Egkatastash ths Ellhnikhs Epiloghs toy Babel gia LaTeX

ProkophsProkopidhs

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Ayto to keimeno perigrafei th diadikasia egkatastashs ths Ellhnikhs epiloghs toy babel, enos paketoy gia thn epejergasia polyglwssikwn keimenwn me to LaTeX.

Contents

1 Aparaithta Arxeia

Ypo8etoyme oti mporeite na grafete Ellhnika sto susthma sas. Epishs oti exete mia swsta egkatesthmenh ekdosh toy LaTeX, mporeite na paragagete p.x. Agglika keimena xrhsimopoiwntas to kai na ta deite me to Xdvi h to ghostview. An kati apo ta parapanw den isxuei, prin na synexisete, mporeite na diabaste ta ejhs keimena:

`<http://www.hellug.gr/gr/howto/howto/pub/html/Hellenic-HOWTO.html>` `<http://linux.forthnet.gr/LDP/HOWTO/TeTeX-HOWTO.html>`

Ypo8etoyme telos oti 8a exete thn koinh logikh na parete antigrafa twn arxeiwn poy 8a metatrecete kata th diadikasia ths egkatastashs.

To (La)TeX toy paradeigmatos mas sth8hke se ena PC apo to Red Hat 5.2 kata thn egkatastash oloy toy Linux. Se periptwsh poy h diar8rwsh toy TeX katalogoy einai diaforetikh sto susthma sas, mporeite na breite ta arxeia poy perigrafontai parakatw xrhsimopoiwntas tis entoles `locate` kai `find`. Gia paradeigma, mporoume na doume pou topo8etoun tis grammatoseires duo diaforetikes ekdoseis toy teTeX, ths dianomhs dhladh poy periexei ta TeX, LaTeX, BibTeX, makeindex, k.l.p, analoga me thn ekdosh toy Red Hat.

```
RedHat 5.2:  tetex-0.9-6 /usr/share/texmf/fonts/

RedHat 5.1:  tetex-0.4pl8-11 /usr/lib/texmf/texmf/fonts/
```

Ginete loipon root sto susthma sas kai katebaste to arxeio

`<ftp://obelix.ee.duth.gr/pub/TeX/TeXgreek.tar.gz>`

Shmeiwnoyme edw oti sto `<ftp://obelix.ee.duth.gr/pub/TeX/>` yparxei kai ena RPM paketo me thn Ellhnikh epilogh. An exete th dynatothta egkatastashs RPM paketwn, mporeite na to katebasete kai na to egkatasthsete opws opoiodhpote allo RPM. Se anti8eth periptwsh, synexiste me tis odhgies poy akoloy8oun gia na sthsete thn Ellhnikh epilogh apo to tar.gz arxeio.

Ena kalo shmeio na topo8ethsete ayto to arxeio sto disko sas einai to `/usr/local/src`. Otan to aposympiesete dinontas

```
tar xvfz TeXgreek.tar.gz
```

h

```
gunzip TeXgreek.tar.gz | tar xvf -
```

8a dhmioyrgh8ei enas katalogos `Texgreek` me thn ejhs domh:

```
Texgreek---
            | -- BibTeX
            | -- babel
            | -- doc
            | -- hyphenation
            | -- iso8858-7
            | -- mf
            | -- misc
            | -- mkindex
            | -- tests
            | -- tfm
```

Proairetika mporeite na katebasete to `greek-mode.el` (apo to `<http://www.ics.forth.gr/~sarantos/>`), dhladh thn Ellhnikh epilogh gia ton Emacs poy egrace o Sarantos Kapidakhs. Proairetika epishs mporeite na sthsete to LyX, poy 8a to katebasete se tar.gz morfh apo to `<ftp://ftp.lyx.org/pub/lyx/lyx-current.tar.gz>`

Leptomereies gi' ayta ta duo programmata sto telos toy ar8roy.

2 To Basiko Meros toy babel.

Ontas ston katalogo `Texgreek` phgainete prwta ston ypokatalogo `babel` gia na egkatasthsete to basiko paketo.

Prwta "trejte" me to LaTeX to arxeio `greek.ins`

```
cd ../babel/
latex greek.ins
```

8a dhmioyrgh8oun ta ejhs arxeia

```
greek.ldf
athnum.sty
grmath.sty
lgrenc.def
lgrcmr.fd
lgrcmro.fd
lgrcmtt.fd
lgrcmss.fd
lgrlcmtt.fd
lgrlcmss.fd
```

Antigracte ta arxeia `lgr*fd`, to `lgrenc.def`, kai to `greek.ldf` ston basiko katalogo toy babel.

```
cp lg*.fd /usr/share/texmf/tex/generic/babel/
cp lgrenc.def /usr/share/texmf/tex/generic/babel/
cp greek.ldf /usr/share/texmf/tex/generic/babel/
```

2.1 grtools: athnum.sty kai grmath.sty

Pername twra sta arxeia `athnum.sty` kai `grmath.sty`. Ta teleytaia "pros8etoyn epipleon leitoyrgikothta sthn ellhnikh epilogh" sumfwna me to `<http://magaz.hellug.gr/1998/04/babel-4.html>` opoy kai 8a breite perissoteres plhrofories gia th xrhsh toys. Gia na ta egkatasthsete,

```
mkdir /usr/share/texmf/tex/latex/grtools
cp athnum.sty /usr/share/texmf/tex/latex/grtools
cp grmath.sty /usr/share/texmf/tex/latex/grtools
```

2.2 iso-8859-7

Akoloy8ei h egkatastash toy `iso8858-7.def` wste na mh xreiazetai na grafoyme se greeklish kai to TeX na katalabainei ta Ellhnika mas keimena.

```
cd ../iso8858-7/
cp iso-8859-7.def /usr/share/texmf/tex/latex/base/
```

Pleon, otan 8a exoyme oloklhrwsei thn egkatastash, 8a mporoume na grafoyme Ellhniko LaTeX se opoiondhpote editor, me thn proupo8esh na yparxoyn prin apo to keimeno mas, dhladh prin apo thn entolh `\begin{document}`, oi parakatw grammes

```
\usepackage[greek]{babel}
\usepackage[iso-8859-7]{inputenc}
```

An den xrhsimopoih8ei ayto to arxeio, 8a prepei na plhktrologoume to keimeno mas kapws etsi ...

```
mia dokimastik'h gramm'h
```

... pragma poy kaneis mallon de 8elei. To apotelesma pantws 8a einai to idio kai stis duo periptwseis. 8ymizoyme oti gia na exete Ellhniko kai jeno keimeno sto idio arxeio, 8a prepei na akoloy8hsete tis odhgies sto `<http://magaz.hellug.gr/1998/04/babel-3.html>` h sta arxeia toy ypokatalogoy `doc` toy `Texgreek`.

3 Bibliografiko Styl kai Ellhnikos Syllabismos

Phgainete prwta ston katalogo `bibtex` gia na egkatasthsete to Ellhniko bibliografiko styl.

```
cd ../BibTeX
cp hellas.bst /usr/share/texmf/bibtex/bst/base/
```

Parempiptontws, ena euxrhsto programma gia th dhmioyrgia kai th diaxeirish ths bibliografias sas mesa sta X einai to bibview. Doyleuei mia xara kai me ta Ellhnika. Mporeite na to katebasete se RPM apo to <http://rufus.w3.org/linux/RPM/dld/5.4/i386/RPMS/i386/bibview-2.2-1.i386.html> h se tar.gz apo to <ftp://ftp.ntua.gr/mirror/ctan/biblio/bibtex/utils/bibview-2.0/bibview-2.2.tar.gz>.

Akoloy8oun ta arxeia gia ton Ellhniko syllabismo. To arxeio `grdfhyphen.tex` apotelei beltiwsh toy `grhyph.tex`. Antigracte kai ta duo ston idio katalogo.

```
cd ../hyphenation/
cp grhyph.tex /usr/share/texmf/tex/generic/hyphen/
cp grdfhyph.tex /usr/share/texmf/tex/generic/hyphen/
```

To `/usr/share/texmf/tex/generic/config/language.dat` einai allo ena arxeio poy prepei na "peirajoyme". Anoijte to se enan editor kai pros8este tis parakatw grammes ston katalogo me tis glwsses poy 8a deite:

```
%greek   grhyph.tex
greek   grdfhyph.tex
```

An dhladh 8elete na xrhsimopoihsete to `grdfhyph.tex` gia to syllabismo balte to `grhyph.tex` se sxolio. Kai to antistrofo. Protimhste to `grdfhyph.tex` afou to allo paroysiazei problhmata kata thn egkatastash, toylaxiston sto `TeXGreek.tar.gz`, ekdosh Septembrioy 1999.

Epishs, ston katalogo `mkindex` yparxoyn plhrofories gia to pws proetoimazetai ena Ellhniko eyrethrio, se synergasia me to makeindex.

4 Grammatoseires

4.1 mf

Oi grammatoseires arkei na mpoune kapoy poy to TeX caxnei gia tetoioy eidoys arxeia. Sto paradeigma poy akoloy8ei, dhmioyrgeitai enas katalogos `cbgreek` gia tis grammatoseires poy erxontai me to paketo.

```
cd ../mf
mkdir /usr/share/texmf/fonts/source/public/cbgreek/
cp *.mf  /usr/share/texmf/fonts/source/public/cbgreek/
```

4.2 tfm

Antistoixa gia ta `*.tfm` arxeia poy perigrafoyn tis diastaseis twn xarakthrwn ths ka8e grammatoseiras.

```
cd ../tfm
mkdir /usr/share/texmf/fonts/tfm/public/cbgreek/
cp *.tfm /usr/share/texmf/fonts/tfm/public/cbgreek/
```

4.3 special.map

Telos 8a prepei na pros8esete me enan editor tis grammes apo to arxeio `special.map`, poy brisketai ston katalogo `misc`, sto arxeio `/usr/share/texmf/fontname/special.map`. To arxeio ayto afora thn 8esh twn `*.pk` arxeiwn, poy einai ypeu8yna gia th morfh twn xarakthrwn.

5 Telikes Ry8miseis

Enhmerwste to TeX gia tis allages poy kanate me thn entolh:

```
texhash
```

Dhmioyrghste to kainourgio arxeio formas gia to LaTeX me thn entolh:

```
cd /tmp
initex latex.ltx
```

Meta apo ena katebato mhnymatwn toy TeX, 8a exete ena arxeio `latex.fmt` poy 8a metaferete sto swsto shmeio:

```
mv latex.fmt /usr/share/texmf/web2c/
```

To neo sas LaTeX me thn Ellhnikh epilogh toy babel einai etoimo. Ston ypokatalogo `doc` 8a breite odhgies gia th xrhsh toy paketoy.

Gia na to dokimasete, phgainete pisw ston katalogo `Texgreek` kai

```
cd babel
latex test2
```

An ola phgan kala, mporeite na deite to `test2.dvi` poy 8a parax8ei, me toys gnwstous tropoys (Xdvi, Kdvi) h na to metatrecete se postscript me to dvips kai na to ejetasete me to ghostview.

6 Editors gia to LaTeX kai h Xrhsh twn Ellhnikwn

Sto PC toy paradeigmatos gia allagh plhktrologioy xrhsimopoieitai to grkbd toy Giannh Tsakirh. Odhgies xrhshs gia to grkbd sto idio to paketo poy 8a to katebasete apo to `<ftp://argeas.cs-net.gr/pub/unix/linux/GREEK/>`.

8ymizoyme jana edw oti den arkei h allagh plhktrologioy gia na katalabei ta Ellhnika to LaTeX. 8a prepei na dhlwnete thn allagh glwssas me tis TeX entoles opws aytes perigrafontai sta arxeia toy ypokatalogoy `doc` toy `Texgreek`.

6.1 Emacs

Ston Emacs, yparxei h dynatothta Ellhnikwn kai me ena eidiko mode gia ton Emacs, to `greek-mode.el`. Einai protimotero giati, ka8ws einai ftiagmeno eidika gia ton Emacs, katalabainei pote plhktrologeite entolh toy LaTeX kai gyrizei aytomata to plhktrologio sta Agglika.

Gia na to sthsete kanete ta ejhs. Afou fortwsete ston Emacs to arxeio `greek-mode.el` 8a prepei na to metaglwttisete dinontas `Alt-x byte-compile-file` kai na swsete to arxeio `greek-mode.elc` poy 8a proku-cei, ston katalogo, p.x., `/usr/lib/emacs/site-lisp/`. Katopin, pros8este sto arxeio .emacs poy exete ston proswpiko sas katalogo thn parakatw grammh:

```
(load "/usr/lib/emacs/site-lisp/greek-mode.elc")
```

Telos trejte ton Emacs me kapoia ellhnikh grammatoseira h akomh kalutera dhmioyrghste ena script me onoma p.x. gremacs poy 8a periexei kati san to parakatw kai 8a to trexete ka8e fora poy 8a 8elete ton Emacs me Ellhnika.

```
#! /bin/sh
# gremacs

emacs -fn -etl-fixed-medium-r-normal--0-0-100-100-c-0-iso8859-7
```

Meta apo ola ayta ta fobera kai tromera 8a mporeite na grafete Ellhnika keimena, LaTeX kai mh, ston Emacs. H allagh toy plhktrologioy 8a ginetai me `alt-g`. Ajizei ton kopo, mia kai o Emacs prosferei ena polu euxrhsto periballon gia th syggrafh keimenwn se (La)TeX, to TeX mode. Ayto perilambanei elegxo twn entolwn, diaforetiko xrwmatismo gia tis entoles kai to kyriws keimeno k.l.p.

6.2 LyX

Gia na gracete ellhnika sto LyX, 8a prepei na pate sto menu `Screen Options` kai na allajete to pedio `font-norm` apo `iso8859-1` se `iso8859-7`. Efoson exete sthsei to grkbd, me `alt-shift` 8a mporeite na grafete ellhnika. 8a exete ena sxedon WYSIWYG editor poy 8a sas boh8hsei arketa sto na gracete keimena gia to LaTeX. Sigoyra omws, otan 8a 8elhsete kati pio periploko, 8a xreiastei na xrhsimopoihsete kwdika LaTeX. To LyX parexei th dynatothta proepiskophshs toy keimenoy sas se dvi h postscript morfh, copy paste kai polla alla. Einai mia efarmogh poy synexws ejelissetai me kainourgies ekdoseis, me o,ti ayto synepagetai.

7 Eyxaristies

Eyxaristoume ton Antwnh Tsolomith gia th boh8eia kai tis plhrofories sxetika me ton Emacs kai to LyX.