Upturned
square terminals

Extravagant
curves

The Geometry
of Type

Extreme weight
variations

Thin bar
becomes
horizontal

Stephen Coles
Foreword by
Erik Spiekermann

Ball terminals

The Anatomy of 100 Essential Typefaces

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The Geometry of Type

The Anatomy of **100** Essential Typefaces

Thames & Hudson

Contents

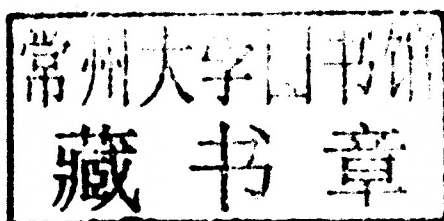# The Geometry
# of Type

Stephen Coles

Foreword by Erik Spiekermann

The Geometry of Type

The Anatomy of **100** Essential Typefaces

Thames & Hudson

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Foreword

The bigger a group gets, the lower its intellectual common denominator falls. The average taste of a group is definitely worse than that of any individual member. One can always see this at board presentations, where the propensity to make decisions is affected by the group size. If a group discussion had a colour, it would be beige.

If that group had to pick a typeface, it would be Arial – a face whose astonishing prevalence is largely due to its astonishing prevalence. We like best what we see most, which describes a type designer's dilemma: a new typeface has to look like all the others – after all, an 'a' has to look like an 'a' – but it has to also have something more. Gimmicks don't work, as they wear off quickly, and basing a whole alphabet on one idea also doesn't fly. This is painfully apparent, for example, in a page set in Avant Garde Gothic, whose geometric shapes separate characters from each other rather than combine them into words. The flow of the letters is important: they have to be modest in each other's company so we can read line after line of them. Details that stick out at large sizes may become invisible as the type gets smaller, but they can add warmth, texture and, yes, character. Type adds the sound to the tunes other people write.

As most users of type are unaware of the fact that type designers even exist, they take it for granted that fonts live on their computers, having got there by some technical intervention or other. For those people, selecting the right typeface is easy: just pull down the menu in your favourite application and click on one of the many popular names that come up. The more familiar these names look, the less likely you are to make a mistake. For those who are a little more interested in what actually makes a typeface useful, even appropriate, advice is easily had from the columns of so-called specialist magazines and websites. But their advice is commonly safe and staid. Security means hiding among the crowd.

If you want to go beyond the beige choices, you need objective criteria that can make finding the right typeface for a project not only likely but even fun. Stephen Coles is one of those people who, like myself, suffers from Typomania – that incurable but non-lethal disease that makes you read type specimens instead of popular literature. Stephen also has a typographic memory: he not only remembers what he has seen in those specimens – be they books or websites – but he also recalls the names of thousands of typefaces and can point anybody who asks to the proper reference point. Scary, I know, but useful for those who really want and need to go beyond what that drop-down menu offers at first sight.

If you know the difference between a font and a typeface, you need this book. If you don't, you need it even more.

Erik Spiekermann

Introduction

. . . .

This book is all about looking at letters. Not just any letters, but the sets of letters that are designed together, in a systematic and harmonious way, to form a typeface.

What gives a typeface its personality? Why does one font appear bigger or clearer or darker or warmer than another? The answers to these questions can often be found by simply looking more closely at the letters themselves.

The performance of a Text typeface is best judged by viewing it – and using it – at its intended size in a passage of text. But just as typography (the use of type) is all about fussing over the details, the details of the typefaces themselves really do matter. Let's put it another way: a chef doesn't need to grow her own vegetables or raise her own cattle, but she can benefit from knowing how the ingredients were made.

When we enlarge a word or phrase that contains a typeface's most distinctive glyphs, we unearth all sorts of information about what makes that typeface tick. We discover how the space inside and between letters is as important as the strokes of the letters themselves, and how the shape of one letter affects the shape of the others. We learn that seemingly minor attributes can affect the personality of the typeface as a whole, and we can surmise the decisions a type designer made to improve the economy, legibility or originality of the design.

Once this knowledge is acquired, it becomes a valuable and instantly accessible piece of a type user's skill set. Graphic designers who can scrutinise and describe type's nuances are better equipped to pick the right tool for the job and discuss those choices with colleagues and clients.

In the following pages you'll find visual and interpretive descriptions of one hundred typefaces. The selections were made with an emphasis on versatility and practical use. There are certainly more popular typefaces out there, or those with a more historically significant background, but each of the families represented here is relevant and useful in contemporary design. There is a mix of 'classics', based on metal typefaces dating back as far as five hundred years, alongside newer releases that are either thoughtful reinterpretations of the classics or completely original designs. A glossary is included on page 9 to help you with some of the most frequently used terms.

While the focus is on Text type, there are also Display faces for setting large and grabbing attention. These were not chosen as mere novelties, but rather for their flexibility of use in a wide variety of settings.

The selections represent a wide range of foundries and designers from around the world, and every typeface was vetted for quality and design integrity. They are organised in a pragmatic way, sorted in groups that borrow some aspects from traditional, history-based classifications but without relying too heavily on dated dogma. Typefaces with similar visual characteristics are placed near each other, making it easy to compare designs and seek alternatives.

How to Use This Book

1. Typeface name

The typeface is the design of a full family of fonts. Variants, such as optical sizes (Display/Text), are noted where necessary below each sample. Digital formats (such as Pro and Std) are omitted because they generally specify a font product's character set, not the design of the typeface.

2. Designer, Foundry, Country of origin, Release year and Classification

The designer(s) of the typeface are credited as per the publishing foundry. For revivals, the designer of the original typeface is noted in parentheses.

The foundry is listed as per the publisher of the specific typeface shown. There may be versions of the typeface published by other foundries.

The country of origin gives a broad indication of where the typeface was developed.

The date indicates when the typeface was released, or in some cases designed. Multiple years indicate the release of variants or extensions. For revivals, the original design's estimated release is displayed in parentheses.

The classification is listed as specified by this book's system. In some cases, a more specific subclass is noted.

3. Character set

An overview of the basic characters (uppercase, lowercase, numerals, and punctuation) in the specified font. Most fonts contain many more characters than are shown here. The specific font style used for the anatomy graphic is noted and distinctive glyphs are highlighted.

4. Anatomy graphic

A few of the typeface's most distinctive glyphs and their distinguishing attributes. Sample words are generally from the language associated with the origins of the typeface.

5. Description

Brief notes about the background and overall character of the typeface, including thoughts about how the attributes highlighted in the anatomy graphic affect the design as a whole. Suggestions for best use are occasionally included.

6. Comparable typefaces

Similar typefaces used in this book are shown with the sample glyphs for easy comparison. Familiar typefaces that are not given a spread in this book are also included, suggesting possible alternatives to overused type.

Glossary of Typographic Terminology

. . . .

This book avoids esoteric lingo whenever possible, but specialised words can be useful for clearly and concisely describing type. Whether you are new to design or a practised professional, this list will be a helpful refresher as you read the following pages.

Aperture: The opening of a counter to the exterior of a glyph (see page 10).

Bracket: A curved or diagonal transition between a serif and main stroke (see page 10).

Character: The basic unit of written language. Can be a letter, a number, a punctuation mark or another symbol (see *Glyph*).

Counter: Any interior shape of a glyph. It can be completely enclosed by strokes, such as the eye of an 'e', or have an opening to the exterior, such as the lower counter of an 'e' (see page 10).

Cursive: A style associated with handwriting, typified by slanted stems with curved tails.

Font: A collection of glyphs. The font is the delivery mechanism, represented by a digital file or a set of metal pieces, for a typeface (see *Typeface*).

Foundry: A company that designs, manufactures and/or distributes fonts.

Glyph: The graphical representation of a character. A font can contain several glyphs for each letter – a lowercase 'a' and small cap 'A', for example – and can also have alternate forms, such as single- and double-storey 'a's or an 'a' with a swash tail. In this way, a single character can be represented by different glyphs (see *Character*).

Humanist: A method of letter construction tied to handwritten strokes made with a pen or brush (see *Rational*, and also page 14).

Ligature: A single glyph made of multiple characters. The most common examples are functional (Standard), such as 'fi', which is designed to resolve excessive spacing or an unpleasant overlap of two letters. There are also ornamental (discretionary) ligatures, such as 'st', that are primarily a stylistic option.

Rational: A method of letter construction using shapes that are drawn as opposed to written (see *Humanist*, and page 15).

Sans serif: A character or typeface without serifs (see page 13).

Serif: A small mark or 'foot' at the end of a stroke. Serifs are lighter than their associated strokes (see page 12).

Slab serif: A heavy serif, typically rectangular in shape, with a blunt end. It is also a typeface classification (see page 13).

Stroke: An essential line or structural element of a glyph. The term derives from the stroke of a pen (see page 11).

Stroke contrast: The weight difference between light and heavy strokes (see page 11).

Style: A stylistic member (e.g. bold, italic, condensed) of a typeface family, typically represented by a separate font.

Substrate: The surface material on which type appears. For hundreds of years, type was printed on paper. Now it is increasingly rendered on the digital screens of desktop computers, tablets, and mobile phones.

Swash: The extension of a stroke or prominent ornamental addition to a glyph, typically used for decorative purposes.

Typeface: The design of a set of characters. In simple terms, the typeface is what you see and the font is what you use.

Weight: The thickness of a stroke. In type design, the geometry of a line (or shape) is usually described using the terminology of weight.
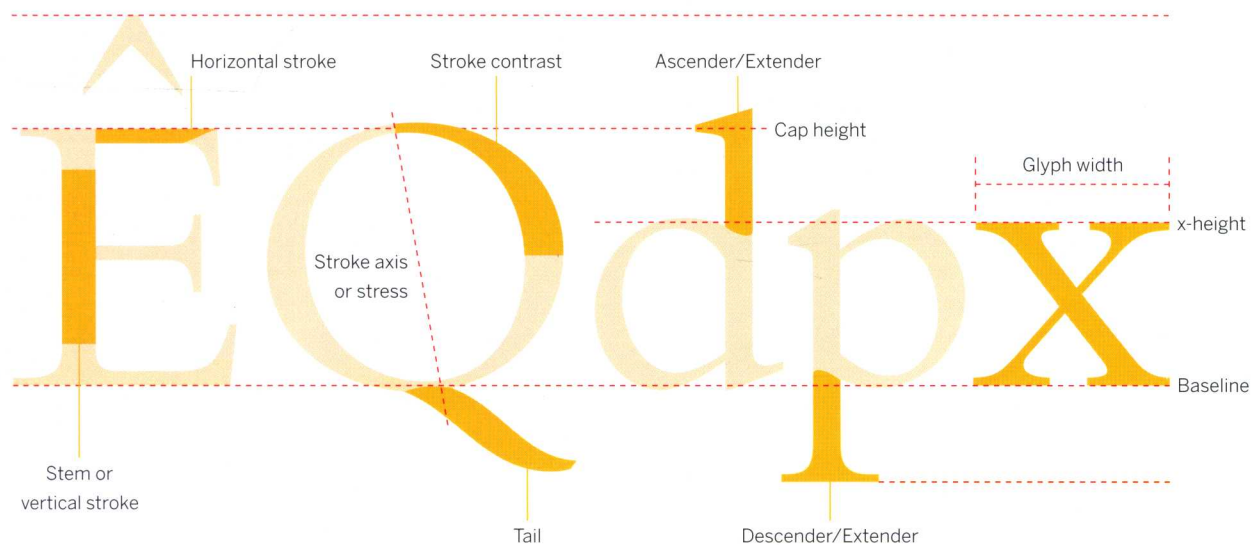
The Anatomy of Type

Apex

Bowl

Serif

ABN

Horizontal stroke or crossbar

Bracket

Diagonal stroke

Spine

Hook or arch

Terminal

Arm

Eye

Ear

Counter

Skefga

Aperture

Link

Spur

Leg

Loop

Bowl

Tail

Just like the human body, the Latin alphabet can take on a surprising range of shapes and proportions. These varieties can come from diverging historical paths, differences in language or culture, or simply the tool used to make the letters – whether it's a pen, a chisel, or a compass.

But there are enough constants in roman (upright) letterforms that a standard vocabulary can label its parts. Using terms that are familiar to everyone who knows basic human anatomy, we can describe and compare typefaces. For example, most roman-based typefaces have an uppercase 'R' with a leg. Some legs are perfectly straight, some are bowed, some have an undulating curve, and some end with a 'foot' (or serif) on the ground (baseline). Each of these characteristics can contribute to the overall appearance of a typeface – how it changes the look of a word, a paragraph or a page. And, just as importantly, they can be functional characteristics, telling us what a typeface is capable of.

There are many terms relating to type anatomy that have the same meaning across the typographic community. Chances are, when you say 'leg', or 'serif', or 'baseline', everyone will know exactly what you mean. But there are other terms, the definitions of which vary, and there are designers and writers who will use different words for the same part of a letter. For this book, we use terms that are as widespread and common as possible, and that help us identify the distinguishing parts of each typeface.

Horizontal stroke   Stroke contrast   Ascender/Extender

Cap height

Glyph width

x-height

Stroke axis or stress

Baseline

Stem or vertical stroke

Tail

Descender/Extender

# Type Classification at a Glance

The typefaces in this book are arranged by classification. This makes similar designs easier to compare and introduces a vocabulary that will not only make you sound smart at parties, but will also help you identify, select and combine typefaces.

But first, a warning: there is no universal classification system. Just like any attempt to apply a set of genres to creative work, be it music, literature or art, typeface classification is inherently problematic. After all, type is not biology – a typeface doesn't have a genetic code like plants or birds do.

That doesn't mean people haven't tried to create some order from the chaos. Scholars and typographic associations have been inventing new classification systems for nearly one hundred years. Still, all of them are fraught with contradictions and controversy. These diverse bundles of letterforms simply have too many subtle variations and too few constants. And once you think you've corralled them into clear, distinguishable groups, a new typeface or style comes along that doesn't fit in any of your bins.

Most classification systems avoid this problem by associating classifications with historical periods. While this is a good way to categorise many of the typefaces from the past, chronological methods become impractical when it comes to contemporary design. Art critics know this problem all too well: what comes after *post-modern*? *Post-post-modern*?

So, while there are the unavoidable links to history, we arranged the typefaces here into groups that are more closely tied to visual appearance. One could argue with any of these labels or sorting decisions – don't be surprised if someone at your party balks when you describe Bodoni as *Rational*, not *Modern* – but hopefully it makes the selections easier to navigate and gives a good sense of the variety of type available. Armed with this knowledge, you can more articulately describe typefaces, draw comparisons and decide which are the right ones for the job.
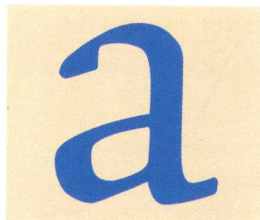
Humanist Serif
Very calligraphic, with a consistent stress angle and moderate stroke contrast. Bracketed, often asymmetrical serifs.

Transitional Serif
Slightly calligraphic, with variable stress angle and usually more stroke contrast. Bracketed serifs and bulbous terminals.

Rational Serif
A regularised structure with vertical stress and moderate to high stroke contrast. Some typefaces have thin, unbracketed serifs. Ball terminals.

Contemporary Serif
Styles vary but most have a large x-height, low stroke contrast and large chunky serifs. Very open apertures.

Inscribed/Engraved
Derived from chiselled or engraved letters. Low stroke contrast is common. Serifs can be wedge-shaped or similar to those of Humanist. Some have flared terminals.
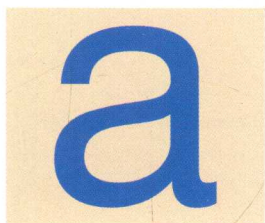
Grotesque Sans
Similar in structure to Transitional or Rational Serif typefaces. Low stroke contrast and fairly regular proportions. Round shapes are often oval, not circular.

Neo-Humanist Sans
Contemporary evolution of Humanist Sans. Larger x-height. Very open apertures. Usually less stroke contrast.

Neo-Grotesque Sans
Like Grotesque, but with more homogenous forms. Minimal stroke contrast. Closed apertures and horizontal terminals. Round shapes are more circular.

Grotesque Slab
Similar forms to Grotesque sans serifs but with heavy rectangular slab serifs. Closed apertures. Ball terminals are common.
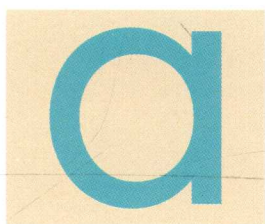
Gothic Sans
American variant of the Grotesque style, with simpler, more static forms. Usually with a large x-height, low stroke contrast, and condensed width.
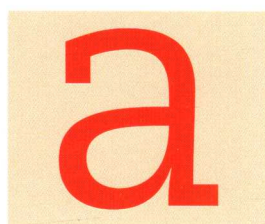
Geometric Slab
Similar forms to Geometric sans serifs but with unbracketed rectangular slab serifs about the same weight as stems.

Geometric Sans
Static and clinical. Constructed of shapes that are nearly circular or square. Minimal stroke contrast.
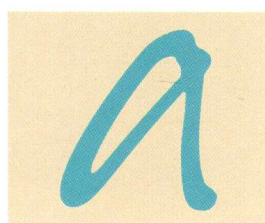
Humanist Slab
Similar forms to Humanist sans serifs but with unbracketed rectangular or wedge-shaped slab serifs.

Humanist Sans
Counterpart to Humanist Serif. Calligraphic in structure, often with higher stroke contrast than other sans serifs. Open apertures.

Script
Any typeface that emulates handwriting, whether connected cursive or informal print.