# **Typography**

## Typographers' Inn

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## Reversed quotes

I am deeply indebted to the many kind people on the TYPO-L mailing list who responded to my query about 'reversed quotes' and where they came from (see the list archives). It's clear that they do exist as a special feaure in some DTP packages, and that they are used out of a desire for a much misunderstood 'symmetry'.

I still think they are an unnecessary and pointless device, but like the misplaced apostrophe, probably impossible to stop. When I become dictator of the planet I'll be able to act on this: until then I trust in your judgment to point out the evils of reversed quotes to anyone who uses them.

#### Vulcan

This package, for which I presented a development report in Vancouver, has been having deep surgery. In the months between the start of work and the TUG meeting, half a dozen other packages were announced or upgraded which tackled—individually—several of the tasks vulcan was designed to deal with.

This is a twofold boost: it means that at least some other folk in the world thought seriously enough of the problems to want to solve them themselves; and it means we can now ditch our half-written or wholly-written patches and just \RequirePackage the relevant tools: an unintentional triumph of modular development! On the downside it means unravelling the developmental code and checking that none of it affects other parts.

All of which is by way of excusing the late non-appearance of the package on CTAN. The comments I got in Vancouver have led to a fairly deep-seated rethink of the way metadata was being handled in the titling—being one of the biggest parts of the package—and it's now being redone in a much more modular fashion.

WinWord Among the package options for vulcan which didn't get much of a mention in Vancouver there suddenly appeared a new one last April 1st:

winword. This is something I had threatened to do quite separately a couple of years ago, and which I mentioned on comp.text.tex at some stage, but I hadn't expected a colleague to ask about it on that particular day.

After some discussion in Vancouver I decided to make this objectionable little item into a package. It invokes something akin to pslatex with the resizing of Helvetica and Courier to match the Times x-height; it implement the most basic built-in styles of normal.dot, including the wonky spacing on lists and the horrible superior ordinals; and it turns off hyphenation and justification. For good measure it reintroduces the notorious bug in the vertical spacing of the first lines of paragraphs, which you probably thought you'd seen the last of.

The net effect is to allow LATEX users to continue to manage their documents with LATEX, but to generate printout and PDF files that look exactly like all the other junk that comes out of wordprocessors. As I mentioned before, it was originally intended to help a former colleague who was trying to introduce LATEX by stealth in his organisation, and needed a temporary cover to avoid being the odd one out at meetings who submitted documents with 'that TEX look' (incidentally another of the reasons for the origins of vulcan).

This way, management would remain unaware that he was subversively ferretting LATEX into the company, because his documents looked like everyone else's, but he could still reformat into a better style at some future date simply by replacing the \usepackage command.

So far I have used it for short reports and similar office documents which I circulate as PDF files (my refusal to send or accept *Word* attachments is notorious), and no-one has raised an eyebrow as they presumably believe it to have been done in *Word*.

## An academic 'How-To'

As part of a new drive to make life easier for postgraduates doing theses and academics writing articles and books in my institution, I have been concocting a document on how to use IATEX for academic writing. This is intended as an introductory text to complement The Not So Short Introduction to IATEX  $2\varepsilon$  [1], which is excellent for users in mathematics and the natural sciences but covers too much technical ground for users in the humanities, which is an area of expansion for IATEX right now. I have new thesis and letter style files to go with it (actually vulcan partly grew out of the need to do this, too).

 $<sup>^{\</sup>rm 1}$  And on other important matters like the abolition of brussels sprouts, accountants (with a few honorable exceptions), and line dancing.

However, there are two major holdups: *a*) the chapter on fonts needs detailed samples to go with instructions on how to get additional fonts working; and *b*) the chapter on cross-references needs a usable set of routines and macros for humanities-style bibliographic citations.

'Free' fonts The font sampler is close to finished, as recent readers of comp.text.tex may have noticed from my occasional grumps about fonts which are supposed to work but don't. On one side of the page I have listed the common everyday typefaces that by now (I hope) come with every LATEX/dvips installation. On the other side I list most (perhaps not all) the other free fonts that are on CTAN, mostly in METAFONT format. I exclude any for which outlines or bitmaps are not freely available.

- Computer Modern with all its common variants (including Dunhill and Fibonacci but excluding Funny Font, for example).
- the ten typefaces representing the Adobe original 'LaserWriter 35', shrinking Avant Garde and growing Chancery a little in order to compensate for the widely differing x-heights. It's surprising how much this difference otherwise obtrudes when you stick all the examples close together like this. The alternative (leaving the 10pt samples as they are) is more 'correct' but in these circumstances would lead to more questions being asked before the reader is equipped to deal with them.
- the X Consortium members' fonts (Utopia, Charter, Nimbus, Antiqua, and Grotesk). On my system (Red Hat Linux, using the default TEX package to which I have of course added hugely over time) all these were broken as installed, even Charter. In all cases the dvips entry was for a PFA file and an encoding which didn't exist, which in most cases didn't match the .fd file created by fontinst, not did it match the .tfm and .vf files. I don't know how this happened, but I'm glad I found it before the users did.
- the METAFONT fonts Pandora, Universal, and Concrete. I'd like to include more METAFONT text faces but space on one side of A4 is limited.
- In at the bottom come examples of Concrete and Euler math, done as EPS file because I haven't figured out how to have three different

math encodings available in one file, nor am I sure I want to.

I have used the phrase 'Typographia Ars Artium Omnium Conservatrix' for the samples on this page, rather than strict alphabets, but for the other typefaces, a quotation relevant to their usage domain would be appropriate (so I'm open to suggestions for a phrase to illustrate Punk, for example).

On the other side comes the fun, therefore. I'm not fond of pigeon-holing typefaces for purposes of usage beyond simple classifications like serif and sans-serif. For typographic taxonomy, of course, there are many useful ways of highlighting the differences, but they would be inappropriate in a document aimed at beginners. I have settled for dividing what is available into 'collections', bearing in mind that scholars approaching the use of LATEX are likely to be most interested in what is useful for their field. The classification is not quite arbitrary but it will do until I find something better, and it's incomplete because as I write I'm still working through CTAN...

Germanic Yannis Haralambous' elegant Fraktur, Schwabacher, Gothic, and Decorative Initials all worked fine, as I would have expected, and I've pinched a bit of Goethe and a bit of Caxton for the sample text.

Historical Ditto Peter Wilson's fine archaic fonts, for which he has kindly updated the Ugaritic (cuneiform). I've added the sean-chló (old Irish) EIAD font in this collection, along with Rustic, Bard, Uncial, and Ogham. These required some surgery to the .fd and .mf files, which was one of my chief problems, not being well versed in METAFONT. I even added Tengwar, which I managed to coax into action some years ago, with some homebrewed macros which let me typeset a readable transliteration of 'Ash nazg durbatulûk...'.

Symbols The problems start when you try to use the symbol fonts like chess, backgammon, astronomical signs, cartography symbols, the BB dingbats, etc. Many of these fonts were designed for use with plain TeX which loads fonts slightly differently from LATeX. Because I was being a good little boy and using or writing .fd files for each font, they were being loaded at an explicit 10pt regardless of whether or not the METAFONT code specified 10pt. As METAFONT's default design size is 128pt I was getting microscopically small characters, and no amount of fiddling with the METAFONT code

<sup>&</sup>lt;sup>2</sup> Without showing variants, just mentioning they exist — this is not for typographers: if readers haven't grasped by this stage that italics slope to the right and that bold is blacker and heavier than roman then I need to hear from them.

<sup>&</sup>lt;sup>3</sup> 'Printing, the art which preserves all others'

## Additional free fonts for use with LATEX

The Historical Collection

 $V_1 \times V_2 \times V_3 \times V_4 \times V_4$ Cypriot

Éireannach Híl aon tinteán man do tinteán réin

**Etruscan** XIPTAPERO MYIMMO MAILLY EFFOLT

Linear 'B' 

+1014<18| < >4W >4+| M OMM| M OMW=4Y<+4| Phoenician 11K8XRMKHIM MRH MRTINM 8HINM 8HHMRMTRIY Runic

IYPOGRAPHIA ARS ARIIUM OMNIUM CONSERVAIRIX Rustic

Bard

Typographia ars artium Omnium Conservatrix Uncial

Quenya

**Ogham** 

**Ugaritic Cuneiform** 

The Symbol Collection

Chess

**Backgammon** 



**Astronomical** 

ο ξ ς δ δ μ η δ Ψ Ρ C γ S χ Θ Ω πρ Δ π. វ σ ∞ χ

**IPA** αβεδεφγιμικλημο?? ([θυυιχίσα αβεδεφγιμικλημο?? ([θυυιμχίσα

Cartography **BB** Dingbats

The Germanic Collection

Fraktur Alles Bergängliche ift nur ein Gleichnif / Das Unzulängliche hier wird's Ereignis;

Das Unbeschreibliche hier wird's getan / Das Ewig-Weibliche zieht uns hinan! Schwabacher

'Gothic' It it plele ony man lpirituel or temporel to bye any pyes of two and thre comemoraciós

**Decorative Initials** 

seemed to fix it. The principal fix was pointed out by several people: add font\_size 10pt#; to the mode\_setup and make sure it is typed without an equals sign. It finally dawned on me that I was still using the .tfm files that I copied from a CD-ROM, when it was suggested I chould check the .tfms with tftopl, and sure enough, they still bore the 128pt design size. Removing the files and letting the system regenerate them was enough: suddenly everything came to life.

Once I've finished the sampler I'll post the fixes needed, as well as the source. I need to get it to the stage where a user can invoke a package and know that the characters needed will be available, and will resize to the current context. One of the distinctions in using these packages is between 'conventional' fonts, which are assumed to be something you want as your body copy (so for example the pslatex package installs Times, Helvetica, and Courier in place of the CM defaults); and 'incidental' fonts (with Runic, for example, it is assumed the user does not want to try and typeset the entire article in runes, but just use the characters in examples).

Bibliographics Humanities bibliographic styles are significantly different from those used in the natural sciences. I mentioned what I wanted some while ago (in-footnote citations with author, title, year, and page range; with full citations unnumbered at the end). I couldn't find any package to do them, but I was pointed at camel. This is a prototype for doing a huge amount of stuff with citations, and looked very useful. It implements legal citations as well as appearing to handle most of what I wanted, but at the time it was alpha software and it conflicted with a number of other things I was trying to do.

After a recent brief but understandable diversion to investigate the interestingly named humanbio (which turned out to be nothing whatever to do with the humanities, but a package to format references for the journal Human Biology), I have ended up writing a spec for what is needed, and I guess I'll go hunting for someone who can program .bst files.

### References

[1] Tobias Oetiker, Hubert Partl, Irena Hyna, and Elisabeth Schlegl. The Not So Short Introduction to IΔTEX 2ε. Technical report, CTAN, http://www.tex.ac.uk/tex-archive/ info/lshort/english, Feb 2000. Web document.

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