A Direct Style for ArsTeXnica

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Building Bibliographies

MlBibTeX for end-users

MlBibTeX for .bib files maintainers

MlBibTeX for ArsTeXnica

Conclusion
Bibliography Processors

\textsc{BibTeX} $\leftarrow$ quite old, bibliography styles are written using a very old-fashioned language.
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For example, DATE field instead of YEAR, MONTH (and DAY).
Considerations about encodings

We used to type accented letters with command accents, e.g.:

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\texttt{L'Unit\'{a}}

but we do not anymore in \LaTeX source texts. Entering:

\texttt{JOURNAL = L'Unità}

within a .bib file.
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.bib files using UTF 8.

Some ‘old’ .bib files in Latin 1, Latin 2, etc. with \TeX{}8.
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Bibliographies in Scheme?

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When you design a bibliography style, you consider data and decide how to organise them.
How?

M\textsc{lib}B\textsc{ib}\TeX can:

\begin{itemize}
  \item \textit{interpret} a .bst file, e.g., arstexnica.bst;
\end{itemize}
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- \textit{apply} an XSLT stylesheet to (S)XML format used for bibliographies;
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M\texttt{L}B\texttt{I}B\texttt{T}\texttt{E}X can:

- *interpret* a .bst file, e.g., arstexnica.bst;
- *apply* an XSLT stylesheet to (S)XML format used for bibliographies;
- run a *direct* bibliography style, wholly written in Scheme.
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Make precise the encoding at the beginning of a .bib file:

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Many byte-based encodings are processed now (Latin 1, Latin 2, UTF 8, ...) but not UTF 16. If this directive is absent, MI\textsc{Bib}TEX tries to guess the encoding by means of the operating system interface. Personally, I do not recommend that. Default encoding is Latin 1, but can (will) be changed.
Compatibility with biblatex

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**BIBTEX vs MIBIBTEX**

*Pay attention!!* The latter is less permissive than the former! Your .bib files will be cleaned up from most typing mistakes, but you will need some steadiness to reach this result. Unrecognised field names ⇐ *(warning messages)*. Numeric or formatted fields, e.g., YEAR or MONTH. Fields related to *person names* or *URLs*. 
Interpretation or direct style?

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...or ask me to update the direct style, providing more checks.
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Interface with XML.
No bug?

I cannot ensure that,
No bug?

I cannot ensure that,
I am not sure to be able to promise a money amount for a person finding a bug, as Donald Knuth did for \TeX,
No bug?

I cannot ensure that,
I am not sure to be able to promise a money amount for a person finding a bug, as Donald Knuth did for TeX, but I have not found bugs for a long time.
Source files  \(\leftrightarrow\) immediate.
Availably

Source files $\leftarrow$ immediate.
Will be available at the CTAN $\rightarrow$ re-organisation in progress.
Source files ← immediate.
Will be available at the CTAN → re-organisation in progress.
End-user manual planned for the beginning of November → looking for an Italian translator.
Last words

That’s a gift: try it for free! 😊