

Letterletter 9

The historical fact maker

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Topics

An issue of Letterletter is not exactly the same as a scientific discovery; it is not even the same as a work of art. However, just like scientific and artistic achievements Letterletter cannot be predicted. There are drafts on the following subjects. The subjects are great but the drafts are just promising: the first stage of disappointment.

1 2 3 4 5 6 7 8 9 0

Numerals are neglected by teachers, authors, designers and everybody else. Everything that should be known of numerals still has to be devised.

The Burgundian bastarda

In the commonplace of typographic history this is a German script. If I were a historian I would look for its origin in the Netherlands of the Burgundian era and I would start my investigations in the workshop of Jacquemart Pilavaine, Bergen, 1450.

The stroke of Frisius

Simon Frisius, a distinguished calligrapher himself, has engraved the plates of *Spiegel der Schrijfkunste* by Jan van den Velde (Rotterdam/Amsterdam 1605). Frisius represented a single stroke of the pen by Van den Velde with a layer of strokes. One stroke of the pen might have required only fifty strokes of the graver because Frisius was a very efficient craftsman. This presumption is founded on photographic analysis of the engravings.

Understand- ing design

Suppose you are a teacher of typography. Because of the round number of his anniversary Giambattista Bodoni will be a topic of the trade magazines in 1990. How would you explain his meaning to designers who are translating their drawings into the vectors and bitmaps of digital type? You could take it easy by pointing at the presumed independence of Bodoni. And because our electronic dungeon allows still more freedom we would only have to learn from Bodoni how to win the game by violating its rules. This approach would be as easy as any other destruction, but it will not be your approach for you was supposed to be a teacher; it would be your duty to make type design understood. It has been suggested that a principle of type design could be found in the technique of punch cutting. A study of the craft of punch cutting could contribute to the understanding of type design. Of course, such an inversed relationship between design and a way of executing design has never been demonstrated, but let us try.

Punch

Students of the department of graphic design of the Royal Academy of The Hague visited the Museum Plantin Moretus at Antwerp. The staff of the museum had been so kind to make same special arrangements for their visitors. On a desk in the library a small box labelled ST 22 was waiting for us. What at first sight looked like a collection of hand-wrought nails which turned out to be the punches of the *joli roman* (± 6.5 point Didot) by Hendrik van den Keere. Our binocular microscope revealed the qualities of its design. Due to the tradition of the Academy all students had some experiences in typesetting of their

own. They knew the complications of designing small letters on a large scale. Now they learned that designing at actual size must have had its complications as well. How could Van den Keere cut punches with a tool of the same steel, and how could he control the result at this small size?

Students know how dangerous it is to ask such questions; they might lead you to new questions which could easily disturb your ambitions for the future. Therefore a teacher can be satisfied when such questions are nevertheless arising. I had now a handle for an introduction to punchcutting. We could see the strokes of the graver being beveled away from the shank of the punch or carefully levelled out in its counters. In the shapes of the typeface no trace of the tool is left.

Yet we did not really learn what punchcutting is. I could demonstrate that a stroke with a graver in rolled copper removes ten times as much of the material as the same stroke in annealed steel but one demonstration does not educate the spectator to an expert in copperplate engraving and steel engraving. I would not say that my students understand punchcutting. They might, however, understand that the influence of punchcutting on typesetting cannot be indicated, because there is not such an influence.

Punchcutting might not be very important for the history of typesetting but during 500 years it has been a practical condition for type-production. This justifies to a degree the stress on punchcutting that is made by the authors of our classics on the history of typography, though not much information is to be expected from a paragraph on engraving written by an author who does not even know how to temper or to hone a graver.

Probably the classical story did not have the purpose to make punchcutting understood. The intention might have been to make us believe that typography must be independent of the stroke of the pen and this propaganda has been very effective.

Updike & scholarship

In his admirably written book, *The Printed Book in America*, Joseph Blumenthal praises the works of Daniel Berkeley Updike: 'Of great importance to his craft, his written works in the history and scholarship of printing are primary sources for its understanding and appreciation', and, more specially about *Printing Types*: 'Updike's scholarship is thorough and perceptive, his style is urbane and witty'.

This is generous, very generous, and I try to believe that it is honest as well, but I do not recognize anything of it in my reading of *Printing Types*. The judgement of Updike is amazing and perhaps, if you would happen to enjoy a very special sense of humour, even amusing, but everywhere it demonstrates painfully the absence of the most elementary understanding of type design and its history.

I appreciate *Printing Types* as an invaluable compilation of facts, dates and pictures which has been unsurpassed in the fifty years after its publication. If it would have to be revised, most of the information could be brought up to date without essential changes and this is remarkable enough. *Printing Types* is an excellent directory but as a work of scholarship it is ridiculous.

It is necessary to say this if I want to

be trustworthy for students of typography and type design. I have to assure my young colleagues that it is not their fault when they do not understand anything of this 'source of understanding'. *Printing Types* does not offer the slightest contribution to the understanding of typography but rash prejudice at most.

I come to this now because I wanted to consult *Printing Types* about Bodoni. For the facts *Printing Types* might still be reliable, but Updike's interpretation of the facts is definitely nonsense. This would not be a serious problem if there would be an alternative, but I do not know of its existence. I am afraid that there is no source for understanding the history type design and typography. Perhaps even this would not be a very serious problem if everybody would be aware of this situation. The serious problem is not that we do not understand anything, but that we appreciate our accumulated misunderstanding as knowledge or even scholarship.

This edifying consideration resulted in an attempt to invent a scientific framework for history (the *Exercise*).

As to Updike's style it is not my principal objective to criticize it, but I find it at more instances clumsy and ponderous than 'urbane and witty'.

Some positions, such as the traditional reputation of Updike and Morison and probably Tschichold and Mardersteig cannot be discussed. Turning to the psychologist in the teacher of design I would like to know why this 'is not done'. He is not quite sure. Any social circle has its unassailable authorities.

Other members of the tribe may get lost or may even be sacrificed deliberately only to preserve the sacrosanct position of the leader. In a primitive society this behaviour might be necessary for the survival of the tribe. However, to explain it as sheer atavism might be a simplification in an individualistic society such as ours. There is at least also some logic in the civilized tradition of celebrating the dead prophets and killing the living ones. The latter do not as patiently accept our adjustments of their message as the dead. Moreover, in our overestimation of youth the young generation is a threat for any established position. It would be the ideal solution for this problem if young people could be educated in respect for our position while keeping them busy with attempts to understand the ununderstandable.

This method could keep up our personal dismissal for a while. But the combination of tribal and individualistic reactions is not healthy for a modern society. For science and scholarship it is a disaster. It is worrisome that scientists and scholars are so readily inclined to condemn an open attitude as something that 'is not done'.

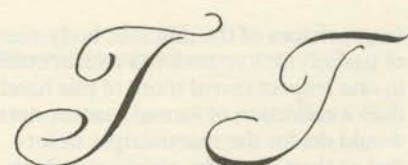
Even this more complicated explanation of cultural repression might be a simplification because a few exceptions, such as *Letterletter*, are often accepted.

The Greek are like children Plato

Υμεῖς
ἐστε
τὸ φῶς
τοῦ κόσμου

αβγ
would
Franklin
have liked
Greek?

The Franklin Letter



What Franklin
expected

What Bodoni
made

Benjamin Franklin wrote the following letter to Bodoni, dated Philadelphia, October 14, 1787:

I have had the very great pleasure of receiving and perusing your excellent Essay des caractères de l'imprimerie. It is one of the most beautiful that art has hitherto produced. I should be glad to see a specimen of your other founts besides this italic and roman of the Letter to the Marquis de Cubieres; and to be informed of the price of each kind.

I do not presume to criticize your italic capitals; they are generally perfect: I would only beg leave to say, that to me the form of the *T* in the word *LETTRE* of the title page seems preferable to that of the *T* in the word *Typographie* in the next page, as the downward stroke of *T*, *P*, *R*, *F*, *B*, *D*, *H*, *K*, *L*, *I*, and some others, which in writing we begin at the top, naturally swells as the pen descends; and it is only in the *A* and the *M* and *N* that those strokes are fine, because the pen begins them at the bottom.

The Franklin Letter in history

I owe the quoted text of the letter to D. B. Updike, *Printing Types; Their History, Forms and Use*, Vol. 2, Cambridge, Harvard University Press 1922. Updike uses the letter to prove the international fame of Bodoni. If this would be important there is only little support in the letter for this fact. With the biography of Franklin in mind I would not read the text as a letter of the famous scientist or the famous statesman but as a letter of an old man who had taken up again his old profession of printer as a hobby. In this letter the old American printer expresses his critical appreciation of the work of the Italian type designer.

In my view Updike missed the point. This is not extraordinary for in the same view Updike always missed the point. It would be easy to compile a voluminous anthology of the curious comments with which Updike decorated his impressive collection of facts. Here is as an example how Updike explains the style of Bodoni:

'But while it was in his first period that he produced his most beautiful books, he himself did not think so. It may be said that this is self-evident, because he soon changed his style for one which he must have considered an improvement. But it was not Bodoni, but the spirit of the art around him, that made his later types more and more rigid, their heavy lines thicker, and their light lines thinner and more wiry. Wonderfully perfect as these types were in detail, they contributed to a style of printing that made these later books as official as a coronation, and as cold as the neighbouring Alps.'

Is it not amusing? Even in Letterletter one would not likely find its equal. I return to the letter to read it again; this time in my own way.

Reading the Franklin Letter

Franklin finds that Bodoni exchanged the accents that handwriting would give 'naturally' to the letters.

The first conclusion to be drawn is simply this: For Franklin it is a matter of fact that type design can be discussed in categories of handwriting. When this idea would have been extravagant, Franklin, in his polite style, no doubt would have apologized for his unusual argument.

Franklin was a man of the world. He knew the old world as well as the new one and in both hemispheres he had lived and worked at all social and cultural levels. If his argument would not have been common in the world of his time, he would, again, have introduced his odd notion. This results in a second conclusion: In the time of Bodoni handwriting was the standard of type design of the Western world.

Franklin worried about Bodoni's deviation from the standard as he, Franklin, understood it. No doubt, his view on handwriting was sufficient for the scientist, the politician and the mediocre typographer he was, it did not meet, however, the subtle understanding of the accomplished printer and type designer Bodoni.

In his typefaces Bodoni took profit of the two different positions of the pen that could be applied in majuscules. This is why Franklin could point at two different forms of *T*.

Third conclusion: The letter does not show that Bodoni cared less for the standard of writing than Franklin did, but that Franklin did not know the finer points of the standard. Obviously he did neither know the typefaces by Fleischmann and Rosart which have the same arrangement of contrast in *T* he criticized in his letter to Bodoni.

The standard of type design

As a matter of fact (to me) the typefaces by John Baskerville, Richard Austin, Bodoni and their contemporaries are reflecting the standard of handwriting of their time.

It should not be too difficult to reconstruct the text-hand of the time from their derivatives. A full range of the dif-

ferent shapes of the different body-sizes of Baskerville's or Bodoni's roman could in one respect reveal more of this hand than a collection of formal manuscripts would do, for the manuscripts, as formal as they might be, are extremely informal when compared with type which allows the designer to specify his view with much more precision than the swift stroke of the pen could carry.

As I can see, the manuscripts do not differ essentially from the typefaces that have been derived from them. The most significant difference is, that the manuscripts are always earlier than the typefaces. Had Franklin known *The Universal Penman*, the collection of English calligraphy published by George Bickham in 1743, he would have recognized it as the background of Baskerville and Bodoni. And in the excellent treatise by Paillasson, *L'art de l'écriture*, in the *Encyclopédie* he could have even found the question in his letter to Bodoni answered explicitly.

Obviously Franklin did not know these works and when he did he certainly did not 'peruse' these fundamental works, but perhaps Bodoni did. Bickham and Paillasson might have made him exchange the example of Fournier for that of Baskerville.

The work of Bodoni

'Wonderfully perfect as these types were in detail [...] Updike chooses to characterize the typefaces of Bodoni, but Updike does not reveal what should be perfect in them and I cannot see it. I like their vigour and their carefree irregularity, but I would not call them perfect for their deliberate 'imperfections'. Similar parts, such as the stems of the letters, are different in thickness, direction and shape. The dull perfection of the Bodoni revivals on our composing machines is absent in Bodoni's typefaces. They are rather excelling in the freedom of good penmanship. Bodoni enlarged the irregularities of the small sizes almost proportionally in the big sizes. He could have easily avoided this. We have to conclude that Bodoni made his typefaces deliberately as irregular as good handwriting or at least that he liked them as irregular as they are.

All these qualities are pulling the typefaces of Bodoni out of the reach of the drawing office where a smooth outline is mistaken as a paramount quality in the production of type. When we did not already learn this from sixteenth century type designers such as Hendrik van den Keere, Bodoni offers us a last chance. His 250th anniversary in 1990 might be a good occasion.

Updike is not a source of understand-

ing Bodoni and there is nothing else that is much better. There is only a remark by Stanley Morison that the change in Bodoni's style was influenced by the work of Baskerville. This is true, not that I could prove this influence, but by assuming it we could come closer to the understanding of Bodoni and in this sense we would probably come nearer to truth.

A relevant history of Bodoni

Bodoni was a good craftsman. He followed the best example he could find and he believed to have found it in the work of Fournier. I do not think that he read how Fournier justified his design by pointing at the criteria of handwriting in his *Manuel typographique*. Perhaps typographers do never read.

The work of John Baskerville was a revelation for him. Bodoni had found his new master. Here it was not necessary to read anything, because it was clear at first sight that the writing master of Birmingham in his type design was just continuing handwriting with other means. Once again typography was writing with prefabricated letters and this is how Bodoni now had learned to understand typography. I do not know this because Bodoni said so (as he seemed to have done) but because I can see it.

The assumed influence of John Baskerville does not sufficiently explain the change in the attitude of Bodoni for the range of his shapes is more extended than that of Baskerville. It is this extension which puzzled Benjamin Franklin who knew the work of Baskerville well enough. Moreover, Bodoni was not the only type designer who followed Baskerville. All his contemporaries did. All typographic instances where Bodoni could have found his new style were interpretations of handwriting. Only from a narrow typographic view these adaptations of common calligraphic practice could be taken as innovations.

It seems to be difficult to find out whether Bodoni followed Baskerville and other type designers in his interpretation of contemporary calligraphy or more immediately their style of design. The difficulty is that in this case type design and handwriting can hardly be distinguished.

For the journalist something is important when it is news. From this point of view Mr. Bush is more important than Franklin, Adams, Jefferson and Washington together. Cultural events are evaluated in the same way. This

newspaper-aesthetics has superseded the appreciation of quality: to be good a work of art has to be new and it should be conspicuously so too. The famous artist of today is a fortune-teller; he has the mysterious imaginary eye foretelling what we want to see. (Of course, he is not supposed to predict the more probable effect of this stupidity.) Historians of art take much trouble to rewrite history in esthetic newspeak. They would show Giotto rather as the first painter of a renaissance than as the last important mediaeval painter of Toscane. This might be a complication for our appreciation of Bodoni. For the gossip of the day Bodoni can only be made important if we could promote him as an innovator, whereas his work can only be understood as an interpretation of his predecessors in handwriting and in type design. This is sufficient to make him uninteresting for modern eyes. It would be of little help to point at the original or even unique subtlety in this interpretation; this would only make things worse, because subtleties cannot be rendered in headline journalism. My view at Bodoni will not likely contribute to his fame. I can only hope that it will inspire students of writing to study his work with a new attention.

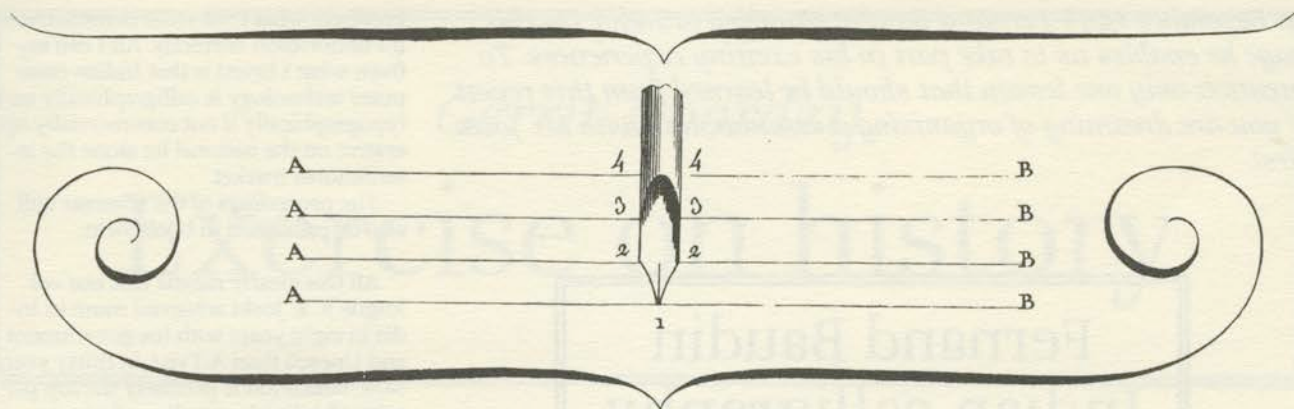
When I visited Alfred Fairbank on his eightieth birthday, I made some photographs. Fairbank arranged the pictures cleverly: he did not give me a change to take a picture which would show him without a pen in his hands.

There is a portrait of Johann Michael Fleischmann with a mould in his hand and with all the tools of the punch cutter on his desk. The tools are telling the whole story: this is the portrait of the great type designer. Am I exaggerating the meaning of details?

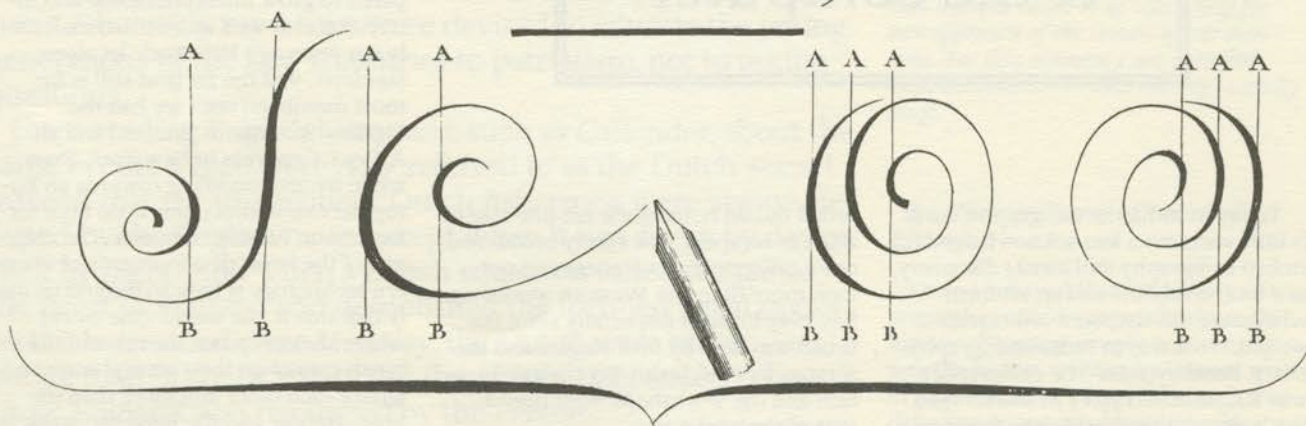
There is a portrait of Giambattista Bodoni. In his hand we do not see a mould or a graver but a quill. The simple message is that this type designer wanted to be depicted with the tool of the penman. Why not accept the hint?

Bodoni interpreted handwriting in his typefaces. This is his relevance for our position.

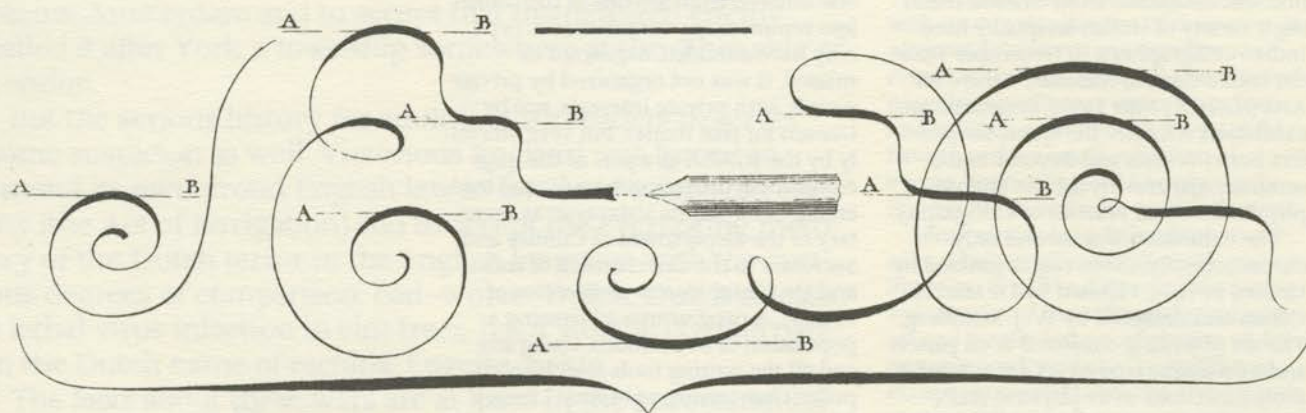




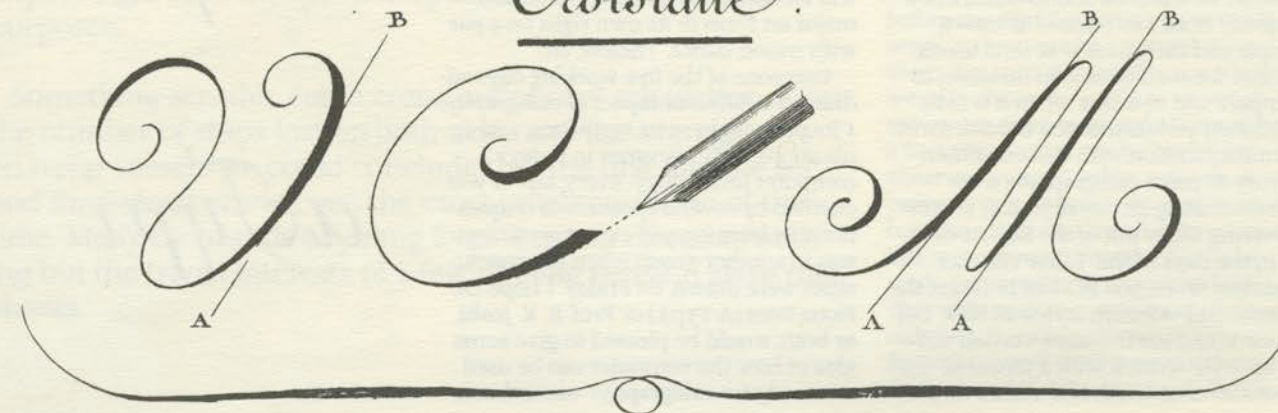
Primitive Position.



Seconde.



Troisième.



In December 1988 Fernand Baudin travelled to India. On this page he enables us to take part in his exciting experiences. To mention only one lesson that should be learned from this report: if you are dreaming of organizing a seminar, talk with Mr. Joshi first.

Fernand Baudin Indian calligraphy & the computer

Today in India, the calligraphic hand is little seen; even less acknowledged [...]. Indian calligraphy still awaits discovery, as a total discipline and an art form wherever the written word carries weight. That was in Indian calligraphy, *Diary*, Bombay 1980. The calligrapher was R.K. Joshi (A.Typ.I.). In March 1988, the Industrial Design Centre, Bombay, published *Aksharayoga*, a Portfolio of Contemporary Indian Calligraphy, with financial assistance from Unesco, featuring a variety of Indian scripts by nine Indian calligraphers. In December 1988, the Indira Gandhi National Centre for Arts (IGNCA), New Delhi, organized an exhibition, AKARA, the Quest for perfect Form Within and Beyond, and a seminar, *Ajsharavinyasa*, the Philosophy, Process and Practice of Calligraphy.

The exhibition was second only, chronologically, to the one organized by Unesco in 1965. Planned by Dr Marcel Cohen and designed by W. J. Sandberg. The art of writing consisted of 50 panels and a catalogue (100 p). AKARA, was far more ambitious in its physical and metaphysical scope. Any number of panels were distributed into 16 sections in order to illustrate and to comment a majority of all Eastern and Western scripts and their uses at several levels. All this we shall be able to measure, to compare and to assert when it will be published and distributed in book form.

In conjunction with this exhibition twenty or more calligraphers were demonstrating all the 18 Indian scripts surviving today out of the 64 that existed in the days of the Lalita Vistara, a Buddhist work, 500 BC. Not to forget the Islamic and Western styles. In New Delhi one could see the same vertical Siddham style written with a Japanese manufactured brush and with a very

broad Indian homemade nib (the size of a 50 cm scraper). This surely broadened one's calligraphic awareness and outlook more than any Western workshop however brilliant (especially since the brush was held by Prof. Nagara and the scraper by Prof. Joshi). Yet the exhibition and the workshops were only a part of the total event.

There is no dearth of seminars. This one differed from anyone of the countless seminars any member of A.Typ.I. may have attended, organized or missed. It was not organized by private people with private interests, nor by Unesco for that matter, but very officially by the IGNCA as a part of the huge educational programme under the leadership of Dr Kapila Vatsyayan as secretary of the Department of Culture and Secretary to the Government of India and Dr Basant Kumar as Director of IGNCA. A programme addressing a population of 800 millions. Using any and all the writing tools and the computer. Comprising a National Literary Mission. Developing a building complex spread over 23 acres where calligraphy will be honoured and celebrated as a major art form in its own right on a par with music, dance, Theater, &c.

Everyone of the five working days addressed a different aspect of calligraphy: 1 its philosophy; 2 its aesthetics; 3 its applications; 4 its relevance in today's computer technology. Every aspect was clarified by several speakers of unquestionable learning and expertise. Since I was in another group when the conclusions were drawn, on Friday, I hope Dr Fiona Ross (A.Typ.I.) or Prof. R. K. Joshi, or both, would be pleased to give some idea of how the computer can be used creatively for calligraphy?—since that is

precisely what Prof. Joshi demonstrated, if I understood correctly. All I can say from what I heard is that Indian computer technology is calligraphically and typographically if not commercially operative on the national let alone the international market.

The proceedings of the seminar will also be published in book form.

All this clearly means that our colleague R. K. Joshi achieved more in India in eight years with his government and Unesco than A.Typ.I. in thirty years. Now, education is precisely the top priority of A.Typ.I. as well as of any government on any continent. Therefore, here is a new challenge: is A.Typ.I. prepared to grow intercontinental and intercultural as well as international? Only ten years ago New York, let alone Stanford, was too far (and still is for most members) until we had the Bigelow Seminar in Stanford and an A.Typ.I. Congress in New York. Even while we are muddling towards an European Community, this is no time for Eastern or Western blinkers. The chip, one of the latest developments of Western technology is here to remind us daily that this is one world. One world where the computer, the nib and the brush cannot go their several ways and ignore each other any more than the brain, the eye and the hand can work in isolation.

Atypi
aTypi

Gerrit Noordzij

Exercise on history

When, as a child, I read about the English wars, I learned stories of brave Dutch enterprises, most of them incredibly victorious. Obviously my books were devised to educate the young generations of the Low Countries to patriotism, not to asking questions.

Later, reading English historians, such as Callender, about the same events which were now referred to as the Dutch wars, I learned that the impertinent Dutch fishermen were always defeated by the English navy, except when it was foggy by day or dark by night. And when a Dutch squadron sailed deep into the heart of England and demolished the fortified naval docks on the barricaded river Medway, the Dutch were rather desperate than brave or smart and they could only succeed because England was paralyzed by the Plague.

There is sufficient nonsense in my infant lecture to arouse suspicion. In spite of their victories the Dutch had to give up Nieuw Amsterdam and to accept that the defeated enemy called it after York, a township somewhere at the other side of London.

But the serious history for adult English readers deserves some suspicion as well. Victorious England was forced to amend its own proud English law in favour of a defeated enemy (the Act of Navigation) and to accept the everlasting memory of the Dutch terror in the English language with the curious degrees of comparison: bad-worse-Dutch. Dutch disease, a lethal virus infection in elm trees, has a worthy counterpart in the Dutch name of rachitis: Engelse ziekte.

The facts about these wars are at hand in the governmental archives of both kingdoms, nevertheless they do not seem to impose rigid restrictions on adapting history to educational purposes.

Something sensible could come out of cool calculation. From the number of ships lost on both sides and the average crew on naval vessels we could conclude that the first and the second English war have been the most cruel massacres of the time. Many thousands of young lives were sacrificed to nothing but the trivial interests of a few rivaling fish and slave merchants.

I do not know whether this view at the most glorious history of civilized christian nations could be of much help for our approach of the issues of our own time. For this moment I am satisfied with the conclusion that history is tricky stuff.

§ 1. *The significance of historical events*

Once I believed that the history of typography could be separated from the history of writing simply because this was the history written by learned men in famous books. History seemed to be definitive to me: we cannot change the past.

The past is a set of chaotic events without any significance of their own. If we want to observe any significance in events of the past, we would have to impose this significance upon them first and before we could do this we would have to make a small collection of events, because it would be physically impossible to deal with a big collection.

Many acorns have fallen from many oaks. Their significance depends on our interests. It will be different for a biological interest or for a climatological interest and for the history of physics all fallen acorns will probably be indifferent except the acorn that in the seventeenth century fell upon the nose of a sleeping scientist. This means that we have to make a significant selection of events before the significance we want to observe in them can be imposed upon them. But then the significance which we may choose to attribute to our observations must be already there before a first observation can be made. Any observation is guided by a dream, a brain wave, a fantasy, a revelation or how we might like to call it. In science this metaphysical intruder has to be made manageable in crisp wording. This will result in a statement of a special class; it is a hypothesis or a theory (hypothesis and theory are not different things but just different words for the

same kind of statements).

History is the art of making a significant arrangement of significant events of the past. The significance a historian wants to expose is largely a matter of his desire. The origin of the questions which are moving him is hidden in his soul. The ultimate reason to separate the collection of typographic events from other events in the realm of writing or, otherwise, to integrate the history of typography in the history of writing is a psychological reason or a reason of the soul. From a psychological point of view we cannot say which trauma is the better one. If we would not like to make psychology too important we could say that we only observe what is significant and that any significance depends on our faith.

In my example from the naval history of England and The Netherlands the significance of the events is connected with the historian's point of view and this depends clearly on his commitment with his subject and with his audience. I presented this commitment as the weak point of the historian, but it is his strength too. A more distant point of view would show the events less distorted, but also less significant.

§ 2. *The problem of selection*

Against the chaotic multitude of events the selection of relevant events might seem to be difficult. This difficulty, however, is solved by my problem even before it can arise. When I do not yet have a problem I can live in peace with the multitude of things as they are. Then, in a dream or at another occasion of revelation or diffuse thinking (the level of thinking which is called feeling) a few things could appear in an intriguing or even a significant coherence. This ready dreamed selection is not only the origin of a hypothesis; it is already a hypothesis, though probably a weak one. Usually the revelation looks more like a problem which can only be solved by working. As far as dreams can be attributed to a psychological condition or to faith your dream is as good as mine. But as a hypothesis not every dream is as good.

§ 3. *The quality of a hypothesis*

In science the simplest and most beautiful hypothesis (or theory) is the best one. Fairy tales might be considered as simple when they can be understood without much thinking and as beautiful when their sentences are short and direct. I would always try to write simple and beautiful in this respect but in scientific fairy tales these literary

qualities are not decisive.

A scientific theory is beautiful and simple when it does not hide its restrictions and its weak points. It will, on the contrary, expose them as clearly as possible and show precisely how it can be criticized. As far as it does not it is not a theory but a myth or a dogma. Just like theories myths are revealing the significance of events but they just want to be accepted as they are. Beautiful and simple as they may be in their own way, they do not claim the main virtue of a theory which always provokes criticism.

Admittedly there is a lot of wishful thinking in this comparison of mythology and science. In fact it is not so easy to distinguish them. The current model, for instance, of an expanding universe that began with a big bang is far from beautiful or simple. It is rather a myth (though a silly one) than a theory. And even this simple observation could evoke taboo reactions as might be expected from the fanatic believers of a myth, but which should not occur in any scientific discussion.

On the other hand myths did not only demand belief; they passed understanding as well in tales 'to present what knowledge there was of the fabric of the world'. The content of ancient myths often seems to be primitive because it is distorted, due to the 'astronomical, geological, biological etc. etc. ignorance of most Assyriologists, Aegyptologists, Old Testament scholars, and so on: the apparent primitivism of many myths is just the reflection of the primitive knowledge of their collectors and translators' (both quotations: C. de Santillana, *The origin of Scientific Thought*).

Perhaps my distinction between myth and theory might be approved thus: The defense of an accepted theory is of mythological nature, whereas the criticism of a theory could be of a more scientific nature. This approach passes the difference between myth and theory from the content of a hypothesis to the response. It is our reaction which is mythological or scientific rather than the hypothesis which seems to be of metaphysical origin anyhow.

Such questions as whether the study of typography can be isolated from the study of writing or whether both studies have to be integrated, can be answered from many different attitudes between two extremes. In a mythological attitude one position has been chosen and this one will be defended. In a scientific attitude both positions are criticized. These extremes are the poles of human attitude, both of them as intolerable as the poles of the earth. The orientation of human life might be dominated by one of these extremes, but it cannot be reduced to it; inconsis-

tency is human fate. Even in the famous scientific discussion of quantum mechanics the last arguments of Einstein and Bohr were mythological prejudices.

I could now try to improve my distinction once more: a scientific discussion of a theory seems to be a rational attempt to justify a religious position. With this refinement my antithesis has lost much of its clear rigidity. What can be saved of it? I would maintain that any scientific (or scholarly) comparison of theories has to be decided by their explanatory power and never by the reputation, let alone the number, of its adherents or because we are accustomed to a special theory. Nevertheless this is what will always happen. It is hard to give up a dream or a comfortable feeling because it is in contradiction with empirical observations, but nevertheless this is the first rule of the game called science.

§ 4. *Historical facts*

Reality provides us with the arguments for discussing theories; a theory is refuted when a contradicting observation can be made. Scientific research is the search for such facts. A fact is real when it can always be observed again (when the proper ritual is observed: the observation of a star might require a telescope whereas the observation of the Mont Blanc might require a journey).

In this narrow scientific sense of the word historical facts are not real. All we have are recordings of events that cannot be observed anymore. When we assume the authenticity of the recordings we can only believe the facts. Historical facts are believed or deduced interpretations of real documents. This brings history in an awkward position from a scientific point of view. In science we are challenged to invent highly improbable theories, because it is the greatest triumph when the most improbable prediction comes true. As far as I can see history is the prisoner of probability.

'You too, Brutus' has been recorded as the last words of Caesar. We do not readily believe the record because it is not probable that Caesar would have cared very much for literary statements while choking in his blood.

It has not been recorded that Gutenberg invented typography. Nevertheless this is believed because it is probable to many of us. I do not believe that Gutenberg invented anything but my doubts could be reduced to considerations of probability as well. I do not see an escape from probability, but history should nevertheless try to invent theories that will make everybody say: that is highly improbable. History too has to be provoking.

§ 5. *The science of history*

History does not belong to science. This does not regard history but only the fact that historians are not used to present their views in scientific (mathematical) models. As soon, however, as I choose to introduce a scientific model in history, history becomes a science under my treatment.

The objection could be made that history cannot be treated this way because history does not deal with real facts, as physics does. This is the objection with which I kept myself under control, but step by step I had to give it up. First I found that I could make an exception for writing (and craftsmanship generally) because the impact of a tool on material could already be rendered by a mechanical (that is mathematical) model and this is how the treasures in our libraries have been made; enough to keep me busy for a while. Then I realized that history would be practically impossible if we would not attribute a degree of reality to the unreal historical facts. To this degree history could be liable to the methods of science.

When you allow me to assume that the manuscripts of Nicolas Jarry really have been written about 1650 and that Grandjean really cut his *romain du roi* towards the end of the seventeenth century, then these presumed realities could be simulated in a model representing the typeface as a projection of the handwriting. This is a scientific conclusion of a reasoning presuming the empirical reality of recorded statements.

It is an advantage of scientific history that it demands apodictic statements, which can be refuted easily. It is not interesting whether you believe me or not. The question is whether you can demonstrate, for instance, that the hand-

writing of Jarry cannot be projected in the typeface. As long as you do not, my hypothesis will stand as the best approach of truth and this fact makes any other position untenable. So long everything that has been written or said about the design of the *romain du roi* has to be rejected but for the views of André Jammes who studied the documents concerning the *romain du roi* (I owe a lot to my conversation with him).

A model would allow me to inverse history and to consider the handwriting of Jarry as a projection of typography. Alfred Fairbank did so in the King Penguin editions of his *Book of scripts* (in later editions the error has been removed). In a mathematical model the inversion of an object and its projection is not necessarily an error; it could be a method for checking the model, but the trick should not be extended to reality. As a rule events of the past cannot be changed in the future. What can be (and has to be) changed is not the past but history.

I have to admit that a mathematical model would prove that the same point of view allows many different interpretations of the same set of phenomena. In his famous (which could mean infamous as well) *Against Method* Paul Feyerabend claims that 'anything goes'. This is in contradiction with the mathematical model which shows that not anything, but only an infinite number of interpretations is possible. The difference might seem to be futile at first sight, but it is substantial: there is always an infinite number of other points of view that could be taken and from each of these points of view nothing goes. If Feyerabend, however, would have given away this refinement it would not have made him as famous as the false statement.

The other hand

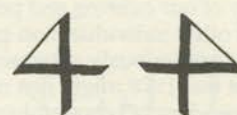
Many left-handed are writing with their right hand. I encourage left-handed students to write with their left hand, because they too should work under optimal conditions.

I am used to sketch and write the lettering for engravings downwards for the most natural control of the contrast of reversed writing. Left-handed have the advantage that they can more easily write mirror-wise on horizontal lines. Accordingly they should write readable writing downwards.

Greece is still under the Turkish rule of its own authorities. In a conversation with a Greek physician about left-handedness, my learned partner spoke: Left-handedness does not occur in Greece for it is forbidden.

In Holland stealing bicycles is forbidden, nevertheless I would advise you to lock your bike.

The broad nib is essential for discussing left-handed writing. Only a broad nib reveals the essential difference between



Ambidextrous writers are right-handed who imitated a left-handed mother.

I invite all specialists on writing and before all the left-handed among them to comment these somewhat provoking theses. I would like to produce together with you a publication of The Committee on Research and Education which might be useful as a guide for teachers and educational authorities.

Because very little is known of left-handed writing in other civilizations than the Western world, I would especially welcome the view of non-western colleagues.

*Slowly
Running
Hands*

This article has its origin in a speech that was given in the General Meeting of the ATypI, on October 1, 1988, when the Prix Charles Peignot 1988 was awarded to the author.

Petr van Blokland

Is there a dichotomy of typography and technology?

Are typographers no longer needed? Doubtlessly, this may seem to be an ironic if not a rhetorical question coming from a typographer like myself. Yet it's a notion to take into account. The mistaken belief that typographers are becoming superfluous in some respects is gaining ground, not in the least due to the advent of Desktop Publishing systems. Many of our existing and potential clients and other individual non-professional users are seriously entertaining the thought that DTP might just make them independent of typographers. Should they take this challenge to their profession seriously? It's a discussion that has been held at ATypI. I think it's time to intensify that discussion. Not because we have to fear for our bread and butter. I am sure that in the long run, DTP, by trial and error, will demonstrate to its non-professional users that typography is not page layout for fancy publications. No, our concern must be with the future of the tools, the technique and standards of our profession. The very fundamentals that we work with every day. It's these that are threatened by DTP, and implicitly so is our profession. And if we don't speak up, the non-professional user will certainly not.

Therefore, it is time that typographers themselves join the debate. ATypI is the proper means to channel not only the reservations about DTP, but also our recommendations for improvements.

Manufacturers of Desktop Publishing systems are increasingly lending support to the notion that DTP systems are

doing away with the need for typographers. With the growth of the DTP market, and the development of new systems and programmes, many users of DTP are provokingly lured into believing that the absence of professional skills can still get them satisfactory results. Needless to say this is not so.

Typography is an elementary part of the production process that will usually result in printed matter. Technological advances such as DTP influence this process, and in the future will substantially influence the way typographers shall work. Given the non-professional's of DTP, and the mistaken assumptions that have so far arisen from this, it seems time for typographers to assert themselves and decide whether or not these technological influences will be positive or negative ones.

Speaking of typography, it is necessary to first establish a definition of the term. In doing so, I quote the Dutch typographer Gerrit Noordzij: 'Typography is writing with predefined letterforms'. I would like to supplement this with: Typography is writing with predefined letterforms and thus creating a vehicle for the relaying of information. In other words, typography is the process of elimination and selection, of simplification and embellishment. It is the paradox which makes sense here, but which is the source of much misunderstanding among laymen.

Thus defining typography, it is equally necessary to set objective standards for composing systems that are such an integral part of the production process.

This actually means establishing what the term quality amounts to. Quality in this narrow sense is no more or less than the best possible result within the given limits, such as time, money and technical facilities. Results, however, that do not sacrifice the professional demands of the typographer.

To what extent is the typographer involved with compositing composing systems? Most likely, he will turn to professional typesetting companies to satisfy his needs. Of course, he can also decide to invest in equipment himself. However, given the choice between expensive top of the line equipment or affordable equipment of lower quality, it seems likely that commercial typesetting firms will get his business. After all, this enables him to seek out those firms that offer the best and the latest facilities for the best price.

The arrival of DTP systems on the scene has radically changed all this. For the first time equipment of relative good quality with a friendly price tag has become available to typographers and laymen alike. The diminutive 'relative' is not only evoked here in relation to the well-known discrepancy in resolution output between the laserprinter and the photographic exposing unit. It is especially mentioned here in view of the hidden drawbacks of DTP that stem from its computer industry heritage. Sure, some of these can be found in traditional typesetting systems as well, but I want to pay particular attention to those that are endemical in DTP.

One of these is size. There are just too many definitions in this respect. Every manufacturer introduces his own. The result is that size no longer refers to the measured size of a typeface. Instead it has become a catalogue number.

Then there is the question of measurement and accuracy. The Anglo-Saxon background of DTP packages presumes the use of inches as means of measurement. The option to convert to millimeters in many packages results in approximations at best.

Confusion is also created by the imprecise correlative of the name of a fount and its actual shape.

Finally, there are differences in terminology: the word 'leading' in the DTP programme XPress is referring to line feed (the distance between the baselines).

A similar charge can be leveled against the design programmes for typefaces. While there is truth in the claim that the user of these programmes can generate his own typeface, the standards still do not match those that typographers demand.

Maybe these are just technical problems. And maybe they will be solved in

the due course. Yet they pose a realistic threat to typographical standards at present. Adding to all this is the stubborn misunderstanding especially in the non-professional field that DTP systems are the facto design machines. Possibly, this is further aggravated by manufacturers that equip their systems with standard applications that cater to the most commonly held and often base beliefs of design. DTP systems seem not to be aimed at the professional markets but rather at the masses that equate design with beautification through the use of electronic gadgets. Yet isn't it paradoxical that pagemaking programmes for DTP purposes, which are developed for designing directly on the screen, are often no quicker than an experienced draftsman who is working with his scalpel and wax coater? Even XPress, one of the pagemaking programmes for the Apple Macintosh, requires an excessive amount of time and skill to be successfully operated.

Even while improvements and programme updates are under way and the increase in the resolution of laserprinter output may soon reach acceptable standards, there is as of yet no breakthrough visible in DTP design that can push it toward acceptable standards for designers. But the intrinsic quality of DTP systems and programmes has to be improved to meet professional standards. This will not happen unless the professional users urge manufacturers to do so. At the same time it is mandatory that students of type and typography will first learn to design. After that, they can go and develop their own standards in relation to DTP machines. This will make them much less dependent on the currently inadequate programmes. Non-stop research into new solutions to new problems of type and page design must be in my view one of the fundamental issues in the current education programmes for typography students. At the Royal Academy of Fine Arts in the The Hague, the aims and methods of the Educational Committee of ATypI have been a crucial part of the curriculum. The approach of typography and type-design at the Hague academy has been firmly rooted in an assessment of our professional needs. It's a small beginning of our telling the so-called creative technocrats that design DTP systems what our real needs are.

Typographers must face up to changing trends in typography and type design. We should neither reject nor outright embrace these developments. What is needed is a careful weighing of the merits of these new tools and equipment. We must tell the industry what we expect of it and let it be known when we feel our needs are not met. It

is after all our responsibility to continuously guard our standards and our profession and to ensure that future systems, programmes and equipment will be all they can be: a challenging foray into the future of typography and type-design.

EDITORIAL GLOSS

I have several reasons to recommend this article to your attention.

The speech is a new chapter in an old story; it reminds me of articles by T. M. Cleland and W. A. Duggins. It is still a tradition that salesmen are telling typographers that typography demands ranging numerals and shortened ascenders and that small caps can be simulated with 'wrong fount'.

New is the position of the designer. This time it would be risky to neglect the esthetic demand, because the young generation is not dependent of misunderstood technology. Petr van Blokland is not only a master in analyzing writing, he has a great reputation in synthesis as well. Some ATypI members will remember his demonstration at our seminar in Hamburg.

He and his young colleagues do not have to accept a narrow minded approach of typographic software. It would be easy for them to write their own modules and to compile stand alone applications for the real needs of typography.

In this article Petr is asking for our co-operation. It would be wise to understand it as an offer of help as well.

When speaking about education, Petr refers to the Royal Academy of The Hague as a matter of fact. It was this school which introduced the student Petr van Blokland to the problems of the new technology and to the standards of design and writing alike. Now the old school is proud of its young teacher.

ATypI expressed already its recognition with the Prix Charles Peignot; now its support is needed. The editor.

Prize

Our friends of Banks and Miles have won the Green Product Design Award with their design of a telephone directory. *Congratulations.*

The design resulted in paper savings alone of 6000000 pounds each year. We have always been convinced that good design will pay itself but now we know how much exactly.

An important argument for the prize has been the reduction in the 'number of trees used' which we should believe to be an improvement of the environment. I do not yet believe this. Suppose that this reduction would become substantial. What would happen? Probably the areas of wood in Canada and Scandinavia would be reduced proportionally and this would hardly improve the environment.

The message is on recycled paper. Recycling requires cleaning of the material in a process that will not likely improve the environment either.

man
&
paard

BC
Efi

Expert

The Schools of the world

At the Frankfurt meeting of ATypI many members offered to send me a list on a Macintosh floppy disk of the schools of graphic design in their country. Until now I received on paper 3 lists. The schools of the world are in Belgium, Hungary and Switzerland.

If you think that this list is not complete, you might send your additions, but I will not type them out again. The list must be on floppy disk.

{ Letterletter }

IO

Sign

Puzzled

I wonder whether I could persuade you to comment the lines from an old manuscript reproduced in Letterletter 8. So far nobody reacted. Now you might, please, consider the following statement:

macham
Iacob

This handwriting is a characteristic example of the humanistic chancery which was invented in Florence in the middle of the fifteenth century. At the end of the sixteenth century this hand had lost much of its characteristic rigidity, notably in the work of Flemish (often confused with Dutch) calligraphers. Therefore the manuscript has probably been written between 1450 and 1550. Should it have been written outside Italy it would be reasonable to guess the origin about 1520, because the hand was not yet current outside Italy before that time, whereas later northern hands are showing a more 'baroque' mood.

Is this true
and why not?

Advanced typedesign

At the Royal Academy of The Hague the study of writing has an important position in the graduate course of graphic design. In september 1990 the school will start postgraduate courses of specialization in the application of writing in lettering and (digital) type design. The programme of the studies (1 to 4 semester) will be related to the individual background of the students.

The branches of the programme will be:
Analysis (theory of writing);
Manual techniques (calligraphy etc.);
Design (typefaces, architectural lettering etc.);
Synthesis (digitizing etc.).

Further information:

Royal Academy of Arts
Department of Graphic Design
Prinsessegracht 4
2514 AN Den Haag
The Netherlands

The pictures

As usual Letterletter has been illustrated with handwriting. This time I selected samples from my scrap showing the kind of handwriting from which the standard of Bodoni and Franklin was derived.

On page 5 I reproduced a page from the article by Paillasson in the *Encyclopédie* showing the different positions of the pen which Franklin did not know.