Conscript Creativity with Computer-based Fonts

Britton Watkins

5th Language Creation Conference

Austin, TX, USA

Why go to the trouble?

- 何でそこまで頑張る？
- ᏏᏁᎻᏃ ᎻᏢᏒᏂᏐᏆ
- ᏣᏓᏖᏥᏫᏍᏫ ᏥᏥᏫᏍᏫ ᏧᏂᏚᏩᏫᏍᏫ\:\:
- ᏰᏰᏫ ᏕᏂᏥᏫ ᏣᏢᏫ

Why go to the trouble?

- 何でそこまで頑張る？
- 𑖨𑖸𑖔𑖼 𑖔𑖕𑖟𑖓𑖝𑖞𑖠
- 𑖢𑖟𑖚𑖵𑖫 𑖥𑖪𑖰𑖫 𑖔𑖕𑖟𑖓𑖝𑖞𑖠𑖽
- 𑖦𑖧𑖼 𑖨𑖰𑖬 𑖔𑖕𑖠

GEN

“language”

Re: Talferdrinda — Inbox

From: Jim Hopkins
Subject: Re: Talferdrinda
Date: December 20, 2011 1:48:52 PM PST
To: Briht'uhn
Cc: Tony Harris

Hide

ꓷꓢꓥꓤꓥ ꓶꓣꓭꓵ ꓶꓤꓠ ꓶꓶꓢꓵ:

ꓫꓤꓶ ꓠ ꓶꓫ ꓶꓣꓭꓵ ꓶꓶꓢꓵ ꓤꓵꓶꓣꓠꓠ ꓶꓶꓢꓵ ꓶꓶꓢꓵ ꓶꓶꓢꓵ

Why go to the trouble?

TAN

“gift”

ABCDEFG

ABCDEFG

ABCDEFG

ABCDEFG

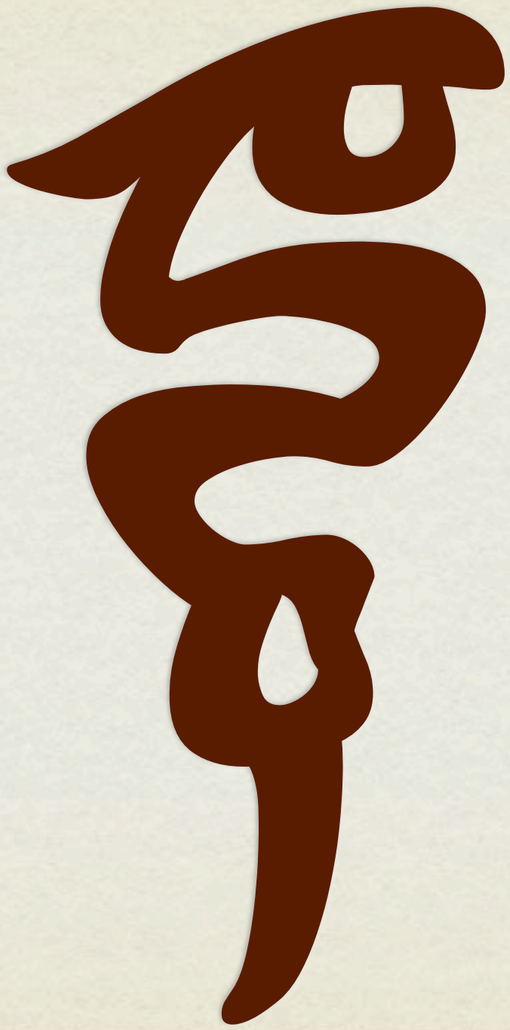
abcdefg

abcdefg

abcdefg

abcdefg

Why go to the trouble?



KATRA

“soul”

Why go to the trouble?

SOCHYA

“serenity”

ابتدائی حالت : ہاتھ پاؤں کو
حرکت دیتے ہوئے
ہاتھ پاؤں کو حرکت دینا

Why go to the trouble?

TANGU

“ideal”

SENN

http://vimeo.com/sennition/lcc5

Click the link above to view video on Vimeo.

ہمارے ملک کا آئین ہمیں
مساوی حقوق دیتا ہے

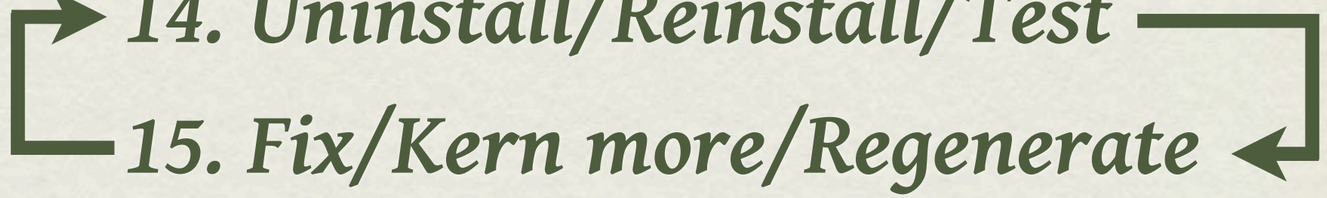
ਸ਼ੁਰੂਆਤ ਕਰੋ

ਸ਼ੁਰੂਆਤ ਕਰੋ

ਸ਼ੁਰੂਆਤ ਕਰੋ

How?

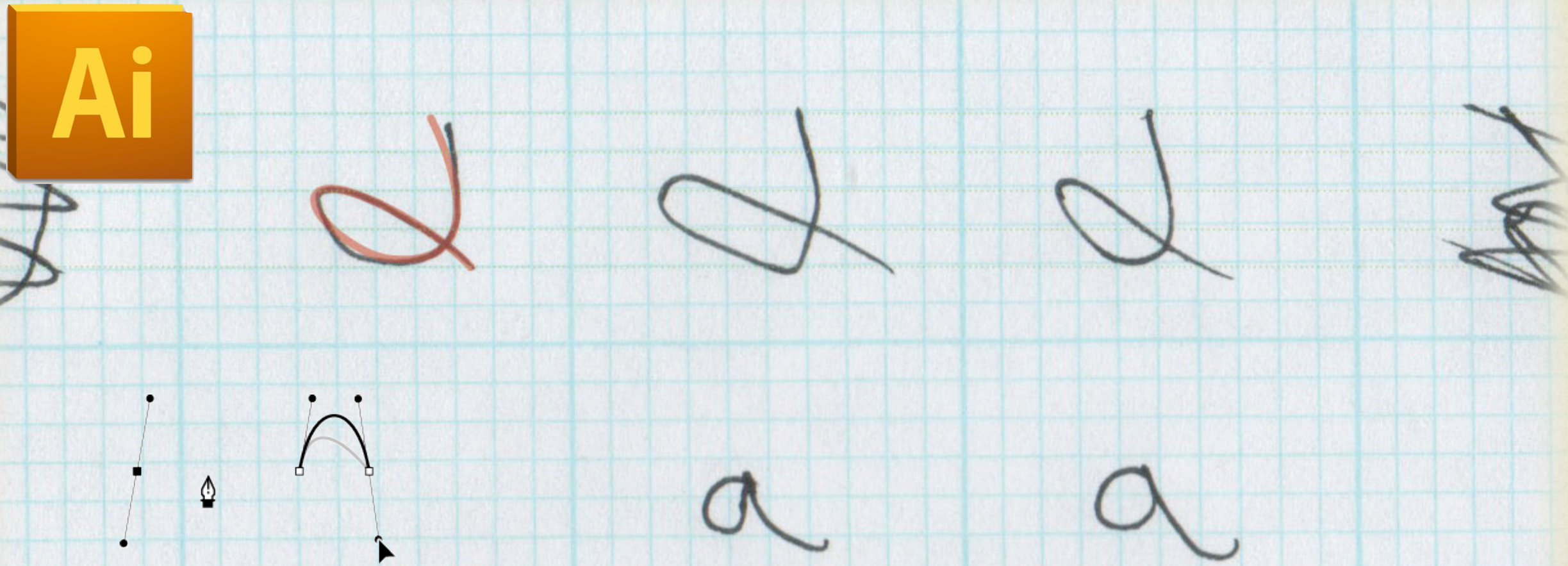
1. Design/Sketch
2. Draw
3. Normalize
4. Outline
5. Map
6. Port
7. Align & Space
8. Kern
9. Generate
10. Install/Test
11. Kern some more
12. Create punctuation, etc.
13. Regenerate
14. Uninstall/Reinstall/Test
15. Fix/Kern more/Regenerate
16. Finalize version
17. Revisit & return to step 15
18. Make other versions



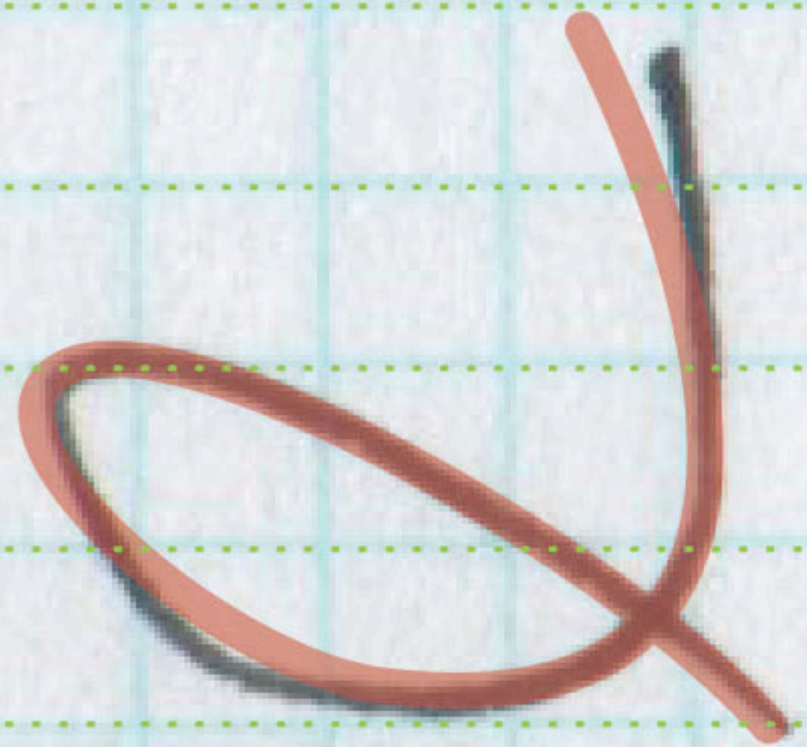
Design/Sketch

ᥒ	ᥒ	ᥒ	ᥒ	ᥒ	ᥒ	ᥒ	ᥒ	
	a	a				á	á	
ᥐ	ᥐ	ᥐ	ᥐ	ᥐ	ᥐ	ᥐ	ᥐ	ᥐ
	â	â	ᥐ	ä	ä		à	à
ᥕ	ᥕ	ᥕ	ᥕ	ᥕ	ᥕ	ᥕ	ᥕ	ᥕ

Draw in a way that generates vector-based artwork.



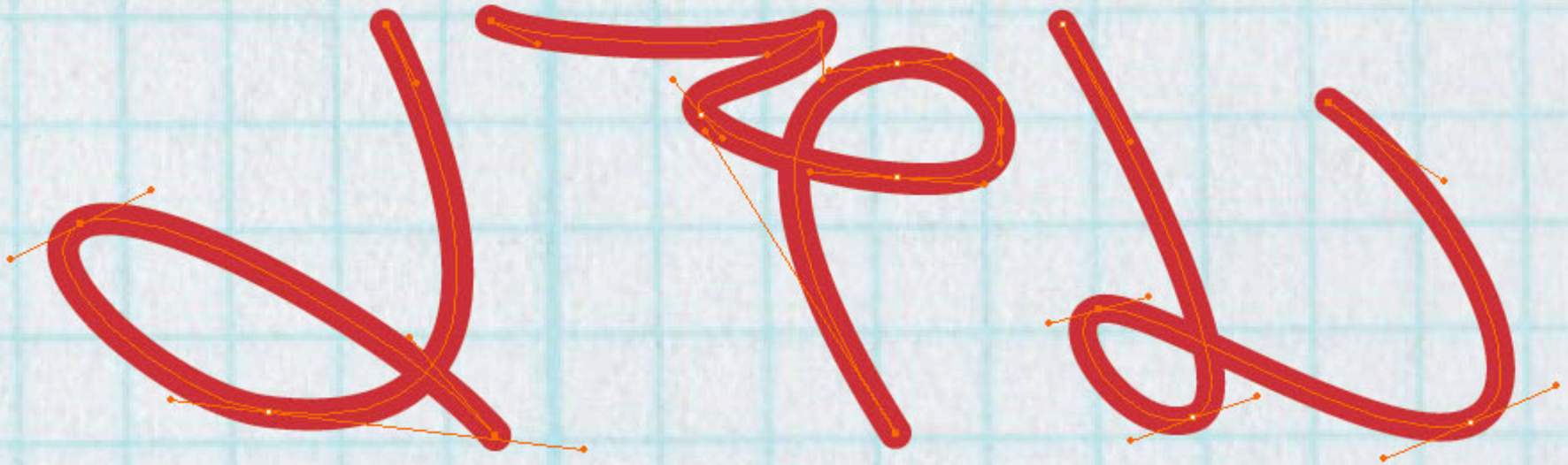
Draw in a way that generates vector-based artwork.



traced over a scanned image

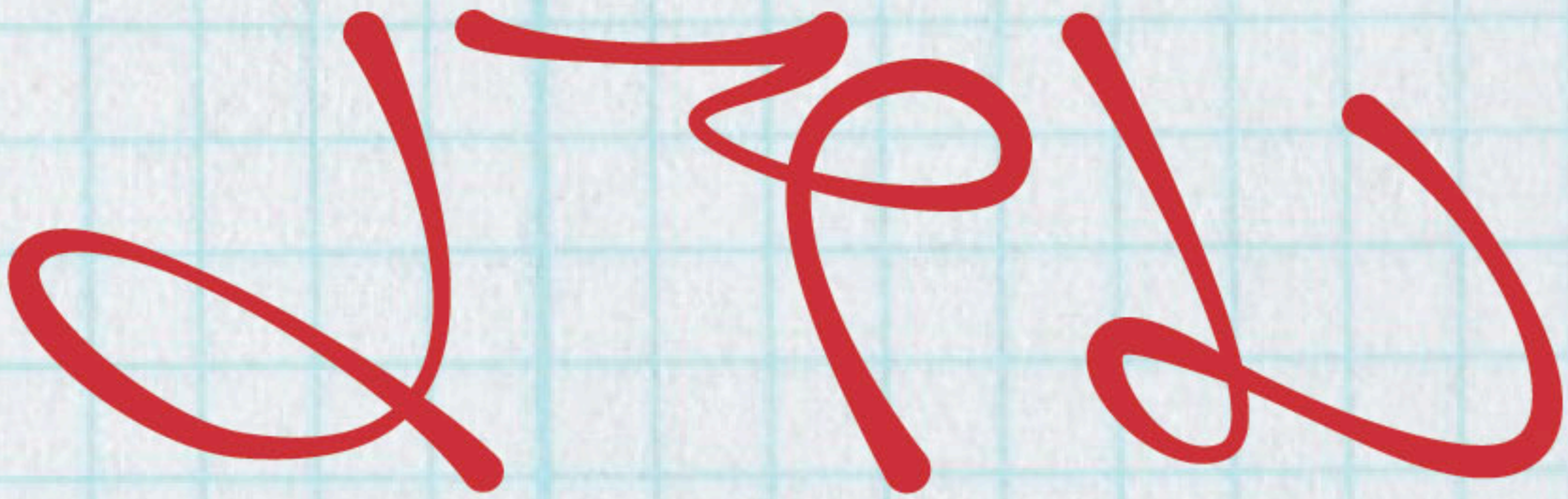
Normalize

Make sure every symbol looks ‘related’ to the others.



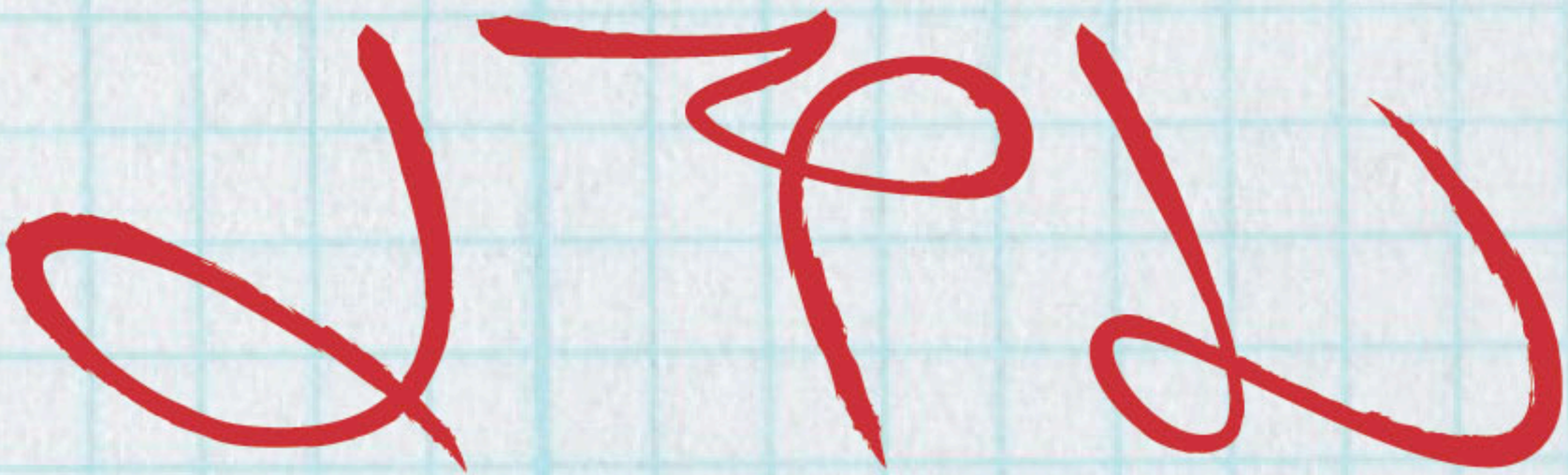
Normalize

Make sure every symbol looks ‘related’ to the others.



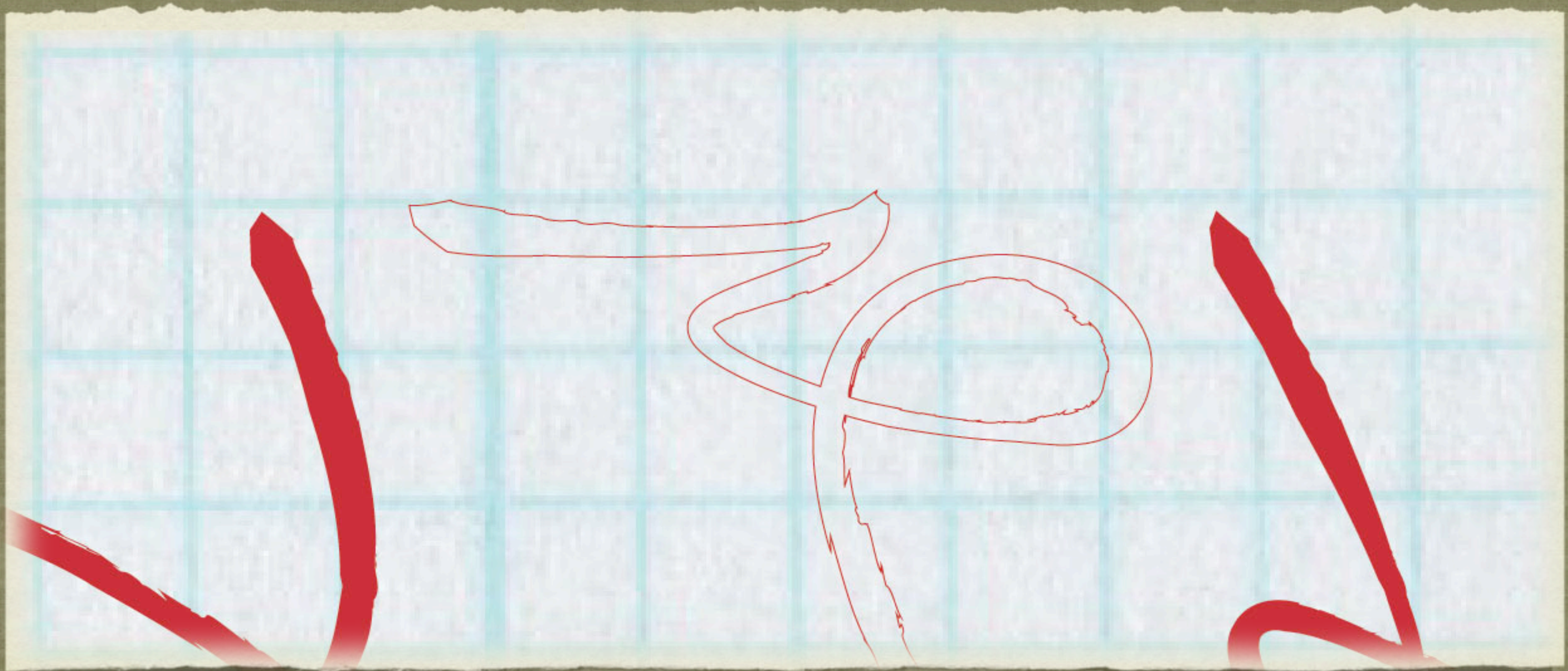
Normalize

Make sure every symbol looks ‘related’ to the others.



Outline

Simply put, fonts are outlines filled with black.



Outline

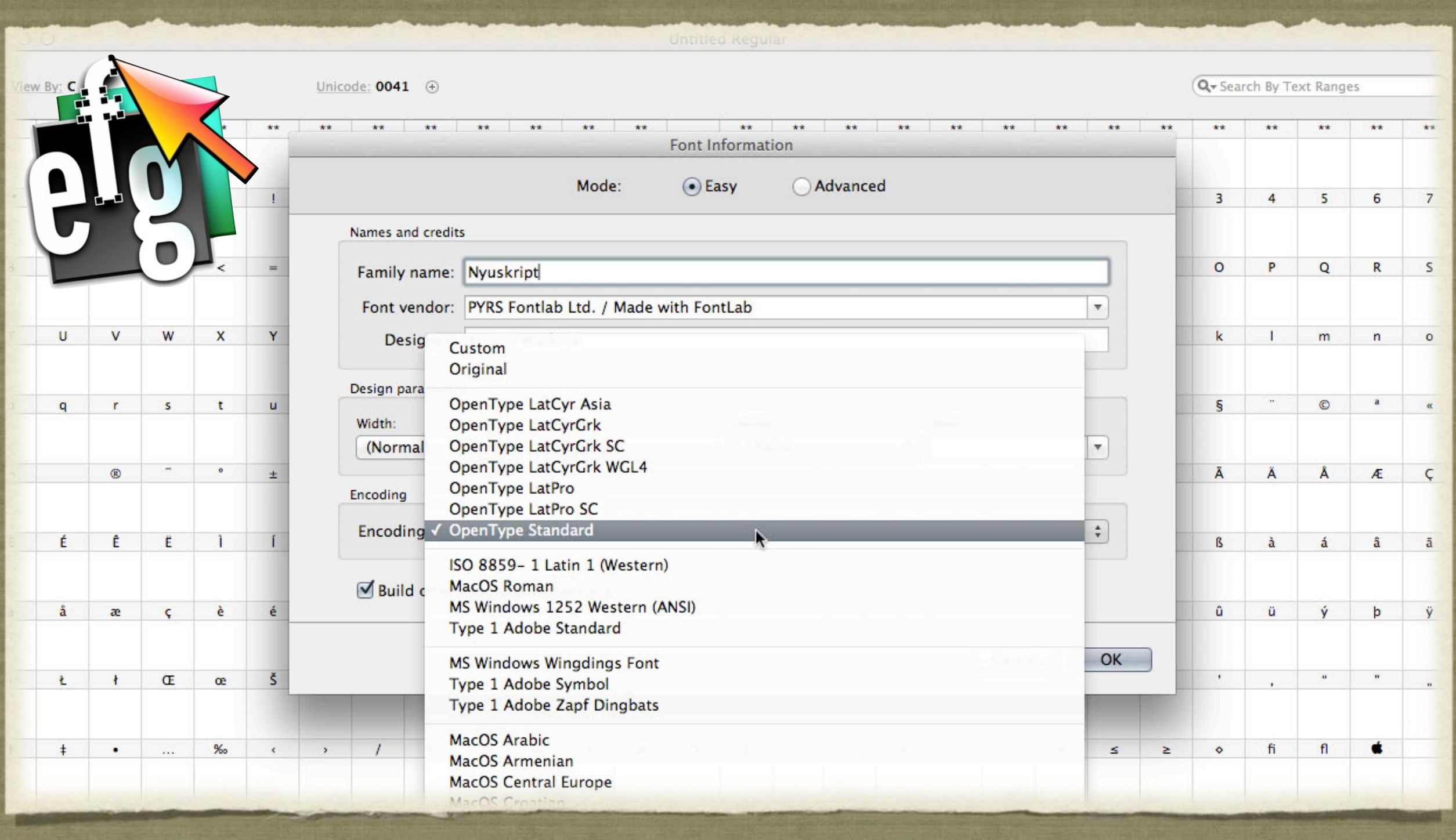
Cleaner paths early lead to fewer tears later.

Map

/a/ = ㅗ = ?

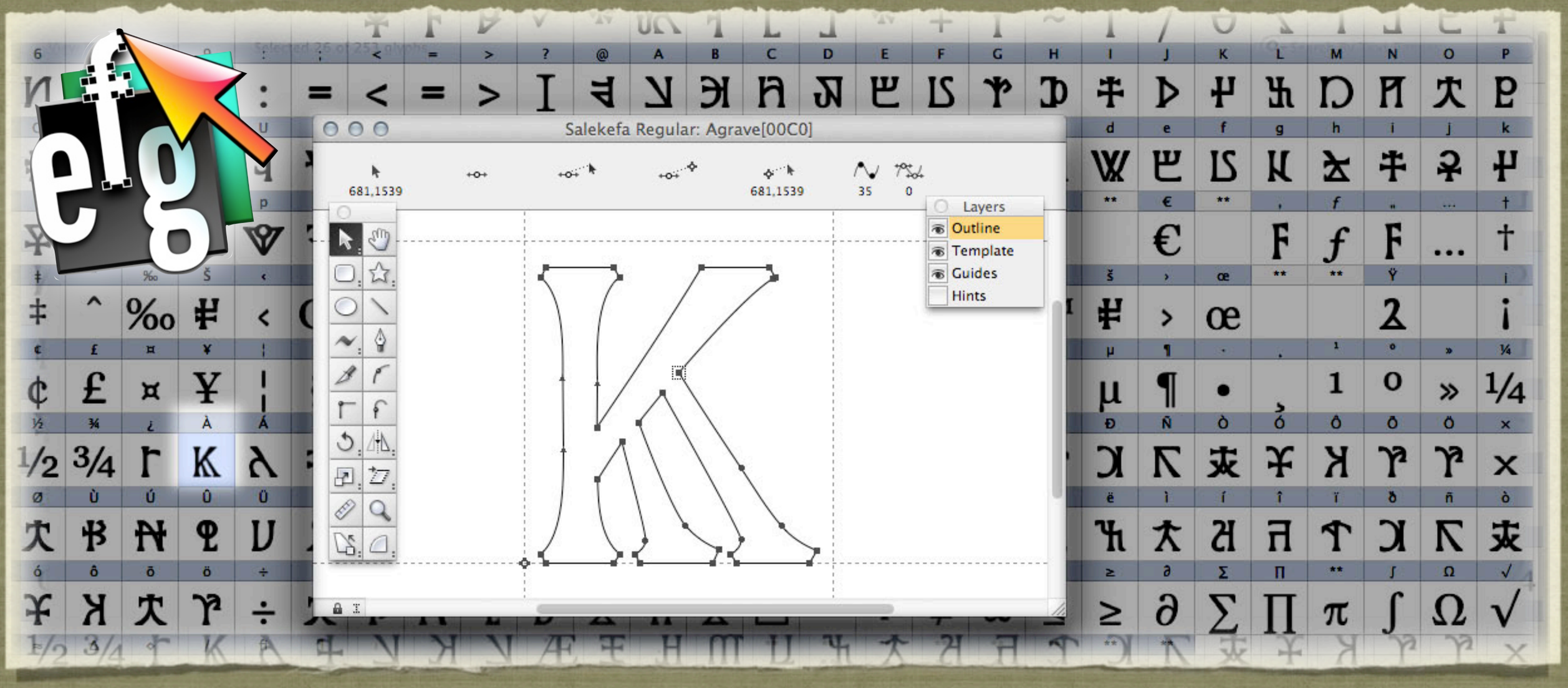
/b/ = ㅂ = ?

sound *symbol* *key(stroke)*


Untitled Regular
Unicode: 0041
Search By Text Ranges
Font Information
Mode:
Easy
Advanced
Names and credits
Family name:
Nyuskript
Font vendor:
PYRS Fontlab Ltd. / Made with FontLab
Design para
Width:
Encoding
Encoding
Custom
Original
OpenType LatCyr Asia
OpenType LatCyrGrk
OpenType LatCyrGrk SC
OpenType LatCyrGrk WGL4
OpenType LatPro
OpenType LatPro SC
OpenType Standard
ISO 8859- 1 Latin 1 (Western)
MacOS Roman
MS Windows 1252 Western (ANSI)
Type 1 Adobe Standard
MS Windows Wingdings Font
Type 1 Adobe Symbol
Type 1 Adobe Zapf Dingbats
MacOS Arabic
MacOS Armenian
MacOS Central Europe
OK

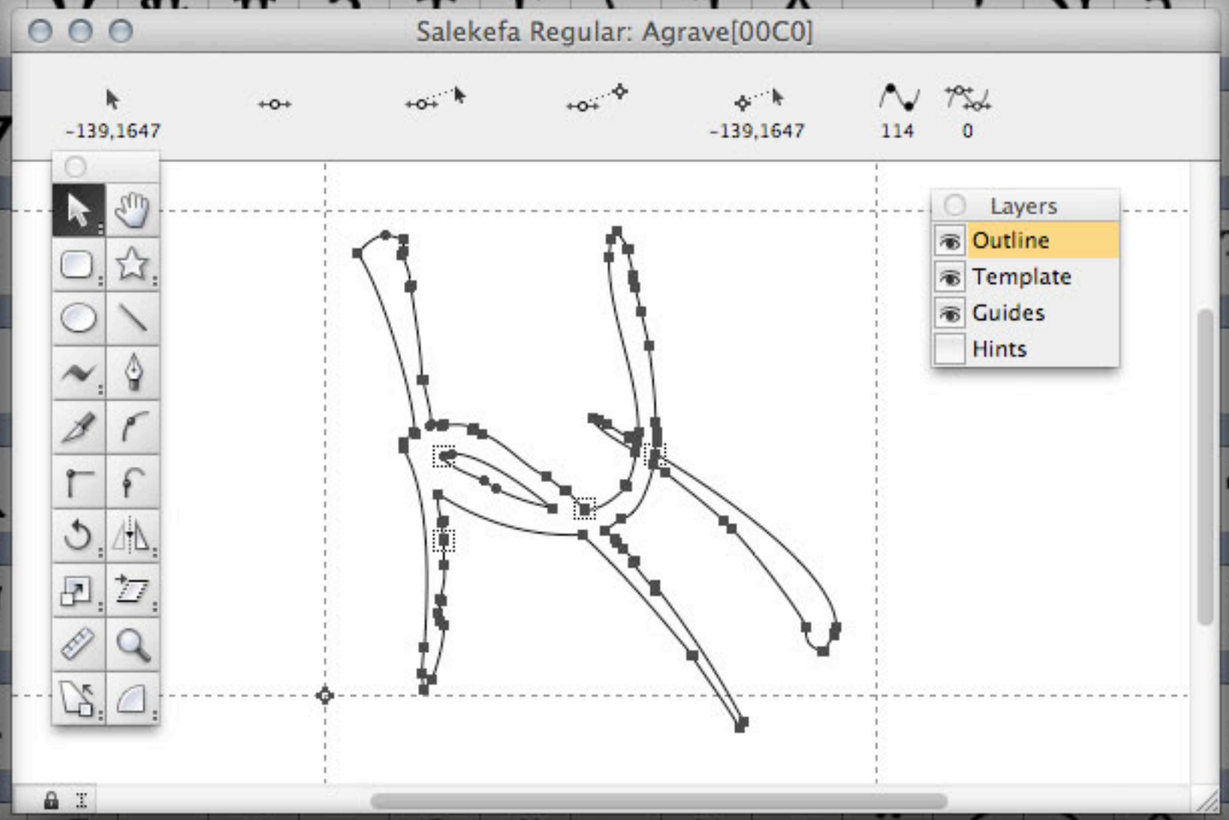
Map

Figure this out in your font-building software.



Map

All typefaces in system should be mapped the same way.



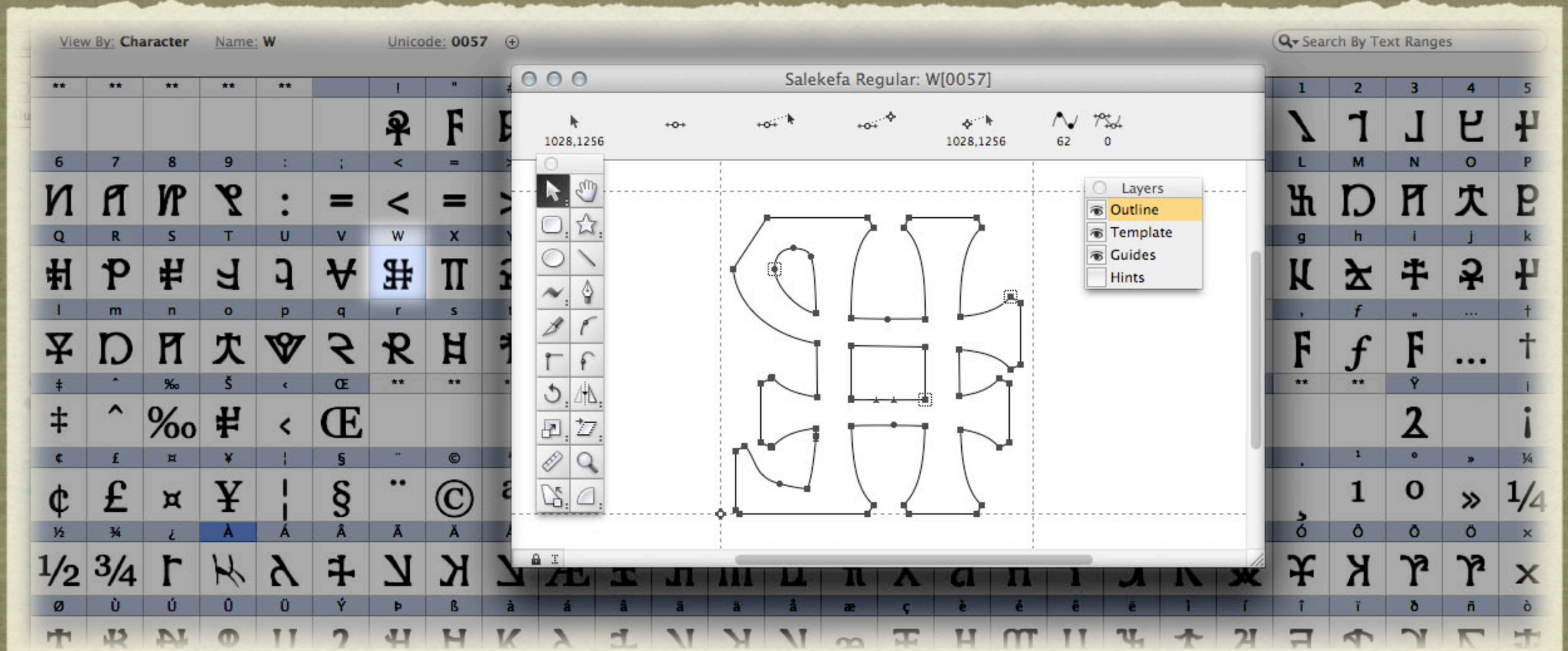
Map

if[**shth**]or[**SHTH**] ››› “shth” ⌘

(Requires careful coding skills & immaculate planning and organization.)

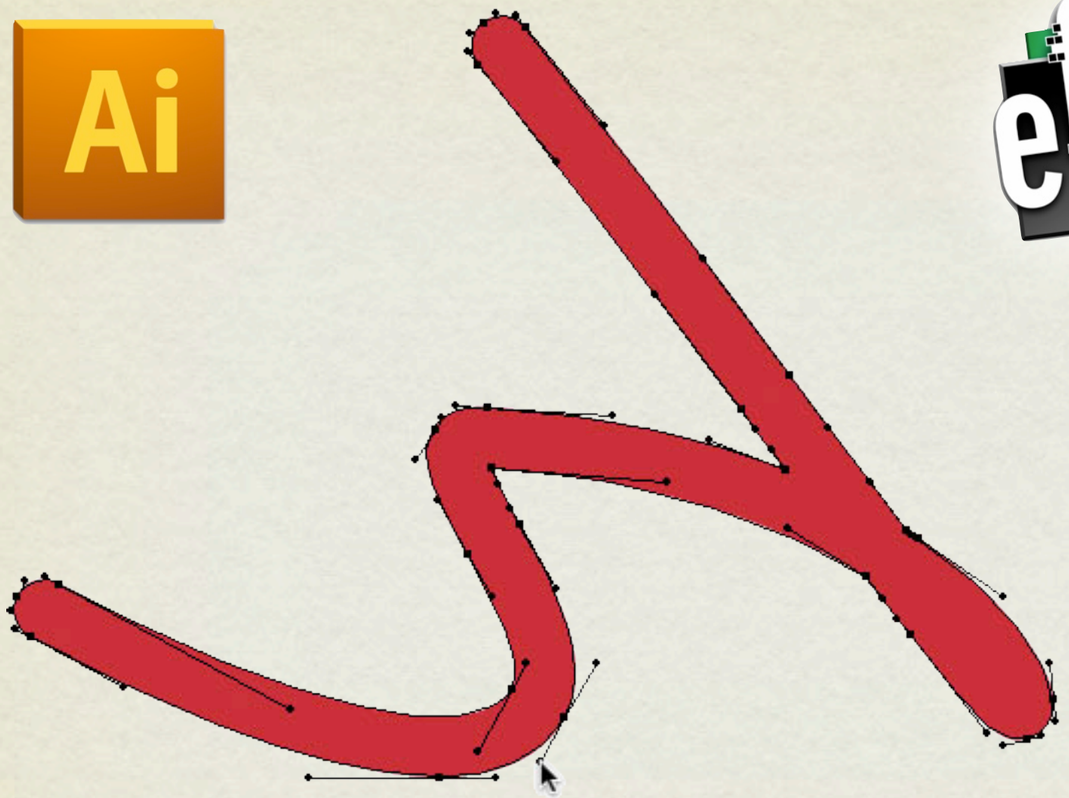
“W” = “shth” ⌘ “w” = ⅁

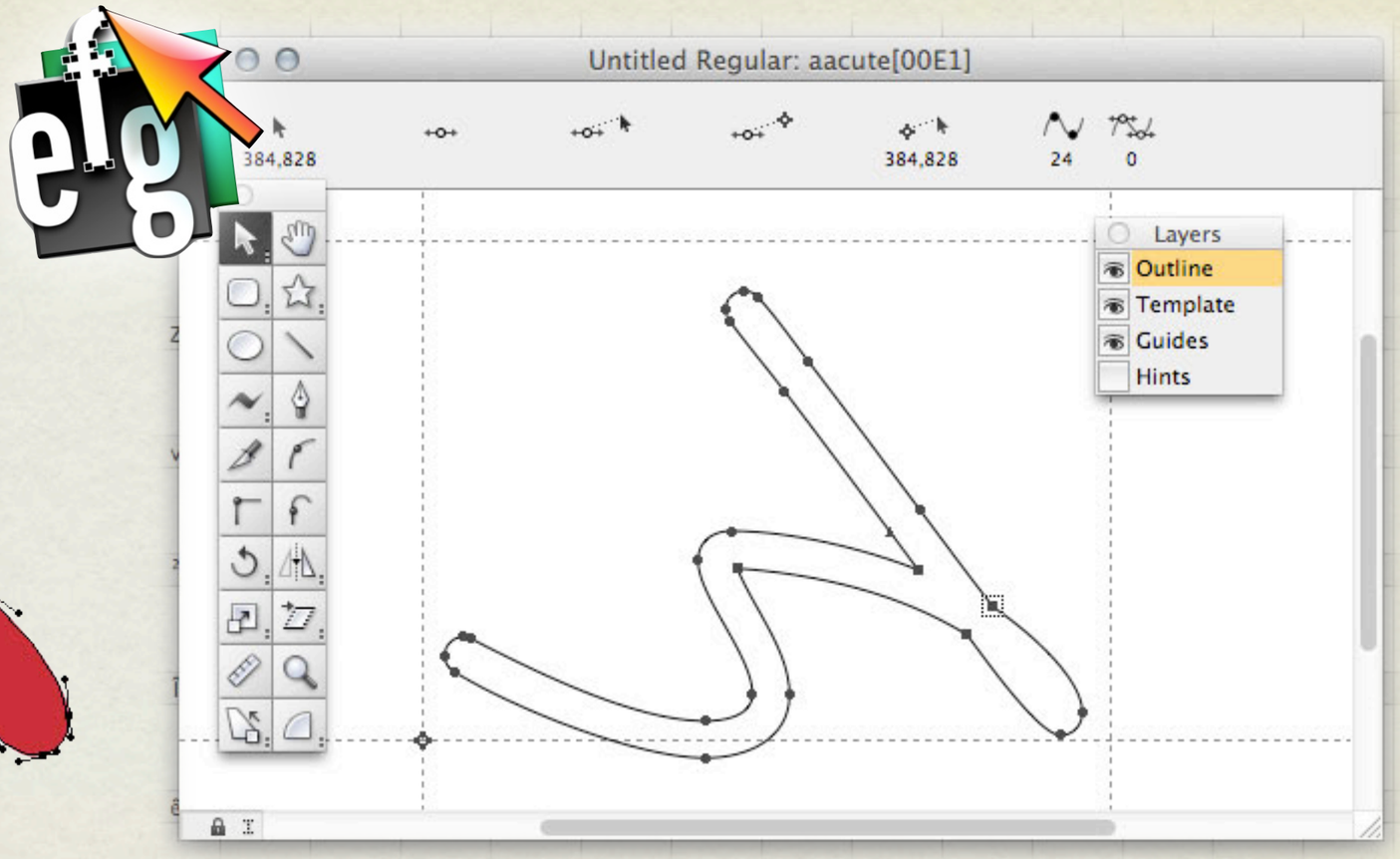
(Requires patience when typing with the font.)



Port

All symbols rendered as outlined artwork become ‘glyphs’.

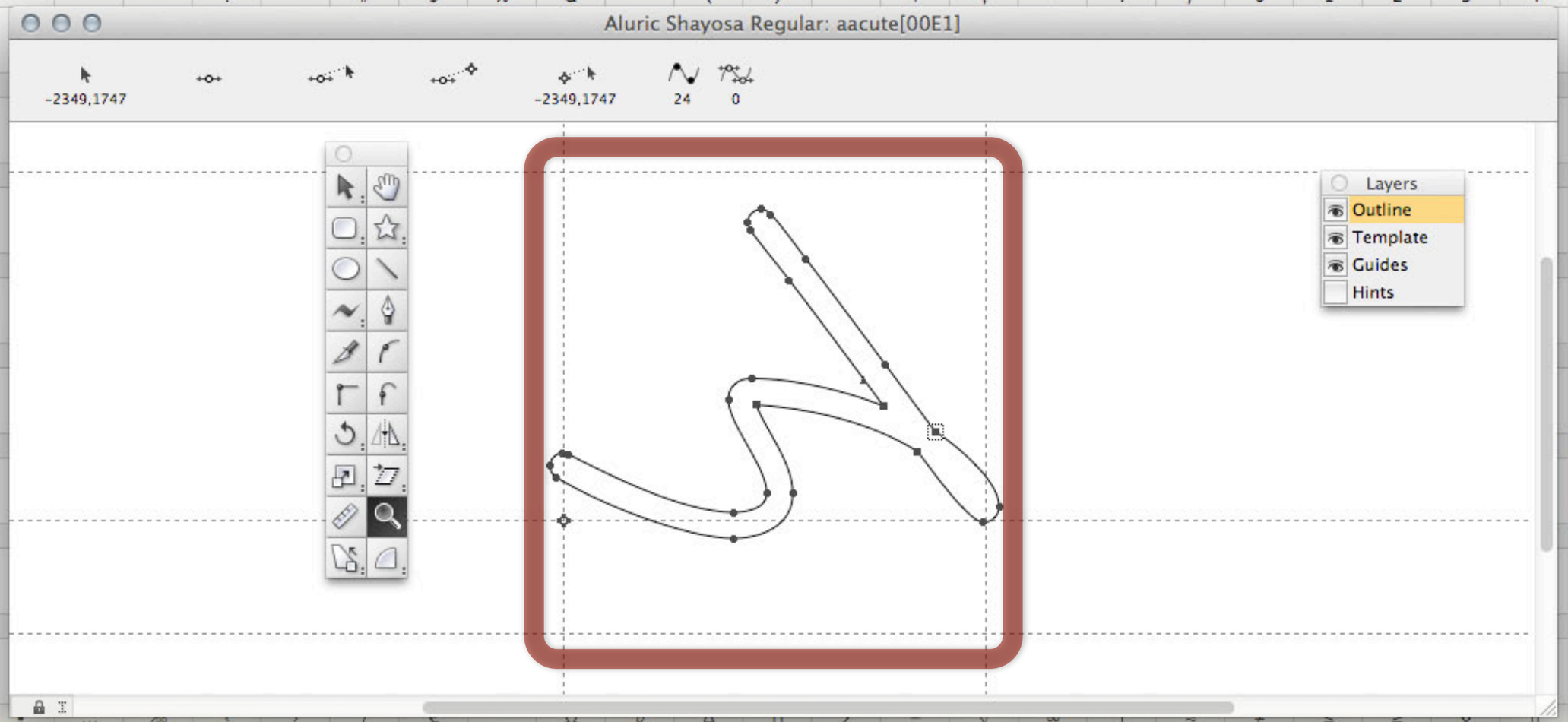




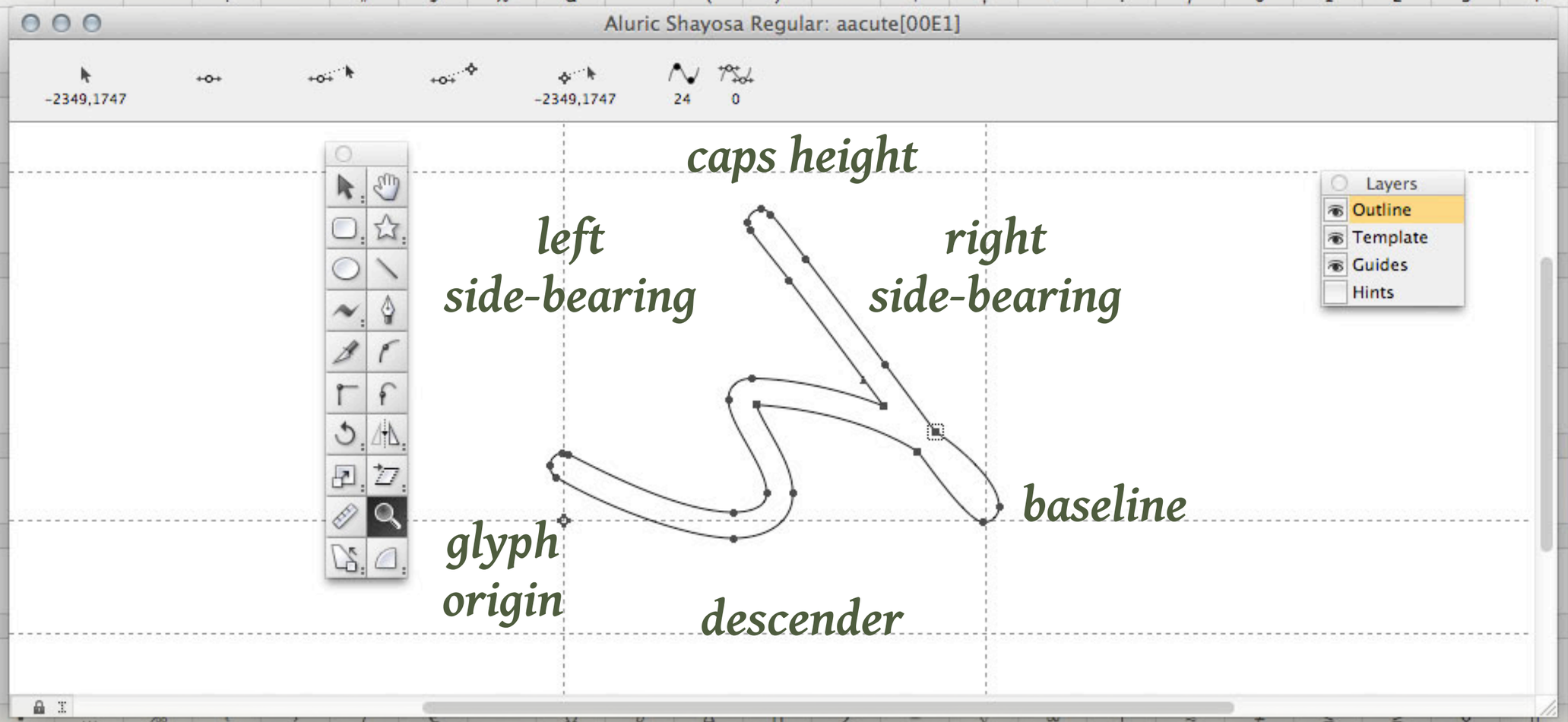
“artwork” *››› a matter of semantics ›››* *“glyph”*

Align & Space

All glyphs live in a 2D “cage”.

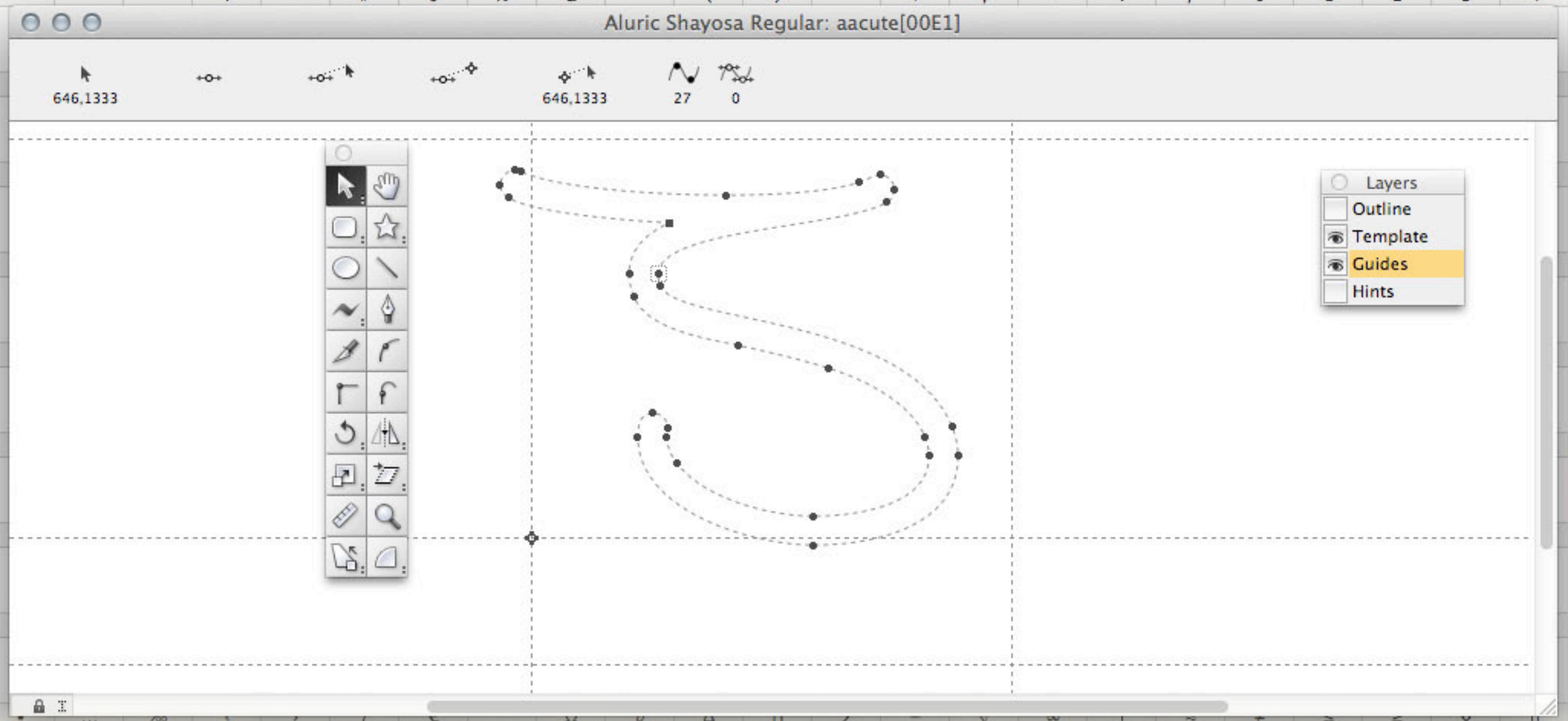


Align & Space


Aluric Shayosa Regular: aacute[00E1]
-2349,1747
-2349,1747
24
0
caps height
left
side-bearing
right
side-bearing
baseline
glyph
origin
descender
Layers
Outline
Template
Guides
Hints

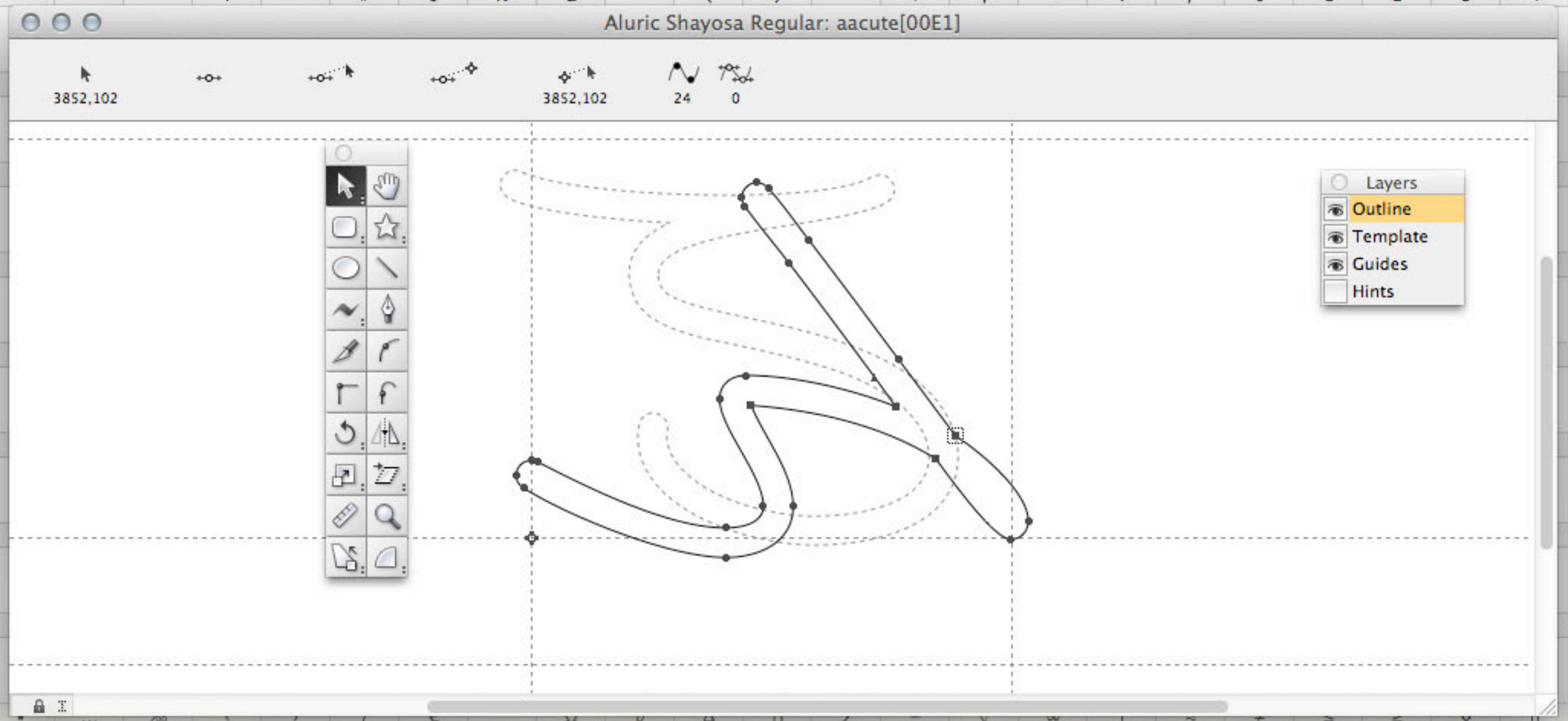
Align & Space

Almost anything can function as a guide.



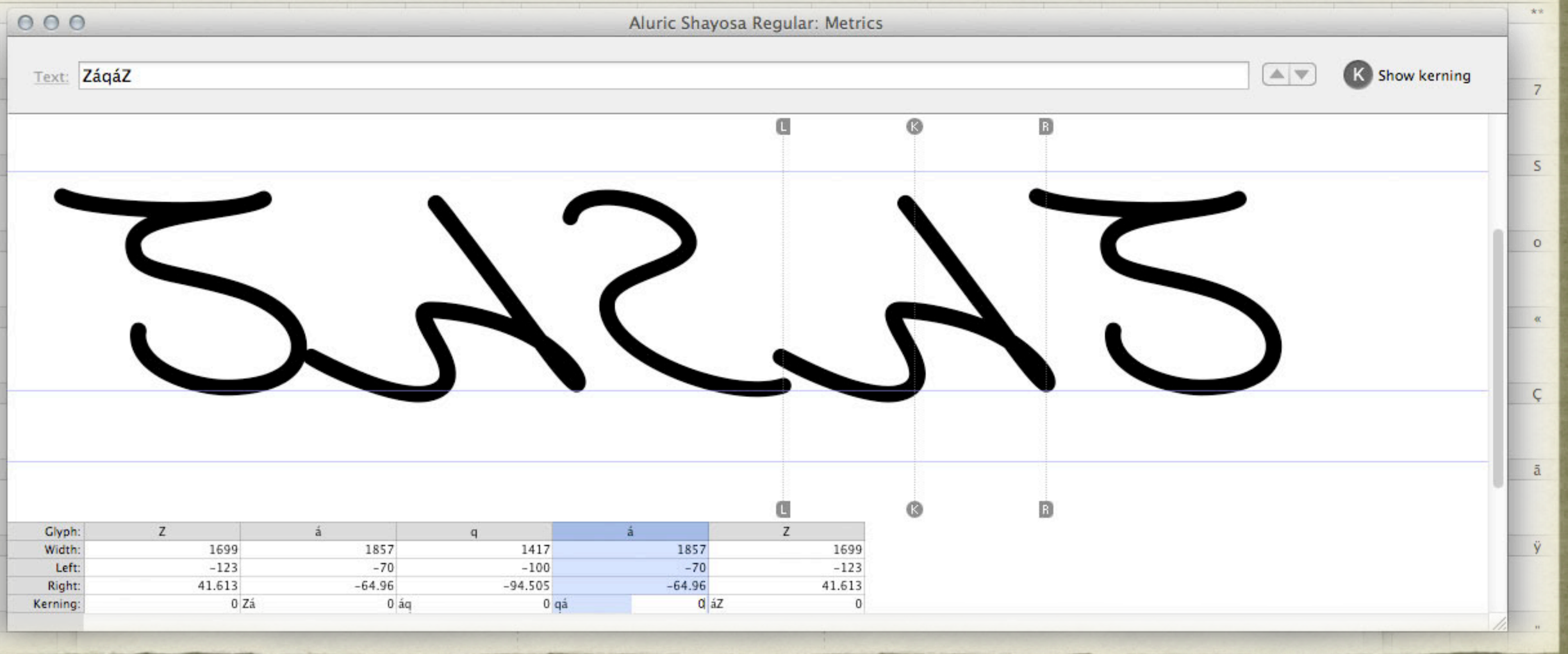
Align & Space

Almost anything can function as a guide.



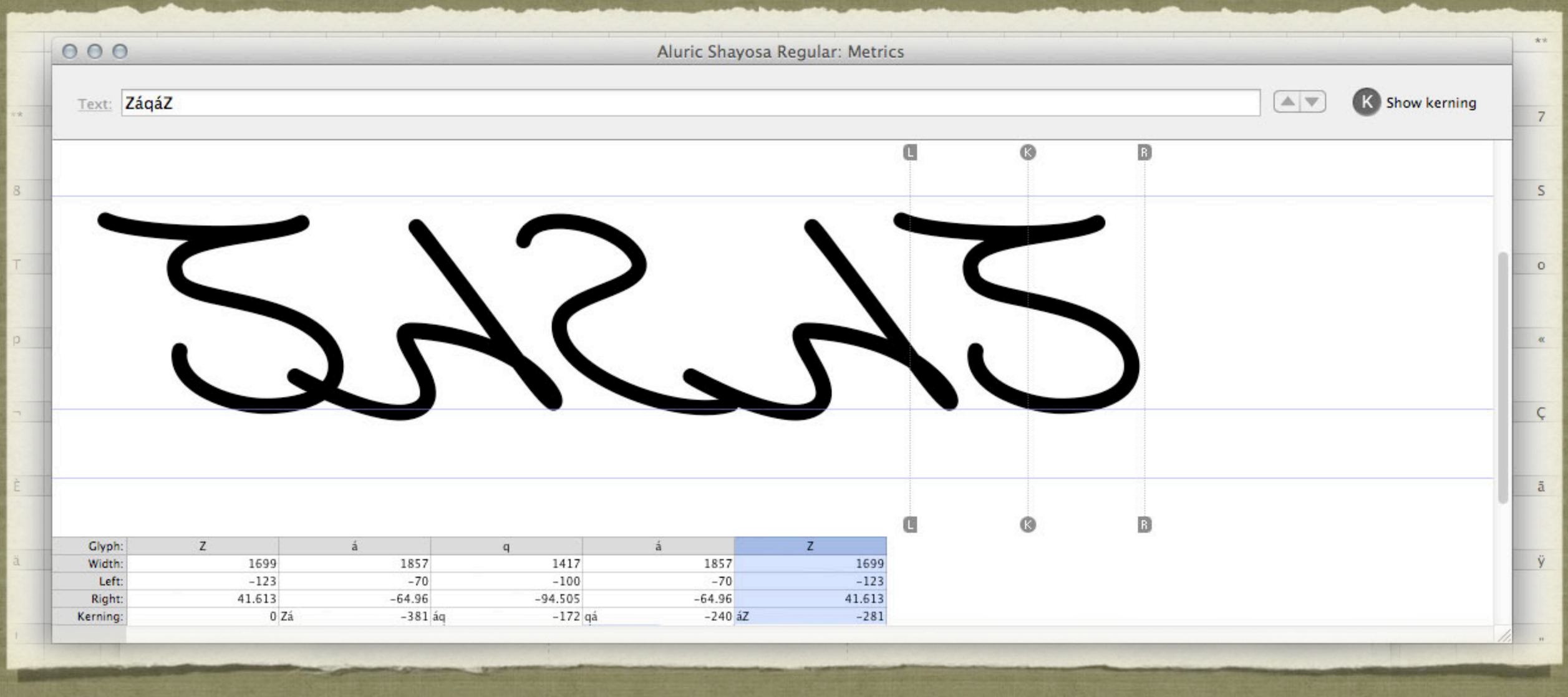
Kerning

Discrete spacing relationships between pairs of glyphs.



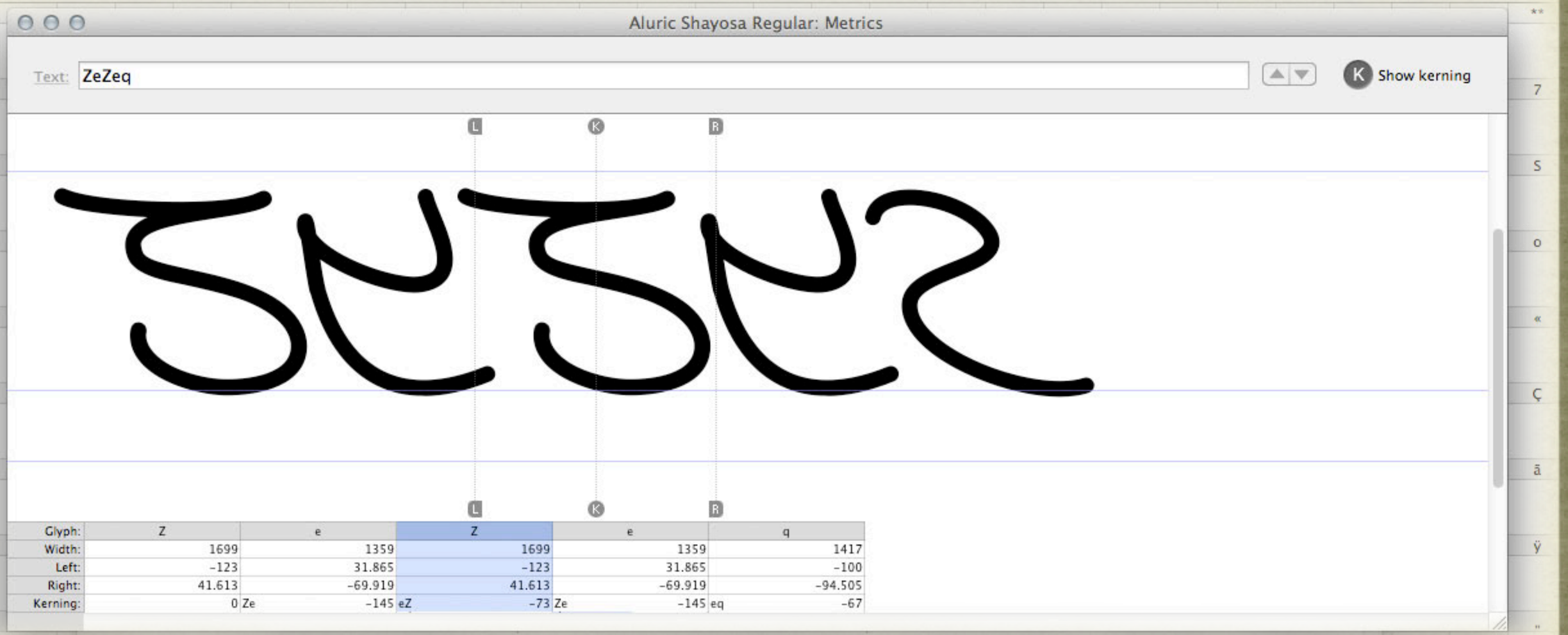
Kerning

Discrete spacing relationships between pairs of glyphs.

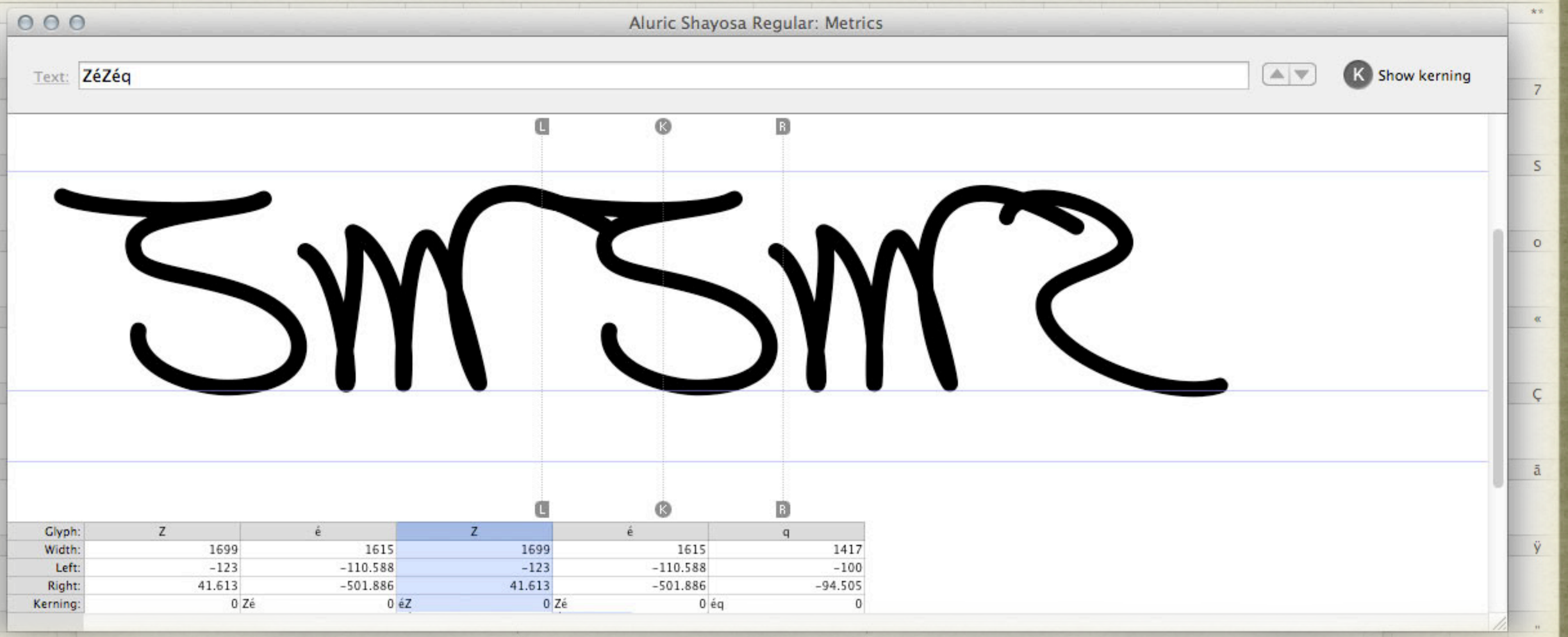


Kerning

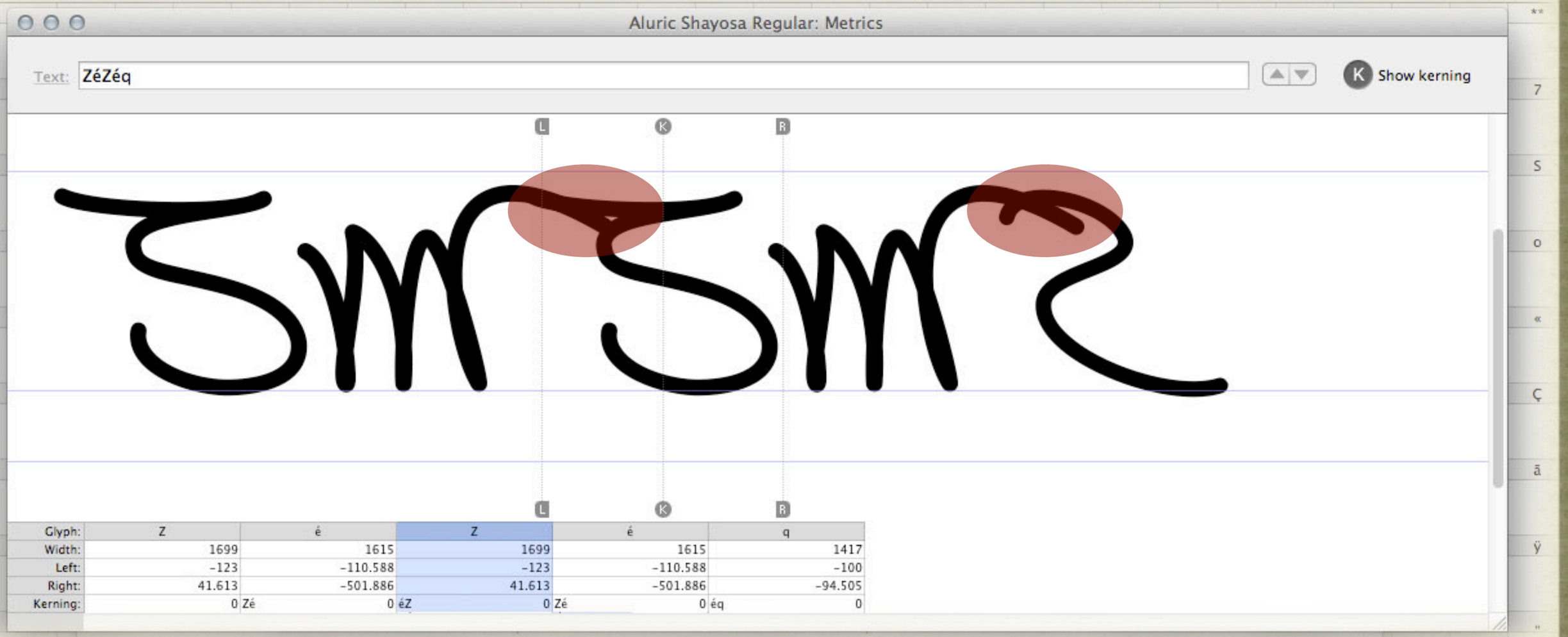
Discrete spacing relationships between pairs of glyphs.



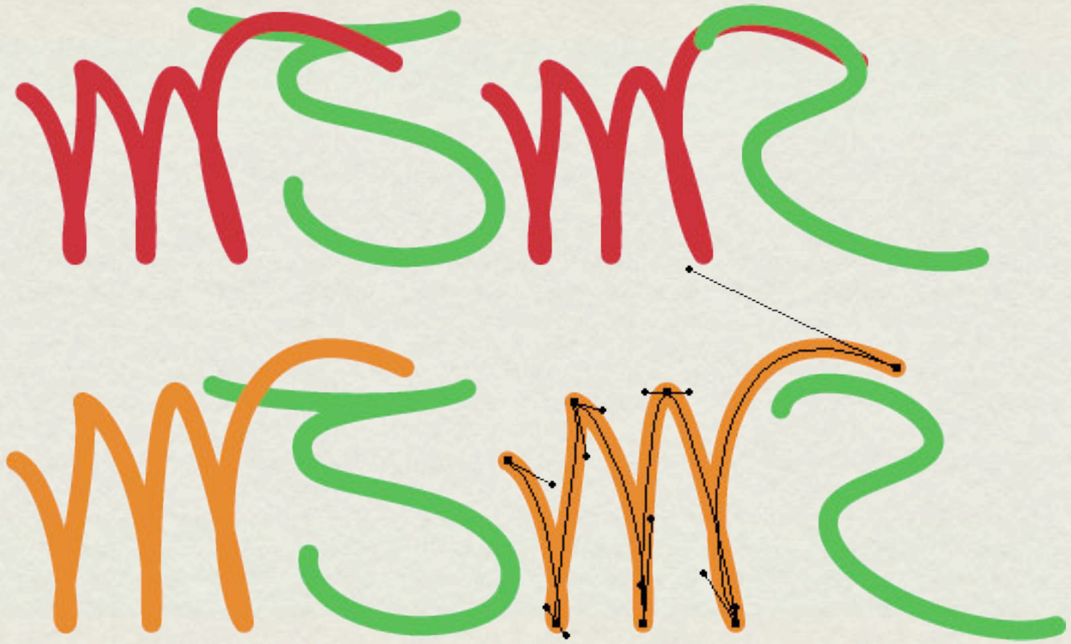
Kerning Uh’ Oooh!



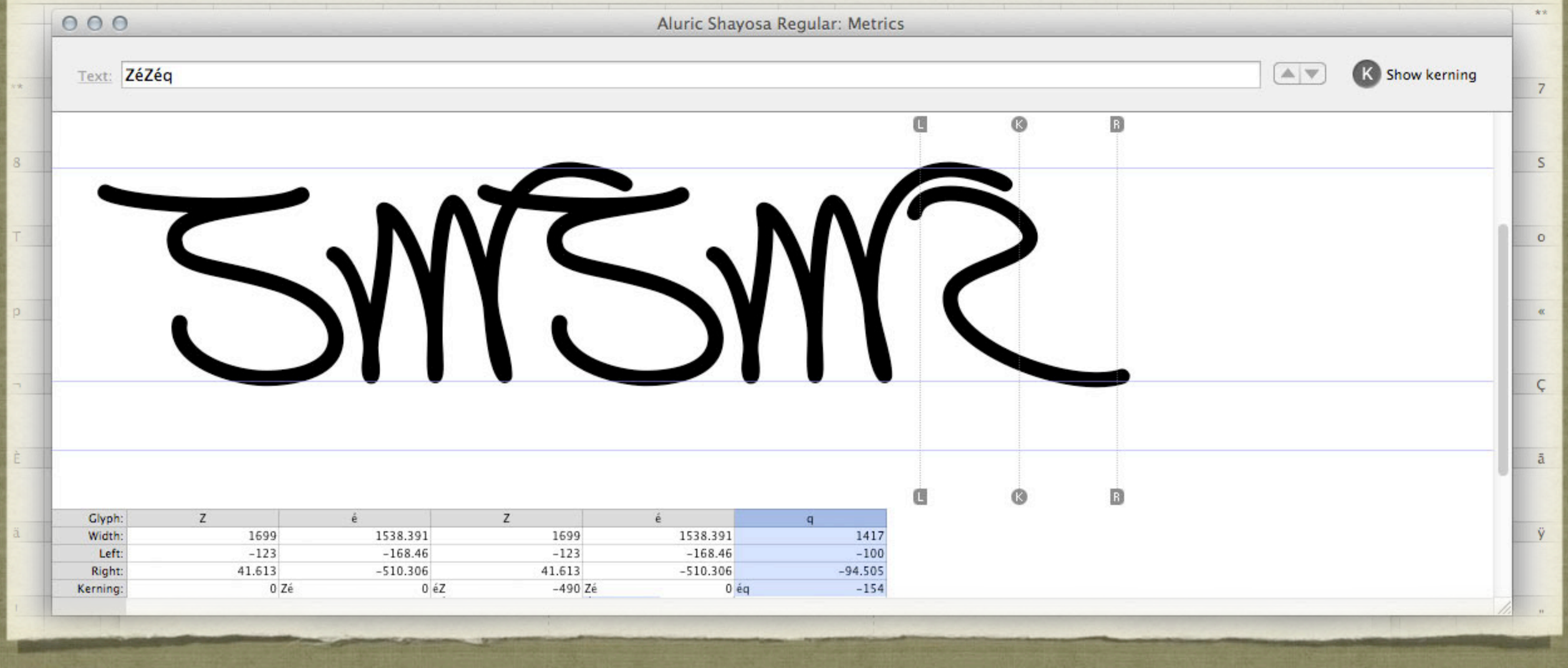
Kerning Uh’ Oooh!



Kerning ››› leads back to the drawing board — LITERALLY.

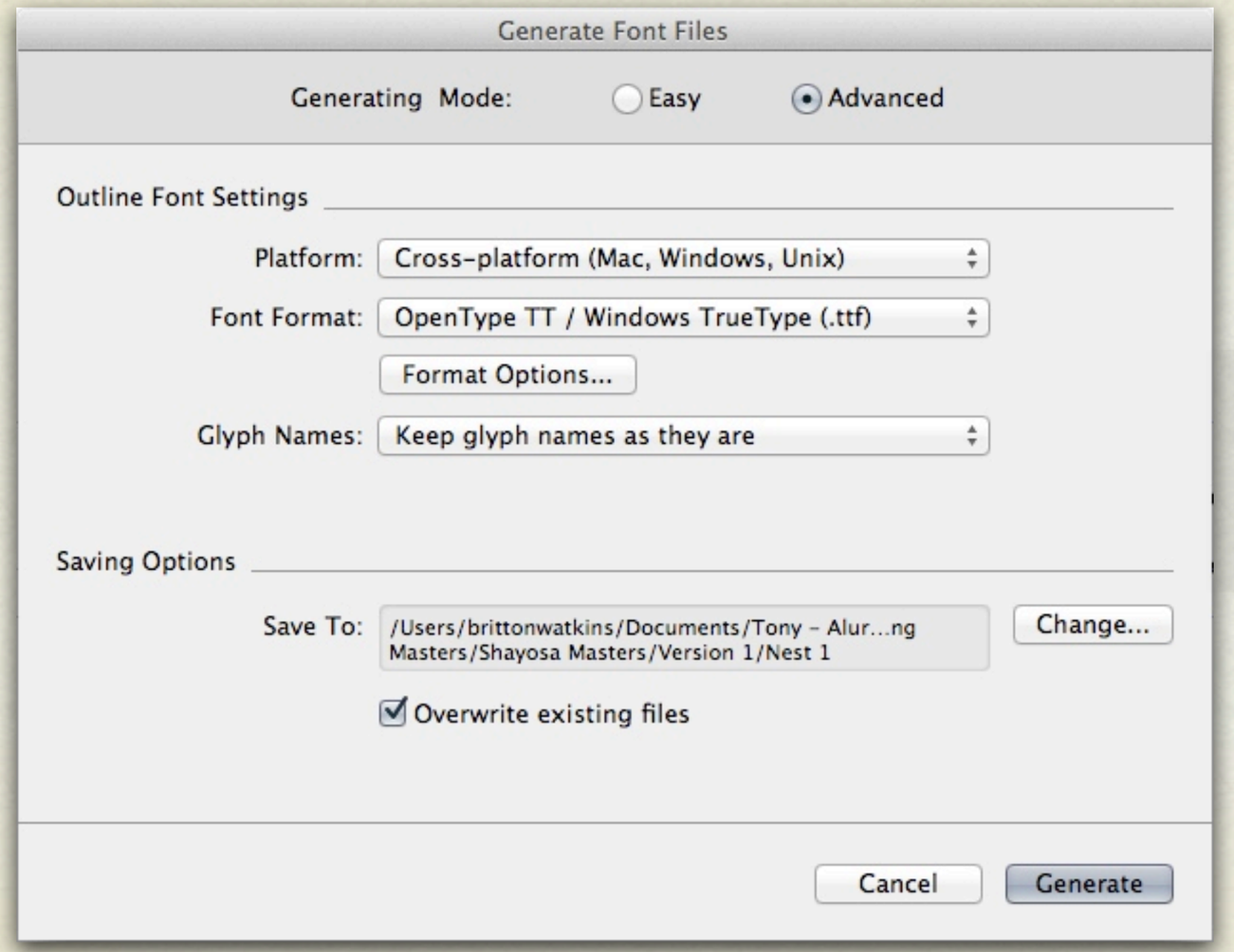


Kerning ››› leads back to the drawing board — LITERALLY.

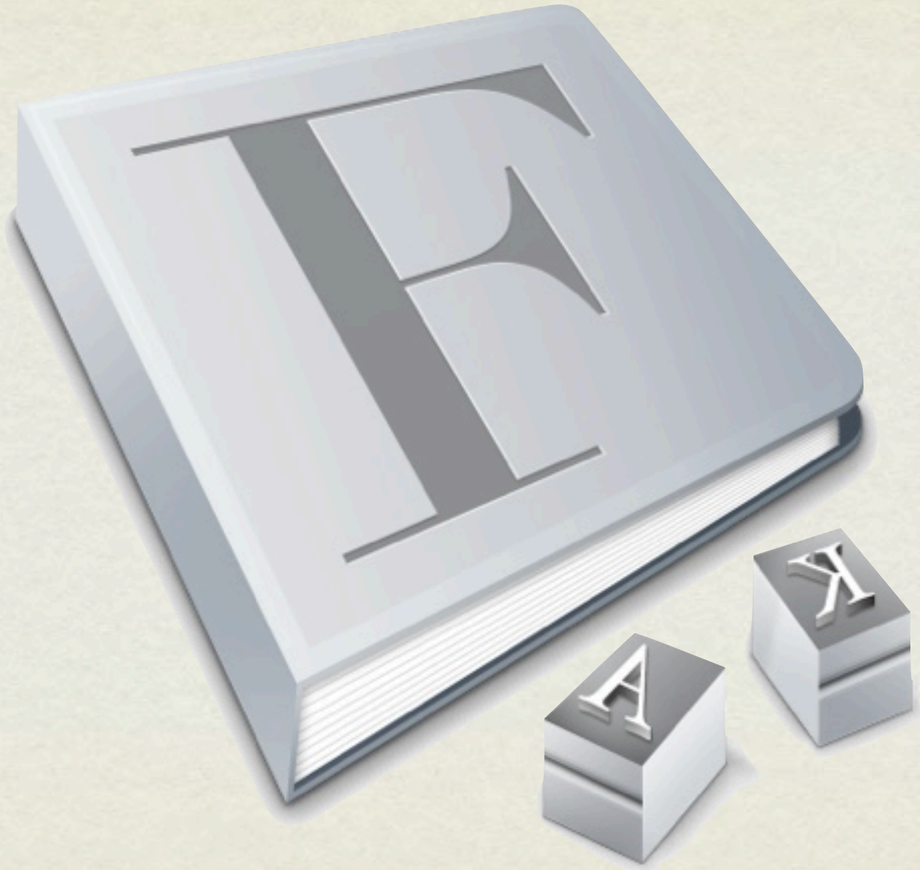


Glyph:	Z		é		Z		é		q
Width:	1699		1538.391		1699		1538.391		1417
Left:	-123		-168.46		-123		-168.46		-100
Right:	41.613		-510.306		41.613		-510.306		-94.505
Kerning:	0	Zé	0	éZ	-490	Zé	0	éq	-154

Generate actual fonts



Install in the same way you'd install any regular font on your PC.



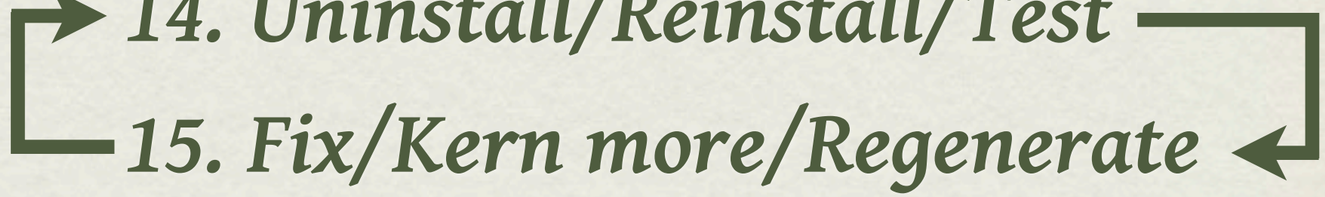
Test in a wide variety of applications and behavioral situations.

ꕥꕢꕤꕀꕥ ꕤꕤꕥ~ꕤꕊꕤꕤꕢꕢꕢꕢꕢ

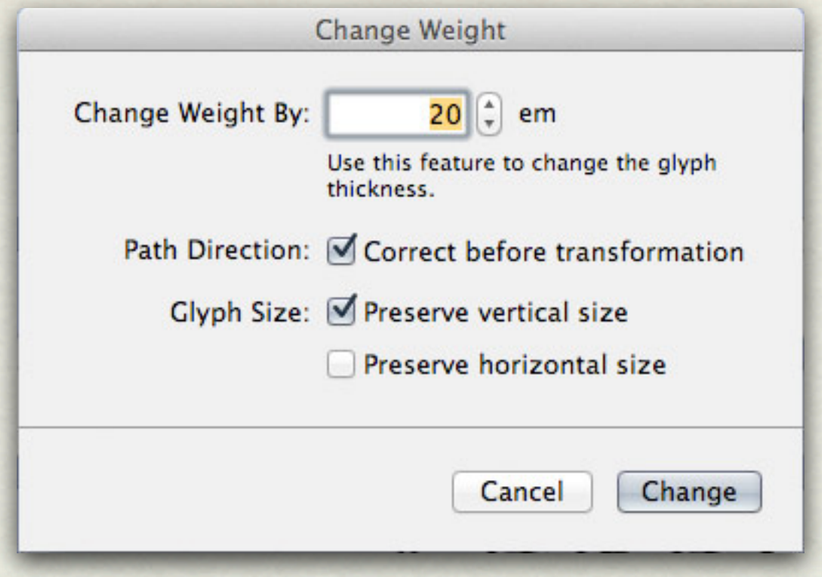
ꕥꕢꕤꕀꕥ ꕤꕤꕥ~ꕤꕊꕤꕤꕢꕢꕢꕢꕢ

ꕥꕢꕤꕀꕥ ꕤꕤꕥ~ꕤꕊꕤꕤꕢꕢꕢꕢꕢ

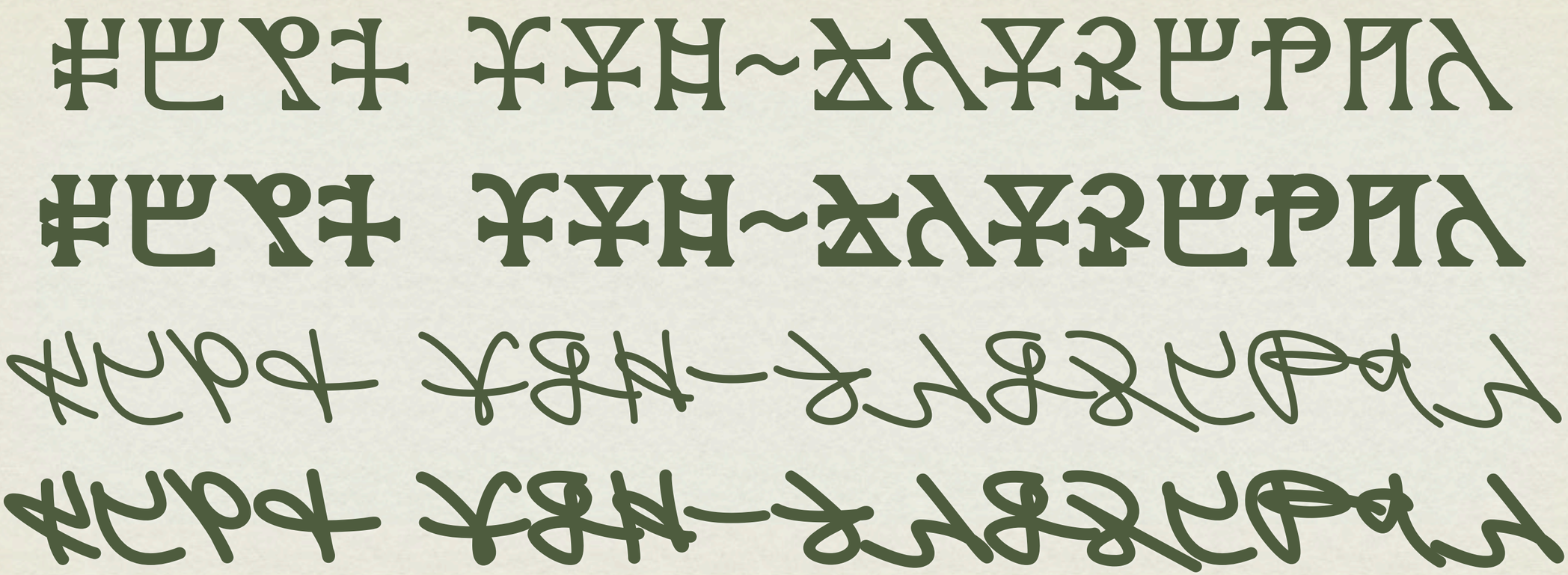
1. Design/Sketch
2. Draw
3. Normalize
4. Outline
5. Map
6. Port
7. Align & Space
8. Kern
9. Generate
10. Install/Test
11. Kern some more
12. Create punctuation, etc.
13. Regenerate
14. Uninstall/Reinstall/Test
15. Fix/Kern more/Regenerate
16. Finalize version
17. Revisit & return to step 15
18. Make other versions



Other weights & styles



Other weights & styles



For your consideration

NALA

“division of labor”

1. Design/Sketch
2. Draw
3. Normalize
4. Outline
5. Map
6. Port
7. Align & Space
8. Kern
9. Generate
10. Install/Test
11. Kern some more
12. Create punctuation, etc.
13. Regenerate
14. Uninstall/Reinstall/Test
15. Fix/Kern more/Regenerate
16. Finalize version
17. Revisit & return to step 15
18. Make other versions

Why not collaborate
with each other more?

Each to the best of her or his abilities.

britton@dragonflypacific.com

korsaya.org

sennition.com