## Typography: Evolution + Revolution

## Fernand Baudin

Typography is considered as a technological phase in the evolution of handwriting. The latter is an intellectual and rational operation and not only a skill that is purely manual or mechanical. That is why ideas about the legibility and intelligibility of text should be extended to include the entire format which supports the written matter, book, or document. The technological revolution in progress in the reproduction and multiplication of printed matter provokes a social revolution in the actual production of writing, and calls for a parallel renewal of teaching — at a higher level — of handwriting. Illustrations and commentary.

The specific techniques of typography: the cutting of punches, the striking of matrices, the composing and printing of type may soon be the concern of historians exclusively. *Typography* is now commonly used in connection with signs, posters, packaging, pictographs, and so on. In short, it tends to cover the whole field of visual communication. This may be quite natural, but it can hardly be said to help clear thinking and precise talk.

Typography has its visual aspects, obviously. Yet its main object is to reproduce and multiply written language, not pictorial representations. More and more people seem to imply that the main issue in this context should be: when is rational discourse going to be altogether superseded by irrational pictorial "language"? When driving on a highway, the instant legibility of any road sign or any other relevant piece of information, is a matter of life and death. When I read a piece of printed or written matter, intelligibility is a question of understanding or senselessly fumbling around the would-be message. It is hardly a question of survival; it is a question of culture and civilization, how to build them and how to preserve them. When watching a TV program or seeing a film, what I see and hear is largely enter-373

tainment and propaganda—and altogether expendable. On the other hand, the current use or abuse of the word typography has already had some rather nasty consequences. I shall cite three examples.

Many art schools all over the world teach typography as a visual art. Only a few people show real talent in the practice of typography in this sense, a very conspicuous but also restricted field. But typography—or as I shall say later on, writing—as a rational discipline for the proper design of intellectual tools is largely ignored in practice, and almost totally neglected as an object for special study and research.

A second example. For more than thirty years eminent practitioners as well as theoreticians have been advocating a universal letter type. Others urge the aesthetic treatment of every new sign or symbol in scientific and general communication. There was no universal acceptance either way. It is an error to mistake linguistic for graphic issues. A language is first created and exists as a linguistic system. Only afterwards can it be written, designed, multiplicated. The other way round is to put the cart before the horse. In a useful linguistic system, the abstract relatedness of abstract functions is fundamental; not so the visual, aesthetic appeal. Useful graphic symbols have been invented before as well as after the introduction of the alphabet. There is nothing revolutionary about that, nor is it surprising. Not only scientists, but also dancers, musicians, sailors, and customs officers will continue to ignore the assistance of designers for their symbols, choreographies, musical notations, Morse, semaphore, road signs, etc.

A third example. It would seem that psychologists have run into something of a blind alley in their legibility research. Assuming that the main issue was the design of the individual typeface, they have been researching legibility for three quarters of a century. Their own conclusions may be summarized as follows: there is no significant difference in the relative legibility of any set of printing types designed to fulfill an identical function and compared under the same conditions of light, distance, etc. This will not surprise anyone familiar with palaeography. In fact, any consistent system of standardized alphabetic signs, can be made legible, readable, and beautiful as well. Given the necessary in-374 structions that will ensure congeniality and readability, legibility is something any scribe or composer can master in a limited time.

It is not my purpose here to disparage psychologists or to suggest that psychological research is useless. One significant practical result of psychological research is in the use of perforated tape for computer setting; i.e., analysis of the operator's mental processes while reading copy and composing on the machine. Nor am I suggesting that legibility at the composer's level is all there is to readability and intelligibility, and that as a consequence we could dispense with others involved in the adequate treatment of any given copy. A psychologist, it seems—as well as a designer—can be a victim of an aesthetic fallacy; viz., to think of the individual letter or alphabet as the main issue in typography.

What, then, can be said about "typography, evolution and revolution"?

There is no revolution in typography in the strict sense. Typography, as such, is a technology that we are growing out of, leaving behind. New technologies are emerging to take its place. The purpose of typography was to increase the production of the scribe. Now, new technologies are stepping up this production in a way that may well be called a technological revolution.

In an effort to narrow my subject down to some measure of specificity, I want to discuss what seems to me to be the essence of "typography" apart from any technological consideration. The scribes of old as well as the typographic composer or operator of today (or, for that matter, the computer) have one and the same purpose: the multiplication of writing, as distinct from visual communication which has been the province of the illuminator, or, as we would put it, the graphic artist.

Writing is now considered a very common, every-day practice —a manual task, hardly an achievement—except for the rather "amusing" expertise of a calligrapher. Thus the fundamental significance of writing is lost; which is, in fact, as a social link as well as an intellectual discipline, not as a personal accomplishment. When talking about typography, we are all too prone to think only of books, posters, ads, and to forget the legal, commercial, religious, and scientific documents that contribute to the rational structure 375 of our society (even though they escape the notice of most artists and researchers). With unfailing instinct, the first thing that the over-all subversive Dada movement assailed was language and typography, precisely as the two fundamental aspects and links of a rational society.

Writing is so familiar, so matter of fact, that we fail altogether to realise that it is a very complex product, the crowning achievement of human culture and of generations of learned and highly specialized people; not of a technology, nor of mere scribes either. Scribes, operators, composers are concerned with individual letter symbols—a matter of legibility. There is much more to writing.

The very intention to put thought—not only pen—to paper affects the thinking process. It invites rational thought, controlled communication. Consciously or unconsciously, it aims at creating and preserving social links; however tiny, they eventually, by sheer accumulation, make up for a whole social structure. The format, the proportions, and the planning not only of a page but also of the whole "written" document affects the very intelligibility which comprises the psychological impact as well as the direct meaning of the text.

Only such a complex subject accounts for the fact that, beginning with the thirteenth century and until late into the sixteenth, writing was taught at universities all over Europe. Writing masters were not mere calligraphers; they were men of learning—mathematicians, philologists. Small wonder that so many manuscripts and printed books were not only useful tools but, as often as not, splendid works of art as well.

Typography took over a scriptorial tradition in full vigour. What happened in the course of the typographical evolution of writing? To put it very briefly, writing masters disappeared from the universities (perhaps there was some connection between their withdrawal and the discarding of Latin for teaching purposes?). From the point of view of status, the liberal arts were superseded by science. The care for typography as writing — as a mental, intellectual discipline—rested more and more with printers who, on the whole, were less and less learned people (more mechanized scribes, so to speak). Finally writing as a part of learning was altogether neglected.

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This is obviously an oversimplification. To be a little more precise: after Gutenberg, the transmission of the scriptorial tradition took effect through the agencies of writing masters, printers, and typefounders. Authors cared less and less. Printers gradually became immersed in industrial and managerial problems. The typefounders alone could not be expected to keep the tradition alive. They can only ensure that their types are properly designed; they cannot enforce the intelligent arrangement of text matter. This applies also to the typefounders' new competitors: the computerised composing machines. And we cannot ignore the fact that there is every indication that the care for the multiplying of new and traditional categories of text matter is in the process of being shifted from the composer's shoulders to the shoulders of typists. I do not wish to appear suspicious about these new technologies. This would be an altogether unrealistic, unpractical attitude. There is no obvious reason why new technologies should spell disaster for writing. Even if they altogether neglected the typographic tradition in the design of type-which is not the casethey could not be blamed for overlooking even a large amount of the typographic niceties and refinements. Fine printing was never the primary purpose of typography either.

During any period there has been only a variable degree of coincidence between the economic and the cultural consciousness, between the drive towards new processes and the sense of scriptorial tradition and culture. Tradition is not an undue respect for the past as such. Only a proper sense of tradition can help the most fanatic modernist put into effect the most revolutionary process. Whether it is baked in some primitive oven or in an electronic contraption, the proof of the cake is in the eating. The proof of writing is not in the computer, it is in the reading. In the case of writing, only a sense of tradition can help us toward an intelligent and contemporary structure for printed text matter.

Since some things—especially those we call cultural—do not, by definition, take care of themselves, I suggest that some consideration be given to the training of many more people in the tradition and practice of designing written language, of writing as an intellectual discipline. Of necessity, more typists are being trained in the compositor's ability to follow instructions. But what about 377 training needed to give proper, adequate instructions? Writing, whether typographically or electronically, is not an inborn talent, but a way of thinking, a rational attitude and a mental discipline. Only when thought is constructed orderly and rationally, can a corresponding orderly, rational structure be given to its transcription—to its layout and design. Some consideration must be given to the training, *at the university level*, of competent people for the proper writing and editing of text matter—not as pieces of art, but as instruments for intellectual information. There are cogent reasons for that.

The indifference of students as regards plain, clear, adequate language is already giving cause for alarm in our universities. It would have practical as well as cultural results to give them some sense of the scriptorial tradition, in its manuscript as well as in its typographic aspects. They would be prepared to meet the new scriptorial needs throughout commercial and industrial managements, scientific laboratories, etc. And, hopefully, they would be equipped with a thoroughly rational and intellectual training in the proper—written as well as spoken—expression of their and other's thinking. The measure of the success of a culture is exactly the measure of the degree of rationality it achieved in its expression. Therefore, there cannot be a fundamental clash between two or more cultures, but only an emotional clash between two or more exponents of diverse aspects of culture.

I am well aware that the programs of American universities are as overcrowded as they are in Europe. All we can hope to achieve now, obviously, is to start thinking about writing in a new light, to look at writing in the perspective that the present and the near future of printing and publishing demands.

Needless to say, typography in the traditional sense, is still open for research. Typography as writing, however, as an intellectual discipline for the proper design of intellectual tools or as the foundation of various types of societies has hardly been touched upon. I know only of one exception: Istvan Haynal, *l'Enseignement de l'ecriture aux universites medievales* (Budapest, 1959)—to whom I am deeply indebted.

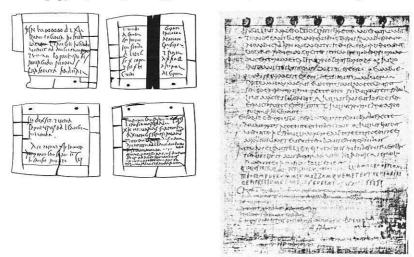
Consider, for instance, these examples: the historic relationship of writing and printing in our countries may help explain the way 378 they developed or did not develop in other countries; the arrangement, the scaling up or down of the various parts of a whole piece of writing, printed or manuscript, may be more important and socially significant than the design of any individual hand or letter design; research may detect unexpected social connections, psychological associations, conscious or unconscious mental attitudes, in the choice and combination of various letter styles. And it is a mistake to suppose that technology is the sole revolutionary element. Somewhere in the beginning of the Christian era, the scroll was superseded by the codex. There is too little factual information on the why and how of this revolution. It made for more transportable books, easier to consult for study and reference, for the introduction of critical apparatus, for editorial refinements, and for propaganda (it is known that the early Christians were not the last to avail themselves of the advantages of this new book form). In modern times, as a result of social, industrial, as well as technological evolutions and revolutions, the daily newspaper introduced the one new "writing" format since Gutenberg.

The study of such a complex subject as writing cannot be confined to any special branch of learning. It calls for the close cooperation of specialists in many branches: linguists, communication, psychology, history, technology. And, if such an interdisciplinary cooperation ever comes about, it would not be a revolution at all, but a very natural evolution of "typography" research.

Fernand Baudin's article was originally presented as a lecture at Gallery 303 in New York City this fall. 379 These illustrations are intended to reinforce the two main points of the argument. First: writing is more than a technology, an artistic or manual accomplishment; it is a rational method for the proper design of intellectual instruments and social links. Second: total format of any piece of writing as an object (manuscript, imprinted, or otherwise) is at least as significant as any single aspect of the document.

Figure 1. *Prescriptio* or quittance for 3480 sesterces. 57 A.D. Roman style. Format: triptych, i.e., three tablets hinged together by a string of seals, stereotyped display of texts on "pages" 2, 3, 4, and 5 (page 4 is partly hollowed to make room for the string of seals). The writing is comparable to any mural graffito; yet, in a *prescriptio*, the spatial arrangement is part of the information.

Figure 2. *Prescriptio* for the sale of a slave. 166 A.D. Greek style. Format: folded papyrus, 7 seals, 7 strings, 7 hands in early roman cursive writing.



Figures 5 and 6 (opposite). Two chapter openings of the "Zurich Bible," ca. 800 A.D. The division in books, chapters, and further sections is as fixed as a ritual. The combination or fixed constellation of writing styles and their hierarchy is typical for Tours in the ninth century: roman square capitals and uncials for display. Yet the text is written in a miscellany of half uncials (Figure 5) and Caroline minuscules (Figure 6). What would we say or think today of anyone mixing Garamond with Bembo in one and the same text matter?

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Figure 3. Imperial diploma. 1053 A.D. The format, the stereotyped order, and wording of the formulas for every single part of the document are clearly as significant as any of the various scripts involved. Formulas comprise: *invocatio*, *intitulatio*, *inscriptio*, *salutatio*, *arenga*, *promulgatio*, *narratio*, *dispositio*, *corroboratio*, *subscriptio*, *date appecratio*, etc. Visual aids: *chrismon*, *Gitterschrift*, minuscule with flourish, protocol, monogram, *signum speciale*, *signum recognitionis*, seal etc.

Figure 4. Menu à 60 francs. Manuscript. Brussels, *Expo. 1958*. A sense for decoration and formality may be instinctive and inborn; scriptorial competence and rationality are not. They need cultivation and tradition combined with observation and an awareness of economics as well as of technological development.

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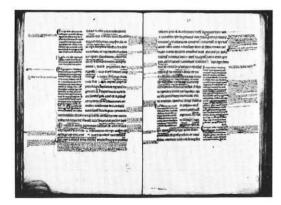
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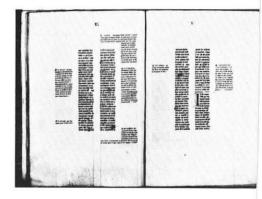
Figure 7. Papal Briefs, 1472, 1512, 1606. The oblong format was used in imperial and papal chanceries through the centuries. It was also very common for various other documents. It is scarcely used as a book form, where it would be deemed inconvenient.

Figure 8. Two diplomas, both issued in the year 1577 at the University of Paris. Identical format. The first, for a *magister artium*, dated March 21, in French gothic cursive. The second, for a *baccalaureus* in theology, dated August 1, in humanistic cursive.

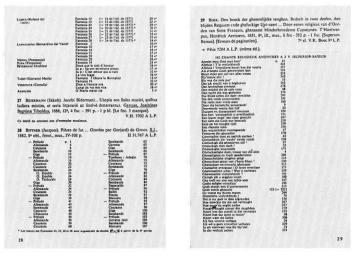
Figure 9 (below). An Epistle and its gloss, thirteenth century.

Figure 10. Aristotle's, *Ethics* and *Politics*, fourteenth century. No longer a linear but a spatial arrangement. The planning of the prickings and the rulings becomes eventually the rational, adequate ordering of an intellectual instrument, as well as a determining factor for cost and delay.





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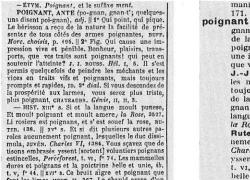


Figures 11 and 12. First proofs of a catalogue of books on music, as they came from a printing shop. One simply reproduced the typed copy. As a matter of fact, no printing school, or art school can really prepare anyone to tackle this kind of design problem.

Figure 13 (below). Cinema programme, Brussels.

Figure 14. Publisher's ad in a joint Italian catalogue. Further proof that rational planning is not an inborn talent, nor even a mere consequence of a printer's training.





t.v, P 44. [[XVI\* s. Ce bruit algre et poignant que font les limes, MONT. II, 367. Le chauld aspre d'un soleil poignant, ID. IV, 404.

- ETYM. Poindre.

POIGNARD (po-gnar; quelques-uns disent poi-

maniere aux commissaires du roi de France », Froiss. II, 171. - E. Poignant, et le suffixe ment.

poignant, ante (po-gnan, gnan-t'; quelques-uns disent p gnan), adj. 4 ° Qui point, qui pique. «Le hérisson a r de la nature la facilité de présenter de tous côtés des arr poignantes », Buff. Morc. choisi, p. 195. 4 2° Fig. Qui ca incorrection prime de ténible. «Lonhour, plaisies, transce incorrection prime de ténible.» une impression vive et pénible. « Bonheur, plaisirs, transpo que vos traits sont poignants ! qui peut en soutenir l'atteint J.-J. Rouss. *Hel.* 1, 5. • II s'est permis quelquefois de pein les méchants et les vices en traits vils et poignants, m toujours prompts et rapides », id. 2<sup>e</sup> dial. • Si vous descen de la prospérité aux larmes, vous serez plus triste, plus p gnant », Chateaub. Génie, 11, 11, 3. - H. XIIIº s. « Si ot langue moult punese, Et moult poignant et moult amer la Rose, 3527. « Li rosiers est poignans, et s'est souef la ros Ruteb. 138.  $\phi$  xv<sup>\*</sup>s.  $\epsilon$  Et si dit plusieurs autres paroles au nement poignant, lesquelles le duc dissimula , Juvi Charles VI, 1384.  $\epsilon$  Vous sçavez que de tisons embra yssent [sortent] voluntiers poignans estincelles », Percefor t. vi, fº 71. « Les mammelles dures et poignans et la poictr belle et unie s, ib. t. v, 1° 44. 4 xv1° s. « Ce bruit algre et p gnant que font les limes », Mont. 11, 367. « Le chauld as d'un soleil poignant s, id. 1v, 104. — E. Poindre. poignard (po-gnar; quelques-uns disent poignar; le d ne se p

Figures 15, 16, 17, and 18. Four examples of the same entry, the word poignant, in a variety of French dictionaries. A sense of format and a proper editorial (i.e., scriptorial) culture are also necessary for what is sometimes improperly called the "compositor's ability" instead of "finer points in the spacing arrangement of writing" (and eventually, of type). For there is no such thing, unless there is an editor's sense of responsibility toward author and copy-and precise instructions for the compositor. Figure 15: (Littré) orderly and sober (three columns a page are practical for reference work); Figure 16: (Littré-Pauvert) more elaborate (one column a page for casual reading); Figures 17 and 18: overemphasis on every single part of the text results in a jumble.

**POIGNANT, ANTE** (poua-gnan, encore po-gnan au XIX° s., in LITTRÉ). adj. (« Pointu » vers 1138; fig. au XIII° s.; anc. p. prés. de pointdre, « piquer »).

|| 1º Vz. Qui point, pique (Cf. BUFFON, in LITTRÉ).

« À cet instant du solstice, la lumière du plein midi est, pour ainsi dire, poignante. » HUGO, Misér., V, I, XVI.

[12] P. Fig. Qui cause une impression très vive, très aigué (souvent pénible<sup>1</sup>). V. Navrant, Douleur<sup>\*</sup> poignante (Cf. Cessation, cit 2: injuste, cit 4). Poignante emotion (Cf. Offrir, cit. 20). Amour passionné (cit. 11) et poignant. Eprouver un brusque et poignante bésoin (cit. 30). La ten-lation la pius poignante (Cf. Frider, cit. 9). Visage emprétint d'une haine poignante (Cf. Hideux, cit. 6).

« Elle ésit douce comme les bêtes gracieuse et aglies aux yeux profonds, et troublait comme, au main, le souvenir poignant et vague de nos têves. » PROUST, Plaistra et jours, p. 6.
« ... comme le capiif qui, comptant les derniers jours et sachant que bientit ese chaînes vont tomber, regarde soudain avec une émotion prignant les murs de sa celluis... »

DURAN, Salavia, v. 11. — Une scène poignanie, très émouvante, à la fois pre-nante et dramatique<sup>\*</sup>. Lecture poignante et exaliante (cit ]). Poignants contrastes (cit 8). Les radités poi-gnanies de la vie (CI. Fil, cit. 36). Des adieuz poignants, déchirants. — C'est poignant, cela perce, serre<sup>\*</sup> le cour. « Il y a quelles chose de pius poignant à voit brôtes qu'un palas, c'est une chaumère. Une chaumère en leu est lamentable. La déva-tation s'abatumère. Le value schermant aut le vet de terre, il y a là on ne sait que de due, quatre-riagi-treise, I. IV. VII.

## 1. POIGNANT, adj., piquant :

Li rosiers est poignans et s'est souef la rose (RUTED., Des Jacobins, I, 178, Jub.)

- Actif:

Il dist encores ce mesme soir que la pere Michaelis estoit guetté de quatre maléficier, et que ce maléfice estoit si poignant, que s'il prenout coup une fois, 11 me vivroit pas trois jours. (Michaeus, Hist. d'une possers. p. 311.)

- Brûlant :

Yous sçavez que de tisons embrases yssent voluntiers poignans estincelles. (Perceforesi, vi, 1º 71°, éd. 1528.)

- S. m., poignard :

Le suppliant tira un poignant ou dague, et d'icelluy fery ledit Guillaume un cop en la poitrine. (1401, Arch. JJ 156, pièce 445.)

La Bresse en Vosges, pouognant,

piquant.

2. POIGNANT, S. m., poignet :

Je me plais en endurant Je me pais en encurant Les coups de tes blanches mains Mais pourlact relire un peu Tes poignans ensanglantez. (D'Avuigné, Œuo., 111, 150, Réaume et Causade.)

La difference provenoit possible plustost de l'incertitude de la balance ou de la va-cillation, de la main, qu'on appelle le poi-gnant. (Lours Savior, Disc. sur les medalles antiques, p. 276, éd. 1627.)

Figures 19 and 20. Two double-spreads from Stéphane Mallarmé's: Un coup de des jamais n aboliva le hasard, 1897, which consists of a single sentence arranged in form of a musical score. The placing of the words and the body of the type should convey a sense of changing sonorities as well as the meaning of the text.

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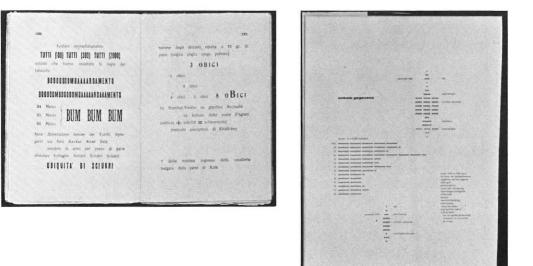


Figure 21. One page of *Zang Tumb Tumb*, Marinetti, 1912. Poets and futurists should (obviously) be free to indulge their wildest fancies. Their "findings" may provide useful visual, as well as rhetorical, devices that can eventually be rationalized for advertising . . .

Figure 22.... or for statistical tabulation, as with W. Sandberg, honorary director of the Stedelijk Museum, Amsterdam.

Figure 23 (below). The result of sheer manual dexterity. Amsterdam, 1892.

