Lessons in Type

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Foreword from The Elements of Typographic Style

There are many books about typography, and some of them are models of the art they teach. But when I set myself to compile a simple list of working principles, one of the benchmarks I first thought of was William Strunk and E.B. White's small masterpiece, The Elements of Style. Brevity, however, is the essence of Strunk and White's manual of literary technique. This book is longer than theirs, and for that there is a cause.

Typography makes at least two kinds of sense, if it makes any sense at all. It makes visual sense and historical sense. The visual side of typography is always on display, and materials for the study of its visual form are many and widespread. The history of letterforms and their usage is visible too, to those with access to manuscripts, inscriptions and old books, but from others it is largely hidden. This book has therefore grown into something more than a short manual of typographic etiquette. It is the fruit of a lot of long walks in the wilderness of letters: in part a pocket field guide to the living wonders that are found there, and in part a meditation on the ecological principles, survival techniques, and ethics that apply. The principles of typography as I understand them are not a set of dead conventions but the tribal customs of the magic forest, where ancient voices speak from all directions and new ones move to unremembered forms.

One question, nevertheless, has been often in my mind. When all right-thinking human beings are struggling to remember that other men and women are free to be different, and free to become more different still, how can one honestly write a rulebook? What reason and authority exist for these commandments, suggestions, and instructions? Surely typographers, like others, ought to be at liberty to follow or to blaze the trails they choose.

Typography thrives as a shared concern — and there are no paths at all where there are no shared desires and directions. A typographer determined to forge new routes must move, like other solitary travellers, through uninhabited country and against the grain of the land, crossing common thoroughfares in the silence before dawn. The subject of this book is not typographic solitude, but the old, well-

“By all means break the rules, and break them beautifully, deliberately, and well”

WRITTEN BY **ROBERT BRINGHURST**

"Letterforms change constantly, yet differ very little because they are alive"

travelled roads at the core of the tradition: paths that each of us is free to follow or not, and to enter and leave when we choose — if only we know the paths are there and have a sense of where they lead. That freedom is denied us if the tradition is concealed or left for dead. Originality is everywhere, but much originality is blocked if the way back to earlier discoveries is cut or overgrown.

If you use this book as a guide, by all means leave the road when you wish. That is precisely the use of a road: to reach individually chosen points of departure. By all means break the rules, and break them beautifully, deliberately, and well. That is one of the ends for which they exist.

Letterforms change constantly, yet differ very little, because they are alive. The principles of typographic clarity have also scarcely altered since the second half of the fifteenth century, when the first books were printed in roman type. Indeed, most of the principles of legibility and design explored in this book were known and used by Egyptian scribes writing hieratic script with reed pens on papyrus in 1000 B.C. Samples of their work sit now in museums in Cairo, London and New York, still lively, subtle, and perfectly legible thirty centuries after they were made.

Writing systems vary, but a good page is not hard to learn to recognize, whether it comes from Tang Dynasty China, The Egyptian New Kingdom or Renaissance Italy. The principles that unite these distant schools of design are based on the structure and scale of the human body — the eye, the hand, and the forearm in particular — and on the invisible but no less real, no less demanding, no less sensuous anatomy of the human mind. I don't like to call these principles universals, because they are largely unique to our species. Dogs and ants, for example, read and write by more chemical means. But the underlying principles of typography are, at any rate, stable enough to weather any number of human fashions and fads.

It is true that typographer's tools are presently changing with considerable force and speed, but this is not a manual in the use of any particular typesetting system or medium. I suppose that most readers of this book will set most of their type in digital form, using computers, but I have no preconceptions about which brands of computers, or which versions of which proprietary software, they may use. The essential elements of style have more to do with the goals typographers set for themselves than with the mutable eccentricities of their tools. Typography itself, in other words, is far more device-independent than PostScript, which is the computer language used to render these particular letters, and the design of these pages, into typographic code. If I have succeeded in my task, this book should be as useful to artists and antiquarians setting foundry metal by hand and pulling proofs on a flatbed press, as to those who check their work on a screen or laser printer, then ship it to high-resolution digital output devices by optical disk or long-distance telephone line.

Typography is the craft of endowing human language

with a durable visual form, and thus with an independent existence. Its heartwood is calligraphy — the dance, on a tiny stage, of the living, speaking hand — and its roots reach into living soil, though its branches may be hung each year with new machines. So long as the root lives, typography remains a source of true delight, true knowledge, true surprise.

As a craft, typography shares a long common boundary and many common concerns with writing and editing on the one side and with graphic design on the other; yet typography itself belongs to neither. This book in its turn is neither a manual of editorial style nor a textbook on design, though it overlaps with both of these concerns. The perspective throughout is first and foremost typographic — and I hope the book will be useful for that very reason to those whose work or interests may be centered in adjacent fields.

“Typography is the craft of endowing human language with durable visual form, and thus with an independent existence”

Essays on the Morality of Good Design

From *The Form of the Book*

"Perfect typography depends on perfect harmony between all of its elements"

WRITTEN BY **JAN TSCHICHOLD**

Perfect typography is more a science than an art. Mastery of the trade is indispensible, but it isn't everything. Unerring taste, the hallmark of perfection, rests also upon a clear understanding of the laws of harmonious design. As a rule, impeccable taste springs partly from inborn sensitivity: from feeling. But feelings remain rather unproductive unless they can inspire a secure judgment. Feelings have to mature into knowledge about the consequences of formal decisions. For this reason, there are no born masters of typography, but self-education may lead in time to mastery.

It is wrong to say that there is no arguing about taste when it is good taste that is in question. We are not born with good taste, nor do we come into this world equipped with a real understanding of art. Merely to recognize who or what is represented in a picture has little to do with a real understanding of art. Neither has an uninformed opinion about the proportions of Roman Letters. In any case, arguing is senseless. He who wants to convince has to do a better job than others. Good taste and perfect typography are suprapersonal. Today, good taste is often erroneously rejected as old-fashioned because the ordinary man, seeking approval of his so-called personality, prefers to follow the dictates of his own peculiar style, rather than submit to any objective criterion of taste.

In a masterpiece of typography, the artist's signature has been eliminated. What some may praise as personal styles are in reality small and empty peculiarities, frequently damaging, that masquerade as innovations. Examples are the use of a single typeface—perhaps a sanserif font or a bizarre nineteenth-century script—a fondness for mixing unrelated fonts; or the application of seemingly courageous limitations, such as using a single size of type for an entire work, no matter how complex. Personal typography is defective typography. Only beginners and fools will insist on using it.

Perfect typography depends on perfect harmony between all of its elements. We must learn, and teach, what this means. Harmony is determined by relationships or proportions. Proportions are hidden everywhere: in the capaciousness of the margins, in the reciprocal relation-

ships to each other of all four margins on the page of a book, in the relationship between the leading of of the type area and dimensions of the margins, in the placement of the page number relative to the type area, in the extent to which capital letters are spaced differently from the text, and not least, in the spacing of the words themselves. In short, affinities are hidden in any and all parts. Only through constant practice and strictest self-criticism may we develop a sense for a perfect piece of work. Unfortunately, most seem content with a middling performance. Careful spacing of words and the correct spelling of capital letters appear to be unknown or unimportant to some typesetters, yet for him who investigates, the correct rules are not difficult to discover.

Since typography appertains to each and all, it leaves no room for revolutionary changes. We cannot alter the essential shape of a single letter without at the same time destroying the familiar printed face of our language, and thereby rendering it useless.

Comfortable legibility is the absolute benchmark for all typography—yet only an accomplished reader can properly judge legibility. To be able to read a primer, or indeed a newspaper, does not make anyone a judge; as a rule, both are readable, though barely. They are decipherable. Decipherability and ideal legibility are opposites. Good legibility is a matter of combining suitable script and an appropriate typesetting method. For perfect typography, an exhaustive knowledge of the historical development of the letters used in printing books is absolutely necessary. More valuable yet is a working knowledge of calligraphy.

Immaculate typography is certainly the most brittle of all the arts. To create a whole from many petrified, disconnected and given parts, to make this whole appear alive and of a piece—only sculpture in stone approaches the unyielding stiffness of perfect typography. For most people, even impeccable typography does not hold any particular aesthetic appeal. In its inaccessibility, it resembles great music. Under the best of circumstances, it is gratefully accepted. To remain nameless and without specific appreciation, yet to have been of service to a valuable work and to the small number of visually sensitive readers—this, as a rule, is the only compensation for the long, and indeed never-ending, indenture of the typographer.

“Immaculate typography is certainly the most brittle of all the arts”

Period Styles: A Punctuated History

“The earliest Greek literary texts were divided into units with a horizontal line called a paragraphos”

WRITTEN BY **ELLEN LUPTON**

Greek and Latin manuscripts were usually written with no space between words until around the ninth century AD, although Roman inscriptions like the famous Trajan column sometimes separated words with a centered dot. Even after spacing became common it remained haphazard. For example, often a preposition was linked to another word. Early Greek writing ran in lines alternating from left to right and right to left. This convention was called boustrephedon, meaning “as the ox plows”. It was convenient for large carved monuments, but boustrephedon hindered the reading and writing of smaller texts and so the left to right direction became dominant. A centered dot divided words which split at the end of a line in early Greek and Latin manuscripts. In the eleventh century a mark similar to the modern hyphen was introduced. Medieval scribes often filled shorts lines with marks and ornaments. The perfectly justified line became the standard after the invention of printing. The earliest Greek literary texts were divided into units with a horizontal line called a paragraphos. Paragraphing remains our central method of organizing prose and yet although paragraphs are ancient, they are not grammatically essential. The correctness of a paragraph is a matter of style, having no strict rules.

Later Greek documents sometimes marked paragraphs by placing the first letter of the new line in the margin. This letter could be enlarged, colored, or ornate. Today the outdent is often used for lists whose items are identified alphabetically as in dictionaries or bibliographies. A mark called capitulum was introduced in early Latin manuscripts. It functioned variously as a pointer or separator. It usually occurred inside a running block of text which did not break onto a new line. This technique saved space. It also preserved the visual density of the page which emulated the continuous unbroken flow of speech.

By the seventeenth century, the indent was the standard paragraph break in Western prose. The rise of printing encouraged the use of space to organize texts. A gap in the printed page feels more deliberate than a gap in a manuscript because it is made by a slug of lead rather than a flux in handwriting.

Even after the ascendence of the indent, the capitulum remained in use for identifying sections and chapters along with other marks like the section, the dagger, the double dagger, the asterisk, and numerous less conventional ornaments. Such marks have been used since the middle ages for citing passages and keying marginal references. The invention of printing made more elaborate and precise referencing possible because the pages of a text were consistent from one copy to the next.

All punctuation was used idiosynchratically until after the invention of printing, which revolutionized writing by disseminating grammatical and typographical standards. Before printing, punctuation varied wildly from region to region and scribe to scribe. The Librarian at Alexandria who was named Aristophanes designed a Greek punctuation system circa 260 BC. His system marked the shortest segments of discourse with a centered dot, called a comma, and marked the the longer sections with a low dot, called a colon. A high dot set off the longest unit. He called it periodos. The three dots were easily distinguished from one another because all the letters were the same height, providing a consistent frame of reference, like a musical staff.

Although the terms comma, colon, and period persist, the shape of the marks and their function today are different. During the seventh and eighth centuries new marks appeared in some manuscripts, including the semicolon, the inverted semicolon, and a question mark that ran horizontally. A thin diagonal slash, called a virgule, was sometimes used like a comma in medieval manuscripts and early printed books. Such marks are thought to have been cues for reading aloud. They indicated a rising, falling, or level tone of voice. The use of punctuation by scribes and their interpretation by readers was by no means consistent, however, and marks might be added to a manuscript by another scribe well after it was written.

Early punctuation was linked to oral delivery. For example the terms comma, colon, and periodos, as they were used by aristophanes, come from the theory of rhetoric, where they refer to rhythmical units of speech. As a source of rhetorical rather than grammatical cues, punctuation served to regulate pace and give emphasis to particular phrases, rather than to mark the logical structure of sentences. Many of the pauses in rhetorical delivery, however, naturally correspond with grammatical structure: for example, when a pause falls between two clauses or sentences.

The system of Aristophanes was rarely used by the Greeks, but it was revived by the Latin grammarian Donatus in the fourth century AD. According to Donatus, punctuation should fall wherever the speaker would need a moment's rest; it provided breathing cues for reading aloud. Some later writers modified the theories of Donatus, returning to a rhetorical approach to punctuation, in which the marks served to control rhythm and emphasis. After the invention of printing, grammarians began to base punctuation on structure rather than on spoken sound: marks

"Before printing, punctuation varied wildly from region to region and scribe to scribe"

"Printing, by producing identical copies of a text, encouraged the standardization of quotation marks"

such as the comma, the colon, and the period signaled some of the grammatical parts of a sentence. Thus punctuation came to be defined architecturally rather than orally. The comma became a mark of separation, the semicolon worked as a joint between independent clauses. The colon indicated grammatical discontinuity. Writing was slowly distanced from speech.

Rhetoric, structure, and pace are all at work in modern English punctuation, whose rules were established by the end of the eighteenth century. Although structure is the strongest rationale today, punctuation remains a largely intuitive art. A writer can often choose among several correct ways to punctuate a passage, each with a slightly different rhythm and meaning.

There was no consistent mark for quotations before the seventeenth century. Direct speech was usually announced only by phrases like "he said". Sometimes a double comma was used in manuscripts to point out important sentences and was later used to enclose quotations. English printers before the nineteenth century often edged one margin of a quote with double commas. This convention presented text as a spatial plane rather than a temporal line, framing the quoted passage like a picture. Printing, by producing identcal copies of a text, encouraged the standardization of quotation marks. Printed books commonly incorporated material from other sources.

Both the Greek and Roman alphabets were originally majuscule: all the letters were the same height. Greek and Roman miniscule letters developed out of rapidly written scripts called cursive, which were used for business correspondence. Miniscule characters have limbs extending above and below a uniform body. Alcuin, advisor to Charlemagne, introduced the "Carolingian" miniscule, which spread rapidly through Europe between the eighth and twelfth centuries. During the dissemination of Carolingian script, condensed, black miniscule styles of handwriting, now called "gothic", were also developing. They eventually replaced the classic Carolingian. A Carolingian manuscript sometimes marked the beginning of a sentence with an enlarged letter. This character was often a majuscule, presaging the modern use of miniscule and majuscule as double features of the same alphabet. Both scripts were still considered separate manners of writing, however.

In the fifteenth century, the Carolingian script was revived by the Italian humanists. The new script, called "lettera antica," was paired with classical roman capitals. It became the basis of the roman typefaces, which were established as a European norm by the mid-sixteenth century. The terms "uppercase" and "lowercase" refer to the drawers in a printing shop that hold the two fonts. Until recently, punctuation was an intuitive art, ruled by convenience and intuition. A printer could literally capitalize the initial of any word she deemedworthy of disctinction, as well as proper names. The printer was free to set some words entirely in capitals and to add further emphasis with extra spaces.

The roman typefaces were based on a formal script used for books. The cursive, rapidly written version of the Carolingian miniscule was employed for business and also for books sold in the less expensive writing shops. Called "antica corsiva" or "cancellersca," this style of handwriting was the model for the italic typefaces cut for Aldus Manutius in Venice in 1500. Aldus Manutius was a scholar, printer, and businessman. Italic script conserved space, and Aldus developed it for his internationally distributed series of small, inexpensive books. The Aldine italic was paired with Roman capitals. The Italian typographer Tagliente advocated Italic Capitals in the early sixteenth century. Aldus set entire books in italic; it was an autonomous type style, unrelated to roman. In France, however, the roman style was becoming the neutral, generic norm, with italic played against it for contrast. The pairs uppercase/lowercase and roman/italic each add an inaudible, non-phonetic dimension to the alphabet. Before italic became the official auxiliary of roman, scribes and printers had other techniques for marking emphasis, including enlarged, heavy, colored, or gothic letters. Underlining appeared in some medieval manuscripts, and today it is the conventional substitute for for italics in handwritten and typewritten texts. Space is sometimes inserted between letters to declare emphasis in German and Eastern European book typography. Boldface fonts were not common until the ninetheenth century, when display advertising created a demand for big black types. Most book faces designed since the early twentieth century belong to families of four: roman, italic, bold roman, and bold italic. These are used for systematically marking different kinds of copy, such as headings, captions, body text, notes, and references.

Since the rise of digital production, printed texts have become more visually elaborate—typographic variations are now routinely available to writers and designers. Some recent fonts contain only ornaments and symbols. Carlos Segura's typeface Dingura consists of mysterious runes the recall the era of manuscript production. During the email incunabala, writers and designers have been using punctuation marks for expressive ends. Punctuated portraits found in electronic correspondence range from the simple "smiley" :-) to such subtle constructions as $-) [yuppie] or :-I [indifferent].

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