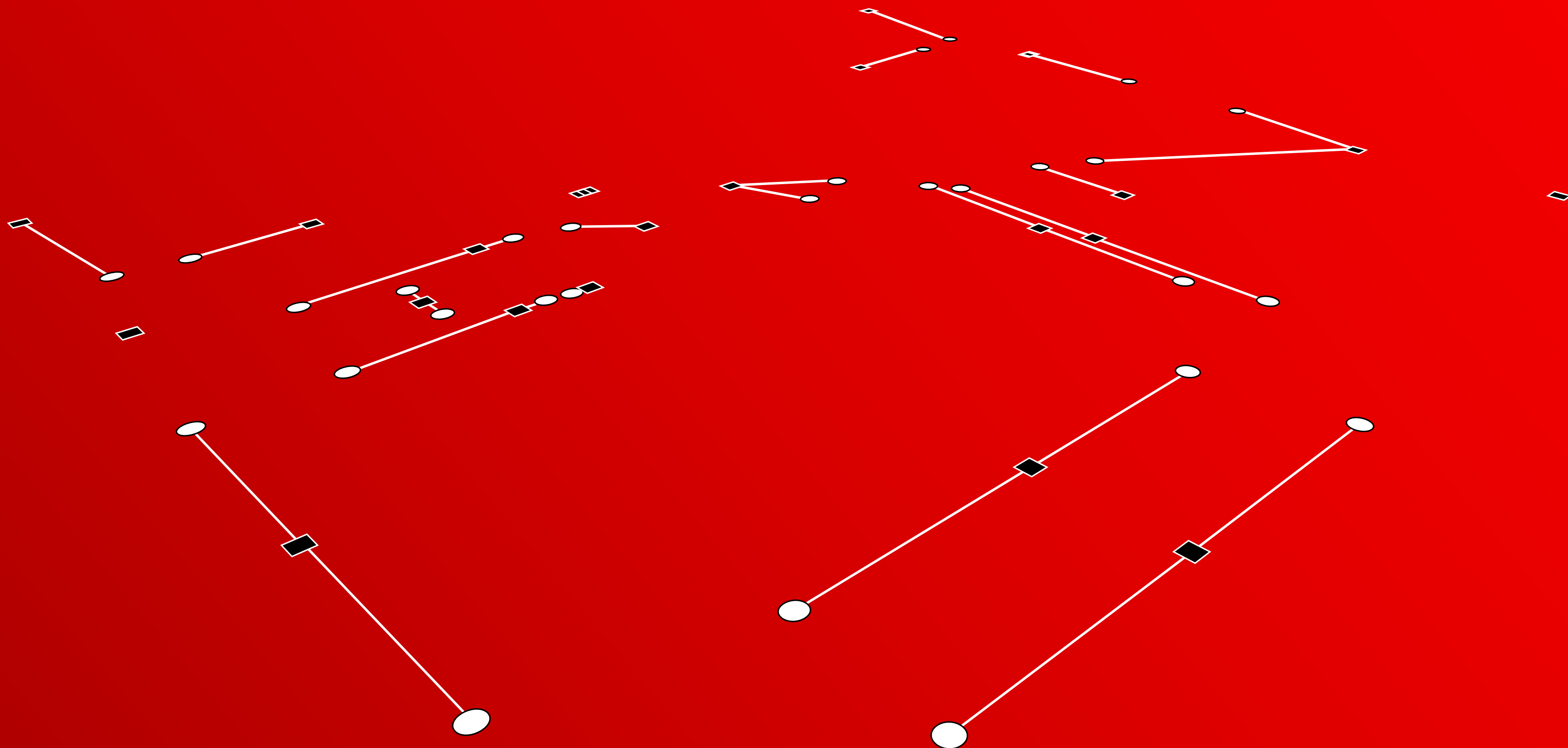


**BLAZETYPE GUIDE:**  
HOW TO DESIGN FONTS?



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# DISCLAIMER

Our goal with this starter guide is to provide you with a quick access to type design. We strongly believe that pretty much any design choice is possible when it comes to designing fonts, as long as your typeface is consistent with its shapes, structure, spacing and so on. But for the sake of easily grasping some basic font design tips and rules, we'll focus first on the construction of a Modern Sans and a Modern Serif font in what we could call a "classic" point of view in type design.

Making choices in designing a font can sometimes be complex, especially in the early stages where everything has to be defined. It may be a bit frustrating, but it's important to understand that when it comes to type design, the most common answer to most questions is: "it depends".

Letters are related to each other. It's no wonder why the term "Typeface family" exists. But this statement is even more true within a font: all glyphs are part of a family and, as such, they should have something in common — this could be their structure, weight, widths, shapes, etc. Consider them as single entities that are all linked together to form a cohesive whole.

So please bear with us here when we state that a glyph "should" look like this, or have this width, or that optical correction.

The goal here is to share a simple and straightforward process to type design. Use this as a guide, a set of rules, and once you're familiar with them, set yourself free and do your own thing!

It's by going against the rules that we allow ourselves to create splendid new forms.

# WE CAN'T WAIT TO SEE WHAT YOU'LL DESIGN.

# ADVICE FROM THE AUTHOR

There's an analogy in type design that we always enjoyed and the longer we spend pondering on the matter, the more sense it makes to us. When they are part of the same font, every glyph shares details of resemblance with each other. It makes me think of the physical or character resemblance you can find in a human family. As such, some glyphs you design will have a lot of linked shapes with others, some will have distant visual links, but overall they share the same DNA. It is an important thing to remember when designing a font: our goal (amongst other things) is consistency and visual coherence within the font itself.

# THE BEST WAY TO LEARN

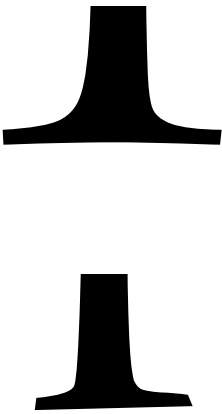
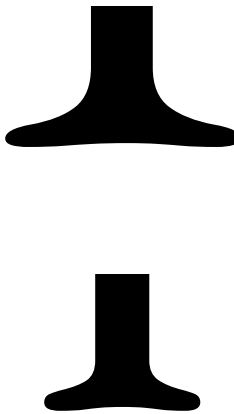
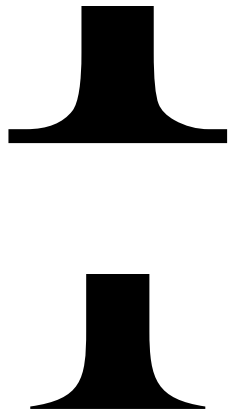
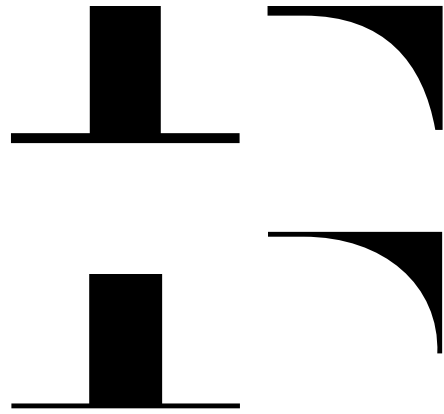
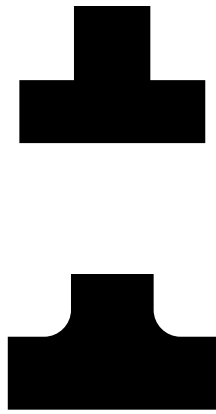


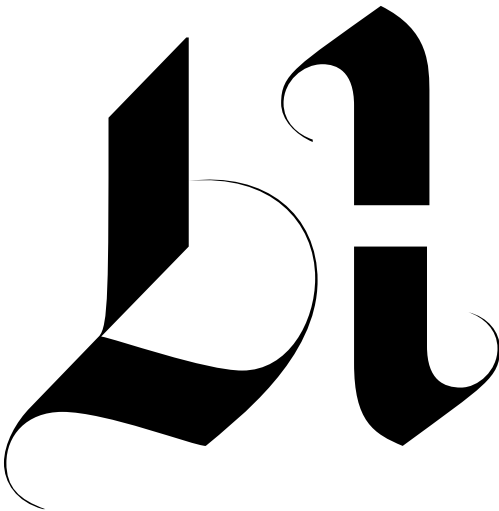

It's all a matter of preference really. My advice is super simple to handle, it only takes dedication from you. Type design is not rocket science, although it is definitely a rabbit hole and you'll see how crazy deep that one can go along your path of learning font design. So, here's how I would do it if I were to learn type design all over again. I would study an 'how to' type design book (like this one) and start right off by designing a font based on a few letters or numbers I'd find in the street. Take pictures of interesting looking words, numbers, letters around your town. Digitalize those in a font design software, design control characters based on the visual information you've got and dive in! Let your "how to" pdf or book next to you and start designing!

I would repeat this method a few times. I would look at other fonts, see how they are designed. I'd share my work amongst my friends and use it on my own project. And at some point I would seek guidance from either type designers Type foundries I admire. The good part now is that there is a lot of information online, articles, tutorials, videos and people eager to share their knowledge in this field. Anything worth it in life takes time, dedication and work. Type design is no different. If you're passionate about this field, you'll do the work, you'll read and learn and more important than anything: practice, practice, practice.

# NOW LET'S GET TO IT.

TYPEFACE CLASSIFICATION

There are lots of different kinds of serifs around, each referring to a certain style of typeface classification. One of the most commonly used classifications is the Maximilien Vox’s or Vox ATypI. While classification can be a very interesting subject to debate on, Vox ATypI is still useful to get your way around the differences between typefaces style. [Here’s a link about it](#)

	Humanes	Garalde	Reale	Didone	Mecane	Linéale	Incise	Manuaires	Script
Serifs & Terminals									
Capitals	IS	IC	IS	IC	IS	NES NES	ERSI PAIC	HEE ESU	DEHB CDFQ
Lowercases	ah	fg	ah	fg	ah	lin	lin	lin	lin

# TYPE TERMINOLOGY

Just like any language, jargon or dialect, type design is the product of time and culture. As such, designers use a wide variety of names when referring to the various bits and pieces of a given letter. Though no official nomenclature exists, there is a consensus on how to name these different parts as you will see throughout this book. Chances are you’ve heard the terms “typeface” and “font” used in a seemingly interchangeable fashion or as synonyms. This is technically incorrect, as there does exist more than just a slight nuance between the two:

## Font

Comes from fonte, which is French for “metal casing”. The word has historically referred to the actual metal casings used in printing that came in a single style and format. As contemporary digital fonts are designed with a wide array of sizes in mind, the term “font” has lost its size-specific meaning—though it still keeps its style-specific sense (such as bold, italic, light, etc.).

## Typeface

Is broader in scope, as it used to refer to a family or collection of related fonts. In fact, this definition is still accurate today, meaning it is possible to use the word “typeface” to describe the use of fonts as a whole. What’s more, the word “typeface” is more appropriate than “font” when referring to the design itself of a typeface (that is to say: how it looks or how it functions). On the other hand, “font” should instead be used to describe digital files, such as .otf files

## Serif

A serif is a small stroke or line that extends from the main strokes of a letter. Serif typefaces are typically considered more traditional and are often used in print materials like books and newspapers.

## Sans-serif

A sans-serif typeface does not have serifs. These typefaces are typically considered more modern and are often used in digital and web design.

**Script** A script typeface is a decorative style that imitates handwriting or calligraphy.

## Kerning

Kerning refers to adjustments to the default space between individual letters. Proper kerning ensures that the letters fit together seamlessly and look balanced and harmonious.

## Spacing

Spacing refers to the overall distance between letters and words in a block of text. Proper spacing can affect readability and legibility.

## Leading

Leading, also known as line spacing, refers to the distance between lines of text. Adjusting the leading can affect the overall density and readability of a block of text.

## Ascender

An ascender is the part of a lowercase letter that extends above the x-height of a typeface.

## Descender

A descender is the part of a lowercase letter that extends below the baseline of a typeface.

## X-height

The x-height of a typeface is the distance between the baseline and the midline of lowercase letters. Typefaces with a large x-height are generally considered more legible.

## Baseline

The baseline is the invisible line upon which most letters sit. It's their ground base.

## Counter

A counter is the space enclosed by a letterform, such as the space inside an “o” or “p.”

## Ligature

A ligature is a combination of two or more letters that are joined together as a single glyph. Ligatures can be used to improve the appearance and readability of certain letter combinations.

## Alternates

Alternates are variations of a letterform that can be used to add variety and interest to a typeface.

## Small caps

Small caps are capital letters that are designed to be the same height as lowercase letters. They are often used in headings or subheadings to add emphasis without disrupting the flow of text.

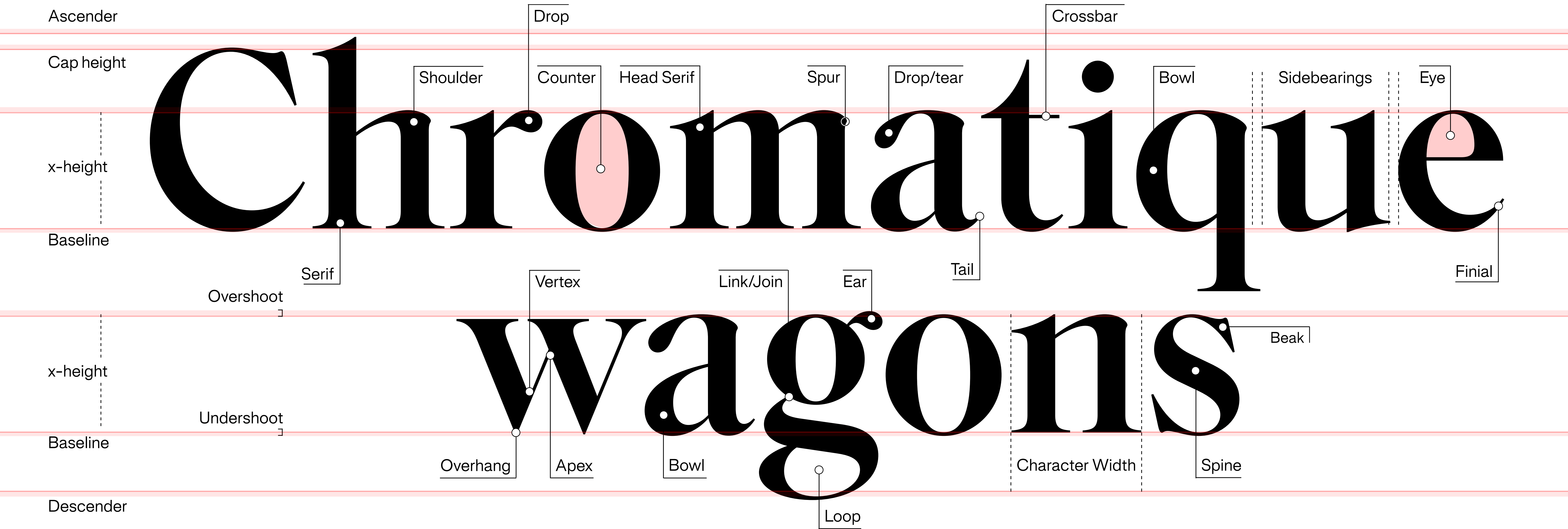
## OpenType

OpenType is a format for digital typefaces that allows for advanced typographic features such as ligatures, alternates, and small caps.

## Vector graphics

Vector graphics are graphics that are made up of lines and curves rather than pixels, allowing them to be resized and scaled without losing quality.

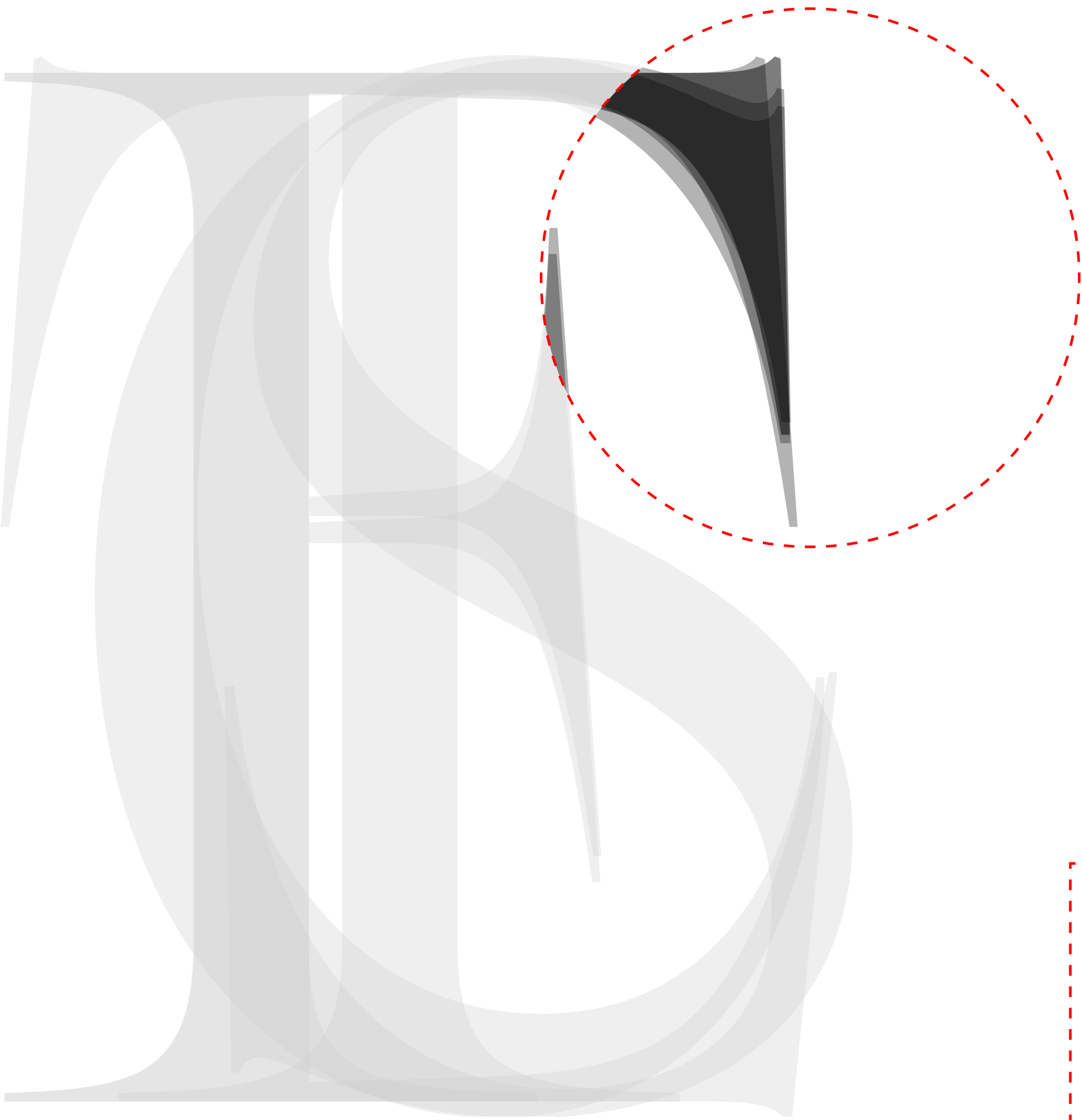
TYPE ANATOMY



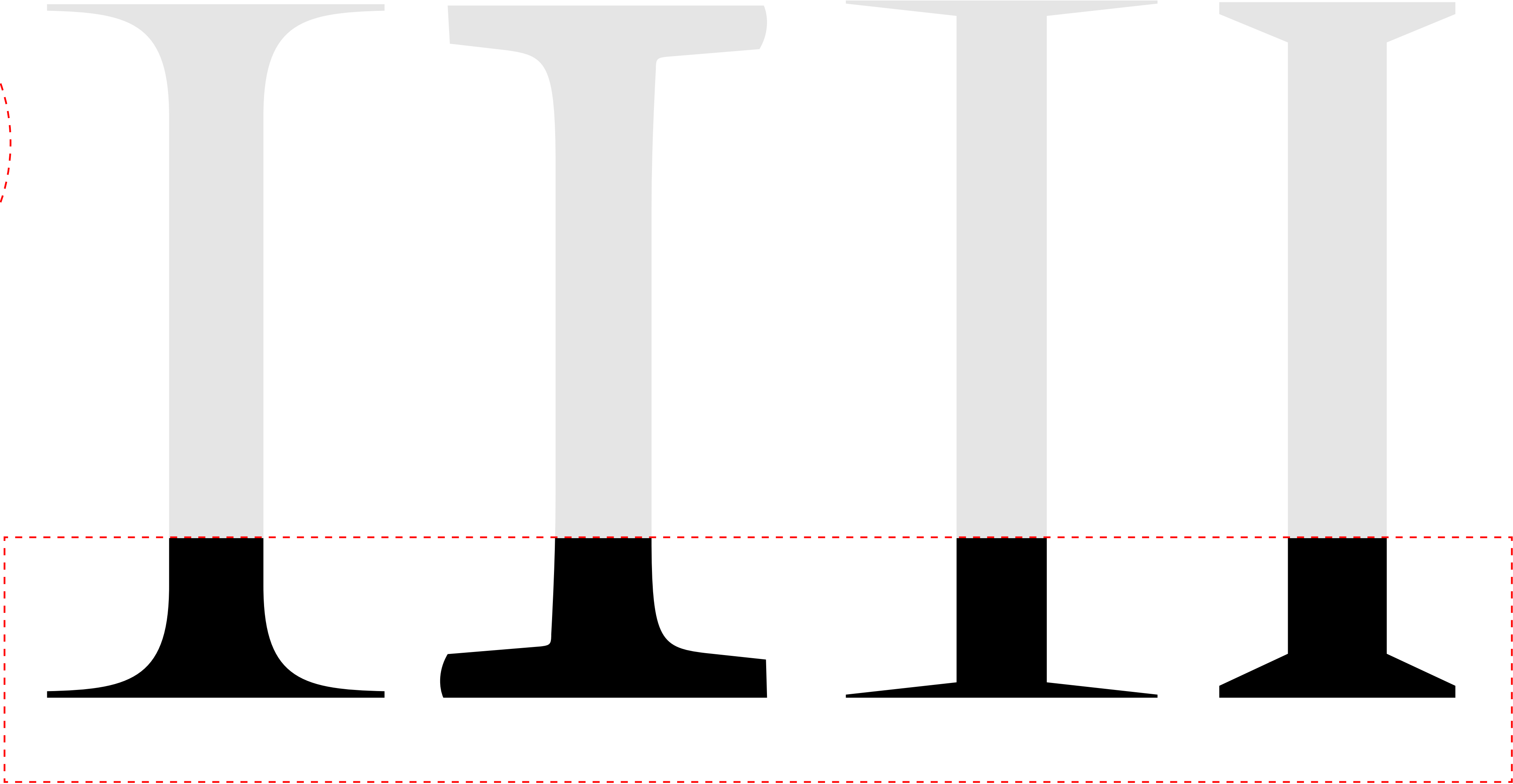


# SERIFS AND TERMINALS

Both serifs and terminals are located at the ends of letter strokes: these endings can exist in different shapes and weight, but the key is they must be consistent in their style and visuals within a given typeface.



Nuances **S, C, T, E, F** terminals.



❶ Nuances

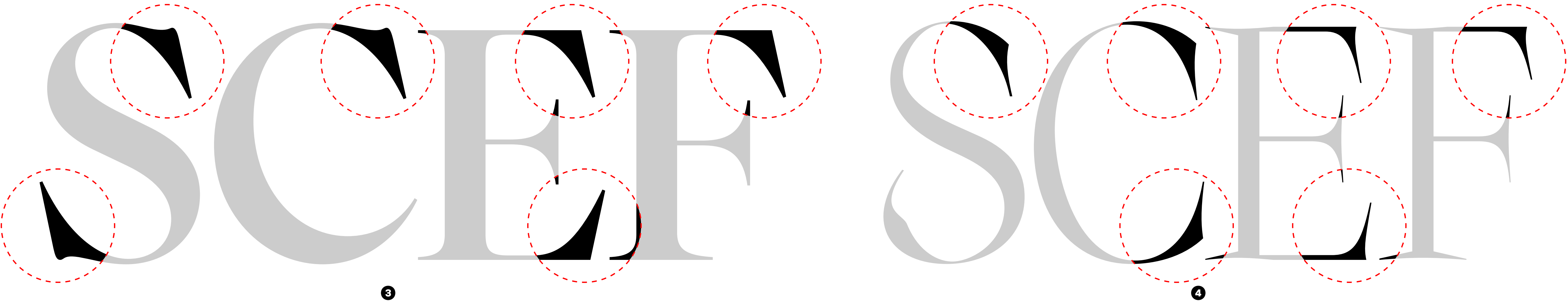
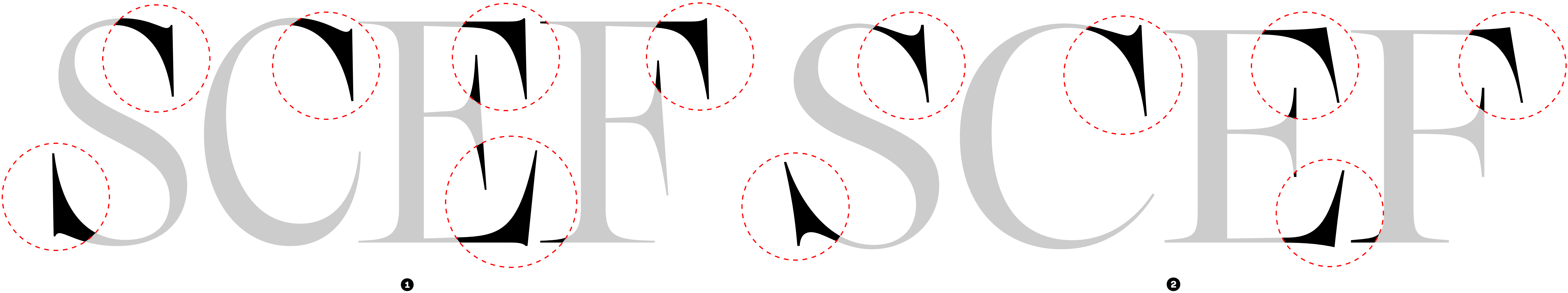
❷ Joly Text

❸ Oroban

❹ Apoc

**SERIFS AND TERMINALS**

Both serifs and terminals are located at the ends of letter strokes: these endings can exist in different shapes and weight, but the key is they must be consistent in their style and visuals within a given typeface.



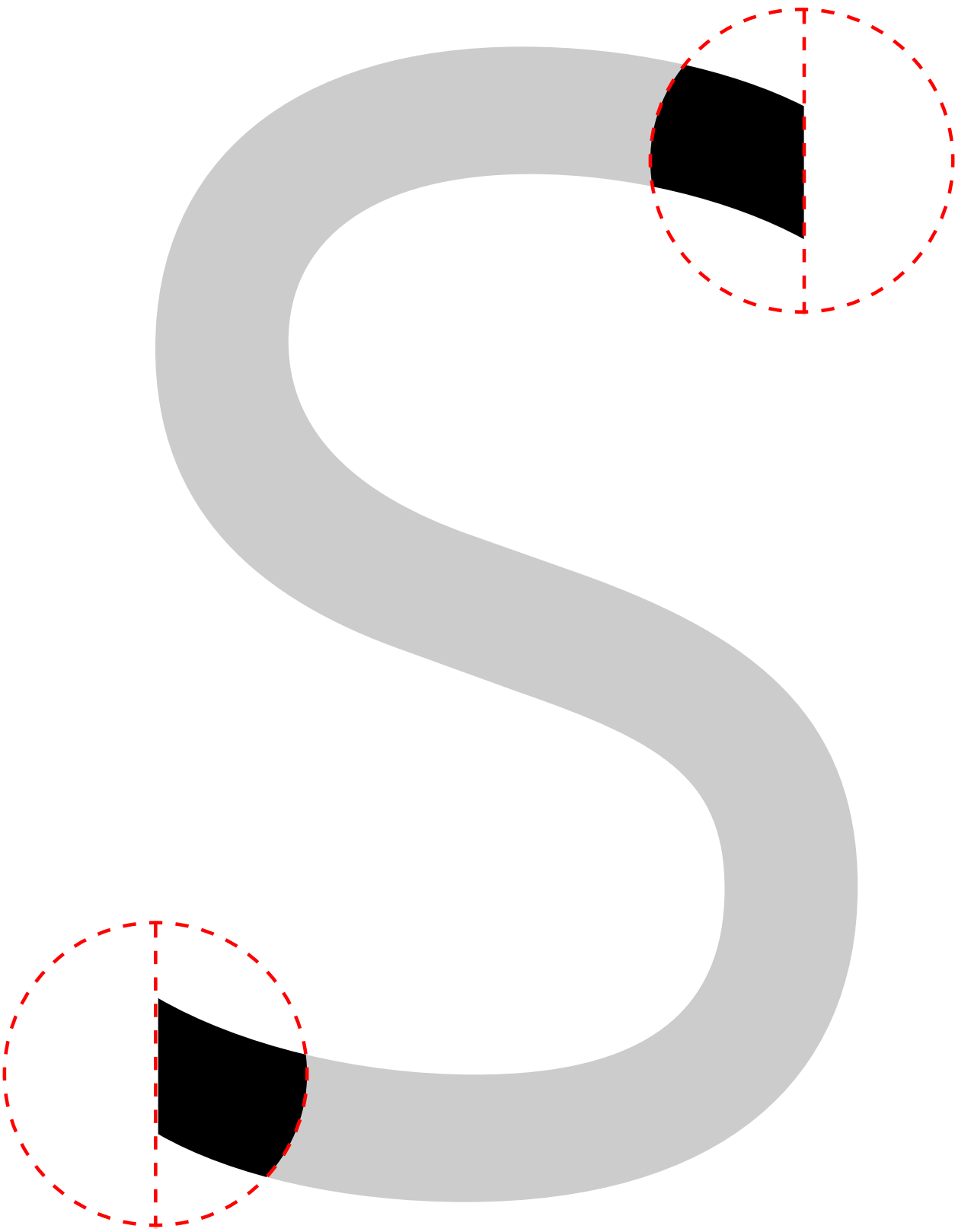
1 Nuances 2 Joly Display 3 Silvana 4 Oroban

# SANS-SERIF STROKE ENDINGS

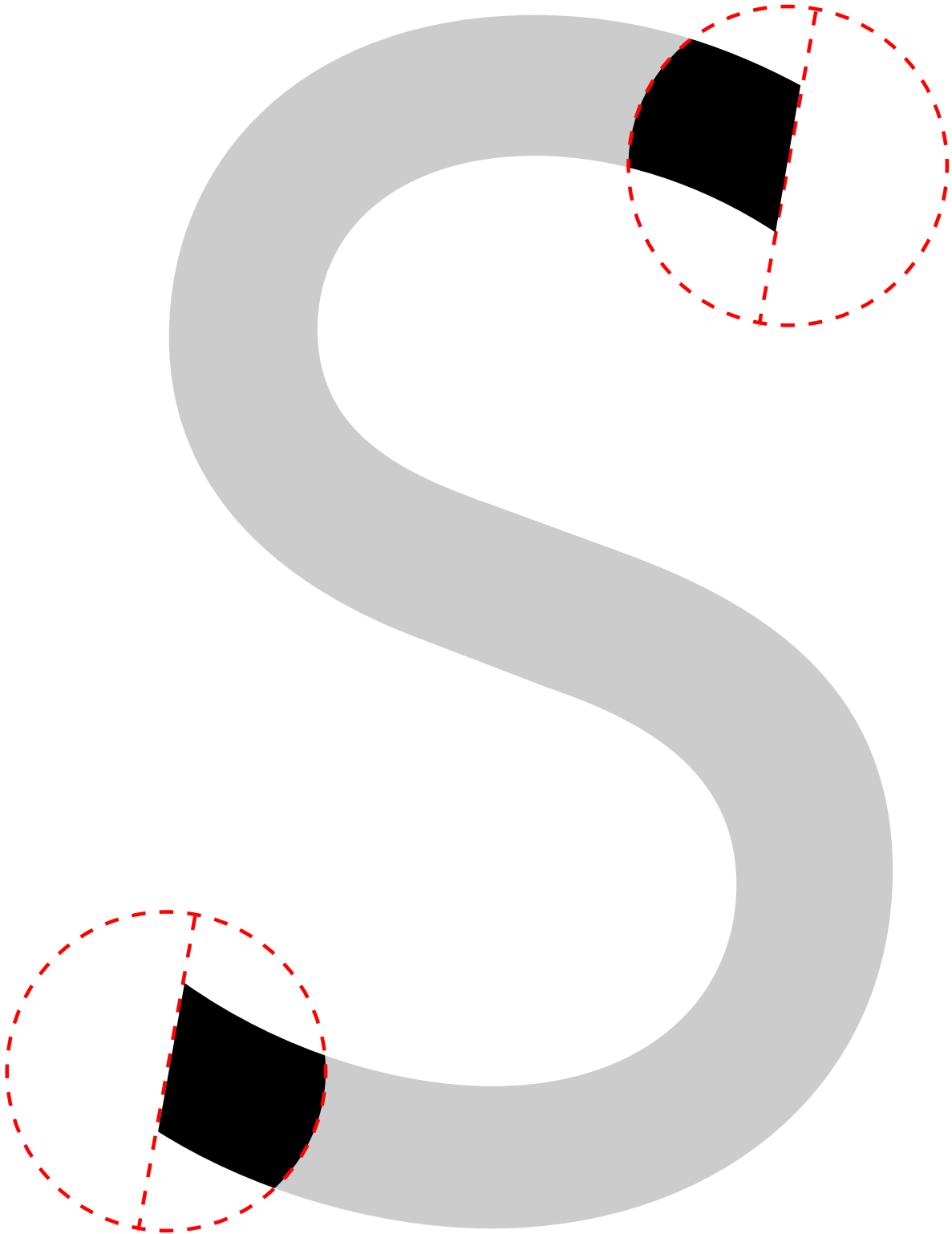
As the name implies, a sans-serif typeface doesn't have any serifs. This means letter strokes will have their endings appearing as cut or sliced (either vertically, horizontally or diagonally), possibly with a rounded or faceted shape to smooth out the truncation. Regardless of how their endings are shaped, these letter strokes will more often than not give the typeface a sort of tool-based feel, evoking the use of a calligraphic pen, a pointed brush, bevel-tipped marker or any imaginary writing tool.

Each stroke ending must be consistent with the chosen tool, keeping the same logic throughout—but that doesn't mean every stroke ending has to be exactly the same. Typically, sans-serif typefaces have their horizontal and vertical letter strokes cut at the capline and the baseline. Note that this doesn't necessarily apply to diagonal stroke, though.

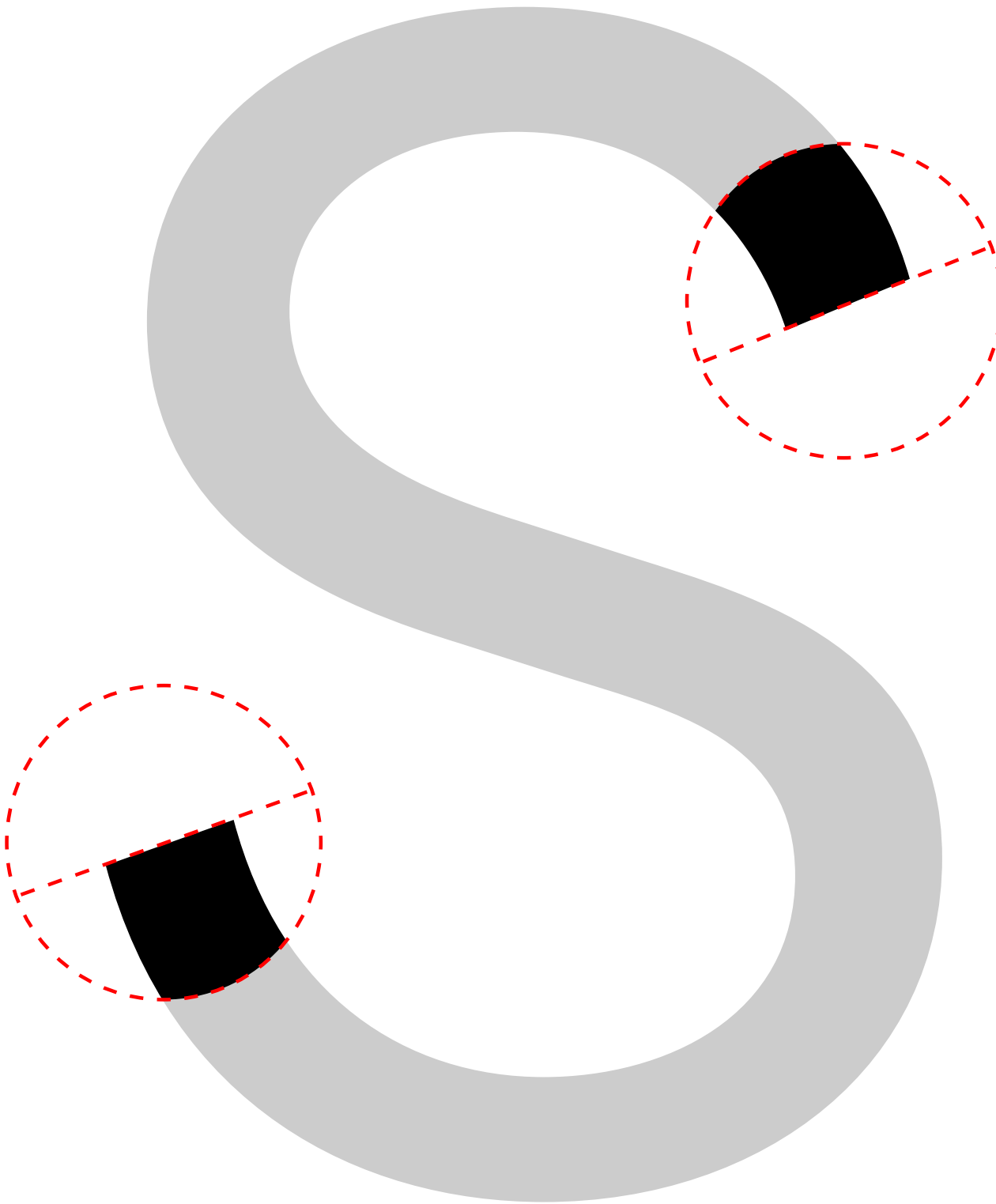
.



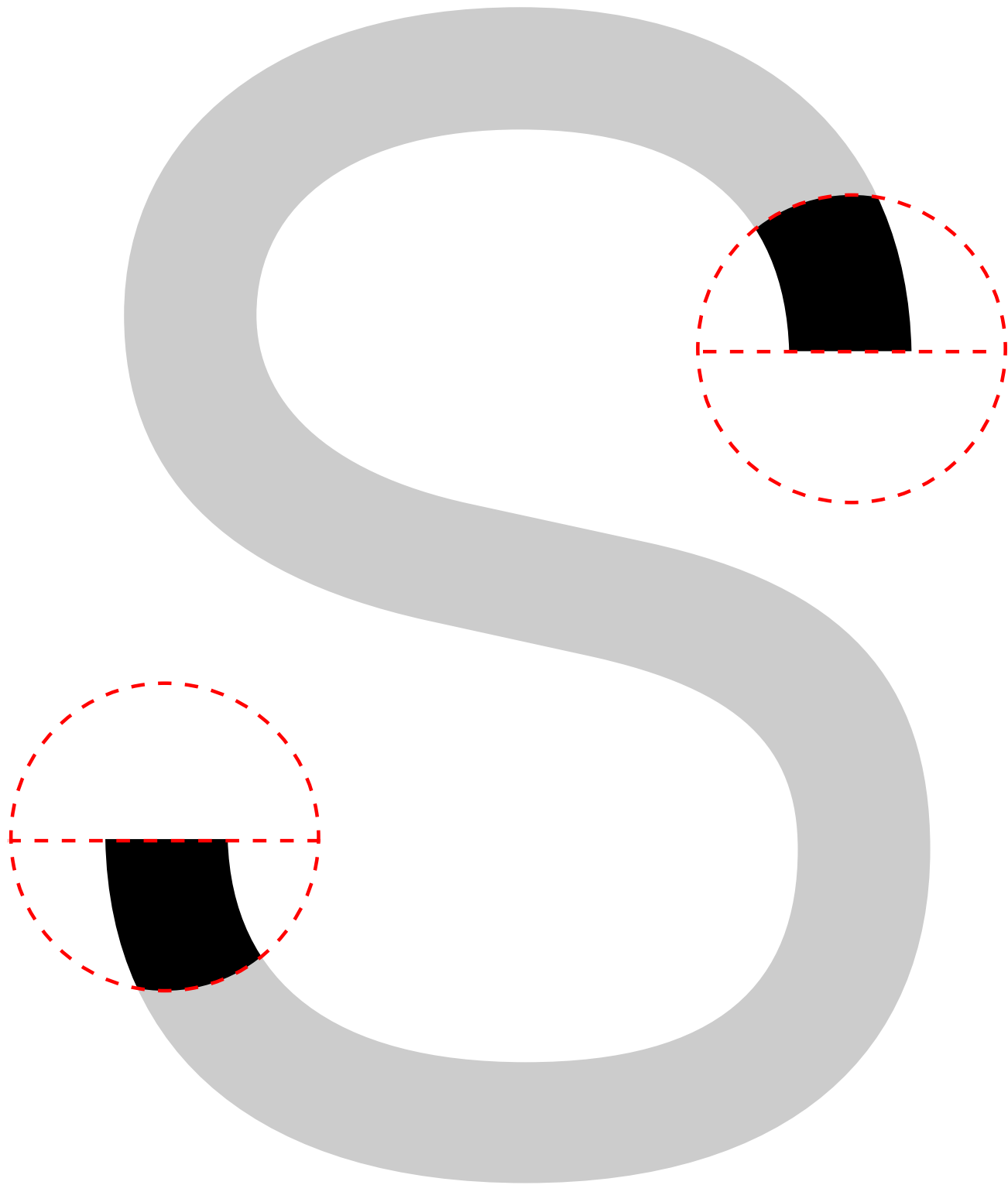
❶ 0° Terminals



❷ 9° Terminals



❸ 68° Terminals



❹ 90° Terminals

# X-HEIGHT

The x-height is the distance between the baseline and the top of, you guessed it, the letter x in a given typeface. That distance usually ranges somewhere between 60 to 75% of the length from the baseline to the capline. Using a smaller x-height will give a softer, gentler aspect to a typeface while, on the contrary, taller x-heights give typefaces a heavier, bulkier look with the extra perk of making them easier to read from a distance as well as on small digital screens, since they have more space to display their features. Be careful not to extend your x-heights too much, though! If your x-height is too tall, you will most likely lose precious room for your ascenders and descenders, meaning the readability of some of your letters will somewhat suffer!

With that being said, you may actually want to design a font with a very high x-height. Some contemporary fonts are even meant that way, as they give a bold feeling when used in Display. These are just general guidelines to help you design a readable font, but the key is experimenting and trying to come up with new shapes no matter what — this is how font design evolves, after all! Since the upper half of a letter is what usually helps the most with readability, this issue can be solved by increasing the height of your ascenders—though this can in turn make your typeface less efficient as a whole. Know that increasing the length of your ascenders doesn't necessarily mean that you must mirror these changes to your descenders—you do you, after all.

It's easy to assume shorter x-heights provide more space to a typeface — this isn't always the case though, because space efficiency is a lot more related to width (horizontal length) than it is to height (vertical length). A short lowercase glyph is most likely going to need some extra breathing room on the sides as you make it wider, which can become an issue when working with longer texts where horizontal space is limited. So, what would the optimal x-height be, you ask? Well, choosing a x-height for a font depends on what you are aiming for: are you more focused on legibility? Experimentation? Are you working on reviving a very old type specimen with super small x-height and want it to perform differently? At the end of the day, it's all about what you want to create!





# WEIGHT

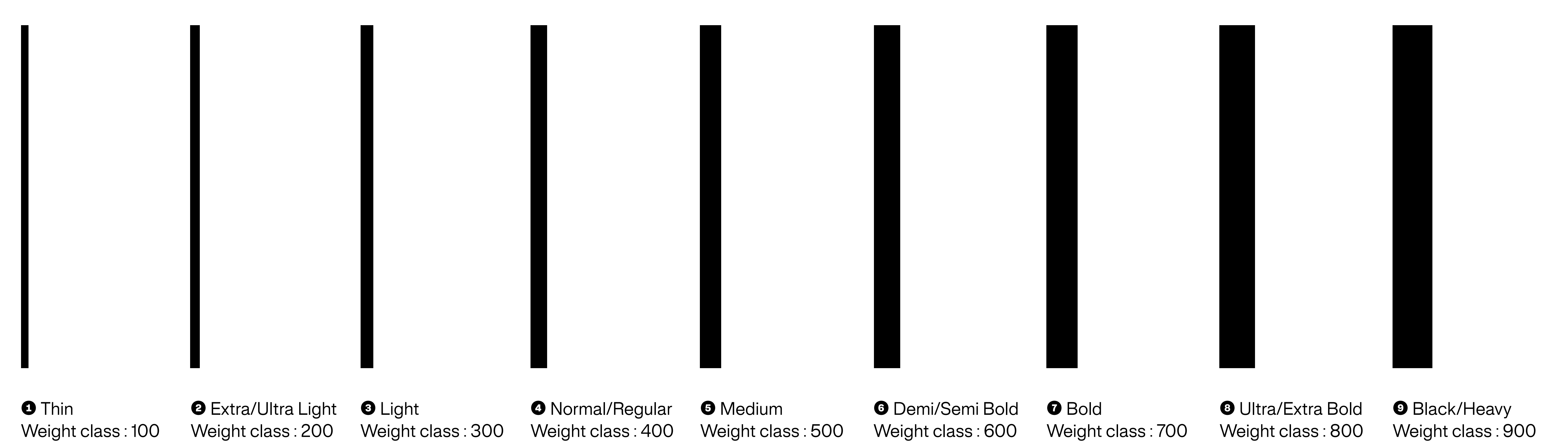
"Font weight" refers to how thin or thick a font is displayed. Simple, right? Well, not entirely: font weights can have various names referring to the same thing, and these names don't actually refer to any standard or definitive measurement system. For example: with a "bold" weight (also referred to as "strong" or "fat") font, you know you're not getting a font that's thin, regular nor in italics. The problem is there is no precise or universal scale that clearly defines what "bold" is—at what point does a font start becoming bold, and when is it past the point of being labeled as bold? Well, it ultimately is up to the designer's interpretation and sensibility. One thing that can be done though is compare the weight of very well known and used typefaces to see how yours should behave within those metrics. It's not all doom and gloom though, as weight standardization does exist in web design. In CSS, font weights range on a scale from 100 to 900 (from Thin to Black, thinnest to blackest, respectively), and the regular weight is always 400 no matter what. As a typeface designer, many font editors allow you to input a weight value directly in the metadata of your fonts. On that note, [a list of metrics can be found here](#). Oh, and you should know that there's a difference between choosing different weight scalings when designing (which is more about the look of your font) and re-organizing them in the design space of the font via things like "axis mapping/axis location" (which is more about the way your font should be understood by computers/software when being used). Typically, the stem to x-height ratio of a normal weight font goes from 1:5 to 1:6, whereas a bold weight could use a minimum ratio of 1:3 to 1:4. A light weight font will instead benefit from a 1:6.5 to 1:9 minimum ratio.

Font weights	usWeightClasse
Thin	100
ExtraLight	200
UltraLight	
Light	300
Normal	400
Regular	
Medium	500
DemiBold	600
SemiBold	
Bold	700
ExtraBold	800
UltraBold	
Black	900
Heavy	

# STEM BALANCE

Glyphs in a given typeface are made of horizontal, vertical and diagonal straight strokes as well as curves. Regardless of the design you decide to go with, bear in mind that your horizontal stems should be slightly thinner than your vertical stems — due to an optical illusion, our eyes tend to make horizontal structures look bolder than their vertical cousins when they are near each other. To fix this, we need to address our horizontal weights. Quick note about stems: your vertical stem is kind of a big deal, because it will dictate the kind of weight you’re working with.

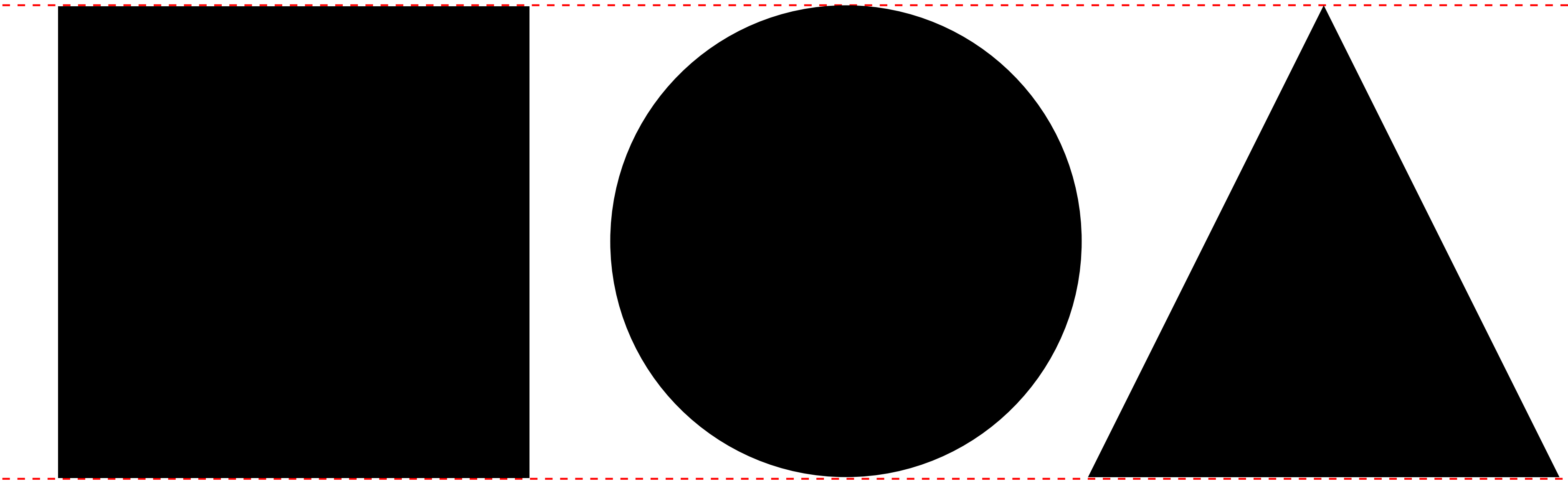
Have a look at other fonts and compare the most common unit sizes for a Regular, a Medium, a Heavy. Very interesting stuff here. This varies from one font to the other, though it’s possible to find recurring aspects here and there. We’ll dive in all of this stuff later — for now, here’s a quick look at different kinds of stems to help you picture what we mean:



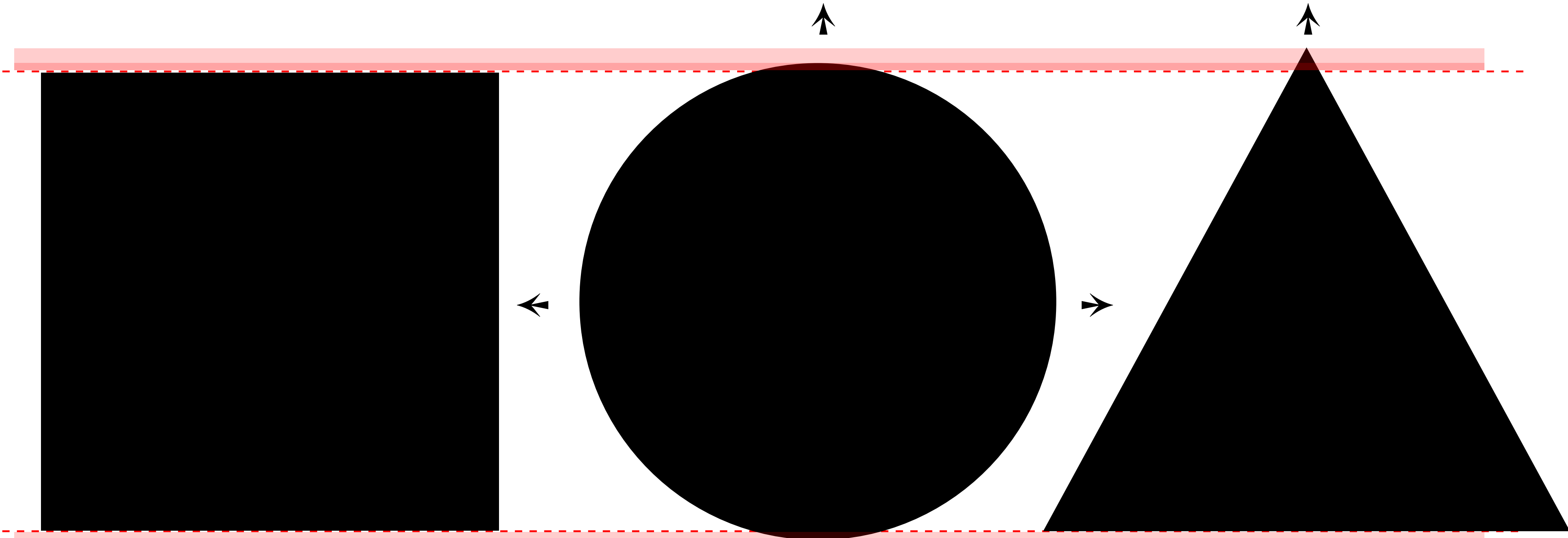
# BALANCING SHAPES & OPTICAL CORRECTIONS

It is quite easy to find basic shapes when looking at the various letters of the Roman alphabet. For example, think about the letters **C**, **A** and **L**, and how you can make a circle, a triangle and a square out of them, respectively. Some letters use diagonals in combination with these shapes, such as the letters **Q** and **Z**. Others can be considered as hybrids, like **D** and its mix of circle and square.

Square shapes will appear larger than circular shapes which, in turn, will look larger than triangular shapes. Understanding this aspect is key, as we'll need to balance them accordingly by slightly extending our round and triangular shapes above the capline (also known as "overshooting") and below the baseline (or "undershooting"), generally by a value of 2 to 5%. This will create an optical illusion where circular and triangular letters will look like they're the same size as our square letters, even if they're actually slightly larger.



Mathematical exact same height.



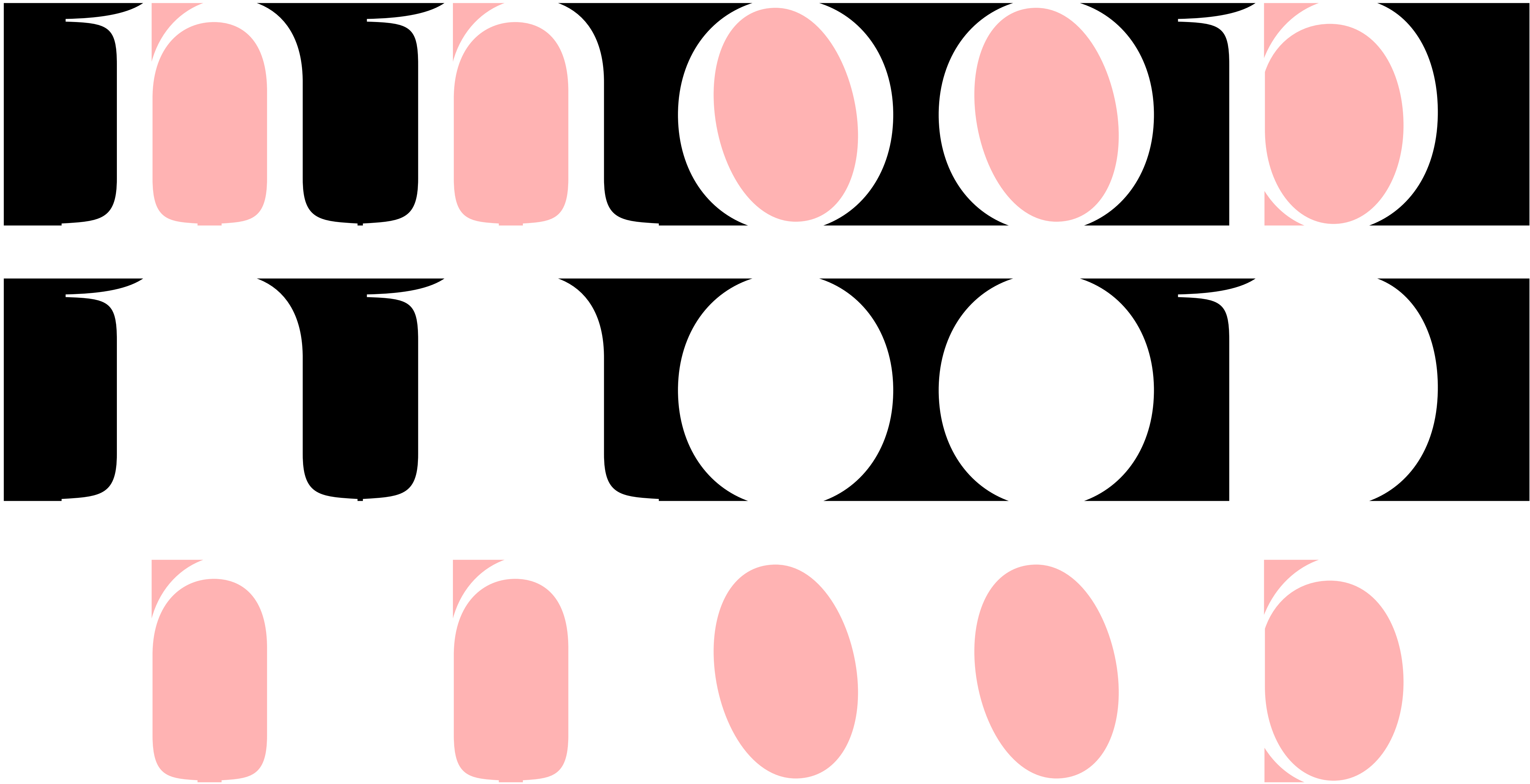
Optically adjusted

# SPACING & SIDEBEARINGS

Disclaimer: note that anything relative to spacing in font design also depends heavily on the point (or pixel) size of the font. If you’re planning on designing a font for 8pt texts you won’t be designing AND spacing it the same way as a font designed for 20pt or huge display uses.

Having cool-looking shapes for your glyphs is one thing, but always remember that spacing them properly is extremely important for readability. It’s mostly up to you to find just the right amount of negative space between your glyphs, because spacing varies from one typeface to another.

With that being said, you can follow a rule of thumb where the amount of empty space within your letters (also known as the “counter”) can serve as a basis for the amount of spacing needed around a given letter (the “sidebearing”).





# SPACING & SIDEBEARINGS

Depending on the kind of display your typeface is going to be used, you may want to take the time to create a font family with various spacing: smaller glyphs will need extra breathing space to, once again, help with readability.

Counterintuitively though, spacing should use opposite proportions if your typeface isn't of regular weight: bold and condensed letters typically have smaller counters, but they require more spacing (if displayed in small sizes) so your text doesn't look like a line of smudge from a distance; on the contrary, light fonts should use tighter spacings (again, this is true for small sizes), otherwise your text can look like a bunch of letters instead of a set of words forming sentences.

Think about it this way: imagine your font used in a text made of sentences and paragraphs printed in black on a huge white sheet of paper. Now imagine you're slowly zooming out as you look at the text. Assuming the spacing in your font is done correctly, you should see an even gray area by looking at it and squinting your eyes.

# Architecture

Architecture c'est l'art majeur de concevoir des espaces et de bâtir des édifices, en respectant des règles de construction empiriques

Architecture c'est l'art majeur de concevoir des espaces et de bâtir des édifices, en respectant des règles de construction empiriques ou scientifiques, ainsi que des concepts esthétiques, classiques ou nouveaux, de forme et d'agencement d'espace,

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❶ Tight Display spacing (~25)

# Architecture

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❷ Regular Spacing (±0)

# Architecture

Architecture c'est l'art majeur de concevoir des espaces et de bâtir des édifices, en respectant des règles de construction empiriques

Architecture c'est l'art majeur de concevoir des espaces et de bâtir des édifices, en respectant des règles de construction empiriques ou scientifiques, ainsi que des concepts esthétiques, classiques ou nouveaux, de forme et d'agencement d'espace,

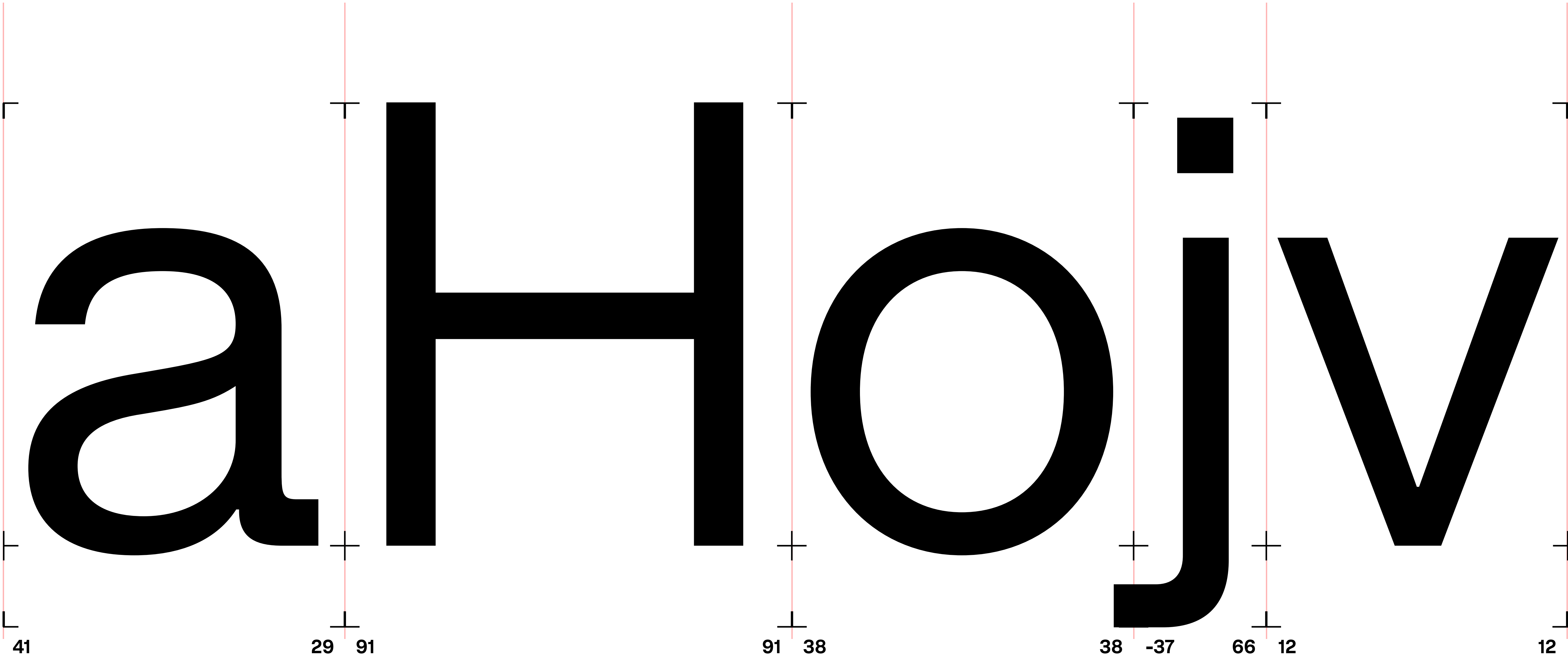
Architecture c'est l'art majeur de concevoir des espaces et de bâtir des édifices, en respectant des règles de construction empiriques ou scientifiques, ainsi que des concepts esthétiques, classiques ou nouveaux, de forme et d'agencement d'espace, en y incluant les aspects sociaux et environnementaux ahabitable, sépulcrale, rituelle, institutionnelle, religieuse, défensive, artisanale, commerciale, scientifique, signalétique, muséale, industrielle, monumentale, décorative, paysagère, voire purement artistique. C'est pourquoi l'architecture est définie comme " une expression de la culture ". Elle est reconnue comme le premier des arts majeurs dans la classification des arts, communément admise, du xxe siècle, des 9 arts majeurs et fait partie des beaux-arts.

❸ Wide Small Text Spacing (+30)

# SPACING & SIDEBEARINGS

A sidebearing is the basic amount of space that’s either to the left or the right side of a letter, meaning there are two sidebearings per letter. As you know, the sidebearings of a letter have their width dictated by the counter of the letter. But wait, there’s more! The width of a sidebearing is also affected by the shape of the letter: letters with round sides or with a diagonal shape tend to have wider sidebearings, while letters with a single stem will require tighter sidebearings.

What’s more, the left sidebearing does not necessarily have the same size as the right sidebearing: for example, alowercase **j** will need a tighter right sidebearing so the next letter doesn’t look out of place. And, of course, a letter is likely to require two different sets of sidebearings depending on whether it is lowercase or uppercase—but you probably already guessed that anyway.



## HOW TO TEST YOUR SPACING

The quickest and smartest way to test your spacing is  
by checking out your typeface in a premade list, *such as this one*:

nnonnoono nnoannooaoo  
 nbnbnnooboo nncnnoocoo  
 nndnnoodoo nnennooeoo nnfnnoofoo  
 nngnnoogoo nnhnnoohoo nninnooioo  
 nnjnnoojoo nnknnookoo nnlnnooloo  
 nmmnnoomoo nnpnnoopoo  
 nnqnnooqoo nnrnnooroo nnsnnnoosoo  
 nntnnootoo nnunnoouoo nnvnnnoovoo  
 nnwnnoowoo nnxnnooxoo  
 nnynnooyoo nnznnoozoo  
 HHOHHOOHOO HHAHHOOA00  
 HHBHHOOB00 HHCHHHOOC00  
 HHDHHOOD00 HHEHHOOE00  
 HHFHHOOF00 HHGHHOOG00

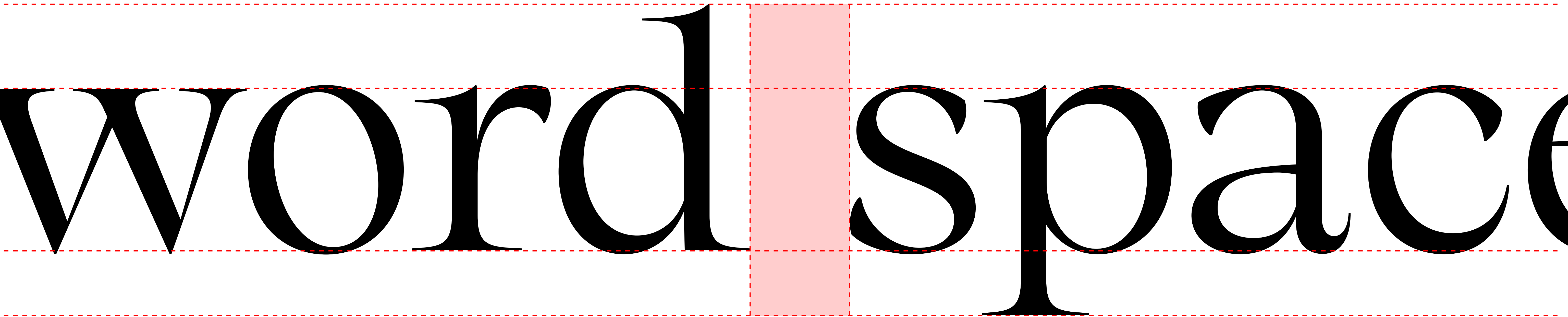
HHJHHOOJ00  
 HHKHHOOK00 HHLHHOOL00  
 HHMHHOOM00 HHNHHOON00  
 HHPHHOOP00 HHQHHOOQ00  
 HHRHHOOR00 HHSHHOOS00  
 HHTHHOOT00 HHUHHOOU00  
 HHVHHOOV00 HHWHHOOW00  
 HHXHHOOX00 HHYHHOOY00  
 HHZHHOOZ00  
 008088088 0010088188  
 0020088288 0030088388  
 0040088488 0050088588  
 0060088688 0070088788  
 0090088988



# WORD SPACE

Simply put, “word space” is the name of the ‘invisible’ character that you input when pressing the spacebar key on your keyboard. And as you probably guessed, you can’t just use a random amount of empty space for that: your word space has to be wide enough so that the words don’t look clumped together, but not too wide either — you don’t want the end result to look like someone’s spacebar was broken.

There are multiple ways to figure out the ideal word space for your typeface. As an example, you could use 70% to 90% of the total width of your i, including its left and ride sidebearings. Again, try things and figure them out depending on how you feel about them.



Et,après mètre retourné,je vis sept chandeliers d’or,et,au milieu des sept chandeliers,quelqu’un qui ressemblait à un fils d’homme,vêtu d’une longue robe,et ayant une ceinture d’or sur la poitrine.Sa tête et ses cheveux étaient blancs comme de la laine blanche,comme de la neige;ses yeux étaient comme une flamme de feu;ses pieds étaient semblables à de l’airain ardent,comme s’il eût été embrasé dans une fournaise;et sa voix était comme le bruit de grandes eaux.Il avait dans sa main droite sept étoiles.Des abouches sortait une épée aiguë,à deux tranchants;et son visage était comme le soleil lorsqu’il brille dans sa force.

❶ Word Space too narrow

Et, après mètre retourné, je vis sept chandeliers d’or, et, au milieu des sept chandeliers, quelqu’un qui ressemblait à un fils d’homme, vêtu d’une longue robe, et ayant une ceinture d’or sur la poitrine. Sa tête et ses cheveux étaient blancs comme de la laine blanche, comme de la neige; ses yeux étaient comme une flamme de feu; ses pieds étaient semblables à de l’airain ardent, comme s’il eût été embrasé dans une fournaise; et sa voix était comme le bruit de grandes eaux. Il avait dans sa main droite sept étoiles. De sa bouche sortait une épée aiguë, à deux tranchants; et son visage était comme le soleil lorsqu’il brille dans sa force.

❷ Good word space!

Et, après mètre retourné, je vis sept chandeliers d’or, et, au milieu des sept chandeliers, quelqu’un qui ressemblait à un fils d’homme, vêtu d’une longue robe, et ayant une ceinture d’or sur la poitrine. Sa tête et ses cheveux étaient blancs comme de la laine blanche, comme de la neige; ses yeux étaient comme une flamme de feu; ses pieds étaient semblables à de l’airain ardent, comme s’il eût été embrasé dans une fournaise; et sa voix était comme le bruit de grandes eaux. Il avait dans sa main droite sept étoiles. De sa bouche sortait une épée aiguë, à deux tranchants; et son visage était comme le soleil lorsqu’il brille dans

❸ Word Space too loose

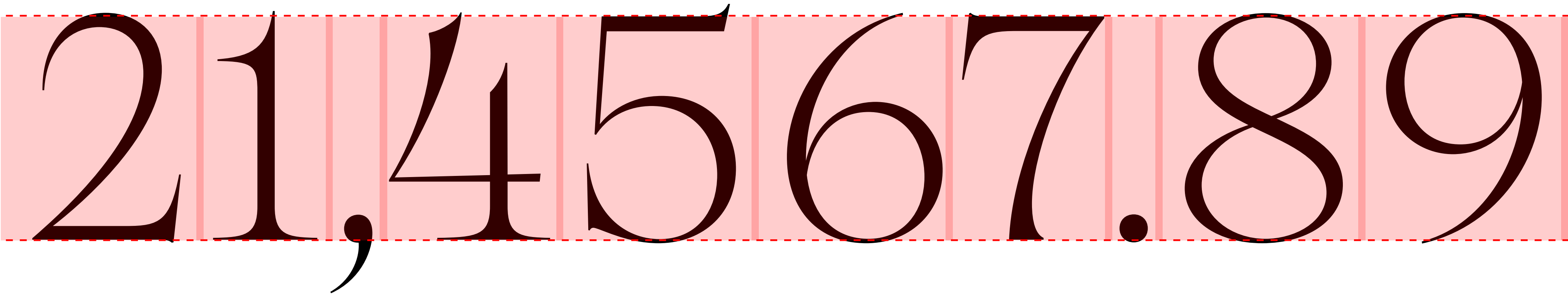


# NUMBERS & PUNCTUATION

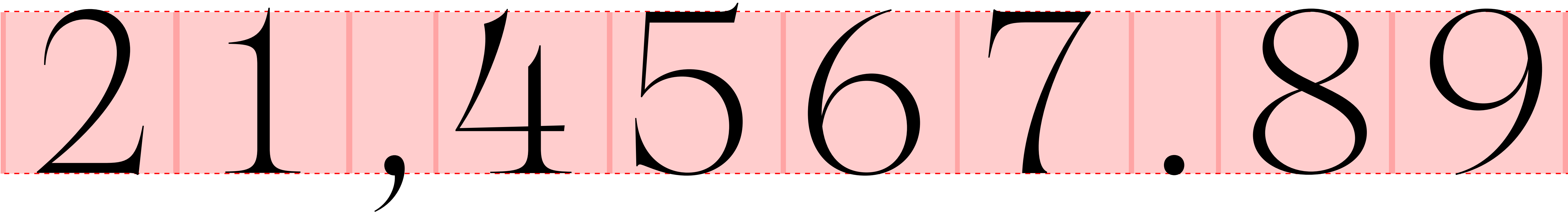
Numbers and punctuation signs come in two flavors called “proportional” and “tabular”. Proportional figures use varied spacing depending on the shape of the number or punctuation sign. Tabular numbers are meant to neatly align in tables and spreadsheets. This means they should all use the same exact width and be visually centered within it.

For better readability, tabular punctuation should have a width based on that of your tabular numbers: signs such as the comma, the period, the colon, the semicolon and the single quote should be placed at the center of half the width of a number. The double quote needs a larger body, which corresponds approximately to twice the width of your single quote. The exclamation mark can typically use a slightly larger single quote width, whereas the question mark generally uses the double quote width.

You may also consider shifting your question mark, exclamation mark and semicolon mark very slightly to the right if you find that merge a bit too much with whatever letter precedes them.



❶ Proportional figures



$a^2$     $a^2$     $\frac{1}{2} * a^2$     $a^2$     $a^2$     $a^2$     $a^2$     $\frac{1}{2} * a^2$     $a^2$     $a^2$

❷ Tabular figures

**KERNING**

As you know by now, letters come in all shapes and sizes. Sadly, your sidebearings won't always do the trick as far as readability is concerned: some letter combinations just look a bit off when they occur. This is where something called “kerning” becomes necessary.



# KERNING

Kerning is the process of finding these letter pairs and tweaking how they should look together so they don't stand out awkwardly.

A practical tip to easily check your letter pairings is to [read the following text](#) using your typeface:

[Here's our own list](#) of words for Kerning.

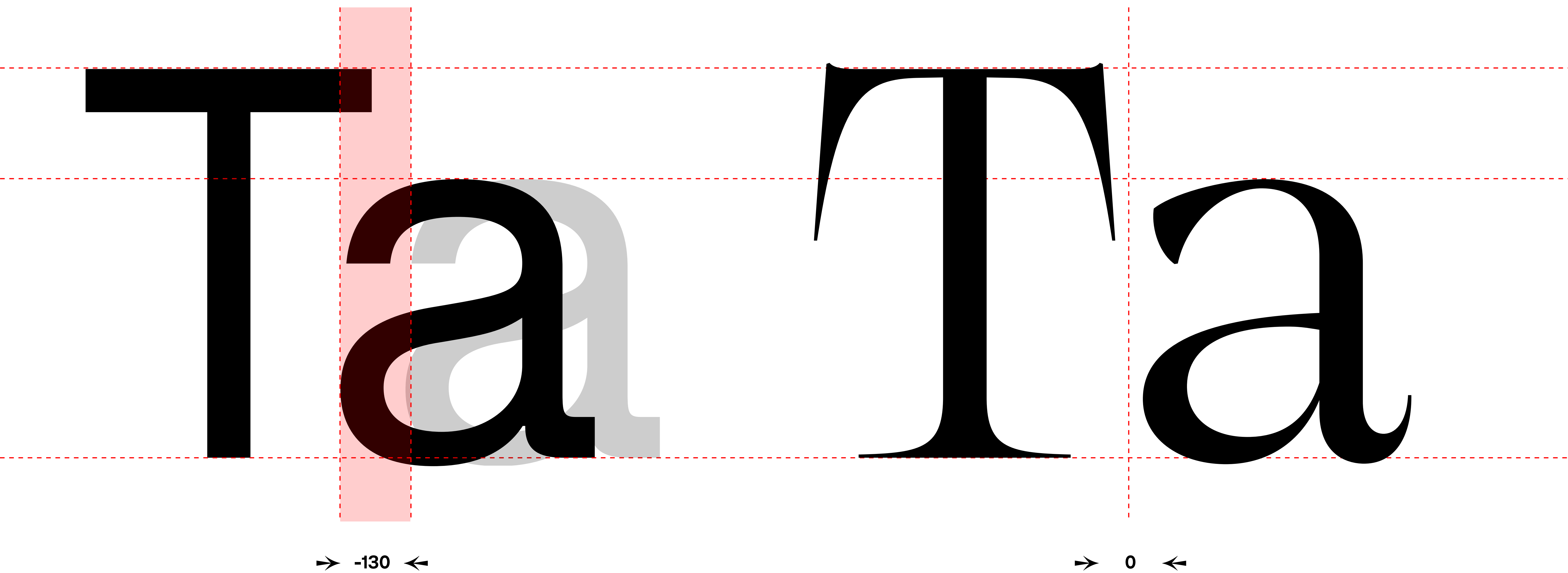
lynx tuft frogs, dolphins abduct by proxy  
the ever awkward klutz, dud, dummkopf,  
jinx snubnose filmgoer, orphan sgt.  
renfruw grudgek reyfus, md. sikh psych  
if halt tympany jewelry sri heh! twyer vs  
jojo pneu fylfot alcaaba son of nonplussed  
halfbreed bubbly playboy guggenheim  
daddy coccyx sgraffito effect, vacuum  
dirndle impossible attempt to disvalue,  
muzzle the afghan czech czar and exninja,  
bob bixby dvorak wood dhurrie savvy, dizzy  
eye aeon circumcision uvula scrungy picnic  
luxurious special type carbohydrate ovoid  
adzuki kumquat bomb? afterglows gold girl  
pygmy gnome lb. ankhs acme aggroupment  
akmed brouhha tv wt. ujjain ms. oz

abacus mnemonics bhikku khaki bwana  
aorta embolism vivid owls often kvetch  
otherwise, wysiwyg densfort wright you've  
absorbed rhythm, put obstacle kyaks krieg  
kern wurst subject enmity equity coquet  
quorum pique tzetse hepzibah sulfhydryl  
briefcase ajax ehler kafka fjord elfship  
halfdressed jugful eggcup hummingbirds  
swingdevil bagpipe legwork reproachful  
hunchback archknave baghdad wejh  
rijswijk rajbansi rajput ajdir okay weekday  
obfuscate subpoena liebknecht marcgravia  
ecbolic arcticward dickcissel pincpinc  
boldface maidkin adjective adcraft adman  
dwarfness applejack darkbrown kiln  
palzy always farmland flimflam unbossy

nonlineal stepbrother lapdog stopgap  
sx countdown basketball beaujolais vb.  
flowchart aztec lazy bozo syrup tarzan  
annoying dyke yucky hawg gagzhukz cuzco  
squire when hiho mayhem nietzsche szasz  
gumdrop milk emplotment ambidextrously  
lacquer byway ecclesiastes stubchen  
hobgoblins crabmill aqua hawaii blvd.  
subquality byzantine empire debt obvious  
cervantes jekabzeel anecdote flicflac  
mechanicville bedbug couldn't i've it's they'll  
they'd dpt. headquarter burkhardt xerxes  
atkins govt. ebenezer lg. lhama amtrak  
amway fixity axmen quumbabda upjohn  
hrumpf

# KERNING

Don't take the above list for the definitive list of problematic pairs: kerning is in fact typeface-dependent and can apply to hundreds or even thousands of letter pairs in total depending on how simple or complex your design is. Another thing to consider is that larger type sizes will require more kerning than smaller sizes due to how the gaps between letters become increasingly obvious as the type size gets bigger. Also, bear in mind that some problematic letter combinations may not exist in your language, but probably do in a bunch of others.



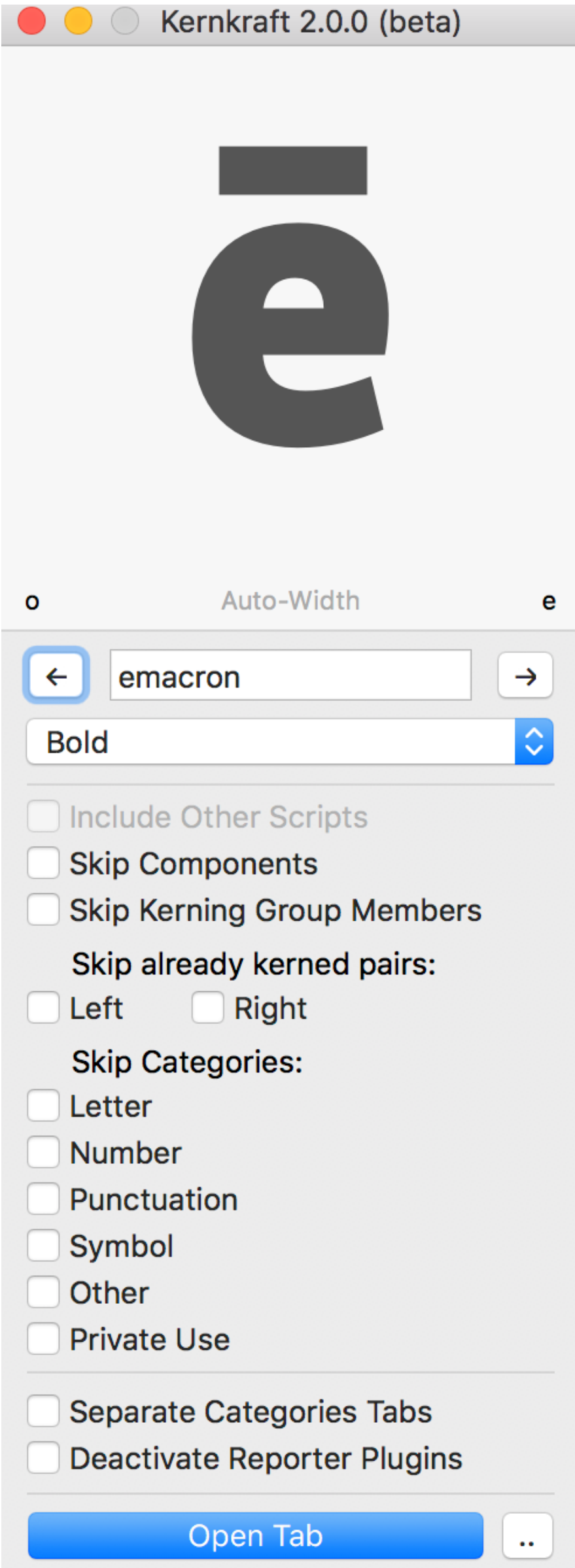


# KERNING

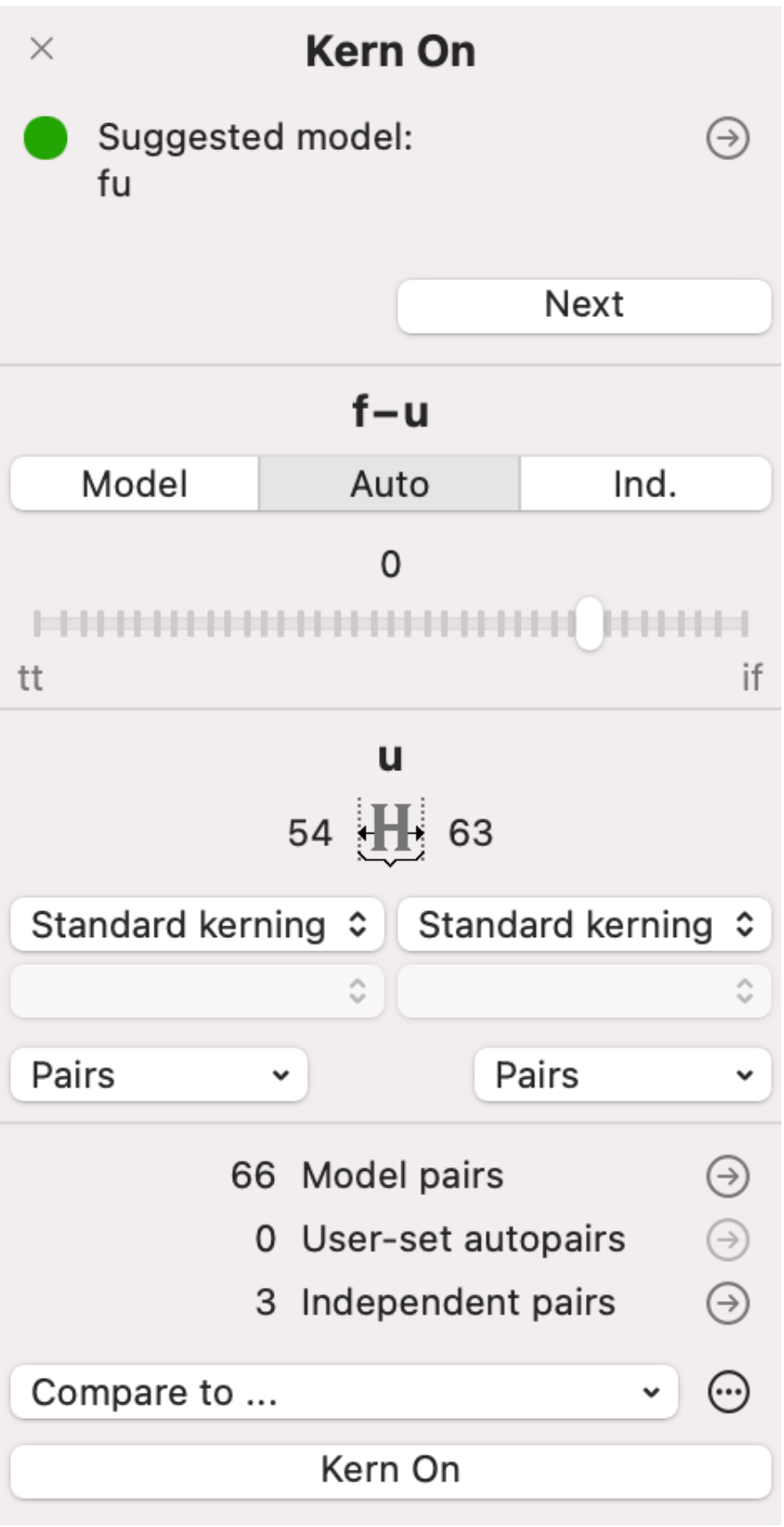
Some Glyphs plugins such as Kernkraft and KerOn can also help with kerning by automating some of the work for you, but we strongly recommend working on your kerning manually before using any of these just to trim the fat, so to speak.

Note that kerning should be done at a very, very late stage of your font design. You can of course do it on the go if you want to try out your font overall look, optical gray, etc. but it should be done in a very focused and consistent manner. As such, doing so as one of the last part of the production is recommended.

Now that we’ve seen quite a few basic notions, let’s dive into font design itself.



[\*KernKraft\*](#) by Mark Frömberg



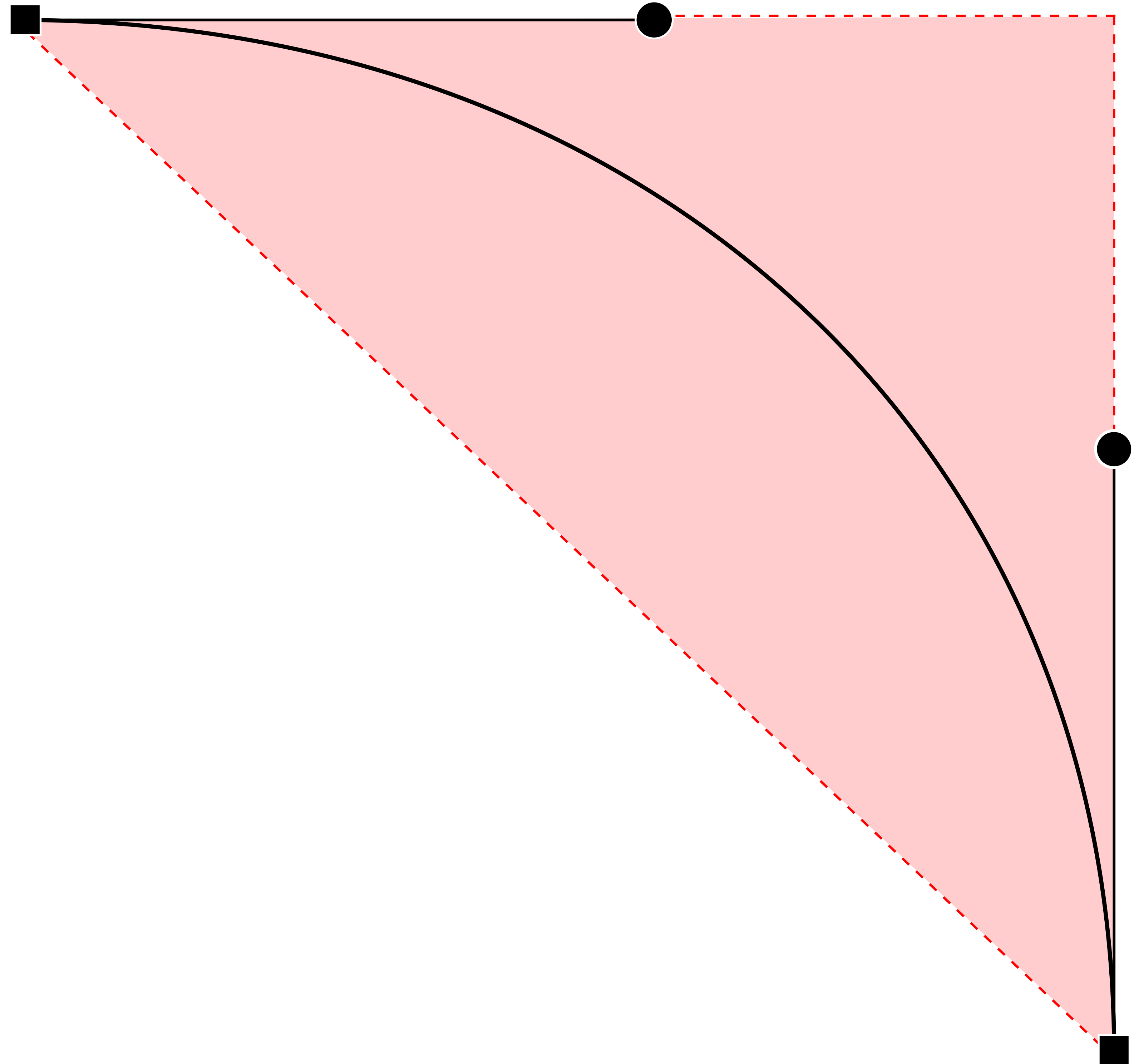
[\*KernOn\*](#) by Tim Ahrens

# DESIGNING GOOD PATHS

## ▪ The Magic Triangle

A “segment” is the line linking two adjacent on-curve points, or “nodes”. Naturally, a segment can either be straight or curved. Curved segments are where things get tricky because they actually have two additional spots outside of the segment itself that act as control points. We’ll be calling them “handles” but, just so you know, the technical term for them is “Bézier control points”. As you can see here, the segment, its nodes and its handles nicely fit in an imaginary triangle. In fact, they have to: if you end up with an unsatisfying result, then you’ll need to tweak the positioning of your nodes. Vertical and horizontal placements are extremely important here.

Chances are that you find this statement quite surprising if you have a graphics design background and are used to vector-drawing with Adobe Illustrator, for instance. Glyphs tip! If you can’t locate one of your handles, that’s because it probably is overlapping a node somewhere. To select that “hidden” handle, click one of your nodes and press Tab until you have that handle selected, then use the arrow keys to move it from behind the node it was hiding under.



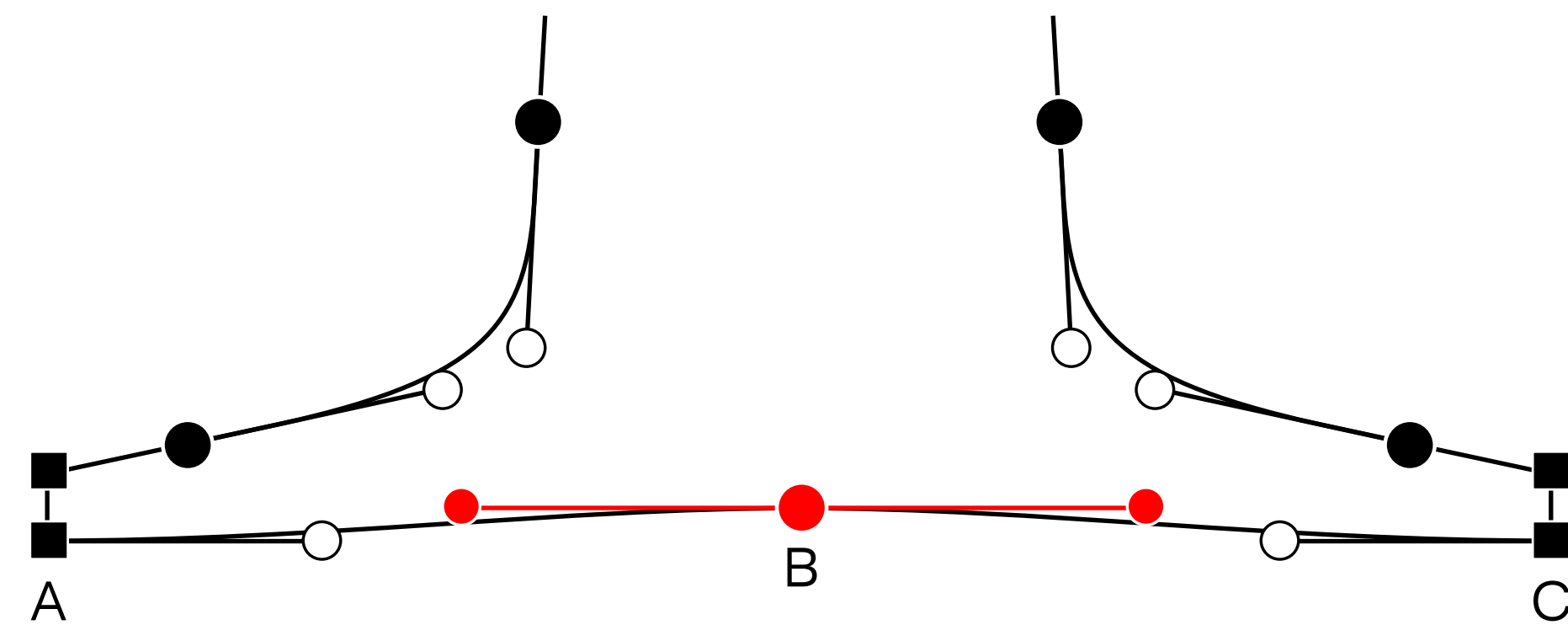
# DESIGNING GOOD PATHS

## ▪ Inflection

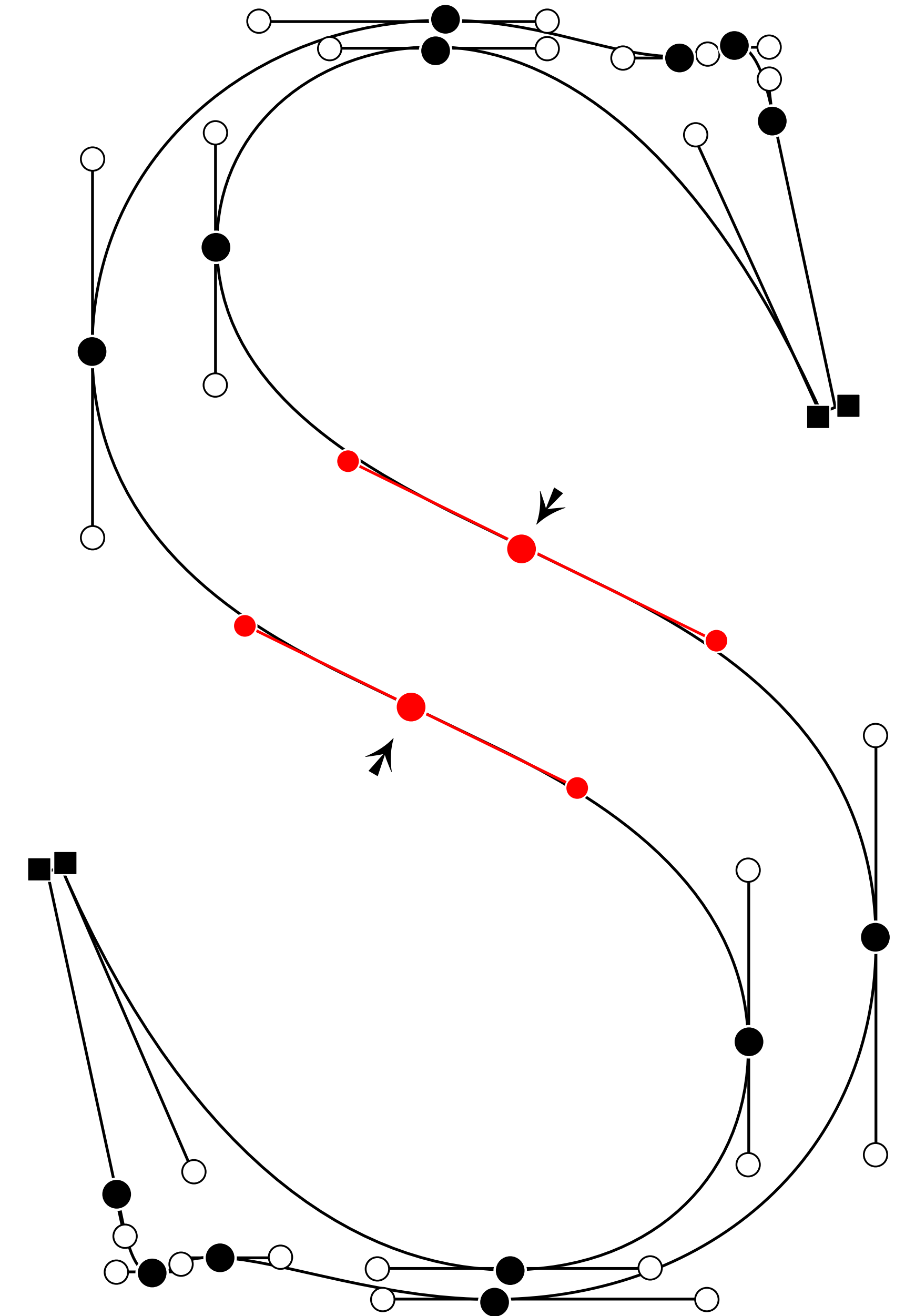
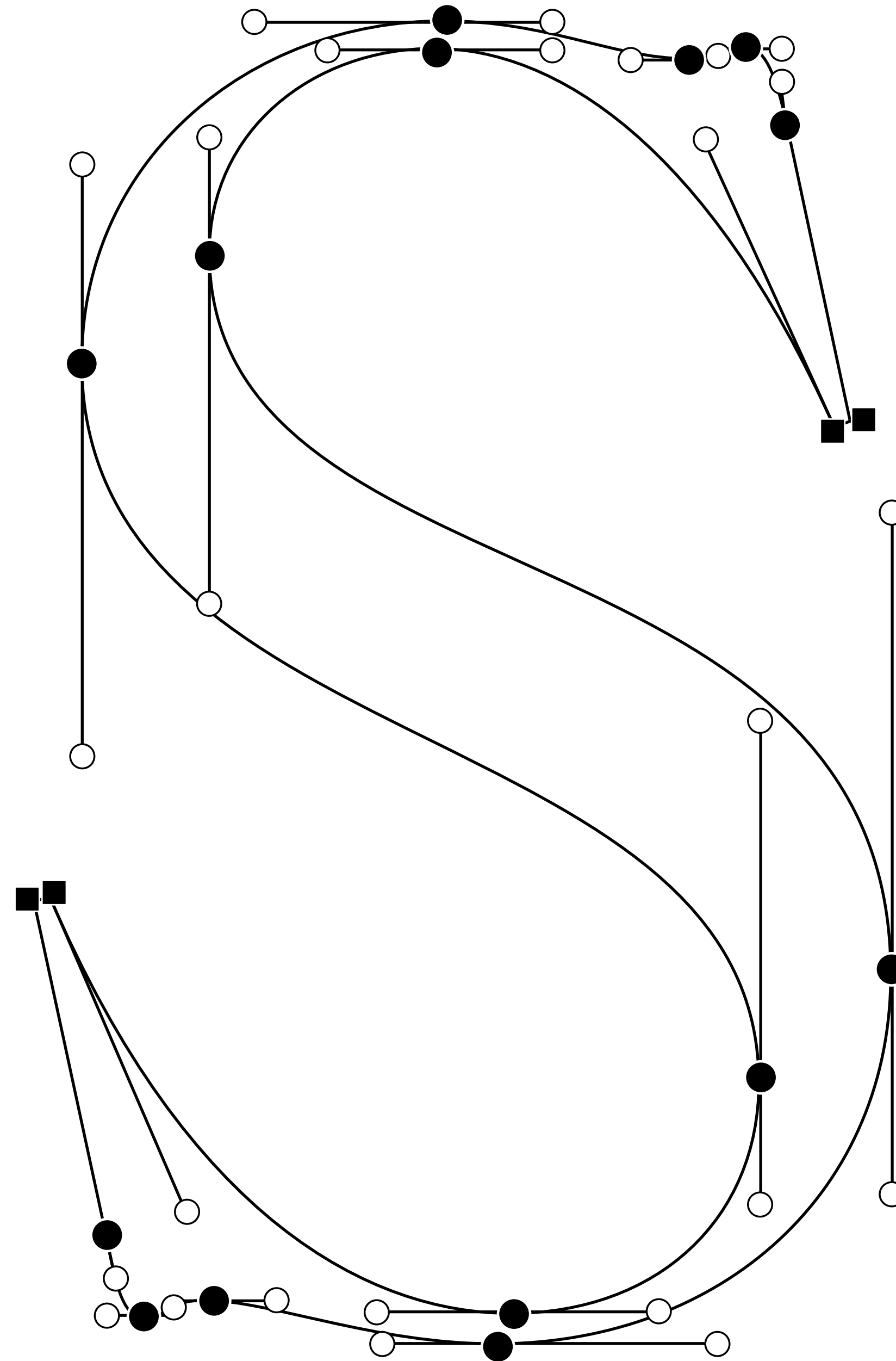
Now, following the triangle format doesn't mean you can't add inflections. The thing is you should avoid them if possible, but they can come in handy when dealing with complex designs or certain glyphs, such as the capital **S**.

Anyway, as a general rule: use as few nodes as possible in a single glyph. In this example, the left side **S** is a much better outcome than the right side **S**:

Glyphs tip! If you really need to add an inflection point to your **S** or tilde, Glyphs can easily do that for you. Click the Draw tool (or press P) and, as you hold down the Shift key, click near the middle of a segment to create a new on-curve at the closest inflection.



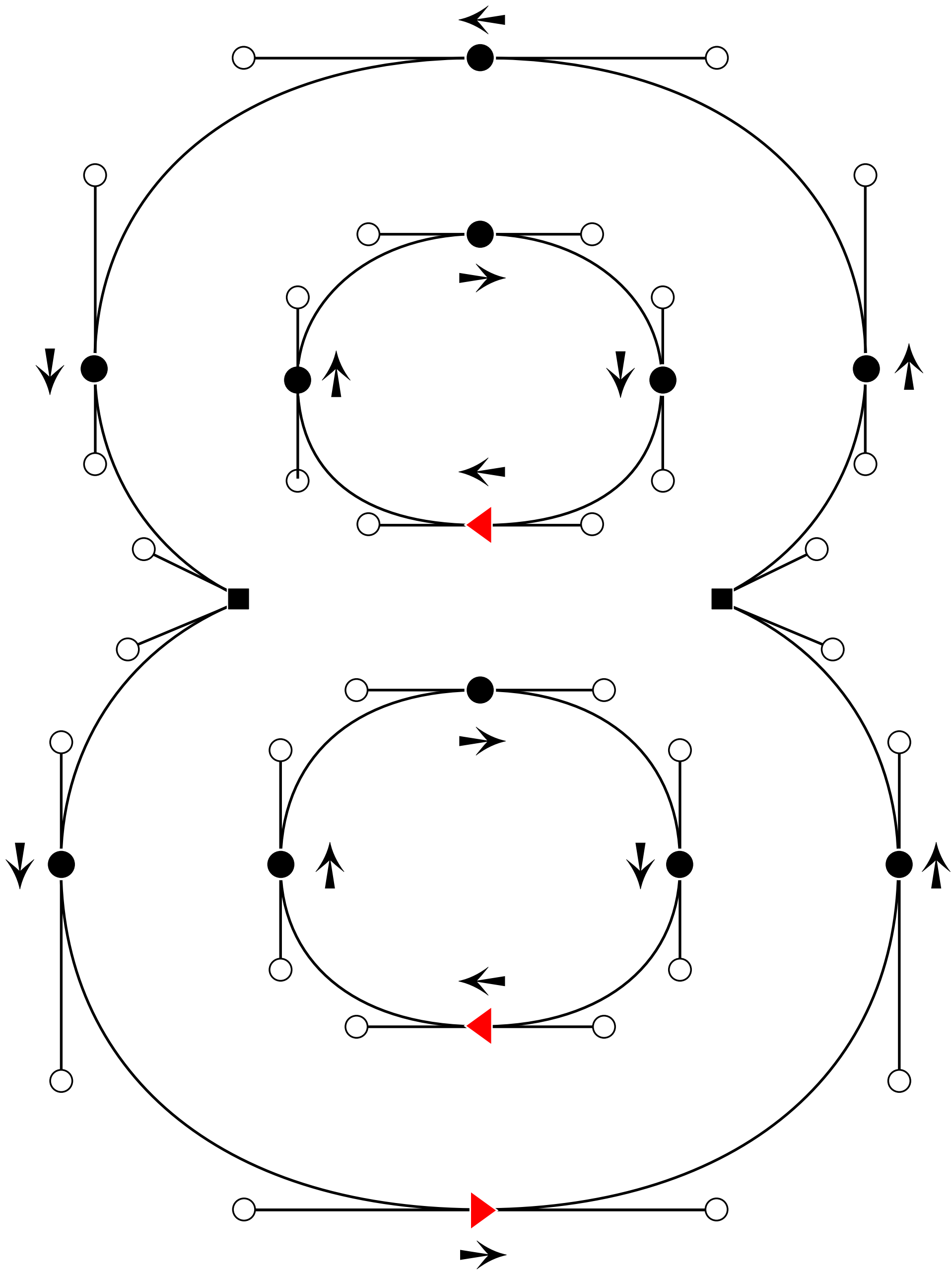
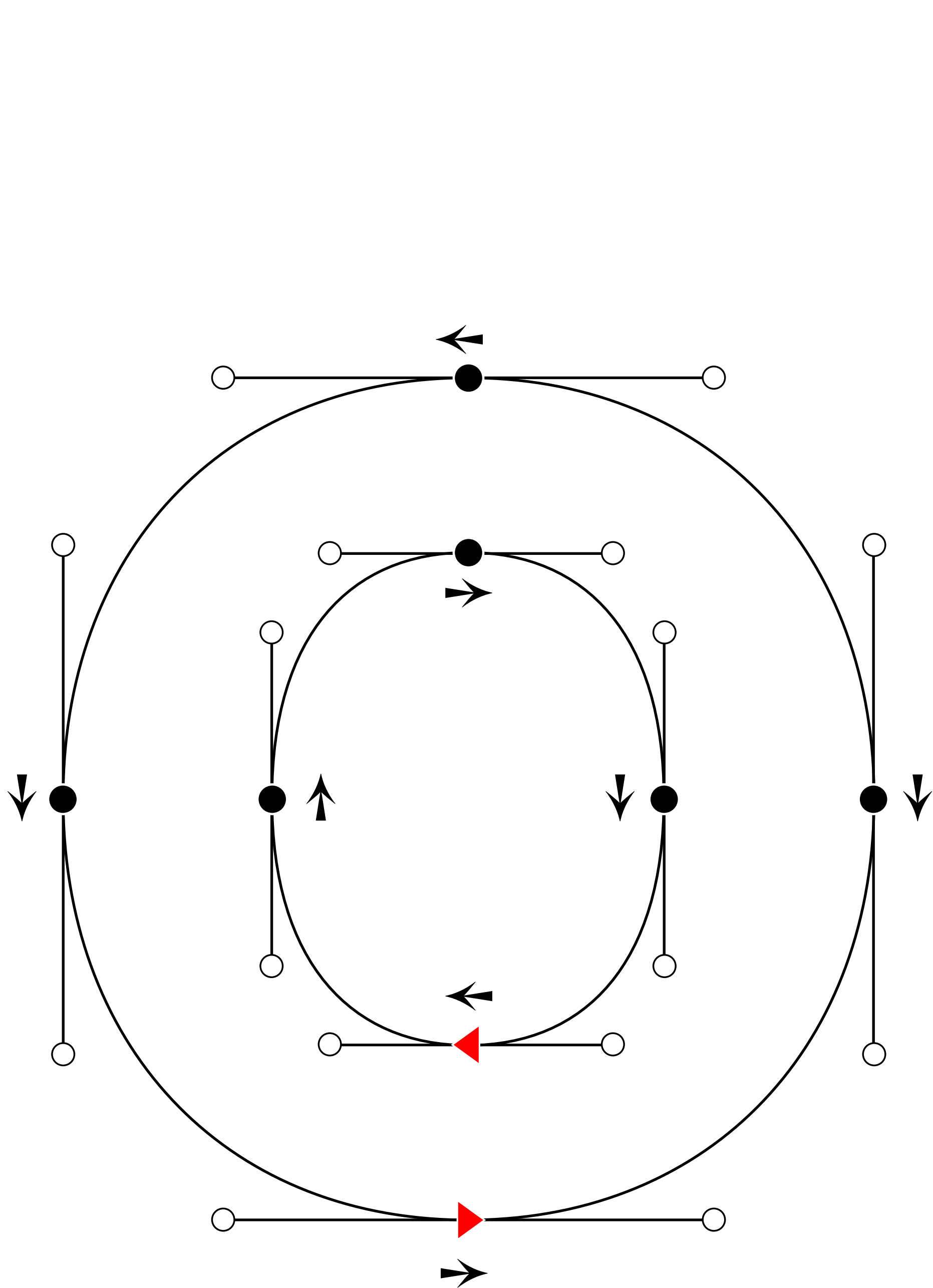
If your font uses cupped serifs, such as the example above, then position your B point on the baseline and your A and C points below, where both of them sit at the same height. A, B and C should have horizontal handles.



# PATH ORIENTATION AND ORDER

When drawing your glyphs, make sure you use consistent paths. As you can see in the above example, the outline of the glyph is drawn counter-clockwise, while the inside is drawn clockwise. This will allow your inner shape to become a counterform of the outside shape.

Glyphs tip! Set a path direction by left-clicking a path, then right click and select the “Reverse Selected Contours” prompt. Glyphs can also automate that via if you press Cmd-Shift-R.





# SELF-INTERSECTION

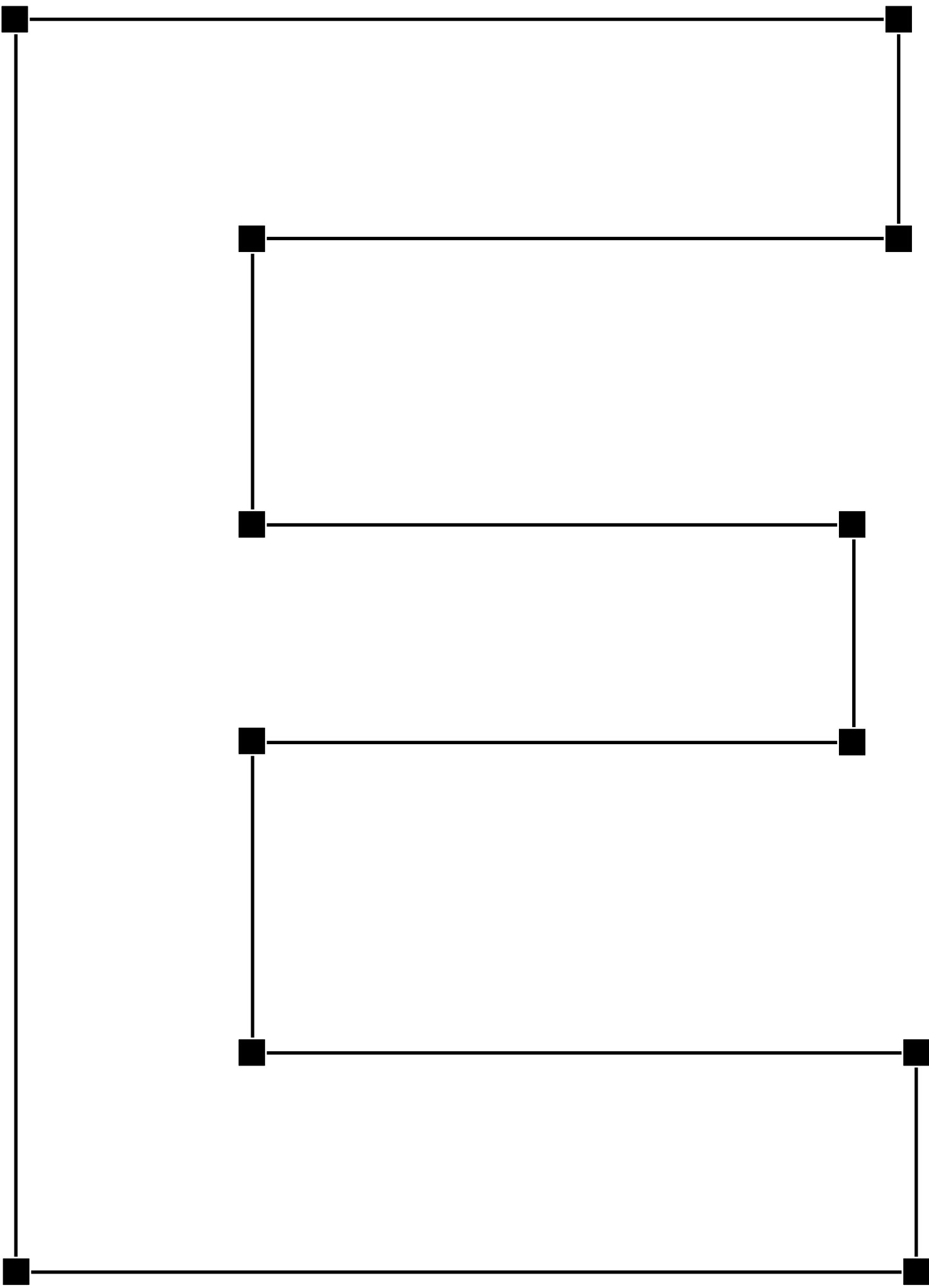
Your typeface should not include a path that intersects or overlaps itself for whatever reason. Glyphs allows you to remove such discrepancies by clicking a problematic contour and hitting Cmd-Shift-O, which will remove any existing overlaps.

Note: this does not work with variable fonts.

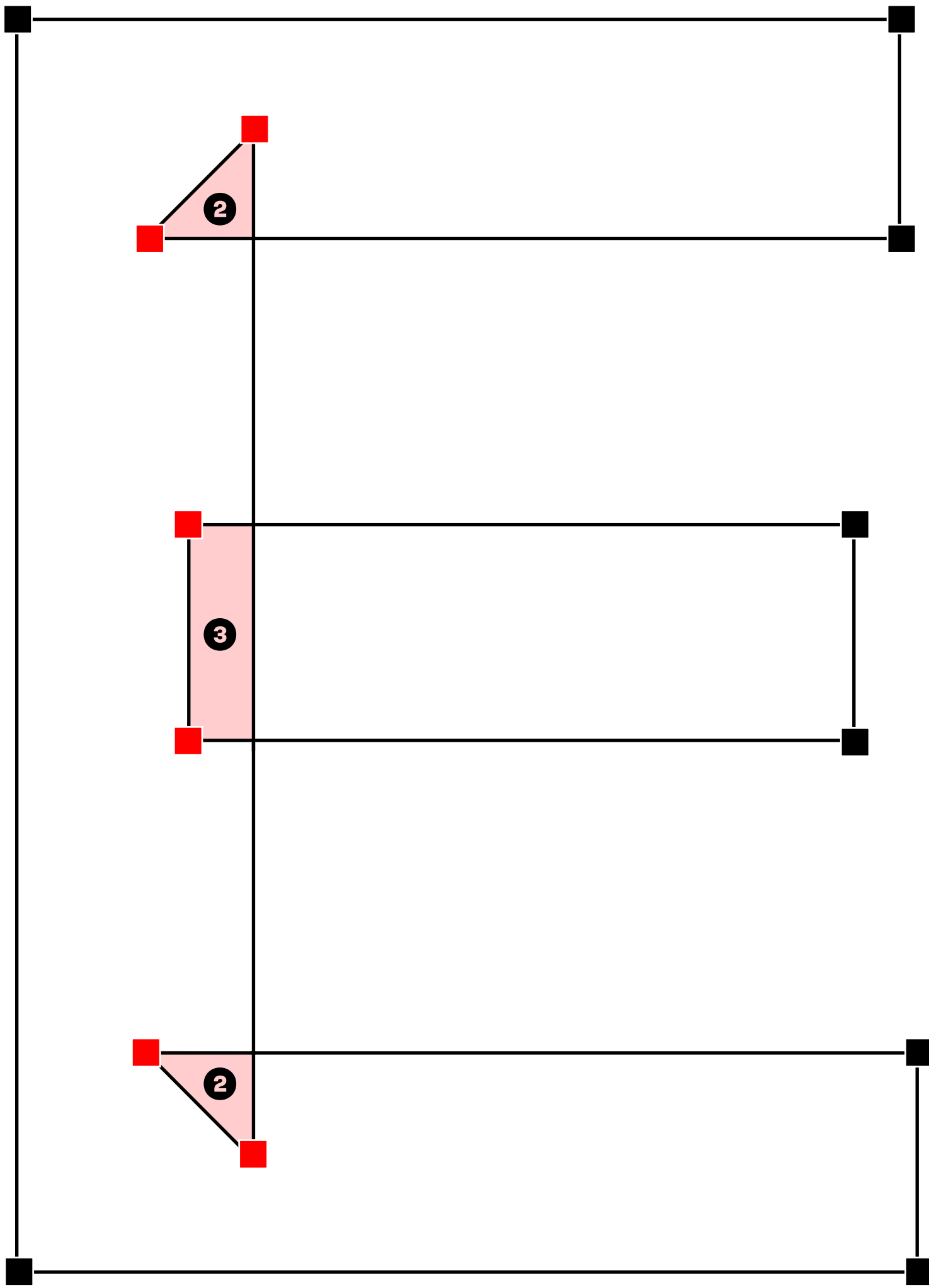
If you need to, you can manually add overlap using the “Reconnect Nodes” and “Open Corner” options from the right-click menu:

Sometimes, you can end up with unwanted small white gaps inside of a glyph. These are double overlaps; in other words, an overlap within another overlap.

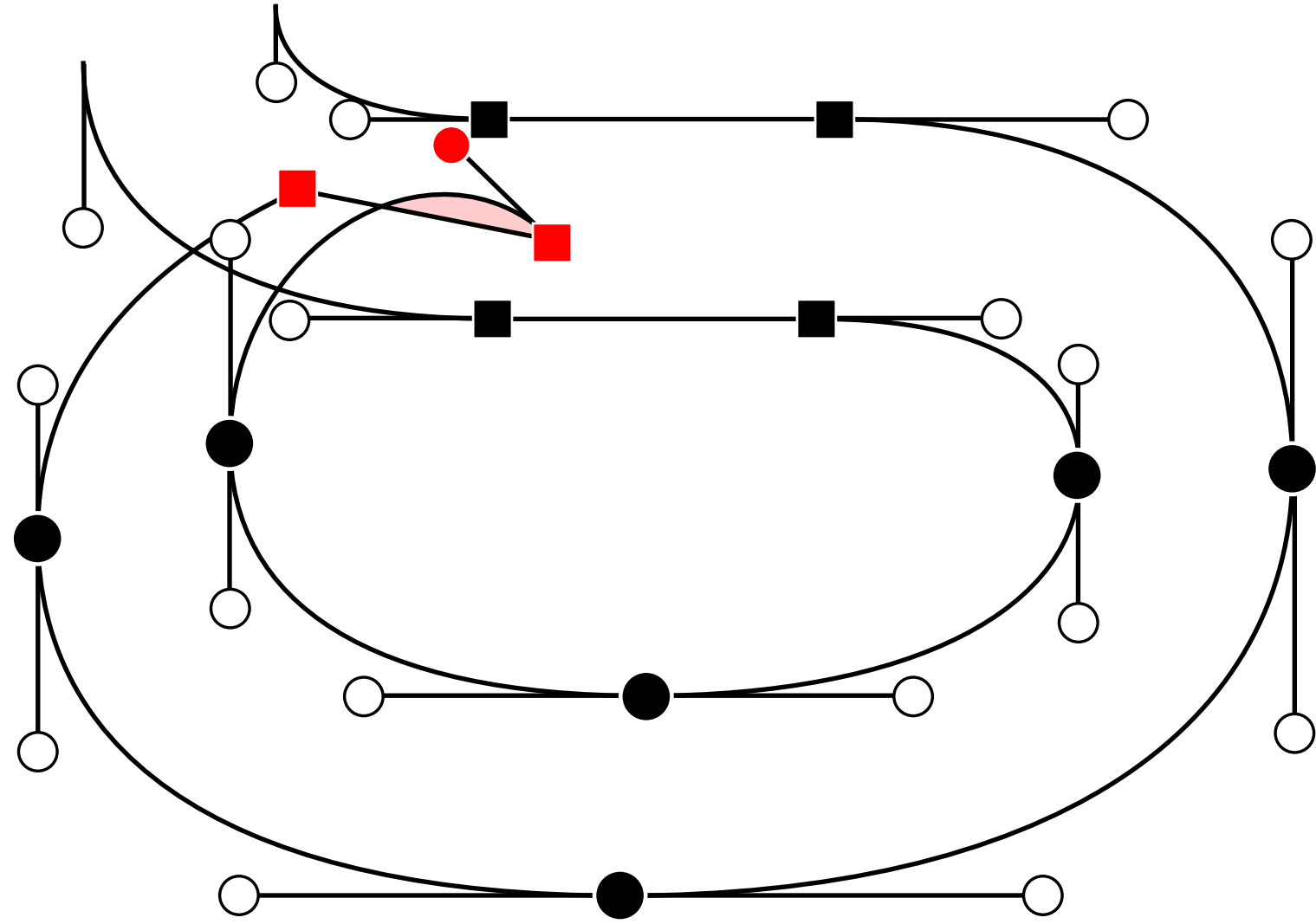
Thankfully, you can use a Python script (found here under the name “New Tab with Small Paths”) to automatically spot these discrepancies according to your preferred margin of error:



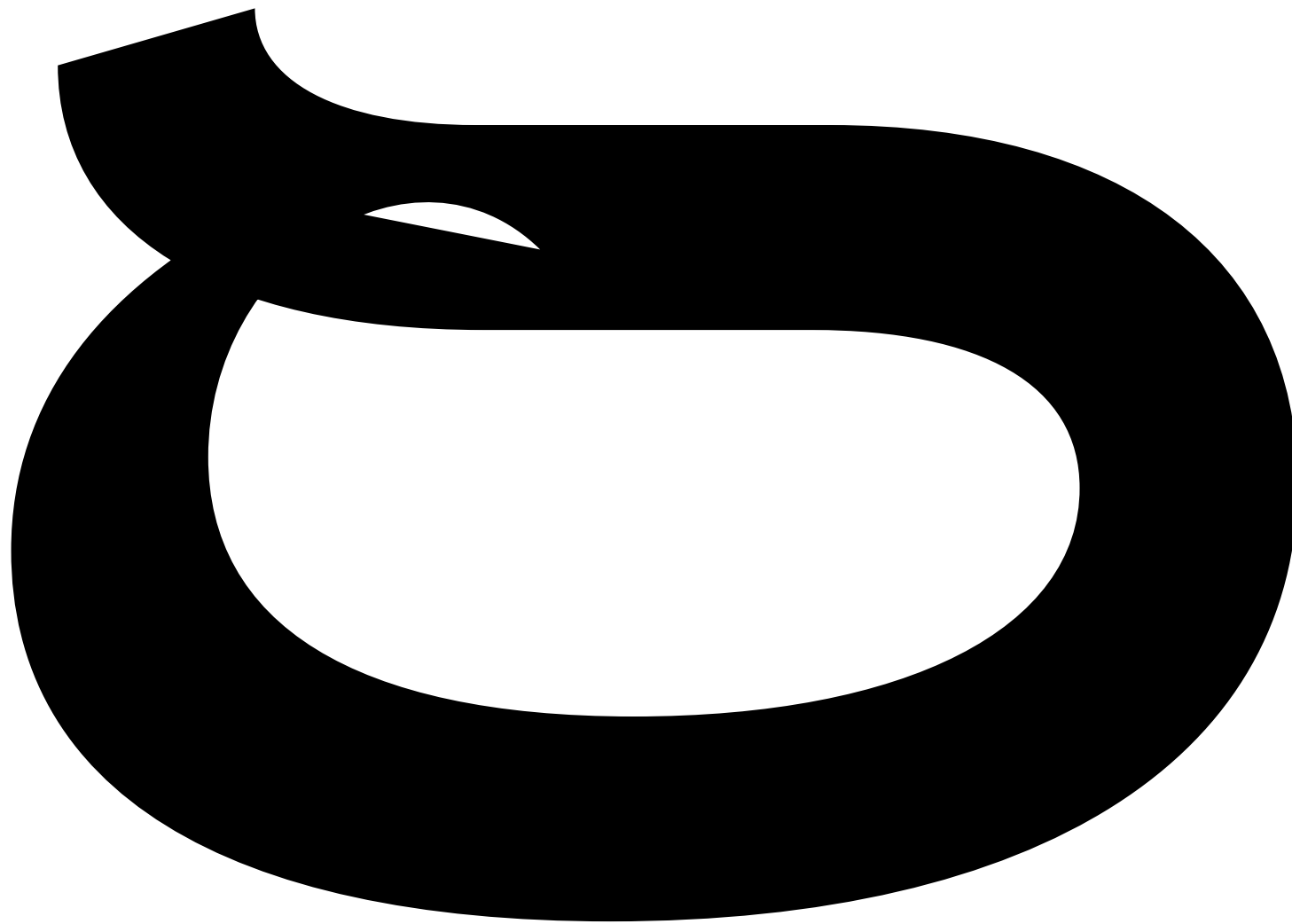
❶ No intersect/overlap paths



❷ Open Corners  
❸ Reconnected Nodes

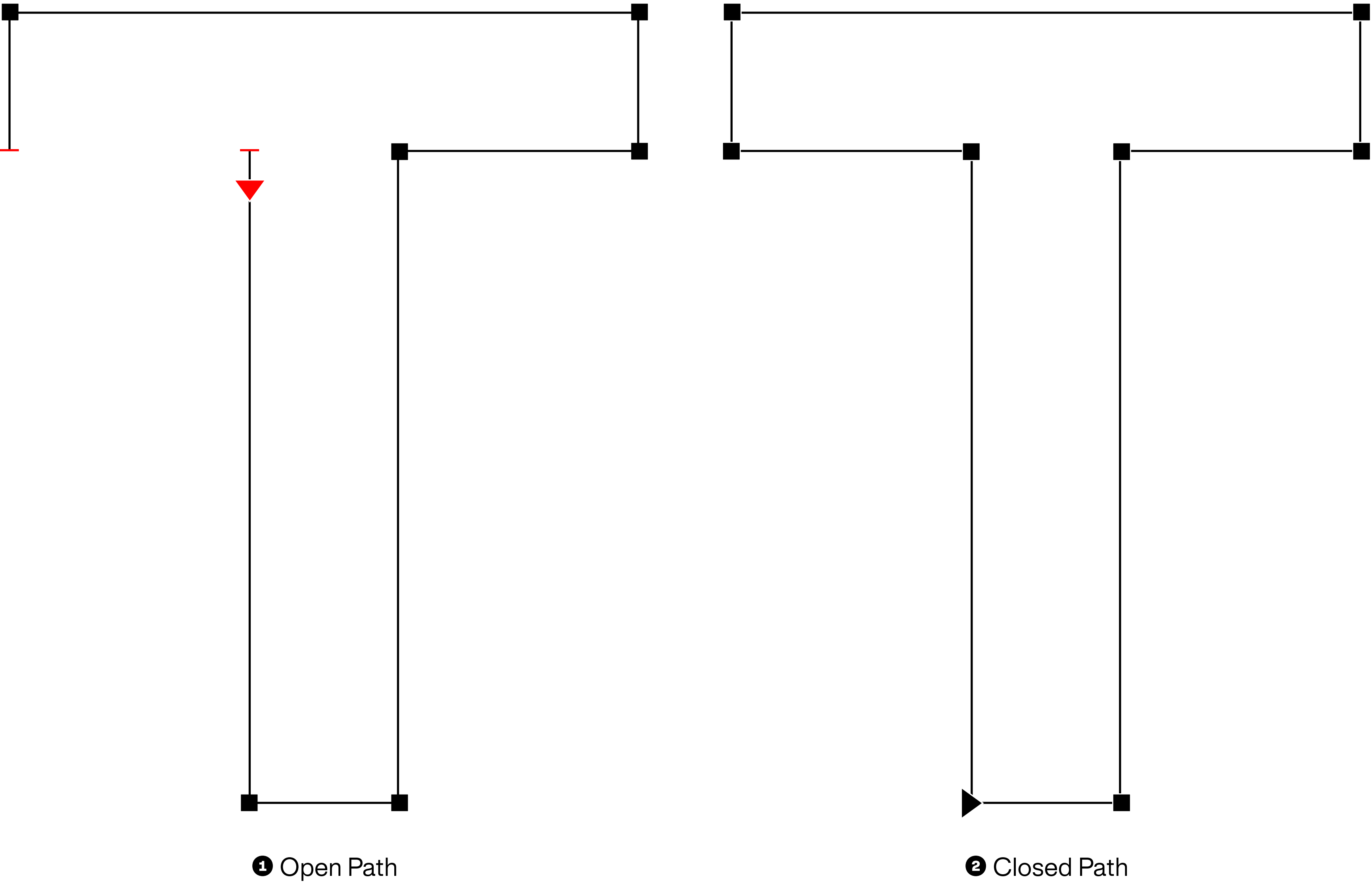


❹ Double overlaps



# MISCELLANEOUS TIPS

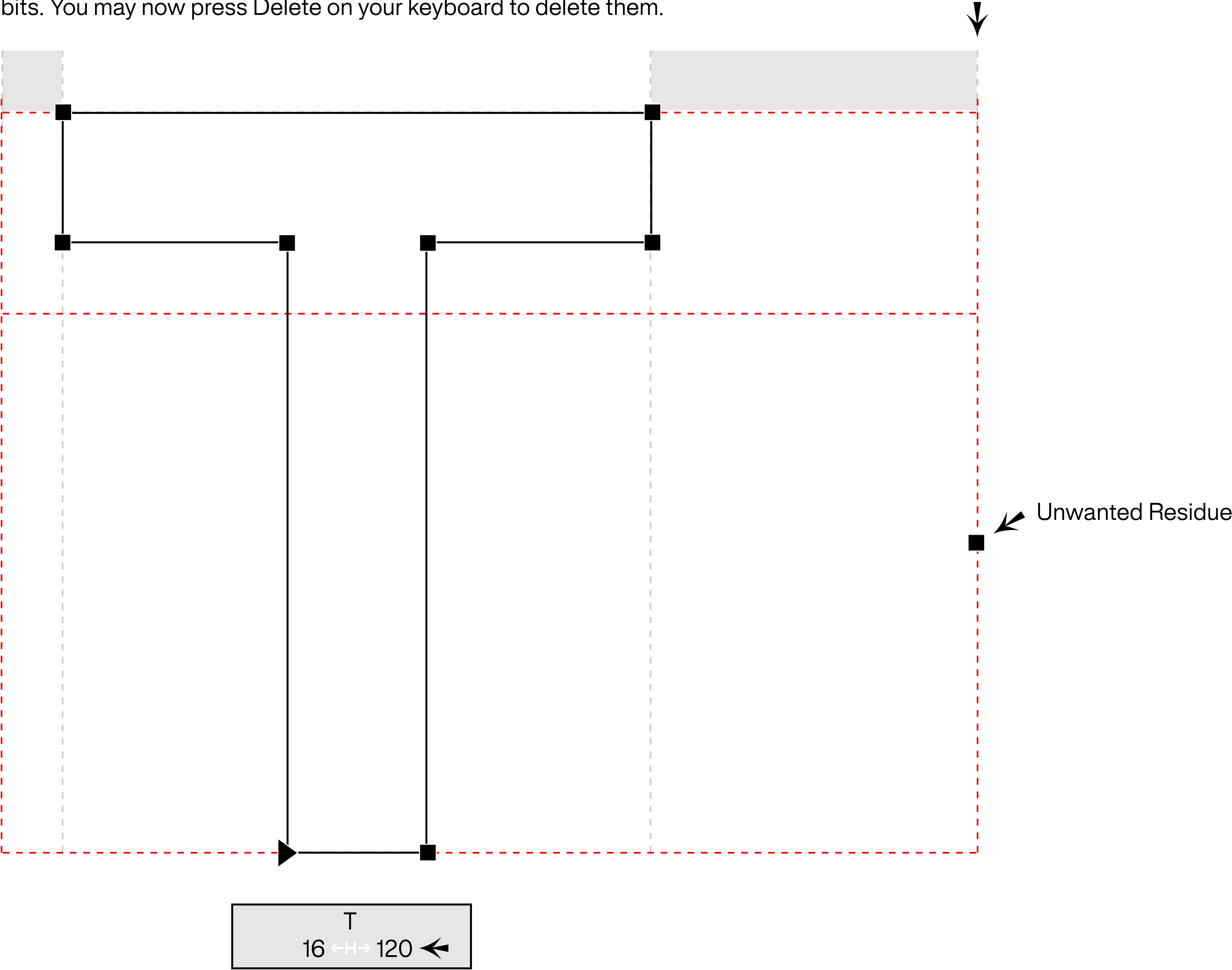
Glyphs will ignore any open paths during export, which means you should close them manually — otherwise you may notice weird stuff with your final results. To close a path, connect one open end to another by dragging it where you want thanks to the Edit tool (shortcut: V). As an alternative, use the Pen (shortcut: P), then click on one end point then the other to connect them together.



# MISCELLANEOUS TIPS

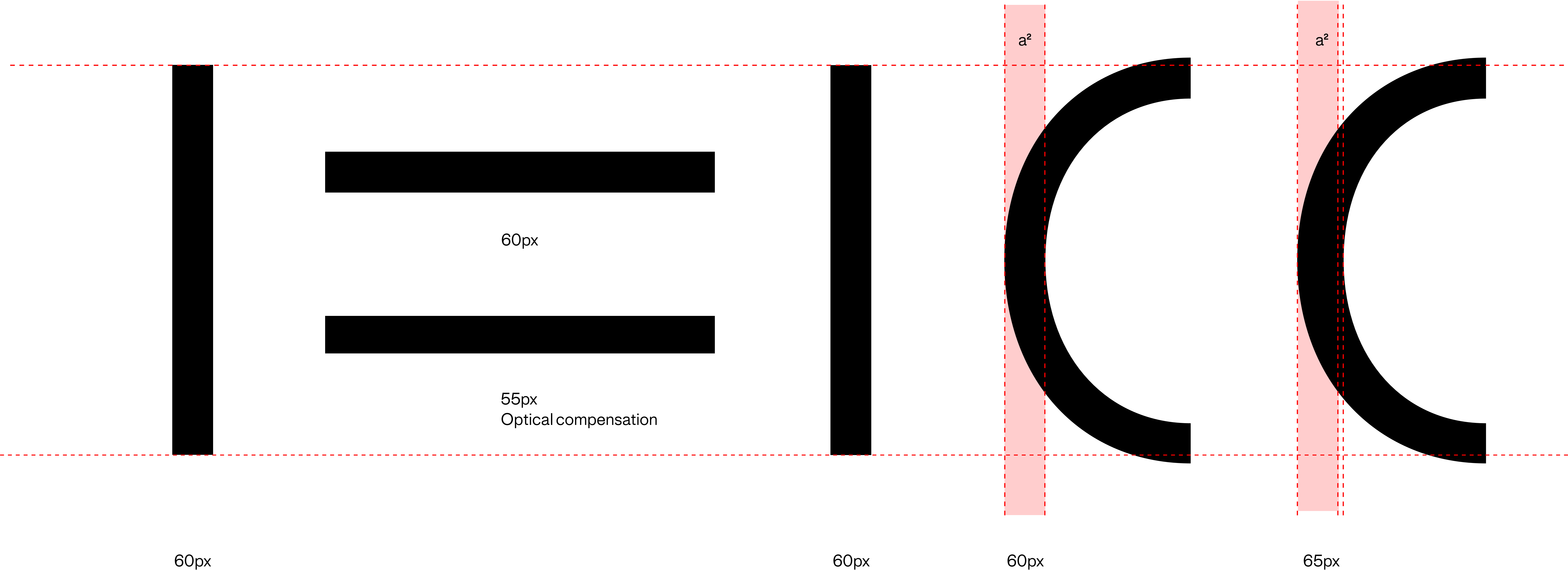
If you notice one of your glyphs has its left or right sidebearing stretching wide for seemingly no reason, that's because your glyph contains some unwanted residue somewhere.

An easy way of cleaning up a faulty glyph is to hit Cmd-A to select every path in the problematic glyph. Then, drag a rectangle as you hold Shift to only select the part you actually want to keep. This will in turn automatically remove anything in that rectangle from the overall selection, meaning the only thing left is the unwanted bits. You may now press Delete on your keyboard to delete them.



# OPTICAL CORRECTION

Font design is a matter of both mathematical and optical values. They are not always on the same page: what might be true in terms of math values might look weird. One of the best example to demonstrate this is to use a 60px wide vertical stem, duplicate it and turn it 90°. The horizontal version will look bolder than the vertical one. There are numerous articles online about the way our eyes and brain perceive things so we won't dive too much into the matter here. What you may want to consider still is the fact that our eyes lie to us but it's often a good idea to trust them over mathematical values if you want to design an 'even' looking font.





# CONTROL CHARACTERS

"Control characters" are what is commonly known as the first glyphs you design when working on a font project. **H** and **O** for capitals, **o** and **n** for lower cases. Why you may ask? Because these few glyphs contain within their structure, weight, width, spacing, balance and design pretty much all the information you're going to need to design your future font.

Now, from one designer to the other, one can also like to design, amongst these glyphs, other ones too. I personally enjoy working as quickly as possible on the lowercase **a**, right after designing the **n**. I find this glyph to be quite consistent in the way we phrase and word our sentences so it gives a lot of aesthetical information about a font.

Let's have a look at a few examples of control characters and see what information they bring to the table.



This is a not a control character  
but we still love drawing it

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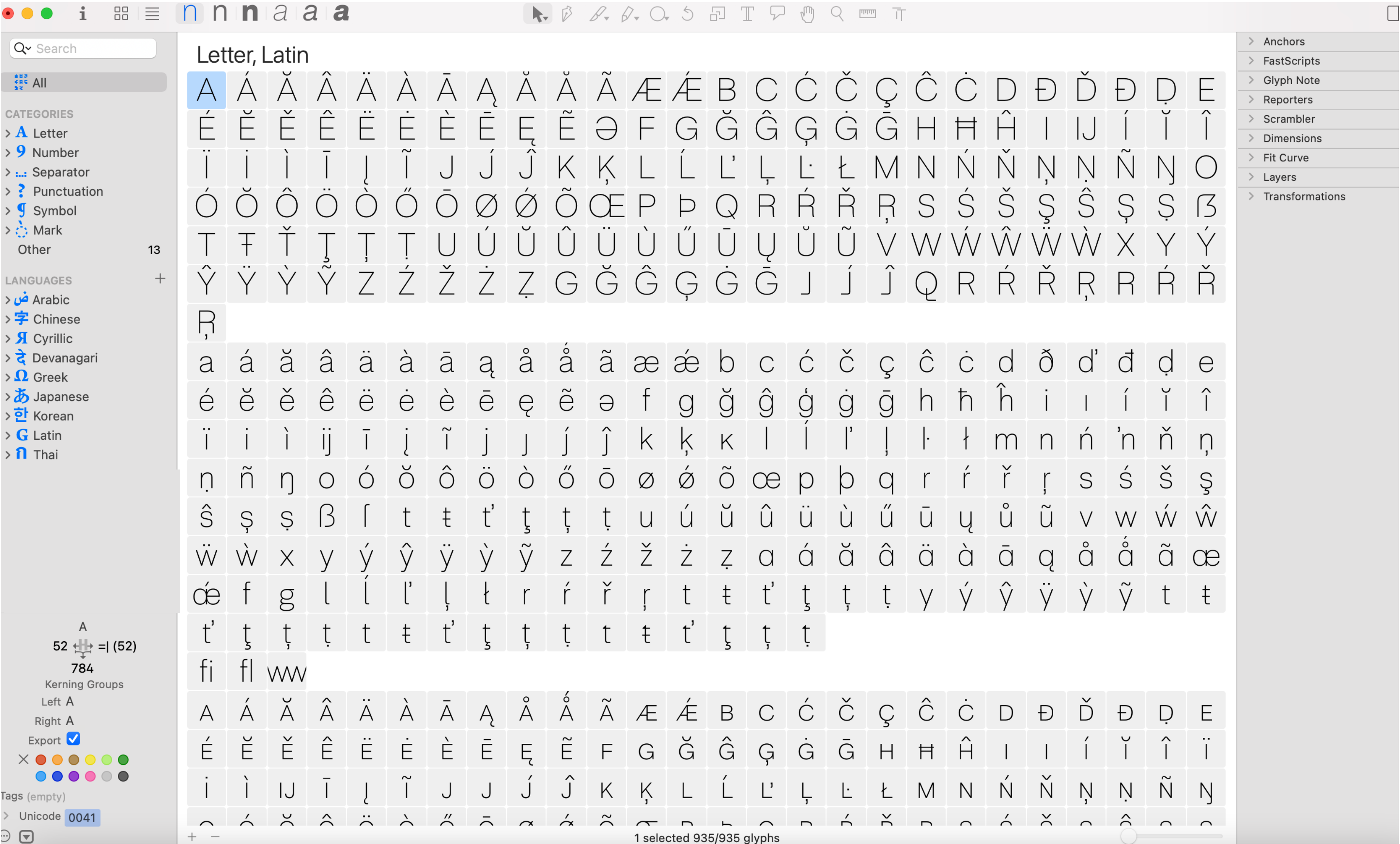
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# CHOOSING A GLYPH SET TO WORK WITH

It all depends on what you're aiming to do with your font really.  
A custom font design tailored for a client might not need hundreds of languages covered — depends on the client — whereas a font distributed online might indeed need to have a minimum of Extended languages support.  
Again, it's up to you to decide, I'd advise to implement as much as you can and learn about those different glyphs, it's a way of giving humanity more tools to communicate.





**— CAPITAL LETTERS —**

H I E F L T

O C G S

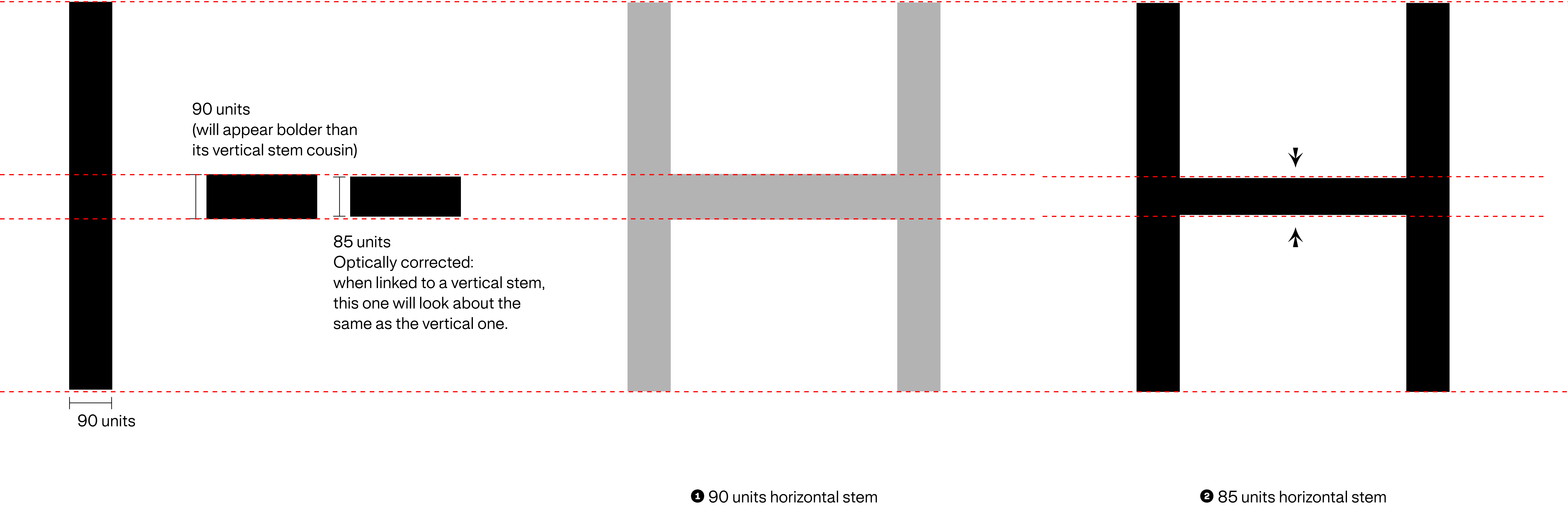
B D P R U J

A K M N V W Y Z

# THE CAPITAL H

Okay! Let’s start off with the vertical stem!  
We’ll go with a 90-unit width which, using the Glyphs.app, should give us something close to a Regular weight design, assuming that logic is applied on all glyphs.  
Now, we can’t just slap a 90° rotation on that vertical stem and call it a day. We need to make it thinner due to that optical illusion we mentioned earlier. For a low-contrast neo-grotesque Sans, we want to adjust our horizontal line so it’s optically correct without being too thin compared to the vertical stem.

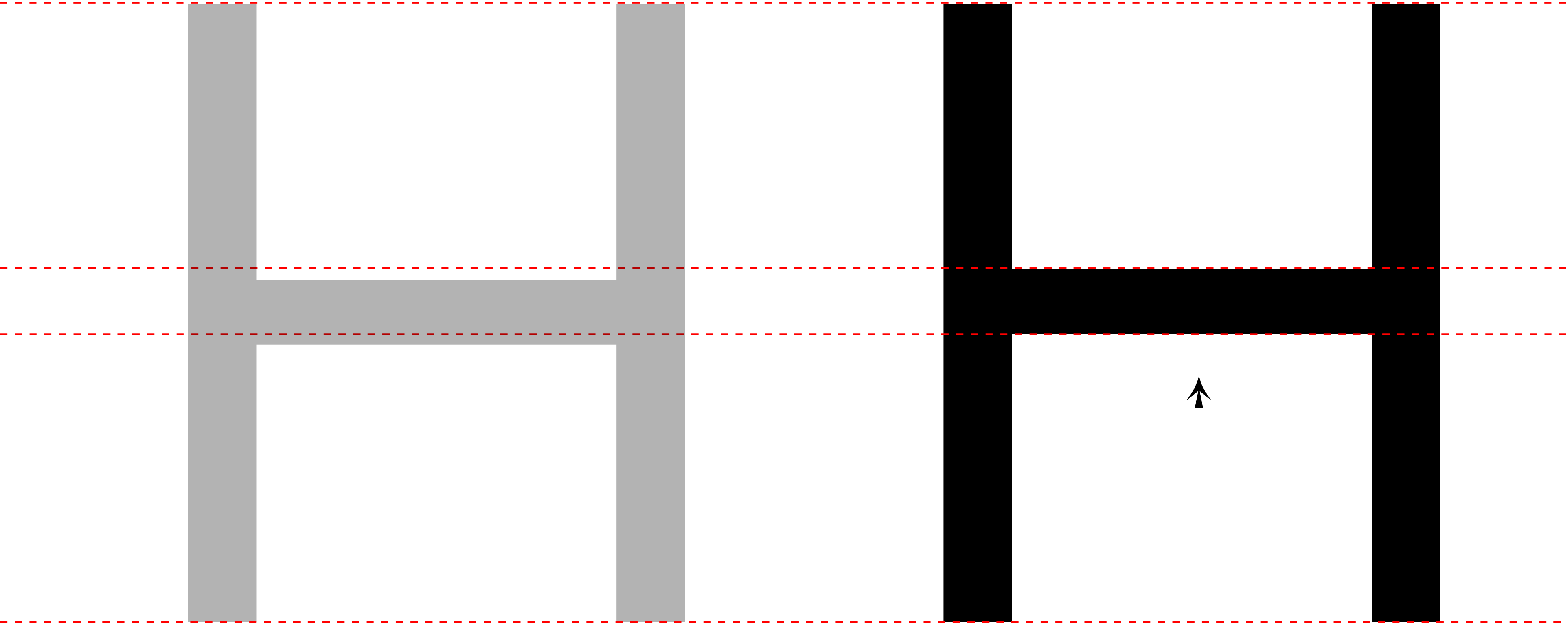
Try reducing it by 5 to 20% until you reach a sweet spot where you’re happy with how your **H** looks. The relationship between the horizontal and vertical stems should stay the same across the whole font.



# THE CAPITAL H

Our **H** still needs adjusting: mathematically aligning horizontal stems to vertical stems won't work if you want your **H** to look evenly balanced. You will need to adjust the y-axis position of your horizontal stem slightly above the mathematical center. Alright! Our **H** now has a proper structure, but we have yet to make a rather important: the width! Since the structure of our font will mostly be based on the width, we have to consider the many possibilities at our disposal here.

For now, let's just stick with our Regular weight, Normal width, beautiful **H**:  
Once your **H** is designed, you can move on to some of its strongly related letters.



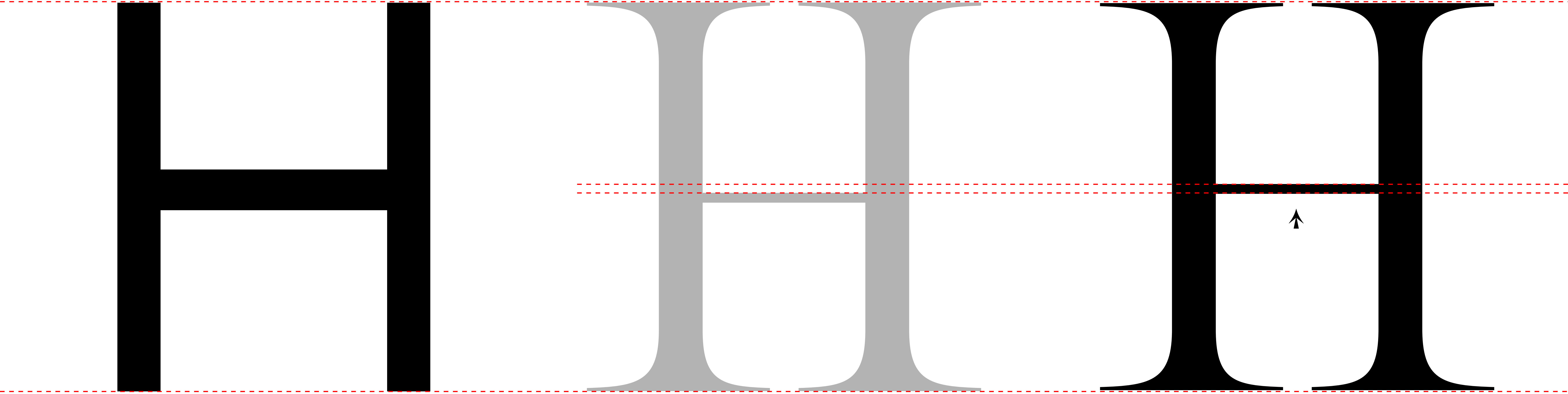
❶ Mathematically aligned horizontal stem

❷ Optically aligned horizontal stem

❶ Condensed   ❷ Compressed   ❸ Normal   ❹ Expanded   ❺ Extended

# THE CAPITAL H

Oh, and same principle applies to serif fonts, once you've set your stem thicknesses, and the amount of contrast you want between your horizontal and vertical strokes. Go for it!



➊ Mathematically aligned horizontal stem

➋ Optically aligned horizontal stem

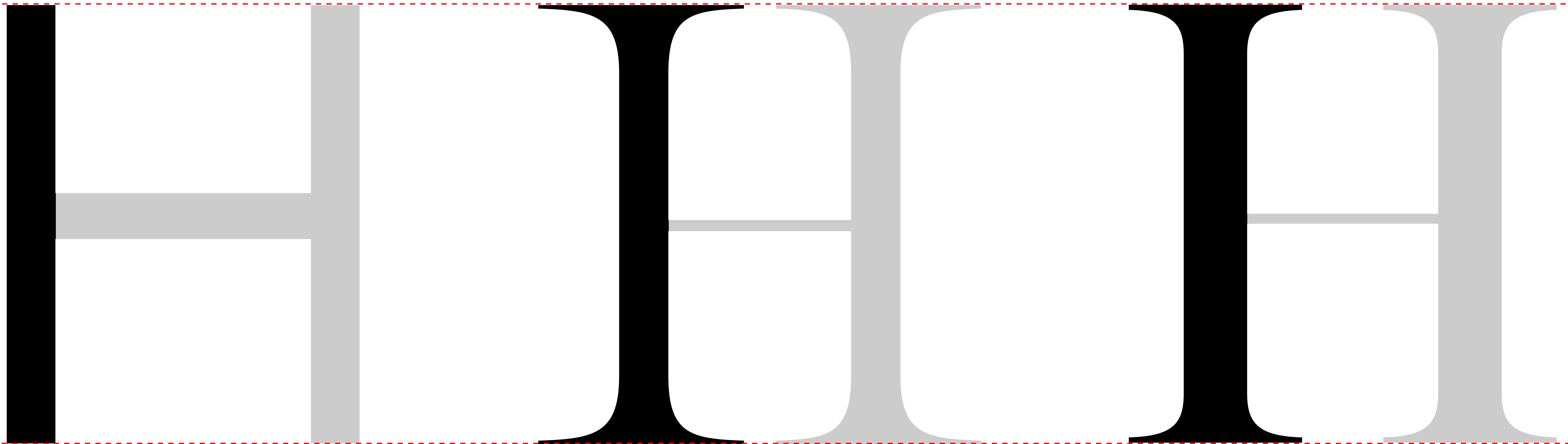


## THE CAPITAL I

The **I** (uppercase **i**) will obviously be the easiest, but it's going to be heavily used in the way you construct a lot of capitals' structure.

Once your **H** is designed, you can move on to some of its strongly related letters.

Alright, let's tear our **H** apart!

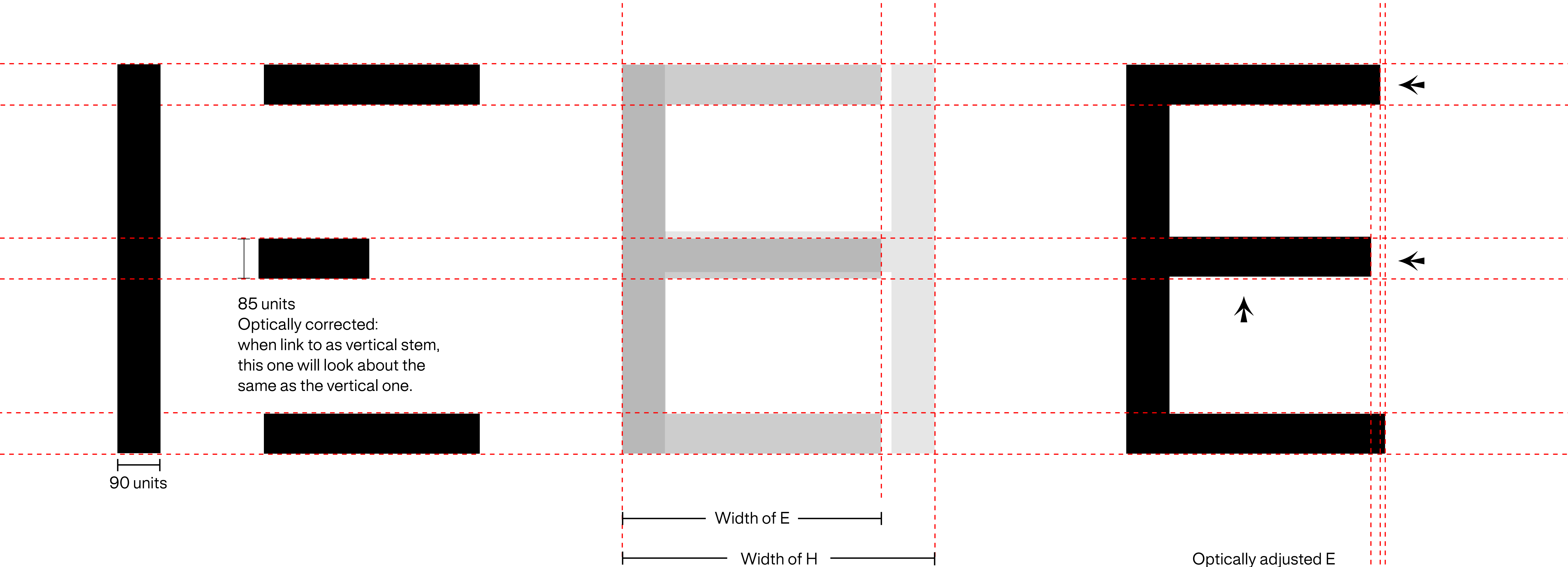


# THE CAPITAL E

Using the **I** vertical stem as a basis, you can then move on the capital **E**. Constructing the horizontal stems of your **E** will require some optical adjustments, though. The horizontal stems will follow the same optical adjustment as what you saw previously on **H**. After our horizontal stems are optically adjusted, we can't just merge them with our vertical stem. We have to look at their widths. See how strange our **E** is looking right now? That's because our horizontal stems are ending inappropriately.

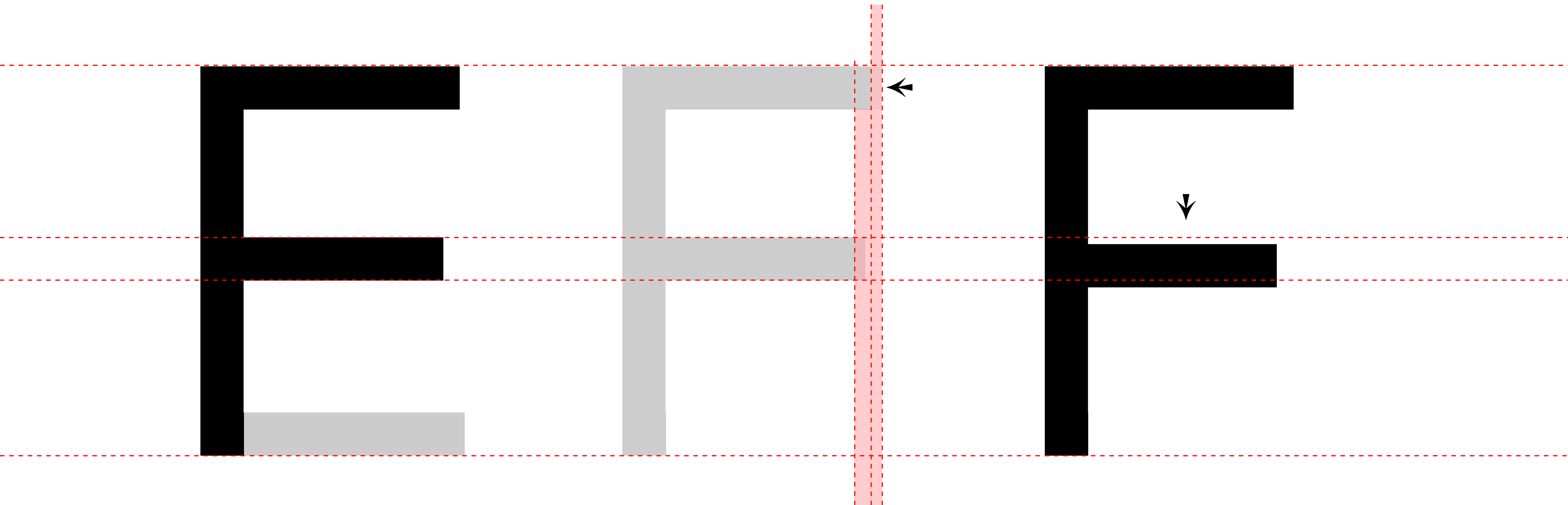
In Modern typefaces, it is possible to consider the width of the **E** glyph in relation to the **H**. Not that all the letter will be the same width than **H**, but we try to fine a harmonious relationship between, letter **E** having a lot of open white space on it's right, we can take those three stems in to the left a bit to avoid **E** looking too wide. We need to adjust the three horizontal stems to an optically-matching width. To do, so we look closely at all three of them and see how they interact with each other.

This part is pretty straightforward: the top horizontal stem should be shorter than the bottom one, and the middle stem should also be shorter than the top one. Also, just like with our **H**, the middle stem shouldn't be mathematically centered, but optically adjusted, so take it bit higher up. In the following example, our middle stem will use the same positioning as the horizontal stem of our **H**: Stem sizes should go like this: bottom > top > middle. For example: if bottom = 200u, then top = 190u and middle = 180



## THE CAPITAL F

Naturally, you can then begin designing your **F** from your **E**. Just like with the **H**, there are some tricks you need to know. First off, you can't just remove the bottom horizontal stem of **E** and call it a day! What we tend to do is to slightly lower the middle crossbar to avoid an awkward, narrow white space. Then, the top and middle horizontal stems can also be shortened a bit (compared to the stems from your **E**) in order to narrow that white space even further and counterbalance the letter, otherwise it can feel like your **F** is leaning to the right.



## THE CAPITAL L

Your capital **E** can also serve as a baseline for your capital **L**. Bear in mind that you will probably want to shorten the bottom leg of your **L** so it doesn't generate too much white space by being unnecessarily wide.

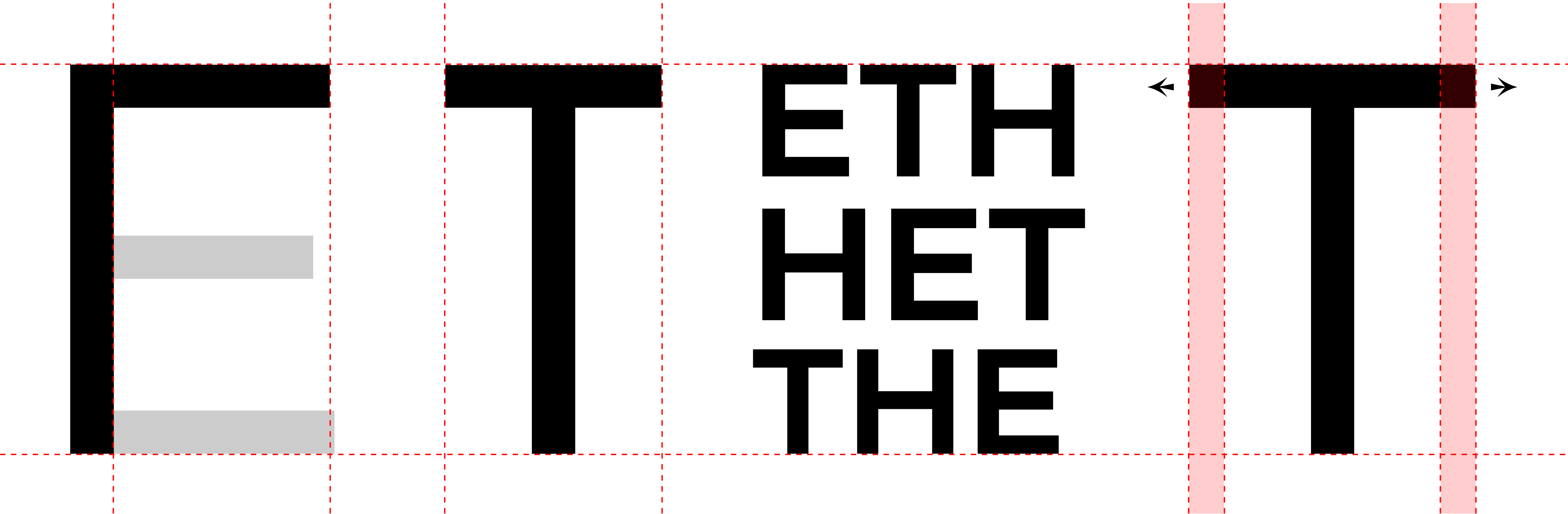
For comparison's sake, here's what happen when we overlap both our **E** and our **L**.



# THE CAPITAL T

The capital **T** is also one of those straight letters, and it's quite easy to pull off in a Sans font!  
How about we begin constructing our **T** from one of our already designed glyphs? Let's pick our **E**, since it contains both vertical and horizontal stems:  
Vertical stem + horizontal stem

Almost there! Our **T** looks a bit too narrow right now (try comparing it to **E** and **H** and see how you feel about it). Our goal is to make these glyphs seem like they can stand in the same visual space.



Optimized T compared with H and E



# THE CAPITAL T

Your serif version might vary accordingly with the design of the terminals you chose for other letters such as **E**, **L**, **S** or **C**.

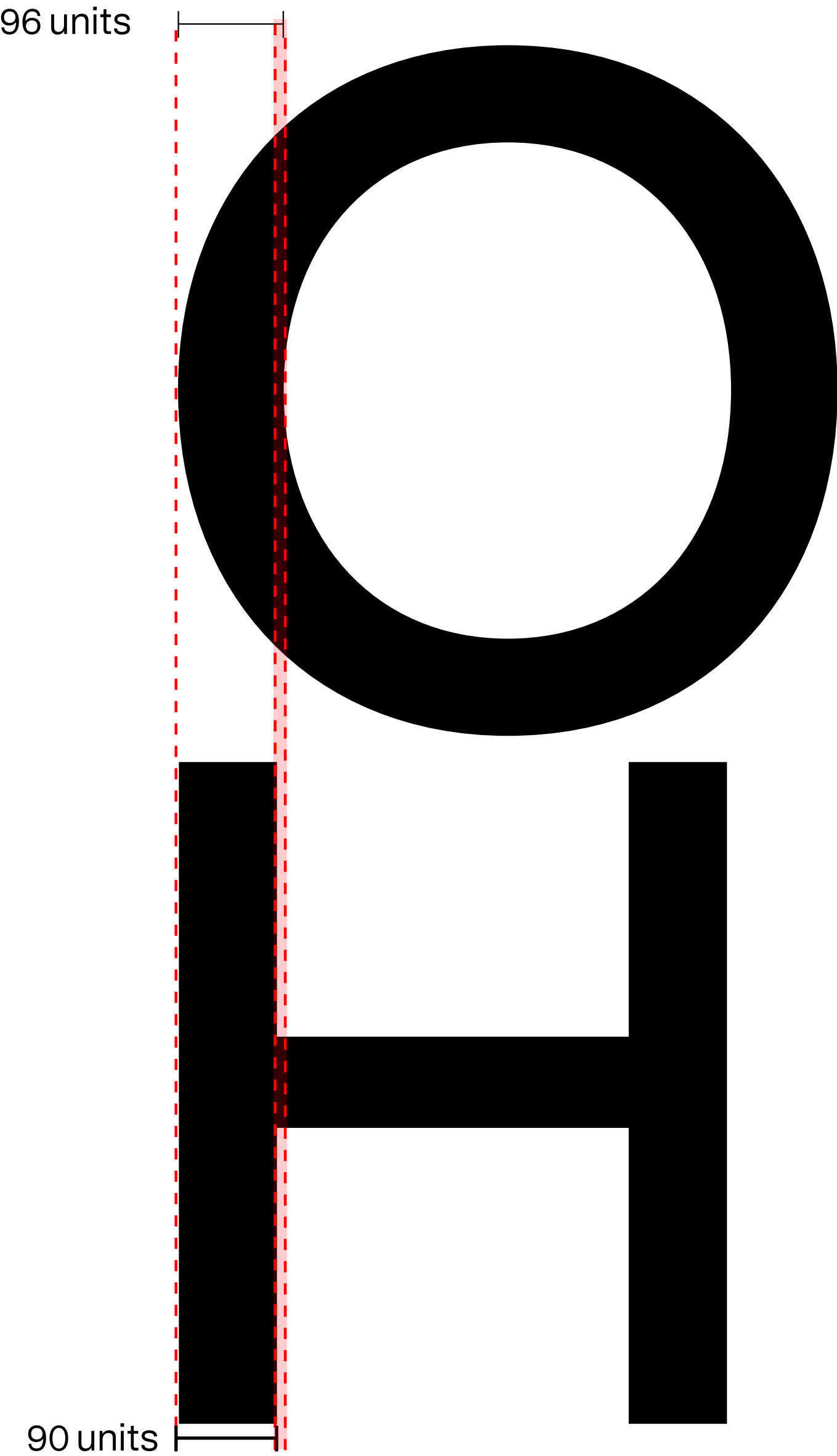
Here, it's pretty straightforward. Of course, feel free to play around with the horizontal width of your **T** so it doesn't extend too much, generating unwanted white space.



# THE CAPITAL O

Now let’s focus on how to work our way through curves and round letters. First things first: the capital **O**.

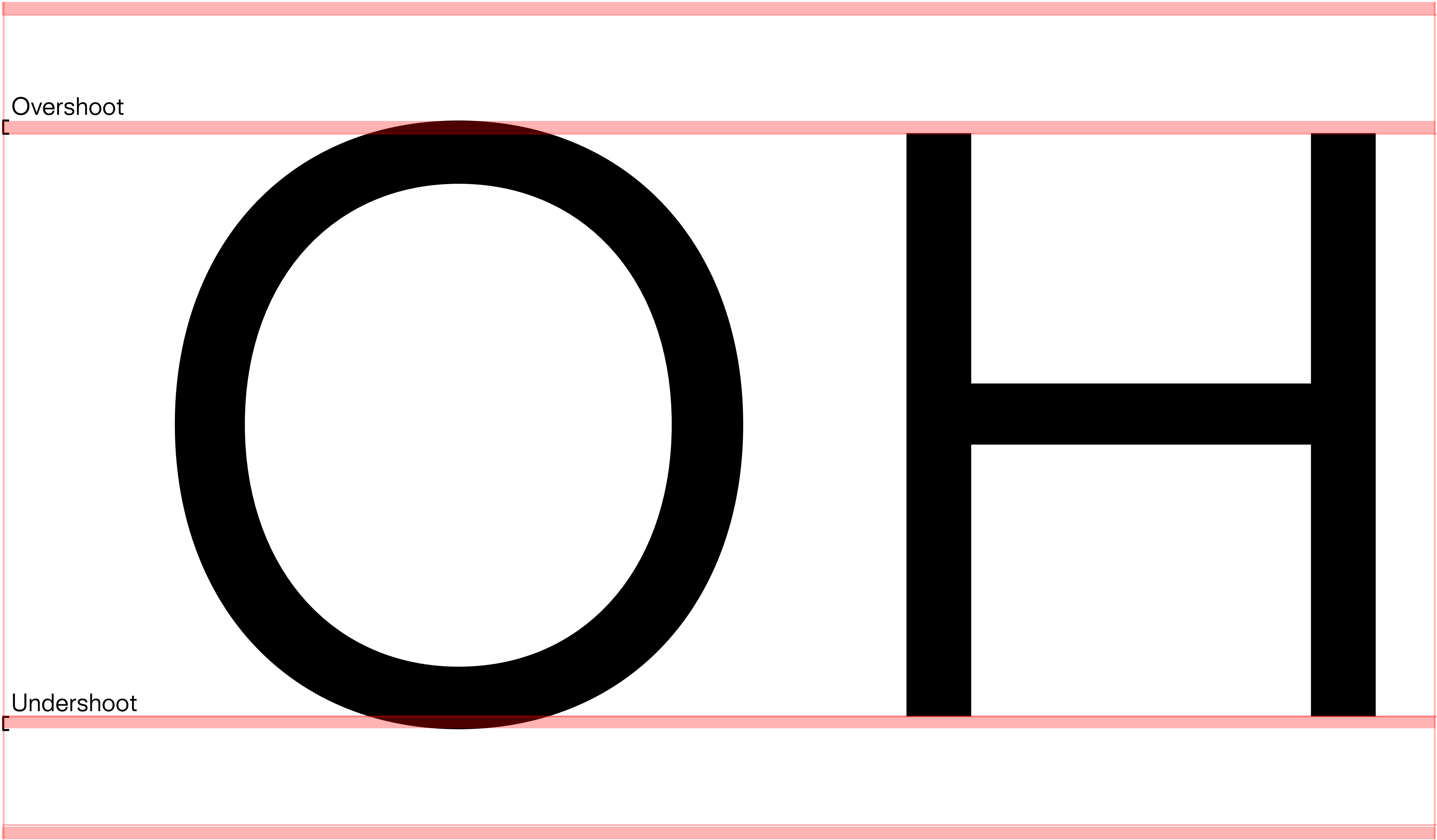
As mentioned earlier, the capital **O** is one of the two control characters for your capital letters: its design is going to impact the other round letters in your typeface (such as the letters **C**, **Q** and **G**). Now, a good starting point for your **O** is to simply draw a geometrical perfect circle. Bear in mind that this should only serve as a base structure — geometry and optical design sometimes don’t get along very well, but more about that later.



First, let’s match our **O**’s stem to our **H**’s stem: We want our circular and angled shapes to look like they have the same height. To achieve this, we need them to have matching overshoots and/or undershoots. Otherwise, it will look like the **O**, in this example, is smaller than the **H**. Glyphs assume these parameters for you by default (based on the x-height, H-height, Ascenders/Descenders height) so you can adjust your design to fit this visual aid.

A standard rule: rounded vertical stems tend to be bolder than straight vertical stems. As for the horizontal stems of our **O**,

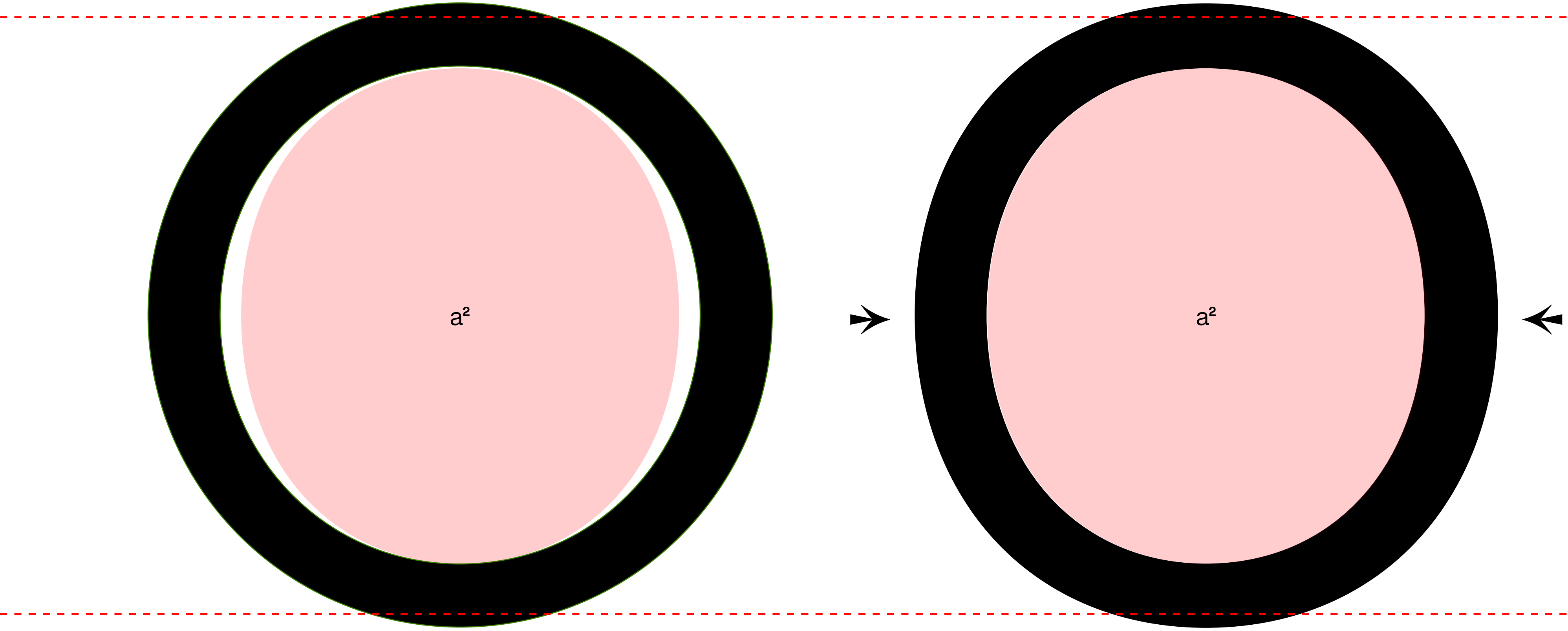
they need to be tighter than the vertical ones. Like the **E**, there’s a difference in terms of weight between vertical & horizontal stems. Our **O** needs some optical correction, else it will look uneven.



# THE CAPITAL O

Let's also clear up a common misconception about the letter **O**: it's actually not a circle! Generally speaking, limiting yourself to just using perfect geometry is one of the biggest traps when it comes to type design. Here, bear in mind that a perfect circle will simply not feel right as an **O** letter. Let's compare a couple designs to illustrate just that.

Beside, one sentence uses a perfectly geometric **O** (weight correction aside), while the other uses a "slightly flattened" **O**: Of course, it's all about design choices at the end of the day: as a designer, you may want to create a series of geometry-inspired glyphs. In this case however, you may still want to apply a bit of optical correction on your **O** to give it an overall even feeling, because the human eye tends to exaggerate the horizontal dimension. Thanks to **O**, you can then design **Q**.



HOHOHO  
OH OH OH

HOHOHO  
OH OH OH

1 Regular Circle

2 Adjusted O

# THE CAPITAL Q

You can basically imagine your **Q** as an **O** with a tail. How you design that tail is up to you, although there are some baseline tips to keep in mind.

A shorter tail means a more compact **Q**, and less “conflict” with whatever letter follows, whereas a longer tail will allow you to inject more personality and dynamism to your typeface. Make sure your kerning is on-point, especially if you opt for a longer, wavy tail. Note that in serif typefaces, it is not uncommon to design the tail of **Q** similarly to the tail of the capital **R**.

Also, your tail is absolutely free to begin inside of the circle shape of your **Q**, or even outside of it without ever touching it! Now that we are set on **O** and **Q**, we have everything we need to move on to **C**.



## THE CAPITAL C

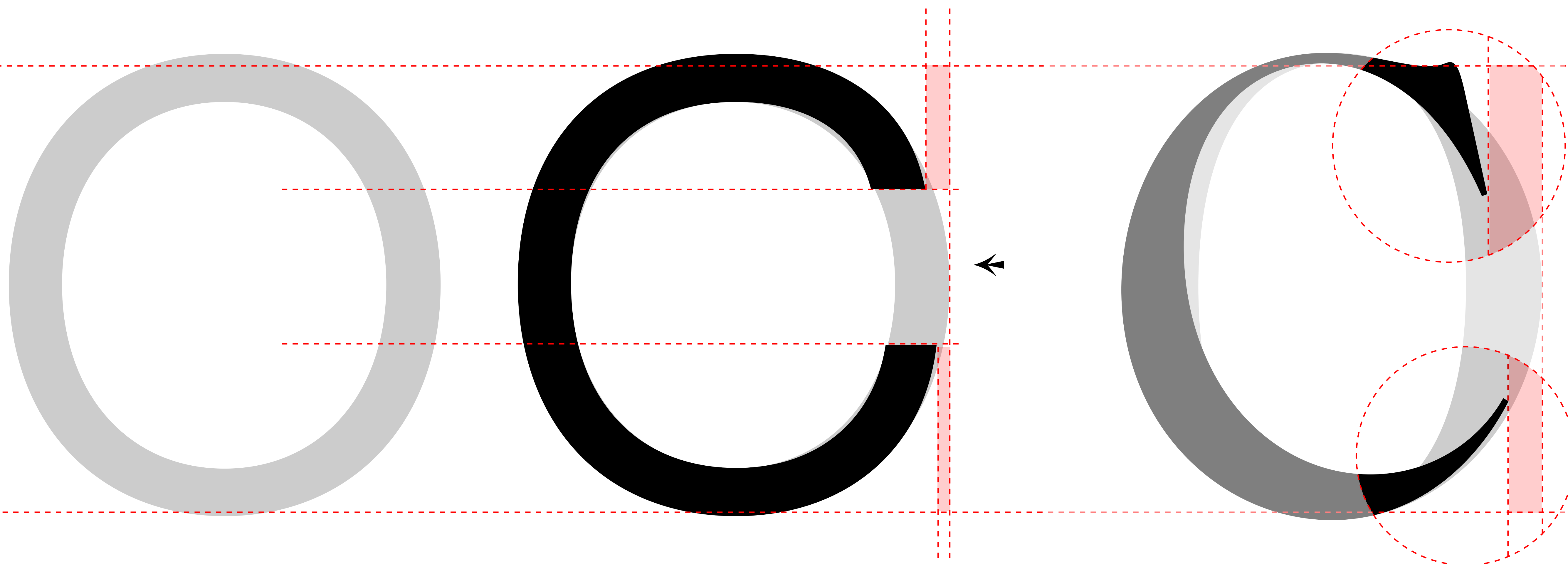
The capital **C** isn't just an **O** with one of its sides cut off.

In Modern typefaces, **C** is in fact a bit narrower than **O**.

Bearing that in mind, you can start tracing your **C** from your **O**.

You can actually balance your **C** depending on how you design both ends of the letter: for example, you may draw the “beak” (the top end of your **C**) and the “tail” (the bottom end) in the same way, but with a slight angle on the beak. By the way, it is not uncommon to use similar (if not identical) beaks for the capital **C** and capital **E** in a given typeface.

Another option is to design your **C** with a tail that doesn't match the beak and flows in a thin stroke.

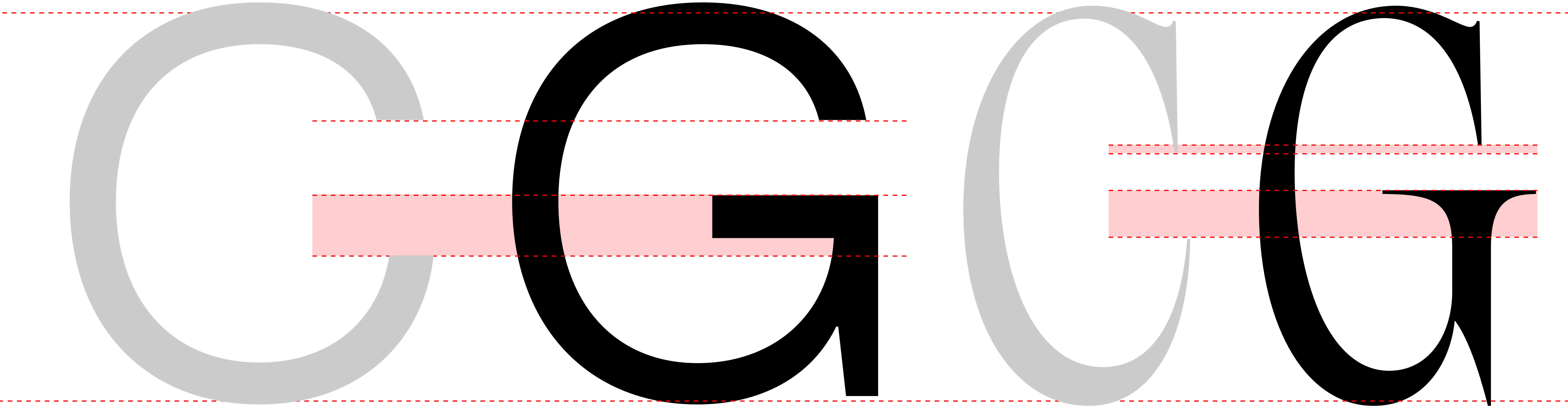




# THE CAPITAL G

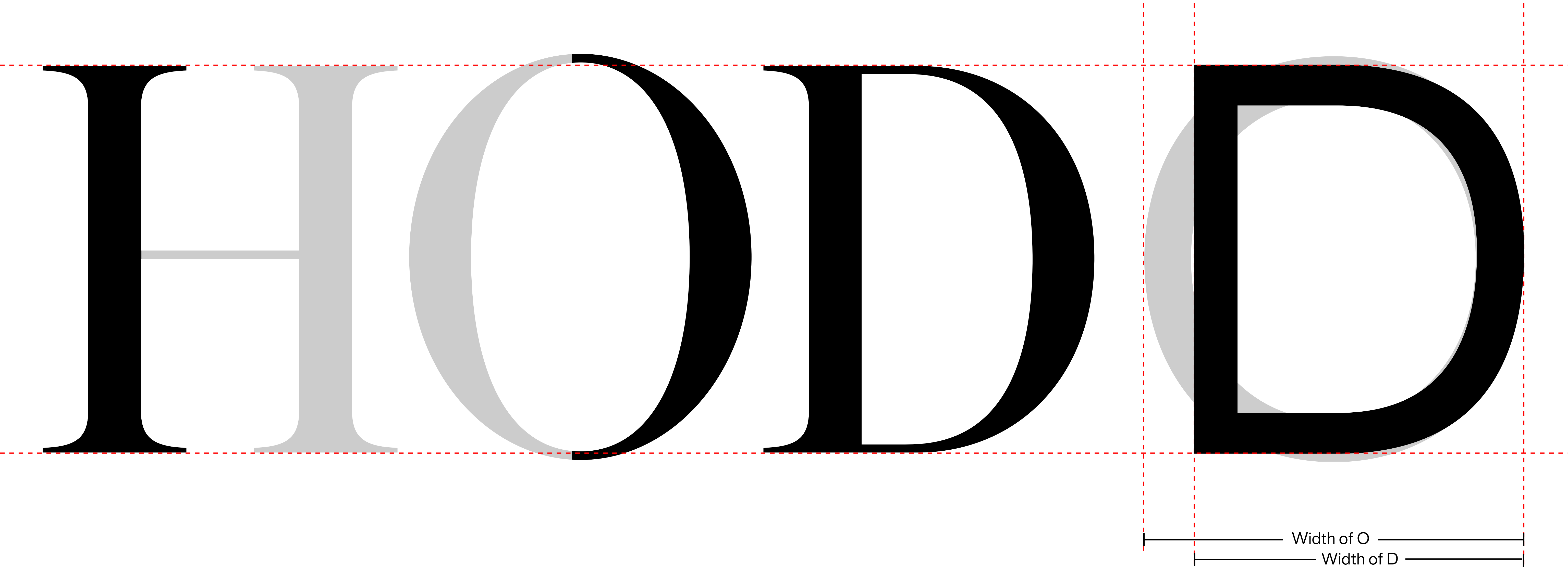
It makes sense to use your **C** as the blueprint for your capital **G**, but there are a few characteristics to take into account. The easiest way to go with this would be to use the **C** as a starting point and adding the extra features. Some fonts may have a width variation between **G** and **C**: the **G** can benefit from being slightly wider than your **C**, as the inside of your **G** needs some breathing room to reduce color created by the horizontal bar that goes inside the letter. This is not very common nowadays but it can be a nice trick to add to your toolbox.

The extra part that differentiates a **G** from a **C** is called the throat. You need to make sure the throat is designed well enough so the two letters won't be mistaken for one another, especially if your typeface has a sophisticated or complex design. For example: you can extend the horizontal bar either to the left or to the right, though leftwards is preferable.



THE CAPITAL D

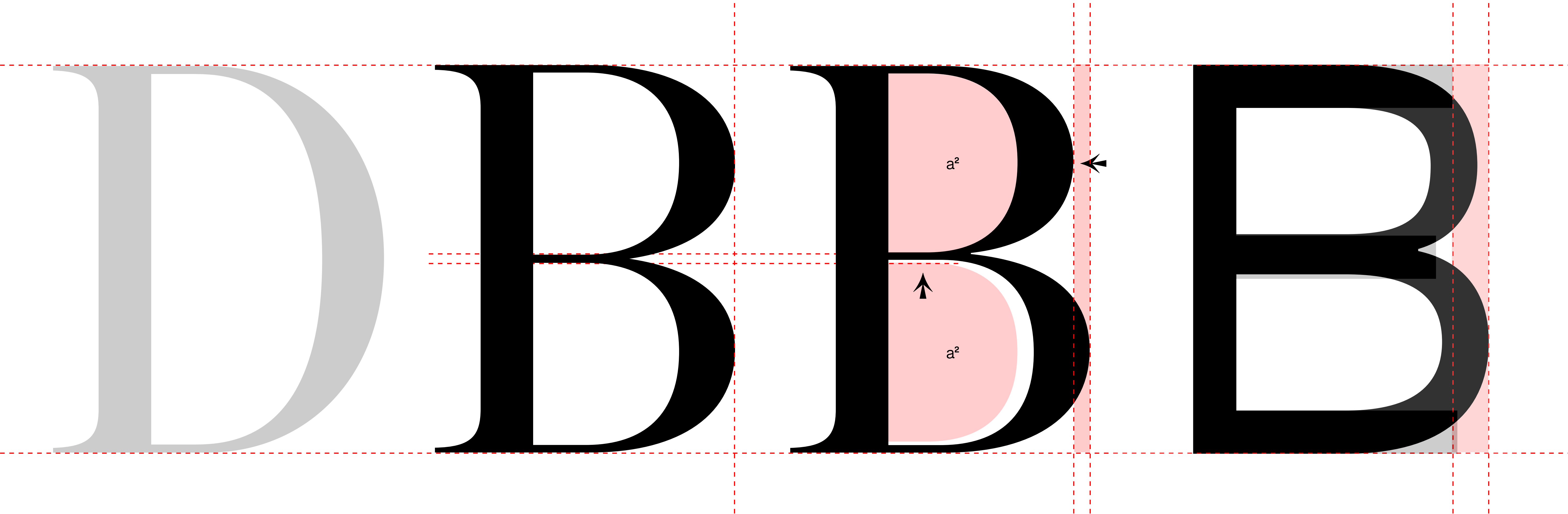
You can design your capital **D** from the vertical stem of your **H** and the curve of your **O**. Bear in mind that your **D** should probably end up as being narrower than your **O**, because its counter needs to encapsulate about the same amount of white space.



# THE CAPITAL B

In a lot of typefaces, the capital **B** mimics the width and height of the capital **E**, though in Modern styles, it is possible to end up with a slightly wider **B**. Again, it's all a matter of achieving your design goal and finding the sweet spot that does the trick for you and the consistency of your font. Instinctively, you may think about making your **B** with a shorter/smaller upper lobe and a bigger/larger bottom lobe, and you would be right to do so!

This is yet another case where having asymmetry works in your favor: if both lobes were exactly identical, you'd be left with an optical illusion where your **B** would appear to be upside down. Wouldn't feel right, would it? It also makes sense to have counters inside of the lobes of your **B** in the same shape of what you did with your **D**.



❶ Symmetrical B

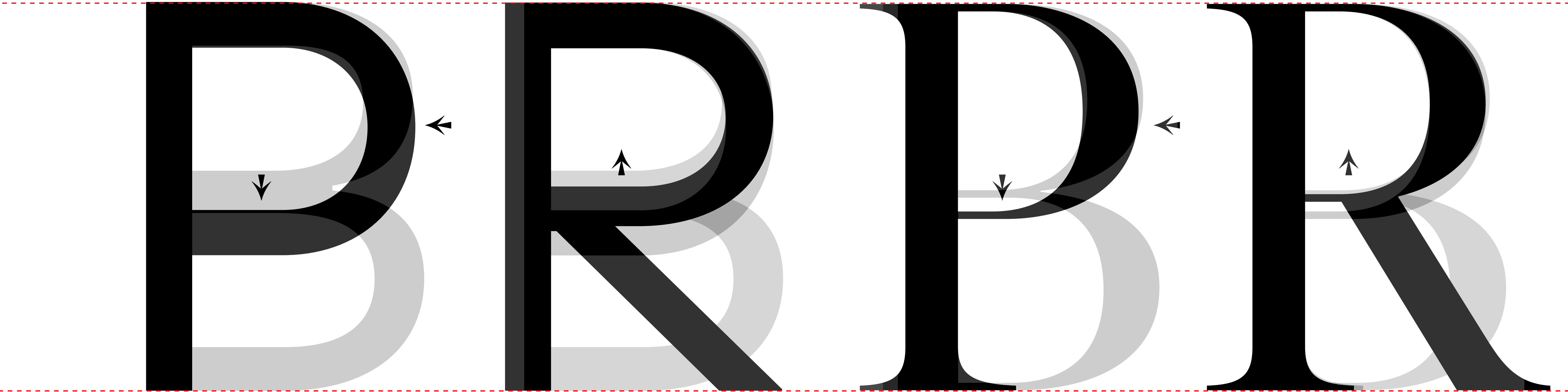
❷ Adjusted B

# THE CAPITAL P

The capital **P** and **B** share a relationship quite similar to what we mentioned earlier for **E** and **F**. What this means is you can start your **P** from your **B** before removing the bottom bowl, then playing around with the height of the upper bowl by extending it below the middle line. Ideally, its final size should be somewhere in between the smaller and bigger bowls of your **B**. **P** is a great example of showing how some glyphs are related to each other and how designing one helps doing the next one.

# THE CAPITAL R

The design of your **P** will naturally help you build your capital **R**. Using your **P** as a blueprint, you may begin by reducing the height of its lobe to make yourself some room below for the leg of the **R**. Similarly to what you can do with the **Q**, the leg of your **R** can extend into a tail for some extra flair, but make sure your kerning is on point if you choose to do so! Please note that design decisions matter when building your **R**, as they will define your capital **K** later on.

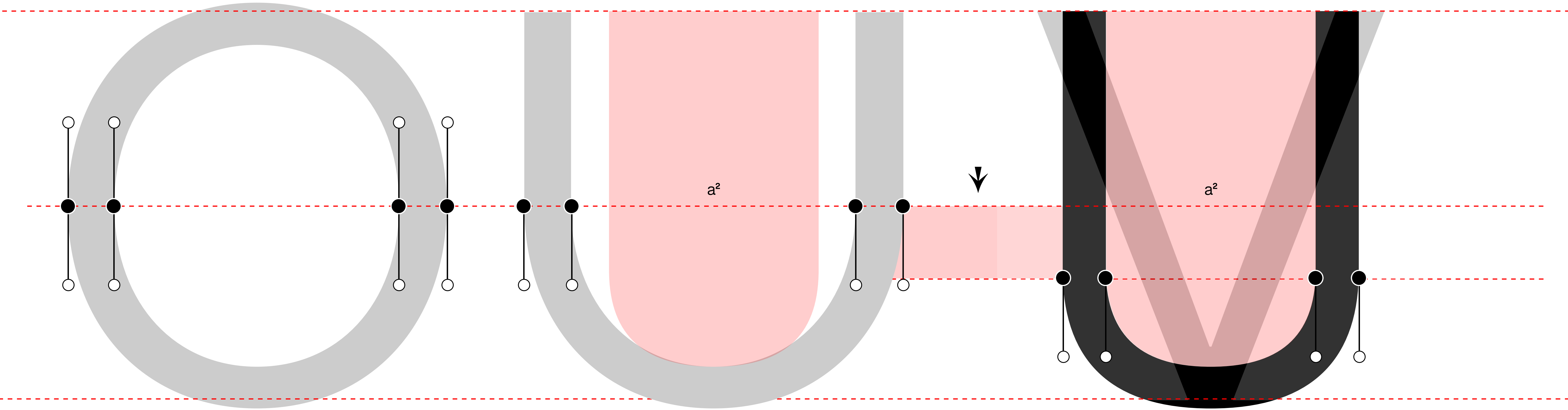




# THE CAPITAL U

Even though the capital **U** is one of the multiple curved letters you will design, it is in fact closely related to the **V** as well. Using your **V** as a baseline will give you a general idea of how wide your **U** should be and where its upper arms should end. Of course, these characteristics don't have to match perfectly between your **U** and your **V**, but they're a good starting point.

The bottom curvature of your **O** will also serve as a blueprint for the lower part of your **U**. Don't forget about checking the color of your **U**. Feel free to give it more breathing room by widening the glyph accordingly.

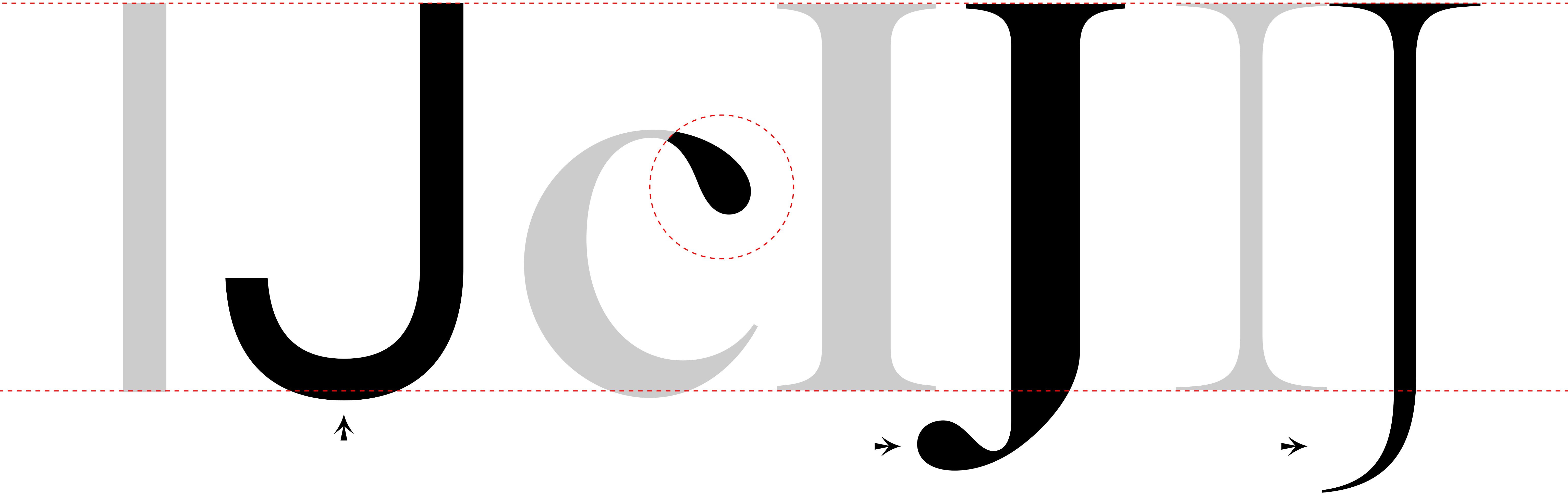


# THE CAPITAL J

The vertical part of your capital **J** will most certainly start from your **I**. The tail is the key feature of your **J**, and there are several options here: first of all, you may design the tail from the terminal you’ve built for your **C**, though you don’t have to. Second, think about how you want the tail to flow.

A curvy tail that stays above the baseline may create issues if it is too big, as your **J** will create too much empty space and “push” away whatever letter is before it.

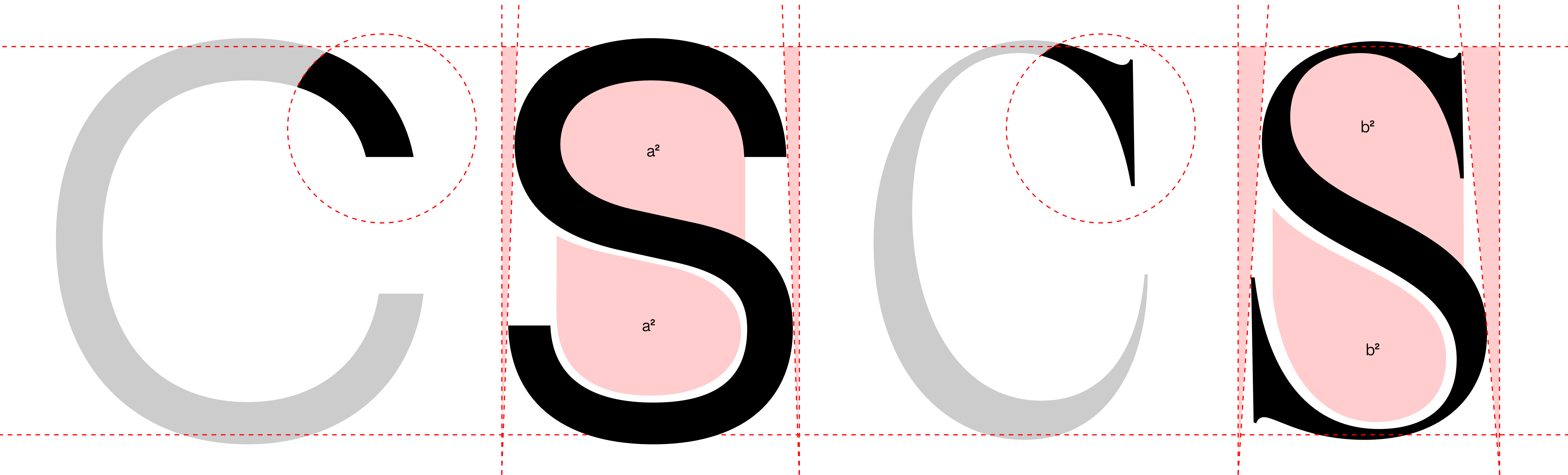
A long tail that extends below the baseline will circumvent that issue, but don’t get carried away! Designing a very long tail may create problems as your **J** may then potentially overlap with any text located underneath.



# THE CAPITAL S

As strange as it may sound, some of the tips discussed about the letters **E** and **B** can actually work when designing your capital **S**. First off, the blueprint for your **S** should be two circles arranged in a vertical way (kind of like a crude **8** shape). You may then resize both circles in order to make the bottom one larger and the upper one smaller.

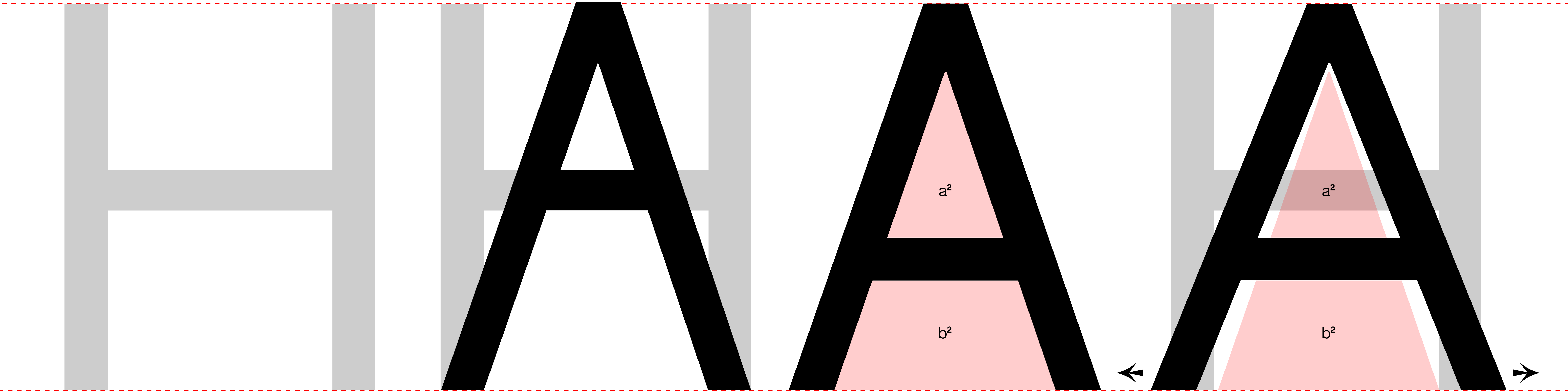
Basically, you want to find a balance similar to what we did with the **B**, and thus avoid an optically top-heavy **S**. From that 8-like shape, you can then draw your **S** and play around with how its tails end, possibly using the terminal style from your **C** and/or **J**.



# THE CAPITAL A

To draw the **A**, you can start from the stems of your capital **H**. But there's a trick here as well: diagonal stems cannot have the same width as their vertical-stem cousins. They need to be optically adjusted. You'll also need to extend the width of your **A** according to your **H** so it looks even. Let's see some tryouts: Here, the **A** and the **H** share the same width, yet they look uneven. What we need to do first is to adjust the width of our **A**.

As you probably noticed, the crossbar of our **A** is at a different height than the crossbar of our **H**. Of course, it's a matter of design choice but you have to also consider that the crossbar of **E**, **F**, **H** and **A** relate to one another, meaning they should follow the same kind of positioning logic.



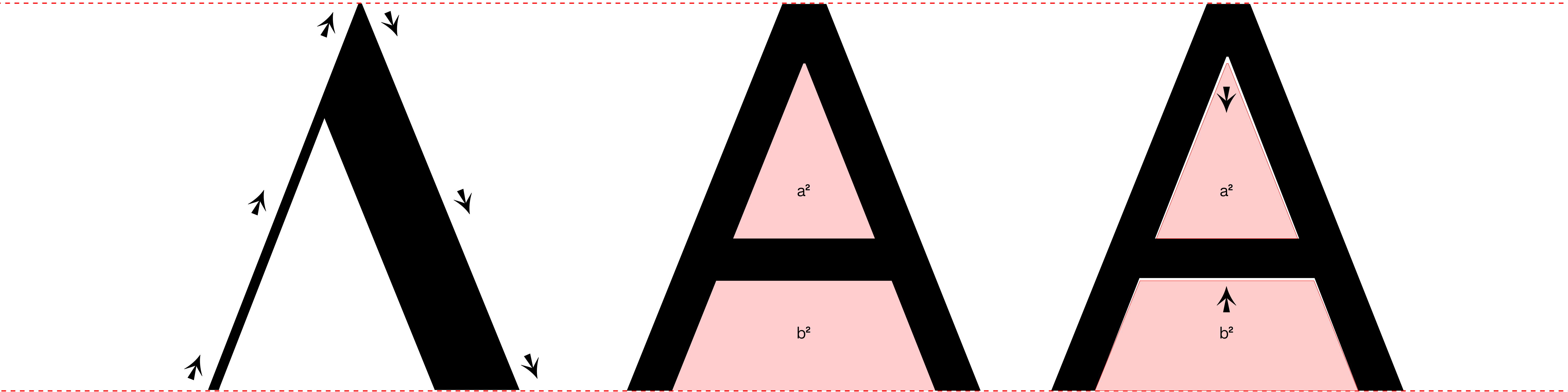


# THE CAPITAL A

As mentioned earlier, diagonal stems need to be optically adjusted to match the weight of the vertical stems. The stem on the left side of our **A** appears as bolder than the right stem, even though they actually share the exact same width. This optical trick can be adjusted by slightly reducing the width of the left stem and doing the opposite with the right stem.

It follows a ductus logic: if you were to draw an **A** with a calligraphic pen, the angle of the pen would create this minor discrepancy. Without diving too much into why our eyes and brain see shapes this way, keep this rule in mind when you're aiming for an optically even weight across your glyphs. Now, let's see our **A** with some optical correction applied before comparing it to our previous **A**:

Doesn't seem like there's much of a difference, right? But trust us on this: when designing your fonts, paying attention to all of these tiny details will go a long way. Going through the trouble of refining and perfecting your work is what will eventually lead to a high quality font!



## THE CAPITAL V

Naturally, your **A** will help you build your capital **V** as well. We can simply start from our **A** and turn it upside down. We'll then use the same logic as before as far diagonal stems are concerned, but the side of drawing is reversed here. Remember that pen ductus thing we talked about earlier?

Your **V** might need some more optical correction where the two stems meet. A dark spot can be seen here, so you might want to attend to that to give your glyph a smoother weight distribution

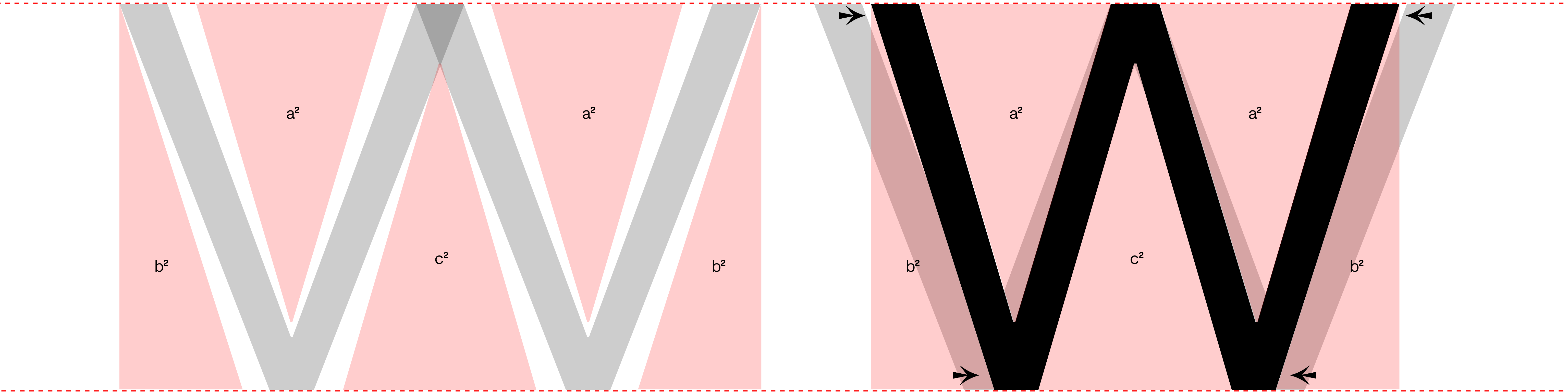


# THE CAPITAL W

To design your **W**, simply take advantage of what you built with your **V**. Contrary to what one might think, a **W** isn't simply constructed by slapping two **V**s together, although you can use that as a starting point.

What happens where your two **V** shapes intersect is up to you: you may either join them together, giving a shape that looks like two **V**s sitting next to each other and touching at the upper tips (**W**), or draw them closer together so they overlap (**W**)

Regardless of what you choose, the white spaces in your **W** should have clear triangular shapes. You can also make the white triangle at the bottom slightly larger than the rest if you feel like your **W** needs more balance.

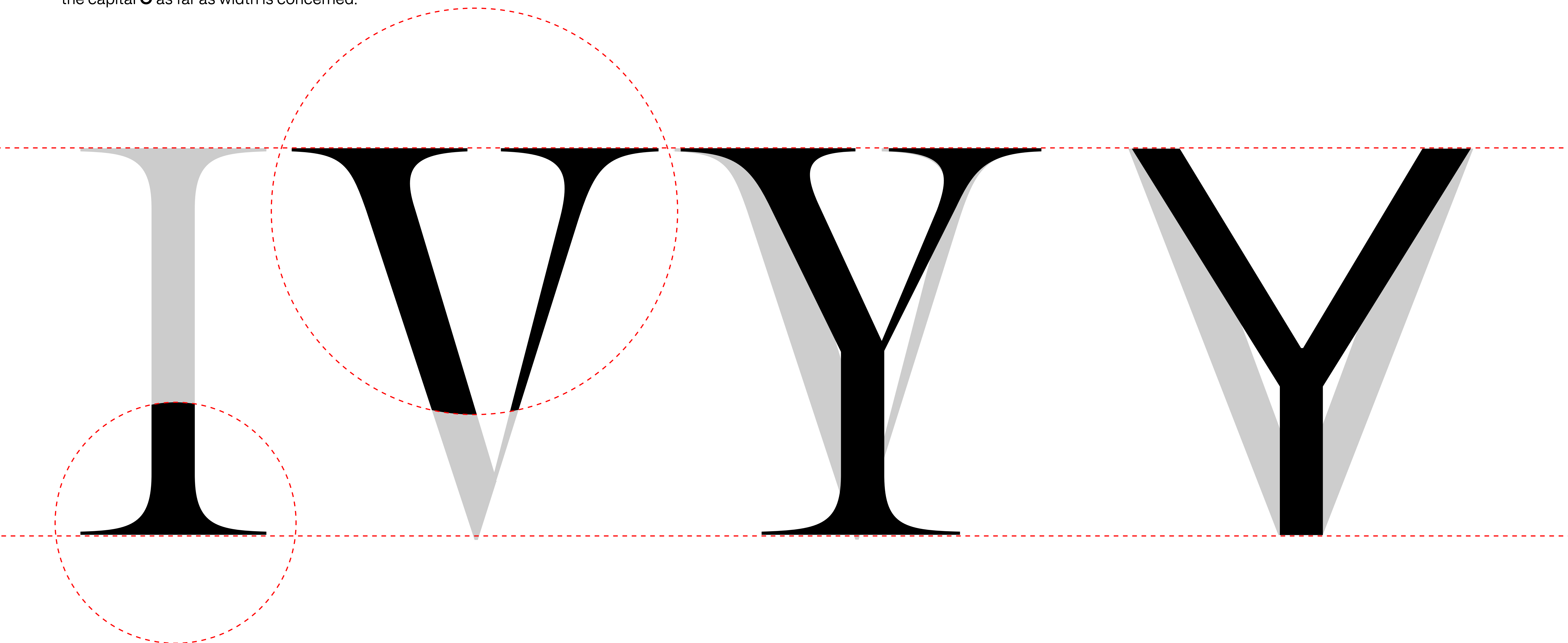


## THE CAPITAL Y

Your **V** can help you build a capital **Y**, as that letter is more or less a smaller **V** sitting upon a vertical stem, which then may need to be resized for overall balance.

Depending on your design preferences, you may have either one or both arms of your **Y** extend into the vertical stem. The length of that vertical stem should be about  $\frac{1}{3}$  to  $\frac{1}{2}$  of the cap-height.

Also note that in Modern proportions, the capital **Y** is very close to the capital **O** as far as width is concerned.





## THE CAPITAL M

Your capital **M** can be constructed from your **V** by adding two vertical stems to the left and the right.

To avoid excess color, there's a few tricks you can use: for starters, enlarging your **V** shape and/or raising the vertex (which is the pointy bit of your **V**) will give your **M** some much needed breathing room. Additionally, you may try making both vertical stems thinner, or even tilting them diagonally to achieve the same goal.

Regardless of how you choose to tweak your **M**, make sure it ends up being a bit larger than your **O**.



# THE CAPITAL N

One of the key aspects with any capital **N** is balance. This balance can be achieved thanks to two adjustments. First, designing the center diagonal stem. That diagonal line in your **N** is probably the most crucial element, since it has to be aligned properly for your glyph to look stable. Consider the **N** as being made of two triangles: a bottom one and an upper one, separated by the diagonal stem.

In order to achieve balance, the bottom triangle has to be slightly larger than the upper one, which can be done by shifting the diagonal line to the right into the right vertical stem. Tweaking the width of the vertical stems in relation to the diagonal stem can also add more stability. As far as size is concerned, your **N** should fit within your capital **O**. In fact, it should even be slightly thinner than your **O** to optically match it.



# THE CAPITAL K

The capital **K** is not too different from the **R** as far as its general structure goes, which means you can absolutely draw some inspiration from **R** when designing your **K**. In fact, both the **R** and **K** glyphs typically use the same width. This glyph also follows similar rules to **E** and **B**, where the lower half should be a bit bigger than the upper half for balancing reasons.

You may want to avoid having the diagonal stems of your **K** intersecting directly at the vertical stem, since this can make the letter look awkward and unstable. A lot of typefaces have a **K** glyph where the leg doesn't even come in contact with the vertical stem and ends inside of the arm instead.



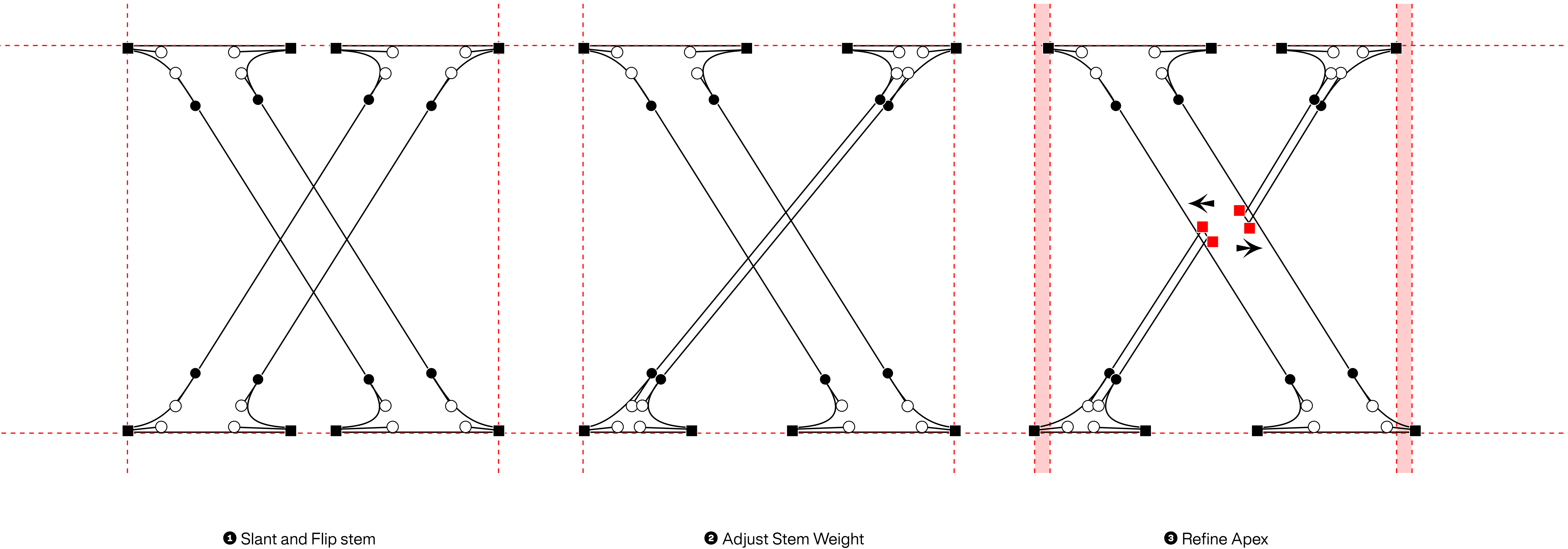
# THE CAPITAL X

The capital **X** is yet another glyph that can't just be symmetrical due to optical illusions, which means its lower half needs to be made a bit wider to "support" the top half.

You may also use the middle crossbar of your **H** as a blueprint to know exactly where the diagonals of your **X** should intersect.

A new optical illusion comes into play with the letter **X**: when two lines intersect, the thinnest one will look like it is shifting to the side after crossing the other.

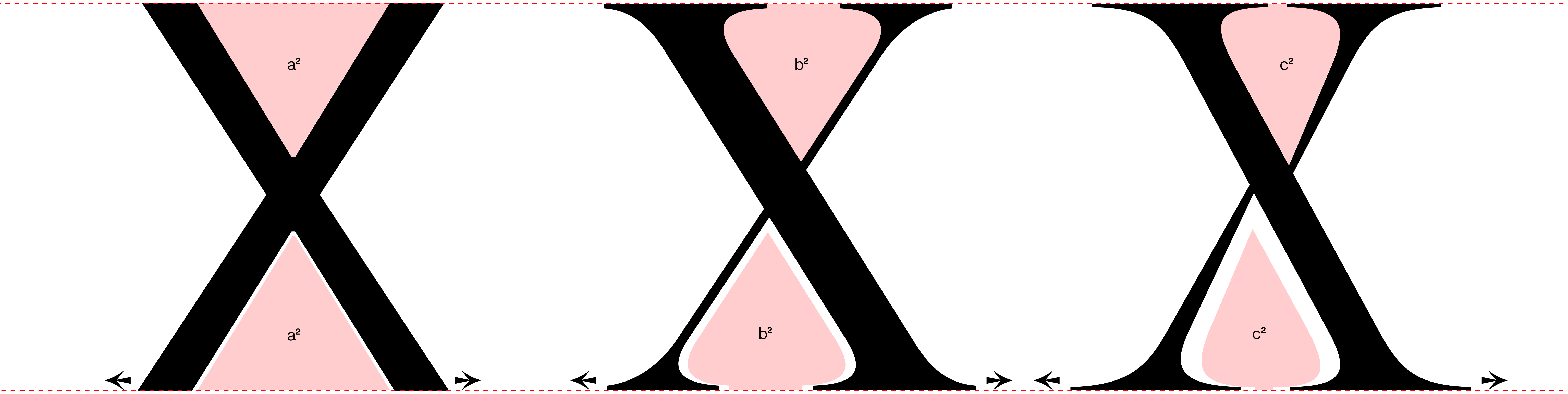
To fix this visual phenomenon, you'll need to "slice" the thinnest diagonal of your **X** in half, right in the middle, and create a subtle shift yourself.



# THE CAPITAL X

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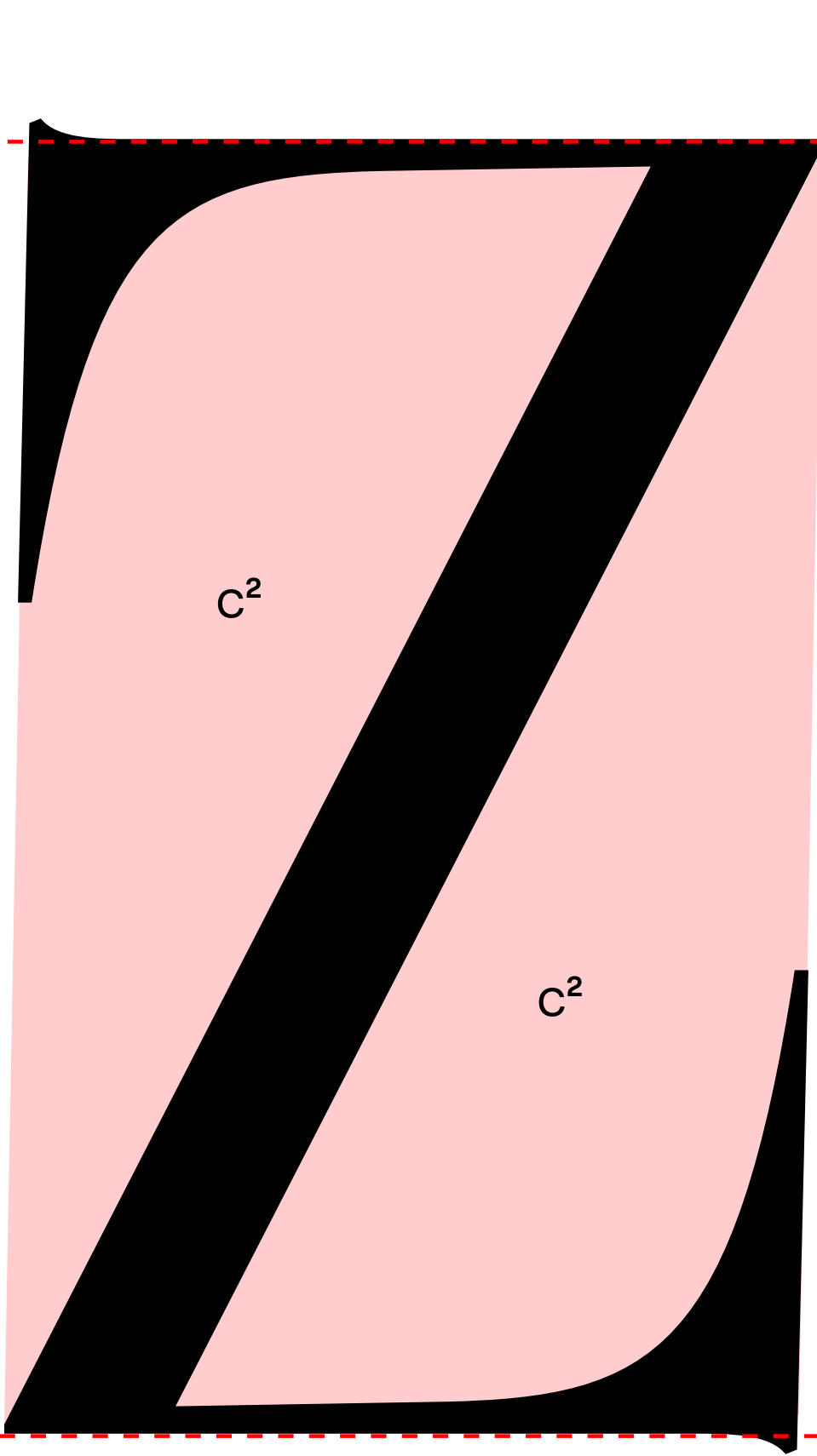
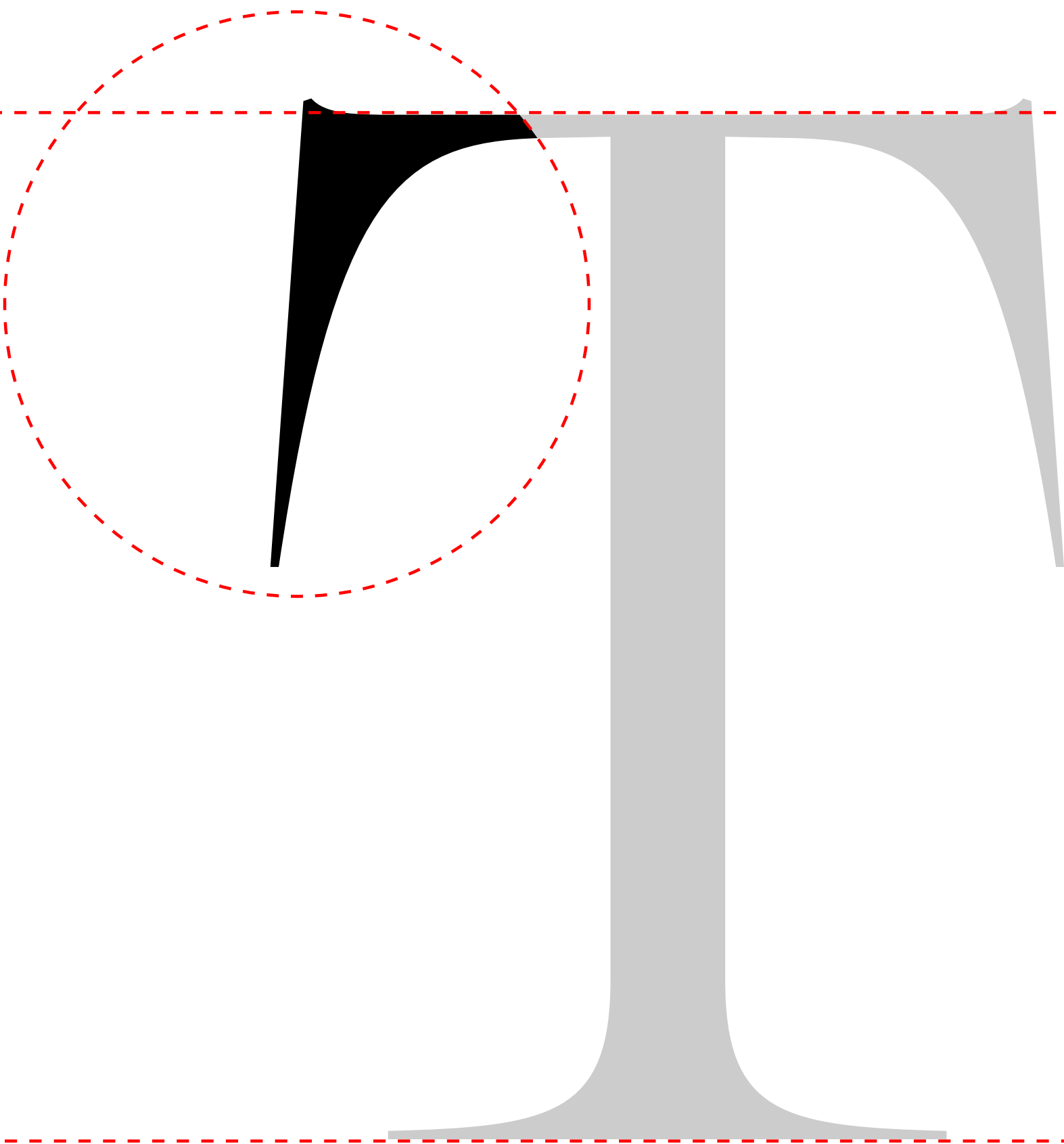
# THE CAPITAL Z

The capital **Z** is far from just being an **N** tilted at a 90° angle.

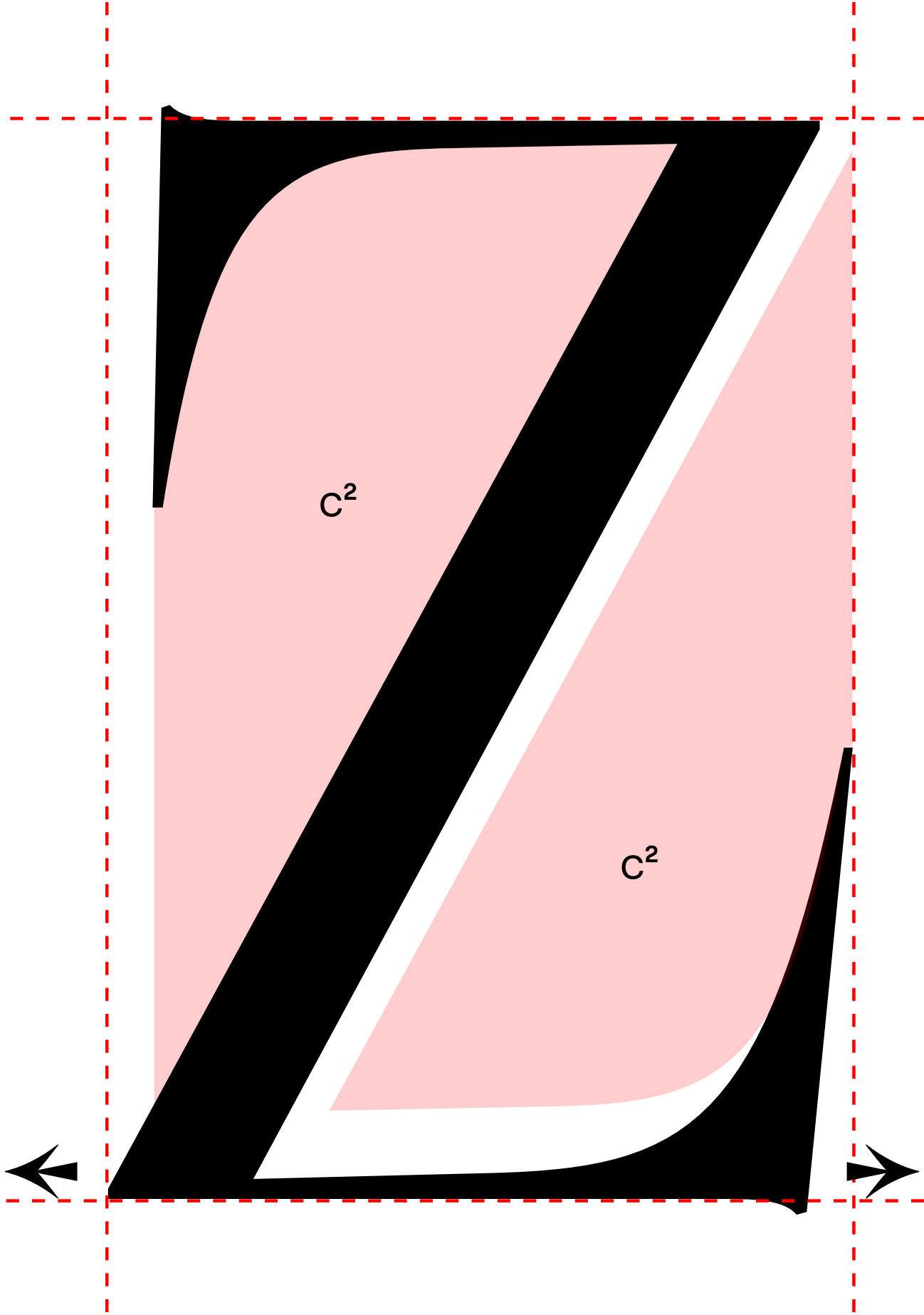
With this glyph, finding a proper balance is key.

Due to optical illusions, the horizontal base of your **Z** will need to be a bit larger than the top horizontal bar. The diagonal bar at the center can be as wide as the other two bars, although it is possible to have a design where it is thinner, but don't overdo it because your **Z** may end up looking too fragile.

On the other hand, it is possible to have a thicker diagonal bar to give your **Z** a stronger feel.



❶ Symmetrical Z



❷ Adjusted Z

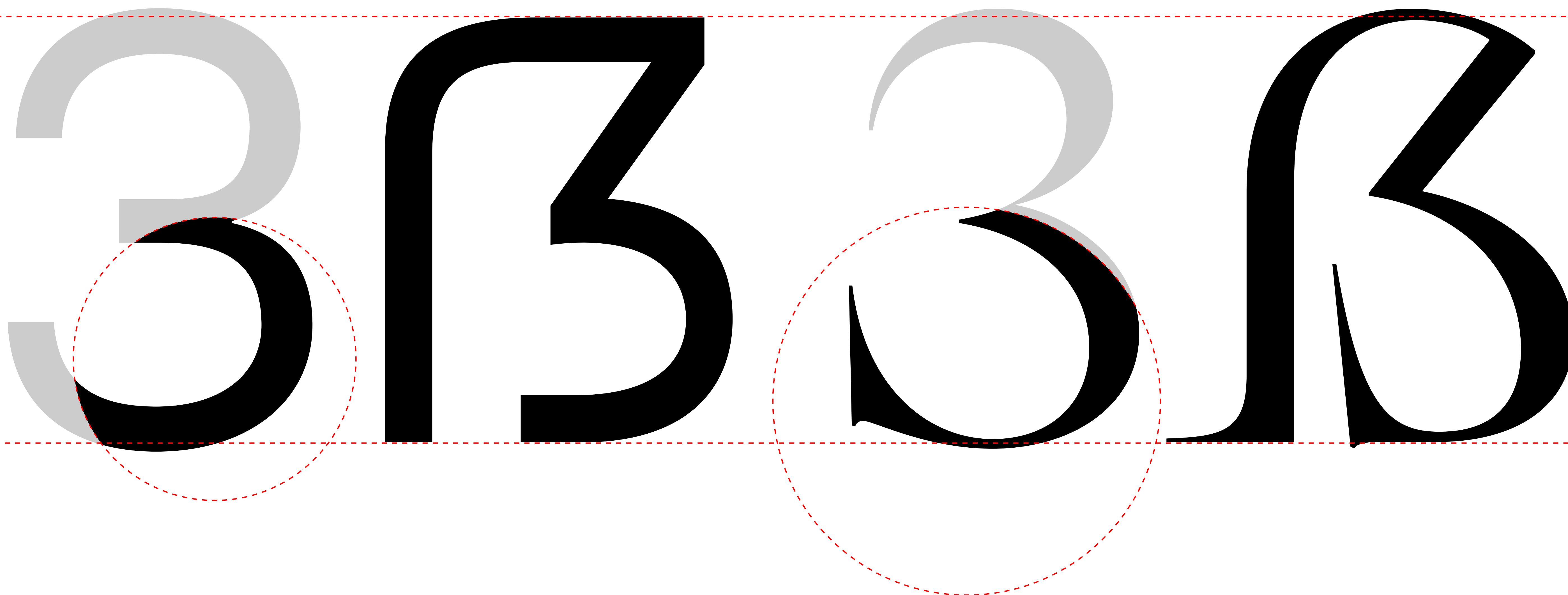
## THE CAPITAL ESZETT

The **Eszett** is unique to the German language. It is more of a ligature than an actual letter, but we've decided to discuss this glyph as part of the alphabet because it has capital and lowercase variations.

Historically, the eszett has undergone various redesigns, though most of them kind of look like a wobbly capital **B** at first glance. Don't take that as a hint for building your eszett, though! In fact, you shouldn't base your eszett on your capital **B**, because we don't want both glyphs to be confused for one another.

But **B** can and will remain a good visual reference to balance our Eszett. A good starting point for your capital eszett can actually come from your number **3**, as long as your design uses the diagonal stem instead of the double bowl shape. For more information on how to design the number **3**, please refer to the corresponding section.

Now, after removing the top of your **3**, draw an arch towards the left. The arch should reach cap-height, then smoothly fall into a vertical stem. The capital **Eszett** is wider than **B**, feel free to exaggerate the width of your glyph so as to create a wider gap between both feet. This will make the glyph look balanced and well put.



# — LOWERCASE LETTERS —


**m h u r l i**  

**e c b p q d**  
**f t j**

**g s**  

**w x y k z**

# THE LOWERCASE **n**

Designing the **n** and **o** as your first lowercase letters is usually a good idea—these will be your control characters. Let’s start with **n** first. The hardest part is getting the “arch” (or shoulder) of the **n** right. Make sure your stroke is also narrower as the arch joins the vertical stem, otherwise your **n** may end up looking awkward and have the general shape of a bump instead of a proper **n** letter.

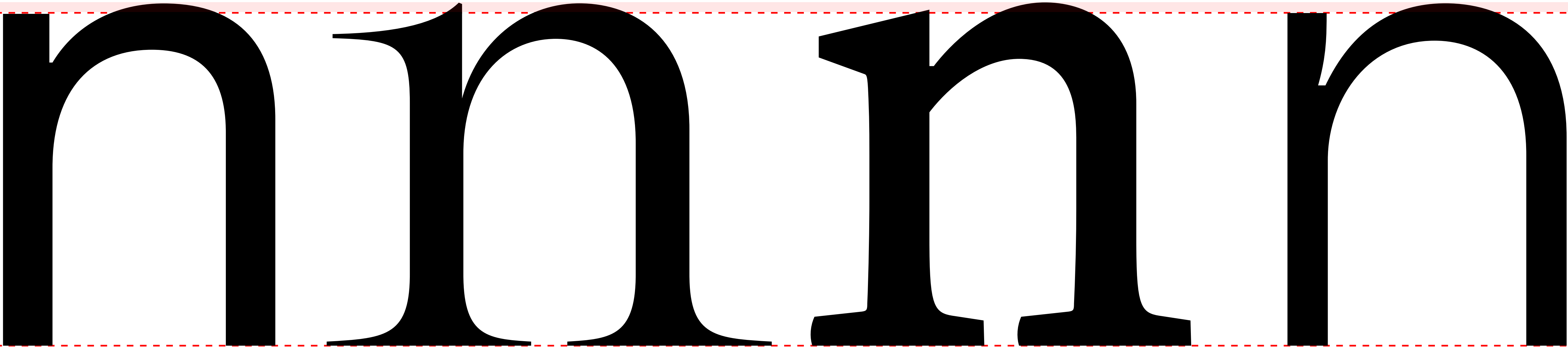
Lowercases' vertical stems tend to be thinner than Capital's. This weight variation can be subtle or exaggerated depending on the art direction of your font. In any case it's an important optical trick to put up if you want to achieve a nice optical balance within your typeface.

Ascender height

Overshoot

x-height

Baseline



## THE LOWERCASE **h**

Once your **n** is done, you've basically designed your lowercase **h**!

You just need to increase the height of the vertical stem of the **n** to make your **h**.

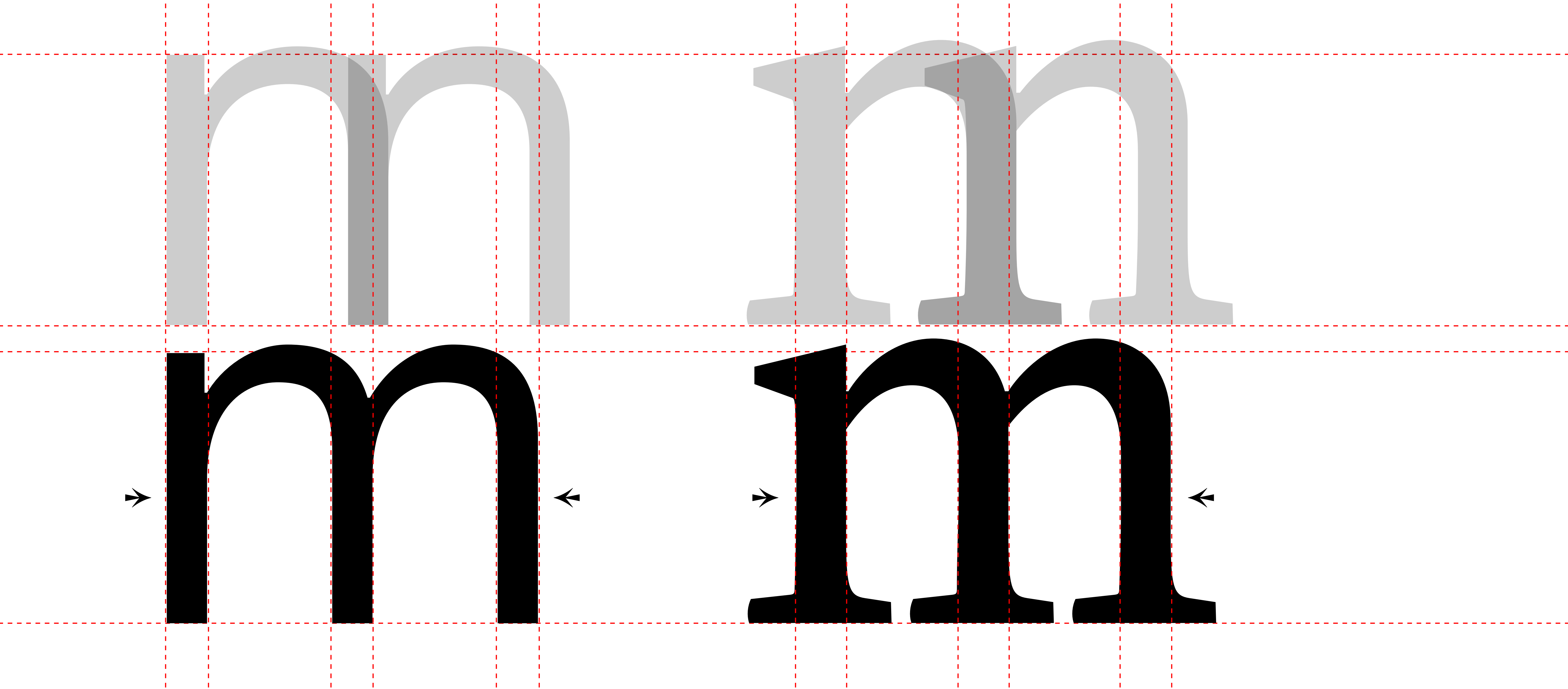
You may optionally "dig" where the curve and vertical stem intersect to gain more white space and avoid color.





THE LOWERCASE **m**

You can then build your lowercase **m** from your **n**. You may start building your m as a double **n**, but you will have to make adjustments to the results otherwise your m will look very large. To fix this, you may either condense your m after it's built, or make your n narrower before duplicating it.



# THE LOWERCASE u

The lowercase **u** is essentially an **n** rotated upside down.  
If in fact, this is how you should begin working on your **u**, as both glyphs will feature a nice, consistent curve without effort.  
Do keep in mind though that some adjustments will have to be made depending on your serifs, since you’ve basically turned the “feet” of your **n** into upper arms for your **u**.



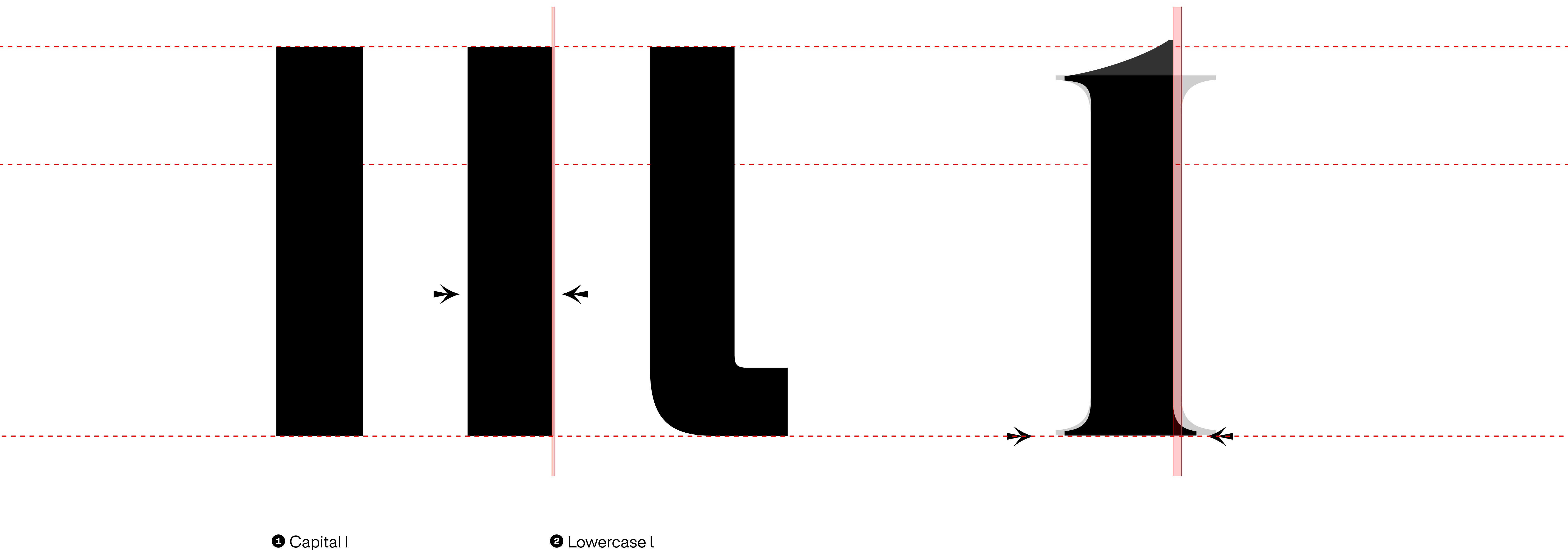
# THE LOWERCASE 1

In Sans typefaces, it is easy to consider the lowercase **l** as a mere copy of the capital **l**, but this isn't exactly the case.

Your lowercase **l** should be slightly thinner than your capital **L**.

Note that if you're creating a Serif typeface, you can replicate the serifs from your capital **I** onto your lowercase **l**.

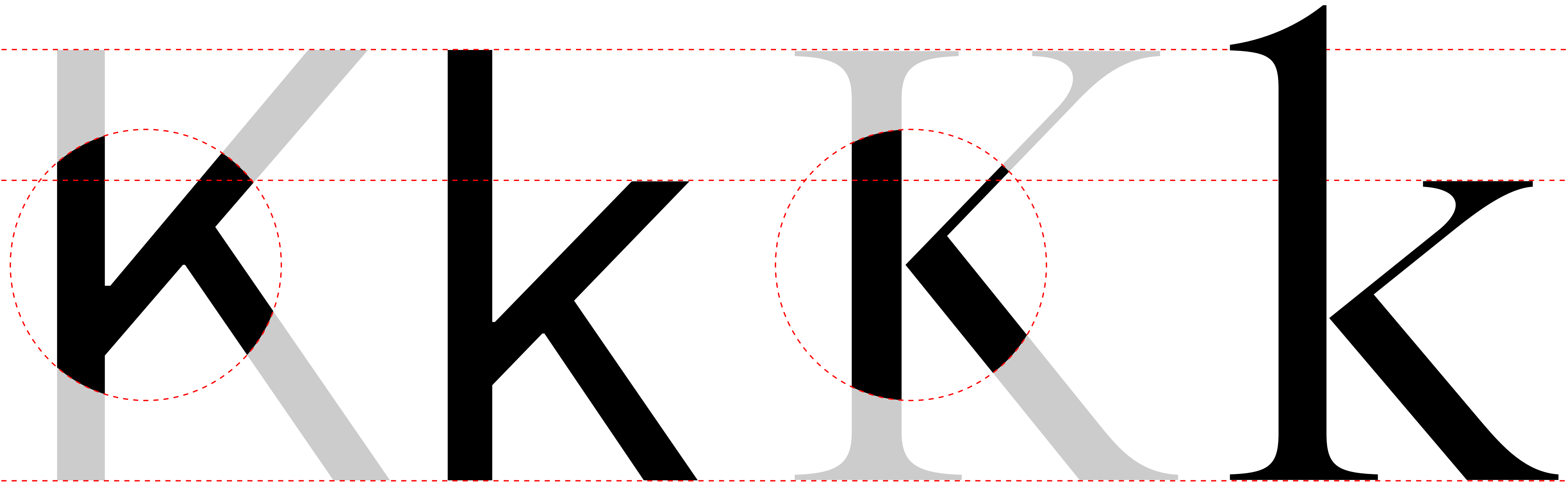
You will however need to make them a bit smaller so they fit the lowercase nature of the glyph. This rule also applies to other lowercase characters where you feel appropriate.



## THE LOWERCASE **k**

As you might have guessed, you may use your lowercase **l** to start building your lowercase **k**.

It is recommended to keep the design of your diagonal arm and leg from your capital **K**, for consistency's sake. You will however need to readjust their size and their placement since you'll have less space to work with. Make sure your **k** ends up being readable, but not too wildly different from your **K** so as to avoid unnecessary confusion from the reader.



## THE LOWERCASE i

Your lowercase **l** can serve as a blueprint for your lowercase **i**.

You can start by decreasing the height of your L

(but without going below the middle line) and then design

the dot that's going to sit on top of your **i**.

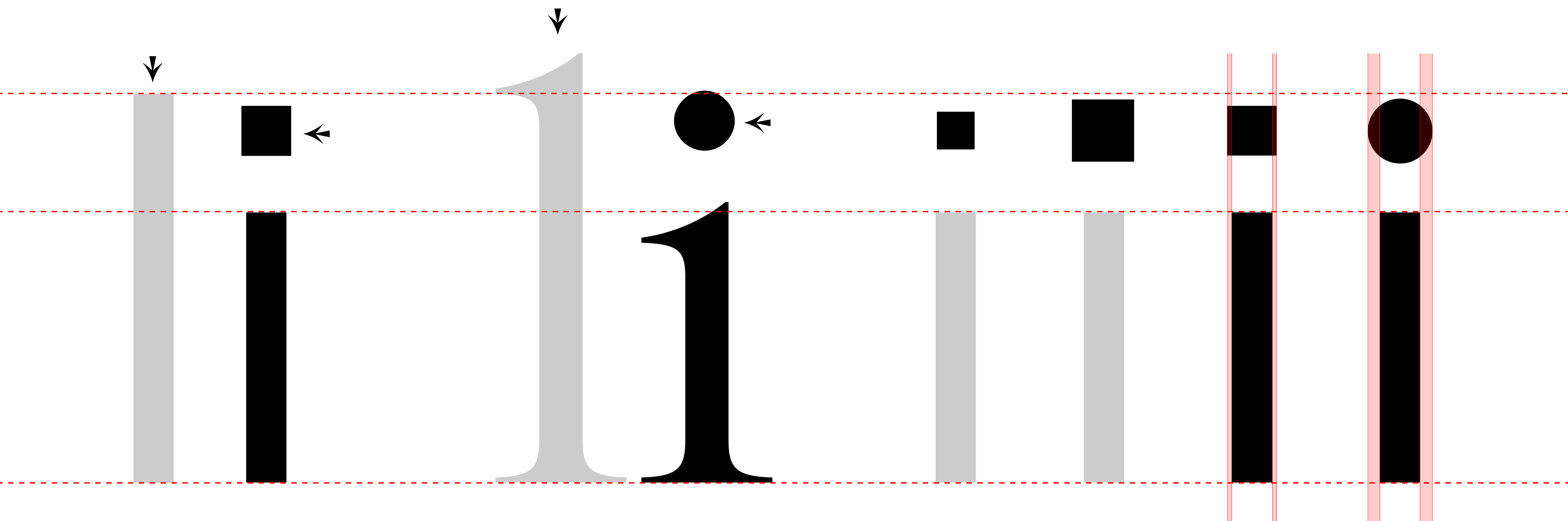
In fact, the “dot” doesn’t necessarily have to be a circle:

feel free to draw it as a square, a square with rounded corners, as

an oval, etc.

—be creative as long as it makes sense and make sure it matches the weight of the vertical stem!

Note that by default, the dot should be placed at the capline, but you may want to raise or lower your dot depending on how tall or small the x-height of your typeface is, respectively.



❶ Too small dot

② Too big dot

③ Nice dot

④ Another dot?

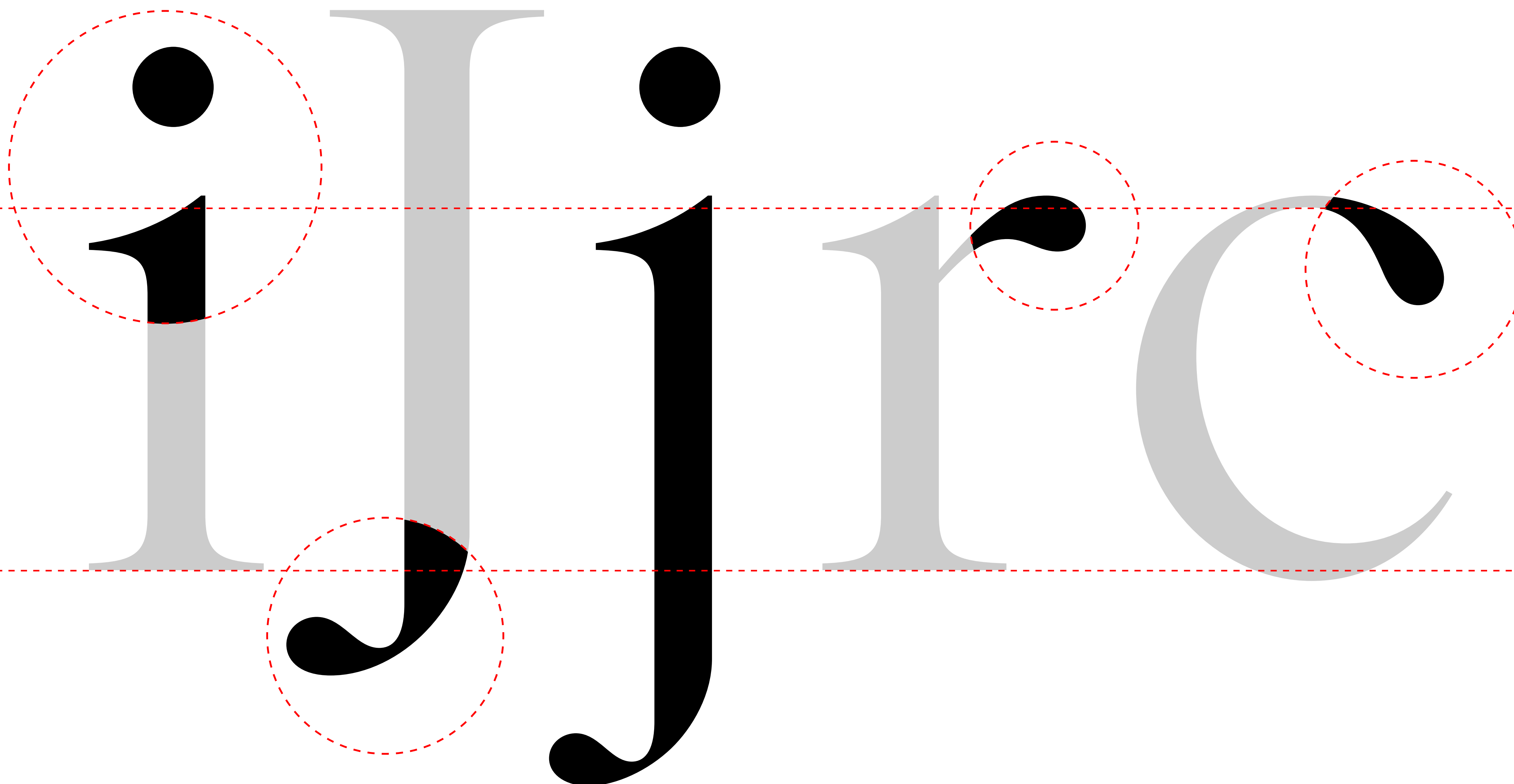


## THE LOWERCASE **j**

The lowercase **j** is basically a lowercase **i** with an extended tail.

Just like we discussed with the capital **J**, make sure the tail doesn't extend too much to avoid issues where your glyph may disrupt whatever text is below.

As a design guideline, note that typically the lowercase **j** and capital **J** share an identical terminal. Plus, in general, **j** also uses a terminal similar to the ones found on the lowercase **r**, **a** and **c**.

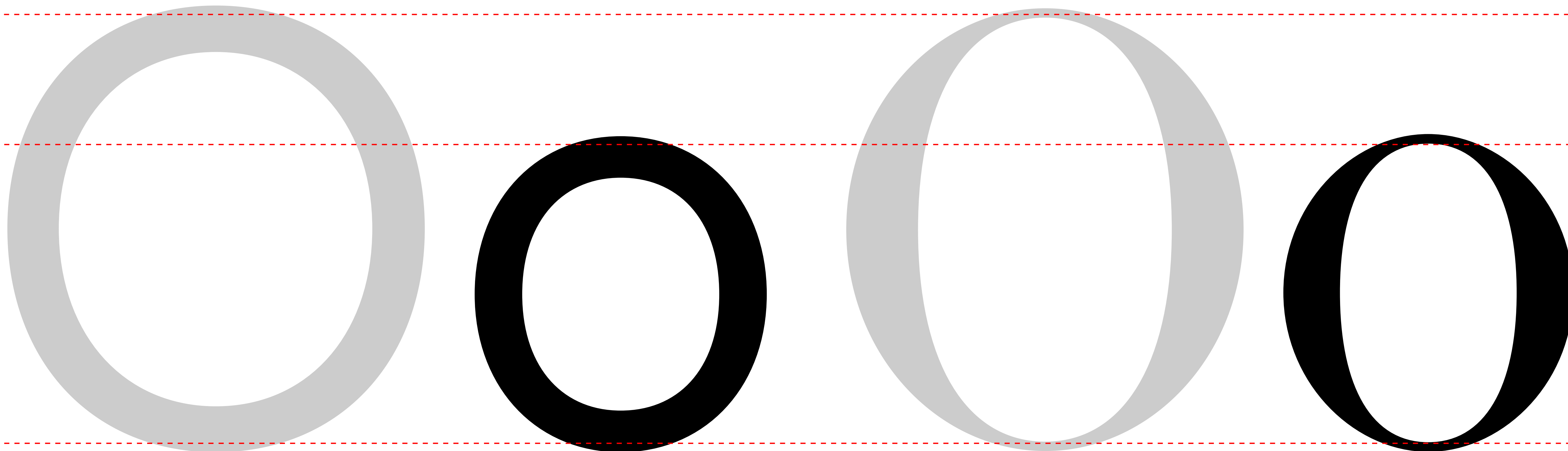


## THE LOWERCASE **o**

As we mentioned earlier, the lowercase **o** is one of your two control characters because its curve will set the maximum width for your lowercase letters.

Naturally, your lowercase **o** needs to have less weight than your capital **O**. This means the stroke of your **o** should be slightly thinner than what you did with your **O**.

This varies from one typeface to another, but both the capital and lowercase versions should feel like they have an even color distribution while keeping the same general shape. It is also good to mention here that rounded forms' stroke is usually thicker than vertical strokes.

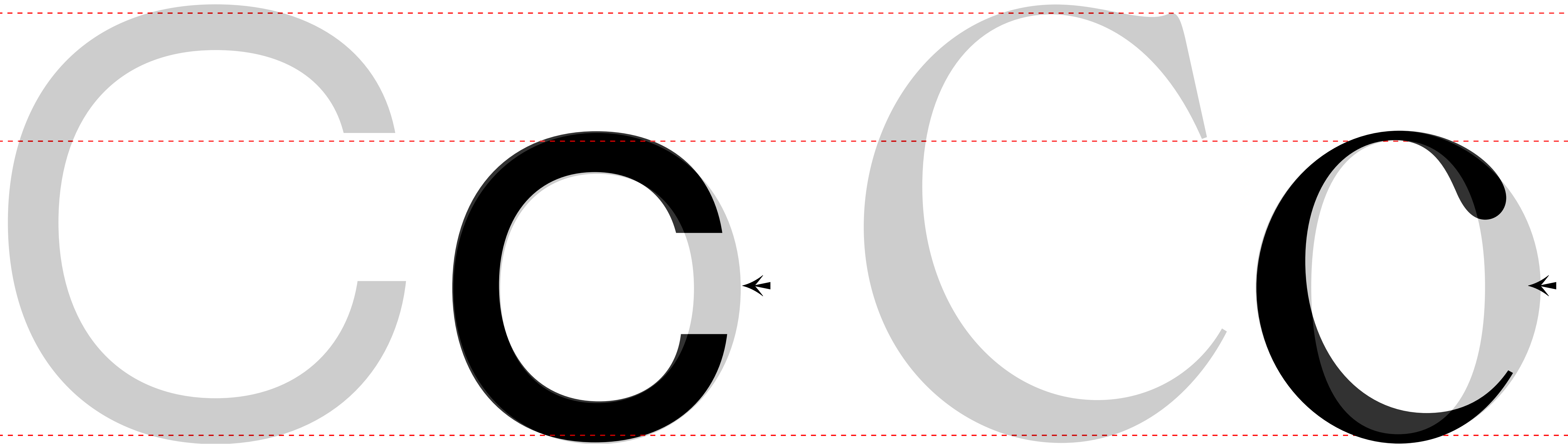


## THE LOWERCASE **c**

This glyph has to follow the curvature of your lowercase **o**. But, just like we mentioned with the capital **O** and **C**, you can't just take your **o** and slice its right side. You can use your **o** as a general baseline, but you will eventually have to make your **c** narrower. You will also need to work on the ends of the stroke. More often than not, the top end and the bottom end of the lowercase **c** use different stylings. The top end can use a terminal similar to those found in **j**, **r** and **a**, while the tail at the bottom can be designed as short or long.

As far as proportions are concerned, the general shape of your **c** should match what you did with your **C**. Both these letters shouldn't look too different from one another.

One final thing to bear in mind: make sure to double check the spacing for your lowercase **c**, especially when a lowercase **l** follows. Bad spacing can cause your **c** and your **l** to merge into what seems to be a **d** (making words such as “clash” look like “dash” instead).



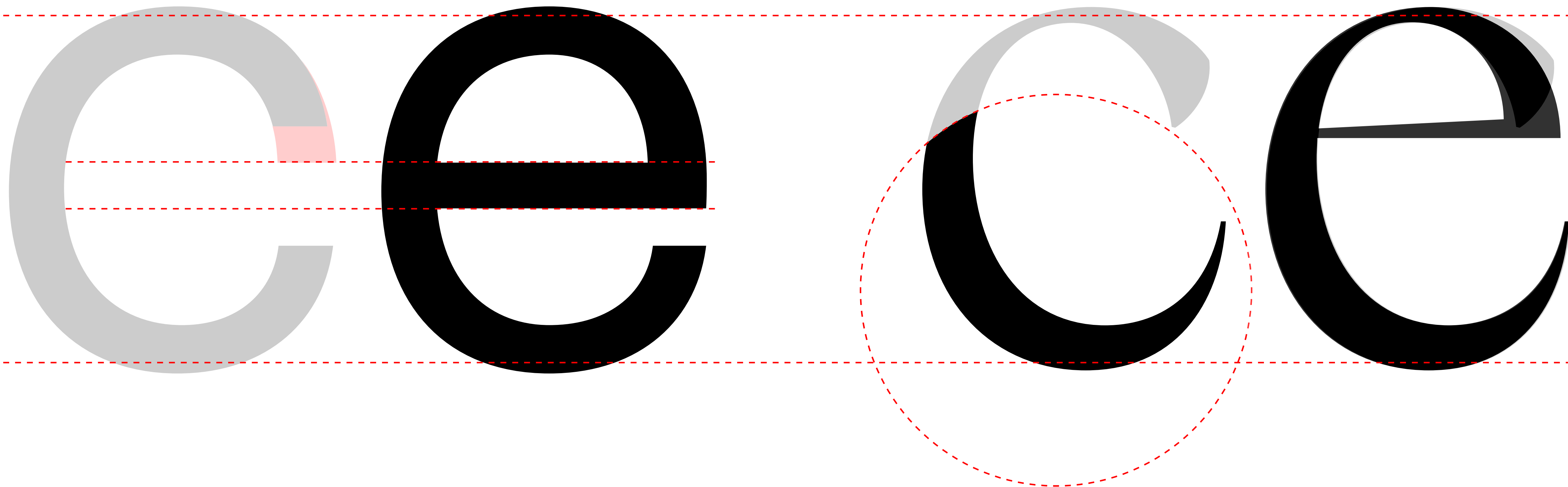
## THE LOWERCASE **e**

The lowercase **e** is not too different from the **c**, although there's a few details that you need to pay attention to.

Again, your **e** should be slightly narrower than your o but not as narrow as your c, because the inside of the **e** naturally features less white space.

Still, your **e** should look like it is related to your **c**, although some adjustments can be made: for example, you may choose to give a slightly shorter tail to your **e** (compared to your **c**) to give it some breathing space.

Also, be careful when setting the height of the horizontal bar of your **e**, as it may impact readability.



## THE LOWERCASE **b**

It makes sense to group these four glyphs together as they all share obvious similarities; one of them being they can be constructed from the curvature of your lowercase **o**, **c** and **e**.





## THE LOWERCASE **b**, **d**, **p** AND **q**

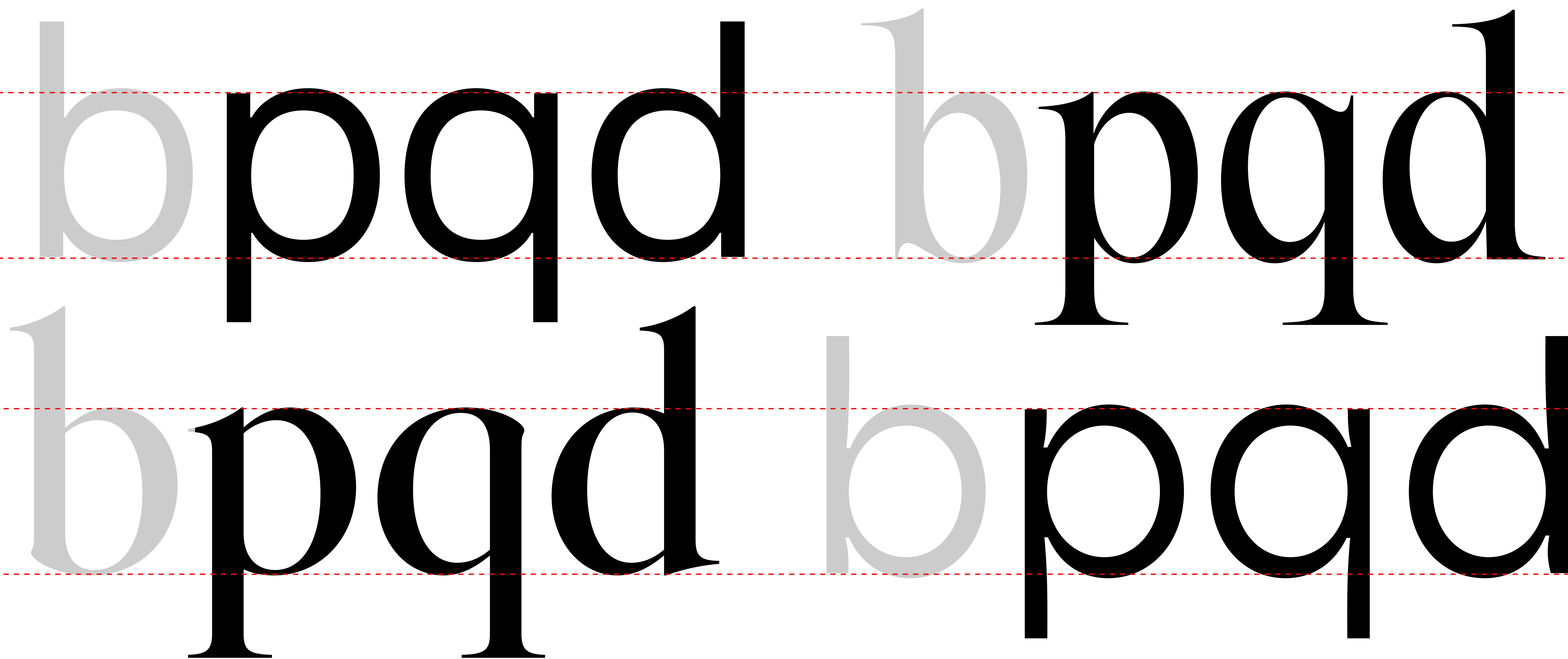
Now you can't just design one of them, then create three copies and lazily flip them around. These four glyphs can actually be divided into two separate groups: **b** and **d** are ascenders (they go up), while **p** and **q** are descenders (they go down).

Ascenders and descenders must share some characteristics, such as having a similarly-designed bowl, but some of their features can be different.

For example, the vertical stem size of **b** and **d** can use a different height compared to the vertical stems of **p** and **q**.

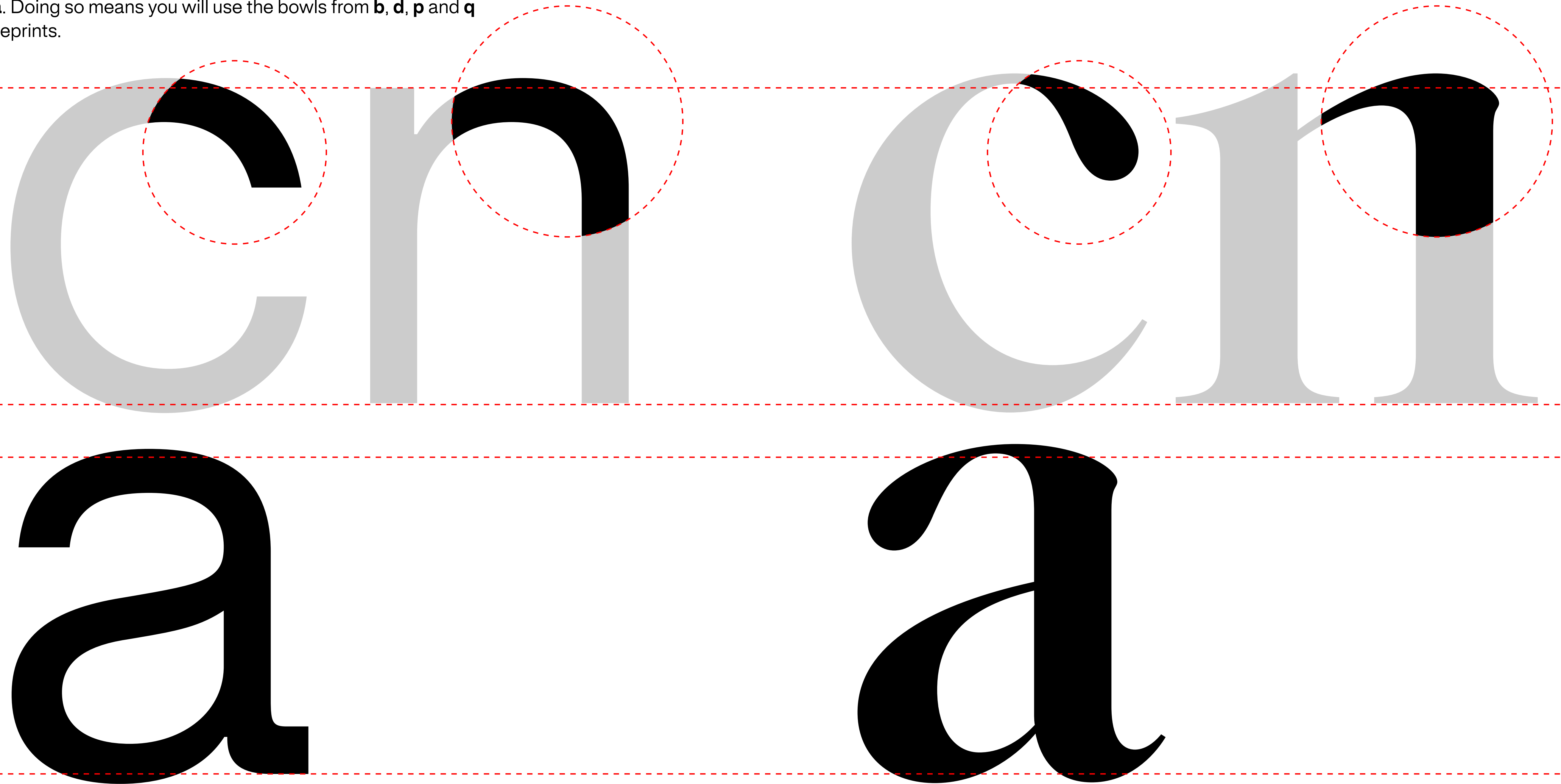
Whatever you do, make sure these glyphs have a decent vertical stem size, otherwise they may get confused for a lowercase **o**.

Another obvious difference between ascenders and descenders can be found in Serif typefaces where, typically, **b** and **d** have an identical stem design while **p** and **q** share another one.



## THE LOWERCASE **a**

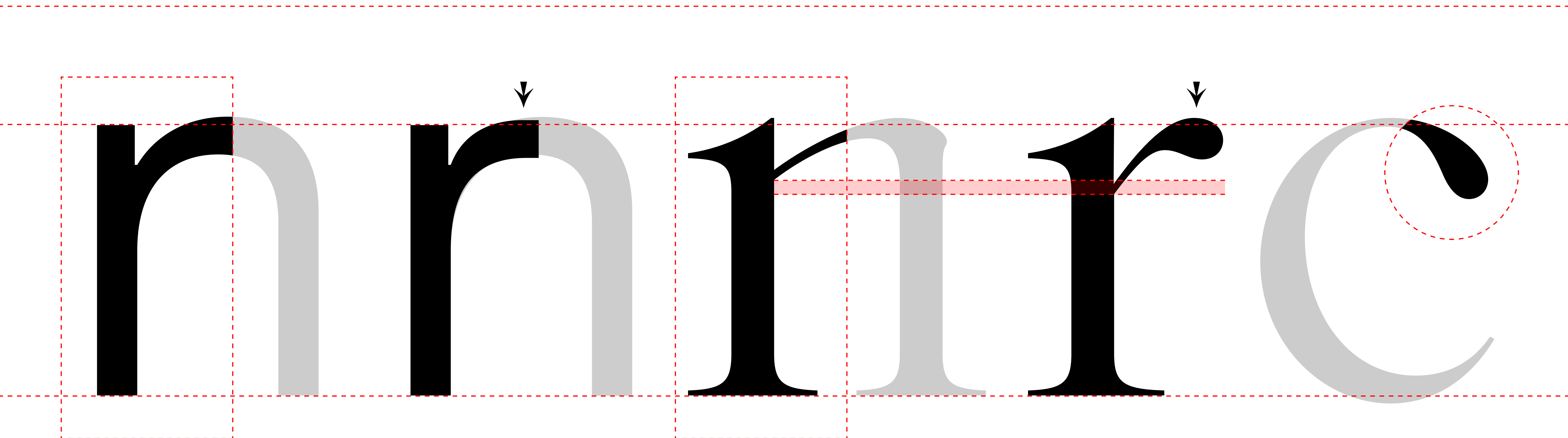
As you can notice, the lowercase **a** has a rather unique structure, which means you'll have to design it from scratch (although you can use the terminal you've previously built for the tail of your **c**). As a narrow glyph and due to its busy design, the lowercase **a** can get quite dark rather easily. This means you need to carefully think about how to approach the design of the arch and the bowl. Note: it is also possible for you to make a single-story design for your **a**. Doing so means you will use the bowls from **b**, **d**, **p** and **q** as blueprints.



## THE LOWERCASE **r**

You may start building your lowercase **r** from the design of your **n**. However, since you're basically removing a foot off of the glyph, you'll need to tweak the "semi-arch" of your **r** to balance the letter properly.

You may also take advantage of this new shape to add a terminal that, in addition to injecting some extra flair, can actually help with balancing your `r` as well as filling some of the empty space below the arch.



## THE LOWERCASE **f**

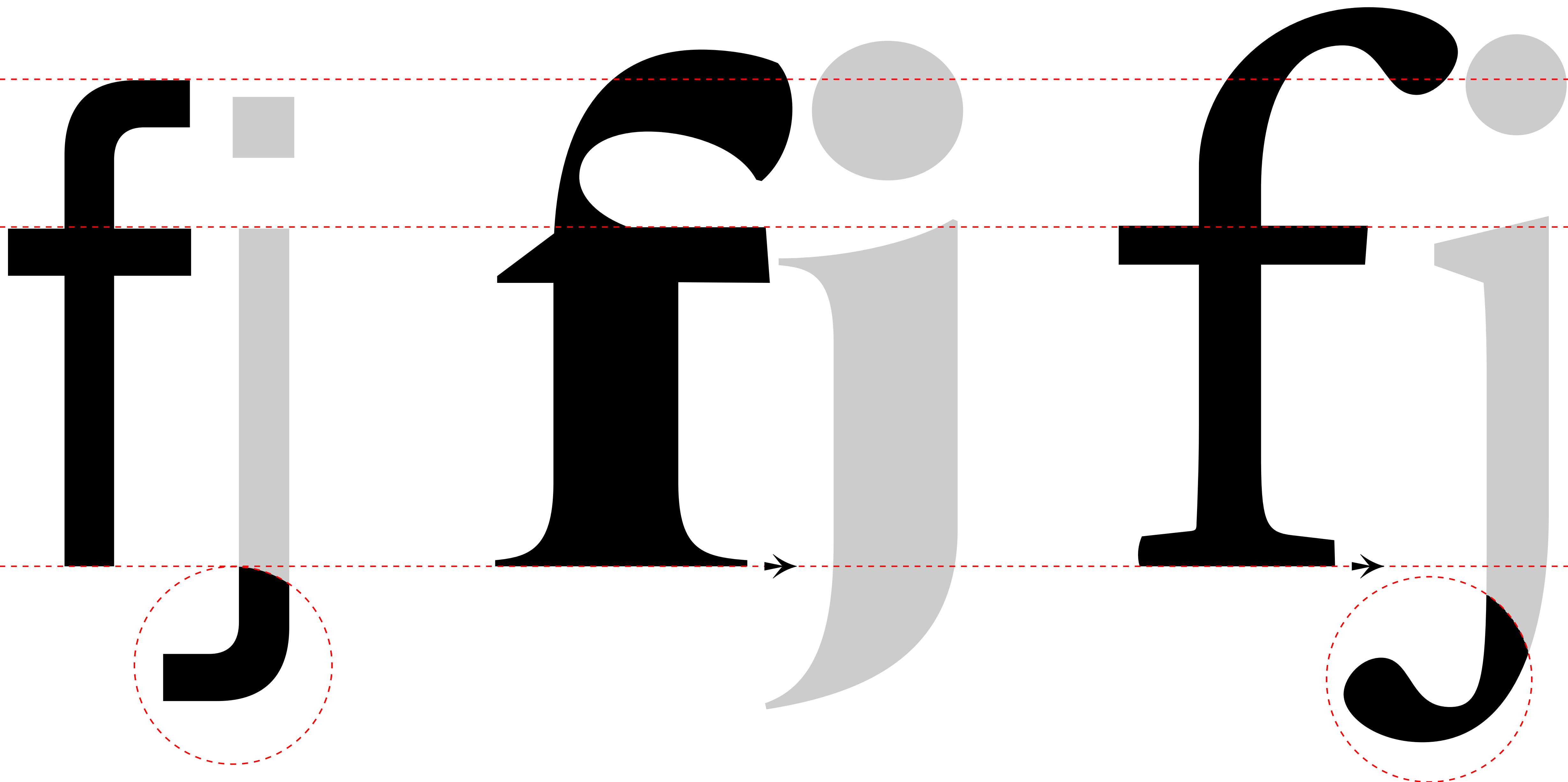
Designing the lowercase **f** can prove difficult for a few reasons, which mostly come down to its “hook” shape.

Because of its hook, **f** is a top-heavy glyph, so it should be balanced with that mind. To achieve this, you can play around with the length of the central crossbar by extending it slightly further to the right. If you designed your **f** with a serif at the foot, then you should also extend that serif to match the crossbar.

Usually, the crossbar can be found near the x-height but you may lower it down a bit if you need more space for the hook above.

The hook can be designed in a similar fashion to the tail of your lowercase **j**, but it isn’t always the case. The most important thing with your hook’s design is that it may touch or even overlap certain glyphs that come after. This is mainly the case with **i**, **j**, **l**, **t** and **f** itself.

To solve this problem, you may either rework your hook so it is shorter, or create ligatures, which are special characters that you design specifically for these scenarios.

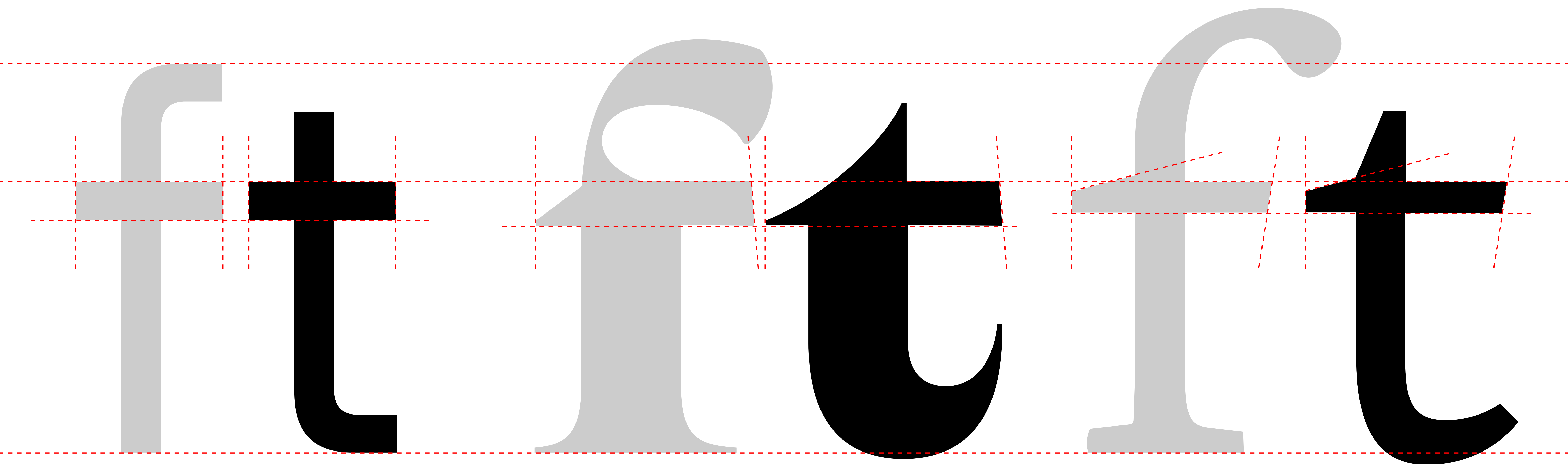


## THE LOWERCASE **t**

The lowercase **t** shares a relationship with the lowercase **f** because it is possible to imagine **f** as an upside down blueprint for **t**.

If you choose to do that, make sure you raise the crossbar so it has the exact same height as what your **f** has.

Also, it's probably best if the tail of your **t** doesn't share the same design as the hook of your **f**.





# THE LOWERCASE **s**

The lowercase s is usually regarded as a “baby” variation of the capital **S**, which means you can most likely start off from your own **S**.

In many typefaces, the **s** uses the same width as the **r**. After scaling your **S** down to an **s**, you will have to tweak it further to avoid any optical color disturbance.

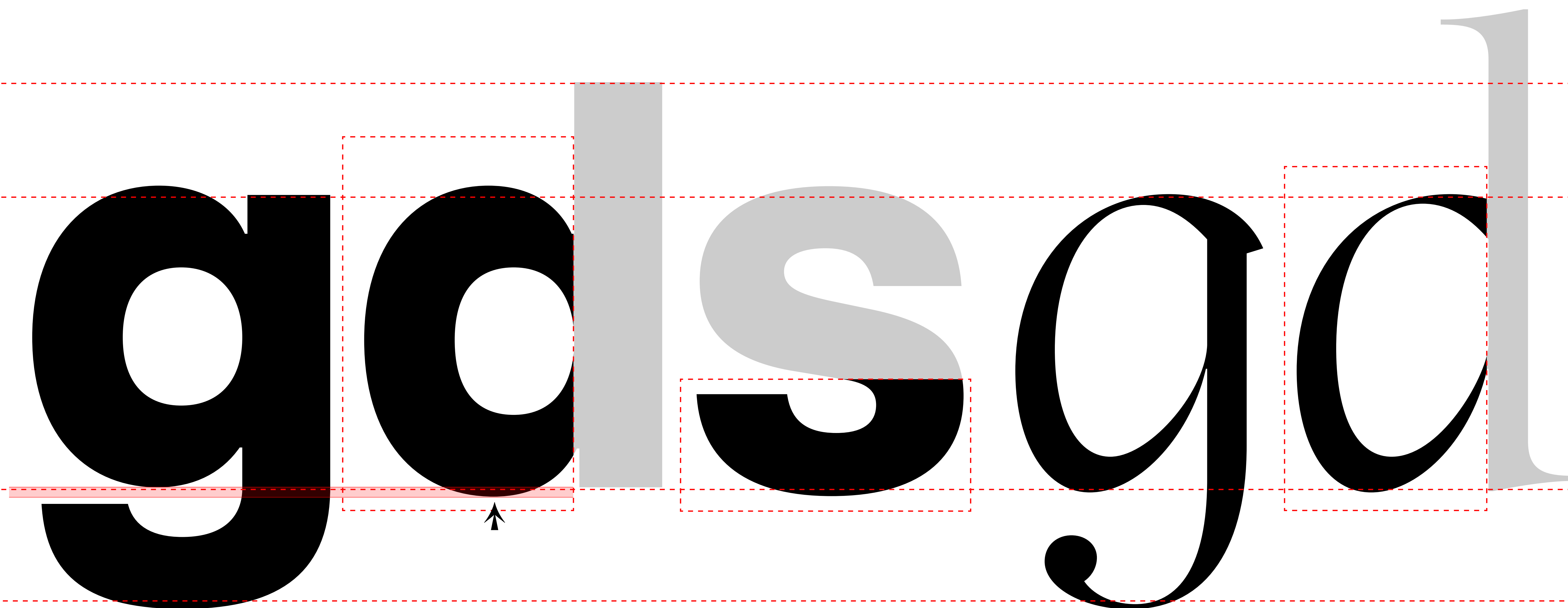
If you’re designing a Serif typeface, you’re free to either implement to your **s** the terminals from your uppercase **S** or design entirely new ones. It’s up to you really, although it’d be a good thing to design them based on your **S** while tweaking their weight and size to match the color for a lowercase version.



## THE LOWERCASE **g**

Your lowercase **g** can be based on other similar letters such as **b**, **d**, **p** and **q**. In fact, you could even use your **q** directly as a blueprint.

Of course, doing so means you will have to extend and curve the tail to create your **g**. You may also want to reduce the size of the bowl so it doesn't get in the way of the tail, creating a dark spot.



# THE LOWERCASE **g**

Note: we’ve covered the design of a single-story **g** but, just like with your **a**, you can choose a double-story design instead. The design of the double story **g** can start by using the bowl of a lowercase **o** and downscaling it to a size that you feel will match your font design (it's safe to go from about 40% to 80% downscale).

We usually tend to the ear part of that element after defining the overall structure. Then comes the link of the glyph: the link is the part that connects the upper bowl to the bottom one (referred to as the tail). This one can be of various form depending of your font's design: sharp, edgy, rounded, etc. The tail usually shares a common weight structure as the bowl, even if it's slightly bolder due to optical corrections.

If you were drawing the tail with a calligraphic pen your first movement would make the shape bold (from left to right) ; then you would have a thin stroke (top right to left bottom). The tail can be a full loop and close itself or be opened, it can end up with a sharp tail or a smooth rounded drop — also this depends on your design. The ear, the final part of the double story **g** is usually an element taken from the drop of your **r**, **c** or even **a**. It should not go too far off the overall structure of your letter as it will cause some issues during spacing.



THE LOWERCASE **v** AND **w**

Both of these lowercase letters are grouped together due to how similarly they function. Simply take your capital **V** and **W** and scale them down to get their lowercase counterparts. But as always, some tweaking will be required!

Your lowercase **v** should have the same width as your lowercase **o** (ignoring the serifs on your **v**, if any).



❶ Capital V

❷ Adjusted lowercase v

❶ Capital V

❷ Scaled down capital V

❸ Adjusted lowercase v

# THE LOWERCASE **v** AND **w**

Your lowercase **w** may need more attention though, because this glyph is more complex. Make sure the initial design of your **W** doesn't blend into a dark spot once scaled down to **w**, especially if your font uses serifs. If so, further adjustments must be made, as readability always comes first.



❶ Capital W

❷ Scaled down capital W

❸ Adjusted lowercase w

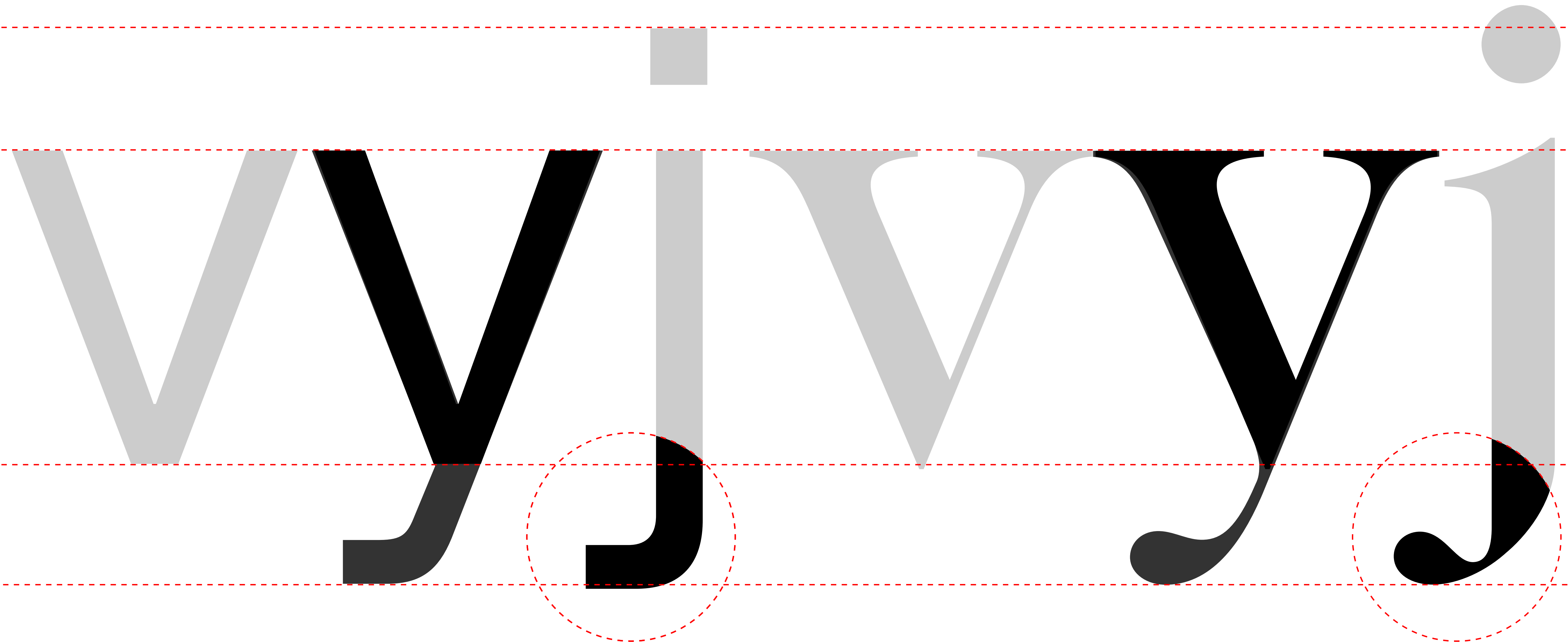


## THE LOWERCASE **y**

Similarly to what you did with **V** and **Y**, you can use your lowercase **v** as a starting point for your lowercase **y**.

The difference here is that the **v** base itself should require minimum tweaking, and the tail of the **y** can lead to more interesting design decisions.

Depending on your preferences, you may draw the tail as a “classic” straight, diagonal line or get a bit more fancy with a curved end. Just like with your **j**, don’t overdo it too much so the tail doesn’t overlay with the text below.

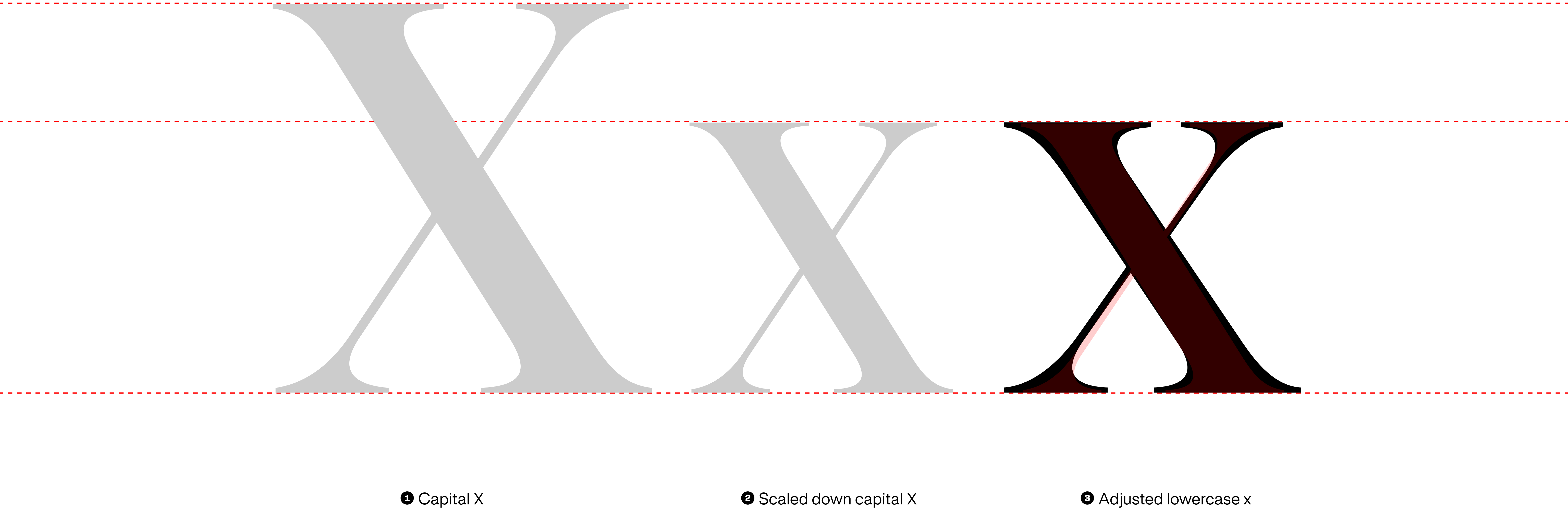


# THE LOWERCASE **x** AND **z**

Our two final lowercase letters are paired together since they follow a similar process: both can be created from scaling down your capital **X** and **Z**.

Pay close attention to the proportions of your newly created **x** and **z**: you may have to make their diagonals slightly thinner, since the glyphs are more condensed than their capital counterparts. This will allow your **x** and **z** to find back their balance, as well as reducing color.

Also, if using serifs, you may encounter additional balancing issues that can be fixed by slightly truncating the serifs.



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❶ Capital Z

❷ Scaled down capital Z

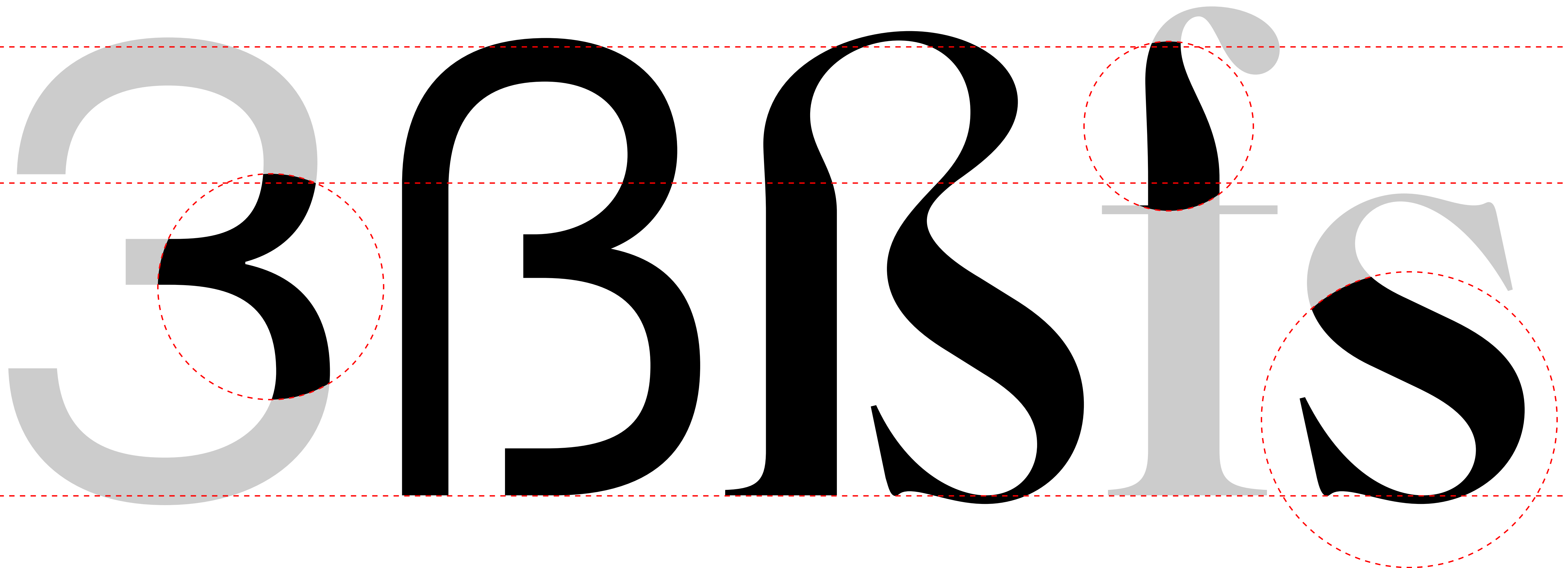
❸ Adjusted lowercase z

## THE LOWERCASE ESZETT

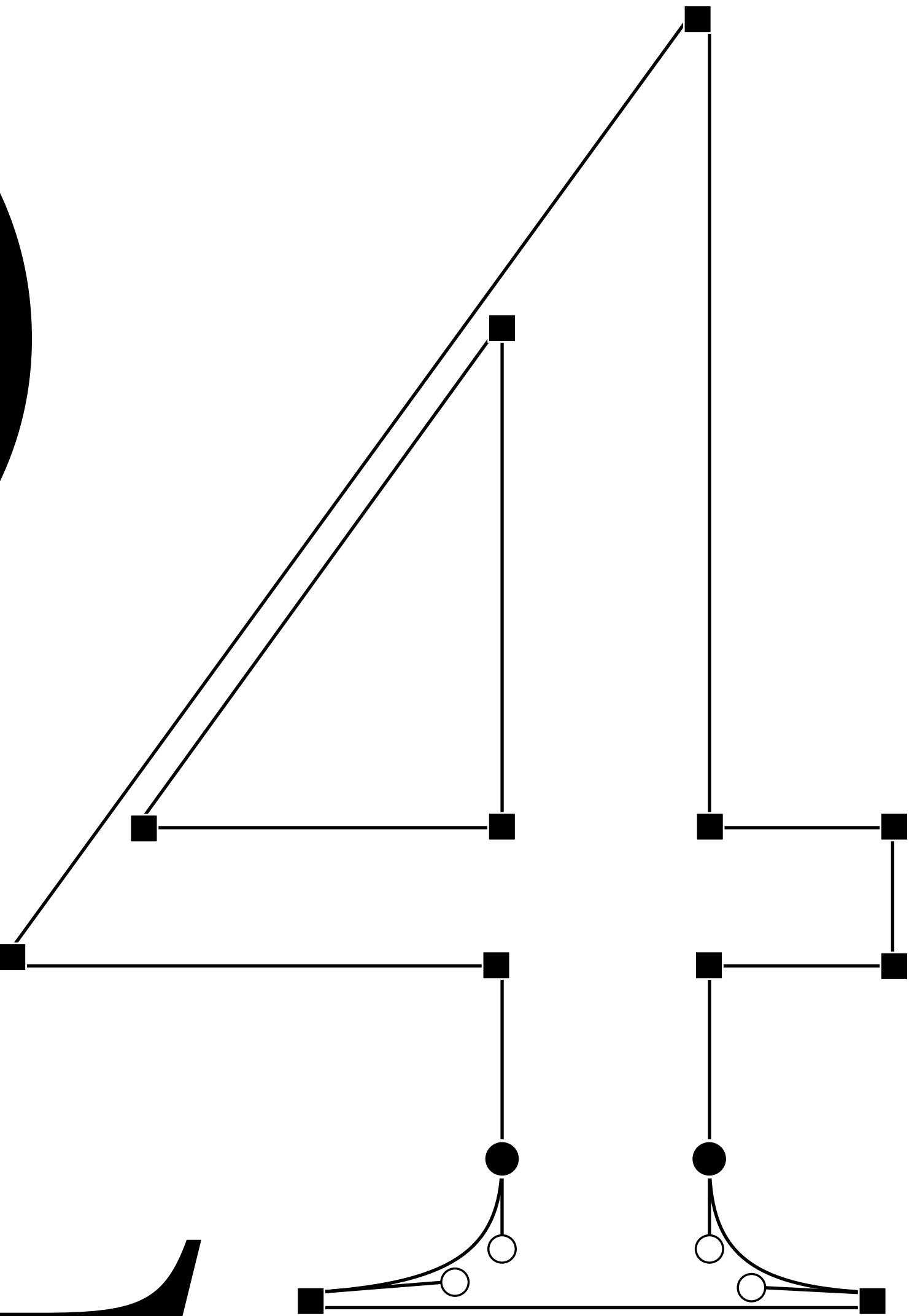
The lowercase **eszett** isn't just a smaller version of your capital eszett. In fact, in its lowercase format, it's OK for your eszett to kind of look like a capital **B**.

The eszett is a ligature between a long **s** (**ſ**) and an **s**, but many other glyphs can be used as a blueprint to structure your **eszett**. You may consider your lowercase eszett as a combination of your lowercase **f** and your **3**, as long as your number **3** uses the double bowl design (and not the diagonal stem).

For more information on how to design the number **3**, please refer to the corresponding section. From this point on, you may remove the horizontal bar from your **f** and join its hook to the top of your **3**, creating a pseudo-**B** shape. Contrary to the capital **eszett**, it's OK for your lowercase variation to have a narrower space between its feet.



— NUMBERS —





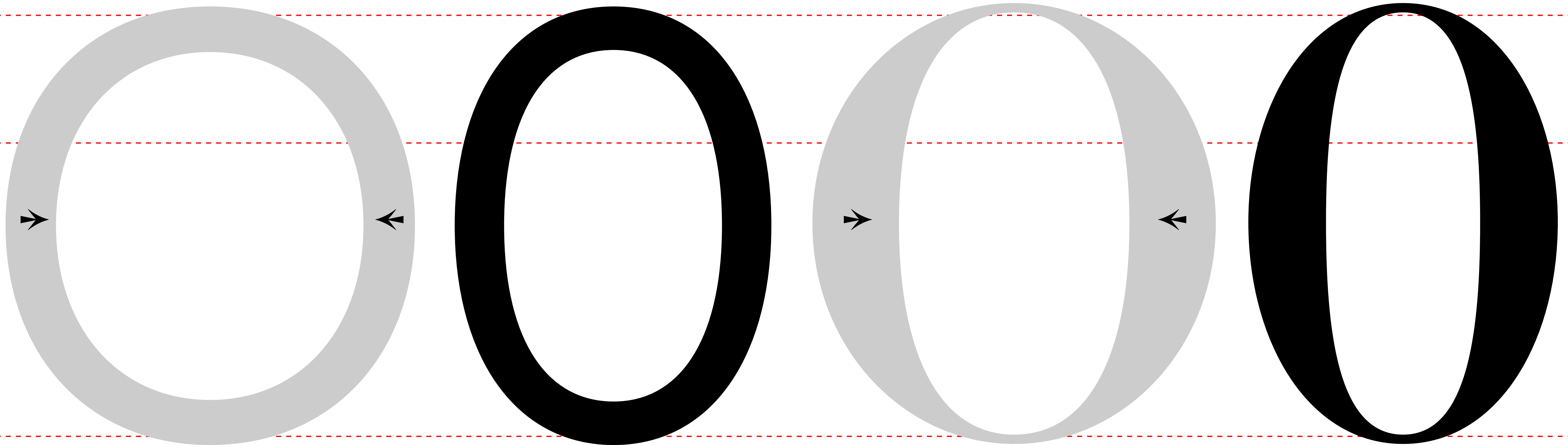
## THE NUMBER 0

Despite its concise shape, the number **0** can raise many problems. As you've probably guessed, the challenge here is to create a glyph that can't (and shouldn't!) be mistaken for the letters **o** and **O**.

You're probably already familiar with what a lot of designers do: quite often, the number **0** looks thinner and lighter than the capital **O**.

An additional trick is to start from the height of your capital **O**, then slightly increase or decrease the height for your number **0**.

Some designs include a diagonal bar or a dot inside of the **0** itself to further differentiate the number from the letter. While interesting, bear in mind that these ideas may prove problematic in certain languages that use similar glyphs (such as **Ø**) as part of their alphabets.



# THE NUMBER 1

The design of your number **1** should also be carefully considered, because it could be misinterpreted as a lowercase **l**. Of course, this scenario is not as common as the **o/O** and **0** problem, but it may occur with some designs. Now that doesn't mean we can't start using our lowercase **l** as a blueprint! From here, you may draw a short stroke from the top of your vertical stem. That distinctive feature is called the "flag", and can be a straight diagonal or curved.

To differentiate your number **1** from your lowercase **l**, you may also add a foot serif at the bottom of your stem. Don't get too carried away, though! In Modern typefaces, the numbers should be designed in such a way that they're still consistent with the various letters and so they don't stick out from the rest in a text.



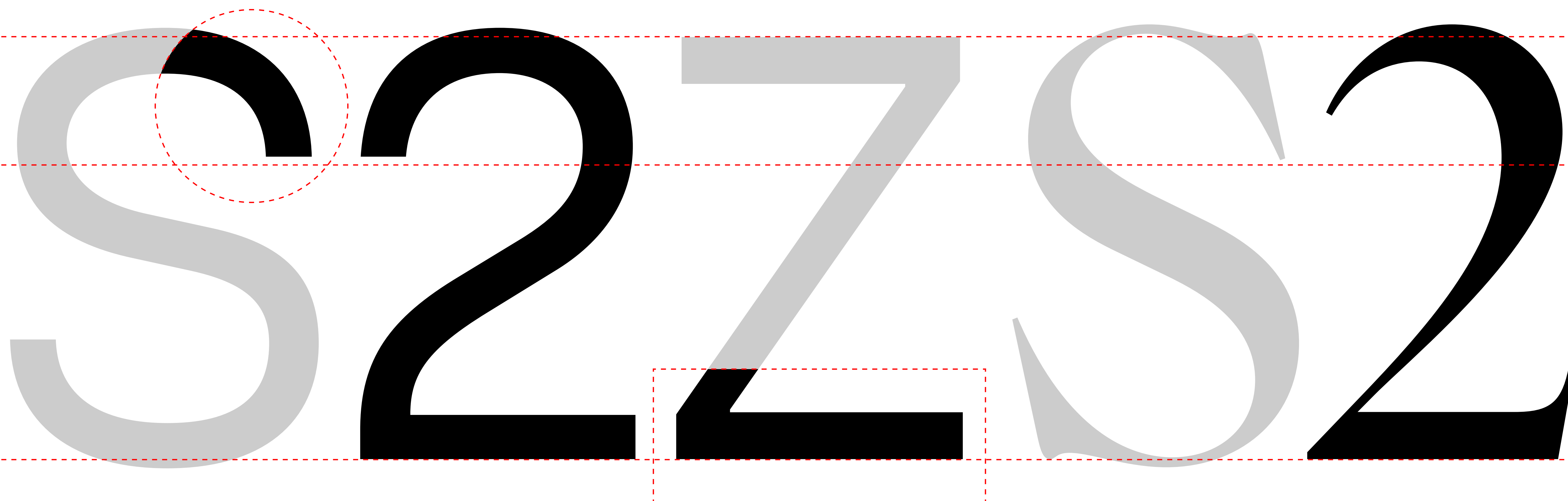
## THE NUMBER 2

The number **2** is made of three distinctive parts: the hook at the top, the spine in the middle and the base at the bottom. You may also find that in some ways, it is reminiscent of a few of the letters we've seen before, such as the **S** and the **Z**, for example.

Indeed, the design of the hook can be taken from the open bowl at the top of your capital **S**.

Similarly to our **Z**, the spine of the **2** should be slightly thinner than the top curve and the base.

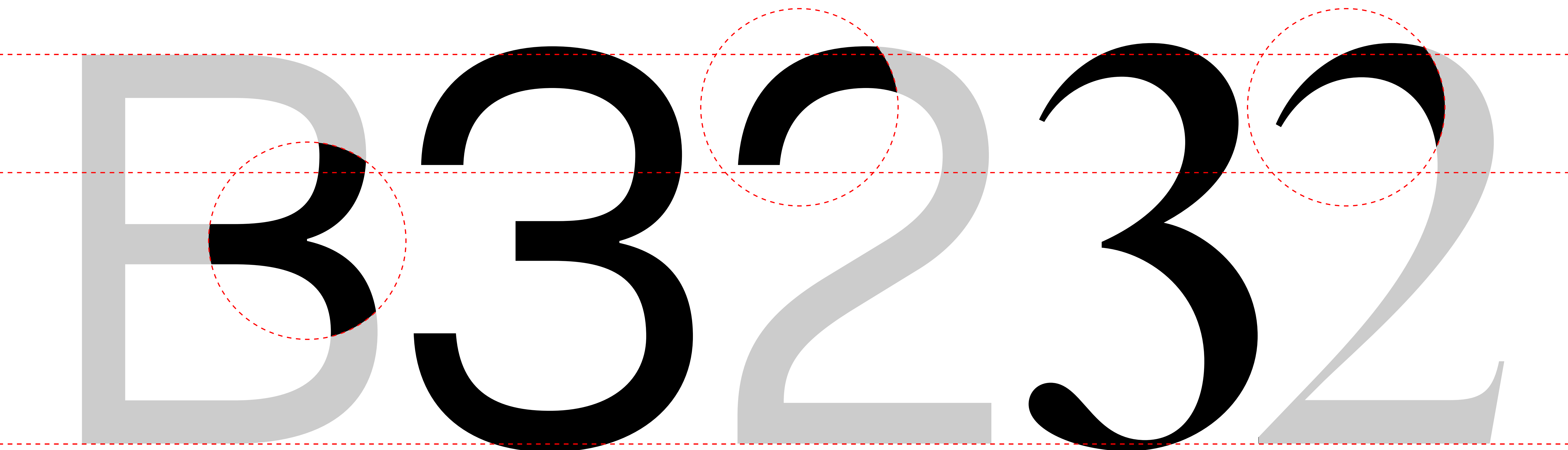
If needed, the horizontal base of the **2** can also be drawn larger than the hook, making the bottom part slightly wider than the top part for, you guessed it, balance purposes.



## THE NUMBER 3

The number **3** comes in two different shapes: the double bowls stacked on top of each other (**3**) and the fancier variation with a diagonal instead of the upper bowl (**3**). It's mostly a matter of picking your favorite.

As far as the “double bowl” **3** is concerned, and in keeping with the double-story rule, the bottom bowl should be slightly larger for balance purposes.

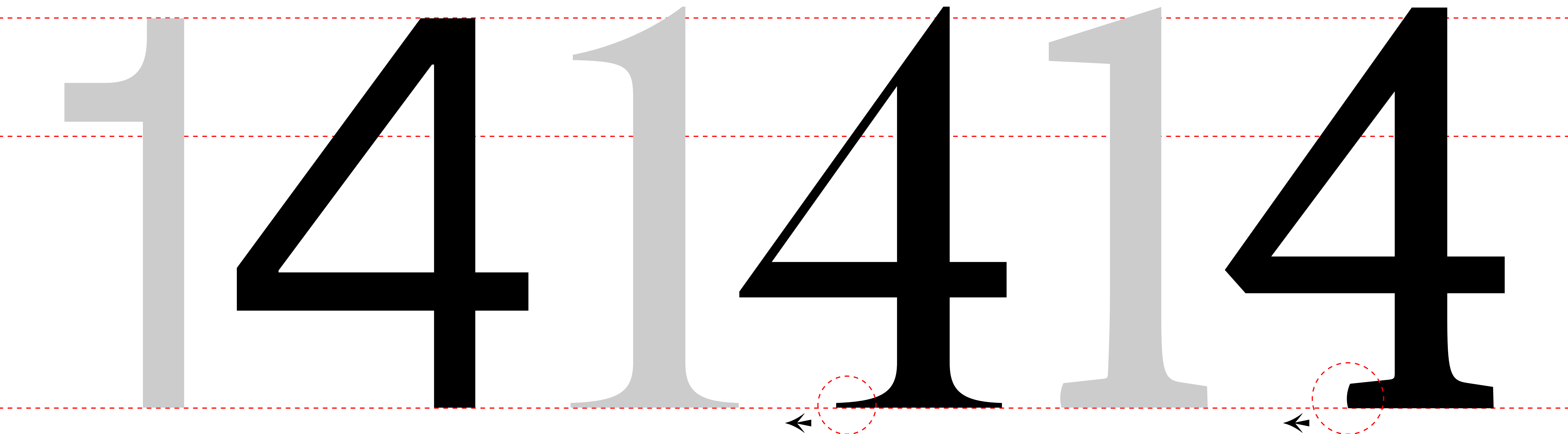


## THE NUMBER 4

Your number **1** can serve as a blueprint for constructing your number **4**, as you can use the same vertical stem (and foot serif, if any), then extend the flag into a triangular shape that ends in a horizontal crossbar.

If using a foot serif, you'll probably want to extend it further to the left to counterbalance the extra weight created by the triangle.

Also note that you may also lean towards the secondary variation of **4**, which uses a shorter vertical stem and may help reduce dark spots: **4**



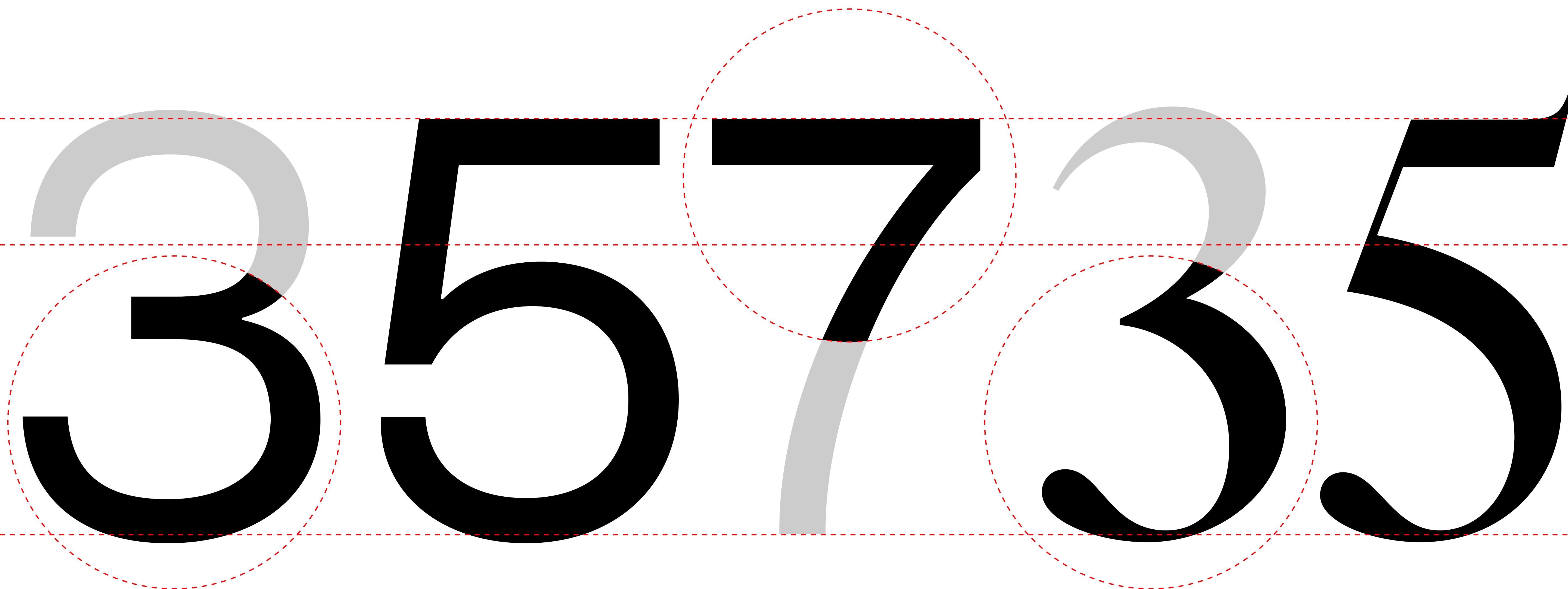


## THE NUMBER 5

In some ways, you may think of the number **5** as a mirrored **3**.

The bowl of your **3** can indeed serve as a baseline for your **5**, but feel free to shake things up if you find that it prevents you from designing the upper half of your **5** the way you want.

The horizontal bar at the top can be connected to the bowl thanks to a vertical line that you can even tilt at an angle. An optional tweak would be to reduce the width of that line so it appears thinner and emphasizes the horizontal bar and the bowl.

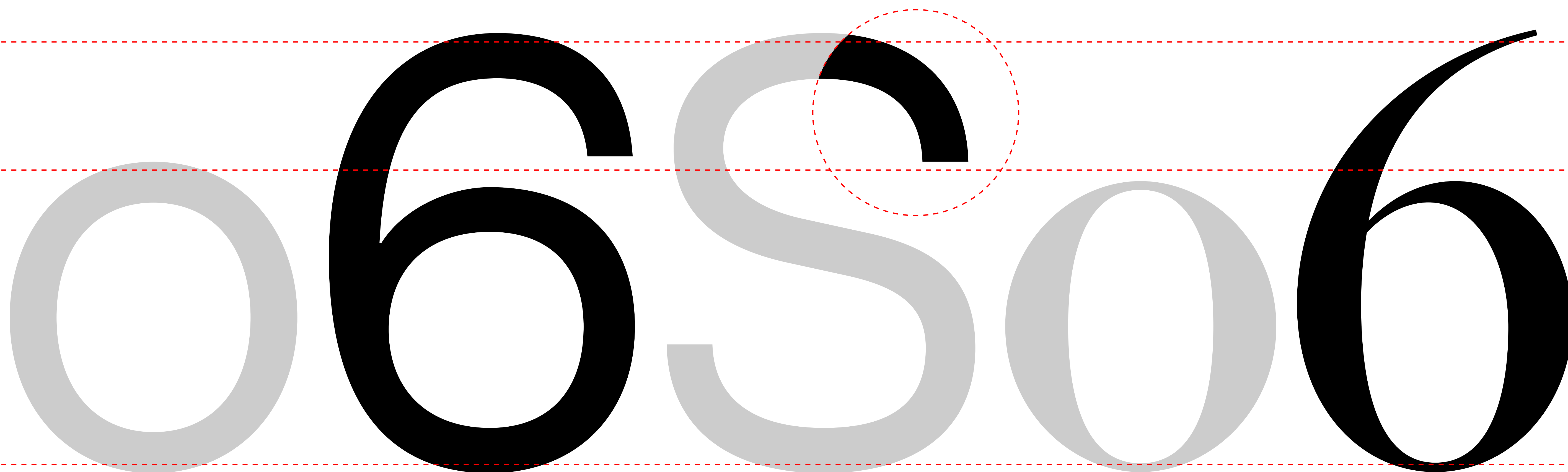


## THE NUMBER 6

You can start off your number **6** from your lowercase o as the bowl of your glyph, although you will mostly likely need to decrease its size so as to make space before adding the upper curved stem.

Serif or sans, there are many ways to design the stem of your **6**.

The key though is to bear in mind that ideally, the end result should also work when flipped upside down for your upcoming number **9**.

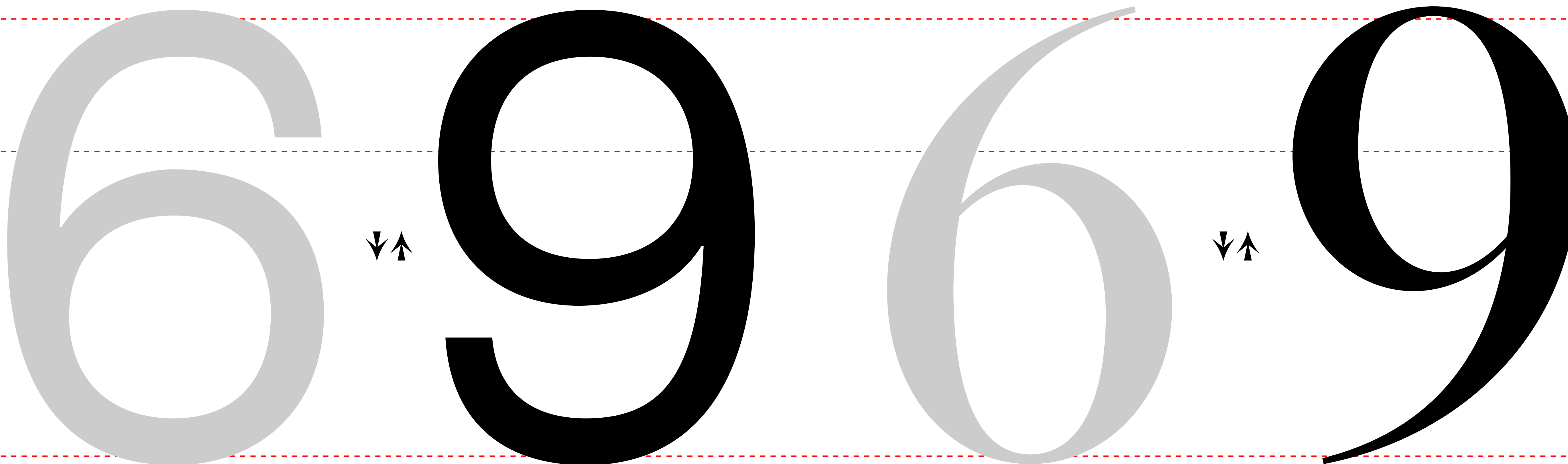


## THE NUMBER 9

Using your **6** as a blueprint for your number **9** seems like a no-brainer, and that would be correct.

You may however need to make sure your **9** doesn't end up as too top-heavy by slightly reducing the bowl, or redesigning your **6**.

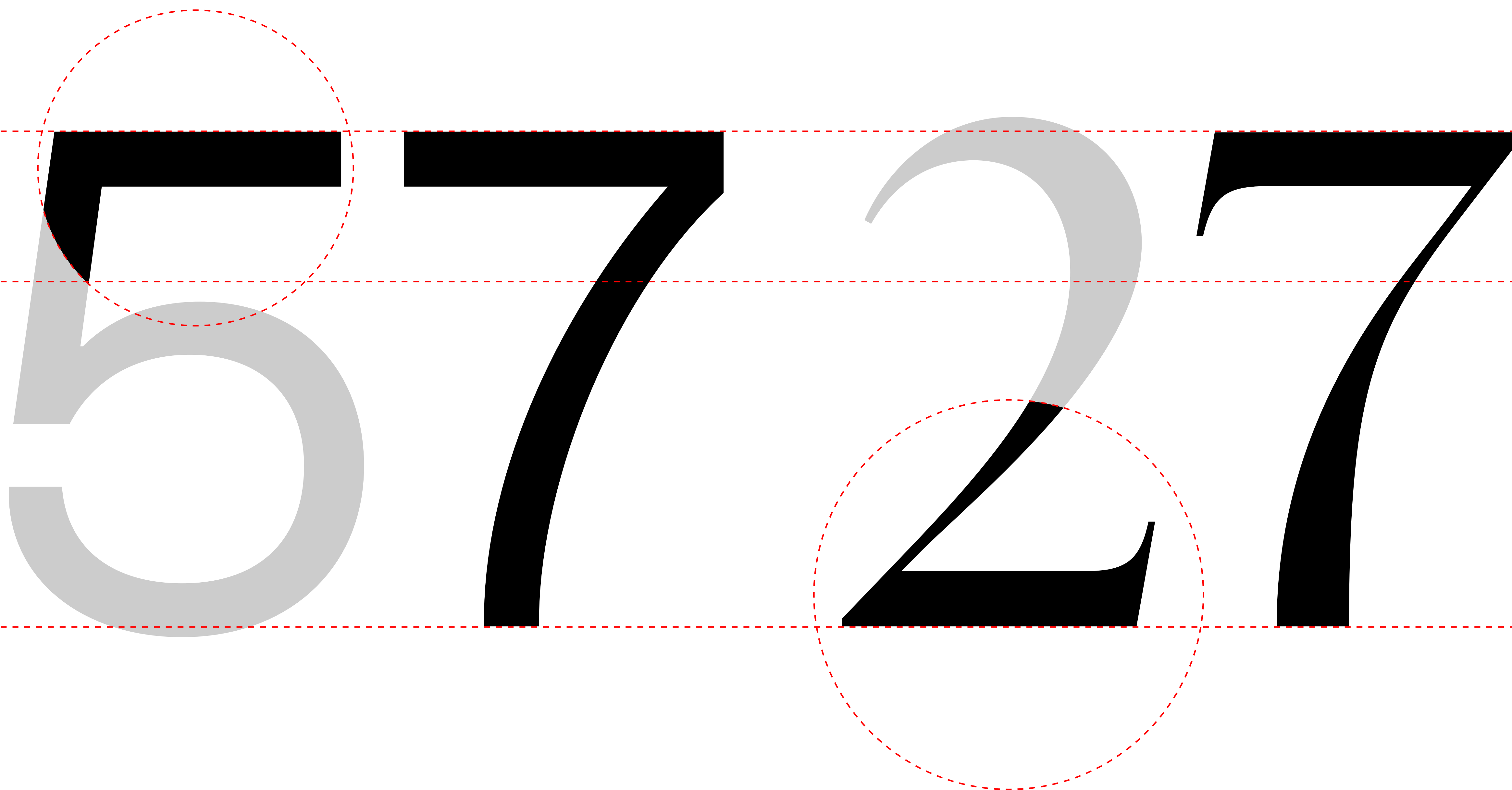
All in all, you should keep your modifications to just simple tweaks, as the goal is to keep a consistent harmony between your **6** and your **9** as they echo each other.



## THE NUMBER 7

Designing your number **7** can be challenging, as the glyph needs to feel balanced without a horizontal base to rely on.

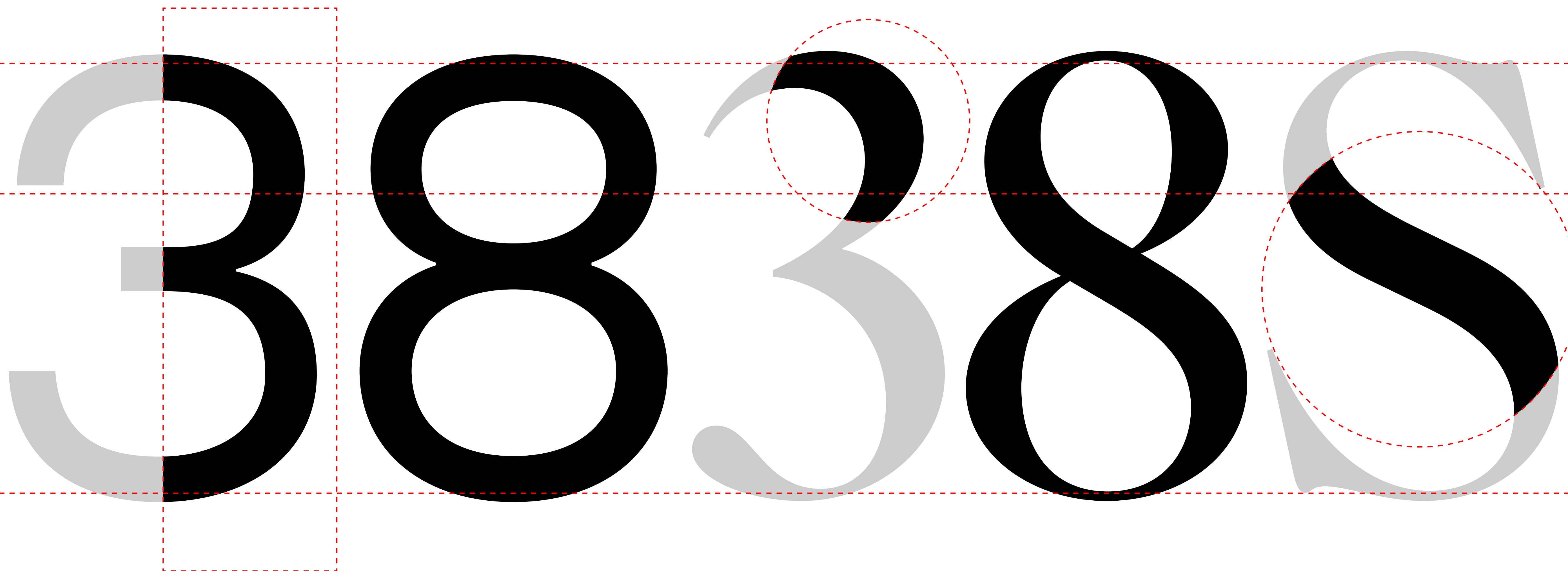
To achieve this, you may try different weights for the top horizontal bar, and/or design the stem of your **7** in such a way that it becomes slightly larger at the bottom end. This will give your glyph some much needed stability.



## THE NUMBER 8

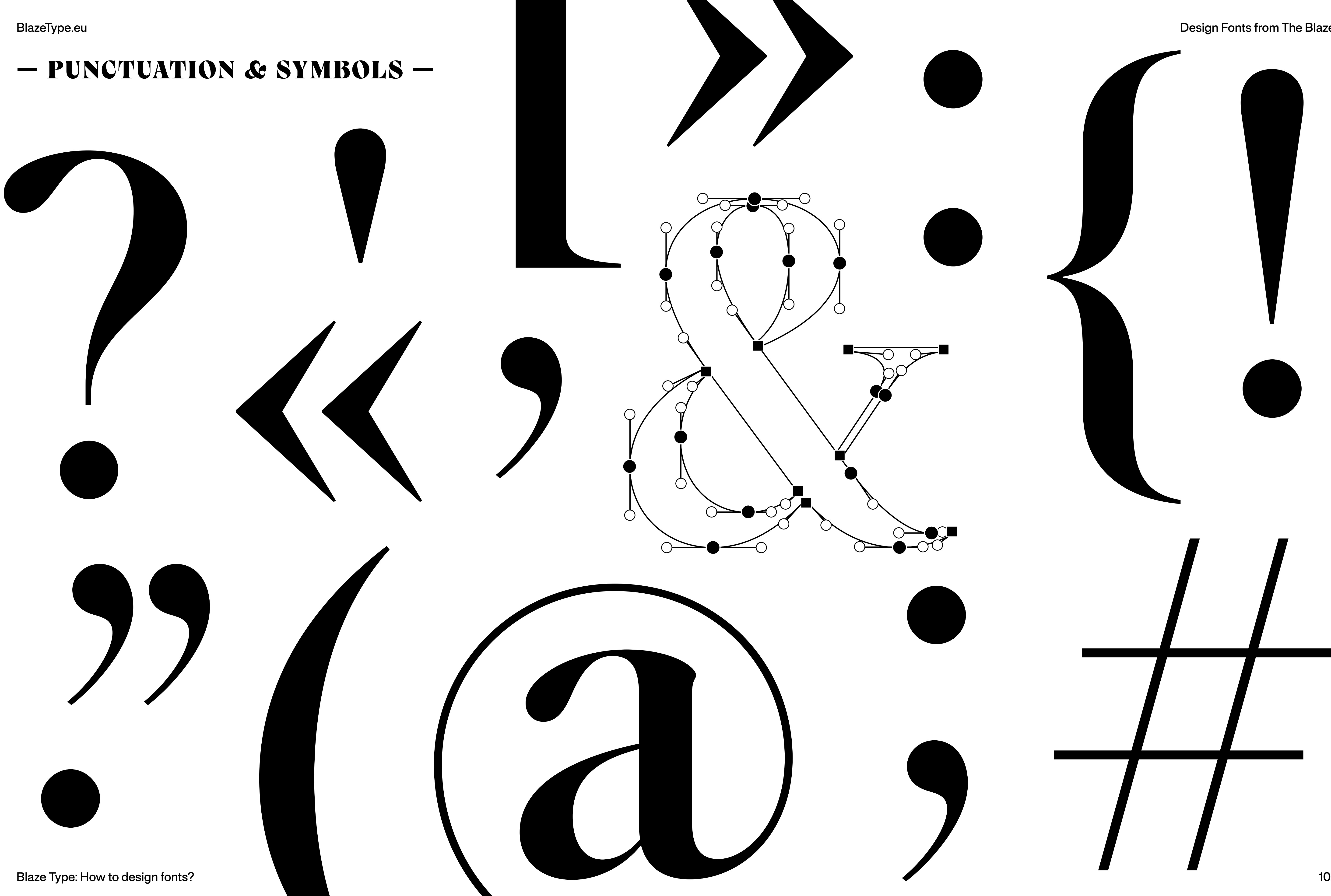
Just like your **3**, your number **8** can be designed from two stacked circles before applying the usual double-story rule by slightly increasing the width and the height of the bottom circle. It is also possible to “carve” the sides of your **8** where both circles touch to reshape the inner circles of the bowls.

In a Serif typeface, you may instead want to construct your **8** by beginning with an **S** shape before connecting both ends together, giving your glyph more flair and less rigidity.





— PUNCTUATION & SYMBOLS —



# THE PERIOD

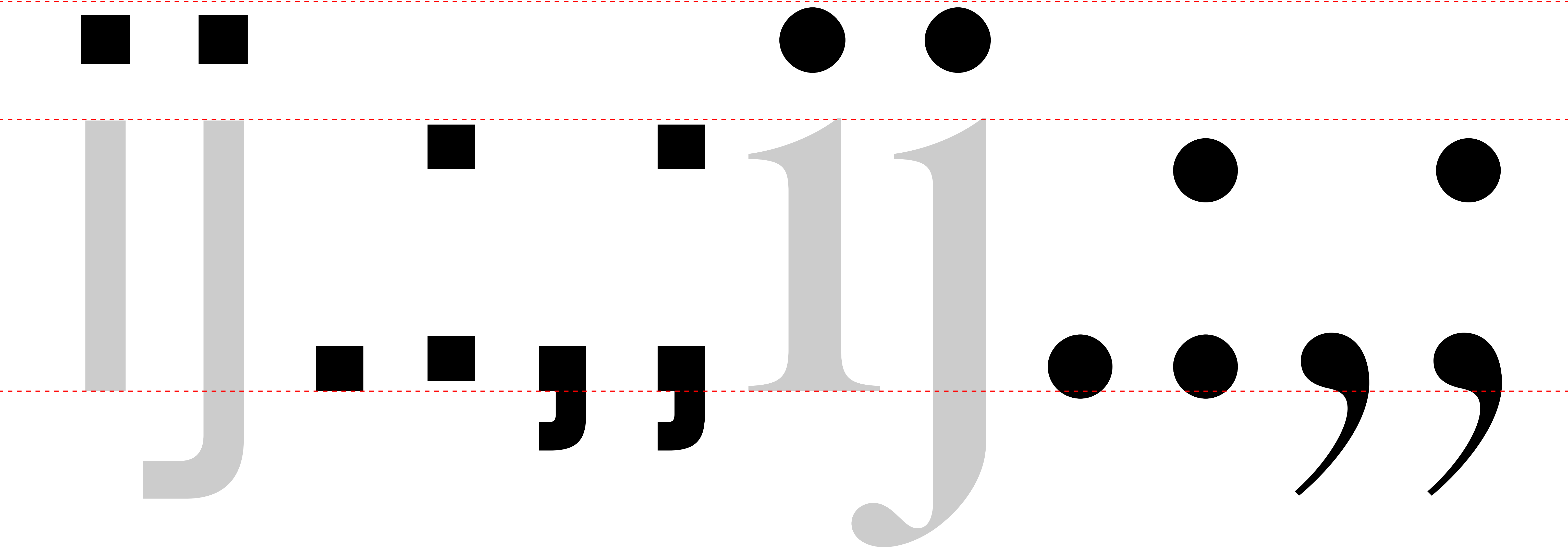
Punctuation should match the overall design of your typeface without standing out for no apparent reason. As such, the period can simply be a direct copy of the dot from your lowercase **i** and **j**. You may want to slightly increase its size to enhance readability.

# THE COMMA

Typically, the comma is derived from the period. In fact, you may even consider the comma as a period transitioning into a tail that leans to the left, either as a straight or curved line. Despite its small size, the comma can absolutely serve as a canvas for creativity as you carve and sculpt it to your liking. Note that in general, the comma is about twice as tall as a period.

# THE COLON AND SEMICOLON

Naturally, both of these characters can be created once you're done with your period and your comma. The top period in both the colon and semicolon should ideally be positioned near the x-height for better readability.



# QUOTATION MARKS & THE APOSTROPHE

Quotation marks actually exist in several shapes, and you will need to make a specific glyph for each of them. Let’s put these aside for a minute so we can deal with the apostrophe first. Designing your apostrophe can be as easy as using your comma as a blueprint. After aligning your apostrophe near the cap-line, you will probably have to reduce its size a little bit so it doesn’t overlap with whatever letters come before and after.

Note that your apostrophe can use a vertical stroke design instead of mimicking your comma. Nowadays, it is not uncommon to find apostrophes completely matching comma’s.

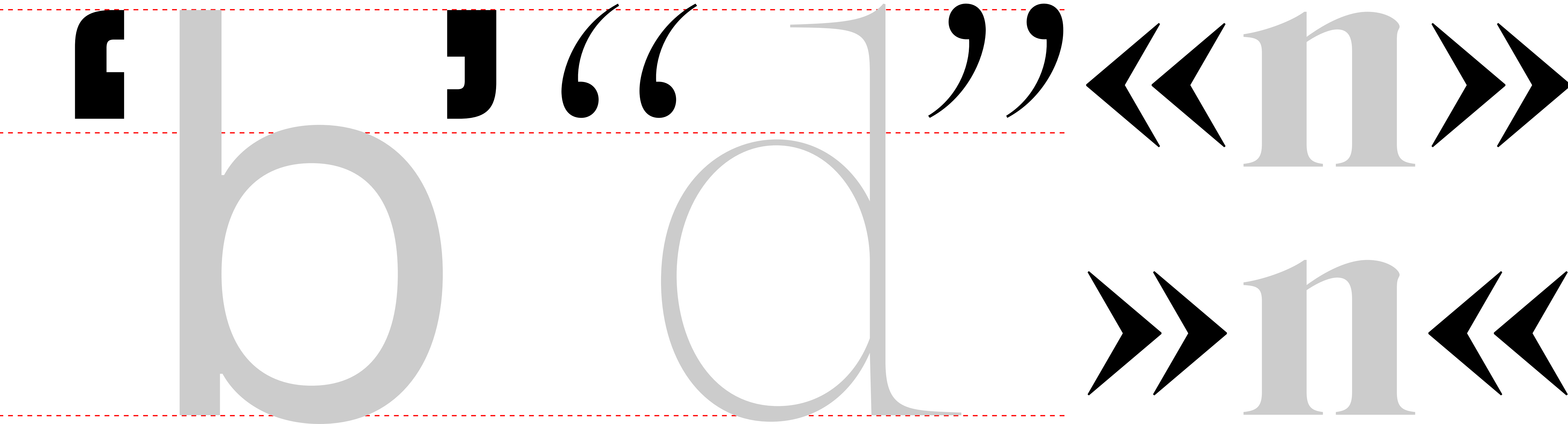


# QUOTATION MARKS & THE APOSTROPHE

Now, quotation marks are a different beast, as they exist as single quotes, double quotes or chevrons. The single-quote design is made of two different glyphs: the opening quote and the closing quote. The good news is you're absolutely free to re-use your apostrophe as the closing quote. The opening quote is just the same design, except mirrored and flipped upside down.

You may think of the opening quote and the closing quote as having the shapes of a **6** and a **9**, respectively. Then, designing the double quotes is as simple as cloning both of your single quotes! The chevrons are a type of quotation mark used in a few languages, such as French (in fact, some people refer to them as "French quotes"). As their name implies, they look like sideways chevrons pointing to the left or to the right, as two separate glyphs.

Note that typically, the opening chevrons point to the left and the closing chevrons point to the right — but some languages (such as German) actually do the opposite. This quirk won't likely affect your approach to designing your chevrons, but it's good to know it's a thing.





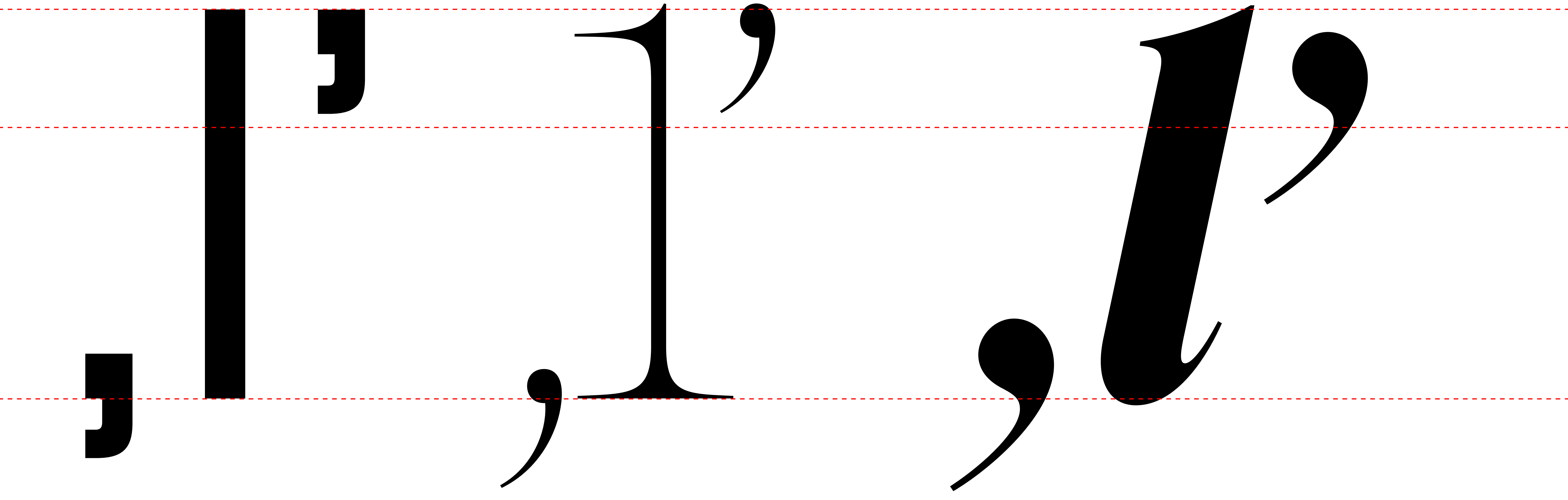


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# THE EXCLAMATION POINT

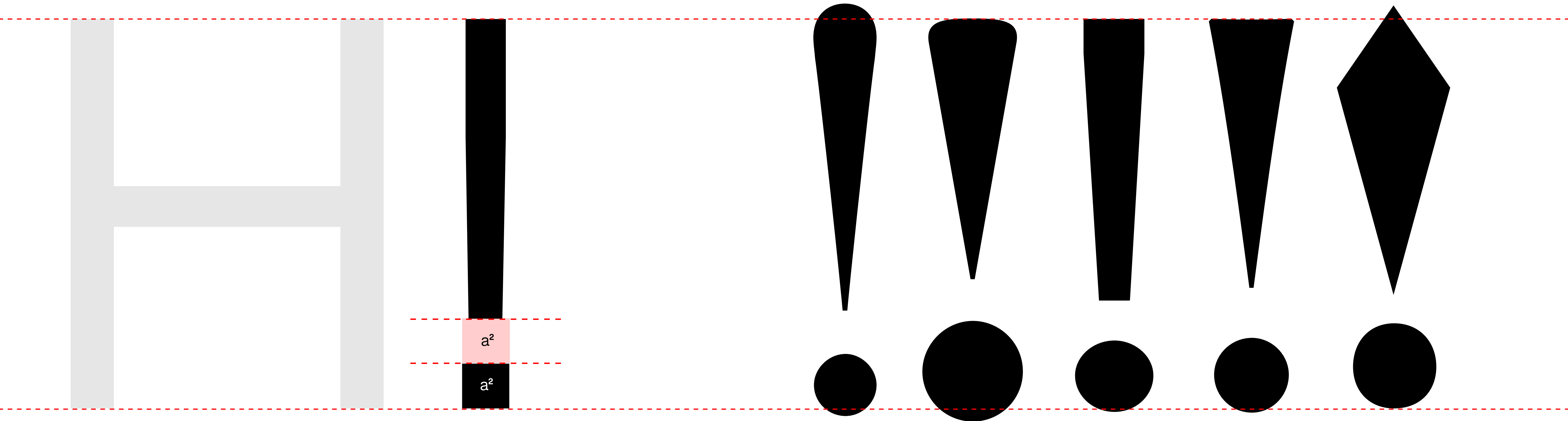
The exclamation point can be summed up as a vertical line floating above a dot.

For that dot, you may simply reuse the period you designed earlier, though you may need to make it slightly smaller to avoid a dark spot.

The vertical line can be as simple as a rectangle that slowly funnels into the period. You can of course give it a rounder design (by smoothing out its angles), but it should remain in the general spirit of the typeface and the rest of the glyphs.

Generally speaking, you'll need an empty space equal to the height of a period between the dot part and the vertical line of your exclamation point. You may go for smaller, but at some point both parts may visually start to blur into one another, especially with smaller fonts.

Finally, the exclamation point should be tall enough to reach and touch the capline.



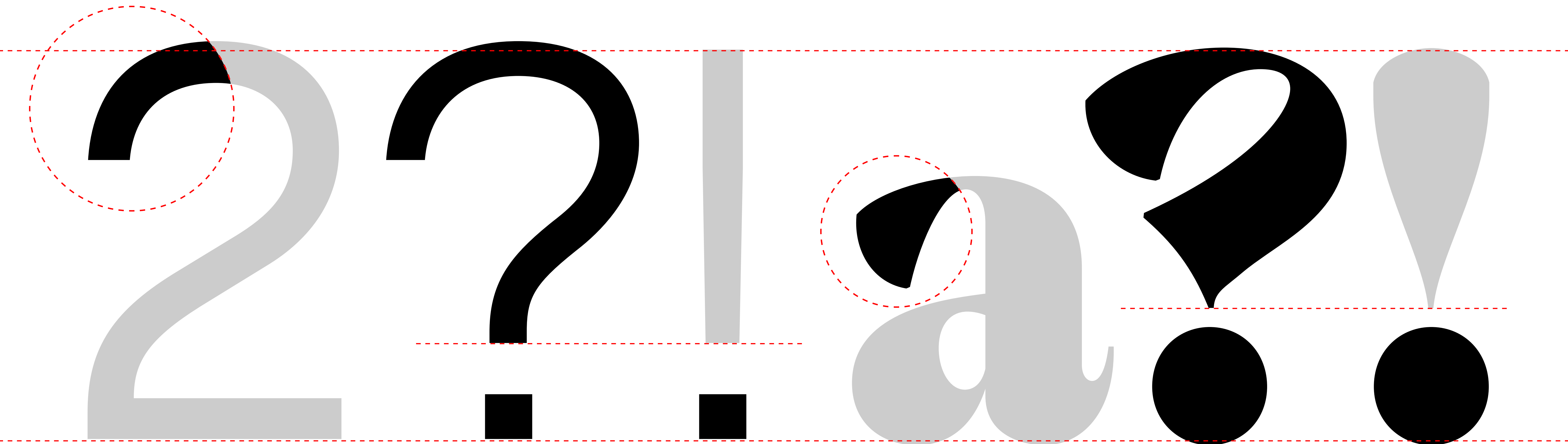
## THE QUESTION MARK

You may start constructing your question mark by using your period once again, just like you did with the exclamation point. Then, you can begin focusing on the distinctive hook-like shape of your question mark.

You may use your number **2** as a blueprint for the shape of the hook. Of course, you will most likely need to readjust the shape and/or height of your question mark accordingly.

The bottom part of your hook can end vertically right above the dot, but it doesn't necessarily have to. Some question marks are designed with a diagonal end, or even an upward curve (not unlike a mirrored **S**). In these scenarios, the dot can instead be aligned to the visual center of the glyph.

Compared to the exclamation point, the question mark provides a lot more room for creativity, so why not make the most of it?



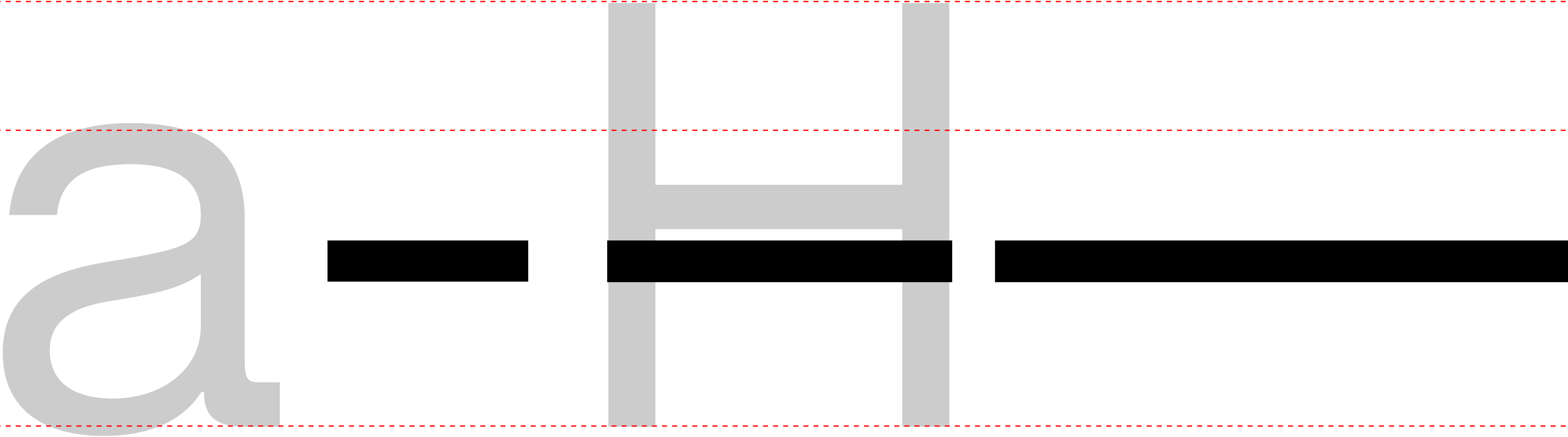
# THE HYPHEN

As a small word-linking glyph, the hyphen should more or less be the width of your lowercase i. You can also give your hyphen some extra width and/or weight if you feel like it is too difficult to discern. Please note that longer lines do exist as glyphs (see “Dashes”, below), so don’t go too crazy with it. You’ll want your hyphen to be optically-centered, which means it has to be positioned according to x-height. Note that in some designs, it is possible to shift the hyphen slightly above x-height if needed.

# DASHES (EN DASH AND EM DASH)

Dashes exist in two forms: – and —. One of the methods you can use to determine the width of the first (shorter) dash is to use the same width as your capital **H**. In any case, the second dash is usually twice as wide as the first one. Most of the time, both dashes actually have their sidebearings set to zero; this surprising oddity allows users to form a continuous line by typing multiple dash in succession.

The vertical positioning of your dashes should match what you picked for your hyphen. And... that’s pretty much it. Ironically enough, these punctuation marks won’t really leave much room for expressing yourself as a designer.





## PARENTHESES, BRACKETS AND BRACES

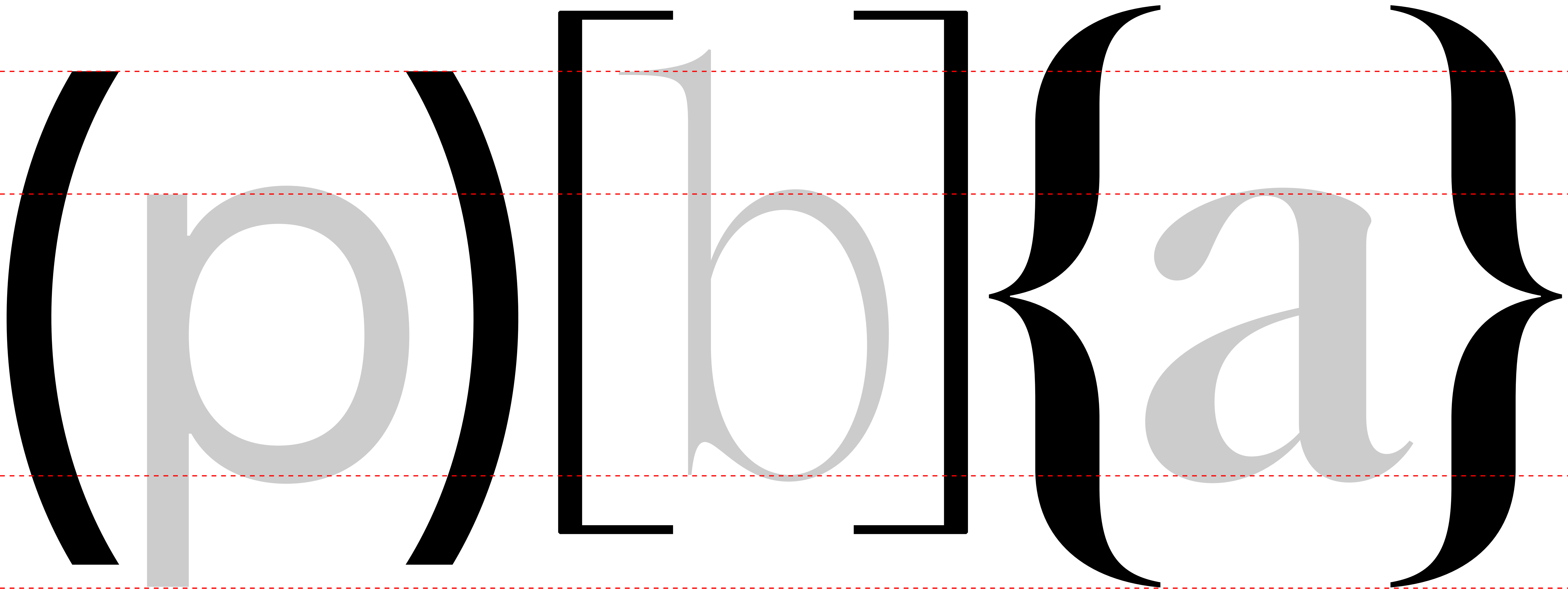
These punctuation characters can be put in the same basket because they share a similar function (which is to enclose words) and you only need to build one copy of each, as their respective counterparts can simply be made by mirroring the first glyph. Handy!

Now they do have their own specificities, actually. Parentheses and braces usually use a very similar width, though braces can be slightly wider for clarity. Also, their overall weight should be a bit less than the weight of your letters.

Braces are a different beast, as they are design-dependent.

This means the overall design of your typeface will influence how your braces should look. In any case, don't make either of these too wide, as they need to slide neatly into the text without pushing away any of the words.

As far as height is concerned, all three characters should follow the same principles: extend all the way up to the ascender line (even slightly above) and all the way down to the descender line. One more thing: if your braces feel off and unbalanced, chances are this is due to their perfect symmetry. To fix this, try making the upper half just slightly shorter than the bottom half.



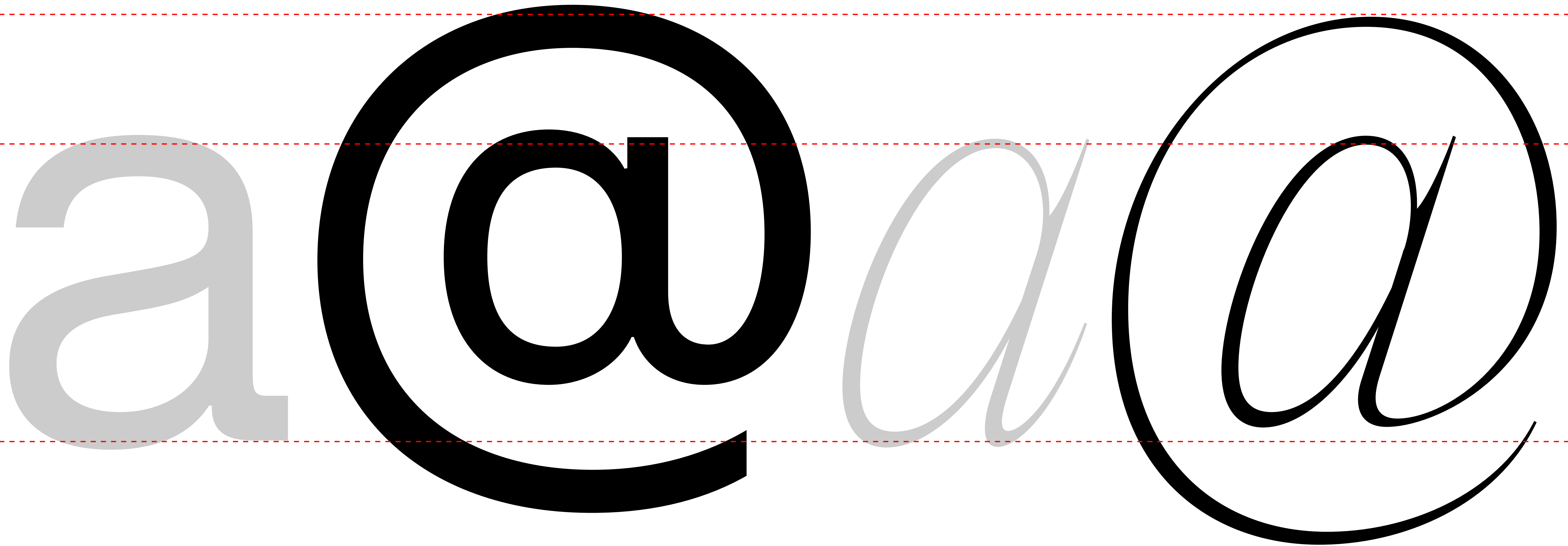


## THE @ SIGN

The @ sign is usually designed from a one-story lowercase **a**, even if the typeface features a double-story lowercase **a**. Constructing the @ sign from a double-story **a** is also a possibility, but it can easily turn into a dark blob on bold and/or smaller fonts.

The round shape that encapsulates the a typically begins from the bottom of the vertical stem and goes around the a in a counter-clockwise fashion before stopping somewhere near the bottom right hand of the glyph.

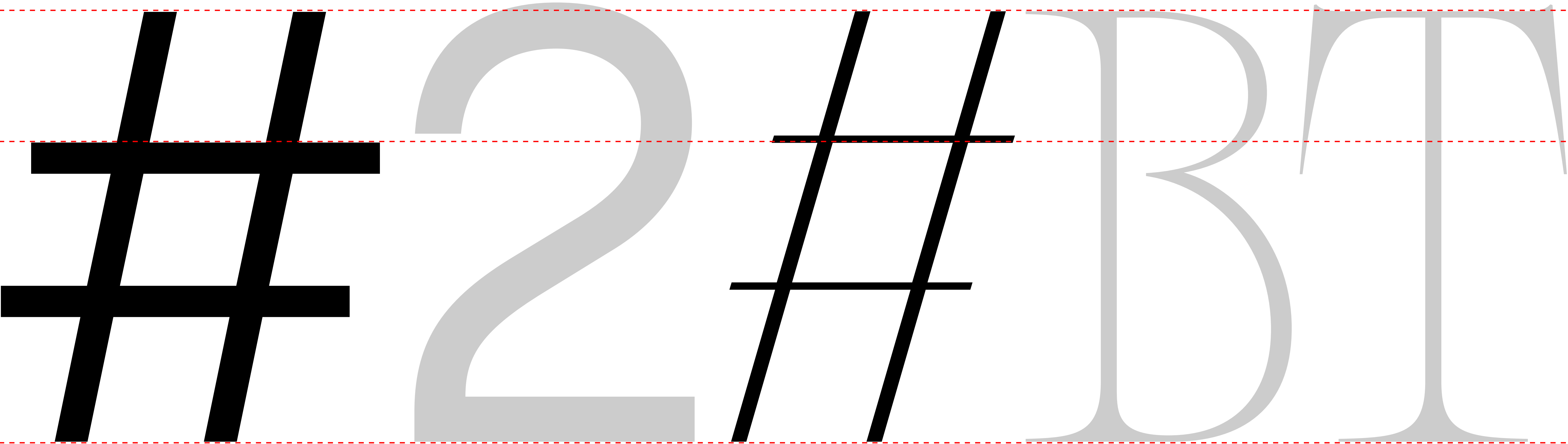
You may break some of these rules if you wish, as long as the end result looks like an unmistakable @ sign. Then again, this sign is more often than not found in the specific context of an email address, so there is some flexibility to be found here, design-wise. Due to how wide the design of the @ sign can be, you can absolutely extend the circle up to the capline and down to the descender line.



**THE HASHTAG  
(THE POUND SIGN)**

Historically, the pound sign was used alongside numbers, which has had an impact on its overall design. Today, you can still encounter the **#** sign before a number (or a set of numbers), but it is arguably more and more found before a string of words in the context of social media as the hashtag symbol.

You may want to take this into account when designing your # sign, especially since there's typically no space between the # and whatever follows after it. #font #design #howto



## THE AMPERSAND

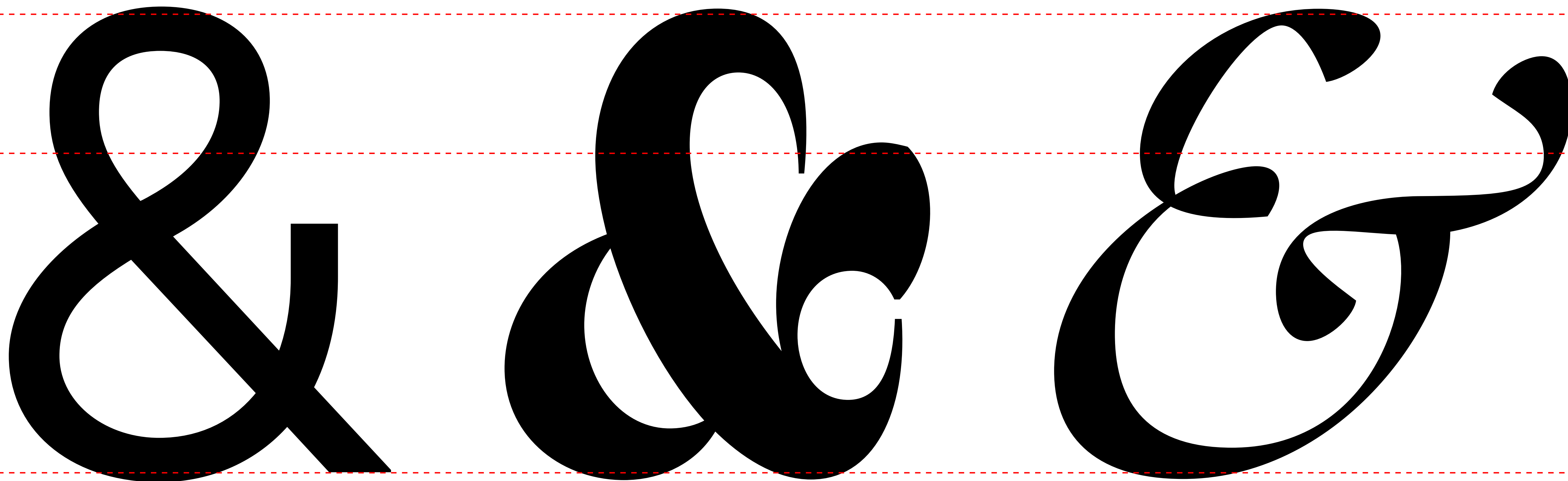
The most intricate (and in my opinion coolest) glyph in any typeface is almost always going to be the ampersand. Despite its simple origins as a ligature for the Latin word “et” (meaning “and”), the ampersand varies wildly as far as its design goes.

In its most common shape, the ampersand looks like an “untied” **8** (&). Some variations are a call back to its beginnings as the word “et” (&), while others are somewhere in between.

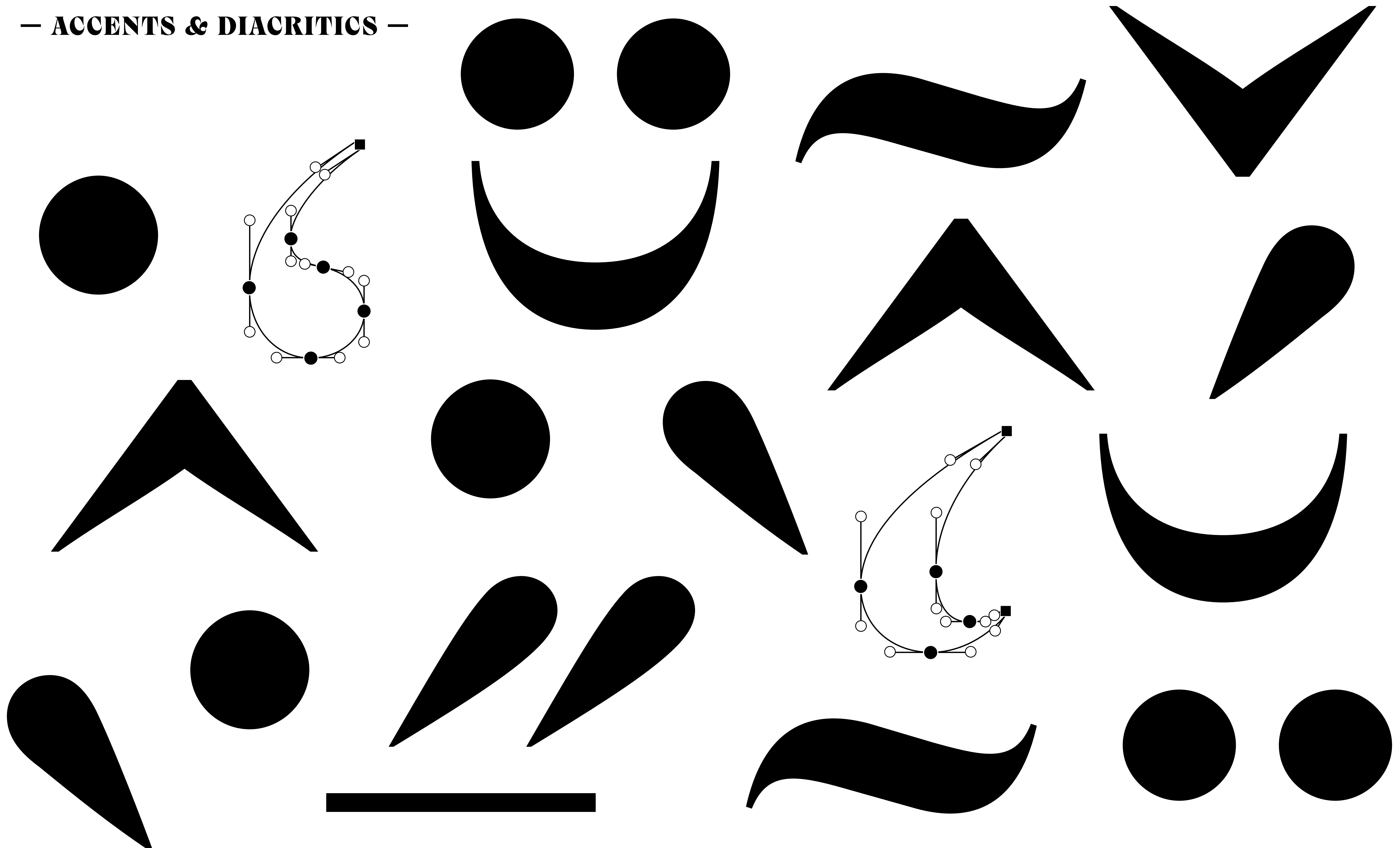
Either way, there’s a lot of creative freedom to be had with this glyph.

Depending on how you design your ampersand, you can use parts of one or a couple other glyphs as a blueprint (for example: the **8**, the **R**, the **t**, etc.) and also add terminals from some of your letters.

In general, you should give your ampersand the same weight as your lowercase letters and numbers, though some tweaking is always possible.



## – ACCENTS & DIACRITICS –



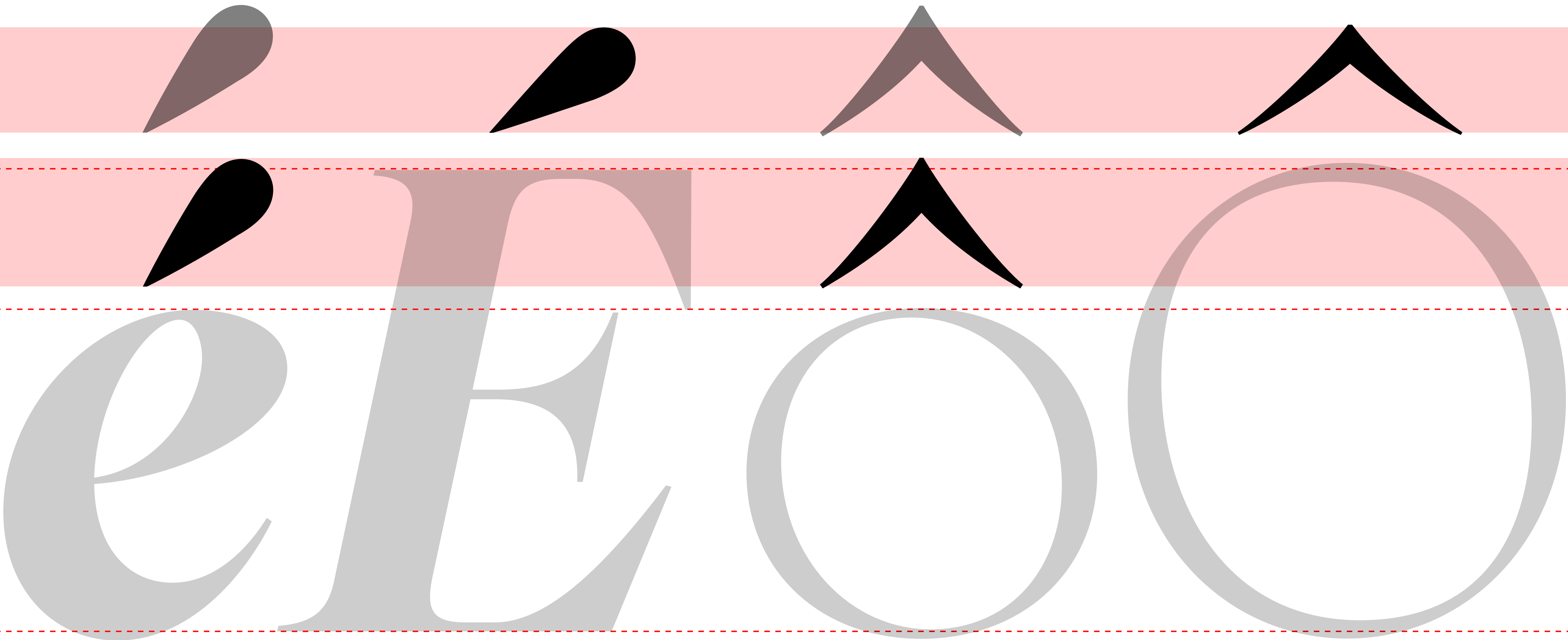
# BEFORE WE BEGIN...

Depending on your native language, you may or may not be familiar with some of the accents and diacritics we’re about to discuss. In essence, these are special signs that you can consider as additions to existing letters (such as accents) or entirely separate glyphs (such as the German **eszett** we explored earlier). Taking diacritics into account during the design process is a key step if you want your typeface to work on an international level! Remember to consider both your lowercase and capital letters for accents and diacritics.

# CAPITAL VS LOWERCASE DIACRITICS

It is really important to note a distinction between capitals diacritics and lower diacritics. Capital diacritics aren't just duplicates of lowercase diacritics — though this can sometimes be the case. But, overall, the better approach is to design them as two separate glyphs, both in looks but also in spacing and vertical positioning.

Again, things will mostly depend on your overall font design. Some type families actually have perfectly matching diacritics between capitals and lowercase glyphs! Though it’s important to know that this is not always the case and sometimes it’s better to have different shapes.





# THE ACUTE AND THE GRAVE

The acute and grave accents show up on the vowels of certain languages, such as French or Spanish to name just a couple. Both of these accents are diagonal strokes that can be seen as two sides of the same coin: the acute goes from top-right to bottom-left, while the grave goes from top-left to bottom-right. You're more or less free to choose the angle of the "slope" for these accents. You can also design one of the two first, then simply mirror the results to create the other one.

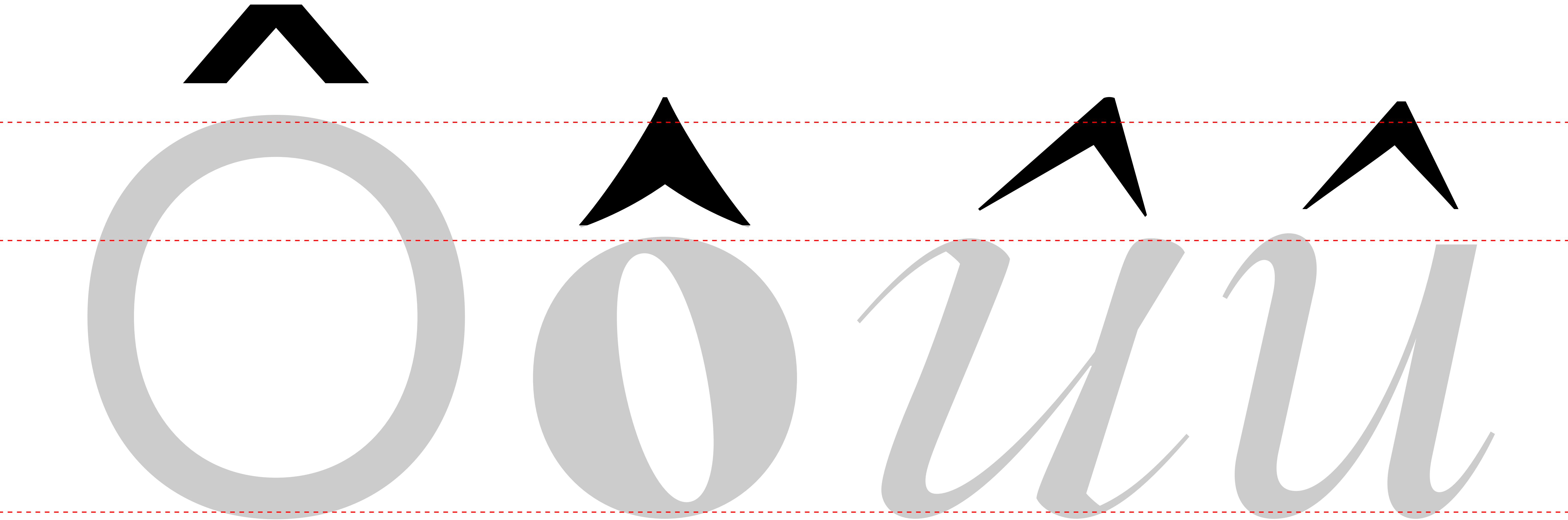
Finally, know that the bottom tip of the acute and grave shouldn't actually be directly above the center of the letter they're on. Instead, you have to slightly align the acute to the right, and the grave to the left. Note that it is absolutely OK to slightly readjust the height, width, etc. of your accents above capital letters, as you'll probably have less room to work with. Just make sure you don't end up with wildly different sizes for the same accent. These tips also apply to future accents discussed below, by the way.



# THE CIRCUMFLEX

The circumflex is similar to the previous accents in the sense that it can be found on certain vowels in some languages. At its core, the circumflex has the shape of an upwards triangle without the base horizontal stroke. Some designers consider the circumflex as an upside down V; others as a floating, pointy hat for vowels. If the designs of your acute and grave accents allow it, you may simply merge these accents together to create the triangular shape for your circumflex.

Feel free to tweak the results afterwards — for example, by narrowing your circumflex to make it taller and pointier. Naturally, the circumflex must be aligned with the center of the letter it's sitting above.



# THE CARON

The caron, also known as the háček, is used in some Slavic languages as well as in the Latinization of certain Asian languages. A pretty straightforward way of designing the caron would be to start from your circumflex and flip it upside down. Some designers will fine-tune the inner space between the two strokes in order to optically adjust the glyph, but both your circumflex and caron should have the same weight overall.

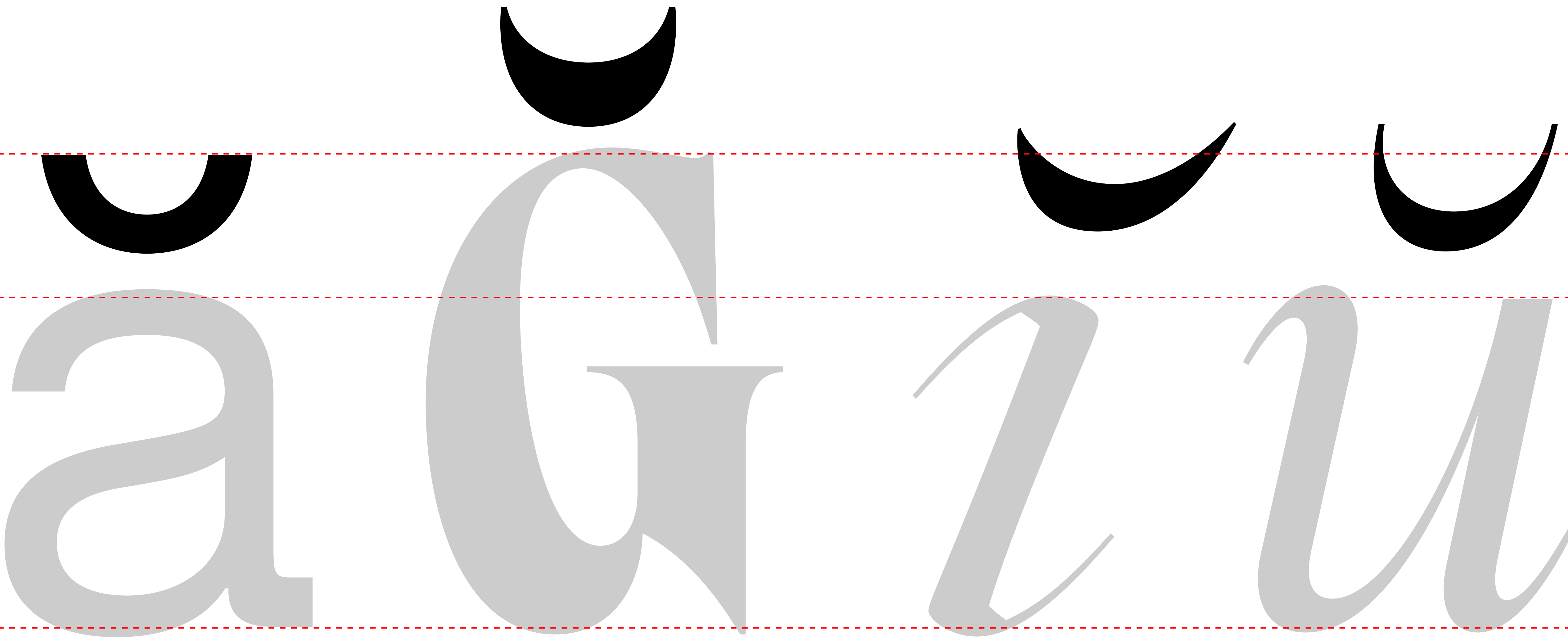
The caron takes a different shape when applied to the lowercase **l**, capital **L**, lowercase **d** and lowercase **t**, where it looks like an apostrophe. Here, using your apostrophe as a blueprint makes a lot of sense, but you must tweak it so it looks smaller and thinner. The caron also needs to be adjusted very close to the letter it's a part of, so close that it's impossible to mistake for an apostrophe.

Note that with your **t** and **L**, raising the caron above the actual letters and all the way to the ascender line is absolutely fine and helps with readability.



**THE BREVE**

In a nutshell, the breve is a round cousin of the pointy caron.  
Your breve can be built from the bottom half of a flat circle.  
Of course, its weight and positioning should be consistent  
with what you previously did with your circumflex and caron.



# THE DIAERESIS / THE UMLAUT

In typeface design, the diaeresis and the umlaut are absolutely identical. They both refer to the double dot glyph found on various vowels in some languages (such as French and German). Designing your diaeresis/umlaut is as easy as it sounds, because you can simply work from the period glyph you designed earlier. A good rule of thumb to know how much space is needed between the two dots of your diaeresis/umlaut is to use the width of the vertical stem of your lowercase **i**.

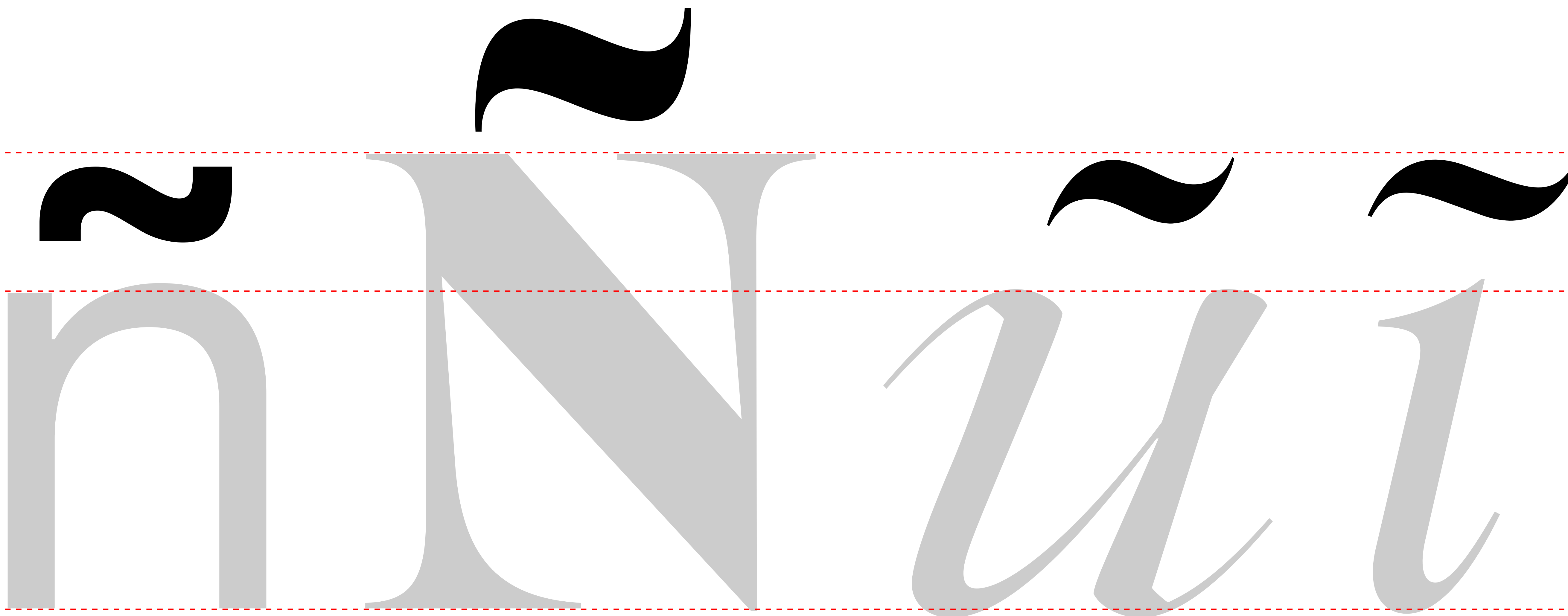
Of course, this may be adjusted on a letter-to-letter basis, but do keep some consistency overall. As far as vertical placement goes, your diaeresis/umlaut should ideally share the same value across all lowercase letters. The same goes for capital letters — though, as always, minor tweaks can go a long way for visual clarity.





## THE TILDE

The tilde can be found in a few languages on top of the **n**, **a**, **N**, and **A** letters. It also exists as a single, separate glyph, kind of like a bendy hyphen. You can consider the tilde as a very narrow, mirrored **S** laying on its side. Some tilde designs are thicker in the middle, while others keep a similar thickness throughout the stroke. The tilde should be aligned above the center of the **n** or **N**, and its length should be a bit shorter than the width of the **n**. You should keep the same exact tilde for the **N** (though make small adjustments if needed).



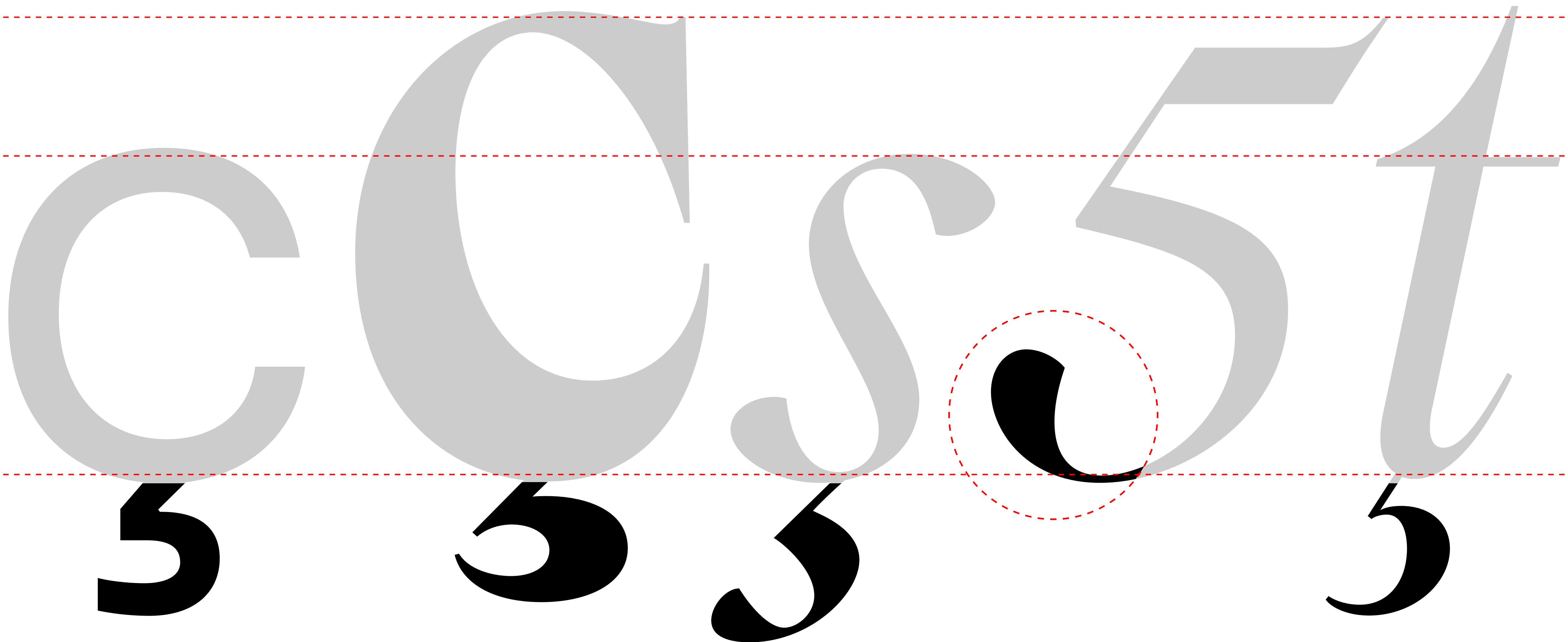
## THE CEDILLA

The cedilla is a sort of small hook found under certain consonants in a few languages (such as the **ç** and **Ç** in French, or the **ș**, **Ș**, **ț** and **Ț** in Romanian).

Your cedilla can be designed from the lower half of your **5** by cutting the top half and connecting the vertical stem to the bottom of the letter. For fancier typefaces, feel free to tone down the details so your cedilla looks more plain and readable.

Using your **5** as a blueprint isn't mandatory though, but it gives you an idea of how your cedilla should be constructed.

Instead of going with a hook-like shaped cedilla, some designers opt for using their comma glyph as a blueprint. In these cases, the cedilla is still located under the letter as normal, but it doesn't connect with it.



## THE OGONEK

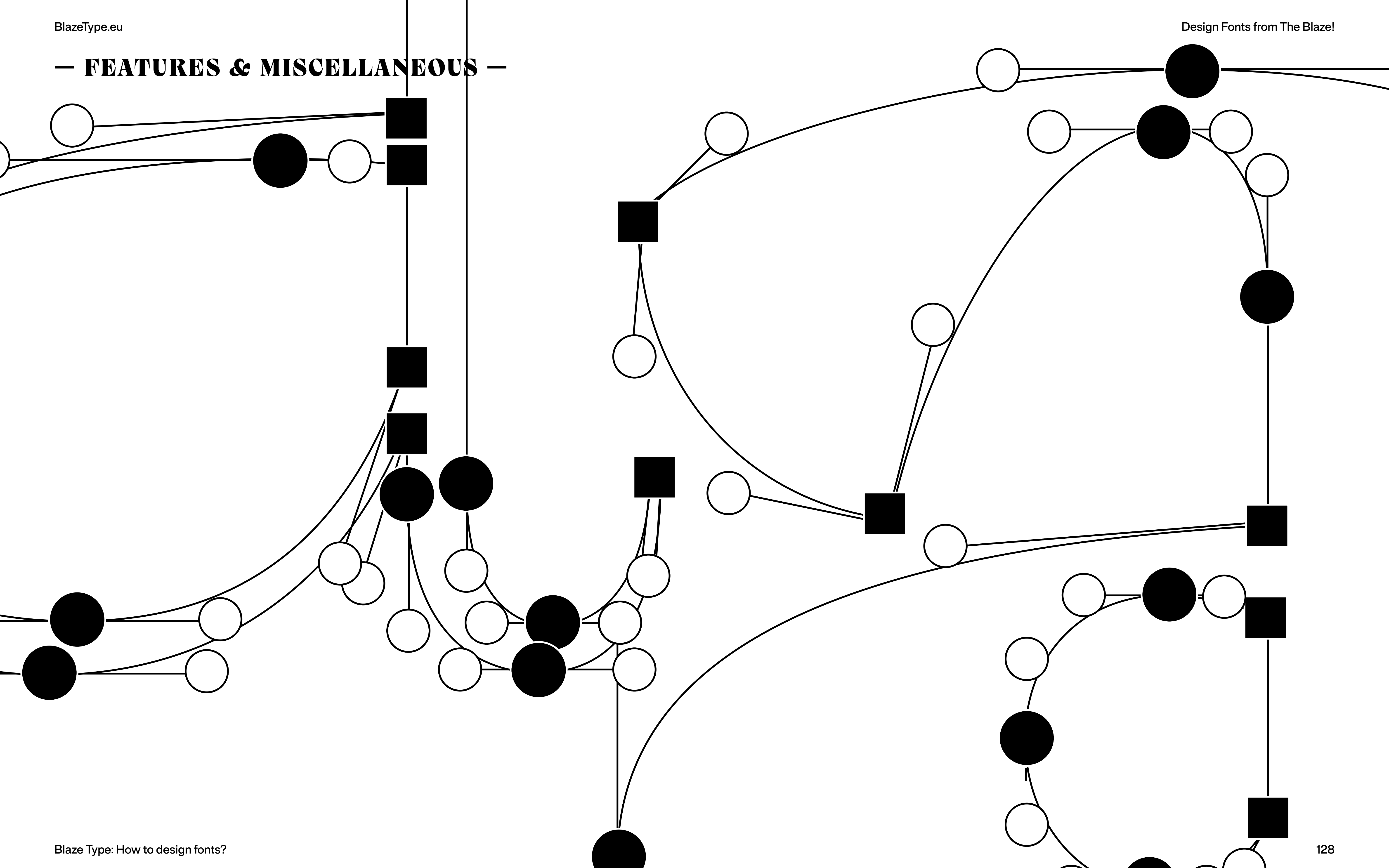
Contrary to what you might initially think, the ogonek is a lot more than just “a cedilla for vowels”!

The ogonek looks like a small tail that goes to the right, whereas the cedilla goes to the left. Another difference is that the ogonek must be connected to the letter.

The horizontal placement of your ogonek is also important: the symbol doesn’t connect to the center of the letter, but to the right side instead (except for the lowercase **i** and capital **I**, for obvious reasons). Additionally, the tail shape shouldn’t extend past the right edge of the letter it is connected to, which can make it tricky to design.



— **FEATURES & MISCELLANEOUS** —

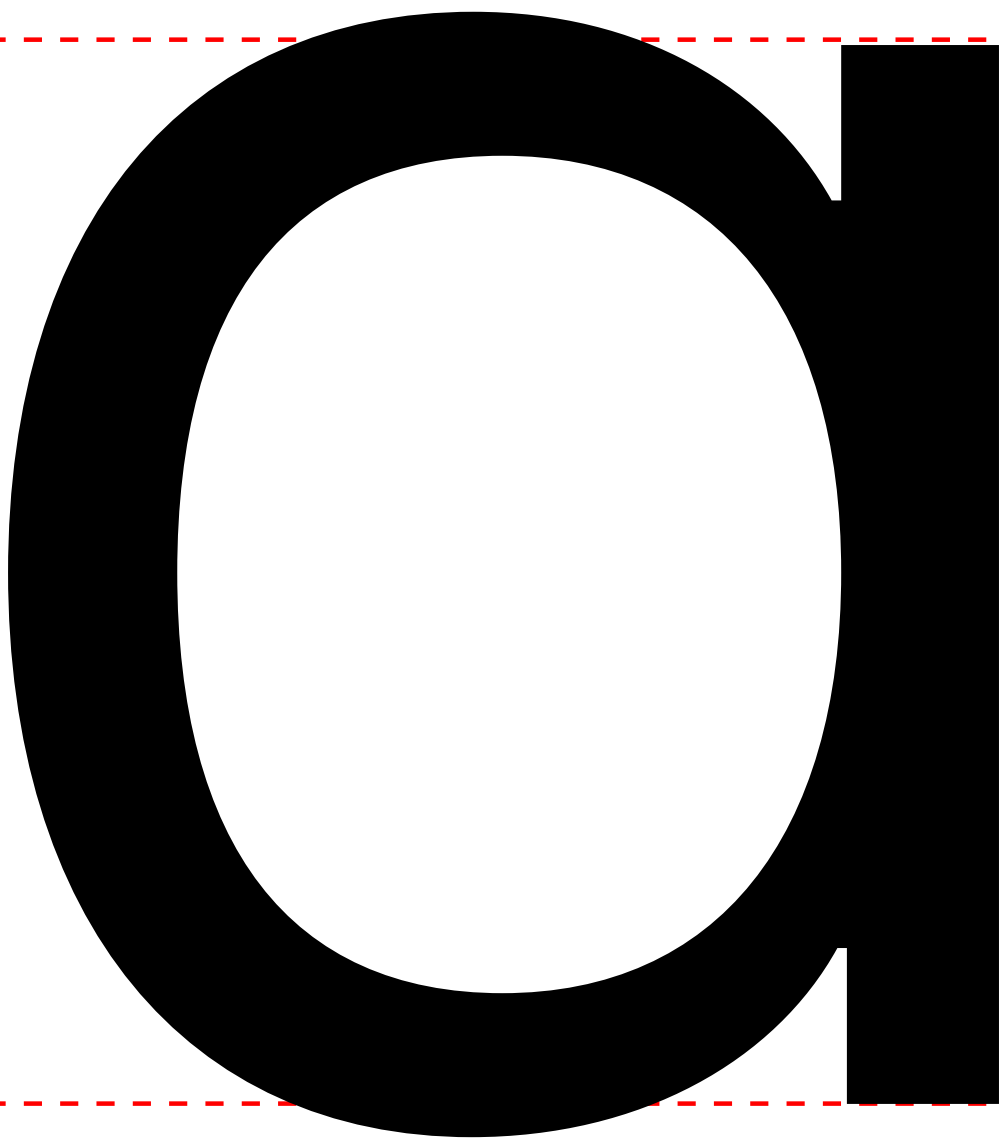


# STYLISTIC SETS

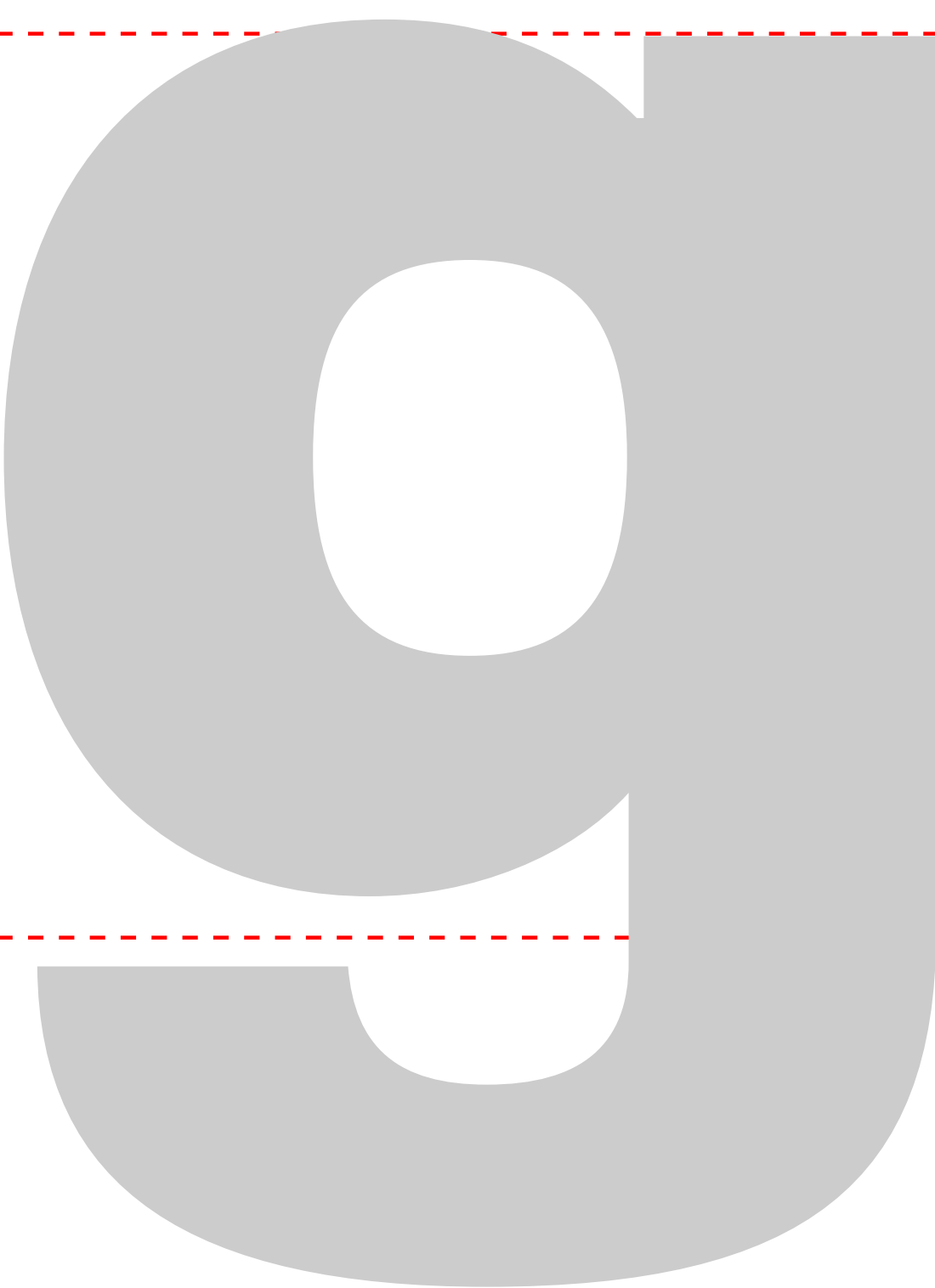
There are many reasons why a type designer might want to make alternates or choose a letterform rather than another. Designers often doubt, especially when making sans-serif fonts, what shape should a **g** have, or an **a**, or an **eszett**,... and alternates often had various functions (swashes and justified text, for example). Stylistic sets are an amazing feature of Open Type, where you can decide to have multiple versions of glyphs. Especially useful when not fully decided between several forms of “**a**” or “**g**”.



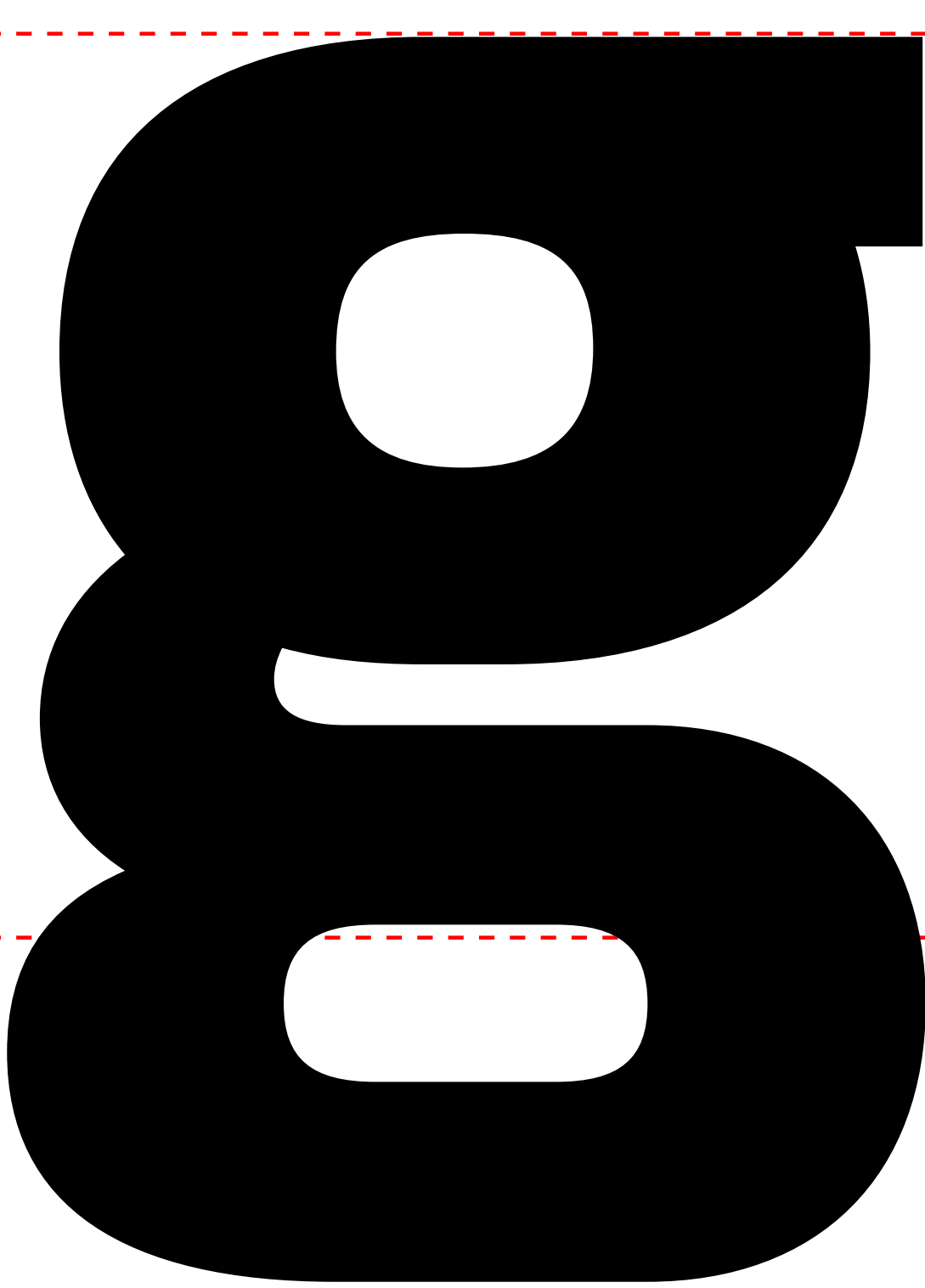
Default



.ss01



Default

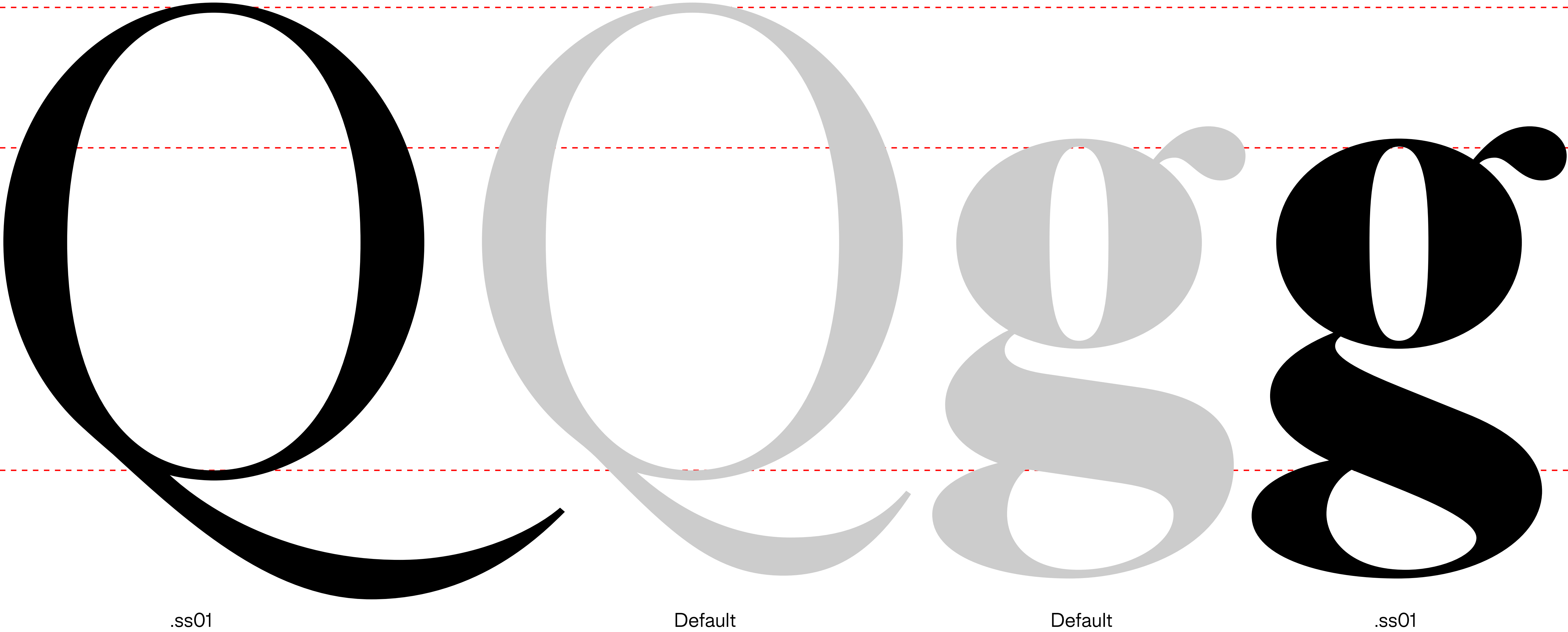


.ss01



# STYLISTIC SETS

Single story or Double Story? But aside from that it also gives the opportunity to expand a glyph set further and have other ways of playing with your design. Which will result in giving more options to your users. This feature is usually activated by using a “.ss0x” after a glyph, such as a.ss01 which would mean that this alternate version of “a” would be activated by using the Stylistic Alternate one. The .ss0 goes from 1 to 20.



# LIGATURES

Ligatures have various functions. Some are glyphs on their own and must not be overlooked (**œ**, **æ**, for instance are very important glyphs to consider in the French language!), some come from older technical constraints (**fi**), others can be just good looking: **st**, **ct**. Some fonts make extensive uses of ligatures to show a panel of very generous and elegant forms.

It's up to you to decide whether you want to go in the direction of having “functional” ligatures: meaning you'll design ligatures for **fi** when you see **f+i** colliding for example. Or you can go “wild” and design beautiful shapes to give your users even more possibility to design within your font.



❶ Linguistic Ligatures

❷ Technical Ligatures

❸ Stylistic Ligatures

❹ Crazy Ligatures

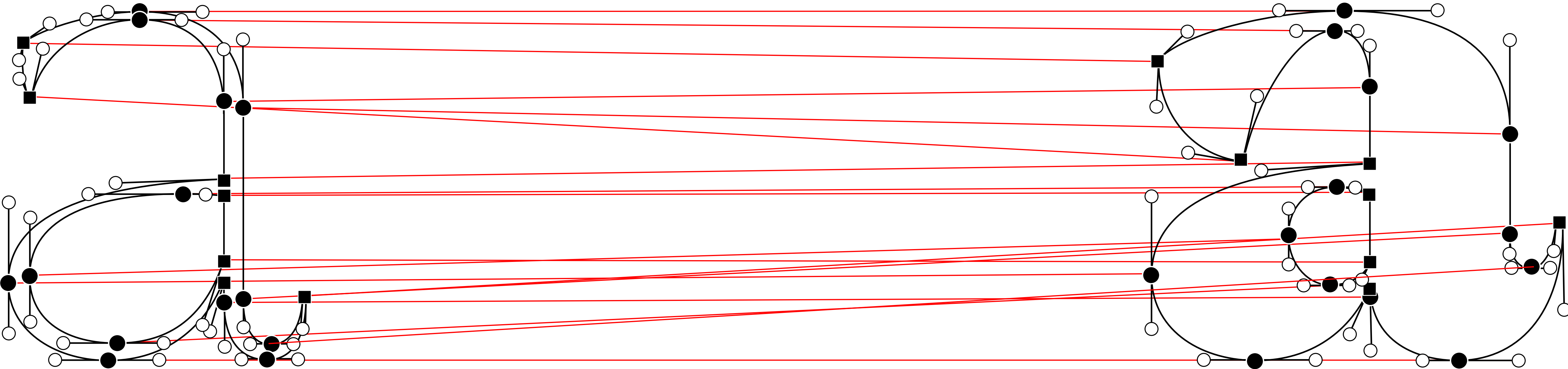
# VARIABLE FONT

Variable Fonts are awesome! They are fun to design, you can do a lot of different things with them but there are quite a few traps you need to avoid if you want to design a good, well working, variable font. A lot of those depend on the quality of your path drawing and if whether or not your different Masters interpolate correctly. But there are also a lot of things to consider on the engineering part of the font design itself. It's a rather complex subject.

So for now, here are some differences to catch on between what's a Static Font and what's a Variable Font:  
A static Font is a specific style, part of a Font Family (or Typeface family). Its style is fixed, hence the term static. Nuances Regular or Nuances Bold, are static fonts, for example.  
A variable font is a file containing all the Axis within a Font Family: it can be Weight, Width, Slant and so on.  
A single file with all possibilities!



1 Static weight distribution



2 Variable weight distribution

AXIS

There are several axes you may want to be using when designing a font. Actually, there are a LOT of them.

The most common one would be: Weight (wght), Width (wdth), Slant (slnt). Each has specific norms and should be implemented according to a certain aspect of what they control.

The Weight axis changes the style from lighter to bolder, by varying stroke weights, spacing and kerning.

The Width axis changes the style from narrower to wider.

It has an impact on the proportions of counters, strokes, spacing and kerning.

The Slant axis changes the style from upright to slanted, its values are usually linked to the maximum angle of your font design

(For example, Slussen Slant axis goes from Zero (0) to Twelve (12), twelve being the maximum angle of the font.)

Slant ↘ → Width  
Weight ↓





# EXPORTING

With Glyphs.app you can export either in OTF, TTF, WOFF, WOFF2 and Variable Format (TTF).

When exporting, if you did set all required informations (Vertical Metrics, Alignment Zones, etc.), you can use the Autohint box so your font is automatically hinted. [Glyphs' tutorial can help you out about this if you need further explanation.](#)

A number of things are important to check when exporting a font. The most important ones are covered in the previous chapter: good path drawing, overlapping shapes, etc. One of the trickiest one to check is the “Axis Location” or “Axis Mapping”. It’s basically giving information to your “Exported Instances” about their Weight, Width, Optical (basically all the Axis you’ve been working on) metrics value.

All of these values are set and it’s important to work within their range so your font behaves correctly everywhere. Remember fonts are softwares in the end.

Good informations about these metric values are found all around, [check this link for detailed infos.](#)

The axis location is even more important when exporting variable font. Without this information your file won’t behave properly on a large variety of browsers or softwares. There’s also another thing to implement called “Stat Table”. This information will state which Axis are present in the font.

0

OTF

VF

Variable Fonts

UFO

Metrics

Outline Flavour

☒ PostScript/CFF

☐ TrueType

File Format

☒ .otf

☒ .woff

☒ .woff2

Options

☒ Remove Overlap

☒ Autohint

Export Destination

☒ Desktop

☐ Test Install

Cancel

Next...

0

OTF

VF

Variable Fonts

UFO

Metrics

File Format

☒ .ttf

☐ .woff

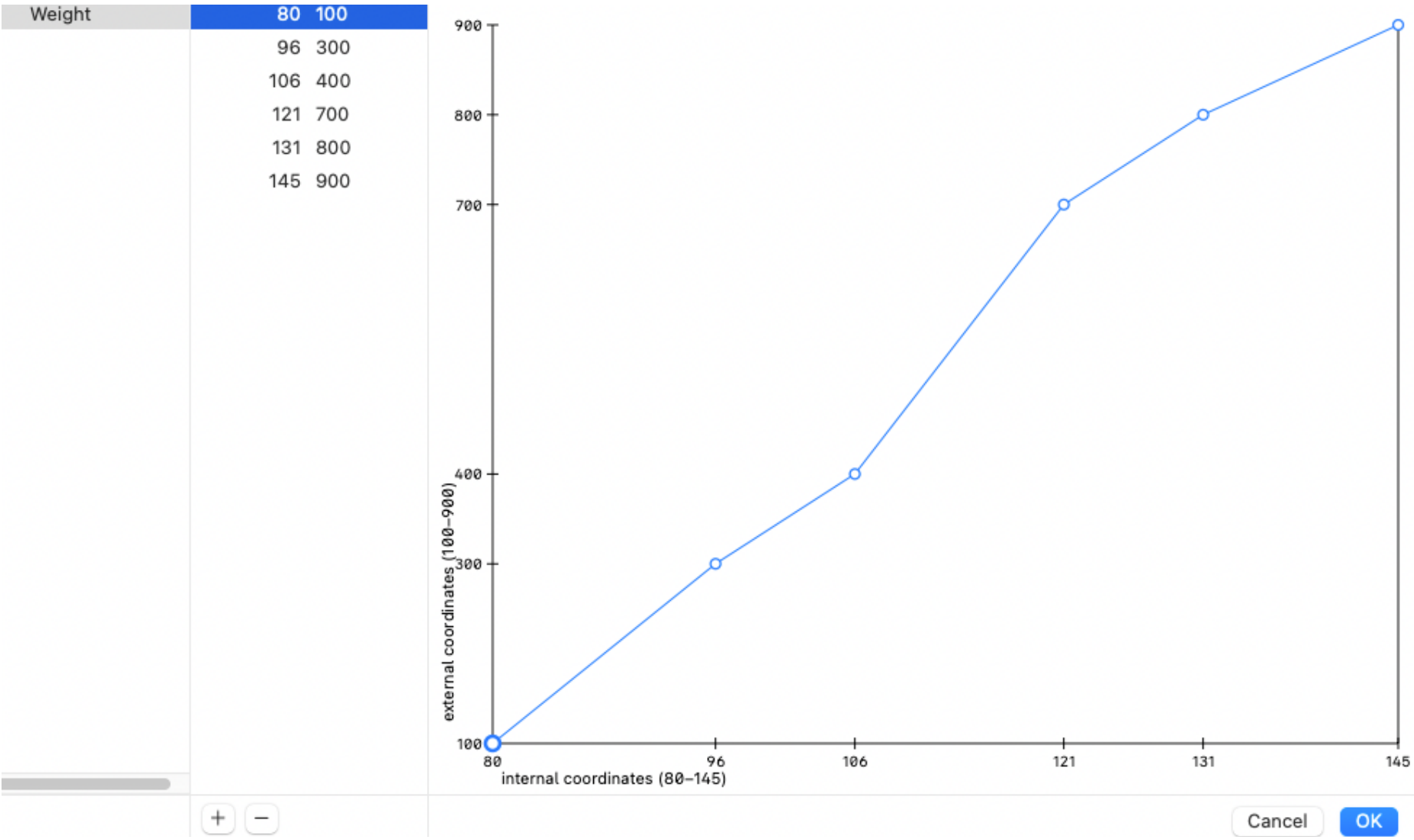
☐ .woff2

Export Destination

☒ Desktop

Cancel

Next...





TESTING/PROOFING

With this document you have received an IDML file to allow you to test and proof your font.

TYPE SPECIMEN

With this document you have received an IDML file to allow you to test and proof your font. You can also check this link and have fun with this auto tool we created! <https://blazetype-specimens.fonts.ninja/>

04 / 29      Spacing / Kerning Test

Spacing strings

Uppercases

HHAHAAOAOO  
HHÁHÁOÁOO  
HHÂHÂOÂOO  
HHÄHÄOÄOO  
HHÀHÀOÀOO  
HHÅHÅOÅOO  
HHÃHÃOÃOO  
HHÆHÆOÆOO  
HHBHBBOBOO  
HHCHCOCOO  
HHÇHÇOÇOO  
HHDHDODOO  
HHÐHÐOÐOO  
HHEHEOEEOO  
HHÉHÉOÉOO  
HHÊHÊOÊOO  
HHËHËOËOO

HHÈHÈOÈOO  
HHFHFOFOO  
HHGHGGOOO  
HHHHHHOOO  
HHIHIOOOO  
HHÍHÍOOOO  
HHÎHÎOOOO  
HHÏHÏOOOO  
HHÌHÌOOOO  
HHJHJOOOO  
HHKHKOOOO  
HHLHLOOOO  
HHŁHŁOOOO  
HHMHMOOOO  
HHNHNOOOO  
HHÑHÑOOOO  
HHOHCOOOO  
HHÓHÓOOOO  
HHÔHÔOOOO  
HHÖHÖOOOO

Font name designed by ...(Edit in Gabarit)

One liners

18 pt (Danish)

Quizdeltagerne spiste jord  
fon

48 pt (Swedish)

Byxfjärma  
wen

36 pt (Esperanto)

Eble ĉiu kvaz  
homtipon

30 pt (Icelandic)

Kæmi ný öxi hér

## INSPIRATION AND RESOURCES FOR TYPE DESIGNERS

It's essential to stay up-to-date on the latest trends and techniques in the field. One way to do this is by following inspiring blogs about fonts and type design. Here are five blogs that type designers might find particularly useful:

[\*Typography Daily\*](#): features a wide range of typography-related content, including interviews with designers, reviews of new typefaces, and inspiration for type design projects.

[\*Fonts in Use\*](#): showcases examples of how fonts are used in the real world, including case studies and interviews with designers.

[\*Type Together\*](#): features interviews with type designers, tips and tricks for type design, and inspiration for creating successful typefaces.

[\*Typeeverything\*](#): features interviews with type designers, tutorials, and inspiration for type design projects.

[\*Typespire\*](#): offers a wide range of typography-related content, including interviews with designers, reviews of new typefaces, and inspiration for type design projects.

By exploring these and other blogs, type designers can find new sources of inspiration and stay up-to-date on the latest trends and techniques in the field. So if you're looking to stay inspired and informed as a type designer, be sure to check out these blogs and see what they have to offer. So, these blogs can be very helpful for type designers to get new ideas and stay updated in their field.

## DEVELOPING A TYPEFACE BRIEF

Developing a typeface brief is an important step in the type design process, as it helps to clarify the goals and requirements of the project and ensure that all stakeholders are on the same page. Here are a few examples of how you might approach developing a typeface brief.

Identify the purpose of the typeface: Is the typeface intended for body copy, headlines, or a specific application (e.g., signage, wayfinding)? Will it be used for print or digital media, or both?

Define the target audience: Who will be using the typeface?

Consider factors such as age, language, culture, and reading level.

Outline the design goals: What are the key design principles that should guide the development of the typeface? For example, should the typeface be modern or traditional, legible or decorative, or somewhere in between?

Specify any technical requirements: Are there any specific technical requirements that the typeface must meet, such as support for multiple languages or specific file formats?

Provide examples of inspiration: Share examples of other typefaces or design styles that serve as inspiration for the project.

Define the scope of the project: Clearly outline the scope of the project, including the number of weights and styles that will be included, any deadlines or milestones, and the process for revisions and feedback.

By developing a thorough and detailed typeface brief, you can help ensure that your typeface project is a success and that all stakeholders are aligned on the goals and requirements of the project.

## DISTRIBUTING YOUR FONT

This one can become quite the headache. Are you willing to go on the solo road and distribute your fonts directly? Through a big platform? Collaborating with an indie foundry and distributing it through them? There's no right or wrong decision here, it's a matter of preference and you are surely the better person to answer these. One thing you can consider though is asking for guidance and advice here with the different possibilities offered to you. I for one am an advocate of self-initiated, self-distributed work. But it can be quite a complex thing to do, especially when alone, if you're looking to get some success. So, let's summarize a few options:

## BUILD YOUR FOUNDRY

Complete autonomy in your work, your choices and way of doing things. You get 100% (or close to that depending on the payment solution you choose to work with) of the sales. Great ! Though you have to build everything, communicate on your own, build notoriety, contact people etc. It's the "solo foundry" kind of way and it can be excruciating: it can be a lonely and hard road. There are solutions to build a foundry website around but if you choose to design and dev one from scratch know that it will cost you — these websites are expensive to do. But ! If you manage to pull through it's probably the most satisfying way to go. It's not for everyone but it sure is fulfilling.

## GOING WITH A BIG DIGITAL PRODUCT PLATFORM

What we mean by this term is platforms distributing every kind of digital product you can think of: mockups, brushes, images, fonts, etc. It's definitely an option but in our humble opinion it is not the most interesting one: your work will drown in an ocean of so many different products. In terms of sales you get between 20 to 50% of your sales depending on the platform. You might have no control on the kind of font licensing also, so make sure you're okay with whatever EULA these platforms go with. Aside from that, these platforms get a lot of daily traffic, so if your work gets some attention you'll probably have a lot of downloads. Again, it's a big 'if' (yet again no one knows what kind of font is going to be the "next hit") but if you want to go that road, sure why not!

## DISTRIBUTING THROUGH A BIG TYPE FOUNDRY

There's a good chance either you know these websites and that you even already purchased / downloaded a font with them once. I think it's a fairly good option if you are offered some guidance in your work. It can be art direction tips on the font, production advice, help in designing, open type, etc. These platforms usually attract a lot of people so, yet again, if your work finds a bit of success you're sure to have some exposure. Might be important again to check if you're okay with their EULA again

## WORKING WITH AN INDIE FOUNDRY

In my opinion it is definitely the best way to start off in this business. Indie foundries are usually eager to work with you, teach, share their tips & secrets, to help you achieve your goals and produce the best possible ways of your font / typeface family before releasing them. I know for a fact that we put a lot of effort in doing that. Aside from the guidance, depending on the foundry you usually get between 40 to 80% of your sales. Indies take care of the communication, licensing, working with the users, etc. You will definitely learn a lot distributing your first font families this way before launching your own platform (if you want to). To find a place that will fit you and your needs as a growing designer: look at the foundry's work, their ethos, what they publish, who work there, their EULA, pricing, etc. My advice is to work with like-minded people that want you to succeed and not only benefit from your work.



# FONT LICENSE

This is a tricky part!

What you have to know first is that when someone purchases a font license, they don't purchase the font per say. They purchase the license: they purchase the "right" to use the font on a certain number of things.

There are lots of different ways to license your fonts.

You can allow people to do anything they want or restrain them by offering different kinds of licensing if you wish to.

My advice would be to make things easy for them and put up some kind of "global licensing" that covers pretty much all kinds of uses, but that's me.

Think of this as giving the right for someone to use your font in a specific medium. There are multiple ways of pricing your license this way. The "common" way of licensing your font would be to give the possibility to purchase a print, web, app, broadcast, social media, logo, game design, or else, etc. kind of licensing.

There is also free licensing, which usually gives the right to people to use the font on anything they want. Or you can put up a free license for personal project but a paid one for commercial ones.

There's also Open Source licensing, which can allow people to share, modify, distribute (while still mentioning the original author(s)), etc.

My honest advice: the best way to license your font is to read foundries' EULA, see how they license things, learn about Free & Open Source, and license your font with whatever makes you comfortable. It is your work after all, you should be able to distribute it the way you want. Don't feel pressured by the comings and goings of the font market: do your thing.

# FONT PRICING

Again, a tricky part. Font pricing is usually linked to font licensing. Some would give more value to one kind of use, or its coverage than the other. Example: a print or desktop license costing less than a web one since more people will see the font online than on print. That sort of thing.

Again, it's a matter of licensing but also of what the font is, what's "inside" of it, its level of design, engineering and most important than anything, again: what you're comfortable with.

# MARKETING & DISTRIBUTING YOUR TYPEFACES

Marketing and distributing your typefaces effectively can be crucial to the success of your type design business.

Here are a few strategies you can use to promote and sell your typefaces. Note though that there is no perfect way or magic recipe here. Some of the listed things here might sound "common", but basic information is always useful to remember when it comes to marketing your work:

**Build a professional website:** Create a website that showcases your portfolio, services, and contact information. Make sure to include high-quality images of your typefaces and provide detailed information about each font, including its intended use, language support, and any special features.

**Utilize social media:** Yes, it sounds cliché, but use social media platforms to connect with potential clients, showcase your work, and engage with your audience. Consider creating a social media strategy that includes regular posts, hashtags, and paid advertising to reach a wider audience.

**Attend industry events:** Attend industry events and conferences to network and showcase your typefaces. Consider exhibiting your work at design shows or presenting at conferences to increase your visibility and credibility.

**Partner with other businesses:** Seek out partnerships with complementary businesses or organizations that can help to promote your typefaces.

**Offer special deals or discounts:** Consider offering special deals or discounts to attract new customers and encourage sales. For example, you might offer a discount for bulk purchases or offer a limited-time promotion to encourage sales. Some designers may look down on this so do whatever you feel comfortable doing. Create marketing materials: Develop marketing materials such as posters, books, clothes, to promote your typefaces and showcase your work. It can cost you but it's always nice to have materials to distribute around.

Again, there's no magic recipe and you will wanna try different things on your own. Test, make mistakes and learn from them. One thing for sure is that by implementing a variety of marketing and distribution strategies, you can effectively promote and sell your typefaces and (maybe) build a successful type design business.

# MY HONEST ADVICE ABOUT DISTRIBUTING FONTS NOWADAYS

I started Blaze Type in 2016 and launched the first website in November 2017. I had never released a font or typeface family anywhere else before that. The situation back then in the type design industry was way different than what it is now in 2022. If you ask me, pricing and EULAS were a mess, that’s why I wanted to have my own place and distribute my work on my own terms. Now, considering everything that surrounds us and all the different possibilities and indie foundries really trying to make a difference either by sharing wealth correctly with their designers, pushing nice and transparent EULAS so their users don’t get rolled over, etc. I would probably work with indie foundries, release a few typeface families in different foundries I like and at one point consider building my own platform.

I do feel though that it is way more complex now to exist in this business than before. There are lots of new foundries around. Maybe we’re in a bubble and at some point most of these type ventures will either get eaten by bigger fish or disappear — it seems to happen in every market so why not in the font design industry.

I think any newcomer in this field will probably have a hard time to be known and seen, we are surrounded by great work nowadays by a lot of people, getting “out there” might be tricky. That’s why I feel it would be “easier” to start by releasing your work with respectable, notorious, fun and genuinely well-intentioned foundries that you like.

This is an amazing field to work in and I wish anyone who’s interested in type design to drive themselves into this practice with passion. And if you are one of those who crave about type design on a daily basis: jump in, keep at it, enjoy, have fun and show us your work!

# CONCLUSION: CONTINUING YOUR TYPE DESIGN JOURNEY

Without sounding too patronizing, the only thing I can say to conclude this book about learning type is to list a few things to keep in mind:

Practice daily, whether it is designing a letter on a software or one on a paper sheet.

This is a field in which we are all students for the rest of our lives.

Stay humble — we are small things.

Listen to the genuine advices people give you

Trust yourself even when you’re the only one doing so

Going against the flow is sometimes the best thing to do

Read everything you get your hands on

Always look at signs and letters in the street

Be thankful to people supporting you

Share your work and process as much as you can



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ABOUT THE AUTHOR

Matthieu Salvaggio is a type designer, art director and graphic designer based in France. He is the founder of Blaze Type, a French type design foundry focused on designing variable fonts. Since 2016, he has been involved in the development of a retail catalog heavily focused on variable fonts but also custom font projects for Volleyball World, Hall & Partners, Mont Saint Michel and others. Matthieu’s typefaces have been defined as some of the most popular of contemporary independent design. His work is known for its mix between historical references and contemporary twists. His fonts are used by, amongst others, Pentagram, byFutura, Graphéine, Ogilvy Labs.

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