

# unexpected applications

## Typesetting modern & contemporary poetry with L<sup>A</sup>T<sub>E</sub>X

### abstract

T<sub>E</sub>X: a typesetting engine limited to scientific publishing? Where would be the fun?

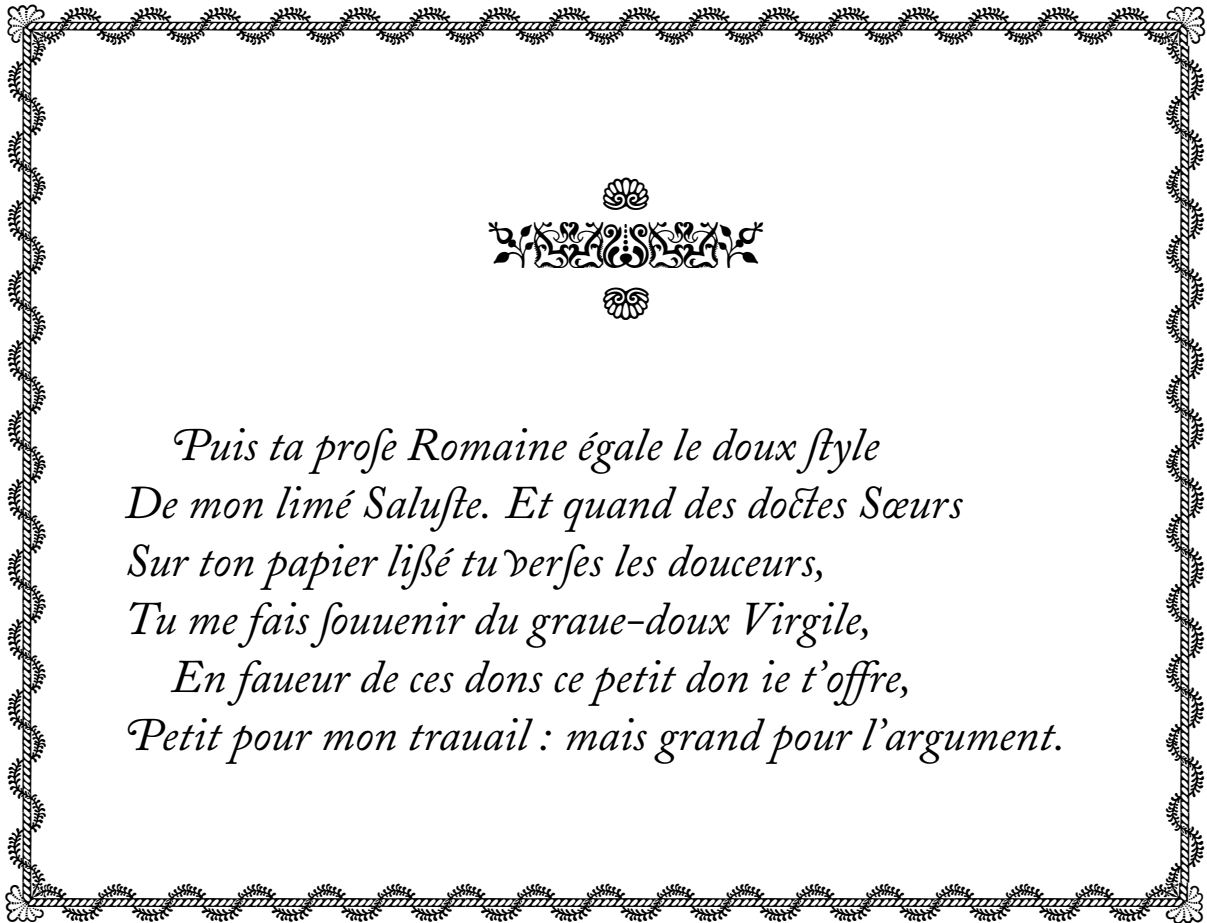
## I

I learned T<sub>E</sub>X because I was a working mathematician. But ‘science’ never was my main interest field. At one point, I realized that T<sub>E</sub>X could do much more than the average desktop publishing software, when it comes to fine horizontal microtypography (vertical justification, grid fitting... being a quite weak point). My first experiment was with intelligent ligatures in virtual fonts, that allow to automate Renaissance use of the long *s* vs. the final *s*, or swash initials, through the word-boundary pseudo-character. I was also amazed how the border’s ornaments were easily programmed using L<sup>A</sup>T<sub>E</sub>X’s picture environment (figure 1):

```
\newlength\ornamentlength
\settowidth\ornamentlength{\fontsize{16pt}{16pt}\ornaments
qwwwwwwwwwwwwwe}%
\begin{picture}(0,0)
\put(-3.5,-7.5){%
\parbox{\ornamentlength}{\fontsize{16pt}{16pt}\ornaments
qwwwwwwwwwwwwwe\[-3.5pt]
U\hfill u\[-1pt]
.....
U\hfill u\[-1pt]
Qwwwwwwwwwwwwwwwe}%
}%
\end{picture}%
```

```
Puis ta prose Romaine égale le doux style \
De mon limé Saluste. Et quand des doctes S\oe urs\
Sur ton papier lissé tu verses les douceurs,\
Tu me fais souuenir du graue-doux Virgile,
```

figure 1: a contemporary version of a 1610 poem ↗



## II

I was so happy with this Caslon experiment, that I used the automatic ligatures from the alternate fonts in a book I published some times later: this fitted quite the precious & even somewhat mannered style of J.-P. Bobillot. He was indeed very happy with the result!

The input source here has no special feature: I simply made a composite virtual font from the basic Adobe Caslon, its expert and alternate sets.


figure 2: A page of Bobillot's *Poèmes coupés* ↗

POÈMES COUPÉS *est la réécriture & le présent volume constitue la version définitive de, respectivement*: La playmate des singes / psaume des paumes, révisée en léthé 1985 & dont un état initial fut publié, dans la collection « Plis », à Lompret, en 1986; Autogènes slapsticks – intermezzo, dérivés au prime-temps 1976 & dont un immature état fut oublié, aux séditions « Le jeu des tombes », à Montmorency, également en 1986; Promenade interdite (poème), dérivée à l'hot town 1986 & dont un format initial fut publié, dans la collection « Tuyau (quotidien) », à Boulazac, en 1987. Il m'a toujours semblé que ces bribes débridées, caillasses de Petit Indexet rescapé des affres du Mot de l'Ordre, participaient d'un même expéri/mentalisme lyrique. D'où le précipité que j'ai tâché d'obtenir, ici, en les « télescopant ». Opération, réalisée les 27 & 28 novembre 1995, suivant le principe de la plus grande hâte créatrice : 20 ans « relus & colligés » en 2 jours !

**VOTRE TEMPS EST BREF, SOYEZ PRÉCIS !**

*Lyon, le 29 novembre 1995*

The same author had painfully written a ‘boustrophedon’ poem by inverting the letters: I proposed him to do it the right way, simply changing the direction of the typesetting at each newline (using *graphics*’ `\reflectbox` macro), which yields fig. 3.

figure 3: A modern boustrophedon! 


INSCR  
NOITION

ISE EST PLUS.FOLLE OU DE PEU.L'  
INCITE À PLUS DE RISQUE SOUS LE DE

RME OÙ BAT.LA HOULE FEU.SOMBRE.

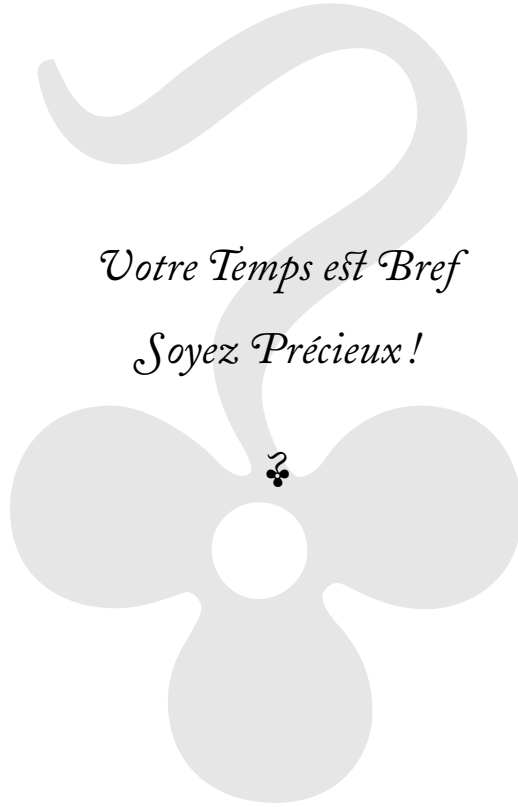
SUR TOUT LES FRONTS.LE DÉFI  
CLAQUE GURE AUX.GLOTTES L'EMPR

Finally, I mixed both experiments in the fourth page of the booklet (this one is in Adobe Garamond—fig. 4).

figure 4: Inverted sentence, inverted words... 

JEAN-PIERRE BOBILLOT  
*POÈMES COUPÉS*

*Votre Temps est Bref*  
*Soyez Précieux!*



JEAN-PIERRE BOBILLOT  
POÈMES COUPÉS



### III

Letterspacing is a strange beast, we're usually shocked by the horrors it may produce, when used blindly in some magazine's narrow columns. However, Antonin Artaud used it deliberately to induce reader's unrest. Here (fig. 5), I decided to render this discomfort by modifying the amount of letterspace on each line, and using the gorgeous Monotype Blado font, which I call a 'litteral humane', because it is one of the very seldom digital font that reproduce crudely a Venitian font *as it rendered in print* at that time.


figure 5: Inferno, according to Artaud 

*tu n'es plus là  
mais rien ne te quitte,  
tu as tout conservé  
sauf toi-même  
et que t'importe puisque  
le monde  
est là.*

*Le  
monde,  
mais ce n'est plus moi.  
Et que t'importe,  
dit le Bardo,  
c'est moi.*

## IV *Un coup de dés*

One of my hardest challenges was to typeset the seminal poem of Stéphane Mallarmé *Un coup de dés* with contemporary means, yet more faithfully to the author's intentions (as illustrated by some proof sheets he corrected, now kept in the Bibliothèque de France) than any version currently available in book stores. I tried out virtually any available digital didone before choosing Linotype Didot, which comes with a set of ornaments and special titling or initial fonts, and is very faithful to the most absolute Didot designs. In my opinion, the rigorous game that Mallarmé plays with sizes, relative weights, (non-)alignments, could not have been achieved with any sloppier font. Here, there is no special font trick (except that I had to convince a typographer friend to draw the missing ff ligatures for me), but I had to face the looseness of T<sub>E</sub>X's vertical typesetting. Getting rigorous horizontal alignments required to inhibit any glue and to make any vertical skip an integer multiple of `\baselineskip`. Apart from that, the work was relatively smooth, and T<sub>E</sub>X's quality is the first responsible for the beauty of the pages.

Title page 

Un coup de dés  
jamais  
n'abolira le  
hasard



*poëme,*  
*1897*

<p><i>COMME SI</i></p> <p><i>Une insinuation</i></p> <p><i>au silence</i></p> <p><i>dans quelque proche</i></p> <p><i>voltige</i></p>	<p><i>simple</i></p> <p><i>enroulée avec ironie</i></p> <p><i>ou</i></p> <p><i>le mystère</i></p> <p><i>précipité</i></p> <p><i>hurlé</i></p> <p><i>tourbillon d'hilarité et d'horreur</i></p> <p><i>autour du gouffre</i></p> <p><i>sans la joncher</i></p> <p><i>ni fuir</i></p> <p><i>et en berce le vierge indice</i></p> <p><i>COMME SI</i></p>
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*C'ÉTAIT*  
*issu stellaire*

*CE SERAIT*  
*pire*

*non*  
*davantage ni moins*  
*indifféremment mais autant*

*LE NOMBRE*

EXISTÂT-IL  
autrement qu'hallucination éparse d'agonie

COMMENÇÂT-IL ET CESSÂT-IL  
sourdant que nié et clos quand apparu  
enfin  
par quelque profusion répandue en rareté  
SE CHIFFRÂT-IL

évidence de la somme pour peu qu'une  
ILLUMINÂT-IL

**LE HASARD**

Choit  
la plume  
rythmique suspens du sinistre

*s'ensevelir*  
*aux écumes originelles*  
*naguères d'où sursauta son délire jusqu'à une cime*  
*flétrie*  
*par la neutralité identique du gouffre*

## *V Conclusion?*

The fine ‘best fit’ algorithm of  $\text{T}_{\text{E}}\text{X}$  makes it a program of choice for the layout of any typeset material. In fact, it is the only tool I know of that allows to use the full features of extended font sets with lots of variants and contextual glyphs. Its scientific abilities even allow to put anything anywhere on the page, which may prove quite helpfull when dealing with contemporary poetry! Horizontal micro-typography is essentially perfect, as long as the fonts are well tuned, but the lack of control over vertical placement is somewhat tedious.

My next programmed experiment is to use pdf $\text{T}_{\text{E}}\text{X}$ 's HZ-like feature in a non-reasonable manner on a text by a french fool.