

Blackletter Typefaces in T1 Encoding*

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September 6, 2005

Abstract

This package `blacklettert1` provides virtual fonts for T1-like variants of the blackletter typefaces published in 1990 by Yannis Haralambous, namely `yfrak`, `yswab` and `ygoth`. Their original encoding is unspecified. Additionally, this package embeds these fonts nicely into L^AT_EX 2_ε's font selection scheme. The structure of this package allows for further blackletter typefaces from other sources to be made usable for L^AT_EX in a similar way, too.

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The documentation driver file

The next bit of code contains the documentation driver file for T_EX, i. e., the file that will produce the documentation you are currently reading. It will be extracted from this file by the `docstrip` program. Since it is the first code in the file one can alternatively process this file directly with L^AT_EX 2_ε to obtain the documentation.

```
1 <*driver>
```

*This file has version number v1.1, last revised 2003/02/17.

```
2 \documentclass{ltxdoc}
3
```

If you comment out the next line, you get a *full* description of this package.

```
4 \OnlyDescription
5
```

Not clean at all, but it works.

```
6 \newlabel{codingscheme}{{??}{??}}
7
8 \setcounter{StandardModuleDepth}{1}
9
10 \usepackage{url}
11 \providecommand*{\url}[1]{\texttt{\mbox{#1}}}
12
13 \usepackage{mathptmx}
14
15 \begin{document}
16   \DocInput{blackletter1.dtx}
17   \PrintChanges
18   \PrintIndex
19 \end{document}
20 \end{driver}
```

1 Introduction

In 1990, Yannis Haralambous published a set of three blackletter typefaces. (Very often, though inaccurately, such typefaces are also called “Gothic” or “old German” typefaces.)

These three fonts are yfrak (Fraktur), yswab (Schwabacher) and ygoth (Textur), and Haralambous made them freely available. They were created using Metafont. Unfortunately, although all three fonts are very nicely drawn and well endowed with ligatures and special symbols, they are produced in a very awkward encoding, making it very inconvenient to use them. Therefore in 1994 Thierry Bouche wrote dcfra, a Metafont font that by and large was a T1 (Cork) encoded re-implementation of Haralambous’ yfrak. Bouche added blacker accents.

His work has three flaws: It only covers yfrak, it is a new font (virtual fonts are preferred if possible) and it doesn’t make use of T_EX’s boundary character feature that was especially designed having blackletter typefaces and old Latin scripts in mind.

2 This package

... provides virtual fonts and a (nearly) T1 encoded Fraktur family that can be used very easily with L^AT_EX. In fact, if you switch to the font by saying

```
\fontfamily{yfrak}\selectfont
```

(no special package is needed, but T1 must be the current encoding) all you still have to do is to break up certain ligatures with `\/` commands. You could even use the same \LaTeX source text for both Fraktur and, say, Times output.

This approach has several advantages:

- Virtual fonts are easy to install and elegantly make use of already installed fonts,
- you don't have to get adjusted to the quite strange input format Haralambous suggested, actually the impact on the source text is (not zero, but) relatively small,
- makes it possible to return to Latin typefaces without further changes,
- makes proper hyphenation in whatever language possible,
- makes spell checkers that can cope with \LaTeX work also for Fraktur texts,
- allows for letterspaced version and
- embeds `yfrak`, `yswab` and `ygoth` nicely in the font selection scheme of \LaTeX .

Additionally, it solves some design flaws of the original fonts:

- `ygoth` is slightly letterspaced.
- The letters `i`, `l` and `fi` of `ygoth` are now correctly positioned within their boxes.
- Many too big and too small letter boxes are adjusted.
- Missing dieresis accent added to `ygoth` and `yfrak`.
- Inter-word space is reduced.

I have to admit one disadvantage of this virtual font approach: Some DVI viewers still can't handle them properly. In this case, please complain to the DVI driver author. At least `dvips` has no problem.

The package bases on a modified version of the T1 encoding, but only unusual slots got a new contents. This T1 variant can be used for other blackletter typefaces, too. See the full documentation of this package for further details.

3 Installation

You can use the already compiled `vf-`, `tfm-` and `fd-`files. Just copy them in directories where \LaTeX and your DVI driver can find them. (Typically where other files with the same respective extension already exist.)

Alternatively you can use the Makefile and give the commands

```
make
make install
```

(At least the latter as root.) This will create fresh versions of the virtual fonts and install them. Please have a look at the Makefile, whether all paths are set as you need them. If you want to compile the fonts, please notice that you need special PL files for yfrak, yswab, ygoth and cmu10. The problem is that they must have set a certain CODINGScheme. See page ?? (this page is unknown if you have set \OnlyDescription) for further details.

Maybe it's necessary to run a program like \TeX 's `texhash` – or something equivalent of your \TeX implementation – after the installation process.

4 Using the fonts

Warning: The original fonts (`.mf` or `.pfb`) must be available for your DVI driver before this package can be used! They are not part of this package.

4.1 Switching to Fraktur

This package doesn't contain a `sty` file that you can include with a `\usepackage` command. If you switch to `yfrak` in the T1 encoding with something like

```
\fontfamily{yfrak}\selectfont
```

you get Fraktur. The `\emph` version will be a neatly letterspaced Fraktur, `\textsl` is Schwabacher. In the preamble you can say

```
\renewcommand{\emph}[1]{\textsl{#1}}
```

and Schwabacher will be the default `\emph` markup, if you prefer that. Bold face is Textur, so that Textur will be used for the headings (standard \TeX behaviour) which is common use.

You can make the Fraktur font selection global for the whole document by saying

```
\renewcommand{\rmdefault}{yfrak}
```

in the preamble.

4.2 Typographic difficulties

A very important point is breaking up ligatures with `\/` or `–` in German texts – with `"|`. Blackletter typefaces have many of them, but at subword boundaries you have to split them up. The German word “austragen” is written in the source as `“aus"|tragen”`, because “aus” is a prefix.

Blackletter typefaces have two lower case “s”: A *round* one, the one we know, and a *long* one, similar of an “f”. In German, the latter has survived as the left part in the ligature “ß”. One must choose the correct form for every occurrence. As a rule of thumb, the round form at the end of the word, the long form everywhere else. \TeX will do that automatically. However, sometimes a round “s” is necessary within a word, at the end of a subword boundary.

From \TeX 's point of view, the letter of “s” within or at the beginning of words is a ligature, too. A typical German case is “aussetzen” that must be input “aus|setzen”. Sometimes you will have to input a $\backslash/$ as in `kafkaes\k`. But there are also English examples: `news\letter` – although Knuth insists on the ligature. ;-)

5 Remarks

The author of this package would like to encourage people to use Fraktur, for small bits of their texts, for special moods or just for aesthetical considerations. Technically speaking, I try to lower the threshold for using these typefaces by making the access a lot easier. They are of course not for everyday texts.

But it's really a pity that many people think that such blackletter typefaces are old use, or connect them with German nationalism, especially the Nazi era. The first is not strictly true (at least not for German speaking regions), the latter is very unfair. Only few people know that the Nazis themselves forbade them in 1941, because they were “Jewish letters” – the ban being as silly as the given reason.

One should consider blackletter typefaces another degree of freedom in the font space. They are not only to revive old texts; in fact, many font foundries produce – albeit only a few – new Fraktur variants.

To non-German authors: Although Fraktur and Schwabacher have been used almost entirely for German texts, there is really no reason to limit it to that. Their parents and sisters, Gothic, Textura, Rotunda, Bastarda etc. have been heavily used for Latin, Italian, French and English. European and American designers have created beautiful Fraktur alphabets. A. Kapr wrote, “Schwabacher and Fraktur are just branches of the Latin script tree, tended by many nations.”

6 Related work

The `fraktur` package by Matthias Muehlich ([FixMe: Link!](#)) is another approach to bring blackletter typefaces to \LaTeX . The main differences are:

- He provides virtual font solutions for many commercial fonts (but not for Haralambous' typefaces).
- He uses another encoding ([FixMe: Name?](#)) which is quite much different from T1. It covers some additional letters and ligatures.

If you want to have a ready-to-run solution for those typefaces (some of which are free for private use), this package will be helpful for you.

Walter Schmidt's `yfonts` package provides a more direct access to Haralambous' fonts, including the initials font `yinitas`. This is especially useful if you want to typeset old texts, with all ligatures and Gutenberg feeling.

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Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in *roman* refer to the code lines where the entry is used.

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<code>\begin</code> 15	<code>\newlabel</code> 6	<code>\setcounter</code> 8
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