Multilingual bibliographies: The `babelbib` package

Harald Harders

`h.harders@tu-bs.de`

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Abstract

This package enables to generate multilingual bibliographies in cooperation with `babel`. Two approaches are possible: Each citation may be written in another language, or the whole bibliography can be typeset in a language chosen by the user.

In addition, the package supports commands to change the typography of the bibliographies.

The current version supports Afrikaans, Catalan, Danish, Dutch, English, Esperanto, Finnish, French,[1] German, Italian, Norwegian, Portuguese, Spanish, and Swedish. Please help me to add more languages.

Many of the standard and extended bibliography styles are available. Please read section **??**.

If you have used version 0.1 of this package: The mechanism to change fonts have changed, please read section ??.

Have a look to `tugboat-babelbib.pdf` which includes detailed descriptions how to use and extend the babelbib bundle.

Contents

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[1] Babelbib does not work with `frenchle` prior V5,987. Please update the frenchle package or use the native babel support for French, instead.

1   Introduction

This package is a replacement for `bibgerm.sty` [**?**] with the aim to be extendable to other languages more easily. In addition, `babelbib` provides a more flexible typography of bibliographies without the need to change `bst` files. But there are two shortcomings: This package needs `babel.sty` [**?**] (thus, it does not work with `german.sty` or `ngerman.sty`), and it is written for LaTeX2_ε and does not work with plain TeX.

The current version supports Afrikaans, Danish, Dutch, English, Esperanto, Finnish, French,[2] German, Italian, Norwegian, Portuguese, Spanish, and Swedish.

If you have used version 0.1 of this package: The mechanism to change fonts have changed, please read section **??**.

2   Usage

To use this package place

`\usepackage{babelbib}`

into the preamble of your document. The package loads all necessary language definitions for all files it knows that are loaded by `babel`.

By default, the language of the bibliographic keywords ("editor", "page", etc.) switches for each item to the language of the cited document. If all citations shall be written in the same language, add the option `fixlanguage` to the package call. Then, all bibliographies are typeset in the document's main language. To change the bibliography's language, use `\selectbiblanguage{⟨language⟩}`. This command only has an effect, if `fixlanguage` is set.

`\selectbiblanguage`

`babelbib` supports the BibTeX styles `babplain`, `babplai3`, `babalpha`, `babunsrt`, `bababbrv`, and `bababbr3` that correspond to the standard `bst` files, but include international support as well as flexible typography.[3] As usual, you select the style using `\bibliographystyle{⟨filename⟩}`. In addition, the package supports the BibTeX style `babamspl` which corresponds to `amsplain` by the $\mathcal{AMS}$. If you want to use this style, you have to add the option `languagenames` to the call of the package.

`\bibliographystyle`

If you don't like some of the keywords provided by `babelbib`, or if you want to use new ones, you are able to get these using the command `\declarebtxcommands`. It takes two arguments, where the first is the language for which you want to add or change keywords, and the second is the list of command definitions. It seems to be best to show that for an example. You may want to change the definitions for Ph.D. theses for English and German with new orthography (the defaults are "PhD thesis" resp. „Dissertation"). You can reach a change by the following code:

`\declarebtxcommands`

`\declarebtxcommands{english}{%`

---

[2]Babelbib does not work with `frenchle` prior V5,987. Please update the frenchle package or use the native babel support for French, instead.

[3]The versions with the `3` in the filenames replace the second and later authors by *et al.*, if more than three authors are given.

```
    \def\btxphdthesis#1{\protect\foreignlanguage{english}{Ph.D.\ thesis}}%
}
\declarebtxcommands{ngerman}{%
  \def\btxphdthesis#1{\protect\foreignlanguage{ngerman}{Doktorarbeit}}%
}
```

You may change more than one command in one `\setbtxcommand` command. You just have to add more of the `\def...` lines. But please don't forget the percent sign at the end of the lines in order to avoid unwanted spaces in the output. The $\mathcal{AMS}$ BIBTₑX style `amsplain` uses "Ph.D. thesis" instead of the default "PhD thesis" for `babamspl`. If you want the same keyword as in the $\mathcal{AMS}$ original, you can use the `\declarebtxcommands` line shown above.

3 Preparing the `bib` files

In order to use the feature of multilingual bibliographies, add the field `language` to every entry in your `bib` files. This field gives the language of the cited document, e. g.

```
@InBook{dieter1997a,
  editor =        {Dieter, George~E. and others},
  title =         {Materials Selection and Design},
  chapter =       {Effects of Composition, Processing, and Structure on
                   Properties of Engineering Plastics},
  publisher =     {ASM International},
  year =          1997,
  volume =        20,
  series =        {ASM Handbook},
  pages =         {434--456},
  language =      {english},
  isbn =          {0-87170-386-6}
}
```

Then, the output of the document data (title, authors, series, etc.) is typeset with correct hyphenation patterns. Wheather also the keywords ("edition", "pages", etc.) are switched to the citation language, depends on wheather `fixlanguage` has been used. All languages that appear in the bibliography have to be loaded by `babel`.

`\setbtxfallbacklanguage`   If the field `language` is missing, the citation is typeset using a fall-back language. By default, the document's main language (that one that is active at `\begin{document}`) is used. You can change the fall-back language by using `\setbtxfallbacklanguage{⟨language⟩}`, e. g.,

`\setbtxfallbacklanguage{ngerman}`

`babelbib` supports four additional fields: `ISBN`, `ISSN`, `URL`, and `URLDATE`. `ISBN` and `ISSN` take the ISBN or ISSN respectively. `URL` is the address of a WWW page while `URLDATE` is the date when the WWW page has been visited. The field `URL` is

typeset using the command `\url` if available, e. g., if the user has loaded `url.sty`. Otherwise, `babelbib` defines a `\url` command which just calls `\texttt`.

`\biblanguage`   If you want to use language-dependent commands as `\alsoname` in a bibliography that was produced with `fixlanguage` you will be surprised that the commands change the output depending on the language of the citation. If you want to write a field with the keyword language, you can use the command `\biblanguage`, e.g.,

```
@Article{abinger1988a,
  author =       {Abinger, R. and Hammer, F. and Leopold, J. and others},
  title =        {Gro"sschaden an einem 300"=MW"=Dampfturbosatz},
  journal =      {Der Maschinenschaden},
  year =         1988,
  volume =       61,
  number =       2,
  pages =        {58--60},
  language =     {ngerman},
  note =         {\biblanguage{\alsoname~\cite{abinger1990a}}}
}
```

This will give the note "see also [. . .]" instead of "siehe auch [. . .]" when the bibliography uses English keywords.

4   Available bibliography styles

The `babelbib` bundle contains adapted versions of the standard bibliography styles `plain`, `unsrt`, `abbrv`, and `alpha`. They are called `babplain`, `babunsrt`, `bababbrv`, and `babalpha`, respectively. All variants write names in a special manner when more than one author is given. The first author ist written "Lastname, Forename" while all other authors are written "Forename Lastname". This is done to emphesize the ordering by the lastname.

If you don't want this behaviour you can use additional variants that use the same notation for all names. By appending `-fl` to the style name, e. g., `babalpha-fl`, all names are written "Forename Lastname". By appending `-lf`, e. g., `babalpha-lf`, all names are written "Lastname, Forename".

The style `babamspl` is the `babelbib` equivalent to `amsplain`.

5   Customisation of the bibliography's typography

In constrast to the standard and `germbib` bst files, the appearance of the different data types is not fixed for `bab*.bst`. There are commands for some data fields that determine the used font.

`\setbibliographyfont`   You can change some font specifications in the bibliography using the command `\setbibliographyfont{⟨element⟩}{⟨font command⟩}`, where ⟨element⟩ is a typographic element, listed in table **??**. ⟨font command⟩ is a command that takes one argument, e. g. `\textbf`, `\emph`, or `\textsc`. If no suitable command is

Table 1: Default values for the fonts in bibliographies. If no value is given, the standard font (normally upright roman) is used.

Element	Data types	Default value for BIBTEX style	
		bababbrv, babalpha babplain, babunsrt	babamspl
name	Authors, editors		
lastname	Lastnames of Authors, editors		
title	All kinds of titles	\emph	\emph
etal	"*et al.*"	\emph	
journal	Journal title		
volume	Volume (journal)		\textbf
ISBN	ISBN	\MakeUppercase	\MakeUppercase
ISSN	ISSN	\MakeUppercase	\MakeUppercase
url	URL	\url	\url
urldate	visiting date of URL		

available, you have to define one, first. For example, you can get a bold italic font as follows:

```
\newcommand\textitbf[1]{{\bfseries\itshape #1\/}}%
\setbibliographyfont{title}{\textitbf}%
```

As it can be seen in this example, the argument of the used font command mustn't be specified in \setbibliographyfont.

The ⟨*element*⟩ name changes the whole name of the author, including forename and lastname. If lastname is also specified, it changes the lastname within the font for the name. For example,

```
\setbibliographyfont{name}{\emph}
\setbibliographyfont{lastname}{\MakeUppercase}
```

leads to \emph{Harald \MakeUppercase{Harders}} resp. "*Harald HARDERS*".

The font definition for urldate can also be used not to change the font but to provide a command that writes the date in the correct language, e. g., using the isodate package:

```
\usepackage[short]{isodate}
\setbibliographyfont{urldate}{\printdate}
```

\btxISBN   There are two additional commands, \btxISBN and \btxISSN. They generate
\btxISSN   the strings "ISBN" and "ISSN" in bibliographies. By default, they do it without a change of the font. For example, if using oldstyle digits, it could be worth to change them e. g. to

```
\renewcommand\btxISBN{\textsc{isbn}}
\renewcommand\btxISSN{\textsc{issn}}
```

`\btxprintISBN`
`\btxprintISSN` By default, the ISBN resp. ISSN is printed if present in the data base. You can switch this behaviour off by using `\btxprintISBN{false}` resp. `\btxprintISSN{false}`. Similarly, printing is switched on by `\btxprintISBN{true}` resp. `\btxprintISSN{true}`. This, however, only works for the "'standard"' styles, i. e., not for the $\mathcal{AMS}$ style `babamspl`.

If you are using `babamspl`, the language names of the citations are printed by default, as the original $\mathcal{AMS}$ style does it. You can avoid this by adding following line to your preamble:

`\newcommand\btxprintamslanguage[1]{}`

6   How to add new languages

The language definitions are placed in special files with the extension `.bdf`. If you want to add a new language to the `babelbib` system, you should copy one of the existing `bdf` files and change the new file.

Since `babelbib.sty` contains a list of known languages, it will not find the new language definition file, automatically. Then, you can give the name of the new file without extension as an option when loading `babelbib`. For example, to load `mylang.bdf`, you have to load the package as follows:

`\usepackage[mylang]{babelbib}`

If you have developed a new `bdf` file, please send it to `h.harders@tu-bs.de`. Then, I will add it to the `babelbib` system.

7   Problems and Incompatibilities

- Babelbib does not work together with old versions of the `frenchle` package prior V5,987. Please update the frenchle package or use the native babel support for the French language, instead.

8   To Do

- Add more languages.

- Complete Dutch.

- Add the possibility to switch off ISBN and ISSN to `babasmpl`.

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References

[1] Braams, Johannes: *Babel, a multilingual package for use with LaTeX's standard document classes*, 2002. `CTAN:macros/latex/required/babel/`.

[2] Wallmeier, M., A. Scherer, and H. Harders: *Macros for german BibTeXing*, 2000. `CTAN:biblio/bibtex/contrib/germbib/`.

9 The implementation

Source lines that look like ⟨*...⟩ or ⟨/...⟩ where ... is arbitrary text are not written into the output files. If a source line starts with ⟨...⟩, this part of the line is omitted.

9.1 Headings of the files

Heading of the package and the other files:

```
1 ⟨*package⟩
2 \NeedsTeXFormat{LaTeX2e}[1998/06/01]
3 \ProvidesPackage{babelbib}
4 ⟨/package⟩
```

File heads of the `bdf` files:

```
5 ⟨afrikaans⟩%% Language definitions for Afrikaans by
6 ⟨afrikaans⟩%%    Danie Els, dnjels@sun.ac.za
7 ⟨afrikaans⟩\ProvidesFile{afrikaans.bdf}
8 ⟨catalan⟩%% Language definitions for Catalan by
9 ⟨catalan⟩%%    Robert Fuster, rfuster@imm.upv.es
10 ⟨catalan⟩\ProvidesFile{catalan.bdf}
11 ⟨danish⟩\ProvidesFile{danish.bdf}
12 ⟨dutch⟩\ProvidesFile{dutch.bdf}
13 ⟨english⟩\ProvidesFile{english.bdf}
14 ⟨esperanto⟩%% Language definitions for Esperanto by
15 ⟨esperanto⟩%%    Taneli Huuskonen, huuskone@cc.helsinki.fi
16 ⟨esperanto⟩\ProvidesFile{esperanto.bdf}
17 ⟨portuguese⟩%% Language definitions for Portuguese by
18 ⟨portuguese⟩%%    Jos\'e Carlos Santos, jcsantos@fc.up.pt
19 ⟨portuguese⟩\ProvidesFile{portuguese.bdf}
```

```
20 ⟨finnish⟩%% Language definitions for Finnish by
21 ⟨finnish⟩%%    Taneli Huuskonen, huuskone@cc.helsinki.fi
22 ⟨finnish⟩\ProvidesFile{finnish.bdf}
23 ⟨french⟩\ProvidesFile{french.bdf}
24 ⟨german⟩\ProvidesFile{german.bdf}
25 ⟨italian⟩\ProvidesFile{italian.bdf}
26 ⟨norsk⟩%% Language definitions for Norwegian by
27 ⟨norsk⟩%%   Hans Fredrik Nordhaug <hansfn@mi.uib.no>
28 ⟨norsk⟩\ProvidesFile{norsk.bdf}
29 ⟨spanish⟩%% Language definitions for spanish by
30 ⟨spanish⟩%%   V{\'\i}ctor Lua{\~n}a, victor@fluor.quimica.uniovi.es
31 ⟨spanish⟩\ProvidesFile{spanish.bdf}
32 ⟨swedish⟩%% Language definitions for Swedish by
33 ⟨swedish⟩%%   Hans Fredrik Nordhaug <hansfn@mi.uib.no>
34 ⟨swedish⟩\ProvidesFile{swedish.bdf}
```

Version information unique for all generated files:

```
35 ⟨latex⟩  [2005/09/01 v1.15  babelbib: multilingual bibliographies (HH)]
36 ⟨bst⟩%% 2005/09/01 v1.15  babelbib: multilingual bibliographies (HH)
```

9.2   The package itself

Define an option which fixes the language in the bibliography to the main language of the document.

```
37 ⟨*package⟩
38 \newif\ifbbbbfixlanguage
39 \DeclareOption{fixlanguage}{\bbbbfixlanguagetrue}
```

If this option is used, generate the commands \btxlanguagename⟨*language*⟩ that save how languages are called in other languages, e. g. in German, French is called „französisch".

```
40 \newif\ifbbbblanguagenames
41 \DeclareOption{languagenames}{\bbbblanguagenamestrue}
```

If additional options are given, try to load these as languages. This is implemented in order to be able to use a new language that is not yet supported by the official babelbib.

```
42 \DeclareOption*{%
43   \InputIfFileExists{\CurrentOption.bdf}{%
44     \expandafter\def\csname bbbb\CurrentOption loaded\endcsname{\@empty}%
45   }{%
46     \PackageError{babelbib}{%
47       Language definition file \CurrentOption.bdf not found}{%
48       Maybe you misspelled the language option?}%
49   }%
50 }
```

Process the given options.

```
51 \ProcessOptions*
```

8

\bbbbifundefined   Define a replacement for `\@ifundefined` that does not define the command it is tested for as side effect. This command has been taken from a news posting by Markus Kohm (`markus.kohm@gmx.de`).

```
52 \newcommand*{\bbbbifundefined}[1]{%
53   \begingroup\expandafter\expandafter\expandafter\endgroup
54   \expandafter\ifx\csname #1\endcsname\relax
55     \expandafter\@firstoftwo
56   \else
57     \expandafter\@secondoftwo
58   \fi
59 }
```

\bbbbaddto   Adds the command named `\bibs#2` to the command `\extras#1`, if this command is defined before, where #1 and #2 are the arguments of `\bbbbaddto`. For internal use only.

```
60 \newcommand\bbbbaddto[2]{%
```

Test wheather `\extras#1` is defined.

```
61   \expandafter\bbbbifundefined{extras#1}{}{%
```

Call `babel`'s command to append `\bibs#1` to `\extras#1`.

```
62     \expandafter\addto\expandafter{\csname extras#1\endcsname}{%
63       \csname #2\endcsname}%
64   \typeout{babelbib extension \@backslashchar #2 added to
65     \string\extras #1}%
66   }%
67 }
```

\inputbdf   Input the file `#2.bdf` if babel has loaded the language #1. For internal use only.

```
68 \newcommand\inputbdf[2]{%
```

Test wheather `\date#1` is defined which is the case if the language #1 has been loaded.

```
69   \bbbbifundefined{date#1}{}{%
```

Input `#2.bdf`.

```
70     \@ifundefined{bbbb#2loaded}{%
71       \expandafter\def\csname bbbb#2loaded\endcsname{\@empty}%
72       \input{#2.bdf}%
73     }{}%
74   }%
75 }
```

\selectbiblanguage   Define `\selectbiblanguage` which explicitly selects the language for the bibliography. This is only useful when the option `fixlanguage` is used. Otherwise the command produces a warning and does nothing else.

     Since all the language dependent macros are not know before `\begin{document}`, the command `\selectbiblanguage` has to wait until there, before doing any action. Because after `\begin{document}`, it can do the action immediately, `\selectbiblanguge` has to be redefined there.

```
76 \ifbbbbfixlanguage
```

Define the `\selectlanguage` command for usage before `\begin{document}`.

```
77   \newcommand\selectbiblanguage[1]{%
78     \AtBeginDocument{\@selectbiblanguage{#1}}%
79   }
```

Redefine it at `\begin{document}`.

```
80   \AtBeginDocument{%
81     \renewcommand\selectbiblanguage[1]{\@selectbiblanguage{#1}}%
82   }
```

Define the "real" command that does the action. It tests wheather `\bibs#1` and `\extras#1` are known and produces error messages if not. If everything is okay, change the bibliography language.

```
83   \newcommand\@selectbiblanguage[1]{%
84     \bbbbifundefined{bibs#1}{%
85       \bbbbifundefined{date#1}{%
86         \PackageError{babelbib}{Language #1 in bibliography not loaded
87           by babel}{%
88           The language #1 hasn't been loaded by babel.
89           Add it to the\MessageBreak
90           options of the \string\usepackage{babel} command or to the
91           global options.}%
92       }{%
93         \PackageError{babelbib}{Language #1 in bibliography unknown by
94           babelbib}{%
95           There are no definitions for #1 available in the
96           current\MessageBreak
97           version of babelbib. Please contact h.harders@tu-bs.de.}%
98       }%
99     }{%
100        \typeout{babelbib: Set language for keywords in the bibliography fixed to #1}%
101        \csname bibs#1\endcsname
102      }%
103    }
104  \else
105    \newcommand\selectbiblanguage[1]{%
106      \PackageWarning{babelbib}{Command \string\selectbiblanguage\space
107        used without package\MessageBreak
108        option fixlanguage. Ignored}%
109    }
110    \AtBeginDocument{%
111      \typeout{babelbib: Use citation-dependent languages in bibliography}%
112    }
113  \fi
```

`\btxselectlanguage` Define `\selectbiblanguage` which selects a language and complains if babelbib does not know about this language. For internal use, only.

```
114 \newcommand\btxselectlanguage[1]{%
115   \bbbbifundefined{bibs#1}{%
116     \bbbbifundefined{date#1}{%
```

```
117    \PackageError{babelbib}{Language #1 in bibliography not loaded
118      by babel}{%
119      The language #1 hasn't been loaded by babel.
120      Add it to the\MessageBreak
121      options of the \string\usepackage{babel} command or to the
122      global options.}%
123    }{%
124      \ifbbbbfixlanguage
125      \PackageWarning{babelbib}{Language #1 in bibliography
126        unknown\MessageBreak
127        by babelbib. Hyphenation will be\MessageBreak
128        incorrect}%
129      \else
130      \PackageError{babelbib}{Language #1 in bibliography unknown by
131        babelbib}{%
132        There are no definitions for #1 available in the
133        current\MessageBreak
134        version of babelbib. Please contact h.harders@tu-bs.de.}%
135      \fi
136    }%
137  }{%
138    \selectlanguage{#1}%
139  }%
140 }
```

\biblanguage   Define \biblanguage which switches to the keyword language within a field.

```
141 \newcommand\biblanguage[1]{{%
142    \expandafter\selectlanguage\expandafter{\biblanguagename}#1}}
```

\btxlanguagename   Define \btxlanguagename which typesets the name of the language given in the argument, spoken in the current active language.

```
143 \newcommand\btxlanguagename[1]{%
144   \bbbbifundefined{btxlanguagename#1}{%
145     \PackageError{babelbib}{Languagename for #1 not
146       defined\MessageBreak
147       in \languagename\space language}{%
148       Either you have forgotten to specify the option 'languagenames'
149       when loading\MessageBreak
150       babelbib, or the command \string\bibs\languagename\space does
151       not contain a definition\MessageBreak
152       for the command \string\btxlanguagename#1.
153       In the latter case, please\MessageBreak
154       contact h.harders@tu-bs.de.}%
155     #1%
156   }{%
157     \@nameuse{btxlanguagename#1}%
158   }%
159 }
```

`\setbtxfallbacklanguage`

```
160 \newcommand*\setbtxfallbacklanguage[1]{%
161   \edef\btxfallbacklanguage{#1}%
162   \typeout{babelbib: Set bibliography fall-back language to
163     \btxfallbacklanguage}%
164 }
```

`\btxfallbacklanguage`

```
165 \AtBeginDocument{%
166   \@ifundefined{btxfallbacklanguage}{%
167     \edef\btxfallbacklanguage{\languagename}%
168   \typeout{babelbib: Set bibliography fall-back language to
169     \btxfallbacklanguage}%
170   }{%
171     \typeout{babelbib: Bibliography fall-back language unchanged
172       (\btxfallbacklanguage)}%
173   }%
174 }
```

`\declarebtxcommands` Declare `\declarebtxcommands` which adds or replaces one or more of the `\Btx` or `\btx` commands defined in a `\bibs⟨language⟩` command. The first argument gives the language for which the commands shall be added or changed. The second argument includes the definitions of the commands. For an example, see section **??**.

```
175 \newcommand*\declarebtxcommands[2]{%
176   \AtBeginDocument{%
177     \typeout{babelbib: Add a command to \string\bibs#1}%
178     \expandafter\g@addto@macro\csname bibs#1\endcsname{#2}%
179     \ifbbbbfixlanguage
180       \selectbiblanguage{\biblanguagename}%
181     \fi
182   }%
183 }
```

This command may only be used in the preamble.

```
184 \@onlypreamble\declarebtxcommands
```

`\btxifchangecaseon`
`\btxifchangecaseoff` The bst files write titles twice, first with changed case and second with preserved case. The macros `\btxifchangecaseon` and `\btxifchangecaseoff` typeset one of these versions. The languages append one of these commands to the `\extras⟨language⟩` commands.

```
185 \newcommand*\btxifchangecaseon{%
186   \def\btxifchangecase{\@firstoftwo}%
187 }%
188 \newcommand*\btxifchangecaseoff{%
189   \def\btxifchangecase{\@secondoftwo}%
190 }%
```

\setbibliographyfont Define `\setbibliographyfont` and `\setbibliographyfont*` that set the font declared by the first argument #1 to the second argument #2. The second argument has to be a macro with one argument, like `\textbf`, `\emph`, `\textsc`, etc. The normal version generates an error, if the internal command `\btx#1font` is not defined. The star version doesn't. error.

```
191 \newcommand\setbibliographyfont{%
192   \@ifnextchar*{\@@setbibliographyfont}{\@setbibliographyfont}%
193 }
```

\@setbibliographyfont

```
194 \newcommand\@setbibliographyfont[2]{%
195   \bbbbifundefined{btx#1font}{%
196     \PackageError{babelbib}{Bibliography font '#1' can't be set}{%
197       You have tried to define a font for the bibliographic element
198       \MessageBreak
199       '#1', which is unknown to babelbib}%
200   }{%
201     \expandafter\renewcommand\csname btx#1font\endcsname{#2}%
202     \typeout{babelbib: Bibliography font for '#1' changed.}%
203   }%
204 }
```

\@@setbibliographyfont The first argument is the ∗ and ignored.

```
205 \newcommand\@@setbibliographyfont[3]{%
206   \bbbbifundefined{btx#2font}{%
207     \expandafter\newcommand\csname btx#2font\endcsname{#3}%
208     \typeout{babelbib: Bibliography font for '#2' newly defined.}%
209   }{%
210     \expandafter\renewcommand\csname btx#2font\endcsname{#3}%
211     \typeout{babelbib: Bibliography font for '#2' changed.}%
212   }%
213 }
```

\providebibliographyfont Define `\providebibliographyfont` and `\providebibliographyfont*` that do the same as `\setbibliographyfont` and `\setbibliographyfont*`, but only, if `\setbibliographyfont` has not been used for #1, before. It is similar to `\providecommmand` which only defines that command if it is undefined, before. This command is intended to be used by the BIBTEX style, but can also be used by the user.

```
214 \newcommand\providebibliographyfont{%
215   \@ifnextchar*{\@@providebibliographyfont}{\@providebibliographyfont}%
216 }
```

\@providebibliographyfont

```
217 \newcommand\@providebibliographyfont[2]{%
218   \bbbbifundefined{btx#1font}{%
219     \PackageError{babelbib}{Bibliography font '#1' can't be set}{%
220       You have tried to define a font for the bibliographic element
```

13

```
221     \MessageBreak
222     '#1', which is unknown to babelbib}%
223   }{%
224     \expandafter\ifx\csname btx#1font\endcsname\@empty
225       \expandafter\renewcommand\csname btx#1font\endcsname{#2}%
226       \typeout{babelbib: Using the BibTeX style's default font for '#1'.}%
227     \else
228       \typeout{babelbib: Using user changed font for '#1'.}%
229     \fi
230   }%
231 }
```

\@@setbibliographyfont   The first argument is the * and ignored.

```
232 \newcommand\@@providebibliographyfont[3]{%
233   \bbbbifundefined{btx#2font}{%
234     \expandafter\newcommand\csname btx#2font\endcsname{#3}%
235     \typeout{babelbib: Using the BibTeX style's default font for '#2'.}%
236   }{%
237     \expandafter\ifx\csname btx#2font\endcsname\@empty
238       \expandafter\renewcommand\csname btx#2font\endcsname{#3}%
239       \typeout{babelbib: Using the BibTeX style's default font for '#2'.}%
240     \else
241       \typeout{babelbib: Using user changed font for '#2'.}%
242     \fi
243   }%
244 }
```

\btxnamefont   Define the dummy commands for available fonts

```
245 \newcommand*\btxnamefont{}
246 \let\btxnamefont=\@empty
247 \newcommand*\btxlastnamefont{}
248 \let\btxlastnamefont=\@empty
249 \newcommand\btxtitlefont{}
250 \let\btxtitlefont=\@empty
251 \newcommand\btxetalfont{}
252 \let\btxetalfont=\@empty
253 \newcommand\btxjournalfont{}
254 \let\btxjournalfont=\@empty
255 \newcommand\btxvolumefont{}
256 \let\btxvolumefont=\@empty
257 \newcommand\btxISBNfont{}
258 \let\btxISBNfont=\@empty
259 \newcommand\btxISSNfont{}
260 \let\btxISSNfont=\@empty
261 \newcommand\btxurlfont{}
262 \let\btxurlfont=\@empty
263 \newcommand\btxurldatefont{}
264 \let\btxurldatefont=\@empty
```

\btxauthorcolon   Define `\btxauthorcolon` which defines the characters typeset after the authors, if they are written before the title. By default, it is a ":".

265 `\newcommand\btxauthorcolon{:}`

\btxISBN   Define `\btxISBN` which outputs "'ISBN"' in a bibliography. For example, it could be defined to `\textsc{isbn}` when old style digits are used.

266 `\newcommand\btxISBN{ISBN}`

\btxISSN   Define `\btxISSN` which outputs "'ISSN"' in a bibliography. For example, it could be defined to `\textsc{issn}` when old style digits are used.

267 `\newcommand\btxISSN{ISSN}`

\ifbtxprintISBN
\ifbtxprintISSN   These commands are used by the bibliography styles to typeset the ISBN or ISSN only if wanted.

268 `\DeclareRobustCommand\ifbtxprintISBN[1]{\ifbtx@printISBN #1\fi}`
269 `\DeclareRobustCommand\ifbtxprintISSN[1]{\ifbtx@printISSN #1\fi}`

\btxprintISBN
\btxprintISSN   These macros are used to switch on or off printing of ISBN resp. ISSN. Valid arguments are `true` and `false`.

270 `\newcommand*\btxprintISBN[1]{\csname btx@printISBN#1\endcsname}`
271 `\newcommand*\btxprintISSN[1]{\csname btx@printISSN#1\endcsname}`

\ifbtx@printISBN
\ifbtx@printISSN   The booleans that store the necessary information.

272 `\newif\ifbtx@printISBN`
273 `\newif\ifbtx@printISSN`
274 `\btxprintISBN{true}`
275 `\btxprintISSN{true}`

\url   Define `\url` which, by default, is used for URLs. Only necessary if not provided by another package, e. g. `url.sty`.

276 `\AtBeginDocument{%`
277 `  \providecommand\url[1]{%`
278 `    \PackageError{babelbib}{No \string\url\space command defined but`
279 `      field URL used\MessageBreak`
280 `      in bibliography}{%`
281 `    Please define a \string\url\space command for printing URLs`
282 `    before \string\begin{document}, e.\,g.\MessageBreak`
283 `      by loading the package 'url.sty'.}%`
284 `  \texttt{#1}%`
285 `  }%`
286 `}`

Perform the following commands at `\begin{document}` in order to be sure to do that after loading `babel`.

287 `\AtBeginDocument{%`

Load `babel` if that has not been done, yet.

288 `  \RequirePackage{babel}`

15

Input all know languages that babel has also loaded, before.

```
289   \inputbdf{afrikaans}{afrikaans}
290   \inputbdf{american}{english}
291   \inputbdf{austrian}{german}
292   \inputbdf{brazil}{portuguese}
293   \inputbdf{brazilian}{portuguese}
294   \inputbdf{british}{english}
295   \inputbdf{canadian}{english}
296   \inputbdf{canadien}{french}
297   \inputbdf{catalan}{catalan}
298   \inputbdf{danish}{danish}
299   \inputbdf{dutch}{dutch}
300   \inputbdf{english}{english}
301   \inputbdf{esperanto}{esperanto}
302   \inputbdf{finnish}{finnish}
303   \inputbdf{francais}{french}
304   \inputbdf{french}{french}
305   \inputbdf{frenchb}{french}
306   \inputbdf{german}{german}
307   \inputbdf{germanb}{german}
308   \inputbdf{italian}{italian}
309   \inputbdf{norsk}{norsk}
310   \inputbdf{mexican}{spanish}
311   \inputbdf{naustrian}{german}
312   \inputbdf{ngerman}{german}
313   \inputbdf{portuges}{portuguese}
314   \inputbdf{portuguese}{portuguese}
315   \inputbdf{spanish}{spanish}
316   \inputbdf{swedish}{swedish}
317   \inputbdf{UKenglish}{english}
318   \inputbdf{USenglish}{english}
```

Call `\bibs#1`, where #1 stands for the main language of the document, to activate the additional bibliographic commands.

```
319   \ifbbbbfixlanguage
320     \typeout{babelbib: Load BibTeX extensions
321       \string\bibs\bbl@main@language\space for \bbl@main@language}%
322     \selectbiblanguage{\bbl@main@language}%
323   \else
324     \expandafter\selectlanguage\expandafter{\bbl@main@language}%
325   \fi
326 }
327 ⟨/package⟩
```

9.3   The language definitions

9.3.1   German

```
328 ⟨*german⟩
```

\bibsgerman Define `\bibsgerman` which itself defines all necessary expressions used in bibliographies that differ in different languages. This command is used for all German dialects.

Since the language of the keywords may differ from the language of the bibliography item, the keyword language is set for each keyword. Because this command is also used for dialects, it has an optional argument which is set to the dialect.

329 `\newcommand\bibsgerman[1][german]{%`

Define the command `\biblanguagename` that always returns the name of the current language for bibliographies.

330   `\def\biblanguagename{#1}%`

First, define all commands for usage within a sentence (which normally start with a lowercase letter, if they aren't a noun). These commands start with a lowercase letter.

Many commands have an argument. This may be used by the bibTeX styles to append a dot after abbreviations, e.g. `\btxetalshort{.}`.

331   `\def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%`
332   `\def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%`
333   `\def\btxandshort##1{\protect\foreignlanguage{#1}{und}}%`
334   `\def\btxandlong##1{\protect\foreignlanguage{#1}{und}}%`

The command `\btxandcomma` contains a "," if a comma is added before the "and" in a list of more than two items. For German, this is not the case.

335   `\def\btxandcomma##1{}%`
336   `\def\btxinlong##1{\protect\foreignlanguage{#1}{in:}}%`
337   `\def\btxinshort##1{\protect\foreignlanguage{#1}{in:}}%`
338   `\def\btxofseriesshort##1{\protect\foreignlanguage{#1}{d.\ Reihe}}%`
339   `\def\btxinseriesshort##1{\protect\foreignlanguage{#1}{in}}%`
340   `\def\btxofserieslong##1{\protect\foreignlanguage{#1}{der Reihe}}%`
341   `\def\btxinserieslong##1{\protect\foreignlanguage{#1}{in}}%`
342   `\def\btxeditorshort##1{\protect\foreignlanguage{#1}{Hrsg##1{}}}%`
343   `\def\btxeditorlong##1{\protect\foreignlanguage{#1}{Herausgeber}}%`
344   `\def\btxeditorsshort##1{\protect\foreignlanguage{#1}{Hrsg##1{}}}%`
345   `\def\btxeditorslong##1{\protect\foreignlanguage{#1}{Herausgeber}}%`
346   `\def\btxvolumeshort##1{\protect\foreignlanguage{#1}{Bd##1{}}}%`
347   `\def\btxvolumelong##1{\protect\foreignlanguage{#1}{Band}}%`
348   `\def\btxnumbershort##1{\protect\foreignlanguage{#1}{Nr##1{}}}%`
349   `\def\btxnumberlong##1{\protect\foreignlanguage{#1}{Nummer}}%`

Avoid the ligature in „Auflage" in the same way, `babel` does it. This is a change in the behaviour to the `germbib` package. In „Aufl" the ligature is still used since this is done in abbreviations.

350   `\def\btxeditionshort##1{\protect\foreignlanguage{#1}{Aufl##1{}}}%`
351   `\def\btxeditionlong##1{\protect\foreignlanguage{#1}{%`
352   `Auf\penalty10000\discretionary{-}{}{\kern.03em}%`
353   `\allowhyphens lage}}%`
354   `\def\btxchaptershort##1{\protect\foreignlanguage{#1}{Kap##1{}}}%`
355   `\def\btxchapterlong##1{\protect\foreignlanguage{#1}{Kapitel}}%`
356   `\def\btxpageshort##1{\protect\foreignlanguage{#1}{S##1{}}}%`

```
357    \def\btxpagelong##1{\protect\foreignlanguage{#1}{Seite}}%
358    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{S##1{}}}%
359    \def\btxpageslong##1{\protect\foreignlanguage{#1}{Seiten}}%
360    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Diplomarbeit}}%
```

Use „Dissertation" instead of „Doktorarbeit" for PhD theses. This is a change in the behaviour to the `germbib` package.

```
361    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{Dissertation}}%
362    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Techn.\ Ber##1{}}}%
363    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Technischer Bericht}}%
364    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januar}}%
365    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februar}}%
366    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{M\"arz}}%
367    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
368    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Mai}}%
369    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Juni}}%
370    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Juli}}%
371    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{August}}%
372    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
373    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
374    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
375    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{Dezember}}%
376    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
377    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
378    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{M\"arz}}%
379    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
380    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Mai}}%
381    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Juni}}%
382    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Juli}}%
383    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
384    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
385    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
386    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
387    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dez##1{}}}%
```

Then, define all commands for usage at the begin of a sentence (which start with an uppercase letter). These commands start with an uppercase letter. Since, in German, many nouns are the same in the middle and at the start of a sentence, the `\Btx` variants just call the `\btx` variant.

```
388    \def\Btxinlong##1{\protect\foreignlanguage{#1}{In:}}%
389    \def\Btxinshort##1{\protect\foreignlanguage{#1}{In:}}%
390    \def\Btxeditorshort{\btxeditorshort}%
391    \def\Btxeditorlong{\btxeditorlong}%
392    \def\Btxeditorsshort{\btxeditorsshort}%
393    \def\Btxeditorslong{\btxeditorslong}%
394    \def\Btxvolumeshort{\btxvolumeshort}%
395    \def\Btxvolumelong{\btxvolumelong}%
396    \def\Btxnumbershort{\btxnumbershort}%
397    \def\Btxnumberlong{\btxnumberlong}%
398    \def\Btxeditionshort{\btxeditionshort}%
```

```
399    \def\Btxeditionlong{\btxeditionlong}%
400    \def\Btxchaptershort{\btxchaptershort}%
401    \def\Btxchapterlong{\btxchapterlong}%
402    \def\Btxpageshort{\btxpageshort}%
403    \def\Btxpagelong{\btxpagelong}%
404    \def\Btxpagesshort{\btxpagesshort}%
405    \def\Btxpageslong{\btxpageslong}%
406    \def\Btxtechrepshort{\btxtechrepshort}%
407    \def\Btxtechreplong{\btxtechreplong}%
408    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{besucht:}}%
```

A command that just puts some user defined text in the language of the keywords.

```
409    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
```

Names of all known languages in the current language. For example, used by `babamspl.bst`.

```
410    \ifbbbblanguagenames
411      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{englisch}}%
412      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{deutsch}}%
413      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugiesisch}}%
414      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugiesisch}}%
415      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{englisch}}%
416      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgarisch}}%
417      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{englisch}}%
418      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franz\"osisch}}%
419      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalanisch}}%
420      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroatisch}}%
421      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tschechisch}}%
422      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{d\"anisch}}%
423      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{niederl\"andisch}}%
424      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{englisch}}%
425      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
426      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finnisch}}%
427      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{franz\"osisch}}%
428      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franz\"osisch}}%
429      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franz\"osisch}}%
430      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{deutsch}}%
431      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{deutsch}}%
432      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{griechisch}}%
433      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebr\"aisch}}%
434      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{ungarisch}}%
435      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{isl\"andisch}}%
436      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irisch}}%
437      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italienisch}}%
438      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{lateinisch}}%
439      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{deutsch}}%
440      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{deutsch}}%
441      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norwegisch}}%
442      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{neunorwegisch}}%
443      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polnisch}}%
444      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugiesisch}}%
```

```
445        \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugiesisch}}%
446        \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russisch}}%
447        \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{schottisch}}%
448        \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbisch}}%
449        \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spanisch}}%
450        \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{schwedisch}}%
451        \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{t\"urkisch}}%
452        \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{englisch}}%
453        \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{englisch}}%
454     \fi
455 }
```

\bibsgermanb Do the same for the language "germanb". Since there is no difference, just call
\bibsgerman.

```
456 \newcommand\bibsgermanb{\bibsgerman}
```

\bibsngerman Do the same for German with new ortography. Call \bibsgerman with new hy-
phenation patterns.

```
457 \newcommand\bibsngerman[1][ngerman]{\bibsgerman[#1]}
```

\bibsaustrian Once again. Austrians use „Jänner" instead of „Januar". Thus, redefine the corre-
sponding command.

```
458 \newcommand\bibsaustrian[1][austrian]{%
459    \bibsgerman[#1]%
460    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{J\"anner}}%
461    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{J\"an##1{}}}%
462 }
```

\bibsnaustrian New Austrian is the same as Austrian.

```
463 \newcommand\bibsnaustrian[1][naustrian]{%
464    \bibsngerman[#1]%
465    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{J\"anner}}%
466    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{J\"an##1{}}}%
467 }
```

The rest has to be executed after loading babel.sty, because the \extra...
commands have to be defined for all used languages.

```
468 \AtBeginDocument{%
```

If the language is fixed, do nothing.

```
469    \ifbbbbfixlanguage
470    \else
```

Append the corresponding \#2 command to each used language, namely \extras#1.

```
471       \bbbbaddto{austrian}{bibsaustrian}
472       \bbbbaddto{german}{bibsgerman}
473       \bbbbaddto{germanb}{bibsgermanb}
474       \bbbbaddto{naustrian}{bibsnaustrian}
475       \bbbbaddto{ngerman}{bibsngerman}
476    \fi
```

Switch off the change of case in titles for all German dialects by appending \btxifchangecaseoff to \extras⟨language⟩.

```
477    \bbbbaddto{austrian}{btxifchangecaseoff}
478    \bbbbaddto{german}{btxifchangecaseoff}
479    \bbbbaddto{germanb}{btxifchangecaseoff}
480    \bbbbaddto{naustrian}{btxifchangecaseoff}
481    \bbbbaddto{ngerman}{btxifchangecaseoff}
482 }
483 ⟨/german⟩
```

9.3.2   English

```
484 ⟨*english⟩
```

The language definition for English is mostly the same as the German one. Therefore, it is not described in detail, again.

\bibsenglish   french.sty already defines \bibsenglish. In this case it has to be redefined, otherwise newly defined.

```
485 \makeatletter
486 \@ifpackageloaded{french}{}{\newcommand\bibsenglish{}}
487 \makeatother
```

Bibliographic commands for English.

```
488 \renewcommand\bibsenglish[1][english]{%
489    \def\biblanguagename{#1}%
490    \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
491    \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
492    \def\btxandshort##1{\protect\foreignlanguage{#1}{and}}%
493    \def\btxandlong##1{\protect\foreignlanguage{#1}{and}}%
494    \def\btxandcomma##1{,}%
495    \def\btxinlong##1{\protect\foreignlanguage{#1}{in}}%
496    \def\btxinshort##1{\protect\foreignlanguage{#1}{in}}%
497    \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{of}}%
498    \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{in}}%
499    \def\btxofserieslong##1{\protect\foreignlanguage{#1}{of}}%
500    \def\btxinserieslong##1{\protect\foreignlanguage{#1}{in}}%
501    \def\btxeditorshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
502    \def\btxeditorlong##1{\protect\foreignlanguage{#1}{editor}}%
503    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{eds##1{}}}%
504    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{editors}}%
505    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
506    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volume}}%
507    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{no##1{}}}%
508    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{number}}%
509    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
510    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{edition}}%
511    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{ch##1{}}}%
512    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{chapter}}%
513    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
514    \def\btxpagelong##1{\protect\foreignlanguage{#1}{page}}%
```

```
515    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pp##1{}}}%
516    \def\btxpageslong##1{\protect\foreignlanguage{#1}{pages}}%
517    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Master's thesis}}%
518    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{PhD thesis}}%
519    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Techn.\ rep##1{}}}%
520    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Technical report}}%
521    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{January}}%
522    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{February}}%
523    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{March}}%
524    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
525    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{May}}%
526    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{June}}%
527    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{July}}%
528    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{August}}%
529    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
530    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{October}}%
531    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
532    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{December}}%
533    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
534    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
535    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar##1{}}}%
536    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
537    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{May}}%
538    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{June}}%
539    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{July}}%
540    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
541    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sept##1{}}}%
542    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Oct##1{}}}%
543    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
544    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dec##1{}}}%
545    \def\Btxinlong##1{\protect\foreignlanguage{#1}{In}}%
546    \def\Btxinshort##1{\protect\foreignlanguage{#1}{In}}%
547    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
548    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Editor}}%
549    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Eds##1{}}}%
550    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Editors}}%
551    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
552    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
553    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{No##1{}}}%
554    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Number}}%
555    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
556    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Edition}}%
557    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Ch##1{}}}%
558    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Chapter}}%
559    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
560    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Page}}%
561    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pp##1{}}}%
562    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pages}}%
563    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tech.\ Rep##1{}}}%
564    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Technical Report}}%
```

```
565    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{visited on}}%
566    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
```

Names of all known languages in the current language.

```
567    \ifbbbblanguagenames
568      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{english}}%
569      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{german}}%
570      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portuguese}}%
571      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portuguese}}%
572      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{english}}%
573      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgarian}}%
574      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{english}}%
575      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{french}}%
576      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catalan}}%
577      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croatian}}%
578      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{czech}}%
579      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{danish}}%
580      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{dutch}}%
581      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{english}}%
582      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
583      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finnish}}%
584      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{french}}%
585      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{french}}%
586      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{french}}%
587      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{german}}%
588      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{german}}%
589      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{greek}}%
590      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebrew}}%
591      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hungarian}}%
592      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{icelandic}}%
593      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irish}}%
594      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italian}}%
595      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latin}}%
596      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{german}}%
597      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{german}}%
598      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norwegian}}%
599      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{new-norwegian}}%
600      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polish}}%
601      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portuguese}}%
602      \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portuguese}}%
603      \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russian}}%
604      \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{scottish}}%
605      \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbian}}%
606      \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spanish}}%
607      \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{swedish}}%
608      \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turkish}}%
609      \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{english}}%
610      \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{english}}%
611    \fi
612 }
```

Copy the commands to the other languages.

```
613 \newcommand\bibsamerican{\bibsenglish[american]}
614 \newcommand\bibsbritish{\bibsenglish[british]}
615 \newcommand\bibscanadian{\bibsenglish[canadian]}
616 \newcommand\bibsUKenglish{\bibsenglish[UKenglish]}
617 \newcommand\bibsUSenglish{\bibsenglish[USenglish]}
```

Append the definitions to the language-calling commands.

```
618 \AtBeginDocument{%
619   \ifbbbbfixlanguage
620   \else
621     \bbbbaddto{american}{bibsamerican}
622     \bbbbaddto{british}{bibsbritish}
623     \bbbbaddto{canadian}{bibscanadian}
624     \bbbbaddto{english}{bibsenglish}
625     \bbbbaddto{UKenglish}{bibsUKenglish}
626     \bbbbaddto{USenglish}{bibsUSenglish}
627   \fi
```

Switch on the change of case in titles for all English dialects by appending
\btxifchangecaseoff to \extras⟨language⟩.

```
628   \bbbbaddto{american}{btxifchangecaseon}
629   \bbbbaddto{british}{btxifchangecaseon}
630   \bbbbaddto{canadian}{btxifchangecaseon}
631   \bbbbaddto{english}{btxifchangecaseon}
632   \bbbbaddto{UKenglish}{btxifchangecaseon}
633   \bbbbaddto{USenglish}{btxifchangecaseon}
634 }
635 ⟨/english⟩
```

9.3.3 Italian

```
636 ⟨*italian⟩
```

\bibsitalian Bibliographic commands for Italian.

```
637 \newcommand\bibsitalian[1][italian]{%
638   \def\biblanguagename{#1}%
639   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
640   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
641   \def\btxandshort##1{\protect\foreignlanguage{#1}{e}}%
642   \def\btxandlong##1{\protect\foreignlanguage{#1}{e}}%
643   \def\btxandcomma##1{}%
644   \def\btxinlong##1{\protect\foreignlanguage{#1}{in}}%
645   \def\btxinshort##1{\protect\foreignlanguage{#1}{in}}%
646   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{della serie}}%
647   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{nella serie}}%
648   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{della serie}}%
649   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{nella serie}}%
650   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{cur##1{}}}%
651   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{curatore}}%
```

24

```
652    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{cur##1{}}}%
653    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{curatori}}%
654    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
655    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volume}}%
656    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{no##1{}}}%
657    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{numero}}%
658    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
659    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{edizione}}%
660    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{cap##1{}}}%
661    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{capitolo}}%
662    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
663    \def\btxpagelong##1{\protect\foreignlanguage{#1}{pagina}}%
664    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pp##1{}}}%
665    \def\btxpageslong##1{\protect\foreignlanguage{#1}{pagine}}%
666    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{tesi di laurea}}%
667    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{tesi di dottorato}}%
668    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Rapp.\ Tecnico}}%
669    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Rapporto Tecnico}}%
670    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{gennaio}}%
671    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{febbraio}}%
672    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{marzo}}%
673    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{aprile}}%
674    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{maggio}}%
675    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{giugno}}%
676    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{luglio}}%
677    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{agosto}}%
678    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{settembre}}%
679    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{ottobre}}%
680    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{novembre}}%
681    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{dicembre}}%
682    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{gen##1{}}}%
683    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{feb##1{}}}%
684    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{mar##1{}}}%
685    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{apr##1{}}}%
686    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{mag##1{}}}%
687    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{giu##1{}}}%
688    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{lug##1{}}}%
689    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{ago##1{}}}%
690    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{set##1{}}}%
691    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{ott##1{}}}%
692    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{nov##1{}}}%
693    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{dic##1{}}}%
694    \def\Btxinlong##1{\protect\foreignlanguage{#1}{Nel}}%
695    \def\Btxinshort##1{\protect\foreignlanguage{#1}{Nel}}%
696    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
697    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Editore}}%
698    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
699    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Editori}}%
700    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
701    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
```

```
702    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{No##1{}}}%
703    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Numero}}%
704    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
705    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Edizione}}%
706    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Cap##1{}}}%
707    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Capitolo}}%
708    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
709    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Pagina}}%
710    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pp##1{}}}%
711    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pagine}}%
712    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Rap.\ Tecnico}}%
713    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Rapporto Tecnico}}%
714    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{accesso a}}%
715    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
```

Names of all known languages in the current language.

```
716    \ifbbbblanguagenames
717      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{inglese}}%
718      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{tedesco}}%
719      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portoghese}}%
720      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portoghese}}%
721      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{inglese}}%
722      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgaro}}%
723      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{inglese}}%
724      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{francese}}%
725      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catalano}}%
726      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croato}}%
727      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{ceco}}%
728      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{danese}}%
729      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{olandese}}%
730      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{inglese}}%
731      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
732      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finlandese}}%
733      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{francese}}%
734      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{francese}}%
735      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{francese}}%
736      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{tedesco}}%
737      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{tedesco}}%
738      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{greco}}%
739      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{ebreo}}%
740      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{ungherese}}%
741      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islandese}}%
742      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irlandese}}%
743      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiano}}%
744      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latino}}%
745      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{tedesco}}%
746      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{tedesco}}%
747      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norvegese}}%
748      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{nuovo norvegese}}%
749      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polacco}}%
```

```
750    \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portoghese}}%
751    \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portoghese}}%
752    \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russo}}%
753    \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{scozzese}}%
754    \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbo}}%
755    \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spagnolo}}%
756    \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{svedese}}%
757    \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turco}}%
758    \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{inglese}}%
759    \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{inglese}}%
760  \fi
761 }
```

Append the definitions to the language-calling commands.

```
762 \AtBeginDocument{%
763   \ifbbbbfixlanguage
764   \else
765     \bbbbaddto{italian}{bibsitalian}
766   \fi
```

Switch off the change of case in titles for Italian by appending \btxifchangecaseoff to \extrasitalian.

```
767   \bbbbaddto{italian}{btxifchangecaseoff}
768 }
769 ⟨/italian⟩
```

9.3.4 Norwegian

```
770 ⟨*norsk⟩
```

The language definition for Norwegian was provided by Hans Fredrik Nord-haug.

\bibsnorsk Bibliographic commands for Norsk.

```
771 \newcommand\bibsnorsk[1][norsk]{%
772   \def\biblanguagename{#1}%
773   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
774   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
775   \def\btxandshort##1{\protect\foreignlanguage{#1}{og}}%
776   \def\btxandlong##1{\protect\foreignlanguage{#1}{og}}%
777   \def\btxandcomma##1{}%
778   \def\btxinlong##1{\protect\foreignlanguage{#1}{i}}%
779   \def\btxinshort##1{\protect\foreignlanguage{#1}{i}}%
780   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{av}}%
781   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{i}}%
782   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{av}}%
783   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{i}}%
784   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
785   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redakt\o r}}%
786   \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
787   \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redakt\o rer}}%
```

```
788    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{bd##1{}}}%
789    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{bind}}%
790    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{nr##1{}}}%
791    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nummer}}%
792    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{utg##1{}}}%
793    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{utgave}}%
794    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{kap##1{}}}%
795    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{kapittel}}%
796    \def\btxpageshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
797    \def\btxpagelong##1{\protect\foreignlanguage{#1}{side}}%
798    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
799    \def\btxpageslong##1{\protect\foreignlanguage{#1}{sider}}%
800    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Masteroppgave}}%
801    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{PhD-avhandling}}%
802    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{tekn.\ rap##1{}}}%
803    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{teknisk rapport}}%
804    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januar}}%
805    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februar}}%
806    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Mars}}%
807    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
808    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Mai}}%
809    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Juni}}%
810    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Juli}}%
811    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{August}}%
812    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
813    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
814    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
815    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{Desember}}%
816    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
817    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
818    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar##1{}}}%
819    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
820    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Mai}}%
821    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1{}}}%
822    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1{}}}%
823    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
824    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
825    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
826    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
827    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Des##1{}}}%
828    \def\Btxinlong##1{\protect\foreignlanguage{#1}{I}}%
829    \def\Btxinshort##1{\protect\foreignlanguage{#1}{I}}%
830    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
831    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redakt\o r}}%
832    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
833    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redakt\o rer}}%
834    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Bd##1{}}}%
835    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Bind}}%
836    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{Nr##1{}}}%
837    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nummer}}%
```

```
838    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Utg##1{}}}%
839    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Utgave}}%
840    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Kap##1{}}}%
841    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Kapittel}}%
842    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{S##1{}}}%
843    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Side}}%
844    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{S##1{}}}%
845    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Sider}}%
846    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ rap##1{}}}%
847    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Teknisk rapport}}%
848    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{sjekket:}}%
849    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
```

Names of all known languages in the current language.

```
850    \ifbbbblanguagenames
851      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{engelsk}}%
852      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{tysk}}%
853      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugisisk}}%
854      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugisisk}}%
855      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{engelsk}}%
856      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgarsk}}%
857      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{engelsk}}%
858      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{fransk}}%
859      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalansk}}%
860      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroatisk}}%
861      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tsjekkisk}}%
862      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dansk}}%
863      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{nederlandsk}}%
864      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{engelsk}}%
865      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
866      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finsk}}%
867      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{fransk}}%
868      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{fransk}}%
869      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{fransk}}%
870      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{tysk}}%
871      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{tysk}}%
872      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{gr\ae sk}}%
873      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebraisk}}%
874      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{ungarsk}}%
875      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islandsk}}%
876      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irsk}}%
877      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiensk}}%
878      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latinsk}}%
879      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{tysk}}%
880      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{tysk}}%
881      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norsk}}%
882      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{nynorsk}}%
883      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polsk}}%
884      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugisisk}}%
885      \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugisisk}}%
```

```
886     \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russisk}}%
887     \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{skotsk}}%
888     \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbisk}}%
889     \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spansk}}%
890     \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{svensk}}%
891     \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{tyrkisk}}%
892     \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{engelsk}}%
893     \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{engelsk}}%
894   \fi
895 }
896 \newcommand\bibsnorwegian{\bibsnorsk}
```

Append the definitions to the language-calling commands.

```
897 \AtBeginDocument{%
898   \ifbbbbfixlanguage
899   \else
900     \bbbbaddto{norsk}{bibsnorsk}
901   \fi
```

Switch off the change of case in titles for Norsk by appending `\btxifchangecaseoff` to `\extrasnorsk`.

```
902   \bbbbaddto{norsk}{btxifchangecaseoff}
903 }
904 ⟨/norsk⟩
```

9.3.5   French

```
905 ⟨∗french⟩
```

`\bibsfrench`   `french.sty` already defines `\bibsfrench`. In this case it has to be redefined, otherwise newly defined.

```
906 \makeatletter
907 \@ifpackageloaded{french}{}{\newcommand\bibsfrench{}}
908 \makeatother
```

Bibliographic commands for French.

```
909 \renewcommand\bibsfrench[1][french]{%
910   \def\biblanguagename{#1}%
911   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
912   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
913   \def\btxandshort##1{\protect\foreignlanguage{#1}{et}}%
914   \def\btxandlong##1{\protect\foreignlanguage{#1}{et}}%
915   \def\btxandcomma##1{}%
916   \def\btxinlong##1{\protect\foreignlanguage{#1}{dans}}%
917   \def\btxinshort##1{\protect\foreignlanguage{#1}{dans}}%
918   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{de}}%
919   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{dans}}%
920   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{de}}%
921   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{dans}}%
922   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{r\'ed##1{}}}%
923   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{r\'edacteur}}%
```

```
924    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{r\'eds##1{}}}%
925    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{r\'edacteurs}}%
926    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{t##1{}}}%
927    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{tome}}%
928    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{%
929        n\textsuperscript{o}\kern.2em\relax{}}}%
930    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{num\'ero}}%
931    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{\'ed##1{}}}%
932    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{\'edition}}%
933    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{chap##1{}}}%
934    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{chapitre}}%
935    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
936    \def\btxpagelong##1{\protect\foreignlanguage{#1}{page}}%
937    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
938    \def\btxpageslong##1{\protect\foreignlanguage{#1}{pages}}%
939    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{M\'emoire de ma\^itrise}}%
940    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{Th\`ese de doctorat}}%
941    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{rap.\ tech##1{}}}%
942    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{rapport technique}}%
943    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{janvier}}%
944    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{f\'evrier}}%
945    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{mars}}%
946    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{avril}}%
947    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{mai}}%
948    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{juin}}%
949    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{juillet}}%
950    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{ao\^ut}}%
951    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{septembre}}%
952    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{octobre}}%
953    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{novembre}}%
954    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{d\'ecembre}}%
955    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{jan##1{}}}%
956    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{f\'ev##1{}}}%
957    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{mar##1{}}}%
958    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{avr##1{}}}%
959    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{mai}}%
960    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{juin}}%
961    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{juil##1{}}}%
962    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{ao\^ut}}%
963    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{sept##1{}}}%
964    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{oct##1{}}}%
965    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{nov##1{}}}%
966    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{d\'ec##1{}}}%
967    \def\Btxinlong##1{\protect\foreignlanguage{#1}{Dans}}%
968    \def\Btxinshort##1{\protect\foreignlanguage{#1}{Dans}}%
969    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{R\'ed##1{}}}%
970    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{R\'edacteur}}%
971    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{R\'eds##1{}}}%
972    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{R\'edacteurs}}%
973    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{T##1{}}}%
```

```
974    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Tome}}%
975    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{%
976        N\textsuperscript{o}\kern.2em\relax}}%
977    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Num\'ero}}%
978    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{\'Ed##1{}}}%
979    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{\'Edition}}%
980    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Chap##1{}}}%
981    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Chapitre}}%
982    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
983    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Page}}%
984    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
985    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pages}}%
986    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Rap. tech##1{}}}%
987    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Rapport technique}}%
988    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{visit\'e le}}%
989    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
```

Names of all known languages in the current language.

```
990    \ifbbbblanguagenames
991      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{anglais}}%
992      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{allemand}}%
993      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugais}}%
994      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugais}}%
995      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{anglais}}%
996      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgare}}%
997      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{anglais}}%
998      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{fran\c{c}ais}}%
999      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catalan}}%
1000     \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croate}}%
1001     \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tch\`eque}}%
1002     \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{danois}}%
1003     \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{n\'eerlandais}}%
1004     \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{anglais}}%
1005     \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1006     \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finnois}}%
1007     \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{fran\c{c}ais}}%
1008     \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{fran\c{c}ais}}%
1009     \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{fran\c{c}ais}}%
1010     \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{allemand}}%
1011     \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{allemand}}%
1012     \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{grec}}%
1013     \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{h\'ebreu}}%
1014     \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hongrois}}%
1015     \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islandais}}%
1016     \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irlandais}}%
1017     \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italien}}%
1018     \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latin}}%
1019     \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{allemand}}%
1020     \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{allemand}}%
1021     \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norv\'egien}}%
```

```
1022     \def\btxlanguagenameynorsk{\protect\foreignlanguage{#1}{nouveau
1023         norv\'egien}}%
1024     \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polonais}}%
1025     \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugais}}%
1026     \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugais}}%
1027     \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russe}}%
1028     \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{\'ecossais}}%
1029     \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbe}}%
1030     \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{espagnol}}%
1031     \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{su\'edois}}%
1032     \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turc}}%
1033     \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{anglais}}%
1034     \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{anglais}}%
1035   \fi
1036 }
```

Copy the commands to the other languages.

```
1037 \newcommand\bibsfrancais{\bibsfrench[francais]}
1038 \newcommand\bibsfrenchb{\bibsfrench[frenchb]}
1039 \newcommand\bibscanadien{\bibsfrench[canadien]}
```

Append the definitions to the language-calling commands.

```
1040 \AtBeginDocument{%
1041   \ifbbbbfixlanguage
1042   \else
1043     \bbbbaddto{francais}{bibsfrancais}
1044     \bbbbaddto{french}{bibsfrench}
1045     \bbbbaddto{frenchb}{bibsfrenchb}
1046     \bbbbaddto{canadien}{bibscanadien}
1047   \fi
```

Switch on the change of case in titles for all French dialects by appending
\btxifchangecaseoff to \extras⟨*language*⟩.

```
1048   \bbbbaddto{francais}{btxifchangecaseoff}
1049   \bbbbaddto{french}{btxifchangecaseoff}
1050   \bbbbaddto{frenchb}{btxifchangecaseoff}
1051   \bbbbaddto{canadien}{btxifchangecaseoff}
1052 }
```

```
1053 ⟨/french⟩
```

9.3.6 Spanish

```
1054 ⟨∗spanish⟩
```

The language definition for Spanish was provided by Víctor Luaña and slightly
changed by me according to `spanish.mbs` (custom-bib package).

\bibsspanish   Bibliographic commands for Spanish.

```
1055 \newcommand\bibsspanish[1][spanish]{%
1056   \def\biblanguagename{#1}%
1057   \def\btxetalshort##1{\protect\foreignlanguage{#1}{y~cols##1{}}}%
```

33

```
1058    \def\btxetallong##1{\protect\foreignlanguage{#1}{y~colaboradores}}%
1059    \def\btxandshort##1{\protect\foreignlanguage{#1}{y}}%
1060    \def\btxandlong##1{\protect\foreignlanguage{#1}{y}}%
1061    \def\btxandcomma##1{}%
1062    \def\btxinlong##1{\protect\foreignlanguage{#1}{en}}%
1063    \def\btxinshort##1{\protect\foreignlanguage{#1}{en}}%
1064    \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{de}}%
1065    \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{en}}%
1066    \def\btxofserieslong##1{\protect\foreignlanguage{#1}{de}}%
1067    \def\btxinserieslong##1{\protect\foreignlanguage{#1}{en}}%
1068    \def\btxeditorshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
1069    \def\btxeditorlong##1{\protect\foreignlanguage{#1}{editor}}%
1070    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{eds##1{}}}%
1071    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{editores}}%
1072    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
1073    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volumen}}%
1074    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{%
1075        n\textsuperscript{\underline{o}}}}%
1076    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{n\'umero}}%
1077    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
1078    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{edici{\'o}n}}%
1079    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{cap##1{}}}%
1080    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{cap{\'\i}tulo}}%
1081    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p\'ag##1{}}}%
1082    \def\btxpagelong##1{\protect\foreignlanguage{#1}{p\'agina}}%
1083    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{p\'ags##1{}}}%
1084    \def\btxpageslong##1{\protect\foreignlanguage{#1}{p\'aginas}}%
1085    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Tesis de Licenciatura}}%
1086    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{Tesis de Doctorado}}%
1087    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Informe t\'ecnico##1{}}}%
1088    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Informe t\'ecnico}}%
1089    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Enero}}%
1090    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Febrero}}%
1091    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Marzo}}%
1092    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{Abril}}%
1093    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Mayo}}%
1094    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Junio}}%
1095    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Julio}}%
1096    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{Agosto}}%
1097    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{Septiembre}}%
1098    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Octubre}}%
1099    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{Noviembre}}%
1100    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{Diciembre}}%
1101    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Ene##1{}}}%
1102    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
1103    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar##1{}}}%
1104    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Abr##1{}}}%
1105    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{May}}%
1106    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun}}%
1107    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul}}%
```

```
1108    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Ago##1{}}}%
1109    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
1110    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Oct##1{}}}%
1111    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
1112    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dic##1{}}}%
1113    \def\Btxinlong##1{\protect\foreignlanguage{#1}{En}}%
1114    \def\Btxinshort##1{\protect\foreignlanguage{#1}{En}}%
1115    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
1116    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Editor}}%
1117    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
1118    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Editores}}%
1119    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
1120    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volumen}}%
1121    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{%
1122        N\textsuperscript{\underline{o}}}}%
1123    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{N\'umero}}%
1124    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
1125    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Edici\'on}}%
1126    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Cap##1{}}}%
1127    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Cap\'\itulo}}%
1128    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P\'ag##1{}}}%
1129    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{P\'agina}}%
1130    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{P\'ags##1{}}}%
1131    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{P\'aginas}}%
1132    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Informe t\'ecnico}}%
1133    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Informe t\'ecnico}}%
1134    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{visitado el}}%
1135    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1136    \ifbbbblanguagenames
1137      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{ingl\'es}}%
1138      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{alem\'an}}%
1139      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugu\'es}}%
1140      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugu\'es}}%
1141      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{ingl\'es}}%
1142      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{b\'ulgaro}}%
1143      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{ingl\'es}}%
1144      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franc\'es}}%
1145      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catalan}}%
1146      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croata}}%
1147      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{checo}}%
1148      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dan\'es}}%
1149      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{holand\'es}}%
1150      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{ingl\'es}}%
1151      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1152      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finland\'es}}%
1153      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{franc\'es}}%
1154      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franc\'es}}%
1155      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franc\'es}}%
1156      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{alem\'an}}%
1157      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{alem\'an}}%
```

```
1158    \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{griego}}%
1159    \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebreo}}%
1160    \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{h\'ungaro}}%
1161    \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{island\'es}}%
1162    \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irland\'es}}%
1163    \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiano}}%
1164    \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{lat\'\i n}}%
1165    \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{alem\'an}}%
1166    \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{alem\'an}}%
1167    \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{noruego}}%
1168    \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{noruego}}%
1169    \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polaco}}%
1170    \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugu\'es}}%
1171    \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugu\'es}}%
1172    \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{ruso}}%
1173    \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{escoc\'es}}%
1174    \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbio}}%
1175    \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{espa~nol}}%
1176    \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{sueco}}%
1177    \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turco}}%
1178    \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{ingl\'es}}%
1179    \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{ingl\'es}}%
1180  \fi
1181 }
```

Copy the commands to the other languages.

```
1182 \newcommand\bibsmexican[1][mexican]{%
1183   \bibsspanish[mexican]%
1184   \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Tesis de Maestr{\'\i}a}}%
1185 }
```

Append the definitions to the language-calling commands.

```
1186 \AtBeginDocument{%
1187   \ifbbbbfixlanguage
1188   \else
1189     \bbbbaddto{spanish}{bibsspanish}
1190     \bbbbaddto{mexican}{bibsmexican}
1191   \fi
1192   \bbbbaddto{spanish}{btxifchangecaseoff}
1193   \bbbbaddto{mexican}{btxifchangecaseoff}
1194 }
1195 ⟨/spanish⟩
```

9.3.7 Danish

```
1196 ⟨*danish⟩
```

\bibsdanish   Bibliographic commands for Danish.

```
1197 \newcommand\bibsdanish[1][danish]{%
1198   \def\biblanguagename{#1}%
```

```
1199  \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
1200  \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
1201  \def\btxandshort##1{\protect\foreignlanguage{#1}{og}}%
1202  \def\btxandlong##1{\protect\foreignlanguage{#1}{og}}%
1203  \def\btxandcomma##1{}%
1204  \def\btxinlong##1{\protect\foreignlanguage{#1}{i}}%
1205  \def\btxinshort##1{\protect\foreignlanguage{#1}{i}}%
1206  \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{af}}%
1207  \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{i}}%
1208  \def\btxofserieslong##1{\protect\foreignlanguage{#1}{af}}%
1209  \def\btxinserieslong##1{\protect\foreignlanguage{#1}{i}}%
1210  \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1211  \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redakt\o r}}%
1212  \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1213  \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redakt\o rer}}%
1214  \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{bd##1{}}}}%
1215  \def\btxvolumelong##1{\protect\foreignlanguage{#1}{bind}}%
1216  \def\btxnumbershort##1{\protect\foreignlanguage{#1}{nr##1{}}}%
1217  \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nummer}}%
1218  \def\btxeditionshort##1{\protect\foreignlanguage{#1}{udg##1{}}}%
1219  \def\btxeditionlong##1{\protect\foreignlanguage{#1}{udgave}}%
1220  \def\btxchaptershort##1{\protect\foreignlanguage{#1}{kap##1{}}}%
1221  \def\btxchapterlong##1{\protect\foreignlanguage{#1}{kapitel}}%
1222  \def\btxpageshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
1223  \def\btxpagelong##1{\protect\foreignlanguage{#1}{side}}%
1224  \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pp##1{}}}%
1225  \def\btxpageslong##1{\protect\foreignlanguage{#1}{sider}}%
1226  \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Speciale}}%
1227  \def\btxphdthesis##1{\protect\foreignlanguage{#1}{ph.d.-afhandling}}%
1228  \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ rap##1{}}}%
1229  \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Teknisk rapport}}%
1230  \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januar}}%
1231  \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februar}}%
1232  \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Marts}}%
1233  \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
1234  \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Maj}}%
1235  \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Juni}}%
1236  \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Juli}}%
1237  \def\btxmonauglong##1{\protect\foreignlanguage{#1}{August}}%
1238  \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
1239  \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
1240  \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
1241  \def\btxmondeclong##1{\protect\foreignlanguage{#1}{December}}%
1242  \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
1243  \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
1244  \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar##1{}}}%
1245  \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
1246  \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Maj}}%
1247  \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1{}}}%
1248  \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1{}}}%
```

```
1249    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
1250    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
1251    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
1252    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
1253    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dec##1{}}}%
1254    \def\Btxinlong##1{\protect\foreignlanguage{#1}{I}}%
1255    \def\Btxinshort##1{\protect\foreignlanguage{#1}{I}}%
1256    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1257    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redakt\o r}}%
1258    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1259    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redakt\o rer}}%
1260    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Bd##1{}}}%
1261    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Bind}}%
1262    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{Nr##1{}}}%
1263    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nummer}}%
1264    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Udg##1{}}}%
1265    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Udgave}}%
1266    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Kap##1{}}}%
1267    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Kapitel}}%
1268    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{S##1{}}}%
1269    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Side}}%
1270    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pp##1{}}}%
1271    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Sider}}%
1272    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ rap##1{}}}%
1273    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Teknisk rapport}}%
1274    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{bes\o gt den}}%
1275    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1276    \ifbbbblanguagenames
1277      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{engelsk}}%
1278      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{tysk}}%
1279      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugisisk}}%
1280      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugisisk}}%
1281      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{engelsk}}%
1282      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgarsk}}%
1283      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{engelsk}}%
1284      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{fransk}}%
1285      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalansk}}%
1286      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroatisk}}%
1287      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tjekkisk}}%
1288      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dansk}}%
1289      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{nederlandsk}}%
1290      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{engelsk}}%
1291      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1292      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finsk}}%
1293      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{fransk}}%
1294      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{fransk}}%
1295      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{fransk}}%
1296      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{tysk}}%
1297      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{tysk}}%
1298      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{gr\ae sk}}%
```

```
1299     \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebraisk}}%
1300     \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{ungarsk}}%
1301     \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islandsk}}%
1302     \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irsk}}%
1303     \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiensk}}%
1304     \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latinsk}}%
1305     \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{tysk}}%
1306     \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{tysk}}%
1307     \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norsk}}%
1308     \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{nynorsk}}%
1309     \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polsk}}%
1310     \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugisisk}}%
1311     \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugisisk}}%
1312     \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russisk}}%
1313     \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{skotsk}}%
1314     \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbisk}}%
1315     \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spansk}}%
1316     \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{svensk}}%
1317     \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{tyrkisk}}%
1318     \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{engelsk}}%
1319     \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{engelsk}}%
1320   \fi
1321 }
```

Append the definitions to the language-calling commands.

```
1322 \AtBeginDocument{%
1323   \ifbbbbfixlanguage
1324   \else
1325     \bbbbaddto{danish}{bibsdanish}
1326   \fi
1327   \bbbbaddto{danish}{btxifchangecaseoff}
1328 }
1329 ⟨/danish⟩
```

9.3.8   Finnish

```
1330 ⟨∗finnish⟩
```

\bibsfinnish   Bibliographic commands for Finnish.

```
1331 \newcommand\bibsfinnish[1][finnish]{%
1332   \def\biblanguagename{#1}%
1333   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
1334   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
1335   \def\btxandshort##1{\protect\foreignlanguage{#1}{ja}}%
1336   \def\btxandlong##1{\protect\foreignlanguage{#1}{ja}}%
1337   \def\btxandcomma##1{}%
1338   \def\btxinlong##1{\protect\foreignlanguage{#1}{teoksessa}}%
1339   \def\btxinshort##1{\protect\foreignlanguage{#1}{teoksessa}}%
1340   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{sarjassa}}%
1341   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{sarjassa}}%
```

```
1342   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{sarjassa}}%
1343   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{sarjassa}}%
1344   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{toim##1{}}}%
1345   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{toimittaja}}%
1346   \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{toim##1{}}}%
1347   \def\btxeditorslong##1{\protect\foreignlanguage{#1}{toimittajat}}%
1348   \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{nide}}%
1349   \def\btxvolumelong##1{\protect\foreignlanguage{#1}{nide}}%
1350   \def\btxnumbershort##1{\protect\foreignlanguage{#1}{nro##1{}}}%
1351   \def\btxnumberlong##1{\protect\foreignlanguage{#1}{numero}}%
1352   \def\btxeditionshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
1353   \def\btxeditionlong##1{\protect\foreignlanguage{#1}{painos}}%
1354   \def\btxchaptershort##1{\protect\foreignlanguage{#1}{l##1{}}}%
1355   \def\btxchapterlong##1{\protect\foreignlanguage{#1}{luku}}%
1356   \def\btxpageshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
1357   \def\btxpagelong##1{\protect\foreignlanguage{#1}{sivu}}%
1358   \def\btxpagesshort##1{\protect\foreignlanguage{#1}{ss##1{}}}%
1359   \def\btxpageslong##1{\protect\foreignlanguage{#1}{sivut}}%
1360   \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Pro Gradu -ty\"o}}%
1361   \def\btxphdthesis##1{\protect\foreignlanguage{#1}{v\"ait\"oskirja}}%
1362   \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{tekn.\ rap##1{}}}%
1363   \def\btxtechreplong##1{\protect\foreignlanguage{#1}{tekninen raportti}}%
1364   \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{tammikuu}}%
1365   \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{helmikuu}}%
1366   \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{maaliskuu}}%
1367   \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{huhtikuu}}%
1368   \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{toukokuu}}%
1369   \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{kes\"akuu}}%
1370   \def\btxmonjullong##1{\protect\foreignlanguage{#1}{hein\"akuu}}%
1371   \def\btxmonauglong##1{\protect\foreignlanguage{#1}{elokuu}}%
1372   \def\btxmonseplong##1{\protect\foreignlanguage{#1}{syyskuu}}%
1373   \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{lokakuu}}%
1374   \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{marraskuu}}%
1375   \def\btxmondeclong##1{\protect\foreignlanguage{#1}{joulukuu}}%
1376   \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{tam##1{}}}%
1377   \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{hel##1{}}}%
1378   \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{maa##1{}}}%
1379   \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{huh##1{}}}%
1380   \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{tou##1{}}}%
1381   \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{kes##1{}}}%
1382   \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{hei##1{}}}%
1383   \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{elo##1{}}}%
1384   \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{syy##1{}}}%
1385   \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{lok##1{}}}%
1386   \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{mar##1{}}}%
1387   \def\btxmondecshort##1{\protect\foreignlanguage{#1}{jou##1{}}}%
1388   \def\Btxinlong##1{\protect\foreignlanguage{#1}{Teoksessa}}%
1389   \def\Btxinshort##1{\protect\foreignlanguage{#1}{Teoksessa}}%
1390   \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Toim##1{}}}%
1391   \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Toimittaja}}%
```

```
1392    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Toim##1{}}}%
1393    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Toimittajat}}%
1394    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Nide##1{}}}%
1395    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Nide}}%
1396    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{Nro##1{}}}%
1397    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Numero}}%
1398    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
1399    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Painos}}%
1400    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{L##1{}}}%
1401    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Luku}}%
1402    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{S##1{}}}%
1403    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Sivu}}%
1404    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Ss##1{}}}%
1405    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Sivut}}%
1406    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ rap##1{}}}%
1407    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Tekninen raportti}}%
1408    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{vierailtu}}%
1409    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1410    \ifbbbblanguagenames
1411      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{englanti}}%
1412      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{saksa}}%
1413      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugali}}%
1414      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugali}}%
1415      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{englanti}}%
1416      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgaria}}%
1417      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{englanti}}%
1418      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{ranska}}%
1419      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalaani}}%
1420      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroaati}}%
1421      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tsekki}}%
1422      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{tanska}}%
1423      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{hollanti}}%
1424      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{englanti}}%
1425      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1426      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{suomi}}%
1427      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{ranska}}%
1428      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{ranska}}%
1429      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{ranska}}%
1430      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{saksa}}%
1431      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{saksa}}%
1432      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{kreikka}}%
1433      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{heprea}}%
1434      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{unkari}}%
1435      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islanti}}%
1436      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{iiri}}%
1437      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italia}}%
1438      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latina}}%
1439      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{saksa}}%
1440      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{saksa}}%
1441      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norja}}%
```

```
1442        \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{uusnorja}}%
1443        \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{puola}}%
1444        \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugali}}%
1445        \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugali}}%
1446        \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{ven\"j\"a}}%
1447        \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{skotti}}%
1448        \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbi}}%
1449        \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{espanja}}%
1450        \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{ruotsi}}%
1451        \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turkki}}%
1452        \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{englanti}}%
1453        \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{englanti}}%
1454    \fi
1455 }
```

Append the definitions to the language-calling commands.

```
1456 \AtBeginDocument{%
1457    \ifbbbbfixlanguage
1458    \else
1459      \bbbbaddto{finnish}{bibsfinnish}
1460    \fi
```

Switch off the change of case in titles by appending \btxifchangecaseoff to \extras⟨language⟩.

```
1461    \bbbbaddto{finnish}{btxifchangecaseoff}
1462 }
1463 ⟨/finnish⟩
```

9.3.9   Esperanto

```
1464 ⟨*esperanto⟩
```

\bibsesperanto   Bibliographic commands for Esperanto.

```
1465 \newcommand\bibsesperanto[1][esperanto]{%
1466    \def\biblanguagename{#1}%
1467    \def\btxetalshort##1{\protect\foreignlanguage{#1}{k~al##1{}}}%
1468    \def\btxetallong##1{\protect\foreignlanguage{#1}{kaj~aliaj}}%
1469    \def\btxandshort##1{\protect\foreignlanguage{#1}{k}}%
1470    \def\btxandlong##1{\protect\foreignlanguage{#1}{kaj}}%
1471    \def\btxandcomma##1{}%
1472    \def\btxinlong##1{\protect\foreignlanguage{#1}{en}}%
1473    \def\btxinshort##1{\protect\foreignlanguage{#1}{en}}%
1474    \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{de}}%
1475    \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{en}}%
1476    \def\btxofserieslong##1{\protect\foreignlanguage{#1}{de}}%
1477    \def\btxinserieslong##1{\protect\foreignlanguage{#1}{en}}%
1478    \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1479    \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redaktoro}}%
1480    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{red-oj##1{}}}%
1481    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redaktoroj}}%
```

```
1482    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
1483    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volumo}}%
1484    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{no##1{}}}%
1485    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nombro}}%
1486    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1487    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{redakcio}}%
1488    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{\^c##1{}}}%
1489    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{\^capitro}}%
1490    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
1491    \def\btxpagelong##1{\protect\foreignlanguage{#1}{pa\^go}}%
1492    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pp##1{}}}%
1493    \def\btxpageslong##1{\protect\foreignlanguage{#1}{pa\^goj}}%
1494    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{magistra disertacio}}%
1495    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{doktora disertacio}}%
1496    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ rap##1{}}}%
1497    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Teknika raporto}}%
1498    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januaro}}%
1499    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februaro}}%
1500    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Marco}}%
1501    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{Aprilo}}%
1502    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Majo}}%
1503    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Junio}}%
1504    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Julio}}%
1505    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{A\u{u}gusto}}%
1506    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{Septembro}}%
1507    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktobro}}%
1508    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{Novembro}}%
1509    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{Decembro}}%
1510    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
1511    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
1512    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar##1{}}}%
1513    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
1514    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Maj##1{}}}%
1515    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1{}}}%
1516    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1{}}}%
1517    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
1518    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sept##1{}}}%
1519    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
1520    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
1521    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dec##1{}}}%
1522    \def\Btxinlong##1{\protect\foreignlanguage{#1}{En}}%
1523    \def\Btxinshort##1{\protect\foreignlanguage{#1}{En}}%
1524    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1525    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redaktoro}}%
1526    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1527    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redaktoroj}}%
1528    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
1529    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volumo}}%
1530    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{No##1{}}}%
1531    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nombro}}%
```

```
1532    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1533    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Redakcio}}%
1534    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{\^C##1{}}}%
1535    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{\^Capitro}}%
1536    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
1537    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Pa\^go}}%
1538    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pp##1{}}}%
1539    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pa\^goj}}%
1540    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tekn.\ Rap##1{}}}%
1541    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Teknika Raporto}}%
1542 %  \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{??}}%
1543    \def\btxurldatecomment##1{\PackageError{babelbib}{Comment for
1544        urldate in Esperanto undefined. Please send the translation for
1545        'visited on' to harald.harders@tu-bs.de}{}}%
1546    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1547    \ifbbbblanguagenames
1548      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{angla}}%
1549      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{germana}}%
1550      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugala}}%
1551      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugala}}%
1552      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{angla}}%
1553      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgara}}%
1554      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{angla}}%
1555      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franca}}%
1556      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalana}}%
1557      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroata}}%
1558      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{\^ce\^ha}}%
1559      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dana}}%
1560      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{nederlanda}}%
1561      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{angla}}%
1562      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1563      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finna}}%
1564      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{franca}}%
1565      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franca}}%
1566      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franca}}%
1567      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{germana}}%
1568      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{germana}}%
1569      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{greka}}%
1570      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebrea}}%
1571      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hungara}}%
1572      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{islanda}}%
1573      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irlanda}}%
1574      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{itala}}%
1575      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latino}}%
1576      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{germana}}%
1577      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{germana}}%
1578      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norvega}}%
1579      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{nov-norvega}}%
1580      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{pola}}%
1581      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugala}}%
```

```
1582     \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugala}}%
1583     \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{rusa}}%
1584     \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{skota}}%
1585     \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serba}}%
1586     \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{hispana}}%
1587     \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{sveda}}%
1588     \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turka}}%
1589     \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{angla}}%
1590     \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{angla}}%
1591   \fi
1592 }
```

Append the definitions to the language-calling commands.

```
1593 \AtBeginDocument{%
1594   \ifbbbbfixlanguage
1595   \else
1596     \bbbbaddto{esperanto}{bibsesperanto}
1597   \fi
```

Switch off the change of case in titles by appending \btxifchangecaseoff to \extras⟨*language*⟩.

```
1598   \bbbbaddto{esperanto}{btxifchangecaseoff}
1599 }
1600 ⟨/esperanto⟩
```

9.3.10   Portuguese

```
1601 ⟨∗portuguese⟩
```

\bibsportuguese   Bibliographic commands for Portuguese.

```
1602 \newcommand\bibsportuguese[1][portuguese]{%
1603   \def\biblanguagename{#1}%
1604   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
1605   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
1606   \def\btxandshort##1{\protect\foreignlanguage{#1}{e}}%
1607   \def\btxandlong##1{\protect\foreignlanguage{#1}{e}}%
1608   \def\btxandcomma##1{,}%
1609   \def\btxinlong##1{\protect\foreignlanguage{#1}{in}}%
1610   \def\btxinshort##1{\protect\foreignlanguage{#1}{in}}%
1611   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{de}}%
1612   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{in}}%
1613   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{de}}%
1614   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{in}}%
1615   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
1616   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{editor}}%
1617   \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{eds##1{}}}%
1618   \def\btxeditorslong##1{\protect\foreignlanguage{#1}{editores}}%
1619   \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
1620   \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volume}}%
1621   \def\btxnumbershort##1{\protect\foreignlanguage{#1}{%
```

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```
1622        n\textsuperscript{\underline{o}}}}}%
1623  \def\btxnumberlong##1{\protect\foreignlanguage{#1}{n\'umero}}%
1624  \def\btxeditionshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
1625  \def\btxeditionlong##1{\protect\foreignlanguage{#1}{edi\c c~ao}}%
1626  \def\btxchaptershort##1{\protect\foreignlanguage{#1}{cap##1{}}}%
1627  \def\btxchapterlong##1{\protect\foreignlanguage{#1}{cap\'\i tulo}}%
1628  \def\btxpageshort##1{\protect\foreignlanguage{#1}{p\'ag##1{}}}%
1629  \def\btxpagelong##1{\protect\foreignlanguage{#1}{p\'agina}}%
1630  \def\btxpagesshort##1{\protect\foreignlanguage{#1}{p\'ags##1{}}}%
1631  \def\btxpageslong##1{\protect\foreignlanguage{#1}{p\'aginas}}%
1632  \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Tese de Mestrado}}%
1633  \def\btxphdthesis##1{\protect\foreignlanguage{#1}{Tese de Doutoramento}}%
1634  \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Rel.\ T\'ec##1{}}}%
1635  \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Relat\'orio T\'ecnico}}%
1636  \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{janeiro}}%
1637  \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{fevereiro}}%
1638  \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{mar\c co}}%
1639  \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{abril}}%
1640  \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{maio}}%
1641  \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{junho}}%
1642  \def\btxmonjullong##1{\protect\foreignlanguage{#1}{julho}}%
1643  \def\btxmonauglong##1{\protect\foreignlanguage{#1}{agosto}}%
1644  \def\btxmonseplong##1{\protect\foreignlanguage{#1}{setembro}}%
1645  \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{outubro}}%
1646  \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{novembro}}%
1647  \def\btxmondeclong##1{\protect\foreignlanguage{#1}{dezembro}}%
1648  \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{jan##1{}}}%
1649  \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{fev##1{}}}%
1650  \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{mar##1{}}}%
1651  \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{apr##1{}}}%
1652  \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{maio}}%
1653  \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{jun##1{}}}%
1654  \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{jul##1{}}}%
1655  \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{ago##1{}}}%
1656  \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{set##1{}}}%
1657  \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{out##1{}}}%
1658  \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{nov##1{}}}%
1659  \def\btxmondecshort##1{\protect\foreignlanguage{#1}{dez##1{}}}%
1660  \def\Btxinlong##1{\protect\foreignlanguage{#1}{In}}%
1661  \def\Btxinshort##1{\protect\foreignlanguage{#1}{In}}%
1662  \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
1663  \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Editor}}%
1664  \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Eds##1{}}}%
1665  \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Editores}}%
1666  \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
1667  \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
1668  \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{%
1669        N\textsuperscript{\underline{o}}}}%
1670  \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{N\'umero}}%
1671  \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
```

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```
1672    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Edi\c c\~ao}}%
1673    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Cap##1{}}}%
1674    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Cap\'{\i}tulo}}%
1675    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P\'ag##1{}}}%
1676    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{P\'agina}}%
1677    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{P\'ags##1{}}}%
1678    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{P\'aginas}}%
1679    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Rel.\ T\'ec##1{}}}%
1680    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Relat\'orio T\'ecnico}}%
1681    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{acedido em}}%
1682    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1683  \ifbbbblanguagenames
1684    \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{ingl\~es}}%
1685    \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{alem\~ao}}%
1686    \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugu\~es}}%
1687    \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugu\~es}}%
1688    \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{ingl\~es}}%
1689    \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{b\'ulgaro}}%
1690    \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{ingl\~es}}%
1691    \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franc\~es}}%
1692    \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catal\~ao}}%
1693    \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croata}}%
1694    \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{checo}}%
1695    \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dinamarqu\~es}}%
1696    \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{holand\~es}}%
1697    \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{ingl\~es}}%
1698    \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1699    \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finland\~es}}%
1700    \def\btxlanguagenamefranceis{\protect\foreignlanguage{#1}{franc\~es}}%
1701    \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franc\~es}}%
1702    \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franc\~es}}%
1703    \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{\alem\~ao}}%
1704    \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{\alem\~ao}}%
1705    \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{grego}}%
1706    \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebreu}}%
1707    \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{h\'ungaro}}%
1708    \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{island\~es}}%
1709    \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irland\~es}}%
1710    \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiano}}%
1711    \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latim}}%
1712    \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{\alem\~ao}}%
1713    \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{\alem\~ao}}%
1714    \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{noruegu\~es}}%
1715    \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{neo-noruegu\~es}}%
1716    \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polaco}}%
1717    \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugu\~es}}%
1718    \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugu\~es}}%
1719    \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russio}}%
1720    \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{escoc\~es}}%
1721    \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{s\'ervio}}%
```

```
1722      \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{espanhol}}%
1723      \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{sueco}}%
1724      \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turco}}%
1725      \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{ingl\^es}}%
1726      \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{ingl\^es}}%
1727   \fi
1728 }
```

Copy the commands to the other languages.

```
1729 \newcommand\bibsbrazil{\bibsportuguese[brazil]}
1730 \newcommand\bibsbrazilian{\bibsportuguese[brazilian]}
1731 \newcommand\bibsportuges{\bibsportuguese[portuges]}
```

Append the definitions to the language-calling commands.

```
1732 \AtBeginDocument{%
1733   \ifbbbbfixlanguage
1734   \else
1735     \bbbbaddto{brazil}{bibsbrazil}
1736     \bbbbaddto{brazilian}{bibsbrazilian}
1737     \bbbbaddto{portuges}{bibsportuges}
1738     \bbbbaddto{portuguese}{bibsportuguese}
1739   \fi
```

Switch off the change of case in titles for all Portuguese dialects by appending
\btxifchangecaseoff to \extras⟨language⟩.

```
1740   \bbbbaddto{brazil}{btxifchangecaseoff}
1741   \bbbbaddto{brazilian}{btxifchangecaseoff}
1742   \bbbbaddto{portuges}{btxifchangecaseoff}
1743   \bbbbaddto{portuguese}{btxifchangecaseoff}
1744 }
1745 ⟨/portuguese⟩
```

9.3.11 Dutch

```
1746 ⟨∗dutch⟩
```

\bibsdutch   Bibliographic commands for Dutch.

```
1747 \newcommand\bibsdutch[1][dutch]{%
1748   \def\biblanguagename{#1}%
1749   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
1750   \def\btxetallong##1{\protect\foreignlanguage{#1}{en anderen}}%
1751   \def\btxandshort##1{\protect\foreignlanguage{#1}{en}}%
1752   \def\btxandlong##1{\protect\foreignlanguage{#1}{en}}%
1753   \def\btxandcomma##1{,}%
1754   \def\btxinlong##1{\protect\foreignlanguage{#1}{in}}%
1755   \def\btxinshort##1{\protect\foreignlanguage{#1}{in}}%
1756   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{van}}%
1757   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{in}}%
1758   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{van}}%
1759   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{in}}%
1760   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
```

```
1761    \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redactie}}%
1762    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1763    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redactie}}%
1764    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
1765    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volume}}%
1766    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{nr##1{}}}%
1767    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nummer}}%
1768    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{druk}}%
1769    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{uitgave}}%
1770    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{hfdst##1{}}}%
1771    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{hoofdstuk}}%
1772    \def\btxpageshort##1{\protect\foreignlanguage{#1}{pag##1{}}}%
1773    \def\btxpagelong##1{\protect\foreignlanguage{#1}{pagina}}%
1774    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pag##1{}}}%
1775    \def\btxpageslong##1{\protect\foreignlanguage{#1}{pagina's}}%
1776    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{scriptie}}%
1777    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{proefschrift}}%
1778    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Tech.\ Rapp##1{}}}%
1779    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Technisch Rapport}}%
1780    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januari}}%
1781    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februari}}%
1782    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Maart}}%
1783    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
1784    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Mei}}%
1785    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Juni}}%
1786    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Juli}}%
1787    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{Augustus}}%
1788    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
1789    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
1790    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
1791    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{December}}%
1792    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
1793    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
1794    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mrt}}%
1795    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
1796    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Mei}}%
1797    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1{}}}%
1798    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1{}}}%
1799    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
1800    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
1801    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
1802    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
1803    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dec##1{}}}%
1804    \def\Btxinlong##1{\protect\foreignlanguage{#1}{In}}%
1805    \def\Btxinshort##1{\protect\foreignlanguage{#1}{In}}%
1806    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1807    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redactie}}%
1808    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1809    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redactie}}%
1810    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
```

```
1811    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
1812    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{Nr##1{}}}%
1813    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nummer}}%
1814    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Druk}}%
1815    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Uitgave}}%
1816    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Hfdst##1{}}}%
1817    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Hoofdstuk}}%
1818    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{Pag##1{}}}%
1819    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Pagina}}%
1820    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pags##1{}}}%
1821    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pagina's}}%
1822    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tech.\ Rapp##1{}}}%
1823    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Technisch Rapport}}%
1824    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{bezocht op}}%
1825    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1826    \ifbbbblanguagenames
1827      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{engels}}%
1828 %    \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{german}}%
1829      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugees}}%
1830      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugees}}%
1831      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{engels}}%
1832 %    \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgarian}}%
1833      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{engels}}%
1834 %    \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{french}}%
1835 %    \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catalan}}%
1836 %    \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croatian}}%
1837 %    \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{czech}}%
1838 %    \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{d\"anisch}}%
1839 %    \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{dutch}}%
1840      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{engels}}%
1841 %    \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1842 %    \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finnish}}%
1843 %    \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{french}}%
1844 %    \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{french}}%
1845 %    \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{french}}%
1846 %    \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{german}}%
1847 %    \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{german}}%
1848 %    \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{greek}}%
1849 %    \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebrew}}%
1850 %    \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hungarian}}%
1851 %    \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{icelandic}}%
1852 %    \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irish}}%
1853 %    \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italian}}%
1854 %    \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latin}}%
1855 %    \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{german}}%
1856 %    \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{german}}%
1857 %    \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norwegian}}%
1858 %    \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{new-norwegian}}%
1859 %    \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polish}}%
1860      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugees}}%
```

```
1861        \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugees}}%
1862 %      \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{russian}}%
1863 %      \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{scottish}}%
1864 %      \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbian}}%
1865 %      \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spanish}}%
1866 %      \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{swedish}}%
1867 %      \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turkish}}%
1868        \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{engels}}%
1869        \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{engels}}%
1870    \fi
1871 }
```

Append the definitions to the language-calling commands.

```
1872 \AtBeginDocument{%
1873    \ifbbbbfixlanguage
1874    \else
1875      \bbbbaddto{dutch}{bibsdutch}
1876    \fi
```

Switch on the change of case in titles for all Dutch dialects by appending \btxifchangecaseoff to \extras⟨language⟩.

```
1877    \bbbbaddto{dutch}{btxifchangecaseoff}
1878 }
1879 ⟨/dutch⟩
```

9.3.12   Swedish

```
1880 ⟨*swedish⟩
```

The language definition for Swedish was provided by Hans Fredrik Nordhaug.

\bibsswedish   Bibliographic commands for Swedish.

```
1881 \newcommand\bibsswedish[1][swedish]{%
1882    \def\biblanguagename{#1}%
1883    \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
1884    \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
1885    \def\btxandshort##1{\protect\foreignlanguage{#1}{och}}%
1886    \def\btxandlong##1{\protect\foreignlanguage{#1}{och}}%
1887    \def\btxandcomma##1{,}%
1888    \def\btxinlong##1{\protect\foreignlanguage{#1}{i}}%
1889    \def\btxinshort##1{\protect\foreignlanguage{#1}{i}}%
1890    \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{av}}%
1891    \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{i}}%
1892    \def\btxofserieslong##1{\protect\foreignlanguage{#1}{av}}%
1893    \def\btxinserieslong##1{\protect\foreignlanguage{#1}{i}}%
1894    \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1895    \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redakt\"or}}%
1896    \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
1897    \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redakt\"orer}}%
1898    \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
1899    \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volym}}%
```

```
1900    \def\btxnumbershort##1{\protect\foreignlanguage{#1}{nr##1{}}}%
1901    \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nummer}}%
1902    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{utg}}%
1903    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{utg\aa va}}%
1904    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{kap##1{}}}%
1905    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{kapitel}}%
1906    \def\btxpageshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
1907    \def\btxpagelong##1{\protect\foreignlanguage{#1}{sida}}%
1908    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{s##1{}}}%
1909    \def\btxpageslong##1{\protect\foreignlanguage{#1}{sidor}}%
1910    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{scriptie}}%
1911    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{proefschrift}}%
1912    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Tech.\ Rapp##1{}}}%
1913    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Technisch Rapport}}%
1914    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januari}}%
1915    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februari}}%
1916    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Mars}}%
1917    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
1918    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Maj}}%
1919    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Juni}}%
1920    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Juli}}%
1921    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{Augusti}}%
1922    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
1923    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
1924    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
1925    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{December}}%
1926    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
1927    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
1928    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mar}}%
1929    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
1930    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Maj}}%
1931    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1{}}}%
1932    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1{}}}%
1933    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
1934    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
1935    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
1936    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
1937    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Dec##1{}}}%
1938    \def\Btxinlong##1{\protect\foreignlanguage{#1}{I}}%
1939    \def\Btxinshort##1{\protect\foreignlanguage{#1}{I}}%
1940    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1941    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redactie}}%
1942    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
1943    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redactie}}%
1944    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
1945    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
1946    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{Nr##1{}}}%
1947    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nummer}}%
1948    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Druk}}%
1949    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Utgave}}%
```

```
1950    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Hfdst##1{}}}%
1951    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Hoofdstuk}}%
1952    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{Pag##1{}}}%
1953    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Pagina}}%
1954    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pags##1{}}}%
1955    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Pagina's}}%
1956    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tech.\ Rapp##1{}}}%
1957    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Technisch Rapport}}%
1958 %  \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{??}}%
1959    \def\btxurldatecomment##1{\PackageError{babelbib}{Comment for
1960        urldate in Swedish undefined. Please send the translation for
1961        'visited on' to harald.harders@tu-bs.de}{}}%
1962    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
1963    \ifbbbblanguagenames
1964      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{engelska}}%
1965      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{tyska}}%
1966      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugisiska}}%
1967      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugisiska}}%
1968      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{engelska}}%
1969      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgariska}}%
1970      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{engelska}}%
1971      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franska}}%
1972      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalanska}}%
1973      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroatiska}}%
1974      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tjeckiska}}%
1975      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{danska}}%
1976      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{nederl\"andska}}%
1977      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{engelska}}%
1978      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
1979      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finska}}%
1980      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{franska}}%
1981      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franska}}%
1982      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franska}}%
1983      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{tyska}}%
1984      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{tyska}}%
1985      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{grekiska}}%
1986      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebreiska}}%
1987      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{ungerska}}%
1988      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{isl\"andska}}%
1989      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{iriska}}%
1990      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italienska}}%
1991      \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{latin}}%
1992      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{tyska}}%
1993      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{tyska}}%
1994      \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{norska}}%
1995      \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{nynorska}}%
1996      \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polska}}%
1997      \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugisiska}}%
1998      \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugisiska}}%
1999      \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{ryska}}%
```

```
2000     \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{skotsks}}%
2001     \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbiska}}%
2002     \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{spanska}}%
2003     \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{svenska}}%
2004     \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turkiska}}%
2005     \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{engelska}}%
2006     \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{engelska}}%
2007   \fi
2008 }
```

Append the definitions to the language-calling commands.

```
2009 \AtBeginDocument{%
2010   \ifbbbbfixlanguage
2011   \else
2012     \bbbbaddto{swedish}{bibsswedish}
2013   \fi
```

Switch on the change of case in titles for all Swedish dialects by appending \btxifchangecaseoff to \extras⟨language⟩.

```
2014   \bbbbaddto{swedish}{btxifchangecaseoff}
2015 }
2016 ⟨/swedish⟩
```

9.3.13   Afrikaans

```
2017 ⟨*afrikaans⟩
```

The language definition for Afrikaans was provided by Danie Els.

\bibsafrikaans   Bibliographic commands for Afrikaans.

```
2018 \newcommand\bibsafrikaans[1][afrikaans]{%
2019   \def\biblanguagename{#1}%
2020   \def\btxetalshort##1{\protect\foreignlanguage{#1}{et~al##1{}}}%
2021   \def\btxetallong##1{\protect\foreignlanguage{#1}{et~alii}}%
2022   \def\btxandshort##1{\protect\foreignlanguage{#1}{en}}%
2023   \def\btxandlong##1{\protect\foreignlanguage{#1}{en}}%
2024   \def\btxandcomma##1{\protect\foreignlanguage{#1}{}}%
2025   \def\btxinlong##1{\protect\foreignlanguage{#1}{in}}%
2026   \def\btxinshort##1{\protect\foreignlanguage{#1}{in}}%
2027   \def\btxofseriesshort##1{\protect\foreignlanguage{#1}{van}}%
2028   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{in}}%
2029   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{van}}%
2030   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{in}}%
2031   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{red##1{}}}%
2032   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{redakteur}}%
2033   \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{reds##1{}}}%
2034   \def\btxeditorslong##1{\protect\foreignlanguage{#1}{redakteurs}}%
2035   \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
2036   \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volume}}%
2037   \def\btxnumbershort##1{\protect\foreignlanguage{#1}{no##1{}}}%
2038   \def\btxnumberlong##1{\protect\foreignlanguage{#1}{nommer}}%
```

```
2039    \def\btxeditionshort##1{\protect\foreignlanguage{#1}{uitg##1{}}}%
2040    \def\btxeditionlong##1{\protect\foreignlanguage{#1}{uitgawe}}%
2041    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{hfst##1{}}}%
2042    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{hoofstuk}}%
2043    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
2044    \def\btxpagelong##1{\protect\foreignlanguage{#1}{bladsy}}%
2045    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{pp##1{}}}%
2046    \def\btxpageslong##1{\protect\foreignlanguage{#1}{bladsye}}%
2047    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Meesters tesis}}%
2048    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{PhD verhandeling}}%
2049    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Tegn.\ versl##1{}}}%
2050    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Tegniese verslag}}%
2051    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{Januarie}}%
2052    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{Februarie}}%
2053    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{Maart}}%
2054    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{April}}%
2055    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{Mei}}%
2056    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{Junie}}%
2057    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{Julie}}%
2058    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{Augustus}}%
2059    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{September}}%
2060    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{Oktober}}%
2061    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{November}}%
2062    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{Desember}}%
2063    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{Jan##1{}}}%
2064    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{Feb##1{}}}%
2065    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{Mrt##1{}}}%
2066    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{Apr##1{}}}%
2067    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{Mei##1}}%
2068    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{Jun##1}}%
2069    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{Jul##1}}%
2070    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{Aug##1{}}}%
2071    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{Sep##1{}}}%
2072    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{Okt##1{}}}%
2073    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{Nov##1{}}}%
2074    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{Des##1{}}}%
2075    \def\Btxinlong##1{\protect\foreignlanguage{#1}{In}}%
2076    \def\Btxinshort##1{\protect\foreignlanguage{#1}{In}}%
2077    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Red##1{}}}%
2078    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Redakteur}}%
2079    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Reds##1{}}}%
2080    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Redakteurs}}%
2081    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
2082    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volume}}%
2083    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{No##1{}}}%
2084    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{Nommer}}%
2085    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Uitg##1{}}}%
2086    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Uitgawe}}%
2087    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Hfst##1{}}}%
2088    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Hoofstuk}}%
```

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```
2089    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
2090    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{Bladsy}}%
2091    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{Pp##1{}}}%
2092    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{Bladsye}}%
2093    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Tegn.\ Verslag}}%
2094    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Tegniese Verslag}}%
2095 %  \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{??}}%
2096    \def\btxurldatecomment##1{\PackageError{babelbib}{Comment for
2097        urldate in Afrikaans undefined. Please send the translation for
2098        'visited on' to harald.harders@tu-bs.de}{}}%
2099    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
2100    \ifbbbblanguagenames
2101      \def\btxlanguagenameafrikaans{\protect\foreignlanguage{#1}{afrikaans}}%
2102      \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{engels}}%
2103      \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{duits}}%
2104      \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugees}}%
2105      \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugees}}%
2106      \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{engels}}%
2107      \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{bulgaars}}%
2108      \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{engels}}%
2109      \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{frans}}%
2110      \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{katalaans}}%
2111      \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{kroaties}}%
2112      \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{tsjeggies}}%
2113      \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{deens}}%
2114      \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{nederlands}}%
2115      \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{engels}}%
2116      \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
2117      \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{fins}}%
2118      \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{frans}}%
2119      \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{frans}}%
2120      \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{frans}}%
2121      \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{duits}}%
2122      \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{duits}}%
2123      \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{grieks}}%
2124      \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebreeus}}%
2125      \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hongaars}}%
2126      \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{yslands}}%
2127      \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{iers}}%
2128      \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{italiaans}}%
2129      \def\btxlanguagenamenlatin{\protect\foreignlanguage{#1}{latyn}}%
2130      \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{duits}}%
2131      \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{duits}}%
2132      \def\btxlanguagenamennorsk{\protect\foreignlanguage{#1}{noors}}%
2133      \def\btxlanguagenamennynorsk{\protect\foreignlanguage{#1}{neo-noors}}%
2134      \def\btxlanguagenamenpolish{\protect\foreignlanguage{#1}{pools}}%
2135      \def\btxlanguagenamenportuges{\protect\foreignlanguage{#1}{portugees}}%
2136      \def\btxlanguagenamenportuguese{\protect\foreignlanguage{#1}{portugees}}%
2137      \def\btxlanguagenamenrussian{\protect\foreignlanguage{#1}{russies}}%
2138      \def\btxlanguagenamenscottish{\protect\foreignlanguage{#1}{skots}}%
```

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```
2139      \def\btxlanguagenamenserbian{\protect\foreignlanguage{#1}{serwies}}%
2140      \def\btxlanguagenamenspanish{\protect\foreignlanguage{#1}{spaans}}%
2141      \def\btxlanguagenamenswedish{\protect\foreignlanguage{#1}{sweeds}}%
2142      \def\btxlanguagenamenturkish{\protect\foreignlanguage{#1}{turks}}%
2143      \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{engels}}%
2144      \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{engels}}%
2145   \fi
2146 }
```

Append the definitions to the language-calling commands.

```
2147 \AtBeginDocument{%
2148   \ifbbbbfixlanguage
2149   \else
2150     \bbbbaddto{afrikaans}{bibsafrikaans}
2151   \fi
```

Switch on the change of case in titles for all Afrikaans dialects by appending
\btxifchangecaseoff to \extras⟨language⟩.

```
2152   \bbbbaddto{afrikaans}{btxifchangecaseoff}
2153 }
2154 ⟨/afrikaans⟩
```


9.3.14   Catalan

```
2155 ⟨∗catalan⟩
```

The language definition for Catalan was provided by Robert Fuster, rfuster@imm.upv.es.

\bibsafrikaans

```
2156 \newcommand\bibscatalan[1][catalan]{%
2157   \def\biblanguagename{#1}%
2158   \def\btxetalshort##1{\protect\foreignlanguage{#1}{i~al##1{}}}%
2159   \def\btxetallong##1{\protect\foreignlanguage{#1}{i~altres}}%
2160   \def\btxandshort##1{\protect\foreignlanguage{#1}{i}}%
2161   \def\btxandlong##1{\protect\foreignlanguage{#1}{i}}%
2162   \def\btxandcomma##1{}%
2163   \def\btxinlong##1{\protect\foreignlanguage{#1}{dins}}%
2164   \def\btxinshort##1{\protect\foreignlanguage{#1}{dins}}%
2165   \def\btxinseriesshort##1{\protect\foreignlanguage{#1}{dins}}%
2166   \def\btxofserieslong##1{\protect\foreignlanguage{#1}{de}}%
2167   \def\btxinserieslong##1{\protect\foreignlanguage{#1}{dins}}%
2168   \def\btxeditorshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
2169   \def\btxeditorlong##1{\protect\foreignlanguage{#1}{editor}}%
2170   \def\btxeditorsshort##1{\protect\foreignlanguage{#1}{eds##1{}}}%
2171   \def\btxeditorslong##1{\protect\foreignlanguage{#1}{editors}}%
2172   \def\btxvolumeshort##1{\protect\foreignlanguage{#1}{vol##1{}}}%
2173   \def\btxvolumelong##1{\protect\foreignlanguage{#1}{volum}}%
2174   \def\btxnumbershort##1{\protect\foreignlanguage{#1}{n}}%
2175   \def\btxnumberlong##1{\protect\foreignlanguage{#1}{n\'umero}}%
2176   \def\btxeditionshort##1{\protect\foreignlanguage{#1}{ed##1{}}}%
2177   \def\btxeditionlong##1{\protect\foreignlanguage{#1}{edici{\'o}}}%
```

```
2178    \def\btxchaptershort##1{\protect\foreignlanguage{#1}{cap##1{}}}%
2179    \def\btxchapterlong##1{\protect\foreignlanguage{#1}{cap{\'\i}tol}}%
2180    \def\btxpageshort##1{\protect\foreignlanguage{#1}{p##1{}}}%
2181    \def\btxpagelong##1{\protect\foreignlanguage{#1}{p\`agina}}%
2182    \def\btxpagesshort##1{\protect\foreignlanguage{#1}{ps##1{}}}%
2183    \def\btxpageslong##1{\protect\foreignlanguage{#1}{p\`agines}}%
2184    \def\btxmastthesis##1{\protect\foreignlanguage{#1}{Tesina de Llicenciatura}}%
2185    \def\btxphdthesis##1{\protect\foreignlanguage{#1}{Tesi de Doctorat}}%
2186    \def\btxtechrepshort##1{\protect\foreignlanguage{#1}{Rep. t\`ecnic}}%
2187    \def\btxtechreplong##1{\protect\foreignlanguage{#1}{Report t\`ecnic}}%
2188    \def\btxmonjanlong##1{\protect\foreignlanguage{#1}{gener}}%
2189    \def\btxmonfeblong##1{\protect\foreignlanguage{#1}{febrer}}%
2190    \def\btxmonmarlong##1{\protect\foreignlanguage{#1}{mar\c{c}}}%
2191    \def\btxmonaprlong##1{\protect\foreignlanguage{#1}{abril}}%
2192    \def\btxmonmaylong##1{\protect\foreignlanguage{#1}{maig}}%
2193    \def\btxmonjunlong##1{\protect\foreignlanguage{#1}{juny}}%
2194    \def\btxmonjullong##1{\protect\foreignlanguage{#1}{juliol}}%
2195    \def\btxmonauglong##1{\protect\foreignlanguage{#1}{agost}}%
2196    \def\btxmonseplong##1{\protect\foreignlanguage{#1}{setembre}}%
2197    \def\btxmonoctlong##1{\protect\foreignlanguage{#1}{octubre}}%
2198    \def\btxmonnovlong##1{\protect\foreignlanguage{#1}{novembre}}%
2199    \def\btxmondeclong##1{\protect\foreignlanguage{#1}{desembre}}%
2200    \def\btxmonjanshort##1{\protect\foreignlanguage{#1}{gen##1{}}}%
2201    \def\btxmonfebshort##1{\protect\foreignlanguage{#1}{feb##1{}}}%
2202    \def\btxmonmarshort##1{\protect\foreignlanguage{#1}{mar\c{c}}}%
2203    \def\btxmonaprshort##1{\protect\foreignlanguage{#1}{abr##1{}}}%
2204    \def\btxmonmayshort##1{\protect\foreignlanguage{#1}{maig}}%
2205    \def\btxmonjunshort##1{\protect\foreignlanguage{#1}{juny}}%
2206    \def\btxmonjulshort##1{\protect\foreignlanguage{#1}{jul}}%
2207    \def\btxmonaugshort##1{\protect\foreignlanguage{#1}{ago##1{}}}%
2208    \def\btxmonsepshort##1{\protect\foreignlanguage{#1}{sep##1{}}}%
2209    \def\btxmonoctshort##1{\protect\foreignlanguage{#1}{oct##1{}}}%
2210    \def\btxmonnovshort##1{\protect\foreignlanguage{#1}{nov##1{}}}%
2211    \def\btxmondecshort##1{\protect\foreignlanguage{#1}{dec##1{}}}%
2212    \def\Btxinlong##1{\protect\foreignlanguage{#1}{Dins}}%
2213    \def\Btxinshort##1{\protect\foreignlanguage{#1}{Dins}}%
2214    \def\Btxeditorshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
2215    \def\Btxeditorlong##1{\protect\foreignlanguage{#1}{Editor}}%
2216    \def\Btxeditorsshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
2217    \def\Btxeditorslong##1{\protect\foreignlanguage{#1}{Editors}}%
2218    \def\Btxvolumeshort##1{\protect\foreignlanguage{#1}{Vol##1{}}}%
2219    \def\Btxvolumelong##1{\protect\foreignlanguage{#1}{Volum}}%
2220    \def\Btxnumbershort##1{\protect\foreignlanguage{#1}{N\'um}}%
2221    \def\Btxnumberlong##1{\protect\foreignlanguage{#1}{N\'umero}}%
2222    \def\Btxeditionshort##1{\protect\foreignlanguage{#1}{Ed##1{}}}%
2223    \def\Btxeditionlong##1{\protect\foreignlanguage{#1}{Edici\'o}}%
2224    \def\Btxchaptershort##1{\protect\foreignlanguage{#1}{Cap##1{}}}%
2225    \def\Btxchapterlong##1{\protect\foreignlanguage{#1}{Cap\'\itol}}%
2226    \def\Btxpageshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
2227    \def\Btxpagelong##1{\protect\foreignlanguage{#1}{P\`agina}}%
```

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```
2228    \def\Btxpagesshort##1{\protect\foreignlanguage{#1}{P##1{}}}%
2229    \def\Btxpageslong##1{\protect\foreignlanguage{#1}{P\`agines}}%
2230    \def\Btxtechrepshort##1{\protect\foreignlanguage{#1}{Rep. t\`ecnic}}%
2231    \def\Btxtechreplong##1{\protect\foreignlanguage{#1}{Report t\`ecnic}}%
2232    \def\btxurldatecomment##1{\protect\foreignlanguage{#1}{visitada el}}%
2233    \def\btxurldatecomment##1{\PackageError{babelbib}{Comment for
2234       urldate in Catalan undefined. Please send the translation for
2235       'visited on' to harald.harders@tu-bs.de}{}}%
2236    \def\btxkeywordlanguage##1{\protect\foreignlanguage{#1}{##1}}%
2237  \ifbbbblanguagenames
2238    \def\btxlanguagenameamerican{\protect\foreignlanguage{#1}{angl\`es}}%
2239    \def\btxlanguagenameaustrian{\protect\foreignlanguage{#1}{alem\`any}}%
2240    \def\btxlanguagenamebrazil{\protect\foreignlanguage{#1}{portugu\`es}}%
2241    \def\btxlanguagenamebrazilian{\protect\foreignlanguage{#1}{portugu\`es}}%
2242    \def\btxlanguagenamebritish{\protect\foreignlanguage{#1}{angl\'es}}%
2243    \def\btxlanguagenamebulgarian{\protect\foreignlanguage{#1}{b\'ulgar}}%
2244    \def\btxlanguagenamecanadian{\protect\foreignlanguage{#1}{angl\`es}}%
2245    \def\btxlanguagenamecanadien{\protect\foreignlanguage{#1}{franc\`es}}%
2246    \def\btxlanguagenamecatalan{\protect\foreignlanguage{#1}{catal\`a}}%
2247    \def\btxlanguagenamecroatian{\protect\foreignlanguage{#1}{croat}}%
2248    \def\btxlanguagenameczech{\protect\foreignlanguage{#1}{txec}}%
2249    \def\btxlanguagenamedanish{\protect\foreignlanguage{#1}{dan\`es}}%
2250    \def\btxlanguagenamedutch{\protect\foreignlanguage{#1}{neerland\`es}}%
2251    \def\btxlanguagenameenglish{\protect\foreignlanguage{#1}{angl\`es}}%
2252    \def\btxlanguagenameesperanto{\protect\foreignlanguage{#1}{esperanto}}%
2253    \def\btxlanguagenamefinnish{\protect\foreignlanguage{#1}{finland\`es}}%
2254    \def\btxlanguagenamefrancais{\protect\foreignlanguage{#1}{franc\`es}}%
2255    \def\btxlanguagenamefrench{\protect\foreignlanguage{#1}{franc\`es}}%
2256    \def\btxlanguagenamefrenchb{\protect\foreignlanguage{#1}{franc\`es}}%
2257    \def\btxlanguagenamegerman{\protect\foreignlanguage{#1}{alem\`any}}%
2258    \def\btxlanguagenamegermanb{\protect\foreignlanguage{#1}{alem\`any}}%
2259    \def\btxlanguagenamegreek{\protect\foreignlanguage{#1}{grec}}%
2260    \def\btxlanguagenamehebrew{\protect\foreignlanguage{#1}{hebreu}}%
2261    \def\btxlanguagenamehungarian{\protect\foreignlanguage{#1}{hongar\`es}}%
2262    \def\btxlanguagenameicelandic{\protect\foreignlanguage{#1}{island\`es}}%
2263    \def\btxlanguagenameirish{\protect\foreignlanguage{#1}{irland\`es}}%
2264    \def\btxlanguagenameitalian{\protect\foreignlanguage{#1}{itali\`a}}%
2265    \def\btxlanguagenamelatin{\protect\foreignlanguage{#1}{llat\'\i}}%
2266    \def\btxlanguagenamenaustrian{\protect\foreignlanguage{#1}{alem\`any}}%
2267    \def\btxlanguagenamengerman{\protect\foreignlanguage{#1}{alem\`any}}%
2268    \def\btxlanguagenamenorsk{\protect\foreignlanguage{#1}{noruec}}%
2269    \def\btxlanguagenamenynorsk{\protect\foreignlanguage{#1}{noruec}}%
2270    \def\btxlanguagenamepolish{\protect\foreignlanguage{#1}{polon\`es}}%
2271    \def\btxlanguagenameportuges{\protect\foreignlanguage{#1}{portugu\`es}}%
2272    \def\btxlanguagenameportuguese{\protect\foreignlanguage{#1}{portugu\`es}}%
2273    \def\btxlanguagenamerussian{\protect\foreignlanguage{#1}{rus}}%
2274    \def\btxlanguagenamescottish{\protect\foreignlanguage{#1}{escoc\`es}}%
2275    \def\btxlanguagenameserbian{\protect\foreignlanguage{#1}{serbi}}%
2276    \def\btxlanguagenamespanish{\protect\foreignlanguage{#1}{espa\~nol}}%
2277    \def\btxlanguagenameswedish{\protect\foreignlanguage{#1}{suec}}%
```

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```
2278    \def\btxlanguagenameturkish{\protect\foreignlanguage{#1}{turc}}%
2279    \def\btxlanguagenameUKenglish{\protect\foreignlanguage{#1}{angl\`es}}%
2280    \def\btxlanguagenameUSenglish{\protect\foreignlanguage{#1}{angl\`es}}%
2281  \fi
2282 }
```

Append the definitions to the language-calling commands.

```
2283 \AtBeginDocument{%
2284  \ifbbbbfixlanguage
2285  \else
2286    \bbbbaddto{catalan}{bibscatalan}
2287  \fi
```

Switch on the change of case in titles for all Afrikaans dialects by appending \btxifchangecaseoff to \extras⟨language⟩.

```
2288    \bbbbaddto{catalan}{btxifchangecaseoff}
2289 }
2290 ⟨/catalan⟩
```

10 BIBTEX style files

10.1 "Normal" BIBTEX style files

10.1.1 Generic code

Because most parts of the BIBTEX style files are equal for all styles, they are generated from the same source code.

```
2291 ⟨*bststd⟩
```

Declare the data fields that are handled by the BIBTEX styles.

```
2292 ENTRY
2293   { address
2294     author
2295     booktitle
2296     chapter
2297     edition
2298     editor
2299     howpublished
2300     institution
2301     isbn
2302     issn
2303     journal
2304     key
2305     language
2306     month
2307     note
2308     number
2309     organization
2310     pages
```

```
2311       publisher
2312       school
2313       series
2314       title
2315       type
2316       url
2317       urldate
2318       volume
2319       year
2320   }
2321   {}
2322 ⟨/bststd⟩
2323 ⟨bststd&!bstalpha⟩   { label }
2324 ⟨bststd & bstalpha⟩   { label extra.label sort.label }
2325 ⟨∗bststd⟩
2326
```

Declare integer variables.

```
2327 INTEGERS
2328   { output.state
2329     before.all
2330     mid.sentence
2331     after.sentence
2332     after.block
2333     before.title
2334   }
2335
```

Declare string variables.

```
2336 STRINGS
2337   { s
2338     t
2339     language.state
2340     change.temp
2341     isbn.command
2342   }
2343
```

Declare the constants that define at which position within a citation we are when processing it.

```
2344 FUNCTION {init.state.consts}
2345 { #0 'before.all :=
2346   #1 'mid.sentence :=
2347   #2 'after.sentence :=
2348   #3 'after.block :=
2349   #4 'before.title :=
2350   "nostate" 'language.state :=
2351 }
2352
```

Logical function not.

Syntax: ⟨*int1*⟩ `not` ⟶ ⟨*int2*⟩.
Returns 1 if ⟨*arg1*⟩ != `0`, `0` otherwise.

```
2353 FUNCTION {not}
2354 {    { #0 }
2355      { #1 }
2356   if$
2357 }
2358
```

Logical function `and`. Syntax: ⟨*arg1*⟩ ⟨*arg1*⟩ `and`. Returns 1 if ⟨*arg1*⟩ == `true` and ⟨*arg2*⟩ == `true`, `0` otherwise.

```
2359 FUNCTION {and}
2360 {    'skip$
2361      { pop$ #0 }
2362   if$
2363 }
2364
```

Logical function `or`. Syntax: ⟨*arg1*⟩ ⟨*arg1*⟩ `or`. Returns 1 if ⟨*arg1*⟩ == `true` or ⟨*arg2*⟩ == `true`, `0` otherwise.

```
2365 FUNCTION {or}
2366 {    { pop$ #1 }
2367      'skip$
2368   if$
2369 }
2370
```

Function `language.change.case`. Syntax: ⟨*string1*⟩ ⟨*string2*⟩ `language.change.case` ⟶ ⟨*string3*⟩ This function has the same syntax as `change.case$` but writes ⟨*string1*⟩ twice into ⟨*string3*⟩, first with changed case, second with original case.

```
2371 FUNCTION {language.change.case}
2372 {
2373   'change.temp :=
2374   't :=
2375   "\btxifchangecase {"
2376   t change.temp change.case$ *
2377   "}{" *
2378   t *
2379   "}" *
2380 }
2381
```

Generates output for the string ⟨*string1*⟩. Syntax: ⟨*string1*⟩ `output.nonnull` ⟶ ⟨*string2*⟩

```
2382 FUNCTION {output.nonnull}
2383 { 's :=
2384   output.state mid.sentence =
2385     { ", " * write$ }
2386     { output.state after.block =
2387         { add.period$ write$
2388           newline$
```

```
2389            "\newblock " write$
2390          }
2391          { output.state before.all =
2392              'write$
2393              {
2394                output.state before.title =
2395                  { "\btxauthorcolon\ " * write$ }
2396                  { add.period$ " " * write$ }
2397                if$
2398              }
2399            if$
2400          }
2401        if$
2402        mid.sentence 'output.state :=
2403      }
2404    if$
2405    s
2406  }
2407
```

Generates output if the given string ⟨*string1*⟩ is not empty. Syntax: ⟨*string1*⟩ output.nonnull ⟶ ⟨*string2*⟩

```
2408 FUNCTION {output}
2409 { duplicate$ empty$
2410      'pop$
2411      'output.nonnull
2412   if$
2413 }
2414
2415 FUNCTION {output.check}
2416 { 't :=
2417   duplicate$ empty$
2418     { pop$ "empty " t * " in " * cite$ * warning$ }
2419     'output.nonnull
2420   if$
2421 }
2422
```

Outputs a bibliography item.

```
2423 FUNCTION {output.bibitem}
2424 { newline$
```

If no language is given, fall back to the language that has been active at \begin{document} or to the given fall-back language. For BIBTEX, this language gets the name nolanguage.

```
2425   language empty$
2426     { "empty language in " cite$ * warning$
2427       language.state "nolanguage" =
2428         'skip$
2429         {
```

```
2430            "\expandafter\btxselectlanguage\expandafter {"
2431            "\btxfallbacklanguage}" * write$
2432            newline$
2433          }
2434        if$
2435        "nolanguage" 'language.state :=
2436      }
2437      { language.state language =
2438          'skip$
2439          { "\btxselectlanguage {" language * "}" * write$
2440            newline$
2441          }
2442        if$
2443        language 'language.state :=
2444      }
2445    if$
2446 ⟨/bststd⟩
2447 ⟨bststd&!bstalpha⟩   "\bibitem{" write$
2448 ⟨bststd & bstalpha⟩   "\bibitem[" label * "]{" * write$
2449 ⟨∗bststd⟩
2450    cite$ write$
2451    "}" write$
2452    newline$
2453    ""
2454    before.all 'output.state :=
2455 }
2456
```

Output an ISBN or ISSN.

Syntax: ⟨*string1*⟩ ⟨*string2*⟩ `output.isbn`

Prints the ISBN or ISSN given by ⟨*string1*⟩ and uses the TeX macro given by ⟨*string2*⟩ to determine if the text is printed or not. ⟨*string2*⟩ normally is `\ifbtxprintISSN` or `\ifbtxprintISSN`.

```
2457 FUNCTION {output.isbn}
2458 {
2459    'isbn.command :=
2460    duplicate$
2461    empty$
2462      'pop$
2463      {
2464        's :=
2465        output.state mid.sentence =
2466          {
2467            isbn.command * " {, " * write$
2468            s "}" *
2469          }
2470          { output.state after.block =
2471              {
2472                 add.period$
2473                 write$
```

```
2474            newline$
2475            "\newblock " write$
2476            isbn.command " {" * s * ".}" *
2477          }
2478          { output.state before.all =
2479              {
2480                write$
2481                isbn.command " {" * write$
2482                s "}" *
2483              }
2484              {
2485                output.state before.title =
2486                  {
2487                    "\btxauthorcolon\ " * write$
2488                    isbn.command " {" * write$
2489                    s "}" *
2490                  }
2491                  {
2492                    add.period$ " " * write$
2493                    isbn.command " {" * write$
2494                    s ".}" *
2495                  }
2496                if$
2497              }
2498            if$
2499          }
2500        if$
2501        mid.sentence 'output.state :=
2502      }
2503    if$
2504    }
2505  if$
2506 }
2507
```

Completes an entry.

```
2508 FUNCTION {fin.entry}
2509 { add.period$
2510   write$
2511   newline$
2512 }
2513
2514 FUNCTION {new.block}
2515 { output.state before.all =
2516     'skip$
2517     { after.block 'output.state := }
2518   if$
2519 }
2520
```

```
2521 FUNCTION {new.sentence}
2522 { output.state after.block =
2523     'skip$
2524     { output.state before.all =
2525         'skip$
2526         { after.sentence 'output.state := }
2527       if$
2528     }
2529   if$
2530 }
2531
2532 FUNCTION {after.authors}
2533 { output.state before.all =
2534     'skip$
2535     { before.title 'output.state := }
2536   if$
2537 }
2538
2539 FUNCTION {new.block.checka}
2540 { empty$
2541     'skip$
2542     'new.block
2543   if$
2544 }
2545
2546 FUNCTION {new.block.checkb}
2547 { empty$
2548   swap$ empty$
2549   and
2550     'skip$
2551     'new.block
2552   if$
2553 }
2554
2555 FUNCTION {new.block.checkc}
2556 { empty$
2557   swap$ empty$
2558   and
2559     'skip$
2560     'after.authors
2561   if$
2562 }
2563
2564 FUNCTION {new.sentence.checka}
2565 { empty$
2566     'skip$
2567     'new.sentence
2568   if$
```

```
2569 }
2570

2571 FUNCTION {new.sentence.checkb}
2572 { empty$
2573   swap$ empty$
2574   and
2575     'skip$
2576     'new.sentence
2577   if$
2578 }
2579

2580 FUNCTION {field.or.null}
2581 { duplicate$ empty$
2582     { pop$ "" }
2583     'skip$
2584   if$
2585 }
2586

2587 FUNCTION {namefont}
2588 { duplicate$ empty$
2589     { pop$ "" }
2590     { "\btxnamefont {" swap$ * "}" * }
2591   if$
2592 }
2593

2594 FUNCTION {lastnamefont}
2595 { duplicate$ empty$
2596     { pop$ "" }
2597     { "\btxlastnamefont {" swap$ * "}" * }
2598   if$
2599 }
2600

2601 FUNCTION {titlefont}
2602 { duplicate$ empty$
2603     { pop$ "" }
2604     { "\btxtitlefont {" swap$ * "}" * }
2605   if$
2606 }
2607

2608 FUNCTION {journalfont}
2609 { duplicate$ empty$
2610     { pop$ "" }
2611     { "\btxjournalfont {" swap$ * "}" * }
2612   if$
2613 }
2614
```

```
2615 FUNCTION {volumefont}
2616 { duplicate$ empty$
2617     { pop$ "" }
2618     { "\btxvolumefont {" swap$ * "}" * }
2619   if$
2620 }
2621
2622 FUNCTION {etalfont}
2623 { duplicate$ empty$
2624     { pop$ "" }
2625     { "\btxetalfont {" swap$ * "}" * }
2626   if$
2627 }
2628
2629 INTEGERS { nameptr namesleft numnames }
2630
2631 FUNCTION {format.names}
2632 { 's :=
2633   #1 'nameptr :=
2634   s num.names$ 'numnames :=
2635   numnames 'namesleft :=
2636     { namesleft #0 > }
2637     { nameptr #1 >
2638 ⟨/bststd⟩
2639 ⟨∗bststd&!bstshort&!namevarb⟩
2640       {
2641         s nameptr "{ff~}{vv~}" format.name$
2642         s nameptr "{ll}" format.name$ lastnamefont *
2643         s nameptr "{, jj}" format.name$ * 't :=
2644 ⟨/bststd&!bstshort&!namevarb⟩
2645 ⟨∗bststd & bstshort&!namevarb⟩
2646       {
2647         s nameptr "{f.~}{vv~}" format.name$
2648         s nameptr "{ll}" format.name$ lastnamefont *
2649         s nameptr "{, jj}" format.name$ * 't :=
2650 ⟨/bststd & bstshort&!namevarb⟩
2651 ⟨∗bststd&!bstshort & namevarb⟩
2652       {
2653         s nameptr "{ll}" format.name$ lastnamefont
2654         s nameptr "{, jj}{, ff}{~vv}" format.name$ * 't :=
2655 ⟨/bststd&!bstshort & namevarb⟩
2656 ⟨∗bststd & bstshort & namevarb⟩
2657       {
2658         s nameptr "{ll}" format.name$ lastnamefont
2659         s nameptr "{,~jj}{,~f.}{~vv}" format.name$ * 't :=
2660 ⟨/bststd & bstshort & namevarb⟩
2661 ⟨∗bststd & bstthree⟩
2662             namesleft #2 >
2663               { " " "\btxetalshort {.}" etalfont * *
```

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```
2664                   #1 'namesleft := }
2665                 {
```
⟨/bststd & bstthree⟩
⟨*bststd⟩
```
2668             namesleft #1 >
2669               { ", " * t namefont * }
2670               { numnames #2 >
2671                   { "\btxandcomma {}" * }
2672                   'skip$
2673                 if$
2674                 s nameptr "{ff~}{vv~}{ll}{, jj}" format.name$ "others" =
2675                   { " " "\btxetalshort {.}" etalfont * * }
```
⟨/bststd⟩
⟨bststd&!bstshort⟩   { " \btxandlong {}\ " * t namefont * }
⟨bststd & bstshort⟩   { " \btxandshort {.}\ " * t namefont * }
⟨*bststd & bstthree⟩
```
2680                   if$
2681                 }
```
⟨/bststd & bstthree⟩
⟨*bststd⟩
```
2684                   if$
2685                 }
2686             if$
2687           }
```
⟨/bststd⟩
⟨*bststd&!bstshort&!namevara⟩
```
2690           {
2691             s nameptr "{ll}" format.name$ lastnamefont
2692             s nameptr "{,~jj}{, ff}{~vv}" format.name$ * namefont
2693           }
```
⟨/bststd&!bstshort&!namevara⟩
⟨*bststd & bstshort&!namevara⟩
```
2696           {
2697             s nameptr "{ll}" format.name$ lastnamefont
2698             s nameptr "{,~jj}{,~f.}{~vv}" format.name$ * namefont
2699           }
```
⟨/bststd & bstshort&!namevara⟩
⟨*bststd&!bstshort & namevara⟩
```
2702           {
2703             s nameptr "{ff~}{vv~}" format.name$
2704             s nameptr "{ll}" format.name$ lastnamefont *
2705             s nameptr "{, jj}" format.name$ * namefont
2706           }
```
⟨/bststd&!bstshort & namevara⟩
⟨*bststd & bstshort & namevara⟩
```
2709           {
2710             s nameptr "{f.~}{vv~}" format.name$
2711             s nameptr "{ll}" format.name$ lastnamefont *
2712             s nameptr "{, jj}" format.name$ * namefont
2713           }
```

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```
2714 ⟨/bststd & bstshort & namevara⟩
2715 ⟨*bststd⟩
2716        if$
2717        nameptr #1 + 'nameptr :=
2718        namesleft #1 - 'namesleft :=
2719      }
2720    while$
2721 }
2722
2723 FUNCTION {format.authors}
2724 { author empty$
2725      { "" }
2726      { author format.names }
2727    if$
2728 }
2729
2730 FUNCTION {format.editors}
2731 { editor empty$
2732      { "" }
2733      { editor format.names
2734        editor num.names$ #1 >
2735 ⟨/bststd⟩
2736 ⟨*bststd&!bstshort⟩
2737          { "\ (\btxeditorslong {})" * }
2738          { "\ (\btxeditorlong {})" * }
2739 ⟨/bststd&!bstshort⟩
2740 ⟨*bststd & bstshort⟩
2741          { "\ (\btxeditorsshort {.})" * }
2742          { "\ (\btxeditorshort {.})" * }
2743 ⟨/bststd & bstshort⟩
2744 ⟨*bststd⟩
2745        if$
2746      }
2747    if$
2748 }
2749
2750 FUNCTION {format.title}
2751 { title empty$
2752      { "" }
2753      { title "t" language.change.case titlefont }
2754    if$
2755 }
2756
2757 FUNCTION {n.dashify}
2758 { 't :=
2759    ""
2760      { t empty$ not }
2761      { t #1 #1 substring$ "-" =
```

```
2762          { t #1 #2 substring$ "--" = not
2763             { "--" *
2764               t #2 global.max$ substring$ 't :=
2765             }
2766             {   { t #1 #1 substring$ "-" = }
2767                 { "-" *
2768                   t #2 global.max$ substring$ 't :=
2769                 }
2770               while$
2771             }
2772           if$
2773         }
2774         { t #1 #1 substring$ *
2775           t #2 global.max$ substring$ 't :=
2776         }
2777       if$
2778     }
2779   while$
2780 }
2781
2782 FUNCTION {format.date}
2783 { year empty$
2784     { month empty$
2785         { "" }
2786         { "there's a month but no year in " cite$ * warning$
2787           month
2788         }
2789       if$
2790     }
2791     { month empty$
2792         'year
2793         { month "\ " * year * }
2794       if$
2795     }
2796   if$
2797 }
2798
2799 FUNCTION {format.btitle}
2800 { title titlefont
2801 }
2802
2803 FUNCTION {tie.or.space.connect}
2804 { duplicate$ text.length$ #3 <
2805     { "~" }
2806     { "\ " }
2807   if$
2808   swap$ * *
2809 }
2810
```

```
2811 FUNCTION {volume.tie.or.space.connect}
2812 { duplicate$ text.length$ #3 <
2813     { "~" }
2814     { "\ " }
2815   if$
2816   swap$ volumefont * *
2817 }
2818
2819 FUNCTION {either.or.check}
2820 { empty$
2821     'pop$
2822     { "can't use both " swap$ * " fields in " * cite$ * warning$ }
2823   if$
2824 }
2825
2826 FUNCTION {format.bvolume}
2827 { volume empty$
2828     { "" }
2829     { output.state after.block =
```
```
2830 ⟨/bststd⟩
2831 ⟨bststd&!bstshort⟩        { "\Btxvolumelong {}" }
2832 ⟨bststd&!bstshort⟩        { "\btxvolumelong {}" }
2833 ⟨bststd & bstshort⟩       { "\Btxvolumeshort {.}" }
2834 ⟨bststd & bstshort⟩       { "\btxvolumeshort {.}" }
2835 ⟨∗bststd⟩
```
```
2836         if$
2837         volume volume.tie.or.space.connect
2838         series empty$
2839           'skip$
```
```
2840 ⟨/bststd⟩
2841 ⟨bststd&!bstshort⟩        { " \btxofserieslong {}\ " * series titlefont * }
2842 ⟨bststd & bstshort⟩       { " \btxofseriesshort {.}\ " * series titlefont * }
2843 ⟨∗bststd⟩
```
```
2844         if$
2845         "volume and number" number either.or.check
2846     }
2847   if$
2848 }
2849
2850 FUNCTION {format.number.series}
2851 { volume empty$
2852     { number empty$
2853         { series field.or.null }
2854         { output.state mid.sentence =
```
```
2855 ⟨/bststd⟩
2856 ⟨bststd&!bstshort⟩            { "\btxnumberlong {}" }
2857 ⟨bststd&!bstshort⟩            { "\Btxnumberlong {}" }
2858 ⟨bststd & bstshort⟩           { "\btxnumbershort {.}" }
2859 ⟨bststd & bstshort⟩           { "\Btxnumbershort {.}" }
```

```
2860 ⟨∗bststd⟩
2861           if$
2862           number tie.or.space.connect
2863           series empty$
2864             { "there's a number but no series in " cite$ * warning$ }
2865 ⟨/bststd⟩
2866 ⟨bststd&!bstshort⟩              { " \btxinserieslong {}\ " * series titlefont * }
2867 ⟨bststd & bstshort⟩            { " \btxinseriesshort {.}\ " * series titlefont * }
2868 ⟨∗bststd⟩
2869           if$
2870         }
2871       if$
2872     }
2873     { "" }
2874   if$
2875 }
2876
2877 FUNCTION {format.edition}
2878 { edition empty$
2879     { "" }
2880     {
2881       output.state mid.sentence =
2882 ⟨/bststd⟩
2883 ⟨∗bststd&!bstshort⟩
2884         { edition "l" language.change.case "~\btxeditionlong {}" * }
2885         { edition "t" language.change.case "~\btxeditionlong {}" * }
2886 ⟨/bststd&!bstshort⟩
2887 ⟨∗bststd & bstshort⟩
2888         { edition "l" language.change.case "~\btxeditionshort {.}" * }
2889         { edition "t" language.change.case "~\btxeditionshort {.}" * }
2890 ⟨/bststd & bstshort⟩
2891 ⟨∗bststd⟩
2892       if$
2893     }
2894   if$
2895 }
2896
2897 FUNCTION {format.isbn}
2898 { isbn empty$
2899     { "" }
2900     { "\btxISBN~\btxISBNfont {" isbn * "}" * }
2901   if$
2902 }
2903
2904 FUNCTION {format.issn}
2905 { issn empty$
2906     { "" }
2907     { "\btxISSN~\btxISSNfont {" issn * "}" * }
2908   if$
```

```
2909 }
2910
2911 FUNCTION {format.url}
2912 { url empty$
2913     { "" }
2914     {
2915       urldate empty$
2916       { "\btxurlfont{" url * "}" * }
2917       {
2918         "\btxurlfont{" url *
2919         "}, \btxurldatecomment{} \btxkeywordlanguage {\btxurldatefont{" *
2920           urldate * "}}" *
2921       }
2922       if$
2923     }
2924   if$
2925 }
2926
2927 INTEGERS { multiresult }
2928
2929 FUNCTION {multi.page.check}
2930 { 't :=
2931   #0 'multiresult :=
2932     { multiresult not
2933       t empty$ not
2934       and
2935     }
2936     { t #1 #1 substring$
2937       duplicate$ "-" =
2938       swap$ duplicate$ "," =
2939       swap$ "+" =
2940       or or
2941         { #1 'multiresult := }
2942         { t #2 global.max$ substring$ 't := }
2943       if$
2944     }
2945   while$
2946   multiresult
2947 }
2948
2949 FUNCTION {format.pages}
2950 { pages empty$
2951     { "" }
2952     { pages multi.page.check
2953 ⟨/bststd⟩
2954 ⟨*bststd&!bstshort⟩
2955         { "\btxpageslong {}" pages n.dashify tie.or.space.connect }
2956         { "\btxpagelong {}" pages tie.or.space.connect }
```

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```
2957 ⟨/bststd&!bstshort⟩
2958 ⟨*bststd & bstshort⟩
2959          { "\btxpagesshort {.}" pages n.dashify tie.or.space.connect }
2960          { "\btxpageshort {.}" pages tie.or.space.connect }
2961 ⟨/bststd & bstshort⟩
2962 ⟨*bststd⟩
2963        if$
2964      }
2965    if$
2966 }
2967

2968 FUNCTION {format.vol.num.pages}
2969 { volume field.or.null
2970   number empty$
2971      'skip$
2972      { "(" number * ")" * *
2973        volume empty$
2974          { "there's a number but no volume in " cite$ * warning$ }
2975          'skip$
2976        if$
2977      }
2978    if$
2979    pages empty$
2980      'skip$
2981      { duplicate$ empty$
2982          { pop$ format.pages }
2983          { ":" * pages n.dashify * }
2984        if$
2985      }
2986    if$
2987 }
2988

2989 FUNCTION {format.chapter.pages}
2990 { chapter empty$
2991      'format.pages
2992      { type empty$
2993 ⟨/bststd⟩
2994 ⟨bststd&!bstshort⟩          { "\btxchapterlong {}" }
2995 ⟨bststd & bstshort⟩         { "\btxchaptershort {.}" }
2996 ⟨*bststd⟩
2997          { type "l" language.change.case }
2998        if$
2999        chapter tie.or.space.connect
3000        pages empty$
3001          'skip$
3002          { ", " * format.pages * }
3003        if$
3004      }
3005    if$
```

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```
3006 }
3007
3008 FUNCTION {format.in.ed.booktitle}
3009 { booktitle empty$
3010     { "" }
3011     { editor empty$
3012 ⟨/bststd⟩
3013 ⟨*bststd&!bstshort⟩
3014         { "\Btxinlong {}\ " booktitle titlefont * }
3015         { "\Btxinlong {}\ " format.editors * ": " * booktitle titlefont * }
3016 ⟨/bststd&!bstshort⟩
3017 ⟨*bststd & bstshort⟩
3018         { "\Btxinshort {.}\ " booktitle titlefont * }
3019         { "\Btxinshort {.}\ " format.editors * ": " * booktitle titlefont * }
3020 ⟨/bststd & bstshort⟩
3021 ⟨*bststd⟩
3022         if$
3023     }
3024   if$
3025 }
3026
3027 FUNCTION {empty.misc.check}
3028 { author empty$ title empty$ howpublished empty$
3029   month empty$ year empty$ note empty$
3030   and and and and and
3031   key empty$ not and
3032     { "all relevant fields are empty in " cite$ * warning$ }
3033     'skip$
3034   if$
3035 }
3036
3037 FUNCTION {format.thesis.type}
3038 { type empty$
3039     'skip$
3040     { pop$
3041       type "t" language.change.case
3042     }
3043   if$
3044 }
3045
3046 FUNCTION {format.tr.number}
3047 {
3048   number empty$
3049   {
3050     type empty$
3051 ⟨/bststd⟩
3052 ⟨bststd&!bstshort⟩        { "\btxtechreplong {}" }
3053 ⟨bststd & bstshort⟩       { "\btxtechrepshort {.}" }
```

```
3054 ⟨∗bststd⟩
3055       { type "t" language.change.case }
3056    if$
3057  }
3058  {
3059    type empty$
3060 ⟨/bststd⟩

3061 ⟨bststd&!bstshort⟩        { "\Btxtechreplong {}" }
3062 ⟨bststd & bstshort⟩        { "\Btxtechrepshort {.}" }
3063 ⟨∗bststd⟩
3064       { type "t" language.change.case }
3065    if$
3066    number tie.or.space.connect
3067  }
3068    if$
3069 }
3070

3071 FUNCTION {format.article.crossref}
3072 { key empty$
3073 ⟨/bststd⟩
3074 ⟨∗bststd&!bstshort⟩
3075    { journal empty$
3076       { "need key or journal for " cite$ * " to crossref " * crossref *
3077         warning$
3078         ""
3079       }
3080       { "\Btxinlong {}\ " journal titlefont * }
3081    if$
3082  }
3083    { "\Btxinlong {}\ " key titlefont * }
3084 ⟨/bststd&!bstshort⟩
3085 ⟨∗bststd & bstshort⟩
3086    { journal empty$
3087       { "need key or journal for " cite$ * " to crossref " * crossref *
3088         warning$
3089         ""
3090       }
3091       { "\Btxinshort {.}\ " journal titlefont * }
3092    if$
3093  }
3094    { "\Btxinshort {.}\ " key titlefont * }
3095 ⟨/bststd & bstshort⟩
3096 ⟨∗bststd⟩
3097    if$
3098    " \cite{" * crossref * "}" *
3099 }
3100

3101 FUNCTION {format.crossref.editor}
```

```
3102 {
3103 ⟨/bststd⟩
3104 ⟨∗bststd&!bstshort⟩
3105   editor #1 "{ll}{,~jj}{, ff}{~vv}" format.name$ namefont
3106 ⟨/bststd&!bstshort⟩
3107 ⟨∗bststd & bstshort⟩
3108   editor #1 "{ll}{,~jj}{,~f.}{~vv}" format.name$ namefont
3109 ⟨/bststd & bstshort⟩
3110 ⟨∗bststd⟩
3111   editor num.names$ duplicate$
3112   #2 >
3113     { pop$ " " "\btxetalshort {.}" etalfont * * }
3114     { #2 <
3115         'skip$
3116         { editor #2 "{ff }{vv }{ll}{ jj}" format.name$ "others" =
3117             { " " "\btxetalshort {.}" etalfont * * }
3118 ⟨/bststd⟩
3119 ⟨∗bststd&!bstshort⟩
3120             { " \btxandlong {}\ " * editor #2 "{ff}{~vv}{~ll}{, jj}"
3121 ⟨/bststd&!bstshort⟩
3122 ⟨∗bststd & bstshort⟩
3123             { " \btxandshort {.}\ " * editor #2 "{vv~}{ll}"
3124 ⟨/bststd & bstshort⟩
3125 ⟨∗bststd⟩
3126                 format.name$ namefont * }
3127             if$
3128           }
3129        if$
3130     }
3131   if$
3132 }
3133
3134 FUNCTION {format.book.crossref}
3135 { volume empty$
3136     { "empty volume in " cite$ * "'s crossref of " * crossref * warning$
3137 ⟨/bststd⟩
3138 ⟨bststd&!bstshort⟩       "\Btxinlong {}\ "
3139 ⟨bststd & bstshort⟩       "\Btxinshort {.}\ "
3140 ⟨∗bststd⟩
3141     }
3142 ⟨/bststd⟩
3143 ⟨∗bststd&!bstshort⟩
3144     { "\Btxvolumelong {}" volume volume.tie.or.space.connect
3145       " \btxofserieslong {}\ " *
3146 ⟨/bststd&!bstshort⟩
3147 ⟨∗bststd & bstshort⟩
3148     { "\Btxvolumeshort {.}" volume volume.tie.or.space.connect
3149       " \btxofseriesshort {.}\ " *
3150 ⟨/bststd & bstshort⟩
```

```
3151 ⟨∗bststd⟩
3152     }
3153   if$
3154   editor empty$
3155   editor field.or.null author field.or.null =
3156   or
3157     { key empty$
3158         { series empty$
3159             { "need editor, key, or series for " cite$ * " to crossref " *
3160               crossref * warning$
3161               "" *
3162             }
3163             { series titlefont * }
3164           if$
3165         }
3166         { key titlefont * }
3167       if$
3168     }
3169 ⟨/bststd⟩
3170 ⟨bststd&!bstshort⟩    { "\Btxinlong {}\ " format.crossref.editor * }
3171 ⟨bststd & bstshort⟩    { "\Btxinshort {.}\ " format.crossref.editor * }
3172 ⟨∗bststd⟩
3173   if$
3174   " \cite{" * crossref * "}" *
3175 }
3176
3177 FUNCTION {format.incoll.inproc.crossref}
3178 { editor empty$
3179   editor field.or.null author field.or.null =
3180   or
3181     { key empty$
3182         { booktitle empty$
3183             { "need editor, key, or booktitle for " cite$ * " to crossref " *
3184               crossref * warning$
3185               ""
3186             }
3187 ⟨/bststd⟩
3188 ⟨bststd&!bstshort⟩              { "\Btxinlong {}\ " booktitle titlefont * }
3189 ⟨bststd & bstshort⟩              { "\Btxinshort {.}\ " booktitle titlefont * }
3190 ⟨∗bststd⟩
3191             if$
3192         }
3193 ⟨/bststd⟩
3194 ⟨bststd&!bstshort⟩        { "\Btxinlong {}\ " key titlefont * }
3195 ⟨bststd & bstshort⟩        { "\Btxinshort {.}\ " key titlefont * }
3196 ⟨∗bststd⟩
3197       if$
3198     }
3199 ⟨/bststd⟩
```

```
3200 ⟨bststd&!bstshort⟩    { "\Btxinlong {}\ " format.crossref.editor * }
3201 ⟨bststd & bstshort⟩    { "\Btxinshort {.}\ " format.crossref.editor * }
3202 ⟨*bststd⟩
3203   if$
3204   " \cite{" * crossref * "}" *
3205 }
3206
3207 FUNCTION {article}
3208 { output.bibitem
3209   format.authors "author" output.check
3210   after.authors
3211   format.title "title" output.check
3212   new.block
3213   crossref missing$
3214     { journal
3215       title missing$
3216         { titlefont }
3217         { journalfont }
3218       if$
3219       "journal" output.check
3220       format.vol.num.pages output
3221       format.date "year" output.check
3222     }
3223     { format.article.crossref output.nonnull
3224       format.pages output
3225     }
3226   if$
3227   format.issn "\ifbtxprintISSN" output.isbn
3228   new.block
3229   format.url output
3230   note output
3231   fin.entry
3232 }
3233
3234 FUNCTION {book}
3235 { output.bibitem
3236   author empty$
3237     { format.editors "author and editor" output.check }
3238     { format.authors output.nonnull
3239       crossref missing$
3240         { "author and editor" editor either.or.check }
3241         'skip$
3242       if$
3243     }
3244   if$
3245   after.authors
3246   format.btitle "title" output.check
3247   crossref missing$
3248     { format.bvolume output
```

```
3249        new.block
3250        format.number.series output
3251        new.sentence
3252        publisher "publisher" output.check
3253        address output
3254      }
3255      { new.block
3256        format.book.crossref output.nonnull
3257      }
3258    if$
3259    format.edition output
3260    format.date "year" output.check
3261    format.isbn "\ifbtxprintISBN" output.isbn
3262    new.block
3263    format.url output
3264    note output
3265    fin.entry
3266 }
3267

3268 FUNCTION {booklet}
3269 { output.bibitem
3270   format.authors output
3271   after.authors
3272   format.title "title" output.check
3273   howpublished address new.block.checkb
3274   howpublished output
3275   address output
3276   format.date output
3277   new.block
3278   format.url output
3279   note output
3280   fin.entry
3281 }
3282

3283 FUNCTION {inbook}
3284 { output.bibitem
3285   author empty$
3286     { format.editors "author and editor" output.check }
3287     { format.authors output.nonnull
3288       crossref missing$
3289         { "author and editor" editor either.or.check }
3290         'skip$
3291       if$
3292     }
3293   if$
3294   after.authors
3295   format.btitle "title" output.check
3296   crossref missing$
3297     { format.bvolume output
```

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```
3298        format.chapter.pages "chapter and pages" output.check
3299        new.block
3300        format.number.series output
3301        new.sentence
3302        publisher "publisher" output.check
3303        address output
3304      }
3305      { format.chapter.pages "chapter and pages" output.check
3306        new.block
3307        format.book.crossref output.nonnull
3308      }
3309    if$
3310    format.edition output
3311    format.date "year" output.check
3312    format.isbn "\ifbtxprintISBN" output.isbn
3313    new.block
3314    format.url output
3315    note output
3316    fin.entry
3317 }
3318

3319 FUNCTION {incollection}
3320 { output.bibitem
3321    format.authors "author" output.check
3322    after.authors
3323    format.title "title" output.check
3324    new.block
3325    crossref missing$
3326      { format.in.ed.booktitle "booktitle" output.check
3327        format.bvolume output
3328        format.number.series output
3329        format.chapter.pages output
3330        new.sentence
3331        publisher "publisher" output.check
3332        address output
3333        format.edition output
3334        format.date "year" output.check
3335      }
3336      { format.incoll.inproc.crossref output.nonnull
3337        format.chapter.pages output
3338      }
3339    if$
3340    format.isbn "\ifbtxprintISBN" output.isbn
3341    new.block
3342    format.url output
3343    note output
3344    fin.entry
3345 }
3346
```

```
3347 FUNCTION {inproceedings}
3348 { output.bibitem
3349   format.authors "author" output.check
3350   after.authors
3351   format.title "title" output.check
3352   new.block
3353   crossref missing$
3354     { format.in.ed.booktitle "booktitle" output.check
3355       format.bvolume output
3356       format.number.series output
3357       format.pages output
3358       address empty$
3359         { organization publisher new.sentence.checkb
3360           organization output
3361           publisher output
3362           format.date "year" output.check
3363         }
3364         { address output.nonnull
3365           format.date "year" output.check
3366           new.sentence
3367           organization output
3368           publisher output
3369         }
3370       if$
3371     }
3372     { format.incoll.inproc.crossref output.nonnull
3373       format.pages output
3374     }
3375   if$
3376   format.isbn "\ifbtxprintISBN" output.isbn
3377   new.block
3378   format.url output
3379   note output
3380   fin.entry
3381 }
3382
3383 FUNCTION {conference} { inproceedings }
3384
3385 FUNCTION {manual}
3386 { output.bibitem
3387   author empty$
3388     { organization empty$
3389         'skip$
3390         { organization output.nonnull
3391           address output
3392         }
3393       if$
3394     }
3395     { format.authors output.nonnull }
```

```
3396  if$
3397  after.authors
3398  format.btitle "title" output.check
3399  author empty$
3400    { organization empty$
3401        { address new.block.checka
3402          address output
3403        }
3404        'skip$
3405      if$
3406    }
3407    { organization address new.block.checkb
3408      organization output
3409      address output
3410    }
3411  if$
3412  format.edition output
3413  format.date output
3414  format.isbn "\ifbtxprintISBN" output.isbn
3415  new.block
3416  format.url output
3417  note output
3418  fin.entry
3419 }
3420
3421 FUNCTION {mastersthesis}
3422 { output.bibitem
3423  format.authors "author" output.check
3424  after.authors
3425  format.title "title" output.check
3426  new.block
3427  "\btxmastthesis {}" format.thesis.type output.nonnull
3428  school "school" output.check
3429  address output
3430  format.date "year" output.check
3431  new.block
3432  format.url output
3433  note output
3434  fin.entry
3435 }
3436
3437 FUNCTION {misc}
3438 { output.bibitem
3439  format.authors output
3440  title howpublished new.block.checkc
3441  format.title output
3442  howpublished new.block.checka
3443  howpublished output
3444  format.date output
```

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```
3445  format.isbn "\ifbtxprintISBN" output.isbn
3446  new.block
3447  format.issn "\ifbtxprintISSN" output.isbn
3448  new.block
3449  format.url output
3450  note output
3451  fin.entry
3452  empty.misc.check
3453 }
3454

3455 FUNCTION {phdthesis}
3456 { output.bibitem
3457  format.authors "author" output.check
3458  after.authors
3459  format.btitle "title" output.check
3460  new.block
3461  "\btxphdthesis {}" format.thesis.type output.nonnull
3462  school "school" output.check
3463  address output
3464  format.date "year" output.check
3465  format.isbn "\ifbtxprintISBN" output.isbn
3466  new.block
3467  format.url output
3468  note output
3469  fin.entry
3470 }
3471

3472 FUNCTION {proceedings}
3473 { output.bibitem
3474  editor empty$
3475    { organization output }
3476    { format.editors output.nonnull }
3477  if$
3478  after.authors
3479  format.btitle "title" output.check
3480  format.bvolume output
3481  format.number.series output
3482  address empty$
3483    { editor empty$
3484       { publisher new.sentence.checka }
3485       { organization publisher new.sentence.checkb
3486         organization output
3487       }
3488     if$
3489     publisher output
3490     format.date "year" output.check
3491    }
3492    { address output.nonnull
3493      format.date "year" output.check
```

```
3494        new.sentence
3495        editor empty$
3496          'skip$
3497          { organization output }
3498        if$
3499        publisher output
3500     }
3501   if$
3502   format.isbn "\ifbtxprintISBN" output.isbn
3503   new.block
3504   format.url output
3505   note output
3506   fin.entry
3507 }
3508
3509 FUNCTION {techreport}
3510 { output.bibitem
3511   format.authors "author" output.check
3512   after.authors
3513   format.title "title" output.check
3514   new.block
3515   format.tr.number output.nonnull
3516   institution "institution" output.check
3517   address output
3518   format.date "year" output.check
3519   format.isbn "\ifbtxprintISBN" output.isbn
3520   new.block
3521   format.url output
3522   note output
3523   fin.entry
3524 }
3525
3526 FUNCTION {unpublished}
3527 { output.bibitem
3528   format.authors "author" output.check
3529   after.authors
3530   format.title "title" output.check
3531   new.block
3532   format.url output
3533   note "note" output.check
3534   format.date output
3535   fin.entry
3536 }
3537
3538 FUNCTION {default.type} { misc }
3539
3540 ⟨/bststd⟩
```

Months and journals:

```
3541 ⟨∗bststd&!bstshort⟩
3542 MACRO {jan} {"\btxmonjanlong {}"}
3543 MACRO {feb} {"\btxmonfeblong {}"}
3544 MACRO {mar} {"\btxmonmarlong {}"}
3545 MACRO {apr} {"\btxmonaprlong {}"}
3546 MACRO {may} {"\btxmonmaylong {}"}
3547 MACRO {jun} {"\btxmonjunlong {}"}
3548 MACRO {jul} {"\btxmonjullong {}"}
3549 MACRO {aug} {"\btxmonauglong {}"}
3550 MACRO {sep} {"\btxmonseplong {}"}
3551 MACRO {oct} {"\btxmonoctlong {}"}
3552 MACRO {nov} {"\btxmonnovlong {}"}
3553 MACRO {dec} {"\btxmondeclong {}"}
3554 MACRO {acmcs} {"ACM Computing Surveys"}
3555 MACRO {acta} {"Acta Informatica"}
3556 MACRO {cacm} {"Communications of the ACM"}
3557 MACRO {ibmjrd} {"IBM Journal of Research and Development"}
3558 MACRO {ibmsj} {"IBM Systems Journal"}
3559 MACRO {ieeese} {"IEEE Transactions on Software Engineering"}
3560 MACRO {ieeetc} {"IEEE Transactions on Computers"}
3561 MACRO {ieeetcad}
3562  {"IEEE Transactions on Computer-Aided Design of Integrated Circuits"}
3563 MACRO {ipl} {"Information Processing Letters"}
3564 MACRO {jacm} {"Journal of the ACM"}
3565 MACRO {jcss} {"Journal of Computer and System Sciences"}
3566 MACRO {scp} {"Science of Computer Programming"}
3567 MACRO {sicomp} {"SIAM Journal on Computing"}
3568 MACRO {tocs} {"ACM Transactions on Computer Systems"}
3569 MACRO {tods} {"ACM Transactions on Database Systems"}
3570 MACRO {tog} {"ACM Transactions on Graphics"}
3571 MACRO {toms} {"ACM Transactions on Mathematical Software"}
3572 MACRO {toois} {"ACM Transactions on Office Information Systems"}
3573 MACRO {toplas} {"ACM Transactions on Programming Languages and Systems"}
3574 MACRO {tcs} {"Theoretical Computer Science"}
3575 ⟨/bststd&!bstshort⟩
3576 ⟨∗bststd & bstshort⟩
3577 MACRO {jan} {"\btxmonjanshort {.}"}
3578 MACRO {feb} {"\btxmonfebshort {.}"}
3579 MACRO {mar} {"\btxmonmarshort {.}"}
3580 MACRO {apr} {"\btxmonaprshort {.}"}
3581 MACRO {may} {"\btxmonmayshort {.}"}
3582 MACRO {jun} {"\btxmonjunshort {.}"}
3583 MACRO {jul} {"\btxmonjulshort {.}"}
3584 MACRO {aug} {"\btxmonaugshort {.}"}
3585 MACRO {sep} {"\btxmonsepshort {.}"}
3586 MACRO {oct} {"\btxmonoctshort {.}"}
3587 MACRO {nov} {"\btxmonnovshort {.}"}
3588 MACRO {dec} {"\btxmondecshort {.}"}
3589 MACRO {acmcs} {"ACM Comput.\ Surv.{}"}
3590 MACRO {acta} {"Acta Inf.{}"}
```

```
3591 MACRO {cacm} {"Commun. ACM"}
3592 MACRO {ibmjrd} {"IBM J.~Res.\ Dev.{}"}
3593 MACRO {ibmsj} {"IBM Syst.~J.{}"}
3594 MACRO {ieeese} {"IEEE Trans.\ Softw.\ Eng.{}"}
3595 MACRO {ieeetc} {"IEEE Trans.\ Comput.{}"}
3596 MACRO {ieeetcad}
3597  {"IEEE Trans.\ Comput.-Aided Design Integrated Circuits"}
3598 MACRO {ipl} {"Inf.\ Process.\ Lett.{}"}
3599 MACRO {jacm} {"J.~ACM"}
3600 MACRO {jcss} {"J.~Comput.\ Syst.\ Sci.{}"}
3601 MACRO {scp} {"Sci.\ Comput.\ Programming"}
3602 MACRO {sicomp} {"SIAM J.~Comput.{}"}
3603 MACRO {tocs} {"ACM Trans.\ Comput.\ Syst.{}"}
3604 MACRO {tods} {"ACM Trans.\ Database Syst.{}"}
3605 MACRO {tog} {"ACM Trans.\ Gr.{}"}
3606 MACRO {toms} {"ACM Trans.\ Math.\ Softw.{}"}
3607 MACRO {toois} {"ACM Trans.\ Office Inf.\ Syst.{}"}
3608 MACRO {toplas} {"ACM Trans.\ Prog.\ Lang.\ Syst.{}"}
3609 MACRO {tcs} {"Theoretical Comput.\ Sci.{}"}
3610 ⟨/bststd & bstshort⟩
```

Action.

```
3611 ⟨∗bststd⟩
3612
3613 READ
3614
3615 ⟨/bststd⟩
```

10.1.2 Sorted bibliographies

This code is only used for sorted bibliographies.

```
3616 ⟨∗bststd&!bstunsorted⟩
3617 FUNCTION {sortify}
3618 { purify$
3619   "l" change.case$
3620 }
3621
3622 INTEGERS { len }
3623
3624 FUNCTION {chop.word}
3625 { 's :=
3626   'len :=
3627   s #1 len substring$ =
3628     { s len #1 + global.max$ substring$ }
3629     's
3630   if$
3631 }
3632
3633 ⟨/bststd&!bstunsorted⟩
```

```
3634 ⟨∗bststd & bstalpha⟩

3635 INTEGERS { et.al.char.used }
3636
3637 FUNCTION {initialize.et.al.char.used}
3638 { #0 'et.al.char.used :=
3639 }
3640
3641 EXECUTE {initialize.et.al.char.used}
3642
3643 FUNCTION {format.lab.names}
3644 { 's :=
3645   s num.names$ 'numnames :=
3646   numnames #1 >
3647     { numnames #4 >
3648   { #3 'namesleft := }
3649   { numnames 'namesleft := }
3650     if$
3651     #1 'nameptr :=
3652     ""
3653   { namesleft #0 > }
3654   { nameptr numnames =
3655     { s nameptr "{ff }{vv }{ll}{ jj}" format.name$ "others" =
3656   { "{\etalchar{+}}" *
3657     #1 'et.al.char.used :=
3658   }
3659   { s nameptr "{v{}}{l{}}" format.name$ * }
3660     if$
3661   }
3662   { s nameptr "{v{}}{l{}}" format.name$ * }
3663   if$
3664   nameptr #1 + 'nameptr :=
3665   namesleft #1 - 'namesleft :=
3666 }
3667     while$
3668     numnames #4 >
3669   { "{\etalchar{+}}" *
3670   #1 'et.al.char.used :=
3671 }
3672 'skip$
3673     if$
3674   }
3675   { s #1 "{v{}}{l{}}" format.name$
3676     duplicate$ text.length$ #2 <
3677   { pop$ s #1 "{ll}" format.name$ #3 text.prefix$ }
3678 'skip$
3679     if$
3680   }
3681   if$
```

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```
3682 }
3683

3684 FUNCTION {author.key.label}
3685 { author empty$
3686     { key empty$
3687   { cite$ #1 #3 substring$ }
3688   { key #3 text.prefix$ }
3689       if$
3690     }
3691     { author format.lab.names }
3692   if$
3693 }
3694

3695 FUNCTION {author.editor.key.label}
3696 { author empty$
3697     { editor empty$
3698   { key empty$
3699       { cite$ #1 #3 substring$ }
3700       { key #3 text.prefix$ }
3701     if$
3702   }
3703   { editor format.lab.names }
3704       if$
3705     }
3706     { author format.lab.names }
3707   if$
3708 }
3709

3710 FUNCTION {author.key.organization.label}
3711 { author empty$
3712     { key empty$
3713   { organization empty$
3714       { cite$ #1 #3 substring$ }
3715       { "The " #4 organization chop.word #3 text.prefix$ }
3716     if$
3717   }
3718   { key #3 text.prefix$ }
3719       if$
3720     }
3721     { author format.lab.names }
3722   if$
3723 }
3724

3725 FUNCTION {editor.key.organization.label}
3726 { editor empty$
3727     { key empty$
3728   { organization empty$
3729       { cite$ #1 #3 substring$ }
```

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```
3730        { "The " #4 organization chop.word #3 text.prefix$ }
3731      if$
3732    }
3733    { key #3 text.prefix$ }
3734        if$
3735      }
3736      { editor format.lab.names }
3737    if$
3738 }
3739
3740 FUNCTION {calc.label}
3741 { type$ "book" =
3742    type$ "inbook" =
3743    or
3744      'author.editor.key.label
3745      { type$ "proceedings" =
3746    'editor.key.organization.label
3747    { type$ "manual" =
3748        'author.key.organization.label
3749        'author.key.label
3750      if$
3751    }
3752        if$
3753      }
3754    if$
3755    duplicate$
3756    year field.or.null purify$ #-1 #2 substring$
3757    *
3758    'label :=
3759    year field.or.null purify$ #-1 #4 substring$
3760    *
3761    sortify 'sort.label :=
3762 }
3763
3764 ⟨/bststd & bstalpha⟩
3765 ⟨∗bststd&!bstunsorted⟩
3766 FUNCTION {sort.format.names}
3767 { 's :=
3768    #1 'nameptr :=
3769    ""
3770    s num.names$ 'numnames :=
3771    numnames 'namesleft :=
3772      { namesleft #0 > }
3773      { nameptr #1 >
3774          { "   " * }
3775          'skip$
3776        if$
3777 ⟨/bststd&!bstunsorted⟩
```

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```
3778 ⟨∗bststd&!bstshort&!bstunsorted⟩
3779     s nameptr "{ll{ }}{  ff{ }}{vv{ } }{  jj{ }}" format.name$ 't :=
3780 ⟨/bststd&!bstshort&!bstunsorted⟩
3781 ⟨∗bststd & bstshort&!bstunsorted⟩
3782     s nameptr "{ll{ }}{  f{ }}{vv{ } }{  jj{ }}" format.name$ 't :=
3783 ⟨/bststd & bstshort&!bstunsorted⟩
3784 ⟨∗bststd&!bstunsorted⟩
3785     nameptr numnames = t "others" = and
3786       { "et al" * }
3787       { t sortify * }
3788     if$
3789     nameptr #1 + 'nameptr :=
3790     namesleft #1 - 'namesleft :=
3791   }
3792   while$
3793 }
3794
3795 FUNCTION {sort.format.title}
3796 { 't :=
3797   "A " #2
3798     "An " #3
3799       "The " #4 t chop.word
3800     chop.word
3801   chop.word
3802   sortify
3803   #1 global.max$ substring$
3804 }
3805
3806 FUNCTION {author.sort}
3807 { author empty$
3808     { key empty$
3809         { "to sort, need author or key in " cite$ * warning$
3810           ""
3811         }
3812         { key sortify }
3813       if$
3814     }
3815     { author sort.format.names }
3816   if$
3817 }
3818
3819 FUNCTION {author.editor.sort}
3820 { author empty$
3821     { editor empty$
3822         { key empty$
3823             { "to sort, need author, editor, or key in " cite$ * warning$
3824               ""
3825             }
3826             { key sortify }
```

```
3827            if$
3828          }
3829        { editor sort.format.names }
3830      if$
3831    }
3832    { author sort.format.names }
3833  if$
3834 }
3835
3836 FUNCTION {author.organization.sort}
3837 { author empty$
3838     { organization empty$
3839         { key empty$
3840             { "to sort, need author, organization, or key in " cite$ * warning$
3841               ""
3842             }
3843             { key sortify }
3844           if$
3845         }
3846         { "The " #4 organization chop.word sortify }
3847       if$
3848     }
3849     { author sort.format.names }
3850   if$
3851 }
3852
3853 FUNCTION {editor.organization.sort}
3854 { editor empty$
3855     { organization empty$
3856         { key empty$
3857             { "to sort, need editor, organization, or key in " cite$ * warning$
3858               ""
3859             }
3860             { key sortify }
3861           if$
3862         }
3863         { "The " #4 organization chop.word sortify }
3864       if$
3865     }
3866     { editor sort.format.names }
3867   if$
3868 }
3869
3870 FUNCTION {presort}
3871 {
3872 ⟨/bststd&!bstunsorted⟩
3873 ⟨*bststd & bstalpha⟩
3874   calc.label
3875   sort.label
```

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```
3876    "    "
3877    *
```
⟨/bststd & bstalpha⟩
⟨*bststd&!bstunsorted⟩
```
3880    type$ "book" =
3881    type$ "inbook" =
3882    or
3883      'author.editor.sort
3884      { type$ "proceedings" =
3885          'editor.organization.sort
3886          { type$ "manual" =
3887              'author.organization.sort
3888              'author.sort
3889            if$
3890        }
3891      if$
3892    }
3893    if$
```
⟨/bststd&!bstunsorted⟩
⟨bststd & bstalpha⟩   *
⟨*bststd&!bstunsorted⟩
```
3897    "    "
3898    *
3899    year field.or.null sortify
3900    *
3901    "    "
3902    *
3903    title field.or.null
3904    sort.format.title
3905    *
3906    #1 entry.max$ substring$
3907    'sort.key$ :=
3908 }
3909
3910 ITERATE {presort}
3911
3912 SORT
3913
```
⟨/bststd&!bstunsorted⟩
⟨*bststd&!bstalpha⟩
```
3916 STRINGS { longest.label }
3917
3918 INTEGERS { number.label longest.label.width }
3919
3920 FUNCTION {initialize.longest.label}
3921 { "" 'longest.label :=
3922   #1 'number.label :=
3923   #0 'longest.label.width :=
```

```
3924 }
3925

3926 FUNCTION {longest.label.pass}
3927 { number.label int.to.str$ 'label :=
3928   number.label #1 + 'number.label :=
3929   label width$ longest.label.width >
3930     { label 'longest.label :=
3931       label width$ 'longest.label.width :=
3932     }
3933     'skip$
3934   if$
3935 }
3936 ⟨/bststd&!bstalpha⟩
3937 ⟨∗bststd & bstalpha⟩

3938 STRINGS { longest.label last.sort.label next.extra }
3939

3940 INTEGERS { longest.label.width last.extra.num }
3941

3942 FUNCTION {initialize.longest.label}
3943 { "" 'longest.label :=
3944   #0 int.to.chr$ 'last.sort.label :=
3945   "" 'next.extra :=
3946   #0 'longest.label.width :=
3947   #0 'last.extra.num :=
3948 }
3949

3950 FUNCTION {forward.pass}
3951 { last.sort.label sort.label =
3952     { last.extra.num #1 + 'last.extra.num :=
3953       last.extra.num int.to.chr$ 'extra.label :=
3954     }
3955     { "a" chr.to.int$ 'last.extra.num :=
3956       "" 'extra.label :=
3957       sort.label 'last.sort.label :=
3958     }
3959   if$
3960 }
3961

3962 FUNCTION {reverse.pass}
3963 { next.extra "b" =
3964     { "a" 'extra.label := }
3965     'skip$
3966   if$
3967   label extra.label * 'label :=
3968   label width$ longest.label.width >
3969     { label 'longest.label :=
3970       label width$ 'longest.label.width :=
```

```
3971      }
3972      'skip$
3973   if$
3974   extra.label 'next.extra :=
3975 }
3976 ⟨/bststd & bstalpha⟩
```

10.1.3   Generic code

```
3977 ⟨∗bststd⟩
3978
3979 EXECUTE {initialize.longest.label}
3980
3981 ⟨/bststd⟩
3982 ⟨bststd&!bstalpha⟩ITERATE {longest.label.pass}
3983 ⟨bststd & bstalpha⟩ITERATE {forward.pass}
3984 ⟨bststd & bstalpha⟩REVERSE {reverse.pass}
3985 ⟨∗bststd⟩
3986
3987 FUNCTION {begin.bib}
3988 {
3989 ⟨/bststd⟩
3990 ⟨∗bststd & bstalpha⟩
3991   et.al.char.used
3992     { "\newcommand{\etalchar}[1]{$^{#1}$}" write$ newline$ }
3993     'skip$
3994   if$
3995 ⟨/bststd & bstalpha⟩
3996 ⟨∗bststd⟩
3997   preamble$ empty$
3998     'skip$
3999     { preamble$ write$ newline$ }
4000   if$
4001   "\begin{thebibliography}{"  longest.label  * "}" * write$ newline$
4002   "  \providebibliographyfont{name}{}%" write$ newline$
4003   "  \providebibliographyfont{lastname}{}%" write$ newline$
4004   "  \providebibliographyfont{title}{\emph}%" write$ newline$
4005   "  \providebibliographyfont{etal}{\emph}%" write$ newline$
4006   "  \providebibliographyfont{journal}{}%" write$ newline$
4007   "  \providebibliographyfont{volume}{}%" write$ newline$
4008   "  \providebibliographyfont{ISBN}{\MakeUppercase}%" write$ newline$
4009   "  \providebibliographyfont{ISSN}{\MakeUppercase}%" write$ newline$
4010   "  \providebibliographyfont{url}{\url}%" write$ newline$
4011 }
4012
4013 EXECUTE {begin.bib}
4014
4015 EXECUTE {init.state.consts}
4016
```

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```
4017 ITERATE {call.type$}
4018

4019 FUNCTION {end.bib}
4020 { newline$
4021   "\end{thebibliography}" write$ newline$
4022 }
4023

4024 EXECUTE {end.bib}
4025 ⟨/bststd⟩
```

10.2   AMS styles

The following BIBTEX styles are derived from the AMS BIBTEX-style-files by the American Mathematical Society. For example, see 'amsplain.bst' for more documentation about the original.

```
4026 ⟨*bstams⟩
4027 ENTRY
4028   { address
4029     author
4030     booktitle
4031     chapter
4032     edition
4033     editor
4034     howpublished
4035     institution
4036     isbn
4037     issn
4038     journal
4039     key
4040     language
4041     month
4042     mrnumber
4043     note
4044     number
4045     organization
4046     pages
4047     publisher
4048     school
4049     series
4050     title
4051     type
4052     url
4053     urldate
4054     volume
4055     year
4056   }
4057   {}
4058   { label bysame }
4059
```

```
4060
4061 INTEGERS { output.state before.all mid.sentence }
4062
4063 FUNCTION {init.state.consts}
4064 { #0 'before.all :=
4065   #1 'mid.sentence :=
4066 }
4067
4068 STRINGS { s t language.state change.temp}
4069
4070 FUNCTION {shows}
4071 { duplicate$ "::::  '" swap$ * "'" * top$
4072 }
4073
4074 FUNCTION {showstack}
4075 {"STACK==========================================================="
4076 top$
4077 stack$
4078 "ENDSTACK========================================================"
4079 top$
4080 }
4081
4082 FUNCTION {not}
4083 {    { #0 }
4084      { #1 }
4085   if$
4086 }
4087
4088 FUNCTION {and}
4089 {   'skip$
4090     { pop$ #0 }
4091   if$
4092 }
4093
4094 FUNCTION {or}
4095 {    { pop$ #1 }
4096     'skip$
4097   if$
4098 }
4099
4100 FUNCTION {language.change.case}
4101 {
4102   'change.temp :=
4103   't :=
4104   "\btxifchangecase {"
4105   t change.temp change.case$ *
4106   "}{" *
4107   t *
4108   "}" *
4109 }
```

```
4110
4111 FUNCTION {field.or.null}
4112 { duplicate$ empty$
4113     { pop$ "" }
4114     'skip$
4115   if$
4116 }
4117

4118 FUNCTION {namefont}
4119 { duplicate$ empty$
4120     { pop$ "" }
4121     { "\btxnamefont {" swap$ * "}" * }
4122   if$
4123 }
4124

4125 FUNCTION {lastnamefont}
4126 { duplicate$ empty$
4127     { pop$ "" }
4128     { "\btxlastnamefont {" swap$ * "}" * }
4129   if$
4130 }
4131
4132 FUNCTION {titlefont}
4133 { duplicate$ empty$
4134     { pop$ "" }
4135     { "\btxtitlefont {" swap$ * "}" * }
4136   if$
4137 }
4138
4139 FUNCTION {journalfont}
4140 { duplicate$ empty$
4141     { pop$ "" }
4142     { "\btxjournalfont {" swap$ * "}" * }
4143   if$
4144 }
4145
4146 FUNCTION {volumefont}
4147 { duplicate$ empty$
4148     { pop$ "" }
4149     { "\btxvolumefont {" swap$ * "}" * }
4150   if$
4151 }
4152
4153 FUNCTION {etalfont}
4154 { duplicate$ empty$
4155     { pop$ "" }
4156     { "\btxetalfont {" swap$ * "}" * }
4157   if$
```

```
4158 }
4159
```

n.dashify is used to make sure page ranges get the TeX code (two hyphens) for en-dashes.

```
4160 FUNCTION {n.dashify}
4161 { 't :=
4162   ""
4163     { t empty$ not }
4164     { t #1 #1 substring$ "-" =
4165         { t #1 #2 substring$ "--" = not
4166             { "--" *
4167               t #2 global.max$ substring$ 't :=
4168             }
4169             {   { t #1 #1 substring$ "-" = }
4170               { "-" *
4171                 t #2 global.max$ substring$ 't :=
4172               }
4173               while$
4174             }
4175           if$
4176         }
4177         { t #1 #1 substring$ *
4178           t #2 global.max$ substring$ 't :=
4179         }
4180       if$
4181     }
4182   while$
4183 }
4184
```

tie.or.space.connect connects two items with a ~ if the second item is less than 3 letters long, otherwise it just puts an ordinary space.

```
4185 FUNCTION {tie.or.space.connect}
4186 { duplicate$ text.length$ #3 <
4187     { "~" }
4188     { "\ " }
4189   if$
4190   swap$ * *
4191 }
4192
4193 FUNCTION {add.space.if.necessary}
4194 { duplicate$ "" =
4195     'skip$
4196     { "\ " * }
4197   if$
4198 }
4199
```

either.or.check gives a warning if two mutually exclusive fields were used in the database.

```
4200 FUNCTION {either.or.check}
4201 { empty$
4202     'pop$
4203     { "can't use both " swap$ * " fields in " * cite$ * warning$ }
4204   if$
4205 }
4206
```

`output.nonnull` is called by output.

```
4207 FUNCTION {output.nonnull}
```

remove the top item from the stack because it's in the way.

```
4208 { 's :=
4209   output.state mid.sentence =
```

If we're in mid-sentence, add a comma to the new top item and write it

```
4210     { ", " * write$ }
```

Otherwise, if we're at the beginning of a bibitem,

```
4211     { output.state before.all =
```

just write out the top item from the stack;

```
4212       'write$
```

and the last alternative is that we're at the end of the current bibitem, so we add a period to the top stack item and write it out.

```
4213         { add.period$ " " * write$ }
4214       if$
4215       mid.sentence 'output.state :=
4216     }
4217   if$
```

Put the top item back on the stack that we removed earlier.

```
4218   s
4219 }
4220
```

Output checks to see if the stack top is empty; if not, it calls output.nonnull to write it out.

```
4221 FUNCTION {output}
4222 { duplicate$ empty$
4223     'pop$
4224     'output.nonnull
4225   if$
4226 }
4227
```

Standard warning message for a missing or empty field. For the user we call any such field 'missing' without respect to the distinction made by BibTeX between missing and empty.

```
4228 FUNCTION {missing.warning}
4229 { "missing " swap$ * " in " * cite$ * warning$ }
4230
```

`output.check` is like output except that it gives a warning on-screen if the given field in the database entry is empty. t is the field name.

```
4231 FUNCTION {output.check}
4232 { 't :=
4233   duplicate$ empty$
4234     { pop$ t missing.warning }
4235     'output.nonnull
4236   if$
4237 }
4238
4239 FUNCTION {output.bibitem}
4240 { newline$
```

If no language is given, fall back to the language that has been active at `\begin{document}`. For BibTeX, this language gets the name `nolanguage`.

```
4241   language empty$
4242     { "empty language in " cite$ * warning$
4243       language.state "nolanguage" =
4244         'skip$
4245         {
4246           "\expandafter\btxselectlanguage\expandafter {"
4247           "\btxfallbacklanguage}" * write$
4248           newline$
4249         }
4250       if$
4251       "nolanguage" 'language.state :=
4252     }
4253     { language.state language =
4254         'skip$
4255         { "\btxselectlanguage {" language * "}" * write$
4256           newline$
4257         }
4258       if$
4259       language 'language.state :=
4260     }
4261   if$
4262   "\bibitem{" write$
4263   cite$ write$
4264   "}" write$
4265   newline$
```

This empty string is the first thing that will be written the next time `write$` is called. Done this way because each item is saved on the stack until we find out what punctuation should be added after it. Therefore we need an empty first item.

```
4266   ""
4267   before.all 'output.state :=
4268 }
4269
4270 FUNCTION {output.nonempty.mrnumber}
4271 { duplicate$ missing$
```

```
4272     { pop$ "" }
4273     'skip$
4274   if$
4275   duplicate$ empty$
4276     'pop$
4277     { " \MR{" swap$ * "}" * write$ }
4278   if$
4279 }
4280
4281 FUNCTION {fin.entry}
4282 { add.period$
4283   write$
4284   mrnumber output.nonempty.mrnumber
4285   newline$
4286 }
4287
```

Removed `new.block`, `new.block.checka`, `new.block.checkb`, `new.sentence`, `new.sentence.checka`, and `new.sentence.checkb` functions here, since they don't seem to be needed in the AMS style. Also moved some real basic functions like 'and' and 'or' earlier in the file.

```
4288 INTEGERS { nameptr namesleft numnames }
4289
```

The extra section to write out a language field was added for babamspl.bst. Not present in babplain.bst.

```
4290 FUNCTION {format.language}
4291 { language empty$
4292     { "" }
4293     { "\btxprintamslanguage{\btxlanguagename {" language * "}}" * }
4294   if$
4295 }
4296
```

This version of format.names puts names in the format "First von Last, Jr." (i. e., first name first, no abbreviating to initials).

```
4297 FUNCTION {format.names}
4298 { 's :=
4299   #1 'nameptr :=
4300   s num.names$ 'numnames :=
4301   numnames 'namesleft :=
4302     { namesleft #0 > }
4303     {
4304       s nameptr "{ff~}{vv~}" format.name$
4305       s nameptr "{ll}" format.name$ lastnamefont *
4306       s nameptr "{, jj}" format.name$ * 't :=
4307       nameptr #1 >
4308         { namesleft #1 >
4309             { ", " * t namefont * }
4310             { numnames #2 >
4311                 { "\btxandcomma {}" * }
```

```
4312                  'skip$
4313                if$
4314                s nameptr "{ff~}{vv~}{ll}{, jj}" format.name$ "others" =
4315                  { " " * "\btxetalshort {.}" etalfont * }
4316                  { " \btxandlong {} " * t namefont * }
4317                if$
4318              }
4319            if$
4320          }
4321          {
4322            s nameptr "{ff~}{vv~}" format.name$
4323            s nameptr "{ll}" format.name$ lastnamefont *
4324            s nameptr "{, jj}" format.name$ * namefont
4325          }
4326        if$
4327        nameptr #1 + 'nameptr :=
4328        namesleft #1 - 'namesleft :=
4329      }
4330    while$
4331 }
4332
4333 FUNCTION {format.authors}
4334 { author empty$
4335     { "" }
4336     { bysame "\bysame" =
4337         {"\bysame"}
4338         { author format.names }
4339       if$
4340     }
4341   if$
4342 }
4343
4344 FUNCTION {format.editors}
4345 { editor empty$
4346     { "" }
4347     { editor format.names
4348       editor num.names$ #1 >
4349         { "\ (\btxeditorsshort {.})" * }
4350         { "\ (\btxeditorshort {.})" * }
4351       if$
4352     }
4353   if$
4354 }
4355
4356 FUNCTION {format.nonauthor.editors}
4357 { editor empty$
4358     { "" }
4359     { editor format.names
4360       editor num.names$ #1 >
4361         { ", \btxeditorsshort {.}" * }
```

```
4362         { ", \btxeditorshort {.}" * }
4363       if$
4364     }
4365   if$
4366 }
4367
4368 FUNCTION {format.title}
4369 { title empty$
4370     { "" }
4371     { title "t" language.change.case titlefont }
4372   if$
4373 }
4374
4375 FUNCTION {format.journal.vol.year}
4376 { journal empty$
4377     { "journal name" missing.warning ""}
4378     { journal journalfont }
4379   if$
4380   volume empty$
4381     'skip$
4382     { " " * volume volumefont * }
4383   if$
4384   year empty$
4385     { "year" missing.warning }
4386     { " (" * year * ")" * }
4387   if$
4388 }
4389
```

For formatting the issue number for a journal article.

```
4390 FUNCTION {format.number}
4391 { number empty$
4392     { "" }
4393     { "\btxnumbershort {.}~" number * }
4394   if$
4395 }
4396
```

For formatting miscellaneous dates

```
4397 FUNCTION {format.date}
4398 { year empty$
4399     { month empty$
4400         { "" }
4401         { "there's a month but no year in " cite$ * warning$
4402           month
4403         }
4404       if$
4405     }
4406     { month empty$
4407         'year
4408         { month "\ " * year * }
```

```
4409        if$
4410      }
4411    if$
4412 }
4413
```

The volume, series and number information is sort of tricky. This code handles it as follows: If the series is present, and the volume, but not the number, then we do "*Book title*, Series Name, vol. 000" If the series is present, and the number, but not the volume, then we do "*Book title*, Series Name, no. 000" If the series is present, and both number and volume, then we do "*Book title*, vol. XX, Series Name, no. 000" Finally, if the series is absent, then we do "*Book title*, vol. XX" or "*Book title*, no. 000" and if both volume and number are present, give a warning message.

```
4414 FUNCTION {format.bookvolume.series.number}
4415 { volume empty$
4416      { "" % Push the empty string as a placeholder in case everything else
4417          % is empty too.
4418        series empty$
4419          'skip$
4420          { pop$ series } % if series is not empty put in stack
4421        if$
4422        number empty$
4423          'skip$
4424          { duplicate$ empty$ % if no preceding material,
4425              'skip$              % do nothing, otherwise
4426              { ", " * }         % add a comma and space to separate.
4427            if$
4428            "\btxnumbershort {.}" number tie.or.space.connect * % add the number information
4429          }
4430        if$
4431      }
```

If the volume is NOT EMPTY:

```
4432      { "\btxvolumeshort {.}" volume tie.or.space.connect % vol. XX
4433        number empty$
4434          { series empty$
4435              'skip$
4436              { series ", " * swap$ *}    % Series Name, vol. XX
4437            if$
4438          }
4439          { series empty$
4440              { "can't use both volume and number if series info is missing"
4441                warning$
4442                "in BibTeX entry type '" type$ * "'" * top$
4443              }
4444              { ", " * series * ", \btxnumbershort {.}" * number tie.or.space.connect }
4445            if$
4446          }
4447        if$
```

```
4448       }
4449    if$
4450
4451 }  % end of format.bookvolume.series.number
4452
```

`format.inproc.title.where.editors` is used by inproceedings entry types No
case changing or emphasizing for the title. We want initial caps, roman. We add
parentheses around the address (place where conference was held). Likewise we
add parentheses around the editors' names.

```
4453 FUNCTION {format.inproc.title.address.editors}
4454 { booktitle empty$
4455      { "" }
4456      { booktitle
4457        address empty$
4458          'skip$
4459          { add.space.if.necessary "(" * address * ")" * }
4460        if$
4461        editor empty$
4462          'skip$
4463          { add.space.if.necessary "(" * format.nonauthor.editors * ")" * }
4464        if$
4465      }
4466    if$
4467 }
4468
```

`format.incoll.title.editors` is similar to `format.inproc...` but omits the
address. For collections that are not proceedings volumes.

```
4469 FUNCTION {format.incoll.title.editors}
4470 { booktitle empty$
4471      { "" }
4472      { editor empty$
4473          { booktitle }
4474          { booktitle
4475            add.space.if.necessary "(" * format.nonauthor.editors * ")" *
4476          }
4477        if$
4478      }
4479    if$
4480 }
4481
4482 FUNCTION {format.edition}
4483 { edition empty$
4484      { "" }
4485      { output.state mid.sentence =
4486          { edition "l" language.change.case " \btxeditionshort {.}" * }
4487          { edition "t" language.change.case " \btxeditionshort {.}" * }
4488        if$
4489      }
```

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```
4490    if$
4491 }
4492
4493 FUNCTION {format.isbn}
4494 { isbn empty$
4495     { "" }
4496     { "\btxISBN~\btxISBNfont {" isbn * "}" * }
4497   if$
4498 }
4499
4500 FUNCTION {format.issn}
4501 { issn empty$
4502     { "" }
4503     { "\btxISSN~\btxISSNfont {" issn * "}" * }
4504   if$
4505 }
4506
4507 FUNCTION {format.url}
4508 { url empty$
4509     { "" }
4510     {
4511       urldate empty$
4512       { "\btxurlfont{" url * "}" * }
4513       {
4514         "\btxurlfont{" url *
4515         "}, \btxurldatecomment{} \btxkeywordlanguage {\btxurldatefont {" *
4516           urldate * "}}" *
4517       }
4518       if$
4519     }
4520   if$
4521 }
4522
4523 INTEGERS { multiresult }
4524
4525 FUNCTION {multi.page.check}
4526 { 't :=
4527   #0 'multiresult :=
4528     { multiresult not
4529       t empty$ not
4530       and
4531     }
4532     { t #1 #1 substring$
4533       duplicate$ "-" =
4534       swap$ duplicate$ "," =
4535       swap$ "+" =
4536       or or
4537         { #1 'multiresult := }
4538         { t #2 global.max$ substring$ 't := }
4539       if$
```

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```
4540     }
4541   while$
4542   multiresult
4543 }
4544
4545 FUNCTION {format.pages}
4546 { pages empty$
4547     { "" }
4548     { pages n.dashify }
4549   if$
4550 }
4551
4552 FUNCTION {format.book.pages}
4553 { pages empty$
4554     { "" }
4555     { pages multi.page.check
4556         { "\btxpagesshort {.}~" pages n.dashify * }
4557         { "\btxpageshort {.}~" pages * }
4558       if$
4559     }
4560   if$
4561 }
4562
4563 FUNCTION {format.chapter.pages}
4564 { chapter empty$
4565     'format.book.pages
4566     { type empty$
4567         { "\btxchaptershort {.}~" }
4568         { type "l" language.change.case " " * }
4569       if$
4570       chapter *
4571       pages empty$
4572         'skip$
4573         { ", " * format.book.pages * }
4574       if$
4575     }
4576   if$
4577 }
4578
4579 FUNCTION {empty.misc.check}
4580 { author empty$ title empty$ howpublished empty$
4581   month empty$ year empty$ note empty$
4582   and and and and and
4583   key empty$ not and
4584     { "all relevant fields are empty in " cite$ * warning$ }
4585     'skip$
4586   if$
4587 }
4588
4589 FUNCTION {format.thesis.type}
```

```
4590 { type empty$
4591     'skip$
4592     { pop$
4593        type "t" language.change.case
4594     }
4595   if$
4596 }
4597
4598 FUNCTION {format.tr.number}
4599 { type empty$
4600     { "\Btxtechrepshort {.}" }
4601     'type
4602   if$
4603   number empty$
4604     { "t" language.change.case }
4605     { number tie.or.space.connect }
4606   if$
4607 }
4608
```

The `format.crossref` functions haven't been paid much attention at the present time (June 1990) and could probably use some work. MJD

```
4609 FUNCTION {format.article.crossref}
4610 { key empty$
4611     { journal empty$
4612         { "need key or journal for " cite$ * " to crossref " * crossref *
4613           warning$
4614           ""
4615         }
4616         { "\btxinshort {} " journal journalfont * }
4617       if$
4618     }
4619     { "\btxinshort {} " key * }
4620   if$
4621   " \cite{" * crossref * "}" *
4622 }
4623
4624 FUNCTION {format.crossref.editor}
4625 { editor #1 "{vv~}{ll}" format.name$
4626   editor num.names$ duplicate$
4627   #2 >
4628     { pop$ " \btxetalshort {.}" * }
4629     { #2 <
4630       'skip$
4631       { editor #2 "{ff }{vv }{ll}{ jj}" format.name$ "others" =
4632           { " \btxetalshort {.}" * }
4633           { " \btxandlong {} " * editor #2 "{vv~}{ll}" format.name$ * }
4634         if$
4635       }
4636     if$
```

```
4637      }
4638   if$
4639 }
4640
4641 FUNCTION {format.book.crossref}
4642 { volume empty$
4643     { "empty volume in " cite$ * "'s crossref of " * crossref * warning$
4644       "\btxinserieslong {} "
4645     }
4646     { "\btxvolumeshort {.}" volume tie.or.space.connect
4647       " \btxofserieslong {} " *
4648     }
4649   if$
4650   editor empty$
4651   editor field.or.null author field.or.null =
4652   or
4653     { key empty$
4654         { series empty$
4655             { "need editor, key, or series for " cite$ * " to crossref " *
4656               crossref * warning$
4657               "" *
4658             }
4659             { series * }
4660           if$
4661         }
4662         { key * }
4663       if$
4664     }
4665     { format.crossref.editor * }
4666   if$
4667   " \cite{" * crossref * "}" *
4668 }
4669
4670 FUNCTION {format.incoll.inproc.crossref}
4671 { editor empty$
4672   editor field.or.null author field.or.null =
4673   or
4674     { key empty$
4675         { booktitle empty$
4676             { "need editor, key, or booktitle for " cite$ * " to crossref " *
4677               crossref * warning$
4678               ""
4679             }
4680             { "\btxinlong {} " * booktitle titlefont * }
4681           if$
4682         }
4683         { "\btxinlong {} " key * }
4684       if$
4685     }
4686     { "\btxinlong {} " format.crossref.editor * }
```

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```
4687   if$
4688   " \cite{" * crossref * "}" *
4689 }
4690
```

The main functions for each entry type.

    journal, vol and year are formatted together because they are not separated by commas.

```
4691 FUNCTION {article}
4692 { output.bibitem
4693   format.authors "author" output.check
4694   format.title "title" output.check
4695   crossref missing$
4696     { format.journal.vol.year output
4697       format.number output
4698       format.pages "pages" output.check
4699     }
4700     { format.article.crossref output.nonnull
4701       format.pages "pages" output.check
4702     }
4703   if$
4704   format.issn output
4705   format.url output
4706   format.language *
4707   note output
4708   fin.entry
4709 }
4710
4711 FUNCTION {book}
4712 { output.bibitem
4713   author empty$
4714     { format.editors "author and editor" output.check }
4715     { format.authors output.nonnull
4716       crossref missing$
4717         { "author and editor" editor either.or.check }
4718         'skip$
4719       if$
4720     }
4721   if$
4722   format.title "title" output.check
4723   format.edition output
4724   crossref missing$
4725     { format.bookvolume.series.number output
4726       publisher "publisher" output.check
4727       address output
4728     }
4729     { format.book.crossref output.nonnull
4730     }
4731   if$
4732   format.date "year" output.check
```

```
4733   format.isbn output
4734   format.url output
4735   format.language *
4736   note output
4737   fin.entry
4738 }
4739
4740 FUNCTION {booklet}
4741 { output.bibitem
4742   format.authors output
4743   format.title "title" output.check
4744   howpublished output
4745   address output
4746   format.date output
4747   format.url output
4748   note output
4749   fin.entry
4750 }
4751
4752 FUNCTION {inbook}
4753 { output.bibitem
4754   author empty$
4755     { format.editors "author and editor" output.check }
4756     { format.authors output.nonnull
4757       crossref missing$
4758         { "author and editor" editor either.or.check }
4759         'skip$
4760       if$
4761     }
4762   if$
4763   format.title "title" output.check
4764   format.edition output
4765   crossref missing$
4766     { format.bookvolume.series.number output
4767       format.chapter.pages "chapter and pages" output.check
4768       publisher "publisher" output.check
4769       address output
4770     }
4771     { format.chapter.pages "chapter and pages" output.check
4772       format.book.crossref output.nonnull
4773     }
4774   if$
4775   format.date "year" output.check
4776   format.isbn output
4777   format.url output
4778   format.language *
4779   note output
4780   fin.entry
4781 }
4782
```

```
4783 FUNCTION {incollection}
4784 { output.bibitem
4785   format.authors "author" output.check
4786   format.title "title" output.check
4787   crossref missing$
4788     { format.incoll.title.editors "booktitle" output.check
4789       format.bookvolume.series.number output
4790       publisher "publisher" output.check
4791       address output
4792       format.edition output
4793       format.date "year" output.check
4794     }
4795     { format.incoll.inproc.crossref output.nonnull
4796     }
4797   if$
4798   note output
4799   format.book.pages output
4800   format.isbn output
4801   format.url output
4802   format.language *
4803   fin.entry
4804 }
4805
4806 FUNCTION {inproceedings}
4807 { output.bibitem
4808   format.authors "author" output.check
4809   format.title "title" output.check
4810   crossref missing$
4811     { format.inproc.title.address.editors "booktitle" output.check
4812       format.bookvolume.series.number output
4813       organization output
4814       publisher output
4815       format.date "year" output.check
4816     }
4817     { format.incoll.inproc.crossref output.nonnull
4818     }
4819   if$
4820   note output
4821   format.book.pages output
4822   format.isbn output
4823   format.url output
4824   format.language *
4825   fin.entry
4826 }
4827
4828 FUNCTION {conference} { inproceedings }
4829
4830 FUNCTION {manual}
4831 { output.bibitem
4832   author empty$
```

```
4833     { organization empty$
4834         'skip$
4835         { organization output.nonnull
4836           address output
4837         }
4838       if$
4839     }
4840     { format.authors output.nonnull }
4841   if$
4842   format.title "title" output.check
4843   author empty$
4844     { organization empty$
4845         { address output }
4846         'skip$
4847       if$
4848     }
4849     { organization output
4850       address output
4851     }
4852   if$
4853   format.edition output
4854   format.date output
4855   format.isbn output
4856   format.url output
4857   note output
4858   fin.entry
4859 }
4860
4861 FUNCTION {mastersthesis}
4862 { output.bibitem
4863   format.authors "author" output.check
4864   format.title "title" output.check
4865   "\btxmastthesis {}" format.thesis.type output.nonnull
4866   school "school" output.check
4867   address output
4868   format.date "year" output.check
4869   format.url output
4870   note output
4871   format.book.pages output
4872   fin.entry
4873 }
4874
4875 FUNCTION {misc}
4876 { output.bibitem
4877   format.authors output
4878   format.title output
4879   howpublished output
4880   format.date output
4881   format.isbn output
4882   format.issn output
```

```
4883   format.url output
4884   note output
4885   format.book.pages output
4886   fin.entry
4887   empty.misc.check
4888 }
4889
4890 FUNCTION {phdthesis}
4891 { output.bibitem
4892   format.authors "author" output.check
4893   format.title "title" output.check
4894   "\btxphdthesis {}" format.thesis.type output.nonnull
4895   school "school" output.check
4896   address output
4897   format.date "year" output.check
4898   format.isbn output
4899   format.url output
4900   note output
4901   format.book.pages output
4902   fin.entry
4903 }
4904
4905 FUNCTION {proceedings}
4906 { output.bibitem
4907   editor empty$
4908     { organization output }
4909     { format.editors output.nonnull }
4910   if$
4911   format.title "title" output.check
4912   format.bookvolume.series.number output
4913   address empty$
4914     { editor empty$
4915         'skip$
4916         { organization output }
4917       if$
4918       publisher output
4919       format.date "year" output.check
4920     }
4921     { address output.nonnull
4922       editor empty$
4923         'skip$
4924         { organization output }
4925       if$
4926       publisher output
4927       format.date "year" output.check
4928     }
4929   if$
4930   format.isbn output
4931   format.url output
4932   note output
```

```
4933    fin.entry
4934 }
4935
4936 FUNCTION {techreport}
4937 { output.bibitem
4938   format.authors "author" output.check
4939   format.title "title" output.check
4940   format.tr.number output.nonnull
4941   institution "institution" output.check
4942   address output
4943   format.date "year" output.check
4944   format.isbn output
4945   format.url output
4946   note output
4947   fin.entry
4948 }
4949
4950 FUNCTION {unpublished}
4951 { output.bibitem
4952   format.authors "author" output.check
4953   format.title "title" output.check
4954   format.url output
4955   note "note" output.check
4956   format.date output
4957   fin.entry
4958 }
4959
4960 FUNCTION {default.type} { misc }
4961
4962 MACRO {jan} {"\btxmonjanlong {}"}
4963 MACRO {feb} {"\btxmonfeblong {}"}
4964 MACRO {mar} {"\btxmonmarlong {}"}
4965 MACRO {apr} {"\btxmonaprlong {}"}
4966 MACRO {may} {"\btxmonmaylong {}"}
4967 MACRO {jun} {"\btxmonjunlong {}"}
4968 MACRO {jul} {"\btxmonjullong {}"}
4969 MACRO {aug} {"\btxmonauglong {}"}
4970 MACRO {sep} {"\btxmonseplong {}"}
4971 MACRO {oct} {"\btxmonoctlong {}"}
4972 MACRO {nov} {"\btxmonnovlong {}"}
4973 MACRO {dec} {"\btxmondeclong {}"}
4974
4975 READ
4976
4977 FUNCTION {sortify}
4978 { purify$
4979   "l" language.change.case
4980 }
4981
4982 INTEGERS { len }
```

```
4983
4984 FUNCTION {chop.word}
4985 { 's :=
4986   'len :=
4987   s #1 len substring$ =
4988     { s len #1 + global.max$ substring$ }
4989     's
4990   if$
4991 }
4992
4993 FUNCTION {sort.format.names}
4994 { 's :=
4995   #1 'nameptr :=
4996   ""
4997   s num.names$ 'numnames :=
4998   numnames 'namesleft :=
4999     { namesleft #0 > }
5000     { nameptr #1 >
5001         { "   " * }
5002         'skip$
5003       if$
5004       s nameptr "{vv{ } }{ll{ }}{  ff{ }}{  jj{ }}" format.name$ 't :=
5005       nameptr numnames = t "others" = and
5006         { "et al" * }
5007         { t sortify * }
5008       if$
5009       nameptr #1 + 'nameptr :=
5010       namesleft #1 - 'namesleft :=
5011     }
5012   while$
5013 }
5014
5015 FUNCTION {sort.format.title}
5016 { 't :=
5017   "A " #2
5018     "An " #3
5019       "The " #4 t chop.word
5020     chop.word
5021   chop.word
5022   sortify
5023   #1 global.max$ substring$
5024 }
5025
5026 FUNCTION {author.sort}
5027 { author empty$
5028     { key empty$
5029         { "to sort, need author or key in " cite$ * warning$
5030           ""
5031         }
5032         { key sortify }
```

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```
5033        if$
5034      }
5035      { author sort.format.names }
5036    if$
5037 }
5038
5039 FUNCTION {author.editor.sort}
5040 { author empty$
5041      { editor empty$
5042          { key empty$
5043              { "to sort, need author, editor, or key in " cite$ * warning$
5044                ""
5045              }
5046              { key sortify }
5047            if$
5048          }
5049          { editor sort.format.names }
5050        if$
5051      }
5052      { author sort.format.names }
5053    if$
5054 }
5055
5056 FUNCTION {author.organization.sort}
5057 { author empty$
5058      { organization empty$
5059          { key empty$
5060              { "to sort, need author, organization, or key in " cite$ * warning$
5061                ""
5062              }
5063              { key sortify }
5064            if$
5065          }
5066          { "The " #4 organization chop.word sortify }
5067        if$
5068      }
5069      { author sort.format.names }
5070    if$
5071 }
5072
5073 FUNCTION {editor.organization.sort}
5074 { editor empty$
5075      { organization empty$
5076          { key empty$
5077              { "to sort, need editor, organization, or key in " cite$ * warning$
5078                ""
5079              }
5080              { key sortify }
5081            if$
5082          }
```

```
5083          { "The " #4 organization chop.word sortify }
5084        if$
5085      }
5086      { editor sort.format.names }
5087    if$
5088 }
5089
5090 FUNCTION {presort}
5091 { type$ "book" =
5092   type$ "inbook" =
5093   or
5094     'author.editor.sort
5095     { type$ "proceedings" =
5096         'editor.organization.sort
5097         { type$ "manual" =
5098             'author.organization.sort
5099             'author.sort
5100           if$
5101         }
5102       if$
5103     }
5104   if$
5105   "    "
5106   *
5107   year field.or.null sortify
5108   *
5109   "    "
5110   *
5111   title field.or.null
5112   sort.format.title
5113   *
5114   #1 entry.max$ substring$
5115   'sort.key$ :=
5116 }
5117
5118 ITERATE {presort}
5119
5120 SORT
5121
5122 STRINGS { longest.label prev.author this.author }
5123
5124 INTEGERS { number.label longest.label.width }
5125
5126 FUNCTION {initialize.longest.label}
5127 { "" 'longest.label :=
5128   #1 'number.label :=
5129   #0 'longest.label.width :=
5130   "abcxyz" 'prev.author :=
5131   "" 'this.author :=
5132 }
```

```
5133
5134 FUNCTION {longest.label.pass}
5135 { number.label int.to.str$ 'label :=
5136   number.label #1 + 'number.label :=
5137   label width$ longest.label.width >
5138     { label 'longest.label :=
5139       label width$ 'longest.label.width :=
5140     }
5141     'skip$
5142   if$
5143   author empty$
5144     { editor empty$
5145       { "" }
5146       'editor
5147       if$
5148     }
5149     'author
5150   if$
5151   'this.author :=
5152   this.author prev.author =
5153     { "\bysame" 'bysame := }
5154     { "" 'bysame :=
5155       this.author "" =
5156         { "abcxyz" }
5157         'this.author
5158       if$
5159       'prev.author :=
5160     }
5161   if$
5162 }
5163
5164 EXECUTE {initialize.longest.label}
5165
5166 ITERATE {longest.label.pass}
5167
5168 FUNCTION {write.lines}
5169 { { duplicate$ "." = NOT }
5170     { write$ newline$ }
5171   while$
5172   pop$
5173 }
5174
5175 FUNCTION {begin.bib}
5176 { preamble$ empty$
5177     'skip$
5178     { preamble$ write$ newline$ }
5179   if$
5180   "\begin{thebibliography}{" longest.label * "}" * write$ newline$
5181   "  \providecommand{\bysame}{\leavevmode\hbox to3em{\hrulefill}\thinspace}"
5182     write$ newline$
```

```
5183   "  \providecommand{\MR}{\relax\ifhmode\unskip\space\fi MR }"
5184     write$ newline$
5185   "  % \MRhref is called by the amsart/book/proc definition of \MR."
5186     write$ newline$
5187   "  \providecommand{\MRhref}[2]{%" write$ newline$
5188   "    \href{http://www.ams.org/mathscinet-getitem?mr=#1}{#2}"
5189     write$ newline$
5190   "  }" write$ newline$
5191   "  \providecommand{\href}[2]{#2}" write$ newline$
5192   "  \providebibliographyfont{name}{}%" write$ newline$
5193   "  \providebibliographyfont{lastname}{}%" write$ newline$
5194   "  \providebibliographyfont{title}{\emph}%" write$ newline$
5195   "  \providebibliographyfont{etal}{}%" write$ newline$
5196   "  \providebibliographyfont{journal}{}%" write$ newline$
5197   "  \providebibliographyfont{volume}{\textbf}%" write$ newline$
5198   "  \providebibliographyfont{ISBN}{\MakeUppercase}%" write$ newline$
5199   "  \providebibliographyfont{ISSN}{\MakeUppercase}%" write$ newline$
5200   "  \providebibliographyfont{url}{\url}%" write$ newline$
5201   "  \providecommand\btxprintamslanguage[1]{\ (#1)}"
5202     write$ newline$
5203 }
5204
5205 EXECUTE {begin.bib}
5206
5207 EXECUTE {init.state.consts}
5208
5209 ITERATE {call.type$}
5210
5211 FUNCTION {end.bib}
5212 { newline$
5213   "\end{thebibliography}" write$ newline$
5214 }
5215
5216 EXECUTE {end.bib}
5217 ⟨/bstams⟩
```