

*A Thesis submitted in partial fulfillment  
of the requirements for the degree of:  
**M.S. in Communications Design,***

*Written & Designed by Giovanni Jubert  
Received & Approved by,*

---

*Thesis Advisor — Professor Graham Hanson*

---

*Department's Chair — Professor Don Arieu*

*Pratt Institute, New York, December 2006*



☺  
*“I believe that reading is that fruitful miracle  
of communications in the midst of solitude”.*  
MARCEL PROUST







*Writing is the solid form of language. Writing in the literary sense is one of the world's most solitary crafts, but it is only pursued on the margins of highly organized and centralized societies. Writing, as Leonard Bloomfield wisely observed, is 'an outgrowth of drawing'. But in growing out of drawing it turns into something else, and has the following characteristics:*

**1. Writing is abstract.**

*Letters are things, not pictures of things, said Eric Gill*

**2. A writing system is codified.**

*It consists of repeating set of symbols sufficient to the language that it serves.*

**3. The symbols are defined in terms of something else. Language.**

**4. The system is stylistically as well as symbolically self-contained.**

*As calligraphic tradition develops, the symbols start to talk to one another, nourished by the dialogues of writers with their tools. Scripts acquire internal grammars of this kind as they mature, by being written.*

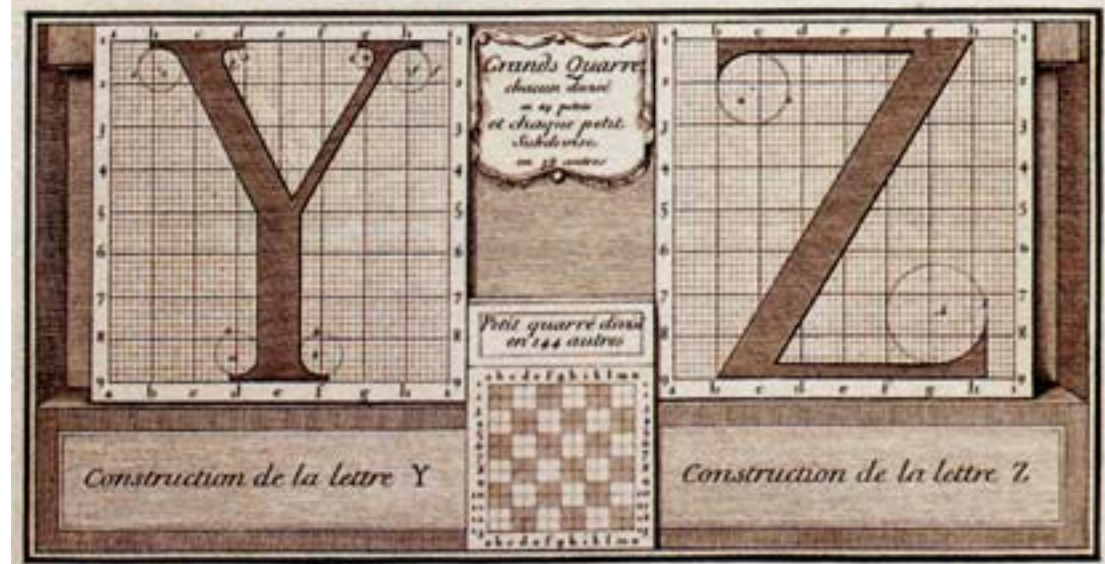
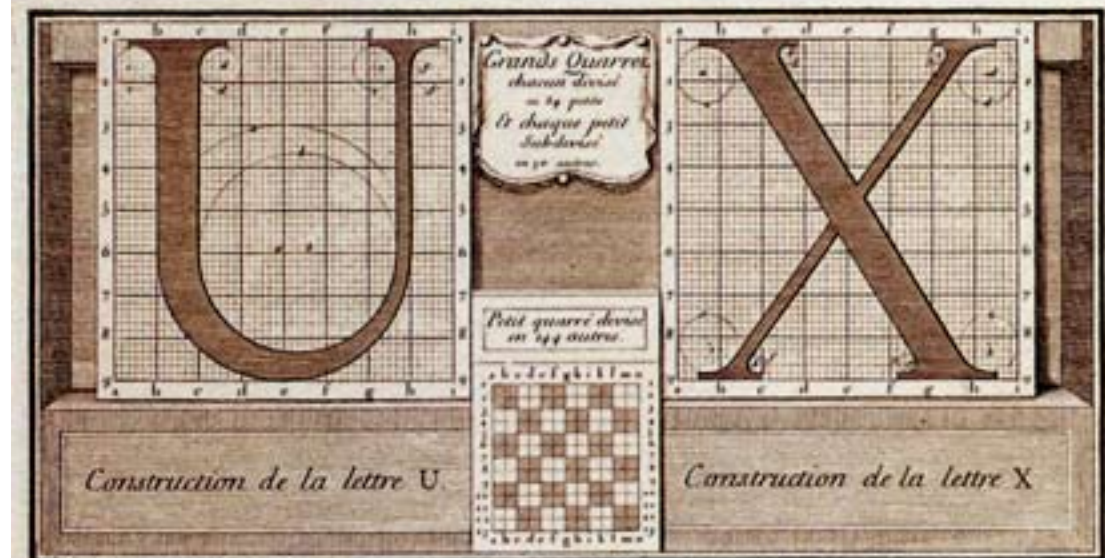
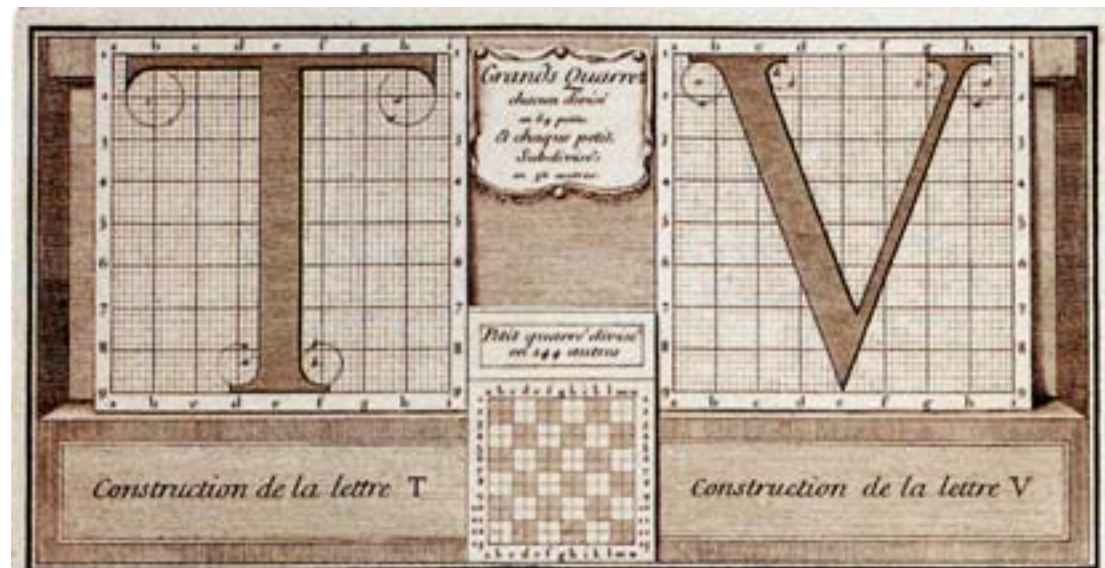
*Stylistic changes - dark to light or squarish to roundish, short-limbed to long-limbed, serif to sanserif, and so on - are part of the life history of almost every script, and over time the changes can be numerous and great. How individuals and heir societies use the system they are given is what tells us who they are.*

*The early european scripts grew by slow degrees into all the different forms of Greek and Latin script: rustic, uncials, square capitals, the Carolingian minuscule, the humanist hands of the 15th-century Italy, and the enormous take-out menu of low-priced digital type that now resides on most computers.*

*It is little short of a miracle that a set of symbols is able to last so long, unless these symbols have inherent qualities akin to the regenerative process found in living organisms. The periodic reincarnation of the classic Roman forms, from the Trajan to our own, may even evidence some of the metaphysical properties of immortality.*



Robert Bringhurst,  
from *Voices, languages and Scripts around the world.*



Good lettering demands three things:

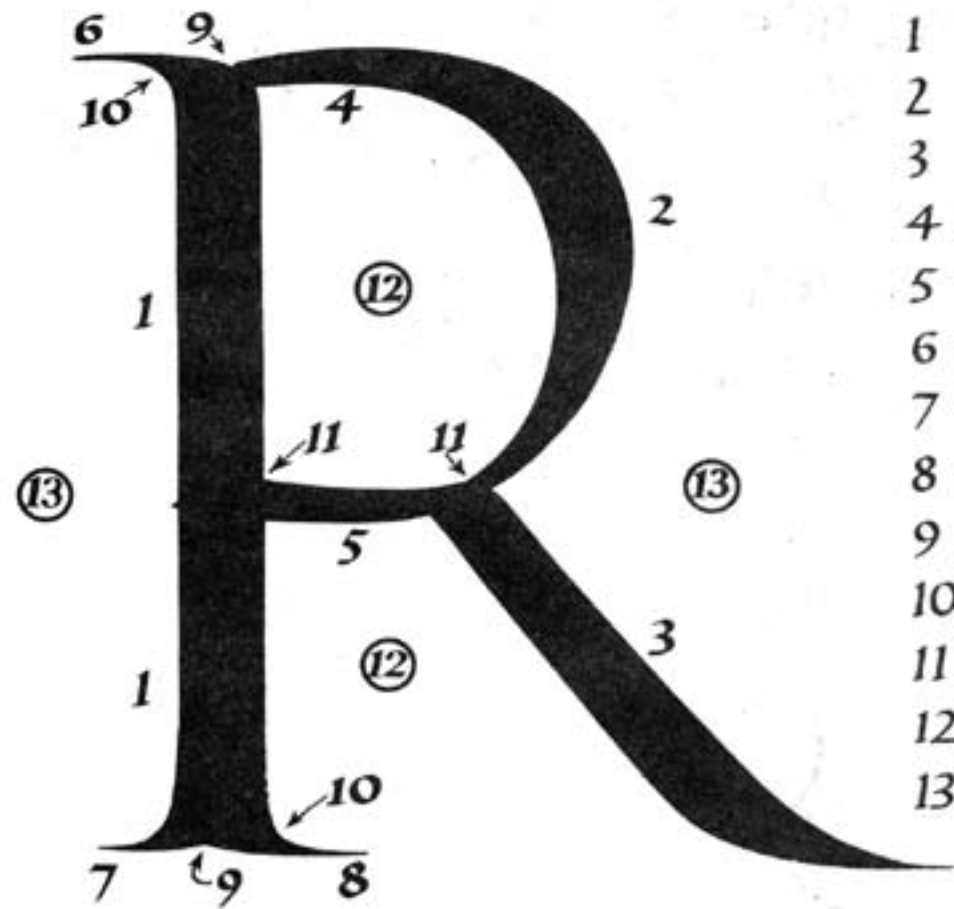
1. **Good letters.**  
A beautiful letterform must be selected which is appropriate to the purpose it is to serve and to the lettering technique to be used.
2. **Good design in all details.**  
Calling for well balanced and sensitive letter and word spacing.
3. **Good layout.**  
An harmonious and logical arrangement of lines is essential.

Good letters are rare. Most letters that we see about us are ugly, inadequate, or erratic. The reason for the shamefully low quality of most lettering on our city streets is the lack of good models. The readily available ones are often of poor quality, hastily thrown together without adequate knowledge. They are the third, fourth and fifth hand imitations which have become increasingly worse along the way, even if the original source was good.

Sources are the classic expression of our basic letter forms which are unknown to most. It is essential to know them and to be guided by them. Letters evolved historically. They must be studied to be mastered.

Perfection cannot be improved but only imitated.

Jan Tschichold from Treasury of Alphabets and Lettering



- 1 - Stem
- 2 - Lobe
- 3 - Tail
- 4 - Arm
- 5 - Mid-arm
- 6 - Head-serif
- 7 - left Foot-serif
- 8 - right Foot-serif
- 9 - Dent
- 10 - Fillet
- 11 - Juncture
- 12 - Counter
- 13 - Inter-space



- 14 - Ascender
- 15 - Spur
- 16 - Ear
- 17 - Lobe
- 18 - Link
- 19 - Arm
- 20 - Loop



- 21 - Thin Oblique
- 22 - Thick Oblique
- 23 - Crossbar
- 24 - Connective

*A good alphabet is like a harmonious group of people in which no one misbehaves.* Jan Tschichold

Letters are everywhere. Letters are the graphic representation of the sound we use to speak. Letters are the simplest more efficient shapes ever designed. Letters are the most basic form of visual communication.

In our roman languages we have twenty-six letters (English) that compose an alphabet, together with numbers and other typographic characters. Twenty-six symbols that combined together form words that combined together form sentences that combined together form paragraphs, pages, books, and languages... With thousand and thousands of different meanings.

We are exposed to letters every day at every moment. They are in our life and I don't think we could live without them. Every day when we wake up until we close our eyes we see letters that guide our way, that communicate to us what we are seeing, where we are going and what we are doing. Letters are printed on every sort of material to execute so many different means that it is just impossible to enumerate them all.

What fascinates me about letters is that they are so rooted in our mind and culture that we mostly take them for granted. Everyone knows how a letters look like and mostly everybody is able to read them. At least this is the basic of alphabetization and elementary school, to instruct people's knowledge of the communication system by learning how to read and write. Simplifying this, we could say that to learn how to read is to learn how to recognize the basic shape of letters and to learn how to write is to learn how to graphically represent those letters.

Were it gets more complicated is when we consider that letters form an alphabet, that depending of their design form fonts. A family of fonts is what we call a typeface. Here is where things start getting a little bit more complicated. We agreed that an "E" is an "E" so then what are the differences between a Baskerville "E" and a Helvetica "E"?

For a long period of time letterforms were drawn manually, with a pen or a nib in paper, or carved with a chisel on stone. In the period from the first century BC to the 15<sup>th</sup> century the evolution of letterforms was determined by the hands of the scribes that used words to pass along messages as the only means of reproductions for texts was calligraphy. The tools and materials used certainly determined how the letters looked like. At the same time a bigger demand of printed matter required faster writing and this also evolved the way letters were written and so, how they looked like.

To make a long story short, in 1440 Guttenberg invented of the removable type machine, or what most people believe is the first

printing machine that allowed for unlimited reproduction of a pages in a very fast way. From then on, letters were cast in metal and for that purpose they had to be designed equally to form what we know now as a font, this is a family of letters that share the same principles of design. From then until the mid 1900's metal type was the most efficient way to print materials until photoletering came by for a short period before the computer era.

All this printing techniques required fonts to print the messages and here is were the history of typography begins. For a long period the material mostly determined letterforms, but once achieved a certain quality in printing techniques and printing materials this allowed to create modifications and variations to letterforms in order achieve better results conceptually and aesthetically, allowing for all sorts of variations.

Nowadays in the XXI century we've walked a long path through the history of letterforms and typography and for this reason thousands of fonts are now available in digital format for us to use. The ascenders and descenders of a letter style creates the characteristic word image. They determine legibility. The thing is to use the proper font for every situation understanding the basic principles of legibility and readability. Legibility is the capacity to recognize a letterform, this meaning that no matter how abstract the shape of a letter can be designed, it still has to be recognized as the letter that is intended to be. Readability is a more complex principle, and deals with the capacity to read easily a page in set in a particular font. Readability is the legibility of texts, whereas legibility is individual character recognition.

The real function of type is to be read, and obviously there are different ways of reading. It is not the same effort we put into reading a caption, a sentence in a billboard or a mark that the attention we have to put to read a whole Shakespeare play.

In one the amount of information is limited and instantly achieved, and in the reader has to focus its attention to continuously read the story. As for so, text faces need to be very pleasant to the eye and extremely easy to recognized by the reader in order not to be distracted. The most effective the typography the less attention we should pay to it, so that we can concentrate in the task of reading.

Caption sentences, logotypes, or single words (display typography) try to capture our attention and simply express a meaning or intention, and for that reason they use expressive typography, this is particular fonts that may carry implicit connotations of meaning in its design. But to a certain point all typefaces carry a certain expression and a background, we know it or not.

It is certain that to most people a word set in Baskerville looks and talks classic and respectful as where the same word set in Helvetica or any other sans serif typefaces reads modernity and dynamism.

👉  
*One day someone will inject motion into an Open Type font,  
and each idiosyncratic character will flash to life.* Nick Shinn  
👉

### Towards Smart Typography.

Since the very beginning of facing a research process for my thesis I was convinced that my focus of attention had to be on the field of typography, which has most attracted me during the last years and to which I have devoted most of my time of study. Since I came to New York to pursue a Masters Degree in Communication Design, I have become more and more interested in this field to an extent today where it even seems to me to have become an obsession.

Last year I took some courses in calligraphy at Cooper Union and type design at The Type Directors Club in order to train my hand to better drawing, and by doing so I discovered that together with this I was also training my eye and my knowledge of history. I was fascinated. I wanted those topics to be part of my thesis. At the beginning of my research I was convinced that there had to be a path in between typography and calligraphy where I could find my way. I was, at the same time, neglecting the idea of designing a typeface, as this seemed too adventurous to me, or at least I had an enormous respect for this matter. As so, I started exploring the marriage between calligraphy and typography, two disciplines/arts that have a lot in common and that feed one another.

Concerned with the era of technology and computers we live at I kept thinking of how little do we use handwriting nowadays as opposed to how much we type words in our keyboards (computers, cellphones, PDA's, etc – "the magic button"). In class we talked about how in the 80's there was this common statement that "type would die" (the end of print era) and then Internet came by and brought a big amount of bad typography, but certainly not the end of it.

According to all this, may we think that the 21st century will see the death of Handwriting?. How is handwriting taught today? In the arms of this path I researched about joining scripts and free forms, I considered italic, gothic and black letter, thinking what are the different approaches and cultural distinctions between all those styles. What are the historical trends? How are different characters created by different techniques? What explains the different variations in the shapes of one character?

Focusing a bit more in calligraphy I explored chancery styles and the historical scribes classification. We also talked about contemporary calligraphy in modern China a very broad and visually fascinating subject with an enormous cultural depth into it, and thought in the relation of ideographic (eastern alphabets) & roman Alphabets.

More questions that came along: can letterforms become more expressive? Can roman letterforms be transformed again into symbols? Again, back into history to explore the work of John Baskerville and the evolution of Jan Tschichold's typographic views. More questions rose: how did constructivism influence today's typography. The typography after the Bauhaus. Sans serif typefaces. How and why Swiss typography. Stereotypes and ethnicity of fonts. I also considered exploring and studying ligatures, those fascinating glyphs made of two or three characters.

At a certain point, seeing all this amount of different questions and the broad differences in them, that could cover an encyclopedia of typography. The fact was that I was reading and studying a lot of history probably without focusing on what I wanted to do. In this sketches I justified to myself my passion for type, and my great rediscovering of history through type, a path that I could follow without getting bored, that could enrich my knowledge, and that was probably relating to my present concerns. Those were how to properly use type, how to create typographic solutions that could stimulate the reader, how to manage and use a font manager, digital type specimens or font books, to be more fluent through typographics.

I kept reading more books coming in my way with one that awakened up a path. Type Now, by Fred Smeijers focused in between other things on the different technological formats that typography is presented in the digital medium.

The historical evolution of typography somehow got stuck when entering the digital era. Since the 80's the computer has been embraced as the ultimate technological tool for every purpose, but not much improvement had happened in the field of typography since the migration of hand setting typography and photo-lettering composition to digital fonts. In fact we could even say that **a certain regression had happened as we assisted to a lost in the care to typographical detail and a homogenized use of plain type**, that brought a big bunch of bad typography to everyday's life and made it common.

With the turning of the century, we finally happened to start embracing a new technology that might solve those issues. Open Type, a typographical file format technology developed by Adobe & Microsoft brings us closer to what we could call smarter typography, and that will resolve the existing limitations of Type 1 Postscript fonts and True Type ones, each one being the native formats for Mac and PC respectively.

**Open Type** is based on Unicode which allows for **advance typographic features that are needed for basic support of certain languages, mostly western and East Asian languages**, providing support to such features as alternate character forms, discretionary ligatures, variant figures and small caps.

**Users of non-latin scripts are able to have their native scripts represented properly on the computer. Languages with flowing scripts (such as Arabic and Devanagari) and ideographic glyphs (such as the Chinese-derived languages of East Asia) are much better supported by OpenType, with its many features for proper positioning, reading flow, and glyph substitution.**

Opentype can unify in **one only file** all the different variations and alternates that were previously called expert sets, as it allows up to **65.000 thousand glyphs** in one file, certainly more extent than the 250 of the previous file formats. Plus, the file **includes additional programming data in its core will make fonts to be smarter and react to certain parameters**. At this point and as seen in certain examples already available on the market, Open Type fonts may allow for really creative solutions and surprising reactions that will come from the code implied in the font, and that will certainly make this fonts smarter and guide us back to a more advanced typography.

**Maybe there has been a regression in the use of typography since the digital era, but this failure in typographic refinement in the printed texts is due to the democratization of the tool that the computer represents.** In a way, it is now possible to anyone to write or compose a text, with any simple software, and choosing from the somehow available fonts installed in their computer and create a document, print it, publish it online or send to distribution without even knowing anything about typographic style.

This is in contrast with the history of human kind, and the tradition of the past last 12 centuries. Since the scribes to the printer, during more than 1000 years the printed word was composed and arranged by an expert. Someone that was specifically trained for his job, and that with the proper education, time and experience could achieve the maximum richness out a text, making it easy to read, fluent and attractive at the same time. The Scribe, the Printer, the typographer, the graphic Designer.

Nowadays typography stays like something everyone guesses about, something that a few care really about, normally typographers, type designers, and somehow lightly designers.

Most people lack the proper education in typography, a skill needed to clarify the important messages over the rest in a world of communication overload with information. Typography is the grammar of pretend communications. Typography is the first language that designers need to be able to speak.

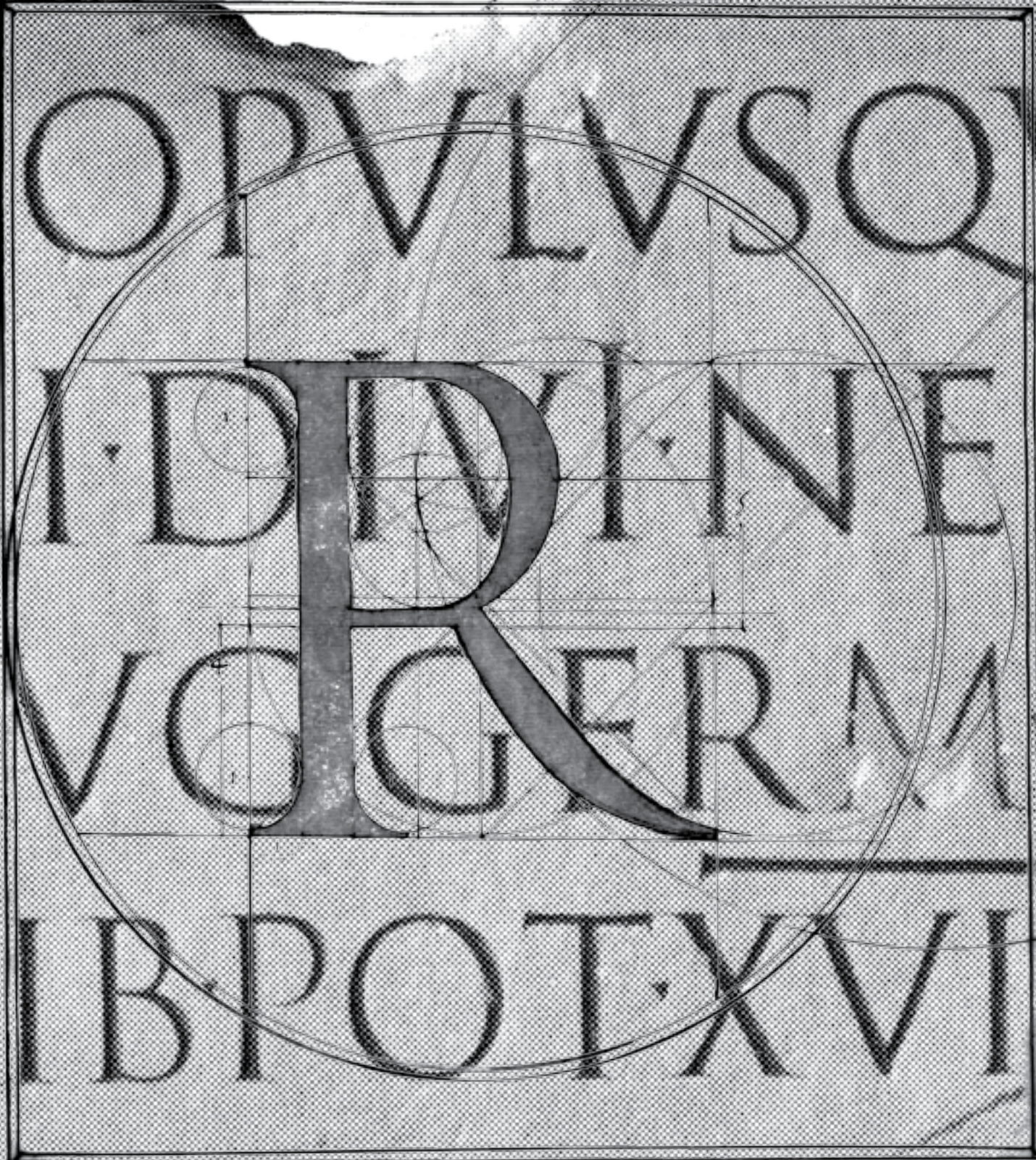
For this, we have to become familiar with the history of calligraphy and typography through all those centuries to understand how to use this set of symbols properly. And in doing so, we will have to understand how its been the tool used in every period, the technic of using those tools, that has determined how our alphabets look like today.

👉  
*Nearly every type of letter with which we are familiar is derived from Roman Capitals, and has come to us through the medium, or been modified by the influence, of the pen.*  
Edward Johnston. Writing and Illuminating, 1906

👉  
*Comparison is the basis of appreciation, and a study of the work of the past is essential for the purpose of establishing one's own standards of judgment. It also provides the inspiration that all designers need, to be absorbed, digested and then transmuted into achievement.*  
Robin Kinross in Modern Typography

👉  
*The historical development of type design has been inseparable from developments of the tools, equipment and materials used to make and print the type.* David Jury in About Face.  
👉

OPVIVVSQVE·ROMANV  
I·DIVINERVAE·F·NERV  
VGGERM·DACICO·PON  
B·POT·XVII·IMP·VICOS·V  
NDVM·QVANTAE·ALTITVDI  
TAN·IBVS·SITE·EGEST



ϣ Ϟ ϗ Ϙ ϙ Ϛ ϛ Ϝ ϝ Ϟ ϟ Ϡ ϡ Ϣ ϣ Ϥ ϥ Ϧ ϧ Ϩ ϩ Ϫ ϫ Ϭ ϭ Ϯ ϯ ϰ ϱ ϲ ϳ ϴ ϵ ϶ Ϸ ϸ Ϲ Ϻ ϻ ϼ Ͻ Ͼ Ͽ Ͽ

1. Phoenician alphabet (c.1000 B.C.) reads from right to left; the small letters indicate the sounds they represented.

Α Β Γ Δ Ε Ζ Η Θ Ι Κ Λ Μ Ν Ξ Ο Π Ρ Σ Τ Υ Φ Χ Ψ Ω

2. Greek alphabet (c.403 B.C.) originally adapted from the Phoenicians c.900 B.C.

A B C D E F G H I K L M N O P Q R S T V X Y Z

3. Roman alphabet (403 B.C.) adapted from the Greek.

A I Q I L V M I N P R A E C E P S R E M I G I I S S V B I G I T S I

4. Square capitals (fourth century) written with a reed pen.

FELICES OPERVM QVINIAM COEVM MOVELAPET

5. Rustica (fifth century) written more freely with reed pen. The dots represent the beginning of punctuation.

INSTAURATIO · NULLA TRANSLATIO · NON ARGUMENTUM · CER

6. Half-uncials (seventh century) written with reed pen. Slashes indicate punctuation.

búab quad uúáitent · ersie thar tho mánata ·

7. Carolingian minuscule (ninth century) written with reed pen.

Seniam nutiga dans pecta in secula seculorum antpph

8. Gothic letter (fifteenth century German) written with reed pen.

uid loquar de secl hominibz · tū aphus paulus · vas electōnīs · qui de

9. Printed line from Gutenberg's Bible c.1455. The design was derived from written Gothic (Figure 8).

igitur habet potestatem · cesse est eum qui hit

10. Humanistic writing (fifteenth century Italian) based on the Carolingian minuscule (Figure 7).

Quidā eius libros nō ipsius esse sed Dionysii & Zophiri lophoniorū tradunt: qui iocādit

11. Printed line of type, Venice, 1475. The design by Nicholas Jensen was derived from Humanistic writing (Figure 10).

*P abula parua legens, nidisq; loquaibus esats, E t nunc porticibus uacuis, nu*

12. Printed line of the first italic type. Also based on Humanistic writing (Figure 10).

### THE MANUSCRIPT LETTERFORMS

From the Roman period to the Renaissance, the Latin Alphabet was, with few exceptions limited to styles that could be formed quickly and easily; Basically everything had to be written by hand.



### INSCRIPTIONAL LETTERS

The Latin alphabet, adopted from the Greek by the Romans, had been developing for centuries before being inscribed in the Trajan Column, in Rome in 114 AD. Incised in stone, these Trajan Capitals have served, ever since, as a permanent criterion for lettering. For twenty centuries, the evolving Latin alphabet was periodically formalized by a renewed study of it. Today, most contemporary styles are strongly influenced, in structure or proportion, by these early inscriptional letters.

The Trajan Capitals were not pen-written forms. First sketched on stone with a broad brush, the letters were incised with a chisel and mallet. The resulting inscription was highly refined, with details that reflected the tools and materials of the stone-cutter rather than those of the pen-writer. The spurred ending of strokes, the serifs, were embellishment marks of the stone-cutter that were later recognized as improvers of legibility and adopted in broad-pen writing.

Although they were many tools that could have been used, the broad pen, made of reed or quill was the traditional choice. It produces with a minimum of strokes, letters that have good legibility and a pleasing distribution of thick and thin forms. By altering letter proportions and pen position, the scribes were capable of producing a great variety of styles, each of which contributed to the evolutionary development of the alphabet. It is important to recognize that during these fifteen centuries of development every style of writing was a reflection of the concurrent cultural atmosphere and technology, and also, that the least successful of styles often provided unique ideas for later significant developments.

### THE ROMAN PERIOD, 1-800 AD

Roman inscriptional lettering resulted in a current pen-written version called square capitals. By the fourth century, the more fluid version rustic capitals was beginning to move to a less formal uncial style that was inspired by current handwriting. For ease in writing, some of the uncial letters had been simplified to the point that ascenders and descenders were needed for proper legibility. Soon came the even more informal half-uncial style. With almost all forms simplified, and with prominent ascenders and descenders, half-uncials suggest the beginning of our small letters, minuscules.

After the fall of Rome in the fifth century, the art of writing was kept in cloister and monasteries until order was restored through the establishment of smaller nations throughout Europe. Monks and scholars then carried their knowledge of writing to these nations, where regional influences and insularity served in the development of many national hands. Most of those writing systems did not represent an evolutionary development of the alphabet.

### THE CAROLINGIAN REFORM, 800-1200

The reign of Charlemagne, beginning in the latter part of the eighth century, was marked by a revival of learning that resulted in the reform of writing, with a serious attempt at establishing a standard European style. Charlemagne was outraged when told that Bibles used in churches and monasteries around his kingdom contained many errors. He persuaded Alcuin of York, to relocate to Tours and gave him complete authority to make the necessary text corrections and supervise his monk-copyists.

Inspired by Roman inscriptions and manuscripts, half-uncial national hands underwent a re-working (redesign) that resulted in the formalization of the minuscules, or small letters. This script became known as Carolingian, was a simple, fluid to write and easy to read script. Alcuin researched for authenticity and his revisions became the standard of correctness. He also used a new standard for page design. Each section started with a capital letter and each sentence ended with a dot. Although Capitals were often used on a page of minuscules, they were purely decorative, and did not necessarily signify proper nouns, sentence beginnings, or other systematic reasons for the capitalizing of words.

## carolingian minuscules CHARLE MAGNE scripts revision

### Alcuin de York relocates at Tour 800 - 1200 The first type design



Silentium\* Pro by Jovica Veljovic  
Based on 10th century Carolingian scripts, Silentium Pro sparkles with a quiet but ebullient sense of the human hand. As a multi-featured Adobe Originals OpenType family, Silentium includes myriad alternate forms, ligatures, and titling characters that add an air of tasteful liveliness to contemporary graphic design and typography. Designed by Yugoslavian calligrapher and type designer Jovica Veljovic, Silentium works well in both display sizes and text setting as small as 8 points. Silentium is the Latin word for silence, a discipline commonly practiced in the medieval European monasteries and court scriptoria where the Carolingian script flourished.

est mandatum magnum in lege. dicitur in hīs. diliges dñm  
dñm tuum ex toto corde tuo. et in tota anima tua. et in to-  
tamente tua. hoc est maximum & primum mandatum. secun-  
dum autem. simile est huic. diliges proximum tuum. sicut  
te ipsum. In his duobus mandatis. uniuersa dependet  
et prophetae.  
Congregatis autem pharisaeis. interrogauit eos ih̄s dicens.  
quid uobis uideatur de hoc uirum filius est. dicunt ei. dauid;  
ait illis. quomodo ergo dauid in sp̄u uocauit eum dñm di-  
cens. dixit dñs dñi omnes sedes dexterae sineis. donec ponam  
inimicos tuos sub pedibus tuorum.  
Sic ergo dauid uocauit eum dñm. quomodo filius uisus est. et ne-  
mo poterat respondere uerbum. neque ausus fuit quisquam  
ex illis eum amplius interrogare.  
Tunc ih̄s locutus est ad turbas. et ad discipulos suos dicens.  
super cathedram moysi. sederunt scribae & pharisaei. Omnia  
ergo quaecumque dixerint uobis. seruate & facite. secundum  
opera uero eorum. nolite facere. dicunt enim & non faciunt.  
Alligant autem onera grauiam et hypocrisis. et hypo-  
nunt in humeros hominum. digito autem suo nolunt ea  
mouere.  
Omnia uero opera sua faciunt. ut uideantur ab hominibus.  
dilatant enim filactoria sua. et magnificant fimbrias.  
Amant autem primosirecubitus in caenis. et primas sca-  
thedras in synagogis. et salutationes in foro. et uocari

### Gothic Writing, 1200-1450 213

After three centuries of dominant use throughout Europe, the round and wide Carolingian hand slowly gave way to styles that gradually become more vertical and more and more compressed. Scribes began to pack as many letters as they could into a line, until finally, at least in northern Europe, all forms were strightsided, with pointed tops and bottoms. Different geographic areas produced what is known as Blackletter or Gothic scripts. Less legible than the round carolingian hand, the rich black texture of a gothic page was very impressive. During the development of Gothic writing, the practice of using capitals and small letters as a dual alphabet system become firmly established.

### Humanist Writing at Venice, 1200-1450 213

While Gothic style was reaching its maximum throughout of the rest of the century, Italians were starting to revive the early roman culture. The Renaissance, created a new interest in the Roman inscriptional capitals. Having the trajan as a model for capitals they adopted the carolingian minuscules as a style that more nearly resembled the shapes and proportions of the roman capitals. Both styles had to be re-worked (redesinged) to work well together as a dual aplhabet. Basically the stone-incised shapes of the capitals were translated into pen shaped forms, and the carolingian minucules adaped to match the features of the trajan translation.

Humanistic writing became the formal culmination of fifteen centuries of development of the latin alphabet in dual system alphabet. Capitals & lowercase. In fact, except for minor changes, the Humanistic letter forms remain our standard today. Humanist script of the early 1400s evolved into clear and ultra-legible, separated letters.

The demand for more books for education forced the commercial scribes to begin writing in the humanist bookhand faster. The upright roundness of Humanist hand began to take cursive attributes, a forward slant and an elliptical mother shape and minimal pen lifts. The need of speed made Humanist bookhand evolve into Humanist cursive or Italic.

At this time the increasingly demand for books was asking for new means of reproduction. Until 1500s all books were written by hand. As humanist minuscule and cursive italic were traveling northward it meet a goldsmith from Mainz, Johannes Gutenberg, who appreciated local manuscripts written in Gothic and set upon finding a way to reproduce them mechanically. He applied his metalsmithing knowledge of casting and punch-cutting to the reproduction of identical letters.

Johannes Gutenberg (1389-1468), mechanize book production by casting individual letters in metal, which could be assembled into words, printed from, and then re-assembled into different words and printed from again, and in doing so he changed the world. His experiments led to the production of his famous 42-line Bible in 1455, the earliest book printed in the western world to have survived. 1286 pages issued in two volumes, with an estimate of 200 copies printed in gothic writing, textura or blackletter, the style Gutenberg was most familiar with.

## Gothic Black Letter Rudolph Koch Buttemberg's Germany Beer und cartofen salad ein franktur gestaltung bratbust tavern 123



Wilhelm Klingenspor Gotisch™ by Rudolf Koch  
Wilhelm Klingenspor Gotisch™ was designed in 1925 by Rudolf Koch for the Klingenspor Bros. Foundry in Offenbach, Germany. Koch, who was chief designer at Klingenspor, named the font in honor of the foundry's co-owner. Koch was a remarkable calligrapher, artist, and designer. This face, admired and emulated by blackletter aficionados around the world, is probably the finest existing example of a textura typeface. Textura (also known as blackletter or gothic) is the style of writing developed in Northern Europe in the middle ages. The use of space in blackletter is quite different from what we know about Roman letterforms. The lowercase forms in such writing and typefaces must be evenly textured with black and white elements, like the texture of weaving or fabric. Gothic capital letters can provide either an integration of the even texture (by the use of ornamental forms) or, if they are wide and open and filled with white, they provide bright spots of visual emphasis. Both the caps and the lowercase in Wilhelm Klingenspor Gotisch are handsome, vigorous, and masterful; and the spacing is almost as good as Gutenberg's. Use this sparkling gothic gem in sizes 14 point or larger for Christmas greetings, certificates, wedding invitations, advertising, or music collateral pieces.

egipti de manu ymahelitar: a qbz  
pdudus erat .fuitq; dñs cū eo: et erat  
uir i cūdis prosp̄ agens. Habitauitq;  
in domo dñi sui: qui optime nouerat  
dñm esse cū eo: et oīa que gereret ab eo  
dirigi i manu illi⁹. Inuenitq; ioseph  
graciā coram dño suo: ⁊ ministrabat  
ei. A quo p̄positus omnibz guberna-  
bat credita sibi domū: ⁊ uniuersa que  
ei tradita fuerāt. Benedixitq; dñs do-  
mū egiptij p̄ter ioseph: ⁊ multiplicauit  
tam i edibus q̄ in agris eundam  
a⁹ substantiā . Nec quicq; aliud noue-  
rat: nisi panē quo uescebat. Erat autē  
ioseph pulcra facie: et decorus aspectu.  
Post multos itaq; dies . iniecit dñs  
oculos suos in ioseph: et ait . Domni  
mecū . Qui nequamq; acquiescens op̄i  
nephario: dixit ad eā . Ecce dñs meus  
omnibz michi traditis . ignorat qd  
habeat in domo sua: nec quicq; ē qd  
non sit in mea potestate . uel nō tradi-  
derit michi : preter te que uxor eius es .  
Quō ergo possū h̄c malū facē: et pecca-  
re i dñm meū? Quiuiscunodi ubi per  
singulos dies loquebat: et mulier no-  
lesta erat adolescenti : et ille recusabat  
stuprū . Accidit autē quadā die ut in-  
traret ioseph domū: ⁊ op̄is quippiā  
absq; arbitris faceret: ⁊ illa apphensa  
lacinia uestimenti eius dicit . Domni  
mecū . Qui relicto i manu eius pallio .  
fugit: et egressus ē foras . Cūq; uidisset  
mulier uestem in manibz suis: ⁊ se esse  
deceptam: uocauit ad se hoīes dom⁹  
sue: et ait ad eos . Ecce introduxit uirū  
hebreū: ut illuderet nobis . Ingressus  
est ad me: ut uideret meū . Cūq; ego  
succlamassen: ⁊ audisset uocem meā:  
reliquit palliū qd tenebam: ⁊ fugit fo-  
ras . In argumentū ergo fidei . retentiū  
palliū ostendit marico reuerenti domū .

et ait . Ingressus ē ad me secu⁹ hebreus .  
quē adduxisti: ut illuderet michi . Cūq;  
audisset me clamare : reliquit palliū  
qd tenebam: ⁊ fugit foras . Hīs audi-  
tis dñs: ⁊ nimium credulus uerbis con-  
iugis . iratus est valde: tradiditq; io-  
seph in carcerem ubi uindi regis custo-  
diebant: ⁊ erat ibi clausus . Fuit autē  
dñs cū ioseph et miseratus est illi⁹: ⁊ de-  
dit ei gradiā in cōsp̄edu principis car-  
ceris . Qui tradidit in manu illi⁹ uni-  
uersos uindos qui i custodia tenebāt:  
et quidq; fiebat . sub ip̄o erat: nec no-  
uerat aliquid . cūdis ei creditis . Dñs  
enī erat cū illo: ⁊ oīa op̄a ei⁹ dirigebat .  
**N**īs itaq; gestis: accidit ut ⁊  
peccaret duo eunuchi . pincerna  
regis egipti et pictor . dño suo . Iratus  
q; contra eos pharao . nam alter pin-  
cernis p̄erat . alter pictoribz: misit eos  
in carcerem principis militū . in quo  
erat uindus ⁊ ioseph . At custos carce-  
ris tradidit eos ioseph: q̄ et ministra-  
bat eis . Aliquotulū t̄pis fluxerat: et illi  
in custodia tenebant . Vidēntq; ambo  
somnia nocte una: iuxta interpretatio-  
nem congruā sibi . Ad quos cū intro-  
isset ioseph mane ⁊ uidisset eos tristes:  
salsicatar⁹ ē dicens . Cur tristes ē hodie  
solito facies uestre? Qui responderūt .  
Somnia uidim⁹: et non est qui inter-  
pretetur nobis . Dixitq; ad eos ioseph .  
Nūquid nō dei ē interpretatio? Referte  
michi quid uideritis . Narrauit prior  
p̄positus pincernar . somniū suū . Vi-  
debam coram me uitan in qua erant  
tres pagines uescere paulatim i gen-  
mas: ⁊ post flores uuas maturescere:  
calicamq; pharaonis in manu mea .  
Tuli ergo uuas ⁊ egressi i calicem quē  
tenebam: ⁊ tradidi uiculiū pharaoni .  
Respondit ioseph . Nec est interpretaō

## HUMANIST WRITING AT VENICE, 1200-1450 AD

In 1458, Charles VII sent the Frenchman Nicolas Jenson to learn the craft of movable type in Mainz, the city where Gutenberg was working. Jenson was supposed to return to France with his newly learned skills, but instead he traveled to Italy, as did other itinerant printers of the time. From 1468 on, he was in Venice, where he flourished as a punchcutter, printer and publisher. He was probably the first non-German printer of movable type, and he produced about 150 editions. Though his punches have vanished, his books have not, and those produced from about 1470 until his death in 1480 have served as a source of inspiration for type designers over centuries.

The new printing technique quickly spread through Europe. By 1475 by William Caxton printed the first book in English and printing had already reached Italy, Switzerland, France, the Netherlands, Belgium, Hungary, Poland and Spain. Venice was the largest and most sophisticated trading center in the World. **Humanist minuscule** (descending from carolingian) became the model for **Venetian Type**. Because most of the German printers settled in Venice after the sack of Mainz, all Italian typography of the 15th century was referred a Venetian. The types of **Nicolas Jenson** were the best example, as they adhere to the shapes of the slanted broad pen, and their skeletal structures and proportions are derived from the Roman inscriptional capitals. These proportions are the result of basing all letter components on the circle, square and triangle. **Jenson** made the Humanist minuscule even more legible by opening up the counterspace within the letters and **completely separating each letter** from its neighbor, creating the **roman lowercase**. Notable in almost all Jensonian Romans is the angled crossbar on the lowercase e, which is known as the "Venetian Oldstyle e."

**Humanist cursive** also made a transition into type. **Aldus Manutius** thought of **printing small, cheap books** on scholarly topics. To do this he needed a more compact, but still legible type. **Francesco Griffo**, a talented type cutter, based **the first Italic typeface** on the Humanist cursive written in the papal **Chancery**. **Ludovico degli Arrighi**, a distinguished scribe in the Chancery office, **wrote the first instructional writing manual** for the Italic style in 1522 called *La Operina*. This little book gives advice on matters of spacing, joining, slant and layout. In 1954 this book was translated to English by Howard Benson and published as **The First Writing Book**.

Many other printed handwriting manuals followed. Tagliente, Palatino, etc... The most important of this was **Giovanni Francesco Cresci** of Milan, The first of his six manuals was published in 1560. In it Cresci complained that Arrighi's letters were old-fashioned, too slow, too spiky, too upright and angular and too difficult to join. Those resulted from the tool Arrighi used, a fairly wide, broad-edge quill. In contrast, Cresci preferred an almost pointed quill that was very flexible. Cresci had a passion for handwriting and was determined to reform Arrighi's letter-

forms, writing style and tools, opening the door to **Copperplate style**. He was the bridge from Renaissance Italic to baroque Copperplate. From the mid 1500's letters could be engraved into a copper plate with a pointed steel tool (burin), achieving clean thin lines and line edges. Line thickness was achieved by pushing the burin deeper into metal. This process made a shift in letter-making rationale. Instead of the letters being shaped by the writing tool, the hand-letter was being modeled by the imitation of what the engraving tool could do. To do so, the quill had to be cut to a sharp, flexible point. This point would allow the pen to create thin and thick lines by pressure and release.

# VENICE

## First books printed Nicholas Jenson Arrighi's italics chancery

*Spaggethi al pesto, con molto basilico & Parma*

REVOLUTION WILL NOT BE TELEVISED ON CNN OR BBC-2

GIOVANNI FRANCESCO GRIFFO WRITING COPPERPLATE



Adobe Jenson™ Pro by Robert Slimbach

In the 1990s, Robert Slimbach designed his contemporary interpretation, Adobe Jenson™. It was first released by Adobe in 1996, and re-released in 2000 as a full-featured OpenType font with extended language support and many typographic refinements. Adobe Jenson provides flexibility for a complete range of text and display composition; it has huge character sets in specially designed optical sizes for captions, text, subheads, and display. The weight range includes light, regular, semibold, and bold. Jenson did not design an italic type to accompany his roman, so Slimbach used the italic types cut by Ludovico degli Arrighi in 1524-27 as his models for the italics in Adobe Jenson.



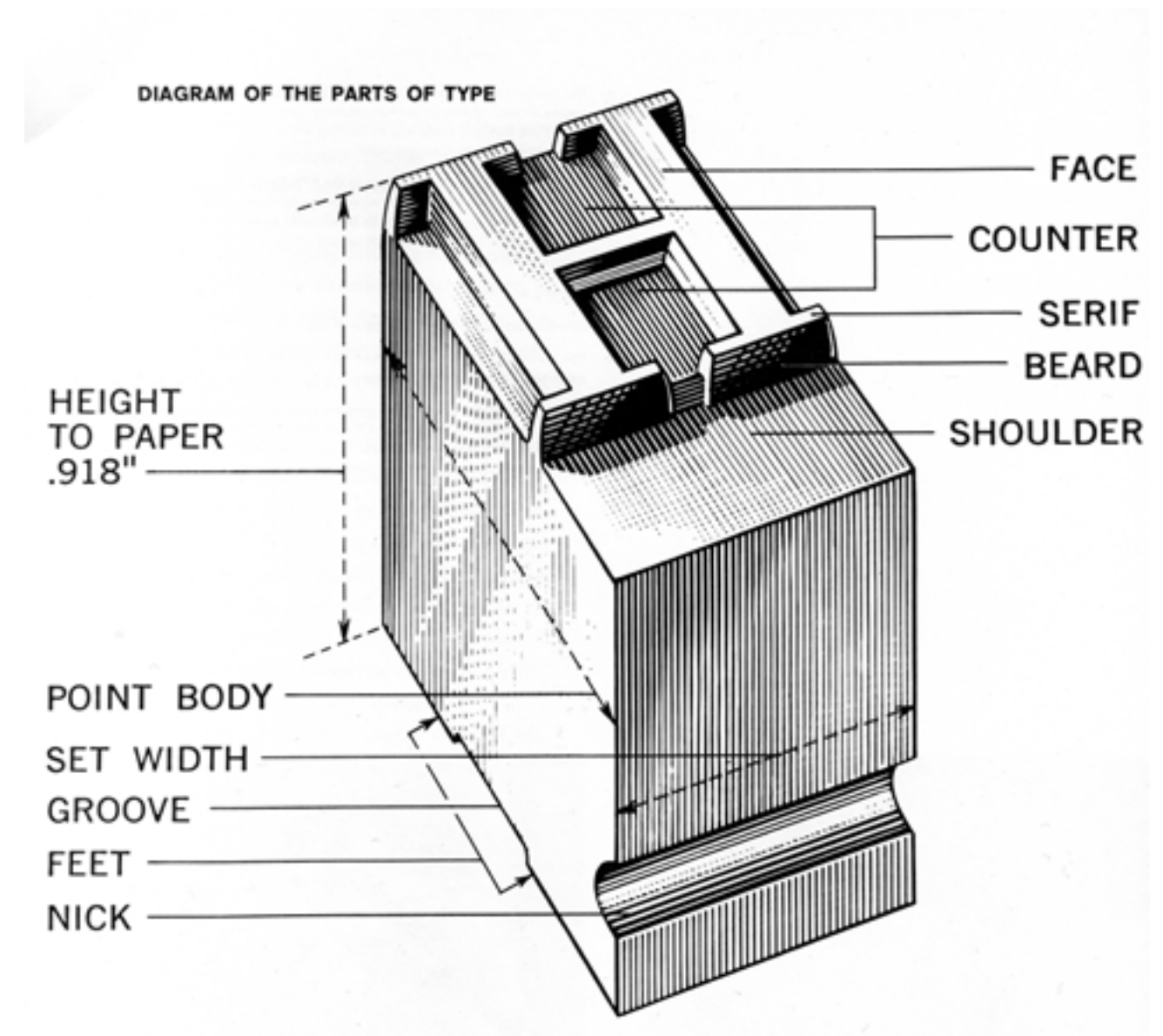
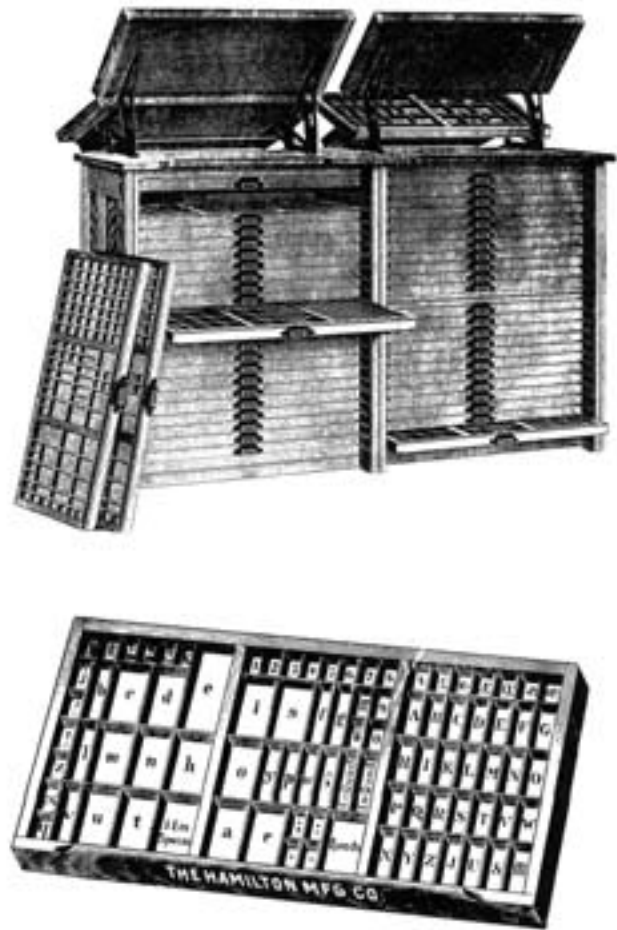
OLD TYPOGRAPHY - BOOK TYPOGRAPHY

*The typography of the first period (1440-1850)  
is limited almost entirely to the book.*

Jan Tschichold

Printers soon, instead of attempting to imitate the esthetics of manuscript writing, began to recognize and develop the esthetics of type-cutting and printing. From this time forward, the alphabet would develop within the terms of typography.

As better printing methods and materials became available (such as improvements in paper and ink), new typefaces would be designed to take advantage of them. Printers would not overlook the developments and innovations in current and formal writing, but only those that could be successfully applied to their craft would be adopted. The broad edge pen would continue to be the basic tool for letterform design, but it would be used as a tool for carefully and slowly sketching rather than for rapid writing. Also, because of the naturally held tool for writing produced diagonally stressed thick and thin lines that were hard to reproduce in metal type-cutting, there would be a natural trend towards more upright shapes and geometric structures.



## SIXTEENTH CENTURY - French Old Style - Garamond

The term, “Old Style”, denotes a structural and proportioning system that is based on the shapes made by the broad pen when held at a natural writing slant. This system was the basis for all type designs until the middle of the eighteenth century.

France was romanizing its culture, and after the sack of Rome in 1527, emerged as the European center of knowledge. Many typefaces were designed following the Venetian Old Style. Towards the middle of the century a modification in the capital letters began to suggest that a new structural system was developing. This modification consisted of the vertical stressing of round shapes which was accomplished by turning the nib of the broad edge pen to a more flat relationship with the paper, producing letters that were easier to model in metal. The types of Claude Garamond are probably the best of French examples.

Claude Garamond (ca. 1480-1561) cut types for the Parisian scholar-printer Robert Estienne in the first part of the sixteenth century, basing his romans on the types cut by Francesco Griffo for Venetian printer Aldus Manutius in 1495. Garamond refined his romans in later versions, adding his own concepts as he developed his skills as a punchcutter. After his death in 1561, the Garamond punches made their way to the printing office of Christoph Plantin in Antwerp, where they were used by Plantin for many decades, and still exist in the Plantin-Moretus museum. Other Garamond punches went to the Frankfurt foundry of Egenolff-Berner, who issued a specimen in 1592 that became an important source of information about the Garamond types for later scholars and designers. In 1621, sixty years after Garamond’s death, the French printer Jean Jannon (1580-1635) issued a specimen of typefaces that had some characteristics similar to the Garamond designs, though his letters were more asymmetrical and irregular in slope and axis. Jannon’s types disappeared from use for about two hundred years, but were re-discovered in the French national printing office in 1825, when they were wrongly attributed to Claude Garamond. Their true origin was not to be revealed until the 1927 research of Beatrice Warde. In the early 1900s, Jannon’s types were used to print a history of printing in France, which brought new attention to French typography and the “Garamond” types. This sparked the beginning of modern revivals; some based on the mistaken model from Jannon’s types, and others on the original Garamond types. Italics for Garamond fonts have sometimes been based on those cut by Robert Granjon (1513-1589), who worked for Plantin and whose types are also on the Egenolff-Berner specimen. There are now available several versions of the Garamond typefaces. Though they vary in design and model of origin, they are all considered to be distinctive representations of French Renaissance style; easily recognizable by their elegance and readability.

# Paris 1523 FRANCE Claude Garamond

The history of books  
Pommes de terre de Monein  
Los origenes de la escritura mecánica  
*Habia una vez un circo that was up side down*

Y NOS DIERON LA UNA Y LAS DOS Y LAS TRES, LAS 4 LAS 5



### Garamond Premier Pro, Robert Slimbach

In 1988 Robert Slimbach visited the Plantin-Moretus Museum in Antwerp, Belgium, to study their collection of Claude Garamond’s metal punches and type designs. Garamond produced a refined array of book types in the mid-1500s that combined an unprecedented degree of balance and elegance, and stand as a pinnacle of beauty and practicality in typefounding. While fine-tuning Adobe Garamond (released in 1989) as a useful design suited to modern publishing, Slimbach started planning an entirely new interpretation of Garamond’s designs based on the large range of unique sizes he had seen at the Plantin-Moretus, and on the comparable italics cut by Robert Granjon, Garamond’s contemporary. By modeling Garamond Premier Pro on these hand-cut type sizes, Slimbach has retained the varied optical size characteristics and freshness of the original designs, while creating a practical 21st-century type family.



## SEVENTEENTH CENTURY

### Dutch & English Old Style - Plantin & Caslon

The intellectual spirit and activity of the Renaissance continued to move northwards, and the Netherland became the center of scholarship and printing during the 17th. The elegant French manner gave way to a plainness and sturdiness that was characteristically Dutch. Plantin, the man, was a well-known Dutch printer of the 16th century whose font foundry turned out traditional Old Face fonts and the italic cut of Garamond. Plantin is indeed a remarkably accommodating type face. The firm modelling of the strokes and the serifs in the letters make the mass appearance stronger than usual; the compact structure of the letters, without loss of size makes Plantin one of the economical faces in use. The seventeenth century Dutch old faces have a distinct character of their own, and were the source for eighteenth century English type designs, such as Caslon. Christoffel Van Dijck was one of the great Dutch typefounders, although this face, which bears his name, may not have been cut by him, it is nevertheless representative of the best designs from that period. The Van Dijck italic, for which original punches survive, is almost certainly the work of Van Dijck.

Dutch types became the model of England's first important punch-cutter, William Caslon. He did not alter the shape of the Dutch letterforms, but his excellent craftsmanship resulted in a typeface very highly regarded. In the attempt to achieve great precision in the structuring and detailing of the forms, Dutch-English Old Style lost the hand-crafted qualities of humanistic typefaces and began to take on a machined look that predicted the future direction of Typography.

The Englishman William Caslon punched many roman, italic, and non-Latin typefaces from 1720 until his death in 1766. At that time most types were being imported to England from Dutch sources, so Caslon was influenced by the characteristics of Dutch types. He did, however, achieve a level of craft that enabled his recognition as the first great English punchcutter. Caslon's roman became so popular that it was known as the script of kings, although on the other side of the political spectrum (and the ocean), the Americans used it for their Declaration of Independence in 1776. The original Caslon specimen sheets and punches have long provided a fertile source for the range of types bearing his name. Identifying characteristics of most Caslons include a cap A with a scooped-out apex; a cap C with two full serifs; and in the italic, a swashed lowercase v and w. Caslon's types have achieved legendary status among printers and typographers, and are considered safe, solid, and dependable.

# DUTCH CASLON

## Van Dijck 235

### *William Caslon I*

## King of printers 1534

## Roasted Beef & Bimbos

## Brighton is home to the morcheeba

### *Imagine there's no heaven, it's easy if you try*

REVOLUTION WILL NOT BE TELEvised ON CNN, BBC OR NBC

### *Adobe Caslon™ Pro by Carol Twombly*

Carol Twombly designed this Caslon revival for Adobe in 1990, after studying Caslon's own specimen sheets from the mid-eighteenth century. This elegant version is quite true to the source, and has been optimized for the demands of digital design and printing. Adobe Caslon™ makes an excellent text font and includes just about everything needed by the discriminating typographer: small caps, Old style Figures, swash letters, alternates, ligatures, expert characters, central European characters, and a plethora of period ornaments.



## EIGHTEENTH CENTURY - Transitional Types

With the advent of the industrial revolution in 1760, technological improvements in printing began to occur very frequently. John Baskerville took up the carrer of printing after Caslon, and his knowledge of paints, metals and manufacturing process resulted in printing ink improvements as well as a method of smoothing handmade paper. These developments, plus a desire to correct the inconsistencies in Caslon type, resulted in a typeface with even finer lines and detailing than Caslon, and a solution to the structural disparity between capitals and small letters. Baskerville decided that all the letters, capitals and lower-case, could be made with the horizontally held broad pen, arriving at a new structural system. It was the final step needed in the evolution of small letters before the alphabet could proceed further in its typographic development. Baskerville letters, in addition to have old style bracketed serifs, have the gradual "swells" of the broad edge pen.

One might also suggest, as a working definition, that this is the point at which printing separates from typography. To over-simplify, the difference is between inarticulate practice with the materials of production (printing) and conscious shaping of the product, by instruction (typography). This separation can be located in the famous first definition of the typographer. In the preface of his *Mechanick exercises: or the doctrine of handy-works* applied to the art of printing (1683-84) Joseph Moxon wrote: *By a typographer, I do not mean a printer, as he is vulgarly acounted, (...) but by a typographer, I mean such a one, who by his own judgement, from solid reasoning with himself, can either perform, or direct others to perform from the beginning to the end, all the handy-works and physical operations relating to typography.*

In 1693 in France, some steps were taken towards further ordering the practice of typography. The first attempt was the design of the 'romain du roi'. Basically it was an attempt to formalize letterforms and measurements. The system developed, although theoretical, was a sophisticated view of typography, with profound and highly practical implications. The first attempt ever to rationalize, nearly in a mechanical way letters as objects, far ahead than geometrically, but nearly industrially. The first French printing manual appeared in 1723. *La science pratique de l'imprimerie* by Martin Dominique Fertel. With it there appeared for the first time a conscious concern with the structuring of verbal information through the devices of typography: size and style of type, headings, subordinated text, space, ornaments, symbols. Fertel's manual exemplifies this new attitude of rationality: concerned to understand how typography works and to explain it to others.

# London ENGLAND John Baskerville High contrast look Thicks & Thins, paper His wife was Mrs. Eaves... Oh!!

UNA Y LAS DOS Y LAS TRES, LAS 4 LAS 5 Y LAS 6

\*\*\*\*\*

### Berthold Baskerville

*John Baskerville (1706-1775) was an accomplished writing master and printer from Birmingham, England. He was the designer of several types, punchcut by John Handy, which are the basis for the fonts that bear the name Baskerville today. The excellent quality of his printing influenced such famous printers as Didot in France and Bodoni in Italy. Though he was known internationally as an innovator of technique and style, his high standards for paper and ink quality made it difficult for him to compete with local commercial printers. However, his fellow Englishmen imitated his types, and in 1768, Isaac Moore punchcut a version of Baskerville's letterforms for the Fry Foundry. Baskerville produced a masterpiece folio Bible for Cambridge University, and today, his types are considered to be fine representations of eighteenth century rationalism and neoclassicism.*



## NINETEENTH CENTURY—Modern Typography

Modern has come to be the term to describe the category of type design whose beginning may be seen in the ‘romain du roi’, and whose first proper appearance has been found in a type of Françoise Ambroise Didot of 1784. As a term of stylistic categorization, ‘modern’ now describes the treatment of serifs (flat and unbracketed), modeling of stroke width (abrupt and exaggerated), and the shading or stress of letters being vertical.

The fashion for very thin strokes in type may also be attributed to the development of smoother papers and of presses that could be operated with greater precision. Modern in the typography of the Didot family and Giambattista Bodoni describes the kind of letterform deployed in arrangements that were unornamented or decorated only with the patterns and devices of the neo-classical style. The Didot Family (1689-1853) was to be the referent in France for the next 50 years, both by their printing and their types, as for new proposals of standardization of types in measurements and units. For about 100 years in the eighteenth and nineteenth centuries, several members of the Didot family were active in France as designers. They were also printers, publishers, typefounders, inventors, writers and intellectuals. Around 1800, the Didot family owned the most important print shop and font foundry. Pierre Didot published books and prints set in typefaces designed and punched by his brother, Firmin Didot.

The statuesque, clear forms of the Didot alphabets are representative of the time, and are quite similar to those designed by Giambattista Bodoni around the same time in Italy. Giambattista Bodoni (1740-1813) was called the King of Printers; he was a prolific type designer, a masterful engraver of punches and the most widely admired printer of his time. His books and typefaces were created during the 45 years he was the director of the fine press and publishing house of the Duke of Parma in Italy. He produced the best of what are known as “modern” style types, basing them on the finest writing of his time. Modern types represented the ultimate typographic development of the late eighteenth and early nineteenth centuries. They have characteristics quite different from the types that preceded them; such as extreme vertical stress, fine hairlines contrasted by bold main strokes, and very subtle, almost non-existent bracketing of sharply defined hairline serifs. Bodoni saw this style as beautiful and harmonious—the natural result of writing done with a well-cut pen, and the look was fashionable and admired. Other punchcutters, such as J. E. Walbaum (1768-1839) in Germany made their own versions of the modern faces.

# MODERN neoclassical style Flat serifs, extreme contrast *Fermin Ambroise Didot* & Giambattista Bodoni Two men, one style. The 1800's perfection

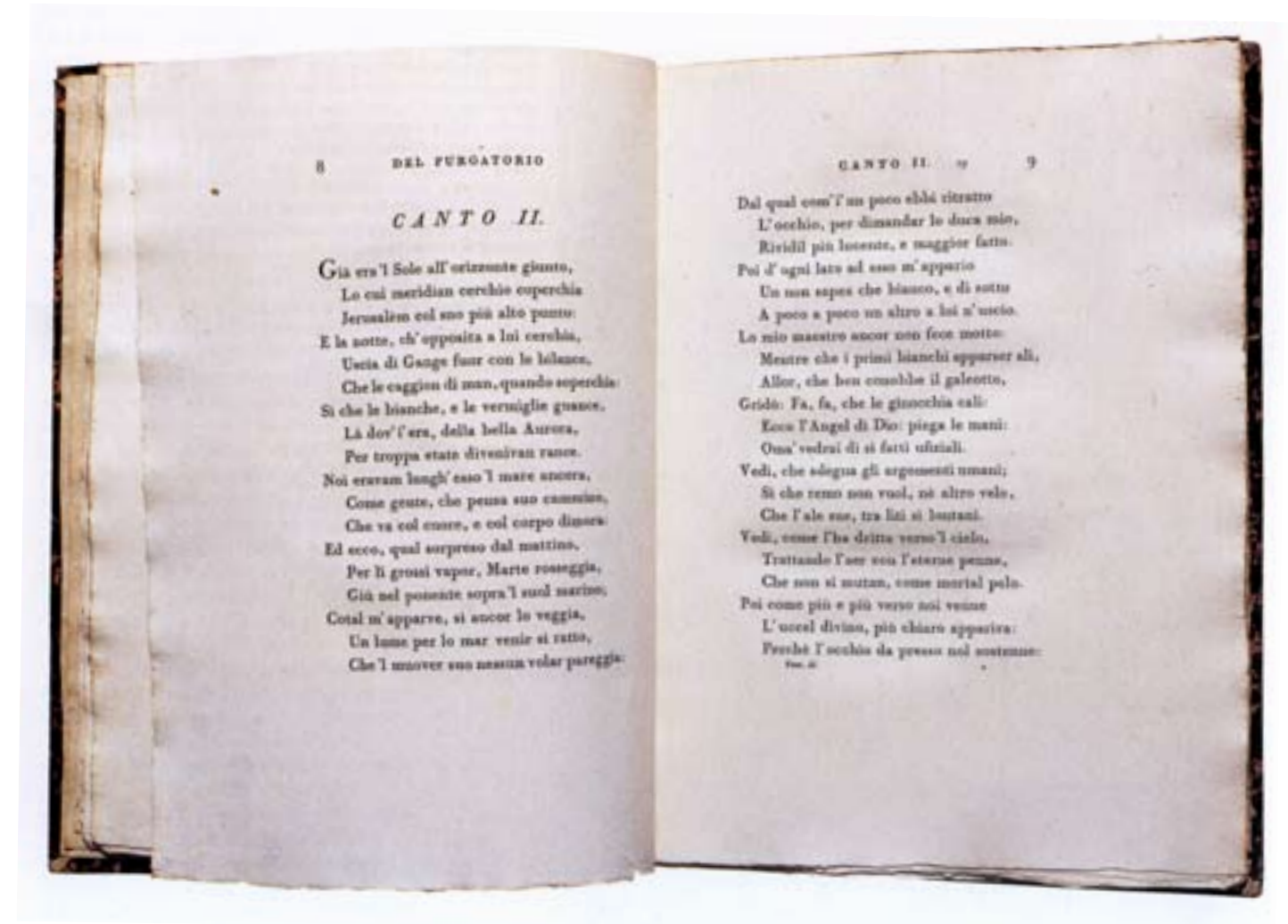


### Linotype Didot by Adrian Frutiger,

Linotype Didot was drawn by Adrian Frutiger in 1991, and is based on the fonts cut by Firmin Didot between 1799 and 1811. Frutiger also studied the Didot types in a book printed by the Didots in 1818, “La Henriade” by Voltaire. This beautifully drawn family has 12 weights including Old style Figures, a headline version, and superb graphic ornaments.

### Bauer Bodoni by Heinrich Jost

Bauer Bodoni was originally released in 1926 from the Bauer Type Foundry in Frankfurt. It was designed by Heinrich Jost, who was the artistic director of the foundry from 1923 until 1948, and punched by Louis Hoell. The forms are closely related to the original Bodoni typefaces, and are considered to be more delicate and graceful than many other Bodoni interpretations. Long admired by typographers as the crème de la crème of available Bodoni display types, this version looks especially fine at large sizes.

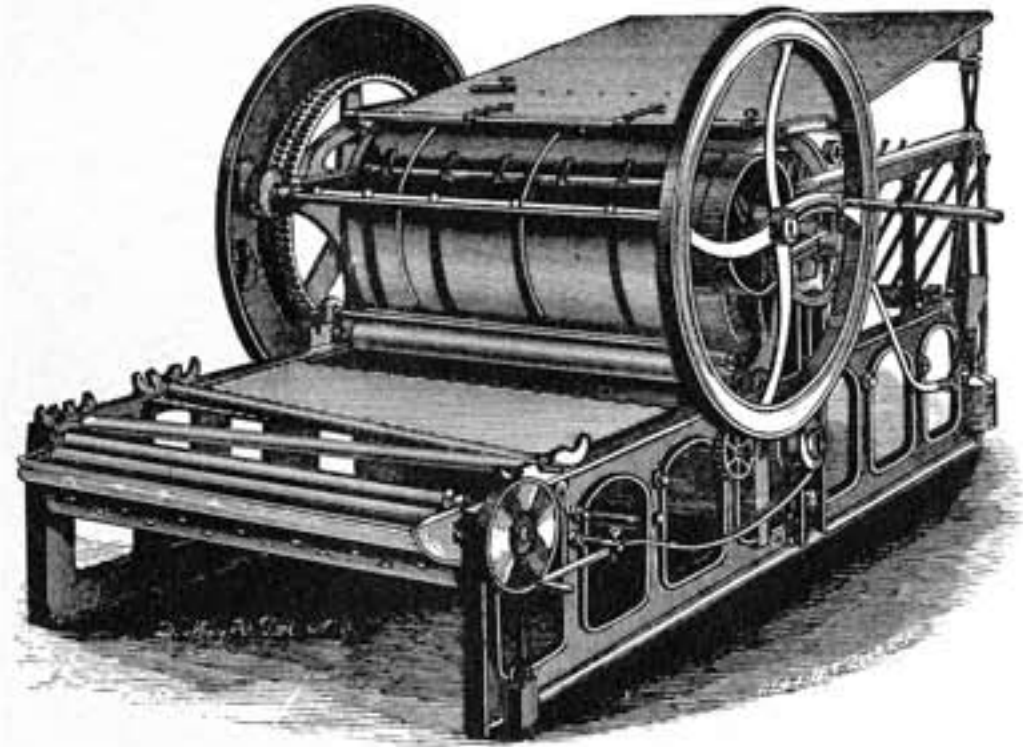


NEW TYPOGRAPHY - DISPLAY TYPOGRAPHY

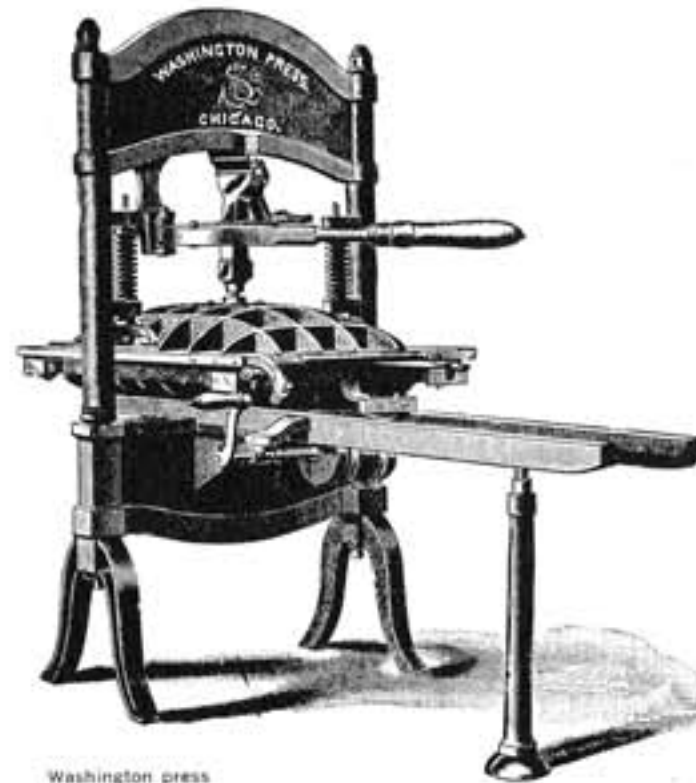
*Modern man has to absorb every day a mass of printed matter which, whether he has asked for it or not, is delivered through his letter-box or confronts him everywhere out of doors (...) As a rule we no longer read quietly line by line, but glance quickly over the whole, and only if our interest is awakened do we study it in detail.*

Jan Tschichold

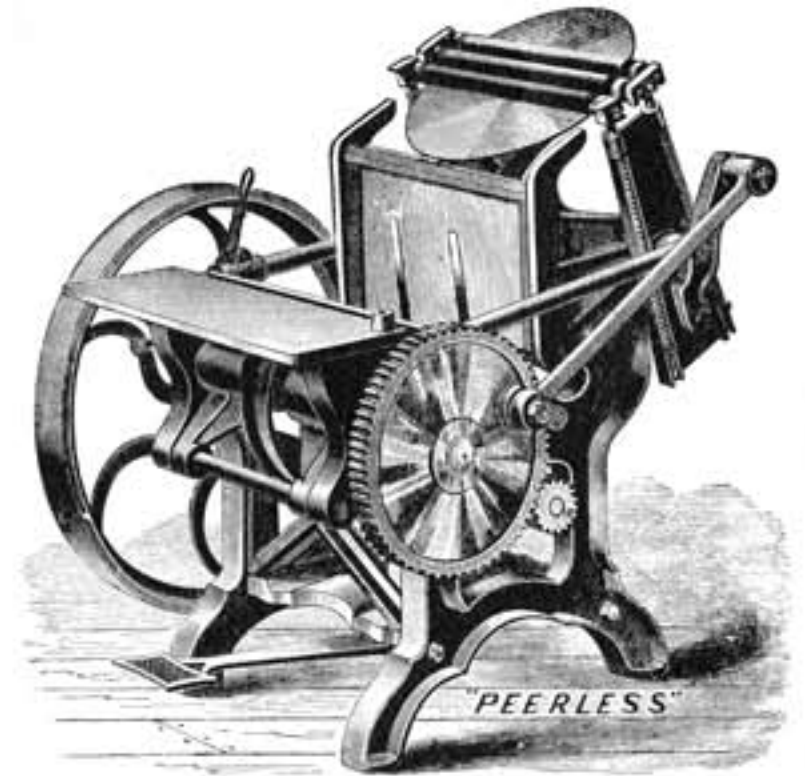
XIXth century printing presses



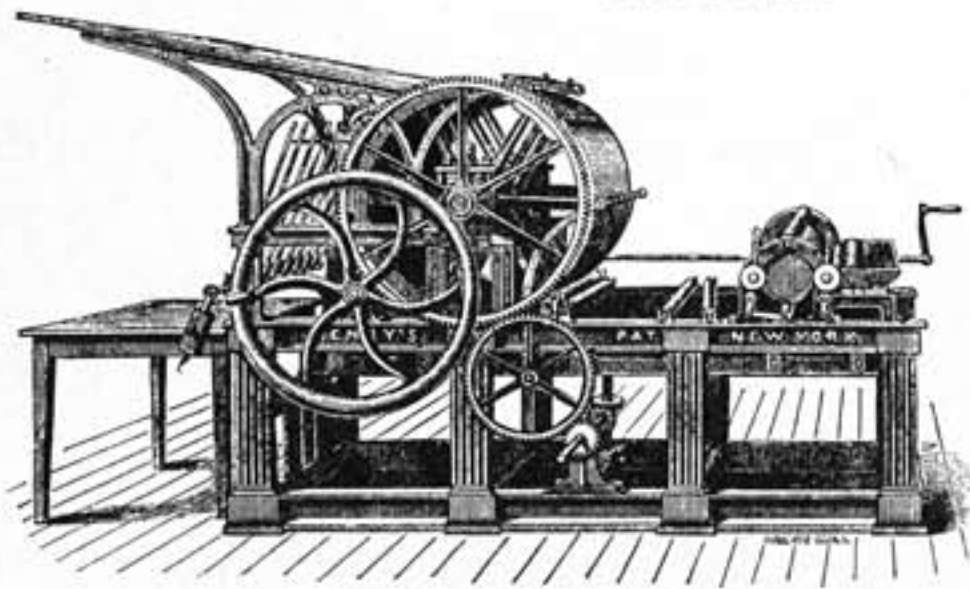
Campbell country press



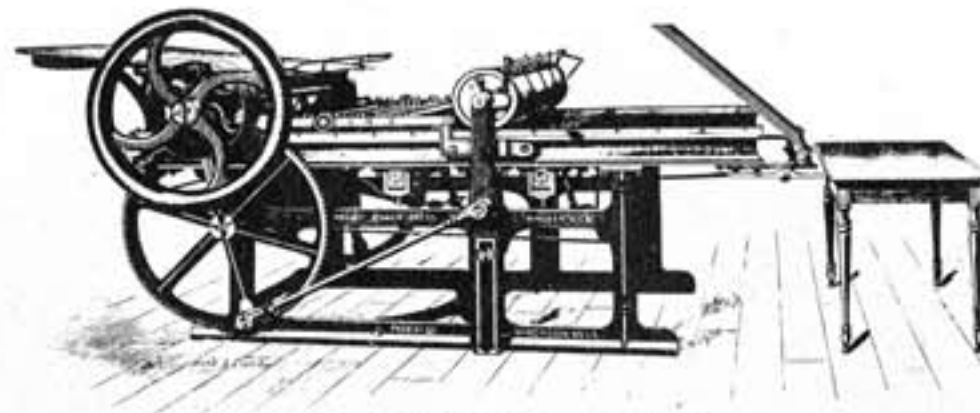
Washington press



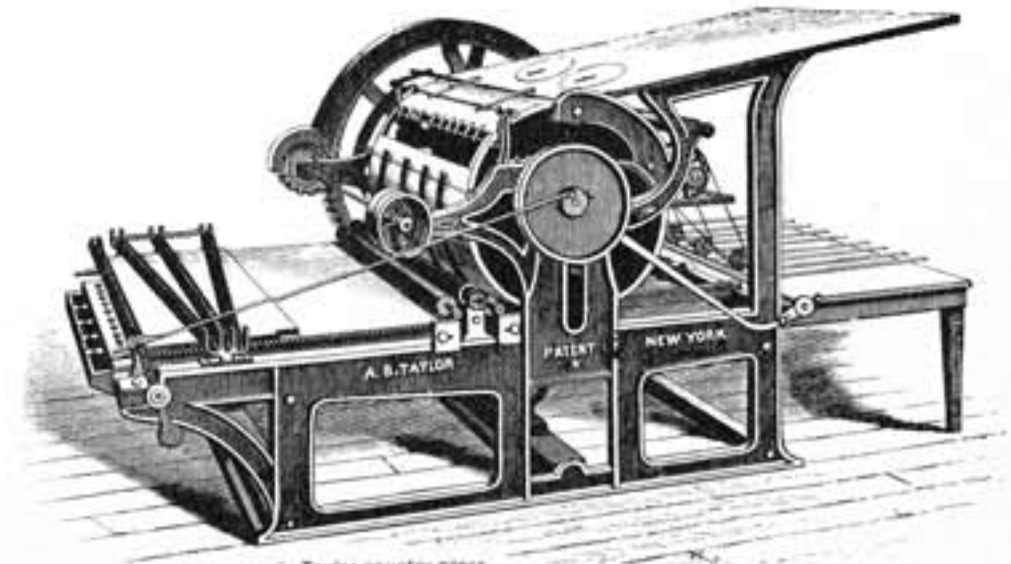
Peerless press



Henry Cylinder press



Prouty Combination book, news and job press



Taylor country press

**NINETEENTH CENTURY.**

The major achievement of this period is certainly the introduction of powered machinery into the printing trade, and its consequent industrialization. One of the complexes of the nineteenth century was the interaction of demands for new kinds of printing with new means of transmitting information. Thus the need for election posters, railway timetables, manufacturers' catalogues, pictorial papers, and so on, consorted with the development of presses able to print these things, and with the invention of the visual means that could articulate such information adequately.

The Industrial Revolution, and the commercial society it engendered, brought an explosion of display type, used in advertising and publicity of all kinds. These big, bold typefaces, often used in all-caps setting, needed big, bold numerals to go with them. Even the text types in the 19th century had modern figures, which stood out prominently from the surrounding text. It was a statement. An influential development in display type was the production of type made of wood.

In the field of letterforms, the departure from norms that the modern face represented seemed to open a way to an almost unlimited series of variations, extensions, and exaggerations, in **display typefaces**. Two categories of letter derived from forms that appeared in the first half of the century were to become essential constituents of the new typography of the 20th century. First **San serif types** made its appearance in a specimen of 1816 of William Caslon IV, though it became established as a style in 1830's England. They were also called 'grotesque or 'grotesk' in EU or 'gothic' in USA. An emboldening of letters had begun to be apparent in the modern face, and was especially evident in England, with the need felt for larger public notices, posters, letters had to become larger and bolder and more various in form. This requirement seems to be at the root of the proliferation of **Slab Serif** typefaces also known as fat faces, around 1848.



**POSTER  
CLARENDON  
Display Types  
industrial fat faces  
machines, linotype & monotype**

\*\*\*\*\*

**Clarendon by Hermann Eidenbenz**  
The first slab serif fonts appeared at the beginning of industrialization in Great Britain in 1820. Clarendon and Ionic became the names for this new development in England, known as English Egyptienne elsewhere in Europe. Clarendon is also the name of a particular font of this style, which, thanks to its clear, objective and timeless forms, never lost its contemporary feel. In small point sizes Clarendon is still a legible font and in larger print, its individual style attracts attention.



**HOLIDAY EXCURSIONS, 1923**

**Every SATURDAY**

MAY 5th to JUNE 30th inclusive (except Saturday, May 19th)

(For 8 or 15 Days)  
Dean & Dawson's EXCURSION TICKETS will be issued to

**SHEFFIELD,  
DONCASTER, HULL  
WORKSOP (FOR THE DUKERIES), RETFORD  
GAINSBORO', BRIGG,  
GRIMSBY DOCKS  
AND**

**GLEETHORPES**

FROM

<b>LIVERPOOL</b> (Central)	<b>MANCHESTER</b> (London Road)
<b>SOUTHPORT</b> (Lord Street)	<b>OLDHAM</b> (Gledwick Road)
<b>WIDNES</b> (Central)	<b>OLDHAM</b> (Clegg Street)
<b>WARRINGTON</b> (Central)	<b>ASHTON</b> (Oldham Road)
<b>WIGAN</b>	<b>ASHTON</b> (Park Parade)
<b>ST. HELENS</b>	<b>STALYBRIDGE</b>
<b>NORTHWICH</b>	<b>GUIDE BRIDGE</b>
<b>KNUTSFORD</b>	<b>NEWTON</b>
<b>MANCHESTER</b> (Central)	<b>HADFIELD</b>

For Times, Fares and full particulars see small bills.

**BOOK IN ADVANCE**

Times and Bills of the above may be secured by telegrams to Messrs. Dean & Dawson Ltd., 38, Lomb Street, Liverpool 53, Piccadilly, Manchester, St. Peter's Square, Stockport, 2, Mumps, Oldham, and the usual agents.  
For further information apply to the District Traffic Manager, L. & N. E. Railway, London Road Station, Manchester, the Passenger Manager, Warrington Station, London N.W.1, or Dean & Dawson's Excursion Offices.

**Composition. Mechanization. Linotype & Monotype**

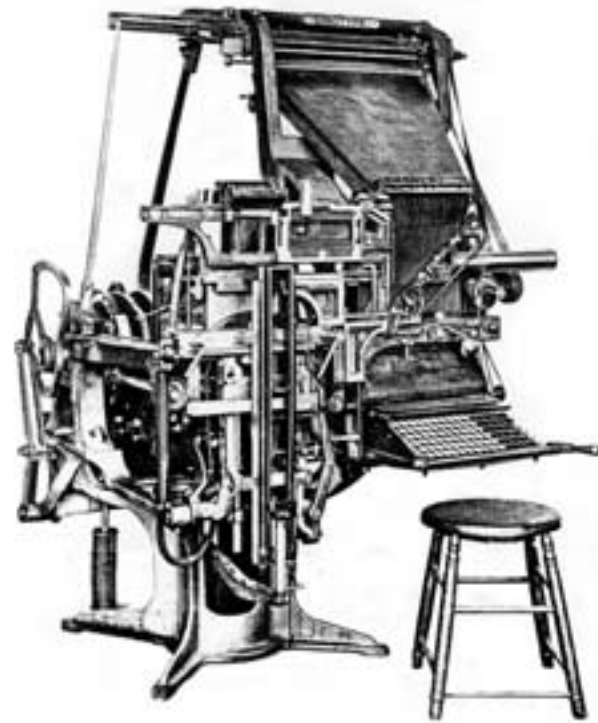
The first really effective machines came only in the late 1880s and the 1890s. the breakthrough was achieved by the incorporation of matrices into the machine, casting type as it was needed. Softer and less durable than founders type, this hot metal type was simply melted down and reused. Both the machines were of American origin: the Linotype was the invention of German émigré Ottmar Mergenthaler; the Monotype, that of Tolbert Lanston of Washington. The Linotype Machine, 1886, cast one line of type as a single piece of metal. After the introduction of Linotype, the type for every newspaper in the world was cast and composed using this system, resulting in an increased speed and ease in page makeup. The Monotype Machine, 1887, casted and composed individual letters one by one, rather than as an entire line. and produced pieces of type that looked virtually identical to those used in handsetting. The monotype system was employed chiefly by letterheads, stationery, and the printing of fine books. Many times faster than setting by hand, both machines were used worldwide for over a hundred years until the advent of phototyping.

**Arts and Crafts. The Revival of writing, books and faces.**

William Morris, revivalist and creator of the Arts and Craft movement, related to typography by The Kelmscott Press 1891-96 at the end of his life, after great political engagement and intense activity in designing and making. The types used by the press looked backwards to early models, but created something new. An imagined typography of the past with a physical richness that was very much there as a statement. A first fundamental was the text should be set with close word spacing, to avoid 'rivers of white', Morris ideal of a black page with closely spaced word remained as a legacy. The second idea, was the unit of the book. The essential unit being the double page spread. Facing pages had to balance and any ornament or illustration had to harmonize with the type.

The Arts and crafts entailed an investigation and revival of formal writing. Edward Johnston from 1899 taught writing at the Central School of Arts & Crafts. In 1906 published the book Writing & Illuminating & lettering. Johnston advocated for learning for development. It was a means of rising awareness of letters, and of developing skills in their handling. Anyone who had learned from writing at school would have access to principles of the construction of letters and of their combination as text; lessons that could be transferred to typography. For the best standards, the theory and practice of typography has always looked to or held the practice of formal writing in the design of letters an in their disposition as text.

This revival had a strong effect on typography. Design would become embodied in the emerging figure of the **typographer**. This person was no longer the master printer, but in Britain was typically the educated amateur, with an aesthetic sense and passion for the history of books and printing. The prosperity of printing by mechanical composition brought the wave of adapting historical faces for machine composition. The leading machine typesetting companies began to produce typefaces that were based in historical models. The revolution brought to the trade by the typographers was to be a historical one. The best old typefaces, machine composed, and used in a historically-conscious manner. **Stanley Morrison** stands as the most famous example or revivalism, being attached to Monotype Corporation in the revival program that brought so many old faces to the mechanical printing trade.



# TIMES

## William Morris Stanley Morrison Arts & Crafts revivals Monotype & Linotype machines

NA Y LAS DOS Y LAS TRES, LAS 4 LAS 5 Y LAS 6



**Times™ by Stanley Morison**

In 1931, The Times of London commissioned a new text type design from Stanley Morison and the Monotype Corporation, after Morison had written an article criticizing The Times for being badly printed and typographically behind the times. The new design was supervised by Stanley Morison and drawn by Victor Lardent. Morison used an older typeface, Plantin, as the basis for his design, but made revisions for legibility and economy of space, important concerns for newspapers. As the old type used by the newspaper had been called "Times Old Roman," Morison's revision became "Times New Roman." The Times of London debuted the new typeface in October 1932. The typeface was very successful and continues to be very popular around the world because of its versatility and readability. And because it is a standard font on most computers and digital printers, it has become universally familiar as the office workhorse.



A reproduction of a newspaper page from The Times, showing various columns of text, advertisements, and classified notices. The page is densely packed with small text, typical of a newspaper's layout.

### New Typography.

Influenced by the futurist manifesto of 1909, Dada, De Stijl, Russian Constructivism the term new typography is adopted from Jan Tschichold's handbook *Die neue typographie* 1928. In this book the historical perspective of new typography was outlined: what came before was dealt as "The old typography" and had to make room for a modern, structured and regulated new typography claiming that typography, like architecture, must be functional.

Tschichold brought a radically new attitude to typography and printing. Introducing the idea of "tension" into typography he encouraged the use of asymmetrical layouts and sans serif type as it stripped the letter forms down to their basic, element shapes with no relation at all to handwriting. New typographers explained their preference for sans serif as following directly from the belief in forms appropriate to the time: the modern age of the machine. In the German context, in which traditionalist typography was largely in use, Sanserif was without national connotations and provided a complete break; from blackletter into the world of international exchange.

This book became the bible of every young typesetter, an historic document, a manifesto, a key theoretical document of Central European modernism. The principles of the new typography are explained as a movement towards clarity and readability; a rejection of superfluous decoration; and an insistence on the primacy of functionality in design. The expression of content through form - Tschichold's emphasis is much on the order and organization'. Contrast is sought to reveal 'the logical arrangement of the printed text'.

Futura, designed by Paul Renner in 1927, became accepted by the new typographers as the most satisfactory of the new 20th century sanserifs. The achievement of Futura was of a typeface that satisfied both the desire for a geometrical typeface, constructed with ruler and compass, and for a typeface that composed well as text, over a whole range of sizes. Then World War II happened. The Bauhaus was closed, and lots of important artists, designers and typographers had to emigrate to other countries spreading the knowledge of this new typography....

After the war Tschichold declared his disillusion with new typography. Tschichold wrote that the doctrinaire belief in sanserif had been diluted (though not abandoned) and, within specific limits, typefaces could be mixed for aesthetic effect and without much regards for their historical provenance. Since 1938 he had devoted himself completely to book typography. He abandoned the asymmetrical arrangements of industrial typography and began to center almost all his work, returning to classic typography. He suggested, and it is important to understand, that for him, the lasting letterform was the roman, proved over centuries and still maintaining the calligraphic tradition.

The British typography was then influenced by the 1947 - 1949 achievement of Tsch. work at Penguin Books where he demonstrated that good standards of text composition could be obtained from printers who had never had such things expected from them. Tsch. reform was founded in the list of composition rules that he introduced as guidance to printers: for the spacing of words and punctuation marks, the setting of footnotes and page numbers, and other fine details of composition. Through this means the typographic designer was, with the collaboration of thorough copy-editors, able to win control of the significant ground of book design.

*Sanserif is a logical development from Didot. The letters are free of all extra accessories: their essential shapes appear for the first time pure and unadulterated.*  
Jan Tschichold

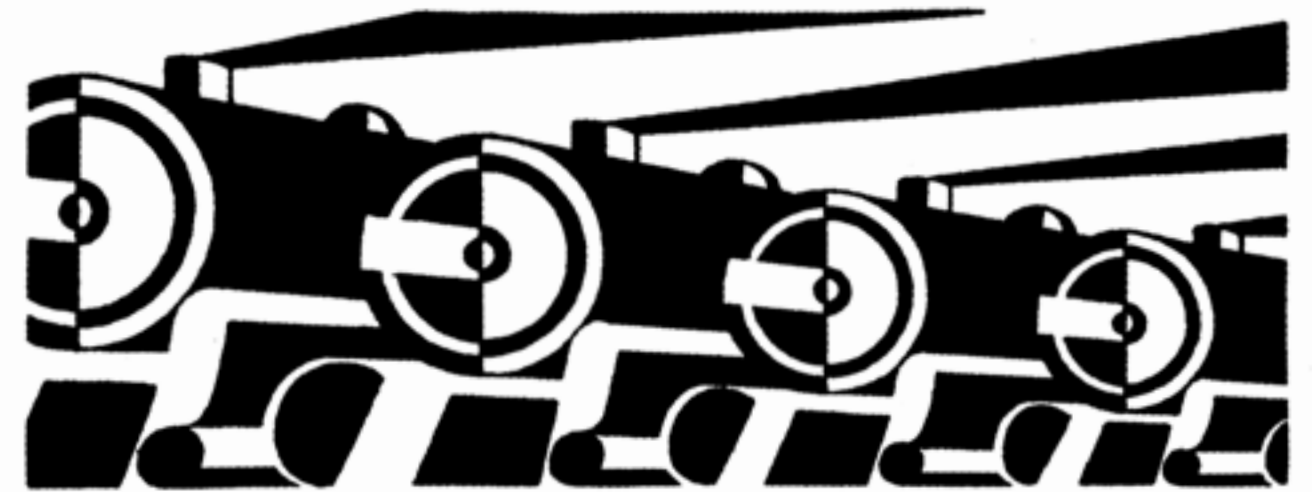
## GERMANY Paul Renner Geometry research the bauhaus of Weimar

UNA Y LAS DOS Y LAS TRES, LAS 4 LAS 5 Y LAS 6



### Futura by Paul Renner

First presented by the Bauer Type Foundry in 1928, Futura is commonly considered the major typeface development to come out of the Constructivist orientation of the Bauhaus movement in Germany. Paul Renner (type designer, painter, author and teacher) sketched the original drawings and based them loosely on the simple forms of circle, triangle and square. The design office at Bauer assisted him in turning these geometric forms into a sturdy, functioning type family, and over time, Renner made changes to make the Futura fonts even more legible. Its long ascenders and descenders benefit from generous line spacing. The range of weights and styles make it a versatile family. Futura is timeless modern; in 1928 it was striking, tasteful, radical - and today it continues to be a popular typographic choice to express strength, elegance, and conceptual clarity. Typefaces in the same style like Futura are: Avenir, Metromedium, Neuzeit Grotesk,



**The Century...The Broadway...The Overland...The Golden State...Four of the dozens of superb trains operated daily over American Railroads. • To express these four and their many sisters, in type as powerful, as clean cut, as distinguished as the trains themselves, has hitherto been rather a problem. • With FUTURA BOLD, however, conveying the same energetic, abstract and logical qualities, this problem fades to the vanishing point. • Never was there a type face better suited to present the message of not only the railroads but also the entire heavy industries, than this...**



# FUTURA

**the type of today  
and tomorrow**

**THE BAUER TYPE FOUNDRY, INC., NEW YORK  
At Two-Thirty-Five East Forty-Fifth Street**

### Swiss Typography.

In the 1930's, in the larger field of graphic art, and in poster design above all, modernist approaches had become well established in Switzerland: simplified images, integration of text and image; the use of photographs, especially as photomontage. In such work, where image was reduced to type-like simplicity, and where type was given a graphic, image like presence, the categories of typography and graphic arts were broken down and fuse to produce what then became graphic design. This led to a view of advertising as essentially a medium of information developing a graphic design that could plausibly aspire to being 'functional', in the sense of being an unobtrusive medium for the communication of useful information.

Max Bill had been a student at the Dessau Bauhaus, and had since adhere to the new typography; A painter and sculptor as well as architect, Bill had earned a living mostly from graphic design and was a leader of the then just nascent 'swiss typography'. Bill suggested in "Uber Typografie", that new typography of the \*1930\* had possessed a decorative impulse, but had become transmuted into a typography that was genuinely functional; logically derived from the material being designed and producing a visual harmony that 'clearly corresponds to the technical and artistic possibilities of our age.

The new technology was a flat one; paper, film and screens. Photocomposition begun to seriously developed after 1945, and found commercial development later 50's onwards. With the full development of photocomposition, metal punches would never be cut again, and types impressed into paper only on rare and occasions. By the mid 50's Swiss typography had begun to penetrate into international consciousness. In 1959 Emil Ruder wrote 'The typography of order' underlying the principles of this new movement. Ruder had been teaching typography at the Basel school since 1942. Form this long-held position at Basel, and as one of the clearest practitioners of swiss typography, Ruder had a great influence on its development. He was to summarize his approach in the book Typographie from 1967.

Together with Ruder, the most influential disseminator of the Swiss typography was Josef Muller-Brockmann. Following his period of teaching in Zurich, he published "the graphic artist and his design problems" 1961 which became a major element of transmission of the principles of swiss typography: the striving for impersonality and objectivity, through an elimination of decorative or expressive effects, and through the application of an ordering grid: restriction in type sizes and typefaces (sanserif as expression of the age suitable for all purposes), the use of unjustified texts, the use of photography in preference of illustration, with an important role for diagrams.

Univers, together with its contemporaries Akzidenz Grotesk and Helvetica, represented an attempt to provide a sanserif that improved both on the nineteenth century grotesques and on the more geometrically designed sanserifs from between the wars. . The most distinctive feature of Univers is that it comprised a family of twenty-one variants. Univers was soon produce to cove Cyrillic and Japanese characters.

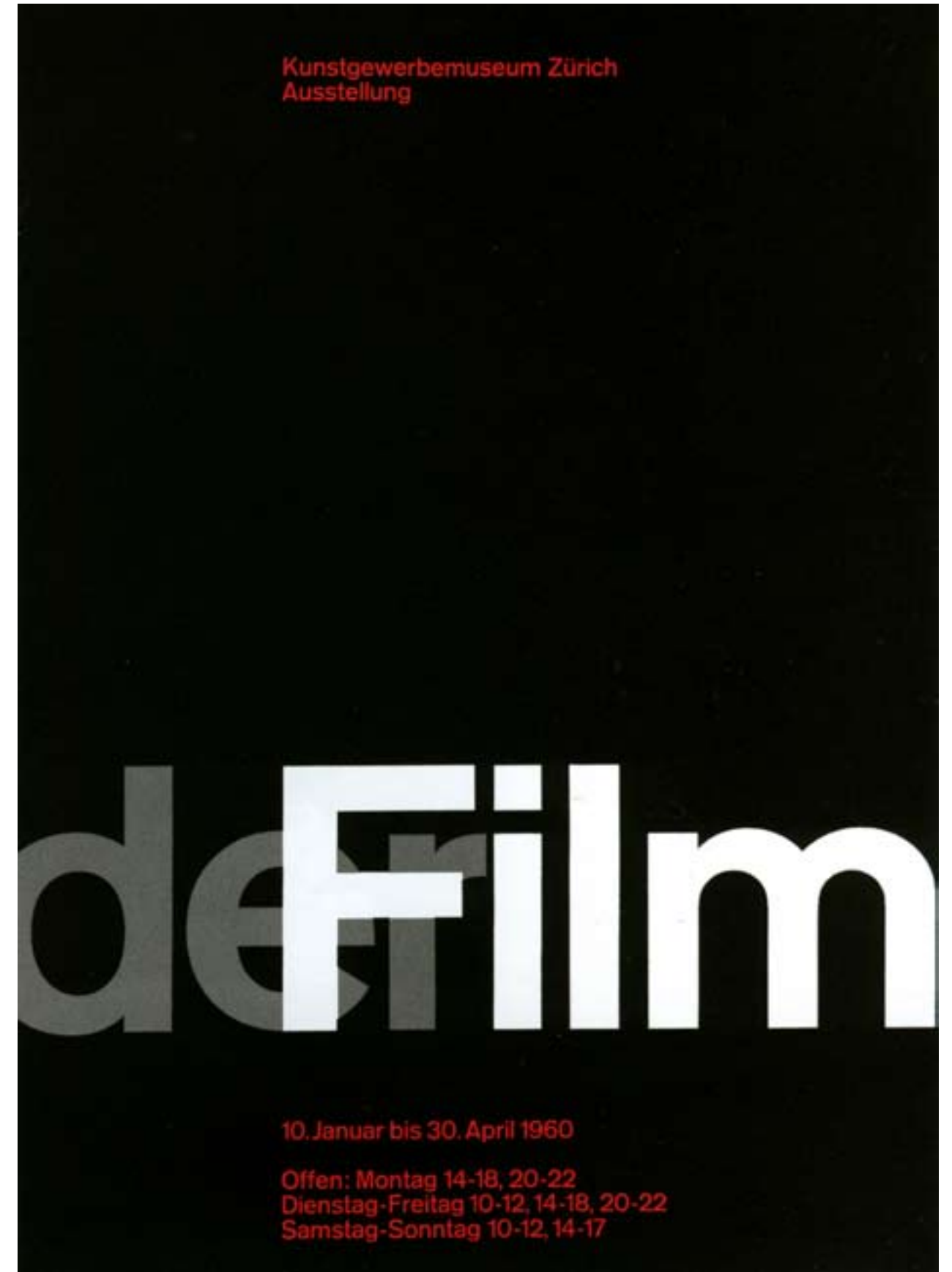
In 1968 Wolfgang Weingart took the place of Emil Ruder at the Basel School, and through him the generation of designers emerging in the 70's began to break with some of the essential principles of swiss typography. This served to confirm that, like any generally accepted approach to design, Swiss typography had been a manifestation fitted to its time and place. Weingart broke from the serene sense of order, making patterns of displacement and disturbance in configuration of the visual materials. He showed little interest for new typefaces, sticking strictly to Akzidenz Grotesk, and avoiding Univers. What was really different in Weingart was the way in which, in his small repertoire of typefaces, he attacked the image of letters by cutting or other means of visual distortion. This was very suggestive for the type designers that were to come in the years that followed.

----- Univers (48 pts) -----

ABCDEFGHIJKLM-  
NOPQRSTUVWXYZ  
abcdefghijklm-  
nopqrstuvwxyz  
0123456789 &?!:;-

#### Univers by Adrian Frutiger

The font family Univers™ is one of the greatest typographic achievements of the second half of the 20th century. The family has the advantage of having a variety of weights and styles, which, even when combined, give an impression of steadiness and homogeneity. The clear, objective forms of Univers make this a legible font suitable for almost any typographic need. Adrian Frutiger wanted to make a new font that would, above all, be suitable for the typesetting of longer texts - quite an exciting challenge for a sans-serif font at that time. Starting with his old sketches from his student days at the School for the Applied Arts in Zurich, he created the Univers type family. In 1957, the family was released by Deberny & Pignot, and afterwards, it was produced by Linotype. Adrian Frutiger continues to do design work with Linotype right up to the present day. In 1997, Frutiger and the design staff at Linotype completed a large joint project of completely re-designing and updating the Univers family.



#### HISTORY OF TYPE FORMATS.

1984 > Adobe creates Type 1 for Macintosh

1985 > Microsoft creates True Type for PC's

1990's > Apple GX & Adobe Multiple Master. Fails

1996 > Adobe & Microsoft create Open Type.

2000 > First Open Type fonts released

#### FONT CAPABILITIES.

ASCII (4 bits) > 128 glyphs

Post Script (8 bits) > 256 glyphs

OpenType (16 bits) > 65.000 glyphs





*If type design is going through a truly international renaissance at the beginning of the 21st century, it is in large part enabled by the desire of the computer industry to sell hardware and software to people who speak languages other than English.*

Letters as bits by John Hudson



## THE DIGITAL ERA

I defined typography as the functional application of beauty to the articulation of text. In the same way that I think a misapprehension is involved in trying to separate beauty from functionality in typography, so it is a mistake to consider the art of type design separate from the technology of type manufacture and use.

Font developers and vendors in the early days of desktop publishing recognised the need to support traditional elements of typographic design such as ligatures, small caps and superior letters, but were forced to do so within a character encoding and text processing model that relied on 8-bit character sets (256 glyphs). Large software companies like Adobe defined private standards for supplementary fonts - expert sets -.

English text does not require ligatures or smallcaps to be readable; it needs them to look good and to articulate its meaning more fully. Other writing systems, such as Arabic and many South Asian scripts classified as Indic, require higher level processing to render the stored text with appropriate typeforms in order to be readable.

Apple adopted the Adobe® PostScript page description language (PDL) for its Apple LaserWriter printer in 1985. This, combined with the introduction of PageMaker®, the first desktop publishing software, sparked a revolution in page layout technology. Soon the PostScript language was adopted for use in higher-end imagesetting devices, and became the native operating mode and language of many graphics programs as well.

It rapidly became obvious to the major system software creators (Apple, Microsoft, and later IBM) that it was important to have scaleable font technology supported at the level of the operating system itself. This would allow much better screen display, compared to pre-made bitmaps which would only look good at a few sizes, and would be jagged at all others. So in the late 1980s, Apple developed its own scaleable font technology introduced as TrueType. The TrueType specifications were made public, and TrueType was built into the next versions of the Mac and Windows® operating systems,

released in 1991-92. So now there were two widely used outline font specifications, one (TrueType) built into the operating systems used by most desktop computers worldwide, and the other (PostScript Type 1) the de facto standard for publishing and the graphic arts.

The first difference between TrueType and PostScript fonts is their use of different sorts of mathematics to describe their curves. (quadratics vs. cubics). A smaller, but consistent, advantage of TrueType has to do with the physical storage of the fonts. TrueType fonts have all the data in a single file. PostScript Type 1 fonts require two separate files: one contains the character outlines, and the other contains metrics data.

Most of the fonts which have “expert sets” of old style figures, extra ligatures, true small capitals and the like are in PostScript format. And, most high-end output devices use PostScript as their internal page description language.

### XXI Century. OpenType Pro

**The format revolution that should unify alphabets of different origins + different languages + cultures together with a font that may have implicit “character” and have embedded the rules to perform advanced typography. This format allow for a more fluid communication between different cultures and all together improve the use of typography.**

### ABOUT OPENTYPE

OpenType is a type format designed by Microsoft and Adobe which attempts to resolve the limitations of the two dominant outline font technologies (Adobe’s Type 1 PostScript fonts, and Apple Computer and Microsoft’s TrueType fonts). **From Microsoft it gets its focus on global language support:** OpenType uses as its basis Unicode, and its advanced typographic features are needed for basic support of certain languages. **From Adobe OpenType gets its emphasis on advanced typography** for western and East Asian languages, providing support within a font for such features as alternate character forms, discretionary ligatures, variant figures (tabular and proportional, lining and old style), and small caps. In this OpenType benefits from the work done by Apple on TrueType GX (lately known as AAT), which had a similar model for advanced typographical features.

### Advantages

The benefits of OpenType to end users (whether graphic designers or not) are immediately apparent: users of non-Latin scripts are able, sometimes for the first time, to have their native scripts represented properly on the computer. Languages with flowing scripts (such as Arabic and Devanagari) and ideographic glyphs (such as the Chinese-derived languages of East Asia) are much better supported by OpenType, with its many features for proper positioning, reading flow (right-to-left versus top-to-bottom, right-to-left versus left-to-right), and glyph substitution.

OpenType fonts can also replace the complicated system of expert fonts, swash fonts, small caps fonts, and fonts containing old style figures with a single file, and makes it much easier to use the complicated sets of ligatures found in fonts such as Mrs Eaves. Glyph substitution and character positioning are as useful for flowing scripts in English as in non-Latin languages, which simulate the appearance of handwritten calligraphy through a complex and sophisticated set of substitutions.

OpenType is a powerful new font format that gives users a much broader range of typographic and linguistic control than has previously been available with a single digital font. Open Type Technology allows for better and richer typography, thanks to its combination of features, cross-platform functionality. But anyhow education of proper use of typography is necessary to take fully advantage of this possibilities.

### The Future of OpenType

Even though OpenType has been a finished standard for several years as of the time of this writing, adoption is still in progress. The natural conservatism and healthy caution of the printing industry, combined with the reluctance with which OpenType has been embraced by software vendors, has slowed adoption. However, it is likely to become the de facto standard technology for digital fonts, and remain such for some time.

## OPEN TYPE FEATURES.

### Based on Unicode >

Multilingual international standard of character encoding

### Cross Platform Compatibility >

One file fits all.

Simpler font management

Should see the end of the text corruptions that occur when interchanging documents in between mac's & PC's when encoding does not match.

### Bad parts >

Expert features only available in OT savvy applications

Poor design in Open Type control panels

### Good >

All OpenType texts are editable

OT fonts work just like any other font format.

Helps arabic development, for joining scripts

### Language Support >

- Western Characters

- International Characters

- Accented Characters for Central European languages

- Cyrillic Characters

- Greek Characters

### Lay out features, Advanced Typography >

- Acces to all alternates

- Contextual alternates

- Stylistic alternates

- Randomize

- Ligatures>

> Standard ligatures

> Contextual ligatures

> Discretionary ligatures

> Historical ligatures

> Historical forms

- Unicase

- Old Style Figures> Lining / Proportional / Tabular

- Small Capitals & Petit Caps

- Case Sensitive Forms

- Capital Spacing

- Titling Alternates

- Swash & Contextual swashes

- Fractions & Alternative fractions

- Numerators & Denominators

- Superscripts & Subscripts

- Scientific Inferiors

- Slashed Zeros / Mathematical Greek

- Alternate annotation forms / Ornaments

## A TYPEFACES TODAY

Another way of classifying type is simply to sub-divide everything into just two sections: text & display. This sub-division was previously achieved simply by size - anything over 14pt. automatically being deemed to be too big for textual use and therefore became display. The sub-division of type into text and display serves to emphasize that there are fundamental differences in the way text and display types are used and expected to function.

Display is reserved for title, headings and sub-headings and are designed to shout, draw attention to themselves and to work more independently of each other.

Text type is used for continuous text, which has to be somehow invisible. Text-type characters are designed to work in close proximity with each other, providing an uninterrupted visual flow, a dynamic left to right momentum, the idea being that the readers eyes able to skim, without hesitation, along the line of type, recognizing the essential shape of each individual letter. Characteristics often required for text faces are openness of form, prominent ascenders and descenders, modeled serifs and strong directional momentum.

A display font might consist of only a single set of 26 characters, a minimal quantity of punctuation and numerals. A good text font, however, will include roman and italic upper- and lower case, small caps, numerals, punctuation, diacritics and pi-sorts, and all in a range of, perhaps, four or five weights. In all over a 1000 characters.

It was common to digital text faces to be organized and sold as two separate family sets. The first, standard. The second, normally referred as expert set, might include the small caps, non-ling numerals, ligatures, fractions, pi-sorts and accents, and depending upon the nature of the typeface the expert set might also include swash caps, designed to be used in conjunction with lowercase italics - and perhaps decorative elements. Now the possibilities of OpenType fonts and its 16 bit engine, allow for 64.000 glyphs in a ONE single file, which allows both sets (standard & expert) in one only file.

## TEXT HIERARCHY & OPTICAL SIZES

Beginning in the sixteenth century, type designers often cut a series of point sizes for a particular type style in order to form a cohesive range of type sizes. For every size that was hand-sculpted in metal, subtle adjustments were made to letter proportion, weight, contrast, and spacing so that the type would be comfortable to read at various sizes. In the past because each different size of font had to be cut individually, more emphasis tended to be placed upon the range of specific and prescribed sizes; normally 6, 7, 8, 9, 10, 11, 12, 14, 18, 24, 30, 36, 42, 48, 60 and 72.

With the advent of photo and digital type technologies, most type manufacturers abandoned the design of optical masters, because it was economically more viable to produce a single master which was then scaled photographically or algorithmically to each point size. Unfortunately, typefaces generated from a single master have a limited range at which they look their best. For example, a typeface that performs well at text sizes may appear light and cramped at smaller sizes, and heavy and ungraceful at larger sizes.

As part of this ongoing program to advance the craft of typography in the digital era, some typefoundries have incorporated optical masters into their best selling and most serious composition families. Text Hierarchy is a logical and visual guide, which allows the variety of headings that normally accompany body text to be organized. Hierarchy indicates different degrees of importance though the use of point size and/or type styles.

Caption: 5-8.5 point

Regular: 9 - 14 point

Subhead: 14-24 point

Display: 24+ point

## ROMAN & ITALIC

Roman and italic were always used quite separately until the 17th Century when typographers began to use both in order to differentiate varied information. Normally, roman used for the main text, italic might be reserved for supporting material such as footnotes, captions and extended quotations. The custom of combining both in the same text, commonly using italic for emphasis and for foreign words and phrases, became popular option for editors in the 19th century. A truly italic (not a sloped roman), must be cursive, which means that has to have the fluidity of handwriting.

## SMALL CAPS

Designed to be the same weight as all the other characters within a font and slightly taller than the x-height of lowercase characters, allowing the text to maintain an even texture. Small Caps provide the designer with a subtle means of highlighting a section of text without it standing out too much. Small caps are more harmonious with the body text because it has been specifically designed to have the same width strokes as those of the regular characters. Used for setting title pages and page headings. Also used for opening paragraphs, abbreviations, times, educational degrees and acronyms

## SWASH CAPS & TERMINAL CHARACTERS

A letterform reveling in luxury. True uppercase italics. They work well in conjunction with lowercase italics or as a dropped initial, but are not designed to form words only composed of capitals. In some typeface the swashes can be extended to the lower case. These are designed only to be used as the last character of a word or at the end of a paragraph.

## LIGATURES

A ligature is a typographical device that joins two or three letters together to form a single character. as a solution to solve spacing problems. OpenType digital fonts usually include the five latin ligatures (ff, ffi, ffl, fi, fl) and many the scandinavian (ffj, fj). There may be also a set of ornamental and archaics (ct, sp, st, Th cky, gi, ip, it, sp, st, ty, ... > k ....) and sometimes there are more of these spacial-purpose ligatures, quaints, in italic than in roman. Usually divided into classes: Basic & Discretionary.

## NUMBERS

When arabic numerals joined the roman alphabet, they too were given both lowercase and uppercase forms.

**Old style figures**, to be used whenever the surrounding text is set in lowercase letters, running text or small caps. It's functional purpose: it differentiates the numerals from each other, making them easier to distinguish and harder to misread. Numbers are specific and precise; they have to be clearly readable.

## Lining Figures

The alternative forms are called lining figures, because they align with one another and with the upper case. Numerals of equal height are needed in a line of capitals,

## Tabular & Proportional

Traditionally, old-style figures have had varying widths, while modern figures have all had the same width. That's one reason modern figures are popular in our number-intensive society; if you type them in columns (think annual report), the numerals all line up. But there's no reason why old-style figures can't do this too; and modern figures, for that matter, don't necessarily have to be all the same width. Some type designers create "tabular old-style figures," which vary in height and shape but all have the same width, and "proportional lining figures," which are full-height but may vary a bit in width.



### The Apple Computer, 1980's

The new technology opened a path for exploration and experiment to develop new typefaces of extremely low quality due to the basic state of technology and digital printing. This soon improved as technology was improving too, and gave place to more sophisticated designs.

### The new revisions & the last craftsmen. 1990's

Corporate typography and the font industry became a new market to reach for developing new designs and mostly reviewing and re-publishing every thing that had been done in the previous 14 centuries. Everything was jammed into digital format and made available to the consumer.

Mathew Carter & Herman Zapf are two examples of the last craftsmen of type design, creating original new designed fonts. Zapf stands from the most prolific type designer, mostly creating typefaces inspired by calligraphy. Mathew Carter a man of letters, probably the only type designer alive that has worked with type in all its forms, becoming an eminence in digital design at his age, his is wellknown for his design of Bell Centennial, a font that works great at small sizes and cheap printing methods for AT&T telephone books, or verdana, a screen typeface developed for Microsoft.

The end of the century sees the boom of what we could call corporate typography, meaning typography specially designed for the particular use of a corporation, a city or magazine, allowing the birth of new small new digital foundries that supply new and revival digital fonts to the general public. Hoefler & Frere-Jones are an example of a small typefoundry designing excellent hi-end fonts for corporate use. Their fonts are high style, thoroughly researched and meticulously engineered. Each font family is given a range of weights and styles, and enough ornaments, ligatures and alternate characters. Erik Spiekermann is another perfect example of the same having designed a corporate font for the city of Berlin together with all the communication and way finding system for the subway of the same German city through his studio Meta Design and it's foundry Font Shop.

But to me the the most representative designers and foundry of this period are Zuzana Licko & Rudy VanderLans from Emigre. Their work is a perfect example of the evolution of typography in the digital era, and how the advancements of technology have determined the way their fonts look today. From the begging style of crappy pixelated fonts and Carson's Raygun style, to the more sophisticated and engeneered revivals like Filosofia or MrsEaves, their work has an outstanding quality and the magazine the published for the past 15 years has made a big impact in the way typography is viewed today.



\*\*\*\*\*

### Mrs. Eaves by Zuzana Licko - Emigre.

*I can't remember when I first encountered a type specimen that had been printed by letterpress, or even if this experience preceded my knowledge of phototype technology. However, I do remember vividly, being shocked by the great difference between letterpress type and phototype, especially when comparing specimens of what was supposedly the same typeface design. What impressed me was not so much the fact that there was a difference; it's expected that different technologies will yield different results. What surprised me was that this difference was so uniquely uniform. Phototype font revivals consistently had an uncanny polished tightness, as though they sought to reproduce the original lead typefaces in some previously unattainable perfection, sometimes with such tight spacing that letters would practically touch; a very difficult task in lead. Perhaps it was their newly-found achievability that made these characteristics desirable at the time. Rarely did designers seek to capture the warmth and softness of letterpress printing that often occurred due to the "gain" of impression and ink spread.*

*Digital font revivals merely extended the quest for perfection introduced by phototype. This evolution is particularly strange in light of the fact that the development of type manufacturing technology has increased freedom of expression by reducing the mechanical restrictions on the form of type. One might imagine that these technological developments would in fact have also increased the variety of interpretations on the past, instead of reducing them. Ever since then, I have contemplated trying my hand at reviving an "old favorite" in a manner that challenged the common, preconceived method of interpreting the classics.*

In the new computer age the proliferation of typefaces and type manipulations represents a new level of visual pollution threatening our culture. Out of thousands of typefaces, all we need are a few basic ones, and trash the rest. So come and see

Price \$7.95

Emigre  
#18

☺

*Most of the typography of this century can be traced back to an approach taken up by William Morris in the closing years of the nineteenth century, an approach that involves looking to the past to retrieve something lost. Right now we're beginning to recognize that we've exhausted this approach, and are caught up in the rush to find something new.*

Jonathan Hoefler.

☺

## **BIBLIOGRAPHY.**

*Modern Typography, an essay in critical history*  
Robin Kinross,  
London, Hyphen Press. Second edititon, 2004

*The Elements of Typographic Style, version 3.0*  
Robert Bringhurst,  
Vancouver, Hartley & Marks Publishers 1992

*Anatomy of a Typeface*  
Alexander Lawson  
Boston, David R. Godine Publisher, 1990

*Letter Forms*  
Stanley Morison  
Vancouver, Hartley & Marks Publishers, 1997

*TypeWise*  
Kit Hinrichs & Delphine Hirasuna  
Ohio, North Light Books, 1990

*The art of Typography; An introduction to Typo.icon.ography.*  
*Understanding contemporary type design through classic typography*  
Martin Solomon  
New York, Watson-Guptill Publications, 1986

*Letters of credit; A view of Type Design,*  
Walter Tracy.  
Boston, David R. Godine Publisher, 1986.

*Typoèmes, poésie visuelle,*  
Jérôme Peignot  
Paris, Editions du Seuil, 2004

*Lettering as Drawing,*  
Nicolette Gray  
New York, Taplinger Publishing Co., Inc. 1982

*Treasury of Alphabets and Lettering*  
Jan Tschichold  
Hertfordshire, Omega Books, 1985

*Designing Typefaces*  
David Earls  
Switzerland, RotoVision SA, 2002

*Typographically speaking, The Art of Matthew Carter*  
Margaret Re  
New York, Princeton Architectural Press, 2003

*Calligraphic Type Design in the Digital Age;*  
An Exhibition in Honor of the contributions of Hermann and Gudrun Zapf, by John Prestianni.  
San Francisco, Gingko Press, 2001

*Handwriting: Everyone's Art*  
Wilcox and Ewan Clayton  
Sussex, Ditchling Museum & The Edward Johnston Foundation, 1999

*The Alhabetic Labyrinth: The letters in History and Imagination*  
Johanna Drucker  
London, Thames and Hudson, 1995.

*Herb Lubalin, Art director, Graphic designer and typographer*  
Gertrude Snyder and Alan Peckolick.  
New York, American Showcase, Inc., 1985

*The Histroical Source Book for Scribes,*  
Michelle P. Brown / Patricia Lovett  
University of Toronto Press Inc., 1999

*An essay on Typography*  
Eric Gill  
Hampshire, Lund Humphries, 1931 (2001)

*Helvetica, Homage to a Typeface*  
Lars Müller  
Switzerland, Lars Müller Publishers, 2002

*Type Style Mixer*  
Weibke Höljes  
London, Laurence King Publishing, 2001

*The Education of a Typographer*  
Steven Heller  
New York, Allworth Press, 2004

*Thinking with type*  
Ellen Lupton  
New York, Princeton Architectural Press, 2004

*Thinking in type*  
Alex W. White  
New York, Allworth Press, 2005

*Counter Punch:*  
*Making typefaces in the sixteenth Century designing typefaces now*  
Fred Smeijers,  
London, Hyphen Press, 1996

*Type now*  
Fred Smeijers  
London, Hyphen Press, 2003

*Type & Typography*  
Phil Baines & Andrew Haslam  
New York, Watson-Gutpill Publications, 2002

*Better Type*  
Betty Binns  
New York, Watson-Gutpill Publications, 1989

*The Thames and Hudson Manual of Typography*  
Phil Baines & Rauri McLean  
London, Thames , 1988

*En Torno a la Tipografia*  
Adrian Frutiger  
Barcelona, GG Diseno, 2001

*Typography Papers 6*  
University of Reading  
London, Hyphen Press, 2005

*U&lc: influencing design and typography*  
Edited by John D. Berry  
New Jersy, Mark Batty Publisher, 2005

*Avant - Garde Page Design*  
Jaroslav Andel  
New York, Delano Greenidge Editions, 2002

*Merz to Emigre and Beyond: Avant-Garde Magazine Design of the 20th Century*  
Steven Heller  
London, Phaidon Press, 2003

*A B Ç - Mas Alfabetos y Otros Signos*  
Edited by Julian Rothenstein and Mel Gooding  
Barcelona, Blume, 2004

*The Art of Written Forms - The Theory and Practice of Calligraphy*  
Donald M. Anderson  
New York, Holt, Rinehart and Winston, 1969

*Designing Books - Practice and Theory*  
Jost Hochuli, Robin Kinross  
London, Hyphen Press, 1996

*La Letra Gotica - Tipo e Identico Nacional*  
Peter Bain, Paul Shaw  
Valencia, Campgrafic Editors, 2001

*Cuaderno de Escritura*  
Rudolf Koch  
Valencia, Campgrafic Editors, 2001

*The Development of Western Type Carved in Wood Plates*  
Adrian Frutiger  
Switzerland, Syndor Press, 1996

*About Face - Reviving the Rules of Typography*  
David Jury  
Switzerland, RotoVision, 2002

*LETTERPRESS: the Allure of the Handmade*  
David Jury  
Switzerland, RotoVision, 2004

*Foundations of Calligraphy*  
Sheila Waters  
Greensboro, John Neal Bookseller, 2006

*The Historical Source Book for Scribes*  
Michelle P. Brown, Patricia Lovett  
London, The British Library, 1999

*Typology: Type Design from the Victorian Era to the Digital Age*  
Steven Heller, Louise Fili  
San Francisco, Chronicle Books, 1999

*Abc of 20rh Century Graphics*  
Sergio Polano, Pierpaolo Vetta  
Milano, Electa, 2002

*Historia del Periodico y su Evolucion Tipografica*  
Andre Gurtler  
Valencia, Campgrafic Editors, 2005

*Tipografia*  
Otl Aicher  
Valencia, Campgrafic Editors, 2004

*The Living Alphabet*  
Warren Chappell  
Charlottesville, The University Press of Virginia, 1975

*Metro Letters: A Typeface for the Twin Cities*  
University of Minnesota Design Institute  
Minnesota, 2003

*Art of the Printed Book 1455 - 1955*  
*Masterpieces of Typography through Five Centuries fro the Collections of the Pierpont Morgan Library*  
New York, Pierpont Morgan Library, 1973

*Pioneros de la Tipografia Moderna*  
Herbert Spencer  
Barcelona, Editioal Gustavo Gilli, 1995

*Type Spaces: In-House Norms in the Typography of Aldus Manutius*  
Peter Burnhill  
London, Hyphen Press, 2003

*The First Writing Book - Arrighi's Operina*  
John Howard Benson  
New Haven and London, Yale University Press, 1954

*How to Spec type*  
Alex White  
New York, Watson-Guptill Publications, 1987

*The New Typography*  
Jan Tschichold  
Berkeley, University of California Press, 1987

*Finer Points: in the Spacing & Arrangement of Type*  
Geoffrey Dowding  
Vancouver, Hartley & Marks Publishers Inc. 1995

*Type - The Secret History of Letters*  
Simon Loxley  
London, I.B.Tauris & Co. Ltd, 2004

*The Thames and Hudson Manual of Typography*  
Ruari McLean  
London, Thames and Hudson Ltd, 1980

*Typologia: Studies in Type Design & Type Making*  
Frederic W. Goudi  
Berkeley, University of California Press, 1940

*Paul Renner - The Art of Typography*  
Christopher Burke  
New York, Princeton Architectural Press, 1998

*The Stroke - Theory of Writing*  
Gerrit Noordzij  
London, Hyphen Press, 2005

*Letterletter*  
Gerrit Noordzij  
Vancouver, Hartley & Marks Publishers Inc. 2000

*Unjustified Texts: Perspective on Typography*  
Robin Kinross  
London, Hyphen Press, 2002

*A View of Early Typography, Up to about 1600*  
Harry Carter  
London, Hyphen Press, 2002

*Principios Fundamentales de la Tipografía*  
Stanley Morison  
Barcelona, Ediciones del Bronce, 1998

*A Suite of Fleurons*  
John Ryder  
London, Phoenix House Ltd, 1956

*A Book of Scripts*  
Alfred Fairbank  
Middlesex, Penguin Books Ltd, 1949

*The Ten Commandments of Typography + Type Heresy*  
Paul Felton  
London, Merrell Publishers Ltd, 2006

*Printing Should Be Invisible*  
Beatrice Warde  
New York, Wessel and Lieberman Booksellers Inc, 2006

*Writing & Illuminating & Lettering*  
Edward Johnston  
London, A&C Black Ltd, 1994

*The Graphic Artist and his Design Problems*  
J. Muller - Brockmann  
Zurich, Verlag Niggli, 1961

*XIXth Century Ornamented Types and Title Pages*  
Nicolette Gray  
London, Faber and Faber, 1938

*An Illustrating History of Writing and Lettering*  
Jan Tschichold  
London, A. Zwemmer, 1946

*The Gutenberg Galaxy*  
Marshall McLuhan  
Toronto, University of toronto Press, 1962

*A Short History of the Printed Word*  
Warren Chappell  
Boston, Nonpareil Books, 1980

*Asymmetric Typography*  
Jan Tschichold  
New York, Reinhold Publishing Corporation, 1967

*Type at Work - Usos de la Tipografía en el Diseño Editorial*  
Andreu Balius  
Barcelona, Index Book, 2003

*Watching Words Move*  
Ivan Chermayeff, Tom Geismar  
San Francisco, Chronicle Books, 1962

*Compendio para Alfabetos - Sistemática de la Escritura*  
Karl Gerstner  
Barcelona, GG Diseno, 2003

*Grid Systems in Graphic Design*  
Josef Muller-Brockmann  
Zurich, Verlag Niggli, 1981

*Jan Tschichold: A Life in Typography*  
Ruari McLean  
New York, Princeton Architectural Press, 1997

*Graphic Design - Principles and Practice*  
Armin Hofmann  
New York, Van Nostrand Reinhold Company, 1965

*A Designer's Art*  
Paul Rand  
New Haven and London, Yale University Press, 2000

*Typography Today (New Edition)*  
Helmut Schmid  
Tokyo, Seibundo Shinkosha, 2003

*Emigre: a Graphic History of Emigre Magazine*  
IDEA Magazine - International Graphic Art and Typography  
Tokyo, Seibundo Shinkosha, 2006

*Typography-ex.[part.01]*  
IDEA Magazine special edition  
Tokyo, Seibundo Shinkosha, 2006

*The Liberated Page*  
Edited By Herbert Spencer  
San Francisco, Bedford Press, 1987

*mmm... Skyscraper i Love You - A Typographical Journal of New York*  
Karl Hyde, John Warwicker  
London, A Tomato/ Underworld Project, 1994

*Contemporary Newspaper Design*  
Edited by John D. Berry  
NewYork, Mark Batty Publisher, 2004

*Designing Type*  
Karen Cheng  
New Haven, Yale University Press, 2005

*Typography: Formation + Transformation*  
Willi Kunz  
Zurich, Verlag Niggli, 2003

*Typography: Macro- + Macroaesthetics*  
Willi Kunz  
Zurich, Verlag Niggli, 1998

*Futurist Typography and the Liberated Text*  
Alan Bartram  
New Haven, Yale University Press, 2005

*The Typographic Grid*  
Hans Rudolf Bosshard  
Zurich, Verlag Niggli, 2000

*l'Homme et ses Signes*  
Adrian Frutiger  
Reillane, France, Atelier Perrousseaux, 2000

*Transition of Modern Typography, Europe & America 1950 s- '60s*  
Ikko Tanaka  
Tokyo, TransArt Inc, 2002

*Typographie*  
Emil Ruder  
Zurich, Verlag Niggli, 1967

*Typography*  
Wolfgang Weingart  
Basel, Lars Muller Publishers, 2000

*The Origin of the Serif - Brush Writing & Roman Letters*  
Edward M. Catich  
Iowa, St. Ambrose University, 1991

*Notes on Book Design*  
Derek Birdsall  
New Haven, Yale University Press, 2004

## ARTICLES IN OPENTYPE

Adobe Systems and Microsoft Deliver

OpenType Font Specification

<http://www.microsoft.com/>

What is Opentype?

<http://www.myfonts.com/info/opentype>

OpenType Specifications

<http://www.microsoft.com/typography/specs>

Enough is enough

<http://jeff.cs.mcgill.ca/~luc/opentyperant.html>

OpenType features

[http://www.typotheque.com/static/opentype\\_features](http://www.typotheque.com/static/opentype_features)

World's Top Font Foundries Embrace OpenType

Adobe Creative Suite Spearheads OpenType

<http://www.creativepro.com/story/news/21746.html>

FontShop adds hundreds of new OpenType fonts

[http://www.atypi.org/news\\_tool/news\\_rss\\_html?newsid=339](http://www.atypi.org/news_tool/news_rss_html?newsid=339)

Font Technologies: History and Development

<http://www.visiongraphics-inc.com/tools/fonttech.html>

Compulsory Bartering: The Implications of OpenType

<http://www.hardcovermedia.com/lab/articles/ot.htm>

OpenType and you

<http://www.p22.com/support/Opentype.html>

Underware

<http://www.underware.nl/opentypeintroduction>

## OPENTYPE EXPERIMENTAL FONTS

Amy Papaelis. Handwriting fonts with something to say.

[http://www.typetalkfonts.com/typetalk\\_demo.html](http://www.typetalkfonts.com/typetalk_demo.html)

Christian Schwarz's Local Gothic

<http://www.vllg.com/OrangeItalic/LocalGothic>

Christina Schultz's Figlig font

[http://www.christinaschultz.de/piclig\\_web\\_concept.htm](http://www.christinaschultz.de/piclig_web_concept.htm)

House Industries Ed Interloc. (Ed Benguiat revivals)

[http://www.houseindustries.com/ed\\_interlock](http://www.houseindustries.com/ed_interlock)

## Videography & Discography.

### TYPOGRAPHY BLOGGS.

Typographica. A Journal in typography

<http://www.typographi.com>

Typofile

<http://www.typofile.com>

Typblography. Thomas Phinney blogg

<http://blogs.adobe.com/typblography>

Typotheque.

<http://www.typotheque.com>

### MAGAZINES

Eye Magazine.

<http://www.eyemagazine.com>

Baseline Magazine

<http://www.baselinemagazine.com>

### TYPE FOUNDRIES

oefler & Frere-Jones

<http://www.typography.com>

Emigre

<http://www.emigre.com>

Font Bureau

<http://www.fontbureau.com>

FontFont Online Shop

<http://www.fontfont.com>

Bitstream

<http://www.bitstream.com>

Fountain Fonts

<http://www.fountain.nu>

FontShop

<http://www.fontshop.com>

Underware

<http://www.underware.nl>

TypeCulture.

<http://www.typeculture.com>



*The secret of writing is the balance of black and white.*



*To make typography understood, we must teach design by teaching handwriting as the art of visual equilibrium.*



*Non-Chinese are dreaming of type design that could exist independently from handwriting. This view cannot explain type design; it has no future because it has no past. Learn this from Chinese at least; the future of a civilization is founded on its tradition.*



Gerrit Noordzij. LetterLetter.

☺  
*But a feeling for good letter forms and attractive typefaces  
can only be acquired by constant & careful practice in sketching letters.*  
Joseph Muller-Brockmann  
☺



☺  
*This project has been advised by Graham Hanson, to whom I have to deeply show my regards. Thanks are to be given to a lot of people. Special thanks go to Cara Di Edwardo, teacher at Copper Union that opened my path to calligraphy and has mentored me through the process of learning and developing my hand skills. Thanks also to Julian & Sheila Waters, John Downer & Alice my calligraphy teachers. To Peter Bain, Carol Whaler & Type Directors Club. Still thankful to Olga de la Roza for her motivation. To Don Arieu for giving me the opportunity to be at Graduate School.*

☺  
*Special thanks to my mother and my family for their support. Alessandra Dini, Tali Bogen & Pol Montleó for their help. Most special thanks and love to Peggy Sue.*

☺  
*This book is dedicated to the memory of my father.*

☺



