

FREE

as in profit

Fonts and the business of software freedom

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“Nothing would please me more than being able to hire ten programmers and deluge the hobby market with good software.”

Bill Gates, 1976

“Creativity can be  
a social contribution  
in so far as society  
is free  
to use the result”

Richard Stallman, 1985

Paid work

Good software

Creativity

Social contribution

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How can I make a  
social contribution?

I have used  
GNU/Linux  
the last 10 years

Lots of things

are proprietary



Lots of things

are still proprietary

Lots of things  
suck

Lots of things  
still suck

Graphics card drivers

suck

Wireless card drivers

suck

Text editors

suck

Fonts

suck





**Obstacles**

Hardware companies'  
secret specifications

**Various  
stale  
laws**

Radio Licensing

Super Copyright

Software Idea Patents

Fonts?

No obstacles

Where are they?

No one else  
was taking care of  
The Problem

I decided to  
“take ownership” of  
The Problem

The Problem

is this:



There are around 20,000  
typefaces in  
myfonts.com

There are around 50  
typefaces in  
Debian

Some of these are

1

man-days of work

Some of these are

365

man-days of work

Some of these are

man-years of work

This is a large  
problem.

*“What is a font?”*

A font is  
a type design  
expressed as software

**Software?  
Fonts aren't  
programs!**



Fonts

are not

programs

Fonts

may be drawn by

programs

Fonts

may contain

programs

Fonts

usually contain

programs

Fonts

usually contain

programs

to control rendering

PostScript

TrueType

OpenType

SVG

METAFONT

PostScript  
+  
TrueType  
=  
OpenType

OpenType



Complex writing systems

are supported in

OpenType

Arabic, Indic, etc

Complex writing systems

“layout features”

a → A      f f f f f f f i → f f f f f f f

Single substitution

Ligature substitution

↪ d d d d d d d d d

Alternate substitution (The 9 'd's of font Zapfino)

झ → ड म      dans → dans

Multiple substitution  
(untied Indian ligature)

Contextual substitution  
(the connecting strokes of 'd' and 's' disappear)

~ ~ ~ ~ ~ ~      ب

Reverse chaining contextual substitution (contextuality of Urdu writing system)

Images from "Fonts & Encodings" p.551 by Yannis Haralambous, 2007

Complex writing systems

“layout features” are

programs

Complex writing systems

“layout features” have

Source Code

Hints

TrueType fonts contain  
“hinting” programs  
to control output  
on-screen

FreeType usually  
ignores hints



FreeType usually  
auto-hints

`Fonts have`  
`Source Code`

# Source code definition

The preferred form of the work  
for making modifications to it

Complete source code means  
all the source code

including

the scripts used to control  
compilation and installation

Freedom

=

Source Code

+

no legal restrictions

legal restrictions?

**Patents**

**Copyrights**

**Trademarks**

Type Designs

Fonts

Names

**Design Rights**

**Copyrights**

**Trademarks**



# Trademarks

Can last forever

Cover 3 characters

# Trademarks

Expire by non-defense

May share 1<sup>st</sup> 2 letters

No person's name

# Type Designs

UK EU USA India Japan ?

# Design Rights

**UK Design Rights**

**Automatic**

**Last 10 years**

**UK Design Rights**

**Registered**

**Last 25 years**

**EU Design Rights**

**Automatic**

**3 years**

**EU Design Rights**

**registered**

**5 years**



**EU Design Rights**

**Reregistered**

**up to 25 years**

US Design Patents

Registered

14 years

Type Designs

Copyright?

# Type Designs

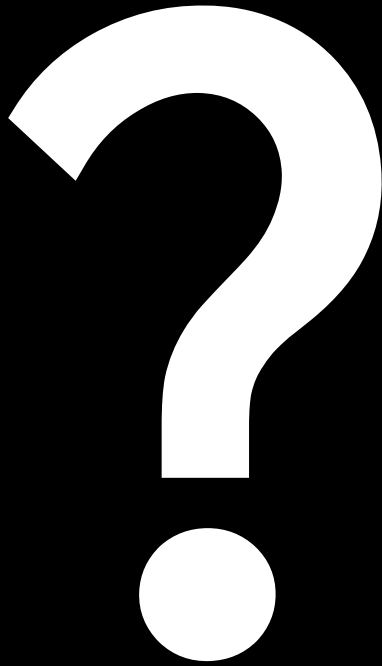
UK 25 years

US ?? years

# Type Designs

UK 25 years

US 0 years



rms

Copyright v Community

3 kinds of works

Function

Art

Statement



Copyright

Art

Patent

Functional

Patent

Type Design

Type Design

functional?

I don't know, why is

Type Design

functional?

**We use them to read with**

**Decoration is inseparable from function**

Functional works

ought to

be free



Software  
ought to  
be free?

Software

ought to

be fixed

Type Designs

ought to

be free

Type Designs

ought to

be fixed

Type Designs

are

broken?

Type Designs

eternally suffer errors

of omission

**Programs**

**have**

**bugs**

Fonts

have

bugs



Type Design

~~Copyright~~

Font software

Copyright

Font software

Literary Copyright

Life + 70 years

Type Designs

Design rights

25 years

Type Designs

public domain after

25 years

**I AM NOT A LAWYER**

**THAT WAS NOT**

**LEGAL ADVICE**

**Type Designers:**

**Real nice,**

**Dave.**

**Cut the crap.**



**How do I get**

**RICH**

**with free software fonts?**

# Step 1

Find someone  
who wants a font

## Step 2

Tell them,

**I Have A Great  
Deal For You!**

Step 2

**I can do it**

**for  $2/3^{\text{rd}}$**

**the normal**

**price**

# Step 2

Don't tell

them the catch

(unless they ask)

# Step 3

Find someone else  
who wants the same thing

## Step 4

Tell them,

**I Have A Great  
Deal For You!**

Step 4

**I can do it**

**for  $2/3^{\text{rd}}$**

**the normal**

**price**



# Step 5

$$66\% + 66\% = 133\%$$

Type design occurs  
with 33% margin

# Step 5

$$15\% \times 10 = 150\%$$

Type design occurs  
with 50% margin

Step 6



**How can I get  
the free fonts  
I want?**

**I'm not a type  
designer!**

# Step 1

Estimate the cost  
of the initial development  
\$A

# Step 2

Estimate the number of people  
who want what you want  
are willing to pay for it

B

# Step 3

Divide \$A by B to make \$C

Times B by 1.5 to make D

# Step 4

Set up a Pledgebank

to pay \$C

if D other people do



Step 5

**Publicise the  
Pledgebank**

# Step 6

Collect the money

# Step 7

Collect the money

Pay type designers

# Step 8

Collect the money

Pay type designers

Type design occurs

**Why would I  
*want***

**free fonts?**

**Why would I  
*want*  
to pay for  
free fonts?**

@font-face

CSS3



Stick URL of font  
in your stylesheet

Browsers grab the font

Browsers use the font

**NB**

**You are distributing**

**the font**

**to every visitor**

**in the world**

: - )

:-)

**DRM**

MSFT



**MSIE**

**EOT**

**EOT + TTF**

MSIE + \*

3<sup>rd</sup> party font services

Downtime

Monthly subscription

...per site

Complex writing systems

**Cultural imperialism**



Fonts

Font?

Typeface implemented in

software

metal

wood

potato

Typeface implemented?

Typeface implemented

pencil + paper

+ HOWTO

Fonts implemented?

Fonts implemented?

[www.inkscape.net](http://www.inkscape.net)

Fonts implemented?

[fontforge.sf.net](http://fontforge.sf.net)



Mse1  
^Mse1  
Mse2  
^Mse2

V E Layer  
X Guide  
X Back  
X Fore

í  
í  
á  
á  
ö  
ö  
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# Spiro Integration

# Python Scripting

```
>>> import fontforge
```

`libfontforge.c`

Open Font Library

[www.openfontlibrary.org](http://www.openfontlibrary.org)

[openfontlibrary.org](https://openfontlibrary.org)

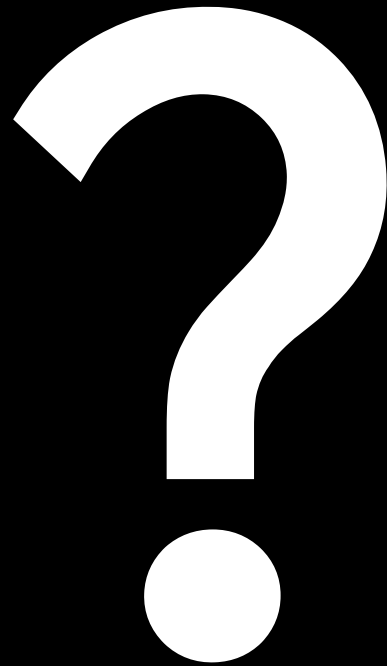


Scarface Method

Guns Money Power Women

Crossland Method

Tools HOWTO Money Fonts



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