

Multiple Masters & Interpolation



Teddy Derkert

Glyphs

glyphsapp.com

Superpolator 3





FontLab VI

Coming Soon

**What is interpolation
and what is it good for?**

Interpolation helps us generate
intermediate steps between styles

It saves time and helps us to
keep things consistent through
out all weights/styles

2 masters

Thin
Regular

n

n

Bold
Regular

1 axis - 2 masters - 3 instances

Thin
Regular

n n n

Bold
Regular

2 axes - 4 masters - 9 instances

Thin
Regular

n

n

n

Bold
Regular

n

n

n

Thin
Condensed

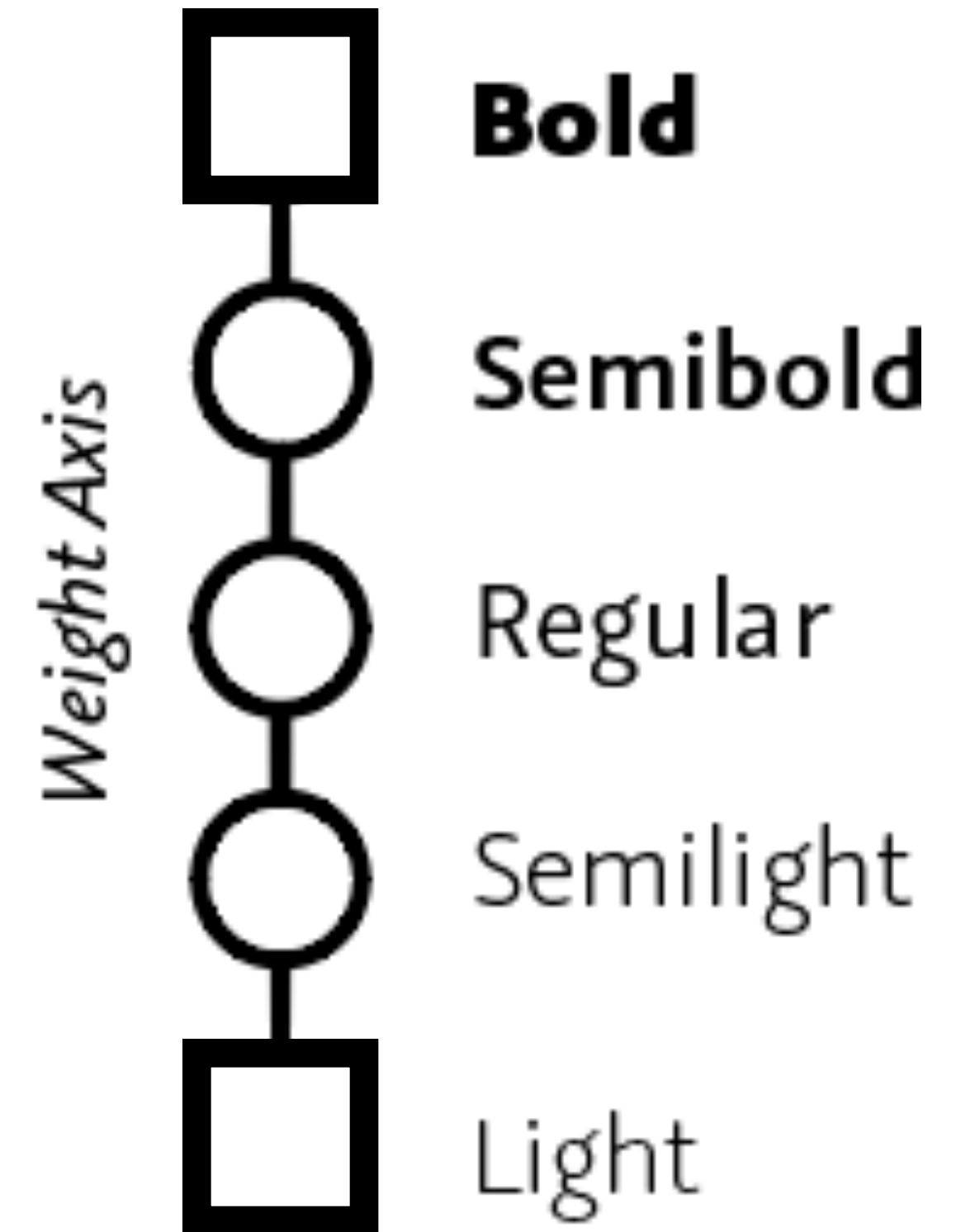
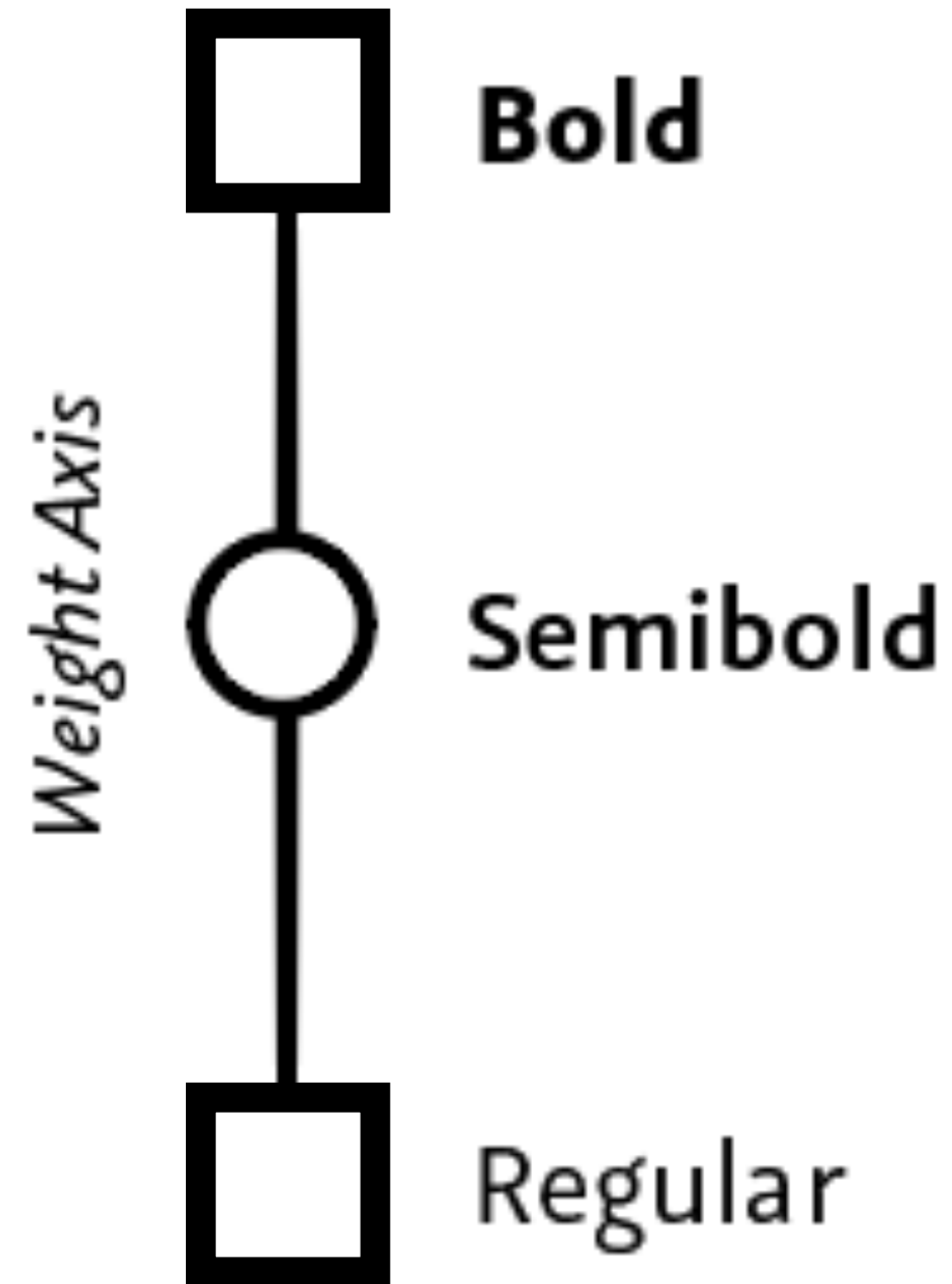
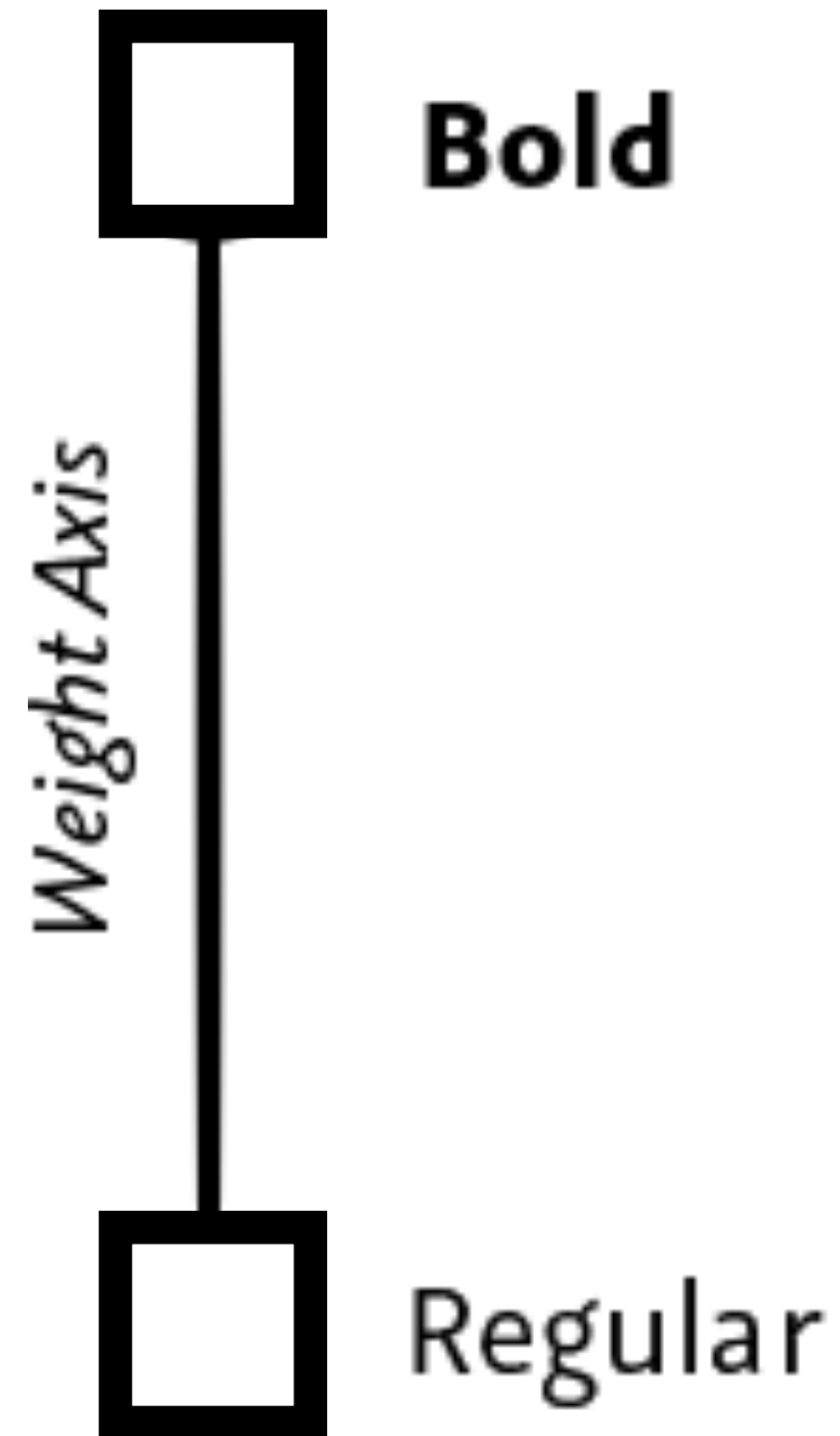
n

n

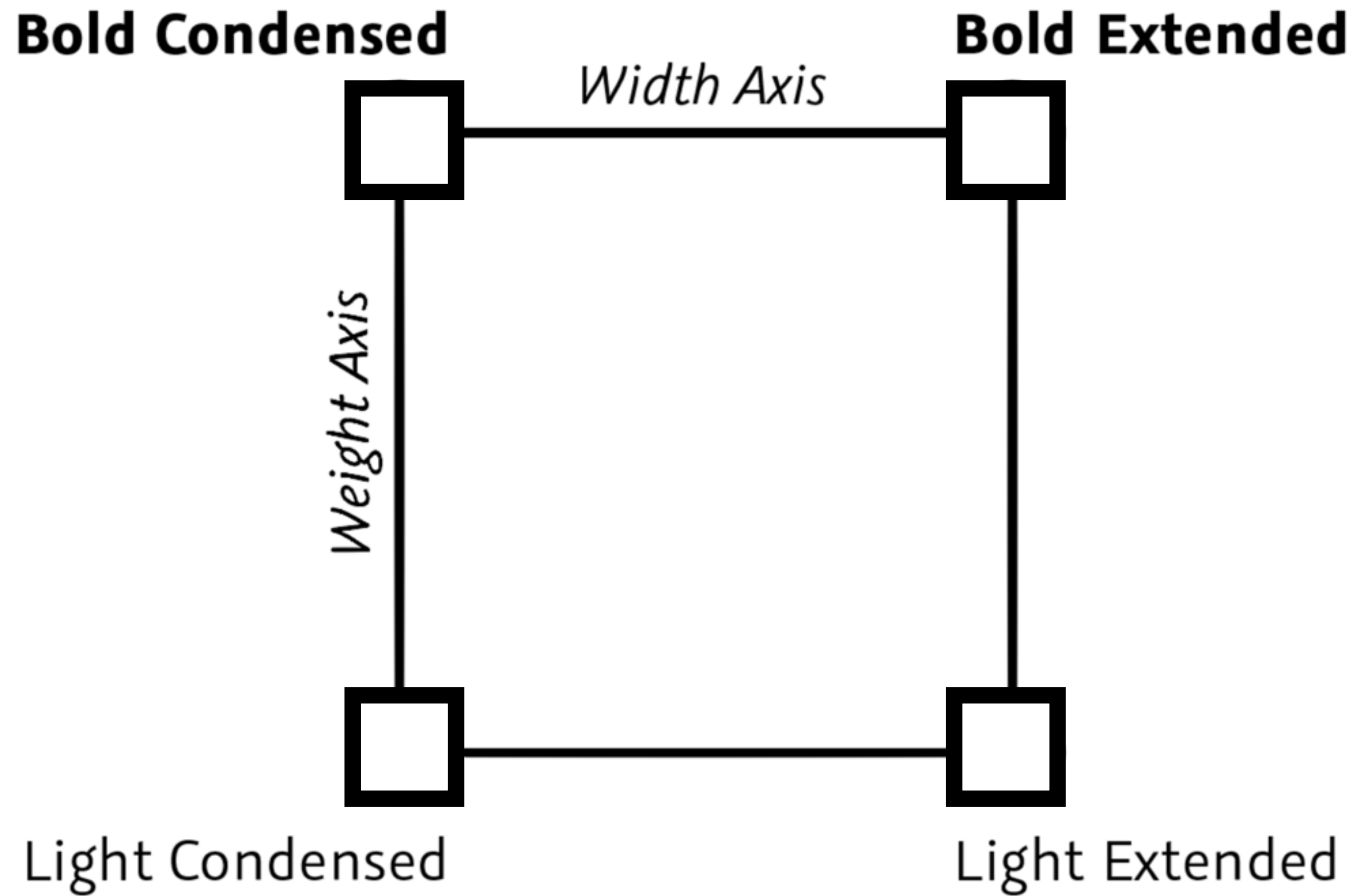
n

Bold
Condensed

1 axis - 2 masters



2 axes - 4 Masters



3 axes - 8 Masters

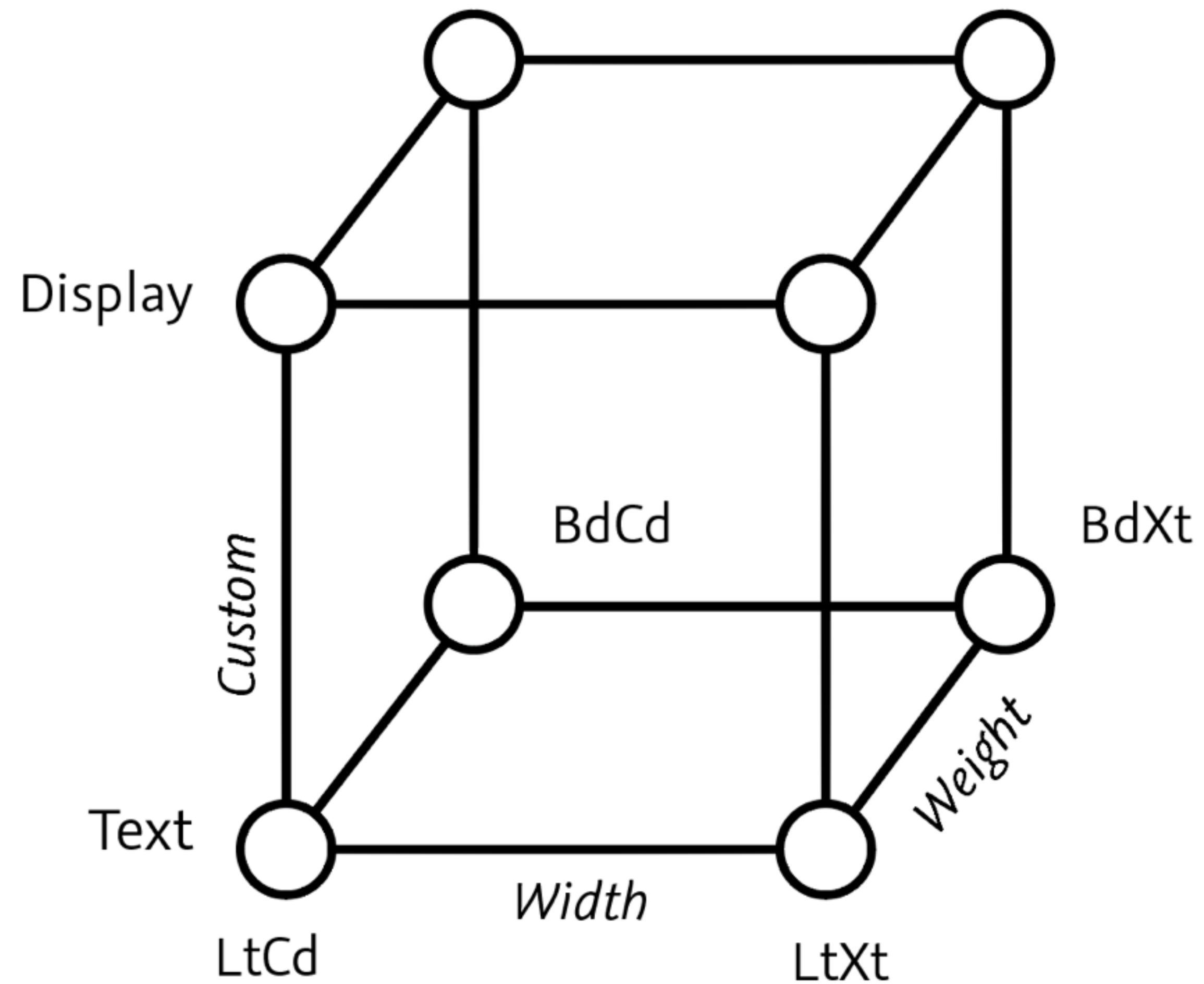


Image from glyphsapp.com

2 axis + 2 axis (oblique)

+ 2 axis (oblique)

					39 univers	
		45 univers	46 <i>univers</i>	47 univers	48 <i>univers</i>	49 univers
53 univers		55 univers	56 <i>univers</i>	57 univers	58 <i>univers</i>	59 univers
63 univers		65 univers	66 <i>univers</i>	67 univers	68 <i>univers</i>	
73 univers		75 univers	76 <i>univers</i>			
83						

Univers
Font System

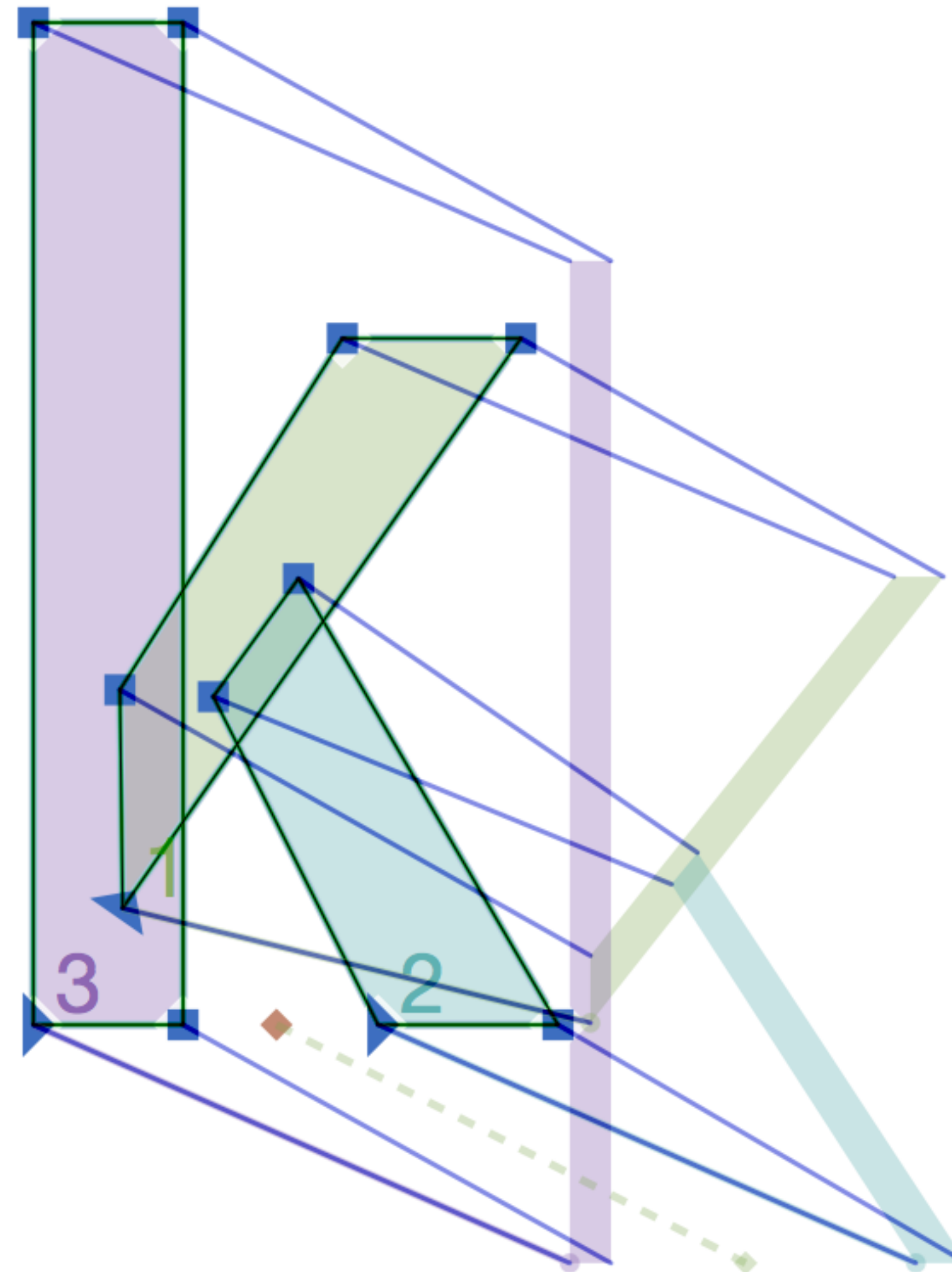
- Adrian Frutiger

Path Compatibility

Path Compatibility - Per glyph

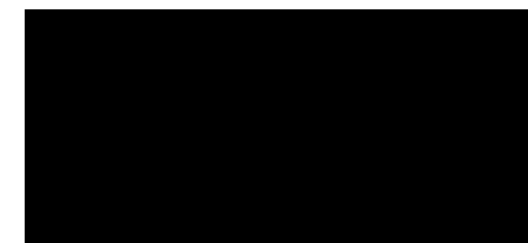
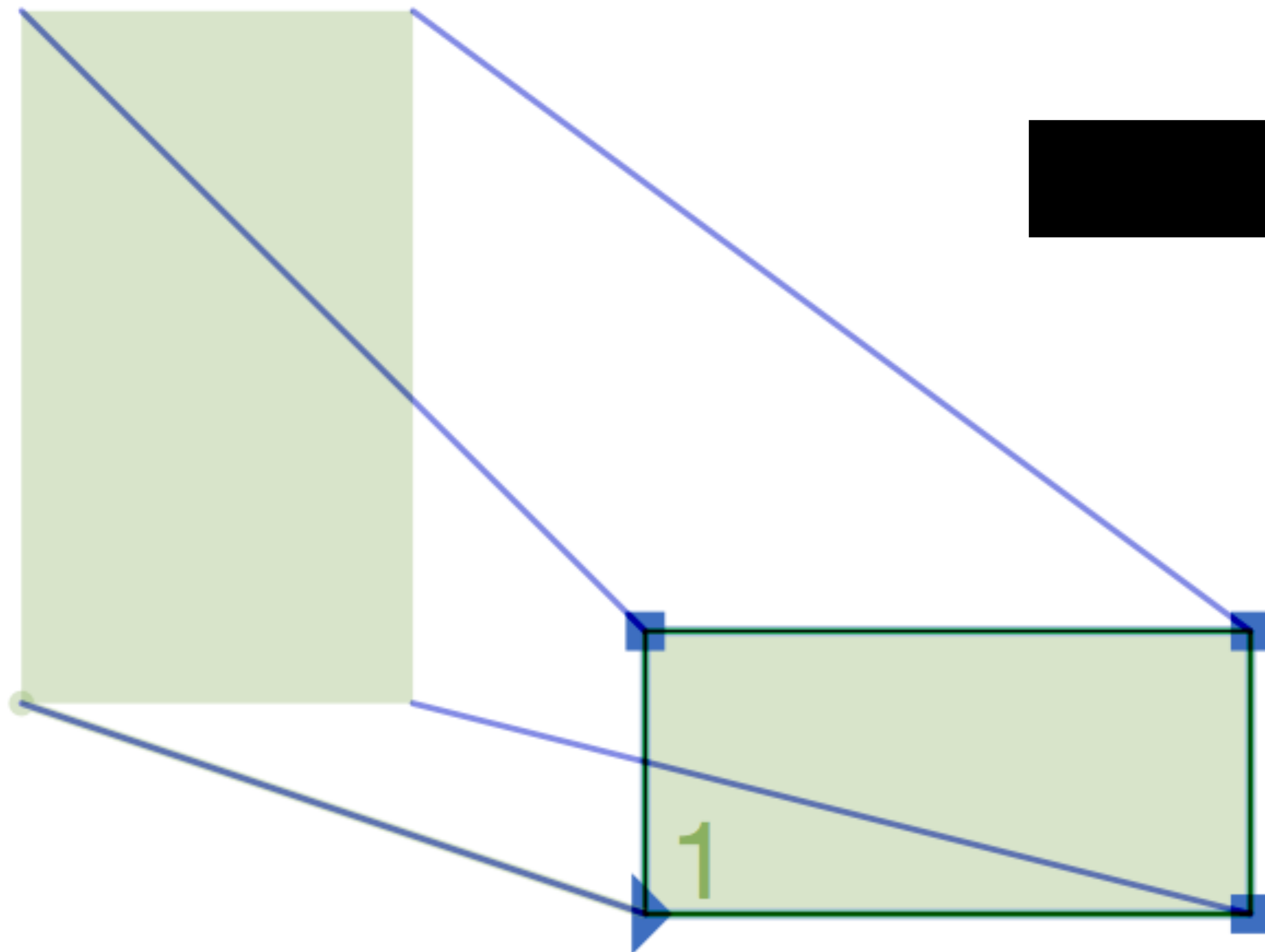
The masters need to have:

- Same node count
- Same start node
- Same Path Directions
- Same order of shapes
- (Same Anchors)



Good compatible
masters

Matching node count

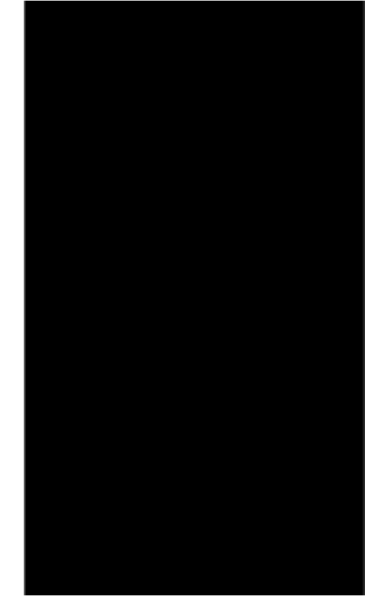
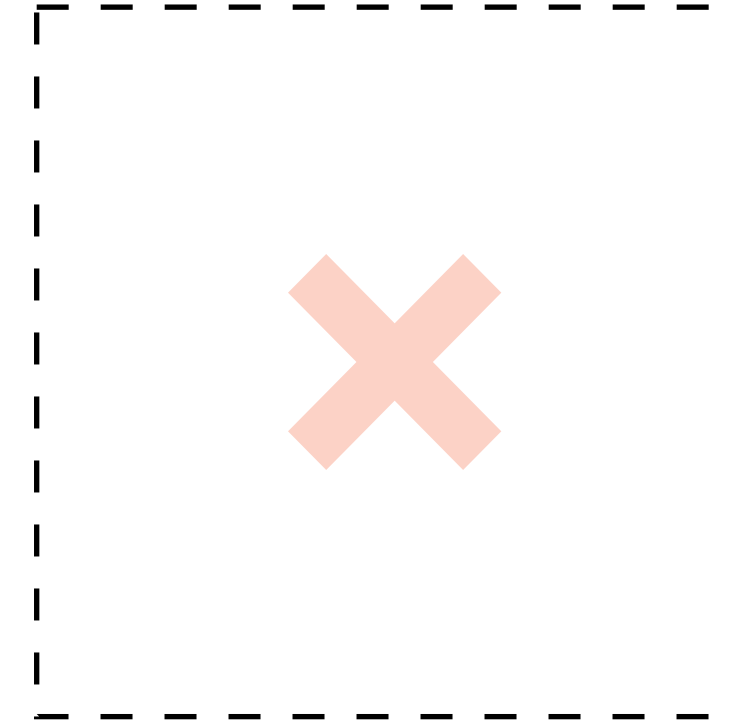
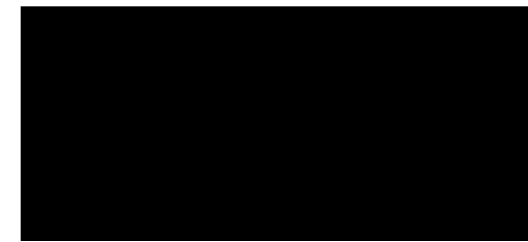
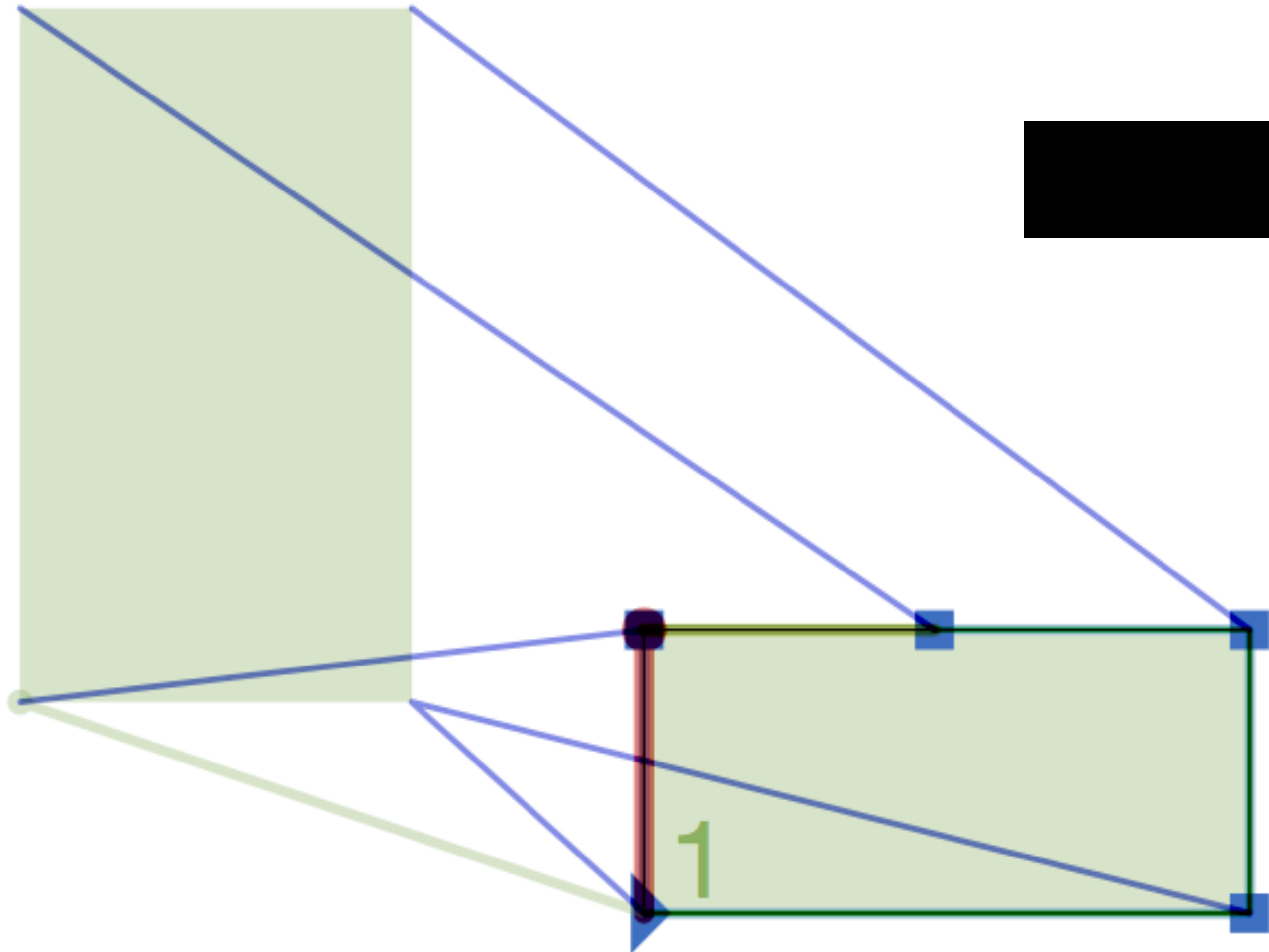


A very simplified “glyph”



Matching node count

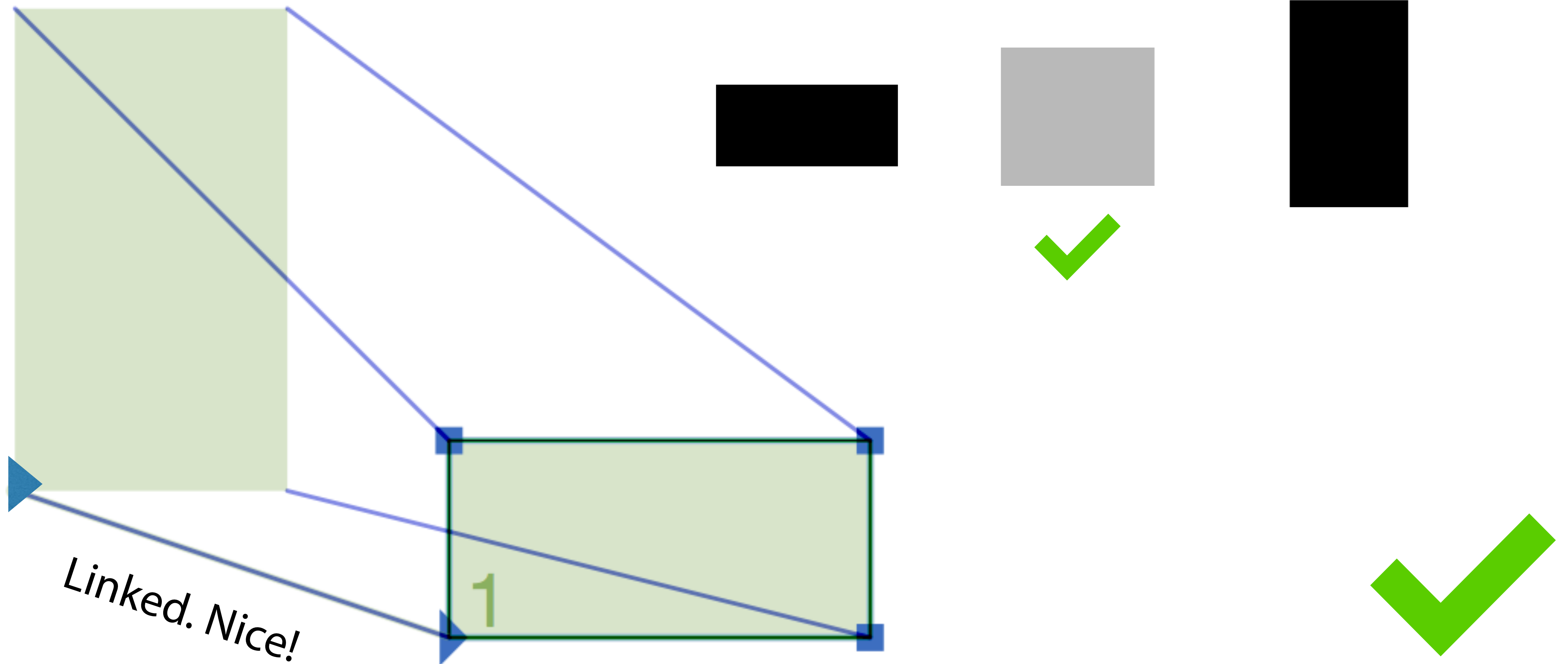
4 nodes



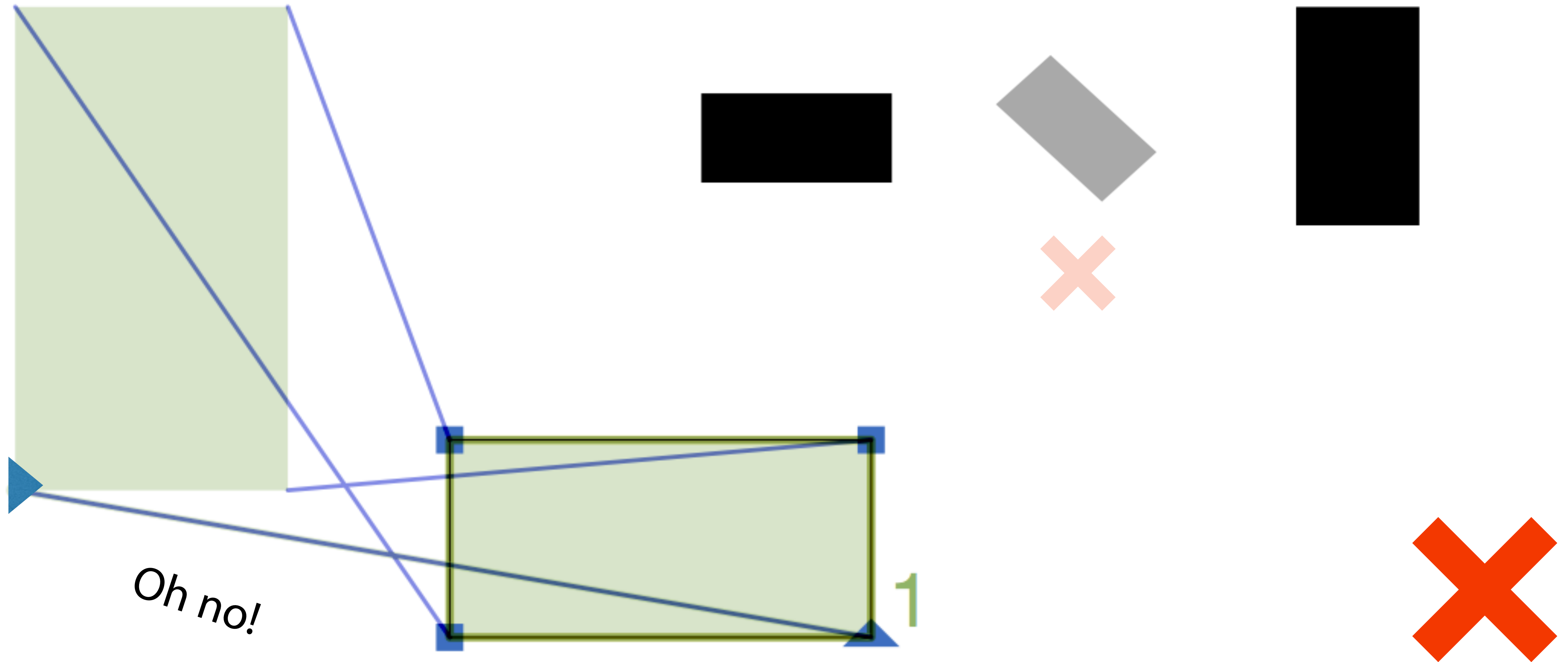
5 nodes!



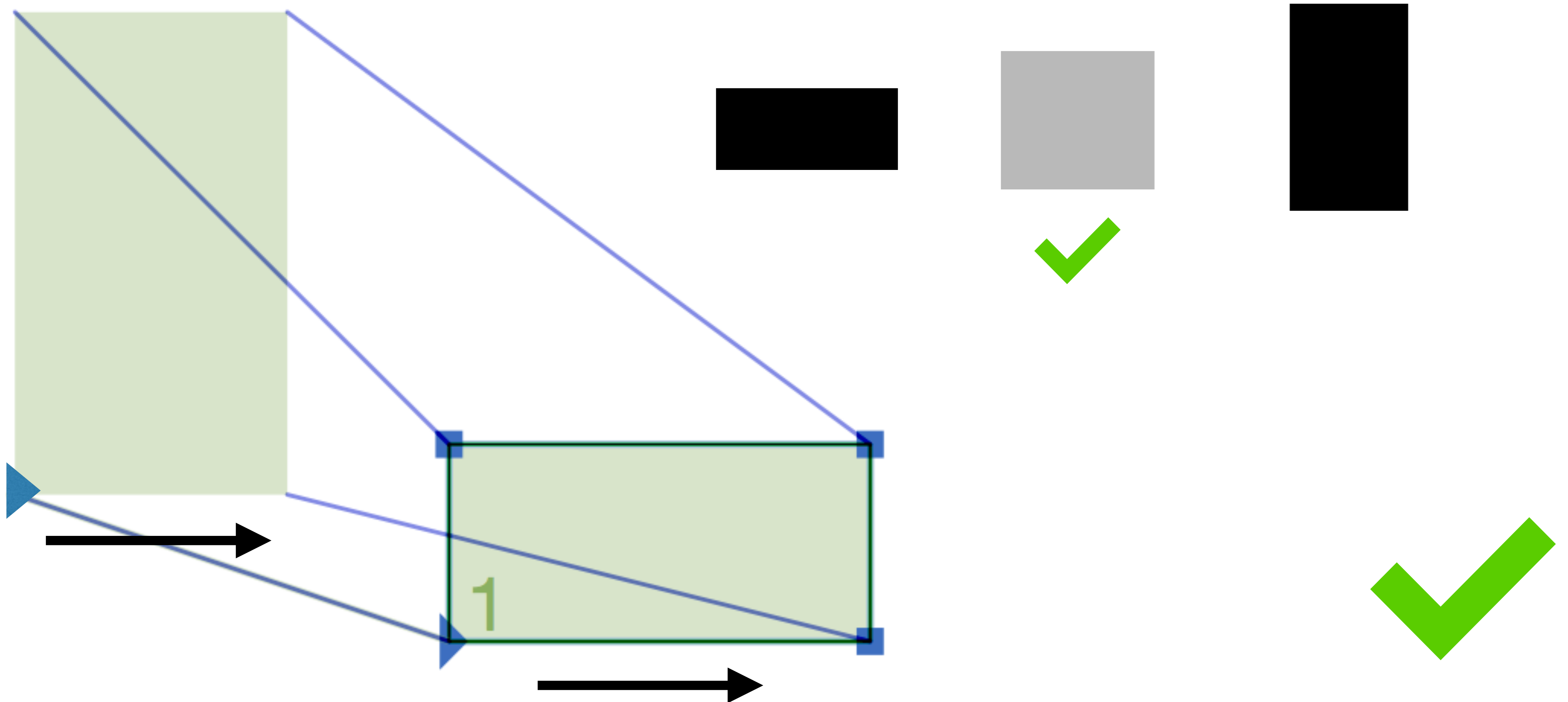
Matching start node



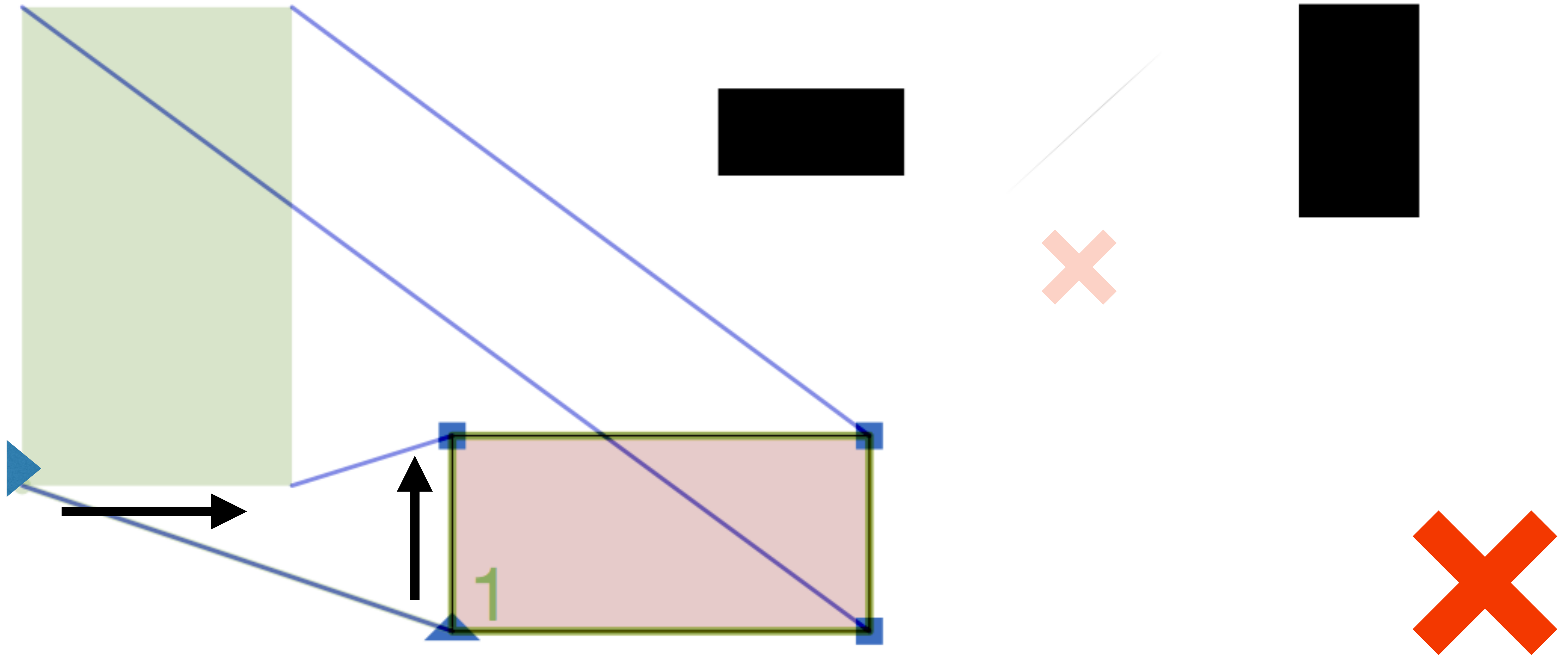
Matching start node



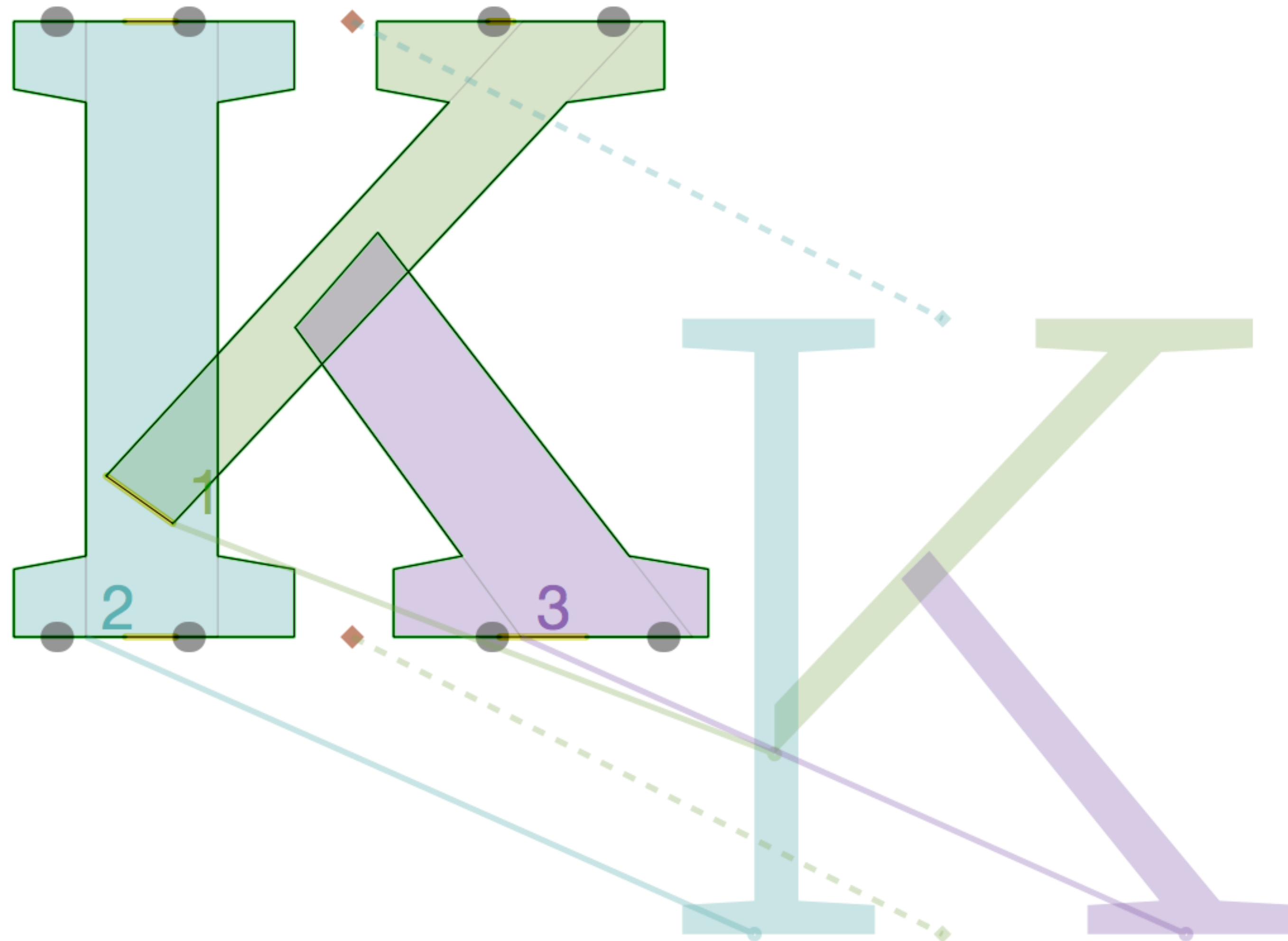
Matching Path direction



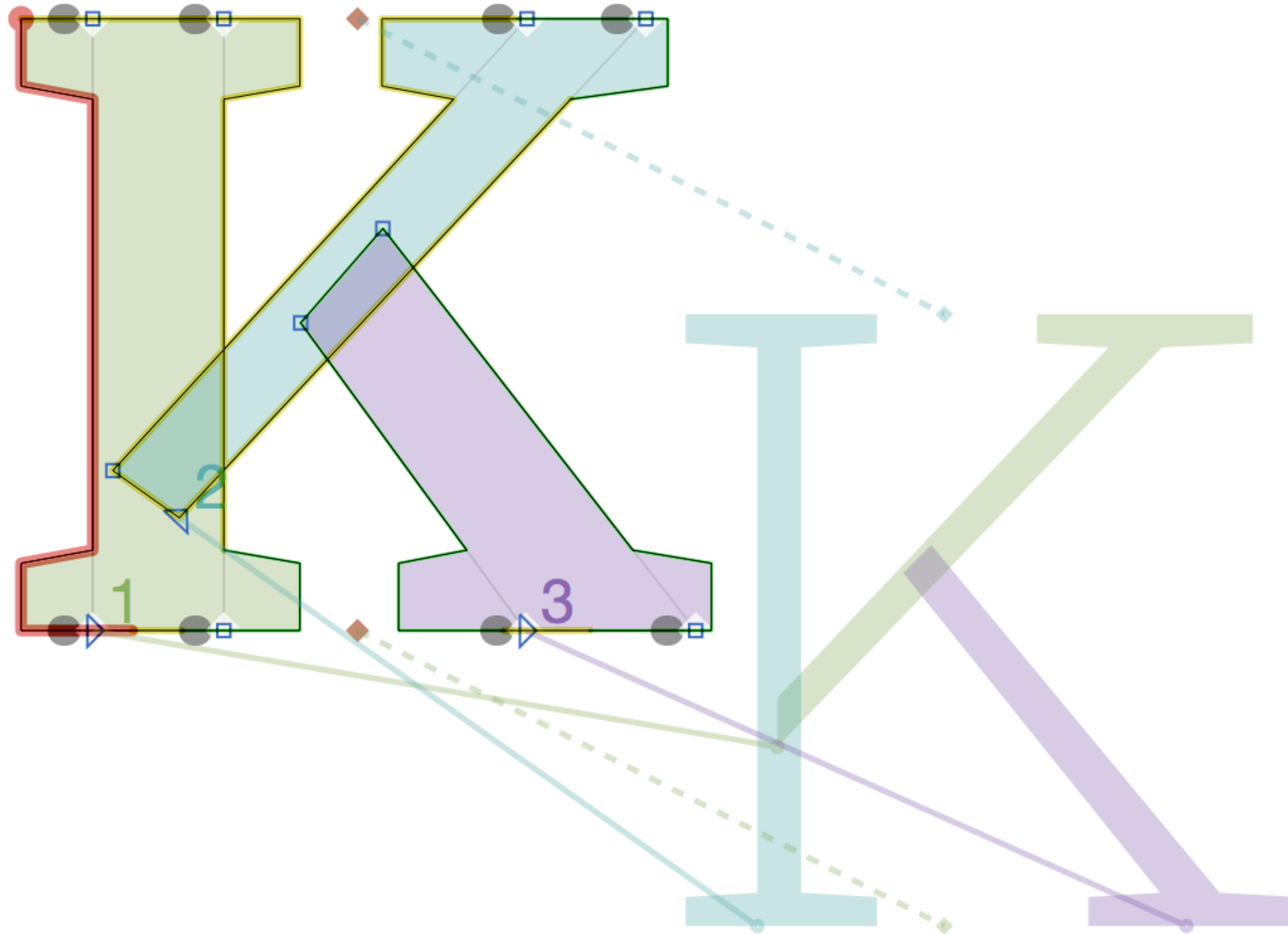
Matching Path direction



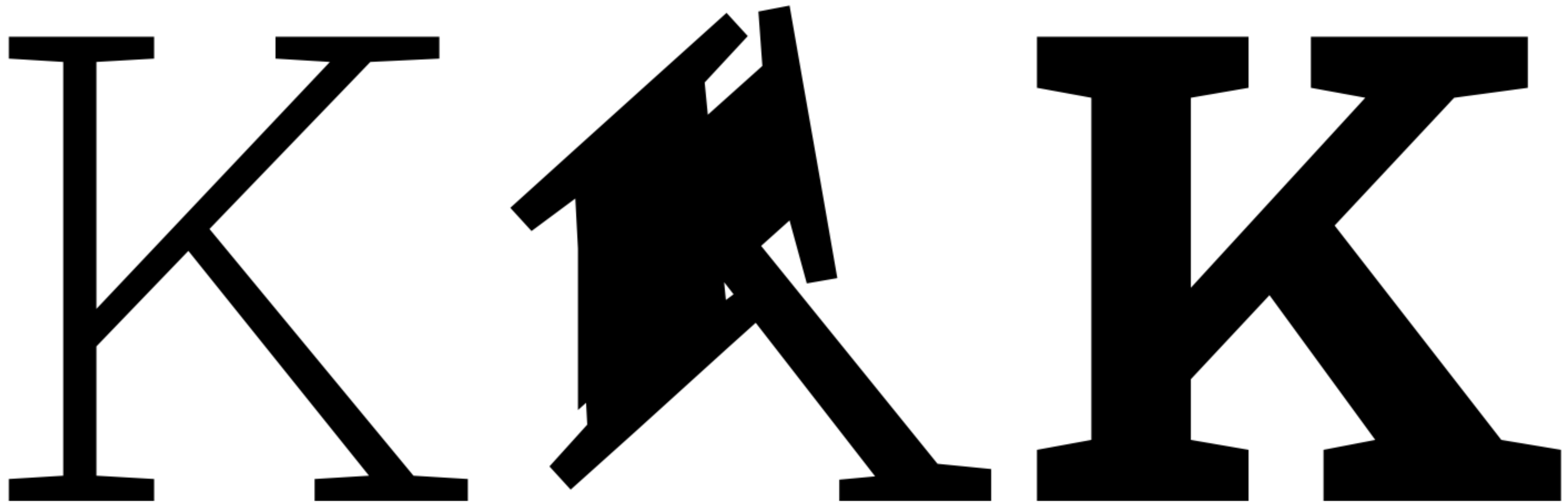
Matching shape order



Matching shape order

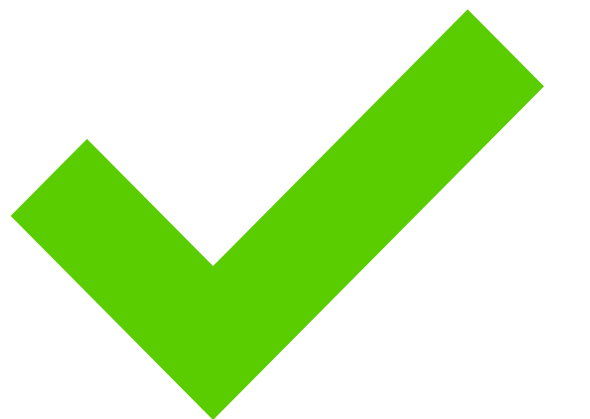


Matching shape order



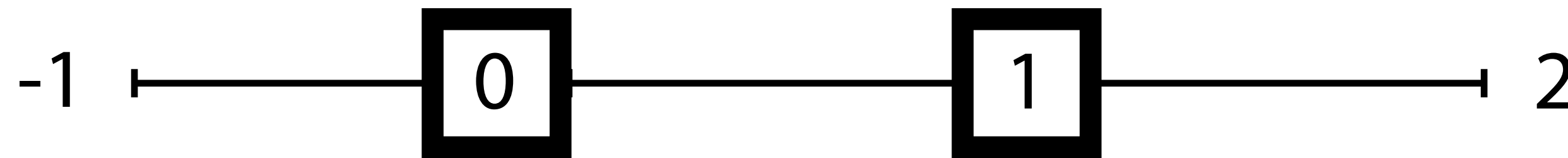
Matching shape order

KKKK



Extrapolation

Can work but many times doesn't



Good resources

Glyphs tutorial on setting up masters and instances

<https://www.glyphsapp.com/tutorials/multiple-masters-part-1-setting-up-masters>

Tips on determining a good weight distribution

<http://www.lucasfonts.com/about/interpolation-theory/>

Thanks!



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**Live Glyphs example
from scratch?**