

=====  
Downloaded sample pages from hyphenpress.co.uk

Pages extracted from:

Gerrit Noordzij

*The stroke*

published by Hyphen Press, London, 2005

Introductory (pp. 1-10)

Chapter 1 (pp. 13-18)

text & illustrations copyright © Gerrit Noordzij 2005

=====  
please note that, to cut down on file size, all pictures are shown here at low-resolution  
=====

## The stroke

*Nisi Dominus*  
Vanum est vobis  
ante lucem surgere  
surgere postquam  
sederitis qui mandu-  
catis panem doloris  
cum dederit dilectis  
suis somnum, *Psalm 127:2*

Gerrit Noordzij  
The stroke  
theory of writing

translated by Peter Enneson

Hyphen Press . London

Published by Hyphen Press, London, in 2005  
Translated from the Dutch edition published by  
Van de Garde, Zaltbommel, 1985, and reprinted by  
Uitgeverij ICS Nederland, Leersum, 1991

Text and illustrations copyright © Gerrit Noordzij, 1985,  
2005

Translation copyright © Peter Enneson, 2005

Production of the book was overseen by Françoise Berserik,  
The Hague. The text was typeset and made into pages  
by Teus de Jong, Nij Beets, in Adobe InDesign. This text  
was output in the typeface `TEFF Ruse`, designed by  
Gerrit Noordzij, Hattem. Proofs of the final pages were read  
by Cynthia Bell, Seattle. The book was made and printed in  
the Netherlands by Koninklijke Wöhrmann bv, Zutphen

ISBN 0-907259-30-8

ISBN 978-0-907259-30-5

[www.hyphenpress.co.uk](http://www.hyphenpress.co.uk)

*All rights reserved: no part of this book may be reproduced in  
any form, by print, photocopy, or any other means, without  
written permission from the publisher*

## CONTENTS

Foreword 1985 7

Foreword 2005 9

1. The white of the word 13
2. The stroke 20
3. The orientation of the front 35
4. The word 41
5. The invention of the word 44
6. The consolidation of the word 49
7. The great break 68
8. Changes in contrast 75
9. Technique 80





A note on the translation 84

Index of texts 86



In this foreword I want to point out the difference between *The stroke* and my book *The stroke of the pen*. *The stroke of the pen* was published by the Royal Academy of Art in The Hague on the occasion of the 300th anniversary of the Academy in 1982. The book was typeset and printed by the Royal Printer Van de Garde in Zaltbommel.

*The stroke of the pen* distinguishes an interrupted and a running construction in writing, by downstrokes and upstrokes. Both constructions can be subdivided according to stroke contrast: translation or expansion. So there are four possibilities for every script.

	<i>running</i>	<i>interrupted</i>
<i>translation</i>		
<i>expansion</i>		

Contrast is a scale on which pure translation and pure expansion are the theoretical extremities. For my teaching at the Academy I have no need of a division of the scale; it seems to be enough to indicate the tendency of the contrast. I have also made use of this in the investigation of old manuscripts. Indeed, for me there is not much difference between teaching and research: in teaching I turn to my future colleagues and in the investigation of manuscripts I meet colleagues from the past. A division of the scale into units might disturb the schematic character of the schema and summon the bogy of letter classification.



In the discussion about computer programs for font creation the need arose to be able to describe tightly each stage of every stroke. This description can be expressed in terms of the size and orientation of the counterpoint. The nature of the contrast is fixed by how these values play out. In this description of the stroke the subjective distinction between downstroke and upstroke is rendered superfluous.

At the start of 1985 I established the periodical *Letterletter*. In this publication of the Association Typographique Internationale (ATypI), my intention was gradually to develop a new formulation of my theory. Then came the Van de Garde proposal to make a Dutch edition of *The stroke of the pen* on the occasion of their 125th anniversary. I seized on this invitation as an occasion to work out a rounded summary of the latest version of my theory. So here then is *The stroke*.

et vidit deus  
lucem quod esset  
bona et divisit lu-  
cem ad tenebras

G E N E S I S 1 : 4

My contribution to the course of graphic design at the Royal Academy of Art in The Hague was founded on calligraphic exercises. Calligraphy is handwriting pursued for its own sake, dedicated to the quality of the shapes. From evaluating and discussing our experiences a theory of writing emerged that allowed us to describe the properties of shapes with parametric precision, without imposing aesthetic or ideological conditions. This book is an introduction to the theory. It might make sense to indicate in a foreword what the theory is good for. It is convenient if you can criticize the consistency of a design with absolute precision by simply asking something like: did you intentionally draw the translation of the *c* at a greater slope than in your *e*? Questions like this one express the properties of a drawing in the parameters of the stroke of a pen.

The first, initial, fundamental shape is the single track of a tool. Only handwriting preserves the characteristics of the single stroke. *Handwriting* is single-stroke writing. *Lettering* is writing with built-up shapes. In lettering the shapes are more patient than in handwriting, as they accept retouching strokes that may gradually improve (or impair) the quality of shapes. Lettering is independent of the tool, but this freedom is only available at the expense of character: in writing composed of overlapping strokes the shapes of single strokes get lost, just as footprints dissolve in a trail of steps. The freedom of lettering is limited by convention. Not that drawing unconventional shapes should be difficult or forbidden, but shapes that do not conform to convention are just not writing.

From a typographic point of view, type is a special branch of writing that differs essentially from lettering. The typographer can only work with writing that is arranged in a font. Since we learned to store typefaces in computers we can imagine type as lettering reproduced in a database (the typographic 'font') that makes the shapes of the original

drawings available for composition. Lettering does not meet this typesetter's condition by itself. However, when it comes to the properties of design there is nothing that could distinguish type; it is impossible to tell typographic letters from other reproductions of lettering.

The theory furthers good practice too. The stroke is the fundamental artefact. Nothing goes further back than the shape of a single stroke. We cannot postpone a shape by drawing outlines first, because any drawing (outlines included) begins with a shape. Outlines are the bounds of shapes. If there is not yet a shape, there is no outline either. Figure 1 evokes the shape in lettering quickly with a zigzag simulating the direction and the length of translation. In figure 2 the shape is defined more precisely. The outlines should not be accentuated; the enclosed shape should absorb the outline. If outlines stand out as shapes of their own, they obstruct the view of the intended shape (figure 3).



1



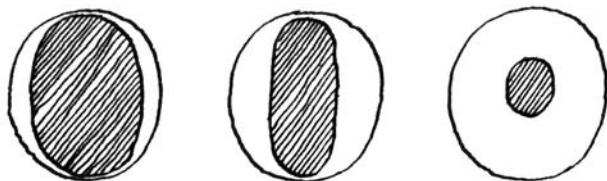
2



3

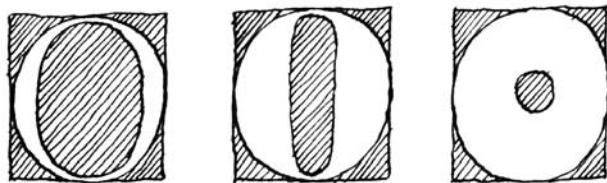
## I. THE WHITE OF THE WORD

A letter is two shapes, one light, one dark. I call the light shape the white of the letter and the dark shape the black. The black consists of the regions of the letter that enclose the white. White and black can be replaced by any combination of a light colour and dark colour, and light and dark can switch roles, but the intriguing effects of these permutations lie outside the scope of this book. Thus I will call the strokes the black of the letter and the enclosed shapes the white of the letter, even in the case of figure 1.1, where I represent the white shape with a dark area.



1.1

The black shape cannot be altered without the enclosed white shape changing and vice versa.

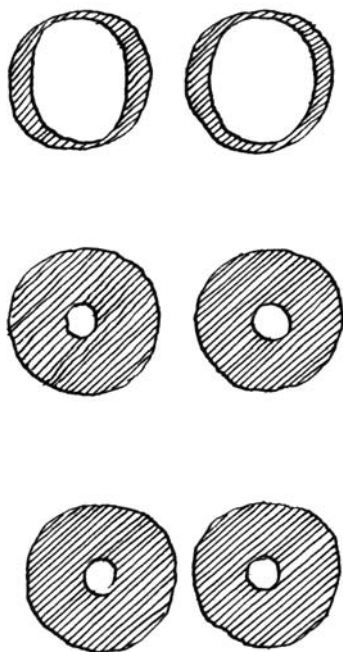


1.2

In figure 1.2 the letters from figure 1.1 appear on 'white' rectangles. In all three cases the exterior shape of the *o* has the same surface area. The surface area of this white does not change when the black shape undergoes changes, but the relation of this surface area to the surface area of the interior

shape does change. In the third rectangle the perceptual significance of the exterior shape is much greater than in the first rectangle because in the first rectangle the exterior shape is overwhelmed by the large interior shape.

In practice a free-standing letter on a small rectangle is a rarity. A word usually consists of two or more adjacent letters. Figure 1.3 is a simple schematic of this.



1.3

The white space between the letters in the second combination is identical to that in the first, but the perceptual significance of this white is so much greater that it drives the letters apart. In the third combination the bond is restored by the drastic reduction of the space between the letters. Maintaining the equilibrium in the white shapes makes all the difference. The white of the word is my only holdfast.

The relation between shape and countershape, which in writing amounts to the relation between white and black, is the foundation of perception. The interpretation of every sensation from any sense organ works on this principle. Writing is a good model for perception because, with its strict rules, it creates an artificial laboratory-like workspace that everyone has within his or her reach. The interaction between light and dark exists wherever and whenever there is something to see, but the game only becomes interesting when the opponents are well matched – I can only experience the relationship if the relationship is clear. If I enlarge the rectangle of 1.2, I diminish the effect that changing the interior shape has on the perceptual significance of the background. In figure 1.1, where the background is the page itself, I can no longer perceive this effect. The relationship is not manifest.

Manifest relationships can be divided into groups. The format of the page derives its meaning mainly from the shape and placement of the text block; the blackness and length of the line are in interaction with the white between the lines; and the forms of the letter variously affect each other within the variable contexts of the word. The word is the smallest organic unit in writing. Whatever can be said about a letter or the stroke must be said with one eye on the word. In this book I pull apart the organism, but only to be able to make the word.

Writing rests on the relative proportions of the white in the word. The various kinds of writing with their various constructions and their various strokes can be compared with each other only in terms of the white of the word – every comparison requires a vantage point that makes things comparable. The white of the word is the only thing all the various kinds of writing have in common. This universal vantage point holds for handwriting and typography alike, for ancient writing as well as modern writing, for western writing as well as the writing of other cultures, in short, it holds for writing.

# In principio erat verbum

Joh. 1:1

Current studies of writing do not attend to the *white* of the *word*, but to the *black* of the *letter*. Consequently considerations of writing exhaust themselves in the exploration of superficial differences. The universal vantage point that renders handwriting and typographic letters comparable is not to be found in the black of the letter. The black of a typographic letter is so different from the black of a handwritten letter that as strict comparatives they appear incommensurate. Wherever typography concerns itself only with the black shapes of the prefabricated letters printable on paper, the academic study of writing is coerced into separating the consideration of handwriting from a history of type. But even the remainders of such a separation cannot be viewed from this vantage point. Consideration of past writing – insofar as it appears in books – falls to palaeography, diplomacy investigates past writing in original sources and letters, and epigraphy studies past writing on walls. Contemporary handwriting is totally ignored. It is at the mercy of the pedagogues who, through their wilful action, place the entire civilization at risk. This may appear immoderate, but what is western civilization if not the cultural community that avails itself of western writing? Pedagogues pride themselves on the fact that they do not burden school children with an introduction to writing. In so doing they undermine western civilization at its foundation. The frightening in-

crease in illiteracy begins with the neglect of writing in the schools. This threat to civilization goes together with the differentiation of the writing disciplines. The black starting-point forces the educated to this differentiation, which has no place for contemporary handwriting, because the black strands of this handwriting have next to nothing in common with the black shapes of the handwriting that the palaeographers seek to chart. It is no exaggeration to say that the school teacher only allows bad handwriting, because he or she regards good handwriting as 'drawn' instead of 'written'. The differentiation protects the point of view. Without it the school teacher would have to test his exemplars against good writing, and this confrontation would be fatal. Now he can serenely face good handwriting, because that belongs to a different subject on the other side of the partition.

In the same manner the academic viewpoints are safeguarded. It is inadmissible to suggest that type is writing, because such speculations undermine the prejudice (a prejudice is a viewpoint that may not be placed in question). When the facts still compel us to compare type with handwriting, the facts are suppressed. The history of the 'romain du roi' is a good example of this. The 'romain du roi' was cut around 1700 according to the directives of a scientific commission. The proposal was worked out on a grid – the traditional way of transposing drawings to scale. The minutes of the commission confirm what anyone can ascertain: the designs follow in detail the handwriting of Nicholas Jarry, who worked around 1650 as calligrapher for the Cabinet du Roi. This history leaves us no other choice than to view the 'romain du roi' – the type – in terms of the handwriting of Jarry. But if this were the case the foundation beneath the sciences of writing would fall away. Scholars forestall the landslide by keeping the affair under wraps. In its place they present the 'romain du roi' as a turning point in history. The grid would then have had to have been the true starting point of the design, and the typographical letter would have become, once and for all, independent of handwriting.



This falsification is intended to rescue an untenable viewpoint, but the effect is just the opposite. It is impossible to say anything about the autonomous typographic letter without calling to mind this historiographic falsification. Falsification is a familiar phenomenon in science. Scholars revert to it when the theory on which they have spent a lifetime threatens to be swept away. Studies of the typographic letter and pedagogy readily occasion forgetting, overlooking or obscuring the actual facts because the view of writing of these disciplines is keyed to the view that the typographic letter and informal handwriting are autonomous. And this point of departure can only be maintained at the cost of the facts.

Science is the art of finding a fitting question for every answer. Theories serve to elicit questions and questions serve to undermine theories. Questions engender perplexity, which is as it should be. When my theoretical house of cards collapses, all it means is that better insight replaces my own, and I will be glad to relinquish my opinion for a better one. Science is lost when the questions that endanger a theory are warded off or ignored.

My objection against science is not that the starting-points for the differentiation of writing are untenable, for that would, in the end, appear to be the case for every theory in every vital scientific endeavour. What bothers me is the unassailability of the starting-points. This unassailability changes science into superstition. The superstitions of the scribal scholars seep into disciplines that rely – recklessly – on the very same superficial consideration of the *black* in the *letter*. I encounter it in psychology, art history, mathematics, the linguistic sciences, etc.

It is impossible for me to stick my tongue out any further. But this must be enough to get anyone who loves jousting onto their horse. In this book I put my starting-point on display, with the friendly but urgent request to hold it up against the light.