Eric Gill in his smock, *c.* 1908

exact character ('The title page should be set in the same style of type as the book and preferably in the same size'), and his pronouncements elsewhere suggest a wholly unromantic one. 'The shapes of letters do not derive their beauty from any sensual or sentimental reminiscences,' he wrote. 'No one can say that the O's roundness appeals to us only because it is like that of an apple or of a girl's breast or of the full moon. Letters are things, not pictures of things.'

Gill died in 1940, just as his most famous font began appearing on the Ministry of Information's wartime warnings about blackouts, careless talk and the recruitment of the Home Guard.

Just My Type:
A Book About Fonts (2010)
Garfield, Simon.
New York: Gotham Books.

3

Legibility vs Readability

In an office, somewhere in Scranton, Pennsylvania, Steve Carell is chairing a meeting, Rainn Wilson is shredding paper, John Krasinski is on the phone and Jenna Fischer is looking resentful. We are, of course, at Dunder Mifflin, the paper-supply company at the heart of *The Office*. The credits roll, the music plays, and when the title of the show comes up in white text on a black background, there is only one typeface that will do the trick: Helvetica. It's clear, it's bold, it sits there like every other sign that you barely glance at. For this is a place you've been to before, a place you'll fit right in. It's probably an office you've worked in yourself, a place of awful recognition.

Helvetica says universality. The font chosen for the cover of the DVD sets for *The Office* are in American Typewriter, another shot at ubiquity, almost a non-font in the way it nudges us back to a pre-digital age. Other branding tries for a more singular attempt at instant association. The lettering on the sides of passenger airlines had always gone for toned-down emotions before European discount airline **easyJet** in **Cooper Black** came along, but here was a company going for something else: a warm fuzziness, a homeliness, a soft hipness.

The lettering on the side of planes had rarely implied fun ('we're one of you! climb aboard!') before easyJet tried it, and so strong is this typographic branding that no one has successfully imitated it. (Although the budget airline's chief rival, Ryanair, once used **Arial Extra Bold** – attracted perhaps by its name – before moving to a proprietary font.)

EasyJet's branding soon extended to the easyGroup's other products, and was discussed in the company's mission statement:

> Our visual identity, known as the 'Getup', is an essential part of the easyJet Brand Licence and is cast in stone! It is defined as: a) white lettering on an orange background (Pantone 021c on glossy print materials; on other surfaces the nearest practicable equivalent), and b) in Cooper Black font (not bold, italics, outline nor underlined), the word 'easy' in lower case, followed (without space) by another word . . .

Cooper Black was a good find. It is rare for a new company to select a pre-digital unmodernized classic face from the shelf and not revive or tweak it in some way, but here was an exception. Like so many fonts that have stuck, it was designed in the 1920s, and became instantly popular. Oswald Bruce Cooper, a former Chicago advertising man, was commissioned by the foundry Barnhart Brothers & Spindler to make something that they could sell to advertisers (and something that looked suspiciously similar to Pabst Extra Bold, designed several years before by Frederic W Goudy for the American brewing firm).

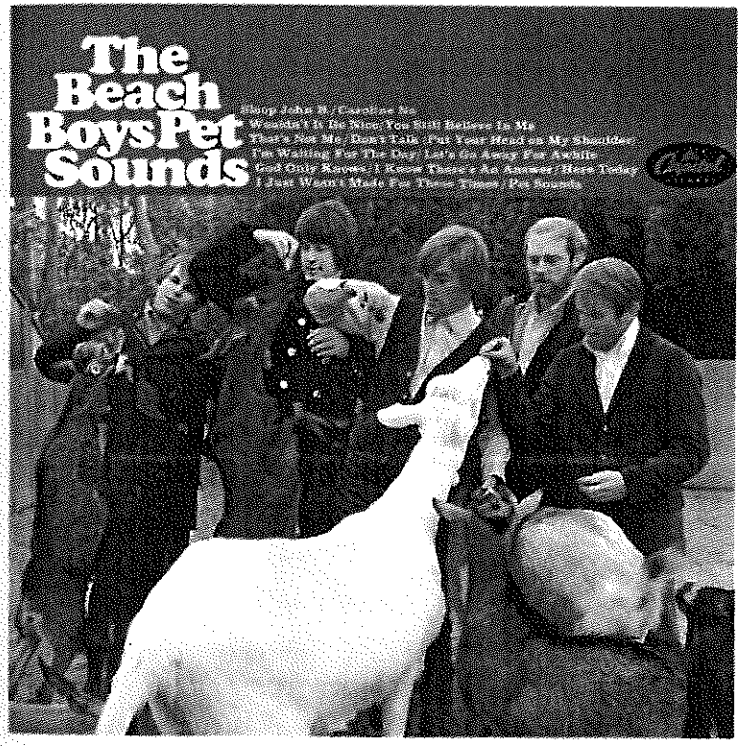
Its success soon allayed Cooper's fear that he would only achieve 'a tiresome effect from the too frequent repetition of the same quirk and curve'. In fact he achieved something spectacular – a serif face that looked like a sans serif. Cooper Black is the sort of font the oils in a lava lamp would form if smashed to the floor. Its creator believed it ideal 'for far-sighted printers with near-sighted

Cooper Black counters strut their stuff
(the d and g are Cooper Hilite)

customers'. There are little nicks at the tops and bases of letters, and they give the font a solid flat weight on a page; without them, the type would always have been appearing to roll away. For a font with such a thickset look, it retains a remarkably unthreatening demeanour. Partly this is due to its stout and pudgy descenders, its large lower-case letters in relation to its capitals, and the limited white peering through the counters of the a, b, d, e and g. It is usually employed quite bunched up, for excessive spacing between letters would make it break up very fast, confusing the eye.*

Cooper Black looks best from afar, as easyJet recognized. Before then, its most famous appearance was probably on the classic Beach Boys album *Pet Sounds*. Like many record covers of the time, this printed each song title on the front of the sleeve – above the photograph of the band feeding goats at the zoo. Cooper Black for the band name and title is iconic, not least because the letters are touching, and reflect Robert Indiana's then very much in-vogue 'Love' logo. But its weakness as a text font is immediately clear. '**Wouldn't It Be Nice/You Still Believe In Me**,' the first line runs, before our brain unscrambles the rest of the offering, '**God Only Knows**', '**Sloop John B**' and the others. The 12-inch record sleeve gets away with it; the CD cover is very hard work.

* The ultimate Cooper Black font, the connoisseur's choice, is ATF Cooper Hilite, a wet-look 3-D type, created by adding an internal white line. This is the equivalent of go-faster stripes on the side of a car, giving each letter the pumped-up steroid appearance of an inner tube fit to burst.



Cooper Black – looks great from afar, and the bigger the better

This is one difference between legibility and readability: at small sizes, **Cooper Black is legible but not very readable.** But some type is meant to be seen rather than read (a type designer once compared this attribute to a dress designed to look great on the catwalk but provide no protection against the elements). Font-as-couture is a common analogy. Adrian Frutiger, designer of one of the most popular modern fonts, Univers, had another: 'The work of a type designer is just like that of a dressmaker,' he noted. 'Clothing the constant, human form.' Or as the graphic designer Alan Fletcher put it, 'a typeface is an alphabet in a straitjacket'.

As with fashion, the design of type is an alarmingly vibrant art form. It refuses ossification. Like the wildest genres of modern art, it is the newest things that upset the traditionalists (although they will seldom admit this, criticizing instead its manners or its lack of proper schooling). The traditionalist will argue that no one buys a typeface to hang on the wall, while the more traditional still may argue that only when a typeface is beautiful enough to be displayed in a gallery may it also be considered suitable for print.

But beauty demands discipline. It is possible that the amateur creatively unleashed by the computer may produce something beautiful, but will it work on the page as practical type? Will all the letters look equally good next to any other letter, or will the spacing between them create textual migraine? (The science of proportional spacing between pairs of letters is known as kerning – ensuring, for example, that slanting letters such as A or V nudge

up to adjacent letters, consistently more pleasing to the eye; the 'kern' is that part of a character that overhangs or underhangs its body and invades the space of the letter next to it.)

Tastes change, thank heavens. A typeface that would once have been regarded as too tight, its letters nuzzling each other and its words colliding, may now, through the power of advertising and familiarity, appear the height of modernity and legibility. It may hold this exalted position for a decade or so, before something dangerously over-spaced renders it passé. A sign or a slogan set entirely in lower case (perhaps McDonald's **i'm lovin' it**) was once considered blasphemous; now it is merely dull. And the old principle of legibility, once the prime factor in any consideration of good type, and defined with terrible severity by the French ophthalmologist Dr Louis Emile Javal at the beginning of the last century (and then slavishly followed by many designers), seems very outdated; our eyes and brains appreciate far more than the first scientists of type thought possible.

One of Dr Javal's theories now seems particularly absurd – that the most legible type is also the most beautiful.

In the 1940s, the most popular test of a font's legibility was the 'blink test'. Blinking relieves tired eyes in the same way as putting down heavy shopping relieves pressure on our palms; our eyes blink more when tired or under strain, and a familiar typeface will cause less fatigue. Under laboratory conditions – where light and type size are regulated, and the 'patient' (reader) is presented

with the same text in many faces (the optician's sight chart yielding to the pursuit of both art and universal clarity) – the number of involuntary blinks was monitored on a handheld clicker.

According to a series of lectures given by John Biggs at the London College of Printing, the types that fared best in the blink tests were those that had survived for centuries and were always being revived and slightly modified: Bembo, Bodoni, Garamond. It might have been easier to ask the patient which text they comprehended better, or which gave them less eyestrain, but such methods would have been subjective and unscientific.

Fortunately we also have more recent investigations. Many of these occurred in the 1970s at the Royal College of Art's Readability of Print Research Unit (in the computer age it became the slightly less ungainly Graphic Information Research Unit). Among its conclusions: people found type with strong distinctive strokes easier to read

Bembo
Bodoni
Garamond

The old faithfuls – scientifically proven in the 1940s

than flattened styles; and a greater distinction between letters led to a clearer (and faster) digest of information. The research confirmed that the key areas that make a letter most distinctive are its top half and right side, the eye using these flagposts to confirm what it anticipates may be there.

Other surveys suggested that most readers prefer bold faces over regular ones, although their legibility is about the same. Serif and sans serif faces are also equally legible, so long as the serifs aren't too heavy and thick. Typefaces with larger counters – the very opposite of Cooper Black – are also regarded as more legible, especially at smaller sizes where these counters could fill with ink.

Legibility is also defined by a less formal characteristic: taste. This is not the same as trendiness; rather it is popularity demonstrated by mass consumption. We like to think of our cultural tastes improving and maturing with age, but in the case of type design something else also happens: we are simply worn down by over-exposure.

The radical Californian type designer Zuzana Licko has a popular theory that 'you read best what you read most'. Heavy blackletter type was once considered more readable than a softer, less formal script, but merely through ubiquity. 'You need to use something that is not necessarily intrinsically more legible, but that people are used to seeing,' Licko observes, echoing the 1940s conclusions. 'Preferences for typefaces such as Times Roman exist by habit, because those typefaces have been around longest. When those typefaces first came out, they

were not what people were used to either. But because they got used, they have become extremely legible.'

Eric Gill had been of much the same mind ('Legibility, in practice, amounts simply to what one is accustomed to'). But the fact that this theory has gained Licko's imprimatur is significant, as she and her partner Rudy VanderLans are among the most respected contemporary type designers in the United States. The duo published a magazine, *Emigre*, which inspired a whole generation of graphic design students. Licko believes that when designing a typeface one must – as Matthew Carter put it – find 'the fascination greater than the frustration'. At the beginning, she says, as a typeface is conceptualized, 'every detail gets questioned. This process is fascinating because it makes you realize how each detail affects the resulting work, as many details are repeated among characters, which multiplies the effect. Eventually this can turn to frustration because it seems the process will never end . . . '

An email conversation with Licko will elicit responses such as the one above, but the big question she won't help you with is why there are relatively few women type designers. 'Sorry,' she typed. 'I have no idea.'

Zuzana Licko and Rudy VanderLans

Licko and her designer friends acknowledge that readability of any text font is best conferred by a number of features, ideally occurring

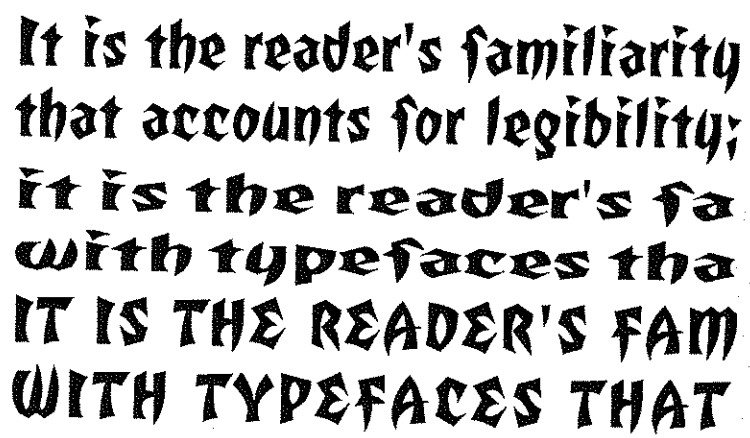
concurrently (if these appear obvious, it is only because we take them for granted). Every letter of the alphabet must be distinct from each other to avoid confusion. The effect of letters on a reader should best be judged in context – as sentences and paragraphs – as it is only the overall shape of combined letters that may be judged either readable or not.

Such readability will be aided by regular paragraphs and sufficient margins, and by an acceptable line length (this is naturally dependent on the size of the text, but is ideally considered to be between ten and twelve words). The space between letters and their relationship to each other is as important as the space between lines (leading or pointing). There should be a contrast between thick and thin strokes, and letters should be in a regular proportion to each other. Variety in width is particularly important, with the upper half of letters being more readable than the lower half. The weight of letters in a block of text should generally be medium – too light a type will cause letters to appear grey and indistinct, while too dark will cause the letters to appear overly thick, wrecking distinguishing details and blocking out the background.

The simplicity of these observations is not reflected in the simplicity of their execution. Still harder to grasp is the realization that confronts every novice when designing a text font for the first time: despite all appearances, letters that appear to be of equal height may in fact be subtly different.

Reading a book or computer screen about a foot away from the eye, this is a difficult element to perceive, but

when letters are enlarged to a couple of inches or more and set upon parallel lines, the slightly longer depth of round letters such as O, S and B becomes more apparent. Our brain demands evenness and certainty, but our eyes play tricks on us. If all letters were exactly the same height they wouldn't appear so: round and pointed letters would appear shorter.



'Totally Gothic' by Zuzana Licko shown in the 1996 Emigre fonts catalogue

It's an interesting party game: the dot of a dotted i in a traditional serif font is usually not directly over the top of the stem but slightly to the left. And the stem of a lower-case t will be slightly thicker at the base to avoid the appearance of frailty and the risk of toppling over backwards. In type, the appearance of beauty and elegance depends on trickery and skill – perhaps the most fruitful and longest-lasting collision of science and art.

Left to right, Baskerville, Goudy Old Style, Sabon and Times New Roman undergo the stem test and dot test

The single most famous pronouncement on type was written in 1932 by a woman called Beatrice Warde, a friend (and sometime lover) of Eric Gill who was the face and voice of the Monotype Corporation in the 1920s and 30s.

There is a revealing photograph of Warde taken during a party in 1923. She is surrounded by more than thirty type men in sombre suits, all looking rather proud of themselves, and justly so: they ran the cream of American type foundries and were jointly responsible for the look of American letters. But none look quite as confident as Warde, the one person in a dress, sitting with a wry smile and her hands in her lap, fairly sure that she was actually in charge. In her early twenties, she was already an extremely busy woman, not only writing extensively about type in the leading graphic design journal *The Fleuron*, but also producing challenging manifestos (originally under the pseudonym Paul Beaujon, out of concern that the typographic community would pay little attention to a woman).

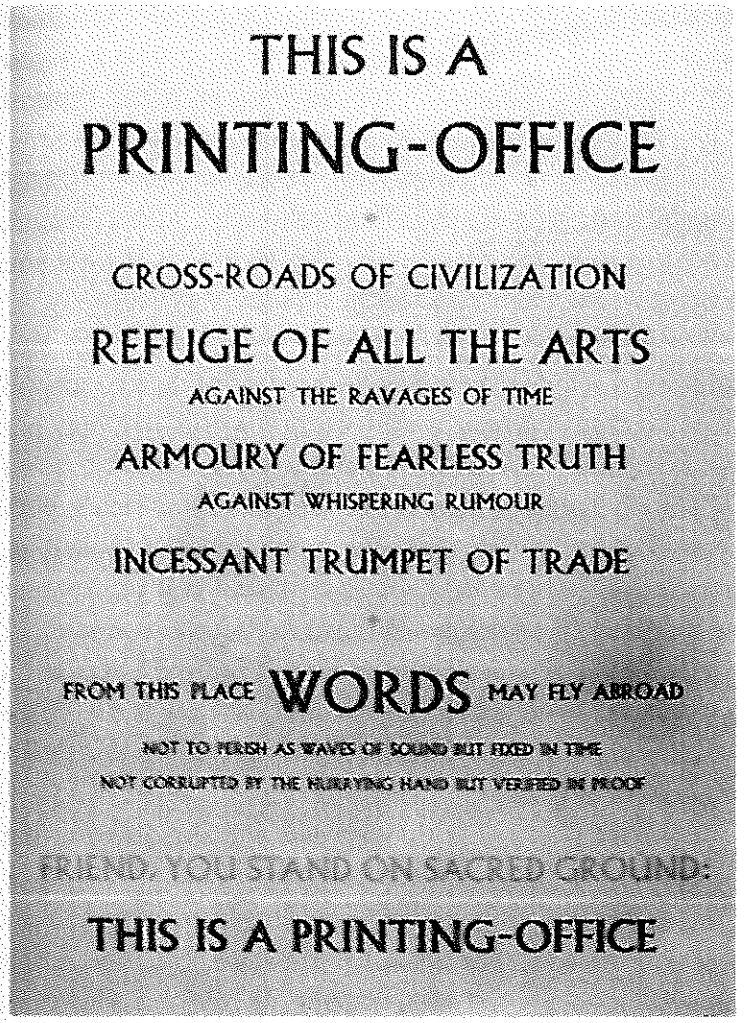
On 7 October 1930, Beatrice Warde addressed the British Typographers Guild at the St Bride Institute, just behind Fleet Street in London. Warde was an American,

and her skill was communication. She found the perfect job as publicity manager for the Monotype Corporation in Surrey, one of the leading companies that produced typesetting machinery and typefaces. Her greatest feat may have been inspirational, lifting the spirits of her customers – printers and designers – by emphasizing the grandeur and responsibilities of their calling. 'What I'm really good at,' she reckoned, not long before she died in 1969, 'is standing up in front of an audience with no preparation at all, then for 50 minutes refusing to let them even wriggle an ankle.'

Why was she so strict? Because she had an unwavering belief in her own teaching, which itself displayed an element of the straitjacket. Despite her boasts, her talk to the British typographers had clearly undergone a lot of preparation, not least in its title, 'The Crystal Goblet, or Printing Should Be Invisible'.

Her simple and sound theory was that the best type existed merely to communicate an idea. It was not there to be noticed, much less admired. The more a reader becomes aware of a typeface or a layout on a page, the worse that typography is. Her wine analogy was cool and mature, and perhaps now appears a little trite: the clearer the glass, the more its contents could be appreciated; not for her the lavish opaque golden goblet symbolized by old gothic script where the heavily barred E resembles a portcullis.

She also made a fine point distinguishing legibility from readability. A type in a larger size is not necessarily more readable, although taken by itself in an optician's chair it might be more legible. A speaker who bellows might be



Strong words from a strong-minded woman (in Albertus). Just about every printer in the country had a copy of Warde's broadside on display.

more audible: 'But a good speaking voice is one which is inaudible as a voice. I need not warn you that if you begin listening to the inflections and speaking rhythms of a voice from a platform, you are falling asleep.'

Likewise with printing. 'The most important thing,' Warde said, 'is that it conveys thought, ideas, images, from one mind to other minds. This statement is what you might call the front door of the science of typography.'

She explained that the book typographer's job was building a window between the reader inside a room and 'that landscape which is the author's words. He may put up a stained-glass window of marvelous beauty, but a failure as a window; that is, he may use some rich superb type like text gothic that is something to be looked at, not through. Or he may work in what I call transparent or invisible typography. 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.'

It is easy to agree with Warde as she sits down to big applause. No one wants a book that's hard to read or offends the eye. But her eighty-year-old viewpoint now seems restrictive, and while her theories chide the flashy they do not reward the curious or the experimental. Warde may have been fearful of the effects of new artistic movements on traditional typographic values; if so, this was a form of xenophobia. To deny the idea that type can itself be the message (to deny that it is enough for it to be exciting and arresting) is to deaden excitement and

progress. Warde's severe view has long been abandoned, and now the most important questions when selecting or appreciating type have become: Does it fit the role it was intended for? Does it get its message across? And does it add something of beauty to the world?