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## Countsr punch

making type in the sixteenth century

designing typefaces now

EDITED BY ROBIN KINROSS

the inner area of the character and the space that belongs to the area between the two characters. This makes them difficult to measure. The way to resolve this is to understand that a certain part of the adjoining space has a double function. This area is inner-space and outer-space at the same time [4.9]. This doubly functioning area stands on the border. It is not fixed, but moves and differs in size when the characters are enlarged or reduced. Another problem is the fact that everyone will define this area a bit differently. So it is certainly not objectively exact or constant.

These areas of double function (and of doubt) are everywhere in the word-image – in text. The importance of serifs now becomes clear. Serifs help the designer and – I strongly suspect – the reader to define inner- and outer-space more definitely and more easily. And just on account of these areas, perfectly balanced type does not and cannot exist. Any attempt to make such a type would be a waste of time. Even if this type were possible, perfectly balanced characters are visually without interest. This is not the issue, even within professional type design. The issue is to develop and find good balance based on and using these doubtful imperfections.

This, when it comes down to it, is all the knowledge you need to have to make word-images. And this knowledge runs as an invisible thread – in fact very visible – through all typographic history. It is a history that consists largely of the quest for balance.

## 5 Comparing typefaces

Comparing typefaces is difficult, especially for students. 'Why is the a of this typeface better than the a of another one?' The question hardly makes sense: typefaces are sums of parts. And final judgement of a typeface may indeed be impossible and not worth attempting. But we can at least make clear what factors to look for when considering a typeface.

One can divide typefaces into two main categories. There are those that have a visual quality that draws attention to itself: in use, they work as much like illustrations as like text that you read. Then there are those typefaces that just work on the level of textual communication. There is no point in mixing these categories. There is no use in comparing the headline typeface Mistral (designed by Roger Excoffon) with the text typeface Romanée (by Jan van Krimpen). What I want to discuss is how to compare Romanée with Plantin.

Making comparisons between typefaces that have a strong illustrational quality may be harder than comparing typefaces designed for textual communication. A comparison between Mistral and one of Neville Brody's typefaces will be a very subjective matter [5.1]. One might only be able to say that Mistral has a fresh, lively, hand-drawn quality that belongs to its time and place – France in the early 1950s. While Brody's Industria may remind one of what was most fashionable in London in the 1980s. Having said that, there is not much more to say – or, if so, it lies outside the scope of this book.

Now all of this may imply that typefaces made just as textcarriers are removed from the question of personal taste. That is not true, of course. But these typefaces do present us with a dimension that can be discussed rationally and with some degree of objectivity. Aa Bb Cc Dd Ee Ff Gg Hb
li Jj Kk Ll Mm Nn
Oo Pp Qq Rr Sr Tt Uu
Vv Ww Xx Yy Zz
1234567890

Aa Bb Cc Dd Ee Ff Gq Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Wш Xx Yq Zz 1234567890

5.1 Typefaces that breathe the air of their times, and which can hardly be compared: Roger Excoffon's Mistral (France in the 1950s) and Neville Brody's Industria (London in the 1980s).

This is because their proper use is bound by the limitations of the human perceptual system.

We do not know exactly what a person - 'an average human being' - can see comfortably: not even when they are reading. If type is too small, it demands too much attention from the reader, who has constantly to decipher the characters. With all this energy devoted to simply seeing, there is not much left over for understanding the content of the text. Type can also be too narrow or too wide. These dimensions are all defined, in the last analysis, by the counter. Counters that are too narrow do not give enough time (fractions of a second) for readers to work out what they have seen. We may get the feeling that we are looking not at letters but at some bar codes. Type that is too wide gives us too much time, and we forget what we have just been reading. Then we have to spell it all out, to get the message. There is some mean or average value, which defines the ratio of height to width in the counters of roman type. Of course in display typography the extremes of this ratio may be far apart. But with type for continuous text and serious reading, the ratio of height to width in counters cannot vary so much. This ratio then becomes a battleground constantly fought over by type designers. They tend to look for the most efficient counter: as tall and as narrow as possible. This may result in a typeface that occupies the least space over a whole page, while remaining entirely readable.

The quest for this perfect counter is, I think, rather a useless one. It has already been found many times over. In fact it has been found every time someone has looked for it. This is certainly the case if the designer has tried to work for the average reader. There are a huge number of average human beings: each one will be different from the other, with a different kind of eyesight and different habits of perception. The limits on a design only become clear when you are designing for a very specific kind of reader (with impaired vision, for example) or specific circumstances of production or use (low-grade printing, instruction manuals). But other-

## Plantin word space Romanée word space

12/16 pt

Plantin

Johann Herder first proclaimed in 1772 that the basis of a nation was a language with its oral, traditional songs and stories. If there is a language, then it must

12/16 pt Romanée

Johann Herder first proclaimed in 1772 that the basis of a nation was a language with its oral, traditional songs and stories. If there is a language, then it must be written down, given an alphabet and

5.2 Comparing typefaces by their nominal size tells us nothing; it reveals merely differences in design proportion. No conclusions can be drawn from this, except that typefaces (even conventional ones) differ from each other.

## 32 pt Plantin Plantin X x Romanée

12/16 pt Plantin

Johann Herder first proclaimed in 1772 that the basis of a nation was a language with its oral, traditional songs and stories. If there is a language, then it must

13.8/16 pt Romanée

Johann Herder first proclaimed in 1772 that the basis of a nation was a language with its oral, traditional songs and stories. If there is a language, then it must be written

5.3 This is what is needed: with equal x-heights, you can compare typefaces. Starting with 12 pt Plantin, you find that Romanée has to be 13.8 pt nominal size, to achieve equal x-height. Comparing the same text set in these sizes, you see that Romanée is the more efficient of the two.

Johann Herder first proclaimed in 1772 that the basis of a nation was a language with its oral, traditional songs and stories. If there is a language, then it must be written down, given an alphabet and standardized by

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13.8/16 bt

5.4 Another factor that effects good and efficient setting of text is wordspace. 5.2 and 5.3 both use 100% word-spaces. In Plantin this is much too large; in Romanée it is acceptable. In the Plantin text above, the wordspace is changed to 80%.

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13.8/16 pt Romanée

5.5 Line increment is another vital factor in setting text. Plantin can do with a smaller line increment; in the text above it is reduced to 15 pt. This increases the number of lines on a page, and thus improves efficiency. To investigate efficiency fully, you have to look at layout: another book.

wise, you are dealing not with the limits of a design, but with the limits created by the perceptual capacities of millions of people at a reading distance of 40 centimetres.

Text typefaces are often compared by showing a small sample of each at the same size: 12 point Plantin and 12 point Romanée, say [5.2]. But this does not tell us much. For one thing, and as is well known, the nominal size of a typeface is not an exact description of its appearing size. You can make the capital heights of the samples the same, but even this does not really help. The real issue in these typefaces is their visual impact, their strength and their comfort at reading sizes. It is this that you want to compare. If you make the capitals equal in height, then you can compare capitals. But capitals are not so important in reading.

The impression one has of a page of text is largely determined by what happens within the x-height of the characters, and, of course, also by all the variables that a designer or compositor can determine (letter-space, word-space, line increment, etc). If you standardize and so discount those variables, then you are left with what we might call x-height performance. It is this that gives a typeface its quality and value. So then, to make a true comparison between typefaces, one has to make x-heights equal [5.3]. Then you can judge on level ground. This should be done at reading sizes. You cannot do it larger and make a transfer in your mind to how it might be at reading size.

To make the test, first print out sample passages of text in the typefaces at equal x-height. Do it at high resolution: on an image-setter not a laser printer. Now look. Does one typeface look blacker than the other? How is this blackness achieved? Are the thin parts strong enough? Or are they too thin, and visually irritating? Can the overall effect of this text match accompanying illustrations? These are the first and most important things to look for. Then you can go on to compare the effects of ascenders and descenders, simply by setting the same text to the same length of line and with the same line increment. You can also tell something about efficiency in this

way. By 'efficiency', I mean not merely the number of characters that fit in a line of a certain length. But also, how large should the word-spaces be? They may be adjusted [5.4]. The vertical dimension of text-setting is part of this too. How much space between lines is needed for satisfactory reading? At a given size, some typefaces need a greater line increment than others [5.5]. And, of course, all these factors interact with each other. Such a test is the only reasonable way to answer the questions: which typeface looks best? and which is the most efficient?

Evaluation does not stop here. There are other dimensions of quality. One important area of consideration is completeness of the character set. Does the typeface have non-lining figures, a bold italic, small capitals, italic small capitals, sufficient ligatures, kerning pairs...? Then you might ask if it is satisfactory when used in large sizes. Is it equipped with a suitable display version? Does this please you at 36 point? Is it too weak? Or too strong and stiff? And here we are back in the field of personal taste.