

# Beyond Basic: The Extended Latin Typography Manual

## WIP, v.1

### Preface

It has been my desire for some time to lay into print the rules, principles and suggestions of the typographic process I am best familiar with, namely the extension of a Basic Latin glyph set in the various Supplements and other Unicode ranges that build what is commonly called “Extended Latin” and which allows the font to speak in the myriad languages that use Latin and its many modifications. Extention of fonts, mainly libre ones, was my main focus in the Fontfabric type foundry I worked in for some time, since then, many more fonts of all shapes and sizes have become polyglots thanks to my aid.

I was taught typography as my major and always considered it as a separate magisterial in the eternal university of art and life in which we study our whole life. It goes without saying that using this manual would require a solid understanding of the principles and elements of design, and the way they pertain to the specific and separate art of typography, lettering, calligraphy and their sibling realms. The road is an arduous one, but so is the reward at the end, and this reward is not a one-time trophy, but consists of the constant joys the craft prepares for the true master every time a happy client or company gives him or her his or her due. This gift keeps on giving and this tree not only bears good food but also spreads

the seeds of a better forest.

I present this work at the feet of the public, both experienced professionals and aspiring designers, to stand the test of the first and to facilitate the progress of the latter, and hopefully, much later once they have achieved mastery, to serve as a quaint reminder of a good beginning. This is no app, no quick and dirty method, no video tutorial, no secret you have to buy a special coupon for. I rely on the hard work, discipline, persistence and stick-to-itness that I own my success to and am still firmly convinced constitute the best way and method to any goal. If it was good enough for St. Paul and the Roman Emperor Marcus Aurelius, it should be good enough for me and many others.

It is the artist's vanity that hopes for a work so epochal as Godfried Bammes' "Human Anatomy" which is considered timeless. No doubt typography changes in such a fashion that no work on the subject can remain timeless. But, for a time, it is this author's hope that it will light the way of many.

Sofia, 2019

## Chapter 1

### The good collection of good letters

A good, well-executed Latin alphabet, the basis of all the rest of this book and indeed of the majority of human communication throughout the ages, is a joy to look at and an invaluable tool even in the hands of dabblers. Enough books have been written on its history, its ties to calligraphy and how to construct it right. These topics are not the subjects of this study and in it I assume you already have a good Basic Latin before you. I plan to explain the glyphs one by one in the order they appear in most font editors.

#### Looking at the type

No matter how much technology advances, the printed proof is still the typographer's best friend (but smart screens are on the verge of doing away with this). When extending Latin, I always print out a large sheet of the punctuation and the alphanumerical symbols, which is a fancy term for letters and numerals. As in any good painting, the various glyphs of a regular, non-fancy font should be balanced in size, color and style. No single glyph should stand out, and this includes a glyph that is well made but simply belongs in another font. The glyphs should not be anemic, there should not be parasitic elements like a bulge on some oval or a spur or a tail on some serif. Speaking of ovals, and I must admit I committed this error early on: when constructing glyphs with ovals, like an O, D, C and so on, always take care to

balance the oval good and consistently throughout the font. It is an often seen error that, e.g., a C has good ovals, because it was constructed from ellipses or circles, and the harder to construct B has ovals that are sharper and in a somewhat different style.

When I love what I see on the screen, I print out the glyphs in three proofs: normal, vertically reversed, and both vertically and horizontally reversed, with some basic kerning added. I look at the proofs from all four sides and remake the glyphs until not one seems to fall on its side, not one is too black, and so on (numerals are especially prone to this “falling to the sides”). Then, I build on this solid foundation.

### Strange characters, wild marks

Latin, like many other scripts, is extended mainly through diacritics, which is the name for symbols like the two dots on the ‘í’ in ‘naïve’ but also the cedilla under the ‘c’ in French. Like the base alphabetical glyphs, their diacritics should be balanced both in comparison with one another, and not be too light or bold in relation to the base glyph. Various techniques and tricks are used to achieve this. Are you sure your basic set is... *set* and ready to go? Then let’s begin.

First, the metrics. Uppercase classically relates in height to lowercase as 7:5, with various ratios from font to font. If the x-height is 500 pt, accents stay about 50 pt above it, and are either 150 pt high (like the acute), or balanced inside the space (like the dieresis/trema)

Acute accent (') – this short stroke builds the design basis for all other diacritics and can be surprisingly hard to get right. It is usually narrower at the lower end, and is neither centered on the base glyph nor just barely touching it with its left foot. It should be balanced optically, most commonly with one third protruding to the left of the optical center and two thirds to the right. Thirds of what? Some say the weight of the diacritic, others say merely its length. The eye rules this out and commands the hand. Similar how good musicians have a good EAR, good artists have a good EYE, and both are trained with time.

Grave accent (`) – a mirror image of the acute, it follows the same construction and balance rules, but can sometimes break them if the style demands it. It always does in italic, but I am focusing on the upright. For now keep in mind that it's in bad taste to make a good Italic letter and cap it off with a non-italic diacritic. Remember the rule that the style should be consistent.

Caron (ˇ) – this downward pointing accent is done on the basis of two acute accents that connect at their wide end. Then flipped to point downward. If it looks too much like a pulled out tooth, amend it until it comes into better shape.

Circumflex (^) – this is the caron pointing up. Almost always, the two are mirror images of each other.

Dieresis/trema/double dot (˝) – since these dots can't neither be extended nor stretched without losing their character (unless the font is really fancy), they are usually centered vertically between the x and cap heights. It is not

a hard and fast rule that they should be as big as the period. They ought to be as big as looks right, neither disappear nor demand too much our attention.

Dot above (·) – this single dot should be bigger than each of the dots in the dieresis so it can balance them out. In certain cases, dots can be different than the standard elliptical ovals – they could be diamond-shaped or something weirder. The main thing is to not resemble other glyphs too much, like a comma. The comma and the period are different beast and should not be confused.

Ring Ø – although it may seem simple, in the ring only the outer oval is perfectly round. The inner one is an ellipse that is thinner than it is tall. Sometimes, like in Å, the ring attaches to the base glyph. In other cases, like Uring, it obviously does not.

Breve (˘) – Ars longa, vita brevis, which translates to “Art endures, life is short”. The breve is a half-circle with ends shorter than how much the middle is thick. In this it varies from the Cyrillic breve, which is the exact opposite – thicker ends and a weaker middle. Both breves can be created when we slice the ring either vertically or horizontally.

Tilde (˜) – used in Spanish and other languages, this symbol derives from the letter “N” and should follow the same principles, mainly that the right curve points downwards and that the mark should be pronounced and undulating good.

It is notoriously difficult to get right. For starters, use the breve diacritic and slice and rotate until the two parts

meet in the middle. Make a good flow from one part to the next. The ends should ideally be perfectly horizontal and less thick than the middle. The tilde is usually centered vertically like the dieresis. You will most probably not get it right the first time – persist in trying out new versions until you do.

Macron – a short stroke above the letter, usually denoting a long vowel and made from the horizontal stem of the A

The cedilla (ç) and ogonek (ń) are not so much diacritics as extensions of the base glyph, especially the ogonek. I mention them in unison because they should be balanced in relation to each other.

The cedilla is a hook you can get from the question mark. It is lighter than the base glyph. Its stem is less thick than its oval and *slanted* rightwards. Keep in mind that this symbol is used not only in French, but also in Romanian and Turkish, where it attached to different letters than C, and in many African languages.

The ogonek is made by mirroring the cedilla vertically and modifying everything except the lower part. The style guide is perfectly written out in Adam Twardoch's <http://www.twardoch.com/download/polishhowto/intro.html>, so I shan't repeat it here.

Now we are ready to begin.

ÀÁÂÃÄÅ – Follow the rules laid out above to center the marks on the A

Æ – this diphthong can be tricky. There is no way we can make it as wide as the rest of the font since it is two letters, so we must fake it.

First, shorten the legs of the E. The left part – surprise – is best made not from an A (you only get the stem hence), but from a V or /. Both parts should be closer together to seem as to be of the same weight as the other letters. But caution! – get them too close and you will get the glyph to look cluttered. This is especially important when making a bolder weight. You got to open kinks and ink traps and make stems lighter until you have made it.

The lowercase æ is made the same way. Always be cautious to remove the foot of the ‘a’ and to declutter the joints of the two letters. Both parts of this glyps should also be pushed together to make it appear balanced with the rest of the lowercase. Remember these rules –we will come back to them soon enough.

Ç – the cedilla attaches to the lowest part of the C.

Push it down as many point as the optical compensation of the lowest part of the C. If it is too big for the lowercase c, make a different one

ÈÉÊË – Follow the rules laid out above to center the marks on the E

ÌÍÎÏ – the rules for these glyphs seem simple enough, but it is a good idea for the mark to not appear too wide on such a stem. Shorten them.

Ð – this symbol, that is used both in Croatian and in Icelandic, albeit with a different lowercase, is done the following way: The stem is slightly thinner than the horizontal stems, and the right part is slightly longer than the left one. How long exactly? Eye-gauge it.

ÑÒÓÔÕÖ – no surprises here. Remember to push marks up when the top of the letter is slightly above the cap or x-height.

Ø – this letter can become cluttered very easily. Combine a / with an O and lighten the result as much as you can – make the diagonal thinner, increase the inner oval slightly, thin the joints between the two. When making very bold weights, you might omit the inner part of the stroke, but only then.

ÙÚÛÜÝ – since there is nothing to hold the marks, they might fall 10–15 pt into the letter. Keep it compact

**P**\_ Slice the bowl of a P and combine it with an I. Get creative if it is a slab serif or something different.

**B** this difficult character denotes the German “double s” and is named “scharfes Ess”. It is best done when combining an l with a modified s.

Recently, this letter got an uppercase – **҆**. It is done by combining an inverted L with a three numeral or a Cyrillic 3. Being a late comer, it occupies a distant Unicode slot from its baby brother – U+1E9E.

Àáâåæçèéêëïï – these follow the same rules as above. Keep in mind that accented glyphs will never appear so many next to each other in human speech, so looking at them in this order may be misleading

$\eth$  - this symbol is one of the most difficult ones and you might want to save such conundrums for last after much of the font is done. If you don't have a math glyph for differential already made, invert a 6 and look at the 'o' for guidelines. The bar is usually somewhere between horizontal and at a right angle to the tail. Balance it with the tail so that nothing protrudes too much.

uppercase. Keep an eye on the ø – it can get cluttered very fast

Đ – the caron should be balanced optically on the top.  
Neither falling off the bowl, nor too much to the left

d' - be sure that the mark is a comma and not a dot or an acute

**đ** – more maDness! This time, as with the Đ, the bar is asymmetrical – but to *the left*, because it is pulled there by the bowl. Eye-gauge the right part. *See*, you are already training your eye hard to spot these small things. In print, they will become microscopical and invisible to the untrained professional. But some day they can appear on some billboard the side of some building. THEN small inconsistencies will be there for all to see. Take care no avoid this possibility.

for the most part follow the rules. You may want to push the circumflex down on some ovals, it's up to you. But the last character is a peculiar case. To the best of my knowledge  $\hat{h}$ , found in Esperanto, can have its cap pushed either to the right in id air, or centered on the stem. Better push it to the right.

**Hh** – this symbol is found in Europe on the island of Malta, where the language got influenced to an extent by

Arabic. On the uppercase, lower the bar of the main glyph to make room for the additional one, and use all available tricks to lighten the image. The secondary (top) bar should be thinner.

In the lowercase, the same rules as ð apply, this time the bar is “pulled” by the right part of the h.

- look above for the rule to shorten the marks. On the letters with the ogoneks, center the hook because the base glyph is symmetrical. Attach it consistently and stylishly to the stem.

**IJ** – you may sometimes see a compressed version of this glyph in which the J goes under the I. It gets accents, but the rules are unclear. Same goes for the lowercase.

**JjKkLl** – from these, the shorten k is the Greenlandic kra. It is not used anymore, but you may wish to retrofit it.

L'l' – same rules apply as in d' – it should be a comma.

Imagine the uppercase as a rectangle. The comma is balanced in the upper right corner.

In the lowercase, the distance from the stem to the comma should be exactly the same as in d'. Important! Both glyph kern differently than l and d.

**L·l·** - this obsolete glyph was used for Catalan to separate two L's when they build a single sound. It's role is now filled by the periodcetrered and kerning. If you wish to retrofit it, center the dot at equal distance from the L and the next l. There is no combination like lk or ly

**Łł** - same rules as Đ apply for the uppercase, The bar is sloped at approx. 30 degrees. On the lowercase, the bar is sloped the same way, but is symmetrical because the base letter is. This Polish glyph is covered well on Mr. Twardoch's site.

ŃńȠȠጀ – for the most part follow the rules.

'n – this glyph was used in Afrikaans. A simple comma before an n

Nn - this is best done by combining N, n with a j.

ĀāĀāĀā – for the most part follow the rules.

**CÆ** – same as the *Æ*, shorten both parts and use a C to weld into the E. Declutter the joints.

Ŕŕř ŔŖŖ ŖŖŖ ŖŖŖ – for the most part follow the rules.

**Ț****ț** – these notorious two are known to create all kinds of coding errors. Used in Romanian, the cedillas were replaced by comma accents.

**ᢃ****ᢃ** – for the comma in the top right part of the t, keeping it compact

**ᢃ****ᢃ** – the bar of the lowercase follows the same rules as the one in ḥ

**Ӯ****Ӯ****ӯ****ӯ****ӻ****ӻ** – for the most part follow the rules.

**Ӯ****Ӯ** – while the lowercase is relatively easy to make (see Twardoch's site), the uppercase might be tricky. The ogonek is both to the right and flowing seamlessly into the bowl. Be careful not to attach it to the center – there *is* such a glyph, but found in some Native American languages.

**Ӯ****Ӯ****ӯ****ӯ****ӻ****ӻ** – for the most part follow the rules.

**Á****á** – this northern glyph deserves a special mention. It is done steadily in many afont. In fact it only occurs in some dictionaries.

After these range follows the Latin Extended-B, which encompasses many African languages. Contrary to popular belief, Africa is far from a monolithic whole, and is a home to a myriad of cultures, languages, peoples and nations. It is, in fact, the second largest landmass in the world, with a population of over a billion people. When not based on Arabic and not accounting for certain fringe cases (Ethiopic being the notable exception), its writing systems are mainly based on Latin. It brings tears to one's eye to think of the many textbooks in Africa that were typed on a typewriter and then each mark and tilde meticulously filled in by hand. Africa will certainly be a big market for future typographic excellence and awaits its fair share of localized fonts. However, I dare not venture there – I am unfamiliar with the terrain. Each professional is best advised to follow their instincts to draw on the pool we created thus far for the new letterforms. Keep in mind that many African languages are tone languages. Making the base glyphs may not be enough.

ઉ – Speaking of tone languages, the principles used for Vietnamese are the same as for the glyphs above. The rules are covered on the site <https://vietnamesetypography.com/>

