Bibliography Tools and ConTExt/LuaTEx

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A bit of history

The ancestor $\iff$ Tib (Refer).
A bit of history

The ancestor $\Leftarrow$ Tib (Refer).

*Preprocessor:* [.some words.]
A bit of history

The ancestor $\Leftarrow$ Tİb (Refer).

*Preprocessor*: [.some words.]

\Lcitemark name\Citebreak year\Rcitemark
A bit of history

The ancestor $\leftarrow$ Tīb (Refer).

*Preprocessor*: [.some words.]

\texttt{	extbackslash Lcitemark name\textbackslash Citebreak year\textbackslash Rcitemark}

bibliography styles’ *components*. 
BibTeX

Cross-references.
BibTeX

Cross-references.

Language for programming bibliography styles, but they are monolithic.
BibTeX

Cross-references.

Language for *programming* bibliography styles, but they are *monolithic*.

Robust,
BibTeX

Cross-references.

Language for *programming* bibliography styles, but they are *monolithic*.

Robust, suitable for works in English.
BibTeX

Cross-references.

Language for *programming* bibliography styles, but they are *monolithic*.

Robust, suitable for works in English.

Some problems solved by means of *workarounds*:

```
AUTHOR = {Maria {\MakeUpperCase{\\MakeUpperCase{\MakeUpperCase{\MakeUpperCase{de La}}}}}} Cruz}
```
Bib{T\TeX} again

Number-only system.
BibTEX again

Number-only system.

Author-date $\leftrightarrow$ natbib
Bib\TeX\ again

Number-only system.

Author-date ⇐ natbib

(+ Author-number).
Bib\TeX again

Number-only system.

Author-date $\leftarrow$ natbib

(+ Author-number).

Short-title $\leftarrow$ jurabib.
Bib\TeX\ again

Number-only system.

Author-date $\iff$ natbib

(+ Author-number).

Short-title $\iff$ jurabib.

*Structure* passed to \LaTeX.
The biblatex package

Formatting references is *deferred* to LaTeX.
The biblatex package

Formatting references is *deferred* to \LaTeX. \bibTeX only searches .bib files for entries and sorts references if need be.
The biblatex package

Formatting references is *deferred* to \LaTeX.\n
\LaTeX{} only searches .bib files for entries and sorts references if need be.\n
Bibliography styles assembled by means of *options*.\n
The biblatex package (con’d)

Notion of *typed* fields, e.g., AUTHOR vs TITLE.
The biblatex package (con’d)

Notion of *typed* fields, e.g., AUTHOR vs TITLE.

\[ \text{DATE} = \{2011-09-19/2011-09-24\} \]
The biblatex package (con’d)

Notion of *typed* fields, e.g., AUTHOR vs TITLE.

\[
\text{DATE} = \{2011-09-19/2011-09-24\}
\]

Many additional fields.
Present problems

Encodings
Present problems

Encodings ($\text{UTF8} \leftrightarrow \text{LuaTEX}$).
Present problems

Encodings ($\text{UTF8} \leftrightarrow \text{LuaTEX}$).

.bst language is old-fashioned.
Present problems

Encodings (\texttt{UTF8} ↔ \texttt{Lua\TeX}).

.bst language is old-fashioned.

Lack of support for multilinguism.
Present problems

Encodings (UTF8 $\Longleftrightarrow$ LuaTEX).
.bst language is old-fashioned.
Lack of support for multilingualism.
Inertia $\Longleftrightarrow$ a huge number of .bib files exists.
Present problems

Encodings ($\texttt{UTF8} \leftrightarrow \text{LuaTEX}$).

.bst language is old-fashioned.

Lack of support for multilinguism.

Inertia $\leftrightarrow$ a huge number of .bib files exists.

+ \LaTeX commands for Con\TeXt users.
New information

Enriching .bib files or putting it elsewhere?
New information

Enriching .bib files or putting it elsewhere?

Philippe
New information

Enriching .bib files or putting it elsewhere?

Philippe  →  Ph.
Christian
New information

Enriching .bib files or putting it elsewhere?

Philippe $\rightarrow$ Ph.
Christian $\rightarrow$ Ch. [fr]
New information

Enriching .bib files or putting it elsewhere?

Philippe $\rightarrow$ Ph.
Christian $\rightarrow$ Ch. [fr]
$\rightarrow$ Chr. [de]
New information

Enriching .bib files or putting it elsewhere?

Philippe $\rightarrow$ Ph.
Christian $\rightarrow$ Ch. [fr]
$\rightarrow$ Chr. [de]
Henry Rider Haggard $\rightarrow$ H. Rider Haggard
BibTEX’s successors

Bibulus needs \texttt{BIB\TeX} to convert entries to an XML-like format $\Rightarrow$ Perl.
Bib\TeX\ ’s successors

Bibulus needs \texttt{BIB\TeX} to convert entries to an \texttt{XML}-like format $\Rightarrow$ Perl.

Cross\TeX\ extends \texttt{BIB\TeX}’s cross-references mechanism.
The biber program

biber generates .bbl files for biblatex
The biber program

biber generates .bbl files for biblatex only!
The biber program

biber generates .bbl files for biblatex only!

Type checking ⇐ powerful but only if need be.
The biber program

biber generates .bbl files for biblatex only!

Type checking $\Leftarrow$ powerful but only if need be.

Additional fields ignored silently.
MlBibTEX

Enriched syntax for multilingual purposes.
MLBibTEX

Enriched syntax for multiligual purposes.
User-friendly syntax for person names.
MlBibTEX

Enriched syntax for multiligual purposes.

User-friendly syntax for person names.

Connection to XML.
MLBibTeX

Enriched syntax for multilingual purposes.

User-friendly syntax for person names.

Connection to XML.

More powerful sort procedures if you use Scheme functions.
MlBib\TeX's availability

Available for downloading!

http://lifc.univ-fcomte.fr/home/~jmhufflen/texts/smlbibtекс-1.3.tar.gz
MLBibTEX’s availability

Available for downloading!

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

Written in Scheme \leftarrow bigloo.
Installing it

./configure --prefix=...
make NOWARNING=yes
make install
In a near future

Making the license conformant.
In a near future

Making the license conformant.

Documentation about installation in English.
In a near future

Making the license conformant.

Documentation about installation in English.

Forum for users: .../texts/mlbibtex/
In a near future

Making the license conformant.

Documentation about installation in English.

Forum for users: ../texts/mlbibtex/
Point of view

Not objective, but
Point of view

Not objective, but

\texttt{MiBibTeX} successfully used to process very big .bib files
Point of view

Not objective, but

M\texttt{M\textsc{I}\texttt{BIBTEX}} successfully used to process very big .bib files

after fixing many typing mistakes.
MiBibTEX and ConTeXt/LuaTEX

Switching \texttt{@PREAMBLE/@CONTEXTPREAMBLE}.

Using \texttt{XML} format.

\texttt{MiBibTEX} can send the result to Lua functions.
New development?

More encodings.
New development?

More encodings.

Others?
New development?

More encodings.

Others? OK, but from February to September.
BibTEX’s successors have put many incompatible extensions into action.
Synthesis

BibTeX’s successors have put many incompatible extensions into action.

TUG 2011 $\Rightarrow$ calling from some convergence.
Ending

12 years ago $\Leftarrow$ \textsc{BibTeX} only.
Ending

12 years ago ← BibTeX only.

Now ← many successors,
12 years ago $\iff$ Bib\TeX only.

Now $\iff$ many successors, but many ways to organise .bib files.
Written documents

General synthesis $\iff$ TUG 2011.
Written documents

General synthesis $\iff$ TUG 2011.

Complements about Con\TeXt/Lua\TeX $\iff$ will be submitted to MAPS.