LaTeX Support For Dogma Fonts From Emigre Graphics

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Abstract

This package provides LaTeX support for the Dogma Fonts from Emigre Graphics, designed by Zuzana Licko, 1994. It has everything you need to typeset in this font - except the font itself, of course.

Contents

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Table 1: PFB Files

File	Font
`dogmab01.pfb`	Dogma Bold
`dogmab07.pfb`	Dogma Black
`dogmao00.pfb`	Dogma Outline
`dogmsb74.pfb`	Dogma Script Bold

1   Introduction

This package provides support files for the Dogma Font family from Emigre Graphics. According to the Fontname scheme [1] this corresponds to the family `fdg`.

The package is written for the set of fonts currently used by *No Starch Press,* `http://www.nostarch.com`. The copyright statement in the fonts refers to 1994. It is possible that other versions of the fonts have slightly different metrics, and package should be changed to accommodate this. To make this easier, I release the package under BSD-style license. This is even more appropriate since most of the files is generated following the great course [2].

The support is limited to T1 and TS1 encoding. No VTeX support files are included.

2   Installation

First, you need to purchase the fonts themselves: the `pfb` files are *not* included in the package. If you got the fonts from *No Starch press,* do not rename the `pfb` files. However, if there are uppercase letters in your file names, downcase them. If you obtained the files from another source, rename the fonts according to Table 1. If your TeX system is TDS-compliant, install the files into `$TEXMF/fonts/type1/public/dogma`. Download `http://ctan.tug.org/install/fonts/psfonts/emigre/dogma.tds.zip` and unzip this file in `$TEXMF`. Add `+fdg.map` to the configuration files of dvips, pdftex and your dvi previewer.

Install the files `*.fd` and `*.sty` in `$TEXMF/tex/latex/dogma`. and documentation (`*.pdf` and `README`) in `$TEXMF/doc/latex/dogma`.

Run updmap and texhash programs to update the configuration files and file names database.

The style `dogma.sty` provides a number of commands for using the font family (see Section 3)

3   Using LaTeX Style

To use Dogma font, you may just add `\usepackage{dogma}` to your preamble. The package defines a number of font shapes and series, as listed in Table 2. To use them, issue the standard NFSS command, for example

Table 2: Fonts Provided By The Package

Series	Shapes
b (bold)	n (upright), it (script), sl (slanted), sc (small caps), ol (outline)
bk (bold letterspaced 5%)	n (upright)
bq (bold letterspaced 10%)	n (upright)
br (bold letterspaced 20%)	n (upright)
bs (bold letterspaced 30%)	n (upright)
h (heavy)	n (upright), sl (slanted), sc (small caps)

`\fontfamily{fdg}\fontshape{ol}\fontseries{b}\selectfont`

\textdogmabold
\textdogmablack
\textdogmaoutline
\textdogmascript

Additionally, the commands \textdogmabold, \textdogmablack, \textdogmaoutline, \textdogmascript typeset their arguments in the corresponding fonts, for example \textdogmaoutline{Zuzana~Licko}. The standard italics commands inside bold font switch from Dogma Bold to Dogma Script Bold, and inside heavy font switch from Dogma Heavy to Dogma Heavy Slanted.

option
scaled

It is probably not a good idea to use Dogma font in the body of the text. However, if you definitely want to do this, the package dogma provides a parameter for better blending body fonts with Dogma font. If you call the style with the optional parameter scaled=..., the font will be scaled down by the corresponding factor, for example \usepackage[scaled=0.94]{dogma}.

4 Implementation

4.1 Identification

We start with the declaration who we are. Most `.dtx` files put driver code in a separate driver file `.drv`. We roll this code into the main file, and use the pseudo-guard `<gobble>` for it.

```
 1 ⟨style⟩\NeedsTeXFormat{LaTeX2e}
 2 ⟨∗gobble⟩
 3 \ProvidesFile{dogma.dtx}
 4 ⟨/gobble⟩
 5 ⟨style⟩\ProvidesClass{dogma}
 6 ⟨fdg − drv⟩\ProvidesFile{fdg-drv.tex}
 7 ⟨fdg − map⟩\ProvidesFile{fdg-map.tex}
 8 ⟨∗!t1k&!ts1k&!t1q&!ts1q&!t1r&!ts1r&!t1s&!ts1s⟩
 9 [2008/03/20 v1.3 Using Dogma Font From Emigre Graphics in LaTeX]
10 ⟨/!t1k&!ts1k&!t1q&!ts1q&!t1r&!ts1r&!t1s&!ts1s⟩
```

And the driver code:

```
11 ⟨∗gobble⟩
12 \documentclass{ltxdoc}
13 \usepackage{booktabs}
14 \usepackage{url}
15 \usepackage[breaklinks,colorlinks,linkcolor=black,citecolor=black,
16            pagecolor=black,urlcolor=black,hyperindex=false]{hyperref}
17 \PageIndex
18 \CodelineIndex
19 \RecordChanges
20 \EnableCrossrefs
21 \begin{document}
22   \DocInput{dogma.dtx}
23 \end{document}
24 ⟨/gobble⟩
```

4.2 Fontinst Driver

This follows [2].

First, the preamble

```
25 ⟨∗fdg − drv⟩
26 \input fontinst.sty
```

There is no "medium" for Dogma (although `afm` file says that Dogma Black is medium, this is a lie). We use script for italics

```
27 \substitutesilent{m}{bx}
28 \substitutesilent{bx}{b}
29 \setint{smallcapsscale}{750}
30 \setint{slant}{167}
```

kspread   Letterspacing spread 5%

```
31 \setint{kspread}{25}
```

`qspread`   Letterspacing spread 10%

```
32 \setint{qspread}{50}
```

`rspread`   Letterspacing spread 20%

```
33 \setint{rspread}{100}
```

`sspread`   Letterspacing spread 30%

```
34 \setint{sspread}{150}
```

Starting recording transforms:

```
35 \recordtransforms{fdg-rec.tex}
```

A bunch of fonts:

```
36 \transformfont{fdgb8r}{\reencodefont{8r}{\fromafm{dogmab01}}}
37 \transformfont{fdgh8r}{\reencodefont{8r}{\fromafm{dogmab07}}}
38 \transformfont{fdgbl8r}{\reencodefont{8r}{\fromafm{dogmao00}}}
39 \transformfont{fdgbw8r}{\reencodefont{8r}{\fromafm{dogmsb74}}}
```

Outline and script fonts are already slanted. We slant the other two ones.

```
40 \transformfont{fdgbo8r}{\slantfont{\int{slant}}%
41   \reencodefont{8r}{\fromafm{dogmab01}}}
42 \transformfont{fdgho8r}{\slantfont{\int{slant}}%
43   \reencodefont{8r}{\fromafm{dogmab07}}}
```

There is no hook in `fontinst.sty` for writing our own preamble to `.fd` file. However, we need to add scaling commands to the preamble. OK, we will patch fontinst:

```
44 \fontinstcc
45 \def\fd_family#1#2#3{
46   \a_toks{#3}
47   \edef\lowercase_file{\lowercase{
48     \edef\noexpand\lowercase_file{#1#2.fd}}}
49   \lowercase_file
50   \open_out{\lowercase_file}
51   \out_line{\percent_char~Filename:~\lowercase_file}
52   \out_line{\percent_char~Created~by:~tex~\jobname}
53   \out_line{\percent_char~Created~using~fontinst~v\fontinstversion}
54   \out_line{}
55   \out_line{\percent_char~THIS~FILE~SHOULD~BE~PUT~IN~A~TEX~INPUTS~
56     DIRECTORY}
57   \out_line{}
58   \out_line{\string\ProvidesFile{\lowercase_file}}
59   \out_lline{[
60     \the\year/
61     \ifnum10>\month0\fi\the\month/
62     \ifnum10>\day0\fi\the\day\space
63     Fontinst~v\fontinstversion\space
64     font~definitions~for~#1/#2.
65   ]}
66   \out_line{}
```

Here is our patch:

```
67    \out_line{\string\expandafter\string\ifx\string\csname\space
68      Dgm@scale\string\endcsname\string\relax}
69    \out_line{\space\string\let\string\Dgm@@scale\string\@empty}
70    \out_line{\string\else}
71    \out_line{\space\string\edef\string\Dgm@@scale\left_brace_char
72        s*[\string\csname\space Dgm@scale\string\endcsname]
73        \right_brace_char\percent_char}
74    \out_line{\string\fi\percent_char}
75    \out_line{}
```

End of the patch.

```
76    \out_line{\string\DeclareFontFamily{#1}{#2}{\the\a_toks}}
77    {
78      \csname #1-#2\endcsname
79      \out_line{}
80      \let\do_shape=\substitute_shape
81      \csname #1-#2\endcsname
82      \let\do_shape=\remove_shape
83      \csname #1-#2\endcsname
84    }
85    \x_cs\g_let{#1-#2}\x_relax
86    \out_line{}
87    \out_line{\string\endinput}
88    \close_out{Font~definitions}
89 }
90 \normalcc
```

Now we install the fonts. First T1. Note the scaling code (taken from PSNFSS packages).

```
91 \installfonts
92 \installfamily{T1}{fdg}{}
93 \installfont{fdgb8t}{fdgb8r,newlatin}{t1}{T1}{fdg}{b}{n}{
94   <->\string\Dgm@@scale}
95 \installfont{fdgh8t}{fdgh8r,newlatin}{t1}{T1}{fdg}{h}{n}{
96   <->\string\Dgm@@scale}
97 \installfont{fdgbl8t}{fdgbl8r,newlatin}{t1}{T1}{fdg}{b}{ol}{
98   <->\string\Dgm@@scale}
99 \installfont{fdgbw8t}{fdgbw8r,newlatin}{t1}{T1}{fdg}{b}{it}{
100   <->\string\Dgm@@scale}
101 \installfont{fdgbo8t}{fdgbo8r,newlatin}{t1}{T1}{fdg}{b}{sl}{
102   <->\string\Dgm@@scale}
103 \installfont{fdgho8t}{fdgho8r,newlatin}{t1}{T1}{fdg}{h}{sl}{
104   <->\string\Dgm@@scale}
105 \installfont{fdgb8tk}{fdgb8r,newlatin}{t1k}{T1}{fdg}{bk}{n}{
106   <->\string\Dgm@@scale}
107 \installfont{fdgb8tq}{fdgb8r,newlatin}{t1q}{T1}{fdg}{bq}{n}{
108   <->\string\Dgm@@scale}
109 \installfont{fdgb8tr}{fdgb8r,newlatin}{t1r}{T1}{fdg}{br}{n}{
110   <->\string\Dgm@@scale}
```

```
111 \installfont{fdgb8ts}{fdgb8r,newlatin}{t1s}{T1}{fdg}{bs}{n}{
112   <->\string\Dgm@@scale}
113 \installfont{fdgbc8t}{fdgb8r,newlatin}{t1c}{T1}{fdg}{b}{sc}{
114   <->\string\Dgm@@scale}
115 \installfont{fdghc8t}{fdgh8r,newlatin}{t1c}{T1}{fdg}{h}{sc}{
116   <->\string\Dgm@@scale}
117 \endinstallfonts
```

And then TS1

```
118 \installfonts
119 \installfamily{TS1}{fdg}{}
120 \installfont{fdgb8c}{fdgb8r,textcomp}{ts1}{TS1}{fdg}{b}{n}{
121   <->\string\Dgm@@scale}
122 \installfont{fdgh8c}{fdgh8r,textcomp}{ts1}{TS1}{fdg}{h}{n}{
123   <->\string\Dgm@@scale}
124 \installfont{fdgbl8c}{fdgbl8r,textcomp}{ts1}{TS1}{fdg}{b}{ol}{
125   <->\string\Dgm@@scale}
126 \installfont{fdgbw8c}{fdgbw8r,textcomp}{ts1}{TS1}{fdg}{b}{it}{
127   <->\string\Dgm@@scale}
128 \installfont{fdgbo8c}{fdgbo8r,textcomp}{ts1}{TS1}{fdg}{b}{sl}{
129   <->\string\Dgm@@scale}
130 \installfont{fdgho8c}{fdgho8r,textcomp}{ts1}{TS1}{fdg}{h}{sl}{
131   <->\string\Dgm@@scale}
132 \installfont{fdgb8ck}{fdgb8r,textcomp}{ts1k}{TS1}{fdg}{bk}{n}{
133   <->\string\Dgm@@scale}
134 \installfont{fdgb8cq}{fdgb8r,textcomp}{ts1q}{TS1}{fdg}{bq}{n}{
135   <->\string\Dgm@@scale}
136 \installfont{fdgb8cr}{fdgb8r,textcomp}{ts1r}{TS1}{fdg}{br}{n}{
137   <->\string\Dgm@@scale}
138 \installfont{fdgb8cs}{fdgb8r,textcomp}{ts1s}{TS1}{fdg}{bs}{n}{
139   <->\string\Dgm@@scale}
140 \installfontas{fdgb8c}{TS1}{fdg}{b}{sc}{
141   <->\string\Dgm@@scale}
142 \installfontas{fdgh8c}{TS1}{fdg}{h}{sc}{
143   <->\string\Dgm@@scale}
144 \endinstallfonts
```

And the end:

```
145 \endrecordtransforms
146 \bye
147 ⟨/fdg − drv⟩
```

4.3   Letterspacing Driver

This follows [3]. We need both T1 and TS1 files:

```
148 ⟨∗t1k | ts1k | t1q | ts1q | t1r | ts1r | t1s | ts1s⟩
149 \relax
150 \encoding
151 ⟨t1k | ts1k⟩\resetint{letterspacing}{\int{kspread}}
152 ⟨t1q | ts1q⟩\resetint{letterspacing}{\int{qspread}}
```

```
153 ⟨t1r | ts1r⟩\resetint{letterspacing}{\int{rspread}}
154 ⟨t1s | ts1s⟩\resetint{letterspacing}{\int{sspread}}
155 \setcommand\gobblethree#1#2#3{}%
156 \let\ligature=\gobblethree
157 ⟨t1k | t1q | t1r | t1s⟩\inputetx{t1}
158 ⟨ts1k | ts1q | ts1r | ts1s⟩\inputetx{ts1}
159 \endencoding
160 ⟨/t1k | ts1k | t1q | ts1q | t1r | ts1r | t1s | ts1s⟩
```

4.4 Fontmap Generation

This is a standard procedure [2]

```
161 ⟨*fdg − map⟩
162 \input finstmsc.sty
163 \resetstr{PSfontsuffix}{.pfb}
164 \adddriver{dvips}{fdg.map}
165 \input fdg-rec.tex
166 \donedrivers
167 \bye
168 ⟨/fdg − map⟩
```

4.5 Style File

The scaling code is from the `helvet` package:

```
169 ⟨*style⟩
170 \RequirePackage[T1]{fontenc}
171 \RequirePackage{textcomp}
172 \RequirePackage{keyval}
173 \define@key{Dogma}{scaled}[1]{%
174   \def\Dgm@scale{#1}}
175 \def\ProcessOptionsWithKV#1{%
176   \let\@tempc\relax
177   \let\Dgm@tempa\@empty
178   \ifx\@classoptionslist\relax\else
179     \@for\CurrentOption:=\@classoptionslist\do{%
180       \@ifundefined{KV@#1@\CurrentOption}%
181       {}%
182       {%
183         \edef\Dgm@tempa{\Dgm@tempa,\CurrentOption,}%
184         \@expandtwoargs\@removeelement\CurrentOption
185           \@unusedoptionlist\@unusedoptionlist
186       }%
187     }%
188   \fi
189   \edef\Dgm@tempa{%
190     \noexpand\setkeys{#1}{%
191       \Dgm@tempa\@ptionlist{\@currname.\@currext}%
192     }%
193   }%
```

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```
194    \Dgm@tempa
195    \let\CurrentOption\@empty
196 }
197 \ProcessOptionsWithKV{Dogma}
198 \AtEndOfPackage{%
199    \let\@unprocessedoptions\relax
200 }
201 \DeclareTextFontCommand{\dogmabold}{%
202    \fontfamily{fdg}\fontseries{b}\selectfont}
203 \DeclareTextFontCommand{\dogmablack}{%
204    \fontfamily{fdg}\fontseries{h}\selectfont}
205 \DeclareTextFontCommand{\dogmaoutline}{%
206    \fontfamily{fdg}\fontshape{ol}\fontseries{b}\selectfont}
207 \DeclareTextFontCommand{\dogmascript}{%
208    \fontfamily{fdg}\fontshape{it}\selectfont}
209 ⟨/style⟩
```

References

[1] Karl Berry. *Fontname. Filenames For T$_E$X Fonts*, September 2005. `http://ctan.tug.org/tex-archive/info/fontname`.

[2] Philipp Lehman. *The Font Installation Guide*, December 2004. `http://www.ctan.org/tex-archive/info/Type1fonts/fontinstallationguide`.

[3] Alan Hoenig. *T$_E$X Unbound: L^{A}T$_E$X and T$_E$X Strategies for Fonts, Graphics, and More*. Oxford University Press, USA, 1998.

Change History

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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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