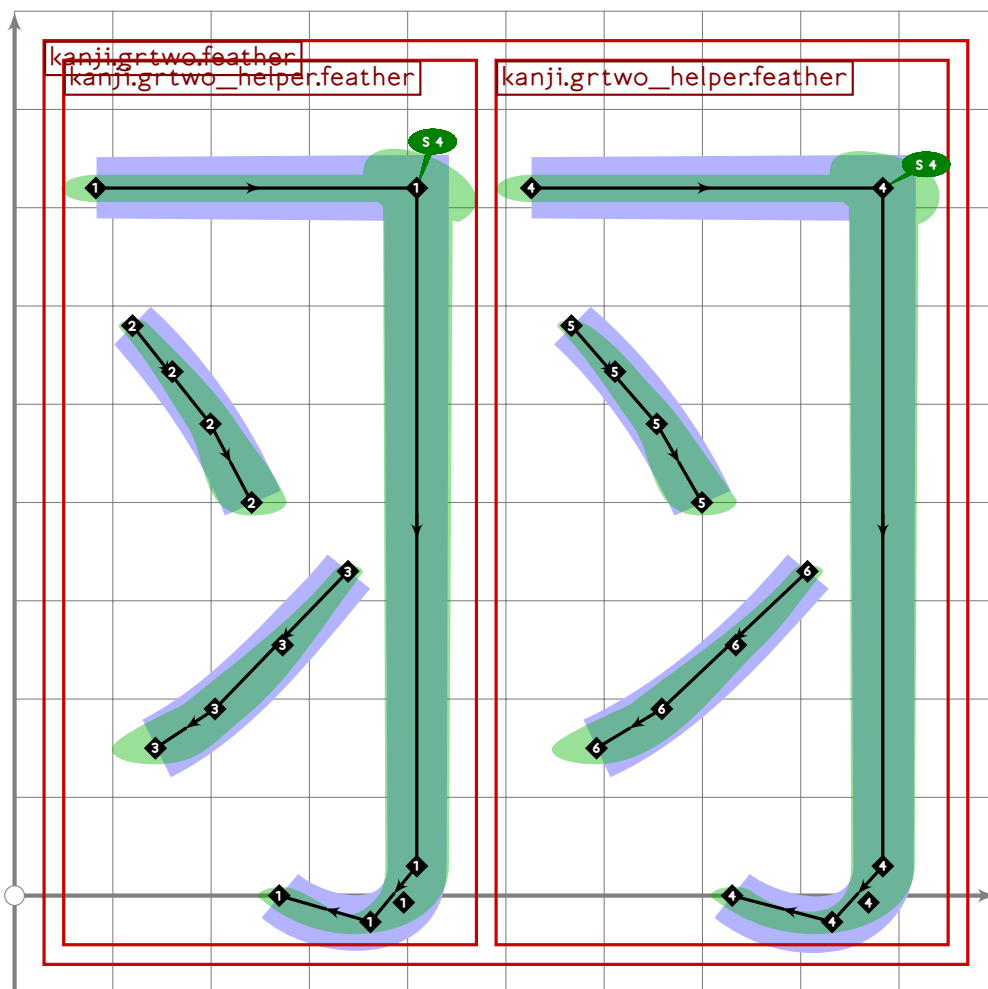
```

262
263 vardef kanji.grtwo.father =
264   push_pbox__toexpand("kanji.grtwo.father");
265   build_kanji.level(build_kanji.tb(700,300)
266     (tsu_xform(identity shifted (0,-180))(kanji.radical.eight))
267     (push_stroke((300,600)..(500,200)..(900,0),
268       (1.3,1.3)-(1.5,1.5)-(1.7,1.7));
269     push_stroke((700,600)..(500,200)..(70,-30),
270       (1.6,1.6)-(1.5,1.5)-(1,1));
271     set_boserif(0,0,10);
272   ));
273   expand_pbox;
274 enddef;

```

U+7FBD
tsuku.uni7FBD

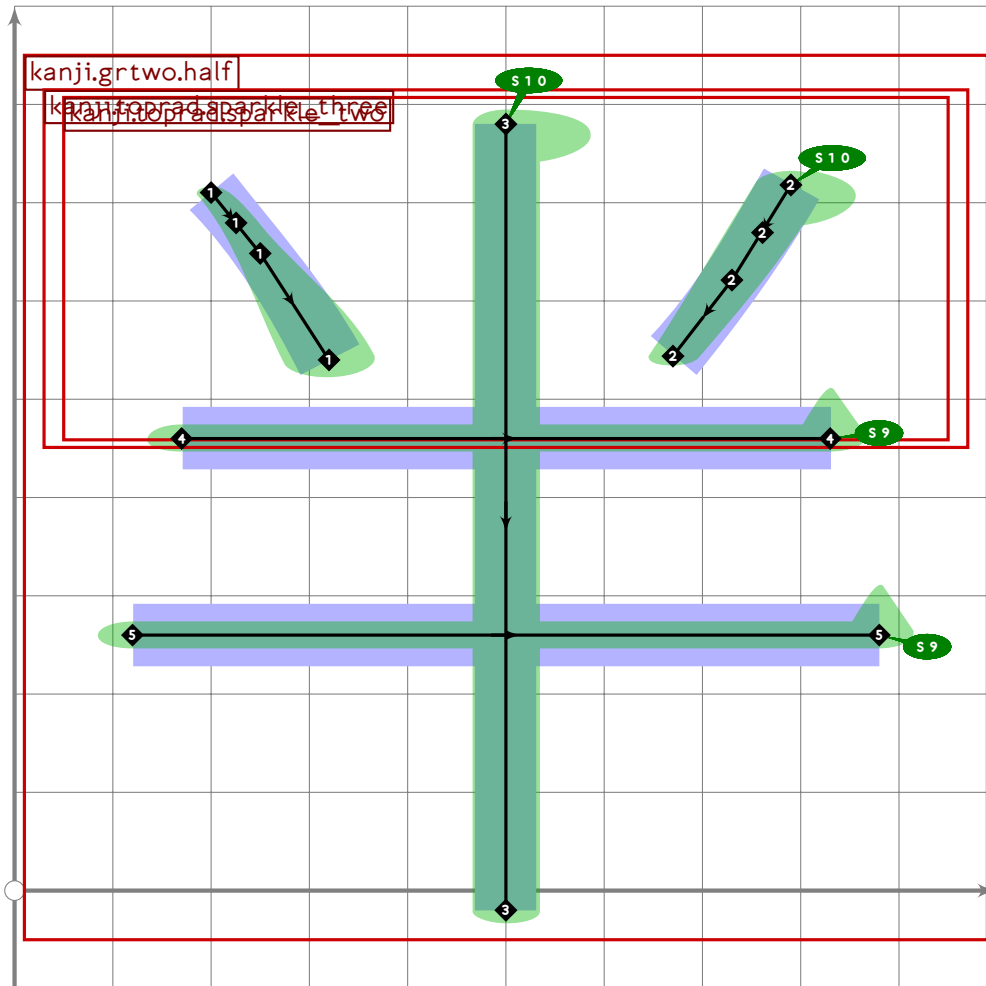
TWO



```

275
276 vardef kanji.grtwo.feather =
277   push_pbox_toexpand("kanji.grtwo.feather");
278   build_kanji.lr(480,-20)
279     (kanji.grtwo_helper.feather)
280     (kanji.grtwo_helper.feather);
281   expand_pbox;
282 enddef;

```



TWO

```

283
284 vardef kanji.grtwo.half =
285   push_pbox_toexpand("kanji.grtwo.half");
286   build_kanji.level(begingroup
287     save saved_path,mytr;
288     path saved_path;
289     transform mytr;
290     xpart mytr=xypart mytr=yxpart mytr=0;
291     xxpart mytr=1;
292     (500,160) transformed mytr=(500,540);
293     (500,780) transformed mytr=(500,780);
294     tsu_xform(mytr)
295     (kanji.toprad.sparkle_three;saved_path:=get_strokep(0));
296     replace_strokep(0)(saved_path);
297     push_stroke((170,460)-(830,460),
298       (1.6,1.6)-(1.6,1.6));
299     set_boserif(0,19);
300     push_stroke((120,260)-(880,260),
301       (1.6,1.6)-(1.6,1.6));
302     set_boserif(0,19);
303   endgroup);

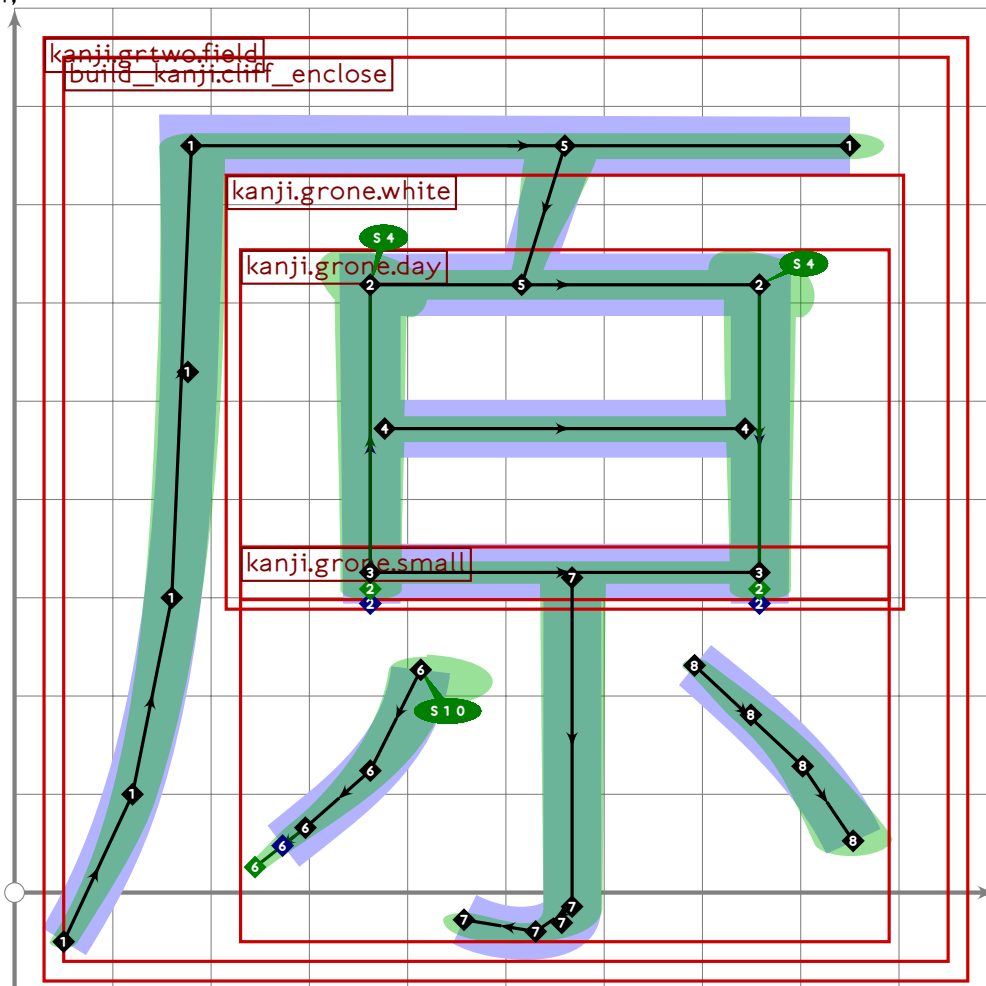
```

TWO

```

304 expand_pbox;
305 enddef;
306
307 vardef kanji.grtwo_helper.feather =
308   push_pbox_toexpand("kanji.grtwo_helper.feather");
309   push_stroke((60,720)-(410,720),(1.6,1.6)-(1.6,1.6));
310   build_kanji.add_jtail(0);
311   replace_strokep(0)(oldp xscaled 2);
312   set_botip(0,1,1);
313   set_boserif(0,1,4);
314   push_stroke((200,580)..tension 1.2..(370,480)..(460,400),
315     (1,1)-(1.3,1.3)-(1.6,1.6));
316   push_stroke((670,330)..tension 1.2..(380,190)..(250,150),
317     (1,1)-(1.6,1.6)-(1.9,1.9));
318   expand_pbox;
319 enddef;

```



```

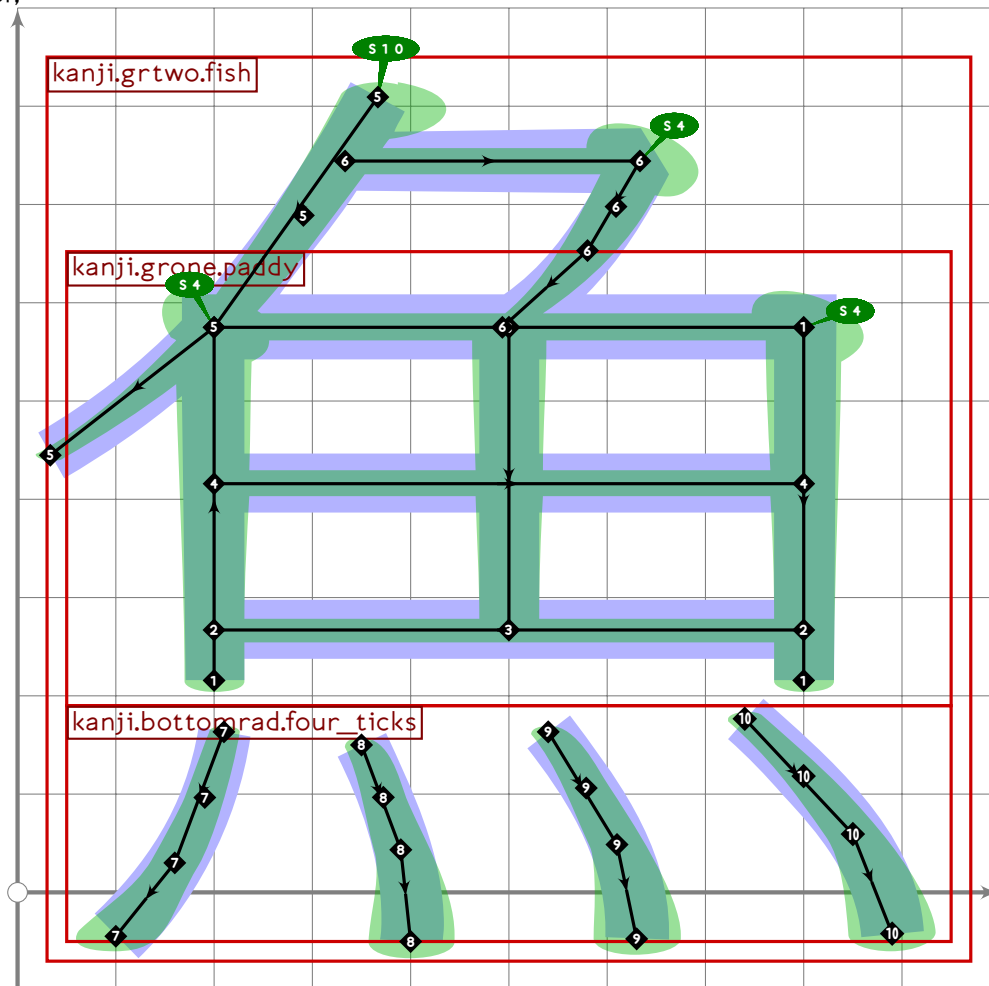
320
321 vardef kanji.grtwo.field =
322   push_pbox_toexpand("kanji.grtwo.field");
323   build_kanji.level(build_kanji.cliff_enclose(
324     build_kanji.tb(380,67)

```

```

325     (kanji.grone.white)
326     (kanji.grone.small));
327   begingroup
328     save myxf;
329     transform myxf;
330     point 2 of get_strokep(-3) transformed myxf=point 2 of get_strokep(-3);
331     ypart (point 0 of get_strokep(-3) transformed myxf)=760;
332     xpart myxf=yxpart myxf=0;
333     xxpart myxf=1;
334     replace_strokep(-3)(oldp transformed myxf);
335   endgroup;
336   set_boserif(-3,0,whatever);
337   set_boserif(-1,0,whatever);
338   expand_pbox;
339 enddef;

```



```

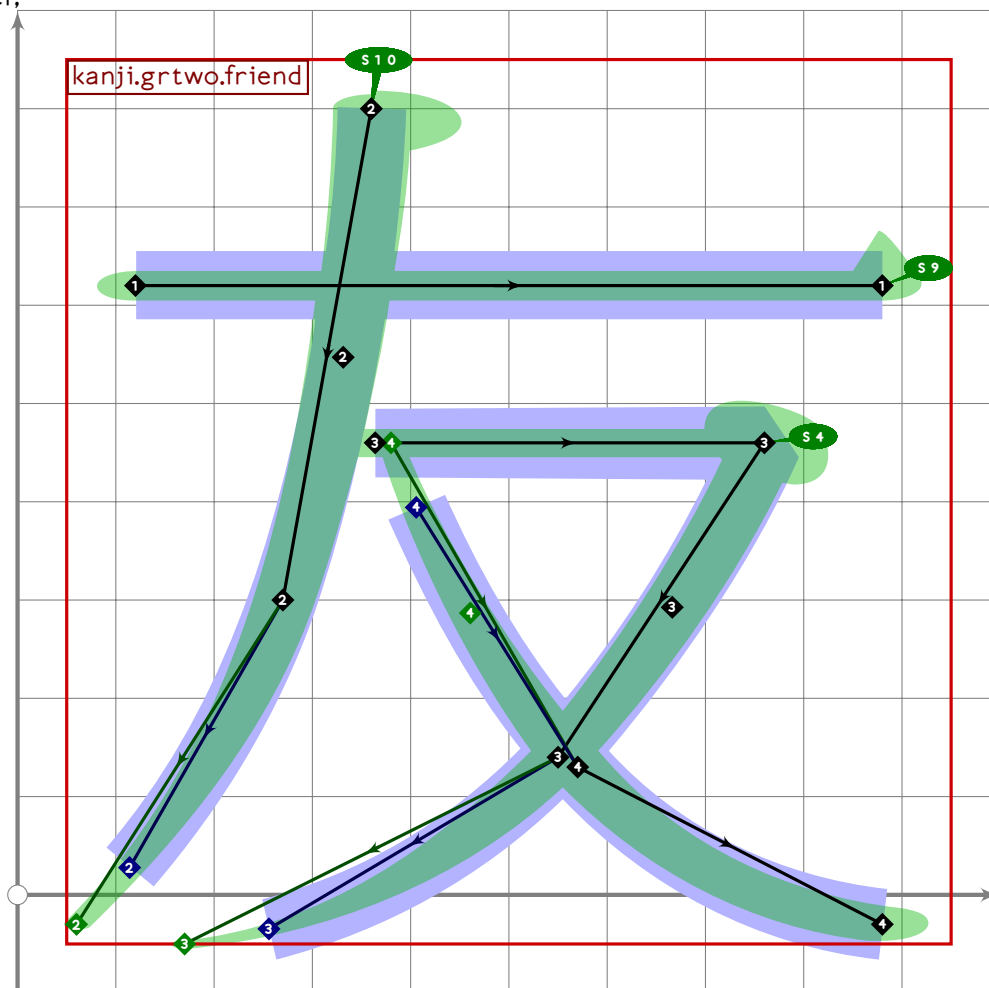
340
341 vardef kanji.grtwo.fish =
342   push_pbox_toexpand("kanji.grtwo.fish");
343   build_kanji.level(build_kanji.tb(190,0)
344     (build_kanji.attach_fishhook(0.7)(kanji.grone.paddy))
345     (kanji.bottomrad.four_ticks));

```

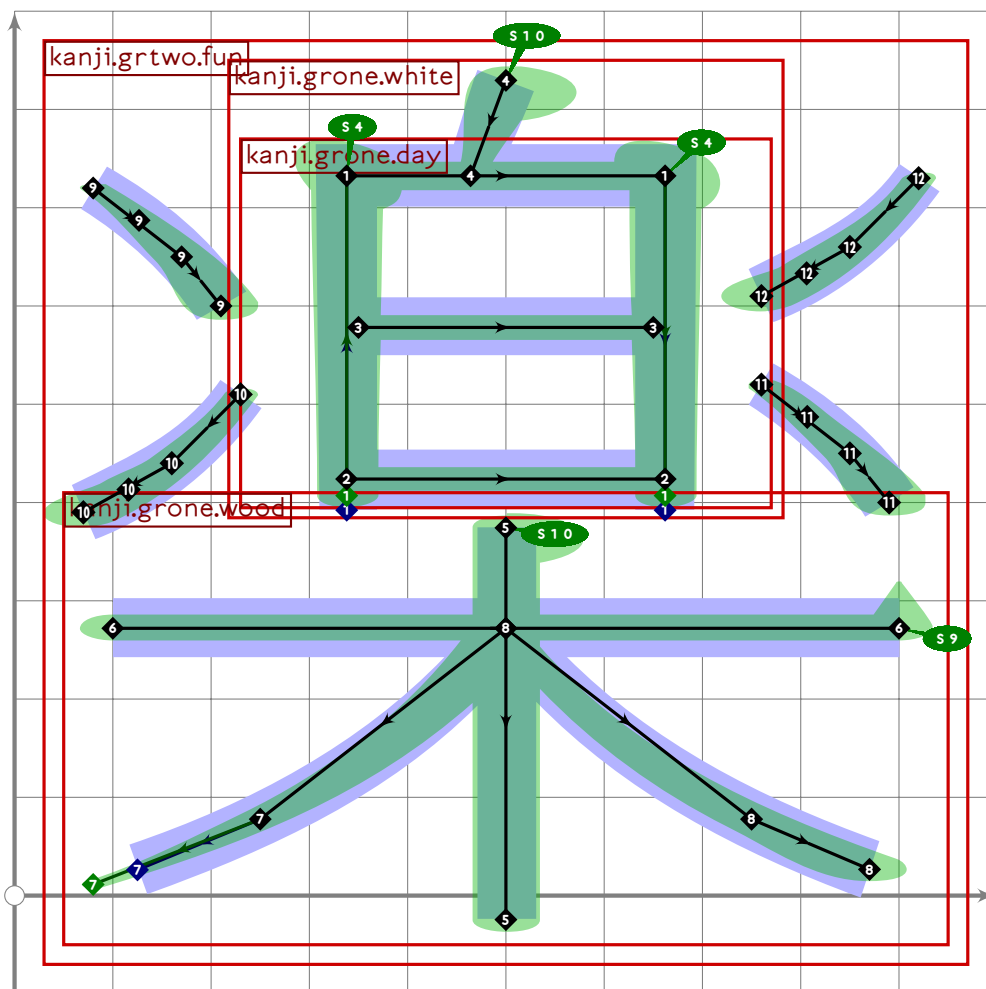
U+53CB
tsuku.uni53CB

```
346 expand_pbox;
347 enddef;
```

TWO



```
348
349 vardef kanji.grtwo.friend =
350   push_pbox_toexpand("kanji.grtwo.friend");
351   build_kanji.lean_to((360,-30));
352   push_stroke(
353     ((50,0)+(get_stroke(0) intersectionpoint ((0,460)-(1000,460))))-(
354       (760,460)..tension 1.2..(550,140)..(170,-50),
355       (1.6,1.6)-(1.5,1.5)-(1.4,1.4)-(0.9,0.9));
356   set_botip(0,1,0);
357   set_boserif(0,1,4);
358   push_stroke((380,460)..tension 1.2..(570,130)..(880,-30),
359     (0.9,0.9)-(1.4,1.4)-(1.8,1.8));
360   expand_pbox;
361 enddef;
```

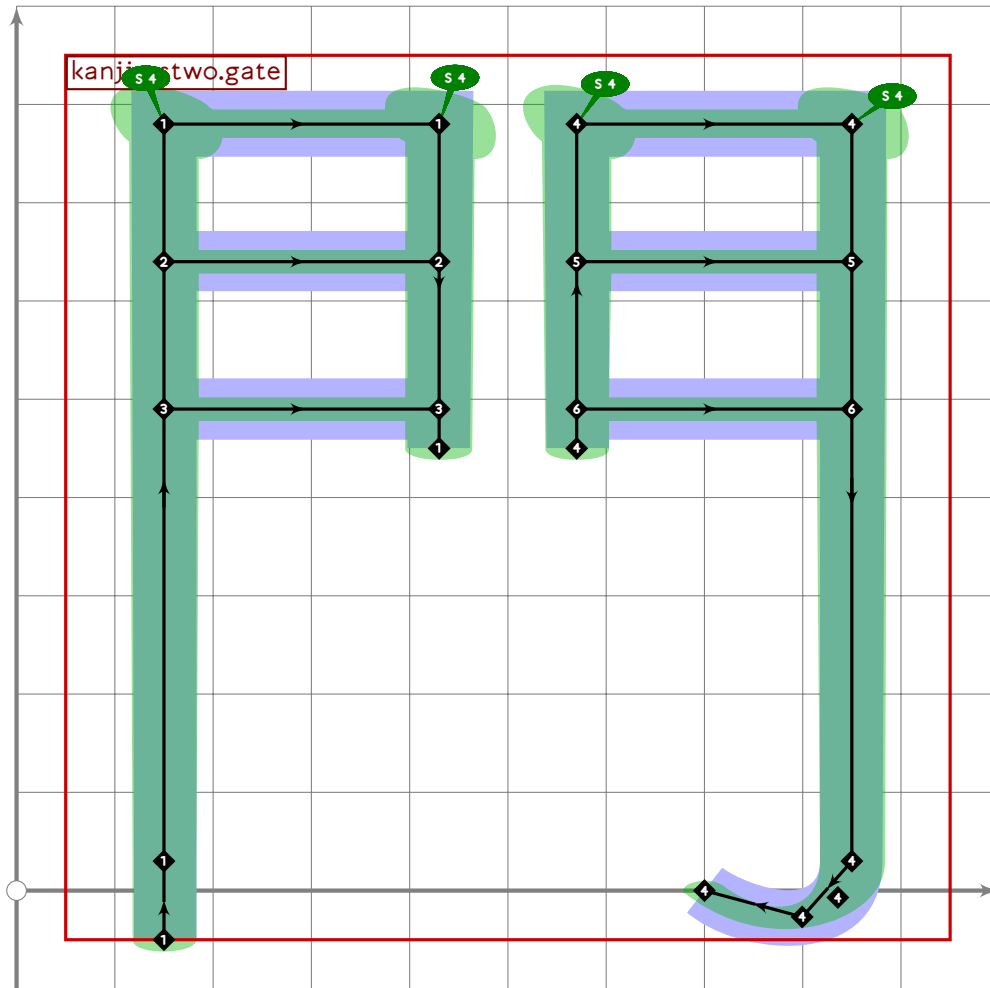
TWO

```

362
363 vardef kanji.grtwo.fun =
364   push_pbox_toexpand("kanji.grtwo.fun");
365   build_kanji.level(
366     build_kanji.tb(400,20)
367       (build_kanji.sscale(xscaled 0.6)(kanji.grone.white))
368       (kanji.grone.wood));
369   push_stroke((80,720)..tension 1.2..(170,650)..(210,600),
370     (1,1)-(1.5,1.5)-(1.8,1.8));
371   set_bosize(0,80);
372   push_stroke((230,510)..(160,440)..tension 1.2..(70,390),
373     (1,1,1)-(14,14)-(19,19));
374   set_bosize(0,80);
375   push_stroke(get_stroke(-1) shifted ((760,520)-point 0 of get_stroke(-1)),
376     get_stroke(-1));
377   set_bosize(0,80);
378   push_stroke(get_stroke(-1) shifted ((760,610)-point 2 of get_stroke(-1)),
379     get_stroke(-1));
380   set_bosize(0,80);
381   expand_pbox;
382 enddef;

```

TWO



```

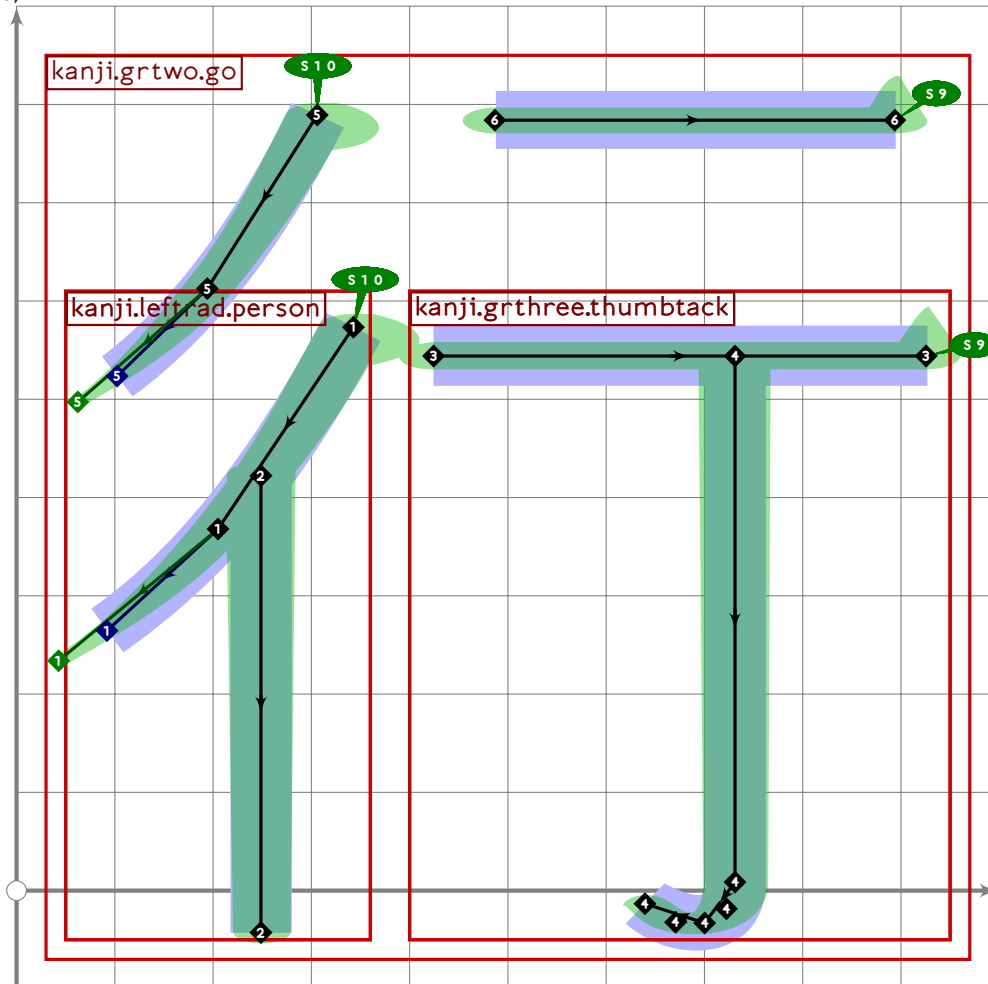
383
384 vardef kanji.grtwo.gate =
385   push_pbox__toexpand("kanji.grtwo.gate");
386   push_stroke((150,50)–(150,30)–(150,780)–(430,780)–(430,450),
387     (1.5,1.5)–(1.5,1.5)–(1.6,1.6)–(1.6,1.6)–(1.5,1.5));
388   set_botip(0,2,1);
389   set_botip(0,3,1);
390   set_boserif(0,2,4);
391   set_boserif(0,3,4);
392   push_stroke((150,640)–(430,640),
393     (1.5,1.5)–(1.5,1.5));
394   push_stroke((150,490)–(430,490),
395     (1.5,1.5)–(1.5,1.5));
396   push_stroke((570,450)–(570,780)–(850,780),
397     (1.5,1.5)–(1.6,1.6)–(1.6,1.6));
398   build_kanji.add_jtail(0);
399   set_botip(0,1,1);
400   set_botip(0,2,1);
401   set_boserif(0,1,4);
402   set_boserif(0,2,4);
403   push_stroke((570,640)–(850,640),

```

```

404 (1.5,1.5)-(1.5,1.5));
405 push_stroke((570,490)-(850,490),
406 (1.5,1.5)-(1.5,1.5));
407 for i=-5 upto 0: set_bosize(i,90); endfor;
408 expand_pbox;
409 enddef;

```



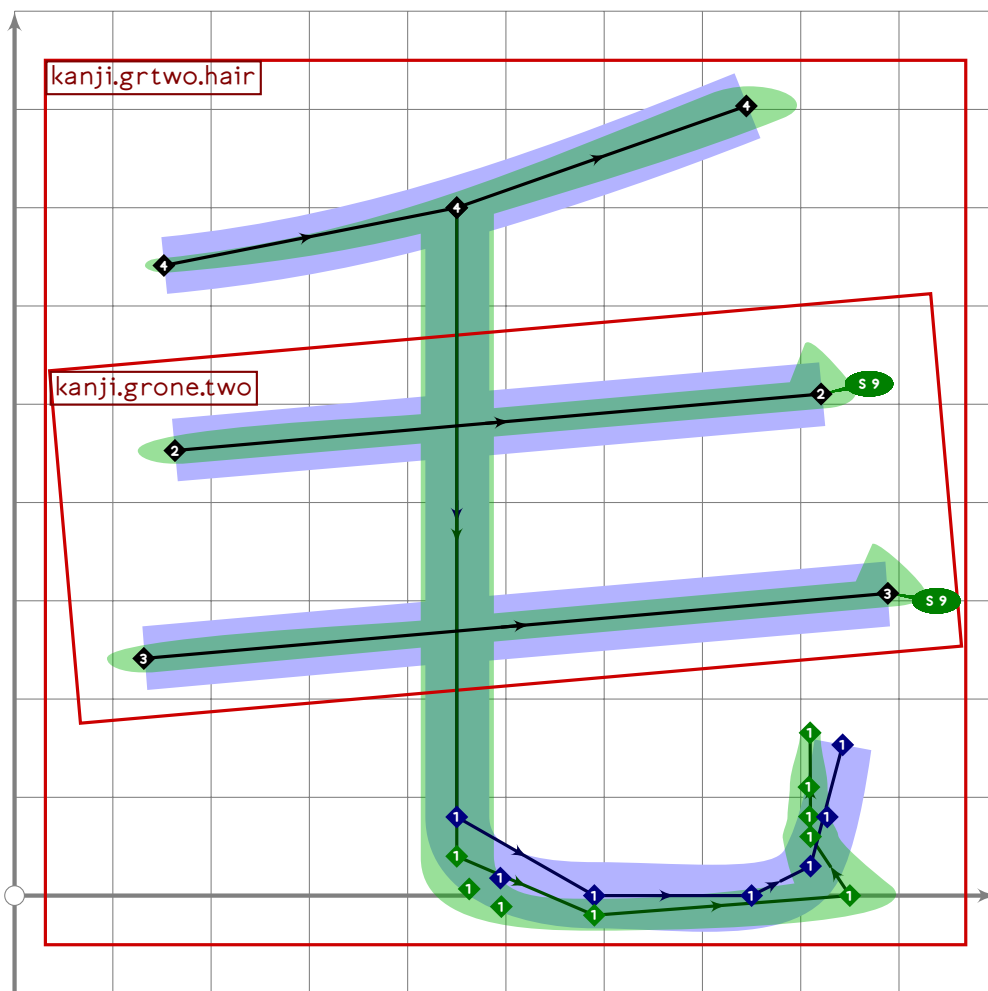
```

410
411 vardef kanji.grtwo.go =
412   push_pbox_toexpand("kanji.grtwo.go");
413   build_kanji.harmonic(240,0.86,50)
414   (build_kanji.level(build_kanji.lr(380,-40)
415     (kanji.leftrad.person)
416     (kanji.grthree.thumbtack)));
417   replace_stroke(-4)(oldp shifted (50,0));
418   expand_pbox;
419 enddef;

```

TWO

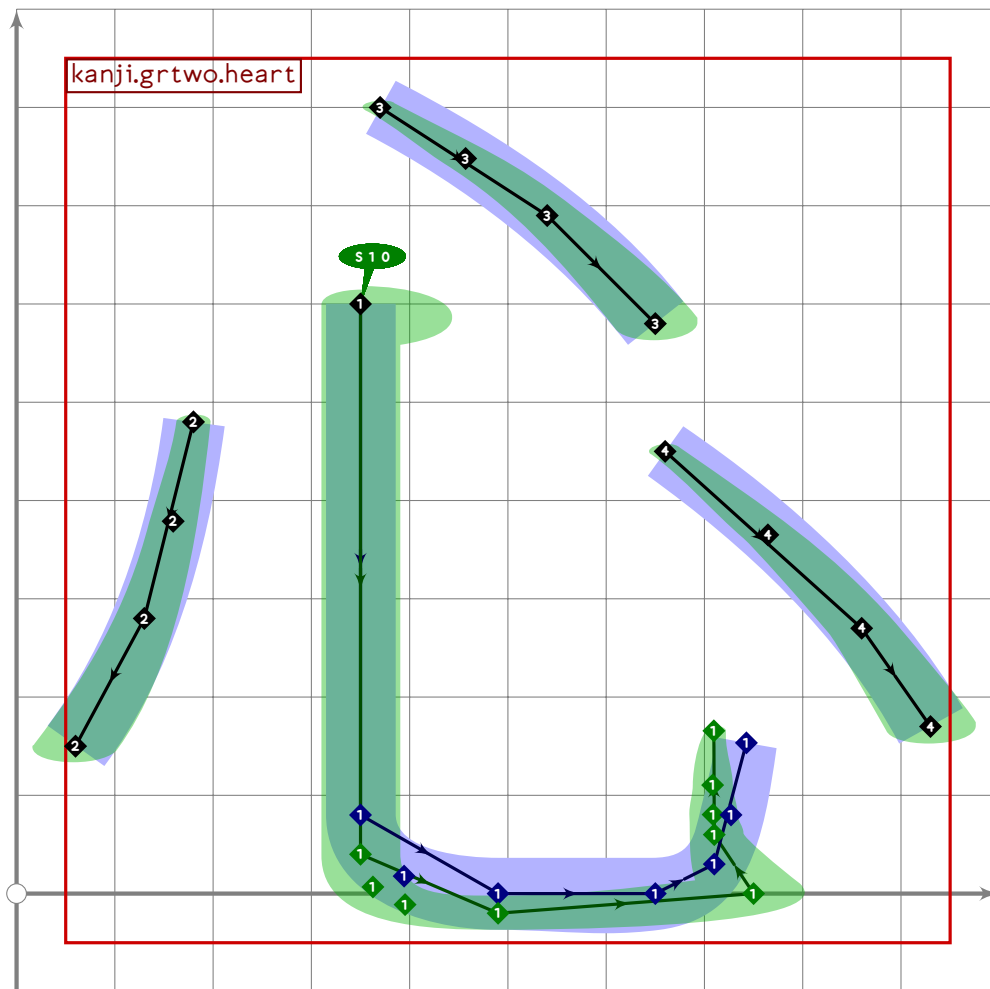
TWO



```

420
421 vardef kanji.grtwo.hair =
422   push_pbox_toexpand("kanji.grtwo.hair");
423   build_kanji.level(build_kanji.add_beret(
424     push_stroke((450,700),(1.6,1.6));
425     build_kanji.add_tail(0);
426     build_kanji.sscale(yscaled 0.4 rotated 5)(kanji.grone.two)));
427   expand_pbox;
428 enddef;

```



TWO

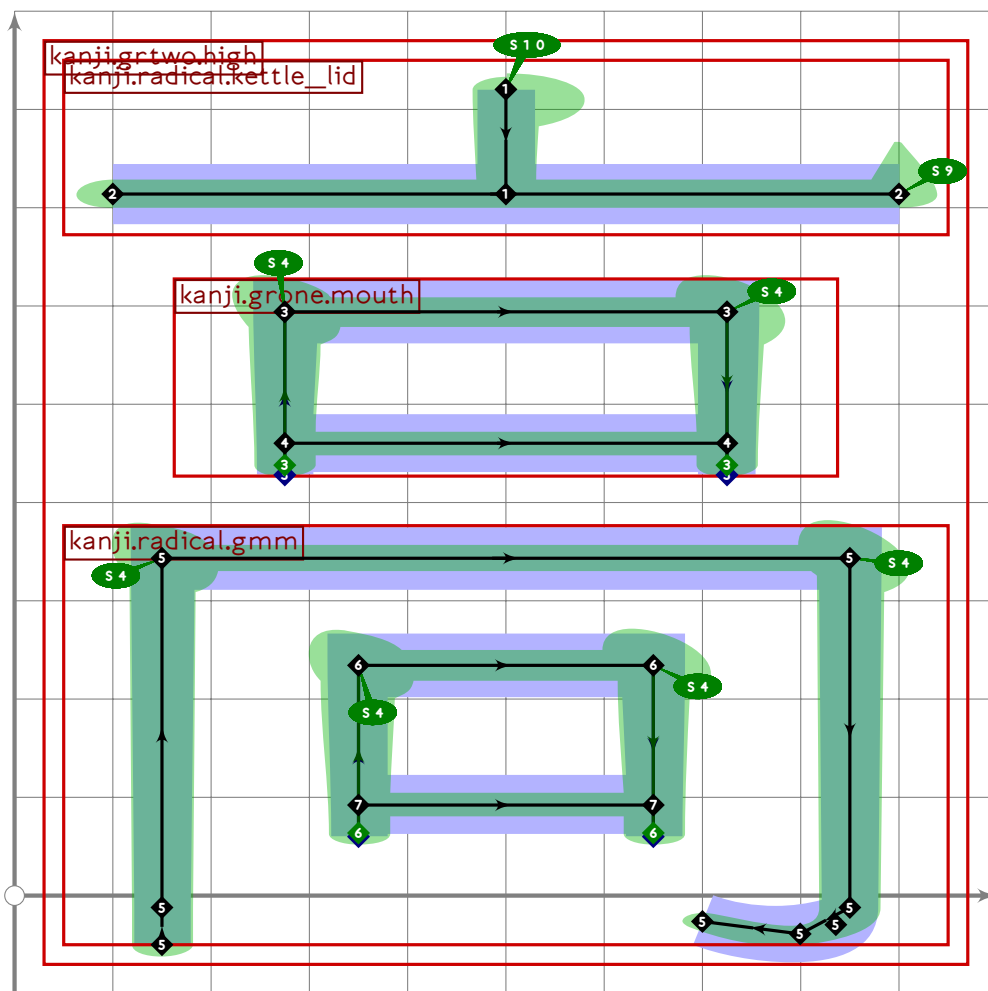
```

429
430 vardef kanji.grtwo.heart =
431   push_pbox__toexpand("kanji.grtwo.heart");
432   tsu_xform(identity shifted (-100,0))
433   (push_stroke((450,600),(1.6,1.6));
434     build_kanji.add_ltail(0));
435   set_boserif(0,0,10);
436   push_stroke((180,480)..tension 1.2..(130,280)..(60,150),
437     (1,1)-(1.4,1.4)-(1.7,1.7));
438   push_stroke((370,800)..tension 1.2..(540,690)..(650,580),
439     (1,1)-(1.4,1.4)-(1.7,1.7));
440   push_stroke((660,450)..tension 1.2..(860,270)..(930,170),
441     (1,1)-(1.5,1.5)-(1.8,1.8));
442   expand_pbox;
443 enddef;

```

U+9AD8
tsuku.uni9AD8

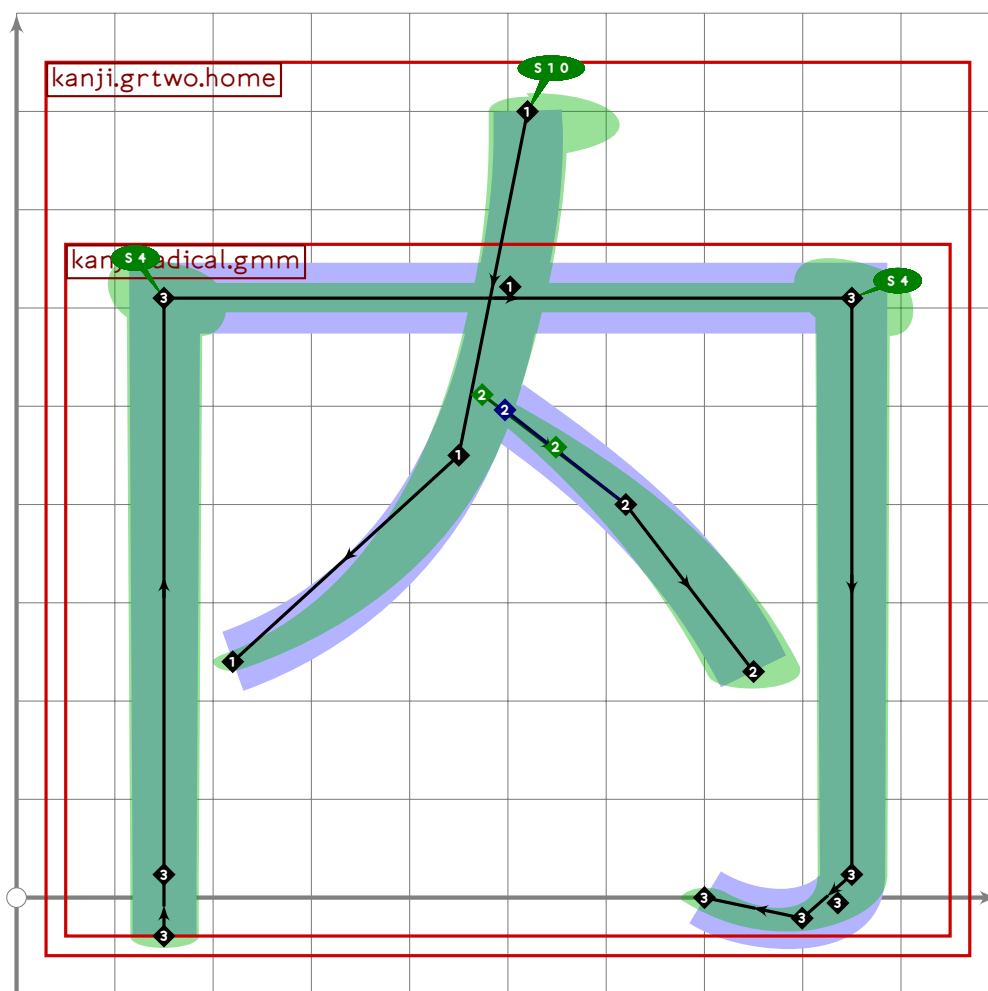
TWO



```

444
445 vardef kanji.grtwo.high =
446   push_pbox_toexpand("kanji.grtwo.high");
447   build_kanji.level(build_kanji.tb(650,-45)
448     (kanji.radical.kettle_lid)
449     (build_kanji.tb(550,-67)
450       (build_kanji.sscale(xscaled 0.75)(kanji.grone.mouth))
451       (kanji.radical.gmm;
452         build_kanji.box((350,550),(650,250));
453       ));
454   expand_pbox;
455 enddef;

```

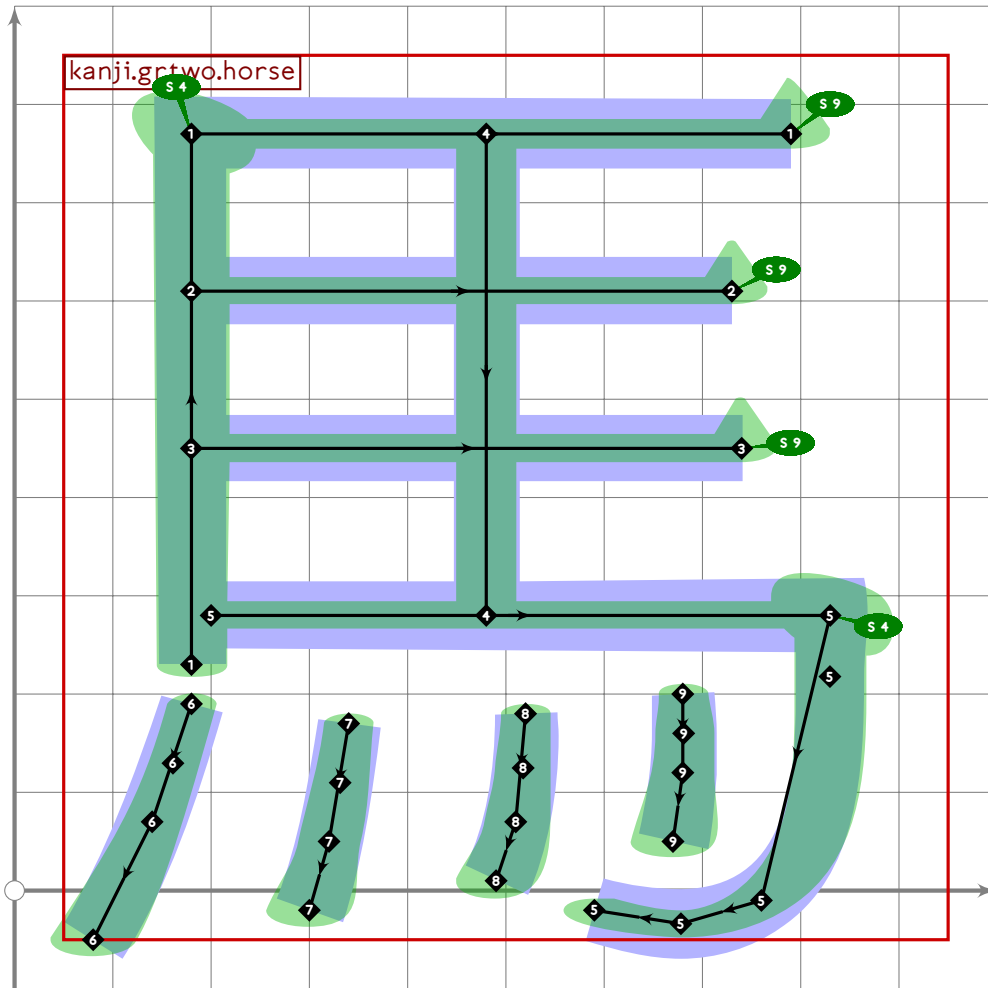


```

456
457 vardef kanji.grtwo.home =
458   push_pbox__toexpand("kanji.grtwo.home");
459   push_stroke((520,800)..tension 1.2..(450,450)..(220,240),
460     (1.6,1.6)–(1.5,1.5)–(1.1,1.1));
461   set_boserif(0,0,10);
462   push_stroke(
463     (point 0.8 of get_strokep(0))..tension 1.2..(620,400)..(750,230),
464     (0.9,0.9)–(1.5,1.5)–(1.8,1.8));
465   tsu_xform(identity yscaled (610/780))(kanji.radical.gmm);
466   expand_pbox;
467 enddef;

```

TWO



```

468
469 vardef kanji.grtwo.horse =
470   push_pbox_toexpand("kanji.grtwo.horse");
471   push_stroke((180,230)–(180,770)–(790,770),
472     (1.5,1.5)–(1.6,1.6)–(1.6,1.6));
473   set_boserif(0,14);
474   set_boserif(0,2,9);
475   set_botip(0,1);
476   push_stroke((180,610)–(730,610),
477     (1.5,1.5)–(1.5,1.5));
478   set_boserif(0,19);
479   push_stroke((180,450)–(740,450),
480     (1.5,1.5)–(1.5,1.5));
481   set_boserif(0,19);
482   push_stroke((480,770)–(480,280),(14,14)–(1.3,1.3));
483   push_stroke((200,280)–(830,280){dir 268}..(760,-10){curl 0.2}(590,-20),
484     (1.5,1.5)–(1.5,1.5)–(1.5,1.5)–(1.5,1.5)–(14,14)–(1.2,1.2));
485   replace_stroke(0)(insert_nodes(oldp)((length oldp)–0.5));
486   set_boserif(0,14);
487   set_botip(0,1);
488   push_stroke((180,190)..tension 1.2..(140,70)..(80,-50),

```

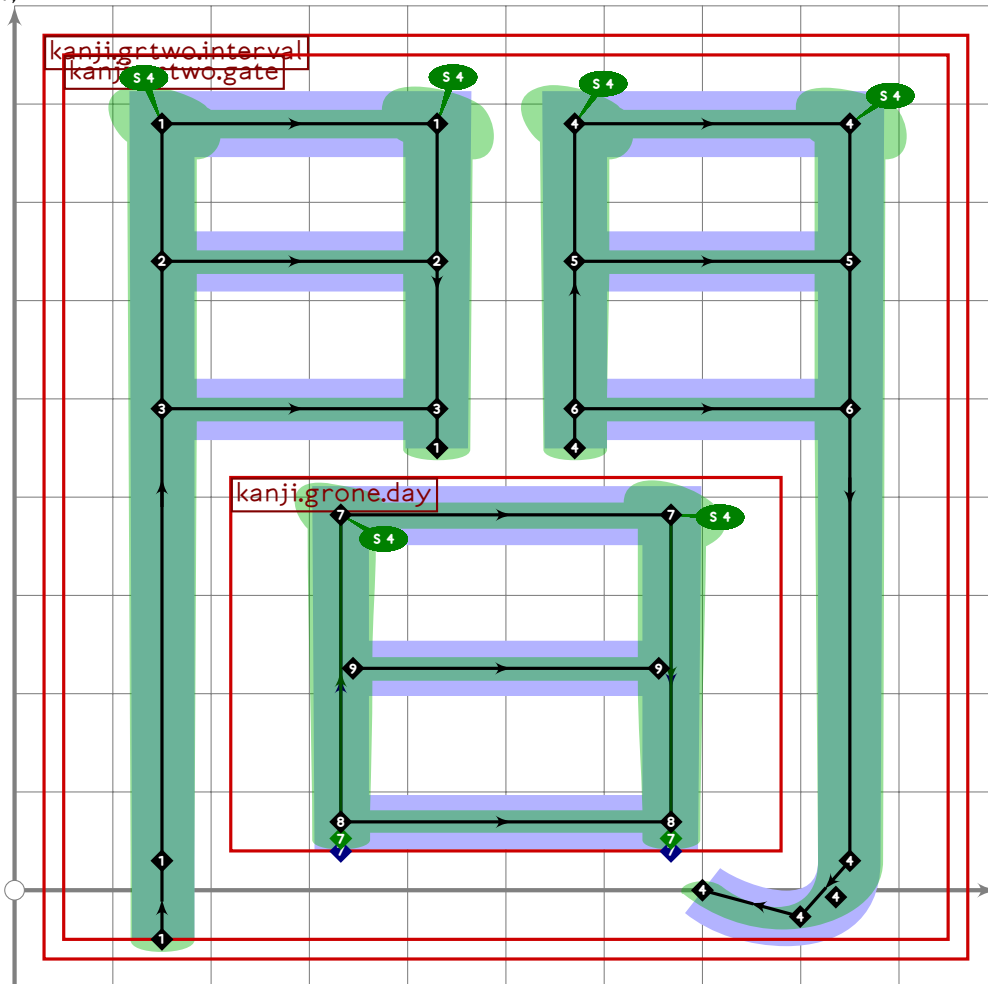


```

489 (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
490 push_stroke((340,170)..tension 1.2..(320,50)..(300,-20),
491 (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
492 push_stroke((520,180)..tension 1.2..(510,70)..(490,10),
493 (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
494 push_stroke((680,200)..tension 1.2..(680,120)..(670,50),
495 (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
496 expand_pbox;
497 enddef;

```

TWO

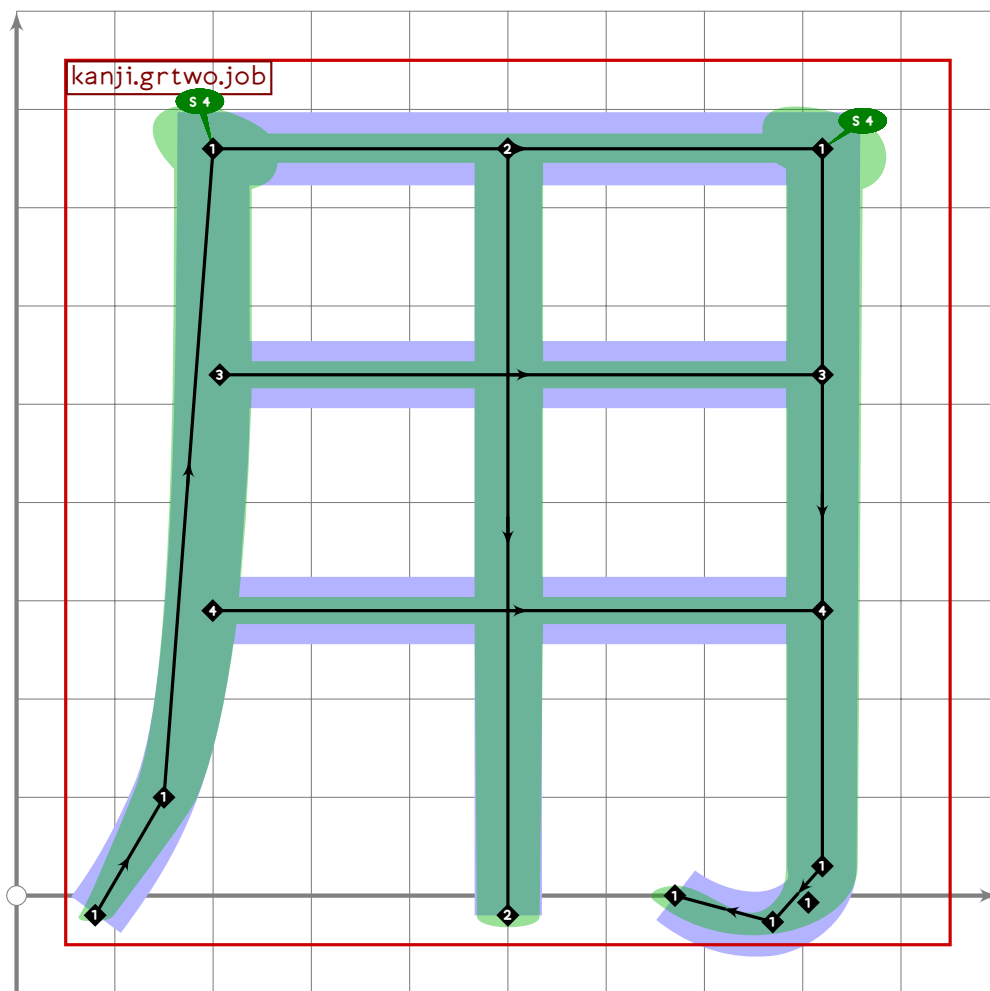


```

498
499 vardef kanji.grtwo.interval =
500   push_pbox_toexpand("kanji.grtwo.interval");
501   build_kanji.gate_enclose(kanji.grone.day);
502   expand_pbox;
503 enddef;

```

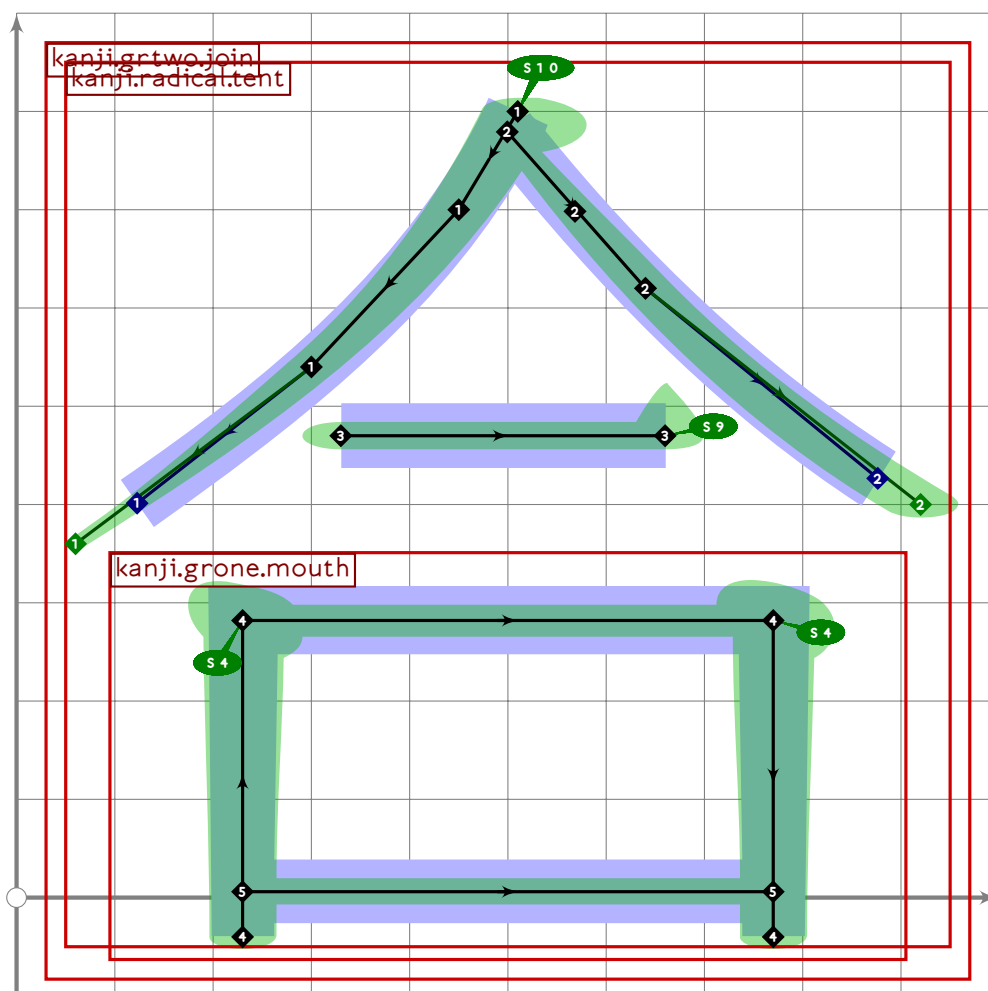
TWO



```

504
505 vardef kanji.grtwo.job =
506   push_pbox_toexpand("KANJI.GRTWO.JOB");
507   push_stroke((80,-20)..(150,100)..{up}(200,760){right}-(820,760),
508     (1,1)-(14,14)-(16,16)-(16,16));
509   build_kanji.add_jtail(0);
510   set_botip(0,2,0.8);
511   set_botip(0,3,1);
512   set_boserif(0,2,4);
513   set_boserif(0,3,4);
514   push_stroke((500,760)-(500,-20),(1.5,1.5)-(14,14));
515   push_stroke(
516     (get_stroke(-1) intersectionpoint ((0,530)-(1000,530)))-(820,530),
517     (1.5,1.5)-(1.5,1.5));
518   push_stroke(
519     (get_stroke(-2) intersectionpoint ((0,290)-(1000,290)))-(820,290),
520     (1.5,1.5)-(1.5,1.5));
521   expand_pbox;
522 enddef;

```



TWO

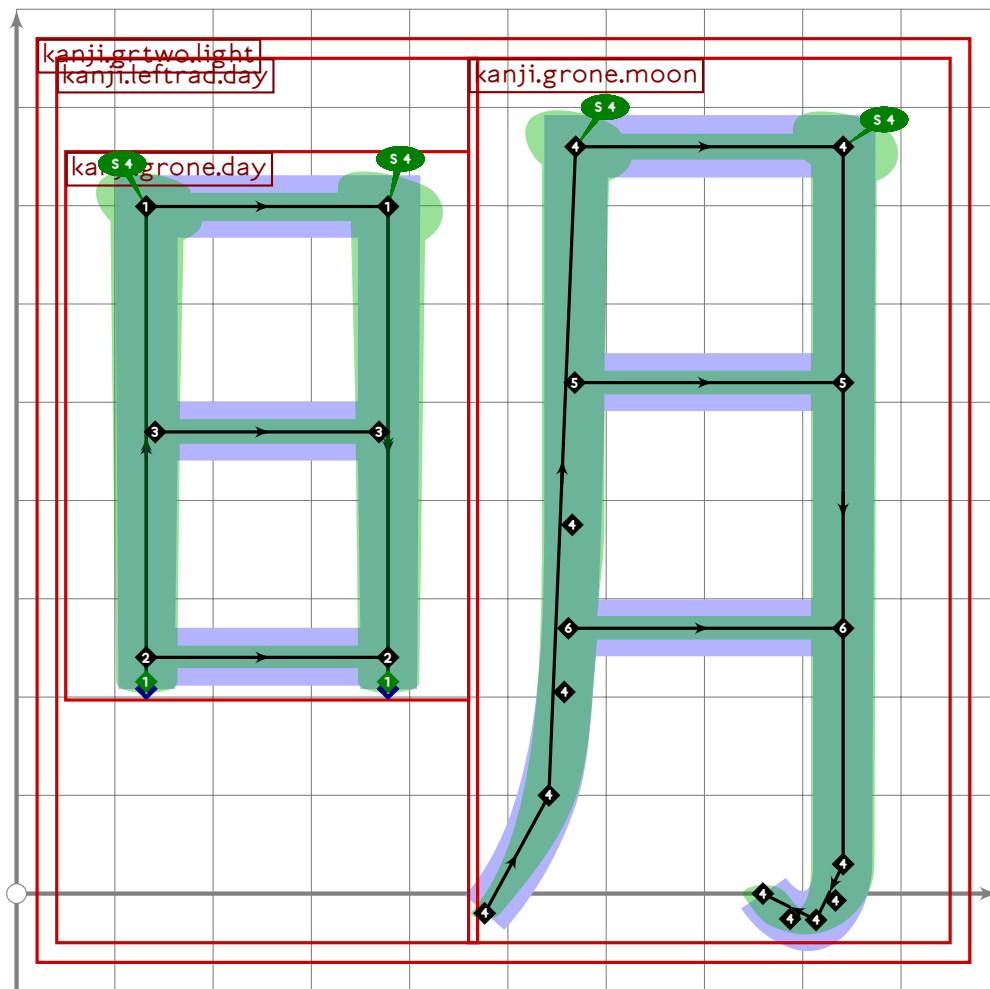
```

523
524 vardef kanji.grtwo.join =
525   push_pbox__toexpand("kanji.grtwo.join");
526   build_kanji.level(
527     kanji.radical.tent;
528     tsu_xform(identity shifted (-500,0) xyscaled (0.9,0.46) shifted (500,-40))
529     (kanji.grone.mouth);
530   );
531   expand_pbox;
532 enddef;

```

U+660E
tsuku.uni660E

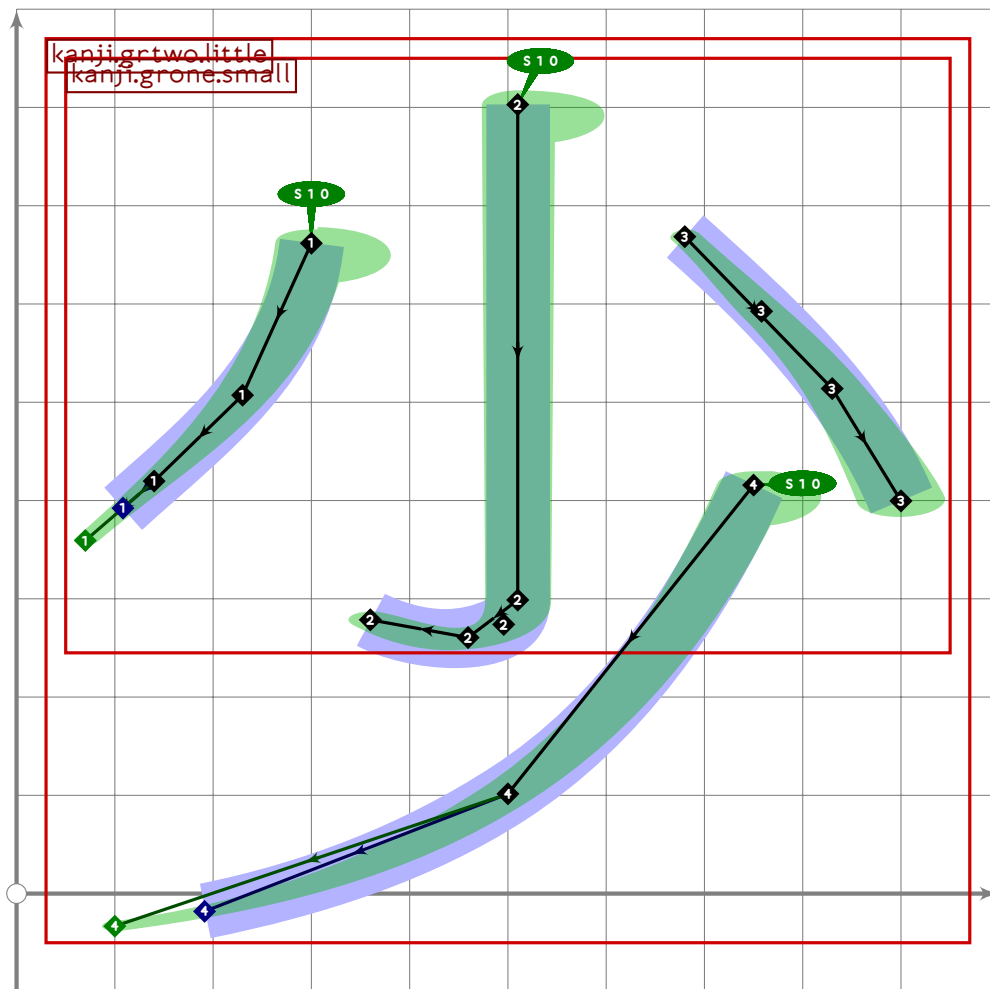
TWO



```

533
534 vardef kanji.grtwo.light =
535   push_pbox_toexpand("kanji.grtwo.light");
536   build_kanji.level(build_kanji.lr(460,0)
537     (kanji.leftrad.day)
538     (kanji.grone.moon));
539   expand_pbox;
540 enddef;

```



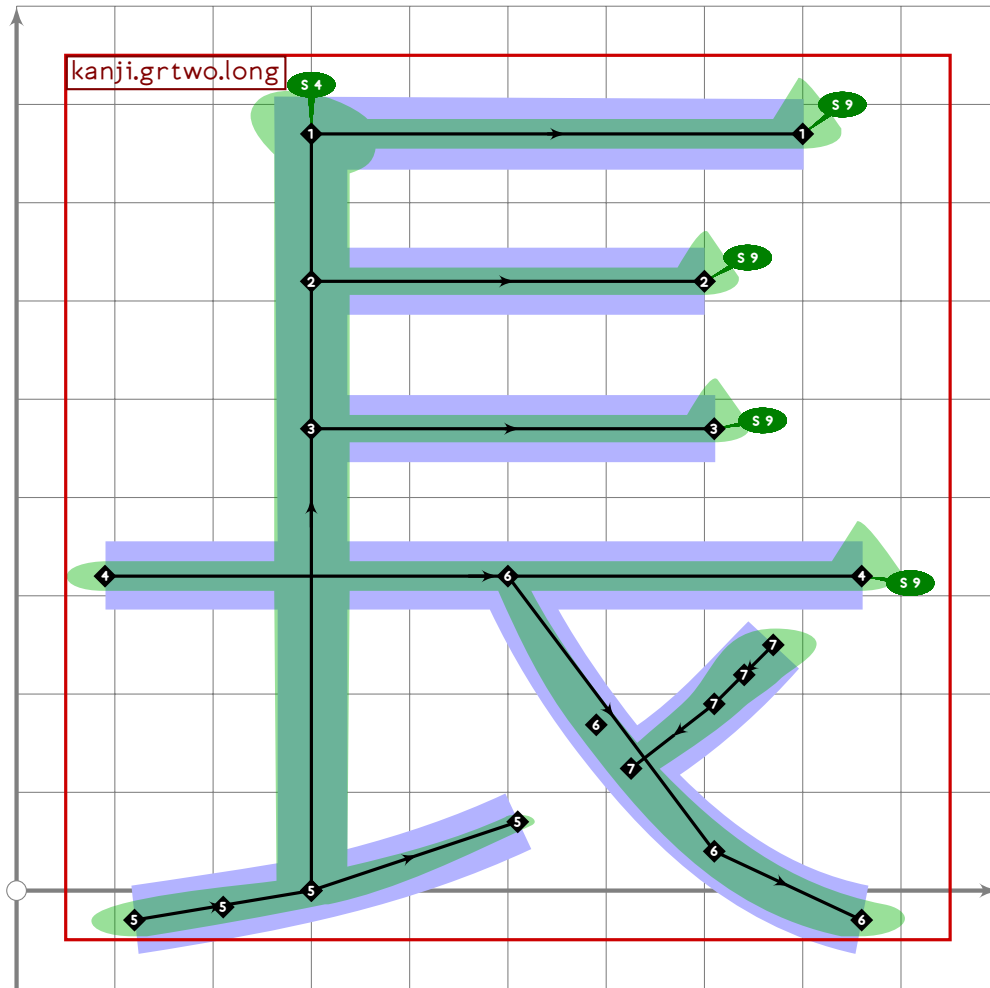
TWO

```

541
542 vardef kanji.grtwo.little =
543   push_pbox__toexpand("kanji.grtwo.little");
544   build_kanji.level(build_kanji.tb(350,210)
545     (kanji.grone.small)
546     (
547       push_stroke((750,780){curl 0.1}..(500,220)..(100,-20),
548         (1.6,1.6)-(1.4,1.4)-(0.9,0.9));
549       set_boserif(0,0,10);
550     ));
551   expand_pbox;
552 enddef;

```

TWO

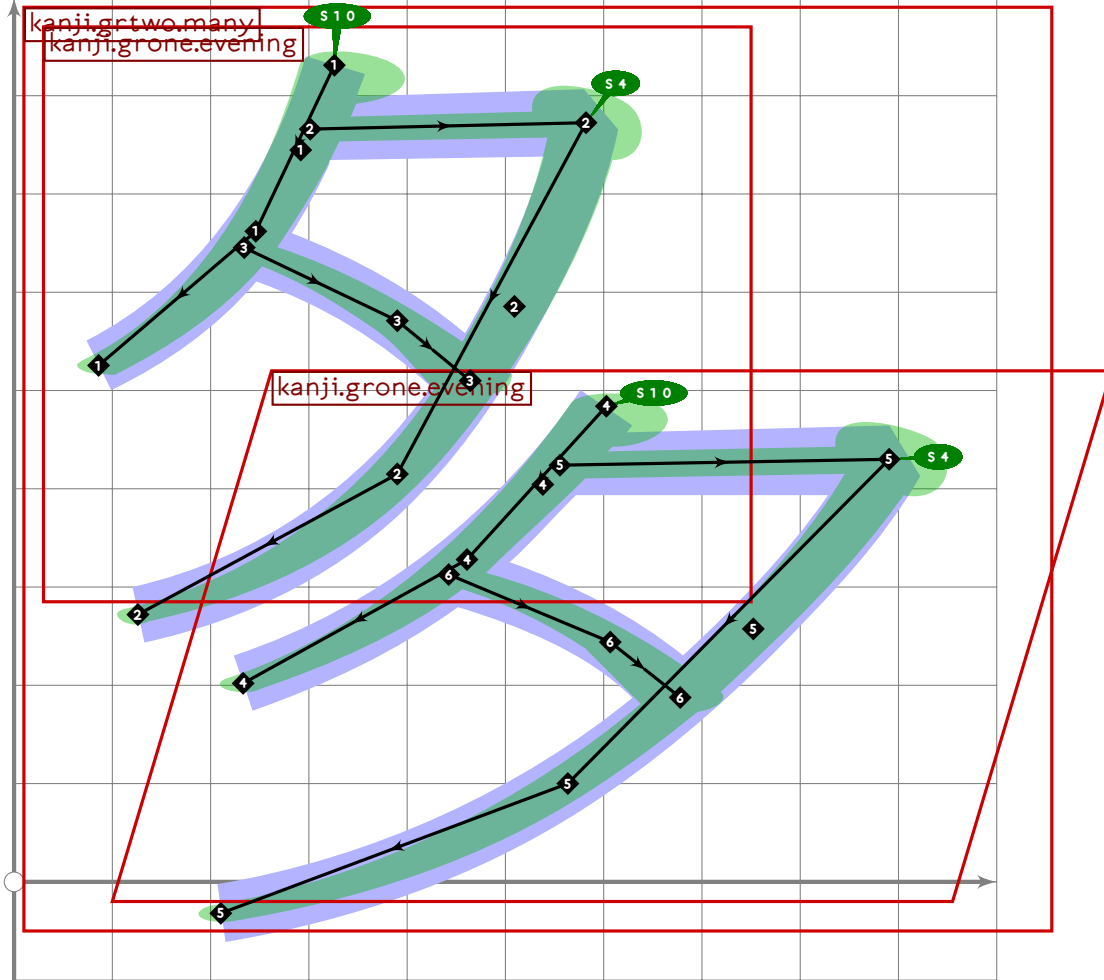


```

553
554 vardef kanji.grtwo.long =
555   push_pbox_toexpand("kanji.grtwo.long");
556   push_stroke((300,0)–(300,770)–(800,770),
557     (1.5,1.5)–(1.6,1.6)–(1.6,1.6));
558   set_boserif(0,14);
559   set_boserif(0,2,9);
560   set_botip(0,1);
561   push_stroke((300,620)–(700,620),(1.5,1.5)–(1.5,1.5));
562   set_boserif(0,19);
563   push_stroke((300,470)–(710,470),(1.5,1.5)–(1.5,1.5));
564   set_boserif(0,1,9);
565   push_stroke((90,320)–(860,320),(1.6,1.6)–(1.6,1.6));
566   set_boserif(0,1,9);
567   push_stroke((120,30)..tension 1.2..(300,0)..(510,70),
568     (1.7,1.7)–(1.5,1.5)–(1,1));
569   push_stroke((500,320)..tension 1.2..(710,40)..(860,30),
570     (1,1)–(1.4,1.4)–(1.7,1.7));
571   push_stroke((770,250)..tension 1.2..(710,190)..
572     (point 0.65 of get_strokep(0)),
573     (1.7,1.7)–(1.4,1.4)–(1.2,1.2));

```

```
574 expand_pbox;
575 enddef;
```

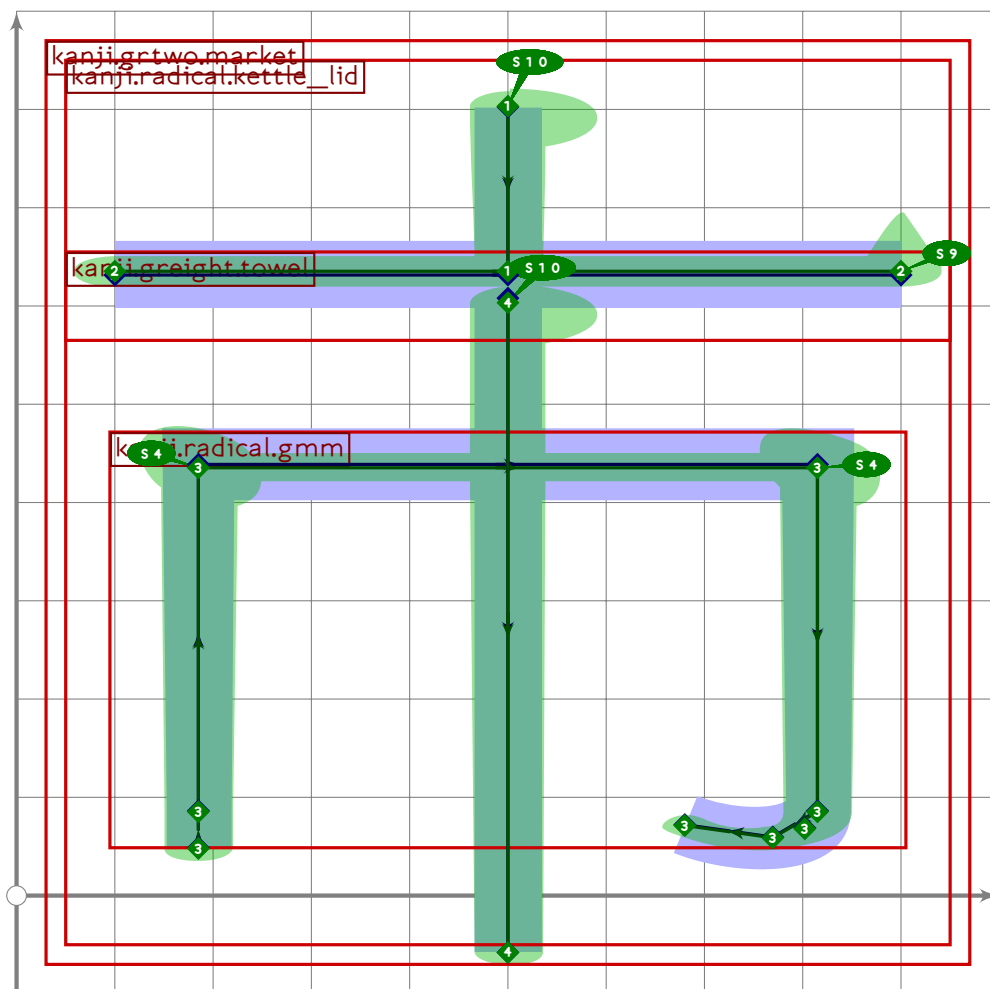


TWO

```
576
577 vardef kanji.grtwo.many =
578   push_pbox_toexpand("kanji.grtwo.many");
579   perl_structure:=perl_structure&"eids.u2FF1.1.1.";
580   tsu_xform(identity shifted (-50,850) xyscaled (0.8,0.65) shifted (30,870))
581     (kanji.grone.evening);
582   tsu_xform(identity shifted (-50,50)
583     xyscaled (0.95,0.6) slanted 0.3 shifted (100,-20))
584     (kanji.grone.evening);
585   expand_pbox;
586 enddef;
```

U+5E02
tsuku.uni5E02

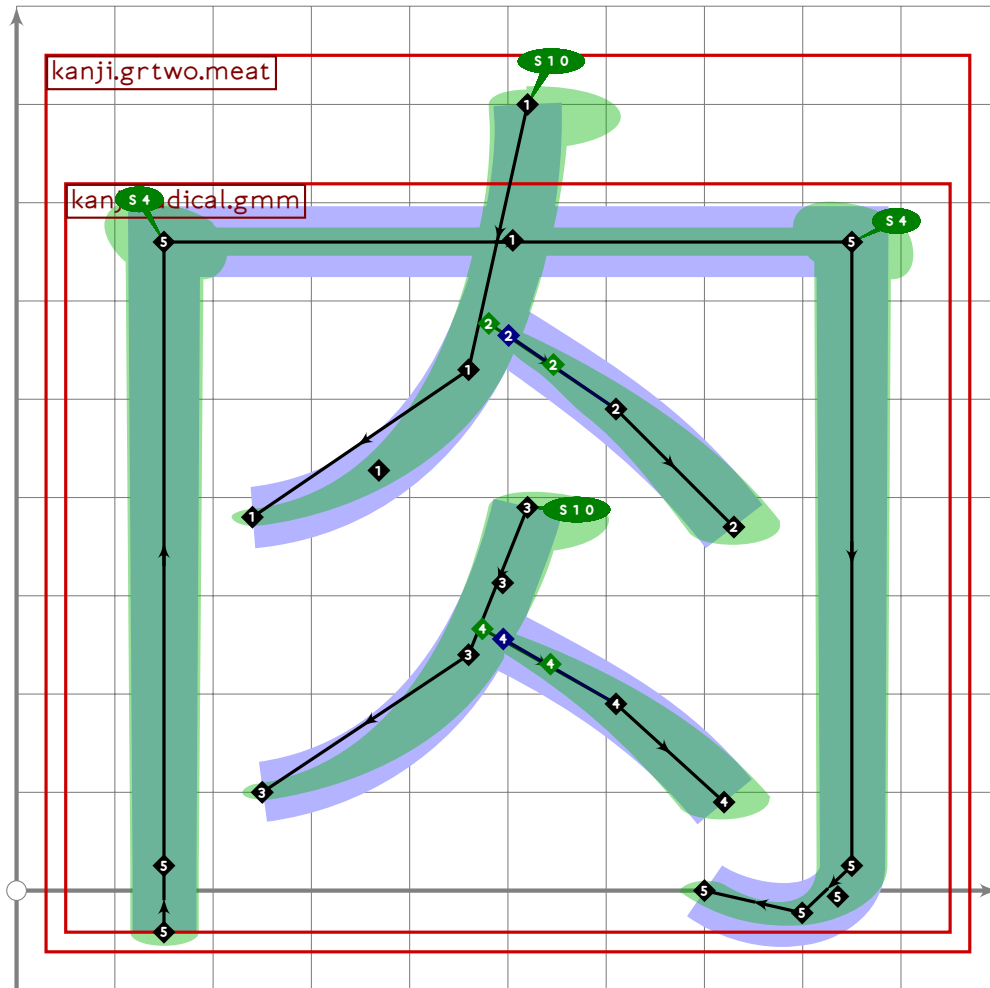
TWO



```

587
588 vardef kanji.grtwo.market =
589   push_pbox_toexpand("kanji.grtwo.market");
590   build_kanji.level(build_kanji.tb(610,90-10*mincho)
591     (kanji.radical.kettle_lid)
592     (kanji.greight.towel));
593   expand_pbox;
594 enddef;

```

TWO

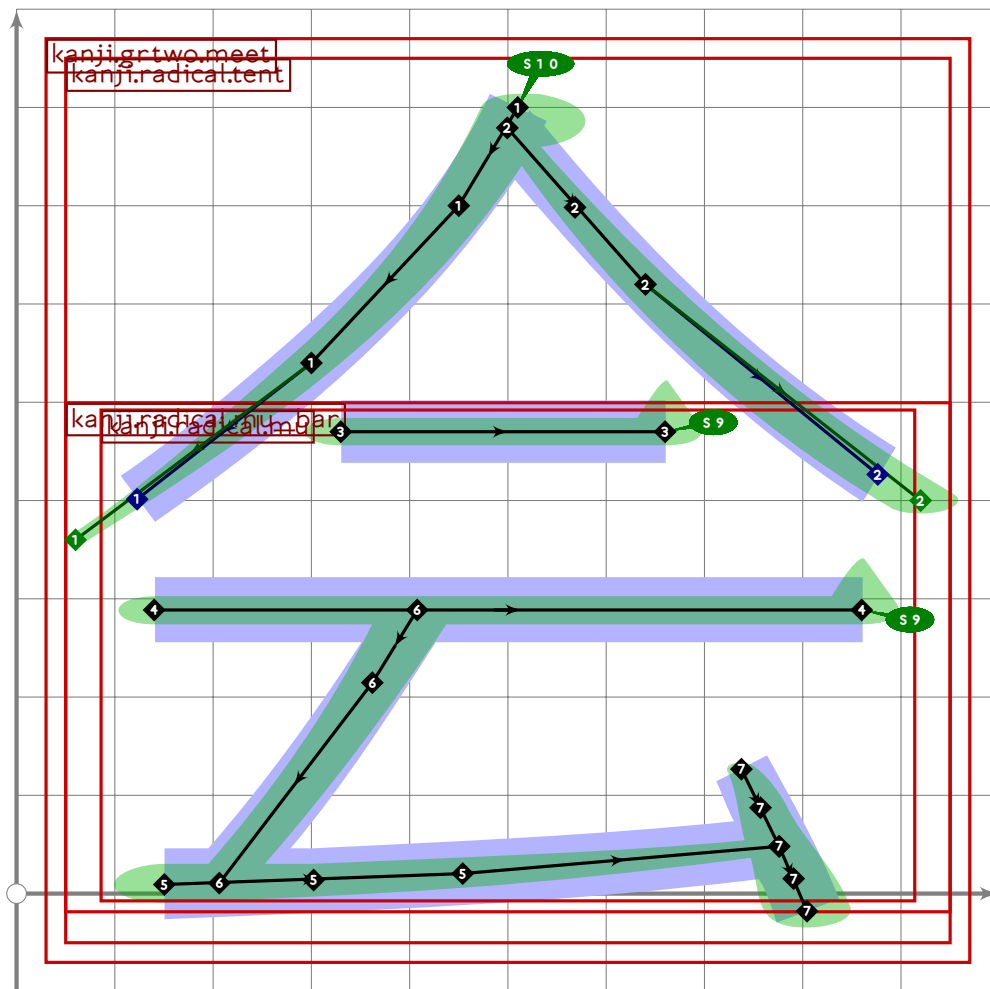
```

595
596 vardef kanji.grtwo.meat =
597   push_pbox_toexpand("kanji.grtwo.meat");
598   push_stroke((520,800)..tension 1.2..(460,530)..(240,380),
599     (1.6,1.6)–(1.5,1.5)–(1.1,1.1));
600   set_boserif(0,0,10);
601   push_stroke((point 0.8 of get_stroke(0))..tension 1.2..(610,490)..(730,370),
602     (0.9,0.9)–(1.5,1.5)–(1.8,1.8));
603   push_stroke((520,390)..tension 1.2..(460,240)..(250,100),
604     (1.6,1.6)–(1.5,1.5)–(1.1,1.1));
605   set_boserif(0,0,10);
606   push_stroke((point 0.8 of get_stroke(0))..tension 1.2..(610,190)..(720,90),
607     (0.9,0.9)–(1.5,1.5)–(1.8,1.8));
608   tsu_xform(identity yscaled (660/780))(kanji.radical.gmm);
609   expand_pbox;
610 enddef;

```

U+4F1A
tsuku.uni4F1A

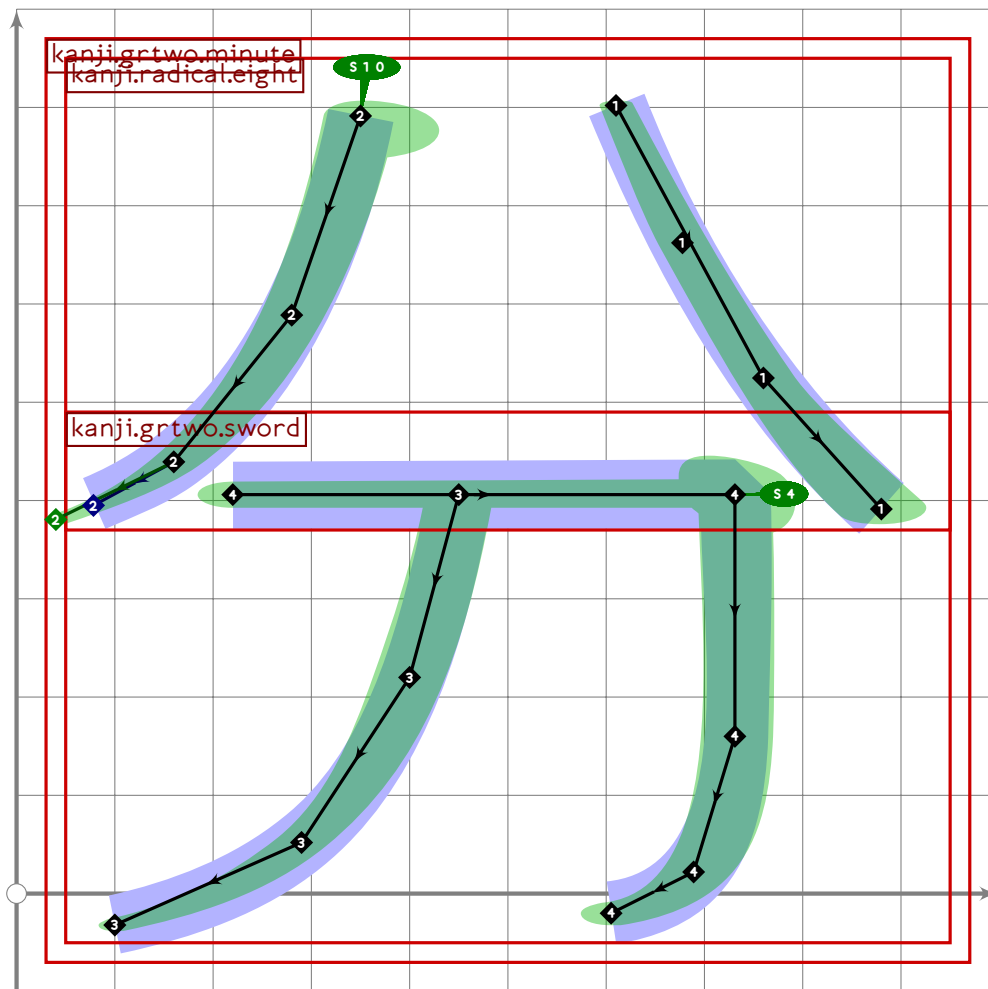
TWO



```

611
612 vardef kanji.grtwo.meet =
613   push_pbox__toexpand("kanji.grtwo.meet");
614   build_kanji.level(
615     kanji.radical.tent;
616     tsu_xform(identity yscaled 0.37)(kanji.radical.mu_bar);
617   );
618   expand__pbox;
619 enddef;

```



TWO

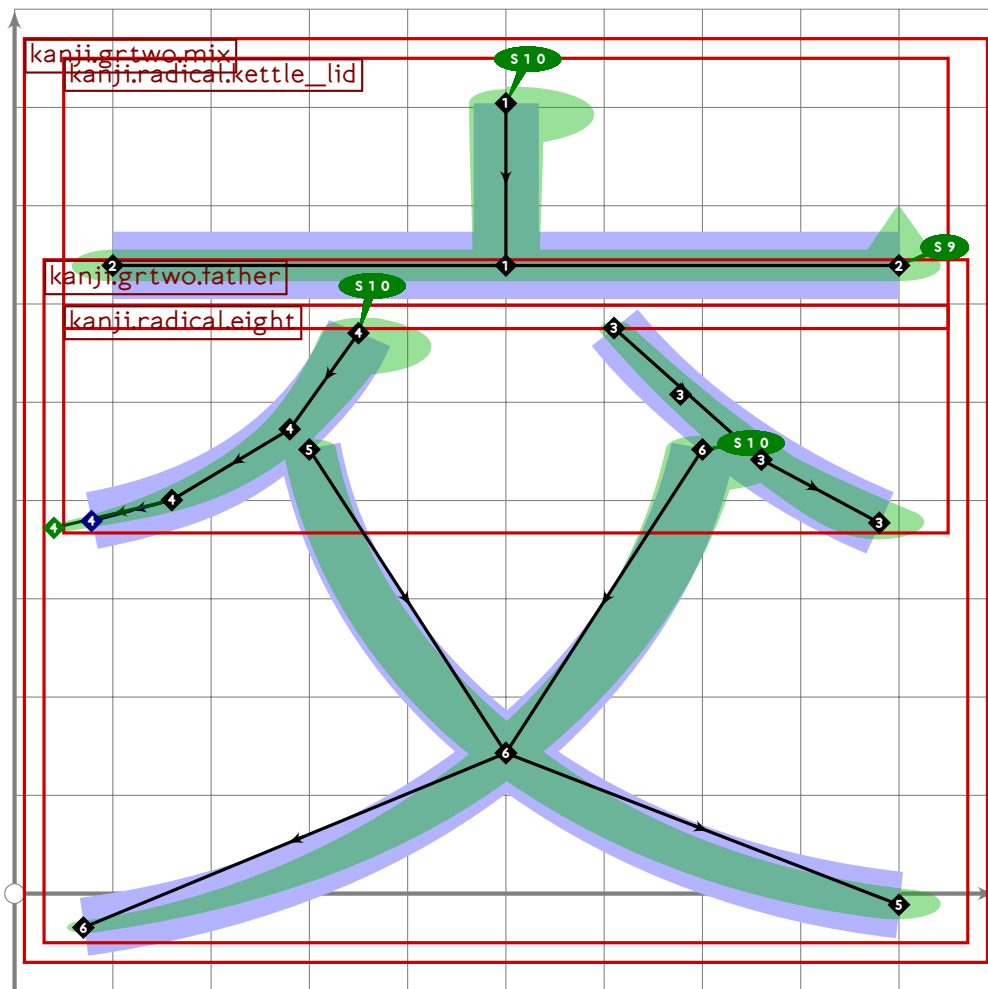
```

620
621 vardef kanji.grtwo.minute =
622   push_pbox__toexpand("kanji.grtwo.minute");
623   build_kanji.level(build_kanji.tb(430,120)
624     (kanji.radical.eight)
625     (kanji.grtwo.sword;
626       replace_stroke(0)(oldp shifted (-500,0) xscaled 0.7 shifted (500,0))));
627   expand_pbox;
628 enddef;

```

U+4EA4
tsuku.uni4EA4

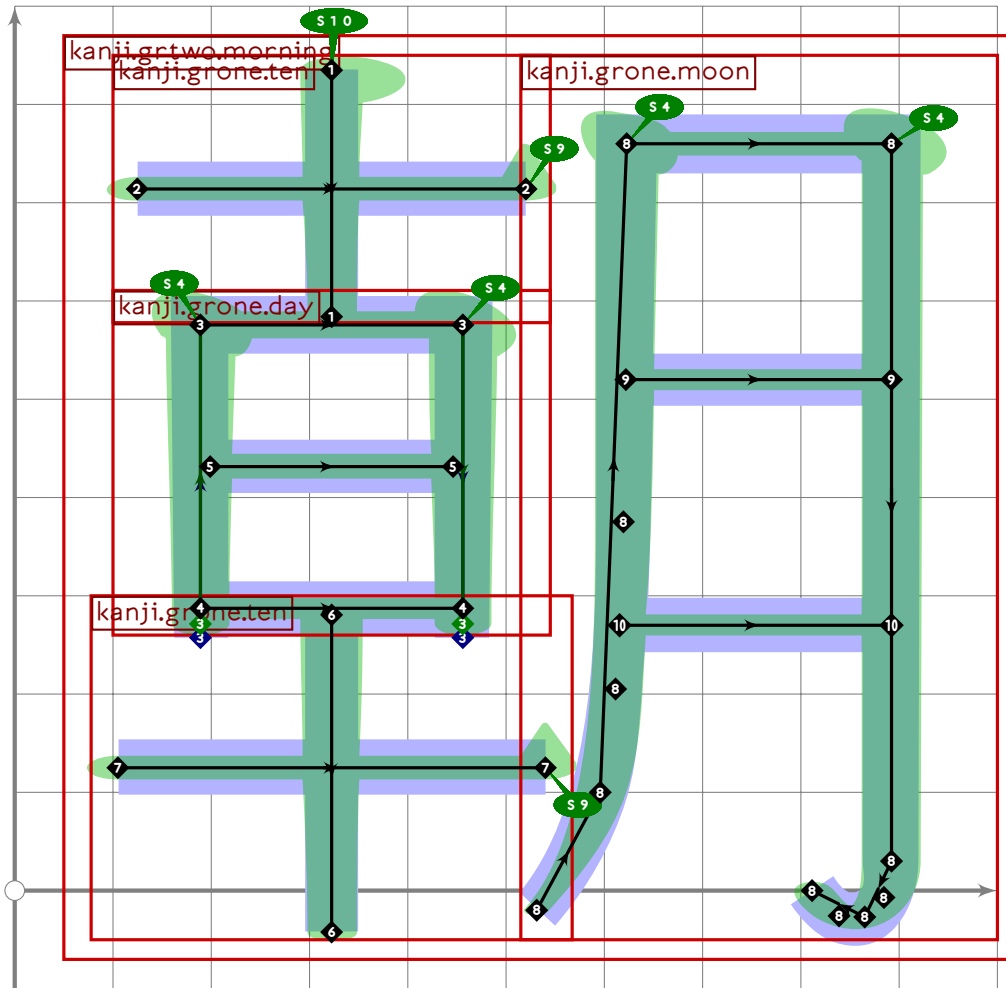
TWO



```

629
630 vardef kanji.grtwo.mix =
631   push_pbox_toexpand("kanji.grtwo.mix");
632   build_kanji.level(build_kanji.tb(610,70)
633     (kanji.radical.kettle_lid)
634     (kanji.grtwo.father));
635   expand_pbox;
636 enddef;

```



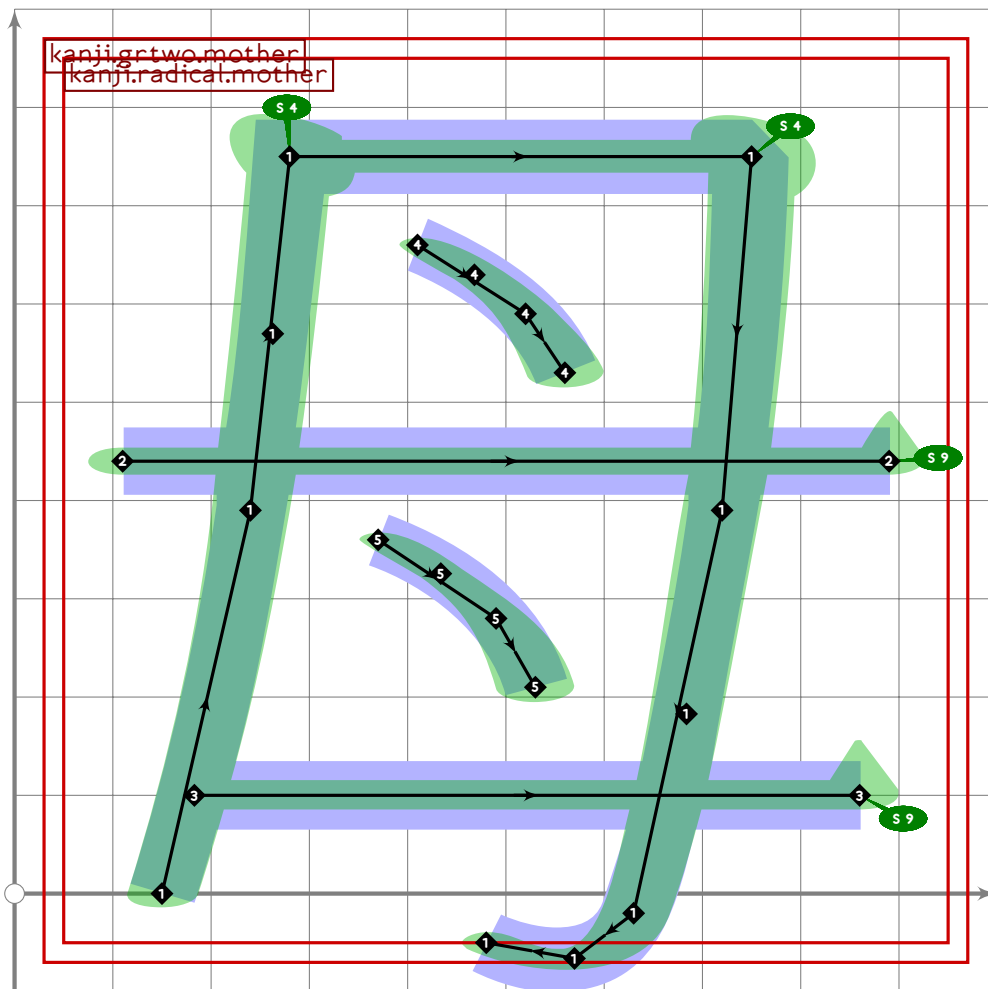
TWO

```

637
638 vardef kanji.grtwo.morning =
639   push_pbox_toexpand("kanji.grtwo.morning");
640   tsu_xform(identity shifted (50,0))
641   (build_kanji.level(build_kanji.lr(480,30)
642     (build_kanji.tb(280,40)
643       (build_kanji.tb(460,50)
644         (kanji.grone.ten)
645         (kanji.grone.day))
646       (build_kanji.sscale(xscaled 1.1)
647         (kanji.grone.ten;
648           set_boserif(-1,0,whatever))))
649     (kanji.grone.moon)));
650   expand_pbox;
651 enddef;

```

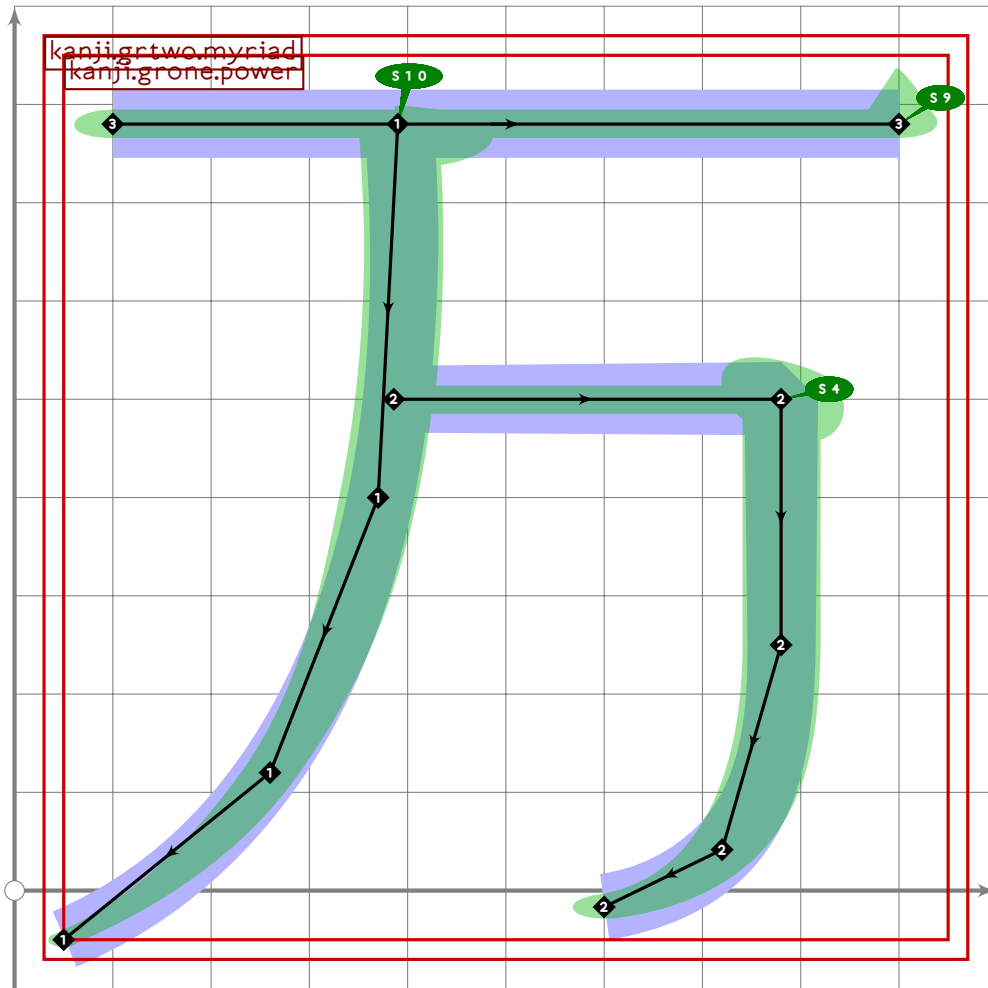
TWO



```

652
653 vardef kanji.grtwo.mother =
654   push_pbox__toexpand("kanji.grtwo.mother");
655   kanji.radical.mother;
656   push_stroke((410,660)..tension 1.2..(520,590)..(560,530),
657     (1,1,1)-(14,1,4)-(1,7,1,7));
658   set_bosize(0,90);
659   push_stroke((370,360)..tension 1.2..(490,280)..(530,210),
660     (1,1,1)-(14,1,4)-(1,7,1,7));
661   set_bosize(0,90);
662   expand_pbox;
663 enddef;

```



TWO

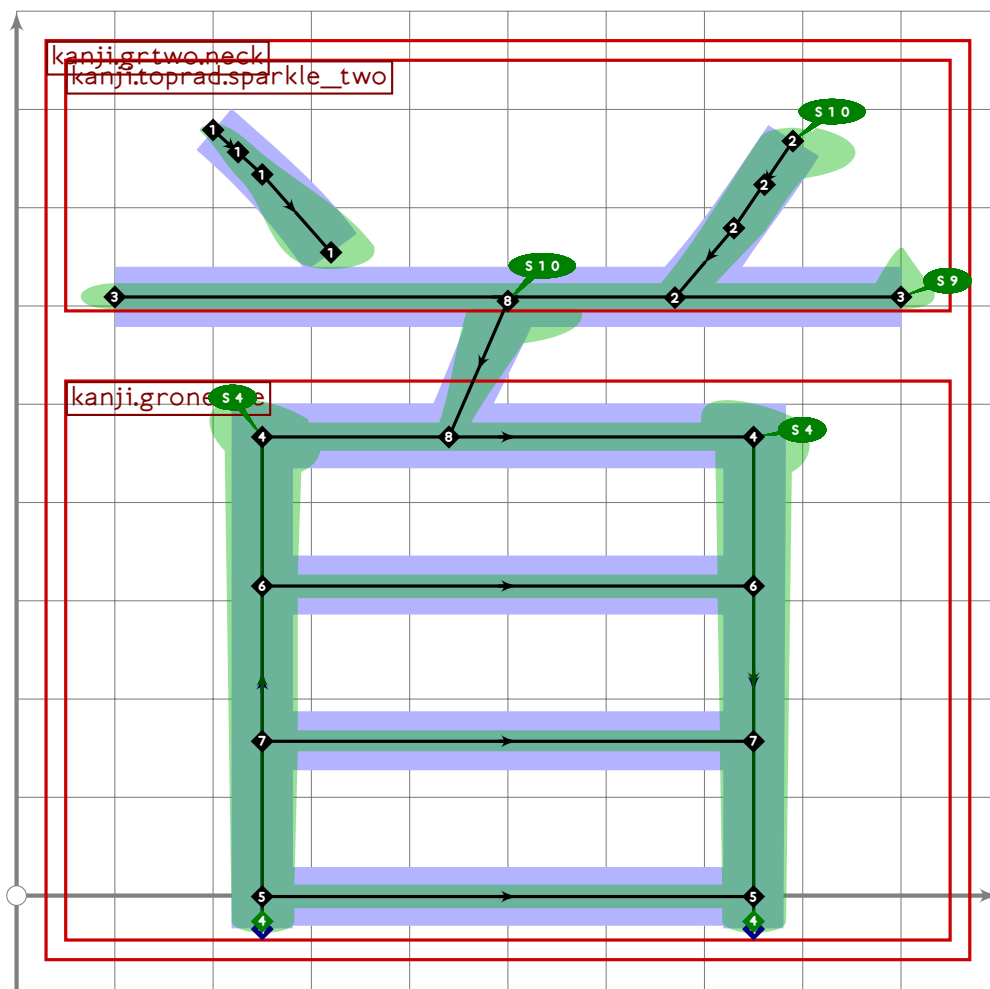
```

664
665 vardef kanji.grtwo.myriad =
666   push_pbox__toexpand("kanji.grtwo.myriad");
667   kanji.grone.power;
668   set_boserif(0,0,whatever);
669   replace_stroke(0)(oldp yscaled (500/600) shifted (-50,0));
670   replace_stroke(0)(
671     subpath (xpart (oldp intersectiontimes get_stroke(-1)),infinity) of oldp);
672   push_stroke((100,780)-(900,780),(1.6,1.6)-(1.6,1.6));
673   set_boserif(0,1,9);
674   expand_pbox;
675 enddef;

```

U+9996
tsuku.uni9996

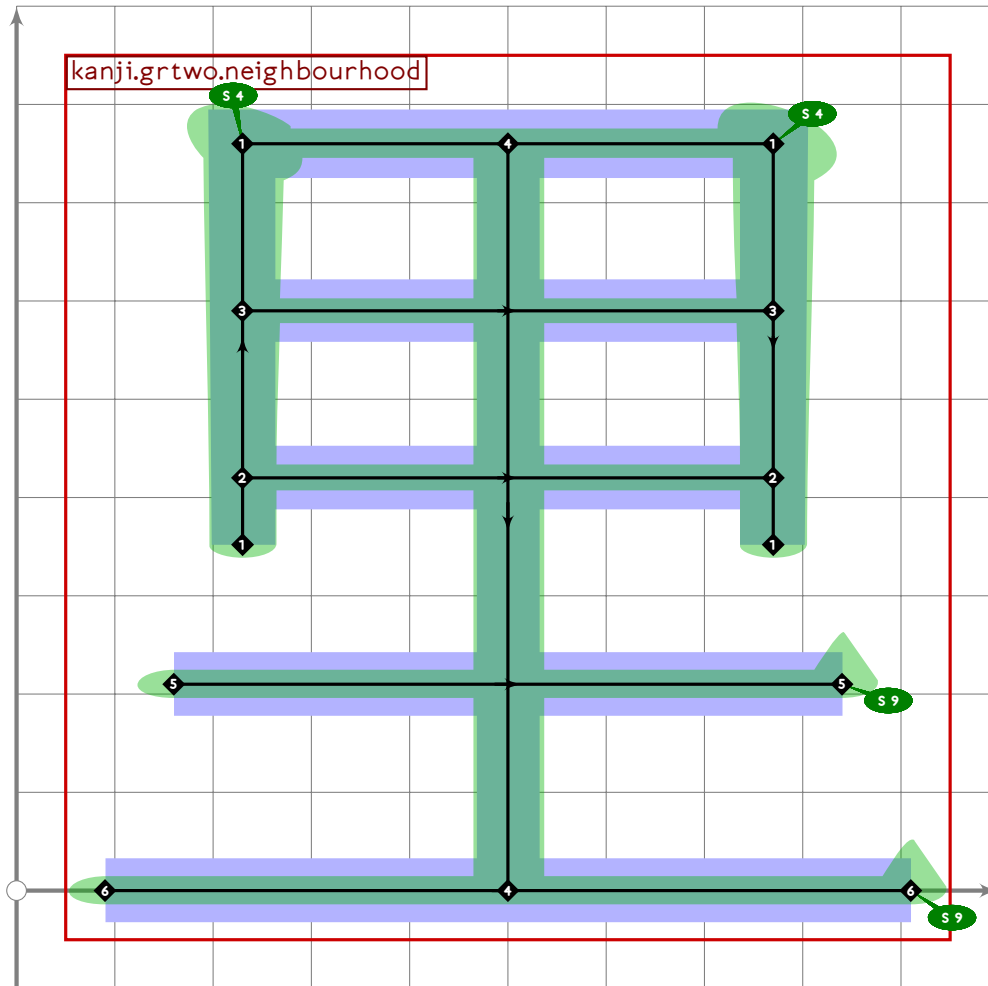
TWO



```

676
677 vardef kanji.grtwo.neck =
678   push_pbox__toexpand("kanji.grtwo.neck");
679   build_kanji.level(build_kanji.tb(600,10)
680     (kanji.toprad.sparkle_two;
681       replace_strokep(0)(oldp shifted (-point 0 of oldp)
682         yscaled 1.25 shifted (point 0 of oldp) shifted (0,-60));
683       push_stroke((100,0)-(900,0),(1.6,1.6)-(1.6,1.6));
684       set_boserif(0,1,9))
685     (build_kanji.attach_tick(660)(kanji.grone.eyeye)));
686   expand_pbox;
687 enddef;

```

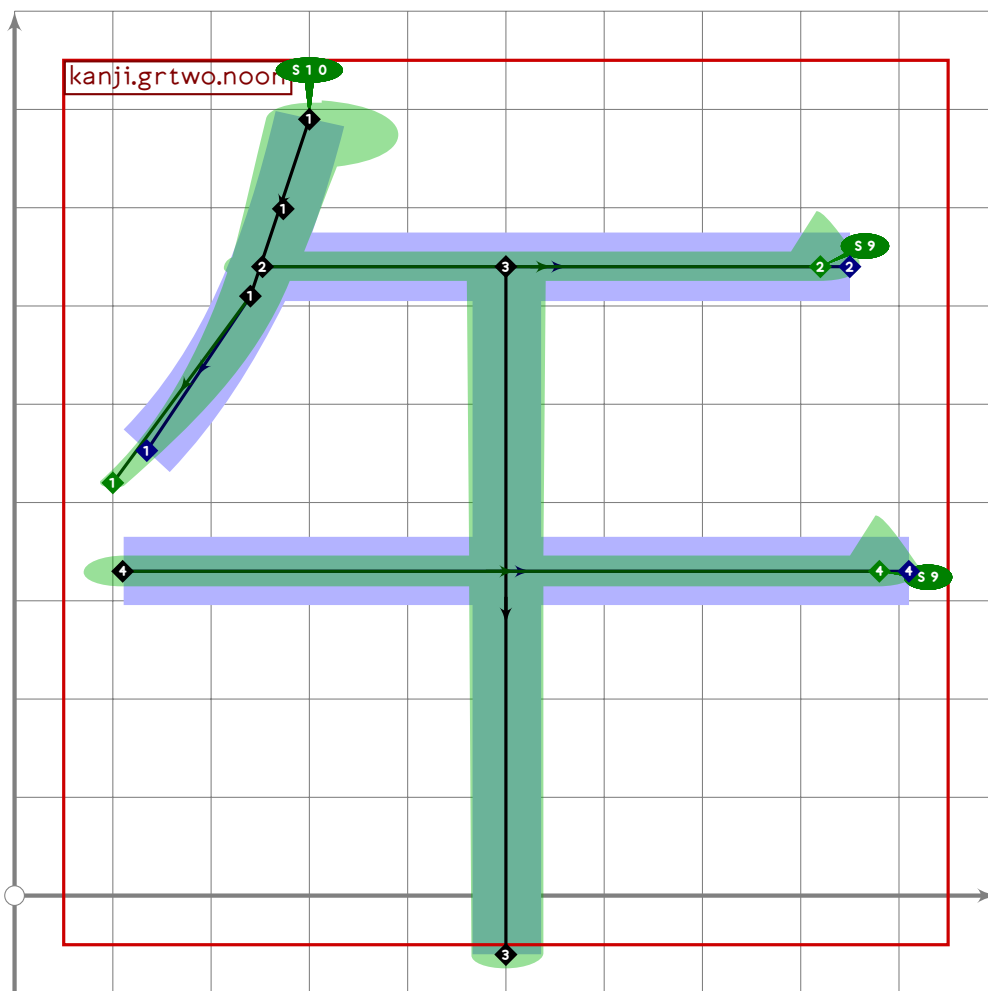
TWO

```

688
689 vardef kanji.grtwo.neighbourhood =
690   push_pbox__toexpand("kanji.grtwo.neighbourhood");
691   build_kanji.box((230,760),(770,420));
692   push_stroke((230,590)–(770,590),(1.5,1.5)–(1.5,1.5));
693   push_stroke((500,760)–(500,0),(1.6,1.6)–(1.5,1.5));
694   push_stroke((160,210)–(840,210),(1.6,1.6)–(1.6,1.6));
695   set_boserif(0,1,9);
696   push_stroke((90,0)–(910,0),(1.6,1.6)–(1.6,1.6));
697   set_boserif(0,1,9);
698   for i=-6 upto 0: set_bosize(i,93); endfor;
699   expand_pbox;
700 enddef;

```

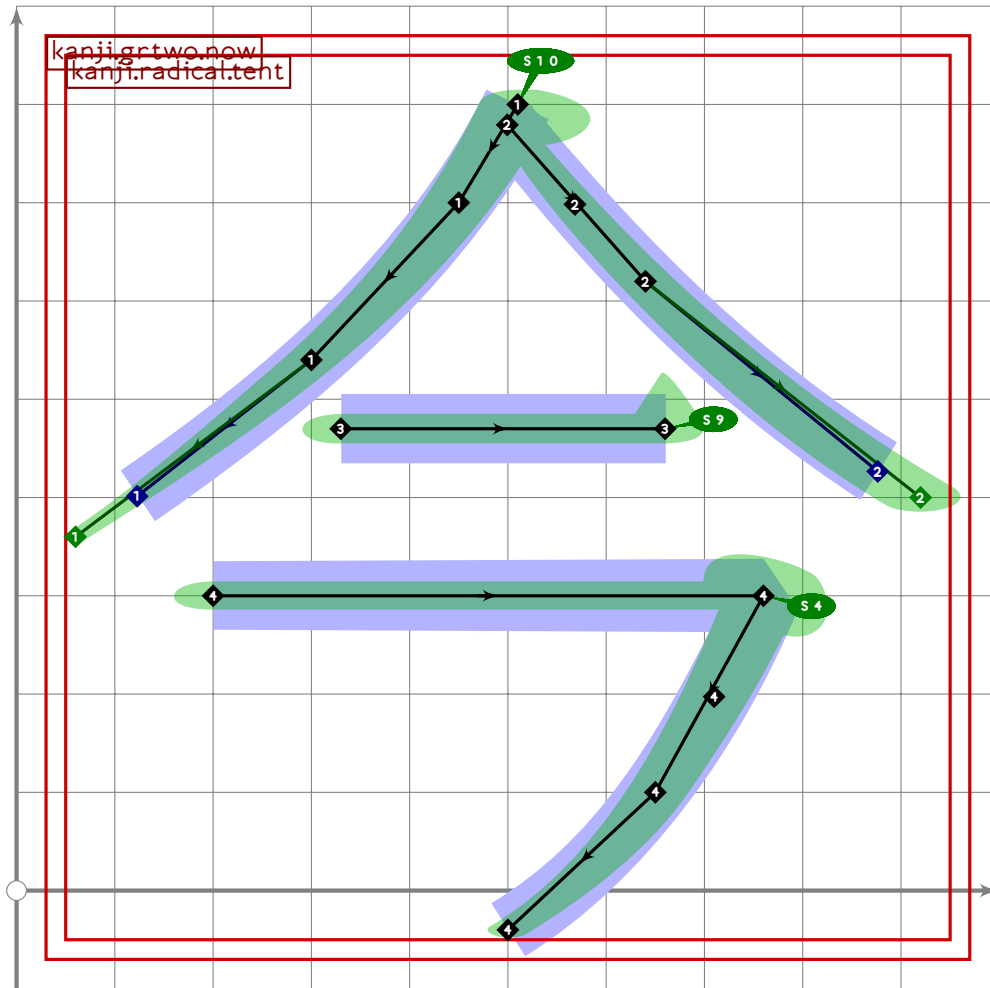
TWO



```

701
702 vardef kanji.grtwo.noon =
703   push_pbox_toexpand("kanji.grtwo.noon");
704   push_stroke((300,790)..tension 1.2..(240,610)..(100,420),
705     (1.7,1.7)–(1.4,1.4)–(0.9,0.9));
706   set_boserif(0,0,10);
707   push_stroke((((0,640)–(1000,640)) intersectionpoint get_stroke(0))–
708     (850–30*mincho,640),
709     (1.6,1.6)–(1.6,1.6));
710   set_boserif(0,1,9);
711   push_stroke((500,640)–(500,–60),(1.6,1.6)–(1.5,1.5));
712   push_stroke((110,330)–(910–30*mincho,330),
713     (1.6,1.6)–(1.6,1.6));
714   set_boserif(0,1,9);
715   expand_pbox;
716 enddef;

```



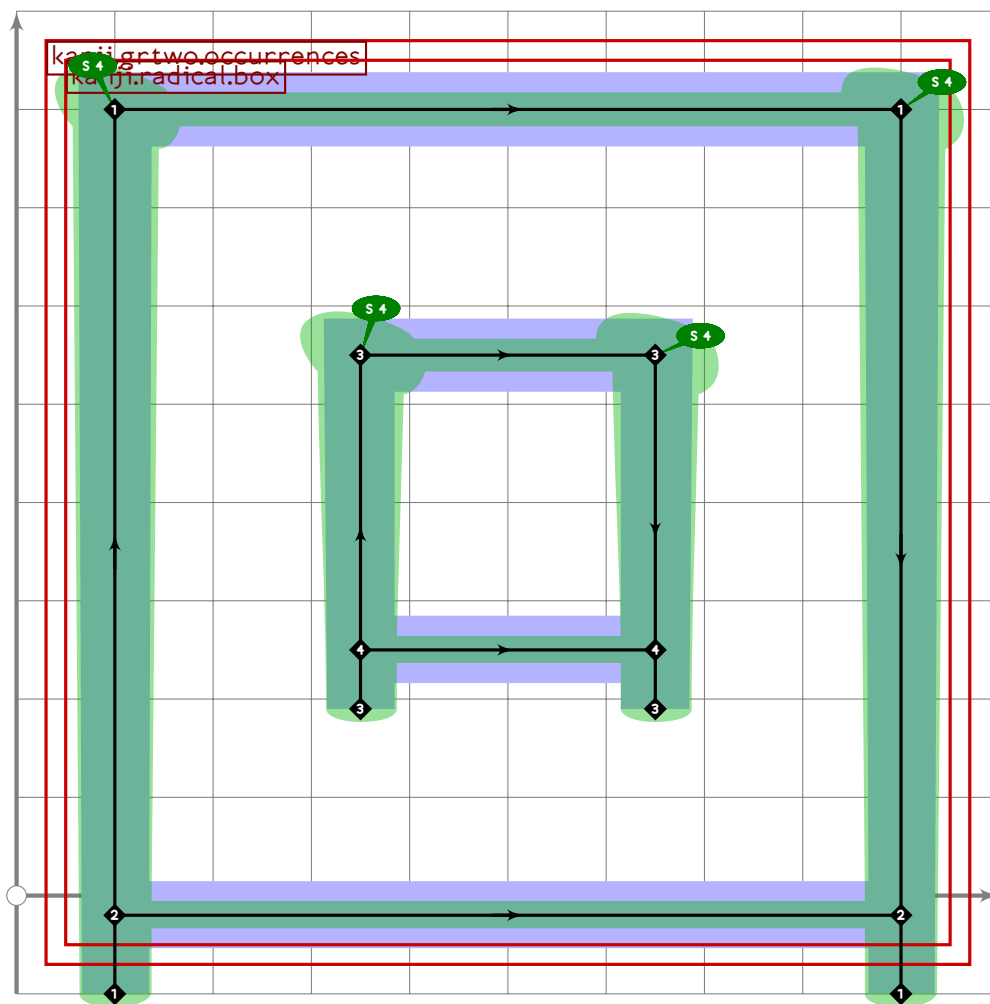
TWO

```

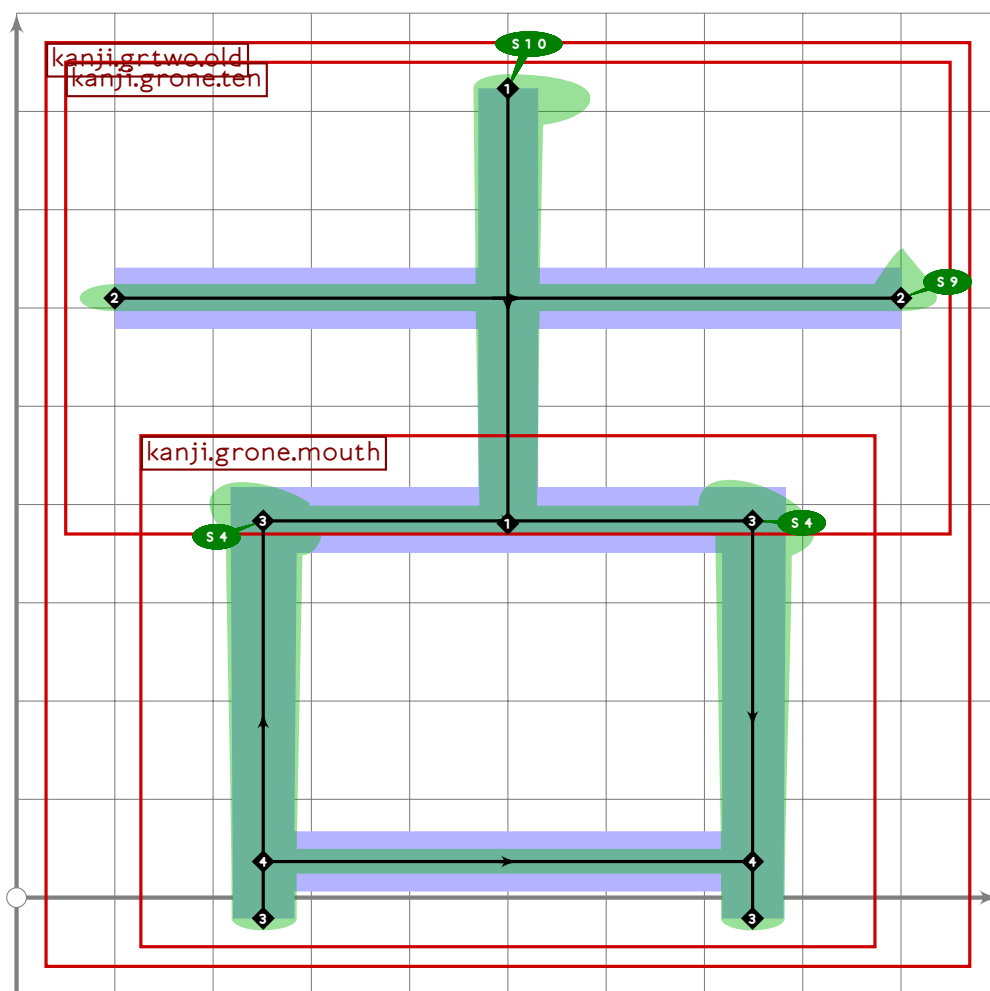
717
718 vardef kanji.grtwo.now =
719   push_pbox__toexpand("kanji.grtwo.now");
720   kanji.radical.tent;
721   push_stroke((200,300)-(760,300)..tension 1.2..(650,100)..(500,-40),
722     (1.6,1.6)-(1.6,1.6)-(1.4,1.4)-(1.1,1.1));
723   set_boserif(0,14);
724   set_botip(0,1,0);
725   expand_pbox;
726 enddef;

```

TWO



528



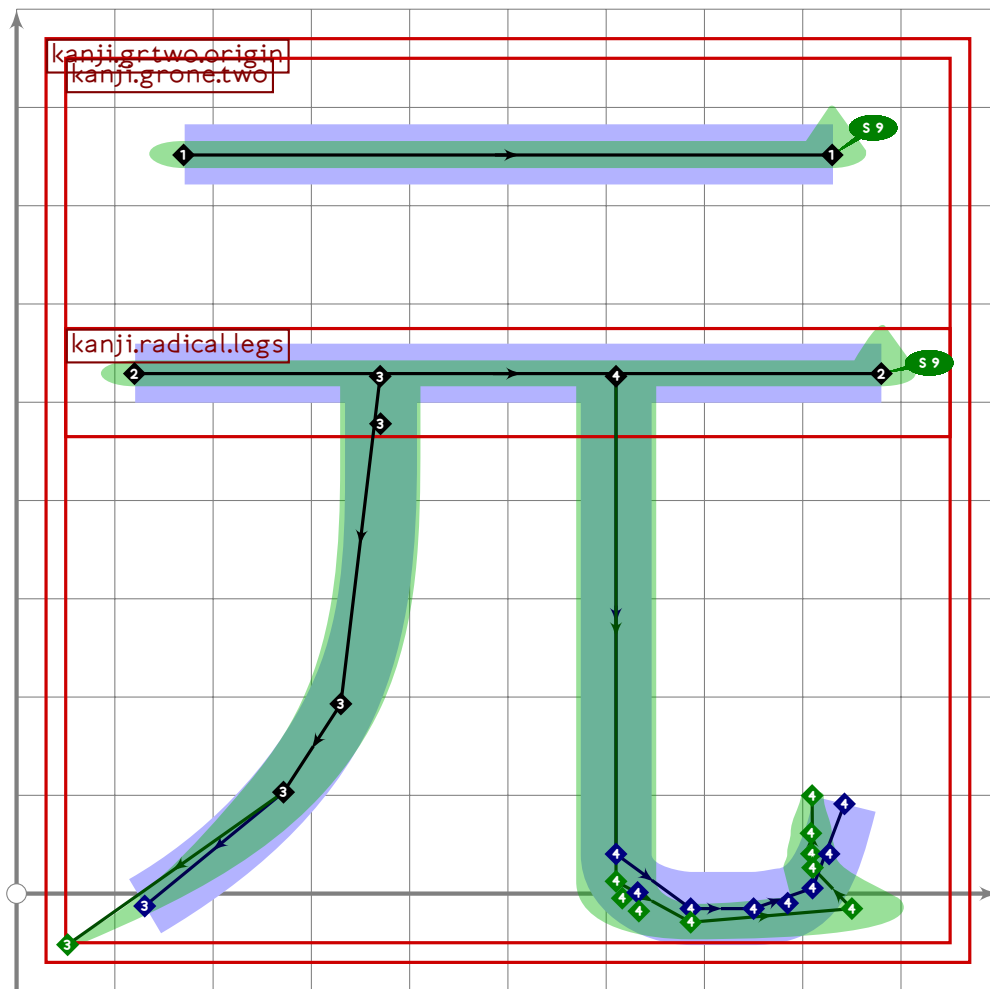
TWO

```

734
735 vardef kanji.grtwo.old =
736   push_pbox_toexpand("kanji.grtwo.old");
737   build_kanji.level(build_kanji.tb(420,100)
738     (kanji.grone.ten)
739     (build_kanji.sscale(xscaled 0.83)(kanji.grone.mouth)));
740   expand_pbox;
741 enddef;

```

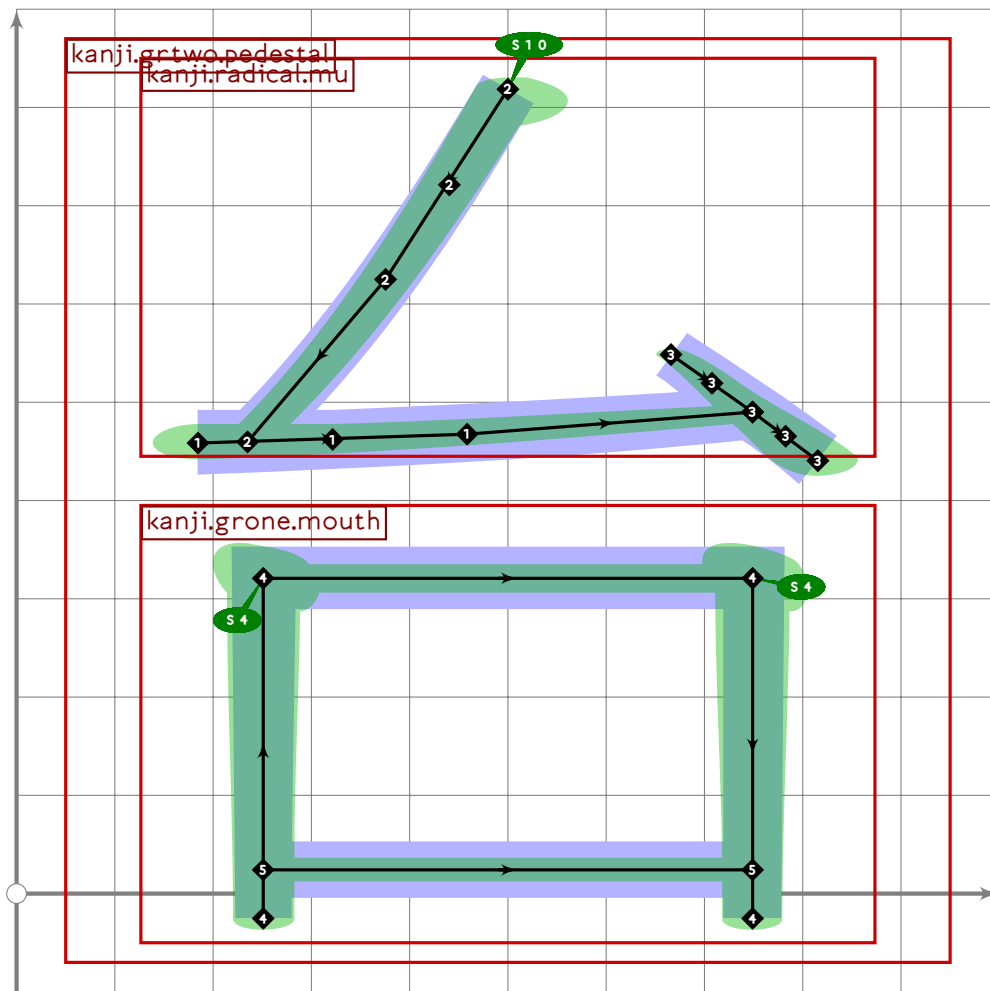
TWO



```

742
743 vardef kanji.grtwo.origin =
744   push_pbox_toexpand("kanji.grtwo.origin");
745   build_kanji.tb(520,110)
746     (kanji.grone.two)
747     (kanji.radical.legs);
748   expand_pbox;
749 enddef;

```



TWO

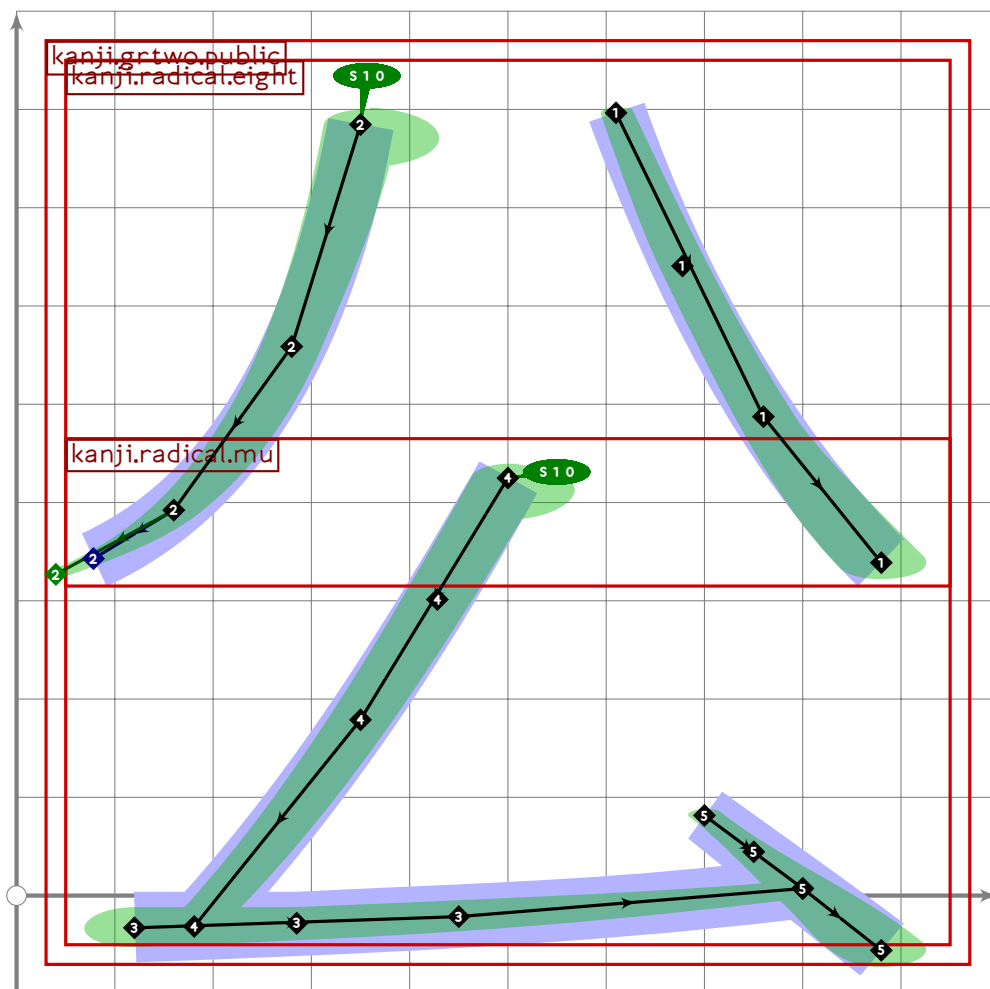
```

750
751 vardef kanji.grtwo.pedestal =
752   push_pbox_toexpand("kanji.grtwo.pedestal");
753   build_kanji.sscale(xscaled 0.83)(
754     build_kanji.level(build_kanji.tb(420,-50)
755       (kanji.radical.mu)
756       (kanji.grone.mouth)));
757   expand_pbox;
758 enddef;

```

U+516C
tsuku.uni516C

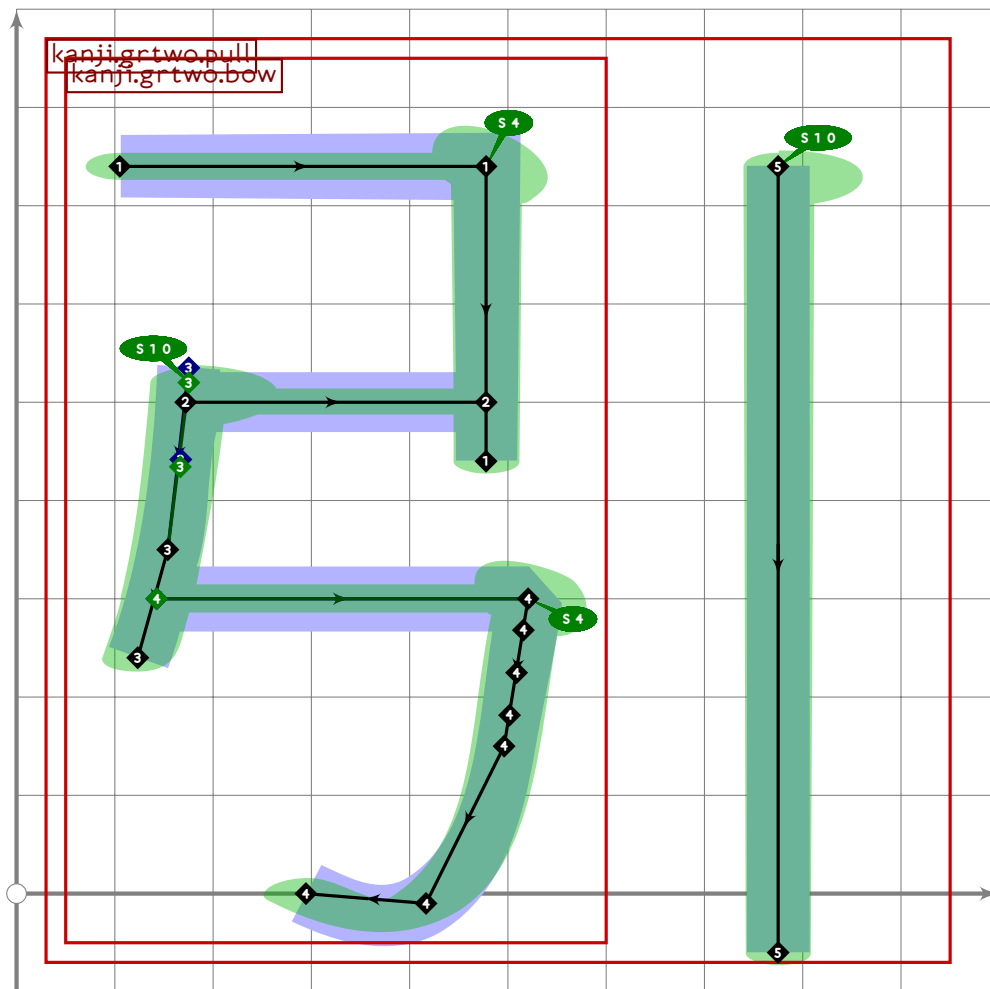
TWO



```

759
760 vardef kanji.grtwo.public =
761   push_pbox_toexpand("kanji.grtwo.public");
762   build_kanji.level(build_kanji.tb(390,150)
763     (kanji.radical.eight)
764     (kanji.radical.mu));
765   expand_pbox;
766 enddef;

```

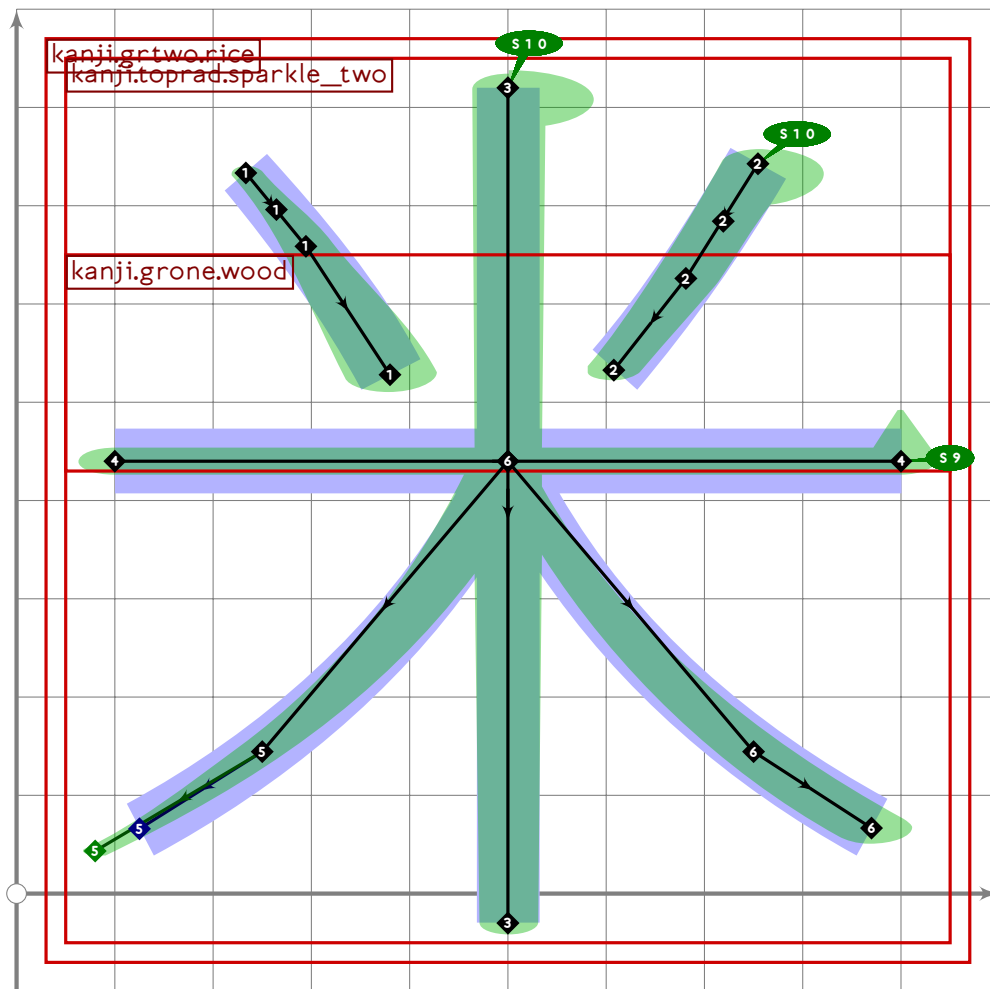
TWO

```

767
768 vardef kanji.grtwo.pull =
769   push_pbox__toexpand("kanji.grtwo.pull");
770   build_kanji.level(build_kanji.lr(600,0)
771     (kanji.grtwo.bow)
772     (push_stroke((500,740)-(500,-60),(1.6,1.6)-(1.5,1.5));
773       set_boserif(0,0,10);
774     ));
775   expand_pbox;
776 enddef;

```

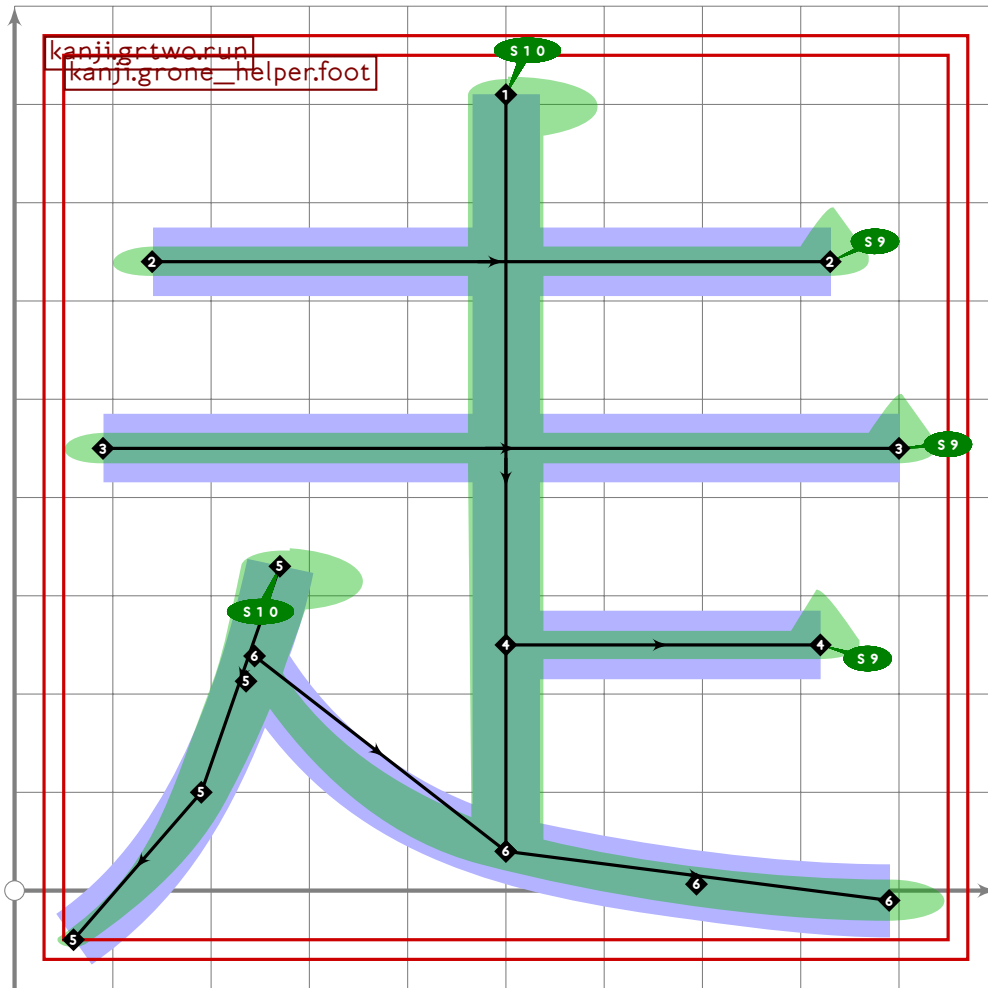
TWO



```

777
778 vardef kanji.grtwo.rice =
779   push_pbox_toexpand("kanji.grtwo.rice");
780   build_kanji.level(build_kanji.tb(540,220)
781     (build_kanji.spread_legs(-200)(kanji.toprad.sparkle_two))
782     (kanji.grone.wood));
783   replace_strokep(-3)((500,820)-(500,-30));
784   replace_strokeq(-3)((1.6,1.6)-(1.4,1.4));
785   expand_pbox;
786 enddef;

```



TWO

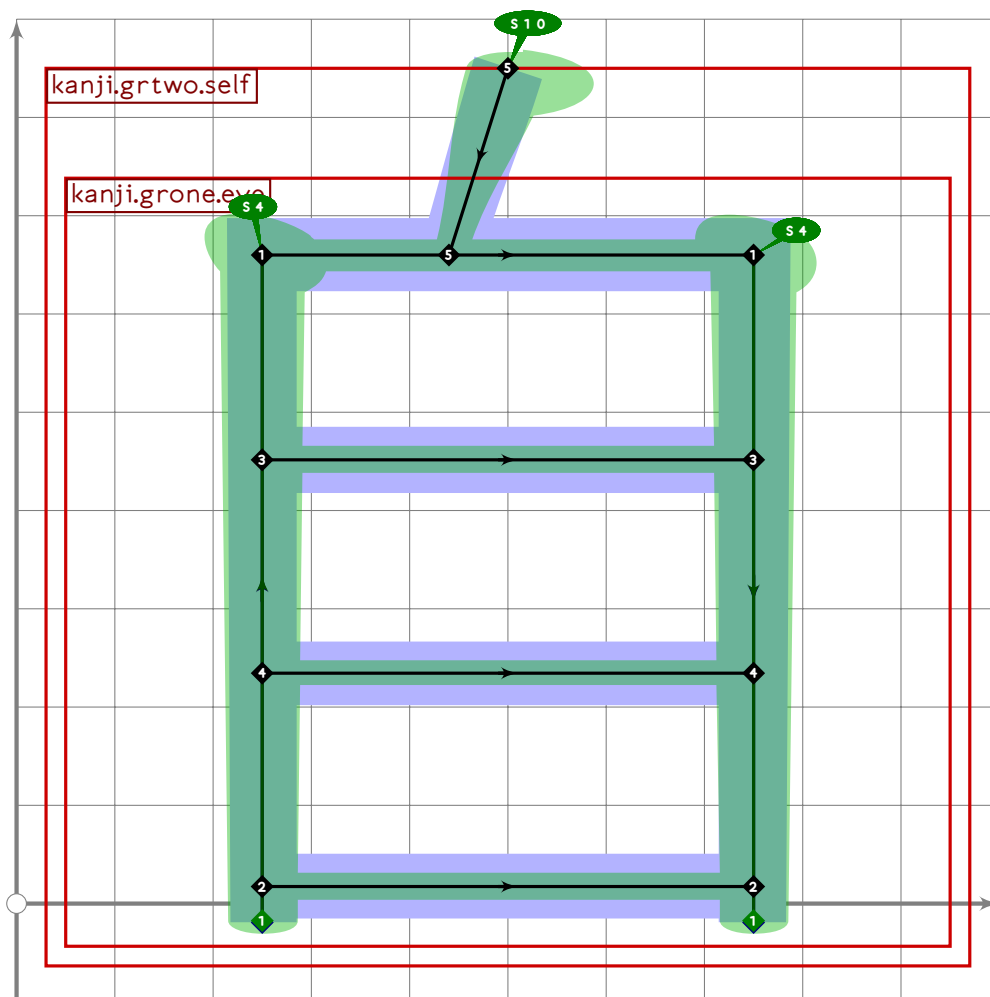
```

787
788 vardef kanji.grtwo.run =
789   push_pbox__toexpand("kanji.grtwo.run");
790   push_stroke((500,810)–(500,40),(1.6,1.6)–(1.5,1.5));
791   set_boserif(0,0,10);
792   push_stroke((140,640)–(830,640),(1.6,1.6)–(1.6,1.6));
793   set_boserif(0,1,9);
794   push_stroke((90,450)–(900,450),(1.6,1.6)–(1.6,1.6));
795   set_boserif(0,1,9);
796   push_stroke((500,250)–(820,250),(1.5,1.5)–(1.6,1.6));
797   set_boserif(0,1,9);
798   kanji.grone_helper.foot;
799   expand_pbox;
800 enddef;

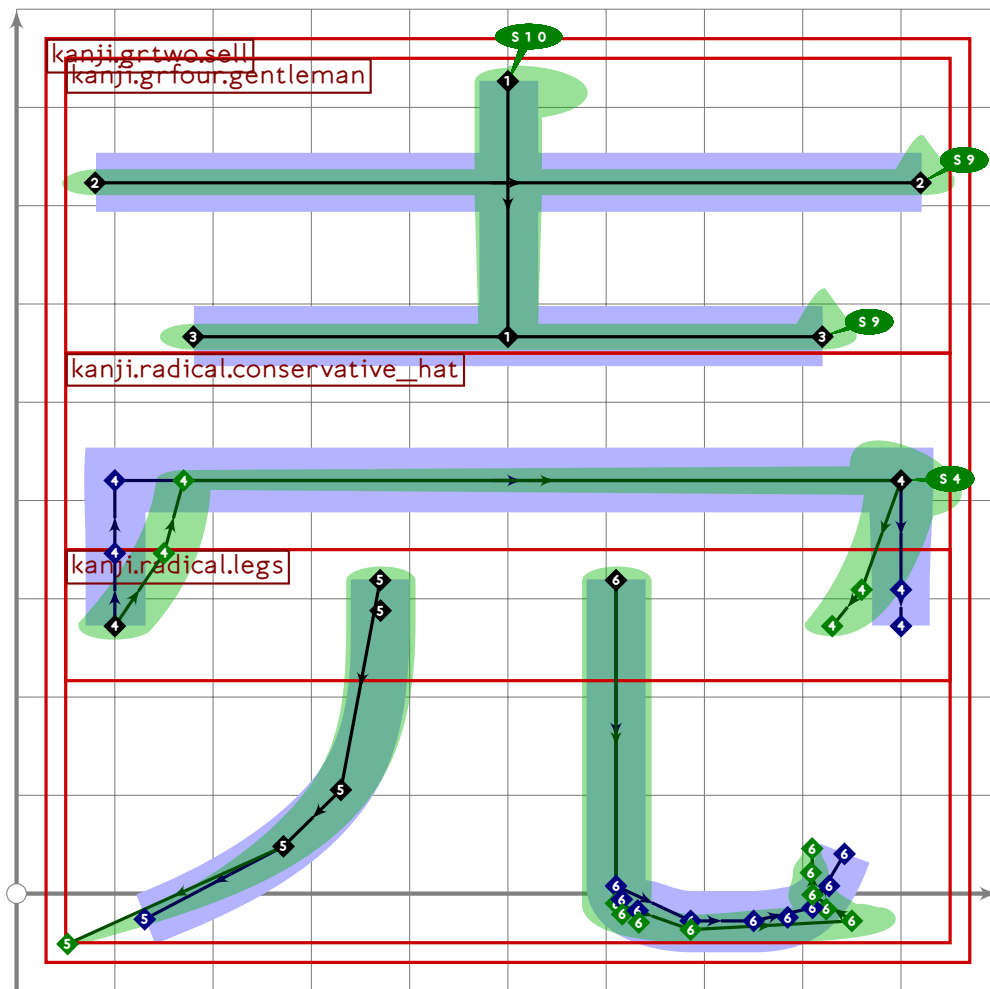
```

U+81EA
tsuku.uni81EA

TWO



```
801
802 vardef kanji.grtwo.self =
803   push_pbox_toexpand("kanji.grtwo.self");
804   build_kanji.attach_tick(660)(kanji.grone.eye);
805   expand_pbox;
806 enddef;
```



TWO

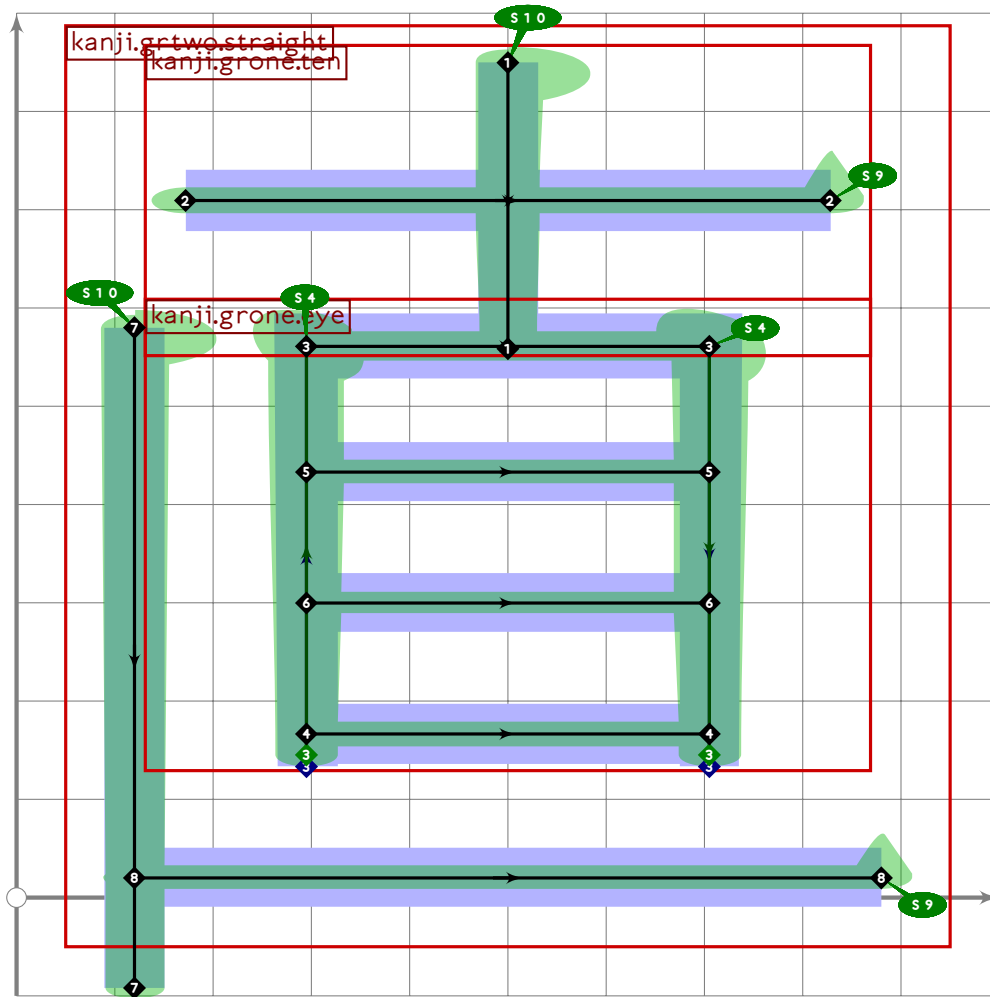
```

807
808 vardef kanji.grtwo.sell =
809   push_pbox_toexpand("kanji.grtwo.sell");
810   build_kanji.level(build_kanji.tb(550,0)
811     (kanji.grfour.gentleman)
812     (build_kanji.tb(450,200)
813       (kanji.radical.conservative_hat)
814       (kanji.radical.legs)));
815   expand_pbox;
816 enddef;

```

U+76F4
tsuku.uni76F4

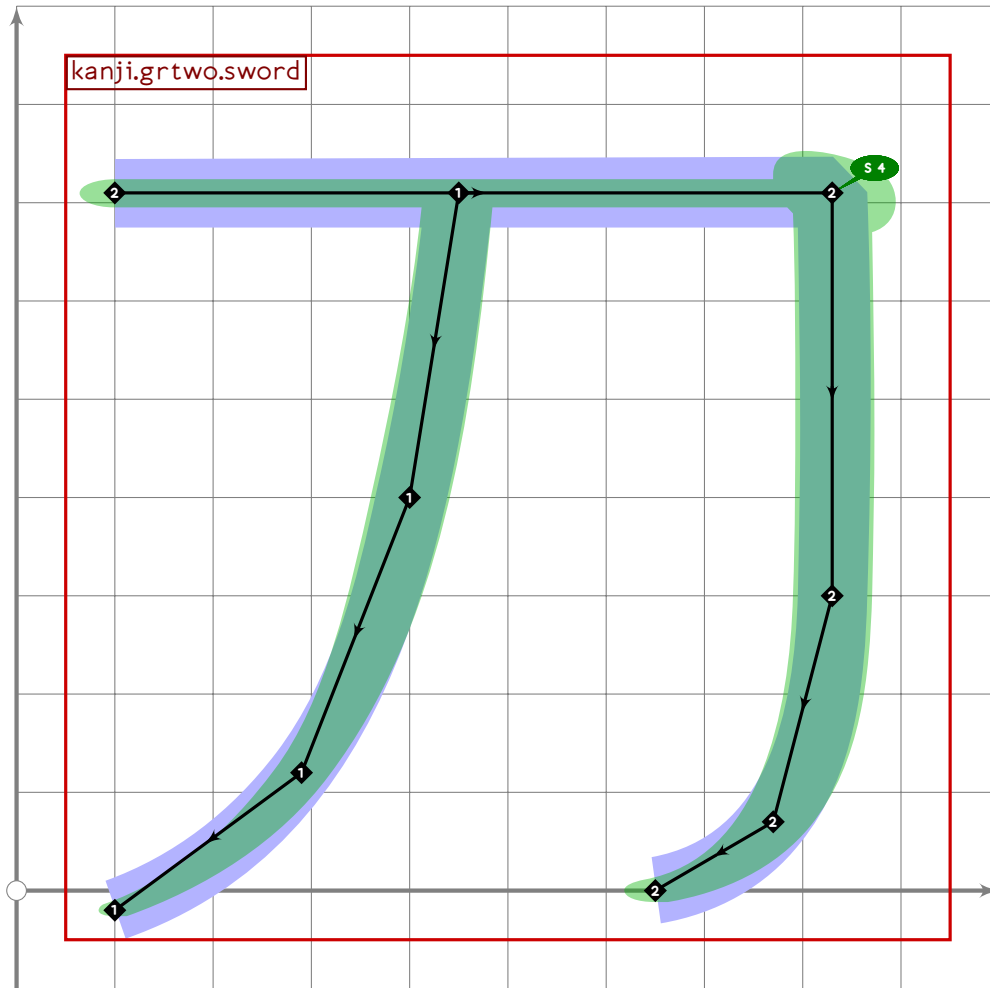
TWO



```

817
818 vardef kanji.grtwo.straight =
819   push_pbox_toexpand("kanji.grtwo.straight");
820   build_kanji.level(
821     build_kanji.sscale(scaled 0.82 shifted (0,100))
822     (build_kanji.tb(500,70)
823       (kanji.grone.ten)
824       (kanji.grone.eye));
825   build_kanji.cup((120,580),(880,20));
826   set_bosize(-1,0);
827   set_boserif(0,1,9);
828 );
829 expand_pbox;
830 enddef;

```



TWO

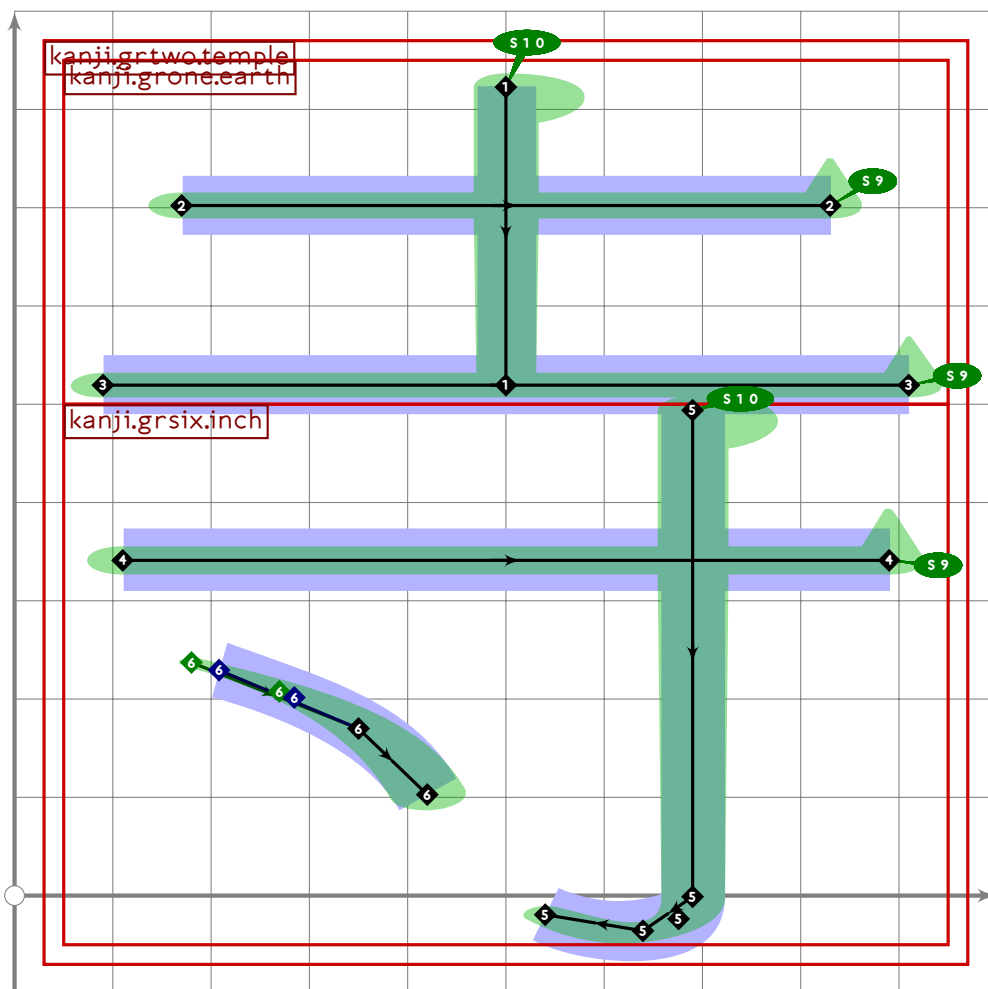
```

831
832 vardef kanji.grtwo.sword =
833   push_pbox__toexpand("kanji.grtwo.sword");
834   push_stroke((450,710)..(400,400)..(290,120)..(100,-20),
835     (1.5,1.5)-(1.6,1.6)-(1.3,1.3)-(1,1));
836   push_stroke((100,710)-(830,710)..tension 1.1..(830,300)..(770,70)..(650,0),
837     (1.5,1.5)-(1.6,1.6)-(1.6,1.6)-(1.6,1.6)-(1.4,1.4));
838   set_botip(0,1,0);
839   set_boserif(0,1,4);
840   expand_pbox;
841 enddef;

```

U+5BFA
tsuku.uni5BFA

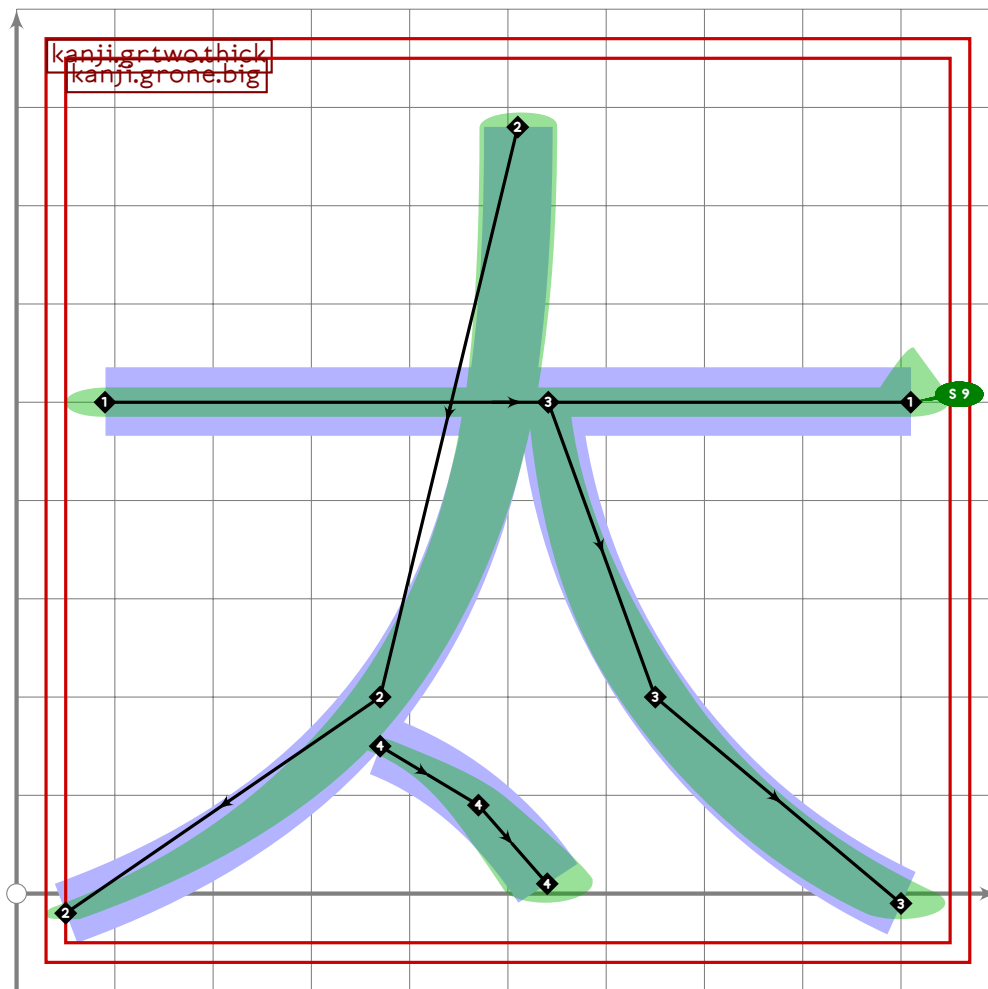
TWO



```

842
843 vardef kanji.grtwo.temple =
844   push_pbox_toexpand("kanji.grtwo.temple");
845   build_kanji.tb(500,0)
846     (kanji.grone.earth)
847     (kanji.grsix.inch;
848       replace_stroke(-1)((point 0 of oldp)+(0,60))
849         -(subpath (1,infinity) of oldp)));
850   expand_pbox;
851 enddef;

```

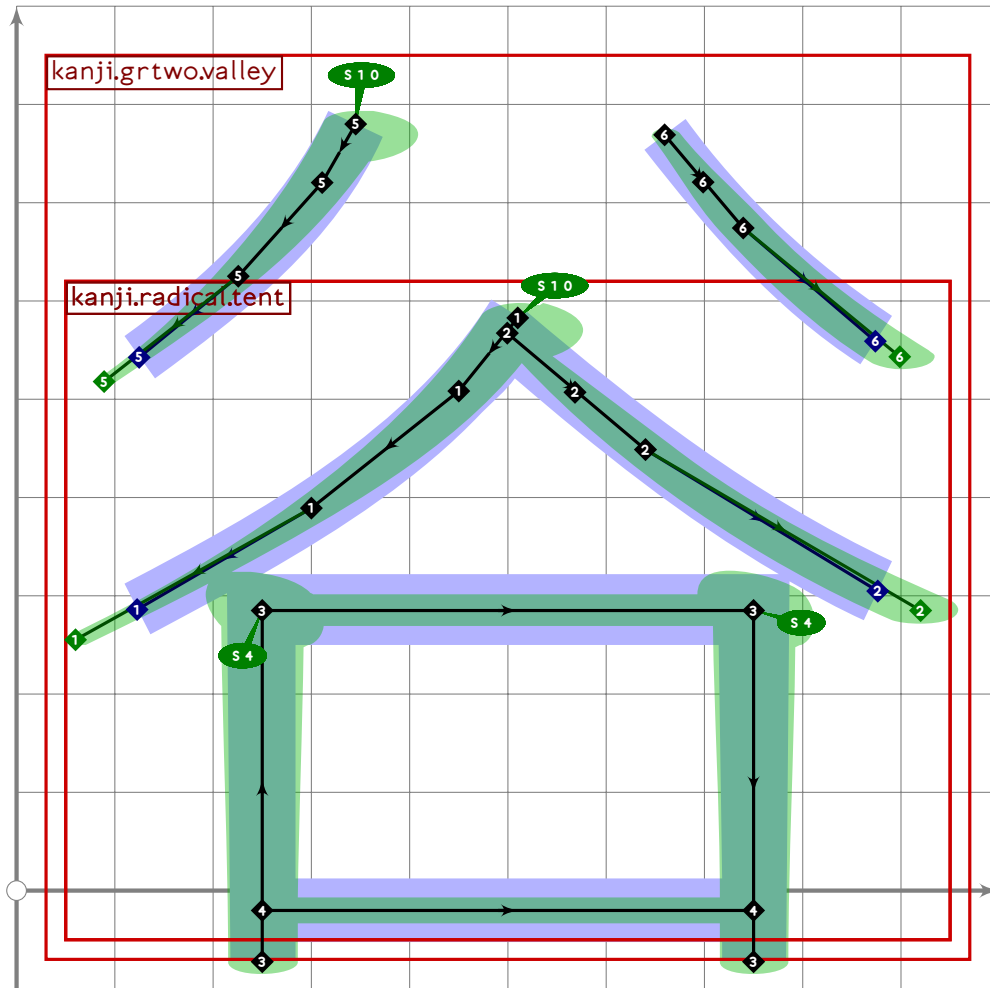



```

852
853 vardef kanji.grtwo.thick =
854   push_pbox_toexpand("kanji.grtwo.thick");
855   kanji.grone.big;
856   push_stroke((370,150)..(470,90)..(540,10),
857     (1,1)-(14,14)-(18,18));
858   expand_pbox;
859 enddef;

```

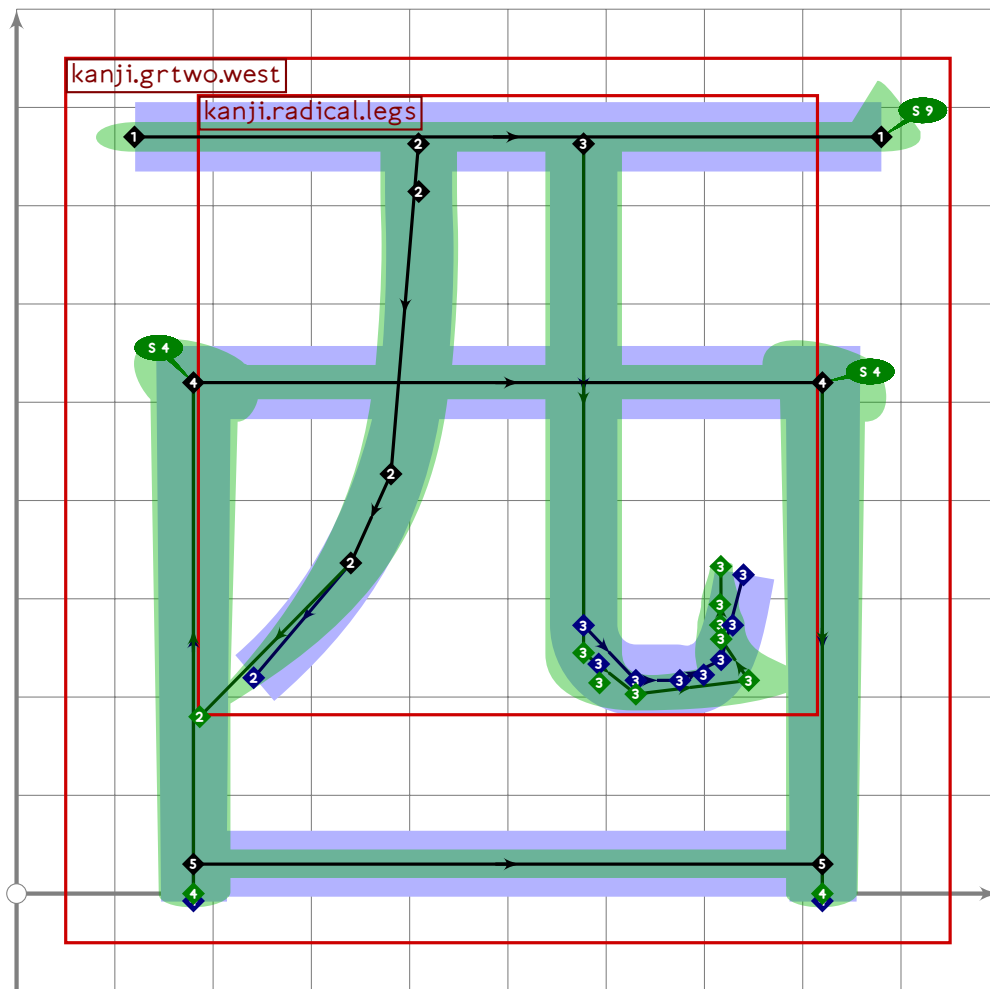
TWO



```

860
861 vardef kanji.grtwo.valley =
862   push_pbox_toexpand("kanji.grtwo.valley");
863   build_kanji.harmonic(230,0.8,260)(build_kanji.level(
864     kanji.radical.tent;
865     pop_stroke;
866     build_kanji.box((250,400),(750,-10));
867   ));
868   expand_pbox;
869 enddef;

```



TWO

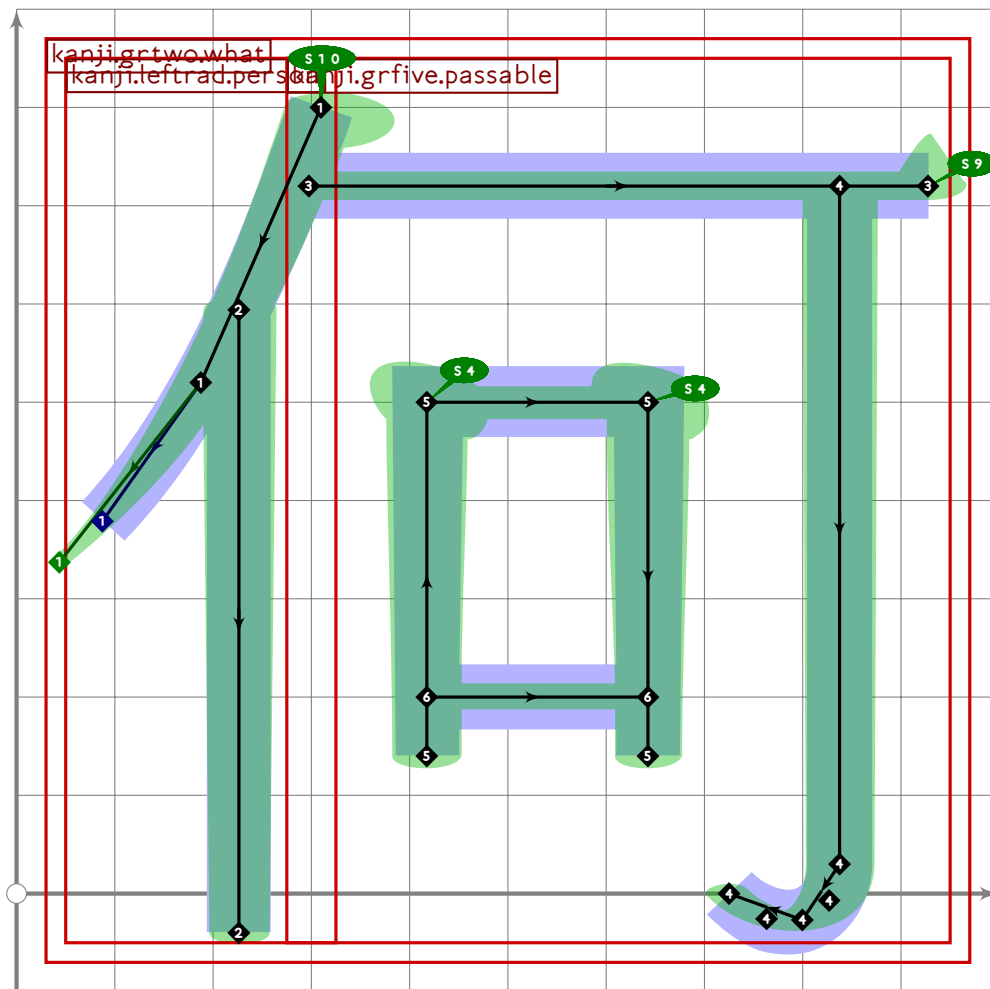
```

870
871 vardef kanji.grtwo.west =
872   push_pbox__toexpand("kanji.grtwo.west");
873   push_stroke((120,770)-(880,770),(1.6,1.6)-(1.6,1.6));
874   set_boserif(0,19);
875   build_kanji.sscale(scaled 0.7 shifted (0,100))
876     (kanji.radical.legs);
877   build_kanji.box((180,520),(820,30));
878   expand_pbox;
879 enddef;

```

U+4F55
tsuku.uni4F55

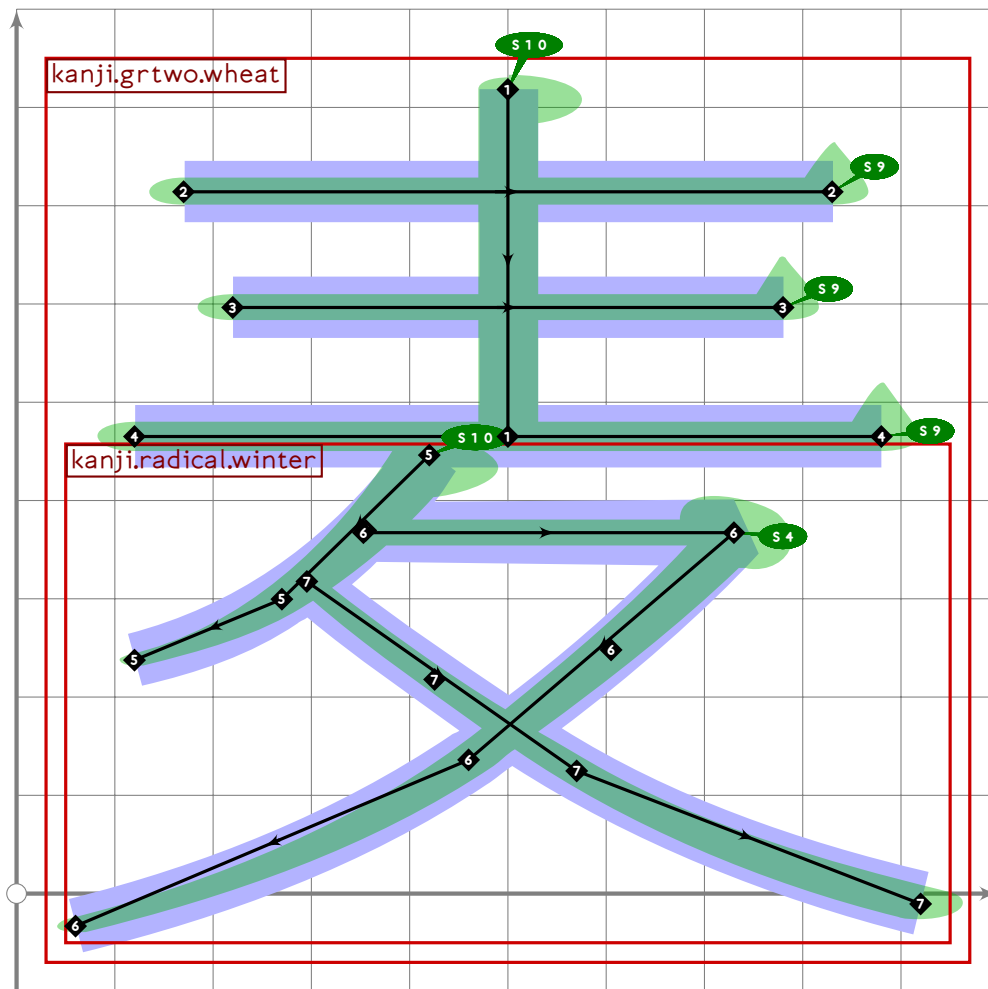
TWO



```

880
881 vardef kanji.grtwo.what =
882   push_pbox_toexpand("kanji.grtwo.what");
883   build_kanji.lr(300,50)
884     (kanji.leftrad.person)
885     (kanji.grfive.passable);
886   expand_pbox;
887 enddef;

```



TWO

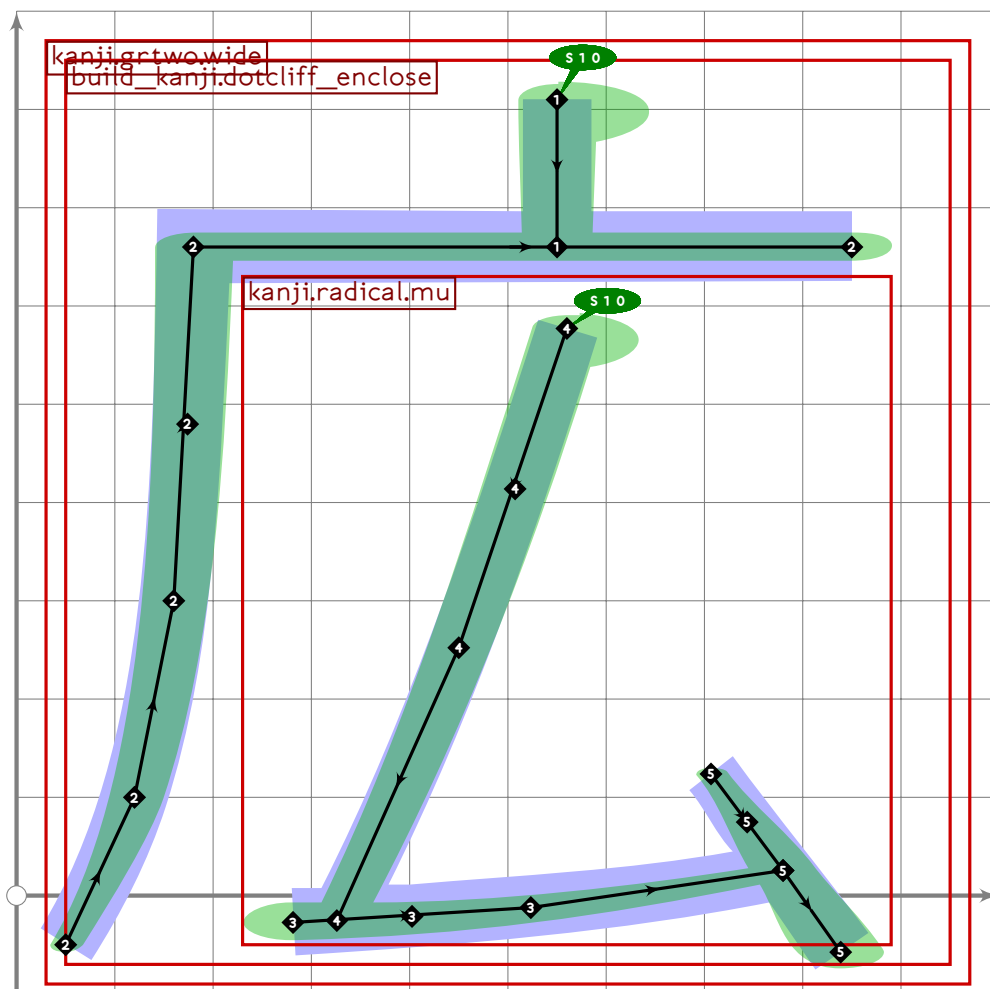
```

888
889 vardef kanji.grtwo.wheat =
890   push_pbox_toexpand("kanji.grtwo.wheat");
891   build_kanji.level(build_kanji.tb(450,15)
892     (push_stroke((500,780)-(500,0),
893       (1.5,1.5)-(1.4,1.4));
894     set_boserif(0,0,10);
895     push_stroke((170,550)-(830,550),
896       (1.6,1.6)-(1.6,1.6));
897     set_boserif(0,1,9);
898     push_stroke((220,290)-(780,290),
899       (1.6,1.6)-(1.6,1.6));
900     set_boserif(0,1,9);
901     push_stroke((120,0)-(880,0),
902       (1.7,1.7)-(1.7,1.7));
903     set_boserif(0,1,9))
904     (kanji.radical.winter));
905   expand_pbox;
906 enddef;

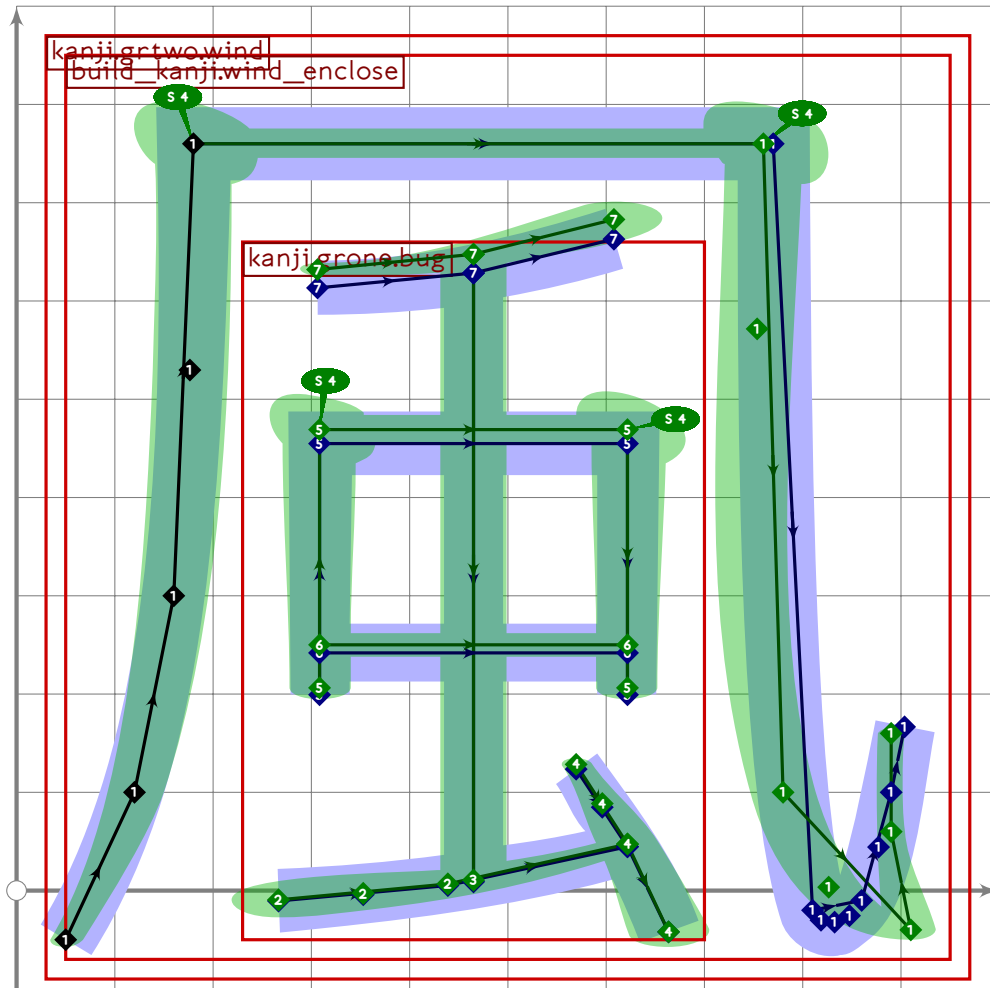
```

U+5E83
tsuku.uni5E83

TWO



```
907  
908 vardef kanji.grtwo.wide =  
909   push_pbox_toexpand("kanji.grtwo.wide");  
910   build_kanji.dotcliff_enclose(kanji.radical.mu);  
911   expand_pbox;  
912 enddef;
```



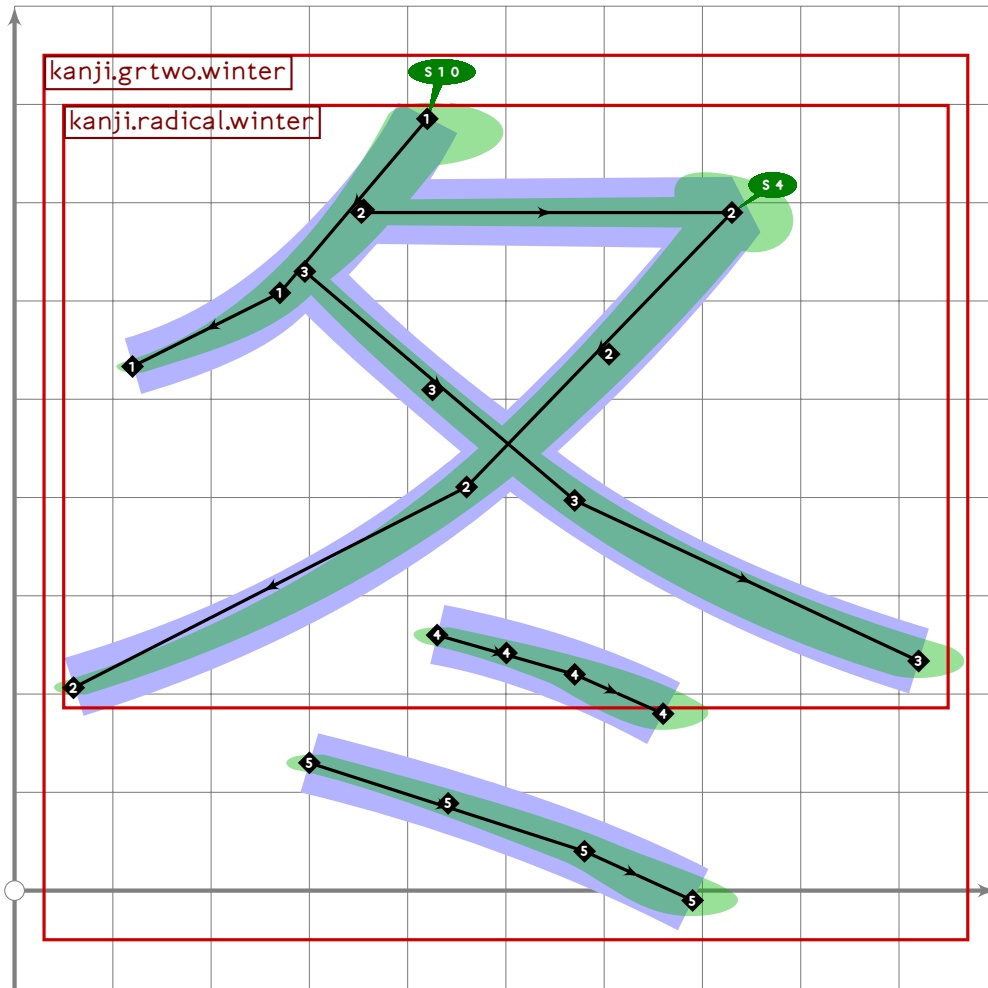
TWO

```

913
914 vardef kanji.grtwo.wind =
915   push_pbox_toexpand("kanji.grtwo.wind");
916   build_kanji.wind_enclose(build_kanji.add_beret(kanji.grone.bug));
917   expand_pbox;
918 enddef;

```

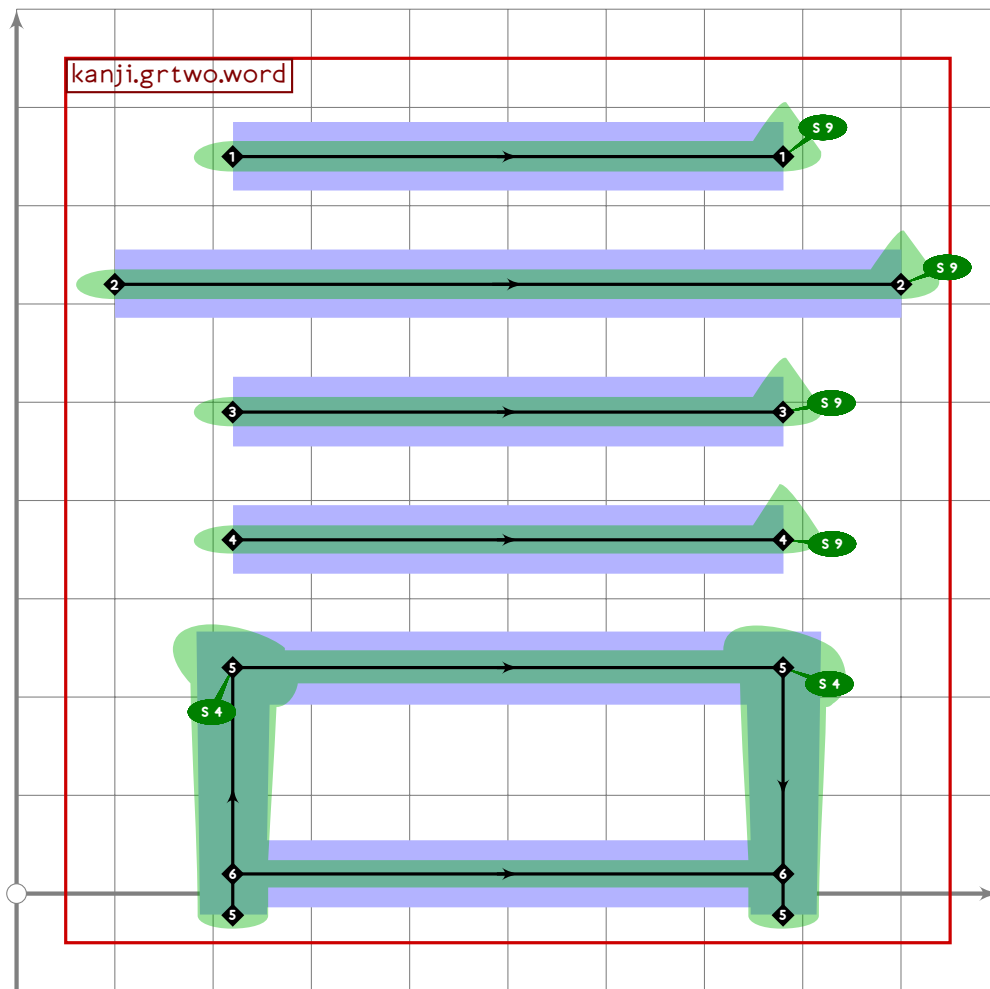
TWO



```

919
920 vardef kanji.grtwo.winter =
921   push_pbox_toexpand("kanji.grtwo.winter");
922   build_kanji.level(
923     tsu_xform(begingroup
924       save myxf;
925       transform myxf;
926       (0,690) transformed myxf=(0,690);
927       (1000,690) transformed myxf=(1000,690);
928       (500,0) transformed myxf=(500,220);
929       myxf
930     endgroup)(kanji.radical.winter);
931   push_stroke((430,260)..tension 1.2..(570,220)..(660,180),
932     (1.2,1.2)-(1.5,1.5)-(1.8,1.8));
933   push_stroke((300,130)..tension 1.2..(580,40)..(690,-10),
934     (1.2,1.2)-(1.5,1.5)-(1.8,1.8));
935 );
936 expand_pbox;
937 enddef;

```

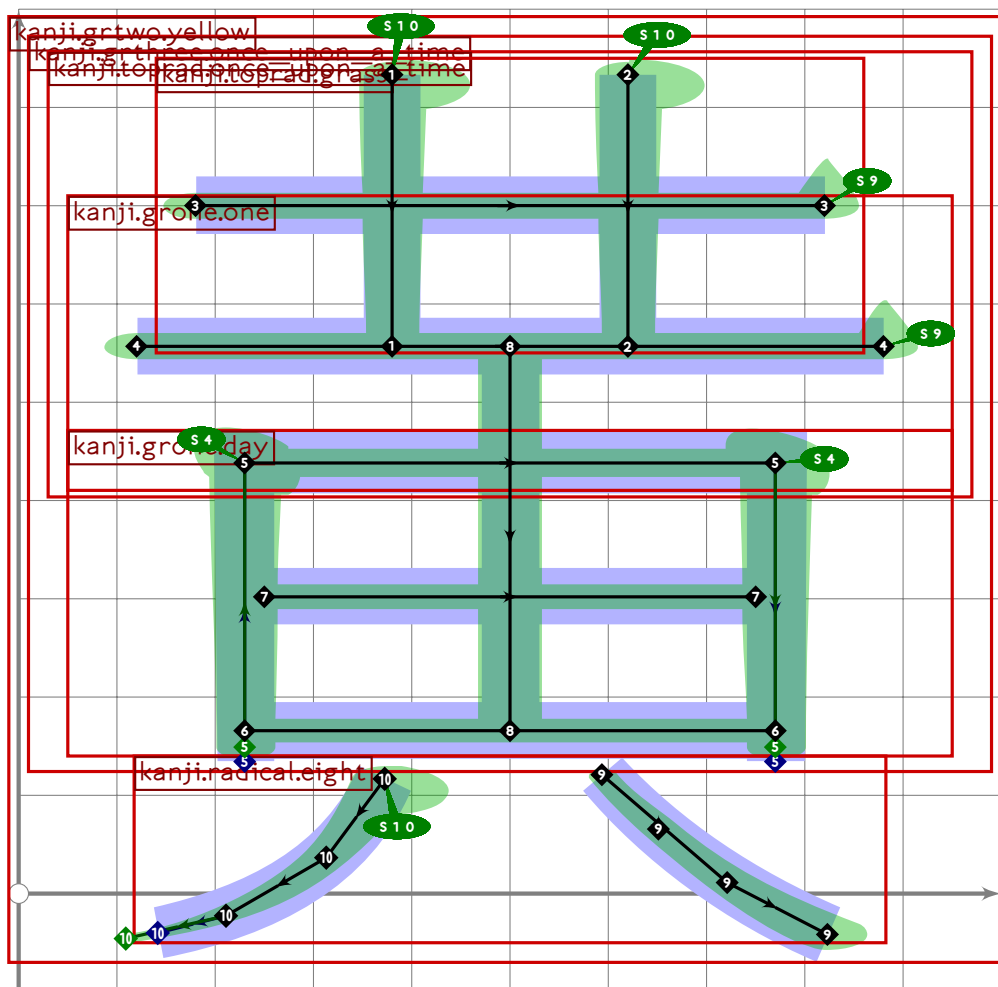
TWO

```

938
939 vardef kanji.grtwo.word =
940   push_pbox_toexpand("kanji.grtwo.word");
941   push_stroke((220,750)-(780,750),(1.6,1.6)-(1.6,1.6));
942   set_boserif(0,1,9);
943   push_stroke((100,620)-(900,620),(1.6,1.6)-(1.6,1.6));
944   set_boserif(0,1,9);
945   push_stroke((220,490)-(780,490),(1.6,1.6)-(1.6,1.6));
946   set_boserif(0,1,9);
947   push_stroke((220,360)-(780,360),(1.6,1.6)-(1.6,1.6));
948   set_boserif(0,1,9);
949   build_kanji.box((220,230),(780,20));
950   expand_pbox;
951 enddef;

```

TWO



```

952
953 vardef kanji.grtwo.yellow =
954   push_pbox_toexpand("kanji.grtwo.yellow");
955   build_kanji.level(build_kanji.tb(140,0)
956     (kanji.grthree.once_upon_a_time;
957       push_stroke((point 0.5 of get_stroke(-3))--
958         (point 0.5 of get_stroke(-1)),
959         (1.6,1.6)--(1.5,1.5)))
960     (build_kanji.sscale(xscaled 0.85)(kanji.radical.eight)));
961   expand_pbox;
962 enddef;

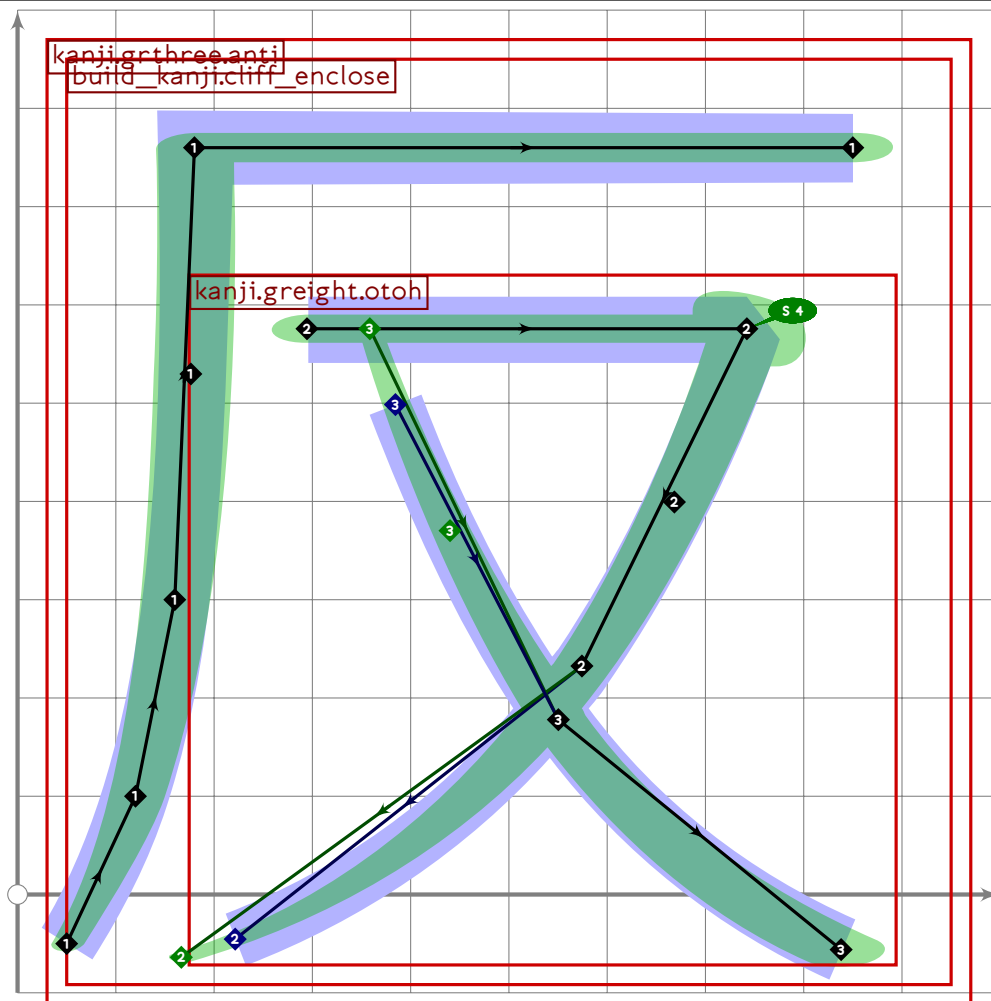
```

gradethree.mp

```

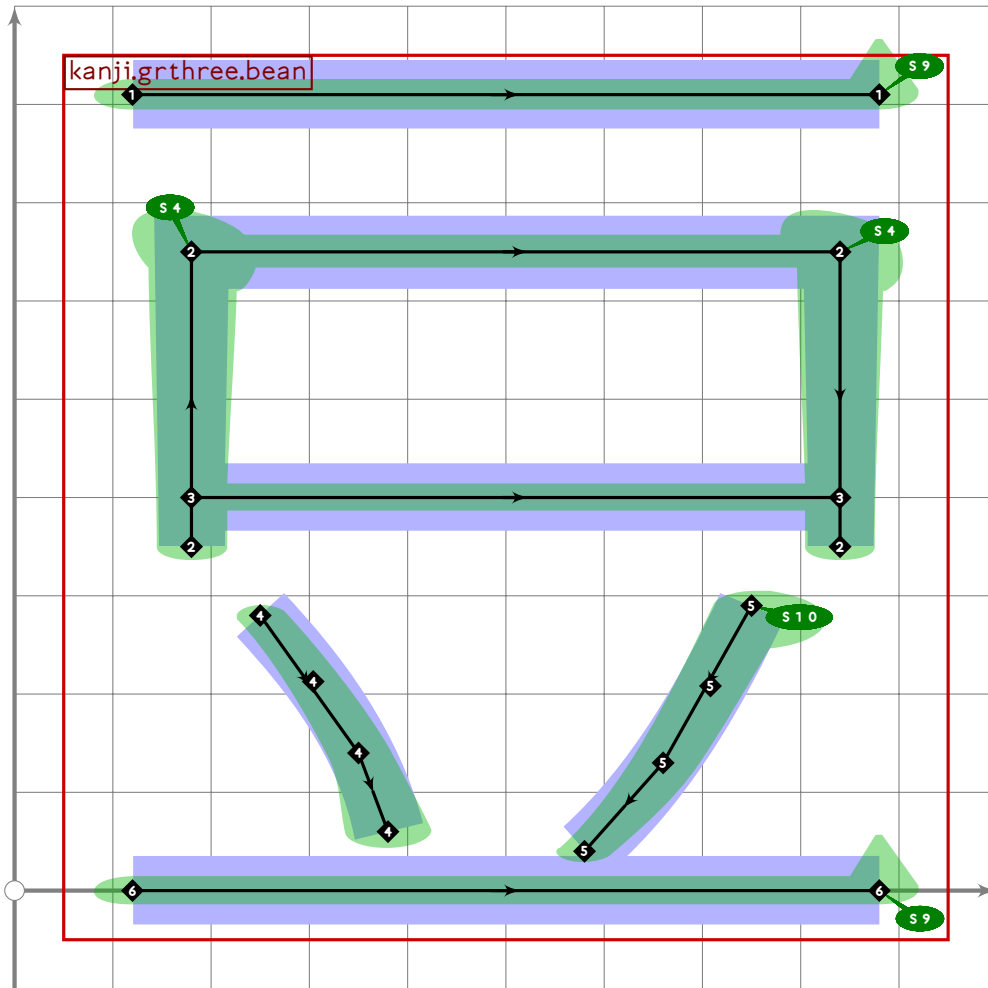
1 %
2 % Grade Three kanji used on more than one page
3 % Copyright (C) 2011, 2012, 2013 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 inclusion_lock(gradethree);
32
33
34
35 vardef kanji.grthree.anti =
36   push_pbox_toexpand("kanji.grthree.anti");
37   build_kanji.cliff_enclose
38     (tsu_xform(identity xyscaled (1.09,0.9) shifted (-80,30))
39       (kanji.greight.otoh));
40   expand_pbox;
41 enddef;

```



THRE

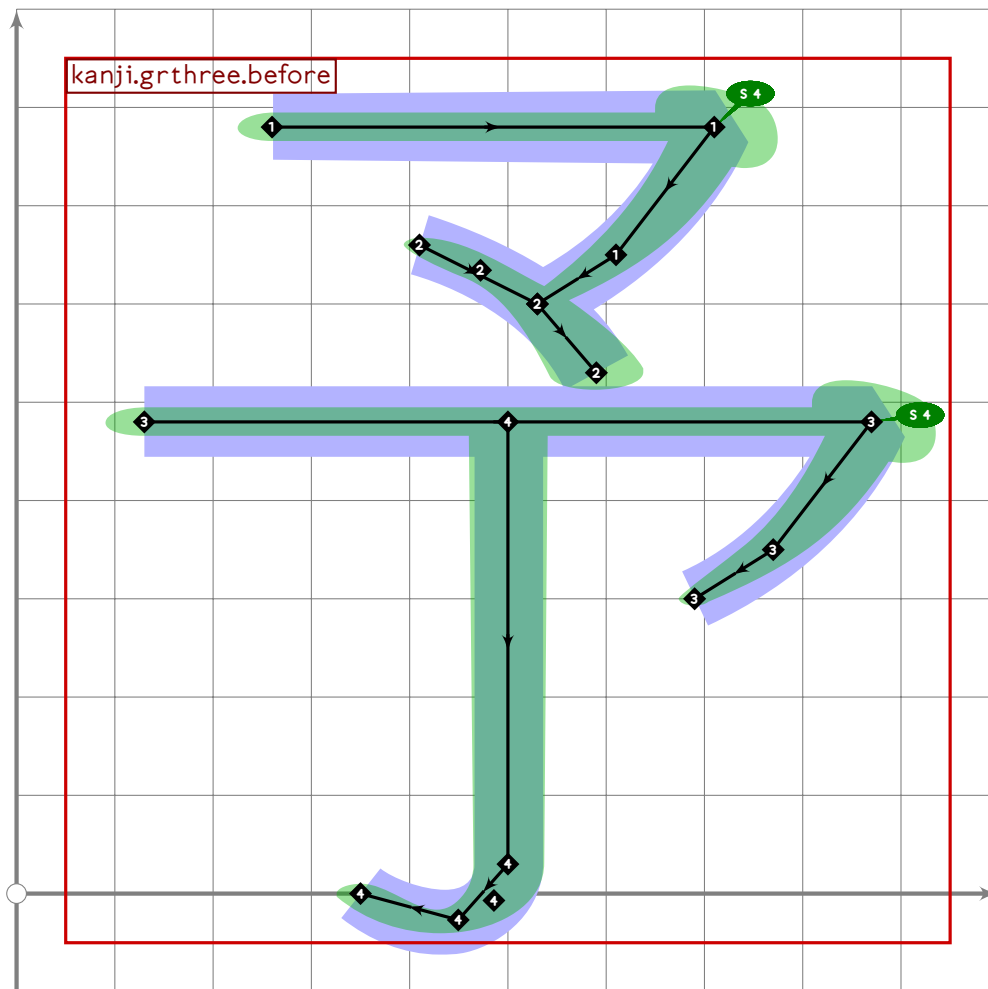
THRE



```

42
43 vardef kanji.grthree.bean =
44   push_pbox_toexpand("kanji.grthree.bean");
45   push_stroke((120,810)-(880,810),
46     (1.6,1.6)-(1.6,1.6));
47   set_boserif(0,1,9);
48   build_kanji.box((180,650),(840,400));
49   push_stroke((250,280)..tension 1.2..(350,140)..(380,60),
50     (1.2,1.2)-(1.4,1.4)-(1.7,1.7));
51   push_stroke((750,290)..tension 1.2..(660,130)..(580,40),
52     (1.6,1.6)-(1.5,1.5)-(1.3,1.3));
53   set_boserif(0,0,10);
54   push_stroke((120,0)-(880,0),
55     (1.6,1.6)-(1.6,1.6));
56   set_boserif(0,1,9);
57   expand_pbox;
58 enddef;

```



THRE

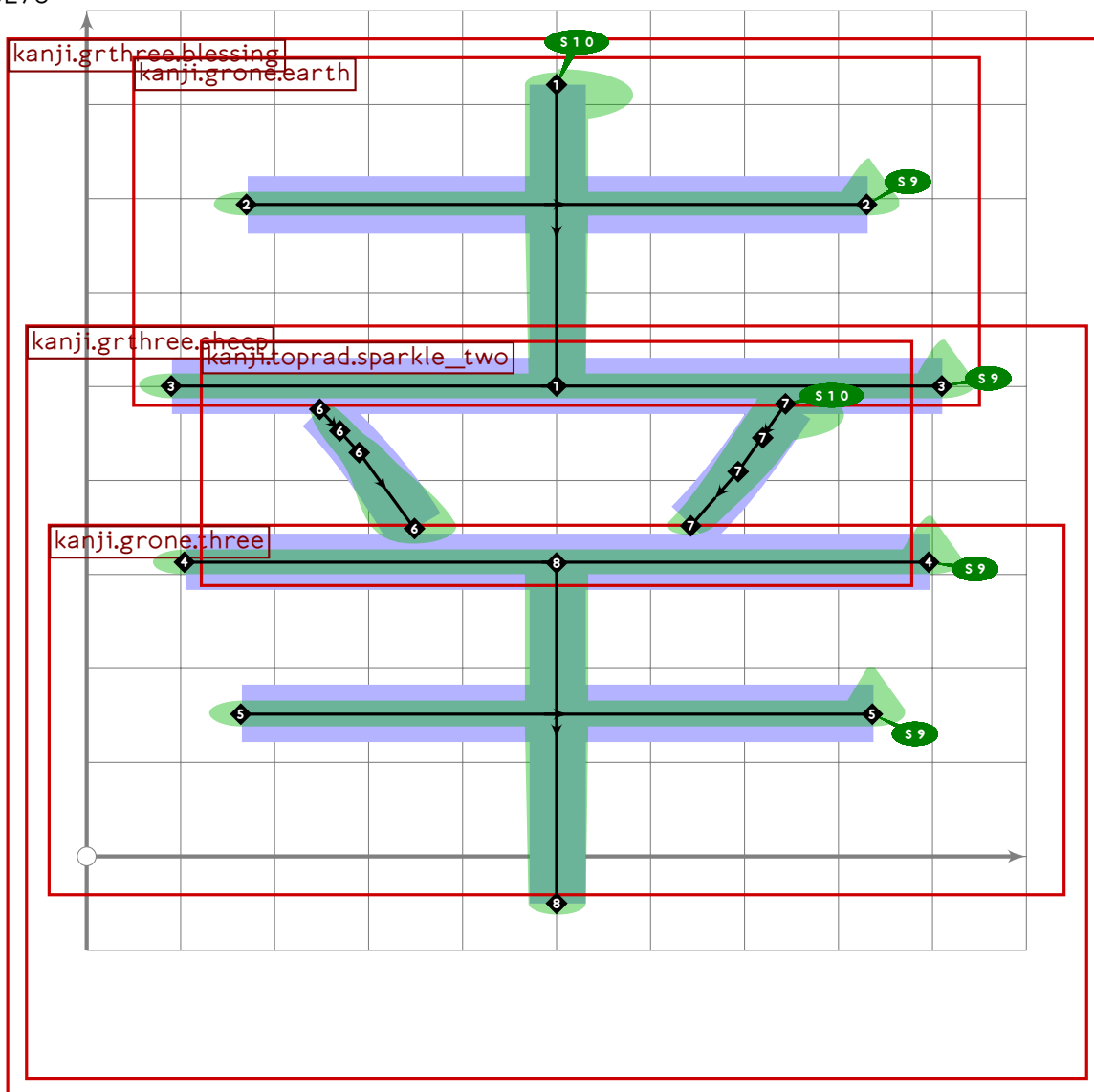
```

59
60 vardef kanji.grthree.before =
61   push_pbox_toexpand("kanji.grthree.before");
62   push_stroke((260,780)-(710,780)..(610,650)..(530,600),
63     (1.5,1.5)-(1.6,1.6)-(1.4,1.4)-(1,1));
64   set_boserif(0,14);
65   set_botip(0,1,0);
66   push_stroke((410,660)..tension 1.2..(530,600)..(590,530),
67     (1,1)-(1.4,1.4)-(1.8,1.8));
68   push_stroke((130,480)-(870,480)..(770,350)..(690,300),
69     (1.6,1.6)-(1.6,1.6)-(1.4,1.4)-(1,1));
70   set_boserif(0,14);
71   set_botip(0,1,0);
72   push_stroke((500,480),
73     (1.6,1.6));
74   build_kanji.add__jtail(0);
75   expand_pbox;
76 enddef;

```

U+5E78
tsuku.uni5E78

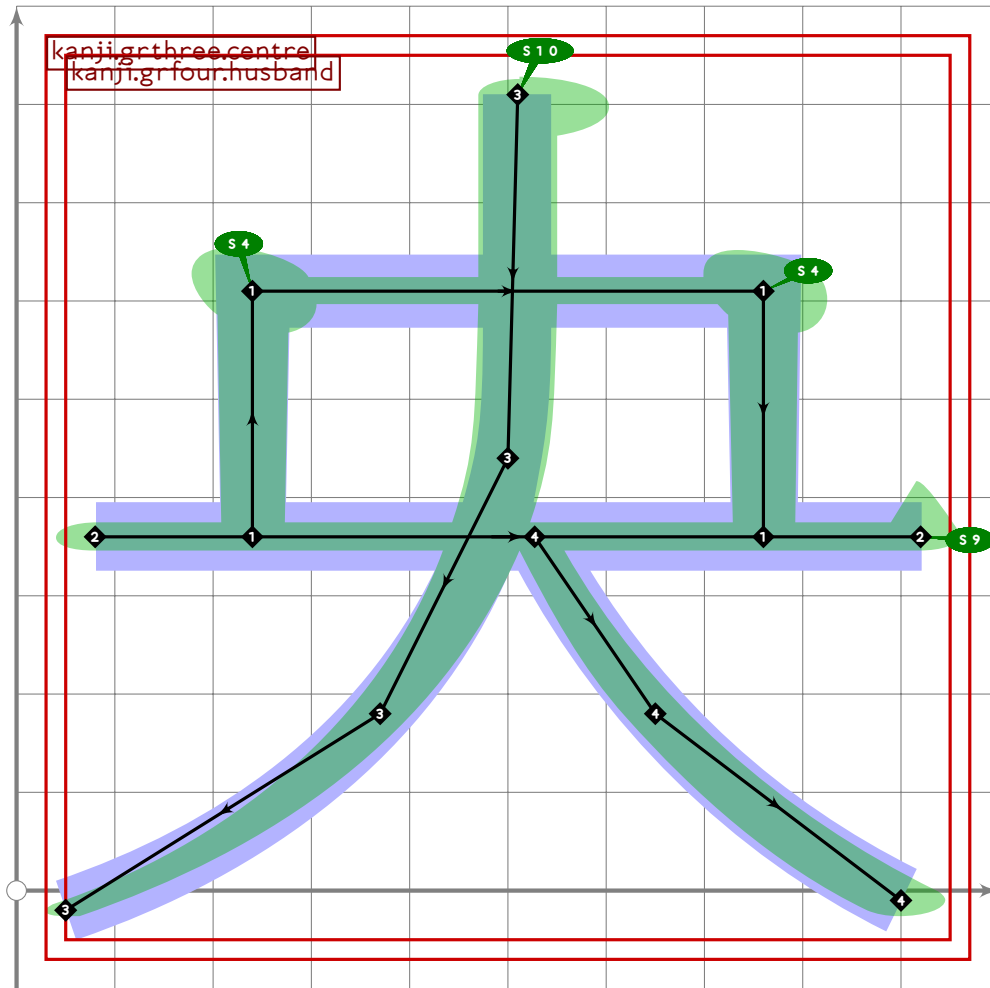
THRE



```

77
78 vardef kanji.grthree.blessing =
79   push_pbox_toexpand("kanji.grthree.blessing");
80   build_kanji.level(build_kanji.tb(480,0)
81     (kanji.grone.earth)
82     (build_kanji.sscale(xyscaled (1.2,1.4) shifted (0,-140))
83       (kanji.grthree.sheep);
84     obstacktype[find_stroke(-3)]:=otnull;
85     replace_strokep(0)((point 0 of oldp)-(500,-50))););
86   expand_pbox;
87 enddef;

```



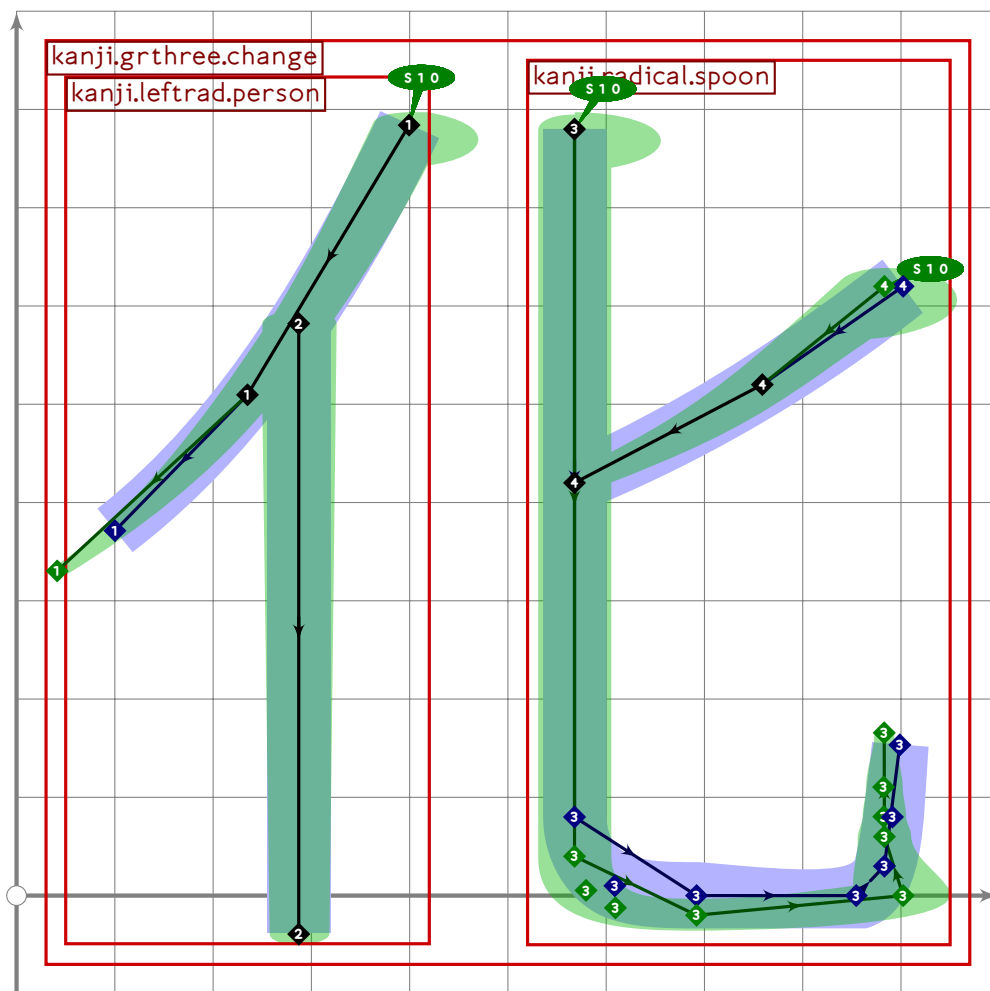
THRE

```

88
89 vardef kanji.grthree.centre =
90   push_pbox__toexpand("kanji.grthree.centre");
91   kanji.grfour.husband;
92   replace_strokep(-3)((240,360)-(240,610)-(760,610)-(760,360));
93   replace_strokeq(-3)((14,14)-(1.5,1.5)-(1.5,1.5)-(14,14));
94   set_boserif(-3,1,4);
95   set_boserif(-3,2,4);
96   set_botip(-3,1,1);
97   set_botip(-3,2,1);
98   expand_pbox;
99 enddef;

```

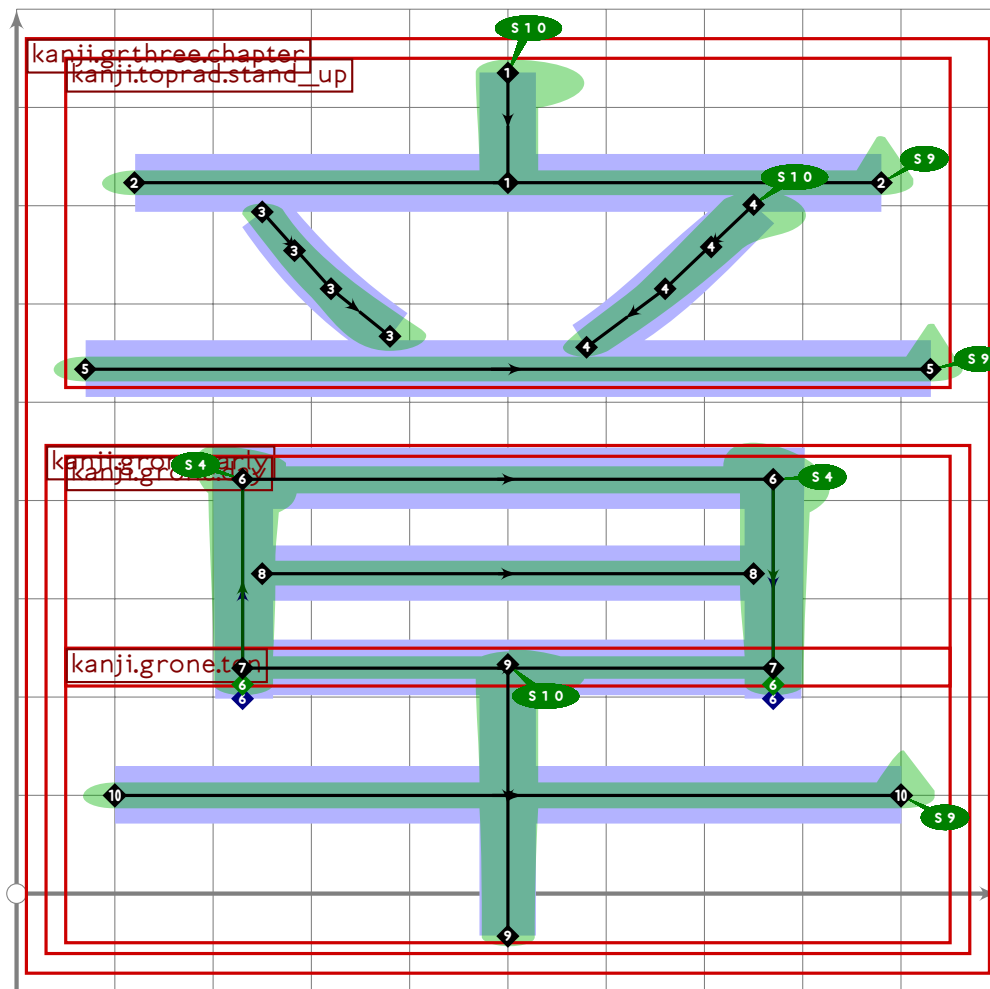
THRE



```

100
101 vardef kanji.grthree.change =
102   push_pbox_toexpand("kanji.grthree.change");
103   build_kanji.level(build_kanji.lr(470,-100)
104     (tsu_xform(identity yscaled 0.98)(kanji.leftrad.person))
105     (kanji.radical.spoon));
106   set_boserif(0,0,10);
107   expand_pbox;
108 enddef;

```

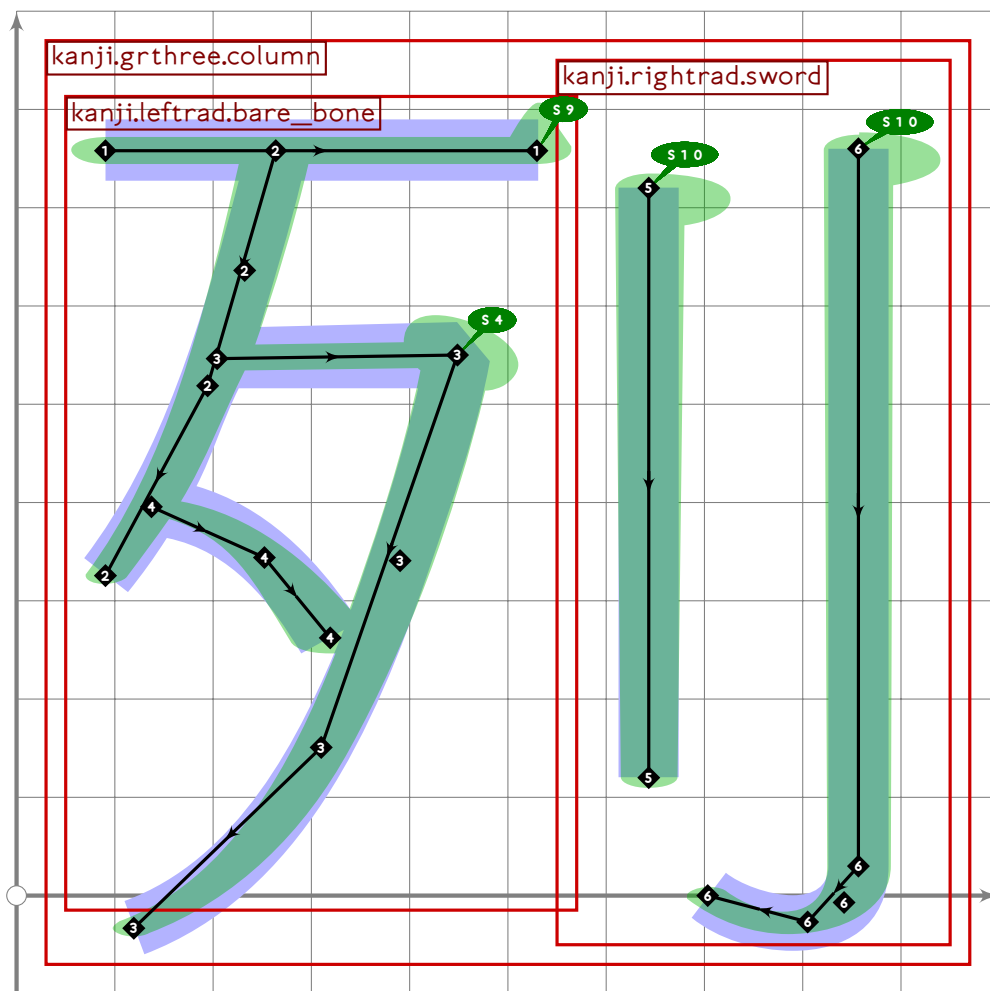



THRE

```

109
110 vardef kanji.grthree.chapter =
111   push_pbox_toexpand("kanji.grthree.chapter");
112   build_kanji.level(build_kanji.tb(480,70)
113     (kanji.toprad.stand_up)
114     (kanji.grone.early));
115   expand_pbox;
116 enddef;

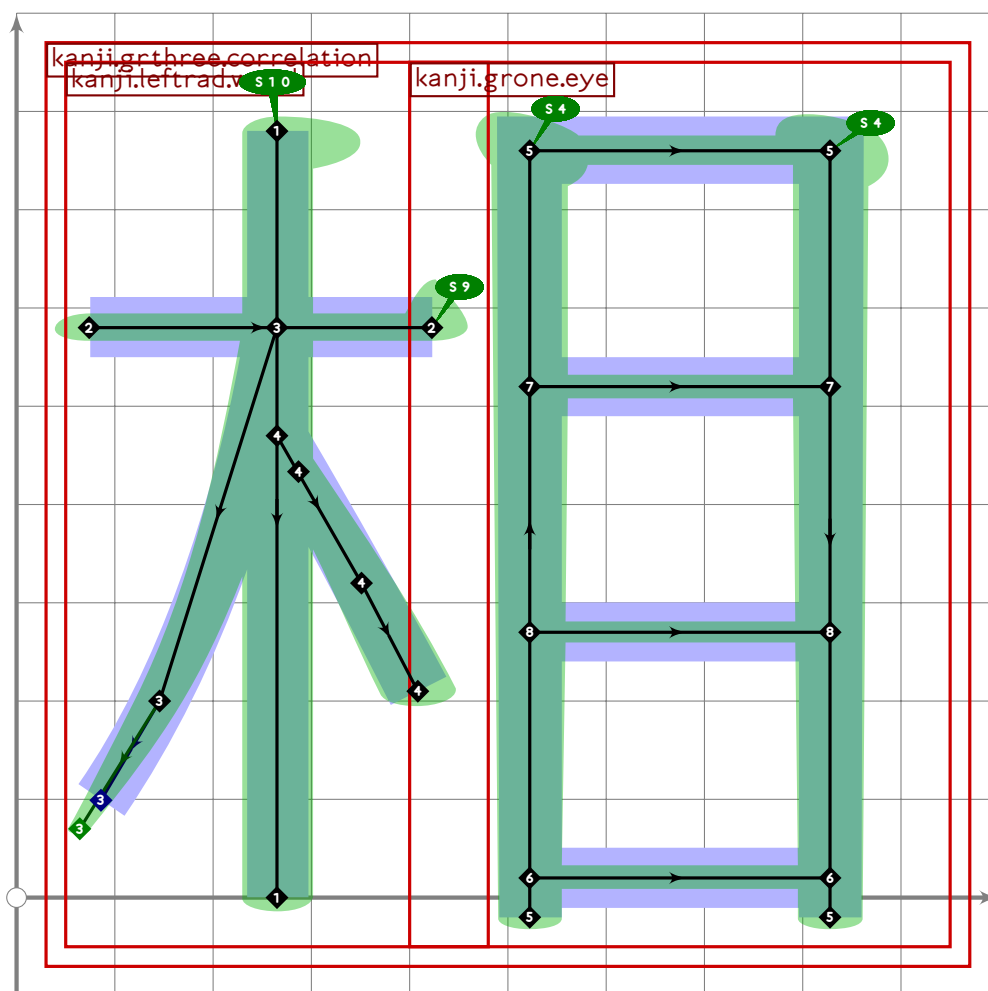
```



```

117
118 vardef kanji.grthree.column =
119   push_pbox_toexpand("kanji.grthree.column");
120   build_kanji.level(build_kanji.lr(560,20)
121     (build_kanji.sscale(yscaled 0.92)(kanji.leftrad.bare_bone))
122     (kanji.rightrad.sword));
123   expand_pbox;
124 enddef;

```



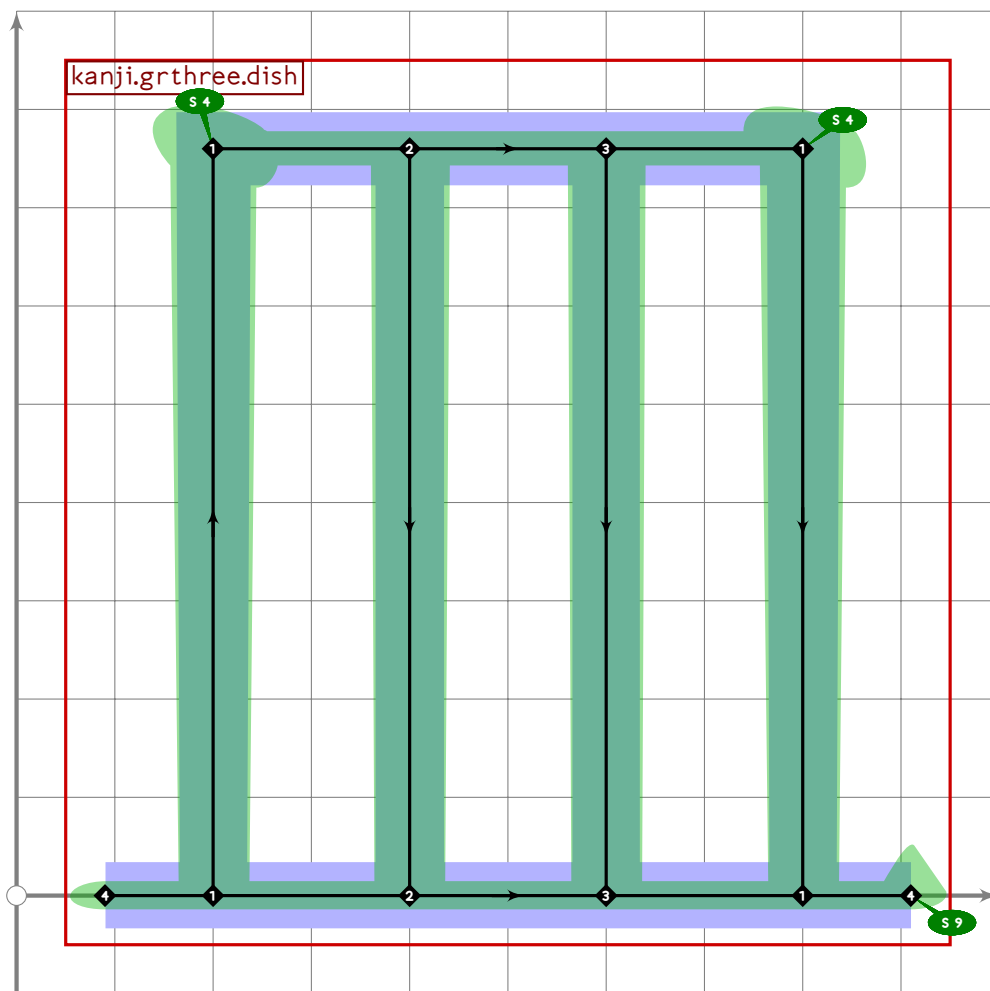
THRE

```

125
126 vardef kanji.grthree.correlation =
127   push_pbox_toexpand("kanji.grthree.correlation");
128   build_kanji.level(build_kanji.lr(440,80)
129     (kanji.leftrad.wood)
130     (kanji.grthree.eye));
131   expand_pbox;
132 enddef;

```

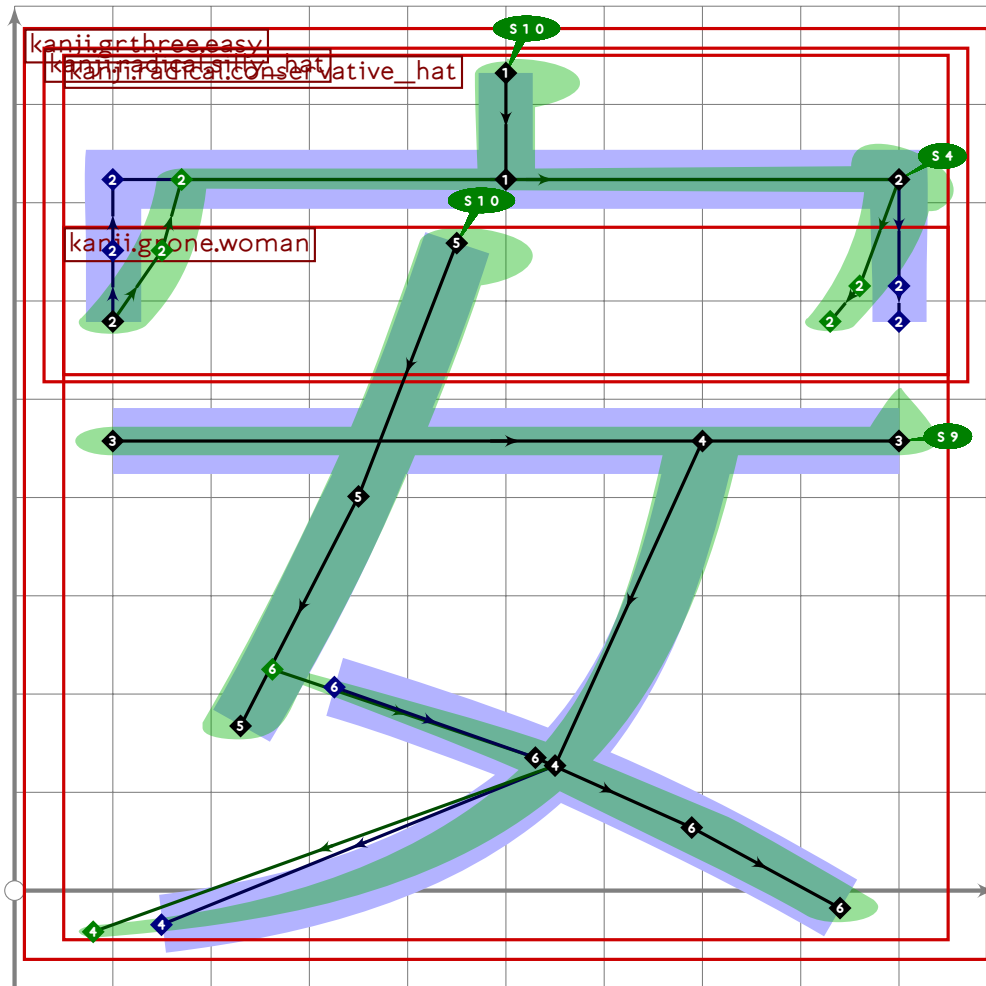
THRE



```

133
134 vardef kanji.grthree.dish =
135   push_pbox_toexpand("kanji.grthree.dish");
136   push_stroke((200,0)–(200,760)–(800,760)–(800,0),
137     (1.5,1.5)–(1.7,1.7)–(1.7,1.7)–(1.5,1.5));
138   set_botip(0,1);
139   set_botip(0,2,1);
140   set_boserif(0,1,4);
141   set_boserif(0,2,4);
142   push_stroke((400,760)–(400,0),(1.6,1.6)–(1.5,1.5));
143   push_stroke((600,760)–(600,0),(1.6,1.6)–(1.5,1.5));
144   push_stroke((90,0)–(910,0),(1.5,1.5)–(1.5,1.5));
145   set_boserif(0,1,9);
146   expand_pbox;
147 enddef;

```



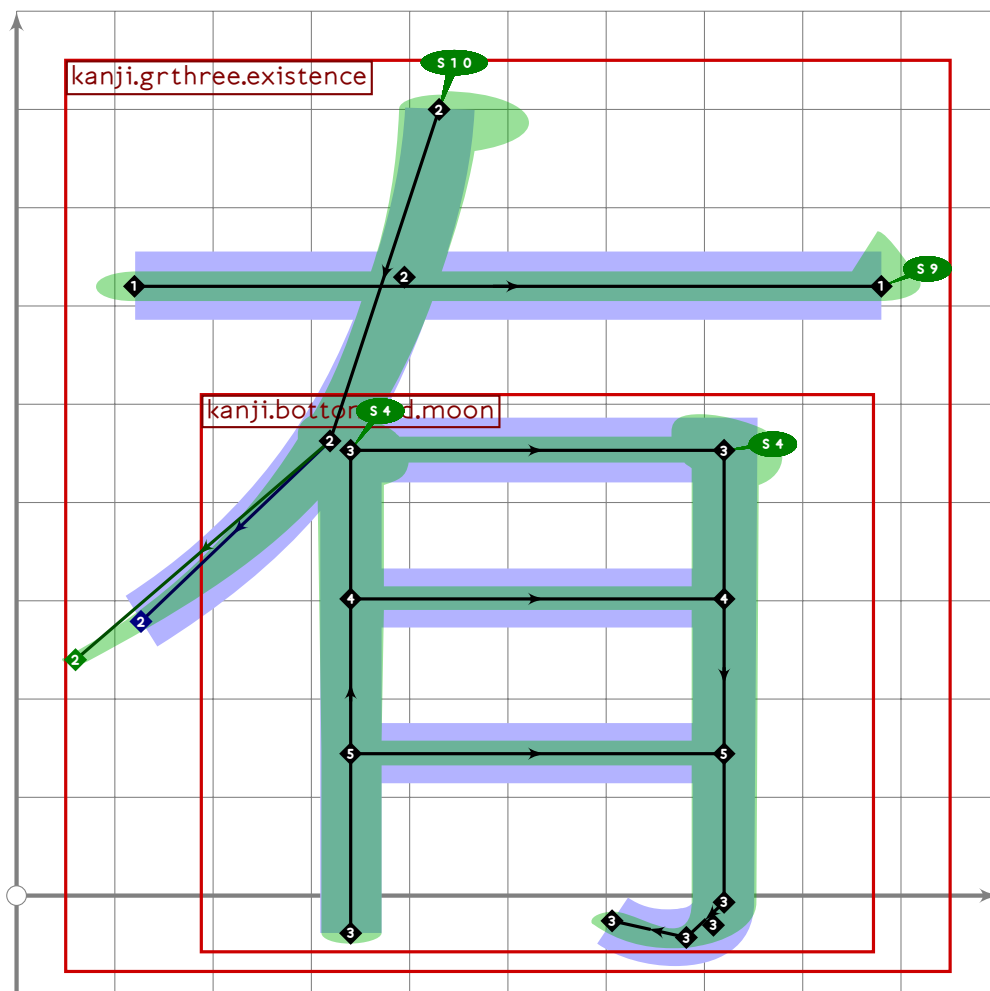
THRE

```

148
149 vardef kanji.grthree.easy =
150   push_pbox_toexpand("kanji.grthree.easy");
151   build_kanji.tb(600,150)
152     (kanji.radical.silly_hat)
153     (kanji.grone.woman);
154   expand_pbox;
155 enddef;

```

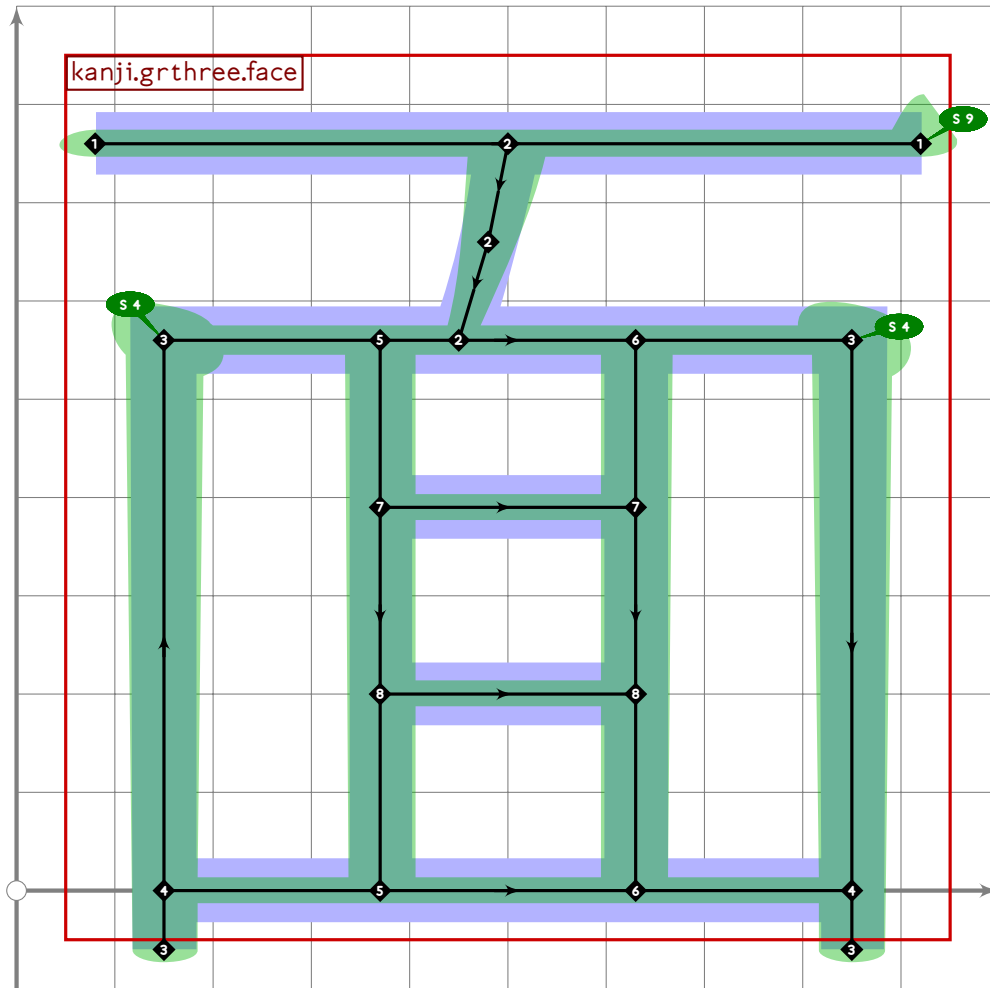
THRE



```

156
157 vardef kanji.grthree.existence =
158   push_pbox_toexpand("kanji.grthree.existence");
159   build_kanji.lean_to((430,240));
160   build_kanji.sscale(xyscaled (0.76,0.63) shifted (30,-170))
161     (kanji.bottomrad.moon);
162   expand_pbox;
163 enddef;

```



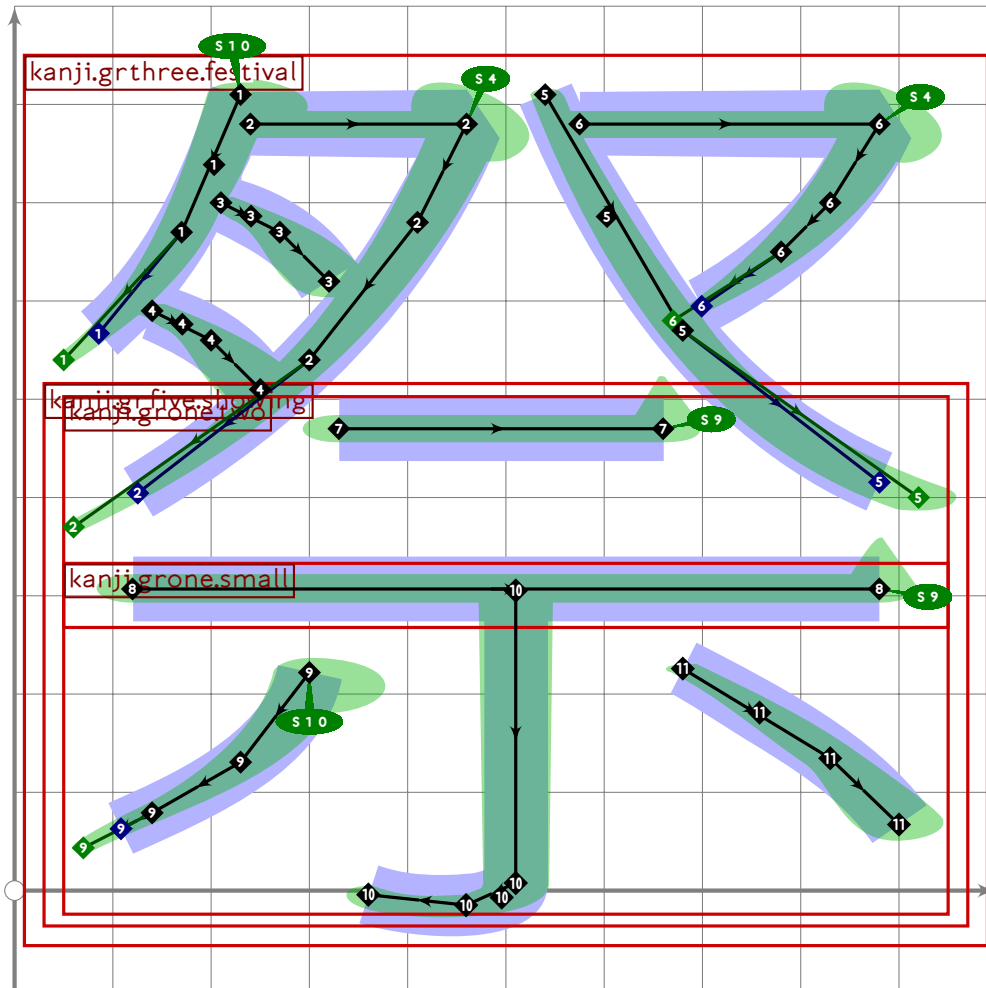
THRE

```

164
165 vardef kanji.grthree.face =
166   push_pbox_toexpand("kanji.grthree.face");
167   push_stroke((80,760)-(920,760),
168     (1,6,1,6)-(1,6,1,6));
169   set_boserif(0,1,9);
170   push_stroke((500,760)..(480,660)..(450,560),
171     (1,7,1,7)-(1,3,1,3)-(1,1));
172   build_kanji.box((150,560),(850,0));
173   push_stroke((370,560)-(370,0),(1,6,1,6)-(1,5,1,5));
174   push_stroke((630,560)-(630,0),(1,6,1,6)-(1,5,1,5));
175   push_stroke((370,390)-(630,390),(1,5,1,5)-(1,5,1,5));
176   push_stroke((370,200)-(630,200),(1,5,1,5)-(1,5,1,5));
177   for i=-7 upto 0: set_bosize(i,92); endfor;
178   expand_pbox;
179 enddef;

```

THRE



```

180
181 vardef kanji.grthree.festival =
182   push_pbox_toexpand("kanji.grthree.festival");
183   build_kanji.level(
184     push_stroke((230,810)..tension 1.2..(170,670)..(50,540),
185       (1.5,1.5)-(1.3,1.3)-(0.85,0.9));
186     set_boserif(0,0,10);
187     push_stroke((240,780)-(460,780)..(410,680)..(300,540)..(60,370),
188       (1.5,1.5)-(1.6,1.6)-(1.5,1.5)-(1.3,1.3)-(0.85,0.9));
189     set_boserif(0,1,4);
190     set_botip(0,1,0);
191     push_stroke((210,700)..tension 1.2..(270,670)..(320,620),
192       (1,1)-(1.4,1.4)-(1.7,1.7));
193     push_stroke((140,590)..tension 1.2..(200,560)..(250,510),
194       (1,1)-(1.4,1.4)-(1.7,1.7));
195     push_stroke((540,810)..tension 1.2..(680,570)..(920,400),
196       (1,1)-(1.3,1.3)-(2.25,0.95));
197     push_stroke((575,780)-(880,780)..(830,700)..(780,650)..(670,580),
198       (1.5,1.5)-(1.6,1.6)-(1.5,1.5)-(1.3,1.3)-(0.85,0.9));
199     set_boserif(0,1,4);
200     set_botip(0,1,0);

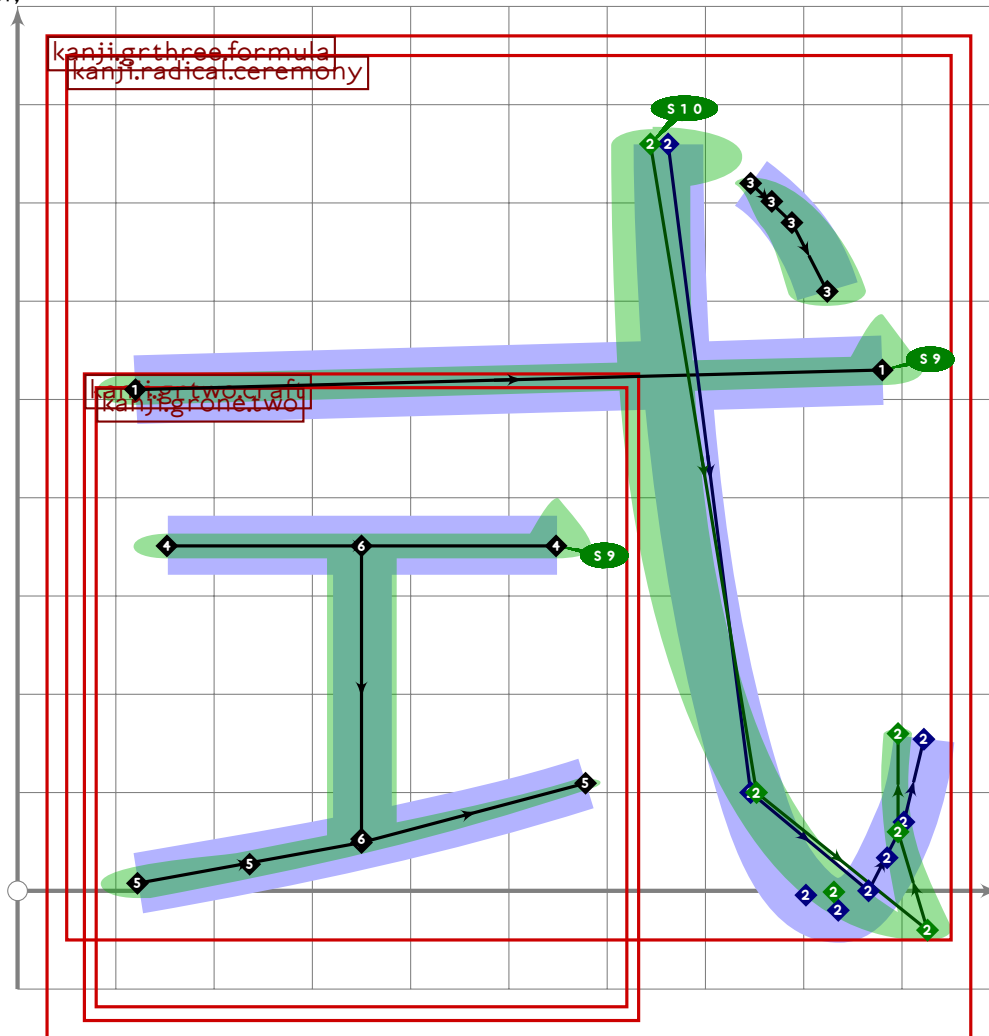
```



```

201   push_stroke((330,470)-(660,470),(1.6,1.6)-(1.6,1.6));
202   set_boserif(0,19);
203   build_kanji.sscaled(yscaled 0.6 shifted (0,-150))(kanji.grfive.showing);
204   obstacktype[find_whatever(otstroke,-4)]:=otnull;
205 );
206 expand_pbox;
207 enddef;

```



THRE

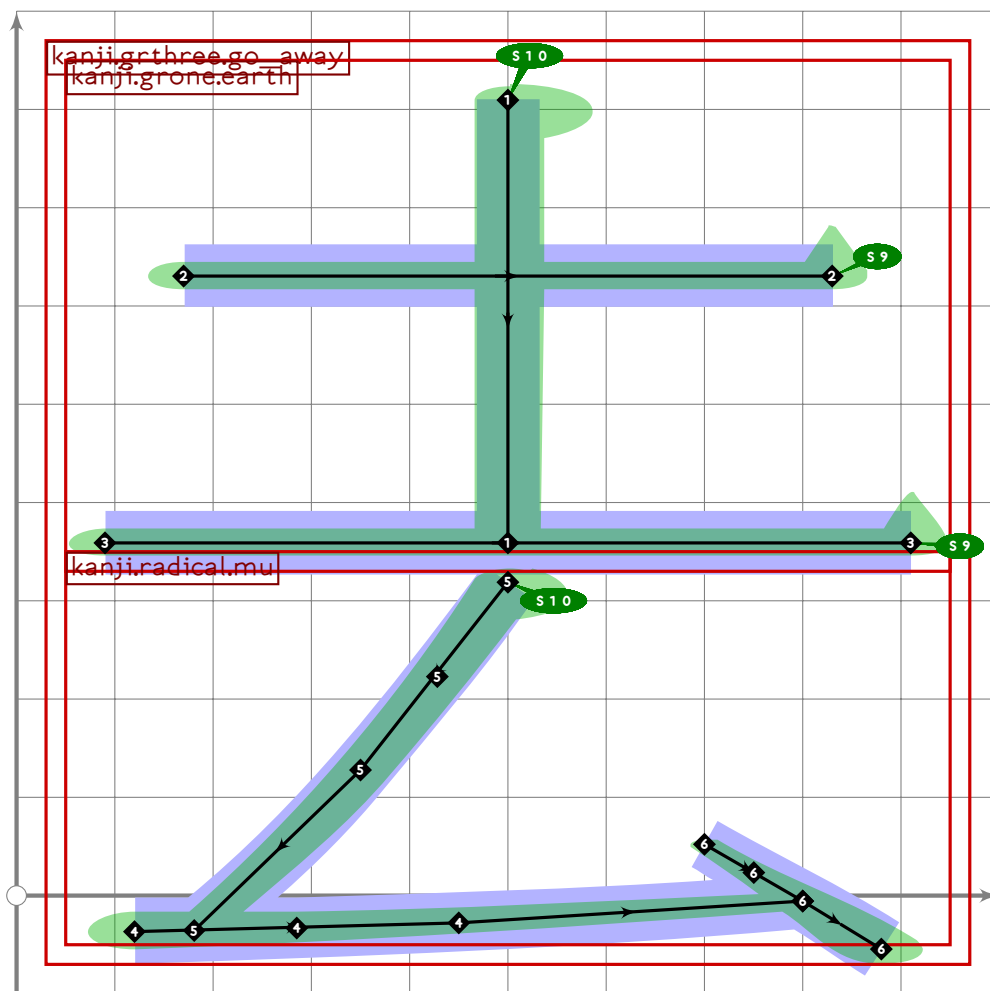
```

208
209 vardef kanji.grthree.formula =
210   push_pbox_toexpand("kanji.grthree.formula");
211   kanji.radical.ceremony;
212   replace_stroke(-1)(oldp shifted (-950,0) xscaled 0.6 shifted (950,0));
213   replace_stroke(0)(oldp shifted (-950,0) xscaled 0.6 shifted (950,0));
214   build_kanji.sscaled(xyscaled (0.6,0.7) shifted (-150,-200))
215     (build_kanji.lift_skirt(400,250)(kanji.grtwo.craft));
216   expand_pbox;
217 enddef;

```

U+53BB
tsuku.uni53BB

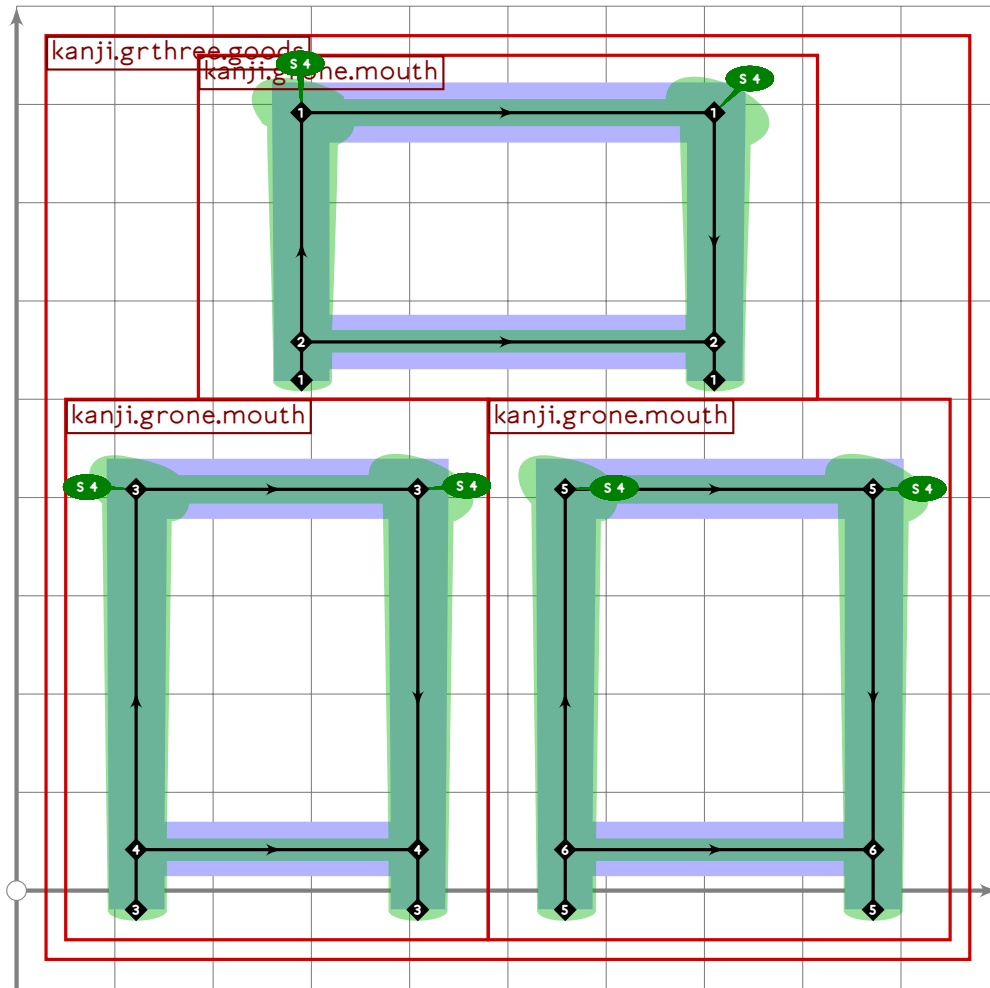
THRE



```

218
219 vardef kanji.grthree.go_away =
220   push_pbox_toexpand("kanji.grthree.go_away");
221   build_kanji.tb(340,20)
222     (kanji.grone.earth)
223     (kanji.radical.mu);
224   expand_pbox;
225 enddef;

```



THRE

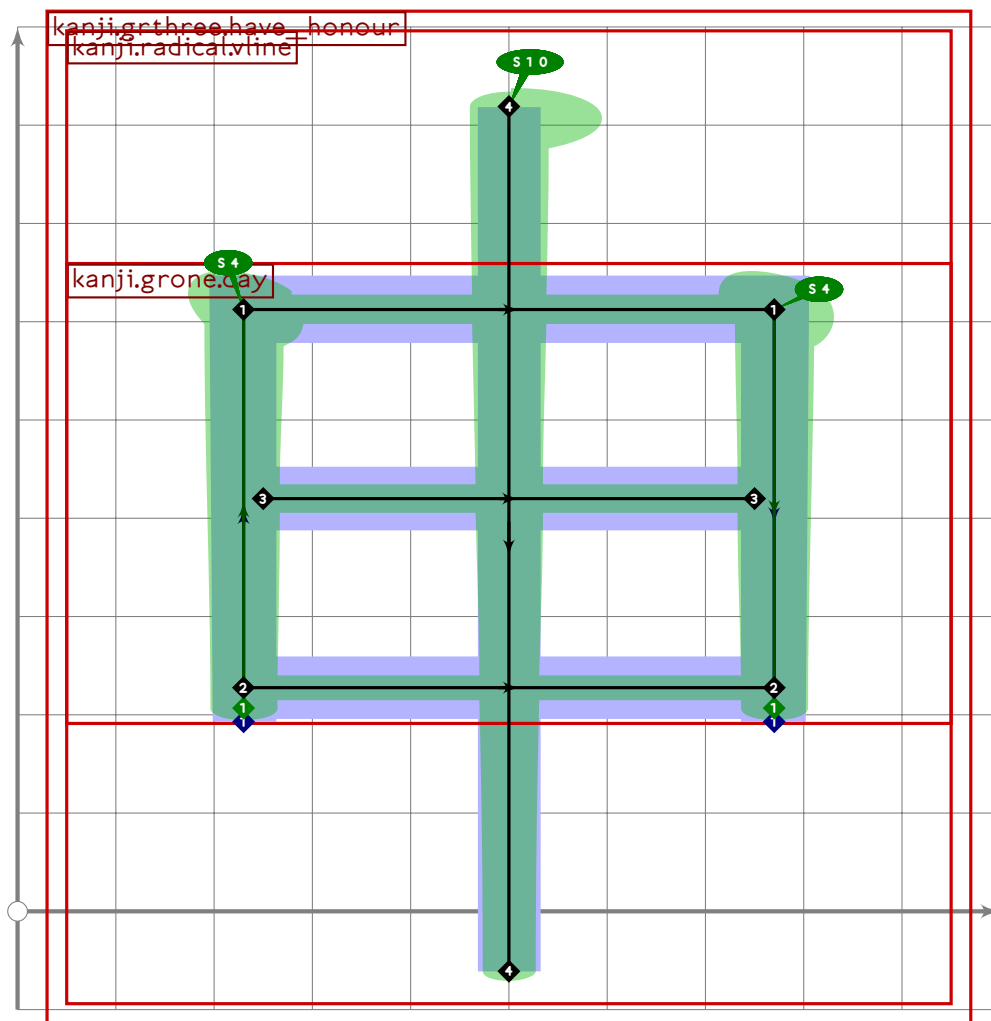
```

226
227 vardef kanji.grthree.goods =
228   push_pbox_toexpand("kanji.grthree.goods");
229   build_kanji.level(build_kanji.tricluster(0.7)
230     (kanji.grone.mouth)
231     (kanji.grone.mouth)
232     (kanji.grone.mouth));
233   expand_pbox;
234 enddef;

```

U+7533
tsuku.uni7533

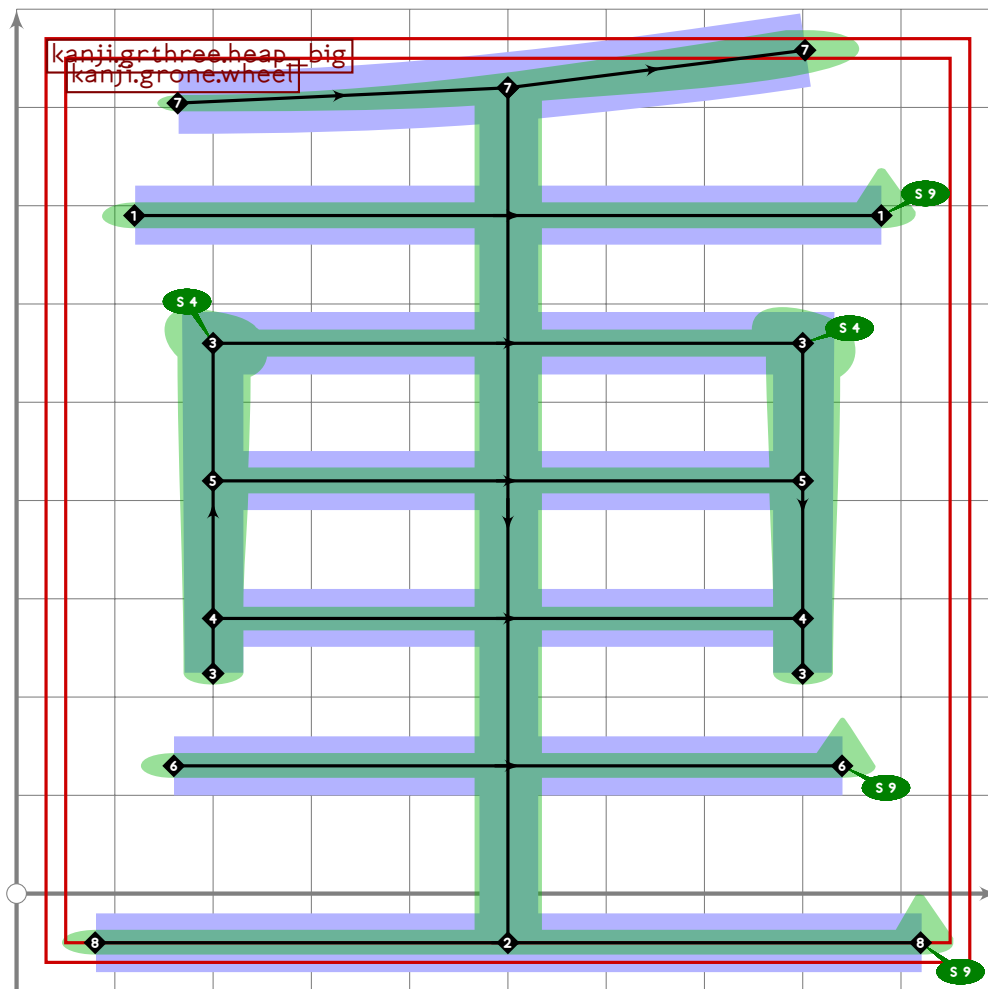
THRE



```

235
236 vardef kanji.grthree.have_honour =
237   push_pbox_toexpand("kanji.grthree.have_honour");
238   build_kanji.level(
239     build_kanji.sscale(yscaled 0.52 shifted (0,30))(kanji.grone.day);
240     build_kanji.sscale(yscaled 1.1)(kanji.radical.vline));
241   expand_pbox;
242 enddef;

```



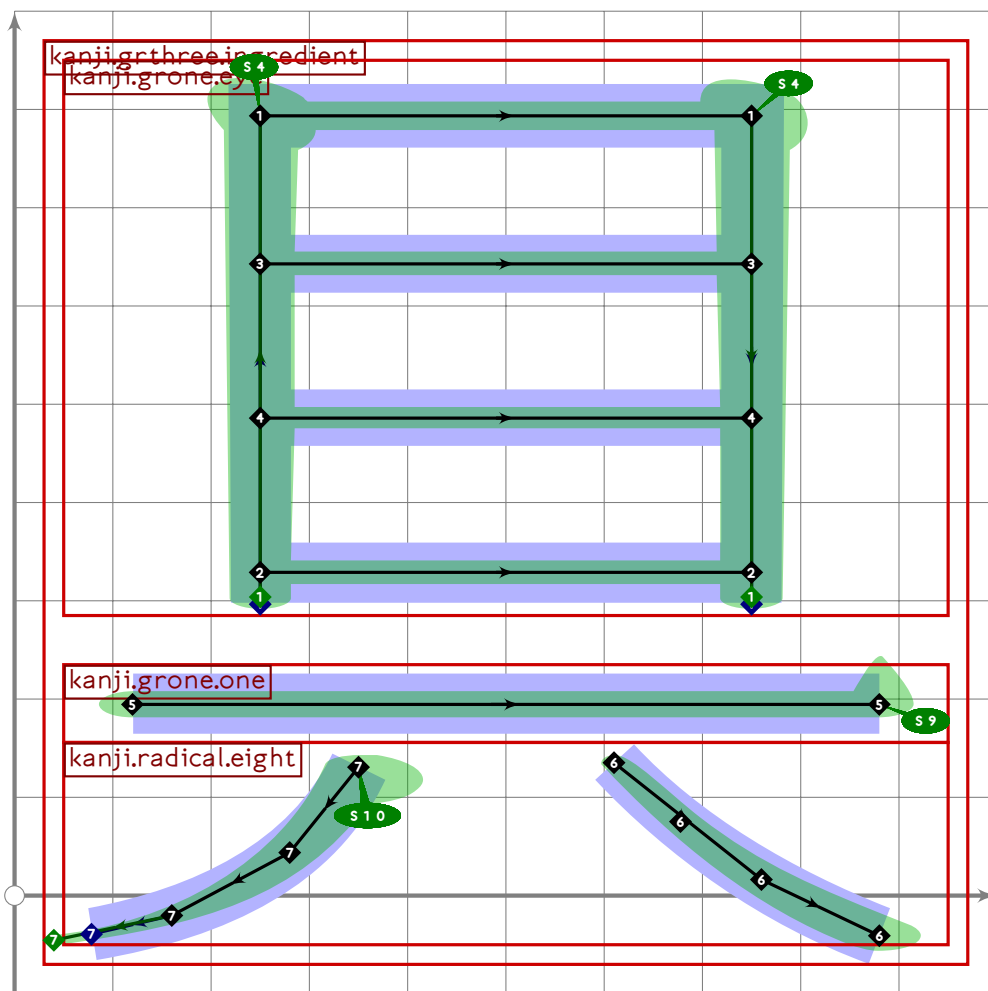
THRE

```

243
244 vardef kanji.grthree.heap_big =
245   push_pbox_toexpand("kanji.grthree.heap_big");
246   build_kanji.add_beret(kanji.grone.wheel);
247   push_stroke(get_stroke(-1),(1.6,1.6)-(1.6,1.6));
248   replace_stroke(0)(oldp shifted (0,-50-ypart llcorner oldp));
249   replace_stroke(-2)
250     ((160,ypart point 0 of oldp)-(840,ypart point 1 of oldp));
251   set_bosertif(0,1,9);
252   set_bosize(0,get_bosize(-2));
253   expand_pbox;
254 enddef;

```

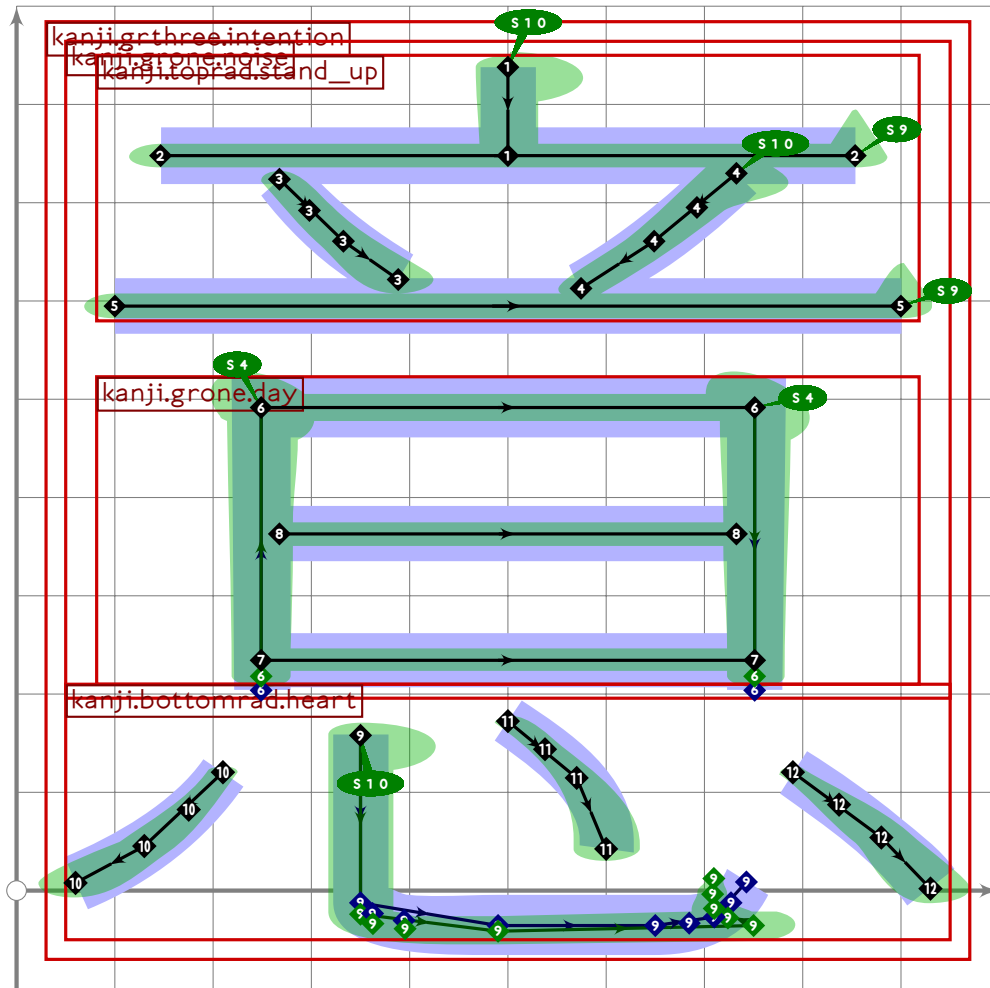
THRE



```

255
256 vardef kanji.grthree.ingredient =
257   push_pbox__toexpand("kanji.grthree.ingredient");
258   build_kanji.level(build_kanji.tb(260,-50)
259     (kanji.grone.ey)
260     (build_kanji.tb(600,0)
261       (kanji.grone.one)
262       (kanji.radical.eight)));
263   expand_pbox;
264 enddef;

```



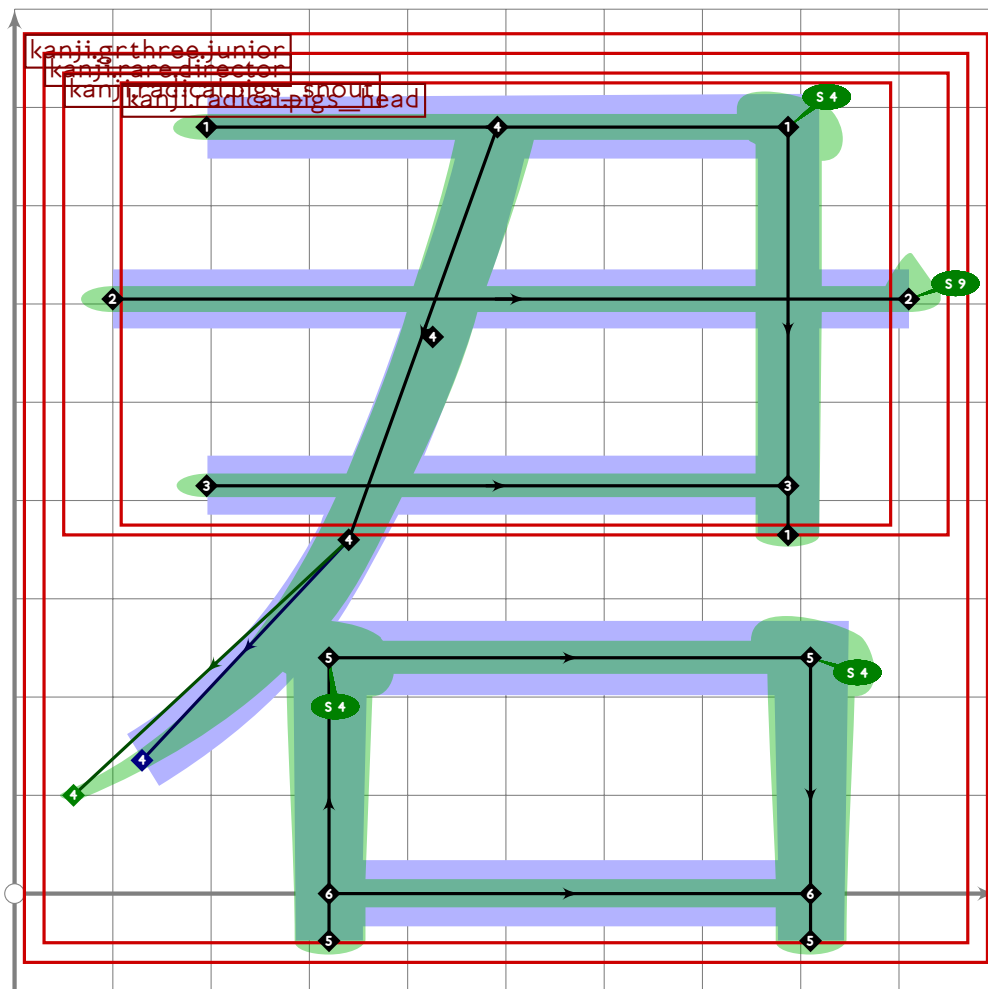
THRE

```

265
266 vardef kanji.grthree.intention =
267   push_pbox_toexpand("kanji.grthree.intention");
268   build_kanji.level(build_kanji.tb(210,0)
269     (kanji.grone.noise)
270     (kanji.bottomrad.heart));
271   expand_pbox;
272 enddef;

```

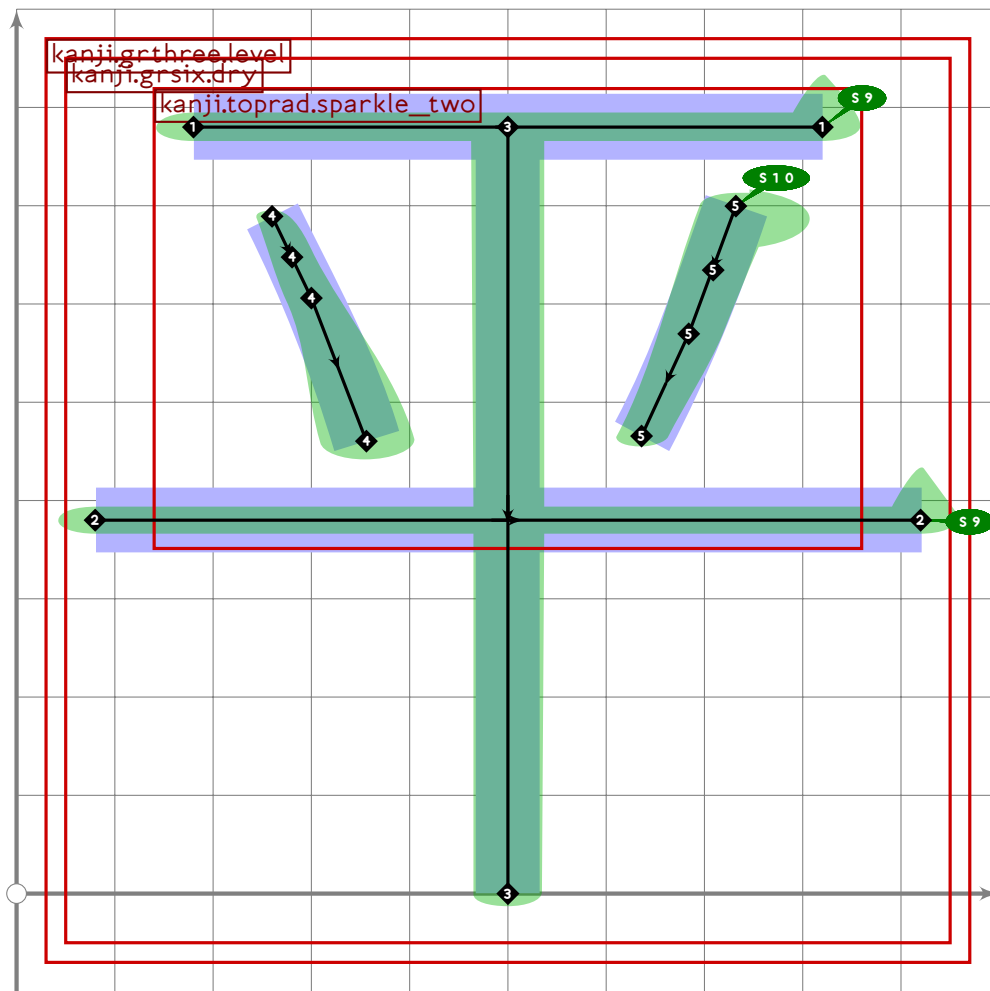
THRE



```

273
274 vardef kanji.grthree.junior =
275   push_pbox_toexpand("kanji.grthree.junior");
276   kanji.rare.director;
277   build_kanji.box((320,240),(810,0));
278   expand_pbox;
279 enddef;

```

THRE

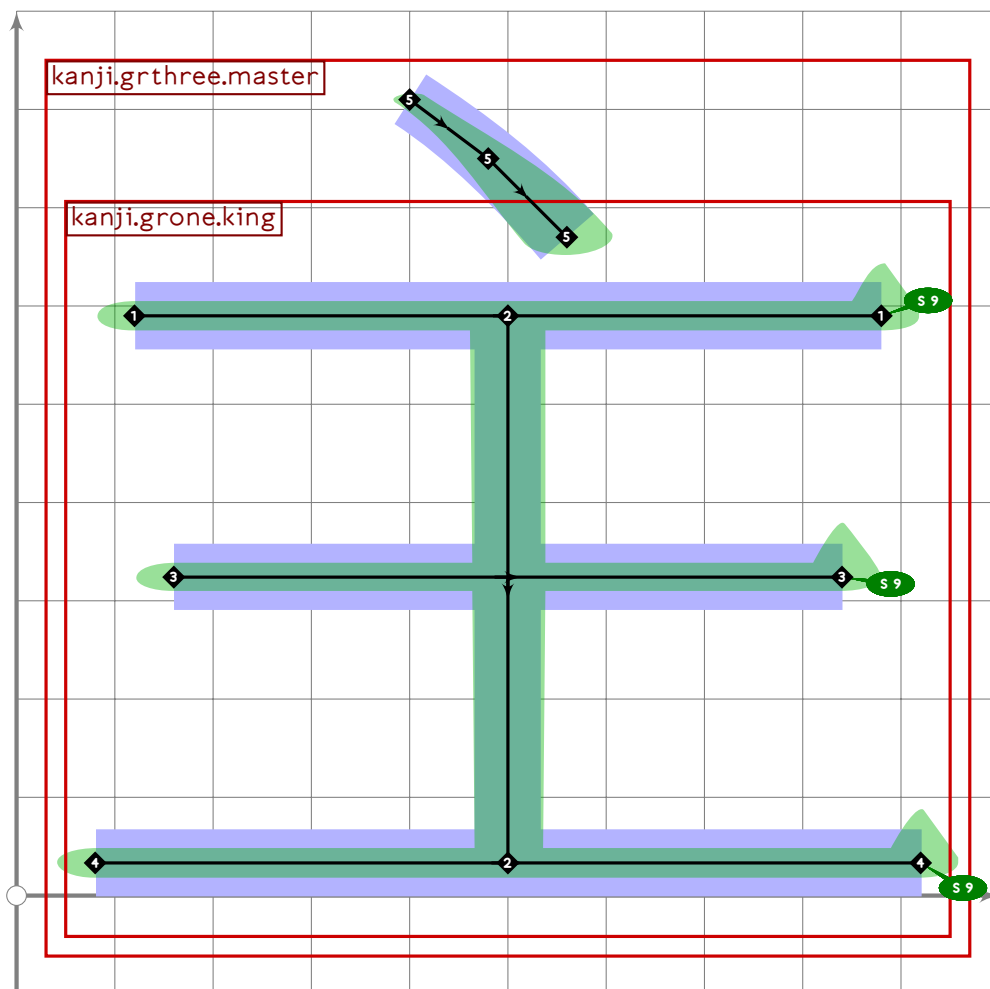
```

280
281 vardef kanji.grthree.level =
282   push_pbox_toexpand("kanji.grthree.level");
283   build_kanji.level(
284     kanji.grsix.dry;
285     replace_stroke(-1)(oldp shifted (0,-90));
286     build_kanji.sscale(xyscaled (0.8,0.52) shifted (0,190))
287     (kanji.toprad.sparkle_two));
288   expand_pbox;
289 enddef;

```

U+4E3B
tsuku.uni4E3B

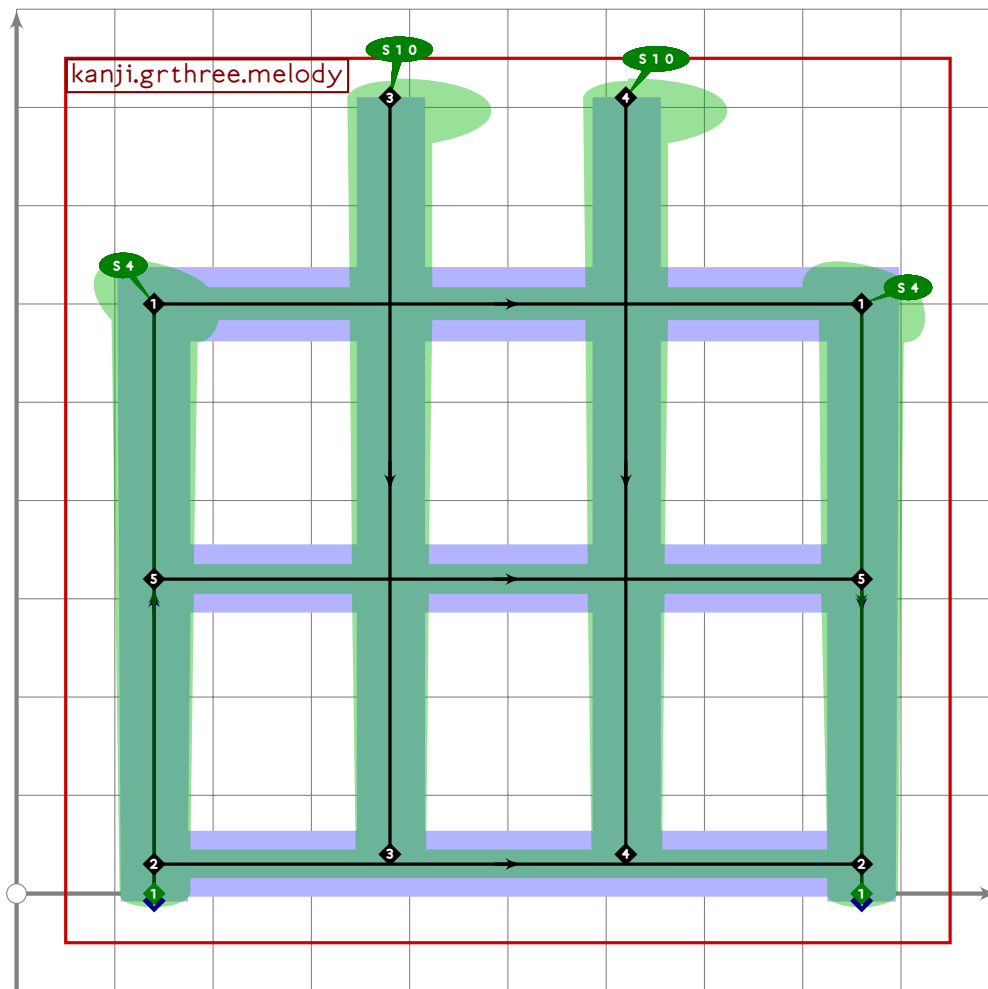
THRE



```

290
291 vardef kanji.grthree.master =
292   push_pbox_toexpand("kanji.grthree.master");
293   build_kanji.level(
294     tsu_xform(identity yscaled (590/710))(kanji.grone.king);
295     push_stroke((400,810)..(480,750)..(560,670),
296       (1,1)-(14,14)-(18,18)));
297   expand_pbox;
298 enddef;

```



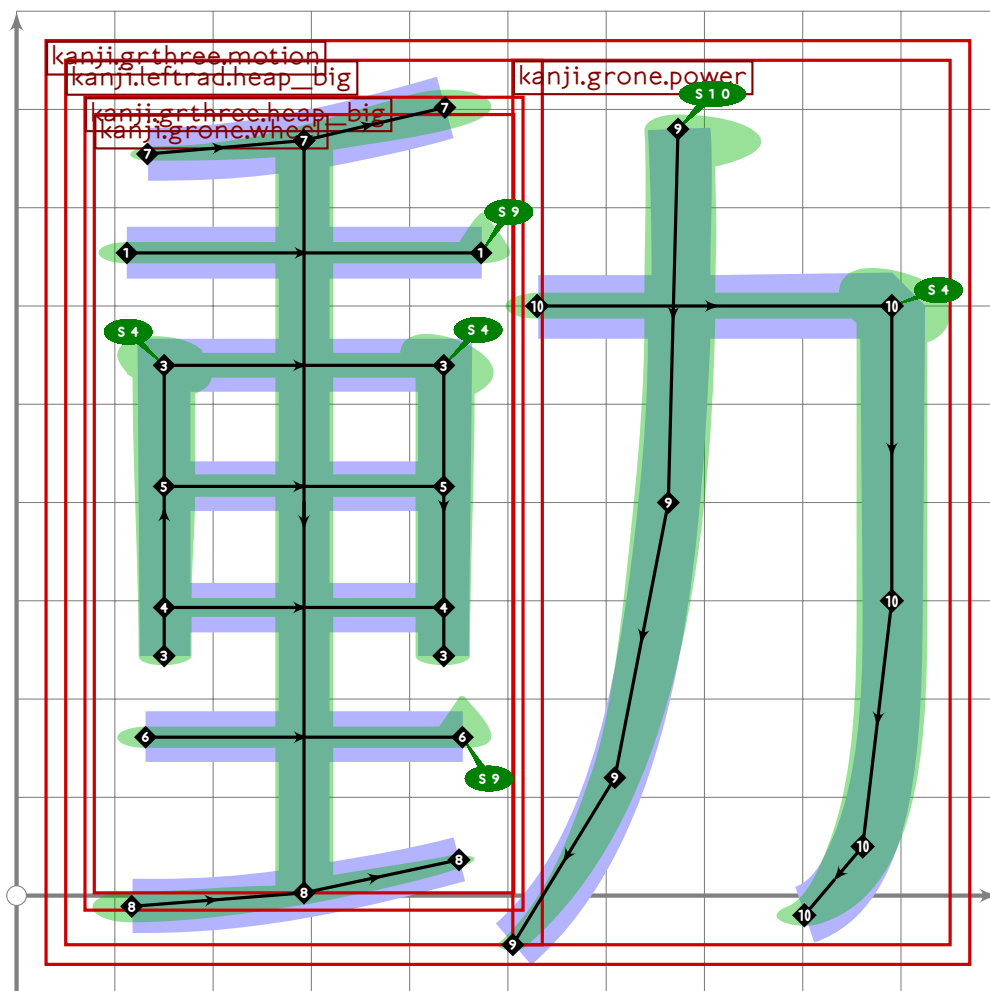
THRE

```

299
300 vardef kanji.grthree.melody =
301   push_pbox__toexpand("kanji.grthree.melody");
302   build_kanji.box((140,600),(860,30));
303   push_stroke((380,810)-(380,40),
304     (1.7,1.7)-(1.5,1.5));
305   set_boserif(0,0,10);
306   push_stroke((620,810)-(620,40),
307     (1.7,1.7)-(1.5,1.5));
308   set_boserif(0,0,10);
309   push_stroke((140,320)-(860,320),
310     (1.6,1.6)-(1.6,1.6));
311   expand_pbox;
312 enddef;

```

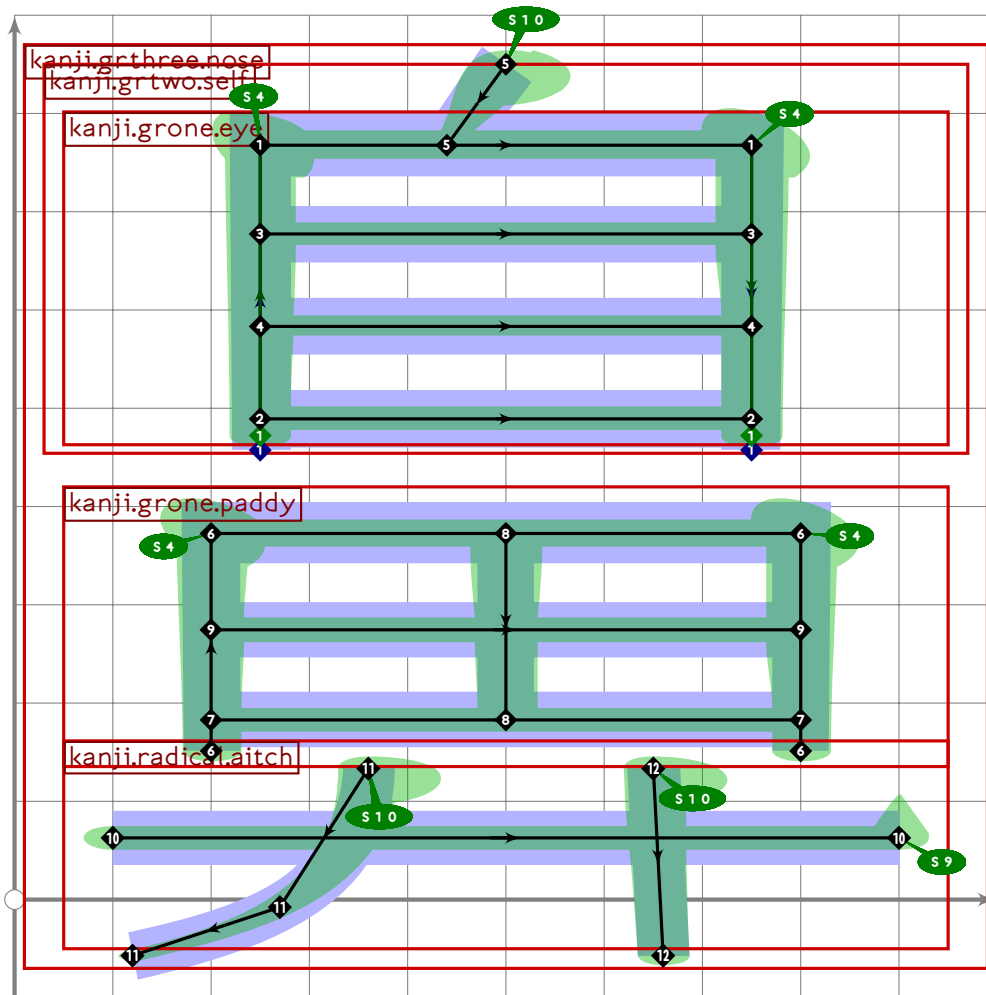
THRE



```

313
314 vardef kanji.grthree.motion =
315   push_pbox_toexpand("kanji.grthree.motion");
316   build_kanji.lr(520,30)
317     (kanji.leftrad.heap_big)
318     (kanji.grthree.power);
319   expand_pbox;
320 enddef;

```



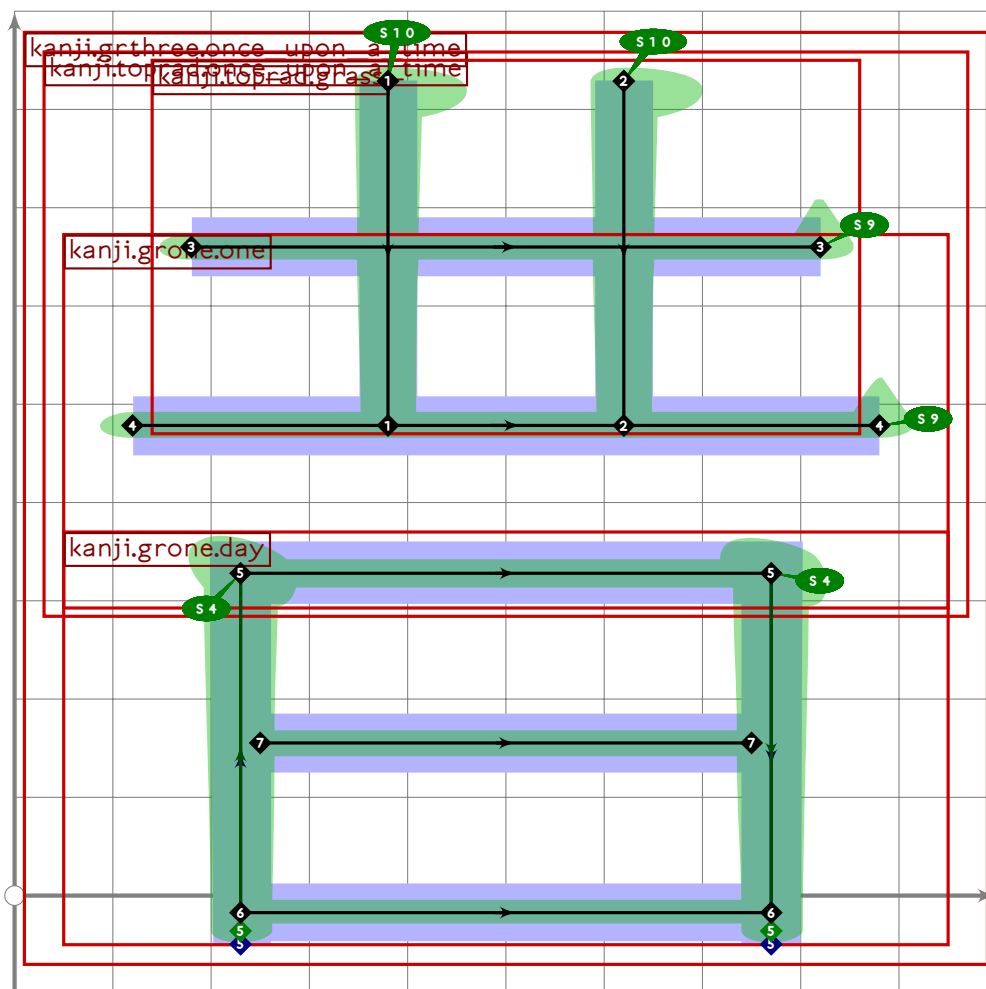
THRE

```

321
322 vardef kanji.grthree.nose =
323   push_pbox_toexpand("kanji.grthree.nose");
324   build_kanji.tb(440,-40)
325     (kanji.grtwo.self)
326     (build_kanji.tb(330,50)
327       (kanji.grone.paddy)
328       (kanji.radical.aitch));
329   expand_pbox;
330 enddef;

```

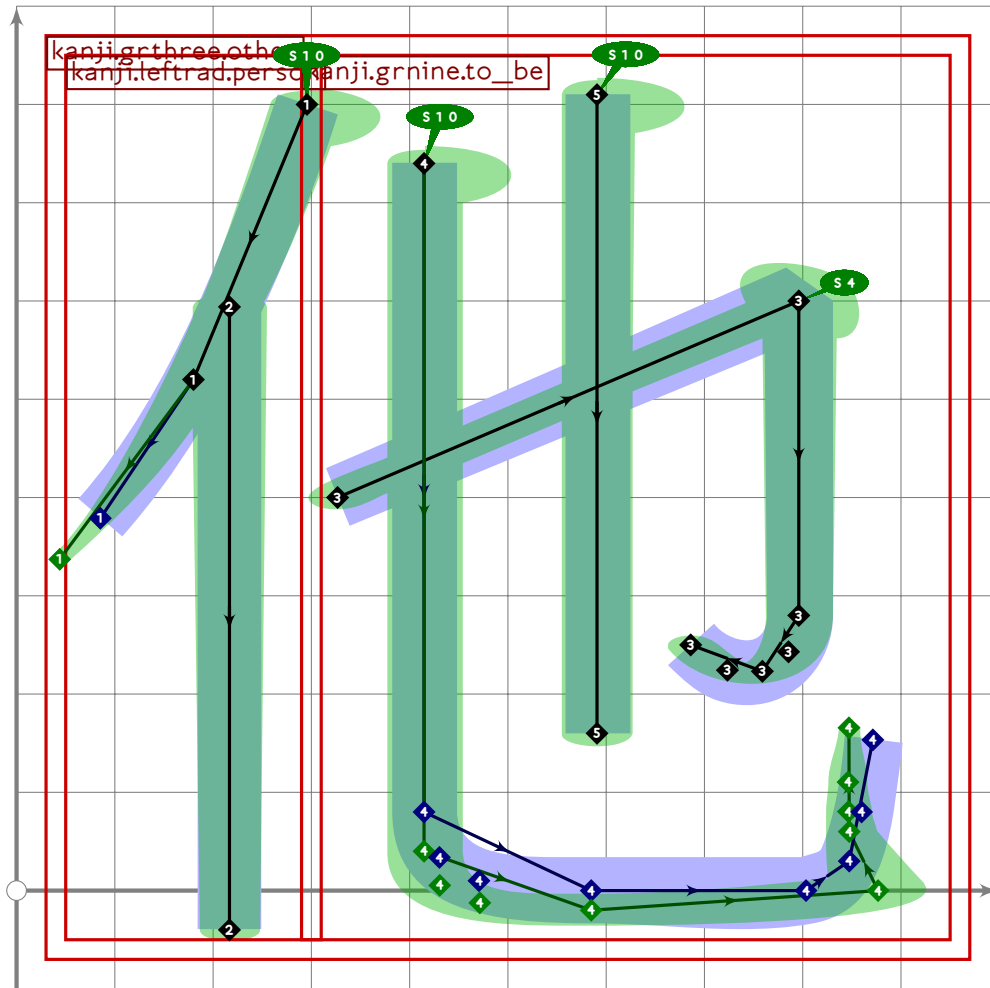
THRE



```

331
332 vardef kanji.grthree.once_upon_a_time =
333   push_pbox_toexpand("kanji.grthree.once_upon_a_time");
334   build_kanji.level(build_kanji.tb(420,-100)
335     (kanji.toprad.once_upon_a_time)
336     (kanji.grone.day));
337   expand_pbox;
338 enddef;

```



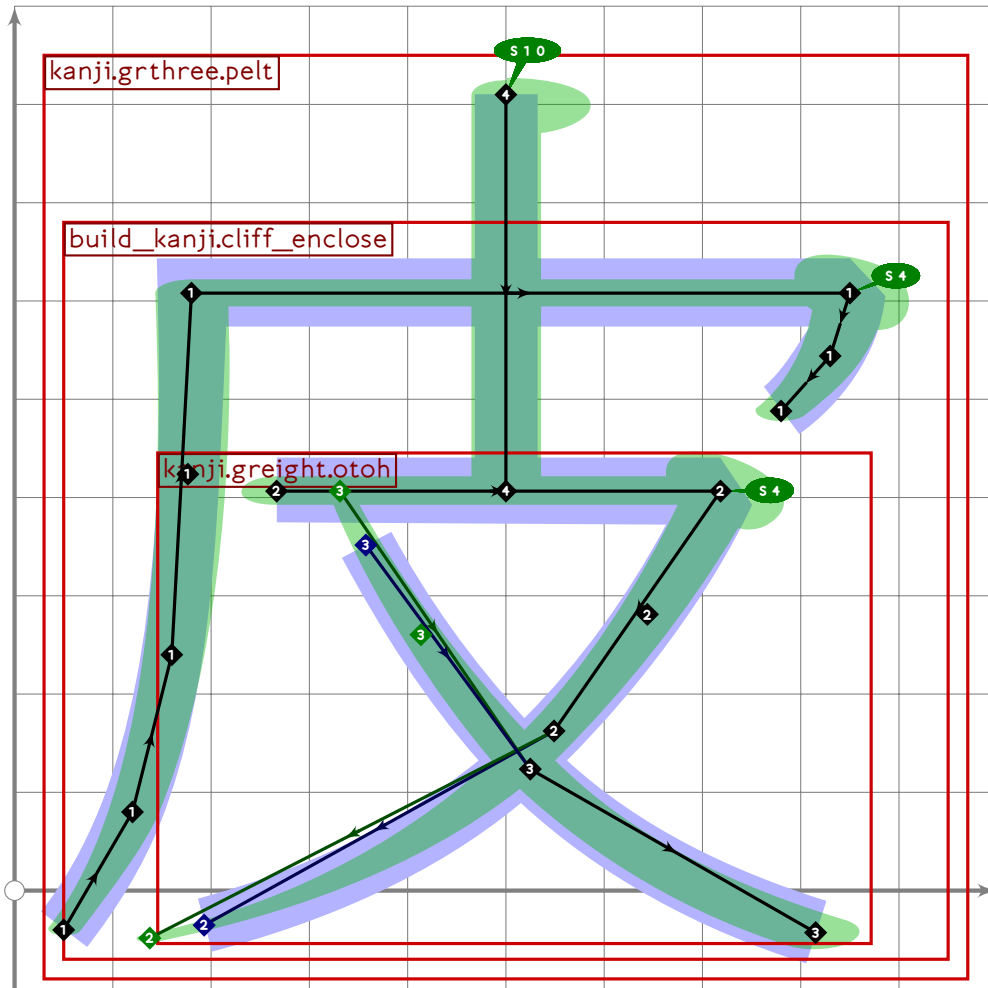
THRE

```

339
340 vardef kanji.grthree.other =
341   push_pbox_toexpand("kanji.grthree.other");
342   build_kanji.lr(300,20)
343     (kanji.leftrad.person)
344     (kanji.grnine.to_be);
345   expand_pbox;
346 enddef;

```

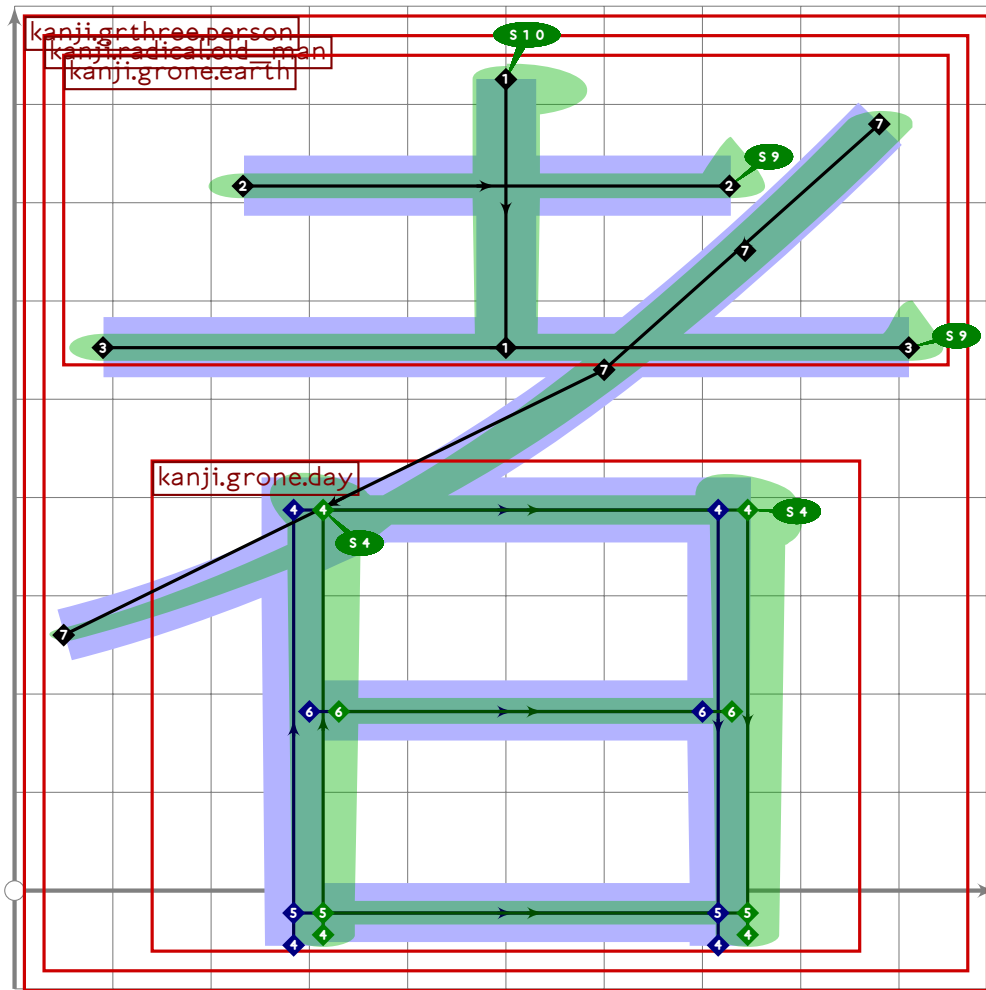
THRE



```

347
348 vardef kanji.grthree.pelt =
349   push_pbox_toexpand("kanji.grthree.pelt");
350   build_kanji.level(
351     tsu_xform(identity yscaled 0.8)(
352       build_kanji.cliff_enclose(
353         tsu_xform(identity xyscaled (1.1,0.8) shifted (-120,-30))
354           (kanji.greight.otoh));
355       replace_stroke(-2)(oldp{curl 1}..(830,680)..(780,610));
356       replace_stroke(-2)(oldq..(1.5,1.5)..(1.3,1.3));
357       set_boserif(-2,4,4);
358       set_botip(-2,4,0));
359   push_stroke((500,810)-(500,200),(1.6,1.6)-(1.5,1.5));
360   set_boserif(0,0,10);
361   replace_stroke(0)((point 0 of oldp)-
362     (oldp intersectionpoint get_stroke(-2)));
363   expand_pbox;
364 enddef;

```

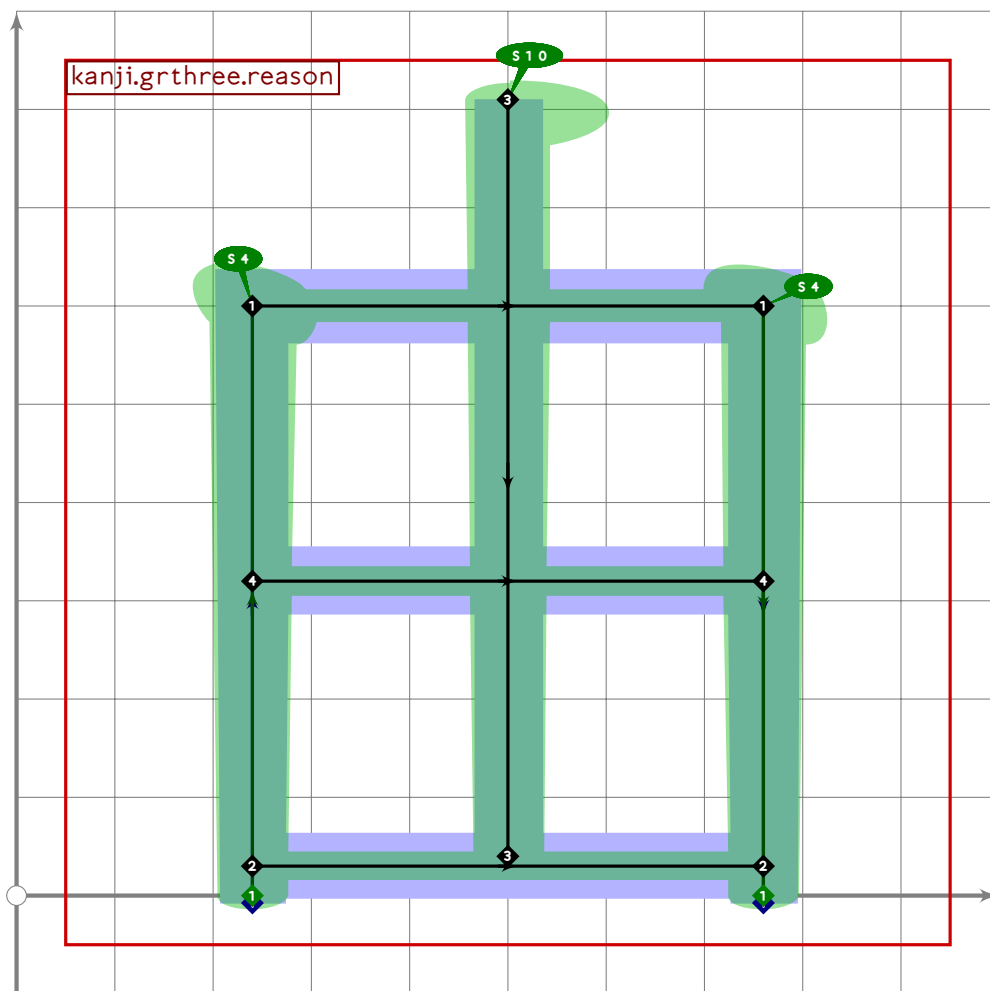
THRE

```

365
366 vardef kanji.grthree.person =
367   push_pbox_toexpand("kanji.grthree.person");
368   kanji.radical.old_man(
369     build_kanji.sscale(xyscaled (0.8,1.05) shifted (30*mincho,0))
370     (kanji.grone.day));
371   expand_pbox;
372 enddef;

```

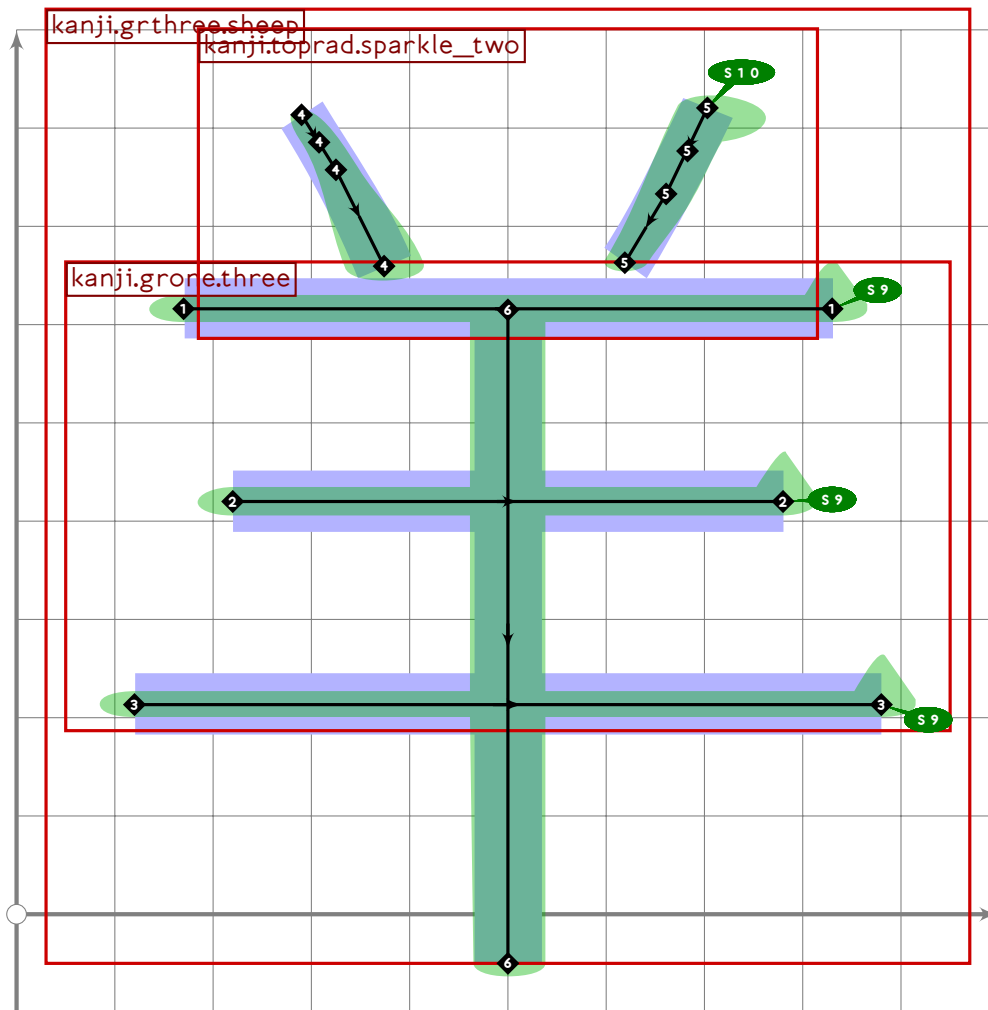
THRE



```

373
374 vardef kanji.grthree.reason =
375   push_pbox_toexpand("kanji.grthree.reason");
376   build_kanji.box((240,600),(760,30));
377   push_stroke((500,810)–(500,40),
378     (1.7,1.7)–(1.5,1.5));
379   set_boserif(0,0,10);
380   push_stroke((240,320)–(760,320),
381     (1.6,1.6)–(1.6,1.6));
382   expand_pbox;
383 enddef;

```



THRE

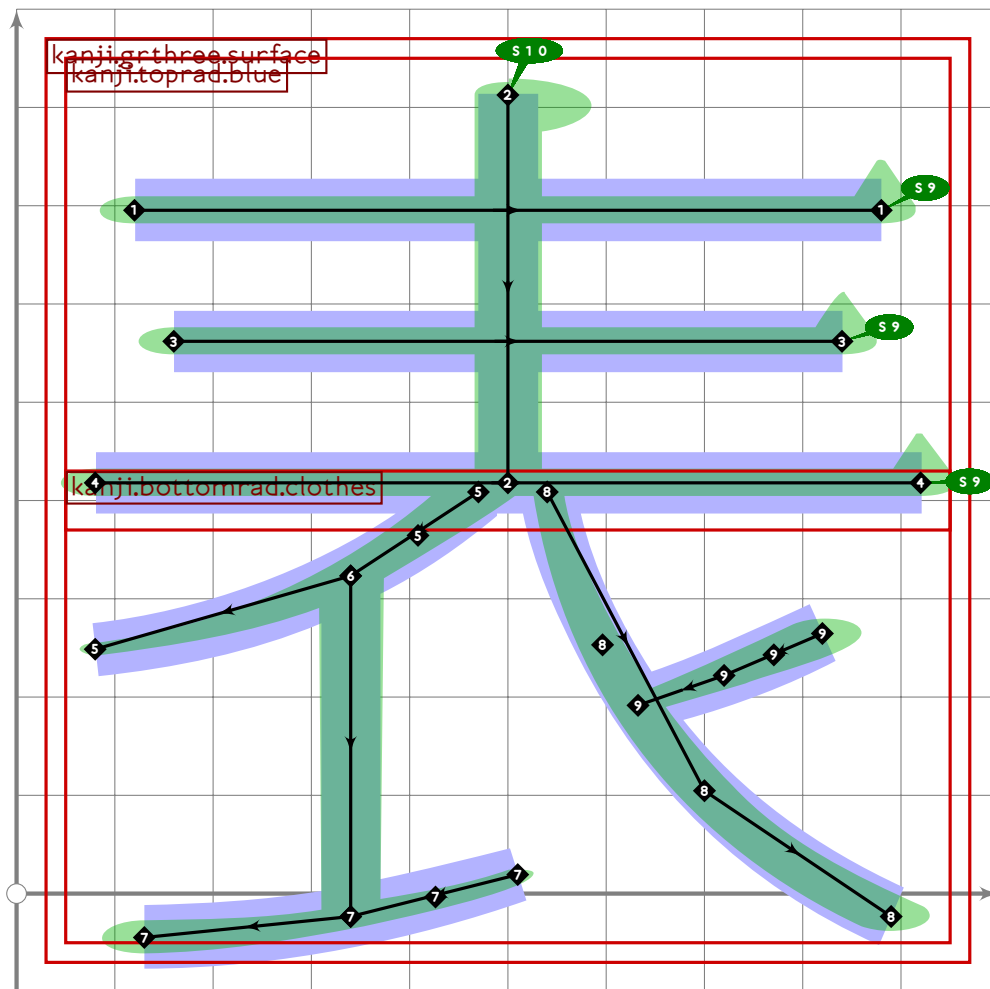
```

384
385 vardef kanji.grthree.sheep =
386   push_pbox_toexpand("kanji.grthree.sheep");
387   build_kanji.sscale(yscaled 0.53 shifted (0,30))
388     (kanji.grone.three);
389   build_kanji.sscale(xyscaled (0.7,0.35) shifted (0,350))
390     (kanji.toprad.sparkle_two);
391   push_stroke((500,615)-(500,-50),(1.6,1.6)-(1.5,1.5));
392   expand_pbox;
393 enddef;

```

U+8868
tsuku.uni8868

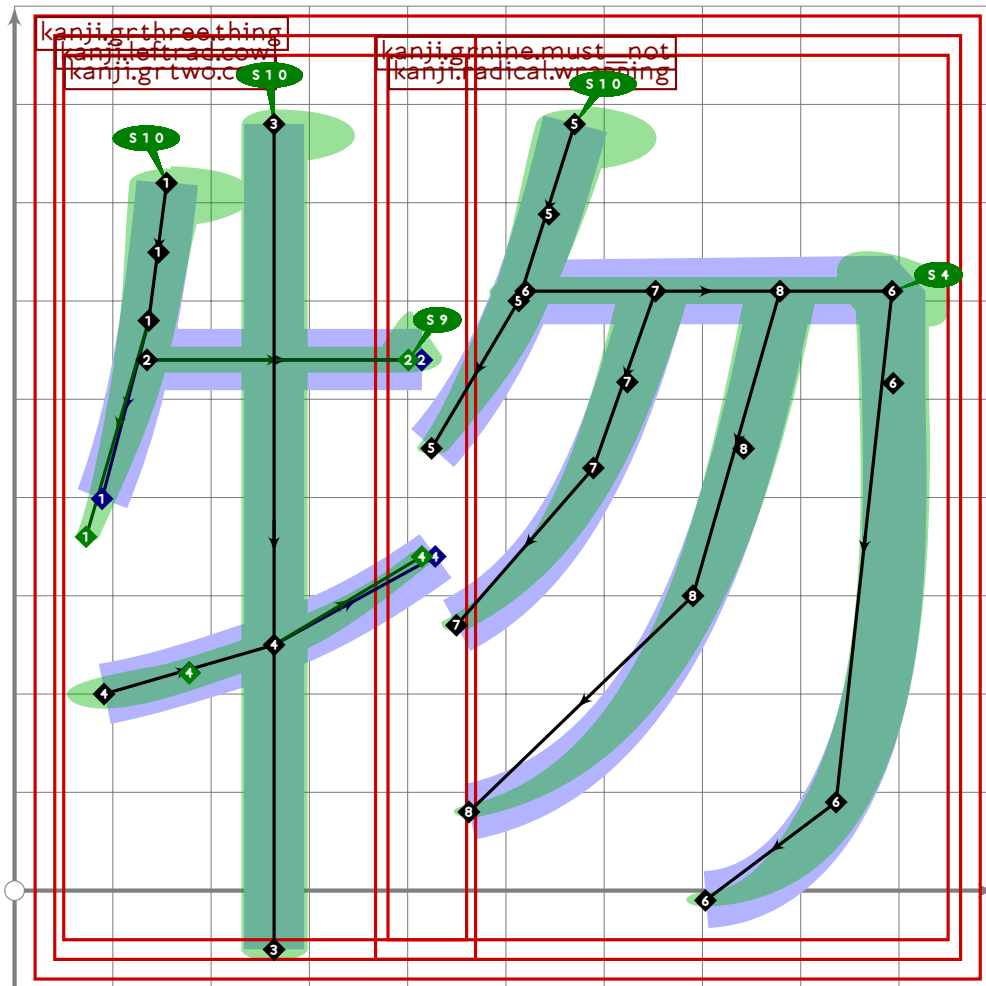
THRE



```

394
395 vardef kanji.grthree.surface =
396   push_pbox__toexpand("kanji.grthree.surface");
397   build_kanji.level(build_kanji.tb(400,60)
398     (kanji.toprad.blue)
399     (kanji.bottomrad.clothes));
400   expand_pbox;
401 enddef;

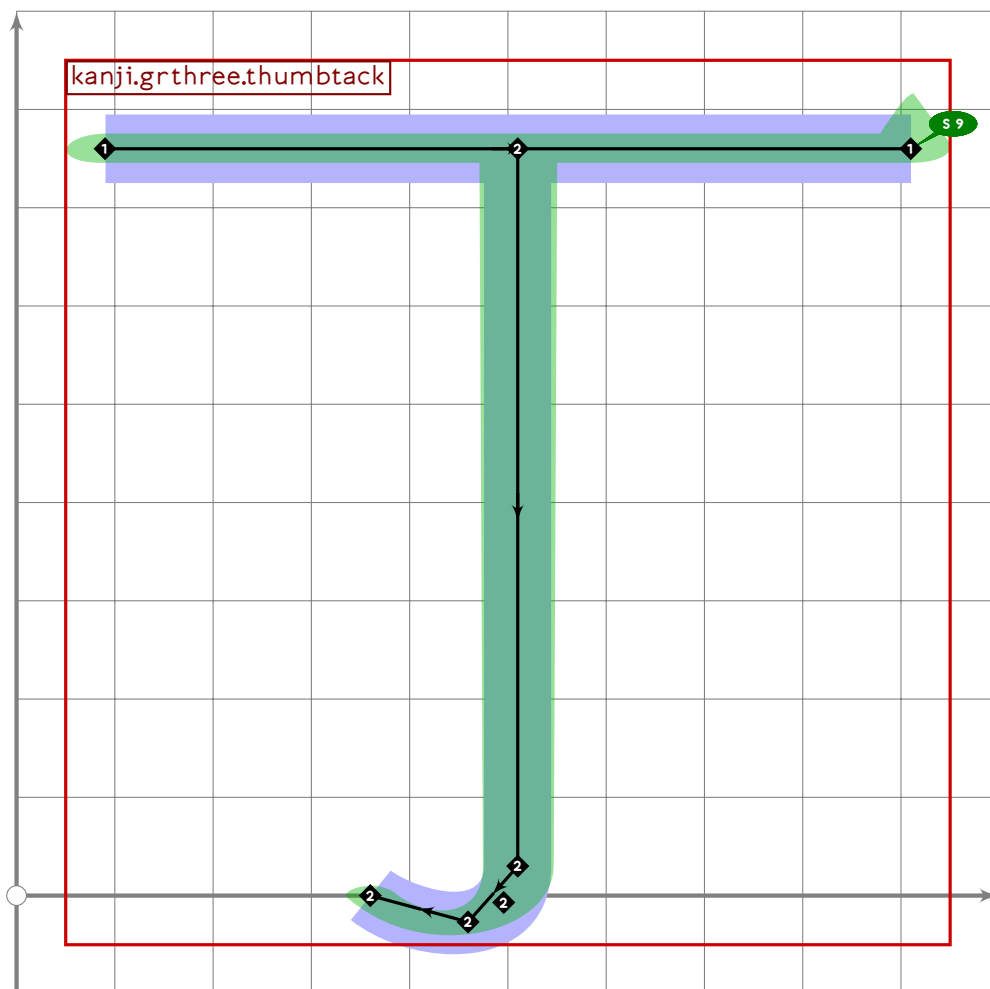
```



THRE

U+4E01
tsuku.uni4E01

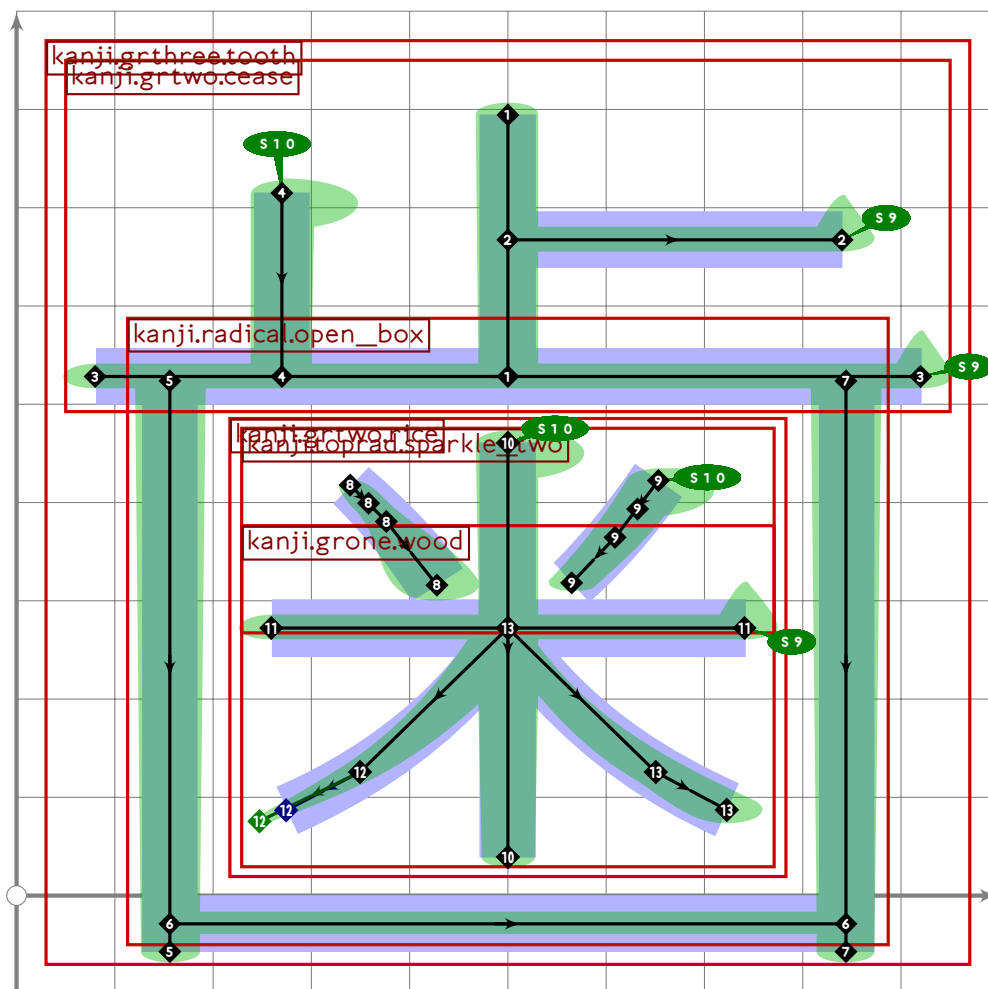
THRE



```

416
417 vardef kanji.grthree.thumbtack =
418   push_pbox__toexpand("kanji.grthree.thumbtack");
419   push_stroke((90,760)-(910,760),(1.6,1.6)-(1.6,1.6));
420   set_boserif(0,1,9);
421   push_stroke((510,760),(1.6,1.6));
422   build_kanji.add_jtail(0);
423   expand_pbox;
424 enddef;

```



```

425
426 vardef kanji.grthree.tooth =
427   push_pbox_toexpand("kanji.grthree.tooth");
428   build_kanji.level(build_kanji.tb(540,95)
429     (kanji.grtwo.cease)
430     (build_kanji.sscale(xscaled 0.86)(
431       kanji.radical.open_box;
432       set_boserif(-2,0,whatever);
433       set_boserif(0,0,whatever);
434       build_kanji.sscale(scaled 0.7 shifted (0,-20))(kanji.grtwo.rice))));
435   expand_pbox;
436 enddef;
437
438 vardef hook.world_corner(expr side_i,bottom_i) =
439   if (obstacktype[side_i]=otstroke) and (obstacktype[bottom_i]=otstroke):
440     if (1=length obstackp[side_i]) and (1=length obstackp[bottom_i]):
441       begingroup;
442       save x,y,p,e;
443       numeric x[],y[],e[];
444       path p[];
445

```

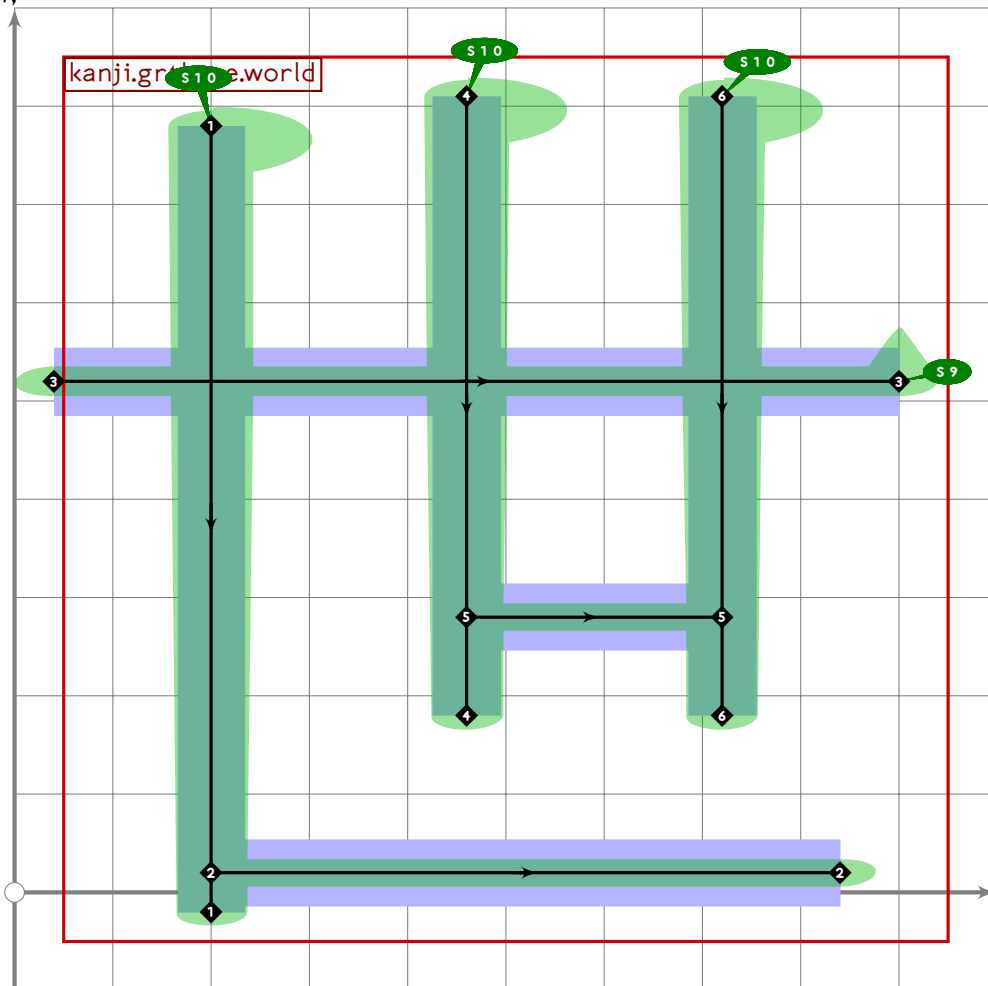
U+4E16
tsuku.uni4E16

THRE

```

446     p1=obstackp[side_i];
447     p2=obstackp[bottom_i];
448
449     z2=(direction 0.5 of p2)/abs(direction 0.5 of p2);
450     z3=(direction 1 of p1)/abs(direction 1 of p1);
451
452     if abs(z3 dotprod z2)<0.1:
453         point 1 of p1=z5+e2*z3;
454         z5=(point 1 of p2)+whatever*z2;
455         e3=obstackna.bosize[bottom_i]*tsu_brush_max*tsu_brush_shape*0.5;
456
457         if e2<e3:
458             p1:=(point 0 of p1)-(z5+e3*z3);
459             obstackp[side_i]:=p1;
460         fi;
461     fi;
462 endgroup;
463 fi;
464 fi;
465 enddef;

```



466


```

467 vardef kanji.grthree.world =
468   push_pbox_toexpand("kanji.grthree.world");
469   build_kanji.box((200,780),(840,20));
470   replace_strokep(-1)(reverse subpath (0,1) of oldp);
471   replace_strokeq(-1)(reverse subpath (0,1) of oldq);
472   set_boserif(-1,0,10);
473   set_boserif(-1,1,whatever);
474   set_botip(-1,1,whatever);
475   pop_hook;
476   push_hook(hsmain_render,
477     "hook.world_corner("&(decimal find_stroke(-1))&"
478       &(decimal find_stroke(0))&");" );
479   push_stroke((40,520)-(900,520),
480     (1.6,1.6)-(1.6,1.6));
481   set_boserif(0,1,9);
482   build_kanji.box((460,810),(720,280));
483   set_boserif(-1,0,10);
484   set_boserif(-1,1,whatever);
485   set_botip(-1,1,whatever);
486   push_stroke(subpath (2,3) of get_strokep(-1),
487     subpath (2,3) of get_strokeq(-1));
488   replace_strokep(-2)(reverse subpath (0,1) of oldp);
489   replace_strokeq(-2)(reverse subpath (0,1) of oldq);
490   set_boserif(0,0,10);
491   expand_pbox;
492 enddef;

```

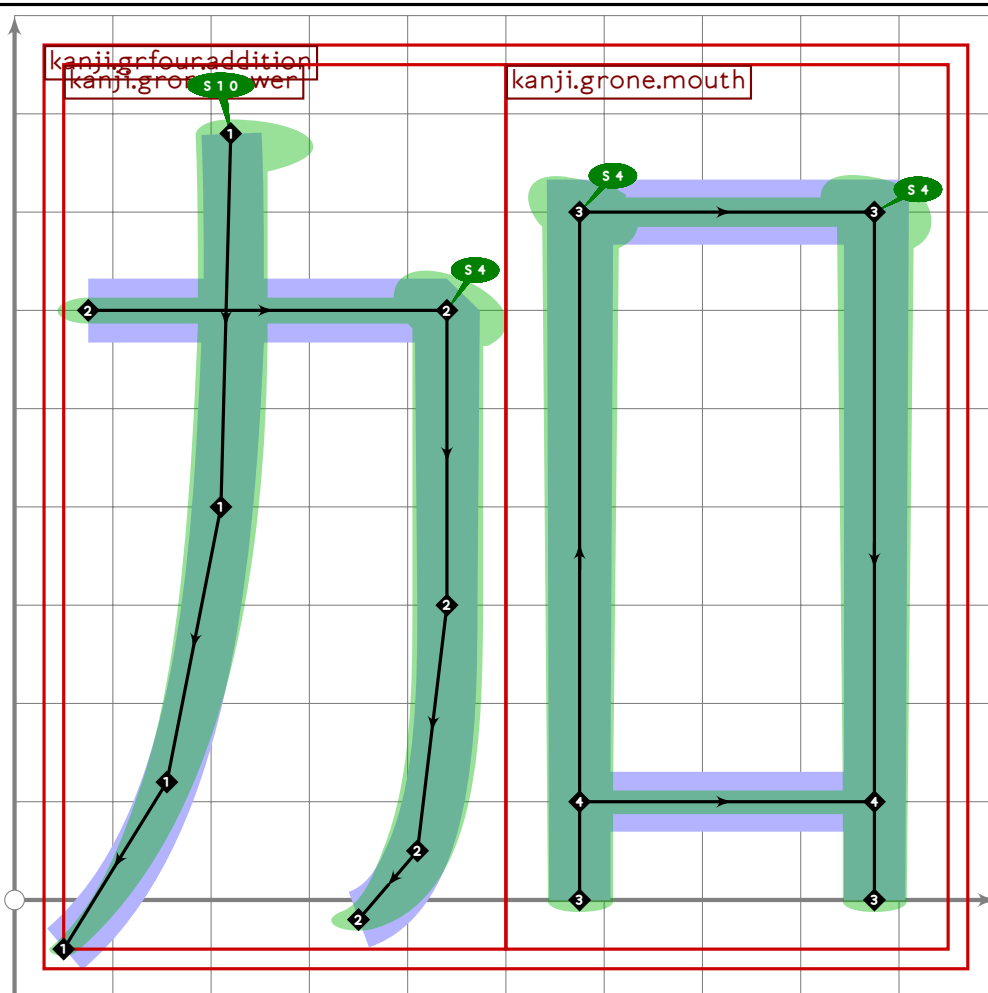
gradefour.mp

```

1 %
2 % Grade Four kanji used on more than one page
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]
30
31 inclusion_lock(gradefour);
32
33

```

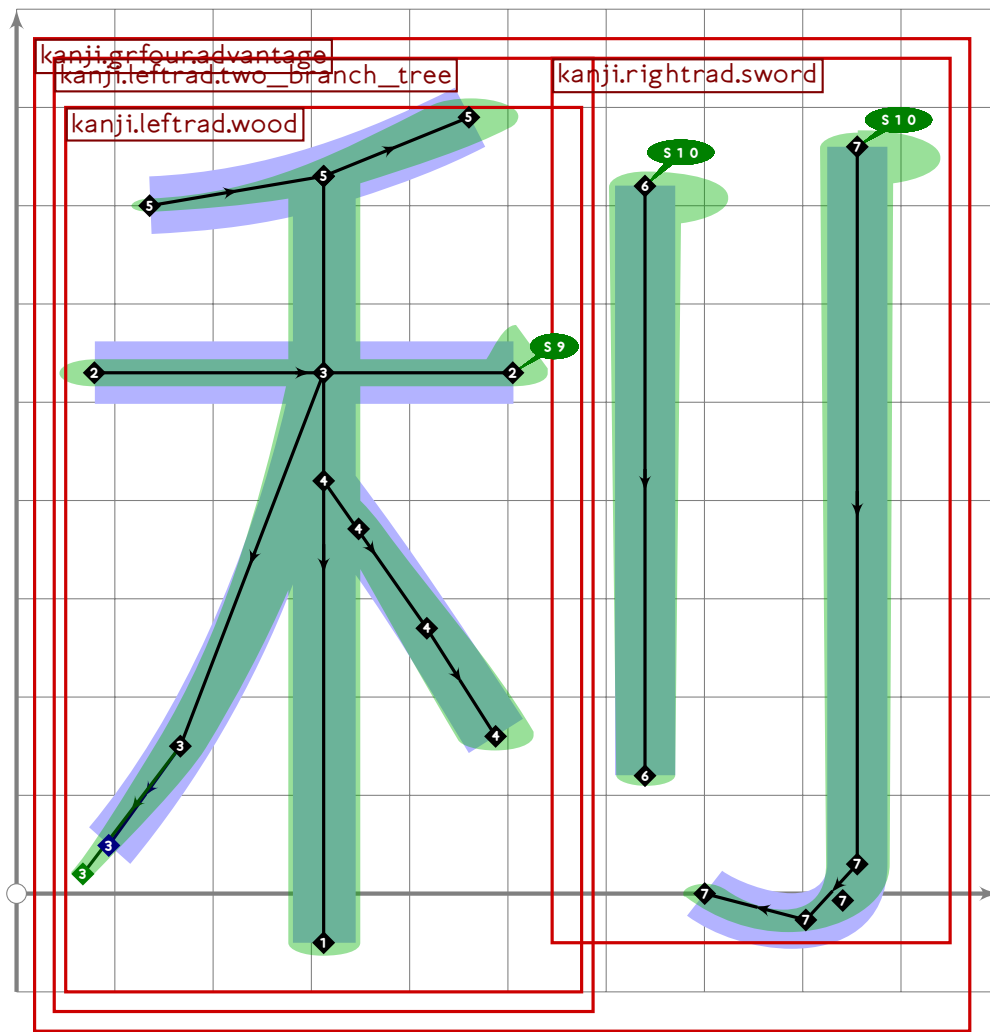
FOUR



```

34
35 vardef kanji.grfour.addition =
36   push_pbox_toexpand("kanji.grfour.addition");
37   build_kanji.level(build_kanji.lr(500,0)
38     (kanji.grone.power)
39     (kanji.grone.mouth));
40   expand_pbox;
41 enddef;

```



FOUR

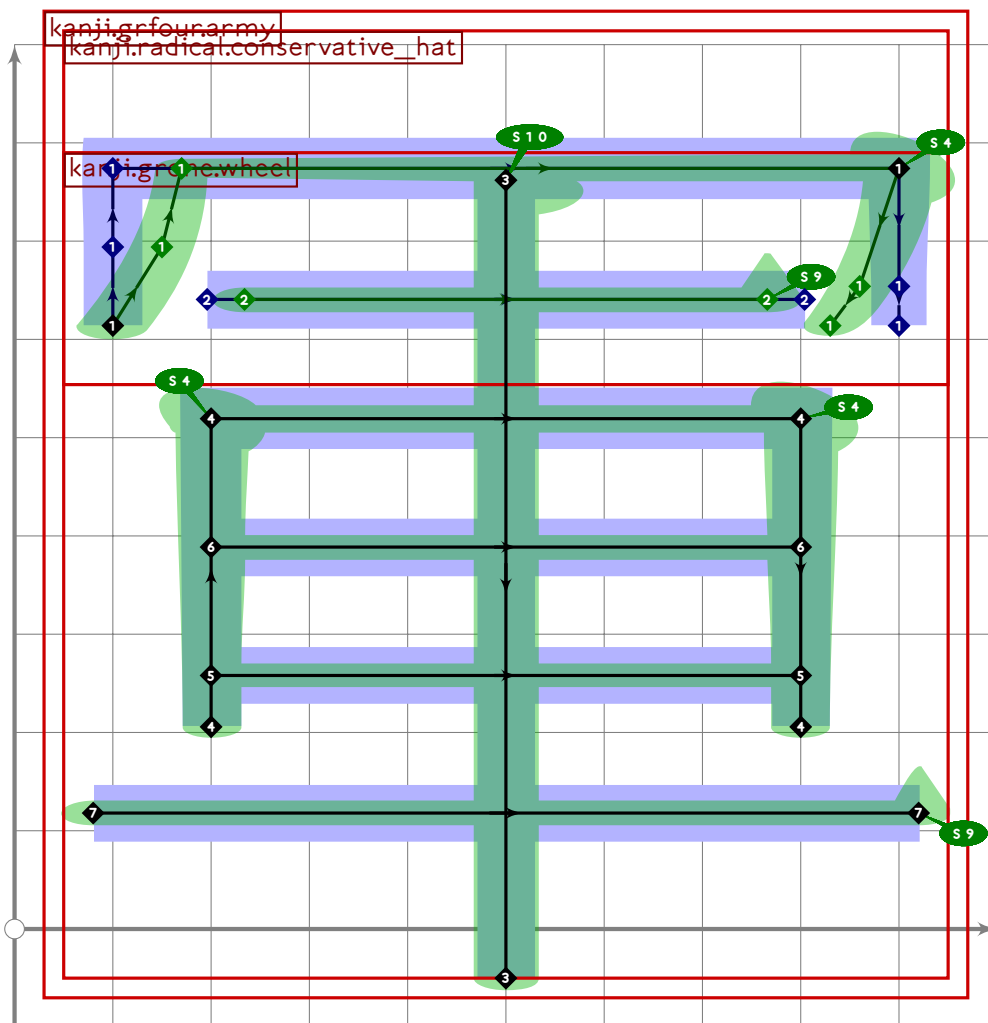
```

42
43 vardef kanji.grfour.advantage =
44   push_pbox_toexpand("kanji.grfour.advantage");
45   build_kanji.level(build_kanji.lr(560,30)
46     (kanji.leftrad.two_branch_tree)
47     (kanji.rightrad.sword));
48   expand_pbox;
49 enddef;

```

U+8ECD
tsuku.uni8ECD

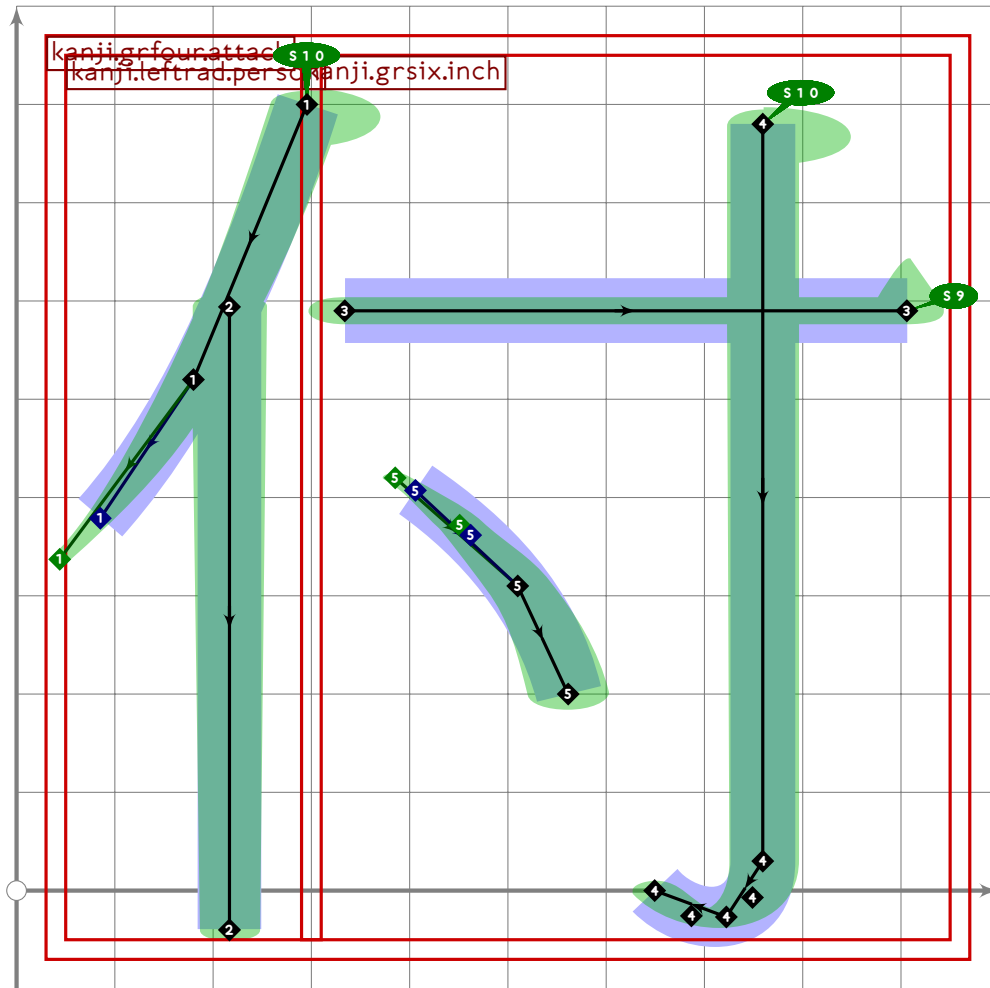
FOUR



```

50
51 vardef kanji.grfour.army =
52   push_pbox_toexpand("kanji.grfour.army");
53   build_kanji.level(build_kanji.tb(640,300)
54     (tsu_xform(identity shifted (0,160))(kanji.radical.conservative_hat))
55     (kanji.grone.wheel;
56       replace_stroke(-5)(subpath (0.1+0.05*mincho,0.9-0.05*mincho) of oldp)));
57   expand_pbox;
58 enddef;

```



FOUR

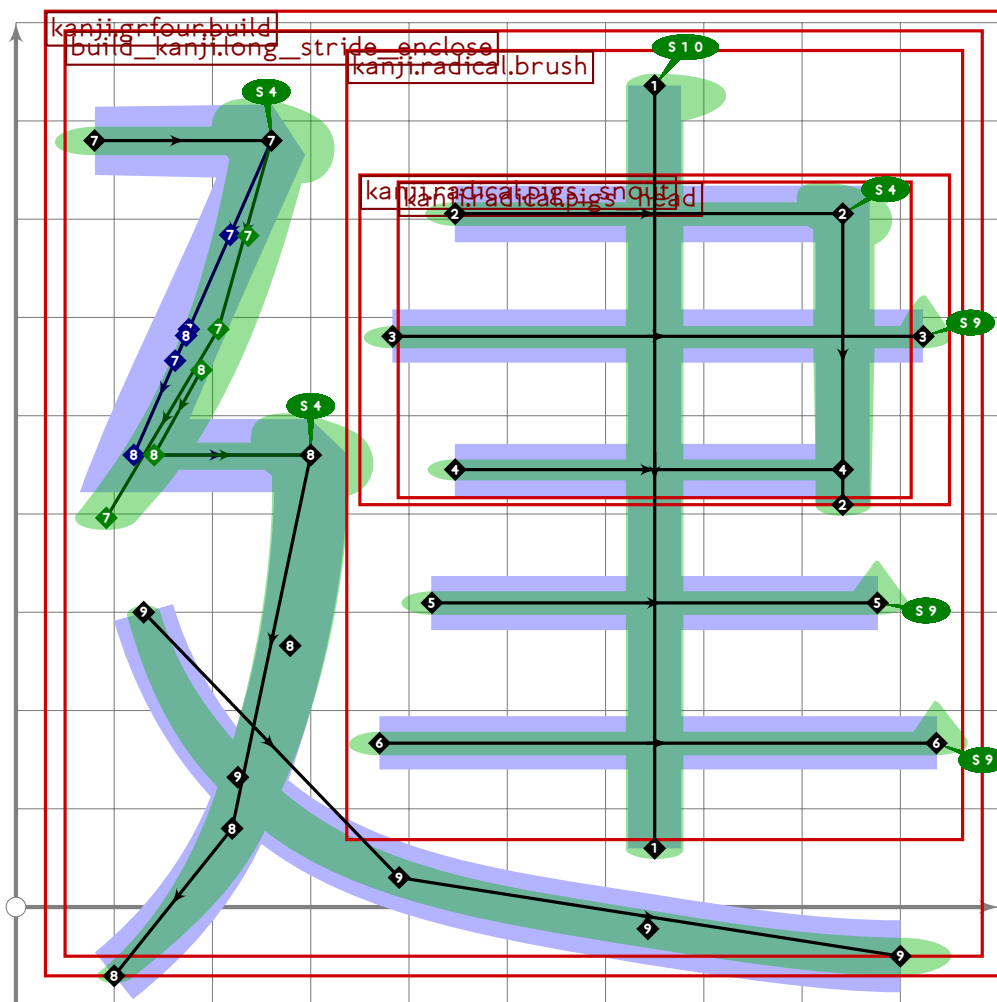
```

59
60 vardef kanji.grfour.attach =
61   push_pbox_toexpand("kanji.grfour.attach");
62   build_kanji.lr(300,20)
63     (kanji.leftrad.person)
64     (kanji.grsix.inch);
65   expand_pbox;
66 enddef;

```

U+5EFA
tsuku.uni5EFA

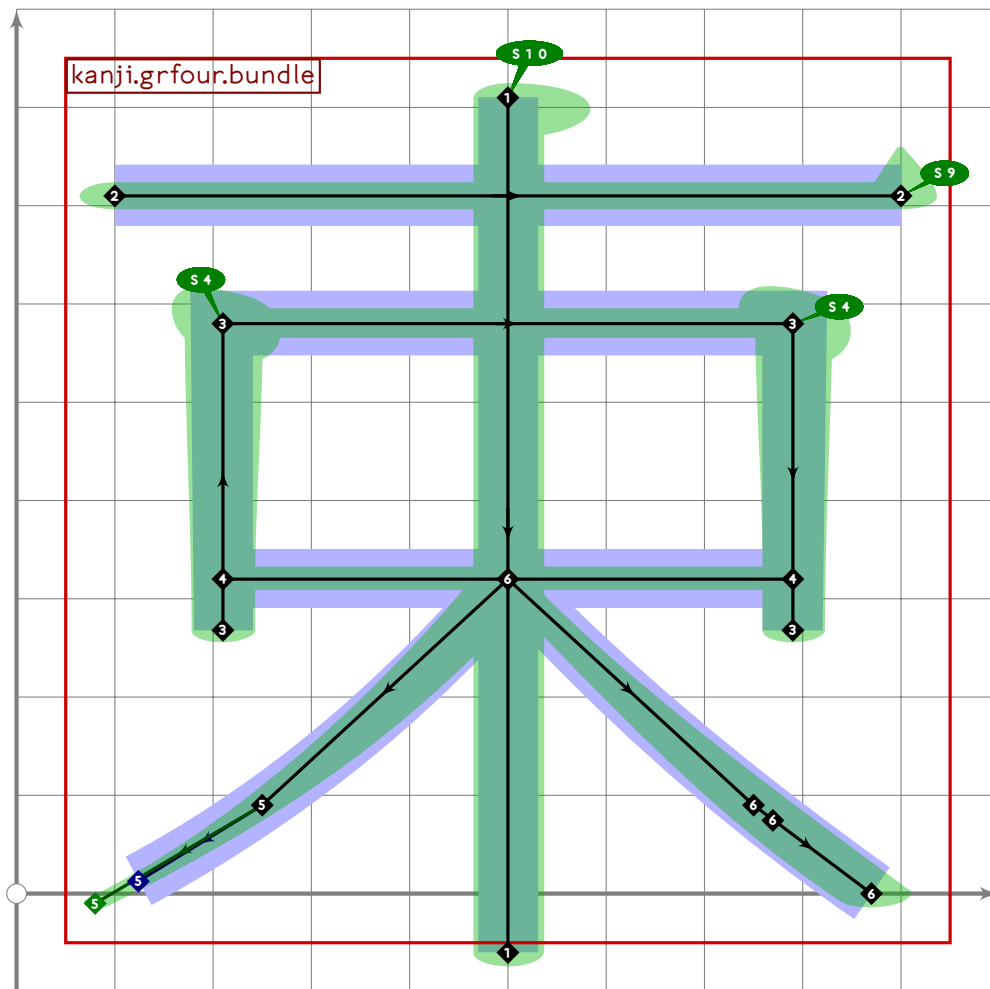
FOUR



```

67
68 vardef kanji.grfour.build =
69   push_pbox_toexpand("kanji.grfour.build");
70   build_kanji.long_stride_enclose(false)
71     (build_kanji.sscale(yscaled 1.1 shifted (0,30))(kanji.radical.brush));
72   expand_pbox;
73 enddef;

```



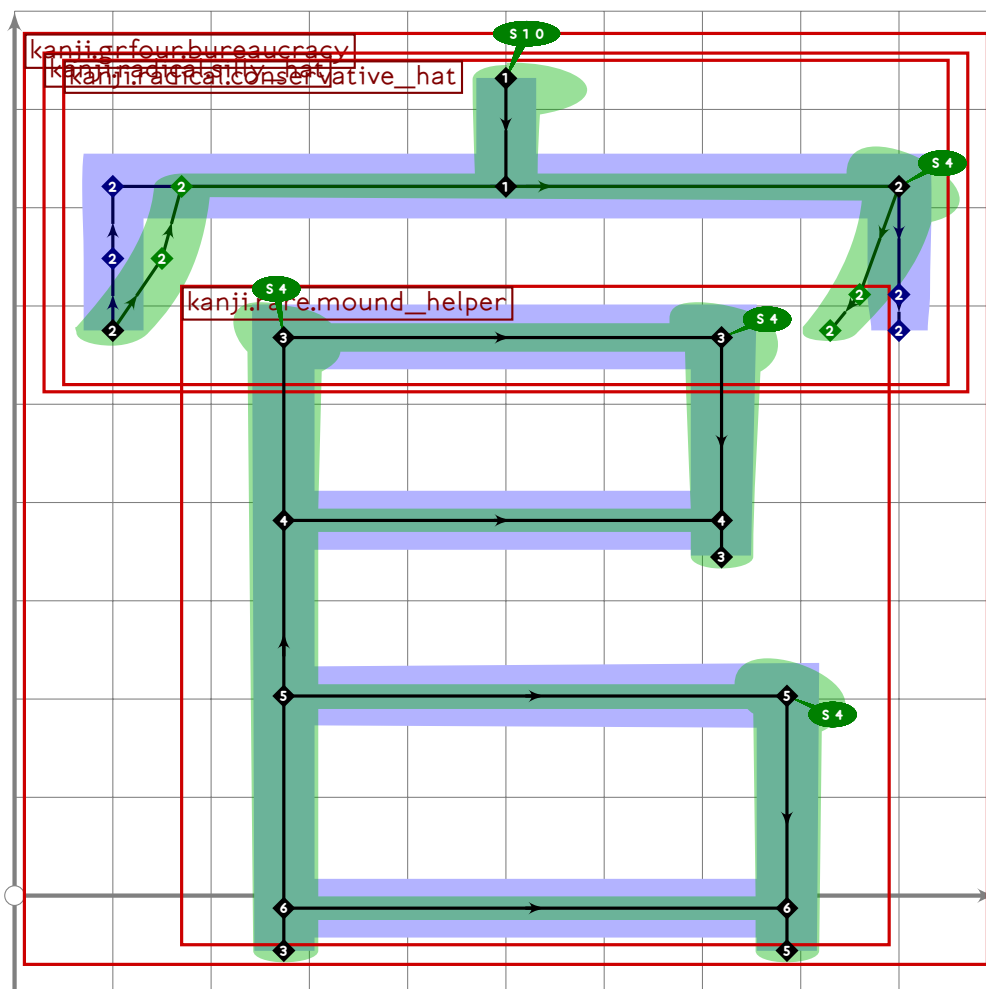
FOUR

```

74
75 vardef kanji.grfour.bundle =
76   push_pbox_toexpand("kanji.grfour.bundle");
77   push_stroke((500,810)-(500,-60),
78     (1.6,1.6)-(1.6,1.6));
79   set_boserif(0,0,10);
80   push_stroke((100,710)-(900,710),
81     (1.6,1.6)-(1.6,1.6));
82   set_boserif(0,1,9);
83   build_kanji.box((210,580),(790,320));
84   push_stroke((500,320)..(250,90)..(80,-10),
85     (1.6,1.6)..(1.3,1.3)..(0.9,0.9));
86   push_stroke((500,320)..(750,90)..(870,0),
87     (1.1,1.1)..(1.5,1.5)..(1.7,1.7));
88   for i=-6 upto 0: set_bosize(i,89); endfor;
89   expand_pbox;
90 enddef;

```

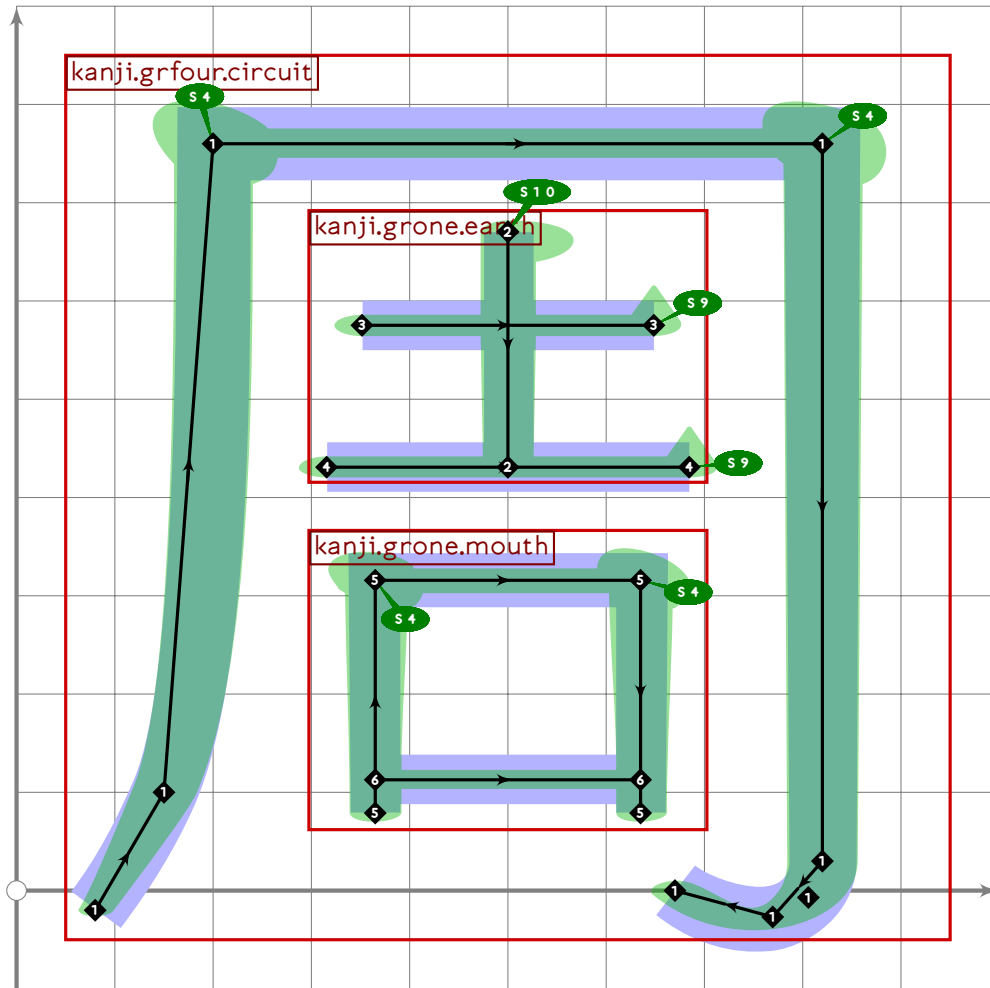
FOUR



```

91
92 vardef kanji.grfour.bureaucracy =
93   push_pbox_toexpand("kanji.grfour.bureaucracy");
94   build_kanji.level(build_kanji.tb(570,100)
95     (kanji.radical.silly_hat)
96     (build_kanji.scale(xscaled 0.8 shifted (30,0))
97       (kanji.rare.mound_helper)));
98   expand_pbox;
99 enddef;

```

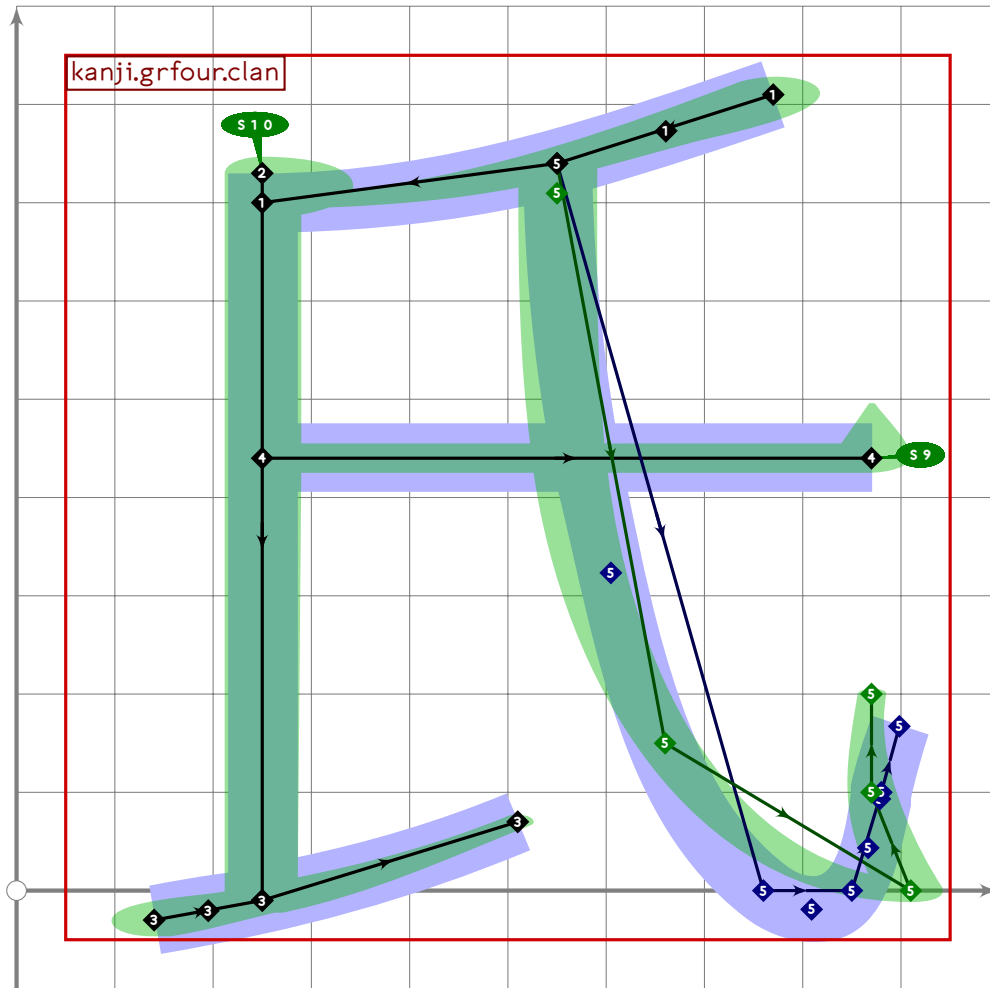
FOUR

```

100
101 vardef kanji.grfour.circuit =
102   push_pbox_toexpand("kanji.grfour.circuit");
103   push_stroke((80,-20)..(150,100)..{up}(200,760){right}-(820,760),
104     (1,1)-(14,14)-(16,16)-(16,16));
105   build_kanji.add_jtail(0);
106   set_botip(0,2,0.8);
107   set_botip(0,3,1);
108   set_boserif(0,2,4);
109   set_boserif(0,3,4);
110   build_kanji.sscale(xyscaled (0.45,0.7) shifted (0,-20))
111     (build_kanji.tb(420,-70)
112       (kanji.grone.earth)
113       (kanji.grone.mouth));
114   expand_pbox;
115 enddef;

```

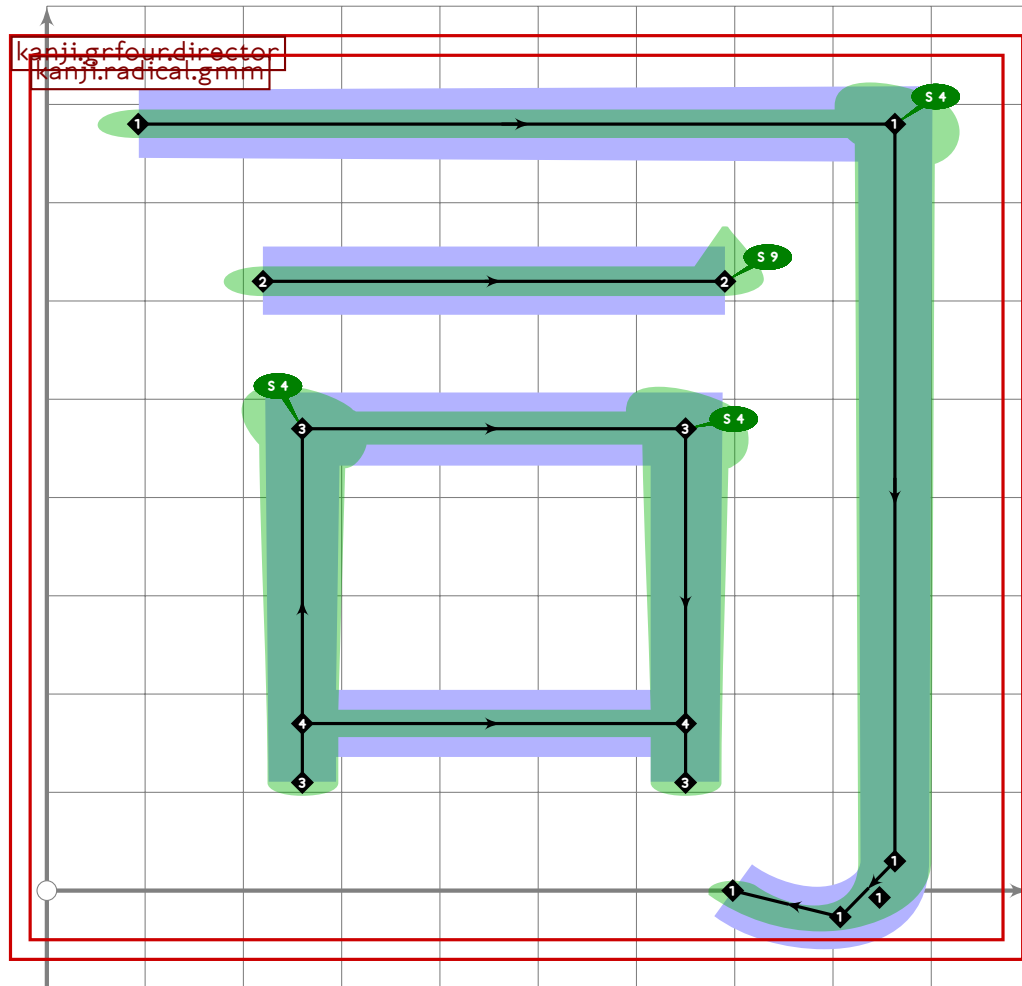
FOUR



```

116
117 vardef kanji.grfour.clan =
118   push_pbox_toexpand("kanji.grfour.clan");
119   push_stroke((770,810)..tension 1.2..(550,740)..(250,700),
120     (1.8,1.8)–(1.5,1.5)–(1,1));
121   push_stroke((250,730)–(250,10),
122     (1.6,1.6)–(1.5,1.5));
123   set_boserif(0,0,10);
124   push_stroke((140,30)..tension 1.2..(250,10)..(510,70),
125     (1.7,1.7)–(1.5,1.5)–(1,1));
126   push_stroke((250,440)–(870,440),(1.6,1.6)–(1.6,1.6));
127   set_boserif(0,1,9);
128   push_stroke(interpath(mincho,
129     (550,740){down}..tension 1.2 and 1.6..(760,0)..(850,0)..tension 1.5..
130     (880,100)..(910,200),
131     (550,740){down}..(660,150)..{right}(910,0){curl 1}..
132     (870,100)..(870,200)),
133     (1.6,1.6)–(1.4,1.4)–(1.4,1.4)–(1.2,1.2)–(0.9,0.9));
134   expand_pbox;
135 enddef;

```



FOUR

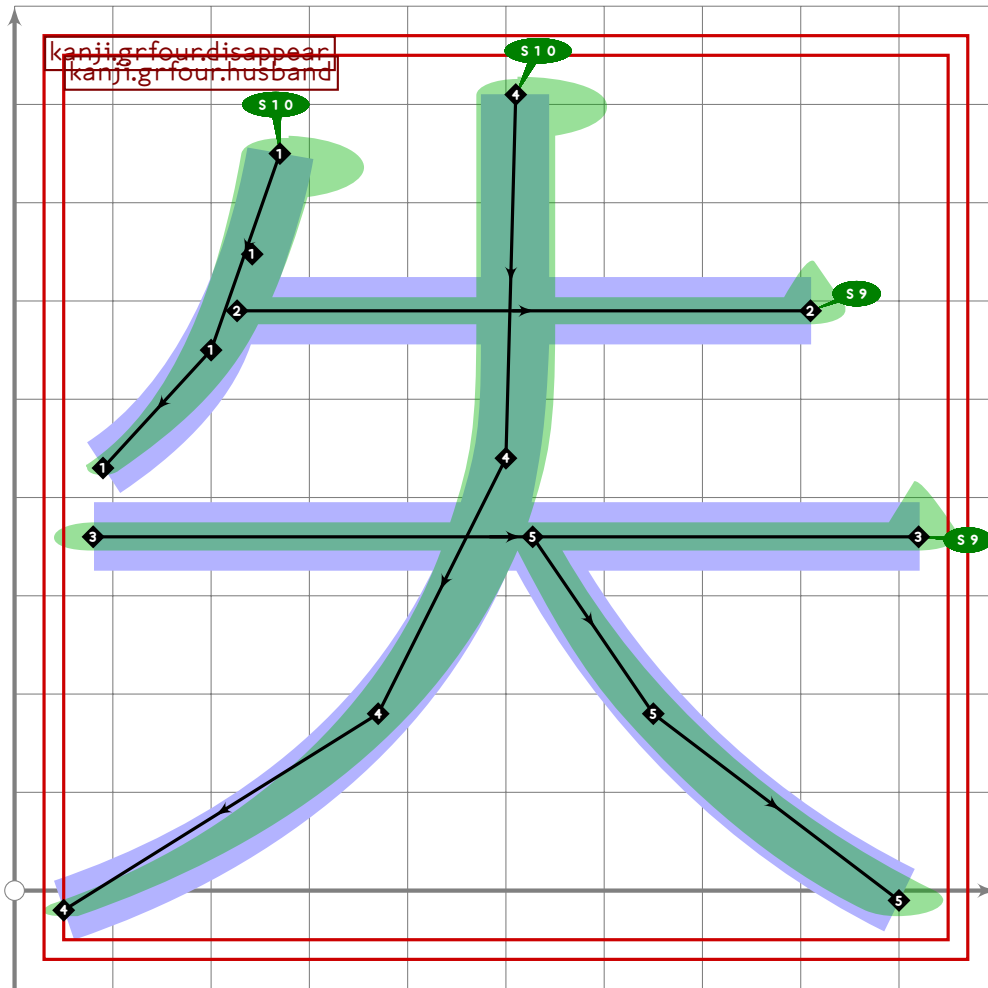
```

136
137 vardef kanji.grfour.director =
138   push_pbox_toexpand("kanji.grfour.director");
139   build_kanji.sscaled(shifted (-20,0) xscaled 1.1)
140     (kanji.radical.gmm);
141   replace_strokep(0)(subpath (2,infinity) of oldp);
142   replace_strokeq(0)(subpath (2,infinity) of oldq);
143   set_botip(0,1,4);
144   set_boserif(0,1,4);
145   set_botip(0,2,whatever);
146   set_boserif(0,2,whatever);
147   set_botip(0,3,whatever);
148   set_boserif(0,3,whatever);
149   push_stroke((220,620)-(690,620),
150     (1.6,1.6)-(1.6,1.6));
151   set_boserif(0,1,9);
152   build_kanji.box((260,470),(650,170));
153   expand_pbox;
154 enddef;

```

U+5931
tsuku.uni5931

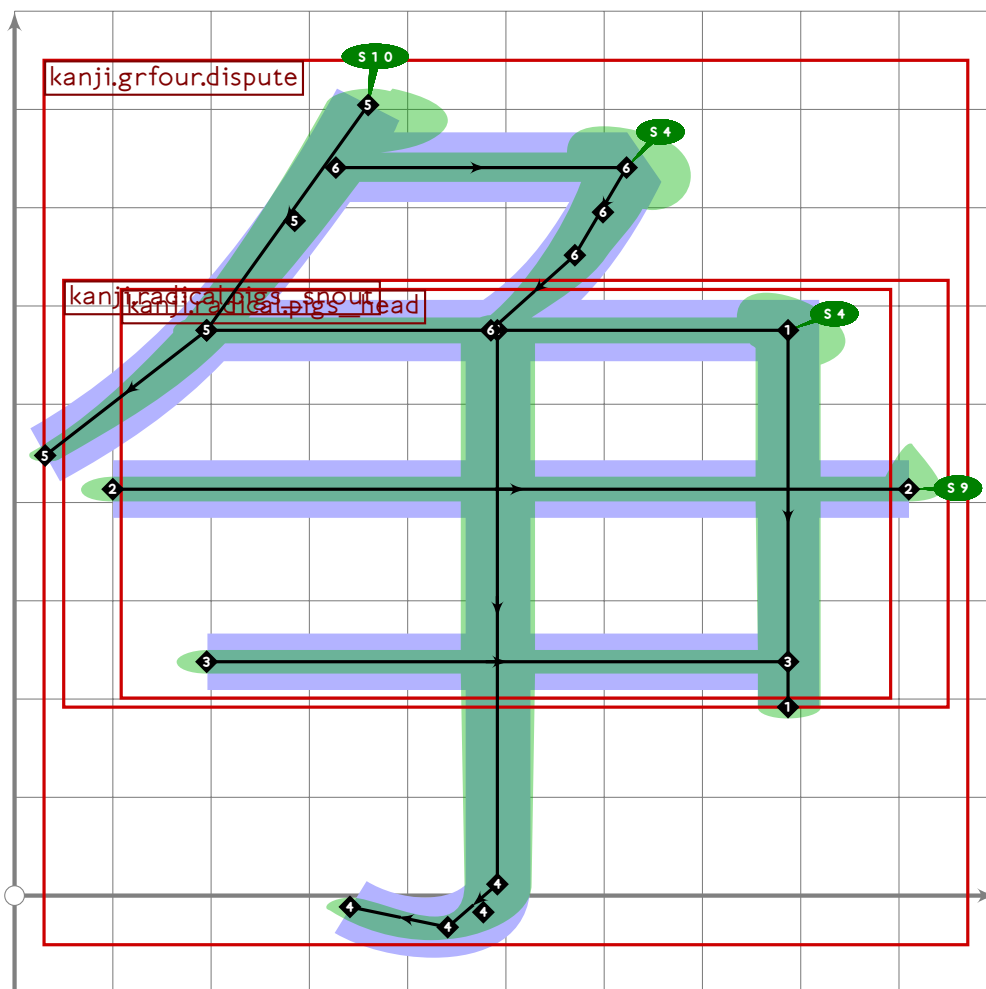
FOUR



```

155
156 vardef kanji.grfour.disappear =
157   push_pbox__toexpand("kanji.grfour.disappear");
158   push_stroke((270,750)..tension 1.2..(200,550)..(90,430),
159     (1.6,1.6)–(1.4,1.4)–(1,1));
160   set_boserif(0,0,10);
161   kanji.grfour.husband;
162   replace_stroke(-3)((100,590)–(810,590));
163   replace_stroke(-3)(subpath
164     (0.01+upart (oldp intersectiontimes get_stroke(-4)),1) of oldp);
165   expand_pbox;
166 enddef;

```



FOUR

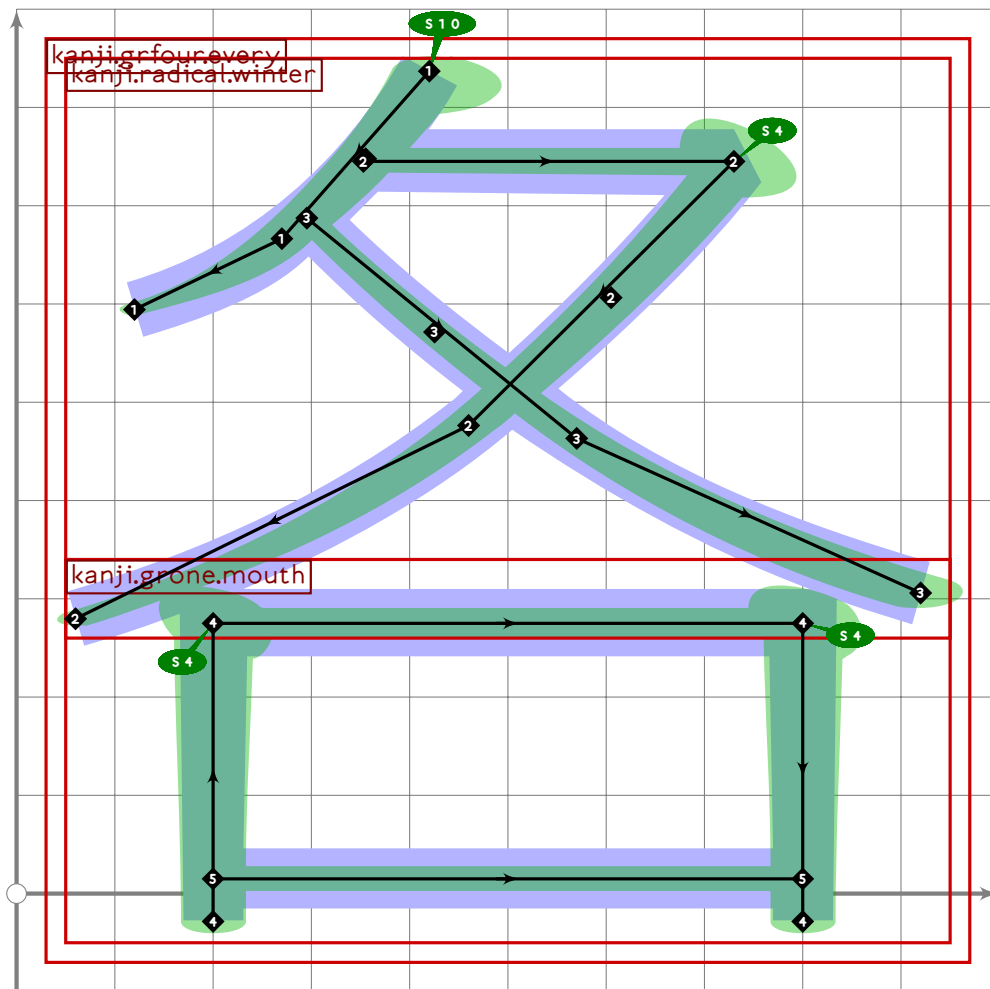
```

167
168 vardef kanji.grfour.dispute =
169   push_pbox_toexpand("kanji.grfour.dispute");
170   build_kanji.attach_fishhook(0.77)(
171     build_kanji.sscale(yscaled 0.6 shifted (0,150))
172     (kanji.radical.pigs_snout);
173     push_stroke((point 0.5 of get_stroke(-2)),((1.6,1.6)));
174     build_kanji.add_jtail(0));
175   expand_pbox;
176 enddef;

```

U+5404
tsuku.uni5404

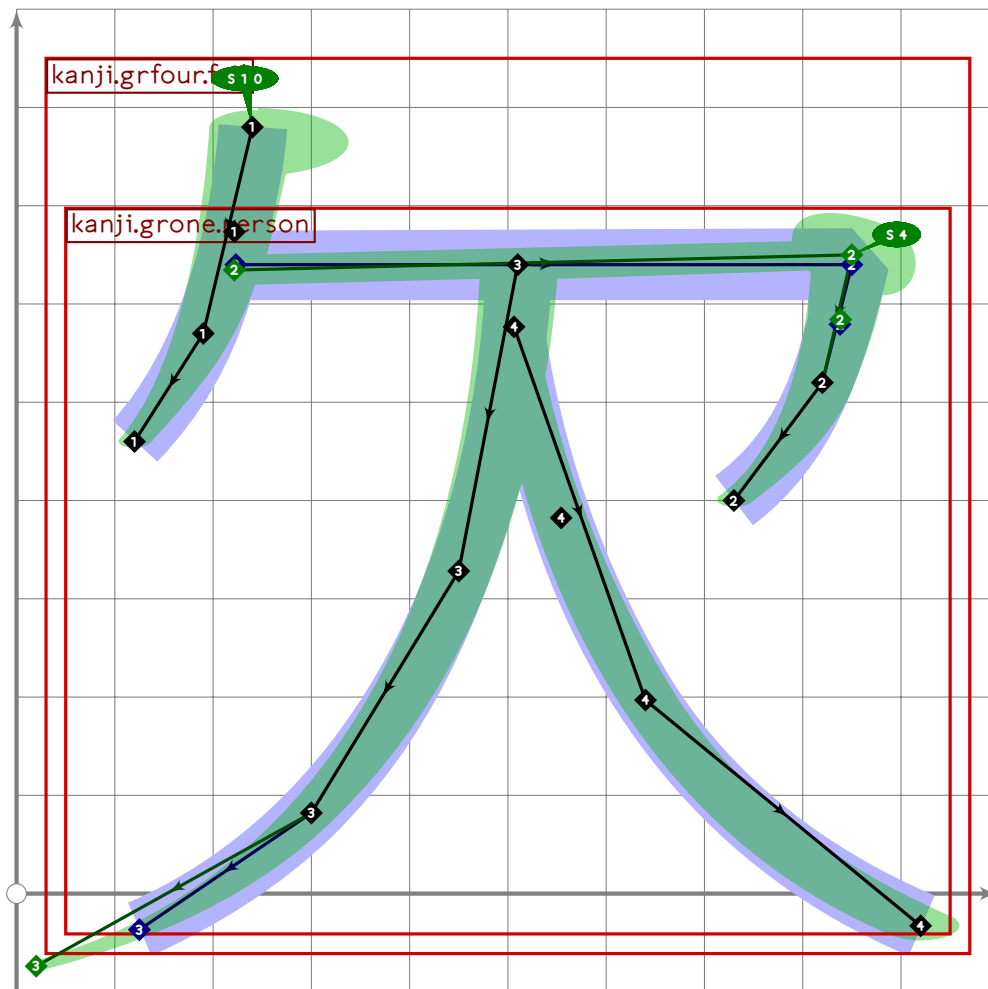
FOUR



```

177
178 vardef kanji.grfour.every =
179   push_pbox_toexpand("kanji.grfour.every");
180   build_kanji.level(build_kanji.tb(300,80)
181     (kanji.radical.winter)
182     (kanji.grone.mouth));
183   expand_pbox;
184 enddef;

```



FOUR

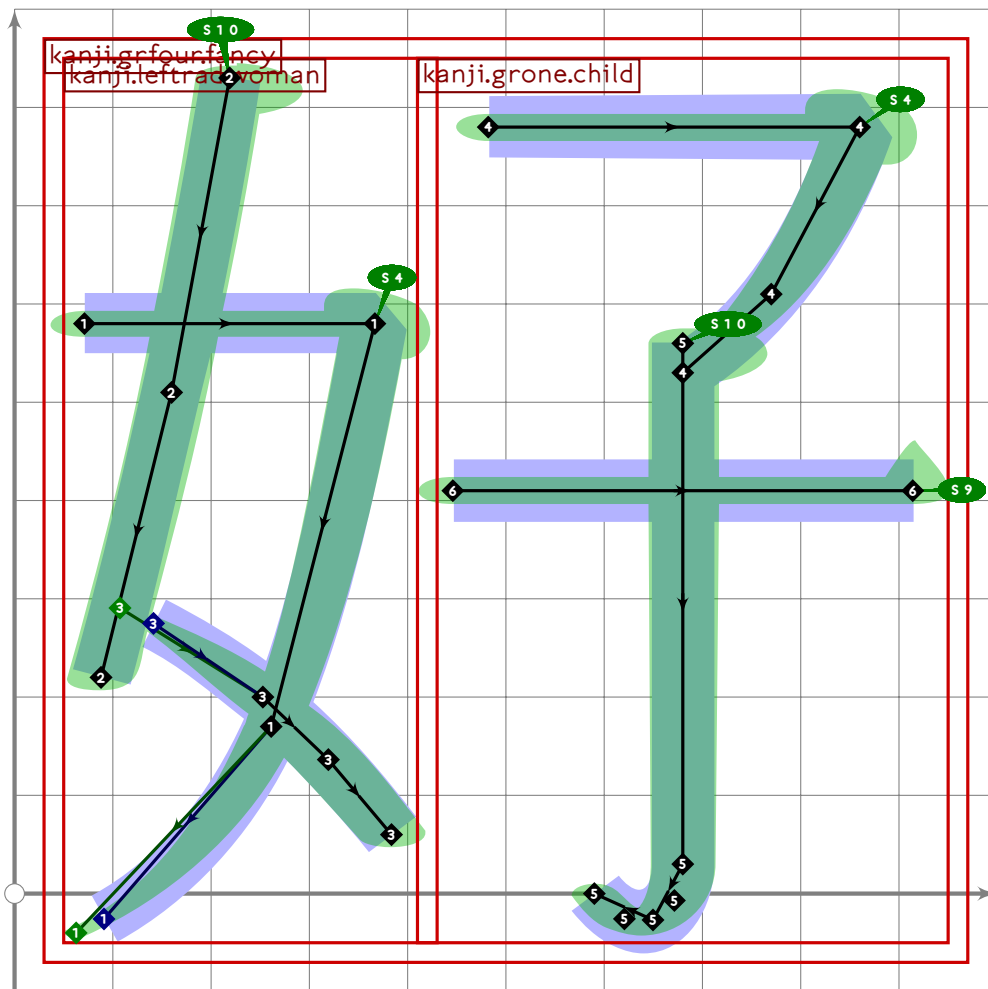
```

185
186 vardef kanji.grfour.fail =
187   push_pbox_toexpand("kanji.grfour.fail");
188   push_stroke((240,780)..tension 1.2..(190,570)..(120,460),
189     (1,7,1,7)-(1,4,1,4)-(1,1));
190   set_boserif(0,0,10);
191   push_stroke(
192     ((get_strokep(0) intersectionpoint
193       ((0,640-7*mincho)-(1000,640))+10,0)))-(
194       ((850,640)+mincho*(0,10))..tension 1.2..(820,520)..(730,400),
195       (1,6,1,6)-(1,6,1,6)-(1,4,1,4)-(1,1));
196   set_boserif(0,1,4);
197   set_botip(0,1,0);
198   tsu_xform(identity yscaled (640/780))(kanji.grone.person);
199   set_boserif(-1,0,whatever);
200   expand_pbox;
201 enddef;

```

U+597D
tsuku.uni597D

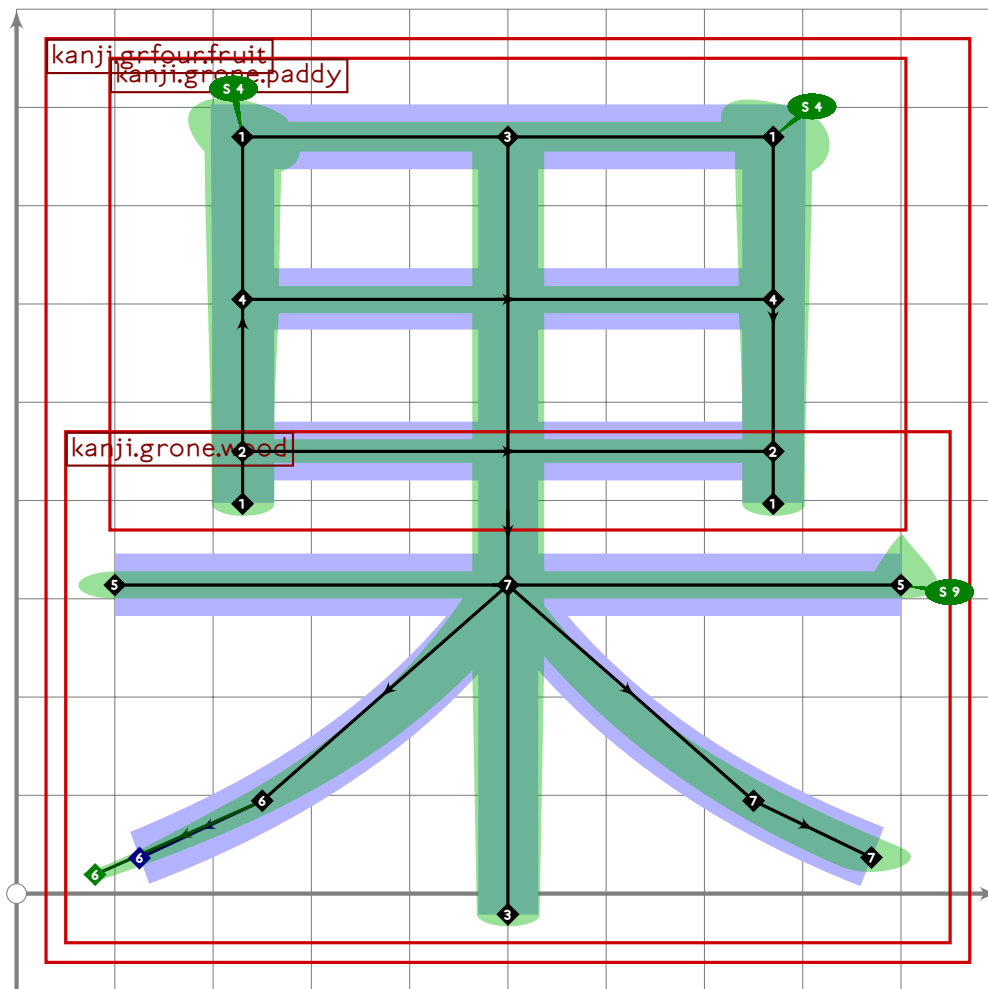
FOUR



```

202
203 vardef kanji.grfour.fancy =
204   push_pbox_toexpand("kanji.grfour.fancy");
205   build_kanji.lr(420,20)
206     (kanji.leftrad.woman)
207     (kanji.grone.child);
208   expand_pbox;
209 enddef;

```

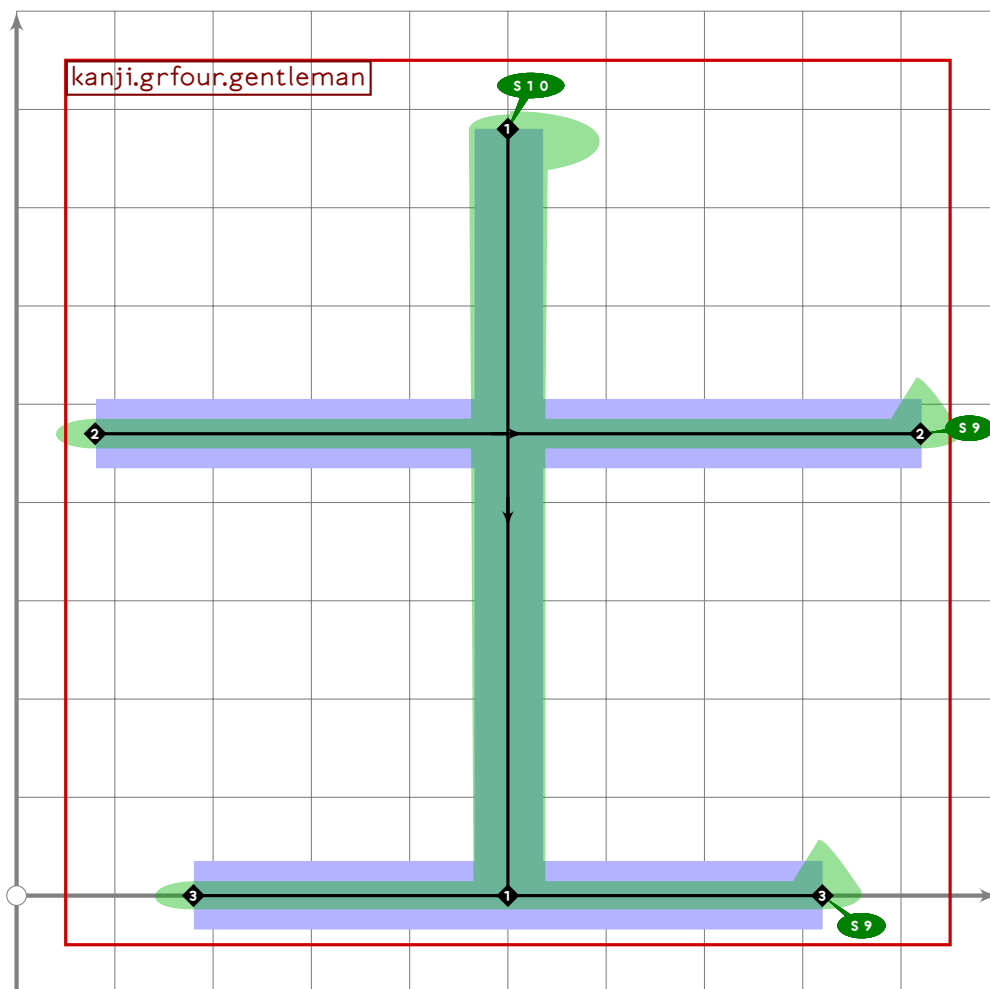
```

210
211 vardef kanji.grfour.fruit =
212   push_pbox__toexpand("kanji.grfour.fruit");
213   build_kanji.tb(420,100)
214     (build_kanji.sscale(xscaled 0.9)(kanji.grone.paddy))
215     (kanji.grone.wood);
216   replace_strokep(-5)
217     ((point 0 of oldp)-(point infinity of get_strokep(-3)));
218   obstacktype[find_whatsoever(otstroke,-3)]:=otnull;
219   expand_pbox;
220 enddef;

```

U+58EB
tsuku.uni58EB

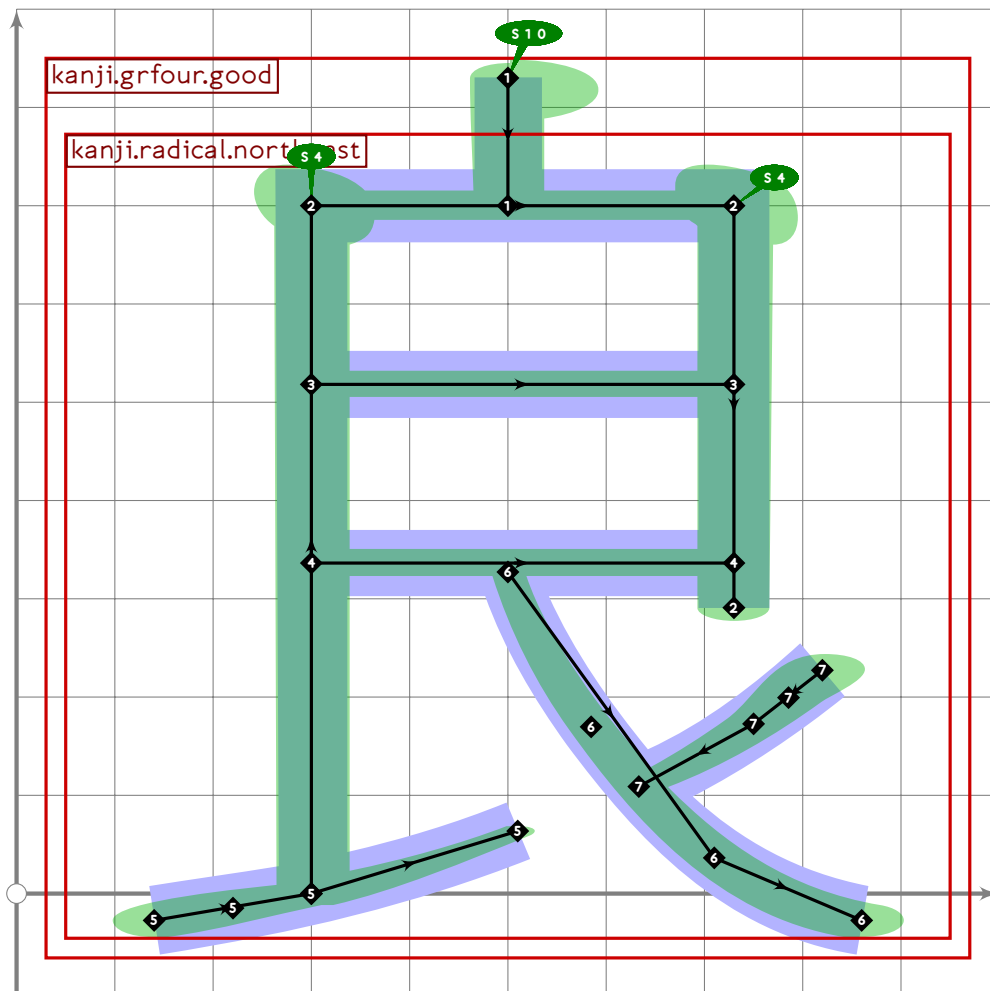
FOUR



```

221
222 vardef kanji.grfour.gentleman =
223   push_pbox__toexpand("kanji.grfour.gentleman");
224   push_stroke((500,780)-(500,0),
225     (1.6,1.6)-(1.5,1.5));
226   set_boserif(0,0,10);
227   push_stroke((80,470)-(920,470),
228     (1.6,1.6)-(1.6,1.6));
229   set_boserif(0,1,9);
230   push_stroke((180,0)-(820,0),
231     (1.6,1.6)-(1.6,1.6));
232   set_boserif(0,1,9);
233   expand_pbox;
234 enddef;

```



FOUR

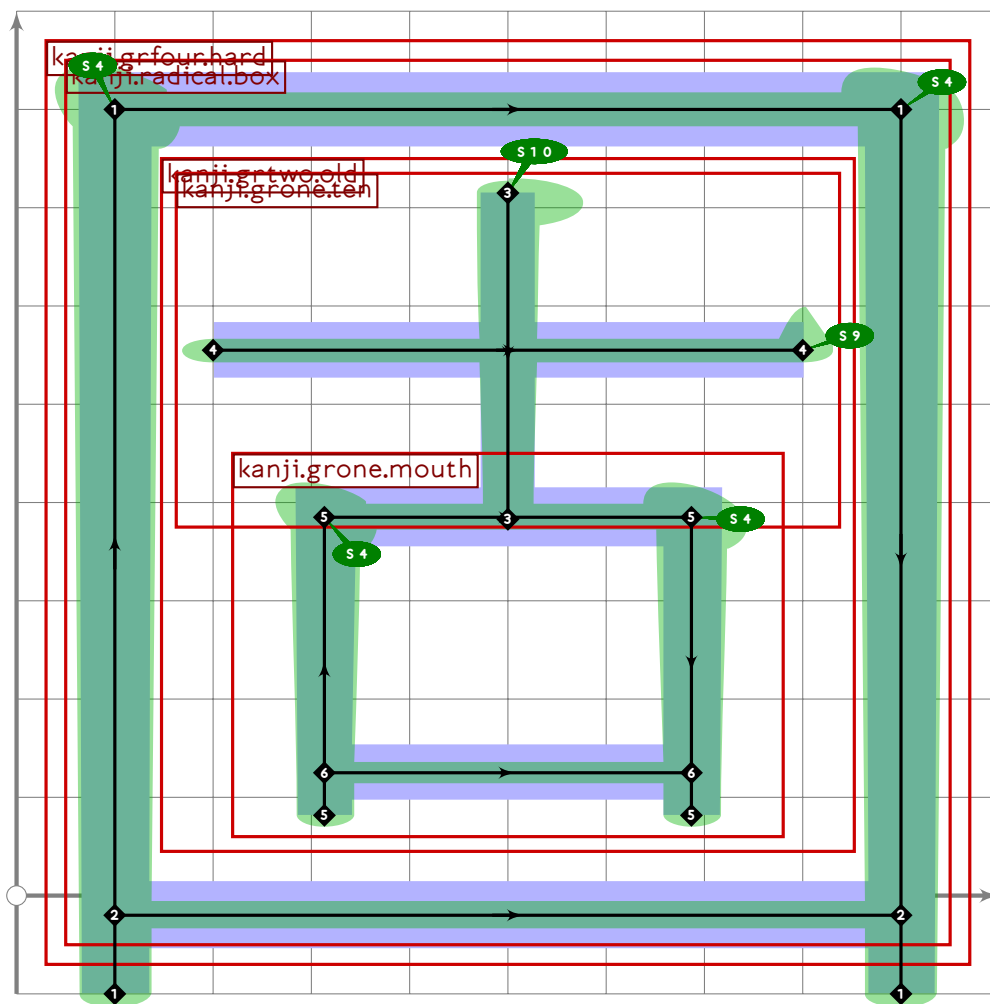
```

235
236 vardef kanji.grfour.good =
237   push_pbox_toexpand("kanji.grfour.good");
238   build_kanji.level(
239     push_stroke((500,830)-(500,700),(1.6,1.6)-(1.5,1.5));
240     set_boserif(0,0,10);
241     tsu_xform(identity yscaled (700/770))(kanji.radical.northeast));
242   expand_pbox;
243 enddef;

```

U+56FA
tsuku.uni56FA

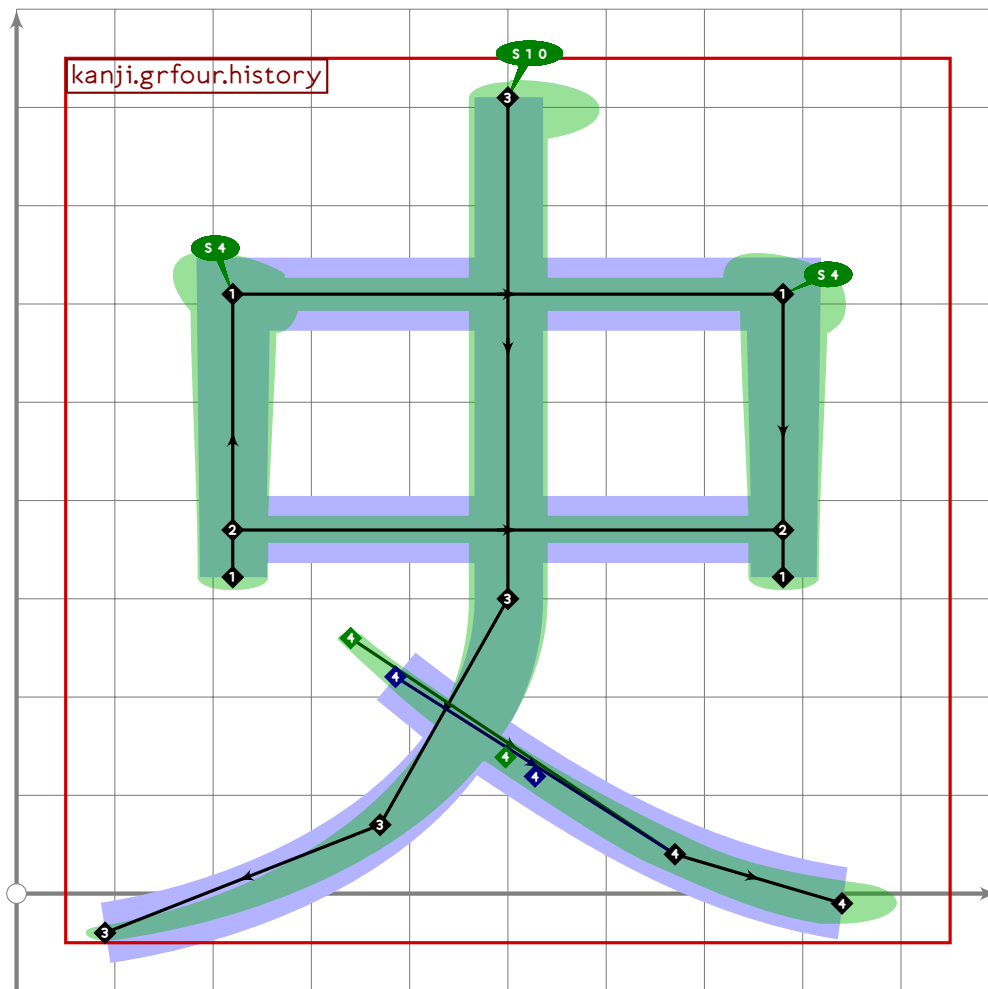
FOUR



```

244
245 vardef kanji.grfour.hard =
246   push_pbox_toexpand("kanji.grfour.hard");
247   kanji.radical.box;
248   build_kanji.sscale(scaled 0.75)(kanji.grtwo.old);
249   expand_pbox;
250 enddef;

```



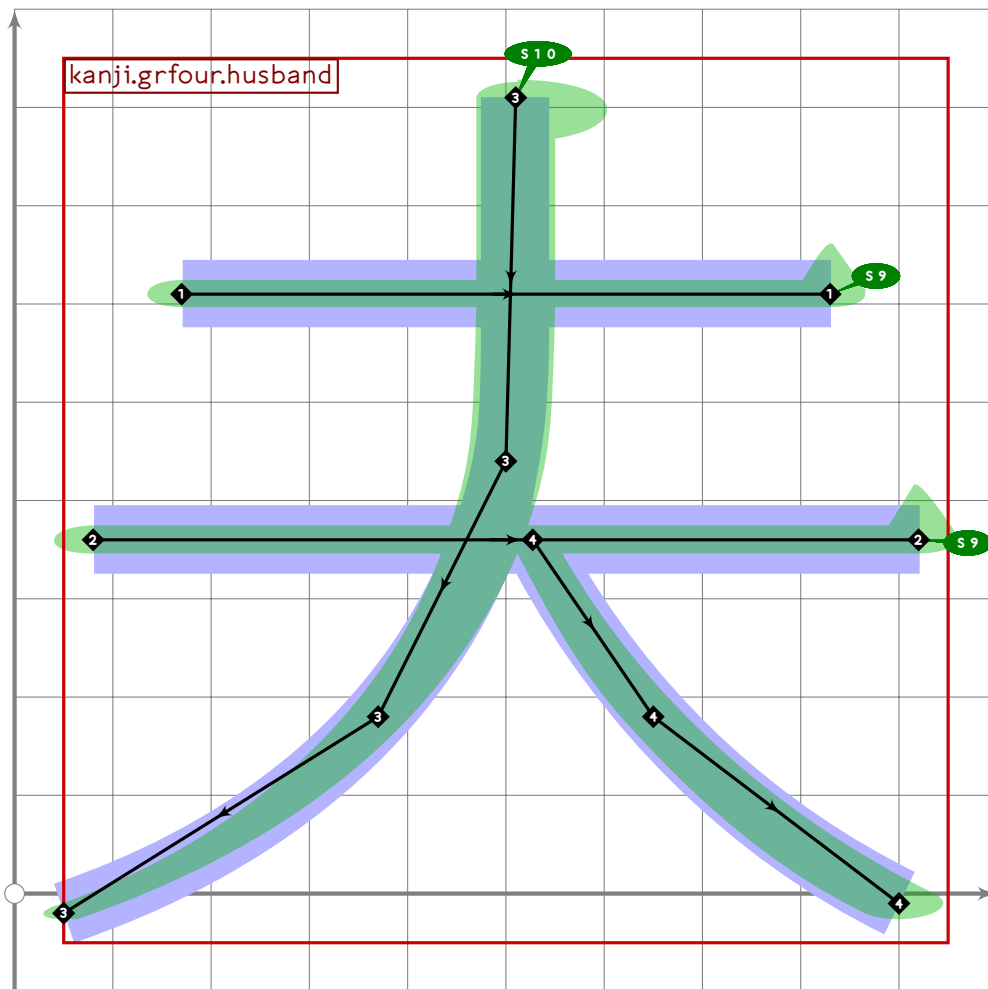
FOUR

```

251
252 vardef kanji.grfour.history =
253   push_pbox__toexpand("kanji.grfour.history");
254   build_kanji.box((220,610),(780,370));
255   push_stroke((500,810)–(500,300){down}..(370,70)..{curl 0.5}(90,-40),
256     (1.6,1.6)–(1.6,1.6)–(1.4,1.4)–(1.1,1.1));
257   set_boserif(0,0,10);
258   push_stroke((340,260)..tension 1.2..(670,40)..(840,-10),
259     (0.9,0.9)–(1.5,1.5)–(2,2));
260   expand_pbox;
261 enddef;

```

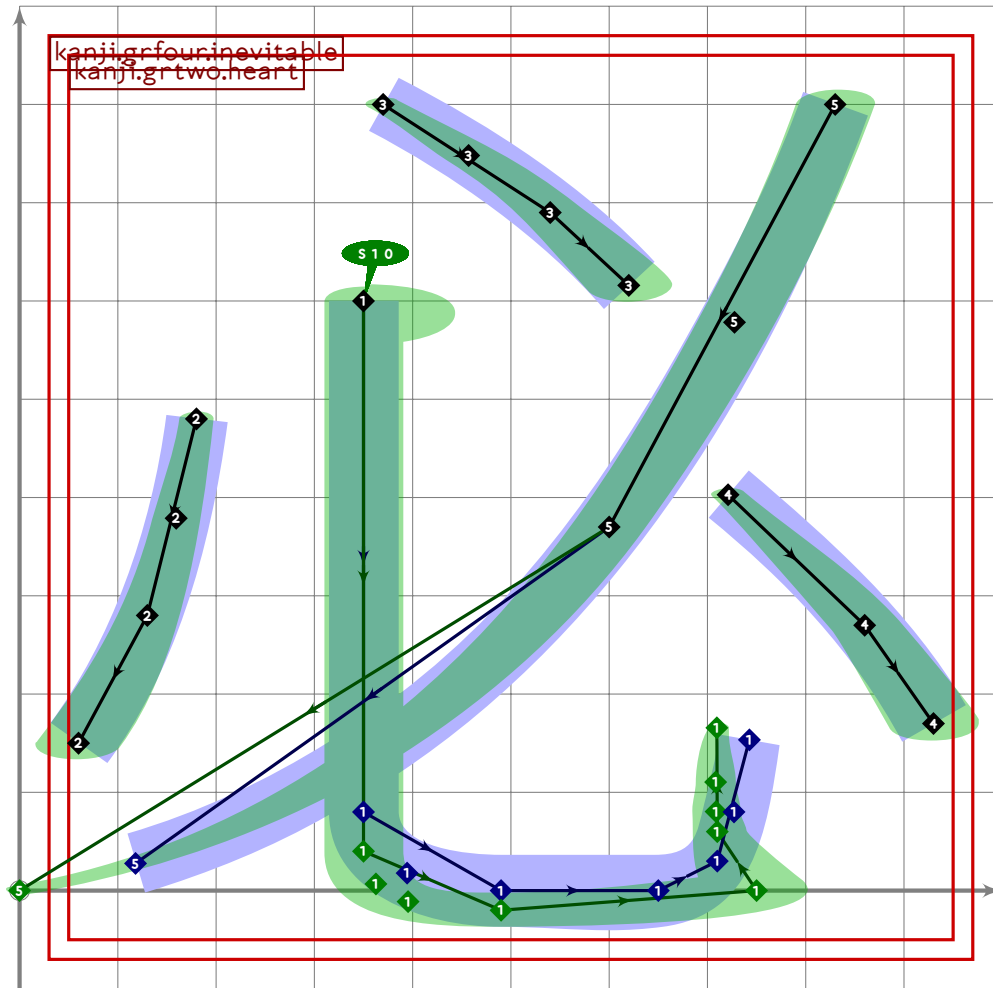
FOUR



```

262
263 vardef kanji.grfour.husband =
264   push_pbox_toexpand("kanji.grfour.husband");
265   push_stroke((170,610)-(830,610),
266     (1.5,1.5)-(1.5,1.5));
267   set_boserif(0,1,9);
268   push_stroke((80,360)-(920,360),
269     (1.6,1.6)-(1.6,1.6));
270   set_boserif(0,1,9);
271   push_stroke((510,810){down}..(500,440)..(370,180)..{curl 0.5}(50,-20),
272     (1.6,1.6)-(1.6,1.6)-(1.4,1.4)-(1.1,1.1));
273   set_boserif(0,0,10);
274   push_stroke(((get_stroke(-1) intersectionpoint get_stroke(0))+(50,0))..
275     (650,180)..(900,-10),
276     (1.1,1.1)-(1.4,1.4)-(1.7,1.7));
277   expand_pbox;
278 enddef;

```



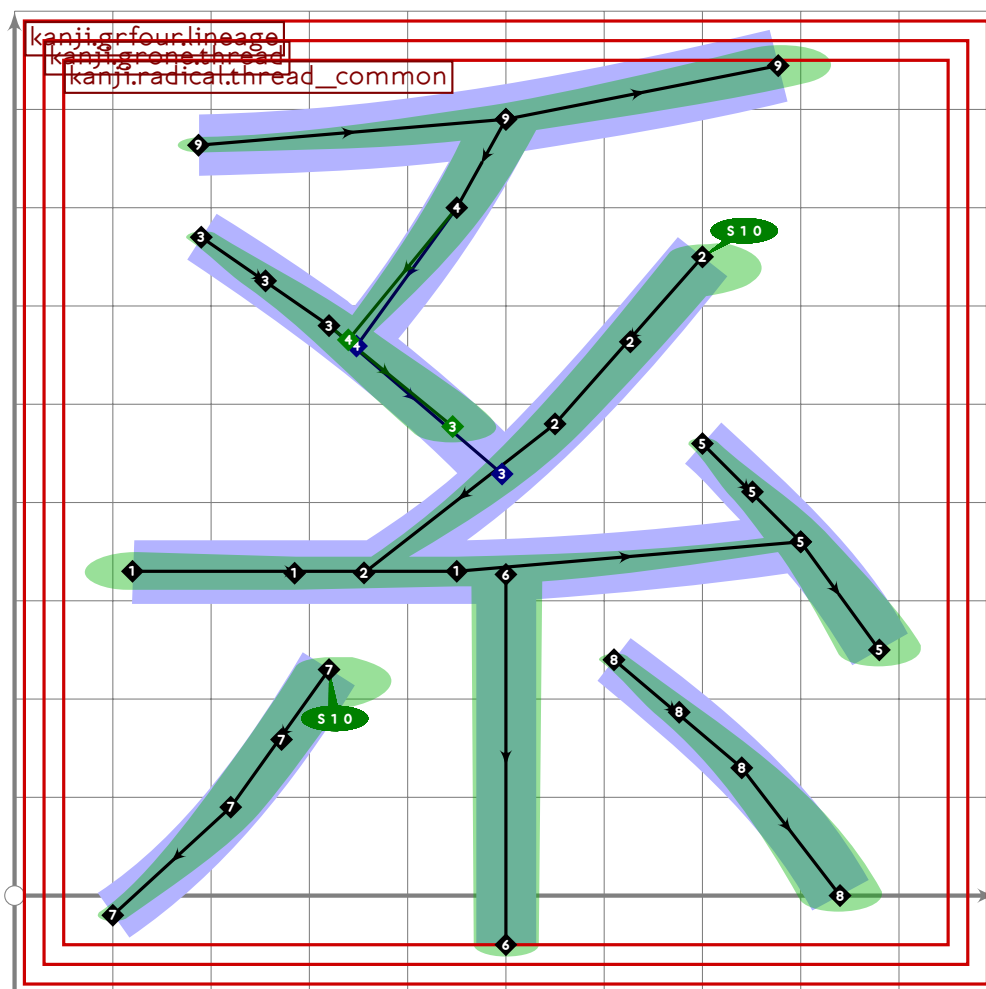
FOUR

```

279
280 vardef kanji.grfour.inevitable =
281   push_pbox__toexpand("kanji.grfour.inevitable");
282   kanji.grtwo.heart;
283   replace_stroke(-1)(subpath (0,1.7) of oldp);
284   replace_stroke(0)(subpath (0.3,2) of oldp);
285   push_stroke((830,800)..tension 1.2..(600,370)..(0,0),
286     (1.6,1.6)–(1.5,1.5)–(0.9,0.9));
287   expand_pbox;
288 enddef;

```

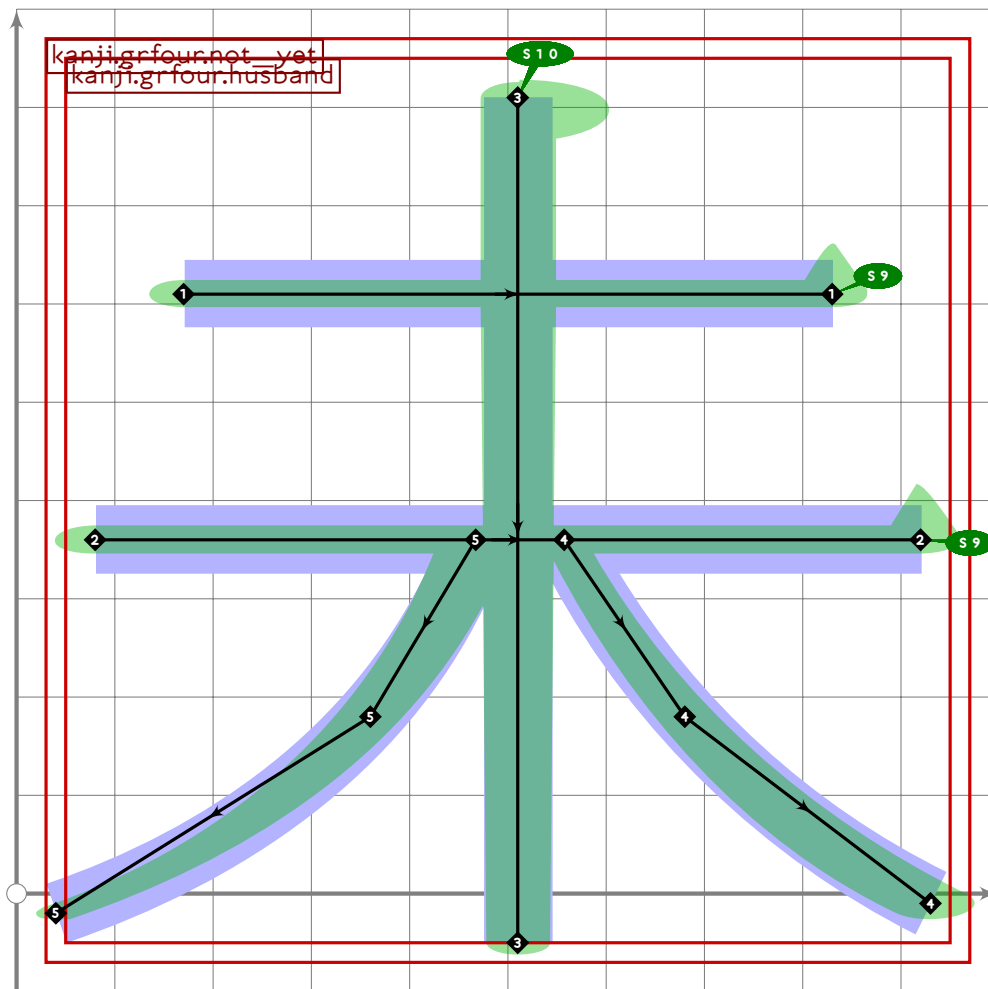
FOUR



```

289
290 vardef kanji.grfour.lineage =
291   push_pbox_toexpand("kanji.grfour.lineage");
292   build_kanji.add_beret(kanji.grone.thread);
293   expand_pbox;
294 enddef;

```

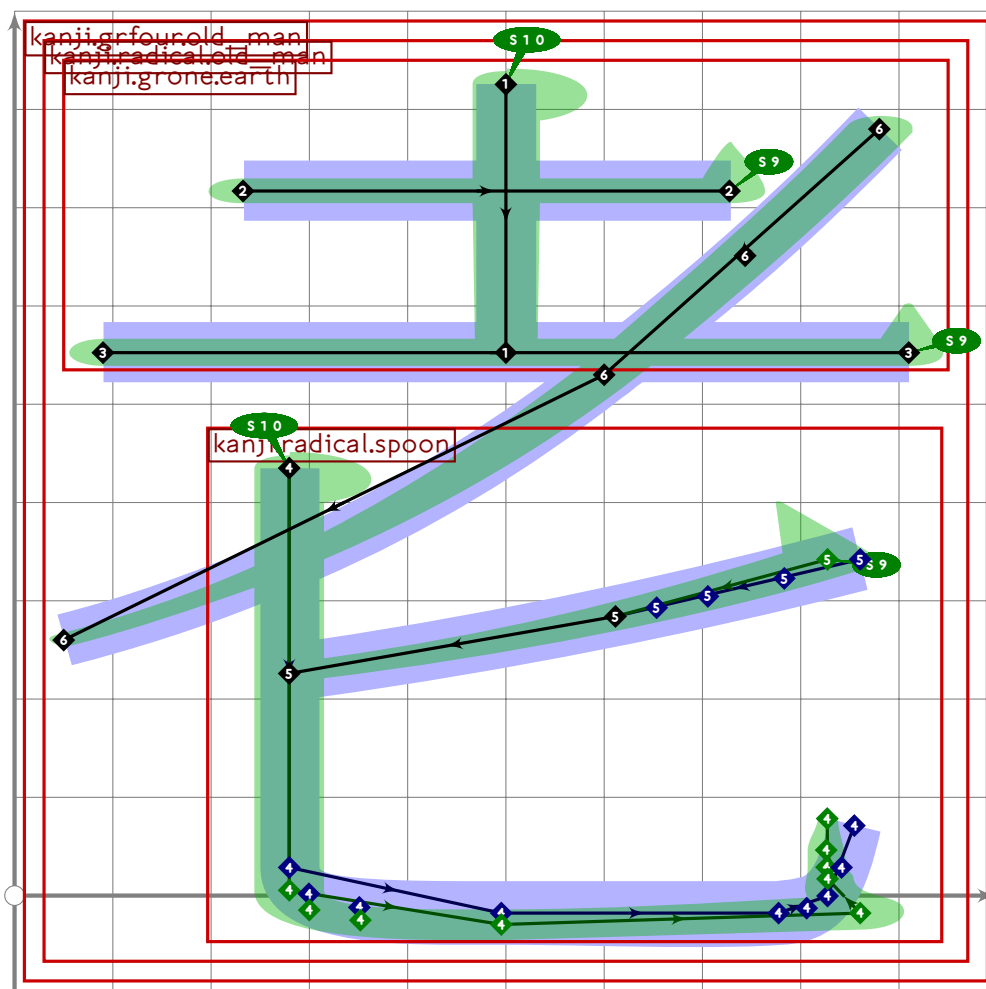
FOUR

```

295
296 vardef kanji.grfour.not_yet =
297   push_pbox_toexpand("kanji.grfour.not_yet");
298   kanji.grfour.husband;
299   begingroup
300     save it;
301     numeric it;
302     it:=xpart (get_strokep(-1) intersectiontimes get_strokep(-2));
303     push_stroke(subpath (it,infinity) of get_strokep(-1) shifted (-10,0),
304       subpath(it,infinity) of get_strokeq(-1));
305   endgroup;
306   replace_strokep(-2)((510,810)-(510,-50));
307   replace_strokeq(-2)((1.6,1.6)-(1.4,1.4));
308   replace_strokep(-1)(oldp shifted (30,0));
309   expand_pbox;
310 enddef;

```

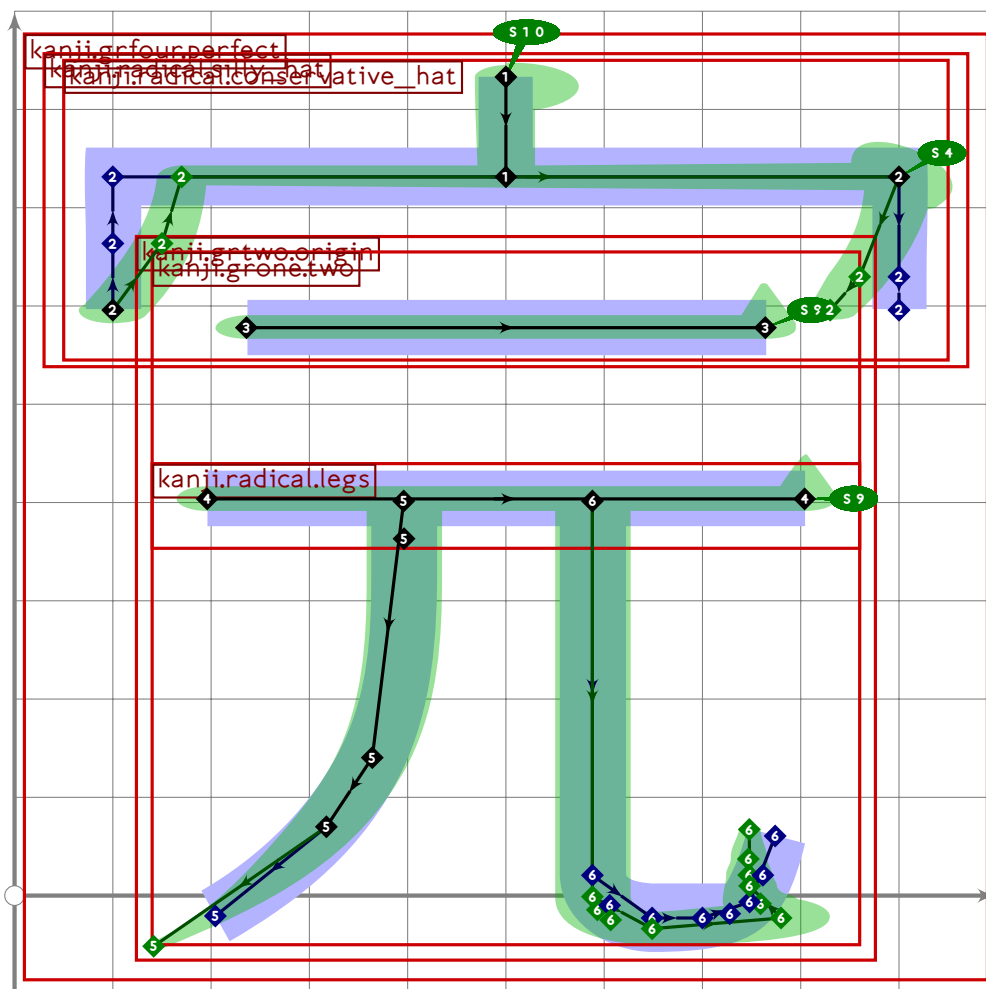
FOUR



```

311
312 vardef kanji.grfour.old_man =
313   push_pbox_toexpand("kanji.grfour.old_man");
314   kanji.radical.old_man(
315     build_kanji.sscale(xyscaled (0.83,1.1) shifted (70,50))
316     (kanji.radical.spoon));
317   expand_pbox;
318 enddef;

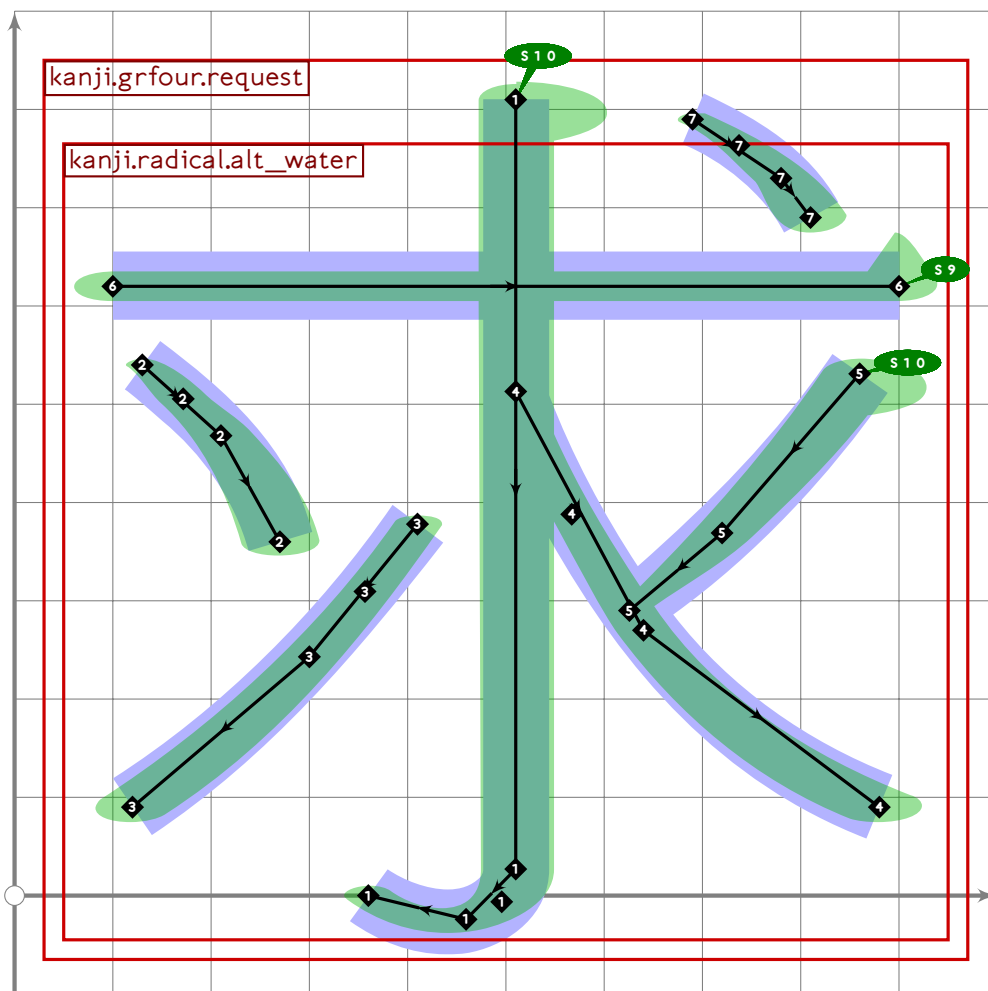
```



615

U+6C42
tsuku.uni6C42

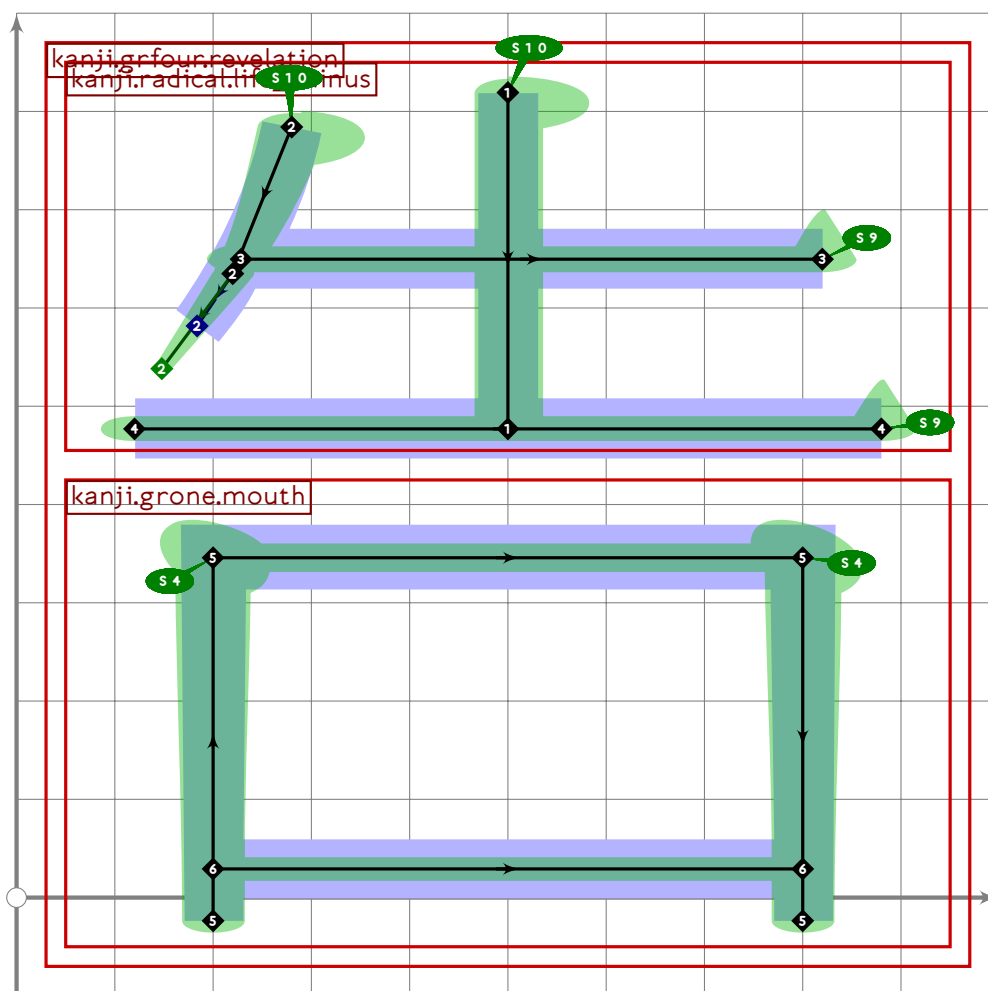
FOUR



```

327
328 vardef kanji.grfour.request =
329   push_pbox__toexpand("kanji.grfour.request");
330   tsu_xform(identity yscaled 0.9)(kanji.radical.alt_water);
331   replace_strokep(-4)((510,810)-(subpath (1,infinity) of oldp));
332   push_stroke((100,620)-(900,620),(1.6,1.6)-(1.6,1.6));
333   set_boserif(0,1,9);
334   push_stroke((690,790)..tension 1.2..(780,730)..(810,690),
335     (1,1)-(14,14)-(1.6,1.6));
336   set_bosize(0,90);
337   expand_pbox;
338 enddef;

```



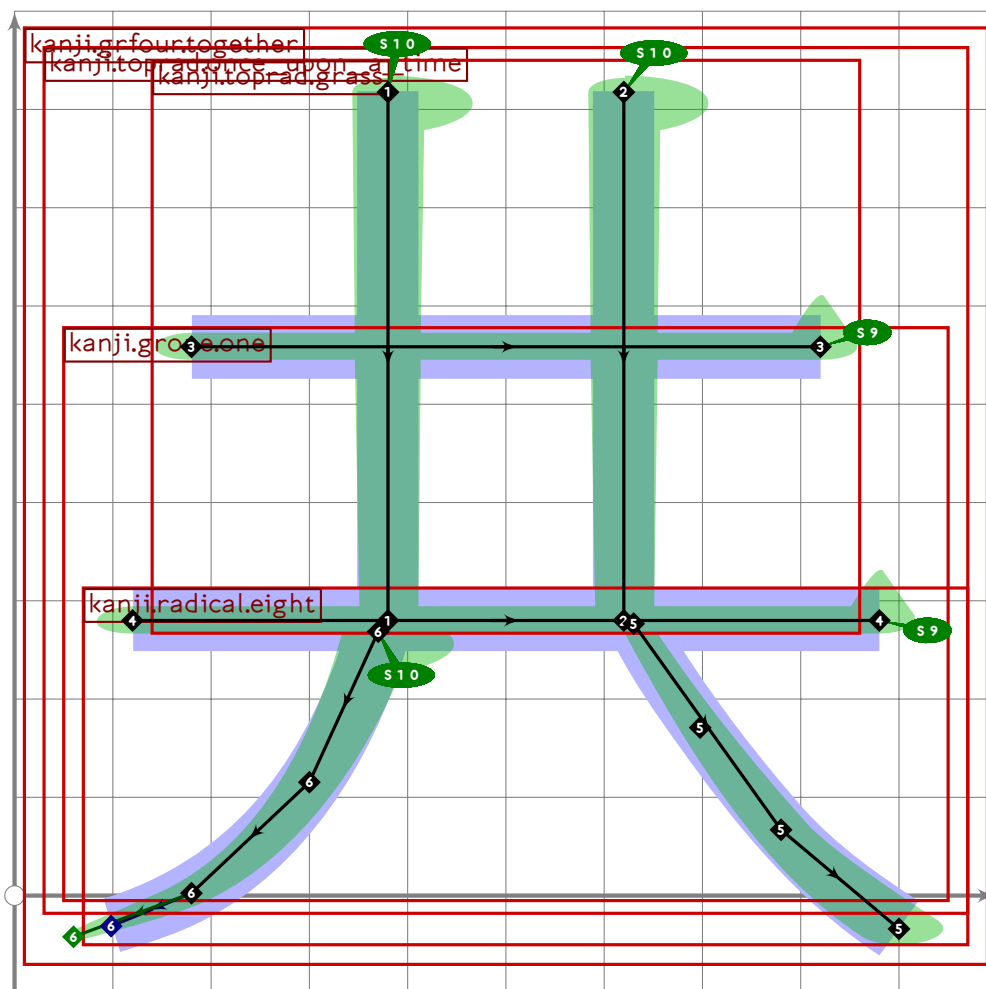
FOUR

```

339
340 vardef kanji.grfour.revelation =
341   push_pbox_toexpand("kanji.grfour.revelation");
342   build_kanji.level(build_kanji.tb(440,-30)
343     (kanji.radical.life_minus)
344     (kanji.grone.mouth));
345   expand_pbox;
346 enddef;

```

FOUR



```

347
348 vardef kanji.grfour.together =
349   push_pbox_toexpand("kanji.grfour.together");
350   build_kanji.level(build_kanji.tb(290,46)
351     (kanji.toprad.once_upon_a_time)
352     (tsu_xform(identity shifted (20,0))(kanji.radical.eight)));
353   expand_pbox;
354 enddef;

```

gradefive.mp

```

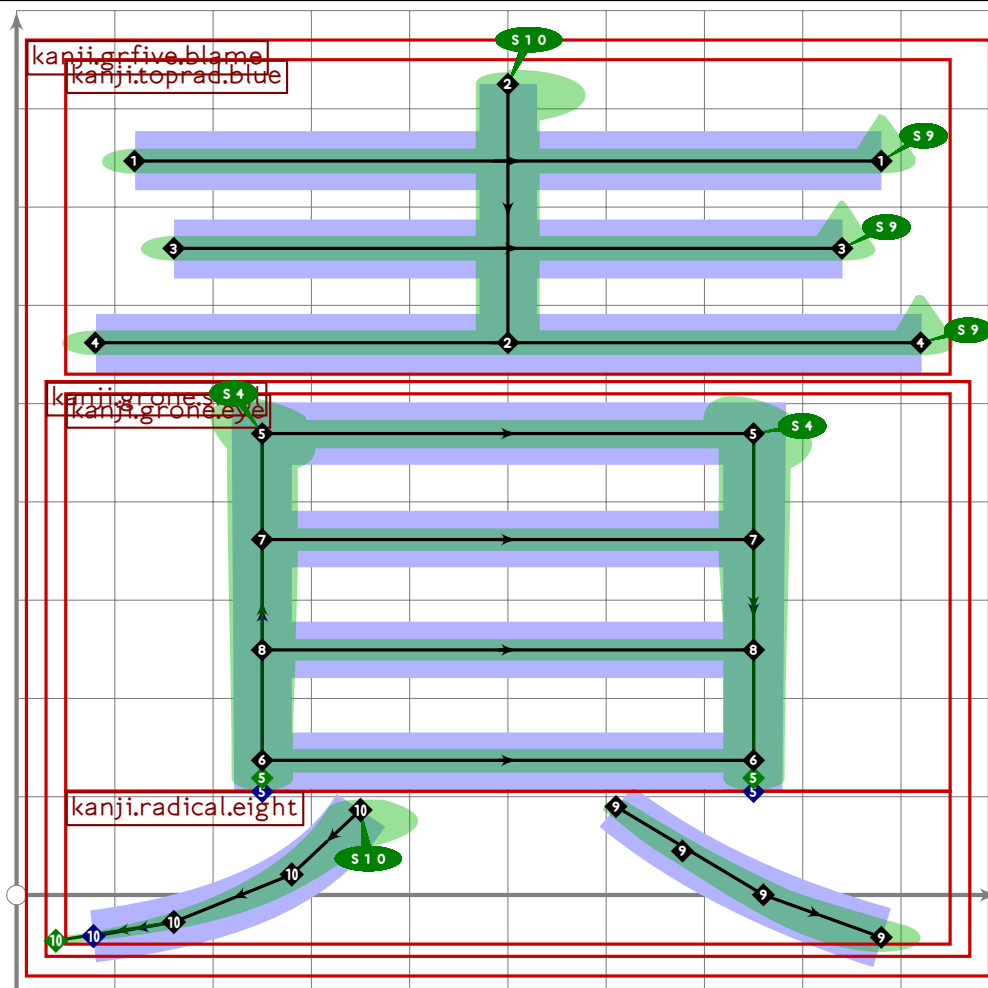
1 %
2 % Grade Five kanji used on more than one page
3 % Copyright (C) 2011, 2012 Matthew Skala
4 %
5-29 [Standard copyright notice]

```

```

30
31 inclusion_lock(gradefive);
32
33

```



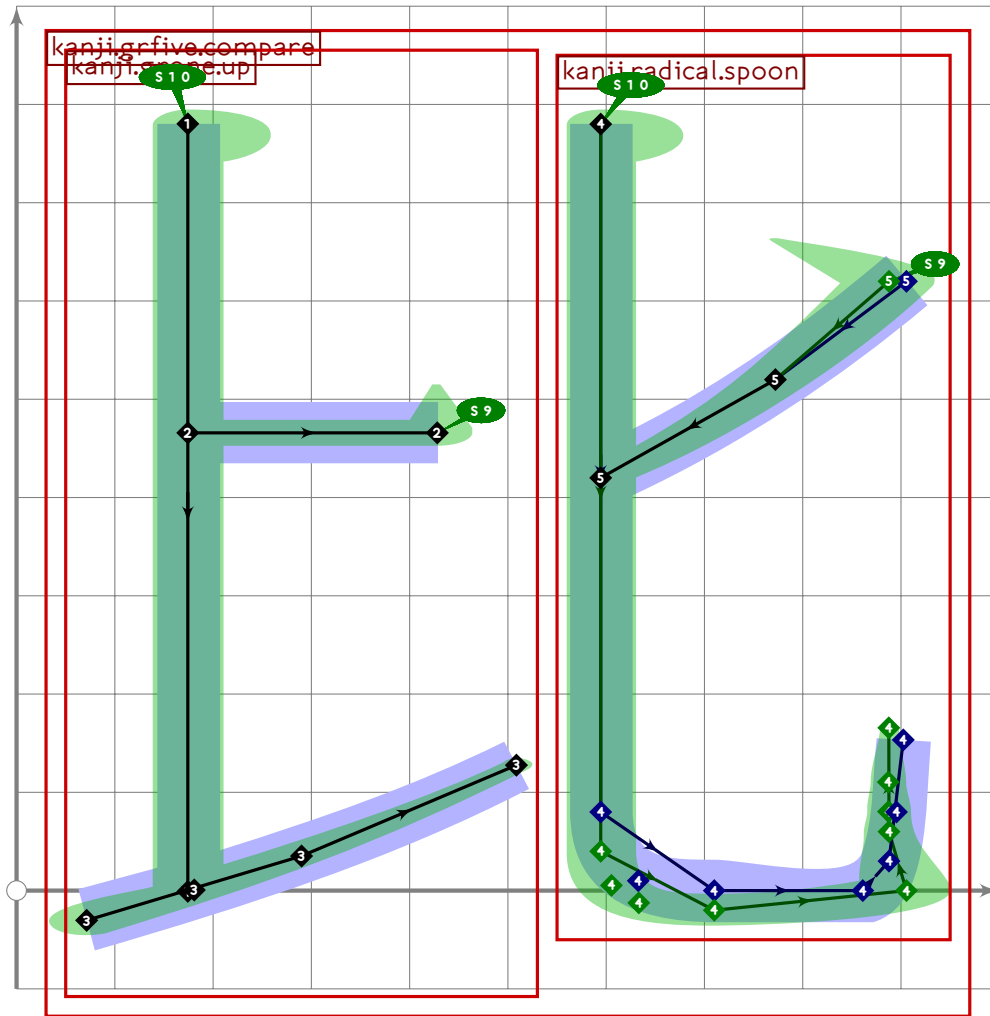
FIVE

```

34
35 vardef kanji.grfive.blame =
36   push_pbox_toexpand("kanji.grfive.blame");
37   build_kanji.level(build_kanji.tb(520;20)
38     (kanji.toprad.blue)
39     (kanji.grone.shell));
40   expand_pbox;
41 enddef;

```

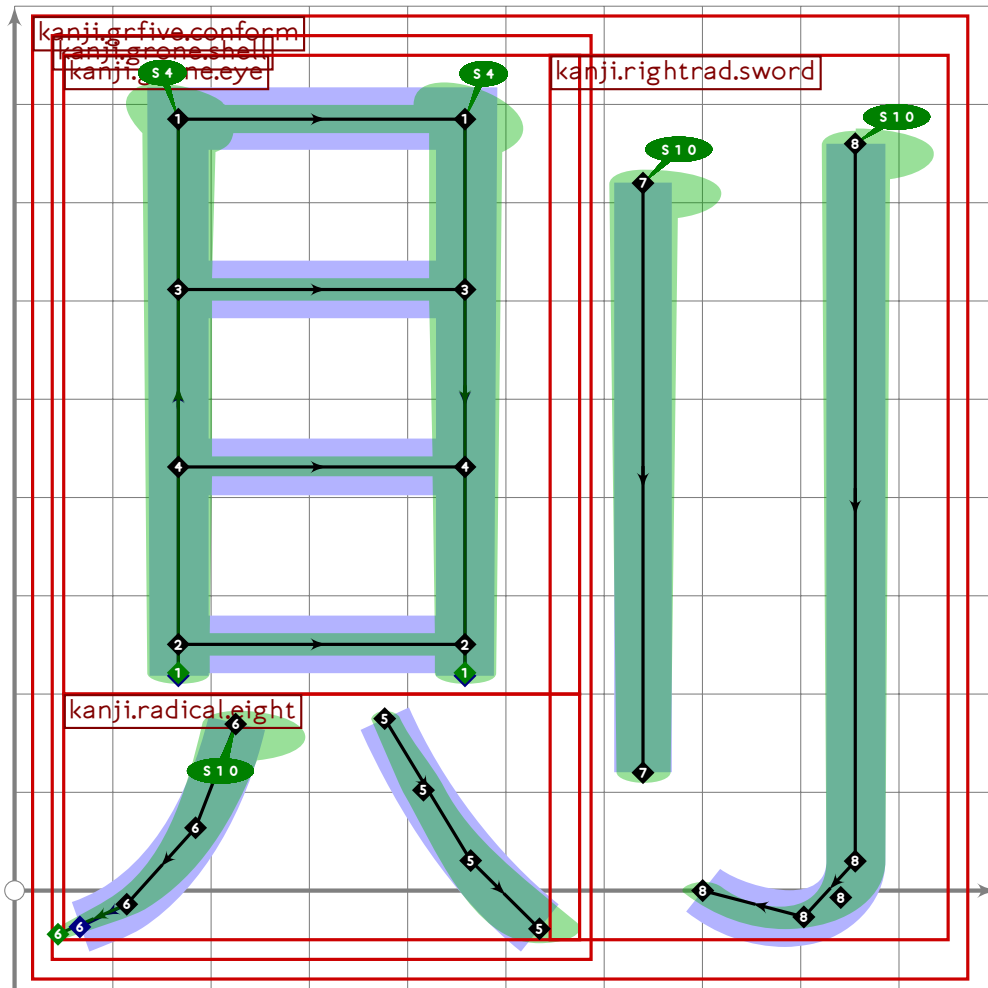
FIVE



```

42
43 vardef kanji.grfive.compare =
44   push_pbox_toexpand("kanji.grfive.compare");
45   build_kanji.level(build_kanji.lr(540,20)
46     (build_kanji.lift_skirt(300,160)
47       (build_kanji.sscale(yscaled 1.07 shifted (0,-27))(kanji.grone.up);
48         replace_strokep(-1)
49           (oldp shifted (-810,0) xscaled 1.7 shifted (810,60));
50         replace_strokep(-2)
51           (oldp shifted (-810,0) xscaled 1.7 shifted (810,0))))
52     (kanji.radical.spoon));
53   expand_pbox;
54 enddef;

```

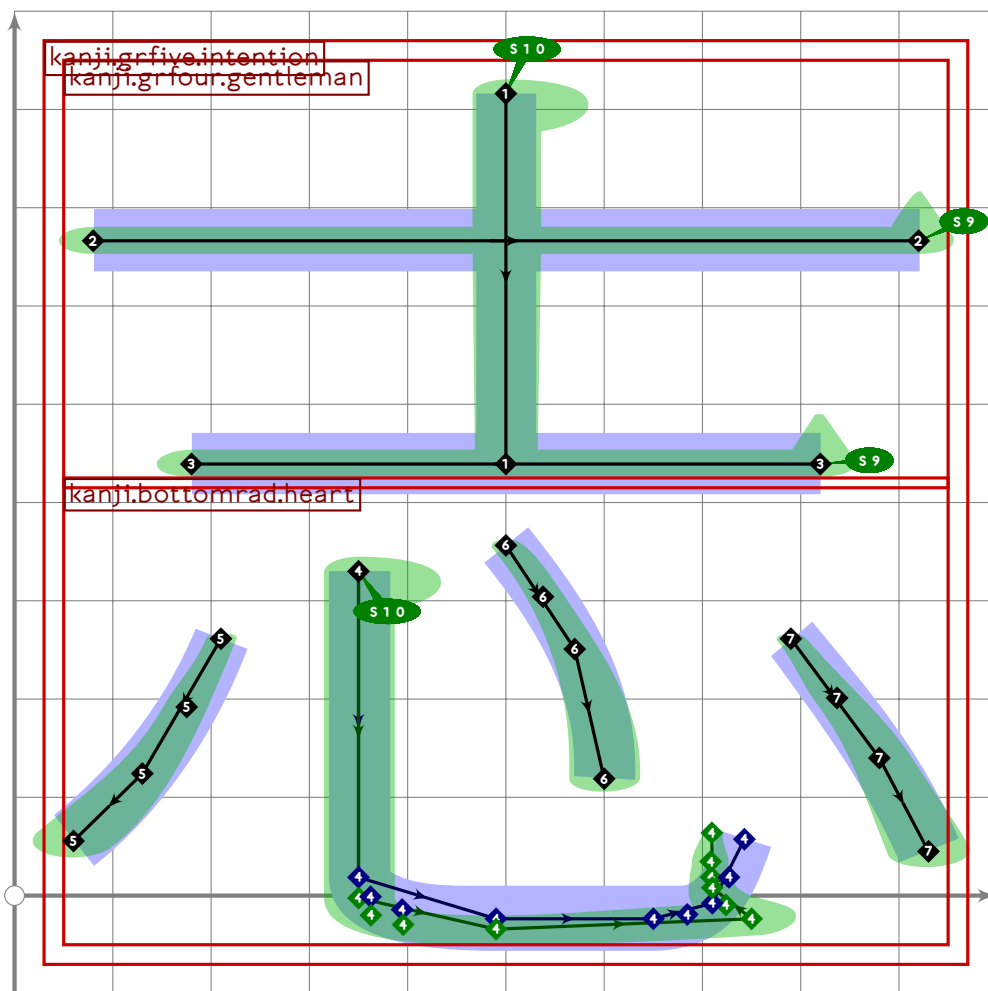



FIVE

```

55
56 vardef kanji.grfive.conform =
57   push_pbox_toexpand("kanji.grfive.conform");
58   build_kanji.level(build_kanji.lr(560,30)
59     (kanji.grone.shell)
60     (kanji.rightrrad.sword));
61   expand_pbox;
62 enddef;

```

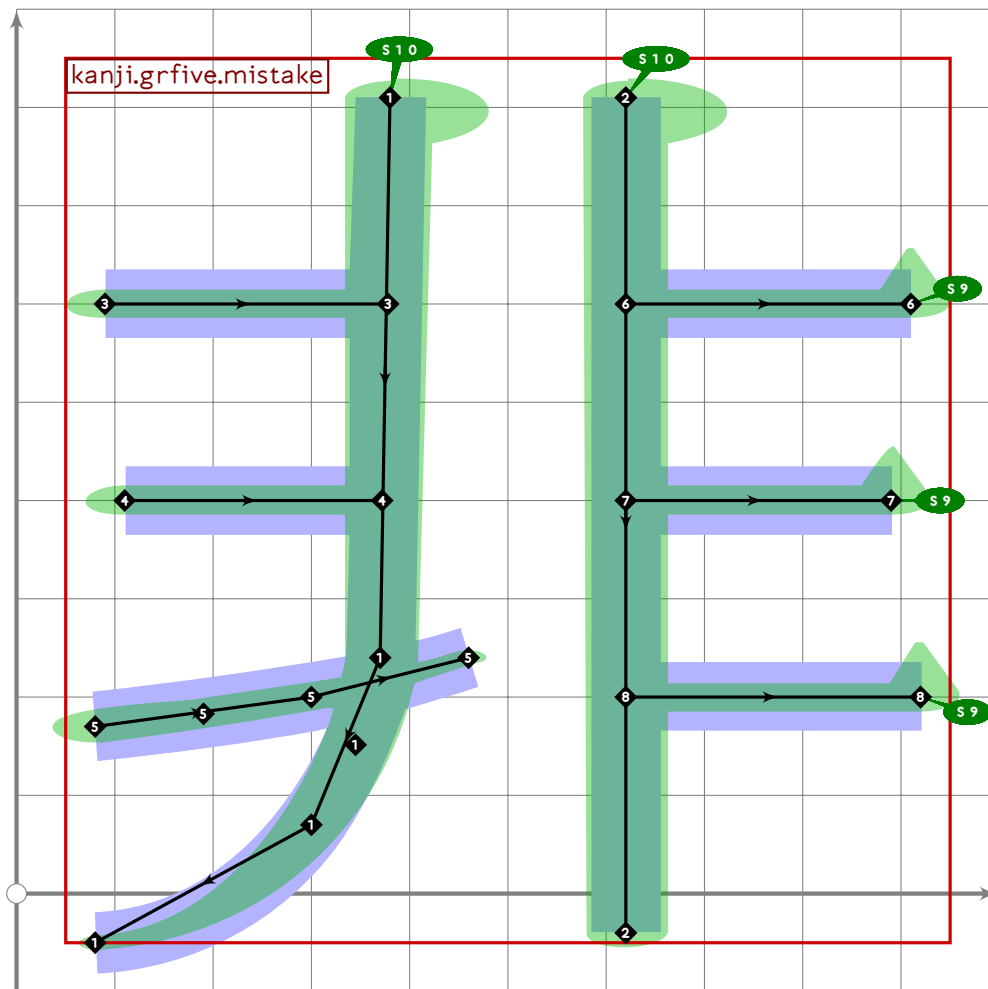


FIVE

```

63
64 vardef kanji.grfive.intention =
65   push_pbox_toexpand("kanji.grfive.intention");
66   build_kanji.level(build_kanji.tb(420,10)
67     (kanji.grfour.gentleman)
68     (kanji.bottomrad.heart));
69   expand_pbox;
70 enddef;

```



FIVE

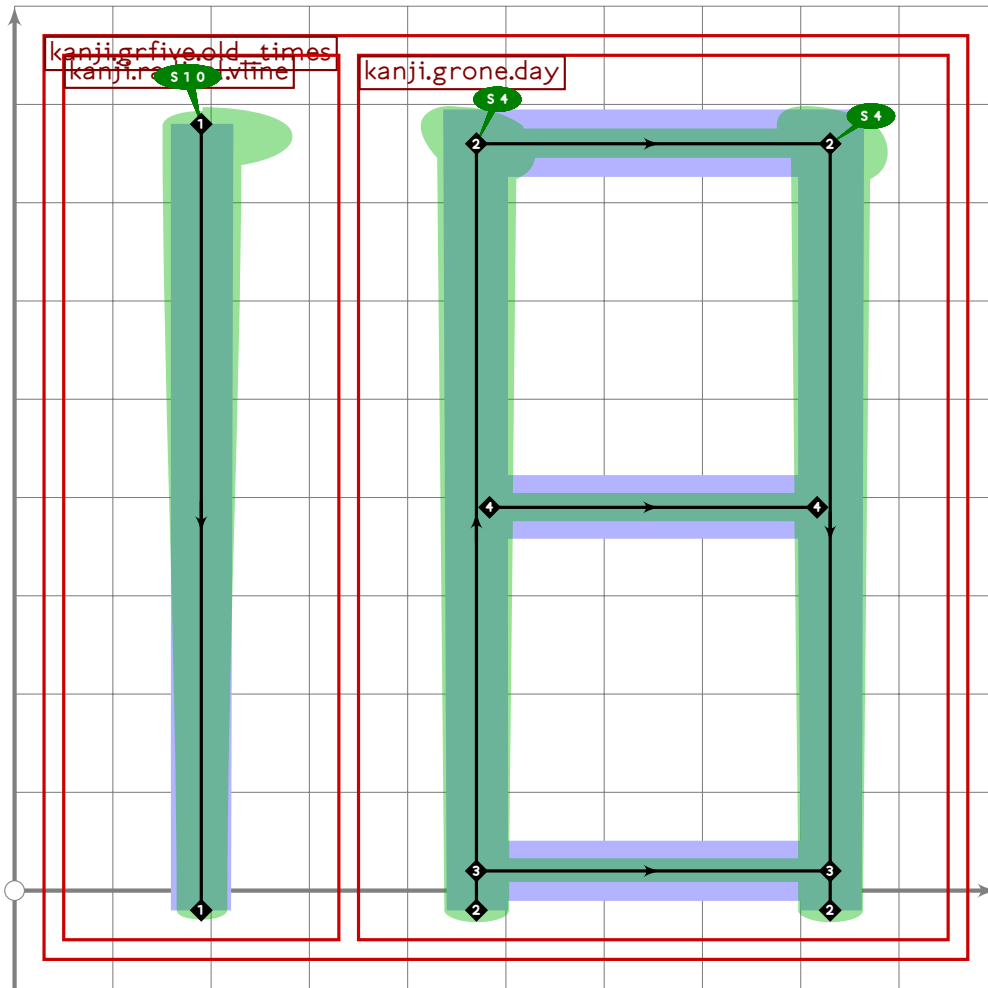
```

71
72 vardef kanji.grfive.mistake =
73   push_pbox_toexpand("kanji.grfive.mistake");
74   push_stroke((380,810)-(370,240){dir 266}.tension 1.2..(300,70)..(80,-50),
75     (1,7,1,7)-(1,55,1,55)-(1,44,1,44)-(1,1));
76   set_boserif(0,0,10);
77   push_stroke((620,810)-(620,-40),(1,7,1,7)-(1,6,1,6));
78   set_boserif(0,0,10);
79   push_stroke((90,600)-(378,600),(1,6,1,6)-(1,6,1,6));
80   push_stroke((110,400)-(372,400),(1,6,1,6)-(1,6,1,6));
81   push_stroke((80,170)..tension 1.2..(300,200)..(460,240),
82     (1,7,1,7)-(1,5,1,5)-(1,1));
83   push_stroke((620,600)-(910,600),(1,6,1,6)-(1,6,1,6));
84   set_boserif(0,1,9);
85   push_stroke((620,400)-(890,400),(1,6,1,6)-(1,6,1,6));
86   set_boserif(0,1,9);
87   push_stroke((620,200)-(920,200),(1,6,1,6)-(1,6,1,6));
88   set_boserif(0,1,9);
89   expand_pbox;
90 enddef;

```

U+65E7
tsuku.uni65E7

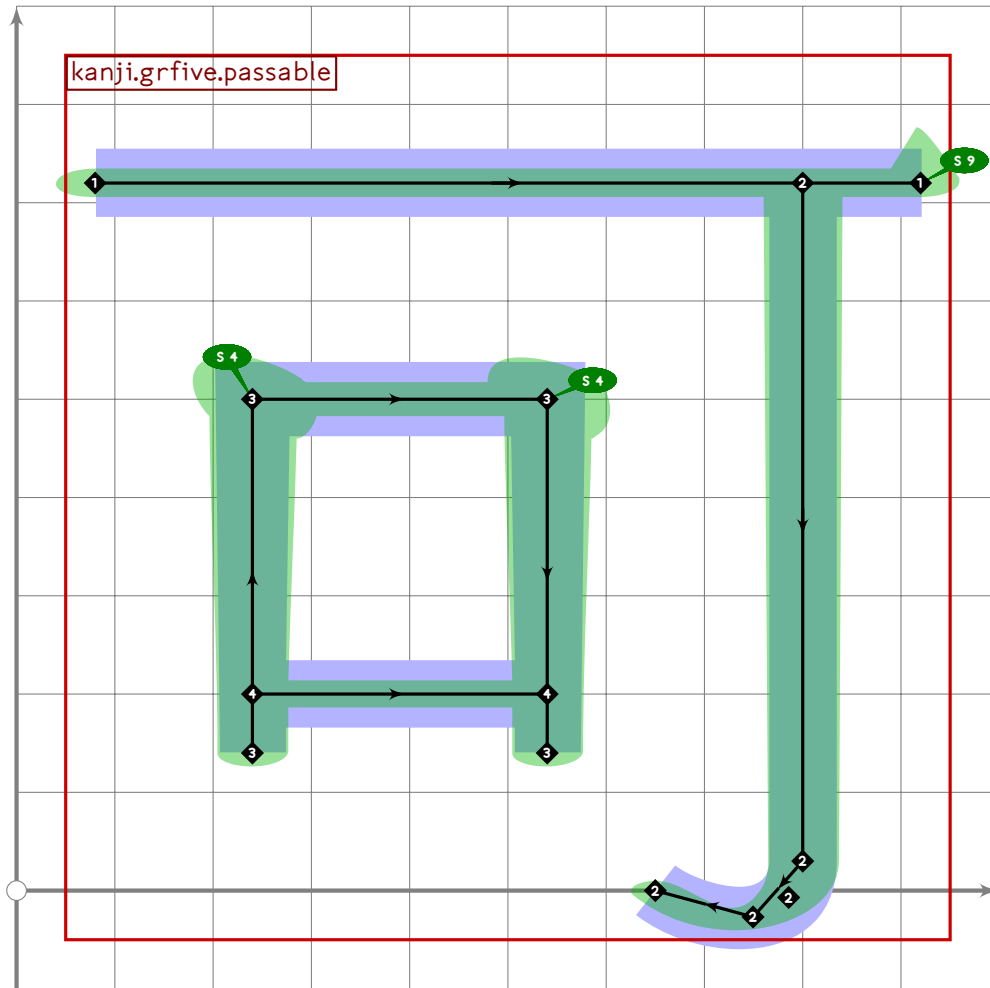
FIVE



```

91
92 vardef kanji.grfive.old_times =
93   push_pbox_toexpand("kanji.grfive.old_times");
94   build_kanji.level(build_kanji.lr(340;-20)
95     (kanji.radical.vline)
96     (kanji.grone.day));
97   expand_pbox;
98 enddef;

```



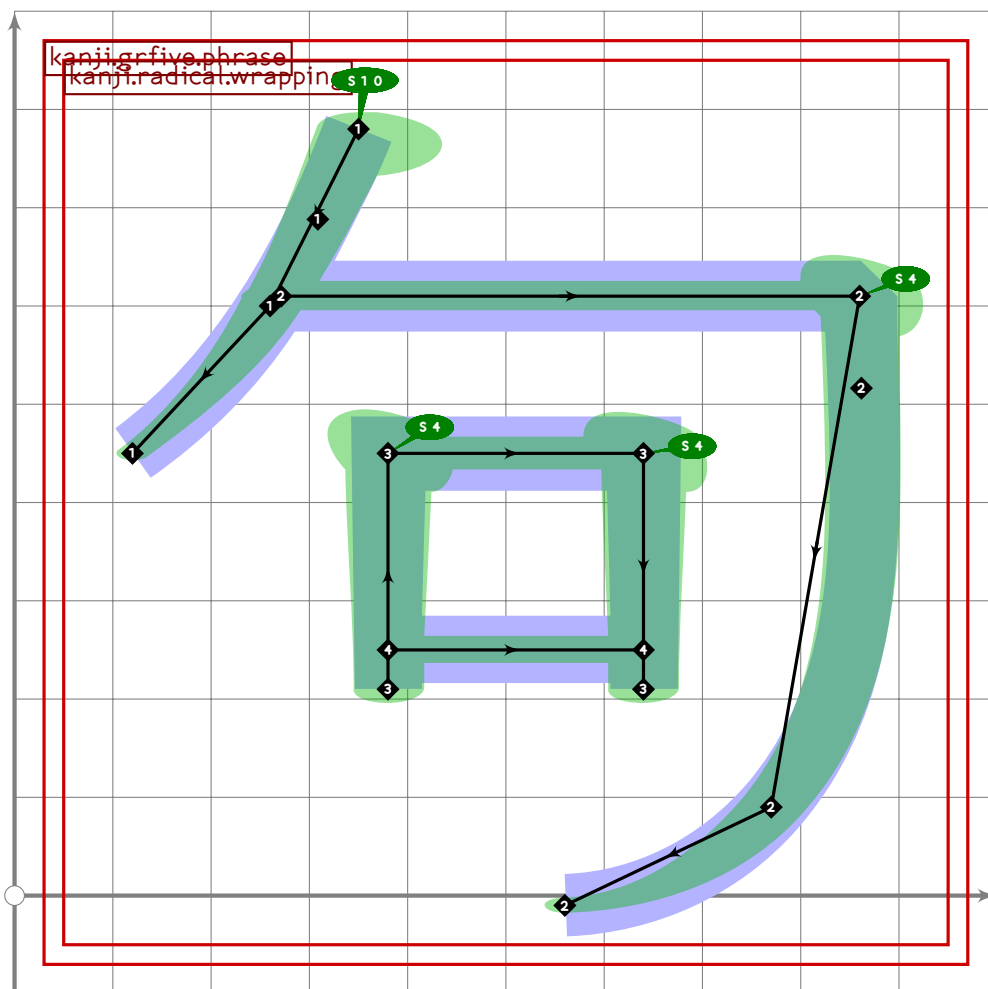
FIVE

```

99
100 vardef kanji.grfive.passable =
101   push_pbox__toexpand("kanji.grfive.passable");
102   push_stroke((80,720)–(920,720),
103     (1.6,1.6)–(1.6,1.6));
104   set_boserif(0,1,9);
105   push_stroke((800,720),
106     (1.6,1.6));
107   build_kanji.add__jtail(0);
108   build_kanji.box((240,500),(540,200));
109   expand_pbox;
110 enddef;

```

U+53E5
tsuku.uni53E5

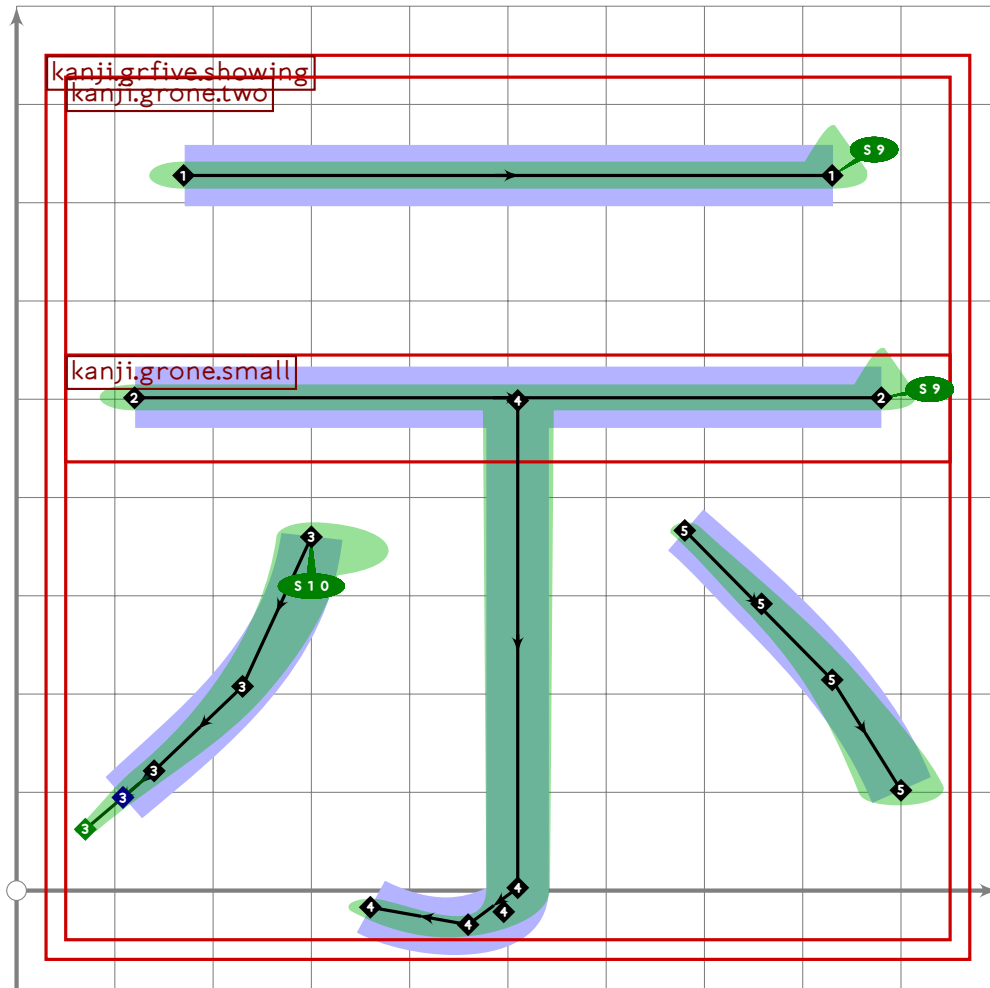


FIVE

```

111
112 vardef kanji.grfive.phrase =
113   push_pbox_toexpand("kanji.grfive.phrase");
114   kanji.radical.wrapping;
115   build_kanji.box((380,450),(640,250));
116   expand_pbox;
117 enddef;

```



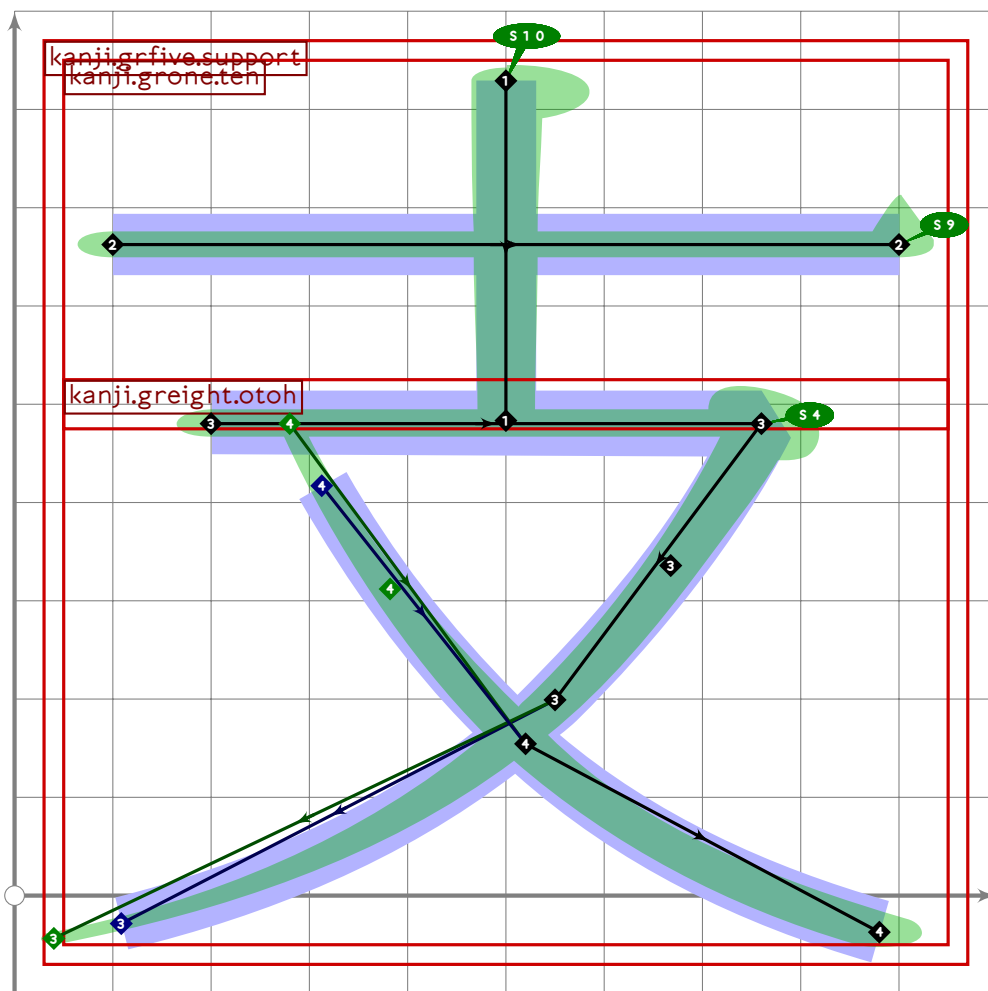
FIVE

```

118
119 vardef kanji.grfive.showing =
120   push_pbox_toexpand("kanji.grfive.showing");
121   build_kanji.level(build_kanji.tb(480,130)
122     (build_kanji.sscale(yscaled 0.9)(kanji.grone.two))
123     (kanji.grone.small));
124   set_boserif(-1,0,whatever);
125   expand_pbox;
126 enddef;

```

U+652F
tsuku.uni652F

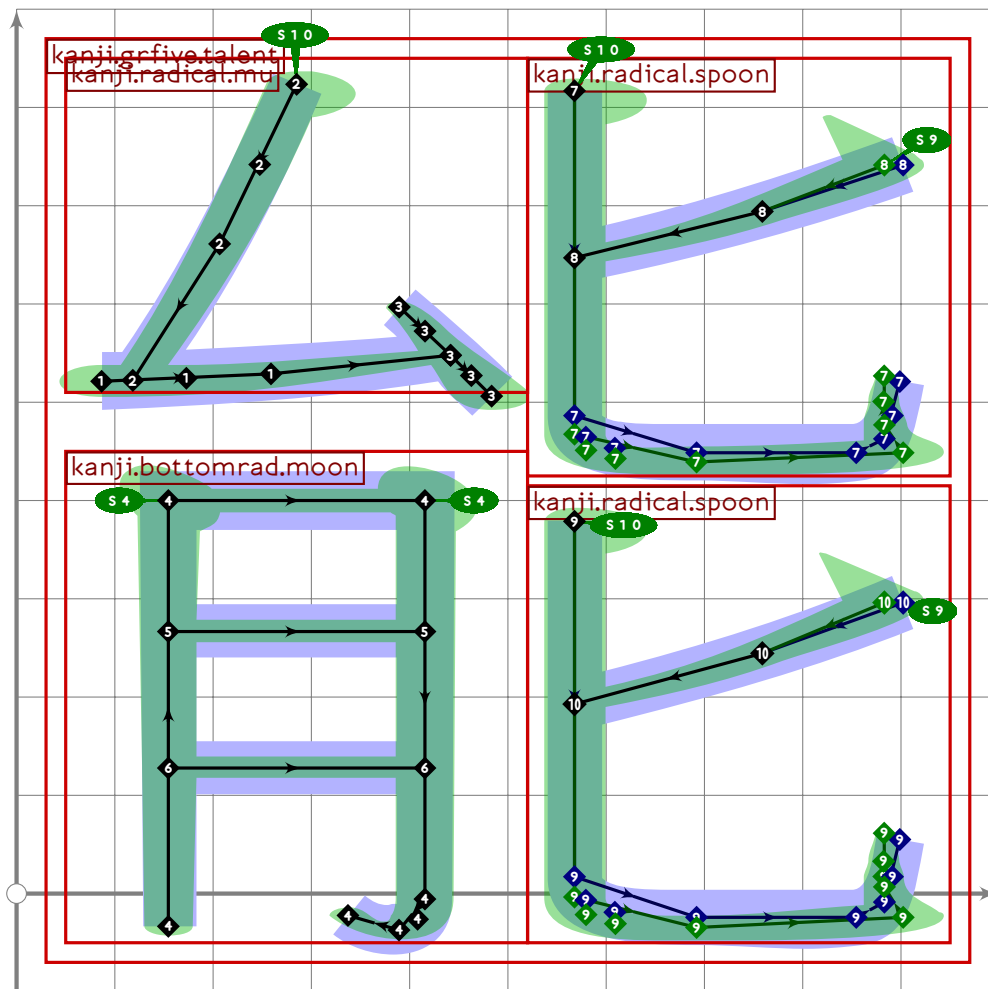


FIVE

```

127
128 vardef kanji.grfive.support =
129   push_pbox_toexpand("kanji.grfive.support");
130   build_kanji.level(build_kanji.tb(500,50)
131     (kanji.grone.ten)
132     (kanji.greight.otoh));
133   expand_pbox;
134 enddef;

```

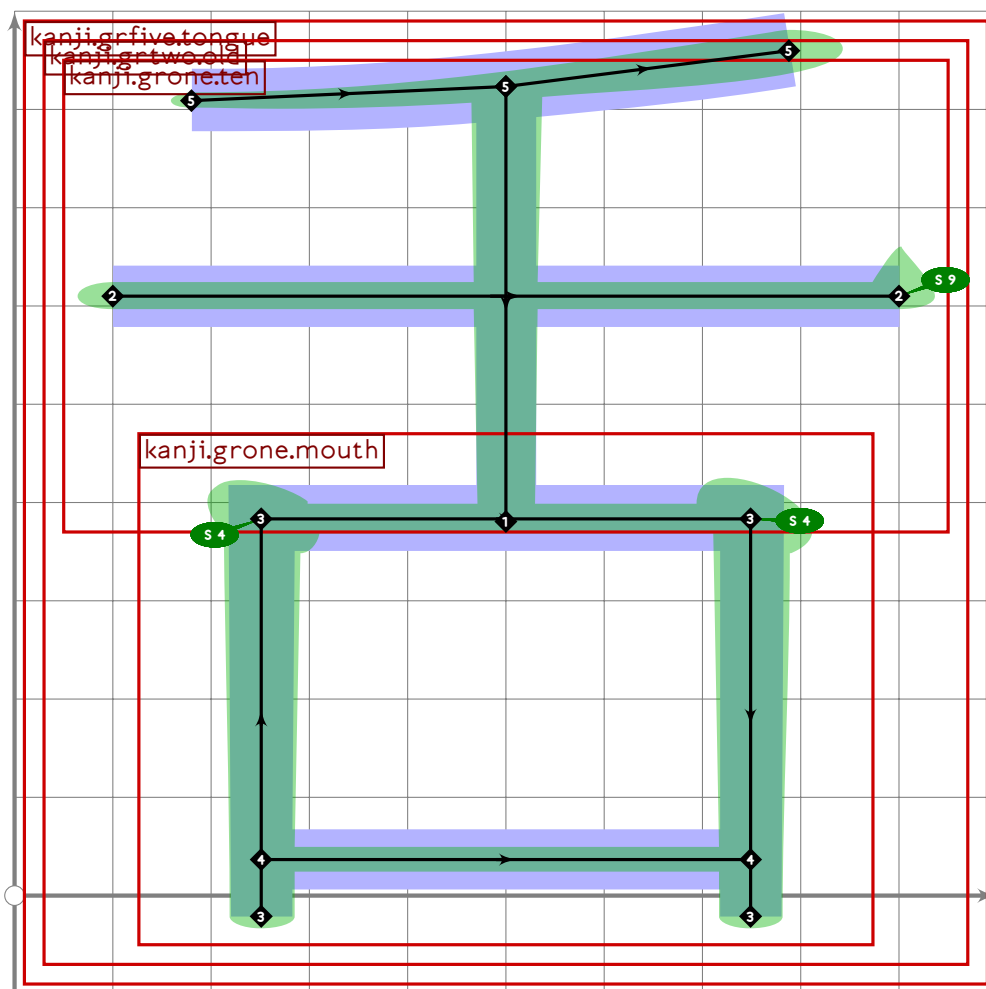
FIVE

```

135
136 vardef kanji.grfive.talent =
137   push_pbox_toexpand("kanji.grfive.talent");
138   build_kanji.level(build_kanji.lr(520,0)
139     (build_kanji.tb(480,-60)
140       (kanji.radical.mu)
141       (kanji.bottomrad.moon))
142     (build_kanji.tb(420,-10)
143       (kanji.radical.spoon)
144       (kanji.radical.spoon)));
145   expand_pbox;
146 enddef;

```

U+820C
tsuku.uni820C



FIVE

```

147
148 vardef kanji.grfive.tongue =
149   push_pbox_toexpand("kanji.grfive.tongue");
150   build_kanji.add_beret(kanji.grtwo.old);
151   expand_pbox;
152 enddef;

```

gradesix.mp

```
1 %
2 % Grade Six kanji used on more than one page
3 % Copyright (C) 2011, 2012, 2013 Matthew Skala
4 %
```

```
5-29 [Standard copyright notice]
```

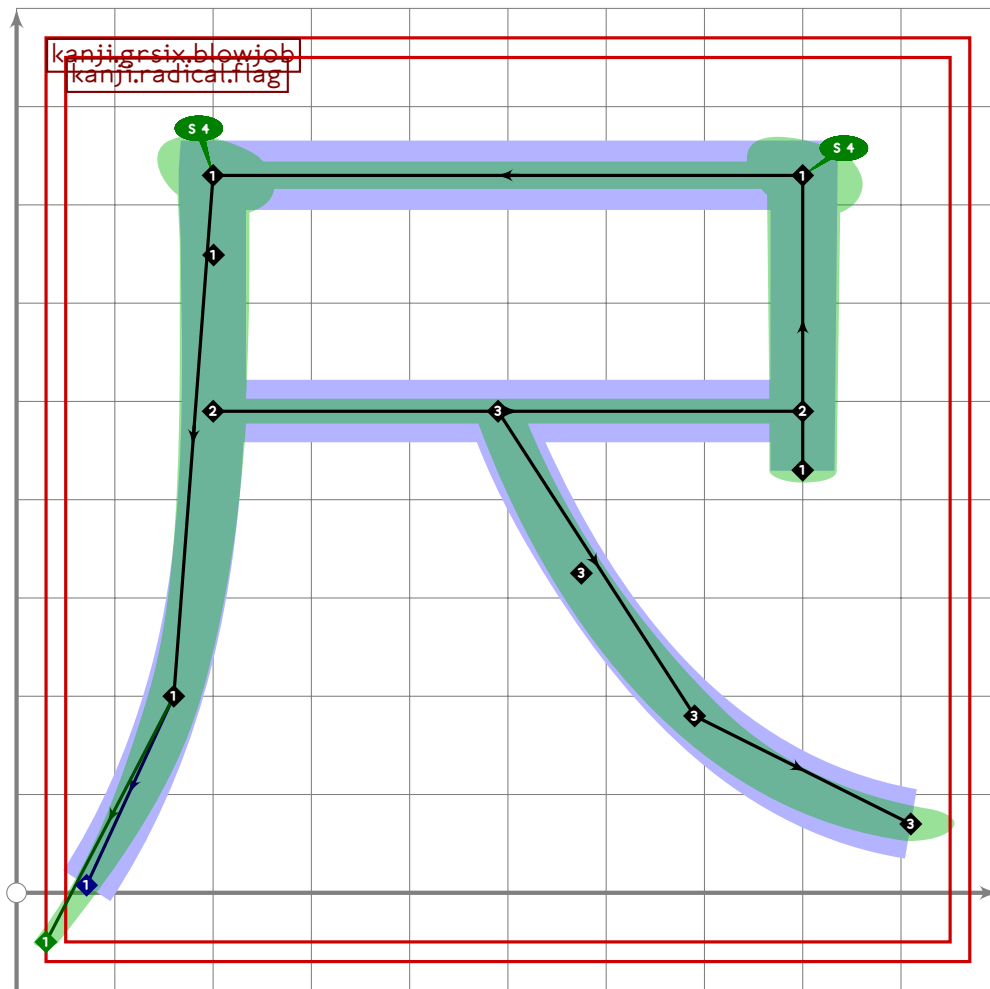
```
30
```

```
31 inclusion_lock(gradesix);
```

```
32
```

```
33
```

```
34
```

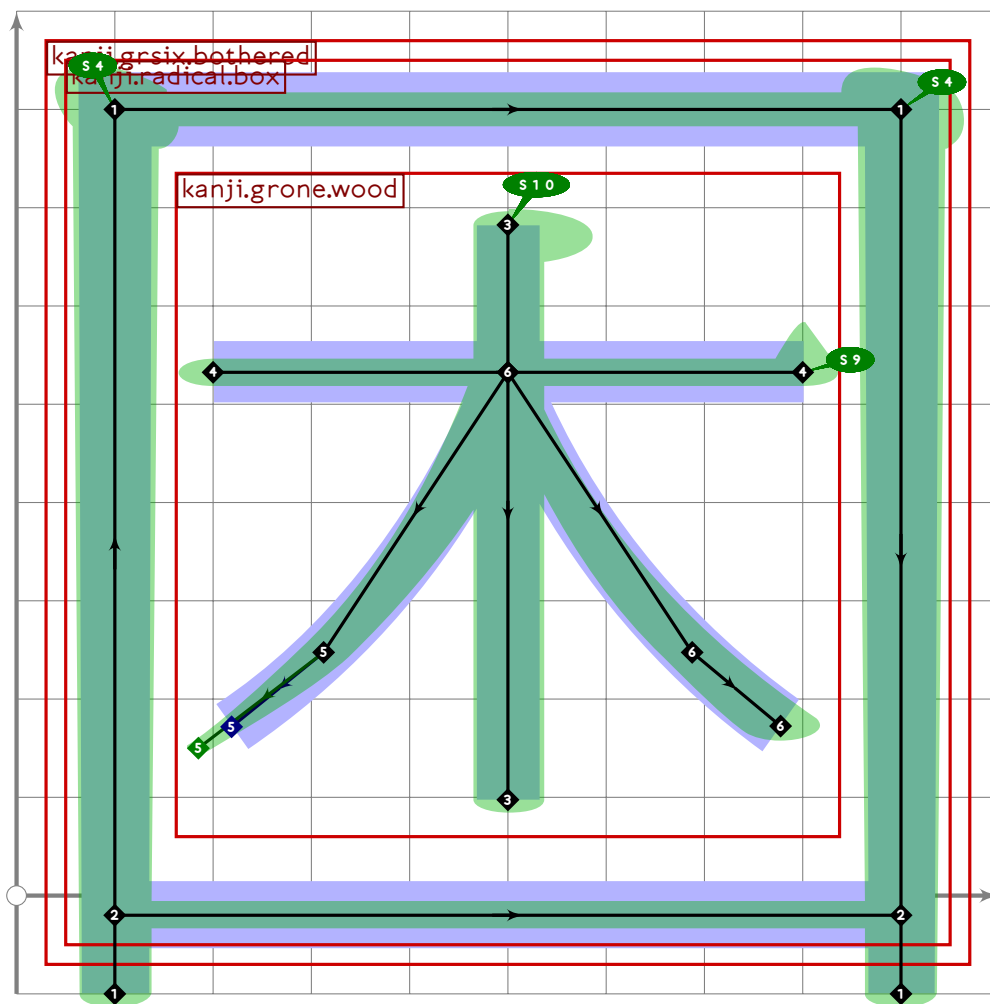


```
35 % the other common word using this kanji is "foot (unit of measure)" but
36 % that is a poor mnemonic because it's ambiguous with "foot (body part)"
```

```
37 vardef kanji.grsix.blowjob =
38   push_pbox_toexpand("kanji.grsix.blowjob");
39   kanji.radical.flag;
40   push_stroke((490,490)..tension 1.2..(690,180)..(910,70),
41     (1.2,1.2)-(14,14)-(17,17));
42   expand_pbox;
43 enddef;
```

SIX

U+56F0
tsuku.uni56F0

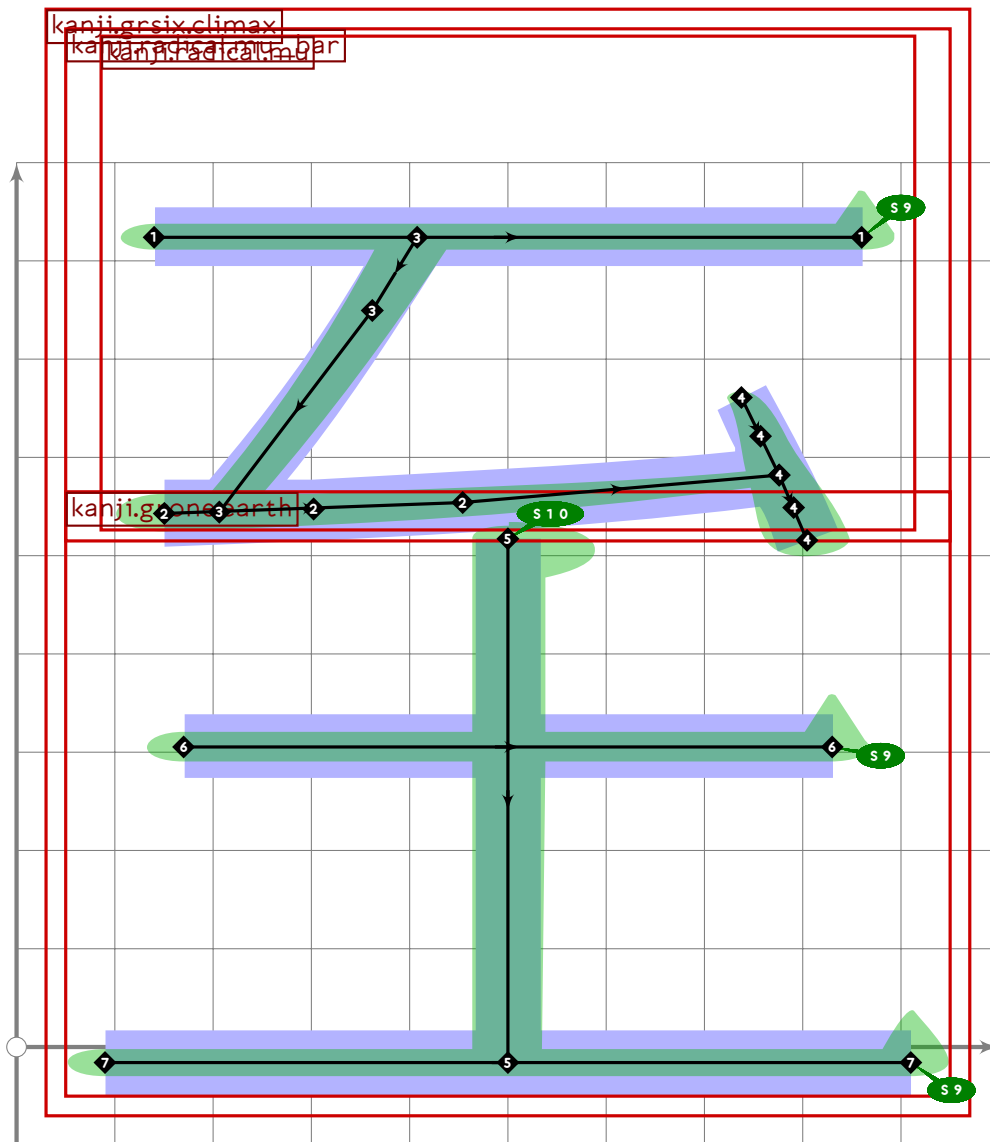


SIX

```

44
45 vardef kanji.grsix.bothered =
46   push_pbox_toexpand("kanji.grsix.bothered");
47   kanji.radical.box;
48   build_kanji.sscale(scaled 0.75)(kanji.grone.wood);
49   expand_pbox;
50 enddef;

```



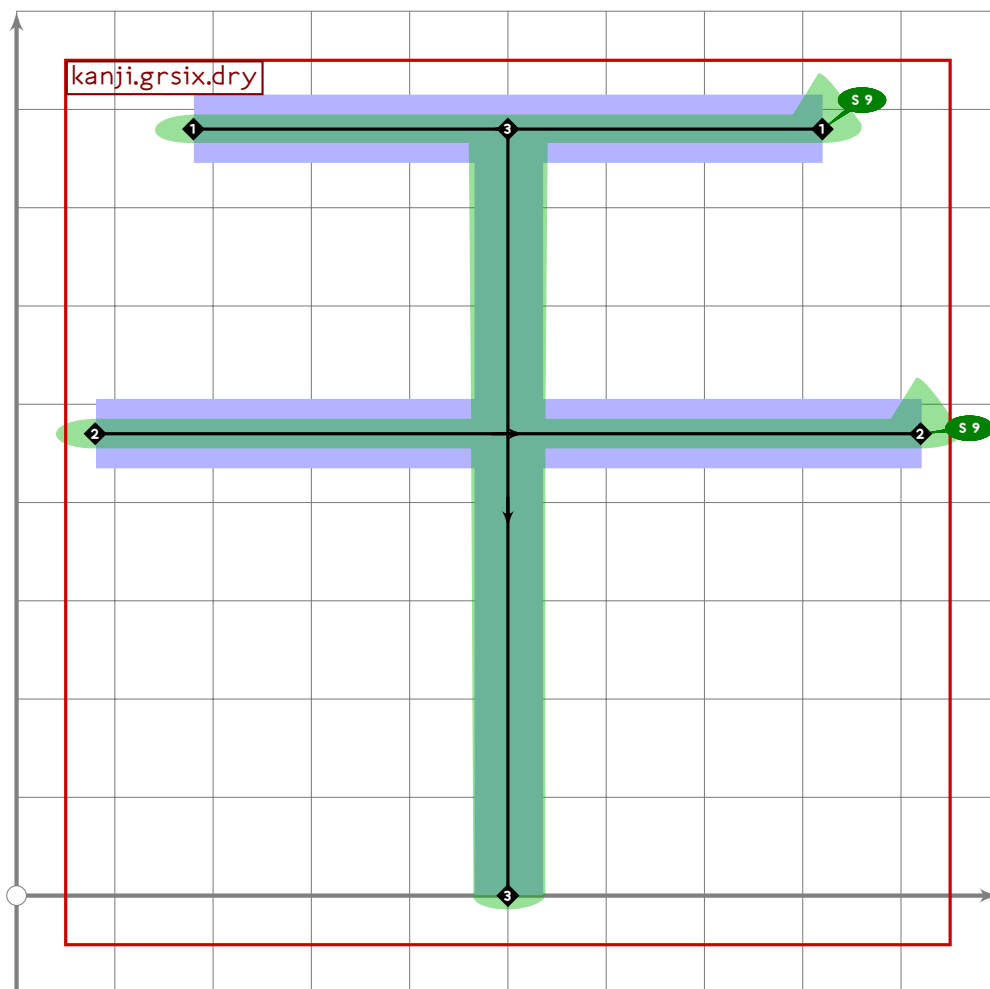
SIX

```

51
52 vardef kanji.grsix.climax =
53   push_pbox_toexpand("kanji.grsix.climax");
54   build_kanji.tb(540,50)
55     (kanji.radical.mu_bar)
56     (kanji.grone.earth);
57   expand_pbox;
58 enddef;

```

U+5E72
tsuku.uni5E72

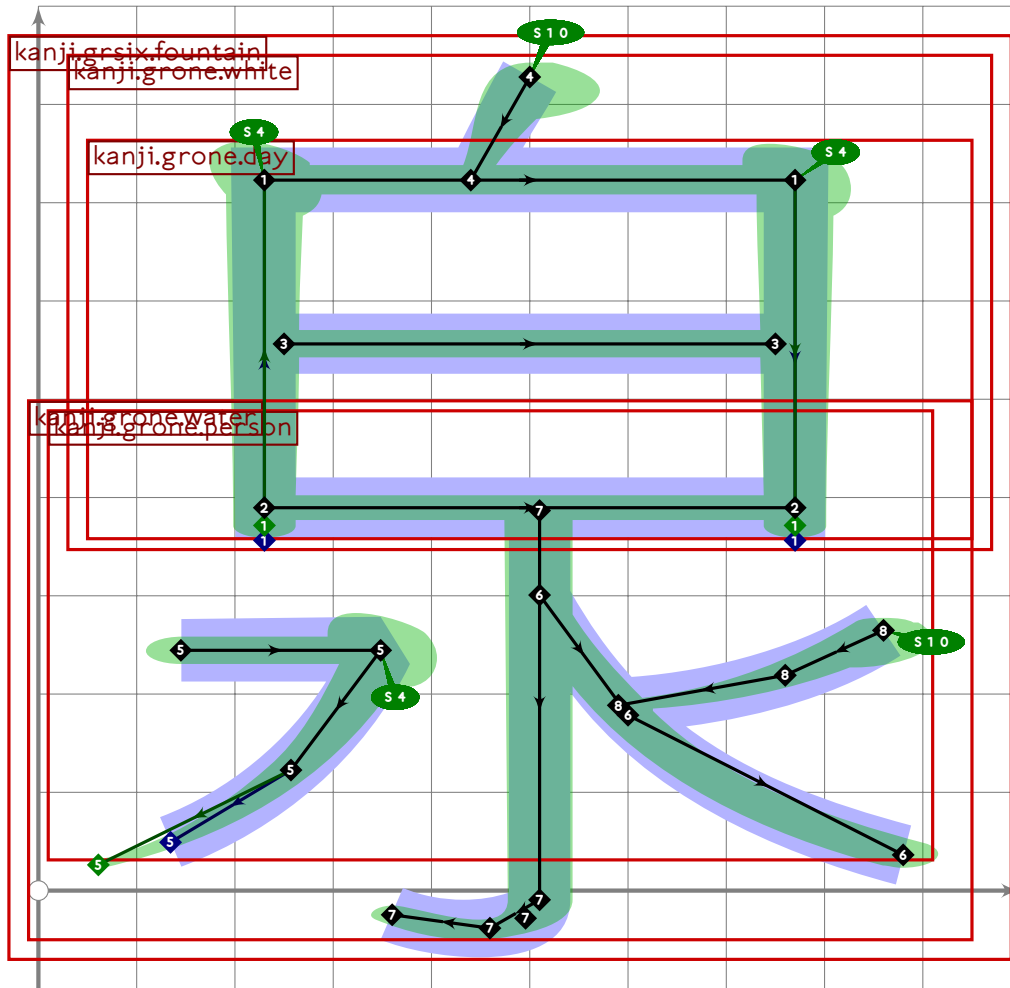


SIX

```

59
60 vardef kanji.grsix.dry =
61   push_pbox_toexpand("kanji.grsix.dry");
62   push_stroke((180,780)–(820,780),
63     (1.6,1.6)–(1.6,1.6));
64   set_boserif(0,1,9);
65   push_stroke((80,470)–(920,470),
66     (1.6,1.6)–(1.6,1.6));
67   set_boserif(0,1,9);
68   push_stroke((500,780)–(500,0),
69     (1.6,1.6)–(1.5,1.5));
70   expand_pbox;
71 enddef;

```



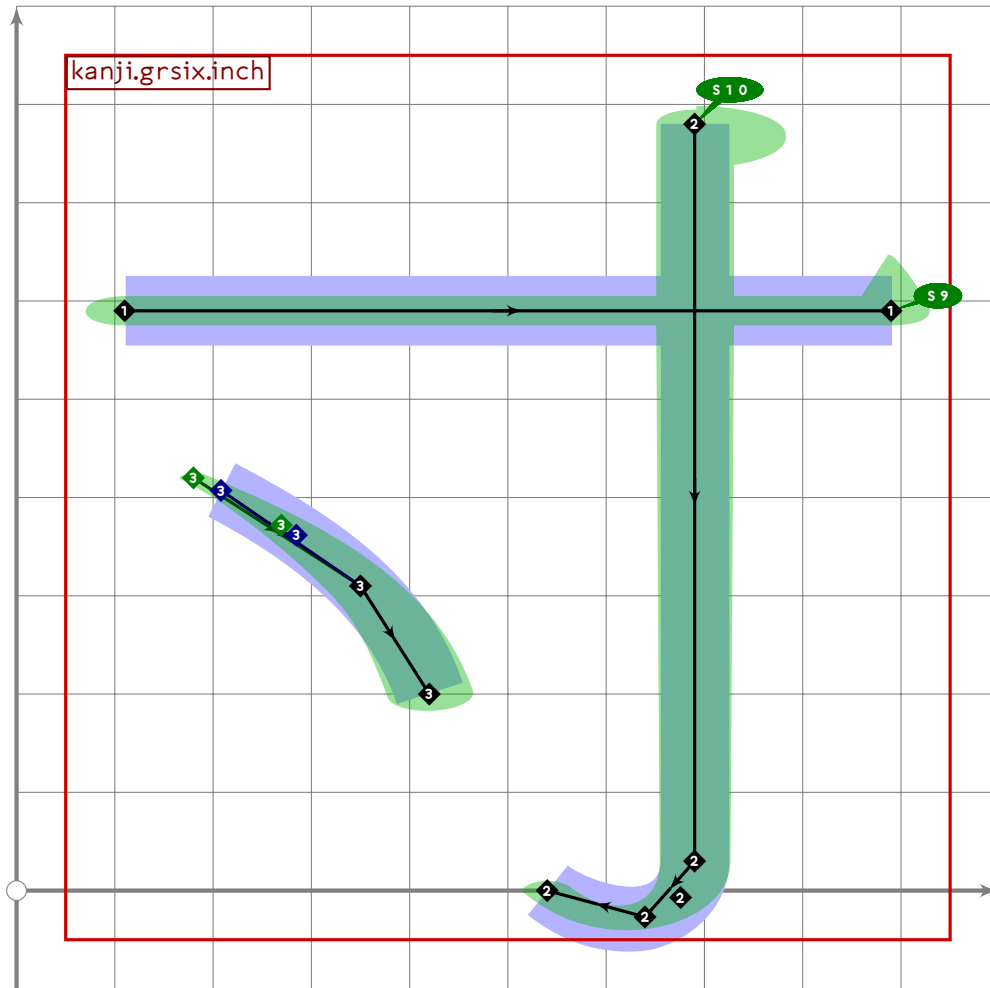
```

72
73 vardef kanji.grsix.fountain =
74   push_pbox__toexpand("kanji.grsix.fountain");
75   build_kanji.level(build_kanji.tb(380,54)
76     (kanji.grone.white)
77     (kanji.grone.water;
78       set_boserif(-1,0,whatever)));
79   expand_pbox;
80 enddef;

```

SIX

U+5BF8
tsuku.uni5BF8

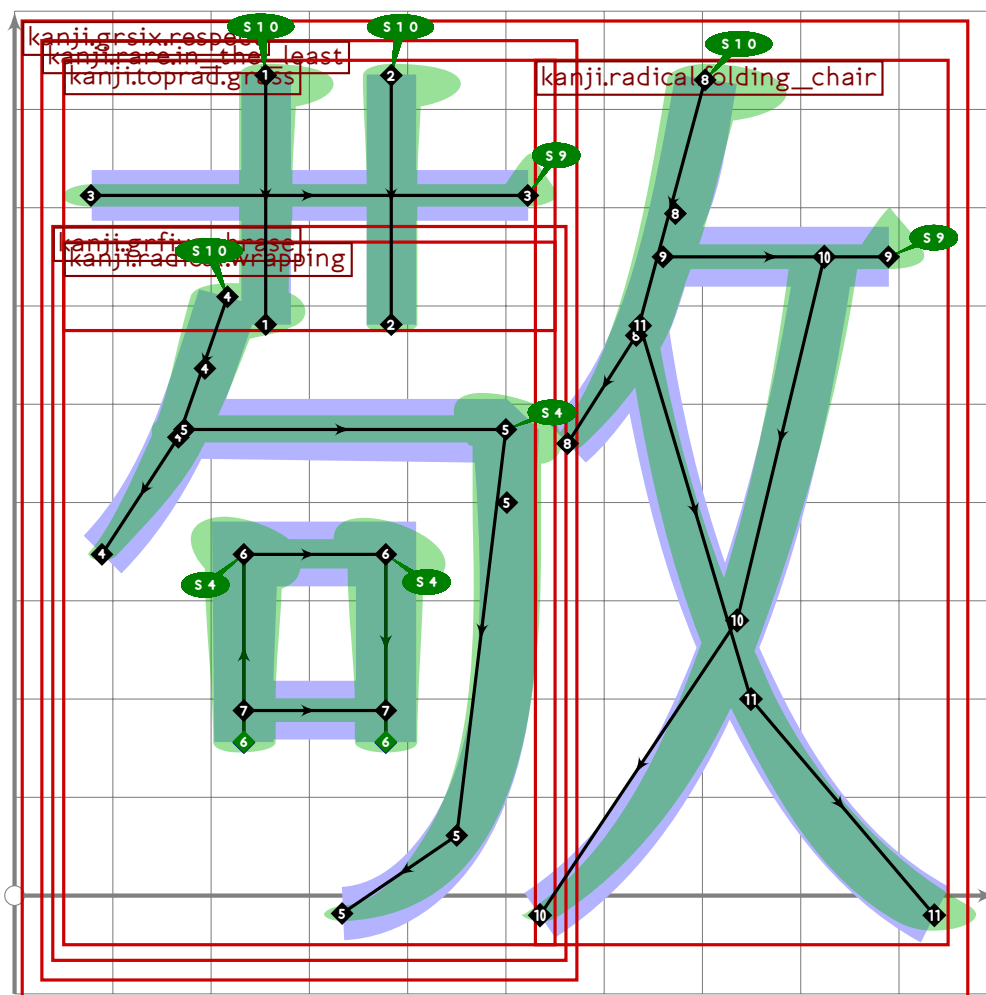


SIX

```

81
82 vardef kanji.grsix.inch =
83   push_pbox_toexpand("kanji.grsix.inch");
84   push_stroke((110,590)–(890,590),(1.6,1.6)–(1.6,1.6));
85   set_boserif(0,1,9);
86   push_stroke((690,780),(1.6,1.6));
87   build_kanji.add_jtail(0);
88   set_boserif(0,0,10);
89   push_stroke((180,420)..tension 1.2..(350,310)..(420,200),
90     (0,0,9)–(1.5,1.5)–(1.7,1.7));
91   expand_pbox;
92 enddef;

```

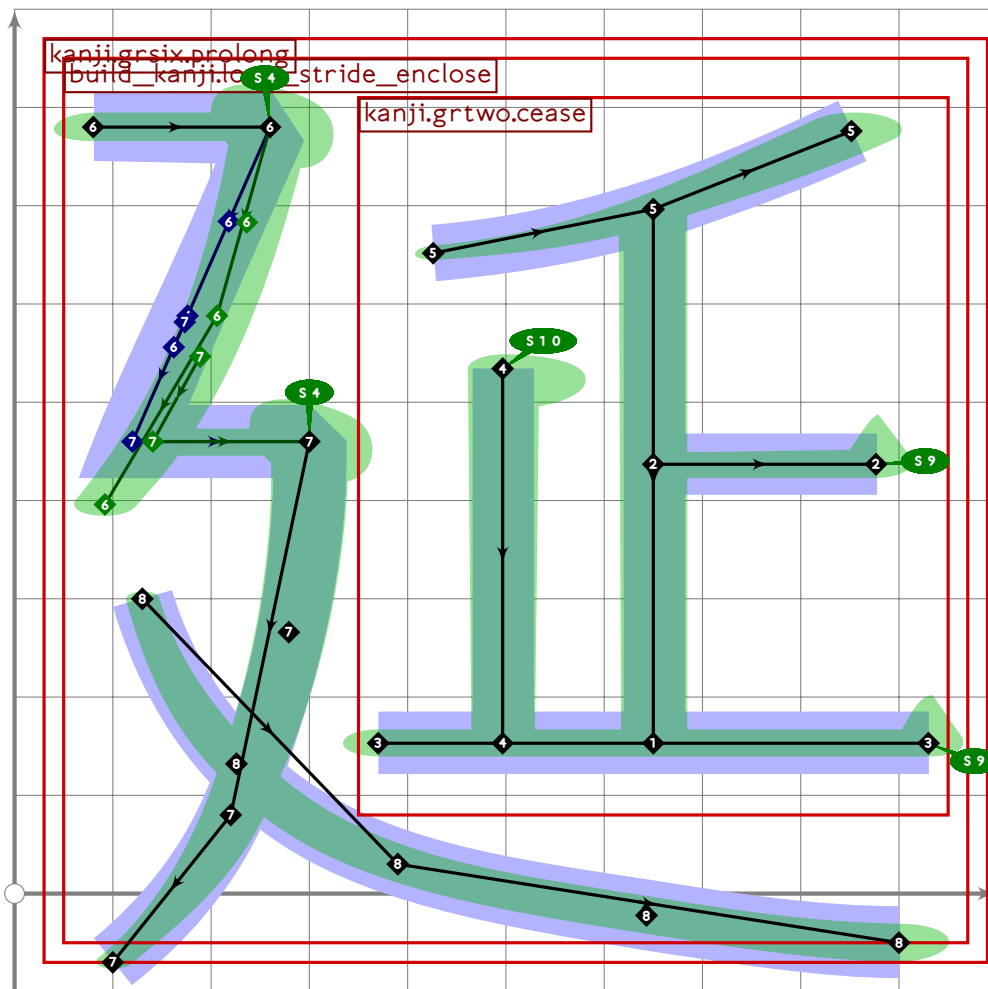
```

93
94 vardef kanji.grsix.respect =
95   push_pbox_toexpand("kanji.grsix.respect");
96   build_kanji.lr(540,20)
97     (kanji.rare.in_the_least)
98     (kanji.radical.folding_chair);
99   expand_pbox;
100 enddef;

```

SIX

U+5EF6
tsuku.uni5EF6

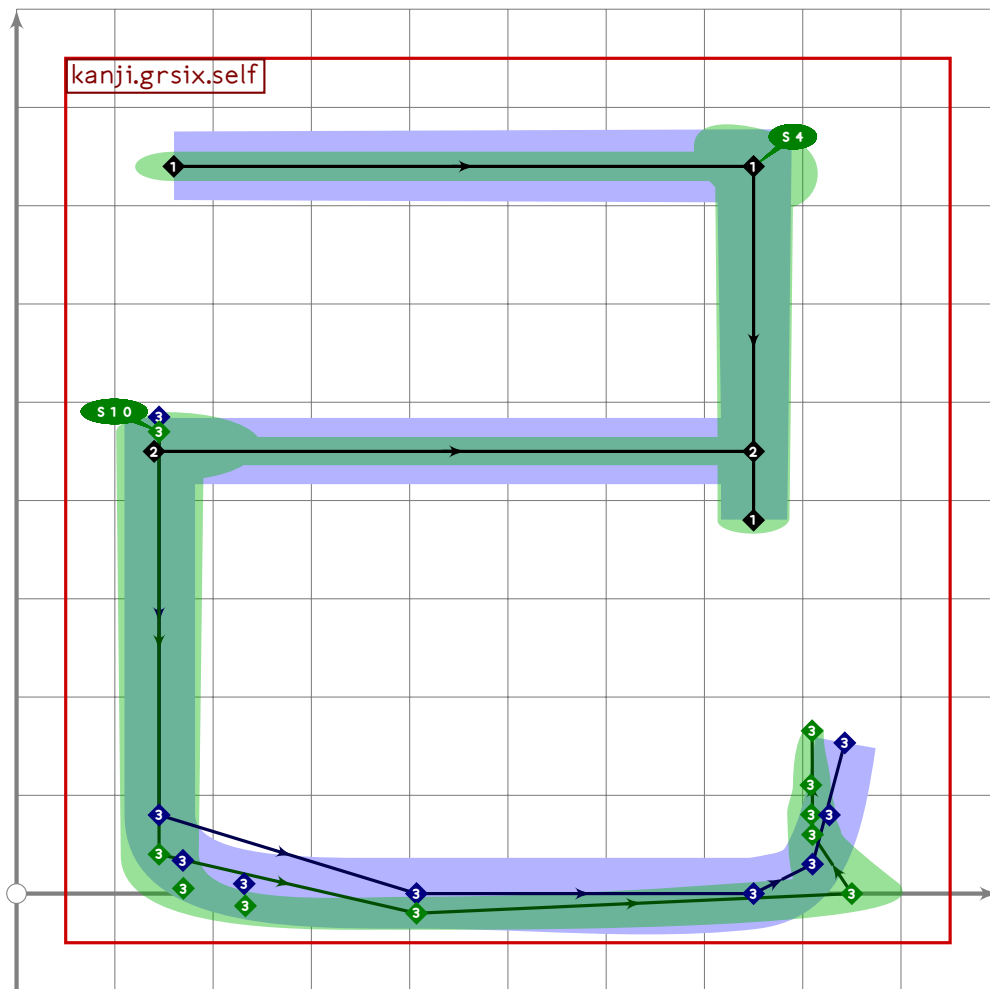


SIX

```

101
102 vardef kanji.grsix.prolong =
103   push_pbox_toexpand("kanji.grsix.prolong");
104   build_kanji.long_stride_enclose(false)
105     (build_kanji.add_beret(kanji.grtwo.cease));
106   expand_pbox;
107 enddef;

```



```

108
109 vardef kanji.grsix.self =
110   push_pbox_toexpand("kanji.grsix.self");
111   push_stroke((160,740)–(750,740)–(750,380),
112     (1.6,1.6)–(1.6,1.6)–(1.5,1.5));
113   set_botip(0,1,1);
114   set_boserif(0,1,4);
115   push_stroke((140,450)–(750,450),
116     (1.5,1.5)–(1.5,1.5));
117   push_stroke((145,485–15*mincho),(1.7,1.7));
118   set_boserif(0,0,10);
119   build_kanji.add_ltail(0);
120   expand_pbox;
121 enddef;

```

SIX