

# MLBibT<sub>E</sub>X and Its New Extensions

Jean-Michel HUFFLEN

DISC — University of Franche-Comté  
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# Contents

MIBIB<sub>T</sub>E<sub>X</sub>

Installation—Toolbox

`mlbiblatex` and `mlbibcontext`

Advantages/drawbacks of MIBIB<sub>T</sub>E<sub>X</sub>

Going further. . .

Conclusion

# MI~~B~~ibT<sub>E</sub>X

Provide a ‘better BIBT<sub>E</sub>X’ with particular focus on multilingual features.■

Early attempts in C (a long time ago).■

Now written in Scheme with some specific parts using XSLT.■

.bib files  $\longrightarrow$  (S)XML  $\longrightarrow$  . . .

# Available now!

`http://disc.univ-fcomte.fr/home/~jmhufflen/texts/superreport/  
smlbibtex-1.3.tar.gz`

Contact:

`jmhuffle@femto-st.fr`

You need a Scheme interpreter/compiler. . . I personally recommend bigloo.

# Installation

Linux and Mac OS X:

```
./configure ...
```

```
make [NOWARNING=yes]
```

```
make install
```

Should work on Windows; I'm looking for a volunteer.

# Programs

mlbibtex analogous to BIB<sub>T</sub><sub>E</sub>X,■

mlbibtex2xml converter from .bib files to XML ones,■

ar-style for French activity reports,■

hal converter from .bib files to HAL metadata (BachoT<sub>E</sub>X 2010 & 2011),■

mlbiblatex

mlbibcontext

# Direct programs

W.r.t. MIBIBT<sub>E</sub>X's terminology:■

the last step is deferred to a program possibly customised by end-users (.bst, XSLT)  $\Leftarrow$  *indirect process*;■

all the steps are written in Scheme  $\Leftarrow$  *direct process*.

## mlbiblatex **and** mlbibcontext

⇒ biblatex package, ConT<sub>E</sub>Xt's bib module.■

[Now ⇒ generalities, 2nd talk ⇒ mlbibcontext]■

.bbl files are *structures*, formatting 'References' sections is deferred to the corresponding typesetting system.



# Advantages/drawbacks of MIBibT<sub>E</sub>X

MIBibT<sub>E</sub>X less permissive than BibT<sub>E</sub>X!

Type checking for:

AUTHOR EDITOR YEAR MONTH PAGES

LANGUAGE

DAY GENDER LASTSORTKEY TOTALPAGES

Possibly refined  $\Leftarrow$  ADDRESS.

# New syntax for person names

*Jean Le Clerc de la Herverie*

first => Jean,

last => Le Clerc de la Herverie



Abbreviating first names:

Henry Rider Haggard, abbr => H. Rider

# Syntax for person names (con'd)

*Collaborators:*

Jean-Michel Hufflen and  
Taco Hoekwater with  
Hans Hagen



Organisations: *EuroT<sub>E</sub>X 2012*

org => Euro\TeX\ 2012,  
sortingkey => EuroTeX 2012

# MI~~B~~ibT<sub>E</sub>X vs bibl~~a~~tex

MI~~B~~IBT<sub>E</sub>X  $\Leftarrow$  extending .bib syntax.■

bibl~~a~~tex  $\Leftarrow$  adding new fields, e.g., COLLABORATOR,  
SORTYEAR, . . . ■

At first glance, you can revert to ‘classical’ styles by  
using bibl~~a~~tex■except for YEAR/MONTH/DATE.■

biber uses configuration files, e.g., for abbreviating first  
names.

# Sorting

Multilingual sort procedures for strings.■

*Chaining* successive criteria is very easy. (Demonstration.)

# Encodings

Presently: Latin 1.■

Due to Scheme (R5RS).■

I'm impatiently waiting for the next standard (R7RS).

# The `mlbiblatex` program

Lepizig version  $\Leftarrow$  uses  $\text{BIBT}_{\text{E}}\text{X}$ 's `biblatex.bst` style, without sort statement;■

Caribbean version  $\Leftarrow$  building `.bbl` files is wholly programmed by means of Scheme functions;■

Breskens version  $\Leftarrow$  'new' entry types have been added.

# The `mlbiblatex` command

`mlbiblatex job-name sort-keys language-code`

■

`sort-keys (n | y | m | t)*`■

`language-code (DE | EN | FR | PO)`



# Going further

Not the DATE field, but you can use the DAY field for simple dates.■

Enlarging the interface:

```
\usepackage[backend=mlbiblatex,...]{biblatex}
```

with other options, e.g., `sorting`, as with `biber`.

# Conclusion

Users do not have to customise the way to build .bbl files  $\implies$  *black box*.■

Writing this step using an efficient language.■biber: good but quite inefficient (in Perl!)■

biblatex: good choice of options, but handling some additional fields (such as AUTHORTYPE, EDITORA) is complicated.■

BIBT<sub>E</sub>X and biber sort only strings, not numbers!■They difficultly sort w.r.t. months.■

Interface with an efficient program, implemented using a ‘real’ programming language.