

French Cursive for L^AT_EX

Emmanuel BEFFARA
manu@beffara.org

version 1.2, February 2nd, 2004

1 Presentation

French Cursive is a cursive hand-writing font family. Its design is based on the French academic tradition for running-hand. The base shape is upright with lightly contrasted stems and hairlines. All lowercase letters are connected, but most uppercase are independent.

style	example
regular	<i>The quick brown fox jumps over the lazy dog.</i>
bold-extended	<i>The quick brown fox jumps over the lazy dog.</i>
slanted	<i>The quick brown fox jumps over the lazy dog.</i>
calligraphic	<i>The quick brown fox jumps over the lazy dog.</i>
fixed-thickness	<i>The quick brown fox jumps over the lazy dog.</i>
wide	<i>The quick brown fox jumps . . .</i>
academic	<i>The quick brown fox jumps over the lazy dog.</i>

The extra styles come with associated macros:

style	environment	local macro
cursive	<code>cursive</code>	<code>\textcursive</code>
calligraphic	<code>calseries</code>	<code>\textcal</code>
fixed-thickness	<code>ftseries</code>	<code>\textft</code>
wide	<code>widseries</code>	<code>\textwide</code>
academic	<code>acadshape</code>	<code>\textacad</code>

For a given design size, the choice was made to make the base height (1ex) equal to the one for Computer Modern faces, i.e. small letters like “a” have the same height in both fonts at 10pt (namely 155/36 points). As you can see, the ascending and descending loops are larger than the largest letters in Computer Modern and other roman fonts. For this reason, the space between lines has to be

augmented a lot. We must actually use a `\linespread` value of 3/2 in paragraphs that contain cursive text.

Inter-letter links are inserted using a complex ligature system. Since ligatures are incompatible with T_EX's way of composing accented letters, all accented letters have to be provided by the font itself, therefore the encoding used is T1. Though technically the font can be used in standard OT1 encoding, this is only suitable if no accented character is to be used, therefore OT1 encoding is not the default.

2 Interface

```
1 \NeedsTeXFormat{LaTeX2e}
2 \ProvidesPackage{frcursive}
3 [2004/02/01 v1.2 support package for French Cursive]
```

2.1 Package options

OT1 The default encoding used for the font is T1, but we provide the option “OT1” to use this encoding instead.

```
4 \newcommand{\frcursive@enc}{T1}
5 \DeclareOption{OT1}{%
6   \renewcommand{\frcursive@enc}{OT1}}
```

default By default we don't change the font for the whole document. However, one might want to typeset a whole text in French Cursive. For this purpose, we provide the option “default”. We must delay the redefinition of the default face in order to take care of these encoding issues.

```
7 \newif\if@frcursive@default
8 \@frcursive@defaultfalse
9 \DeclareOption{default}{%
10  \@frcursive@defaulttrue}
```

These are the only options we provide.

```
11 \ProcessOptions\relax
```

Now we can change fonts if asked for it.

```
12 \if@frcursive@default
13 \renewcommand{\rmdefault}{frc}
14 \linespread{1.5}
15 \RequirePackage[T1]{fontenc}
16 \fi
```

2.2 Macros

\cursive The main macro we define is obviously the one that switches to cursive font. What it has to do is change the font family and encoding, and also change the line spread, because letters in French Cursive are larger. We define this as an environment because it can be used either in plain T_EX style as `{\cursive text}` or as a L^AT_EX environment.

```

17 \newenvironment{cursive}{%
18 \fontencoding{\frcursive@enc}%
19 \fontfamily{frc}%
20 \linespread{1.5}%
21 \selectfont}{%
22 \par}

```

For the sake of completeness, we provide the alternative form for short cursive texts as `\textcursive{text}`:

```
23 \newcommand{\textcursive}[1]{\cursive#1}
```

However, take care that the effect of the `\linespread` macro only appears when changing paragraphs, which means that the `\par` must appear inside the group where `\cursive` is used. That is why we put it at the end of the `cursive` environment.

`\calseries` One of the variants of the typeface is called “calligraphic”. It is a series like `\textcal` “medium” and “bold”, with strong stems and thin hairlines. We thus provide a macro to use this series. Using this macro when not using the `frc` family will not work.

```
24 \newenvironment{calseries}{\fontseries{cal}\selectfont}{}

```

We also provide a variant of this macro in the style of `\textbf`:

```
25 \newcommand{\textcal}[1]{\calseries#1}
```

`\ftseries` Another variant is called “fixed-thickness”, it is also a series like “medium” and `\textft` “bold”, but with a constant line thickness. We provide a macro to use this series. As before, using this macro when not using the `frc` family will not work.

```
26 \newenvironment{ftseries}{\fontseries{ft}\selectfont}{}

```

```
27 \newcommand{\textft}[1]{\ftseries#1}
```

`\wideseries` There is a variant with wide inter-letter links, we declare it as a new series called `\textwide` “wide”. This is also specific to French Cursive.

```
28 \newenvironment{wideseries}{\fontseries{w}\selectfont}{}

```

```
29 \newcommand{\textwide}[1]{\wideseries#1}
```

`\acadshape` In the same spirit, we now define a pair of macros for accessing the “academic” `\textacad` shape, the one with integer height ratios between base height, ascenders and descenders. This also will not work with other font families.

```
30 \newenvironment{acadshape}{\fontshape{ac}\selectfont}{}

```

```
31 \newcommand{\textacad}[1]{\acadshape#1}
```

2.3 Workbook lines

The following macro is an experimental mechanism for drawing horizontal lines behind cursive text, in the style of children’s workbooks.



I took this idea from C. Verchery's typeface family Plum. His approach was to create a version (named Seyes) with the lines in them. Although this would be rather trivial to implement with Metafont, it would not work with T_EX, in particular because of its handling of spaces. Therefore my approach is to put the rules using T_EX commands, which also allows, for instance, for changing their color independently of the text.

`\seyesThickness` The default thickness of the rules will be a twentieth of a millimeter, which can be changed by redefining the `\seyesThickness` length:

```
32 \newlength{\seyesThickness}
33 \setlength{\seyesThickness}{0.05mm}
```

`\seyesDefault` The default code for changing colors is contained in `\seyesDefault`, which is empty by default. One can redefine it for instance to `\color{blue}` to make the rules blue.

```
34 \newcommand{\seyesDefault}{}
```

`\seyes` The main macro thus takes the text as argument and behaves as a box with this text in it and the lines behind. The width of the box is the one of the text, while its height and depth are the maximal ones in the font. We actually take reference characters to define the height of each line, so that it works with any font. However the result is strange when not using the academic shape of French Cursive.

```
35 \newsavebox{\seyes@box}
36 \newlength{\seyes@ln}

37 \newcommand{\seyes}[2][\seyesDefault]{%
38   \mbox{%
39     \sbox\seyes@box{#2}%
40     #1%
41     \raisebox{-0.5\seyesThickness}{\mbox{%
42       \rlap{\rule{\wd\seyes@box}{\seyesThickness}}%
43       \settoheight\seyes@ln{a}%
44       \rlap{\rule[\seyes@ln]{\wd\seyes@box}{\seyesThickness}}%
45       \settoheight\seyes@ln{d}%
46       \rlap{\rule[\seyes@ln]{\wd\seyes@box}{\seyesThickness}}%
47       \settoheight\seyes@ln{b}%
48       \rlap{\rule[\seyes@ln]{\wd\seyes@box}{\seyesThickness}}%
49       \settodepth\seyes@ln{p}%
50       \rlap{\rule[-\seyes@ln]{\wd\seyes@box}{\seyesThickness}}%
51       \settodepth\seyes@ln{g}%
52       \rlap{\rule[-\seyes@ln]{\wd\seyes@box}{\seyesThickness}}%
53     }}%
54   \usebox\seyes@box}
```