

# Imprint

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### About This Book

Typography is everywhere. If you walk out the door, you will be hard pressed to find any element of our daily lives that doesn't involve or rely on typography. The prevalence of typography is not limited only to the analog world. This eBook introduces historical and cultural aspects of type and how they relate to the Web industry. Find out about changing fads in type, about the complexities of Japanese characters and about typographic applications for different situations. You are sure to learn something that you didn't know before from our great authors.

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# Japanese, A Beautifully Complex Writing System

#### BY SHOKO MUGIKURA 🕬

As a Japanese person living in Europe, I'm sometimes asked: "Japanese is a difficult language, isn't it?" Those asking are often surprised when my answer is a simple: "No, actually, it's not."

While it is true (at least to many Westerners) that Japanese is an exotic language, when compared to learning other European languages, it may seem harder because it has no relation to their own language. But from my own experiences of learning English and German (and also from seeing some European friends learning Japanese), I can say with confidence that learning spoken Japanese is, in fact, not so difficult. The grammar is in many ways simpler than most European languages. Take for example the fact that we don't have cases, grammatical genders, nor articles. However, reading and writing in Japanese is... well, not so simple.

While discussing typography we most often focus on English language problems, which is only natural considering that the majority of design material is written in English. However, a lot can be gleaned from looking at how other languages are used as part of communication and design — it helps to lend context and a different point of view.

#### Japanese Scripts

Modern Japanese is written in a mixture of three basic scripts: Kanji — which are Chinese ideographic symbols — as well as Hiragana and Katakana — two phonetic alphabets (syllables). There are a few thousand Kanji characters, while Hiragana and Katakana have 46 each. Although there is a basic rule for when to use which script, there are many exceptions, and what's worse is that words written in Kanji have often multiple pronunciations, depending on the context or conjunction. This is hard enough for native speaker to get right every time, so I almost feel sorry for those non-natives who are learning to read and write Japanese.



# Hi ra ga na ひらがな Ka ta ka na カタカナ

From top to bottom: Kanji is mainly used for the lexical elements: nouns, verb stems, adjective stems, and so forth; Hiragana has rounded letter shapes, which are mainly used for the grammatical elements of sentences such as particles, auxiliary verbs, and suffixes of nouns; Katakana has an angular letter shape, which is most often used for foreign words and also for the purpose of emphasis.

Some say that the "tragedy" started when Japan decided to "import" the Chinese writing system, inscribing it into their own language in the 3rd century.

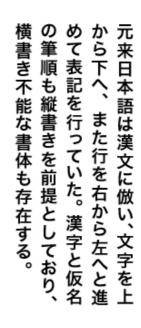
Since Japanese is as different from Chinese as it is to any other language, simply using the Chinese writing system was not sufficient, and a more appropriate way of writing Japanese was sought out. Some Chinese characters began to be used not for their meaning, but purely for their phonetic value. So by the 9th century, Hiragana and Katakana scripts were derived from simplified Chinese characters that were used to write Japanese phonetically.

The story doesn't end there. As if using three scripts isn't enough, we write in both horizontal and vertical orientation.

# Horizontal? Vertical? The Unique Case Of Japanese Typography

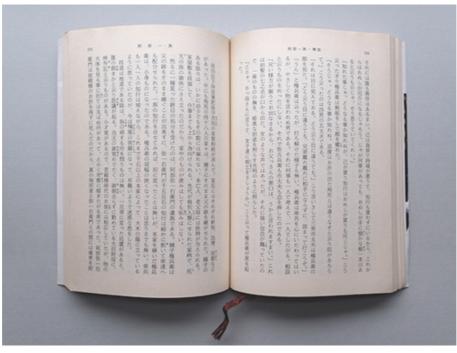
"Vertical or horizontal?" — when setting a piece of text in Japanese, this is a question that Japanese designers constantly need to ask themselves. Being able to use both vertical and horizontal writing orientations is something so normal for us native Japanese speakers that most of us won't even stop to wonder why this is possible, or even when and how it was first introduced.

元来日本語は漢文に倣い、文字を上 から下へ、また行を右から左へと進 めて表記を行っていた。漢字と仮名 の筆順も縦書きを前提としており、 横書き不能な書体も存在する。



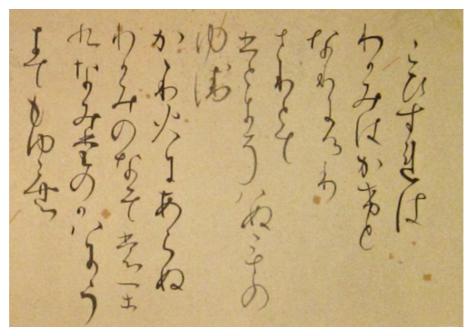
The identical piece of text set vertically (right) and horizontally (left). When it is set vertically it's read from top to bottom, as the lines go from right to left; when it is set horizontally, it is read from left to right, like in European languages.

In general, these two writing orientations have a clear usage: vertical for something "Japanese", "traditional", "novels and other humanistic writings"; horizontal for "contemporary", "business documents", "scientific & foreign language related writings" and so on. When a main text is set horizontally, the binding is on the left-hand side, and pages progress to the right, like books in Latin scripts. Traditional books in vertical setting are the other way around, with the binding at the right hand side, and pages progressing to the left. So when you handle a Japanese book, don't confuse the front with the back!



A typical page layout of a Japanese paperback novel using a vertical setting. Ogai Mori (1913), "Abe Ichizoku", Shincyo-bunko.

一日八



Needless to say, traditional calligraphy is always done vertically. With their organic flow, characters are often connected and have different heights and widths — which makes it impossible to disconnect and align them horizontally. Calligraphy by Keiko Shimoda, 2011 (http://www.tsukushidesign.com<sup>1</sup>)

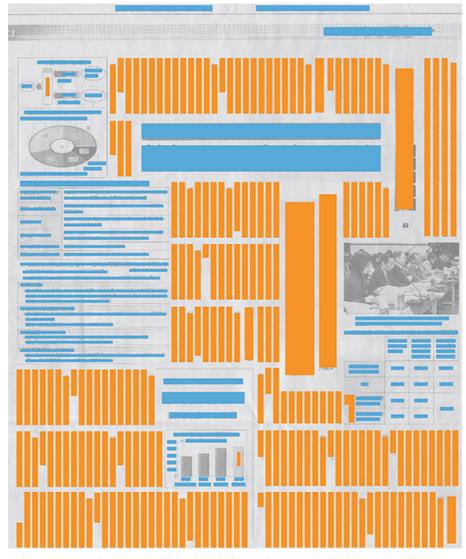


Horizontal setting is preferred for scientific texts, mathematical texts and language related books, where words and phrases in foreign scripts and signs are often included, as they are more easily incorporated horizontally. The example (above) is a Japanese-English dictionary. (Pocket Comprehensive English-Japanese / Japanese-English Dictionary, 2000, Obunsha)

Where the efficient use of space is important — namely newspapers and magazines — both orientations are often combined. Although it may appear a bit chaotic, or even random to foreign eyes, these two directions are usually used in a systematic way as a means to indicate different text elements on a page. For instance, a main text is often set in a vertical setting, but headings and captions may be set in a horizontal setting.



A typical newspaper layout – the main text is vertical but headings, diagrams, tables, and captions are placed horizontally.



The same newspaper as above, but highlighting the vertical text (orange) and the horizontal text (blue). © The Nikkei (May 8th, 2009)

In a way, it's comparable to "typographic variants" which are found in Latin typography — in Latin script text one may use bold, italic, or a different font to differentiate things such as pull quotes from the main text, whereas in Japanese we can do this by using a different orientation. Publications which accommodate non-linear or complex text (as opposed to linear text, such as novels) seem to benefit in particular from having these two orientations, which allow the layout to be highly flexible, and also to create strong visual impact.

The extreme cases of "space-efficiency-oriented typography" are informational-heavy pieces of text, such as diagrams and signage — also exploiting the two directional orientations. The Tokyo Metro map (Fig 10) is a good example of this — as you can see, both orientations are used accordingly, so that everything fits best within the limited space.

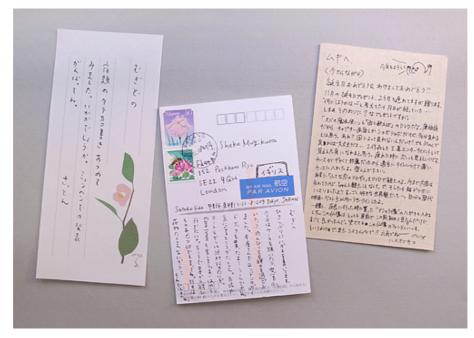


Tokyo Metro map



Tokyo Metro route map. The large type on the top is the station name which is placed horizontally. The name of the metroline may be horizontal, but the name of the stops are placed vertically.

It's true that in many cases they look quite chaotic and sometimes even aesthetically questionable to eyes that are used to "orderly" design. But it's easy to appreciate the visual impact and energy they create — they remind you that effective, appealing informational design does not always have to look "neat and tidy".



Letters from my friends: when it comes to handwriting, orientation is up to a personal preference or simply one's "mood". But when you are writing a more official letter, or writing to somebody who is much older than you, it's probably safer to opt for vertical orientation.

#### What's Happening On Screen-Based Media?

Since the introduction of horizontal writing in the Japanese language, print-based media and signage have been employing both of these writing orientations effectively, and in ways that complement one another. But what's been happening to screen-based media? With a few exceptions — such as word-processing machines made exclusively for the Japanese text output, or subtitles for film and TV screens, which tend to use either depending on the background image — horizontal orientation has been the dominant choice.

The prime example of this is the Web: horizontal orientation has been used almost exclusively. For the past 15 years, I have hardly come across a website that uses vertical setting. Mobile phone screens also use a horizontal orientation. I believe this may be due to the relations of hardware, operating systems and user interfaces that have become the norm, all of which have been designed to work with horizontal writing. It feels somewhat awkward to see vertical writing while all the other elements on the screen, such as the menu bar and UI elements, are horizontal.

Needless to say, the technical limitations (the support of a vertical setting by browsers is a fairly recent introduction) have largely contributed to this too. Perhaps underestimated, maybe the biggest factor for not using vertical setting for screen-based media could well be the mental association with horizontal orientation being used for something "modern" and "contemporary".



The Nihon Keizai Newspaper website. Although the printed newspaper employs a vertical setting for the body texts, the web-version uses a horizontal setting.



So far, even with content as Japanese as a tea ceremony, a website will use a horizontal setting. (Accessed Jan. 20th, 2012)

### Will Vertical Writing Orientation Die Out?

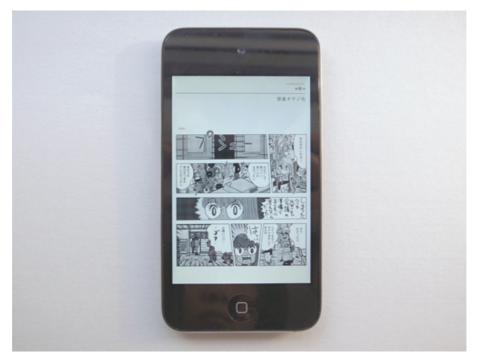
Will vertical writing orientation die out from screen-based media? Or can it make a comeback, when the technological environment allows us to use vertical settings more easily? Many e-book apps on smart phones and tablets have already started using vertical settings. With its intuitive way of navigating the screen along with the lack of external input devices (and apps being able to have more flexible/responsive layout), vertical writing seems to be incorporated much more comfortably.

I've spent some time reading these e-books — and pleasantly surprised at how easy they are to read. Apart from the fact that you need to scroll the screen horizontally, it's just as comfortable as reading "normal" or horizontally set text. In fact, it's even better for some types of publications like novels, or Manga. Our association towards this type of content when compared to the vertical setting is pretty strong; it would somehow feel "wrong" to see them set horizontally.

Amazon's Kindle has yet to support the Japanese language, but apparently they're on their way to doing so. If they seriously want to attract Japanese readers, it would be unthinkable for them not to support vertical setting.



Soseki Natsume's "Sanshiro" (1908) e-book on iPhone.



Kotobuki Shiriagari's "OSHIGOTO" (2010) e-book on iPhone.

The situation also seems to be slowly changing on the Web – some interesting attempts have been made in order to familiarize ourselves with Web pages that have vertical setting. One such example is Taketori<sup>2</sup>, which works just like Google translate – you can type in the URL of a Web page you wish to see in vertical setting, and Taketori does it for you. There's also a piece of software called Kagetaka, which can switch any Web text into a vertical orientation.

Personally, I'm not too sure how well vertical setting will be supported by the users of normal Web pages, unless the way we navigate Web pages is re-developed, or a new type of browser with more innovative UI appears. Even though I complained earlier about the difficulty of the Japanese writing system, I do appreciate its diversity and flexibility, while making use of its three scripts and two orientations allows us to express subtle nuances of content — and we have been benefiting from that for decades.

I thought it would be a shame if we lose these methods of textual articulation in an age of screen-based media. But what has been happening for the last couple of years on touch-screen mobile devices (as well as the Web) can reassure us that both writing orientations may happily co-exist and collaborate on screen in the future, just as they have done off-screen for the last hundred years. **\*** 

2. http://taketori.org

# **Respect Thy Typography**

#### BY ESPEN BRUNBORG 😕

Good typography shouldn't have to rely on ornamental crutches to stand tall. Yet despite all the tools and knowledge available to us, we readily embrace a flourishing, decorative typography, with cheap tricks used in a misguided attempt to make it "pop". This ancient art may rapidly be gaining popularity, but are we paying it the respect it deserves?

Take a snapshot of the visual culture that surrounds you — magazines, movie posters, packaging, websites — how much of it relies on typography? How much of the typography around you is actually well considered? Chances are you'll find a handful of beautifully crafted typographical designs competing with an avalanche of visually "rich", image-heavy creations. Typography is then relegated to the role of "necessary evil" in order to display text, or ill-considered typographic pieces, where the meaning of MS WordArt has been interpreted a smidgen too literally... *Why*?

#### Looking Back

It's fair to say that the global webdesign community is experiencing a typographical renaissance. Revolutionary technologies like Typekit<sup>3</sup>, Fontdeck<sup>4</sup>, the introduction of the @font-face tag, and online licensing for professional typefaces are all encouraging type enthusiasts around the Web to transcend the shackles of common type<sup>5</sup>. Furthermore, clever use of CSS and JavaScript are allowing us to mimic a range of typesetting techniques (though admittedly some basic typographical controls are still frustratingly infantile<sup>6</sup>).

But with such power comes great responsibility. And even though modern tools give us the opportunity to do so many things, doing a great deal of these things isn't always a recipe for beautiful design. Just because we have many options opening up to us doesn't mean we need to employ every single one of them in the hope of developing a design that stands out — and most likely for all the wrong reasons.

<sup>3.</sup> https://typekit.com/

<sup>4.</sup> http://fontdeck.com/

<sup>5.</sup> http://www.ampsoft.net/webdesign-l/WindowsMacFonts.html

<sup>6.</sup> http://8gramgorilla.com/print-vs-web-part-1-incredible-ink/

That's not to say typographic design can't be ornamental, complex or even illustrative. But centuries of working with movable type has left us with principles on which to base our typography, and it's our duty as designers to understand them (at least if we're aiming to break them). A good place to start is to look at what those who came before us have done — even the briefest throwback into the annals of typography and design history will help.

Consider Milton Glaser's<sup>7</sup> "I love New York" logo from 1977, commissioned as part of a marketing campaign by the New York State Department of Commerce. Glaser, who did the work pro-bono, wisely avoided skylines, figures of people holding hands, or flowery ornaments by using only a simple heart shape to represent the key word of the mark: love. We all know the subsequent success of the logo, as it has been brandished on millions of white t-shirts, inspiring countless knock-offs since its inception.

And if the heart-symbol of Glaser's work seems too pictorial in this context, how about Robert Indiana's<sup>8</sup> "Love" sculpture? Originally created for a Museum of Modern Art Christmas card in 1964, this iconic piece of type shuns imagery altogether, relying only on the power of letterforms (arguably based on Clarendon<sup>9</sup>) to ignite our compassion.



Lovely examples of modern typographic icons.

- 7. http://www.miltonglaser.com/
- 8. http://robertindiana.com/
- 9. http://typophile.com/node/27607



Milton Glaser's post-9/11 update of his own masterpiece.

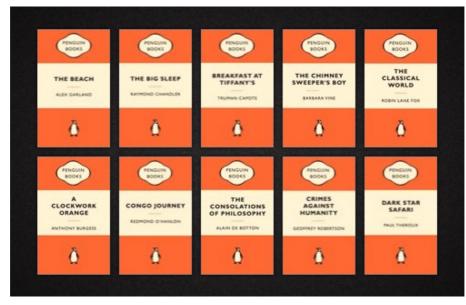
Of course, this kind of admiration for type didn't just start with 60's advertising. Typography is a craft going back thousands of years<sup>10</sup> – to the birth of writing, if you wished to go deep enough – and has evolved and developed a great deal since that time. Theories have been postulated and developed as to how to best communicate through letterforms, especially when an idea needs to be transmitted as easily as possible. As Bringhurst explains while introducing the first chapter of his timeless "The Elements of Typographic Style": *Typography exists to honor content.* 

Beatrice Warde's well known essay "The Crystal Goblet" beautifully explains the role of the typographer and his or her type, and she reinforced this point during an address given in 1930 to the British Typographers Guild in London. Advocating the idea that type was not there to be admired, or even noticed, that it existed only with the purpose of

<sup>10.</sup> http://en.wikipedia.org/wiki/Trajan's\_Column

communicating an idea, she proclaimed; "I have a book at home of which I have no visual recollection whatever as far as its typography goes; when I think of it, all I see is the Three Musketeers and their comrades swaggering up and down the streets of Paris." I wonder how many us have the same consideration for content when we browse through MyFonts or Typekit in search of the perfect typeface.

One of the many great designers who echoed Warde's ethos was Jan Tschichold<sup>11</sup>. His most well-known work is found in the legacy he created during his time working for Penguin (1947-1949), refining and redesigning the former book covers and creating the rulebook for the Penguin covers that followed him.

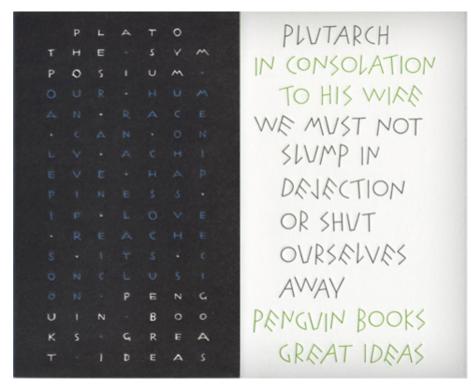


Notice the absence of decorative elements in this series of Penguin covers by Tschichold.

Looking at these covers one will see that the focus is unequivocally on the communication of a book's title and author, and the result is truly magnificent. The covers are not beautiful because of particular ornaments or images, or even the individual shapes of the letters, but for their clarity of message. It's not by accident that a clarity of (and focus on) typography has stuck with Penguin until the present day, which is beautifully demonstrated by David Pearson's<sup>12</sup> designs for the "Great Ideas" series from 2004, 2005 and 2008.

<sup>11.</sup> http://en.wikipedia.org/wiki/Jan\_Tschichold

<sup>12.</sup> http://www.davidpearsondesign.com/



Though the style may be different, the focus on typography still embodies the spirit of Tschichold.

### Challenging The Rules

The approach advocated by modernist typographers is one of clarity and legibility. Scientific methods (let's call it early "A/B testing") were utilized in the quest to find the perfect typeface — not in terms of aesthetic, but rather efficiency for communicating — and rigid systems were developed to achieve ideal reading conditions. In the strictest sense, typographic beauty is not to be gained from the letters or ornaments themselves, but should come as a natural result from an "invisible" type that unselfishly honors the words and content.

However, movements of any kind invariably inspire counter-movements, and the modernist ethos was to be thoroughly challenged towards the end of the last century, most notably by David Carson (b. 1954), Peter Saville (b. 1955) and Neville Brody (b. 1957). While earlier designers sought to communicate the messages they were setting as clearly and cleanly as possible, these young contenders wished to push the boundaries of legibility and normality, so that the emotion and idea wasn't delivered via what the words represented, but how the words were seen as objects separated from their meaning.

These three designers were to shape the face of contemporary typography with their groundbreaking work spanning magazines, newspapers, film titles (Carson and Brody) and record sleeves (Saville). They helped pioneer experimental typesetting in the 80's and 90s', throwing the modernist rulebook out the window, yet retaining the communicative authority for letters and words.

Nowadays it's easy to argue that their use of type did indeed include a great deal of flourish and extras. But seen in the context of the postmodern era, it's clear that this was not simply an attempt to "beautify" their work. On the contrary, the disrespect for clarity and to embrace "grunge" were design statements opposing the impersonal coldness of the modernist designers... they were adding emotion to the words they were communicating, which also reflected the cultural movement of the time.

Jan Tschichold might have turned in his grave at brash expressions such as these, but the power of typography seemed stronger than ever. Their work showed that there is an infinite number of ways that typography can be used to communicate a message.



Clockwise from top left: Saville's cover for Hard-Fi: Once Upon a Time in the West, Carson's High Priority spread for NY magazine, Nike ad by Neville Brody.

The conscious tenet arising from such examples is an appreciation, by the designer, of how typography can be emotionally valuable. Each of the above examples evoke something – whether heartfelt, or slightly

adrenalin pumping, it can be concluded that this is often the role of illustrative typography: to move the heart, and not just yell at the mind.

#### From Movable Type To Type That Moves

Regardless of the word count, the typographic experience can be as emotional as any pictorial masterpiece. This notion is beautifully exemplified by the "Coming Together" campaign for FontAid by The Society of Typographic Aficionados<sup>13</sup> (SOTA) in support of relief efforts following the 2010 disaster in Haiti. The project — a font consisting of hundreds of ampersands designed by contemporary typographers — showed that despite the common saying that "a picture speaks a thousand words", sometimes all you need is a handful of letters... or indeed, just a single character.



The "Coming Together" typeface shows us the power of a single character.

Other, less sentimental examples of moving (literal as well as metaphorical) type are masterfully displayed on the blog of <u>Trent Wal-</u>ton<sup>14</sup>, a true magician in terms of utilizing modern technologies to add depth to his typography. When spelling out the title <u>Workspace<sup>15</sup></u>, a particularly illustrative typographic treatment conjures up images of your very own – or perhaps your dad's very own – workspace, complete with holes in the wall for hanging up indispensable tools ("I *really* need-ed that magnetic stud finder").

In another example, <u>Unitasking</u><sup>16</sup>, the "I" in the headline doubles as an illuminated "1" when it is interacted with, emphasizing the message

<sup>13.</sup> http://www.typesociety.org/

<sup>14.</sup> http://trentwalton.com/

<sup>15.</sup> http://trentwalton.com/2011/11/18/workspace/

<sup>16.</sup> http://trentwalton.com/2011/09/20/unitasking/

of the article. Granted, neither example can be described as "pure" typography. But note how the extensive use of technology with typographic tricks can be used to illustrate the message, infusing it with added emotion, rather than for decorative purposes.



Movable, interactive typography with nostalgic undertones.



Laborious use of CSS trickery adds value to the message.

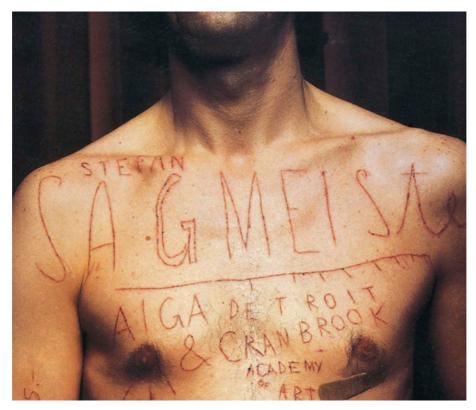
Stefan Sagmeister<sup>17</sup> is another designer (actually, another legend) fascinated by the concept of emotional typography and how design can touch our fellow human beings, and he's unafraid to use unconventional means of communication. For a 1999 AIGA lecture poster he literally

<sup>17.</sup> http://www.sagmeister.com/welcome

carved all the copy into his own body using a razor blade (well, his studio mate did the carving) before photographing himself, the result being so disturbingly powerful that it's difficult to look away.

But it's not all gore, of course. As part of his "Things I have learned" series he created a type-only billboard for Experimenta Lisbon<sup>18</sup>, spelling out his message in capital letters: "Complaining is silly. Either act or forget". Simple enough, right? Not quite. Using no ink what so ever, Sagmeister and his team created a gigantic stencil and exposed huge sheets of newsprint to the scorching sun over a period of weeks.

The letters (covered by the stencil) would remain white as the newsprint yellowed, and by the time the billboard went up the statement was easily read by onlookers. The subsequent effect was, as you may have deduced by now, that the letters would slowly fade away as the previously non-exposed newsprint would yellow to the same color as the background. Thus the message to "act or forget" was emotionally strengthened with every passing day.



Sometimes typography can be effective without trying to be beautiful.

<sup>18.</sup> http://www.sagmeister.com/node/219



Using the sun's ultraviolet rays to slowly fade away the message.

At this point we've come a long way from the clear, simple typography of Tschichold. I'm sure many of you are questioning whether the latter examples, in comparison, rely too much on visual tricks to get their messages across. Indeed, I opened this chapter by challenging the overuse of ornaments and decoration in order to enhance our typography, and yet aren't Walton's and Sagmeister's work examples of just that? Not quite.

Despite heavy use of non-typographic elements, there are no unnecessary flourishes to be found, nor are there any signs of unrelated decoration (though, to be pedantic, Walton's use of surface textures may be superfluous). In truth, both designers are *adding value* by choosing techniques and expressions that purposefully match the content and create an emotional frame in which to deliver the message, thus highlighting it's impact.

Contemporary experimentalists like Walton and Sagmeister might contradict traditional typographic principles, yet they play an important role in the global, ongoing design conversation by constantly discovering new and unconventional means for typographic expression.

### Spread The Word. Literally.

In all honesty, type is not just movable, it has the power to move — and it's up to us to carry this legacy forward and into the digital frontier, that is inevitably our future. By learning from past examples of excellence, we can challenge the status quo of mediocre typography and misplaced stock photography, and start to push things forward. We don't always need to do too much (well written copy is, after all, your very best friend), and we certainly don't have to use all the tools in our drawer every time.

But we can continuously look for new ways to add value, as long as we make sure our typography doesn't communicate anything other than the intended message. Sometimes that means heavy use of CSS, making creative use of sunshine, or experimenting with size and position. Other times — perhaps most times — it means keeping things simple, letting the words do the talking and letting the typography work itself gently into the background.

Remember, despite the plethora of typographical tools we now have at our immediate disposal, we're the latest chapter of a long history of typographic craftsmanship — typographers painstakingly arranged letters by hand for centuries before the computer (or even phototypesetting) came along. We should honor the hard work that has been put in by those who came before us. We can do this by recognizing typography as an essential part of our work (be it for Web or print), learn about the principles (especially if you're aiming to break them) and consider all the factors that make for great communication through letterforms.

If right now you are thinking "but my boss will never let me do what Sagmeister does!" — don't sweat it, most projects don't allow for typographic experimentation. But that doesn't mean you can't hone your skills — there's plenty to be gained from taking pride in the small things, and making sure you get the details right. If your brief dictates uninspiring imagery, put your effort and pride into perfecting the accompanying typography. Is the line-length appropriate? What about font-size, line-height, and hierarchical contrast? Does the typeface echo the sentiments of the message? Maybe if you get all the small things right, the bigger things will come easier once that suitable project comes your way.

So roll up those sleeves, consider the meaning of the words you're setting, and pay some respect to the centuries of evolution behind the typeface you're using today, and just as importantly, the craft of typography as a means of expression. By all means use images, but just remember that you don't always have to — typography can be just as meaningful by itself, even without the alluring magic of word-art.

A big "thank you" to our typography editor, <u>Alexander Charchar</u><sup>19</sup>, for preparing this chapter. **\*** 

<sup>19.</sup> http://retinart.net/

# Typography Carved In Stone

#### BY ANNE BRADY 🐲

Every name here is a tragic story of loss and heartbreak. The Garda Memorial Garden, or *Gairdín Cuimhneacháin an Gharda Síochána*, is located in the heart of Dublin city. This memorial is a contemplative garden with large stone plinths and a lot of names and numbers. The list of names, this "roll of honor," records individual police officers (*gardaí*) who have lost their lives violently and tragically in the line of duty since the formation of the Irish state in 1921.

This chapter offers insight into the creative thought processes I followed in designing a typographic solution for this memorial. I'll discuss my choice of typeface, my detailed layout, the size of type, the materials, the process of engraving, and leaving open the possibility to add names in the future. My objective was to keep a sense of visual harmony throughout the design, while aiming for a certain consistency in the future engraving of names, regardless of language.



Detail showing the carved dual-language granite plinth leading into the memorial garden.



The garden is located in Dublin castle, originally a medieval fortress.



The memorial garden is curved. It contains carved plinths, seating and plants.



The garden at night.

# Background

In the spring of 2009, Ana Dolan, senior architect in the Office of Public Works, asked me to think about the style of lettering that should be used in a project she was working on. Her job was to design a new memorial garden to honor all those who had died in the line of duty. The state had decided to carve the names of these 82 individuals into a new limestone memorial, and the need for a typographer on the team was recognized. It was great to be offered such an unusual and nonephemeral project.



A detail of the carved lettering in speckled granite, with dark-gray infill.



Some letters in the Irish alphabet have accented characters called "fadas."



The typeface was also carved into stainless steel and infilled in dark gray.

Ana explained to me that another memorial to honor all of these gardaí already existed somewhere else in the city. It had served as a place for their families to visit since the 1950s. All of the people's names and unique regimental codes were carved in stone in a continuous block, each separated by a simple cross. The original lettering style (see below) was handmade and calligraphic in style; simple, elegant and carved deeply. Sadly, information about its architect and typographer has been lost over time. However, it might have been carved by the English typographer Michael Biggs, and the monument designed by the Irish architect Desmond Fitzgerald. More research is required on this.



A detail of the original memorial from the 1950s, with hand-carved names and crosses.

This older memorial was located in a high-security place that was difficult to visit without prior appointment or without undergoing strict screening. Over the years, the families of those people whose names were inscribed in this memorial felt that visiting the place was quite difficult. As a result, a decision was made to redesign the roll of honor and relocate it in the city center, on the grounds of Dublin Castle.

#### A New Memorial

The architect and I met in early 2009 to discuss the new memorial and to assess the advantages and disadvantages of the carved lettering in the old memorial. The lettering reflected the typographic sensibilities of the time (1950s); so, pondering the choice of lettering and layout was crucial to bringing some of those qualities into the new memorial garden's typography. Initially, I was instructed to faithfully copy the original letters, but thankfully this specification changed as the project progressed.

The new architectural team had also gone some way towards developing a typographic approach and were favoring a ranged-left (i.e. ragged-right) style rendered in a PC-available face. Happily, I was invited to join the team at this stage, before too many decisions had been made about positive and negative spatial planning, choice of face, general layout and credentials of the stone carver (more on that last point later).

In an email conversation with my client, I explained that the rangedleft model that her team had designed and emailed to me (see below) had visual problems. For example, the white space between the left and middle blocks of names looked wider than the space between the middle and right blocks. This visual oddity happened because the length of the names in the middle block was longer than in the other two blocks, resulting in an uncomfortable spatial arrangement.



The ranged-left layout didn't work visually, especially with long names.

To my eye, the uneven white space between columns looked crude and clumsy. Harmony and regularity were demanded by the vertical and horizontal rhythm of the letterforms, the thicks and thins, the counters. It was important that the white space also have visual harmony. A lack of visual calm and harmony would detract from the overall coherence and stability — not a good vibe for a garden that needed all visual elements to be fully considered, that needed a thoughtful approach and that needed to be an oasis of visual order. These men and women died protecting Irish society from crime. Most died violently and in chaos. I didn't want chaos in the typography. I wanted to create a calm and contemplative space. The typographic layout needed to be visually coherent, with a sense of structure and order. These people had made the ultimate sacrifice by giving their lives to protect others. The typographic design and layout needed to reflect the gardaí's role of order and discipline in society, not the chaos that resulted in their deaths.

The task of laying out these names and numbers of different lengths in the allocated space in the limestone was complex. It presented the typographer with a visual riddle to be solved. I requested more time to explore these challenges on paper. Of course, allowing me more time came with a financial cost, but, happily, the architect understood the importance of typography and agreed with my arguments, giving me the green light.

#### Establishing A Layout



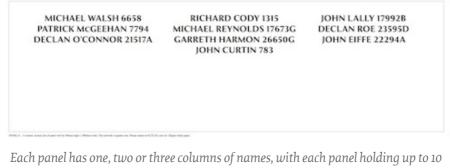
Early experiments of mine

Finding an effective typographic layout for the gardai's names and numbers called for a number of considerations to be made, such as the number of names, their varying number of characters, and the dimensions of each stone plinth. Eighty-three names (and ID numbers) were to be carved across nine limestone plinths of varying widths, each of which would allow room for ten rows of names across one, two or three columns.

I decided to center all of the names vertically.

To get more consistent margins and better balance, I advised that long names not be put on the same row across the three blocks. Long names sat best in the center block, with two shorter names on the left and right. The reverse (i.e. a short name in the center and longer ones on the sides) would work equally well.

For obvious reasons, not leaving any plinths blank was important. So, the 83 names were arranged across each of them, with space left below for names to be added in future (as will be needed, tragically). There is capacity to carve another 117 names into the plinths.



parallel lines.

#### MICHAEL KENNELLY 1408 DESMOND DIXON 23363C JEREMIAH MCCABE 15860G JOHN MASTERSON 14676E AMBROSE FOGARTY 26178E

PANEL 1 - 1 column. Actual size of panel will be 540mm high x 900mm wide. This artwork is quarter size. Please output at ACTUAL size on 120gum white paper.

A one-column panel holds a total of 10 names.

PATRICK MORRISSEY 14545K GEORGE RICE 22336M JOHN O'DONNELL 6481 HENRY BYRNE 18300H JOHN FITZSIMONS 10543M DENIS HARRINGTON 4034 JOHN GANTLY 4804 RICHARD FALLON 9936 SAMUEL DONEGAN 8586 WILLIAM ROCHE 21738G

A two-column panel holds a total of 20 names.

MICHAEL PADDEN 27477A VINCENT RYAN 10094 HUGH WARD 5663 DAVID DOWD 22762E JOHN MCMAHON 15062B MICHAEL JOYCE 6587 PATRICK O'HALLORAN 651 MICHAEL LAWLESS 17751B TONY TIGHE 17644C JOHN FLYNN 10445M RICHARD NOLAN 21244L

A three-column panel holds a total of 30 names.

# Choosing A Typeface

There was general agreement that the shape of the letters and numerals in the 1950s memorial reflected a sense of "Irishness," particularly in the letterforms, which were calligraphic in style and had a slightly uncial quality commonly seen in the letterforms of the Irish/Celtic manuscript tradition of the 8th century onwards. *The Book of Durrow*<sup>20</sup>, the *Book of Kells*<sup>21</sup> and the *Book of Lismore*<sup>22</sup> all contain calligraphic letterforms whose shapes are influenced by the angle of the quill head and the angle of the scribe's hand. However, I felt that a calligraphic typeface was not suitable for this project. I wanted a face that was almost invisible, so that, when reading the names of the fallen, one would think of them and not of the typeface. I wanted a typeface that was neither difficult to read nor so full of personality that it drew attention to itself, but rather one that reflected the hand-drawn character of calligraphy, a human quality. Yet it also needed the uniformity, strength and regularity of form found in a print typeface.

It was important that the new memorial have a typeface that could be set and carved in dual languages, namely English and Irish. However, for the long term, given the increase in gardaí with names that are non-Irish, non-English and non-European, the typeface needed to be versatile, be robust and include all glyphs and accented character sets.

I knew that the typeface would need to be easy to carve. I didn't want one that had thin serifs, counters, stems or terminals that could be easily misinterpreted by a stone carver, resulting in a badly drawn version appearing in stone.

The hunt for a suitable typeface was on!

After some research online and using atlases of type, I found three possibilities for the project: Optima, Zapf Humanist 601 and Exemplar

<sup>20.</sup> http://en.wikipedia.org/wiki/Book\_of\_Durrow

<sup>21.</sup> http://en.wikipedia.org/wiki/Book\_of\_Kells

<sup>22.</sup> http://en.wikipedia.org/wiki/Book\_of\_Lismore

Pro. Each had a beautiful visual rhythm and lovely numerals. They were also all available for purchase in OpenType format and — more importantly for typesetting — available in digital form. The faces could all be slightly modified if needed with accented characters (commonly found in the Irish and central European languages), customized letters and individual number spacing.

#### Optima

Information about the typeface Optima and where to buy it.

# ABCDEFGHIJKLMN OPQRSTUVWXYZÀ ÅÉÎÕabcdefghijklmn opqrstuvwxyzàåéîõø &1234567890(\$£.,!?)

Combines features of both serif and sans serif types into one humanistic design.

The Optima typeface was a candidate for the memorial.

#### Zapf Humanist 601

Information about the typeface Zapf Humanist 601 and where to buy it.

ABCDEFGHIJKLMNO PQRSTUVWXYZÀÅÉÎ ÕØÜabcdefghijklmno pqrstuvwxyzàåéîõøü &1234567890(\$£.,!?)

The Zapf Humanist typeface was another candidate.

All three faces had visual traits that were similar to the original 1950s lettering. For example, in Optima, the uppercase "K" had the same calligraphic kick in the top and bottom diagonal strokes. The uppercase "O" had the same vertical stress, and the stem of the numeral "7" leaned back at the same angle. And as in the old memorial, the crossbar on Zapf Humanist's uppercase "T" was not parallel but had a calligraphic bend in the middle that was very satisfying.

#### THE PERFECT FACE

#### Exemplar Pro

Information about the typeface Exemplar Pro and where to buy it.

# ABCDEFGHIJKLMNOP QRSTUVWXYZÀÅÉÎÕ abcdefghijklmnopqrst uvwxyzàåéî&12345678 901234567890(\$£€.,!?)

Exemplar Pro was chosen.

#### Exemplar Pro

After much deliberation, I settled on Exemplar Pro as the most robust and flexible typeface. Its weight and solidity of design were greater than those of Optima or Zapf Humanist; plus, it had a full range of accented characters, ideal for unusual names.

Comparing Exemplar Pro to the 1950s hand carving, I noticed that a lot of the capital letters (N, M, C, H) and numerals (7, 1, 6) were sympathetic in design. The letterforms in Exemplar Pro have a roundness and rhythm that I liked, as well as a slightly calligraphic or hand-drawn quality. I wanted to avoid typefaces that were coldly geometric or mechanical. I was dealing with the names of people who had died tragically. Their families would visit this memorial regularly. I didn't want the relatives of fallen gardaí to feel that the memorial was cold, industrial or mass produced. I wanted the typeface to be sensitively drawn and a little quirky, the way people are sometimes quirky. When set in Exemplar Pro, the individual names and numbers had a friendliness and individuality that was appropriate to the project. Exemplar Pro also seemed to translate well into a carved face. The serifs were not too thin, and the shapes not too fine or difficult for a carver to redraw or lasercut. I decided to set the type and provide size layouts, which the stonecarver carefully cut into stone.

It was interesting to research Exemplar Pro's designer and his rationale for this face as I was critiquing the letterforms. I came across this online description written about the typographer, Göran Söderström:

"Söderström, born 1974, is a self-taught Swedish type designer and font developer based in Stockholm. Having just finished a little bit of calligraphic studies, he was twenty when he made the first sketches of Exemplar in 1994. In 2009 the full version became available, all glyphs were redrawn and improved. Diacritics were build for central European languages and small caps, different numerals and alternate letters were added. Finally, the typeface family was expanded to four weights with corresponding italics."

Inspired by the beauty and perfection of several typefaces and the art of calligraphy, he wanted to create a typeface that was traditional yet unconventional, a balance that felt both old and new. It was the perfect typeface for my project. Thank you, Göran!

#### Final Layout

The limestone plinths had a uniform height of 540 millimeters, but their widths varied, ranging from 900 to 1800 millimeters. For the layout of the names, I looked closely at the scale and size of the type (with letters that were 17 to 25 millimeters in height), the weight of the letters (roman or bold), the number of lines of text (a minimum of 10 and maximum of 11) and the visual positioning of the text.

# JOHN MCMAHON 15062B JOHN MCMAHON 15062B JOHN MCMAHON 150

Different point sizes and weights were considered.

I created a series of sample design layouts for panels of varying widths (1800 and 1300 millimeters), including a visual reference of names at the actual size on an A3 landscape page, demonstrating the three possible heights of names (17, 20 or 25 millimeters, the last being preferred).

Regarding the number of names, letters that were 17 millimeters in height, in roman or bold, would fit 11 lines per panel, making for 264 names in total. Alternatively, letters that were 25 millimeters in height, in bold weight, at 10 lines per panel would fit 200 names in total. The latter was more legible, and it had a better visual scale and allowed for a larger carving area letter by letter.

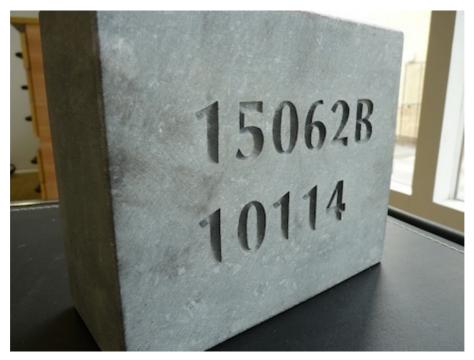
My client and I were in total agreement on the final height of the letters, the general shapes of the letters, the number of lines, the layout and the overall number of names for the memorial. The result was 25-millimeter-tall capital letters (100 points) over 10 lines, providing a total capacity of 200 names. We could have increased the capacity by reducing the size of the type, but that would have compromised the aesthetics and the carver's accuracy.

The full and final list of names finally arrived as a Microsoft Word file, set in the Courier typeface. I got to work and supplied all of the final size layouts on paper to the stone carver for execution. (More names have since arrived, each one being carved directly on site.)

#### **Engraving Technique**

We decided to ask the stonemason to do a test piece on the limestone in order to firefight any final problems before all of the names were carved. At that point, we also had to make the crucial decision of whether to carve the letterforms and numerals by hand or by machine. The decision would have a major impact on the visuals, budget and schedule. Limestone is actually quite porous and weathers fairly rapidly, and its color and texture when dry is distinct from when it's wet.

I also provided the names of two proofreaders who were qualified to proofread the stone carver's work at phased intervals on site in Dublin Castle. I suggested that the architects order one or two extra pieces of stone in case of spelling mistakes or a carving accident. I love contingency plans, especially on a project like this!



A piece of limestone was carved by hand and by laser to test the quality of the carving.

To our surprise, the handcut lettering was shallow and hard to read. In strong light (our rare Irish sunshine) and in overcast conditions (which was more normal), the hand-carved lettering was the same color as the surface of the stone, so one couldn't read it properly. However, the machine-cut lettering was very deep; shadows were apparent, and the text was very easy to read. The letters looked darker than the surrounding stone, and the resulting contrast improved legibility hugely.

Unsurprisingly, we agreed to cut the letters by machine. This decision had several other positive outcomes. First, it ensured that the carving of future names would be consistent with the initial names; secondly, it ensured a deeper definition of form, given the sharper edge; and thirdly, it maximized legibility.

The stone carver used an interesting technique (three stone carvers have worked on this project so far). I supplied the full-sized artwork in

black and white on a large sheet of thin grammage paper (120 GSM), one per plinth. The carver then glued this paper onto a "blanket," or intermediary sheet of heavy blue material, which in turn was glued into position on each stone. The stone mason handcut the letterforms by scalpel, cutting through the paper and blanket layers.



The stonecutter placed the full-sized printed sheets onto the stone before carving.

He then sandblasted and lasercut the cutout areas of paper and blanket to a standard depth of 2.5 millimeters. The edges of each letterform and their uniform depth had a very pleasing visual effect.

A decision was made to leave the lettering uncolored on the limestone. However, the granite, which contained a heavy background texture and pattern, needed greater legibility. So, a dark-gray infill was chosen for the granite plinths over each entrance.

## Troubleshooting

The best laid plans sometimes don't go as hoped! The original stonemason was chosen by the memorial's architect. The builder who won the tender to build the memorial had included stone carving as part of their price. Four or five plinths were carved under this financial arrangement. Unfortunately, the main building contractor on this project was not so in tune with all of our typographic sensibilities and had hired a building subcontractor, who in turn had a different stonemason who in effect was working blind and hadn't been vetted for quality. The result (illustrated below in the letter "G") was disastrous. The letterforms were poorly cut and had no fidelity to the original typeface.



An example of an uppercase "G" and "A" carved in granite and infilled. The letters are sharp.



The "G" and "A" carved in limestone without any infill color. The "G" has lost some of its elegance.



Uppercase "G" and "R" carved in limestone.



These letters have been very poorly carved. The "G" and "E" have lost vital shape in their serifs.

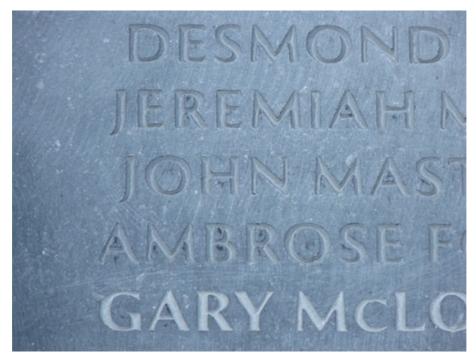
I spoke to the original stonemason some time later and learned that his switch in supplier was accidental. He had received all of this feedback through the "trade" grapevine. He also mentioned that a third stonemason was hired by the building subcontractor. The overall result is that the letterforms were not properly carved and, sadly, the standard of carving is very inconsistent throughout. I contacted my client and mentioned my disappointment in the quality of the stone carving. The client happily took my comments to heart and has since gotten a new stone mason. New names are now beautifully carved. Happy days!

### Conclusion

The names of the fallen will continue to be carved in random order, so having a sustainable design and manufacturing process that could potentially last the lifetime of the designer and stone carver and then get passed on to the next generation was important.



New names are typeset in black ink. The gray names have already been carved.



New names take a year or two to weather and blend in with the other names.

To assist this process, I created a set of detailed typographic guidelines for future reference, outlining the typeface, alignment and point size and offering advice on tackling white space and the general layout. These guidelines were created to help the next typographer take over the project from me. This project will probably run for another 100 years, with approximately one name being added each year -I don't plan on being around to see the last name added!

Being asked to tackle this emotionally loaded typographic conundrum was a huge honor. I hope I have created a sense of visual coherence and restful harmony. Each letter shape was important. Each person memorialized here was someone's son, daughter, father, brother, mother or friend. Each name is now set permanently in the heart of this island's capital. Even if you didn't know any of these people personally, hopefully you feel that this memorial is a fitting monument to their lives and service.

Of course, this being Ireland, we never like to leave on a low note. The next time you are in Dublin, if it's not raining, please remember to visit the memorial; sitting in the garden and reflecting is a rewarding experience. **\*** 

# **Industrial-Strength Types**

#### BY ALASTAIR JOHNSTON 🏞

The Industrial Revolution gave us a new iron age, one of cast iron, which a devotee of Vulcan told me he thought was the highest achievement of man — or, as he put it, "the hairless ape." In the 18th century, cast-iron bridges sprang across British rivers such as the Tay and Severn. These lovely sculptural archways are resistant to rust, so many are still standing.

But tragedies like the Dee Bridge collapse and the terrible Tay Bridge disaster of 1879 dampened the public's enthusiasm and led to William McGonagall's famous ballad:

"Beautiful railway bridge of the silv'ry Tay, Alas! I am very sorry to say, That ninety lives have been taken away, On the last sabbath day of 1879, Which shall be remembered for a very long time."

What are "Industrial-strength types"? In this chapter I propose to explore them.

# Birth Of Trainspotting

Railway locomotives, which moved through the countryside, were the first big machines to broach people's consciousness. As individual self-propelled machines, they altered the landscape, which had been static until that point. A coach or horse-drawn cart moved along well-worn paths, but a railway required straighter lines and a level surface, so cuttings, ramparts and bridges were built, and the coal-fired locomotive would spew fire and ash like a dragon as it clattered along.



A replica of "Puffing Billy," a giant boiler on wheels with a beam engine, runs at the Beamish Open Air Museum in County Durham, UK. Its nameplate reads "Locomotion" in sans serif.



The Agenoria, built in 1829, is on display at the Railway Museum in York, UK. Its name is cast onto the driving wheel in a thick roman typeface.

The Great Western Railway was one of the first to have a livery, and Isambard Kingdom Brunel also distinguished his railway by having a broad gauge, of seven feet. Though he was well known as an engineer and a builder of bridges and iron ships, he was pleased to buy two steam locomotives from George Stephenson, who is considered by many to be the father of the modern railway for his 1829 "Rocket."



The original "Rocket," in the Science Museum in London.

The brass nameplate shows a strong hand-wrought letter with backward-only serifs on the upright of the K and reinforced bracketing on the serifs of E and T. Otherwise, it is an early form of the type later known as Clarendon.

#### The Purpose Of Clarendon Types

Clarendon was first introduced for emphasis, a precursor of bold as a related face in a family. The idea of a boldface directly related to a roman arose with the Linotype machine in 1895, where bold was offered as an alternative to italic in two-matrix machines, but in the 20th century, extended typeface families that included bolds and semi-bolds became commonplace.

Before the introduction of Clarendon as a text face, it could be seen as a display type, for example in Figgins' two-line Pica in shade, from about 1817. It was copyrighted by Robert Besley of London's Fann Street Foundry in 1845, and as soon as the copyright lapsed three years later, it was widely copied. Railway timetables, newspaper headings, dictionaries, guidebooks, textbooks and other places that required spot emphasis were its preferred venues at first.

#### c. From Sicily to Greece.

From Catania to the Piræus viâ Canea (Crete, p. 417), steamer of the NAVIGAZIONE GENERALE ITALIANA every Wed. at 1 p.m., reaching Canea in 2 days and the Piræus in nearly 3 days. These steamers belong to the Genoa & Odessa Line, leaving Genoa every Tues. evening and touching at Leghorn (Wed.), Naples (Thurs.), Palermo (Sat.), and Messina (Mon.).

**Catania.** — Hotels. HÔTEL GRANDE-BRETAGNE; HÔTEL BRISTOL ET DU GLOBE. — Cab for 1 pers 40, at night 50 c.; luggage 10 c. — Office of the Navigazione Generale Italiana, Piazza Duca di Genova; embarkation or disembarkation 60 c., with luggage 1 fr.

Catania, a seaport to the S. of Mt. Etna, see Baedeker's Southern Italy.

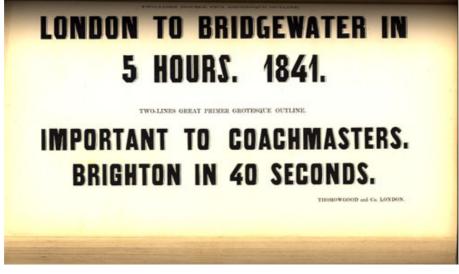
The blunt cone of Etna long remains in sight after the steamer has quitted Catania. On the second day the vessel is out of sight of land; but early in the third morning the island of *Cerigotto* (the ancient Antikythera, p. 356) comes into view on the left, while on the right we descry the barren mountains of Crete and the long peninsulas on its N. coast that enclose the Bay of Kisamos. Doubling *Cape Spatha*, the most N. point of Crete, the steamer enters the wide Bay of Canea and anchors in the roads outside the harbour of *Canea* (p. 419). In bad weather the steamers anchor in Souda Bay (p. 420). After a halt of three hours the vessel proceeds on its N. voyage, and early next morning it comes in sight of Attica.

Baedeker's "Greece," Leipzig, 1909. Clarendon used for emphasis.

In essence, Clarendon is a condensed slab-serif letterform (known as Egyptian in its earliest lead incarnations), with brackets on the serifs.

#### Specimen Texts

Images of railway trains frequent the Fann Street Foundry's 1844 specimen (which still bears the name of Thorowgood & Co). They feature on sans-serif, bold and even Tuscan display types. One of my favorite pages advertises the speed of the new mode of transport:

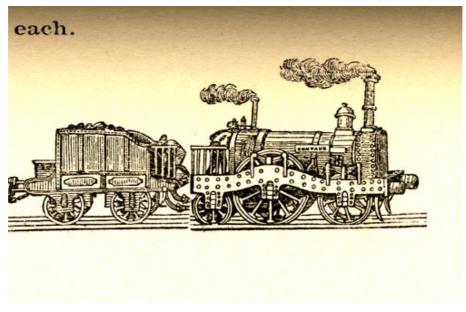


Thorowgood's two-lines Grotesque Outline of 1841.

The typeface is a condensed sans serif with a slight shadow on the right, suggesting movement. (Isambard Kingdom Brunel built the first Bridgwater station in 1841 on his Great Western Line.)



Thorowgood's 48-point Railway Ornaments of 1841.



Detail of Thorowgood's locomotive, the Centaur.

Cuts of trains that could be pieced together by printers were also made by Thorowgood for use on posters. An enlargement of the largest size (four lines pica, or two thirds of an inch high) shows a locomotive of the "Firefly" class, the Centaur (labeled in grotesque, or sans serif), which was also built in 1841 and ran on the Great Western Railway.

## Fellow Travellers

The Rocket ran on the Liverpool and Manchester railway. For its 150th anniversary, a replica coach was created (now in the Railway Museum, York) along the lines of a stagecoach body, with the word "Traveller" in silver slab serif, to which an elegant two-tone shadow in blue and black (like daintily made-up eyes) has been added.



An early passenger carriage built along the lines of a stagecoach.

Such illusionistic shadows became a staple of the 19th-century signpainter's art, and many superb examples are found on surviving coaches from the time.

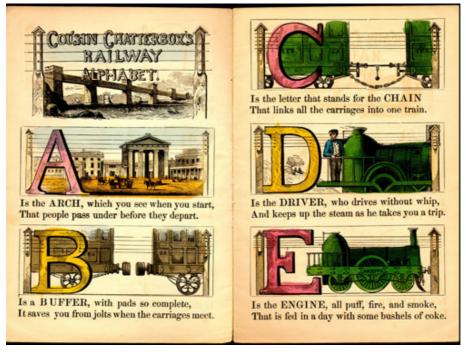


Nameplate of a Great Western Railway locomotive, 1838.

The North Star was built by Stephenson around 1838, and a rubbing of its brass nameplate shows a bold slab serif with brackets. The style, which became the basis of the Great Western Railway style for the next century is "exciting and has a solid magnificence," according to Patricia Davey in her article "Locomotive Lettering" (*Typographica* 13, p. 12).

# Kidding Around

Alphabets of things were a popular subject for children's books in the 19th century. The Great Western Railway is depicted in *Cousin Chatterbox's Railway Alphabet* (London, Dean & Son, 1854), drawn by Freeman DeLaMotte.



Cousin Chatterbox's Railway Alphabet, 1854. (Courtesy of the Fox Collection of Children's Books, San Francisco Public Library)

While the vehicles are labelled in plain grotesque (or square sans-serif) lettering, the alphabet book uses an elementary Clarendon form, suited to the subject. At the outset — "A is the ARCH" — we see the Doric entrance to Euston station from 1837 (no longer extant), which was one of the first recreations of monumental Graeco-Roman architecture in Britain after its designer Philip Hardwick visited Italy. The engine shown is the "Mazeppa" (a name popularized by Byron's 1819 epic poem). Euston was opened as the base for the London and Birmingham Railway in 1838.



Gladstone, 1882.

The Gladstone was built for the Brighton and South Coast railway in 1882. The sans-serif lettering floats off the surface with its multicolored 3-D effect as well as a double shadow. The red of the body detail is cleverly echoed in the highlights of the letterform. These illusionistic effects were employed throughout the British railways in the late-Victorian period.



Detail of London and North-Eastern Railway tender.



Elaborately detailed lettering in a third-class compartment.

Here are some more examples from London and North-Eastern Railways and from London Midland and Scottish railways of floating sansserif capitals:



Bold shadowed grotesque letters from Victorian-era trains.

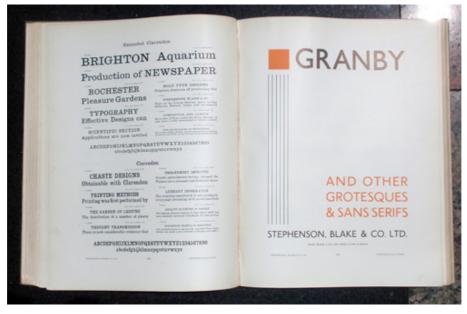
A century later, locomotive lettering had evolved with the times. The A4 locomotive, known to trainspotting youth as a Streak, in service on the East Coast route, was a magnificent Art Deco streamlined model, built in 1915. The first four Streaks were silver in color and went 500 miles a day. When I was a lad, the names Mallard, Falcon, Guillemot and Sir Nigel Gresley were magical to us, and we would interrupt our cricket game by the side of the track to gawk as the Flying Scotsman sped past at 100 mph. (These locomotives were mostly named after birds; Sir Nigel was the designer of this model.)



An Art Deco locomotive known to trainspotters as a Streak. (Image: Gavin Cameron<sup>23</sup>)

The LNER express trains, in service until 1963, were British racing green, although Mallard and Sir Nigel were blue. The lettering was akin to Gill Sans; indeed, Eric Gill was also inspired by locomotive lettering as a boy and was a pupil and flatmate of Edward Johnston, celebrated as designer of the London Underground railway's proprietary typeface used in its signage. Gill Sans is now institutionalized as a British national letterform (seen for example in the typography of the BBC). A rival to Monotype's Gill Sans face was made by Stephenson-Blake and called Granby. It actually leans more toward Johnston's interpretation of humanist sans serif, a style he had invented.

<sup>23.</sup> http://en.wikipedia.org/wiki/File:2011-04-24\_SirNigelGresley.jpg



A spread from "Specimen of Printing Types" by Stephenson-Blake (Sheffield, 1932), showing Clarendon and Granby.

## Pressing On

One of the great inventions of the 19th century was the all-iron printing press. Ever since Johannes Gutenberg adapted a wooden screw-lever wine press to printing in the 1440s, printers had tried to improve the power of the machine. The first successful iron press was the one made in 1800 by Walker for the third Earl Stanhope, who generously did not patent it, so anyone could build a cast-iron press. It was a huge step forward in print production and quality. The Stanhopes had the maker's name and "Stanhope Inv." engraved in a modern roman letter on either side of the staple.

More improvements followed, the most famous being the Albion and Columbian, but many companies made machines incorporating their own patents to improve the screw action or the pressure. The "Son of Vulcan," whom I alluded to earlier, collects cast-iron machinery — in particular, iron printing presses. A visit to his collection inspired me to think about the letterforms chosen by their makers to identify them ; quite a few of his machines are unique. Unlike other cast-iron machinery, such as engines, stoves and military equipment, for which sansserif forms seem to be preferred (because dealing with the mould when casting is easy), two letterforms dominate printing press identities: modern face and Clarendon.



*F.J.* Austin of New York engraved his name in a bold modern face on the metal plate bolted to his iron press, with its bas relief of acorns, patented in October 1836.



The 1848 Imperial Press, a tabletop model, uses a bold modern for its cast name; some of the alignment is a bit erratic, perhaps because the makers attempted to follow the curve with letters that work better upright. A strut supporting the feet of this same press is in a regular, more contrasted modern typeface.



The Albion Press was another popular cast-iron printing press. The lettering is a stout modern face with bracketed serifs; in essence, a Clarendon. This one was made by Henry Watts of London in 1853.



Cincinnati Type Foundry's acorn-shaped Press was made after the design of Stansbury, sometime between 1825 and 1856. The stars are a nice touch. The lettering is also Clarendon and quite regular, suggesting that punches were used to make the mould.



For a change from the Clarendon, the British-made Lion press uses a bold Tuscan letterform. This press was an advance on the Albion made by Frederick Ullmer from 1866 onward. It was designed for embossing or bank-note printing, for which great pressure was required. The location, "LONDON," is in a heavy monoline sans serif.

# Stolid And Solid

Speaking of banks, there is something suggestive of strength in the best bank typography. A bronze plaque on the old Wells Fargo building on Montgomery Street in San Francisco, undated, has a condensed bold modern letterform. It is hybrid of Ultra Bodoni and Engraver's Bold, with a dash of Imre Reiner's 1932 typeface Corvinus Fett in the K.

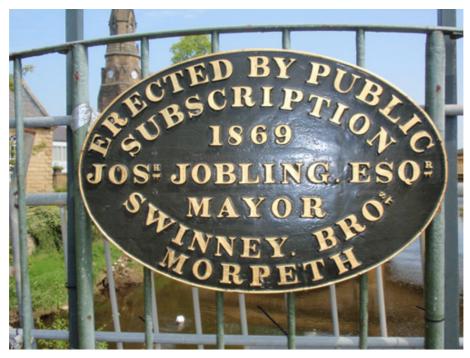


Wells Fargo Bank (date unknown) bronze plaque.



Bank Chambers in Haringey, north London, suggests solidity with its bold square sans serif. It may have been made by pressing wood pattern letters into wet cement.

A cast-iron plaque from 1869 on an iron bridge in Morpeth, Northumberland, tells the story of the bridge in bold modern. Note the initial S in "Subscription," "Josh" and "ESQ" have been turned upside down. There's a folk quality to this (reminiscent of the Superman logo) that puts the weight at the top of the letter.



1869 brass plaque on a footbridge over the River Wansbeck, Northumberland.

I've found many examples of Victorian cast-iron lettering buried in ornate structures, from bridges to manhole covers to drinking fountains to public toilets — the one for drinking fountains, seen in Edinburgh, asks you to "Keep the pavement dry" in a condensed, spaced gothic or sans serif.



Ornate shelter for a Victorian drinking fountain (a dry spot in Scotland).

# Iron Ladies On The High Seas

Ships are magnificent examples of machine-age artistry, and all of them have names. One of the last sailing ships with an iron hull, the four-masted windjammer Peking, was built in Germany around 1890.



The Peking in South Street Seaport, New York.



The Turbinia in permanent dry dock.

The Turbinia was built in 1894 as the first steam-turbine-powered ship and was by far the fastest ship in the world. Charles Parsons was its engineer. The sleek and elegant design was matched by a fanciful late-Victorian letterform for the name that has the strength of a sans serif with additional midriff bulges (popularized from the 1860s to '70s). The Ionic serifs resemble a Stephenson-Blake type of the time called Flemish Expanded, but the visual effect, with simple drop shadow, is more akin to wood type of the period.



The Mauretania is no longer extant.

The RMS Mauretania was the sister ship of the more famous Lusitania. At the time of her launch, she was the heaviest and largest moving object on earth. The Mauretania held the record as the world's fastest ship from her inaugural Atlantic crossing in 1907 and on for the next 22 years. She was built for Cunard at the Swan Hunter shipyard on the river Tyne, and, interestingly, the name of the ship contains a huge typo. The North African roman province is often spelled Mauritania, but having gone ahead with it, the directors decided that the alternative spelling was acceptable.



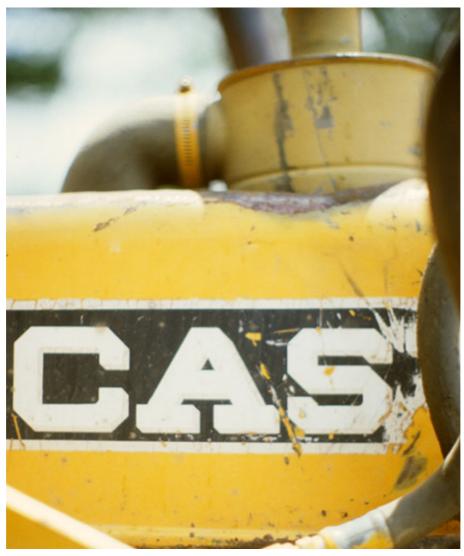
This massive brass letter for the Mauretania was an enormous typo.

The brass letters used for the name of the ship were two feet square in rudimentary sans serif, but set at an angle to create a racy, more nautical italic. My photo above is of the model ship made by Swan Hunter for its board room, and the "E" is the original letter, saved when the ship was scrapped in 1935.



The U.S.S. Pampanito in San Francisco Bay.

The U.S.S. Pampanito is a submarine built in New Hampshire in 1943 that saw active duty in the Pacific during World War II. The name is Spanish for "butterfish." Typical of military machines, it has chamfered gothic letterforms — like on a rugby or American football jersey — suggestive of ruggedness.



Chamfered Gothic lettering on a bulldozer.

We would expect a bulldozer to have the same letterform. Indeed, here is a typical example from Laytonville, in Northern California:



Original Caterpillar tractor logo.

However, there's always an exception to the rule: the original logo of Caterpillar reflected the sinuous delicate creature it is named after.

Consciously or unconsciously, typographers use types for graphic effect. Bold types are used for impact, but we increasingly see subtle differences between weights of type to articulate levels of meaning. The industrial-strength types I have been discussing seem like natural choices for cast-iron machinery that emerged during this period of technological change. Today, they are found in contexts where strength or solidity is needed. But there is always a parallel history to the one we write. Forays into Tuscan or the decorative shadow effects of the signpainter's palette show that, no matter how straightforward a letterform, there is always an urge to adorn and decorate.

#### CREDITS

All photos copyright 2012 by Alastair Johnston, except "Sir Nigel Gresley" by Gavin Cameron. Thanks to Ted Salkin for providing access to his collection of cast-iron printing presses. Trains photographed at Beamish Open-Air Industrial Museum, Durham, UK; The Science Museum, London; The Museum of Transport, Glasgow; and the National Railway Museum, York. Turbinia and Mauretania photographed at the Discovery Museum, Newcastle-on-Tyne. Fann Street Foundry 1844 specimen, Baedecker's Greece, and Stephenson-Blake catalogue from the Poltroon Press collection. Cousin Chatterbox's Railway Alphabet courtesy of the Fox Collection of Children's Books, San Francisco Public Library. **\*** 

# Legitima Typeface: An Experience Of Fossils And Revivals

#### BY CÉSAR PUERTAS 👐

Just as living species depend on mutation and adaptation to survive, typefaces too depend on their features to optimize the performance of text in a given environment. This principle seems to determine, in a way, the degree of failure or success that printing types (old and new) have in the physical world.

Typeface revivals (i.e. old typefaces beautiful enough to see a second digital life) are a virtually never-ending source of inspiration, as well as a good opportunity for graphic designers to learn some history. After taking part in the practice, I can say without doubt that the similarities between this process and the work of palaeontologists when reconstructing the appearance of dinosaurs and other extinct animals from fossils are striking.

This chapter covers the process of reviving a typeface almost lost in time, which, in its digital incarnation, I've named Legitima. The results shown here are the product of an exercise to learn a little history and some of the basics of typeface design, which I undertook in the Type and Media postgraduate course given at the Royal Academy of Art in The Hague (KABK).



La Cicceide Legitima, spread from the prologue.

### Introduction

I was nearly 12 years old when my parents took me to see *The Land Before Time*, a Disney animated movie relating the adventures of Littlefoot and his fellow dinosaur friends sometime during the Jurassic or Cretaceous period. I have been interested in everything concerning evolution and dinosaurs ever since, so much so that I even considered a career in paleontology when I was younger.

Later, when I got involved in typeface design, I realized that the process of reviving a typeface is comparable to the reconstructions done by paleontologists when they imagine how creatures long extinct might have looked. Even more fascinating is that both processes usually start with isolated findings and incomplete evidence, but imagination and informed speculation come to the rescue and help to fill in the missing pieces. If we look closely at the history of paleontology, we can see how both time and imagination have played a major role in the development of the science, for only these two components can enable us to go back in time to see these awe-inspiring creatures.

Both paleontology and typeface design seemed to be completely unrelated to me until they mixed in late 2008, when I had the experience of reviving a typeface used in a book printed long ago. What follows is the history of that, with my findings from the process of digitization and the result of the revived typeface.

#### Background

#### THE BOOK

It is widely known that the remains of creatures that lived millions of years ago have been preserved thanks to the process of fossilization. As infrequently as a well-preserved fossil is found, so too is a well-printed and well-preserved 17th-century book discovered. This is the case of the source of my revival: a carefully composed but poorly printed copy of *La Cicceide Legitima* by Giovanni Francesco Lazzareli (third edition), a book of poems recounting the deeds of a man nicknamed Ciccio in Italy in the late-17th century. The book appears to have been printed in Venice in 1694 in a printshop named Herz.



Spread of La Cicceide Legitima showing the extent of deterioration of the book.

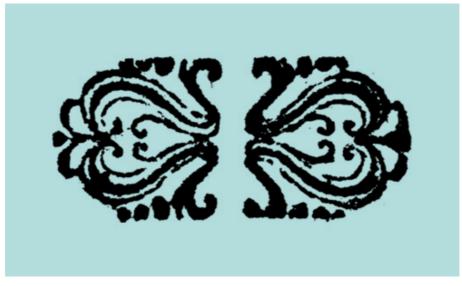
I came across this book in a second-hand bookstore in my hometown, Bogotá, Colombia, in 2003. I found the idea of reviving a very old typeface very attractive, but I didn't realize how hard it would be, working with a sample in this condition. However, the thought of the freedom of interpretation this would give me helped me decide to use this book, dismissing two other better printed but less interesting candidates.

The book, a volume of 228 pages and nine signatures and measuring  $9.8 \times 16.5$  centimeters, is printed on what appears to be highly absorbent, ordinary handmade paper. Three type sizes were used to set the text, and the one in small pica (about 10 points in size) features both roman and italic style. All of the pages appear to have been carelessly printed, the evidence of which includes excessive pressure, worn-out types (printing offices at the time would use a set of matrices for decades or even centuries) and unjustified or moved characters.

#### HISTORICAL CONTEXT

The history of a typeface is incomplete without some consideration of the context in which it was used. The one we're interested in was produced in the early Baroque period (17th century), concurrent with a significant decline in the quality of books and typefaces produced in Italy. But it was also a period of great achievements in typography in other nations such as France and the Low Countries.

Europe in the 17th century falls in what we now call the Early Modern period, characterized by the Baroque cultural movement, the French Grand Siècle dominated by Louis XIV, and the beginning of modern science and philosophy, including the contributions of Galileo Galilei, René Descartes, Blaise Pascal, Isaac Newton. Europe was also torn apart by warfare throughout the century as a result of the Thirty Years' War, the Great Turkish War, the end of the Dutch Revolt against Spain and the English Civil War, among others, while Europe's colonization secured the Americas as a major economic resource of the new empires.



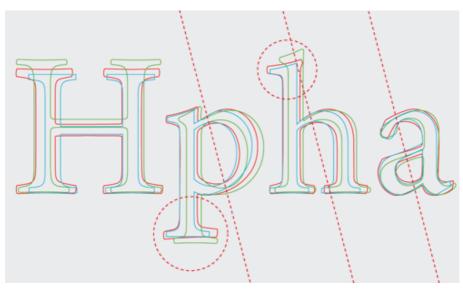
An intricate ornamental pattern found in the book, reminiscent of works from the Baroque period.

#### THE TYPEFACE

Precisely identifying our typeface was especially difficult, due in part to the ubiquity of some printing types at that time, as pointed out by M. Carter, 1961:

"Community of typefaces becomes particularly evident in Germany soon after 1500, and those faces that were common in Germany are found also in Italy, the Low Countries, England, Scotland and even, during the first thirty years of the century, in France, a country that has rarely imported type or matrices. Mr. A. F. Johnson has done some hard work on the German types of 1500 to 1540, and has left it on his record that as many as ten or twenty presses had founts made of the same set of punches during those years."

On the other hand, some features of our typeface, such as the low contrast and the notably tilted stressing, correspond to an early (but not Venetian) roman type, of the kind known as "old style." A few other features (such as the pointed shape of the right stroke of the roman "g" and the unusual treatment of the same letter in the italics) make the typeface hard to identify with more accuracy; although certain treatments — such as the horizontal crossbar of the "e" and the more dissimulated pen strokes — point to a French or Dutch roman, close to the typefaces cut by Garamond and Van den Keere. Another reason why the typefaces used in the book could be French is because Italian printers began buying matrices from France in the middle of the 16th century. Additionally, Garamond's romans, like a handful of its predecessors, served dozens of printers in several countries.



A sample of three roman types with similar characteristics: Minion (blue), Garamond Pro (green) and Arno Pro (red). The overall proportions, stress axis and serif shapes, all features of garalde roman types, were borrowed for the revival.

If pressed to pinpoint this typeface, I would say it is a small pica roman old-style type, probably French, cut in the 16th or early-17th century, featuring medium extenders, medium contrast between thicks and thins and a good optical weight for long text settings.

### The Process

#### WORKING FROM THE INSIDE OUT

Due to the low quality of my samples, I started with great uncertainties about the actual shape of each letter. All I had were tiny models blurred by the excessive pressure during printing, so I decided to select the best of every uppercase and lowercase letter, as well as every number, in order to make reasonable decisions.

I straightened and superimposed every sample as a separate layer in an image file so that the common areas tended to be darker than the eccentric forms produced by the spread of ink on the paper. I called the resulting shape the "maximum": an area of ink potentially spread in all directions that would contain the DNA of the typeface.



Scans of several samples of the same letter were put on layers in order to find the maximum ink spread.

I looked for the "skeleton" of each letter (theoretically located in the middle of each stroke) in order to start drawing from the inside to the border of the ink spread (outwards). This skeleton would become one of my very few certainties during the entire process of revival.



The skeleton of the typeface emerged from the blurry letterforms. Like a digital paleontologist, all I would have to do afterwards was add the flesh and skin.

#### **OPTICAL SIZE AND WEIGHT**

Upon finding the skeleton of each letter, I felt more confident to start drawing. The next logical step was to decide the visual weight of the original typeface — or at least of the one I wanted to create. This was done rather arbitrarily, just making sure to keep the width of the vertical stems of the lowercase inside the "maximum", thus making the visual weight optimal for reading at 10 points in size. I decided to start with one fifth of the x-height, because I learned this has been one of the most established practices of typeface design in the last few centuries.

These would turn into the muscles and tendons of the new type.

Up to this point, no details at all were present. Perhaps the only additional decision I made was the result of thinking about what sorts of shapes could have been derived from the carving of a piece of metal just a few millimeters high with burins and files. According to Fred Smeijers, the shapes were the natural result of technical limitations:

"Not only do the tools invite the punchcutter to make the second n, but also this shape is easier to handle in the rest of the process of typeface design and punchcutting. It has no straight lines and no sharp corners. And the absence of these hard elements makes the form of the second n more acceptable to the human eye than that of the first. This more subtle shape has notable visual margin of tolerance. Hard straight lines make us wonder whether they are really straight or not. If they are indeed not quite straight, this is awkward to look at. So the punchcutter avoided such niggling questions and situations by building in a kind of visual doubt: no straight edges, no sharp corners. The forms become easy to handle, easy to mix and to bring into balance with each other."

So, I decided to avoid sharp corners and straight edges, just as a punchcutter four centuries ago would have done. This decision proved very useful in helping me to distribute the visual weight of the letters at the baseline and at the x-height, thus producing a horizontal effect that was perhaps useful to achieving a nice word shape and, therefore, a comfortable reading experience.

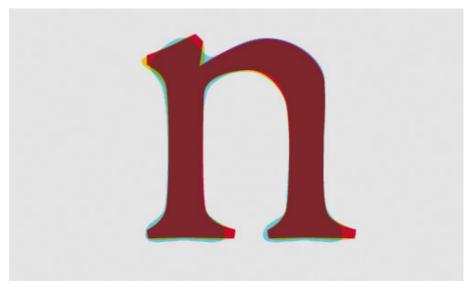


The lessons of broad-nib pen calligraphy provided a good starting point for the proportion between the x-height and the stem width, since the model was initially obscured by the excess of ink and pressure.

At this point, I had drawn the lowercase and uppercase letter and the numbers. But the page had a certain blurriness overall that I found disturbing. The new typeface looked worn out and overused, just like the original, and that was not the effect I was going for. That made me realize that most of the smaller details needed special attention.

#### FROM BLURRY TO SHARP

The final shapes of the serifs and stem connections emerged from my analysis of existing types, some of them revivals and others not, such as Adobe Garamond Pro, Minion and Quadrata. From a careful observation of Adobe Garamond Pro, I realized that most of the round connections in my typeface were too round. Minion showed me the grace of sharper details; I also learned from it that some serifs needed harder and crisper edges to look more convincing. The process of borrowing details from similar typefaces is comparable to taking the scales, skin texture and color from living species during the process of reconstructing a dinosaur.



The evolution of the serif details: first draft (blue), intermediate stage (yellow) and final version (red).

#### THE CAPS DILEMMA

Everything was progressing until I noticed a subtle yet important difference between the original typeface and my rendering: the caps were remarkably darker in the book. So, I decided to make my capital letters darker than the lowercase letters in order to stay true to what seemed to be the intention of the original designer and the convention at that time. This is a principle of optics: the larger the letterform, the darker strokes need to be in order to compensate for the excess of white in the counters. This principle has been followed since the invention of printing and is still used today. I exaggerated it a bit here to achieve an olderlooking style.



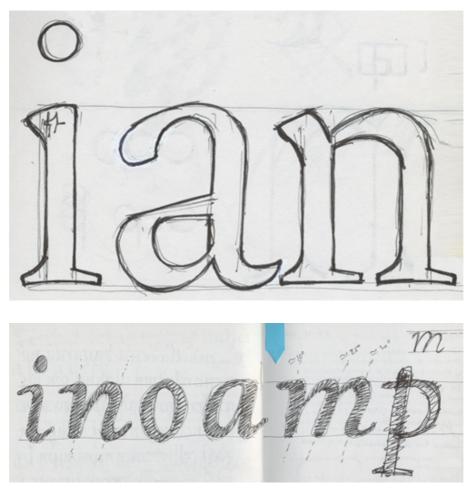
Darker caps (right) are typical of old-style printing types and one strongly visible in my source book — something worth preserving in the revival.

#### MY ADDITIONS AND CONTRIBUTIONS

Just as living species depend on mutation and adaptation to survive, typefaces too depend on features that enhance their performance in their natural environment. This seems to partly determine the degree of failure or success of print typefaces in the real world.

Even though many typefaces with features similar to those of Legitima must exist, many of them seem to me just too polished to capture the special atmosphere that old metal typeface gives to the page (perhaps with the exception of Quadraat and Adobe Garamond Pro). Legitima was designed from a 10-point original to work best when printed at the same size.

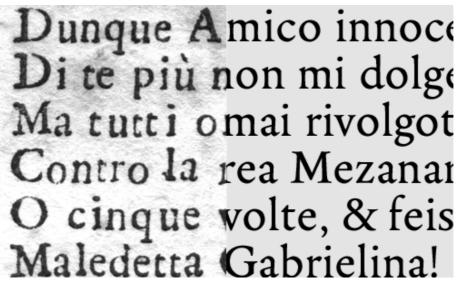
A certain awkwardness or imperfection present in the original was preserved, too, apparent in the bulkiness or fullness at the points where the strokes change direction. Among the other details, the uppercase letters were left purposefully heavy, and the drawing of the curves was meant to the recall the effect of the burin and file on old metal type.



Sketches of Legitima. The additional weight where the strokes change direction (top) as well as the diversity of angles in the italics (bottom) are some of the characteristics that were preserved in the digital fonts.

All of the features mentioned above, plus the slightly concave strokes (stronger at the top and bottom), contribute to making Legitima a very legible text type, rooted in the traditions of 17th-century Europe but with great expressive potential for our time.

## Conclusion



The original typeface as it was printed compared to the final version of Legitima.

During the process of designing Legitima, I learned that reviving a typeface is not so much about bringing old shapes back to life as it is about preserving the qualities that justify its existence in today's digital world. Merely tracing contours could be done by a machine, but bringing the spirit of a bygone age into the 21st century is inherently human, adds value to our time and contributes to preserving a cultural heritage that would be lost without the sensibilities of the designer. Proceeding the spirit of the sensibilities of the designer.

## When Typography Speaks Louder Than Words

#### BY CAROLYN KNIGHT & JESSICA GLASER 🐲

Clever graphic designers love to use typography to explore the interaction between the look of type and what type actually says. In communicating a message, a balance has to be achieved between the visual and the verbal aspects of a design.

Sometimes, however, designers explore the visual aspect of type to a much greater extent than the verbal. In these cases, the visual language does all the talking. This chapter explores when the visual elements of typography speak louder than words.

Cal Swan, author of *Language and Typography*, makes this point well when he says, "These two distinct areas often come together in practice as there is clearly a very strong relationship between the conception of the words as a message and their transmission in visible form."

To avoid any misunderstanding, let's clarify what the terms "visual language" and "verbal language" mean. In professional graphic design, visual language refers to the meanings created by the visual appearance of both text and image. In this chapter, the term "visual language" refers to the character and significance created by carefully selected typography. Verbal language is the literal meaning of words, phrases and sentences.

In this chapter, we will look at the powerful effect that typography has in taking control of meaning. We will discuss a range of examples, from verbal language that inspires and shapes visual treatment to visual language that dominates verbal meaning. The implications of typographic choices in meaning and interpretation will also be examined. And we will show how the same message can be presented in a number of ways to convey and encourage a diversity of responses.

We all have different cultural backgrounds and experiences that affect our perception of type one way or another. So, regardless of the designer's skill and effort, a number of uncontrollable aspects remain, including the viewer's perception, expectations, knowledge, experiences and preferences. And while accounting for all such unpredictable responses to type is impossible, awareness is critical.

For starters, let's look at an interesting piece from an <u>ad campaign</u> by Greenpeace<sup>24</sup>:

<sup>24.</sup> http://www.greenpeace.org.uk/files/po/index.html



The name style from Greenpeace's campaign to raise awareness of the impact of deforestation.

In this ad, you are confronted with the familiar name style of one of the world's favorite chocolate bars, the Kit Kat. The type style and letterform proportions and certainly the color, shape and angle all create an instantly recognizable connection with the Kit Kat brand — so much so that you would be forgiven for seeing the name Kit Kat before reading and taking in the actual written message. Your familiarity with the brand is an instant draw, and appreciating the change of message might take you a second look.

## Manipulating Feelings and Reactions

The visual language established when designing with type can bring into play not only emotions, but also physical responses. The following examples are simple illustrations of the varied and emotive effects and highly dominant control that can be achieved by changing the visual language of a message, while still presenting the same verbal language.

This first of a pair of illustrations shows a single large bold word, set in lowercase and closely kerned. The positioning in the frame makes the word dominant and loud, and the message comes across as enthusiastic, friendly and confident. The person speaking is pleased to see you and is coming towards you with a big smile on their face.



The second illustration contrasts dramatically with the first, despite featuring the exact same greeting. The font, case, scale, color and positioning all suggest a considerably more distant and hesitant meeting. In fact, you would be forgiven for thinking that the person speaking here is not at all sure they even want to acknowledge you and would have preferred to ignore you completely.

# HELLO

Reading these examples aloud helps us instantly appreciate the different effects of visual language. If you read the first example out loud, it would be a loud enthusiastic call that exudes genuine delight, friendliness and openness. Reading aloud the second example, the exact same word, it would be delivered in a much quieter tone, an almost hesitant voice, lacking the assurance and delight of the first. There is an infinite range of typographic alternatives that achieve subtle or dramatic changes in volume and tone of voice.

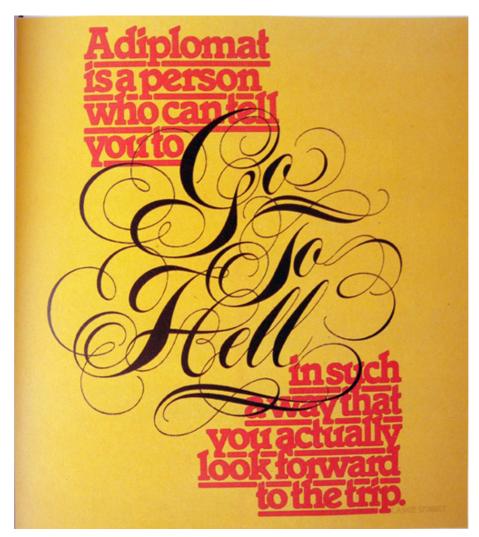
## Making The Most Of Visual Language

Verbal language is often used to inspire and shape design and typography in order to get a message across, with the goal being to make the most of the viewer's reaction. Carefully mixing a design's implication with literal meaning can lead to a memorable outcome. The following designs are great examples of the effects that can be achieved by employing verbal language that has helped to inspire a visual treatment.

Our first illustration is taken from the work of renowned American graphic designer Herb Lubalin, who was described in a monograph about him by Gertrude Snyder and Alan Peckolick as being "a tenacious typographer, whose graphic concept employed copy, art and typography, and he used available production methods to underline the drama inherent in the message. Idea preceded design."

Given the subject of this chapter, this quote is especially fitting. It shows Lubalin as a designer who valued the combined communicative power of language, typography and composition. The book goes on to explain that he used production methods not just for effect but also as a way to emphasize the meaning and message of a project. In Lubalin's time, these decisions would have entailed manual labor, posing greater limitations than we face today. Finally, this quote confirms that, for Lubalin, concept was of paramount importance and always came before design.

One of his many entries in the Visual Graphics Corporation's 1964 competition features a carefully selected quote by US editor and writer Caskie Stinnett.



One of Lubalin's many typographically expressive designs that have become iconic and inspiring to generations of graphic designers. (Image: Peter Gabor<sup>25</sup>)

<sup>25.</sup> http://www.typogabor.com/herb-lubalin/pages/herb\_lubalin\_040.html

Using delicate and well-considered composition of typographic detailing, Lubalin has succeeded in making an unpleasant message seem attractive and pleasing. The quote states "A diplomat is a person who can tell you to go to hell in such a way that you actually look forward to the trip." The focal point of this statement, being told to "go to hell," is shown in an elaborate and elegant calligraphic form, enabling this mildly offensive statement to be mistaken for something that could be looked forward to with great anticipation at first sight.

The work of hand-lettering designer <u>Alison Carmichael</u><sup>26</sup> provides a range of current examples that beautifully illustrate the powerful effect of typography when it takes control of meaning. One such design is her award-winning self-promotional ad for the Creative Circle.

Carmichael's hand-lettering is engraved and inked in an elaborate style on the lid of an old school desk. At first sight, we seem to be looking at a beautiful, possibly historic, work of gothic lettering; seconds later, reality strikes and the rather unpleasant meaning of the text becomes clear.

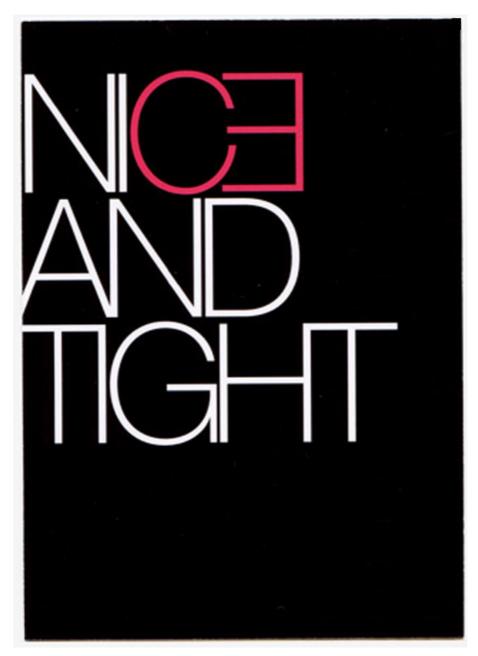


Award-winning self-promotional ad by Alison Carmichael for the Creative Circle.

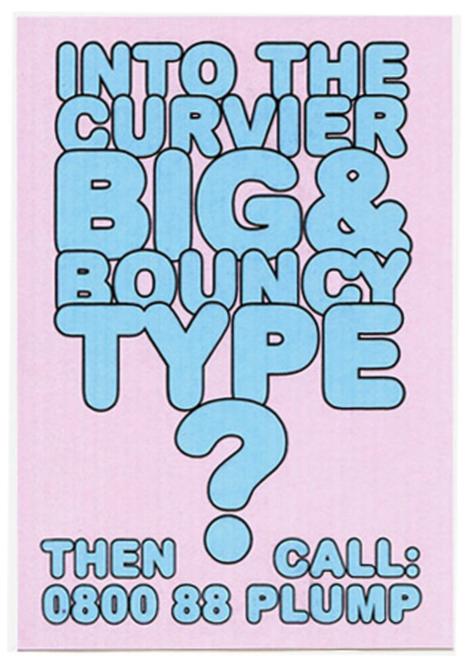
<sup>26.</sup> http://alisoncarmichael.com/

Type Tarts is a UK initiative established to raise awareness of the plight of workers trafficked into the sex industry. Contributing designers are asked to send type-oriented "Tart cards" for exhibition. Many London prostitutes advertise their services by displaying promotional cards in phone boxes. Even in the age of the Internet and mobile phones and in the face of police crackdowns, these cards have achieved a cult following, being highly praised and collected as art.

Both examples below use expressive typefaces and type manipulation to visually reinforce the meanings of the provocative text. In the context of the campaign, figuring out the meaning of the cards is easy enough.



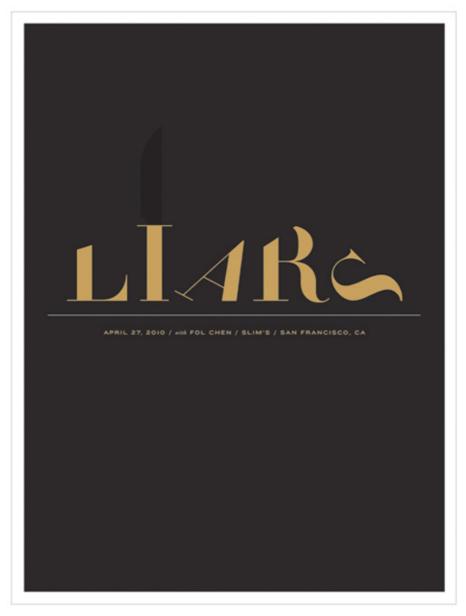
"Nice and Tight" by Duncan Bancroft



"Big and Bouncy" by Peter Fletcher

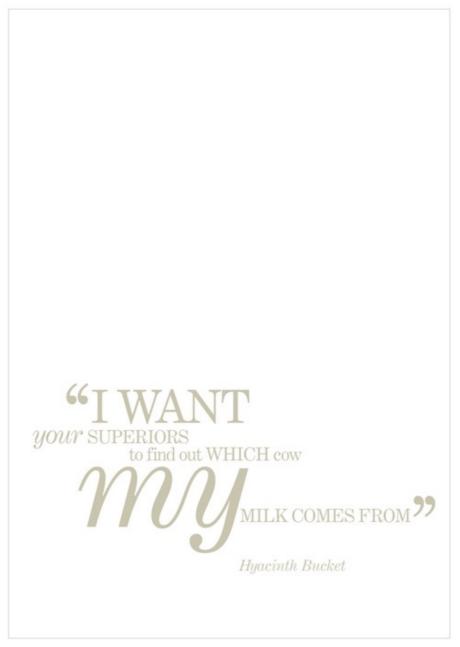
Another stunning example of the visual language of type is by American designer Jason Munn<sup>27</sup>, well known for his highly acclaimed music posters. This example for Liars is mainly typographic, with sections of each letter cleverly removed so that the viewer doesn't get the full picture. What is the truth? The choice of typeface is also significant; its extreme contrasts of thick and thin strokes point to the contrast between truth and lies.

<sup>27.</sup> http://jasonmunn.com/posters.php



Jason Munn's poster for the US band Liars

The designs above use type to reinforce the meaning of their statements. Meanwhile, the British Battleaxe Collection's visuals for a proposed range of type-based tea towels feature quotes from strong UK female comedy characters. These designs are doing something slightly different; type is used primarily to reinforce the agenda and assertive tone of the speakers.



British Battleaxe typographic tea towel design, inspired by the voice of the lead character in the BBC sitcom Keeping Up Appearances. (Credit: Bright Pink Communication Design)

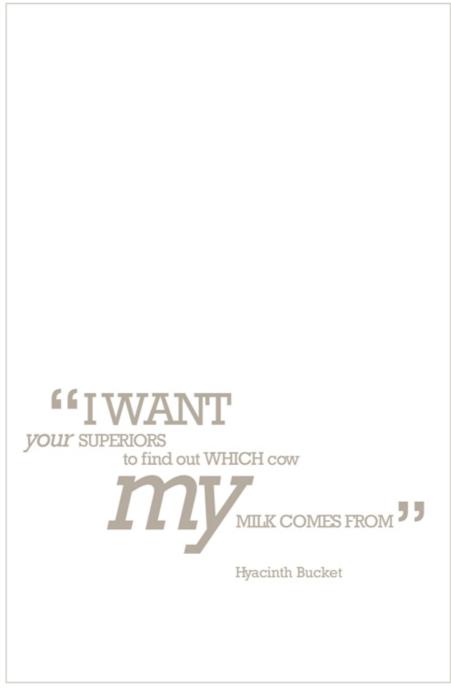
The example above features a quote from the BBC sitcom Keeping Up Appearances<sup>28</sup>. The words themselves are spoken by the program's main character — the eccentric, social-climbing and bossy Hyacinth Bucket, a lady in her 60s with grand aspirations. Typographically, the letterforms have been selected and grouped to emphasize the desires of the character. The words "I want" and "my" stand out because of a dramatic change of scale. "Superiors" is emphasized with capital letters,

<sup>28.</sup> http://en.wikipedia.org/wiki/Keeping\_up\_appearances

whereas "your" is reduced in size and given lowercase letters, thus downgrading the importance of whom she is talking to, in keeping with the character's bossy nature and tone of voice when speaking to her milkman.

In this design, the typeface has been dictated by the character's tone of voice. The serif typeface with its stylish italics and capital letters captures the meaning and cultural context of this statement from a "woman of a certain age."

Typography is used to communicate tone of voice, personality, age, gender and mood, and it can be easily manipulated. If, instead of this serif font that so successfully represents this woman's personality, we used a slab serif, suddenly the character changes, as does the emotional impact of the statement. Judging simply by the font, the narrator is no longer definitively female; she is no longer in their mid-60s, and her mood is not merely pompous, but could be described as verging on angry. It's a great example of how quickly the tone can shift with a simple change of typeface.



A different typographic treatment of this tea towel clearly manipulates the tone of voice and possibly even changes the gender of the speaker. (Credit: Bright Pink Communication Design)

## The Power Of Typography Cannot Be Underestimated

All the examples discussed in this chapter demonstrate that typographic treatment works alongside verbal language to create, enhance and alter meaning. While the aesthetic value of design is always important, the significance of type in influencing meaning should not be underestimated.

The role — and, in fact, the obligation — of the designer in establishing a tone that adds meaning to the verbal message is a matter of regular debate. Many graphic designers and academics argue that the designer has a responsibility to add "flavor" to their work, not only helping to convey and enhance meaning, but also making the message enjoyable and encouraging to "read" and also memorable.

#### FURTHER RESOURCES

- The Herb Lubalin Study Center of Design and Typography<sup>29</sup>
- Herb Lubalin Archive at Cooper Union<sup>30</sup>, Flickr
- *Reading Images: The Grammar of Visual Design*<sup>31</sup>, Gunther Kress and Theo van Leeuwen.

A big "thank you" to our typography editor, Alexander Charchar<sup>32</sup>, for preparing this chapter. **\*** 

<sup>29.</sup> http://lubalincenter.cooper.edu/

<sup>30.</sup> http://www.flickr.com/photos/justinthomaskay/sets/72157619656156152/

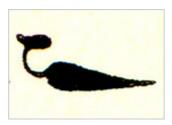
<sup>31.</sup> http://www.amazon.com/Reading-Images-Grammar-Visual-Design/dp/0415319153/

<sup>32.</sup> http://retinart.net/

## Weird And Wonderful, Yet Still Illegible

#### BY ALASTAIR JOHNSTON 🁐

First a question (or perhaps a Freudian jab at your subconscious): What does this shape represent?

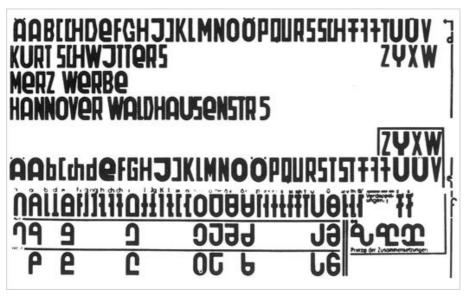


Could it be a trowel, a duck, an ornamental motif, or a seed-pod? I know, Aladdin's Lamp! What if I told you it was an alphabetic character? What alphabet would you assign to it? Cham? Telugu? Perhaps it has the cursive quality of South Asian letterforms, created on bamboo strips (or palm leaves) and written with the pen held in one's fist... doesn't it?

It has been said that "we read best what we read most". This quote was used as a type specimen in *Emigre* magazine in the late 1980's by Zuzana Licko. It was written in defense of her typefaces, whose elemental shapes — designed with the strictures of the early HP laser printer in mind — challenged the commonly held notions of what made typefaces legible.

The paradigm shift — wrought by the personal computer, Postscript and desktop publishing — should have had a massive impact on the shapes of our typographic characters, just as the advances of the World Wide Web further changed the way we viewed words (even though letterforms change at the pace of the most conservative reader). Thus, radical innovations like Kurt Schwitters' *Systemschrift*, (a phoenetic alphabet from 1927), are doomed to fail.

Our writing, which is derived from either Roman or Gothic forms (and sometimes both), is historic and non-systematic, said Schwitters. His "optophoenetic" approach was to make the shapes of the letters more accurately reflect how they sounded. But in order for it to work, massive re-education would be required.



Kurt Schwitters' "Systemschrift", an attempt at developing a phoenetic alphabet.

Licko was paraphrasing Sir Cyril Burt who wrote, "almost everyone reads most easily matter set up in the style and size to which he has become habituated." (*A Psychological Study of Typography*, Cambridge, 1959, p. 18). So we do not necessarily respond to "beautiful" type. You may find Centaur elegant, but others will find the spiky serifs distracting. For this reason, rather dull typefaces (like Times Roman), come to dominate our graphic landscape. My purpose here is to examine some failed attempts at creating economy, or furthering the cause of legibility.

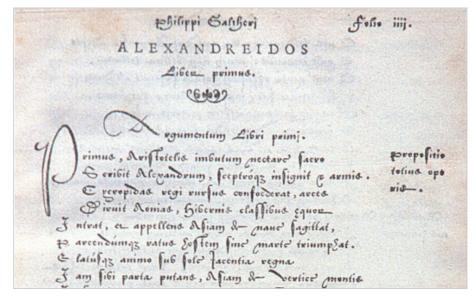
## Is Blackletter Unreadable?

For hundreds of years English was written and read in blackletter. Today we struggle with such works, such as in the piece below printed by Richard Faques at the "Sign of the Maiden's Head" (St Paul's Churchyard, London, 1530). The Roman character gradually supplanted blackletter in the 17th century. It was referred to by the English printers as *White Letter*, due to the lighter massed effect on the page. In the 19th century, during the period known as the Gothic Revival, blackletter was reintroduced as a novelty in English printing. poure nedes. And the lyrte, that the woll chale a wap from pou, all puels. CAnd thele thynges peake not onelp for poure telfe, but for all critten people, for pe prape in the plone, and in the obedpence of holp chyre ehe, and to for the profipte of holp chyrche in all poure terupce, as I have tapbe of the before hande. And all poure praper ps to moche the before hande. And all poure praper ps to moche the better. Vugo fulgens, Uprgyn thynynge in declues before all creatures, putte awape oute fynnes, and bypuge bettues in to oure towlies. Tu nos, Lorrectethow be when we erre, lyfte thou we by, when we falle putte oute the bengen hande, and dryne awape alwayes noys ous thynges. CAntempne. Non obluif catur, D byr gyn of progrus the bleffed fonne mote not forgette bs, lette that oute cumpe be enhaunted ppon bs.

Our modern Roman alphabet is a hybrid reflecting the handwriting from two periods in the development of Roman letters. It combines the *Capitalis Quadratus* of 1st century Roman inscriptional lettering — which are our "capital" letters — with their devolved state as manifested in the 11th century in the monasteries (that had flourished in France under Emperor Charlemagne). These became our minuscules, or lower-case letters.

Charlemagne himself desired to learn to read and write, but said that "a hand accustomed to the sword could only form the simplest shapes." By this time, war with the Arabs had cut off the supply of reeds, but relief was on the way with the introduction of papermaking (cheaper and more amenable to writing than parchment was), and goose or crow quills were substituted for reeds. These, in turn, gave way to steel pens, introduced in the 18th century (and popularized in the 1830's), which also had a strong impact on the way we read and wrote.

Copperplate scripts, learned from writing manuals, featured steeper angles and added virtuoso flourishing. Handwriting, just like music, was considered a useful art suitable for instructing young ladies.



Script type based on the hand of its cutter, Robert Granjon — a wonderful example of the everyday handwriting of 16th century Protestant Europe.

As letterforms were introduced by scribes, they were soon emulated by the founders of type. In 1557, French punch-cutter Robert Granjon cut a typeface based on his own handwriting, hoping to supplant the popularity of italics (first introduced by Aldus in a 1501 Virgil), which he himself had made widespread. His Gothic script (today called Civilité, after the children's conduct book in which it was used) unfortunately did not catch on, although it accurately reflected the everyday handwriting in Protestant Europe at the time.

The problem for Granjon was printers were equipped with blackletter (*batârde*) for vernacular works, Roman type for works in Latin, and if they wanted variety, (say for poetry), they used italic. Beautiful as Granjon's vernacular script is, it was not essential. On top of this, the extra sorts (30 ligatures, 24 alternates for terminal letters, etc.) made it difficult for typesetters. But the introduction to Gautier de Châtillon's *Ten Books of Alexandreidos* (Lyon, 1558) lauds the type:

"The novelty and strangeness of these letters will certainly surprise the reader, but I dare say he will be as much delighted by their cleanness and elegance. In point of beauty and legibility these letters are not outdone by others, and they are familiar to us because they imitate the written hand. What is printed looks like writing, and it may be hard to tell the pages printed with type."

– Translated by Harry Carter, in Carter & H. D. L. Vervliet, Civilité Type, Oxford, 1966, p. 16.

## As If Written By Hand

Roman letterforms evolve slowly, gradually reflecting the medium in which they are written. The Rustic letterforms of the ancient Romans, often written with a stylus on a wax tablet, were fluid and more condensed than the *capitalis quadratus*, but less cursive than letters written in ink with a reed (on parchment or papyrus). In 1741, Joseph Manni, a Florentine printer (and the first of our misguided visionaries) produced a unique edition of Virgil based on a manuscript of the poems (*Codex antiquissimus*) found in the Medici Laurentian library.

With an eye on retro-style, he cut new versions of "A", "U" and "Y", and sorted them with his Roman capitals to create a likeness of the original — sacrificing detail, but giving an overall approximation of the look of this ancient manuscript. He refers to them on the title-page as "Typis descriptus", or descriptive types. Daniel Berkeley Updike had said of it: "The work displays that amazing audacity at arriving at a striking effect, notwithstanding inaccurate details and economy of method, which was typical of Italian printing of the time." (*Printing Types*, Harvard, 1937, vol 1, p. 171)



HESPERIAM MAIOR RERUM MIHI NASCITUR OR MAIUS OPUS MOUEO- REX ARUA LATINUS ET IAM SENIOR LONGA PLACIDAS IN PAGE REGI HUNC FAUNO. ET NAMPHA GENITUM LAUREN ACCIPIMUS FAUNO PICUS PATER ISQ. PAREN TE SATURNE REFERT TU SANGUINIS ULTIMUS A FILIUS HUIC FATO DIUUM PROLESQ. UIRILIS NULLA FUIT PRIMAQ ORIENS EREFTA HUJENT SOLA DOMUM. ET TANTASERUABAT FILIA SED

Florentine printer Manni cut new versions of A, U & Y to evoke a 1st century manuscript.

A later typographic copy of a manuscript form was made perhaps by Joseph Jackson, a former apprentice at the celebrated Caslon foundry whose work was acquired by them after his death. Talbot Baines Reed's assessment of this script type is that it "is of no particular merit though faithfully enough rendering the contemporary clerkish hand." (A History of the Old English Letter Foundries, 1952 Edition, Faber & Faber, p. 245). The type had to be heavily kerned (which caused frequent breakage, as it was cast on angular bodies) might work in some contexts, such as a circular letter, or brief documents intended to look hand-written.

But it certainly did not work for continuous text. Nevertheless, that was how it was put to use by J. P. Cooke, a London printer, in his edition of Mary Potter's *Poetry of Nature* (1789). The poems are in fact prose reworkings from the legendary Highland Bard Ossian, hailed as "The Scottish Homer", but who was actually a fabrication of the poet James MacPherson. Cooke added titles in blackletter capitals to really confound his readers.

The decorative qualities of the blackletter caps work well individually with the plainer lowercase letters, but when grouped together, all-cap titles in blackletter become a tangle of confusion. The copperplate script, however, was popular with founders (less so with printers, because of the breakage) and was still being manufactured up until the mid-19th century.

OF THRE. COMPRIGING, A SELECTION OF THE MOST SUBLIME AND BEAUTIFUL APOSTROPHES, SONGS, HISTORIES, ELEGIES, Co. FROMTHEWORKS OFTHE CHICDORIAR BHADS. The TYPOGRAPHICAL Execution in a Style entirely New. and Decorated with the Superb Ornaments, of the Celebrated Caflon. I Frice Ten Shillings and Six-Pener. ] DDRCSS to the moon. Daughter of heaven fair art thou ! the silence of thy face is pleasant ! thou comest forth in thy lovelines. The stars attend thy blue course in the east. The clouds rejoice in thy presence, O moon : they brighten their dark-brown sides. Who is like thee in heaven, light of the silent night ? the stars are ashumed in thy presence. They turn away their sparkling eyes.

Troublesome script typeface in use in 1789: as it had to be heavily kerned this led to frequent breakage.

## So The Blind Can Read

Before Louis Braille (1829) there were several attempts to devise a raised letterform to teach the blind to read. Valentin Haüy met Baroness Von Paradis in 1780 and "was surprised to find in her apartments several contrivances for the instruction of the blind; for instance, embroidered maps, and a pocket printing apparatus." (Charles Timperley's *Encyclope-dia of Literary & Typographical Anecdote*, London, Henry G. Bohn, 1842, p. 751).

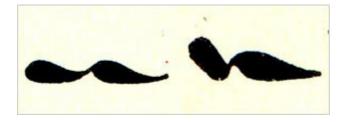
Haüy's *Essai sur l'Education des Aveugles* (Paris, 1786) was a strange effort. Printed by Clousier, printer to Louis XVI (the last King of France), the book was typeset by blind children as part of Haüy's plan to allow them to be a useful part of society, by having them set and print work for themselves to read. His fundamental blunder was he approached the problem from the angle of a sighted person, assuming that conventional alphabets offered the best hope.

DESCHARENGIES: 49 EDUC ATSON :8 nous à craindre du frél'astre le plus reculédant quent usage qu'ils feront l'immensité des Cieur Deleurs livres, Sice n'est Et lorsque nos Elèves cette destruction entière distinguent au toucher un Des Volumes, De Laquelle caractère Lypographique ceux des clairvoyans même dont l'ail est émoussé: resont pas exemts? lorsqu'ils sentent la dif. mae. Wos livres (ajouférence d'an quart de limite-t-cn ) sont trop volugne entre deux épaisseurs "mineuz. Wous enflor un données; lorsqu'enfinils » léger intequise , & vous lisent encore une suite de n en faites croître la formold après qu'on en a af. »me commede 80 portati-Failsé les reliefs, qu'avons B non.

The highly decorative, non-kerning, upright script form he chose (popular in France at the time) would impede even the nimblest reading fingers. In the printed version the letter-spacing and swash cap headers also would slow you down. One minor benefit to the compositors was that since the work was produced by embossing, the young typesetters worked with right-reading types.

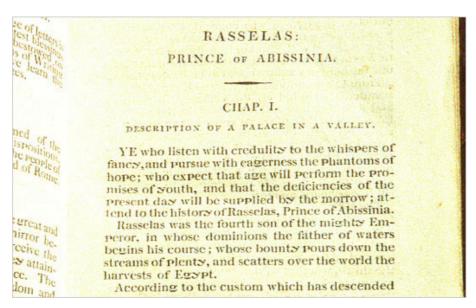
#### TWO MORE CLUES

OK, remember our quiz? Here are two more clues... what are these: Ladies' shoes, or just squiggles?



### Attempts At Cleverness

Like Manni's attempt, economy of method was the tool employed by Philip Rusher, who also falls into our "misguided visionary" category. He proposed to save space, and thereby paper, by eliminating descenders, since only five letters in our alphabet -gjpqy – have them. But he made a serious tactical error; to demonstrate his new type he chose to reprint a popular novel, Samuel Johnson's *Rasselas, Prince of Abissinia* (Banbury, 1804). Apart from the fact that it is an unremittingly dull story with little incident and a dim grasp of locale, most of the story is set in Egypt – and that word, with its three descending letters in an awkward huddle, pops up frequently.



*Notice something missing...?* 

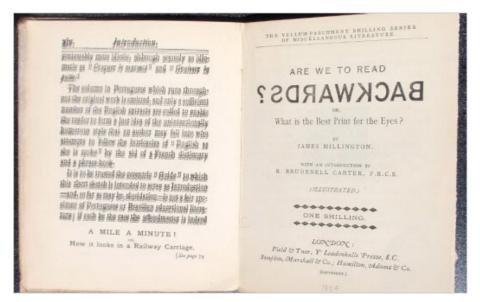
The type was later used by Rusher's nephew in 1852. Rusher even obtained a patent for "various improvements and alterations in the form of printing types ... so as to diminish the trouble and expense of printing, and to render it more uniform and beautiful." But clearly they were anything but uniform and beautiful.



The letters *q*, *y* and *p* are found in an awkward huddle.

An early, somewhat tongue-in-cheek, study of legibility is James Millington's *Are We to Read Backwards?* This book was published by the remarkable Leadenhall Press of London (1884). The press was run by Andrew W. Tuer, an antiquarian who also enjoyed the look of old books, so his typography is quite anachronistic for that time period.

However, there is a great printer's jest in his frontispiece which shows how books look in a railway carriage as the reader is bounced & rattled along (The frontispiece is from Millington's introduction to *English as She is Spoke*, published by Field & Tuer the year before — a French-Portuguese phrase book, translated into English with a French dictionary!).

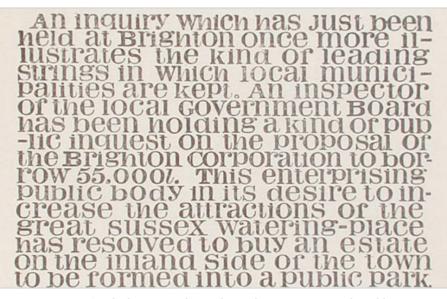


A printer's joke – the page on the left simulating the reading-on-the-train experience.

Several "improved" alphabets are shown. Plate 5 (as shown below) is *boustrophedon* type, which would save eye movement in reading, but caused brain strain as well as posed problems for typesetters when they had to fix an error. Plate 7 (with no ascenders or descenders, to save space), has an almost folkloric quality to it, suggesting lettering done by amateurs.

#### Plate-5

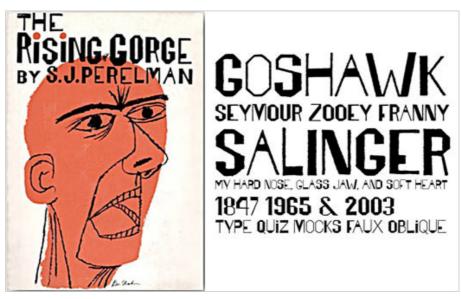
An attempt to reduce eye-movement resulted in more problems than it solved.



A typeface lacking ascenders & descenders creates a visual jumble.

Non-professional lettering is a common source for experimental alphabets. In the 1930's the American artist Ben Shahn was documenting The Great Depression in the rural South for the Farm Security Administration. He adapted the primitive signs he'd photographed to create his own distinctive letter-forms, seen in posters and dust-jacket designs. These in turn have been digitized into the FF Folk typeface family by Maurizio Osti in 1995 (*below right*).

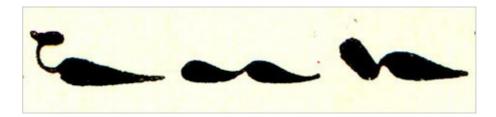
There is a problem with the typographic adaptations of quirky lettering, and that is each character is always going to look the same. When two or three "O"s appear in close proximity, they tend to become monotonous. An artist will vary letter-forms, not just to avoid predictability, but to make pairings work better together. Even without numerals, Granjon cut 138 sorts for his first Civilité type seen earlier in this chapter. FF Folk has two versions for each letter, and three weights to obviate the problem.



Ben Shahn dustjacket, inspired by Southern US folk signs, and a modern typeface based on Shahn's lettering.

## Unreadable Letters In Readable Sentences

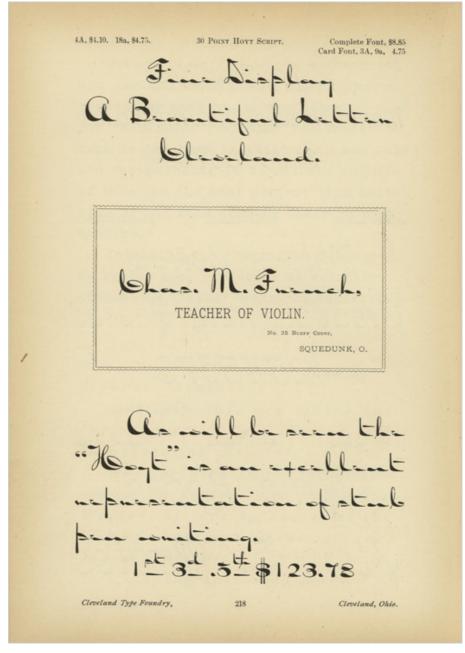
But let's go back to our riddle. The answer is, if you haven't guessed already, the letters "e," "n" and "r" in Hoyt Script.



Handwriting flourished — no pun intended — in the 19th century, before the perfection of a new gadget called the typewriter (1873). And people experimented with different nibs, including one called the stub-pen, whose effect was as blunt as it sounds. Simultaneously, a major change was underway in the production of typefaces. Having learned how to grow matrices from a cast character or piece of type (to pirate typefaces), the ingenious Americans soon discovered that instead of cutting steel punches, they could simply carve a character out of a piece of soft type-metal.

This created an electrotype matrix, taking hours out of the laborious process. Typeface production accelerated, and there would be a boom in the 1880's for the introduction of new types. James West adapted these

optimized methods of production. He worked for many founders in his career, including Miller & Richard (in his native Edinburgh), Caslon and Figgins (in London), and George Bruce (in New York). In the 1880's he worked for the Cleveland typefoundry and cut many scripts with intricate connecting strokes for them, beginning with Carpenter Script, based on the handwriting of a "Mr. Carpenter" (who worked for Robert Hoe & Company, the press manufacturer).



Released in 1883, the letters of Hoyt Script are individually unreadable, but when brought together are lively and overflowing with personality.

This script was so popular that Cleveland induced West to cut more scripts, and Hoyt Script was patented in February, 1883. It's seen here above in Cleveland's 1883 specimen book, where as you perhaps can see, it's recommended as "an excellent representation of stub-pen writing." Individually the characters are completely unreadable, but *en masse*, they create a unique and lively typeface, overflowing with personality.

Ideal for selling ladies' shoes, Aladdin's lamps, or whatever you fancy.

**Note**: Granjon, Manni, Potter, Haüy & Rusher books are reproduced courtesy of the Robert Grabhorn Collection on the History of Printing & Development of the Book at San Francisco Public Library. All other images from the author himself.

A big "thank you" to our typography editor, Alexander Charchar<sup>33</sup>, for preparing this chapter. **\*** 

## Font Wars: A Story On Rivalry Between Type Foundries

#### BY SIMON LOXLEY 🕬

I had thought of terms like "intellectual property" or "intellectual theft" as being of fairly recent provenance, so my eye was caught by the latter's use in a headline of a 1930 edition of the American trade journal *The American Printer*.

The article it fronted proved to be equally intriguing, a response by the president of American Type Founders to a June 1929 article in the German journal *Gebrauchsgraphik* by the designer Rudolf Koch calling ATF a "highway robber of German intellectual property". The issue was a typeface marketed by ATF earlier in 1929 called Rivoli. Koch and the German typefoundry Klingspor asserted that Rivoli was no more than a copy of Koch's 1922 design Koch Antiqua, also later known as Locarno, and released in America as Eve. Klingspor had already taken legal action for piracy against the Viennese foundry Karl Brendler und Sohne for their lookalike Radio Antiqua, but with no success.

t amabilius uirtute, mibil ouod maois al, nines ad dilioendum. Quippe cum prop em Xipbitatem, etiam quos nungi uidi, lammodo dilioimus. Cuiusea uisest, ut I maius es t, in hofte etiam dilioamus.

Wyss: Part of the sample of Wyss' script offered by ATF to back their claim that Koch Antiqua was not its designer's intellectual property. Neither of the two styles of 'g' resemble Koch's however — to take just one example.

# ABCDEFGHIJKLMN OPQRSTUVWXYZ abcdefghijklmnopqrlstuvwxyz chcklchfffiflftllfilftllfilftBa&& ABCDEFGHIJKLM

Koch Antiqua: Koch Antiqua, and uppercase letters of the italic.

Klingspor lost that case, argued ATF, because far from Koch Antiqua being Koch's or German intellectual property, both it and the Austrian face were based on the Lombardic penmanship of the Swiss calligrapher Urbanus Wyss, in particular from his 1549 book *Libellus Valde Doctus*. Klingspor could not claim theft of a design that was not theirs to begin with.

Whatever the truth of this, the most striking part of ATF's broadside was their free admission that the similarity between Rivoli and Koch Antiqua/Eve, far from being accidental, was quite deliberate, Rivoli having been created and released both as a spoiler for the popular Eve but also as a "reprisal" face. Klingspor was partially owned by Stempel, whose 1925 catalogue contained what ATF claimed were "confessedly" fourteen type series of American origin, including what they deemed pirated versions of their own designs.

WYSS DESIGN OF 1549 REPRODUCED FROM A WOODCUT PRINT KOCH'S ADAPTATION (1916-1922) OF WYSS' DESIGN RIVOLI OF THE AMERICAN TYPE FOUNDERS CO., 1929 ihiles biliusa WYSS DESIGN OF 1549, REPRODUCED FROM A WOODCUT PRINT dilige pb Cuidi~ KOCH'S ADAPTATION (1916-1922) OF WYSS' DESIGN idi= iligep RIVOLI OF THE AMERICAN TYPE FOUNDERS CO.. 1929 dilige pb Cuidi= FIG. 4. Word combinations proving that Eve

and Rivoli follow Wyss' design of 1549 with noticeable fidelity Comparison: ATF's comparison of the faces which accompanied their article, but not the truth, says David Pankow. What purported to be Wyss' script was in fact Brendler and Sohne's Radio Antiqua, printed heavily onto soft paper.

The ATF/Koch/Stempel "face-off" (for the full story see David Pankow, "A face by any other name is still my face: a tale of type piracy" *Printing History* 37, New York, 1998) was part of a savage turf war, fought by a company to defend its commercial position with arguably, only a decade after a world war, some national antagonism thrown in. ATF remained relatively conservative in its designs, whereas on their own doorstep the New York-based Continental Typefounders' Association was importing type in which was enshrined the latest European stylistic developments. The acerbity of the language on both sides is unrestrained, while exacerbated by ATF's suspicions that Continental were involved too, stoking the fires of the argument.

Type design is a business that has long been bedevilled by piracy and plagiarism, conscious or unconscious, licensing issues and scant or no legal protection for intellectual property. Some of the problems stem from the nature of the craft itself. Although in theory the number of ways you can position the points of say, a capital A, are myriad, the demands of legibility, style and fashion radically reduce the options, and alphabet designs are all using the same raw material.

As designer Dave Farey has described himself, facetiously but with an undercurrent of truth: "Nothing I have done is original, it's all based on the 26 letters of the alphabet and the Arabic numerals." Add to this revivals and redrawings of classic faces, and similarities are unavoidable. Type design is an art that is constantly echoing and alluding. Most people working in the graphic arts are, in a big part of their design psyche, fans. We will probably have been inspired to get started in the first place by seeing other people's work that we absolutely love. It's unavoidable that some of that DNA will crop up or be used consciously in our own work. In the area of type revivals you can at least credit your source in the type name; as designer Nick Shinn says on Typophile<sup>34</sup>, "plagiarism means copying without recognition of the source."

In today's digital environment, do any of the attitudes and practices that marked the ATF quarrel persist? I asked Phil Garnham of London's Fontsmith if he regarded other font companies as rivals:

"I think there is definitely a healthy and friendly rivalry between today's independent digital foundries. Over the past few years, as de-

<sup>34.</sup> http://typophile.com/node/70238

signers have become more aware of the power of type in branding, particularly the possibilities of bespoke type and with the boom in type design education at Reading University and Type Media at the Hague, fresh competition is popping up on a monthly basis, which is a great thing for type design. It keeps us all on our toes and looking for new possibilities within our beloved alphabets."

And spoilers? Phil feels the tactic might still be out there, but for his own part, like musicians who consciously don't listen to other people's music when writing and recording, he tries not to look too much at other work: "I think that it keeps me detached from other people's ideas, and allows me to pursue mine, free from any subconscious involvement."

But even then you can find that what you've done looks like something else: "Arguably, I think there are many designers tripping up in this way, even with the best intentions. I've been in this awkward position myself. You have to explore new proportions and alternative letterforms so you can bring something new to the market."



Square leg – Horatio with its restyled 'R' in the Letraset catalogue, available in three weights.

How close have people steered, consciously? Dave Farey recalls from his time working for Letraset how, among one selection of faces presented to the committee for inclusion in the dry transfer giant's range was Harry, a design owned by the Visual Graphics Corporation. The committee loved it, but unfortunately permission hadn't yet been obtained, and VGC refused. So Letraset produced Horatio: "I think the only thing we changed was the leg of the uppercase R," Dave recalls, adding candidly, "Ours was worse."

Heldustry Medium TASTE IN PRINTING DETERMINES THE FORM TY pography is to take the selection of a congruous typeface, the quality and suitability for its purpose of the paper to be used, the care and labor, time and cost of materials devoted to its production, all in a direct ratio to its ultimate worth and destinati

Heldustry: From the 1983 Compugraphic Type catalogue.

Clues could even be given in the font names — or not. Customers requesting Helvetica of 1980s photosetting companies which used the Compugraphic type library might be told: "We don't have Helvetica but we do have Heldustry" — which looked, well, similar. The catalogue which digital company Bitstream produced at the start of the 1990s was helpful to customers unable to find familiar names: their Staccato 222, for instance, was the "Bitstream version of Mistral", "Lapidary 333 is the Bitstream version of Perpetua", Venetian 301 the "Bitstream version of Centaur".





Bitstream version of Mistral

Staccato: From the Bitstream catalogue, early 1990s.

# Some More "Face-Offs"

# MEMPHIS AND STYMIE



Memphis: Memphis seen here in extra bold weight, and Stymie Bold.

1931 saw ATF squaring up to Stempel again, countering their Memphis slab serif with Stymie, the name being golf-talk for blocking your opponent's line of play. ATF's prolific Morris Fuller Benton based Stymie on his own Rockwell Antique, basically a repackaging of Litho Antique, whose owner the Inland Type Foundry had been taken over by ATF. According to Patricia Cost in her book *The Bentons*, Monotype then copied Rockwell Antique and called it, confusingly, Stymie Bold.

# JACNO AND BANCO

# ABCDEFGHIJ ABCCDEFGHIJ

Rather than stealing the design, Excoffon exercised squatter's rights in the territory – with style (above). The names were near anagrams, probably no coincidence.

French type legend Roger Excoffon's employers, Fonderie Olive, were such rivals with Parisian foundry Deberny and Peignot that Excoffon examined with a magnifying glass a picture of their designer Marcel Jacno at work on his new self-named type. "Then I rapidly made some sketches for a few letters in a commercial type, not identical, but of the same family... The rest is a success story. Banco was used throughout the world... It's the most shameful thing I ever did in my career." (From *Roger Excoffon et la Fonderie Olive*, Sandra Chamaret, Julien Gineste and Sébastien Morlighem, Ypsilon Editeur, Paris, 2010.)

### ABCDEFGHIJ Granjon 1567, Pierpont 1913 ABCDEFGHIJ ABCDEFGHIJ Morison/Lardent Spring 1931 ABCDEFGHIJ Morison/Lardent Spring 1931 ABCDEFGHIJ Morison/Lardent Spring 1931

# STARLING BURGESS VS. STANLEY MORISON

A comparison of Starling Burgess' design (Lanston no.54) and Stanley Morison and Victor Lardent's work on Times, as it appeared in Printing History 31/32 (1994).

According to a 1994 article by Mike Parker which appeared in *Printing History*, Times New Roman was an extremely close reproduction of a typeface designed years earlier by maverick genius boat and car designer Starling Burgess, which lay unpaid for and abandoned at Lanston Monotype until the design of the new face for *The Times* newspaper became problematic. Although Morison had the reputation among some for being a slippery operator, the story as presented seems hard to credit. Font Bureau offer a Mike Parker design called Starling.

## FUTURA AND TWENTIETH CENTURY

# Central Central

No cigar, but close, Twentieth Century (above), Lanston Monotype's response to Futura (below).

Buffalo, NY-based foundry P22 have in their Lanston Type Company collection Twentieth Century, "Monotype's answer to Futura". They describe Sol Hess' redrawing as "close"; as an attractive optional extra they have included digital recreations of some of Paul Renner's original experimental characters for Futura.

# COMIC SANS AND CHALKBOARD

# Comic Sans Chalkboard

Comic and Chalkboard: Both ideal for warning notices.

Apple's OS X doesn't supply you with the world's favourite, Comic Sans, but you do get Chalkboard, which inhabits pretty much the same terrain.

# HELVETICA AND ARIAL

# Arial Helvetica

Hard to actually love perhaps, but Arial has certainly been well used, if only by default setting.

Arial, designed in 1982 by Robin Nicholas and Patricia Saunders, seems to attract a certain amount of online ill-feeling in "font hate" blogs these days on the grounds of being Microsoft's Helvetica lookalike.

# Does It Really Matter?

For the user, does any of this matter? If you like a font and it fits your purpose, then its provenance is irrelevant. And if it's a new or recent design, then it comes with little or no backstory. But it's always useful in terms of design rationale to investigate the background to your choice. Who designed it? When, and for whom — for a specific project in the first instance or for a company? If for a particular project, would those associations jar with how you're planning to use it now, and does that matter? If it was designed originally for Monotype, is the one you're planning to buy a Monotype font, or from someone else? What do Monotype offer as their version, and how does it compare? Stempel Garamond versus Simoncini Garamond, or Garamont?

# KOCH RIVOLI

Koch Rivoli: Channelling the spirit of Rudolf Koch and Willard T Sniffin.

And how has history served those original battling typefaces? Sebastian Carter in *Twentieth Century Type Designers* says of Koch Antiqua: "One of the most successful advertising faces of the inter-war period, still often used to suggest the vanishing luxury of ocean liners." Though some of that usage might have been in reality Rivoli, Koch's reputation as a type designer endures.

As does the name Rivoli, although its creator or draughtsman, the magnificently-named Willard T Sniffin, is less remembered. But urbanfonts.com for one offers as a free font Koch Rivoli (a pairing of names that would have the German designer spinning in the proverbial grave), an uppercase-only design that takes inspiration from the thick-thin double stroke of Koch's italic uppercase — and Rivoli's. ?\*

# Hands-On Experience: The Rehabilitation Of The Script

## BY SIMON LOXLEY 🍽

Serifs, sans serifs and... scripts. In theory not a bad typographic palette to play with, but when it comes to practice, the options are always far fewer.

One member of that stylistic trio could never quite punch its weight. But over the last few years we have seen something of a rebirth and revitalization of scripts, a category that once represented a care home for the typographically underemployed. But why has this come about, and why was one needed in the first place?

The problem with scripts was that although they were supposed to offer a freer, natural, handwritten style of lettering, when you tried to use them, most turned out to be more rigid and constricting than sans serifs and serifs. There was little room for any play with letterspacing, because the characters needed to connect. Uppercase letters could be equivocal, to put it mildly, in terms of legibility.

Although one of their traditional default applications was wedding invitations, even there you could run into problems. If the RSVP address included a postal code composed of capital letters and numbers the visual effect was clumsy at best, unreadable at worst. There was often a density of strokes in the x-height area that impeded legibility, an angle that always seemed to dog scripts; like handwriting itself, certain words could look ambiguous, or not readily identifiable. If you pushed nagging doubts to one side and persevered in your decision to use a script on aesthetic grounds — just because it looked great or felt right — it would frequently be shot down by client or editor for lack of clarity.

For a typeface this is a considerable disadvantage; as designers we can sometimes be forgiving, but others can be brutally frank. Jan Tschichold, in his 1946 book *An Illustrated History of Writing and Lettering*, provides a possible explanation as to why this state of affairs came about, blaming eighteenth century "seductive engraved copy-books", where a florid over-decorative style had emerged which owed little to genuine penmanship. What would be called the copperplate style, and commercial script, was a further distortion of this, using "regular alternation of fine and thick strokes [to disguise] the unnatural writing technique".

Where it went wrong, according to Tschichold, the abandonment of a natural writing style in favour of decoration.

There was also a stylistic handicap. R.S. Hutchings, in *A Manual of Script Typefaces* (1965) says: "Until well into the 1930s it was exceptional for even a well-stocked composing room to hold more than a single script series, and their use was restricted almost exclusively to the circumscribed field of professional and social stationery". To test this out I took a look at my copy of the beautiful *A Book of Typefaces* produced by printers WS Cowell of Ipswich, England in 1952.

In their main display of faces is a solitary script, Marina, a 1936 design from Stephenson Blake, the standard copperplate style that would have been hauled out if someone came in and wanted some wedding invitations printed. It's this kind of lifeless, off-the-peg sophistication to which designer Michael Bierut alludes in Gary Hustwit's *Helvetica* film, when talking of corporate makeovers of the 1960s; clients would have "some letterhead that would say 'Amalgamated Widget' on the top and some goofy... maybe a script typeface ... the nuptial script and the ivory paper."



Marina in action; although Cowell's catalogue features some attractive pages of type in action, this is probably the least confident example. The fault of the type?



Scripts were almost a default headline style for American ads of the forties and fifties, a "visual bad habit that was endemic in those days," says Michael Bierut. But some have since found them inspirational.

Later, more informal styles emerged, based on letters written with a brush, or contemporary handwriting. Several have become standards on computer operating systems; Brush Script, a 1940s American Type Founders advertising face by Robert E Smith, and the celebrated Mistral of Roger Excoffon, (1953) a handwriting-style script that belonged, says Julien Gineste in *Roger Excoffon et la Fonderie Olive*, "to the 'civilization' of the ballpoint pen".

A more recent addition to the lineup has been Hermann Zapf's magisterial Zapfino (1998). But these three all present problems. Think of the logo of world-conquering 1980s Australian soap Neighbours to get an aesthetic reading on Brush Script. Excoffon's designs are wonderful, but outside of France, carry too much aesthetic baggage. They seem more like works of art than typographic workhorses. Zapfino is a cathedral; you want to fall to your knees before the power of its sweeping ascenders and descenders, but it feels like a script that no mortal hand could actually have written. Just how or where do you use it?

Neighbours

Everybody needs good ones – scripts that is. Brush Script was used for the logo of Kylie's springboard.



Roger Excoffon overcame the physical limitations of metal type while moving diametrically away from the rising Swiss aesthetic.



Cynical writer proved wrong; the designer of this label thought Zapfino was just the thing.

Fortunately the choice has broadened considerably. With it a lot of the old legibility issues seem to have disappeared, surely a result of faces being properly designed and considered for a purpose rather than being bastardized historical hand-me-downs. Nick Cooke<sup>35</sup> has recently released Rollerscript<sup>36</sup>, described in MyFonts" March 2012 Creative Characters<sup>37</sup> newsletter as "the most realistic script face on the market". Rollerscript is based on multiple versions of characters written in his own hand using a Pentel roller pen. I wondered if he thought there was a script renaissance, and what the reasons were:

"There has been a huge rise of script/handwriting fonts over the past couple of years and it's definitely to do with more type designers exploring the features of OpenType and the complexities of programming. Designers are finally becoming aware of and are embracing OpenType technology and its possibilities for more expressive type us-

<sup>35.</sup> http://www.g-type.com/

<sup>36.</sup> http://www.g-type.com/blog/new-rollerscript-fonts-released/

<sup>37.</sup> http://www.myfonts.com/newsletters/cc/201203.html

age, now that most programs are OT savvy, even the dreaded — by me — MS Word."

Rollerscript

Nick Cooke's latest comes in Rough and Smooth versions, seen here. Described as a "modern sister" to his Olicana, it has over 100 ligatures.

Developments in software are clearly a factor then, but maybe another is that different people are moving into the field. Nick continues:

"I noticed that when I released an earlier script, Olicana, in 2007 there were many more purchases from the USA than in Britain. I think scripts have been popular over there a lot longer than here. Of course there are a lot of very poor fonts but there are also many more fantastic new ones available from the likes of Alejandro Paul at Sudtipos, Laura Worthington and Emily Lime. This seems to be an area which attracts more women designers, which is a good thing. Type design has for too long been pretty much a male preserve."

You can probably see more connecting and brush scripts in one place at the site of Argentinian collective Sudtipos<sup>38</sup> than anywhere else, or at any point in history. This struck me as possibly a cultural influence, and brought to mind the beautiful individualistic script lettering you can often see on shop fascias in Spain. But assumptions can be risky. In *Creative Characters: the MyFonts interviews, volume* 1<sup>39</sup>, Alejandro Paul says that Argentinian graphics are broadly European modernist in flavour, outside of packaging, his own background. Much of his inspiration comes from early twentieth century American scripts. Which brings us back to one of Nick Cooke's observations. It's a field in which Buffalo NY-based P22<sup>40</sup> are strong. They offer as one option fonts based on the handwriting of artists: Cézanne, Van Gogh, Michelangelo, Rodin, Monet and Gauguin. Christina Torre's Dearest<sup>41</sup> is an elegant addition to this field, although using an anonymous nineteenth century century as

<sup>38.</sup> http://sudtipos.com/home

http://www.amazon.com/Creative-Characters-Interviews-Font-Designers/dp/ 9063692242

<sup>40.</sup> http://www.p22.com/

<sup>41.</sup> http://www.p22.com/ihof/dearest.html

its source. But that twentieth century advertising feel is strongly represented too: Rob Leuschke's Corinthia<sup>42</sup> and Michael Clark's <u>Sneaky<sup>43</sup></u> are two examples. Richard Kegler's <u>Casual Script<sup>44</sup></u> is a "free-flowing thin brush style evocative of vintage product advertisements and packaging lettering".



Alejandro Paul's Buffet Script was based on the calligraphy of American signwriter Alf Becker. (image from Creative Characters: the MyFonts interviews, vol 1).

Written, not painted

P22 Gauguin, based on the artist's own handwriting.

43. http://www.p22.com/ihof/sneakypro.html

**<sup>42.</sup>** http://www.p22.com/ihof/corinthia.html

<sup>44.</sup> http://www.p22.com/ihof/casualscript.html



P22 Casual – look at the ad picture above, and the source of inspiration is fairly clear.

Nick also picks up on a significant wider trend, the desire for the handmade: "I think designers nowadays are looking for a personal touch and faux handwriting is just part of that 'homemade aesthetic' trend". This is due partly to the turning of fashion's wheel. During the 1990s the complete dominance of computer-generated design made other methods look obsolete. It was a period in which photography dominated, to the point that Rick Poynor could write in *Eye* in 1993 that "the effect of the continuing preference for photography... is to make most design based on illustration look decidedly old hat".

Photography could be easily manipulated in Photoshop and – certainly in the UK – we saw the blanket dominance of the "fuzzy-photo" school of book cover design. Why spend money commissioning an illustration when you could use a stock photo, or even take one yourself? Crop in very close or take your subject at a great distance and then, crucially, blur to add mystery, obscure awkward details and cover up any technical shortcomings in the picture. But eventually people tire of production line design that anyone can do, and turn again to the personal and the handcrafted. The latter also chimes with a post-global economic meltdown, do-it-yourself aesthetic that has also seen a rise in popularity of traditional homemaking crafts previously considered moribund, such as sewing and knitting.

But — and here I risk making myself very unpopular — I think there's another contributing factor to the rise of the script. It may be sublimal, but significant — the ubiquity of Comic Sans. Although it is not a script in the sense that the letterforms connect, consider its source of inspiration. The lettering in the speech balloons of comic books are handdrawn, and often have a slight calligraphic incline to them. It is this characteristic that drew enough people to use it in its early years as a bundled font for Windows 95 for it to reach a tipping point of familiarity to over-familiarity. As its creator Vincent Connare has said: "People like it because it isn't the kind of font that they would use to type a serious letter." Although you might complain that that is exactly what a lot of people have been doing with it for years, his point is an important one. Comic Sans has had an impact on our feel for type, whether we like it or not, and part of that effect has been a new wave of lively, fun, informal scripts, definitely not the kinds that you would use for your society wedding invites. Now I'm getting out of here before you start looking around for something to throw. **\*** 

# **About The Authors**

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Alastair Johnston is a scholar, teacher and letterpress printer. He is the author of "Transitional faces," a forthcoming biography of Richard Austin, cutter of the Bell and Scotch Roman types and his son Richard T. Austin, a wood engraver. He is co-editor of William E. Loy's "Nineteenth-century American designers & engravers of type," and most recently has produced "Typographical tourists: tales of the tramp printer," from his Poltroon Press based in Berkeley, California.

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# Carolyn Knight & Jessica Glaser

Carolyn Knight and Jessica Glaser are academics from the University of Wolverhampton in the UK, graphic designers, and prolific design writers. Their numerous books focus on topics including the use of space in

<sup>45.</sup> http://www.twitter.com/cesarpuertas

graphic design, mnemonics and memory devices and the understanding and creation of visual hierarchy. Their latest book is the best selling "Graphic Design Exercise Book", published in English by RotoVision and in Spanish by Editorial Gustavo Gili. Their company Bright Pink Communication Design, works in such areas as healthcare, construction, education, financial services and the public sector.

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<sup>46.</sup> http://primate.co.uk/

<sup>47.</sup> http://8gramgorilla.com/

<sup>48.</sup> https://twitter.com/#!/ebrunborg/

**<sup>49.</sup>** http://shokomugi.com/

<sup>50.</sup> http://stbride.org/friends/publications/ultrabold

# About Smashing Magazine

Smashing Magazine<sup>51</sup> is an online magazine dedicated to Web designers and developers worldwide. Its rigorous quality control and thorough editorial work has gathered a devoted community exceeding half a million subscribers, followers and fans. Each and every published article is carefully prepared, edited, reviewed and curated according to the high quality standards set in Smashing Magazine's own publishing policy<sup>52</sup>.

Smashing Magazine publishes articles on a daily basis with topics ranging from business, visual design, typography, front-end as well as back-end development, all the way to usability and user experience design. The magazine is — and always has been — a professional and independent online publication neither controlled nor influenced by any third parties, delivering content in the best interest of its readers. These guidelines are continually revised and updated to assure that the quality of the published content is never compromised.

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Smashing Media GmbH<sup>53</sup> is one of the world's leading online publishing companies in the field of Web design. Founded in 2009 by Sven Lennartz and Vitaly Friedman, the company's headquarters is situated in southern Germany, in the sunny city of Freiburg im Breisgau. Smashing Media's lead publication, Smashing Magazine, has gained worldwide attention since its emergence back in 2006, and is supported by the vast, global Smashing community and readership. Smashing Magazine had proven to be a trustworthy online source containing high quality articles on progressive design and coding techniques as well as recent developments in the Web design industry.

<sup>51.</sup> http://www.smashingmagazine.com

<sup>52.</sup> http://www.smashingmagazine.com/publishing-policy/

<sup>53.</sup> http://www.smashing-media.com