# GlossTEX 0.4 Volkan Yavuz\* 1997/12/13

#### Abstract

GlossT<sub>E</sub>X is a tool for the preparation of glossaries, lists of acronyms or sorted lists in general. It greatly simplifies this task. One or more glossary-definition files serve as databases which contain descriptions of terms. These terms are identified through labels. Based upon labels set into the T<sub>E</sub>X-source, GlossT<sub>E</sub>X determines which entries have to appear in the typeset list. GlossT<sub>E</sub>X uses MAKEINDEX for the sorting of the lists. References to the place where a term appears in the text can be set in the list. A term consists of a label which is used to identify it, an optional item describing the typeset output, an optional long-form and the actual text representing it. There are many ways to access each of these fields within the document. It is also possible to generate cross-references to another term. GlossT<sub>E</sub>X is well customizable in respect to the produced output.

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### List of Acronyms

ASCII	American Standard Code for Information Interchange acter encoding. See also EBCDIC.	A char-
EBCDIC	Extended Binary Coded Decimals Interchange Code ter encoding exclusively used on mainframes. See also	

### 1 Introduction

#### 1.1 Purpose

GlossTEX is a tool for the automatic preparation of glossaries, lists of acronyms, nomenclature and sorted lists in general. Based upon the labels set into the TEX-source, GlossTEX determines which entries from a glossary-definition file have to be processed to generate the list. GlossTEX then creates an intermediate file that has to be processed by MAKEINDEX for sorting. The output of MAKEINDEX is then included into the TEX-source for typesetting. With each term associated is an item representing the typeset output, an optional long-form if it's an acronym and an optional descriptive text. These elements can all be accessed within the document in many ways.

#### 1.2 History

I created GlossTEX because there were no tools for the preparation of glossaries that fit my needs. GlossTEX is mainly a combination of the features of the packages acronym, nomencl and GloTEX. The commands starting with \ac are taken more or less directly from acronym and the way GlossTEX handles page references is almost identical to the way nomencl does. The use of glossary databases is inspired by GloTEX.

#### 1.3 Legalise

 $GlossT_EX$  is provided "as is" and comes with absolutely no warranty. It is covered by the GNU General Public License (see the file COPYING that comes with this package).

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### 2 Building and Installation

First, you need to build glosstex from its C sources. Note that you need an ANSI C compiler. If you have MAKE and a decent OS (speak UNIX), typing make from the shell should build the binary (have a look at the various makefiles, namely Makefile (which is my rather complex development version that may not run on your system setup), Makefile.unx (which is the most generic one) and Makefile.os2). Also have a look at the start of the makefiles where you will find some variables to be customized. The most important ones may be CC and SHELL. You may also want to have a look at config.h.

If you don't have MAKE get it right now or just issue these commands:

```
cc -c database.c -o database.o
cc -c error.c -o error.o
cc -c labels.c -o labels.o
cc -c list.c -o list.o
cc -c main.c -o main.o
cc -c version.c -o version.o
cc database.o error.o labels.o list.o main.o version.o -o glosstex
```

Now just move the resulting binary to a directory where your other binaries live. After that you need to unpack glosstex.dtx. Do this by invoking

#### latex glosstex.ins

which will produce some more files. You will have to move them to their proper places according to your particular  $T_EX$ -installation. The instructions that will appear on the screen should give you a good start.

#### 2.1 A Goodie for teT<sub>E</sub>X User

If you are using THOMAS ESSER's fantastic teTEX system, GlossTEX has some good news for you. GlossTEX comes with a kpathsea shell-wrapper which supports path searching. For this to work, rename glosstex to glosstex.bin and glosstex.sh to glosstex. Put them somewhere convenient. Now add a line of the form

```
GDFINPUTS = $KPSE_DOT:$TEXMFS/glosstex//
```

in you texmf.cnf file. That's it!

If you get problems, the following notes may help you. First check whether

```
kpsetool -v -n glosstex '$GDFINPUTS'
```

and

kpsetool -v -n tex '\$GDFINPUTS'

do what you want, i.e. their output should be equal. These won't find your teTEX texmf tree (where your texmf.cnf file lives) if glosstex is not in something like teTeX/bin or teTeX/bin/i386-linux. In these cases, replace

TETEXDIR = \$SELFAUTOPARENT

in texmf.cnf with something like

TETEXDIR = /usr/local/lib/teTeX.

This makes sure that the proper texmf tree is found, even if glosstex is not in the teT<sub>F</sub>X texmf tree but in your local texmf tree.

You also need symbolic links from e.g. /usr/local/lib/localTeX/texmf.cnf to your teT<sub>E</sub>X texmf.cnf. This is because kpathsea looks for texmf.cnf in the tree where the binary was found.

These instructions should apply to teTEX version 0.4 or newer.

### 3 Usage

The LATEX-macros needed by GlossTEX have to be included into the source using

 $\ensuremath{\mathsf{usepackage}}[{\operatorname{options}}]]{glosstex}$ 

Valid  $\langle options \rangle$  are listed in table 1.

Option	Discussed in section
refpage, norefpage	3.3
<i>itemfirst</i> , longfirst	3.4.1
text, footnote	3.4.2
roundparen, squareparen	3.4.3

Table 1: Package options. Defaults are set in *italics*.

\glosstex

Whenever you want a term to appear in the glossary, you insert

 $\[(\langle list \rangle)][[\langle pageref-mode \rangle]]{\langle label \rangle}$ 

into the text.  $\langle label \rangle$  references the entry and the optional arguments  $\langle pageref-mode \rangle$  and  $\langle list \rangle$  determine the mode for page references<sup>1</sup> and the list the referenced term should appear in.

But you can create *n* independent lists and make each  $\langle label \rangle$  appear in any  $\langle list \rangle$ , each appearance independent of the other ones. To facilitate the creation of multiple  $\langle list \rangle$ s and especially make it easy to achieve the most likely usage, there are actually two sets of commands. One set starting with \gl defaults to  $\langle list \rangle$  glo (which stands for glossary) and  $\langle pageref-mode \rangle$  p, the other set starting with \ac defaults to  $\langle list \rangle$  acr (list of acronyms) and  $\langle pageref-mode \rangle$  n. The following is the equivalent to \glosstex for acronyms:

\acronym

 $\mbox{acronym[(\langle list \rangle)][[\langle pageref-mode \rangle]]}{\langle label \rangle}$ 

These two commands can also be called as  $glosstex{*}$  and  $acronym{*}$  to include all terms found in the .gdf-files into the corresponding  $\langle list \rangle$ . This

<sup>&</sup>lt;sup>1</sup>Page references are described in section 3.3. (*pageref-mode*) works in conjunction with the optional arguments refpage and norefpage to the package and defaults to p.  $\langle list \rangle$  defaults to glo.

is similar to the command Nocite in  $BiBT_EX$  and is primarily meant for debugging purposes. But do *not* use something like gls (see below).

There is another set of commands that produce both an entry in the list (this is optional) and typeset output.

\gls \gls\*

\acf\*

 $\sls[*][(\langle list \rangle)][[\langle pageref-mode \rangle]]{\langle label \rangle}$ 

\gls typesets  $\langle item \rangle$  and produces a list entry ( $\langle list \rangle$  defaults to glo). The starred version \gls\* just produces typeset output without a list-entry.<sup>2</sup>

\ac	
\ac*	$\int dx = \frac{1}{2} \int \frac{1}{2} \frac{1}{2} \frac{1}{2} \int \frac{1}{2} \int \frac{1}{2} \int \frac{1}{2} \frac{1}{2} \int \frac{1}{2} \int$
\acs	$ \sum_{i=1}^{n}  \langle lparen \rangle, \langle rparen \rangle,  [\langle (form) \rangle] [(\langle list \rangle)] [[\langle pageref-mode \rangle]] \{\langle label \rangle\} $
\acs*	$\ \left[ \left( \left( list \right) \right) \right] \left[ \left( pageref-mode \right) \right] \left\{ \left( list \right) \right\} \right]$
\acl	$ \sum_{i=1}^{                                    $
\acl*	$\label{eq:label} \label{label} \labell} \label{label} \label{label} \label{label} \l$
\acf	These all produce typeset output. $\acs$ typesets $(item)$ , $\acl$ typesets

These all produce typeset output.  $\acs$  typesets  $\langle item \rangle$ ,  $\acl$  typesets  $\langle long-form \rangle$  and  $\acf$  typesets  $\langle full \rangle$  (see section 3.4).  $\ac$  works like  $\acf$  at it's first invocation and like  $\acs$  on all subsequent ones. Using  $\ac$  you can make sure that an acronym is always spelled out at least once in your document while safely using the short form whenever possible. Note that the use of  $\acf$  has no effect on subsequent invocations of  $\ac$ . The starred versions  $\ac*, \acs*, \acl*$  and  $\acf*$  just produce typeset output. Table 2 gives an overview of all this.

defaults	list	list and text	text	output
(glo)[p]	\glosstex	\gls	\gls*	$\langle item \rangle$
(acr)[n]	\acronym	\ac	\ac*	$\langle item \rangle$ or $\langle full \rangle$
(acr)[n]		\acs	\acs*	$\langle item \rangle$
(acr)[n]		\acl	\acl*	$\langle long$ -form $\rangle$
(acr)[n]		\acf	\acf*	$\langle full \rangle$

Table 2: Overview of the different sets of commands.

In the most simple case,  $\langle full \rangle$  will look like " $\langle item \rangle$  ( $\langle long-form \rangle$ )". You can switch the order of  $\langle item \rangle$  and  $\langle long-form \rangle$  by using the options itemfirst and longfirst. If you rather like either in a footnote, try the option footnote instead of the default text. If you don't like the round parentheses, just use the optional arguments  $\langle lparen \rangle$ ,  $\langle rparen \rangle$  which are also described in section 3.4.

#### 3.1 The Glossary Definition File

A glossary-definition file (suffix .gdf) is needed which serves as a database for  $GlossT_EX$ , holding the actual descriptions of all terms. You can have m .gdf-files that contain the definitions to the  $\langle label \rangle$ s you reference in your documents. Entries have the form

 $Qentry{\langle label \rangle [, \langle item \rangle [, \langle long-form \rangle ]]} [\langle text \rangle ]$ 

<sup>&</sup>lt;sup>2</sup>To be honest, a list-entry is produced, but it never appears in the output. The starred version implicitly produces entries with  $\langle list-mode \rangle$  **n** (never appear in typeset  $\langle list \rangle$ ) while the unstarred versions set  $\langle list-mode \rangle$  to **a** (always appear). There is no other way of specifying the  $\langle list-mode \rangle$  of an  $\langle label \rangle$ .

where  $\langle label \rangle$  is used to identify the entry and  $\langle text \rangle$  may contain any amount of T<sub>E</sub>X-source, being the actual definition of the item. You should know that  $\langle label \rangle$  is used to construct T<sub>E</sub>X-macros, so it shouldn't contain funny characters or you will most likely get funny errors. The optional argument  $\langle item \rangle$  describes the appearance of the item in the produced list. If omitted, it defaults to  $\langle label \rangle$ . It can be used when some special form of typesetting is wanted.  $\langle item \rangle$  can contain any T<sub>E</sub>X-construct, as long as each "{" has a corresponding "}" or GlossT<sub>E</sub>X will get confused. The same applies to  $\langle long-form \rangle$ , except that it defaults into an empty string if not specified.

Following is the .gdf-file used for this documentation. Note the use of "~" as the quote-character. Also note that all lines until the first line starting with @entry{ are ignored. Additionally, all lines starting with "%" are ignored, too. Thus they can serve as comments.

```
1 \langle *gdf \rangle
2 % -*- latex -*-
3
 4 This is a database file for GlossTeX.
5
6 Centry{ist-file, \texttt{.ist}-file} Style file for \MakeIndex{},
 7 describing the input and output format of read and written files.
8
9 Centry{gdf-file, \texttt{.gdf}-file} This file is the database file
10 containing definitions for Gloss\TeX{}.
11
12 @entry{gxs-file, \texttt{.gxs}-file} Intermediate file produced by
13 \GlossTeX{} to be processed by \MakeIndex{}.
14
15 @entry{glx-file, \texttt{.glx}-file} This file contains the sorted
16 lists, ready to be read by \LaTeX{}.
17
18 Centry{gxg-file, \texttt{.gxg}-file} This is the log-file produced by
19 the \GlossTeX{}-run. See also \glxref{glg-file}.
20
21 @entry{glg-file, \texttt{.glg}-file} This is the log-file produced by
22 the \MakeIndex{}-run. See also \glxref{gxg-file}.
23
24 @entry{ASCII, ASCII, American Standard Code for Information Interchange}
25 \mbox{ A character encoding}. See also \glxref{EBCDIC}.
26
27 @entry{EBCDIC, EBCDIC, Extended Binary Coded Decimals Interchange Code}
28 A character encoding exclusively used on mainframes. See also
29 \glxref{ASCII}.
30 \langle /gdf \rangle
```

#### 3.2 Invocation

After the first run of  $LAT_EX$ , the .aux-file contains all necessary information for the preparation of the glossary. GlossT<sub>E</sub>X is then invoked to read one or more .gdf-files and outputs all definitions that are referenced in the .aux-file. The output of GlossT<sub>E</sub>X is then processed by MAKEINDEX for sorting.

GlossTEX is invoked in a UNIX-like environment using the following command

glosstex  $\langle aux-file \rangle \langle gdf-file \rangle [\langle gdf-file \rangle[...]] [-v[0...5]]$ 

This produces 2 files as output, one .gxs-file to be input into MAKEINDEX and a log-file with extension .gxg which contains more detailed information. The -v option selects how verbose GlossT<sub>E</sub>X should be when writing the log-file. -v is equal to -v4 and -v2 is the default. -v0 makes GlossT<sub>E</sub>X shut his mouth and only report errors and -v5 makes GlossT<sub>E</sub>X really talkative.

MAKEINDEX has to be invoked in this way

makeindex  $\langle gxs-file \rangle$  -o  $\langle glx-file \rangle$  -s glosstex.ist [-t  $\langle glg-file \rangle$ ]

The commands

glosstex thesis thesis.gdf master.gdf
makeindex thesis.gxs -o thesis.glx -s glosstex.ist

\printglosstex

 $\printglosstex[(\langle list \rangle)][[\langle pageref-mode \rangle]]$ 

produce the final .glx-file which is then included by

during the next IAT<sub>E</sub>X-run. The argument  $\langle pageref-mode \rangle$  supersedes the one given to the entries individually for each  $\langle list \rangle$  and defaults to p. You can turn on page references unconditionally for each  $\langle list \rangle$  individually by using  $\langle pageref-mode \rangle$  a and turn it off by using  $\langle pageref-mode \rangle$  n as argument to  $\printglosstex$ . See also table 3 for an overview of these options.

Note that, no matter of how many  $\langle list \rangle$ s you produce, there is always exactly one .glx-file which contains the entries of all produced lists.

Depending on whether you use  $\langle item \rangle$  or  $\langle long-form \rangle$  in your text or you have cross-references, it may be necessary to run  $\text{ET}_{\text{EX}}$  and  $\text{GlossT}_{\text{EX}}$  up to 4 times until all references are resolved. Watch out for warnings from glosstex during a  $\text{ET}_{\text{EX}}$  run. Messages about unresolved  $\langle label \rangle$ s from  $\text{GlossT}_{\text{EX}}$  are caused by missing definitions in the .gdf-files.

#### 3.3 Page References

You may want a reference in the list to the place where the term first appears in the text. This can be done using the optional argument  $\langle pageref-mode \rangle$  on  $\langle item \rangle$ -level and  $\langle list \rangle$ -level. These arguments in combination with the option to **\usepackage** control page references. Table 3 gives an overview of all possible combinations of these 3 arguments.

list	refpage			norefpage			
entry	a	р	n	a	р	n	
a	$\times$	×		×	×	-	
р	$\times$	×	-	$\times$	_	-	
n	$\times$	-	-	×	_	-	

Table 3: Options controlling the appearance of page references. A " $\times$  " indicates that a reference is produced.

One possible usage of this feature: while debugging a document, turn on page references by using the option **refpage** to the package. Every entry included with the modes **a** (always) or the default **p** (package) will contain a reference. After debugging, remove the option **refpage** and only those entries that were included with mode **a** will still have a reference.

#### 3.4The Appearance of $\langle full \rangle$

 $\langle full \rangle$  stands for the appearance of the typeset term in the text. The appearance of  $\langle full \rangle$  is controlled through the optional arguments  $\langle lparen \rangle$ ,  $\langle rparen \rangle$  and  $\langle form \rangle$ to \ac and \acf. Additionally, these arguments work together with defaults set forth on  $\langle list \rangle$ -level and package level. The following sections shall shed some light on this topic.

#### 3.4.1 The $\langle order \rangle$ of $\langle item \rangle$ s

\glxitemorderdefault

The options itemfirst and longfirst control which one of  $\langle item \rangle$  and  $\langle long-form \rangle$ should be typeset first. On  $\langle list \rangle$ -level,  $\langle item$ -order  $\rangle$  can be set using

 $\left| \left( list \right) \right| \left( list \right) \right|$ 

(*item-order*) may be either "i", "1" or empty. i first typesets (*item*), 1 first typesets  $\langle long-form \rangle$ . Omitting  $\langle item-order \rangle$  lets the defaults take effect. Table 4 gives an overview over each combination of the options for  $\langle item-order \rangle$ .

list	itemfirst				longfirst		
entry	i	_	1	i	_	1	
i	i	i	1	i	i	1	
_	i	i	1	i	1	1	
1	i	1	1	i	1	1	

Table 4: Options controlling  $\langle item-order \rangle$ .

#### **3.4.2** Placement of footnotes and $\langle form \rangle$

\glxitemplacementdefault

The options text and footnote control where the second typeset output should go, either into the text or into a footnote.

```
\label{eq:list} \
```

sets this option on  $\langle list \rangle$ -level.  $\langle item-placement \rangle$  may be either t, f or empty. t typesets both parts into the text, f puts one part into a footnote. Omitting (item-placement) lets the defaults for (item-placement) take effect. See also table 5 for an overview of all possible combinations.

list	text			footnote			
entry	t	—	f	t	—	f	
t	t	t	f	t	t	f	
_	t	t	f	t	f	f	
f	t	f	f	t	f	f	

Table 5: Options controlling  $\langle item-placement \rangle$ .

The aforementioned  $\langle form \rangle$  is built by simply concatenating  $\langle item-order \rangle$  and  $\langle item-placement \rangle$ . You supply the  $\langle form \rangle$  argument to \ac and \acf by enclosing it in angle brackets, just like \ac<if>{foo} or \ac<t>{bar}. Please note that  $\langle item-order \rangle$  is specified before  $\langle item-placement \rangle$ .

#### 3.4.3 Encapsulation

\glxparendefault \glxparenlistdefault

fault When using t for  $\langle item-placement \rangle$ , the second part is encapsulated within  $\langle lparen \rangle$ fault on the left and  $\langle rparen \rangle$  on the right.

 $\glxparendefault{(list)}{(paren)}{(rparen)}$ 

sets this option on package level. The options roundparen and squareparen may be used as well.

 $\glxparenlistdefault{\langle list \rangle}{\langle lparen \rangle}{\langle rparen \rangle}$ 

sets this option on  $\langle list \rangle$ -level. On  $\langle item \rangle$ -level these are supplied to ac and acf just like  $ac,(,),{foo}$  or acf,--,-,<lt>bar}. It may look strange, but I was out of parentheses.

#### 3.5 Cross-References

\glxref \*glxref

 $\glxref[*]{\langle item \rangle}$ 

It may be useful to use cross-references in entries. Assume you have referenced \glosstex{ascii} which describes the term ASCII (American Standard Code for Information Interchange). You may also want to include EBCDIC (Extended Binary Coded Decimals Interchange Code) as an example for another character encoding. To achieve this, write this into the definition of ASCII

#### See also \glxref{ebcdic}.

and GlossT<sub>E</sub>X then produces "See also EBCDIC" and also includes the definition for EBCDIC into the same list ASCII appears in. Note that glxref is only available within the  $\langle text \rangle$  argument in the .gdf-file since it only makes sense within a  $\langle list \rangle$ . There is also a starred version glxref\* that doesn't produce typeset output.

#### $3.6 \quad \text{GlossT}_{\text{E}} X \text{ and } \text{nomencl}$

It is possible to use nomencl and  ${\rm Gloss}T_EX$  in one document without problems. The following commands show how to deal with documents using both  ${\rm Gloss}T_EX$  and nomencl.

```
latex thesis
glosstex thesis thesis.gdf
makeindex thesis.gxs -o thesis.glx -s glosstex.ist
makeindex thesis.glo -o thesis.gls -s nomencl.ist
latex thesis
```

### 4 Customizing

#### 4.1 Global

GlossT<sub>E</sub>X can be customized by using the file glosstex.cfg which is automatically loaded if it is present. The file glosstex.std is the default configuration file that is absolutely mandatory to GlossT<sub>E</sub>X's proper working. It shows all aspects that are meant to be customized, so let's discuss it now.

Each term that gets typeset either goes through  $\GLX@output@short or \GLX@output@long, depending whether it's the <math>\langle item \rangle$  or  $\langle long-form \rangle$ . These macros each take 3 arguments and get called this way:

```
GLXCoutputCshort{\langle label \rangle}{\langle list \rangle}{\langle item \rangle}
                                                                     GLXCoutputClong{\langle label \rangle}{\langle list \rangle}{\langle long-form \rangle}
                                                         We just output \langle item \rangle as it is. See section 4.2 for some more elaborate implemen-
                \GLX@output@short
                                                        tation of this macro.
                 \GLX@output@long
                                                          31 (*std)
                                                          32 \newcommand{\GLX@output@short}[3]{#3}
                                                          33 \newcommand{\GLX@output@long}[3]{#3}
                                                         This is used to typeset the page at the end of a definition. It uses \pagename so
                        \glosstexpage
                                                          that should be defined elsewhere.
                                                          34 \newcommand{\glosstexpage}[1]{\nobreak{\itshape\pagename~#1}\nobreak}
                       \glxgldefault
                                                                These macros set the defaults for \langle list \rangle and \langle pageref-mode \rangle which the com-
                                                         mands starting with \gl (except for \glxref, of course) and \ac are using.
                        \glxacdefault
                                                          35 \glxgldefault{glo}{p}
                                                          36 \glxacdefault{acr}{n}
                                                                 These macros set the defaults concerning \langle item-placement \rangle and \langle item-order \rangle
        \glxitemorderdefault
\glxitemplacementdefault
                                                         in \langle list \rangle. We specify no default on \langle list \rangle-level.
                                                          37 \glxitemorderdefault{glo}{}
                                                          38 \glxitemplacementdefault{glo}{}
                                                          39 \glxitemorderdefault{acr}{}
                                                          40 \glxitemplacementdefault{acr}{}
                 \glxparendefault
                                                                These macros set the defaults concerning \langle lparen \rangle and \langle rparen \rangle on package and
                                                          \langle list \rangle-level, respectively. To set \langle paren \rangle on package level, you may as well use the
        \glxparenlistdefault
                                                         options roundparen and squareparen. Because roundparen is the default option,
                                                          this command is not used. As long as there is no \langle paren \rangle-default on \langle list \rangle-level,
                                                          the default on package-level is used. So therefor, \glxparenlistdefault is not
                                                          used here as well.
                                                          41 %\glxparendefault{(}{)}
                                                          42 \ \text{glxparenlistdefault} = \frac{1}{2} \
                                                         Each \langle list \rangle gets embedded into \GLX@benv@\langle list \rangle and \GLX@eenv@\langle list \rangle, so these
                        \GLX@benv@glo
                        \GLX@eenv@glo
                                                         macros should provide a reasonable environment. Each line itself is typeset using
                                                          GLX@item@(list) which gets called with 7 arguments.
                        \GLX@item@glo
                        \GLX@benv@acr
                                                                     \label{list} (list) {(list)} {(list)}
                        \GLX@eenv@acr
                        \GLX@item@acr
                                                         43 \newcommand{\GLX@benv@glo}{\begin{description}}
                                                         44 \newcommand{\GLX@eenv@glo}{\end{description}}
                                                         45 \newcommand{\GLX@item@glo}[7]{%
```

```
46 \tim[#2]\tim[#3\empty\else\emph{#3}\space{fi#4\space#7}
```

```
\label{GLX@item@acr@label}[1]{\mbox{#1}\dotfill}
```

```
48 \newcommand{\GLX@benv@acr}{
```

```
49 \begin{list}{}{%
```

```
\setlength{\labelwidth}{7em}%
                    51
                             \leftmargin\labelwidth \advance\leftmargin by \labelsep}}
                    52
                    53 \newcommand{\GLX@eenv@acr}{\end{list}}
                    54 \newcommand{\GLX@item@acr}[7]{%
                        \item[\textsc{#2}]%
                    55
                           \ifx#3\empty\else#3\quad\fi\ifx#4\empty\else#4\space\fi#7}
                    56
                   These are defined to contain some default strings if they're not already defined
   \glossaryname
\listacronymname
                    (\pagename e.g. is defined trough babel).
       \pagename
                    57 \ifx\glossaryname\@undefined
                    58 \def\glossaryname{Glossary}
                    59 \fi
                    60 \ifx\listacronymname\@undefined
                    61 \def\listacronymname{List of Acronyms}
                    62 \fi
                    63 \ifx\pagename\@undefined
                        \def\pagename{page}
                    64
                    65 \fi
                       Each \langle list \rangle starts with an appropriate heading which is defined by
     \glxheading
                         \glxheading[\langle list \rangle] \{\langle definition \rangle\}.
```

```
66 \ifx\chapter\@undefined
67 \glxheading{glo}{\section*{\glossaryname}}
68 \glxheading{acr}{\section*{\listacronymname}}
69 \else
70 \glxheading{glo}{\chapter*{\glossaryname}}
71 \glxheading{acr}{\chapter*{\listacronymname}}
72 \fi
73 \/std>
```

### 4.2 Local

Now we need a local configuration file for this document. This is done by using a file named glosstex.cfg. In \GLX@output@short we test whether we are in the list of acronyms (GLX@acdef@list) and typeset  $\langle item \rangle$  with caps and small caps if we are. Otherwise, just typeset  $\langle item \rangle$ . We also define a call to \index in \GLX@output@short. As sort-key, we use  $\langle label \rangle$ . Instead of the usual @ we use = for designating the appearance part of the index entry.

```
74 (*cfg)
75 \renewcommand{\GLX@output@short}[3]{%
76 \ifthenelse{\equal{#2}{\GLX@acdef@list}}{%
77 \textsc{#3}}{#3}\index{#1=#3}}
78 (/cfg)
```

### 5 Some Details

While reading the .aux-file, GlossT<sub>E</sub>X only considers the first appearance of one  $\langle item \rangle$  for each  $\langle list \rangle$ . All subsequent entries are silently ignored. (Almost silently, because the .gxg-file will contain detailed information about this, and more.) But if the first entry says not to produce a page reference and a following one

says to do so, then the latter will supersede the former. The same applies if a term is referenced without the option not to generate a list-entry (all commands containing a \*, e.g. \gl\*), but a following tells to do so.

While reading one or more .gdf-files, only the first definition is used, all other entries are ignored. This fact can be utilised in some way. Assume you have a master.gdf which contains general terms and a file thesis.gdf which only contains terms that are intended for use in your thesis. Whenever an entry is present in both .gdf-files, the one from thesis.gdf should be taken. To achieve this, specify thesis.gdf *before* master.gdf.

Additionally, see the file TODO in this package for known bugs (also called features) and not yet implemented features (also called bugs).

### 6 Acknowledgments

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DANIEL COURJON, STEFAN A. DEUTSCHER, MICHAEL FRIENDLY, OLAF MICHELSSON

### Glossary

.gdf-file This file is the database file containing definitions for  $\text{GlossT}_{\text{E}}$ X. page 5

- .glg-file This is the log-file produced by the MAKEINDEX-run. See also .gxg-file. page 12
- .glx-file This file contains the sorted lists, ready to be read by LATEX. page 7
- .gxg-file This is the log-file produced by the GlossTEX-run. See also .glg-file. page  $\gamma$
- .gxs-file Intermediate file produced by GlossTEX to be processed by MAKEINDEX. page 7