

OXREF BUNDLE

OXREF – Biblatex styles inspired by the *Oxford Guide to Style*

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Introduction

This document provides the documented sources for the [oxref](#) bibliography styles:

- `oxnotes`: a style similar to the standard `verbose` and its variants, intended for use with footnotes;
- `oxnum`: a style similar to the standard `numeric`, intended for use with numeric in-text citation labels;
- `oxalph`: a style similar to the standard `alphabetic`, intended for use with alphabetic in-text citation labels;
- `oxyear`: a style similar to the standard `authoryear`, intended for use with parenthetical in-text citations.

1.1 Quick start

The styles are self-contained, so you can load them with [biblatex](#):

<code>\usepackage[style=oxnotes]{biblatex}</code>	<code>\usepackage[style=oxalph]{biblatex}</code>
<code>\usepackage[style=oxnum]{biblatex}</code>	<code>\usepackage[style=oxyear]{biblatex}</code>

For further information, including some additional options you can set, please refer to the separate documentation files `oxnotes-doc.pdf`, `oxnum-doc.pdf`, `oxalph-doc.pdf`, and `oxyear-doc.pdf` respectively.

1.2 Installation

1.2.1 DEPENDENCIES

To compile the documentation you will need to have the [minted](#) package working, which in turn relies on Python 2.6+ and Pygments. See the documentation of that package for details.

1.2.2 MANAGED WAY

The latest stable release of the `biblatex-oxref` bundle has been packaged for TeX Live and MiKTeX. If you are running TeX Live and have `tlmgr` installed, you can install the bundle simply by running `tlmgr install biblatex-oxref`. If you are running MiKTeX, you can install the bundle

by running `mpm --install=biblatex-oxref`. Both `tlmgr` and `mpm` have GUI versions that you might find friendlier.

1.2.3 AUTOMATED WAY

A makefile is provided which you can use with the Make utility on UNIX-like systems:

- Running `make source` generates the derived files
 - `README.md`
 - `oxref.bbx`, `oxnotes.bbx`, `oxnotes-ibid.bbx`, `oxnotes-note.bbx`, `oxnotes-inote.bbx`, `oxnotes-trad1.bbx`, `oxnotes-trad2.bbx`, `oxnotes-trad3.bbx`, `oxyear.bbx`, `oxnum.bbx`, `oxalph.bbx`
 - `oxnotes.cbx`, `oxnotes-ibid.cbx`, `oxnotes-note.cbx`, `oxnotes-inote.cbx`, `oxnotes-trad1.cbx`, `oxnotes-trad2.cbx`, `oxnotes-trad3.cbx`, `oxyear.cbx`, `oxnum.cbx`, `oxalph.cbx`
 - `american-oxref.lbx`, `british-oxref.lbx`, `english-oxref.lbx`, `spanish-oxref.lbx`, `polish.lbx`
 - `oxnotes.dbx`, `oxnotes-ibid.dbx`, `oxnotes-note.dbx`, `oxnotes-inote.dbx`, `oxnotes-trad1.dbx`, `oxnotes-trad2.dbx`, `oxnotes-trad3.dbx`, `oxyear.dbx`, `oxnum.dbx`, `oxalph.dbx`
 - `oxref.bib`
 - `oxref.ins`
 - `oxnotes-doc.tex`, `oxyear-doc.tex`, `oxnum-doc.tex`, `oxalph-doc.tex`
- Running `make` generates the above files and also `oxref.pdf`, `oxnotes-doc.pdf`, `oxyear-doc.pdf`, `oxnum-doc.pdf` and `oxalph-doc.pdf`.
- Running `make inst` installs the files in the user's TeX tree. You can undo this with `make uninst`.
- Running `make install` installs the files in the local TeX tree. You can undo this with `make uninstall`.
- Running `make clean` removes auxiliary files from the working directory.
- Running `make distclean` removes the generated files from the working directory as well.

1.2.4 MANUAL WAY

To install the bundle from scratch, follow these instructions. If you have downloaded the zip file from the [Releases](#) page on GitHub, you can skip the first two steps.

1. Run `luatex oxref.dtx` to generate the source files. (You can safely skip this step if you are confident about step 2.)
2. Compile `oxref.dtx`, `oxnotes-doc.tex`, `oxyear-doc.tex`, and `oxnum-doc.tex` with LuaLaTeX and Biber to generate the documentation. You will need to enable shell escape so that [minted](#) can typeset the listings.
3. Move the files to your TeX tree as follows:
 - `source/latex/biblatex-oxref`: `oxref.dtx`, (`oxref.ins`)
 - `tex/latex/biblatex-oxref`: `american-oxref.lbx`, `british-oxref.lbx`, `english-oxref.lbx`, `spanish-oxref.lbx`, `polish-oxref.lbx`, `oxalph.bbx`, `oxalph.cbx`, `oxalph.dbx`, `oxnotes.bbx`, `oxnotes.cbx`, `oxnotes.dbx`, `oxnotes-ibid.bbx`, `oxnotes-ibid.cbx`, `oxnotes-ibid.dbx`, `oxnotes-inote.bbx`, `oxnotes-inote.cbx`, `oxnotes-inote.dbx`, `oxnotes-note.bbx`, `oxnotes-note.cbx`, `oxnotes-note.dbx`, `oxnotes-trad1.bbx`, `oxnotes-trad1.cbx`, `oxnotes-trad1.dbx`, `oxnotes-trad2.bbx`, `oxnotes-trad2.cbx`, `oxnotes-trad2.dbx`, `oxnotes-trad3.bbx`, `oxnotes-trad3.cbx`, `oxnotes-trad3.dbx`, `oxnum.bbx`, `oxnum.cbx`, `oxnum.dbx`, `oxref.bbx`, `oxyear.bbx`, `oxyear.cbx`, `oxyear.dbx`

- doc/latex/biblatex-oxref: README.md, oxalph-doc.pdf, oxalph-doc.tex, oxnotes-doc.pdf, oxnotes-doc.tex, oxnum-doc.pdf, oxnum-doc.tex, oxref.bib, oxref.pdf, oxyyear-doc.pdf, oxyyear-doc.tex
4. You may then have to update your installation's file name database before TeX and friends can see the files.

1.3 Licence

Copyright 2016–2026 Alex Ball.

This work consists of the documented LaTeX file oxref.dtx and a Makefile.

The text files contained in this work may be distributed and/or modified under the conditions of the [LaTeX Project Public License \(LPPL\)](#), either version 1.3c of this license or (at your option) any later version.

This work is 'maintained' (as per LPPL maintenance status) by [Alex Ball](#).

Bibliography styles

2.1 Base style: oxref.bbx

2.1.1 LOADING DEPENDENCIES, SETTING UP LANGUAGES, APPLYING OPTIONS

Dependencies:

- For ease of maintenance, we will patch some definitions with `xpatch` instead of writing out our own in full.
- We will manipulate strings with `xstring`.
- We will use `graphicx` for stretching `\bibnamedashes`

```
20 \RequirePackage{etoolbox}
21 \RequirePackage{xpatch}
22 \RequirePackage{xstring}
23 \RequirePackage{graphicx}
```

Language support may be widened in future, but for now we support British and American English. Adapted language files have the following suffix.

```
24 \DeclareLanguageMappingSuffix{-oxref}
```

We provide some additional bibliography strings:

- roles expressed as functions;

```
25 \NewBibliographyString{%
26   director, performer, reader, conductor, serieseditor, holder, editorcm,
27   directors, performers, readers, conductors, serieseditors, holders, editorcms,
```

- roles expressed as actions;

```
28   bydirector, byperformer, byreader, byconductor, byserieseditor, byholder, byeditorcm,
```

- publication details;

```
29   facsimile, revised, revisedenlarged, revisedreprint, suppto, equals, original, amendedby,
```

- publication state;

30 `inpressin,`

- pagination;

31 `book, books, canto, cantos, stanza, stanzas, act, acts, scene, scenes, folio, folios,`
 32 `article, articles, clause, clauses, regulation, regulations, rule, rules,`
 33 `booktotal, booktotals, cantototal, cantototals, stanzatotal, stanzatotals,`
 34 `acttotal, acttotals, scenetotal, scenetotals, foliototal, foliototals,`
 35 `articletotal, articletotals, clausetotal, clausetotals, regulationtotal,`
 36 `regulationtotals, ruletotal, ruletotals,`

- types;

37 `facebook, tweet, podcast, clip, webcast, poster,`

- miscellaneous;

38 `nolocation, modified, recorded, uploaded, filed, issued,`

- labels;

39 `anon, pseudo, urldown,`

- country names, patents, and patent requests;

40 `countryjp, patentjp, patreqjp,`

- borrowed from other styles.

41 `1column, 2column, inflayer, suplayer, paper, papyrus, parchment,`
 42 `eucase, eujoinedcases, commissiondecision, application,`
 43 `order, bill, draft, opened, signed, adopted, inforce,`
 44 `}`

The `\blx@ox@langbibstring` utility is used to prefix a bibstring with one or more language names, but since this only works in certain languages, by default it discards the language names (first argument) and just prints the bibstring (second argument). This is overridden in `english-oxref.lbx` and friends.

45 `\def\blx@ox@langbibstring#1#2{\bibstring{#2}}`

We base our styles on the standard on the principle of least surprise (and to aid with maintenance in the face of new `biblatex` versions). We set some defaults different to the standard ones, but the author can still override them.

46 `\RequireBibliographyStyle{standard}`
 47 `\ExecuteBibliographyOptions{urldate=comp, pagetracker, timezeros=false, time=12h, isbn=false}`

Here are the new default punctuation conventions. The new `\recordseriespunct` is used for audiovisual resources, while `\cacasetitlepunct` and `\uscasetitlepunct` are for punctuation following the case title in Canadian and American cases respectively.


```

48 \renewcommand*{\labelnamepunct}{\addcomma\space}
49 \renewcommand*{\newunitpunct}{\addcomma\space}
50 \renewcommand*{\subtitlepunct}{\addcolon\space}
51 \renewcommand*{\intitlepunct}{\nopunct\space}
52 \renewcommand*{\bibnamedash}{\resizebox{2em}{\height}{\textendash}\addthinspace}
53 \newcommand*{\recordseriespunct}{\addcomma\space}
54 \newcommand*{\cacasetitlepunct}{\addcomma\space}
55 \newcommand*{\uscasetitlepunct}{\addcomma\space}
56 \renewcommand*{\relateddelim}{\addsemicolon\space}
57 \DeclareDelimFormat{revsdnamedelim}{\addcomma}
58 \DeclareDelimFormat[pair]{revsdnamedelim}{}
59 \DeclareDelimFormat{authortypedelim}{\addspace}
60 \DeclareDelimFormat{editortypedelim}{\addspace}
61 \DeclareDelimFormat{translatortypedelim}{\addspace}

```

2.1.2 NAMES

We declare some new name formats so that authors/editors/others who appear mid-reference can be handled differently from those that appear at the head of the reference.

```

62 \DeclareNameAlias{bookauthor}{default}
63 \DeclareNameAlias{bookeditor}{default}

```

Traditionally, Oxford style (for the humanities) prints author names in small capitals in the bibliography, but in normal case in citations. This is falling out of fashion, so we introduce it as an option.

```

64 \newtoggle{blx@ox@scnames}
65 \DeclareBibliographyOption{scnames}[true]{%
66   \settoggle{blx@ox@scnames}{#1}
67 }

```

The style manuals prefer to omit titles but accept they may need to be included in some circumstances. There are some titles that are only used with full names and some that may be used with initials, so we provide an option for manually switching them off.

```

68 \newtoggle{blx@ox@nametitle}\toggletrue{blx@ox@nametitle}%
69 \DeclareBibliographyOption{global,type,entry}{usenametitles}[true]{%
70   \settoggle{blx@ox@nametitle}{#1}}

```

We provide some additional macros for formatting names with titles. Here is the one for natural name order.

```

71 \newbibmacro*{name:title-given-family}[5]{%
72   \usebibmacro{name:delim}{#2#3#1}%
73   \usebibmacro{name:hook}{#2#3#1}%
74   \ifdefvoid{#5}{\iftoggle{blx@ox@nametitle}{\mkbibnametitle{#5}\isdot\bibnamedelimd}{}}%
75   \ifdefvoid{#2}{\mkbibnamegiven{#2}\isdot\bibnamedelimd}%
76   \ifdefvoid{#3}{%
77     \mkbibnameprefix{#3}\isdot
78     \ifprefchar
79       {}
80     {\ifuseprefix{\bibnamedelimc}{\bibnamedelimd}}}%
81   \mkbibnamefamily{#1}\isdot
82   \ifdefvoid{#4}{\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}}

```

Here is the one for inverted name order.

```

83 \newbibmacro*{name:family-title-given}[5]{%
84   \ifuseprefix{%
85     \usebibmacro{name:delim}{#3#1}%
86     \usebibmacro{name:hook}{#3#1}%
87     \ifdefvoid{#3}{}{%
88       \ifcapital{%
89         \mkbibnameprefix{\MakeCapital{#3}}\isdot
90       }{%
91         \mkbibnameprefix{#3}\isdot}%
92     \ifprefchar{}{\bibnamedelimc}}%
93   \mkbibnamefamily{#1}\isdot
94   \ifdefvoid{#4}{}{\ifnumeral{#4}{}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%
95   \ifboolxpe{%
96     (test {\ifdefvoid{#5}} or not togl {blx@ox@nametitle})
97     and
98     test {\ifdefvoid{#2}}%
99   }{}{%
100     \printdelim{revsdnamepunct}}%
101   \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\bibnamedelimd\mkbibnametitle{#5}\isdot}{}}%
102   \ifdefvoid{#2}{}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
103 }{}%
104   \usebibmacro{name:delim}{#1}%
105   \usebibmacro{name:hook}{#1}%
106   \mkbibnamefamily{#1}\isdot
107   \ifdefvoid{#4}{}{\ifnumeral{#4}{}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%
108   \ifboolxpe{%
109     (test {\ifdefvoid{#5}} or not togl {blx@ox@nametitle})
110     and
111     test {\ifdefvoid{#2}}
112     and
113     test {\ifdefvoid{#3}}%
114   }{}{%
115     \printdelim{revsdnamepunct}}%
116   \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\bibnamedelimd\mkbibnametitle{#5}\isdot}{}}%
117   \ifdefvoid{#2}{}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
118   \ifdefvoid{#3}{}{\bibnamedelimd\mkbibnameprefix{#3}\isdot}}

```

Oxford style (for the humanities) is to write author names surname first in the bibliography, but in natural order in citations. We implement this, along with the case changing option, in the following name format. We also add a second hash for checking if names (e.g. author and authoraddon) are the same. We only need name:revsdelim on the first item, and only if it will be followed by something else.

```

119 \renewbibmacro*{name:revsdelim}{%
120   \ifboolxpr{
121     (
122       test {\ifnumequal{\value{liststop}}{1}}
123       and
124       test \ifmorenames
125     )
126     or
127     test {\ifnumequal{\value{liststop}}{2}}
128   }
129   {\printdelim{revsdnamedelim}}
130   {}
131 \def\blx@ox@lasthash{}
132 \DeclareNameFormat{bib-family-given/cite-given-family}{%
133   \iffielddannotation{inferred}{\ifnumequal{\value{listcount}}{1}{\bibopenbracket}{}{}%
134   \ifitemannotation{inferred}{\bibopenbracket}{}%
135   \ifbibliography{%
136     \iftoggle{blx@ox@scnames}{%
137       \renewcommand*{\mkbibnamefamily}[1]{\textsc{##1}}%

```

```

138     \renewcommand*{\mkbibnamegiven}[1]{\textsc{##1}}%
139     \renewcommand*{\mkbibnameprefix}[1]{\textsc{##1}}%
140     \renewcommand*{\mkbibnamesuffix}[1]{\textsc{##1}}%
141     \renewcommand*{\mkbibnametitle}[1]{##1}%
142   }{}%
143   \ifgiveninits{%
144     \usebibmacro{name:family-title-given}%
145     {\namepartfamily}%
146     {\namepartgiveni}%
147     {\namepartprefix}%
148     {\namepartsuffix}%
149     {\nameparttitle}%
150   }{%
151     \usebibmacro{name:family-title-given}%
152     {\namepartfamily}%
153     {\namepartgiven}%
154     {\namepartprefix}%
155     {\namepartsuffix}%
156     {\nameparttitle}%
157   }%
158   \savefield{hash}{\blx@ox@lasthash}%
159   \ifitemannotation{pseudo}{%
160     \addspace\printtext[parens]{%
161       \iftoggle{blx@ox@scnames}{%
162         \textsc{\bibsstring{pseudo}}%
163       }{%
164         \bibsstring{pseudo}%
165       }%
166     }{}%
167     \iftoggle{blx@ox@scnames}{%
168       \renewcommand*{\mkbibnamefamily}[1]{##1}%
169       \renewcommand*{\mkbibnamegiven}[1]{##1}%
170       \renewcommand*{\mkbibnameprefix}[1]{##1}%
171       \renewcommand*{\mkbibnamesuffix}[1]{##1}%
172       \renewcommand*{\mkbibnametitle}[1]{##1}%
173     }{}%
174     \ifboolexpe{%
175       test {\ifnumequal{\value{listcount}}{\@ne}}
176       and
177       (
178         test {\ifnumless{\value{listcount}}{\value{liststop}}}
179         or
180         test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}}
181         or
182         test {\ifandothers{\currentname}}
183       )
184       and not
185       (
186         test {\ifdefvoid\namepartgiven}
187         and
188         test {\ifdefvoid\namepartprefix}
189       )
190     }{\usebibmacro{name:revsdelim}}{}%
191   }{}%

```

Some implementations of `\ltx@finalnamedelim` do not allow logical tests to be included in the argument, so we need to spell out all these alternatives longhand.

```

192   \ifgiveninits{%
193     \ifitemannotation{pseudo}{%
194       \usebibmacro{name:title-given-family}%
195       {\bibsstring{pseudo}\namepartfamily}%

```

```

196         {\namepartgiveni}%
197         {\namepartprefix}%
198         {\namepartsuffix}%
199         {\nameparttitle}%
200     }{%
201         \usebibmacro{name:title-given-family}%
202         {\namepartfamily}%
203         {\namepartgiveni}%
204         {\namepartprefix}%
205         {\namepartsuffix}%
206         {\nameparttitle}}%
207     }{%
208         \ifitemannotation{pseudo}{%
209             \usebibmacro{name:title-given-family}%
210             {\biblstring{pseudo}\namepartfamily}%
211             {\namepartgiven}%
212             {\namepartprefix}%
213             {\namepartsuffix}%
214             {\nameparttitle}%
215         }{%
216             \usebibmacro{name:title-given-family}%
217             {\namepartfamily}%
218             {\namepartgiven}%
219             {\namepartprefix}%
220             {\namepartsuffix}%
221             {\nameparttitle}}%
222         }%
223         \savefield[hash]{\blx@ox@lasthash}%
224     }%
225     \ifitemannotation{inferred}{\bibclosebracket}{}%
226     \ifitemannotation{variant}{%
227         \global\settoggle{blx@ox@variantname}{true}%
228     }{%
229         \global\settoggle{blx@ox@variantname}{false}%
230     }%
231     \usebibmacro{name:andothers}%
232     \iffieldannotation{inferred}{%
233         \ifboolexpr{
234             test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
235             or
236             test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
237             or (
238                 test {\ifnumequal{\value{listcount}}{\value{minnames}}}
239                 and
240                 test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}}
241             )
242         }{\bibclosebracket}{}%
243     }{}%
244 }

```

We change the regular given-family format to include the alternative-name hash and use the title-enhanced name format. We also add a toggle for triggering special formatting if `authoraddon` or `editoraddon` are annotated with `variant`.

```

244 \newtoggle{blx@ox@variantname}
245 \DeclareNameFormat{given-family}{%
246     \ifgiveninits
247         {\usebibmacro{name:title-given-family}
248          {\namepartfamily}
249          {\namepartgiveni}
250          {\namepartprefix}
251          {\namepartsuffix}
252          {\nameparttitle}}

```

```

253     {\usebibmacro{name:title-given-family}
254       {\namepartfamily}
255       {\namepartgiven}
256       {\namepartprefix}
257       {\namepartsuffix}
258       {\nameparttitle}}%
259   \savefield{hash}{\blx@ox@lasthash}%
260   \ifitemannotation{variant}{%
261     \global\settoggle{blx@ox@variantname}{true}%
262   }{%
263     \global\settoggle{blx@ox@variantname}{false}}%
264   \usebibmacro{name:andothers}}

```

We do likewise for the regular family-given format. Also, we only want to use the `name:revsdelim` on the last name in the list if it will be followed by ‘et al.’.

```

265   \DeclareNameFormat{family-given}{%
266     \ifgiveninits
267       {\usebibmacro{name:family-title-given}
268         {\namepartfamily}
269         {\namepartgiveni}
270         {\namepartprefix}
271         {\namepartsuffix}
272         {\nameparttitle}}
273       {\usebibmacro{name:family-title-given}
274         {\namepartfamily}
275         {\namepartgiven}
276         {\namepartprefix}
277         {\namepartsuffix}
278         {\nameparttitle}}%
279     \savefield{hash}{\blx@ox@lasthash}%
280     \ifitemannotation{variant}{%
281       \global\settoggle{blx@ox@variantname}{true}%
282     }{%
283       \global\settoggle{blx@ox@variantname}{false}}%
284     \ifbool{expe}{%
285       (
286         test {\ifnumless{\value{listcount}}{\value{liststop}}}
287         or
288         test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}}
289         or
290         test {\ifandothers{\currentname}}
291       )
292       and not
293       (
294         test {\ifdefvoid\namepartgiven}
295         and
296         test {\ifdefvoid\namepartprefix}
297       )
298     }{\usebibmacro{name:revsdelim}}}%
299     \usebibmacro{name:andothers}}

```

There is no comma before numeric suffixes, but there is before textual ones (e.g. ‘junior’).

```

300   \xpatchbibmacro{name:given-family}%
301     {\bibnamedelimd\mkbibnamesuffix{#4}}%
302     {\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}}%
303   {\wlog{WARNING: biblatex-oxref failed to patch name:given-family}}
304   \xpatchbibmacro{name:family-given}%
305     {\bibnamedelimd\mkbibnamesuffix{#4}}%
306     {\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}}%
307   {\wlog{WARNING: biblatex-oxref failed to patch name:family-given}}

```

Pseudonyms are printed after the main name, enclosed in parentheses (OGS) or brackets (NHR). Biblatex provides the `nameaddon` field for this use case, but it is a literal field (it doesn't format the name provided).

```
308 \DeclareFieldFormat{nameaddon}{\mkbibbrackets{#1}}
309 \DeclareFieldFormat{namevariant}{\mkbibparens{\bibstring{equals}\space #1}}
```

We have two use cases for a bibmacro that reimplements the loopcode logic of `\printnames`, but operates on two name lists simultaneously. One is to support the new name fields `authoraddon` and `editoraddon`; the other is to pair up names with the short form used in references, as required by `oxyear` below.

We need to do this in a way that doesn't break the patterns used for configuring and adapting the punctuation that delimits the list items, so the `namepair:delim` macro does the same as `name:delim` but instead of reading the current counters, takes two extra arguments (in addition to the current name): the number of the current name pair and the total number of name pairs. The regular `finalistdelim` delimiter format looks up the value of the `liststop` counter, so we need to give it the right value.

```
310 \newbibmacro*{namepair:delim}[3]{%
311   \ifnumgreater{#2}{\@ne}{%
312     \ifnumless{#2}{#3}{%
313       \printdelim{multinamedelim}%
314     }{%
315       \ifnumgreater{#3}{\c@maxnames}{%
316         \c@liststop\c@minnames
317       }{%
318         \c@liststop#3}%
319       \ltx@finalnamedelim{#1}}%
320   }}
```

The `namepairs` bibmacro takes two arguments: the data fields holding the main name and alternative name respectively. When rendering the names, we use `saveboxes` to extract the hashes, and only print the alternative name if it has a different hash. In this case, we also switch to the 'pair' delimiter context, where the `revsdnamedelim` (if any) is suppressed.

```
321 \DeclareFieldFormat{expanded}{\mkbibparens{#1}}
322 \newcounter{namepairs}
323 \newsavebox{\blx@ox@namebox}
324 \newsavebox{\blx@ox@altnamebox}
325 \newtoggle{blx@ox@thispairvariant}%
326 \newbibmacro*{namepairs}[2]{%
327   \setcounter{namepairs}{0}%
328   \savebibmacro{name:andothers}%
329   \renewbibmacro*{name:andothers}{}%
330   \whilebool{expr{%
331     test {\ifnumless{\value{namepairs}}{\value{#1}}}
332     and (
333       test {\ifdefvoid{\c@maxnames}}
334       or
335       test {\ifnumequal{\c@maxnames}{0}}
336       or
337       test {\ifnumless{\value{#1}}{\c@maxnames}}
338       or
339       test {\ifnumequal{\value{#1}}{\c@maxnames}}
340     or
341     test {\ifdefvoid{\c@minnames}}
342     or
343     test {\ifnumequal{\c@minnames}{0}}
344   }}
```

```

344     or
345     test {\ifnumless{\value{namepairs}}{\c@minnames}}
346   )
347 }{%
348   \stepcounter{namepairs}%
349   \savebox{\blx@ox@namebox}{%
350     \printnames[#1][\value{namepairs}-\value{namepairs}]{#1}%
351   }%
352   \let\blx@ox@firsthash=\blx@ox@lasthash
353   \savebox{\blx@ox@altnamebox}{%
354     \printnames[#1][\value{namepairs}-\value{namepairs}]{#2}%
355   }%
356   \let\blx@ox@secondhash=\blx@ox@lasthash
357   \iftoggle{blx@ox@variantname}{%
358     \toggletrue{blx@ox@thispairvariant}%
359   }{%
360     \togglefalse{blx@ox@thispairvariant}%
361   }%

```

This is the part intended for `authoraddon` and `editoraddon`. Note that it contains an additional test for the variant name toggle.

```

362   \IfEndWith{#2}{addon}{%
363     \usebibmacro{namepair:delim}%
364     {\unhbox\blx@ox@namebox}{\value{namepairs}}{\value{#1}}%
365     \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
366       \hbox{\unhbox\blx@ox@namebox
367     }%
368     \iftoggle{blx@ox@thispairvariant}{%
369       \ifbibliography{%
370         \delimcontext{pair}%
371         \printnames[#1][\value{namepairs}-\value{namepairs}]{#1}%
372         \setunit{\addspace}%
373         \printtext[namevariant]{%
374           \printnames[#1][\value{namepairs}-\value{namepairs}]{#2}%
375         }%
376         \hbox{\unhbox\blx@ox@namebox
377       }%
378     }{%
379       \delimcontext{pair}%
380       \printnames[#1][\value{namepairs}-\value{namepairs}]{#1}%
381       \setunit{\addspace}%
382       \printtext[nameaddon]{%
383         \printnames[#1][\value{namepairs}-\value{namepairs}]{#2}%
384       }%
385     }%
386   }%

```

This is the part intended for `shortauthor` and `shorteditor`. There are differences in the formatting, and the alternative name is actually printed before the main name.

```

387 }{%
388   \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
389     \usebibmacro{namepair:delim}%
390     {\unhbox\blx@ox@namebox}{\value{namepairs}}{\value{#1}}%
391     \hbox{\unhbox\blx@ox@namebox
392   }%
393   \usebibmacro{namepair:delim}%
394   {\unhbox\blx@ox@altnamebox}{\value{namepairs}}{\value{#1}}%
395   \delimcontext{pair}%
396   \printnames[#1][\value{namepairs}-\value{namepairs}]{#2}%
397   \setunit{\addspace}%

```

```

398     \printtext[expanded]{%
399       \printnames[#1][\value{namepairs}-\value{namepairs}]{#1}%
400     }%
401   }%
402 }%
403 }%

```

Now we return to common code.

```

404 \ifboolexpr{
405   test {\ifnumequal{\value{namepairs}}{\c@minnames}}
406   and
407   test {\ifnumgreater{\value{#1}}{\c@maxnames}}
408 }{%
409   \ifnumgreater{\c@minnames}{1}{%
410     \finalandcomma
411   }{%
412     \printdelim{andothersdelim}\bibstring{andothers}%
413   }{%
414     \restorebibmacro{name:andothers}%
415   }

```

We use this now for authors. We provide additional handling to support printing editors or translators promoted to joint authorship status.

```

416 \newbibmacro*{author+altauthor}{%
417   \ifboolexpr{
418     test {\ifnameundef{authoraddon}}
419     and
420     test {\ifnameundef{jointauthor}}
421   }{%
422     \printnames{author}%
423   }{%
424     \ifnumequal{\value{authoraddon}}{\value{author}}{%
425       \usebibmacro{namepairs}{author}{authoraddon}%
426     }{%
427       \printnames{author}%
428       \ifnameundef{authoraddon}{%
429         \setunit*\addspace%
430         \printtext[nameaddon]{\printnames[byauthor]{authoraddon}}%
431       }%
432       \ifnameundef{jointauthor}{%
433         \setunit{\addcomma\space}%
434         \iffieldundef{jointauthortype}{%
435           \bibstring{byeditor}%
436         }{%
437           \printfield{jointauthortype}%
438           \setunit{\addspace}%
439           \printnames[author]{jointauthor}%
440         }%
441       }%
442     }
443   \DeclareFieldFormat{jointauthortype}{%
444     \ifbibstring{by#1}{\bibstring{by#1}}{#1}}

```

This is the (simpler) implementation for editors.

```

445 \newbibmacro*{editor+alteditor}{%
446   \ifnameundef{editoraddon}{%
447     \printnames{editor}%
448   }{

```



```

449 \ifnumequal{\value{editoraddon}}{\value{editor}}{%
450 \usebibmacro{namepairs}{editor}{editoraddon}%
451 }{%
452 \printnames{editor}%
453 \setunit*{\addspace}%
454 \printtext[nameaddon]{\printnames[byeditor]{editoraddon}}%
455 }%
456 }%
457 }

```

Traditional Oxford style is to use dashes instead of repeating author names, but NHR recommends abandoning the practice as it interferes with text mining. We therefore turn this feature off by default, but allow authors to switch it on with `dashed=true`.

```

458 \newbibmacro*{bbx:savehash}{%
459 \DeclareBibliographyOption{dashed}[true]{%
460 \ifstrequal{#1}{true}{%
461 \ExecuteBibliographyOptions{pagetracker}%
462 \renewbibmacro*{bbx:savehash}{\savefield{fullhash}{\bbx@lasthash}}%
463 }{%
464 \renewbibmacro*{bbx:savehash}{}%
465 }%
466 }
467 \InitializeBibliographyStyle{%
468 \global\undef\bbx@lasthash}
469 \newbibmacro*{bbx:dashcheck}[2]{%
470 \ifboolexpr{
471 test {\iffieldequals{fullhash}{\bbx@lasthash}}
472 and
473 not test \iffirstonpage
474 and
475 (
476 not bool {bbx@inset}
477 or
478 test {\iffieldequalstr{entrysetcount}{1}}
479 )
480 }{#1}{#2}%
481 }

```

The following is used in the `authortitle` and `authoryear` styles to switch off the dash check macro for reference sets.

```

482 \newbool{bbx@inset}
483 \DeclareBibliographyDriver{set}{%
484 \booltrue{bbx@inset}%
485 \entryset{}{}%
486 \newunit\newblock
487 \usebibmacro{setpageref}%
488 \finentry}

```

We provide options for how to handle the author name ‘Anonymous’.

```

489 \newtoggle{blx@ox@autoanon}
490 \newtoggle{blx@ox@abbranon}
491 \DeclareBibliographyOption[string]{anon}[short]{%
492 \ifcsdef{blx@ox@opt@anon@#1}{%
493 \csuse{blx@ox@opt@anon@#1}%
494 }{%
495 \PackageError{biblatex-oxref}
496 {Invalid option 'anon=#1'}
497 {Valid values are 'long', 'short', and 'literal'.}}%

```

```

498 \csdef{blx@ox@opt@anon@literal}{\togglefalse{blx@ox@autoanon}}
499 \csdef{blx@ox@opt@anon@long}{\toggletrue{blx@ox@autoanon}\togglefalse{blx@ox@abbranon}}
500 \csdef{blx@ox@opt@anon@short}{\toggletrue{blx@ox@autoanon}\toggletrue{blx@ox@abbranon}}

```

We copy the author to rawauthor for easier testing.

```

501 \DeclareStyleSourceMap{
502   \maps[datatype=bibtex]{%
503     \map{%
504       \step[fieldsource=author]%
505       \step[fieldset=rawauthor, origfieldval]%
506     }
507   }%
508 }

```

The author macro is enhanced from the standard version by

- checking if the author name is ‘Anonymous’;
- including a dash check, to see if the name(s) should be replaced with a dash (as in `author title` and `author year`);
- inserting the `nameaddon` field if provided;
- inserting the author type if provided (as in `author year`).

```

509 \newcommand*{\oxrefanon}{Anonymous}
510 \newtoggle{blx@ox@isanon}
511 \renewbibmacro*{author}{%
512   \iffieldequals{rawauthor}{\oxrefanon}{%
513     \toggletrue{blx@ox@isanon}%
514   }{%
515     \togglefalse{blx@ox@isanon}}%
516   \ifboolexpr{
517     test \ifuseauthor
518     and
519     ( not test {\ifnameundef{author}} )
520     and (
521       ( not togl {blx@ox@isanon} )
522       or
523       ( not togl {blx@ox@autoanon} )
524       or
525       test {\ifbibliography}
526     )
527   }
528   {\usebibmacro{bbx:dashcheck}
529     {\bibnamedash}
530     {\usebibmacro{bbx:savehash}%
531       \ifboolexpr{
532         togl {blx@ox@autoanon}
533         and
534         togl {blx@ox@isanon}
535       }{%
536         \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}}%
537       }{%
538         \usebibmacro{author+altauthor}%
539       }%
540       \iffieldundef{nameaddon}
541       {}
542       {\setunit{\addspace}%
543         \printfield{nameaddon}}%
544       \setunit{\printdelim{author typedelim}}}%
545     \iffieldundef{author type}

```

```

546     {}
547     {\usebibmacro{authorstrg}%
548       \setunit{\addspace}}}%
549     {\global\undef\bbx@lasthash}}
550   \DeclareFieldFormat{authortype}{\mkbibparens{#1}}

```

We make the punctuation between a title and ‘by [author]’ configurable.

```

551   \newcommand{\titlebyauthor delim}{\addcomma\space}

```

Following `authortitle` and `authoryear`, we redefine the `editor` and `editor+others` macros to use a common `bbx:editor` macro. The macro we use is the similar to the normal one except we delegate printing editor names to `editor+altdeditor`, and we don’t yet add the year label.

```

552   \renewbibmacro*{editor}{%
553     \usebibmacro{bbx:editor}{editorstrg}}
554   \renewbibmacro*{editor+others}{%
555     \usebibmacro{bbx:editor}{editor+othersstrg}}
556   \newbibmacro*{bbx:editor}[1]{%
557     \ifboolexpr{
558       test \ifuseeditor
559       and
560       not test {\ifnameundef{editor}}
561     }
562     {\usebibmacro{bbx:dashcheck}
563       {\bibnamedash}
564       {\usebibmacro{editor+altdeditor}%
565         \setunit{\printdelim{editortypedelim}}}%
566       \usebibmacro{bbx:savehash}}}%
567     \usebibmacro{#1}%
568     \clearname{editor}}
569   {\global\undef\bbx@lasthash}}
570   \DeclareFieldFormat{editortype}{\mkbibparens{#1}}

```

We do the same for `translator` as well.

```

571   \renewbibmacro*{translator}{%
572     \usebibmacro{bbx:translator}{translatorstrg}}
573   \renewbibmacro*{translator+others}{%
574     \usebibmacro{bbx:translator}{translator+othersstrg}}
575   \newbibmacro*{bbx:translator}[1]{%
576     \ifboolexpr{
577       test \ifusetranslator
578       and
579       not test {\ifnameundef{translator}}
580     }
581     {\usebibmacro{bbx:dashcheck}
582       {\bibnamedash}
583       {\printhe{translator}%
584         \setunit{\printdelim{translatortypedelim}}}%
585       \usebibmacro{bbx:savehash}}}%
586     \usebibmacro{#1}%
587     \clearname{translator}%
588     \setunit{\addspace}}}%
589   {\global\undef\bbx@lasthash}}
590   \xpatchbibmacro{translatorstrg}%
591     {\bibstring}%
592     {\bibstring[\mkbibparens]}%
593   {\wlog{WARNING: biblatex-oxref failed to patch translatorstrg}}%
594   \xpatchbibmacro{translator+othersstrg}%
595     {\bibstring}%

```

```

596   {\bibstring[\mkbibparens]}%
597   {}{\wlog{WARNING: biblatex-oxref failed to patch translator+othersstrg}}}%

```

When referencing one work from a collection by the same author, Oxford style traditionally puts ‘id.’ in the bookauthor position (instead of omitting it as in standard `biblatex`).

```

598   \renewbibmacro*{bybookauthor}{%
599     \ifnameequal{author}{bookauthor}%
600     {\bibstring{idem\thefield{gender}}}%
601     {\printnames{bookauthor}}}

```

Similarly, with mixed collections, if referencing a work by the editor of the collection, the editor name is replaced with ‘id.’. We insert this logic into a copy of the `editor+others` macro, which will *not* get a year inserted into it by `oxyear`.

```

602   \newbibmacro*{bookeditor}{%
603     \ifboolexpr{
604       test \ifuseeditor
605       and
606       not test {\ifnameundef{editor}}
607     }{%
608       \ifnameequal{author}{editor}{%
609         \bibstring{idem\thefield{gender}}%
610         \setunit{\addspace}%
611         \usebibmacro{editor+othersstrg}%
612         \clearname{editor}%
613       }{%
614         \printnames[bookeditor]{editor}%
615         \setunit*\addspace%
616         \usebibmacro{editor+othersstrg}%
617         \clearname{editor}%
618       }%
619     }{}

```

We provide a macro for printing series editors.

```

620   \newbibmacro*{byserieseditor}{%
621     \ifnameundef{serieseditor}
622     {}
623     {\usebibmacro{bytypestrg}{serieseditor}{serieseditor}%
624       \setunit{\addspace}%
625       \printnames[byeditor]{serieseditor}%
626       \newunit}}
627

```

2.1.3 TITLES

Title handling is mostly as it is in the standard styles, except that the `titleaddon` is printed in square brackets; it is not preceded by punctuation.

```

628   \renewbibmacro*{title}{%
629     \ifboolexpr{
630       test {\iffieldundef{title}}
631       and
632       test {\iffieldundef{subtitle}}
633     }
634     {}
635     {\printtext[title]{%
636       \printfield[titlecase]{title}%

```

```

637     \setunit{\subtitlepunct}%
638     \printfield[titlecase]{subtitle}%
639     \setunit{\addspace}%
640     \usebibmacro{origtitle}%
641     \setunit*\addspace%
642     \printfield{titleaddon}%
643     \iffieldequalstr{relatedtype}{equals}{%
644         \iftoggle{bbx:related}{%
645             \usebibmacro{related:init}%
646             \usebibmacro{related}%
647             \clearfield{related}%
648         }{}%
649     }{}%
650 }
651 \DeclareFieldFormat{titleaddon}{\mkbibbrackets{#1}}

```

The `origtitle` field is used for translated works. If the cited work is a native language translation of a foreign work, the original title is given in parentheses. If the cited work is foreign translation of a native language work, the original title is printed in square brackets, preceded by the name of the foreign language (if appropriate) and ‘translation of’.

```

652 \DeclareFieldFormat{origtitle}{\mkbibemph{#1}}
653 \newbibmacro*{origtitle}{%
654     \iffieldundef{origtitle}{}%
655     \iflistundef{language}{%
656         \printtext[parens]{\printfield{origtitle}}%
657     }%
658     \printtext[brackets]{%
659         \blx@ox@langbibstring{\printlist{language}}{translation of}\addspace
660         \printfield{origtitle}}}%

```

2.1.4 DATES AND TIMES

Year ranges are truncated (e.g. 2012–3). Therefore, we provide a command that compares two years, and outputs a full or truncated version of the second year, depending on how similar it is to the first. It is adapted from code by Marco Daniel.¹

```

661 \newcommand{\blx@ox@compyear}[2]{%
662     \def\num@one{#1}%
663     \def\num@two{#2}%
664     \StrLen{\num@one}[\num@one@len]%
665     \StrLen{\num@two}[\num@two@len]%

```

The year is only trimmed if it is greater than, but has the same number of digits as, the comparison number.

```

666     \ifbool{expr{
667         test {\ifnumequal{\num@one@len}{\num@two@len}}
668         and
669         test {\ifnumless{\num@one}{\num@two}}
670     }}{%

```

For years since 1000, at least two digits must be the same before trimming occurs.

```

671     \StrCompare{\num@one}{\num@two}[\Result]%
672     \ifnum\num@two@len>3%

```

¹<http://tex.stackexchange.com/questions/23483/>

```

673 \IfStrEq{\Result}{2}{\def\Result{1}}}%
674 \fi

```

In legal references, the truncated year is at least two digits.

```

675 \ifboolexpr{
676   (
677     test {\ifentrytype{jurisdiction}}
678     or
679     test {\ifentrytype{legislation}}
680   )
681   and
682   test {\IfStrEq{\Result}{4}}
683 }{\def\Result{3}}}%

```

Since \Result is the number of digits to trim from the left hand side of the year, plus one, we provide an extra sacrificial zero before trimming.

```

684 \StrGobbleLeft{0\num@two}{\Result}%
685 }{\num@two}}

```

We patch the date range formats from biblatex.sty to use the above function.

```

686 \patchcmd{\mkdaterangefull}{%
687   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
688 }{%
689   \iffieldundef{#2endmonth}%
690     {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
691     {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
692 }{}{\wlog{WARNING: biblatex-oxref failed to patch mkdaterangefull}}
693 \patchcmd{\mkdaterangefullextra}{%
694   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
695 }{%
696   \iffieldundef{#2endmonth}%
697     {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
698     {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
699 }{}{\wlog{WARNING: biblatex-oxref failed to patch mkdaterangefullextra}}
700 \patchcmd{\mkdaterangetrunc@i}{%
701   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
702 }{%
703   \iffieldundef{#2endmonth}%
704     {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
705     {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
706 }{}{\wlog{WARNING: biblatex-oxref failed to patch mkdaterangetrunc@i}}
707 \patchcmd{\mkdaterangetruncextra@i}{%
708   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
709 }{%
710   \iffieldundef{#2endmonth}%
711     {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
712     {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
713 }{}{\wlog{WARNING: biblatex-oxref failed to patch mkdaterangetruncextra@i}}

```

We provide a way of prefacing dates (and times) with a type. This is mainly intended for online resources.

```

714 \DeclareFieldFormat{datatype}{%
715   \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
716 }
717 \newtoggle{blx@ox@timefirst}
718 \DeclareBiblatexOption{global,type,entry}{timefirst}[true]{%

```

```

719 \settoggle{blx@ox@timefirst}{#1}}
720 \newbibmacro*{date+time}{%
721 \ifboolexpr{
722   test {\iffieldundef{year}}
723   and
724   test {\iffieldundef{yeardivision}}
725   and
726   test {\iffieldundef{month}}
727   and
728   test {\iffieldundef{hour}}
729 }{}{%
730   \printfield{datetype}}%
731 \setunit*{\addspace}%
732 \iftoggle{blx@ox@timefirst}{%
733   \printtime
734   \setunit*{\addcomma\space}}{}%
735 \printdate
736 \iftoggle{blx@ox@timefirst}{}%
737   \setunit*{\addcomma\space}%
738   \printtime}%
739 }
740 \renewbibmacro*{date}{\usebibmacro{date+time}}

```

We provide an equivalent for origdate. This is mainly intended for audiovisual resources (for the date of recording).

```

741 \DeclareFieldFormat{origdatetype}{%
742 \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}}%
743 }
744 \newbibmacro*{origdate+time}{%
745 \ifboolexpr{
746   test {\iffieldundef{origyear}}
747   and
748   test {\iffieldundef{origyeardivision}}
749   and
750   test {\iffieldundef{origmonth}}
751   and
752   test {\iffieldundef{orighour}}
753 }{}{%
754   \printfield{origdatetype}}%
755 \setunit*{\addspace}%
756 \iftoggle{blx@ox@timefirst}{%
757   \printorigtime
758   \setunit*{\addcomma\space}}{}%
759 \printorigdate
760 \iftoggle{blx@ox@timefirst}{}%
761   \setunit*{\addcomma\space}%
762   \printorigtime}%
763 }

```

If a date is inferred, it goes in square brackets.

```

764 \DeclareFieldFormat{date}{%
765 \def\currentfield{date}%
766 \iffieldannotation{inferred}{\mkbibbrackets{#1}}{#1}%
767 \undef\currentfield}
768 \DeclareFieldFormat{origdate}{%
769 \def\currentfield{origdate}%
770 \iffieldannotation{inferred}{\mkbibbrackets{#1}}{#1}%
771 \undef\currentfield}
772 \DeclareFieldFormat{eventdate}{%
773 \def\currentfield{eventdate}%

```

```

774 \iffielddannotation{inferred}{\mkbibbrackets{#1}}{#1}%
775 \undef\currentfield}

```

2.1.5 EDITIONS, PAGES, AND OTHER NUMBER-LIKE FIELDS

We let edition take a localization key as well as a number.

```

776 \xpatchfieldformat{edition}{%
777   {#1\isdot}%
778   {\ifbibstring{#1}{\bibstring{#1}}{#1\isdot}}%
779   {}{\wlog{WARNING: biblatex-oxref failed to patch edition}}

```

Page ranges are compressed, but are not usually marked with ‘pp.’. The exception is if the page numbers are not obviously numbers.

```

780 \DeclareFieldFormat{pages}{%
781   \iffieldundef{bookpagination}%
782   {\mkcomprange{#1}}%
783   {\mkpageprefix[bookpagination][\mkcomprange]{#1}}%
784 }

```

The same is true in citations.

```

785 \DeclareFieldFormat{postnote}{%
786   \iffieldundef{pagination}%
787   {\mkcomprange{#1}}%
788   {\mkpageprefix[pagination][\mkcomprange]{#1}}%
789 }
790

```

2.1.6 PUBLISHERS

The *Oxford Guide to Style* says it is fine to omit publisher names uniformly from bibliographic information. This is odd, but we can support it with a simple option.

```

791 \DeclareBibliographyOption{nopublisher}[true]{%
792   \DeclareFieldInputHandler{publisher}{\def\NewValue{}}%
793 }

```

The style guides are less forgiving about omitting the place of publication. We provide a bibliography option that fills in such gaps with the `nolocation` localization string for selected entry types. It works using a source map, which is a clean solution but cannot easily be switched off again or used on a per-type basis.

```

794 \DeclareBibliographyOption{nolocation}[true]{%
795   \DeclareStyleSourceMap{
796     \maps[datatype=bibtex]{
797       \map{
798         \pertype{book}
799         \pertype{mvbook}
800         \pertype{bookinbook}
801         \pertype{inbook}
802         \pertype{suppbook}
803         \pertype{collection}
804         \pertype{mvcollection}
805         \pertype{incollection}
806         \pertype{suppcollection}

```



```

807     \pertype{reference}
808     \pertype{mvreference}
809     \pertype{inreference}
810     \pertype{proceedings}
811     \pertype{mvproceedings}
812     \pertype{inproceedings}
813     \step[notfield=location, fieldset=location,
      ↪ fieldvalue={\noexpand\bibstring{olocation}}]
814   }
815 }
816 }%
817 }

```

We also provide an entry option that has the same effect; this works using the `\restorelist` mechanism instead.

```

818 \newtoggle{blx@ox@noloc}
819 \def\blx@ox@noloc{{\bibstring{olocation}}}
820 \DeclareEntryOption{olocation}[true]{%
821   \settoggle{blx@ox@noloc}{#1}%
822   \iflistundef{location}{%
823     \iftoggle{blx@ox@noloc}{\restorelist{location}{\blx@ox@noloc}}{}%
824   }}

```

2.1.7 URLs

The OGS recommends the ISO convention of enclosing URLs in angle brackets, but NHR recommends leaving URLs bare so as not to interfere with text-mining. The latter is the default.

```

825 \DeclareBibliographyOption{isourls}[true]{%
826   \ifstrequal{#1}{true}
827     {\DeclareFieldFormat{url}{$\langle\url{##1}\rangle$}}
828     {\DeclareFieldFormat{url}{\url{##1}}}%
829 }
830 \ExecuteBibliographyOptions{isourls=false}

```

NHR specifies that URLs should be broken across lines *after* slashes and (for presumably visual reasons, certainly not syntactical ones) percents; and if that doesn't work, *before* other punctuation (including hyphens). Out of necessity, we deviate slightly by breaking after colons as well. The break penalty and stretch around punctuation can be configured independently of those for slashes, colons, percents, numbers, and letters.

```

831 \newcounter{biburlpunctpenalty}
832 \setcounter{biburlpunctpenalty}{200}
833 \newmskip\biburlpunctskip
834 \biburlpunctskip=0mu plus 1mu\relax
835 \renewcommand*{\biburlsetup}{%
836   \Urlmuskip\bigskip
837   \mathchardef\urlbigbreakpenalty=\value{biburlbigbreakpenalty}\relax
838   \mathchardef\urlbreakpenalty=\value{biburlbreakpenalty}\relax
839   \def\UrlBigBreaks{\do\//\do\:\}%
840   \def\UrlBreaks{\do\%}%
841   \ifnumgreater{\value{biburlpunctpenalty}}{0}{%
842     \def\do##1{\appto\UrlSpecials{\do##1{%
843       \mskip\bigskip \penalty\value{biburlpunctpenalty}}}%
844     \mathchar`##1 \mskip\bigskip}}}%
845   \do\! \do\ " \do\$ \do\$& \do\$' \do\(\do\) \do\*\do\+ %
846   \do\, \do\ - \do\. \do\; \do\< \do\> \do\? \do\@ \do\[ %
847   \do\ \do\ ] \do\^ \do\_ \do\` \do\{ \do\} \do\~ \do\ } %

```

```

848 \ifnumgreater{\value{biburlnumpenalty}}{0}{%
849   \def\do##1{\appto\UrlSpecials{\do##1{%
850     \mathchar`##1 \mskip\biburlnumskip \penalty\value{biburlnumpenalty}}}%
851   \do\1\do\2\do\3\do\4\do\5\do\6\do\7\do\8\do\9\do\0}{}%
852 \ifnumgreater{\value{biburlucpenalty}}{0}{%
853   \def\do##1{\appto\UrlSpecials{\do##1{%
854     \mathchar`##1 \mskip\biburlucskip \penalty\value{biburlucpenalty}}}%
855   \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J%
856   \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T%
857   \do\U\do\V\do\W\do\X\do\Y\do\Z}{}%
858 \ifnumgreater{\value{biburllcpenalty}}{0}{%
859   \def\do##1{\appto\UrlSpecials{\do##1{%
860     \mathchar`##1 \mskip\biburllcskip \penalty\value{biburllcpenalty}}}%
861   \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J%
862   \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T%
863   \do\U\do\V\do\W\do\X\do\Y\do\Z}{}%
864 \let\do=\noexpand}

```

URL dates are set off with a comma rather than parentheses.

```

865 \DeclareFieldFormat{urldate}{\bibstring{urlseen}\space#1}
866 \xpatchbibmacro{url+urldate}%
867   {\setunit*{\addspace}}%
868   {\setunit*{\addcomma\addspace}}%
869   {}{\wlog{WARNING: biblatex-oxref failed to patch url+urldate}}

```

The DOI is introduced by ‘doi’ in lowercase.

```

870 \xpatchfieldformat{doi}%
871   {\mkbibacro{DOI}}%
872   {\printtext{doi}}%
873   {}{\wlog{WARNING: biblatex-oxref failed to patch doi}}

```

Unlike URLs, DOIs are preceded by a full stop.

```

874 \xpatchbibmacro{doi+eprint+url}%
875   {\printfield{doi}}%
876   {\setunit{\addperiod\space}\printfield{doi}}%
877   {}{\wlog{WARNING: biblatex-oxref failed to patch doi+eprint+url}}
878

```

2.1.8 ADDENDA

The publication state is given in parentheses. Other addenda are added plain.

```

879 \renewbibmacro*{addendum+pubstate}{%
880   \ifboolexpr{
881     test {\iffieldundef{pubstate}}
882     or
883     test {\iffieldequalstr{labeldatesource}{pubstate}}
884   }{%
885     \nopunct
886     \ifbibstring{\thefield{pubstate}}{%
887       \printtext[pubstate]{\bibstring{\thefield{pubstate}}}%
888     }{%
889       \printfield{pubstate}}}%
890   \setunit{\addsemicolon\addspace}\newblock
891   \printfield{addendum}}
892 \DeclareFieldFormat{pubstate}{\mkbibparens{#1}}

```

Publication descriptions are printed plain for unpublished works, and in brackets for other entry types.

```
893 \DeclareFieldFormat{howpublished}{\mkbibbrackets{#1}}
894 \DeclareFieldFormat[misc,unpublished]{howpublished}{#1}
```

2.1.9 ARTICLES AND PERIODICALS

Subtypes for articles and similar are in square brackets.

```
895 \DeclareFieldFormat[article,periodical,supperiodical,review]{entrysubtype}{\mkbibbrackets{#1}}
```

We provide a configurable command for testing if a title is abbreviated. We test for ASCII capitals and a limited number of accented capitals by default, but users can extend or replace the list if it causes problems.

```
896 \global\let\blx@ox@abbrevstring\empty
897 \newrobustcmd*{\DeclareAbbrEndChars}{%
898   \ifstar{%
899     \blx@ox@apptoabbrevstring
900   }{%
901     \global\let\blx@ox@abbrevstring\empty
902     \blx@ox@apptoabbrevstring}}
903 \def\blx@ox@apptoabbrevstring#1{
904   \xdef\blx@ox@abbrevstring{\blx@ox@abbrevstring#1}}
905 \DeclareAbbrEndChars{%
906   A\^{A}BCDEFG\u{G}HI\^{I}JKLMNO\"{O}\^{O}PQRSTU\"{U}\^{U}VWXYZ.}%
907 \newcommand*{\ifabbrev}[3]{%
908   \StrRight{#1}{1}[\blx@ox@lastchar]%
909   \expandafter\IfSubStr*\blx@ox@abbrevstring{\blx@ox@lastchar}{#2}{#3}%
910 }
```

We renew the journal+issuetitle macro so that if a work takes up a whole issue (signified by using issuetitle *instead* of title), the title and journal title are separated by ‘=’ instead of the usual punctuation. It also inserts an appropriate localization string if the publication status demands it. We insert a comma after the journal title, regardless of what follows. There is also a comma after numeric (but not textual) series.

```
911 \renewbibmacro*{journal+issuetitle}{%
912   \ifboolexpr{
913     test {\iffieldundef{title}}
914     and
915     not test {\iffieldundef{issuetitle}}
916   }{%
917     \usebibmacro{issue}%
918     \setunit{\addspace =\addspace}%
919   }{%
920     \ifboolexpr{
921       ( not test {\iffieldundef{pubstate}} )
922       and
923       test {\ifbixstring{\thefield{pubstate}in}}
924     }{%
925       \printtext{\bibstring{\thefield{pubstate}in}\space}%
926       \clearfield{pubstate}%
927     }{}%
928     \usebibmacro{journal}%
929     \iffieldundef{journalsubtitle}{%
930       \ifabbrev{\strfield{journaltitle}}{\setunit{\addspace}}{\newunit}%
931     }{%
```

```

932     \ifabbrev{\strfield{journalsubtitle}}{\setunit{\addspace}}{\newunit}}%
933 \iffieldundef{series}{}{%
934     \newunit\newblock
935     \printfield{series}%
936     \ifbibxstring{\thefield{series}}{%
937         \setunit{\addspace}%
938     }{%
939         \newunit}}%
940 \usebibmacro{volume+number+eid}%
941 \setunit{\addspace}%
942 \usebibmacro{issue+date}%
943 \newunit}

```

We renew the title+issuetitle macro (for whole periodical issues) to apply the same punctuation changes after the periodical name and series. At the same time, we delegate handling of volume and issue numbers to the appropriate macro so we can customize it.

```

944 \renewbibmacro*{title+issuetitle}{%
945     \usebibmacro{periodical}%
946     \iffieldundef{subtitle}{}{%
947         \ifabbrev{\strfield{title}}{\setunit{\addspace}}{\newunit}}%
948     }{%
949         \ifabbrev{\strfield{subtitle}}{\setunit{\addspace}}{\newunit}}%
950 \iffieldundef{series}{}{%
951     \newunit\newblock
952     \printfield{series}%
953     \ifbibxstring{\thefield{series}}{%
954         \setunit{\addspace}%
955     }{%
956         \newunit}}%
957 \usebibmacro{volume+number+eid}%
958 \setunit{\addspace}%
959 \usebibmacro{issue+date}%
960 \newunit}

```

OGS and NHR provide plentiful options for formatting volume and issue numbers. We implement four of them here as options. The default is to use a slash between volume and issue number. Note that we prevent the volume+number+eid macro from actually printing the EID; this is printed by issue+date instead (see below).

```

961 \DeclareBibliographyOption[string]{issuestyle}[slash]{%
962     \ifcsdef{blx@ox@issuestyle@#1}{%
963         \csuse{blx@ox@issuestyle@#1}%
964     }{%
965         \PackageError{biblatex-oxref}
966             {Invalid option 'issuestyle=#1'}
967             {Valid values are 'slash', 'colon', 'comma', 'parens'}%
968     }%
969 }
970 \csdef{blx@ox@issuestyle@slash}{%
971     \renewbibmacro*{volume+number+eid}{%
972         \printfield{volume}%
973         \setunit*{\addslash}%
974         \printfield{number}%
975     }%
976 }
977 \csdef{blx@ox@issuestyle@colon}{%
978     \renewbibmacro*{volume+number+eid}{%
979         \printfield{volume}%
980         \setunit*{\addcolon\space}%
981         \printfield{number}%

```

```

982 }%
983 }
984 \csdef{blx@ox@issuestyle@comma}{%
985   \renewbibmacro*{volume+number+eid}{%
986     \printfield{volume}%
987     \setunit*{\addcomma\space}%
988     \printfield{number}%
989   }%
990 }
991 \csdef{blx@ox@issuestyle@parens}{%
992   \renewbibmacro*{volume+number+eid}{%
993     \printfield{volume}%
994     \setunit*{\addspace}%
995     \printfield[parens]{number}%
996   }%
997 }
998 \ExecuteBibliographyOptions{issuestyle=slash}

```

OGS consistently prints dates of newspapers and magazines bare, but those of academic journals in parentheses. NHR seems to favour printing dates in parentheses regardless, but notes that some publishing houses take the OGS approach.

We provide an option for switching between the two approaches. If active and an issue has no volume or issue numbers (first block), the year division and date are printed bare. Otherwise (second block) they are printed in parentheses just as in the standard version of the macro.

```

999 \newtoggle{blx@ox@varissuedate}
1000 \DeclareBiblatexOption{global,type,entry}{varissuedate}[true]{%
1001   \settoggle{blx@ox@varissuedate}{#1}}
1002 \DeclareBiblatexOption{global,type,entry}{issuedate-plain}[true]{%
1003   \settoggle{blx@ox@varissuedate}{#1}}
1004 \renewbibmacro*{issue+date}{%
1005   \ifboolexpr{
1006     test {\iffieldundef{issue}}
1007     and
1008     test {\iffieldundef{year}}
1009     and
1010     test {\iffieldundef{yeardivision}}
1011     and
1012     test {\iffieldundef{month}}
1013   }{%
1014     \ifboolexpr{
1015       togl {blx@ox@varissuedate}
1016       and
1017       test {\iffieldundef{volume}}
1018       and
1019       test {\iffieldundef{number}}
1020     }{%
1021       \newunit
1022       \printtext{%
1023         \iffieldundef{issue}{%
1024           \usebibmacro{date}
1025         }%
1026       \printfield{issue}%
1027       \setunit*{\addspace}%
1028       \usebibmacro{date}}}%
1029     }{%
1030       \printtext[parens]{%
1031         \iffieldundef{issue}{%
1032           \usebibmacro{date}%
1033         }%
1034       \printfield{issue}%

```

```

1035         \setunit*{\addspace}%
1036         \usebibmacro{date}}}}}%
1037     \newunit
1038     \printfield{eid}%
1039 }

```

Our article driver is like the standard one except

- it has no ‘in’ macro;
- there is a handler for the suppto relation;
- there is no language macro;
- the punctuation before related items is configurable.

```

1040 \DeclareBibliographyDriver{article}{%
1041     \usebibmacro{bibindex}%
1042     \usebibmacro{begentry}%
1043     \usebibmacro{author/translator+others}%
1044     \setunit{\printdelim{nametitledelim}}\newblock
1045     \usebibmacro{title}%
1046     \setunit{\titlebyauthordelim}\newblock
1047     \usebibmacro{byauthor}%
1048     \newunit\newblock
1049     \usebibmacro{bytranslator+others}%
1050     \newunit\newblock
1051     \printfield{version}%
1052     \newunit\newblock
1053     \usebibmacro{journal+issuetitle}%
1054     \newunit
1055     \usebibmacro{byeditor+others}%
1056     \iffieldequalstr{relatedtype}{suppto}{%
1057         \setunit{\addsemicolon\space}%
1058         \iftoggle{bbx:related}{%
1059             \usebibmacro{related:init}%
1060             \usebibmacro{related}%
1061             \clearfield{related}%
1062         }{}%
1063     }{}%
1064     \newunit
1065     \usebibmacro{note+pages}%
1066     \newunit\newblock
1067     \iftoggle{bbx:isbn}
1068     { \printfield{issn} }
1069     {}%
1070     \newunit\newblock
1071     \usebibmacro{doi+eprint+url}%
1072     \newunit\newblock
1073     \usebibmacro{addendum+pubstate}%
1074     \iftoggle{bbx:related}
1075     { \usebibmacro{related:init}%
1076       \usebibmacro{related} }
1077     {}%
1078     \setunit{\bibpagerefpunct}\newblock
1079     \usebibmacro{pageref}%
1080     \usebibmacro{finentry}}

```

Similar changes are made to the periodical driver.

```

1081 \DeclareBibliographyDriver{periodical}{%
1082     \usebibmacro{bibindex}%
1083     \usebibmacro{begentry}%

```

```

1084 \usebibmacro{editor}%
1085 \setunit{\printdelim{nametitleledelim}}\newblock
1086 \usebibmacro{title+issuetitle}%
1087 \newunit\newblock
1088 \usebibmacro{byeditor}%
1089 \newunit\newblock
1090 \printfield{note}%
1091 \newunit\newblock
1092 \iftoggle{bbx:isbn}
1093   {\printfield{issn}}
1094   {}%
1095 \newunit\newblock
1096 \usebibmacro{doi+eprint+url}%
1097 \newunit\newblock
1098 \usebibmacro{addendum+pubstate}%
1099 \iftoggle{bbx:related}
1100   {\usebibmacro{related:init}%
1101     \usebibmacro{related}}
1102   {}%
1103 \setunit{\bibpagerefpunct}\newblock
1104 \usebibmacro{pageref}%
1105 \usebibmacro{finentry}}

```

The supperiodical driver is just like the article one, except the note comes sooner after the title. This is to allow it to be used as a descriptor. Since we're breaking the alias, we need to explicitly replicate the article formatting for the rest of the entry.

```

1106 \DeclareFieldFormat[supperiodical]{title}{%
1107   \def\currentfield{title}%
1108   \iffielddannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}%
1109   \undef\currentfield}
1110 \DeclareFieldFormat[supperiodical]{volume}{#1}% volume of a journal
1111 \DeclareFieldFormat[supperiodical]{number}{#1}% number of a journal
1112 \DeclareFieldFormat[supperiodical]{series}{% series of a journal
1113   \ifinteger{#1}
1114     {\mkbibordseries{#1}~\bibstring{jourser}}
1115     {\iffibstring{#1}{\bibstring{#1}}{#1}}}
1116 \DeclareBibliographyDriver{supperiodical}{%
1117   \usebibmacro{bibindex}%
1118   \usebibmacro{begentry}%
1119   \usebibmacro{author/translator+others}%
1120   \setunit{\printdelim{nametitleledelim}}\newblock
1121   \usebibmacro{title}%
1122   \setunit{\titlebyauthordelim}\newblock
1123   \usebibmacro{byauthor}%
1124   \newunit\newblock
1125   \usebibmacro{bytranslator+others}%
1126   \newunit\newblock
1127   \printfield{note}\clearfield{note}%
1128   \newunit\newblock
1129   \printfield{version}%
1130   \newunit\newblock
1131   \usebibmacro{journal+issuetitle}%
1132   \newunit
1133   \usebibmacro{byeditor+others}%
1134   \iffieldequalstr{relatedtype}{suppto}{%
1135     \setunit{\addsemicolon\space}%
1136     \iftoggle{bbx:related}{%
1137       \usebibmacro{related:init}%
1138       \usebibmacro{related}%
1139       \clearfield{related}%
1140     }{}%

```

```

1141 }{}%
1142 \newunit
1143 \usebibmacro{note+pages}%
1144 \newunit\newblock
1145 \iftoggle{bbx:isbn}
1146   {\printfield{issn}}
1147   {}%
1148 \newunit\newblock
1149 \usebibmacro{doi+eprint+url}%
1150 \newunit\newblock
1151 \usebibmacro{addendum+pubstate}%
1152 \iftoggle{bbx:related}
1153   {\usebibmacro{related:init}%
1154     \usebibmacro{related}}
1155   {}%
1156 \setunit{\bibpagerefunct}\newblock
1157 \usebibmacro{pageref}%
1158 \usebibmacro{finentry}}

```

2.1.10 BOOKS AND WORKS IN BOOKS

By default, editors do not appear before the title in book or reference entries.

```

1159 \ExecuteBibliographyOptions[book,mvbook,reference,mvreference]{useeditor=false,usetranslator=false}

```

The titles of books that have been collected into an anthology are treated like regular chapters and set in quotes. Poems and plays, however, are set in italics.

```

1160 \DeclareFieldFormat[bookinbook]{title}{%
1161   \ifboolexpr{
1162     test {\iffieldequalstr{entrysubtype}{poem}}
1163     or
1164     test {\iffieldequalstr{entrysubtype}{play}}
1165   }{%
1166     \mkbibemph{#1}%
1167   }{%
1168     \mkbibquote{#1\isdot}}

```

Unlike the standard styles, we have a separate driver for inference, so we need to change the title style accordingly.

```

1169 \DeclareFieldFormat[inference]{title}{\mkbibquote{#1\isdot}}

```

Volume numbers in monograph-style entries are formatted as roman numerals (if they are indeed numbers). We take some care here to support simple ranges (e.g. 1-3, 4–9). Support for more complex ranges may be considered on request.

```

1170 \newcommand*{\mkvolroman}[1]{\Rn{#1}}
1171 \DeclareFieldFormat[book,mvbook,bookinbook,inbook,suppbook,%
1172 collection,mvcollection,incollection,suppcollection,%
1173 proceedings,mvproceedings,inproceedings,%
1174 reference,mvreference,inference]{volume}{%
1175 \IfSubStr{#1}{-}{%
1176   \StrCount{#1}{-}[\blx@ox@dashnum]%
1177   \StrBefore{#1}{-}[\blx@ox@volnum]%
1178
1179   ↪ \expandafter\ifinteger\blx@ox@volnum{\mkvolroman{\blx@ox@volnum}}{\blx@ox@volnum}\bibrangedash
1180   \StrBehind[\blx@ox@dashnum]{#1}{-}[\blx@ox@volnum]%
1181   \expandafter\ifinteger\blx@ox@volnum{\mkvolroman{\blx@ox@volnum}}{\blx@ox@volnum}%

```



```

1181 }{%
1182   \ifinteger{#1}{\mkvolroman{#1}}{#1}}

```

Where a multi-volume work is more like a series, the volume number and main title are put in a bracketted block between the volume title and the usual publication block.

```

1183 \newbibmacro*{maintitle+volume}{%
1184   \ifboolexpr{
1185     test {\iffieldundef{maintitle}}
1186     or
1187     test {\iffieldundef{volume}}
1188   }{%
1189     {\printtext[maintitle+volume]{%
1190       \bibstring{volume}\addspace
1191       \printfield{volume}\printfield{part}\addspace
1192       \bibstring{ofseries}\addspace
1193       \usebibmacro{maintitle}}}
1194   }
1195   \DeclareFieldFormat{maintitle+volume}{\mkbibbrackets{#1}}

```

The `in` before the booktitle is suppressed for works in yearbooks.

```

1196 \renewbibmacro*{in:}{%
1197   \iffieldequalstr{entrysubtype}{yearbook}{}{%
1198     \bibstring{in}%
1199     \printunit{\intitlepunct}}}

```

Oxford style signifies formal publication by putting the relevant details in parentheses.

```

1200 \DeclareFieldFormat{publication}{\mkbibparens{#1}}

```

Standard `biblatex` puts a space between series name and number. OGS separates them with a comma. It also has an example with a series editor.

```

1201 \renewbibmacro*{series+number}{%
1202   \printfield{series}%
1203   \setunit*{\addcomma\space}%
1204   \usebibmacro{byserieseditor}%
1205   \setunit*{\addcomma\space}%
1206   \printfield{number}}

```

We provide an option for displaying the series information before, instead of within, the publication block.

```

1207 \newtoggle{blx@ox@altbookseries}
1208 \DeclareBibliographyOption[string]{bookseries}[in]{%
1209   \ifstrequal{#1}{out}{%
1210     \toggletrue{blx@ox@altbookseries}%
1211   }{%
1212     \togglefalse{blx@ox@altbookseries}%
1213     \ifstrequal{#1}{in}{%
1214       \PackageError{biblatex-oxref}
1215       {Invalid option 'bookseries=#1'}
1216       {Valid values are 'in' and 'out'.}}

```

If there are the same number of locations and publishers, and there are more than one pair, we print them pairwise rather than in two separate lists. In order to do this while retaining the normal mechanisms for punctuating the list, we need a `listpair:delim` macro similar to

namepair:delim (above) that uses the generic list punctuation. Again, the three arguments are the item being printed, the number of the current item pair and the total number of item pairs.

```

1217 \newbibmacro*{listpair:delim}[3]{%
1218   \ifnumgreater{#2}{\@ne}{%
1219     \ifnumless{#2}{#3}{%
1220       \printdelim{multilistdelim}%
1221     }{%
1222       \c@liststop#3%
1223       \lbx@finallistdelim{#1}}%
1224   }{}}

```

We use this as the basis of a list format that will be applied to the location element of a location–publisher pair.

```

1225 \newcounter{locpubpairs}
1226 \DeclareListFormat{locpub}{%
1227   \usebibmacro{listpair:delim}%
1228   {#1}{\value{locpubpairs}}{\value{location}}%
1229   #1\isdot
1230 }

```

When citing both the first and a later edition, the first one comes first, and the later one comes after a semicolon. As per standard `biblatex`, the elements of a single edition are separated by commas except that the publisher is preceded by a colon. The origdate is only printed here if at least one of the edition, the origlocation or the origpublisher is also specified.

```

1231 \newsavebox{\blx@ox@locbox}
1232 \newbibmacro*{edition+publisher+location+date}{%
1233   \printlist{origlocation}%
1234   \iflistundef{origpublisher}%
1235     {\setunit*{\addcomma\space}}%
1236     {\setunit*{\addcolon\space}}%
1237   \printlist{origpublisher}%
1238   \setunit*{\addcomma\space}%
1239   \ifboolexpr{
1240     test {\iflistundef{origlocation}}
1241     and
1242     test {\iflistundef{origpublisher}}
1243     and
1244     test {\iffieldundef{edition}}
1245   }{ }{%
1246     \printorigdate}%
1247   \setunit{\addsemicolon\space}%
1248   \printfield{edition}%
1249   \setunit*{\addcomma\space}%

```

As mentioned, if there are the same number of locations and publishers, and there are more than one pair, we print them pairwise rather than in two separate lists. This uses the same principle as the namepairs bibmacro, but does not have the list truncation apparatus. This time we use a savebox just for efficiency.

```

1250 \ifboolexpr{%
1251   test {\ifnumcomp{\value{publisher}}{>}{1}}
1252   and
1253   test {\ifnumequal{\value{location}}{\value{publisher}}}
1254 }{ }%
1255 \setcounter{locpubpairs}{0}%
1256 \savebibmacro{list:andothers}%
1257 \renewbibmacro*{list:andothers}{ }%

```

```

1258 \whileboolexpr{%
1259     test {\ifnumcomp{\value{locpubpairs}}{<}{\value{publisher}}}
1260 }{%
1261     \stepcounter{locpubpairs}%
1262     \printlist[locpub][\value{locpubpairs}-\value{locpubpairs}]{location}%
1263     \setunit{\addcolon\space}%
1264     \printlist[][\value{locpubpairs}-\value{locpubpairs}]{publisher}%
1265 }%
1266 \restorebibmacro{list:andothers}%
1267 }{%
1268     \printlist{location}%
1269     \iflistundef{publisher}%
1270     {\setunit*{\addcomma\space}}%
1271     {\setunit*{\addcolon\space}}%
1272     \printlist{publisher}%
1273 }%
1274 \setunit*{\addcomma\space}%
1275 \usebibmacro{date}%
1276 }

```

Oxford style is to provide publication details – series name and number, edition, publisher, location, date – in a parenthetical block after the title information.

```

1277 \newbibmacro*{series+number+edition+publisher+location+date}{%
1278 \iftoggle{blx@ox@altbookseries}{%
1279     \usebibmacro{series+number}%
1280     \setunit{\addspace}\newblock{}%
1281 \ifboolexpr{
1282     test {\iffieldundef{series}}
1283     and
1284     test {\iffieldundef{number}}
1285     and
1286     test {\iffieldundef{edition}}
1287     and
1288     test {\iflistundef{publisher}}
1289     and
1290     test {\iflistundef{location}}
1291     and
1292     test {\iffieldundef{year}}
1293     and
1294     test {\iffieldundef{yeardivision}}
1295     and
1296     test {\iffieldundef{month}}
1297 }{}{%
1298     \nopunct
1299     \printtext[publication]{%
1300 \iftoggle{blx@ox@altbookseries}{%
1301     \usebibmacro{series+number}%
1302     \setunit{\addsemicolon\addspace}}%
1303     \usebibmacro{edition+publisher+location+date}%
1304     \usebibmacro{copub}}}%
1305 \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1306 \setunit{\addspace}\newblock
1307 \usebibmacro{origpub}%
1308 }

```

The edition information for reference works is recorded earlier in the reference, so we provide a variant that excludes it from the publication block.

```

1309 \newbibmacro*{series+number+publisher+location+date}{%
1310 \iftoggle{blx@ox@altbookseries}{%
1311     \usebibmacro{series+number}%

```

```

1312     \setunit{\addspace}\newblock}{}%
1313 \ifbool{expr{
1314     test {\iffieldundef{series}}
1315     and
1316     test {\iffieldundef{number}}
1317     and
1318     test {\iflistundef{publisher}}
1319     and
1320     test {\iflistundef{location}}
1321     and
1322     test {\iffieldundef{year}}
1323     and
1324     test {\iffieldundef{yeardivision}}
1325     and
1326     test {\iffieldundef{month}}
1327 }}{%
1328     \nopunct
1329     \printtext[publication]{%
1330     \iftoggle{blx@ox@altbookseries}{%
1331         \usebibmacro{series+number}%
1332         \setunit{\addsemicolon\addspace}}%
1333     \usebibmacro{publisher+location+date}%
1334     \usebibmacro{copub}}}%
1335 \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1336 \setunit{\addspace}\newblock
1337 \usebibmacro{origpub}%
1338 }

```

The copub macro prints co-publication details.

```

1339 \newbibmacro*{copub}{%
1340     \ifbool{expr{
1341         togl {bbx:related}
1342         and
1343         test {\iffieldequalstr{relatedtype}{copub}}
1344     }}{%
1345         \setunit{\addsemicolon\space}%
1346         \usebibmacro{related:init}%
1347         \usebibmacro{related}%
1348     }}%
1349 }

```

The origpub macro prints the origdate field if it has not yet been cleared.

```

1350 \newbibmacro*{origpub}{%
1351     \ifbool{expr{
1352         test {\iflistundef{origlocation}}
1353         and
1354         test {\iflistundef{origpublisher}}
1355         and
1356         test {\iffieldundef{edition}}
1357         and
1358         ( not test {\iffieldundef{origyear}} )
1359     }}{%
1360         \printtext[parens]{\bibstring{origpubin}\space\printorigdate}%
1361     }}%
1362 }

```

The changes to the book driver compared to the standard style are as follows:

- maintitle is processed with volume just before series, instead of with title;
- edition is processed where the standard style processes note, and vice versa;

- volumes is omitted;
- series to date information is delegated to a separate macro;
- support is added for howpublished field;

```

1363 \DeclareBibliographyDriver{book}{%
1364   \usebibmacro{bibindex}%
1365   \usebibmacro{begentry}%
1366   \usebibmacro{author/editor+others/translator+others}%
1367   \setunit{\printdelim{nametitledelim}}\newblock
1368   \usebibmacro{title}%
1369   \setunit{\titlebyauthordelim}\newblock
1370   \usebibmacro{byauthor}%
1371   \newunit\newblock
1372   \usebibmacro{byeditor+others}%
1373   \newunit\newblock
1374   \printfield{note}%
1375   \newunit\newblock
1376   \usebibmacro{maintitle+volume}%
1377   \newunit
1378   \usebibmacro{series+number+edition+publisher+location+date}%
1379   \setunit{\addspace}%
1380   \printfield{howpublished}%
1381   \newunit\newblock
1382   \usebibmacro{chapter+pages}%
1383   \newunit
1384   \printfield{pagetotal}%
1385   \newunit\newblock
1386   \iftoggle{bbx:isbn}
1387     {\printfield{isbn}}
1388     {}%
1389   \newunit\newblock
1390   \usebibmacro{doi+eprint+url}%
1391   \newunit\newblock
1392   \usebibmacro{addendum+pubstate}%
1393   \iftoggle{bbx:related}
1394     {\usebibmacro{related:init}%
1395      \usebibmacro{related}}
1396     {}%
1397   \setunit{\bibpagerefunct}\newblock
1398   \usebibmacro{pageref}%
1399   \usebibmacro{finentry}}

```

Unlike the standard styles, we have a separate driver for `mvbook` which behaves slightly differently. It is in fact closer to the standard book driver. The changes are as follows:

- volume/part is processed just after maintitle+title;
- edition is processed where the standard style processes note;
- note is processed after volumes;
- series to date information is delegated to a separate macro;

```

1400 \DeclareBibliographyDriver{mvbook}{%
1401   \usebibmacro{bibindex}%
1402   \usebibmacro{begentry}%
1403   \usebibmacro{author/editor+others/translator+others}%
1404   \setunit{\printdelim{nametitledelim}}\newblock
1405   \usebibmacro{maintitle+title}%
1406   \newunit
1407   \ifboolexpr{
1408     test {\iffieldequalstr{relatedtype}{multivolume}}

```

```

1409     or
1410     ( not test {\iffieldundef{maintitle}} )
1411   }{%
1412     \printfield{volume}%
1413     \printfield{part}%
1414     \setunit{\titlebyauthordelim}\newblock
1415     \usebibmacro{byauthor}%
1416     \newunit\newblock
1417     \usebibmacro{byeditor+others}%
1418     \newunit\newblock
1419     \printfield{volumes}%
1420     \newunit\newblock
1421     \printfield{note}%
1422     \newunit\newblock
1423     \ifboolexpr{
1424       test {\iffieldequalstr{relatedtype}{multivolume}}
1425       and
1426       test {\iffieldundef{maintitle}}
1427     }{%
1428       \printfield{volume}%
1429       \printfield{part}%
1430     }{%
1431       \newunit\newblock
1432       \usebibmacro{series+number+edition+publisher+location+date}%
1433       \newunit\newblock
1434       \usebibmacro{chapter+pages}%
1435       \newunit
1436       \printfield{pagetotal}%
1437       \newunit\newblock
1438       \iftoggle{bbx:isbn}
1439         {\printfield{isbn}}
1440         {}%
1441       \newunit\newblock
1442       \usebibmacro{doi+eprint+url}%
1443       \newunit\newblock
1444       \usebibmacro{addendum+pubstate}%
1445       \iftoggle{bbx:related}
1446         {\usebibmacro{related:init}%
1447          \usebibmacro{related}}
1448         {}%
1449       \setunit{\bibpagerefunct}\newblock
1450       \usebibmacro{pageref}%
1451       \usebibmacro{finentry}}

```

Our inbook driver modifies the standard one in just the same way as our mvbook driver modifies the standard book.

```

1452 \DeclareBibliographyDriver{inbook}{%
1453   \usebibmacro{bibindex}%
1454   \usebibmacro{begentry}%
1455   \usebibmacro{author/translator+others}%
1456   \setunit{\printdelim{nametitledelim}}\newblock
1457   \usebibmacro{title}%
1458   \setunit{\titlebyauthordelim}\newblock
1459   \usebibmacro{byauthor}%
1460   \newunit\newblock
1461   \usebibmacro{in:}%
1462   \usebibmacro{bybookauthor}%
1463   \newunit\newblock
1464   \usebibmacro{maintitle+booktitle}%
1465   \newunit
1466   \iffieldundef{maintitle}
1467     {\printfield{volume}}%

```

```

1468     \printfield{part}}
1469   {}%
1470   \newunit\newblock
1471   \usebibmacro{byeditor+others}%
1472   \newunit\newblock
1473   \printfield{volumes}%
1474   \newunit\newblock
1475   \printfield{note}%
1476   \newunit\newblock
1477   \usebibmacro{series+number+edition+publisher+location+date}%
1478   \newunit\newblock
1479   \usebibmacro{chapter+pages}%
1480   \newunit\newblock
1481   \iftoggle{bbx:isbn}
1482     {\printfield{isbn}}
1483     {}%
1484   \newunit\newblock
1485   \usebibmacro{doi+eprint+url}%
1486   \newunit\newblock
1487   \usebibmacro{addendum+pubstate}%
1488   \iftoggle{bbx:related}
1489     {\usebibmacro{related:init}%
1490      \usebibmacro{related}}
1491     {}%
1492   \setunit{\bibpagerefpunct}\newblock
1493   \usebibmacro{pageref}%
1494   \usebibmacro{finentry}}

```

Our suppbok driver is just like inbook except that the note is moved nearer the title so it can be used as a descriptor.

```

1495   \DeclareFieldFormat[suppbok]{title}{%
1496     \def\currentfield{title}%
1497     \iffielddannotation{descriptor}{#1}{\mkbibemph{#1}}%
1498     \undef\currentfield}
1499   \DeclareBibliographyDriver{suppbok}{%
1500     \usebibmacro{bibindex}%
1501     \usebibmacro{begentry}%
1502     \usebibmacro{author/translator+others}%
1503     \setunit{\printdelim{nametitledelim}}\newblock
1504     \usebibmacro{title}%
1505     \setunit{\titlebyauthordelim}\newblock
1506     \usebibmacro{byauthor}%
1507     \newunit\newblock
1508     \printfield{note}%
1509     \setunit{\addspace}\newblock
1510     \usebibmacro{in:}%
1511     \usebibmacro{bybookauthor}%
1512     \newunit\newblock
1513     \usebibmacro{maintitle+booktitle}%
1514     \newunit
1515     \iffielddundef{maintitle}
1516       {\printfield{volume}%
1517        \printfield{part}}
1518       {}%
1519     \newunit\newblock
1520     \usebibmacro{byeditor+others}%
1521     \newunit\newblock
1522     \printfield{volumes}%
1523     \newunit\newblock
1524     \usebibmacro{series+number+edition+publisher+location+date}%
1525     \newunit\newblock

```

```

1526 \usebibmacro{chapter+pages}%
1527 \newunit\newblock
1528 \iftoggle{bbx:isbn}
1529   {\printfield{isbn}}
1530   {}%
1531 \newunit\newblock
1532 \usebibmacro{doi+eprint+url}%
1533 \newunit\newblock
1534 \usebibmacro{addendum+pubstate}%
1535 \iftoggle{bbx:related}
1536   {\usebibmacro{related:init}%
1537    \usebibmacro{related}}
1538   {}%
1539 \setunit{\bibpagerefpunct}\newblock
1540 \usebibmacro{pageref}%
1541 \usebibmacro{finentry}}

```

We also provide a bookinbook driver that handles origdate differently.

```

1542 \DeclareBibliographyDriver{bookinbook}{%
1543   \usebibmacro{bibindex}%
1544   \usebibmacro{begentry}%
1545   \usebibmacro{author/translator+others}%
1546   \setunit{\printdelim{nametitledelim}}\newblock
1547   \usebibmacro{title}%
1548   \setunit{\titlebyauthordelim}\newblock
1549   \usebibmacro{byauthor}%
1550   \newunit\newblock
1551   \usebibmacro{in:}%
1552   \usebibmacro{bybookauthor}%
1553   \newunit\newblock
1554   \usebibmacro{maintitle+booktitle}%
1555   \newunit
1556   \iffieldundef{maintitle}
1557     {\printfield{volume}%
1558      \printfield{part}}
1559     {}%
1560   \newunit\newblock
1561   \usebibmacro{byeditor+others}%
1562   \newunit\newblock
1563   \printfield{volumes}%
1564   \newunit\newblock
1565   \printfield{note}%
1566   \newunit\newblock
1567   \usebibmacro{series+number+edition+publisher+location+date}%
1568   \newunit\newblock
1569   \usebibmacro{chapter+pages}%
1570   \newunit\newblock
1571   \iftoggle{bbx:isbn}
1572     {\printfield{isbn}}
1573     {}%
1574   \newunit\newblock
1575   \usebibmacro{doi+eprint+url}%
1576   \newunit\newblock
1577   \usebibmacro{addendum+pubstate}%
1578   \iftoggle{bbx:related}
1579     {\usebibmacro{related:init}%
1580      \usebibmacro{related}}
1581     {}%
1582   \setunit{\bibpagerefpunct}\newblock
1583   \usebibmacro{pageref}%
1584   \usebibmacro{finentry}}

```

Our collection driver modifies the standard one in just the same way as our book driver.


```

1585 \DeclareBibliographyDriver{collection}{%
1586   \usebibmacro{bibindex}%
1587   \usebibmacro{begentry}%
1588   \usebibmacro{editor+others}%
1589   \setunit{\printdelim{nametitledelim}}\newblock
1590   \usebibmacro{title}%
1591   \newunit\newblock
1592   \usebibmacro{byeditor+others}%
1593   \newunit\newblock
1594   \printfield{note}%
1595   \newunit\newblock
1596   \usebibmacro{maintitle+volume}%
1597   \newunit
1598   \usebibmacro{series+number+edition+publisher+location+date}%
1599   \newunit\newblock
1600   \usebibmacro{chapter+pages}%
1601   \newunit
1602   \printfield{pagetotal}%
1603   \newunit\newblock
1604   \iftoggle{bbx:isbn}
1605     {\printfield{isbn}}
1606     {}%
1607   \newunit\newblock
1608   \usebibmacro{doi+eprint+url}%
1609   \newunit\newblock
1610   \usebibmacro{addendum+pubstate}%
1611   \iftoggle{bbx:related}
1612     {\usebibmacro{related:init}%
1613      \usebibmacro{related}}
1614     {}%
1615   \setunit{\bibpagerefunct}\newblock
1616   \usebibmacro{pageref}%
1617   \usebibmacro{finentry}}

```

Our mvcollection driver modifies the standard collection driver in just the same way as our mvbook driver modifies the standard book.

```

1618 \DeclareBibliographyDriver{mvcollection}{%
1619   \usebibmacro{bibindex}%
1620   \usebibmacro{begentry}%
1621   \usebibmacro{editor+others}%
1622   \setunit{\printdelim{nametitledelim}}\newblock
1623   \usebibmacro{maintitle+title}%
1624   \newunit
1625   \ifboolexpr{
1626     test {\iffieldequalstr{relatedtype}{multivolume}}
1627     or
1628     ( not test {\iffieldundef{maintitle}} )
1629   }{%
1630     \printfield{volume}%
1631     \printfield{part}%
1632   \newunit\newblock
1633   \usebibmacro{byeditor+others}%
1634   \newunit\newblock
1635   \printfield{volumes}%
1636   \newunit\newblock
1637   \printfield{note}%
1638   \newunit\newblock
1639   \ifboolexpr{
1640     test {\iffieldequalstr{relatedtype}{multivolume}}
1641     and
1642     test {\iffieldundef{maintitle}}
1643   }{%

```

```

1644     \printfield{volume}%
1645     \printfield{part}%
1646   }{%
1647   \newunit\newblock
1648   \usebibmacro{series+number+edition+publisher+location+date}%
1649   \newunit\newblock
1650   \usebibmacro{chapter+pages}%
1651   \newunit
1652   \printfield{pagetotal}%
1653   \newunit\newblock
1654   \iftoggle{bbx:isbn}
1655     {\printfield{isbn}}
1656     {}%
1657   \newunit\newblock
1658   \usebibmacro{doi+eprint+url}%
1659   \newunit\newblock
1660   \usebibmacro{addendum+pubstate}%
1661   \iftoggle{bbx:related}
1662     {\usebibmacro{related:init}%
1663      \usebibmacro{related}}
1664     {}%
1665   \setunit{\bibpagerefunct}\newblock
1666   \usebibmacro{pageref}%
1667   \usebibmacro{finentry}}

```

Our incollection driver modifies the standard one in the same way as our mvbook driver modifies the standard book. In addition, the bookeditor macro precedes maintitle instead of byeditor+others following it.

```

1668   \DeclareBibliographyDriver{incollection}{%
1669     \usebibmacro{bibindex}%
1670     \usebibmacro{begentry}%
1671     \usebibmacro{author/translator+others}%
1672     \setunit{\printdelim{nametitledelim}}\newblock
1673     \usebibmacro{title}%
1674     \setunit{\titlebyauthordelim}\newblock
1675     \usebibmacro{byauthor}%
1676     \newunit\newblock
1677     \usebibmacro{in:}%
1678     \usebibmacro{bookeditor}%
1679     \newunit\newblock
1680     \usebibmacro{maintitle+booktitle}%
1681     \newunit
1682     \iffieldundef{maintitle}
1683       {\printfield{volume}%
1684        \printfield{part}}
1685       {}%
1686     \newunit\newblock
1687     \printfield{volumes}%
1688     \newunit\newblock
1689     \printfield{note}%
1690     \newunit\newblock%
1691     \usebibmacro{series+number+edition+publisher+location+date}%
1692     \newunit\newblock
1693     \usebibmacro{chapter+pages}%
1694     \newunit\newblock
1695     \iftoggle{bbx:isbn}
1696       {\printfield{isbn}}
1697       {}%
1698     \newunit\newblock
1699     \usebibmacro{doi+eprint+url}%
1700     \newunit\newblock

```

```

1701 \usebibmacro{addendum+pubstate}%
1702 \iftoggle{bbx:related}
1703   {\usebibmacro{related:init}%
1704    \usebibmacro{related}}
1705   {}%
1706 \setunit{\bibpagerefunct}\newblock
1707 \usebibmacro{pageref}%
1708 \usebibmacro{finentry}}

```

Our suppcollection driver is just like incollection except that the note is moved nearer the title so it can be used as a descriptor.

```

1709 \DeclareFieldFormat[suppcollection]{title}{%
1710   \def\currentfield{title}%
1711   \iffieldannotation{descriptor}{#1}{\mkbibemph{#1}}%
1712   \undef\currentfield}
1713 \DeclareBibliographyDriver{suppcollection}{%
1714   \usebibmacro{bibindex}%
1715   \usebibmacro{begentry}%
1716   \usebibmacro{author/translator+others}%
1717   \setunit{\printdelim{nametitledelim}}\newblock
1718   \usebibmacro{title}%
1719   \setunit{\titlebyauthordelim}\newblock
1720   \usebibmacro{byauthor}%
1721   \newunit\newblock
1722   \printfield{note}%
1723   \setunit{\addspace}\newblock
1724   \usebibmacro{in:}%
1725   \usebibmacro{bookeditor}%
1726   \newunit\newblock
1727   \usebibmacro{maintitle+booktitle}%
1728   \newunit
1729   \iffieldundef{maintitle}
1730     {\printfield{volume}%
1731      \printfield{part}}
1732     {}%
1733   \newunit\newblock
1734   \printfield{volumes}%
1735   \newunit\newblock%
1736   \usebibmacro{series+number+edition+publisher+location+date}%
1737   \newunit\newblock
1738   \usebibmacro{chapter+pages}%
1739   \newunit\newblock
1740   \iftoggle{bbx:isbn}
1741     {\printfield{isbn}}
1742     {}%
1743   \newunit\newblock
1744   \usebibmacro{doi+eprint+url}%
1745   \newunit\newblock
1746   \usebibmacro{addendum+pubstate}%
1747   \iftoggle{bbx:related}
1748     {\usebibmacro{related:init}%
1749      \usebibmacro{related}}
1750     {}%
1751   \setunit{\bibpagerefunct}\newblock
1752   \usebibmacro{pageref}%
1753   \usebibmacro{finentry}}

```

Unlike the standard styles, we provide a separate driver for reference. It is just like book except that edition is given directly after the title.

```

1754 \DeclareBibliographyDriver{reference}{%
1755   \usebibmacro{bibindex}%
1756   \usebibmacro{begentry}%
1757   \usebibmacro{author/editor+others/translator+others}%
1758   \setunit{\printdelim{nametitledelim}}\newblock
1759   \usebibmacro{title}%
1760   \newunit\newblock
1761   \printfield{edition}%
1762   \setunit{\titlebyauthordelim}\newblock
1763   \usebibmacro{byauthor}%
1764   \newunit\newblock
1765   \usebibmacro{byeditor+others}%
1766   \newunit\newblock
1767   \printfield{note}%
1768   \newunit\newblock
1769   \usebibmacro{maintitle+volume}%
1770   \newunit
1771   \usebibmacro{series+number+publisher+location+date}%
1772   \newunit\newblock
1773   \usebibmacro{chapter+pages}%
1774   \newunit
1775   \printfield{pagetotal}%
1776   \newunit\newblock
1777   \iftoggle{bbx:isbn}
1778     {\printfield{isbn}}
1779     {}%
1780   \newunit\newblock
1781   \usebibmacro{doi+eprint+url}%
1782   \newunit\newblock
1783   \usebibmacro{addendum+pubstate}%
1784   \iftoggle{bbx:related}
1785     {\usebibmacro{related:init}%
1786      \usebibmacro{related}}
1787     {}%
1788   \setunit{\bibpagerefpunct}\newblock
1789   \usebibmacro{pageref}%
1790   \usebibmacro{finentry}}

```

Similarly, `mvreference` is just like `mvbook` except that edition is given directly after the title.

```

1791 \DeclareBibliographyDriver{mvreference}{%
1792   \usebibmacro{bibindex}%
1793   \usebibmacro{begentry}%
1794   \usebibmacro{author/editor+others/translator+others}%
1795   \setunit{\printdelim{nametitledelim}}\newblock
1796   \usebibmacro{maintitle+title}%
1797   \newunit
1798   \ifboolexpr{
1799     test {\iffieldequalstr{relatedtype}{multivolume}}
1800     or
1801     ( not test {\iffieldundef{maintitle}} )
1802   }{%
1803     \printfield{volume}%
1804     \printfield{part}%
1805   \newunit\newblock
1806   \printfield{edition}%
1807   \setunit{\titlebyauthordelim}\newblock
1808   \usebibmacro{byauthor}%
1809   \newunit\newblock
1810   \usebibmacro{byeditor+others}%
1811   \newunit\newblock
1812   \printfield{volumes}%
1813   \newunit\newblock

```

```

1814 \printfield{note}%
1815 \newunit\newblock
1816 \ifboolexpr{
1817   test {\iffieldequalstr{relatedtype}{multivolume}}
1818   and
1819   test {\iffieldundef{maintitle}}
1820 }{%
1821   \printfield{volume}%
1822   \printfield{part}%
1823 }{%
1824 \newunit\newblock
1825 \usebibmacro{series+number+publisher+location+date}%
1826 \newunit\newblock
1827 \usebibmacro{chapter+pages}%
1828 \newunit
1829 \printfield{pagetotal}%
1830 \newunit\newblock
1831 \iftoggle{bbx:isbn}
1832   {\printfield{isbn}}
1833   {}%
1834 \newunit\newblock
1835 \usebibmacro{doi+eprint+url}%
1836 \newunit\newblock
1837 \usebibmacro{addendum+pubstate}%
1838 \iftoggle{bbx:related}
1839   {\usebibmacro{related:init}%
1840    \usebibmacro{related}}
1841   {}%
1842 \setunit{\bibpageref punct}\newblock
1843 \usebibmacro{pageref}%
1844 \usebibmacro{finentry}}

```

Our inference driver is just like inbook except bookeditor replaces bybookauthor and edition is given just before byeditor+others.

```

1845 \DeclareBibliographyDriver{inference}{%
1846   \usebibmacro{bibindex}%
1847   \usebibmacro{begentry}%
1848   \usebibmacro{author/translator+others}%
1849   \setunit{\printdelim{nametitledelim}}\newblock
1850   \usebibmacro{title}%
1851   \setunit{\titlebyauthordelim}\newblock
1852   \usebibmacro{byauthor}%
1853   \newunit\newblock
1854   \iffieldundef{editor}{%
1855     \usebibmacro{in:}%
1856     \usebibmacro{bookeditor}%
1857     \newunit\newblock}%
1858   \usebibmacro{maintitle+booktitle}%
1859   \newunit
1860   \iffieldundef{maintitle}
1861     {\printfield{volume}%
1862      \printfield{part}}
1863     {}%
1864   \newunit\newblock
1865   \printfield{edition}%
1866   \newunit
1867   \usebibmacro{byeditor+others}%
1868   \newunit\newblock
1869   \printfield{volumes}%
1870   \newunit\newblock
1871   \printfield{note}%

```

```

1872 \newunit\newblock%
1873 \usebibmacro{series+number+publisher+location+date}%
1874 \newunit\newblock
1875 \usebibmacro{chapter+pages}%
1876 \newunit
1877 \printfield{pagetotal}%
1878 \newunit\newblock
1879 \iftoggle{bbx:isbn}
1880   {\printfield{isbn}}
1881   {}%
1882 \newunit\newblock
1883 \usebibmacro{doi+eprint+url}%
1884 \newunit\newblock
1885 \usebibmacro{addendum+pubstate}%
1886 \iftoggle{bbx:related}
1887   {\usebibmacro{related:init}%
1888    \usebibmacro{related}}
1889   {}%
1890 \setunit{\bibpagerefunct}\newblock
1891 \usebibmacro{pageref}%
1892 \usebibmacro{finentry}}

```

2.1.11 WORKS PRESENTED AT MEETINGS

By default, editors do not appear before the title in proceedings entries.

```

1893 \ExecuteBibliographyOptions[proceedings,mvproceedings]{useeditor=false,usetranslator=false}

```

In our version of the event+venue+date macro, the venue and date are set off with commas respectively instead of parentheses.

```

1894 \renewbibmacro*{event+venue+date}{%
1895   \printfield{eventtitle}%
1896   \newunit
1897   \printfield{eventtitleaddon}%
1898   \newunit
1899   \printfield{venue}%
1900   \newunit%
1901   \printeventdate%
1902   \newunit}

```

The changes to the proceedings driver compared to the standard style are as follows:

- We support the concept of an author before the title, which is usually the organization;
- editor comes after the title, not before;
- volume/part is processed just after maintitle+title;
- note is moved to before series;
- series to date information is delegated to a separate macro;

As in the (inherited) standard style, mvproceedings is an alias for this driver, since it is unlikely that the proceedings of a single meeting will be split into long series of independently published volumes!

```

1903 \DeclareBibliographyDriver{proceedings}{%
1904   \usebibmacro{bibindex}%
1905   \usebibmacro{begentry}%
1906   \usebibmacro{author}%

```

```

1907 \newunit
1908 \usebibmacro{maintitle+title}%
1909 \newunit
1910 \iffielddundef{maintitle}
1911   {\printfield{volume}%
1912    \printfield{part}}
1913   {}%
1914 \newunit\newblock
1915 \usebibmacro{event+venue+date}%
1916 \newunit\newblock
1917 \usebibmacro{byeditor+others}%
1918 \newunit\newblock
1919 \printfield{volumes}%
1920 \newunit\newblock
1921 \printfield{note}%
1922 \newunit\newblock
1923 \printlist{organization}%
1924 \newunit
1925 \usebibmacro{series+number+edition+publisher+location+date}%
1926 \newunit\newblock
1927 \usebibmacro{chapter+pages}%
1928 \newunit
1929 \printfield{pagetotal}%
1930 \newunit\newblock
1931 \iftoggle{bbx:isbn}
1932   {\printfield{isbn}}
1933   {}%
1934 \newunit\newblock
1935 \usebibmacro{doi+eprint+url}%
1936 \newunit\newblock
1937 \usebibmacro{addendum+pubstate}%
1938 \iftoggle{bbx:related}
1939   {\usebibmacro{related:init}%
1940    \usebibmacro{related}}
1941   {}%
1942 \setunit{\bibpagerefunct}\newblock
1943 \usebibmacro{pageref}%
1944 \usebibmacro{finentry}}

```

Our inproceedings driver modifies the standard one in the same way as our proceedings driver modifies the standard one.

```

1945 \DeclareBibliographyDriver{inproceedings}{%
1946   \usebibmacro{bibindex}%
1947   \usebibmacro{begentry}%
1948   \usebibmacro{author/translator+others}%
1949   \setunit{\printdelim{nametitledelim}}\newblock
1950   \usebibmacro{title}%
1951   \setunit{\titlebyauthordelim}\newblock
1952   \usebibmacro{byauthor}%
1953   \newunit\newblock
1954   \usebibmacro{in:}%
1955   \usebibmacro{maintitle+booktitle}%
1956   \newunit
1957   \iffielddundef{maintitle}
1958     {\printfield{volume}%
1959      \printfield{part}}
1960     {}%
1961   \newunit\newblock
1962   \usebibmacro{event+venue+date}%
1963   \newunit\newblock
1964   \usebibmacro{byeditor+others}%
1965   \newunit\newblock

```

```

1966 \printfield{volumes}%
1967 \newunit\newblock
1968 \printfield{note}%
1969 \newunit\newblock
1970 \printlist{organization}%
1971 \newunit
1972 \usebibmacro{series+number+publisher+location+date}%
1973 \newunit\newblock
1974 \usebibmacro{chapter+pages}%
1975 \newunit\newblock
1976 \iftoggle{bbx:isbn}
1977   {\printfield{isbn}}
1978   {}%
1979 \newunit\newblock
1980 \usebibmacro{doi+eprint+url}%
1981 \newunit\newblock
1982 \usebibmacro{addendum+pubstate}%
1983 \iftoggle{bbx:related}
1984   {\usebibmacro{related:init}%
1985    \usebibmacro{related}}
1986   {}%
1987 \setunit{\bibpagerefunct}\newblock
1988 \usebibmacro{pageref}%
1989 \usebibmacro{finentry}}

```

2.1.12 GREY LITERATURE

We provide a macro for handling type+number. We provide some extra logic to insert ‘No.’ before the number if there is no type.

```

1990 \newbibmacro*{series+type+number}{%
1991   \ifboolexpr{
1992     test {\iffieldundef{series}}
1993     and
1994     test {\iffieldundef{type}}
1995   }{%
1996     \printfield{series}%
1997     \newunit
1998     \ifboolexpr{%
1999       test {\iffieldundef{type}}
2000       and
2001       not test {\iffieldundef{number}}
2002     }{%
2003       \bibcpstring{number}
2004     }{%
2005       \printfield{type}%
2006     }%
2007     \setunit*{\addspace}%
2008     \printfield{number}}}%

```

Our version of the institution+location+date macro is just like the standard one except it is wrapped in parentheses, and the preceding punctuation is therefore suppressed. This is used by the report driver.

```

2009 \renewbibmacro*{institution+location+date}{%
2010   \ifboolexpr{
2011     ( test {\iffieldundef{number}}
2012       or
2013       not test {\iffieldundef{type}}
2014       or

```



```

2015     not test {\iffieldundef{series}}
2016   )
2017   and
2018   test {\iflistundef{institution}}
2019   and
2020   test {\iflistundef{location}}
2021   and
2022   test {\iffieldundef{year}}
2023   and
2024   test {\iffieldundef{yeardivision}}
2025   and
2026   test {\iffieldundef{month}}
2027 }{\%
2028 \nopunct
2029 \printtext[publication]{%
2030   \ifboolexpr{
2031     test {\iffieldundef{series}}
2032     and
2033     test {\iffieldundef{type}}
2034   }{\%
2035     \printfield{number}%
2036     \setunit*{\addcomma\space}%
2037   }{\%
2038     \printlist{location}%
2039     \iflistundef{institution}%
2040     {\setunit*{\addcomma\space}}%
2041     {\setunit*{\addcolon\space}}%
2042     \printlist{institution}%
2043     \setunit*{\addcomma\space}%
2044     \usebibmacro{date}}}}

```

We provide a slightly more complicated version with the type included at the beginning. It is used by the thesis driver. We provide two versions: one with the type outside and one with it inside the parentheses.

```

2045 \newtoggle{blx@ox@altthesis}
2046 \newtoggle{blx@ox@plainthesis}
2047 \DeclareFieldAlias{thesis:publication}{publication}
2048 \DeclareFieldFormat{plain}{#1}
2049 \DeclareBibliographyOption{altthesis}[true]{%
2050   \settoggle{blx@ox@altthesis}{#1}
2051 }
2052 \DeclareBibliographyOption[string]{thesis}[out]{%
2053   \ifstrequal{#1}{plain}{%
2054     \toggletrue{blx@ox@altthesis}%
2055     \toggletrue{blx@ox@plainthesis}%
2056     \DeclareFieldAlias{thesis:publication}{plain}%
2057   }{%
2058     \togglefalse{blx@ox@plainthesis}%
2059     \DeclareFieldAlias{thesis:publication}{publication}%
2060     \ifstrequal{#1}{in}{%
2061       \toggletrue{blx@ox@altthesis}%
2062     }{%
2063       \togglefalse{blx@ox@altthesis}%
2064       \ifstrequal{#1}{out}{%
2065         \PackageError{biblatex-oxref}
2066           {Invalid option 'bookseries=#1'}
2067           {Valid values are 'in', 'out', and 'plain'.}}}}
2068 \newbibmacro*{type+institution+location+date}{%
2069   \iftoggle{blx@ox@altthesis}{%
2070     \ifboolexpr{
2071       test {\iffieldundef{type}}

```

```

2072     and
2073     test {\iflistundef{institution}}
2074     and
2075     test {\iflistundef{location}}
2076     and
2077     test {\iffieldundef{year}}
2078     and
2079     test {\iffieldundef{yeardivision}}
2080     and
2081     test {\iffieldundef{month}}
2082   }{}{%
2083     \iftoggle{blx@ox@plainthesis}{}{\nopunct}%
2084     \printtext[thesis:publication]{%
2085       \printfield{type}%
2086       \setunit*{\addcomma\space}%
2087       \printlist{location}%
2088       \iflistundef{institution}{%
2089         \setunit*{\addcomma\space}%
2090       }{%
2091         \setunit*{\addcolon\space}}%
2092       \printlist{institution}%
2093       \setunit*{\addcomma\space}%
2094       \usebibmacro{date}}}
2095   }{}{%
2096     \printfield{type}%
2097     \newunit
2098     \usebibmacro{institution+location+date}}}

```

We provide an even more convoluted version that also includes series, title and number, and uses the more common publisher in place of institution. We also include some logic that means organization is used instead of publisher if no publisher is provided; otherwise it is printed before location. This is used by the manual driver.

```

2099 \newbibmacro*{type+series+number+edition+organization+publisher+location+date}{%
2100   \ifboolexpr{
2101     test {\iffieldundef{type}}
2102     and
2103     test {\iffieldundef{series}}
2104     and
2105     test {\iffieldundef{number}}
2106     and
2107     test {\iffieldundef{edition}}
2108     and
2109     test {\iflistundef{organization}}
2110     and
2111     test {\iflistundef{publisher}}
2112     and
2113     test {\iflistundef{location}}
2114     and
2115     test {\iffieldundef{year}}
2116     and
2117     test {\iffieldundef{yeardivision}}
2118     and
2119     test {\iffieldundef{month}}
2120   }{}{%
2121     \nopunct
2122     \printtext[publication]{%
2123       \usebibmacro{series+type+number}%
2124       \setunit{\addsemicolon\space}%
2125       \printfield{edition}%
2126       \setunit*{\addcomma\space}%
2127       \iflistundef{publisher}{}{}%

```

```

2128     \printlist{organization}%
2129     \setunit*{\addcomma\space}}%
2130 \printlist{location}%
2131 \iflistundef{publisher}{%
2132   \iflistundef{organization}{%
2133     \setunit*{\addcomma\space}%
2134   }{%
2135     \setunit*{\addcolon\space}%
2136     \printlist{organization}}%
2137 }{%
2138   \setunit*{\addcolon\space}%
2139   \printlist{publisher}}%
2140 \setunit*{\addcomma\space}%
2141 \usebibmacro{date}}}}

```

The changes to the report driver compared to the standard style are as follows:

- support is added for volume, maintitle and series;
- type and number are moved to just before the publication information block;
- the punctuation is slightly different for the legal entry subtype.

```

2142 \newcommand*{\legreport}{legal}
2143 \DeclareBibliographyDriver{report}{%
2144   \usebibmacro{bibindex}%
2145   \usebibmacro{begentry}%
2146   \usebibmacro{author}%
2147   \setunit{\printdelim{nametitledelim}}\newblock
2148   \usebibmacro{maintitle+title}%
2149   \newunit
2150   \iffieldundef{maintitle}
2151     {\printfield{volume}%
2152      \printfield{part}}
2153   {}%
2154   \setunit{\titlebyauthordelim}\newblock
2155   \usebibmacro{byauthor}%
2156   \newunit\newblock
2157   \printfield{version}%
2158   \newunit\newblock
2159   \printfield{note}%
2160   \newunit\newblock
2161   \usebibmacro{series+type+number}%
2162   \setunit{\addspace}%
2163   \usebibmacro{institution+location+date}%
2164   \iffieldequals{entrysubtype}{\legreport}{%
2165     \setunit{\addspace}\nopunct
2166     \let\origadddot\adddot
2167     \def\adddot{}%
2168     \usebibmacro{chapter+pages}%
2169     \let\adddot\origadddot
2170   }{%
2171     \newunit\newblock
2172     \usebibmacro{chapter+pages}%
2173   }%
2174   \newunit
2175   \printfield{pagetotal}%
2176   \newunit\newblock
2177   \iftoggle{bbx:isbn}
2178     {\printfield{isrn}}
2179     {}%
2180   \newunit\newblock
2181   \usebibmacro{doi+eprint+url}%
2182   \newunit\newblock

```

```

2183 \usebibmacro{addendum+pubstate}%
2184 \iftoggle{bbx:related}
2185   {\usebibmacro{related:init}%
2186    \usebibmacro{related}}
2187   {}%
2188 \setunit{\bibpagerefpunct}\newblock
2189 \usebibmacro{pageref}%
2190 \usebibmacro{finentry}}

```

We patch the thesis driver to use our slightly more complex version.

```

2191 \xpatchbibdriver{thesis}{%
2192   \printfield{type}%
2193   \newunit
2194   \usebibmacro{institution+location+date}%
2195 }{%
2196   \usebibmacro{type+institution+location+date}%
2197 }{}{\wlog{WARNING: biblatex-oxref failed to patch thesis}}

```

We give booklet entries descriptor support.

```

2198 \DeclareFieldFormat[booklet]{title}{%
2199   \def\currentfield{title}%
2200   \iffielddannotation{descriptor}{#1}{%
2201     \mkbibquote{#1\isdot}}%
2202   \undef\currentfield}

```

With patents, the titles are italic and the patent type is not abbreviated.

```

2203 \DeclareFieldFormat[patent]{title}{\mkbibemph{#1}}
2204 \DeclareFieldFormat[patent]{type}{\ifbibstring{#1}{\biblstring{#1}}{#1}}

```

The holder, origdate and date fields have explicit signposting; the latter two use origdatatype and datatype, with some sensible defaults.

```

2205 \DeclareNameAlias{byholder}{default}
2206 \renewbibmacro*{byholder}{%
2207   \ifnameundef{holder}{}{%
2208     \bibstring{byholder}%
2209     \setunit{\addspace}%
2210     \printnames[byholder]{holder}}}%
2211 \newbibmacro*{location+dates}{%
2212   \ifboolexpr{
2213     test {\iffielddundef{location}}
2214     and
2215     test {\iffielddundef{origyear}}
2216     and
2217     test {\iffielddundef{origmonth}}
2218     and
2219     test {\iffielddundef{year}}
2220     and
2221     test {\iffielddundef{month}}
2222   }{}{%
2223     \nopunct
2224     \printtext[publication]{%
2225       \printlist[][[-\value{listtotal}]]{location}%
2226       \setunit*{\addcomma\space}%
2227       \ifboolexpr{
2228         test {\iffielddundef{origyear}}
2229         and
2230         test {\iffielddundef{origmonth}}

```

```

2231     }{}%
2232     \iffieldundef{origdatatype}{%
2233       \bibstring{filed}
2234     }{
2235       \printfield{origdatatype}}%
2236     \setunit*{\addspace}}%
2237   \usebibmacro{origdate+time}%
2238   \setunit*{\addcomma\space}%
2239   \ifboolexpr{
2240     test {\iffieldundef{year}}
2241     and
2242     test {\iffieldundef{month}}
2243   }{}{%
2244     \iffieldundef{datatype}{%
2245       \bibstring{issued}%
2246     }{
2247       \printfield{datatype}}%
2248     \setunit*{\addspace}}%
2249     \usebibmacro{date}}}}

```

The patent driver differs from the regular one by having note moved further forward, and having a publication block consisting of location, origdate and date.

```

2250 \DeclareBibliographyDriver{patent}{%
2251   \usebibmacro{bibindex}%
2252   \usebibmacro{begentry}%
2253   \usebibmacro{author}%
2254   \setunit{\printdelim{nametitle}}\newblock
2255   \usebibmacro{title}%
2256   \newunit
2257   \printlist{language}%
2258   \setunit{\titlebyauthor}\newblock
2259   \usebibmacro{byauthor}%
2260   \newunit\newblock
2261   \printfield{note}%
2262   \newunit\newblock
2263   \printfield{type}%
2264   \setunit*{\addspace}%
2265   \printfield{number}%
2266   \newunit\newblock
2267   \usebibmacro{byholder}%
2268   \newunit\newblock
2269   \usebibmacro{location+dates}%
2270   \newunit\newblock
2271   \usebibmacro{doi+eprint+url}%
2272   \newunit\newblock
2273   \usebibmacro{addendum+pubstate}%
2274   \iftoggle{bbx:related}
2275     {\usebibmacro{related:init}%
2276      \usebibmacro{related}}
2277     {}%
2278   \setunit{\bibpagerefpunct}\newblock
2279   \usebibmacro{pageref}%
2280   \usebibmacro{finentry}}

```

Direct use of the manual entry type is not encouraged, but it serves as a basis for other entry types, notably standards, and software. The main change to the manual driver compared to the standard style is that type, series, number, edition and organization are moved into the publication information block with publisher, location and date. Note that standards will put the number field at the head of the reference if there is no author.

```

2281 \DeclareBibliographyDriver{manual}{%
2282   \usebibmacro{bibindex}%
2283   \usebibmacro{begentry}%
2284   \ifbool{expr{
2285     test {\ifentrytype{standard}}
2286     and
2287     ( test {\ifnameundef{author}}
2288       or
2289       not test \ifuseauthor )
2290     and
2291     not test {\iffieldundef{number}}
2292   }}{%
2293     \printfield{number}\clearfield{number}%
2294     \newunit\newblock
2295   }{%
2296     \usebibmacro{author/editor}%
2297     \setunit{\printdelim{nametitledelim}}\newblock
2298     \ifentrytype{software}
2299       {\usebibmacro{title+version}}
2300       {\usebibmacro{title}}%
2301     \setunit{\titlebyauthordelim}\newblock
2302     \usebibmacro{byauthor}%
2303     \newunit\newblock
2304     \usebibmacro{byeditor}%
2305     \newunit
2306     \ifentrytype{software}
2307       {}
2308       {\newunit\printfield{version}}%
2309     \newunit
2310     \printfield{note}%
2311     \newunit\newblock
2312     \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
2313     \newunit\newblock
2314     \usebibmacro{chapter+pages}%
2315     \newunit
2316     \printfield{pagetotal}%
2317     \newunit\newblock
2318     \iftoggle{bbx:isbn}
2319       {\printfield{isbn}}
2320       {}%
2321     \newunit\newblock
2322     \usebibmacro{doi+eprint+url}%
2323     \newunit\newblock
2324     \usebibmacro{addendum+pubstate}%
2325     \iftoggle{bbx:related}
2326       {\usebibmacro{related:init}}%
2327       {\usebibmacro{related}}
2328     {}%
2329     \setunit{\bibpagerefpunct}\newblock
2330     \usebibmacro{pageref}%
2331     \usebibmacro{finentry}}
2332 \DeclareBibliographyAlias{standard}{manual}
2333 \ExecuteBibliographyOptions[standard]{useeditor=false}

```

2.1.13 AUDIOVISUAL MATERIALS

The publication block for audiovisual resources is quite different from the normal, as the type, series and number come between the publisher and date. The punctuation or otherwise between elements depends on the combination present. The date and time of recording is given before the block if a number is provided (indicating a published recording) but within it otherwise.

```

2334 \newbibmacro*{publisher+type+series+number+date}{%
2335   \iffieldundef{number}{}%
2336   \setunit{\addcomma\space}%
2337   \usebibmacro{origdate+time}%
2338 }%
2339 \ifboolexpr{%
2340   test {\iflistundef{origpublisher}}
2341   and
2342   test {\iflistundef{location}}
2343   and
2344   test {\iflistundef{publisher}}
2345   and
2346   test {\iffieldundef{type}}
2347   and
2348   test {\iffieldundef{series}}
2349   and
2350   test {\iffieldundef{number}}
2351   and
2352   test {\iffieldundef{year}}
2353   and
2354   test {\iffieldundef{yeardivision}}
2355   and
2356   test {\iffieldundef{month}}
2357   and
2358   test {\iffieldundef{origyear}}
2359   and
2360   test {\iffieldundef{origyeardivision}}
2361   and
2362   test {\iffieldundef{origmonth}}
2363   and
2364   test {\iffieldundef{hour}}
2365 }{}{%
2366   \nopunct
2367   \printtext[publication]{%
2368     \printlist{origpublisher}%
2369     \setunit*\addsemicolon\space}%
2370   \printlist{location}%
2371   \iflistundef{publisher}%
2372     {\setunit*\addcomma\space}}%
2373     {\setunit*\addcolon\space}}%
2374   \printlist{publisher}%
2375   \iffieldundef{series}%
2376     {\setunit*\addspace}}%
2377     {\setunit*\recordseriespunct}}%
2378   \printfield{series}%
2379   \setunit*\addcomma\space}%
2380   \printfield{type}%
2381   \iflistundef{publisher}%
2382     {\setunit*\addcomma\space}}%
2383     {\setunit*\addspace}}%
2384   \printfield{number}%
2385   \iffieldundef{number}{%
2386     \setunit{\addcomma\space}%
2387     \usebibmacro{origdate+time}%
2388   }{}%
2389   \setunit{\addcomma\space}%
2390   \usebibmacro{date+time}}}%

```

We provide the `endeditor` option to determine if credits should be placed before or after the publication block.

```

2391 \newtoggle{blx@ox@endeditor}
2392 \DeclareEntryOption{endeditor}[true]{%
2393   \settoggle{blx@ox@endeditor}{#1}}
2394 \newbibmacro*{pre-byeditor+others}{%
2395   \iftoggle{blx@ox@endeditor}{}%
2396   \usebibmacro{byeditor+others}%
2397 }%
2398 \newbibmacro*{post-byeditor+others}{%
2399   \iftoggle{blx@ox@endeditor}{%
2400   \usebibmacro{byeditor+others}%
2401 }%

```

We provide a specialist audio driver. It borrows elements from the book and online drivers, and incorporates the above variations.

```

2402 \DeclareBibliographyDriver{audio}{%
2403   \usebibmacro{bibindex}%
2404   \usebibmacro{begentry}%
2405   \usebibmacro{author}%
2406   \setunit{\printdelim{nametitledelim}}\newblock
2407   \usebibmacro{title}%
2408   \newunit
2409   \usebibmacro{maintitle}%
2410   \iffieldequalstr{relatedtype}{includes}{%
2411     \iftoggle{bbx:related}{%
2412       \newunit\newblock
2413       \usebibmacro{related:init}%
2414       \usebibmacro{related}%
2415       \clearfield{related}%
2416     }%
2417   }%
2418   \setunit{\addspace}
2419   \usebibmacro{onlinetype}%
2420   \setunit{\titlebyauthor\delim}\newblock
2421   \usebibmacro{byauthor}%
2422   \newunit\newblock
2423   \usebibmacro{pre-byeditor+others}%
2424   \newunit\newblock
2425   \printfield{volumes}%
2426   \newunit\newblock
2427   \printfield{note}%
2428   \newunit\newblock%
2429   \printlist{organization}%
2430   \newunit\newblock%
2431   \usebibmacro{publisher+type+series+number+date}%
2432   \setunit{\addspace}%
2433   \printfield{howpublished}%
2434   \newunit\newblock
2435   \usebibmacro{post-byeditor+others}%
2436   \newunit\newblock
2437   \iftoggle{bbx:isbn}
2438     {\printfield{isbn}}
2439   {}%
2440   \newunit\newblock
2441   \usebibmacro{doi+eprint+url}%
2442   \newunit\newblock
2443   \usebibmacro{addendum+pubstate}%
2444   \iftoggle{bbx:related}
2445     {\usebibmacro{related:init}%
2446      \usebibmacro{related}}
2447   {}%
2448   \setunit{\bibpagerefpunct}\newblock

```



```

2449 \usebibmacro{pageref}%
2450 \usebibmacro{finentry}}

```

The same driver will do very well for music, video and movie.

```

2451 \DeclareBibliographyAlias{music}{audio}
2452 \DeclareBibliographyAlias{movie}{audio}
2453 \DeclareBibliographyAlias{video}{audio}

```

In parallel with book-like entries, we provide an inaudio driver for citing tracks from an album.

```

2454 \DeclareBibliographyDriver{inaudio}{%
2455   \usebibmacro{bibindex}%
2456   \usebibmacro{begentry}%
2457   \usebibmacro{author}%
2458   \setunit{\printdelim{nametitle}{delim}}\newblock
2459   \usebibmacro{title}%
2460   \setunit{\titlebyauthor{delim}}\newblock
2461   \usebibmacro{byauthor}%
2462   \newunit\newblock
2463   \usebibmacro{in:}%
2464   \usebibmacro{bybookauthor}%
2465   \newunit\newblock
2466   \usebibmacro{maintitle+booktitle}%
2467   \iffieldequalstr{relatedtype}{includes}{%
2468     \iftoggle{bbx:related}{%
2469       \newunit\newblock
2470       \usebibmacro{related:init}%
2471       \usebibmacro{related}%
2472       \clearfield{related}%
2473     }{}%
2474   }{}%
2475   \setunit{\addspace}%
2476   \usebibmacro{onlinetype}%
2477   \newunit\newblock
2478   \usebibmacro{pre-byeditor+others}%
2479   \newunit\newblock
2480   \printfield{volumes}%
2481   \newunit\newblock
2482   \printfield{note}%
2483   \newunit\newblock%
2484   \printlist{organization}%
2485   \newunit\newblock%
2486   \usebibmacro{publisher+type+series+number+date}%
2487   \setunit{\addspace}%
2488   \printfield{howpublished}%
2489   \newunit\newblock
2490   \usebibmacro{post-byeditor+others}%
2491   \newunit\newblock
2492   \iftoggle{bbx:isbn}{
2493     {\printfield{isbn}}
2494   }{}%
2495   \newunit\newblock
2496   \usebibmacro{doi+eprint+url}%
2497   \newunit\newblock
2498   \usebibmacro{addendum+pubstate}%
2499   \iftoggle{bbx:related}{
2500     {\usebibmacro{related:init}%
2501       \usebibmacro{related}}
2502   }{}%
2503   \setunit{\bibpagerefpunct}\newblock
2504   \usebibmacro{pageref}%

```

```
2505 \usebibmacro{finentry}}
```

The same driver will do very well for inmusic, invideo and inmovie. The latter two are for completeness but probably not useful.

```
2506 \DeclareBibliographyAlias{inmusic}{inaudio}
2507 \DeclareBibliographyAlias{inmovie}{inaudio}
2508 \DeclareBibliographyAlias{invideo}{inaudio}
```

We set up appropriate inheritance rules.

```
2509 \DeclareDataInheritance{audio,music,movie,video}{inaudio,inmusic,inmovie,invideo}{%
2510 \inherit{title}{booktitle}
2511 \inherit{subtitle}{booksubtitle}
2512 \inherit{titleaddon}{booktitleaddon}
2513 \noinherit{shorttitle}
2514 \noinherit{sorttitle}
2515 \noinherit{indextitle}
2516 \noinherit{indexsorttitle}
2517 }
```

Titles for videos do not have a consistent format, so we define some entrysubtype-based variation. We also allow the use of descriptors; note that the title is transformed into a descriptor by means of an annotation, rather than using a dedicated field. This greatly simplifies the code used elsewhere.

```
2518 \DeclareFieldFormat{audio,music}{title}{%
2519 \def\currentfield{title}%
2520 \iffielddannotation{descriptor}{#1}{%
2521 \iffieldequalstr{entrysubtype}{podcast}{%
2522 \mkbibquote{#1\isdot}%
2523 }{%
2524 \mkbibemph{#1}}}%
2525 \undef\currentfield}
2526 \DeclareFieldFormat{movie,video}{title}{%
2527 \def\currentfield{title}%
2528 \iffielddannotation{descriptor}{#1}{%
2529 \ifboolexpr{
2530 test {\iffieldequalstr{entrysubtype}{episode}}
2531 or
2532 test {\iffieldequalstr{entrysubtype}{clip}}
2533 or
2534 test {\iffieldequalstr{entrysubtype}{webcast}}
2535 }{%
2536 \mkbibquote{#1\isdot}%
2537 }{%
2538 \mkbibemph{#1}}}%
2539 \undef\currentfield}
2540 \DeclareFieldFormat{inaudio,inmusic,inmovie,invideo}{title}{%
2541 \def\currentfield{title}%
2542 \iffielddannotation{descriptor}{#1}{%
2543 \mkbibquote{#1\isdot}%
2544 }{%
2545 \undef\currentfield}
2546 \DeclareFieldFormat{inaudio,inmusic}{booktitle}{%
2547 \def\currentfield{booktitle}%
2548 \iffielddannotation{descriptor}{#1}{%
2549 \iffieldequalstr{entrysubtype}{podcast}{%
2550 \mkbibquote{#1\isdot}%
2551 }{%
2552 \mkbibemph{#1}}}%
2553 }
```

```

2553 \undef\currentfield}
2554 \DeclareFieldFormat[inmovie,invideo]{booktitle}{%
2555 \def\currentfield{booktitle}%
2556 \iffielddannotation{descriptor}{#1}{%
2557 \ifboolexpr{
2558 test {\iffieldequalstr{entrysubtype}{episode}}
2559 or
2560 test {\iffieldequalstr{entrysubtype}{clip}}
2561 or
2562 test {\iffieldequalstr{entrysubtype}{webcast}}
2563 }{%
2564 \mkbibquote{#1\isdot}%
2565 }{%
2566 \mkbibemph{#1}}}%
2567 \undef\currentfield}
2568

```

The performance driver is similar to the audio driver, but instead of a publication block, it displays a set of event-related fields. With a bit of generosity, it can also work for artworks and images.

```

2569 \DeclareBibliographyDriver{performance}{%
2570 \usebibmacro{bibindex}%
2571 \usebibmacro{begentry}%
2572 \usebibmacro{author}%
2573 \setunit{\printdelim{nametitledelim}}\newblock
2574 \usebibmacro{title}%
2575 \newunit
2576 \usebibmacro{maintitle}%
2577 \iffieldequalstr{relatedtype}{includes}{%
2578 \iftoggle{bbx:related}{%
2579 \newunit\newblock
2580 \usebibmacro{related:init}%
2581 \usebibmacro{related}%
2582 \clearfield{related}%
2583 }{}%
2584 }{}%
2585 \setunit{\addspace}
2586 \usebibmacro{onlinetype}%
2587 \setunit{\titlebyauthordelim}\newblock
2588 \usebibmacro{byauthor}%
2589 \newunit\newblock
2590 \usebibmacro{pre-byeditor+others}%
2591 \setunit{\addspace}%
2592 \printfield{howpublished}%
2593 \newunit\newblock
2594 \printfield{type}%
2595 \newunit\newblock
2596 \printfield{note}%
2597 \ifboolexpr{
2598 test {\iffieldundef{origyear}}
2599 and
2600 test {\iffieldundef{origmonth}}
2601 }{}{%
2602 \setunit{\addspace}\newblock
2603 \printtext[publication]{\usebibmacro{origdate+time}}
2604 \newunit\newblock
2605 \usebibmacro{event+venue+location+date}%
2606 \newunit\newblock
2607 \usebibmacro{post-byeditor+others}%
2608 \newunit\newblock
2609 \printlist{organization}%
2610 \newunit\newblock

```

```

2611 \iftoggle{bbx:isbn}
2612   {\printfield{isbn}}
2613   {}%
2614 \newunit\newblock
2615 \usebibmacro{doi+eprint+url}%
2616 \newunit\newblock
2617 \usebibmacro{addendum+pubstate}%
2618 \iftoggle{bbx:related}
2619   {\usebibmacro{related:init}%
2620    \usebibmacro{related}}
2621   {}%
2622 \setunit{\bibpagerefpunct}\newblock
2623 \usebibmacro{pageref}%
2624 \usebibmacro{finentry}}
2625 \DeclareBibliographyAlias{image}{performance}
2626 \DeclareBibliographyAlias{artwork}{performance}

```

Here is the macro used for printing the event location and date for performances and exhibitions.

```

2627 \newbibmacro*{event+venue+location+date}{%
2628   \printfield{eventtitle}%
2629   \newunit
2630   \printfield{eventtitleaddon}%
2631   \newunit
2632   \printlist{institution}%
2633   \newunit
2634   \printfield{venue}%
2635   \newunit
2636   \printlist{location}%
2637   \newunit%
2638   \ifboolexpr{
2639     test {\iffieldundef{year}}
2640     and
2641     test {\iffieldundef{month}}}
2642   {\printeventdate}{\usebibmacro{date+time}}}
2643

```

2.1.14 DIGITAL MEDIA

Website articles and social media

The titles of web pages and similar intrinsically online resources are written in roman text within quotes.

```

2644 \DeclareFieldFormat[online,image]{title}{%
2645   \def\currentfield{title}%
2646   \iffieldannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}%
2647   \undef\currentfield}
2648

```

We provide an onlinetype macro for clarifying the type of online material. It is triggered by appropriate values of entrysubtype.

```

2649 \newbibmacro*{onlinetype}{%
2650   \ifboolexpr{
2651     test {\iffieldundef{url}}
2652     or
2653     test {\iffieldundef{entrysubtype}}}
2654   {}{%
2655     \ifbibxstring{\thefield{entrysubtype}}{%

```

```

2656 \printtext[brackets]{\bibstring{\thefield{entrysubtype}}}%
2657 }{}}

```

The changes to the online driver compared to the standard style are as follows:

- We support the use of maintitle for, say, the title of the website in which the web page is located. This comes after title.
- We insert the aforementioned onlinetype macro after maintitle.
- The date is wrapped in parentheses if present.
- We support displaying a publisher after the date; this is a legacy feature based on examples that are now deprecated.

```

2658 \DeclareBibliographyDriver{online}{%
2659   \usebibmacro{bibindex}%
2660   \usebibmacro{begentry}%
2661   \usebibmacro{author/editor+others/translator+others}%
2662   \setunit{\printdelim{nametitledelim}}\newblock
2663   \usebibmacro{title}%
2664   \newunit
2665   \usebibmacro{maintitle}
2666   \setunit{\addspace}%
2667   \usebibmacro{onlinetype}%
2668   \setunit{\titlebyauthordelim}\newblock
2669   \usebibmacro{byauthor}%
2670   \newunit\newblock
2671   \usebibmacro{byeditor+others}%
2672   \newunit\newblock
2673   \printfield{version}%
2674   \newunit
2675   \printfield{note}%
2676   \newunit\newblock
2677   \printlist{organization}%
2678   \iffieldundef{year}{%
2679     \setunit{\addspace}\newblock
2680     \printtext[parens]{\usebibmacro{date+time}}%
2681   }%
2682   \newunit\newblock
2683   \printlist{publisher}%
2684   \newunit\newblock
2685   \iftoggle{bbx:eprint}{
2686     {\usebibmacro{eprint}}
2687   }%
2688   \newunit\newblock
2689   \usebibmacro{url+urldate}%
2690   \newunit\newblock
2691   \usebibmacro{addendum+pubstate}%
2692   \iftoggle{bbx:related}{
2693     {\usebibmacro{related:init}%
2694       \usebibmacro{related}}
2695   }%
2696   \setunit{\bibpagerefpunct}\newblock
2697   \usebibmacro{pageref}%
2698   \usebibmacro{finentry}}

```

Software

The version for software goes between the title and titleaddon.

```

2699 \newbibmacro*{title+version}{%
2700   \ifboolexpr{
2701     test {\iffieldundef{title}}
2702     and
2703     test {\iffieldundef{subtitle}}
2704   }
2705   {}
2706   {\printtext[title]{%
2707     \printfield[titlecase]{title}%
2708     \setunit{\subtitlepunct}%
2709     \printfield[titlecase]{subtitle}}%
2710     \setunit{\addspace}}%
2711   \printfield{version}%
2712   \setunit{\addspace}%
2713   \printfield{titleaddon}%
2714 }
2715 \DeclareFieldFormat[software]{version}{\mkbibparens{\bibstring{version}~#1}}

```

The url date string is different for software: ‘downloaded’ rather than ‘accessed’.

```

2716 \DeclareFieldFormat[software]{urldate}{\bibstring{urldown}\space#1}

```

The software driver is a variant of the manual driver.

```

2717 \DeclareBibliographyAlias{software}{manual}

```

Datasets

The main change to the dataset driver compared to the standard style is that type, series, number, edition and organization are moved into the publication information block with publisher, location and date.

```

2718 \DeclareBibliographyDriver{dataset}{%
2719   \usebibmacro{bibindex}%
2720   \usebibmacro{begentry}%
2721   \usebibmacro{author/editor+others/translator+others}%
2722   \setunit{\printdelim{nametitledelim}}\newblock
2723   \usebibmacro{title}%
2724   \newunit
2725   \printlist{language}%
2726   \setunit{\titlebyauthordelim}\newblock
2727   \usebibmacro{byauthor}%
2728   \newunit\newblock
2729   \usebibmacro{byeditor+others}%
2730   \newunit\newblock
2731   \printfield{type}%
2732   \newunit
2733   \printfield{version}%
2734   \newunit\newblock
2735   \printfield{note}%
2736   \newunit\newblock
2737   \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
2738   \newunit\newblock
2739   \usebibmacro{doi+eprint+url}%
2740   \newunit\newblock
2741   \usebibmacro{addendum+pubstate}%
2742   \iftoggle{bbx:related}
2743     {\usebibmacro{related:init}%
2744      \usebibmacro{related}}
2745     {}%
2746   \setunit{\bibpagerefpunct}\newblock

```

```

2747 \usebibmacro{pageref}%
2748 \usebibmacro{finentry}}

```

2.1.15 LEGAL REFERENCES

Legal references are a law unto themselves, and thus require extensive fiddly coding. This entire section is adapted from *oscola* by Paul Stanley.

Entry options

```

2749 \newtoggle{bbx:scotstyle}
2750 \DeclareEntryOption{scottish-style}[true]{%
2751   \settoggle{bbx:scotstyle}{#1}}
2752 \newboolean{bbx@year-essential}\setboolean{bbx@year-essential}{false}
2753 \DeclareEntryOption{year-essential}[true]{%
2754   \setboolean{bbx@year-essential}{#1}}
2755 \newboolean{bbx@paryear-essential}\setboolean{bbx@paryear-essential}{false}
2756 \DeclareEntryOption{paryear-essential}[true]{%
2757   \setboolean{bbx@paryear-essential}{#1}}
2758 \newtoggle{blx@ox@nopostnotedelim}
2759 \newtoggle{bbx:altcourt}
2760 \DeclareBiblatexOption{global,type,entry}{court-plain}[true]{%
2761   \settoggle{bbx:altcourt}{#1}}
2762 \newtoggle{bbx@ecliuse}
2763 \newtoggle{bbx@eclionly}
2764 \DeclareBibliographyOption[string]{ecli}[yes]{%
2765   \ifstrequal{#1}{no}{%
2766     \global\togglefalse{bbx@ecliuse}%
2767     \global\togglefalse{bbx@eclionly}%
2768   }{%
2769     \global\toggletrue{bbx@ecliuse}%
2770     \ifstrequal{#1}{only}{%
2771       \global\toggletrue{bbx@eclionly}%
2772     }{}}

```

Field formats

```

2773 \DeclareFieldFormat{casenotetitle}{\mkbibquote{\mkbibemph{#1}}}
2774 \DeclareFieldFormat[jurisdiction,legislation,legal]{journaltitle}{#1}
2775 \DeclareFieldFormat[jurisdiction]{volume}{#1}
2776 \DeclareFieldFormat[jurisdiction]{titleaddon}{\mkbibparens{#1}}
2777 \DeclareFieldFormat{romanvol}{\RN{#1}}
2778 \DeclareListFormat[jurisdiction]{listb}{}
2779 \protected\def\mkusbibordinal#1{%
2780   \begingroup
2781   \@tempcnta0#1\relax\number\@tempcnta
2782   \@whilenum\@tempcnta>100\do{\advance\@tempcnta-100\relax}%
2783   \ifnum\@tempcnta>20
2784     \@whilenum\@tempcnta>9\do{\advance\@tempcnta-10\relax}%
2785   \fi
2786   \ifcase\@tempcnta th\or st\or d\or d\else th\fi
2787   \endgroup}%
2788 \DeclareFieldFormat{usseries}{\ifinteger{#1}{\mkusbibordinal{#1}}{#1}}
2789 \DeclareFieldFormat{verba}{#1}
2790
2791 \DeclareListFormat{echrinst}{%
2792   \ifboolexpr{%
2793     test {\ifnumequal{\value{listtotal}}{1}}
2794     or

```

```

2795     test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
2796   }{%
2797     \ifboolexpr{
2798       test {\ifdefstring{\Commission}{#1}}
2799       or
2800       test {\ifdefstring{\commission}{#1}}%
2801     }{%
2802       \bibstring{commissiondecision}%
2803     }{#1}%
2804   }{%
2805     \setcounter{blx@tmpcnt}{\value{listcount}}%
2806     \addtocounter{blx@tmpcnt}{1}%
2807     \ifnumequal{\value{blx@tmpcnt}}{\value{listtotal}}{%
2808       \ifnumgreater{\value{listtotal}}{2}{%
2809         #1\finalandcomma\space\bibstring{and}\addspace
2810       }{%
2811         #1\space\bibstring{and}\addspace
2812       }
2813     }{%
2814       #1\addcomma\space}}}%
2815
2816 \newcommand*{\commission}{commission}
2817 \newcommand*{\Commission}{Commission}
2818 \DeclareListFormat{ecthr}{%
2819   \ifboolexpr{
2820     test {\ifdefstring{\Commission}{#1}}
2821     or
2822     test {\ifdefstring{\commission}{#1}}
2823   }{\bibstring[\mkbibparens]{commissiondecision}\toggletrue{blx@ox@nopostnotedelim}}{}}
2824
2825 \newcommand*{\pcijrep}{PCIJ Rep}
2826 \DeclareFieldFormat{international}{%
2827   \iffieldequals{journaltitle}{\pcijrep}{%
2828     \bibcplstring{jourser}\space #1%
2829   }{#1}}
2830
2831 \DeclareListFormat{checkcontains}{%
2832   \bbx@check{#1}}
2833 \newtoggle{bbx@institutiontoggle}
2834 \newcommand\iflistcontains[2]{%
2835   \global\togglefalse{bbx@institutiontoggle}%
2836   \def\bbx@check##1{%
2837     \ifdefstring{#2}{##1}{\global\toggletrue{bbx@institutiontoggle}}{}}%
2838   \printlist[checkcontains]{#1}%
2839   \iftoggle{bbx@institutiontoggle}}
2840
2841 \DeclareFieldFormat{draftleg}{%
2842   \StrBefore{#1}{ Bill}}
2843
2844 \DeclareListFormat{billprinting}{%
2845   \ifstrequal{#1}{HC}{%
2846     \mkbibbrackets{\strfield{number}}%
2847     \toggletrue{blx@ox@nopostnotedelim}%
2848   }{%
2849     \strfield{number}%
2850     \togglefalse{blx@ox@nopostnotedelim}}}
2851
2852 \newcommand*{\treatypartysep}{\allowbreak ---\allowbreak}
2853 \DeclareListFormat{treaty}{%
2854   \ifmoreitems{%
2855     \ifnumequal{\value{listcount}}{1}{%
2856       \bibopenparen
2857     }{}}%

```



```

2858     \ifnumgreater{\value{liststop}}{\value{listcount}}{%
2859       #1\ treatysep
2860     }{%
2861       #1\ bibcloseparen}}
2862
2863 \def\siganddate#1{%
2864   \def\bbx@tempa{#1}%
2865   \expandafter\bbx@signeddatei#1/relax}
2866 \def\bbx@signeddatei#1=#2/relax{%
2867   \def\bbx@tempa{#2-}%
2868   \bibstring{#1}\space\expandafter\makebbx@datei\bbx@tempa}
2869 \def\makebbx@datei#1-#2-#3-{%
2870   \makebbx@dateii{#1}{#2}{#3}}
2871 \def\makebbx@dateii#1#2#3{%
2872   \blx@imc@stripzeros{#3}~\mkbibmonth{#2}%
2873   \space
2874   #1}
2875 \DeclareListFormat{treatydates}{%
2876   \ifnumequal{\value{listcount}}{1}{%
2877     \siganddate{#1}%
2878   }{%
2879     \addcomma\space\siganddate{#1}}
2880

```

Pagination formats

We define an alternative to `\mkpageprefix` that takes a pagination key directly.

```

2881 \newrobustcmd*{\mkrawpageprefix}[1][none]{%
2882   \begingroup
2883   \def\blx@tempa{\blx@mkpageprefix@i}%
2884   \ifstrequal{#1}{none}{}%
2885     \ifbibstring{#1}{%
2886       \def\blx@tempa{\blx@mkpageprefix{#1}}%
2887     }{%
2888       \blx@warning@entry{Unknown pagination type '#1'}}}%
2889   \@ifnextchar[%
2890     {\blx@tempa}
2891     {\blx@tempa[\@firstofone]}}
2892
2893 \newcommand*\paragraphmarkings{[]}
2894 \DeclareFieldFormat[jurisdiction,legislation,legal]{postnote}{%
2895   \iffielddundef{pagination}{%
2896     \ifboolexpr{
2897       test {\ifkeyword{eu}}
2898       or
2899       test {\ifkeyword{echr}}
2900     }{%
2901       \mkcomprange[\mkrawpageprefix[paragraph]][#1]%
2902     }{%
2903       \mkcomprange{#1}}}%
2904   }{%
2905     \iffieldequals{pagination}{\paragraphmarkings}{%
2906       \mkcomprange[\mkbibbrackets]{#1}%
2907     }{%
2908       \mkcomprange[\mkpageprefix[pagination]][#1]}}}%

```

Shorthands

With legal references, the introduction of shorthands is less verbose.

```

2909 \renewbibmacro*{shorthandintro}{%
2910 \iffieldundef{shorthandintro}
2911 {\iffieldundef{shorthand}
2912 {}
2913 {\setunit{\addspace}%
2914 \printtext[parens]{%
2915 \ifboolexpr{
2916 test {\ifentrytype{jurisdiction}}
2917 or
2918 test {\ifentrytype{legal}}
2919 or
2920 test {\ifentrytype{legislation}}
2921 }{ }{%
2922 \bibstring{citedas}\space}%
2923 \printfield{shorthand}}}}
2924 {\setunit{\addspace}%
2925 \printtext[parens]{\printfield{shorthandintro}}}}
2926

```

Common macros

```

2927 \newbibmacro*{issue/volume}{%
2928 \iffieldundef{volume}%
2929 {\iffieldundef{issue}%
2930 {}%
2931 {\printfield{issue}}}%
2932 {\printfield[default]{volume}}}
2933 \newcommand*{\subtypenewsp}{newspaper}
2934 \newbibmacro*{year+vol+report}[1][default]{%
2935 \iffieldequals{entrysubtype}{\subtypenewsp}{%
2936 \setunit{\addcomma\space}%
2937 }{%
2938 \usebibmacro{journaldate}%
2939 \setunit{\addspace}%
2940 \printfield[parens]{origyear}%
2941 \setunit{\addspace}%
2942 \printfield{volume}%
2943 \setunit{\addspace}}}%
2944 \printfield{journaltitle}%
2945 \setunit*{\addspace}%
2946 \iffieldundef{series}{ }{%
2947 \setunit{\addspace}%
2948 \printfield[#1]{series}%
2949 \setunit{\addspace}}}%
2950 \iffieldequals{entrysubtype}{\subtypenewsp}{%
2951 \setunit{\addcomma\space}%
2952 \printdate%
2953 }{ }}
2954 \newbibmacro*{journaldate}[1][ ]{%
2955 \ifboolexpr{
2956 test {\iffieldundef{#1volume}}
2957 or
2958 bool {bbx@#1year-essential}
2959 }{%
2960 \ifboolexpr{
2961 test {\ifkeyword{sc}}
2962 or
2963 test {\iftoggle{bbx:scotstyle}}
2964 }{%
2965 \setunit{\addcomma\space}%
2966 \printfield{#1year}%
2967 }{%

```

```

2968     \printfield[brackets]{#1year}}%
2969   }{%
2970     \printfield[parens]{#1year}}%
2971 \newcommand*\casenote{\casenote}
2972 \newcommand*\casenotetext{\bibstring{casenote}}
2973 \newbibmacro{journaltitle}{%
2974   \iffieldequals{entrysubtype}{\casenote}{%
2975     \iffieldundef{crossref}{%
2976       \usebibmacro{title}%
2977     }{%
2978       \iffieldundef{note}{%
2979         \restorefield{note}{\casenotetext}%
2980       }{%
2981         \ifboolexpr{
2982           test {\iffootnote}
2983           and test {\iftoggle{bbx@samefootnote}}
2984           and test {\iffieldequals{crossref}{\blx@lastkey@foot}}%
2985         }{\printfield[casenotetitle]{title}}}%
2986       }{%
2987         \usebibmacro{title}}}%
2988 \newbibmacro*{unreported}[1][default]{%
2989   \iffieldundef{verba}{%
2990     \ifboolexpr{
2991       test {\iflistundef{institution}}
2992       and
2993       test {\iffieldundef{date}}
2994       and
2995       test {\iffieldundef{year}}
2996     }{%
2997       \ifboolexpr{
2998         test {\iffieldundef{date}}
2999         and
3000         test {\iffieldundef{year}}
3001       }{%
3002         \mkbibparens{\printlist[jurisdiction]{institution}}%
3003       }{%
3004         \toggletrue{blx@ox@nopostnotedelim}%
3005         \iflistundef{institution}{%
3006           \mkbibparens{\usebibmacro{date}}%
3007         }{%
3008           \printtext[parens]{%
3009             \printlist[#1]{institution}%
3010             \setunit{\addcomma\space}
3011             \usebibmacro{date}}}%}%
3012       }{%
3013         \iftoggle{bbx@ecliuse}{}%
3014         \printfield{verba}}}%
3015 \newbibmacro{court-note}{%
3016   \iffieldundef{note}%
3017   }{%
3018     {\printfield{note}%
3019     \toggletrue{blx@ox@nopostnotedelim}}}
3020 \newbibmacro*{jurisdictionpages}{%
3021   \let\origadddot\adddot
3022   \def\adddot{}%
3023   \iffieldequals{entrysubtype}{\subtypenewsp}{}%
3024   \setunit{\addspace}%
3025   \printfield{pages}%
3026   \let\adddot\origadddot
3027 }
3028 \newbibmacro{pcitenote}{%
3029   \iffieldundef{parreporter}{}%
3030   \setunit{\addcomma\space}%

```

```

3031     \iffielddundef{postnote}}{%
3032     \printfield{postnote}%
3033     \clearfield{postnote}%
3034     \setunit{\addsemicolon\space}}}}
3035 \newbibmacro*{courtid}{%
3036 \iffielddundef{number}{%
3037 \ifboolexpr{
3038   test {\iflistundef{institution}}
3039   and
3040   test {\iffielddundef{location}}%
3041 }{%
3042   \togglefalse{blx@ox@nopostnotedelim}%
3043 }{%
3044   \ifboolexpr{%
3045     test {\iffielddundef{journaltitle}}
3046     or
3047     not togl {bbx:altcourt}}
3048 }{%
3049   \printtext[parens]{%
3050     \printfield{location}%
3051     \setunit{\addspace}%
3052     \printlist{institution}%
3053     \usebibmacro{unrep:date}}%
3054   \toggletrue{blx@ox@nopostnotedelim}
3055 }{%
3056   \setunit{\addcomma\space}%
3057   \printfield{location}%
3058   \setunit*\addspace}%
3059   \printlist{institution}}}%
3060 }{%
3061   \togglefalse{blx@ox@nopostnotedelim}}}}
3062 \newbibmacro*{unrep:date}{%
3063 \ifboolexpr{
3064   test {\iffielddundef{journaltitle}}%
3065   and
3066   test {\iffielddundef{number}}%
3067   and
3068   test {\iffielddundef{neutralcite}}%
3069 }{%
3070   \setunit{\addcomma\space}%
3071   \usebibmacro{date}%
3072 }{}}
3073

```

Legal cases

There are different formats depending on the jurisdiction.

```

3074 \DeclareBibliographyDriver{jurisdiction}{%
3075   \usebibmacro{bibindex}%
3076   \usebibmacro{begentry}%
3077   \usebibmacro{juriscitation}%
3078   \usebibmacro{doi+eprint+url}%
3079   \setunit{\addspace}%\newblock
3080   \usebibmacro{addendum+pubstate}%
3081   \setunit{\addspace}%\newblock
3082   \iftoggle{bbx:related}
3083     {\usebibmacro{related:init}%
3084     \usebibmacro{related}}
3085     {}%
3086   \setunit{\bibpagerefpunct}\newblock
3087   \usebibmacro{pageref}%

```

```

3088 \usebibmacro{finentry}}
3089 \newtoggle{bbx@juriscitedone}
3090 \newbibmacro{juriscitation}{%
3091 \togglefalse{bbx@juriscitedone}%
3092 \renewcommand{\do}[1]{%
3093 \ifkeyword{##1}{%
3094 \toggletrue{bbx@juriscitedone}\usebibmacro{##1juriscitation}%
3095 \listbreak
3096 }{}%
3097 \docsvlist{eu,echr,int,ca,us}%
3098 \iftoggle{bbx@juriscitedone}{}{\usebibmacro{enjuriscitation}}%
3099 }

```

Here is the format for EU cases.

```

3100 \newtoggle{bbx@commissiondecision}
3101 \newbibmacro*{eujuriscitation}{%
3102 \ifboolexpr{
3103 test {\iflistcontains{institution}{\commission}}
3104 or
3105 test {\iflistcontains{institution}{\Commission}}}
3106 }{%
3107 \toggletrue{bbx@commissiondecision}%
3108 }{%
3109 \togglefalse{bbx@commissiondecision}}%
3110 \iftoggle{bbx@commissiondecision}{}{%
3111 \usebibmacro{eucasenumber}}%
3112 \usebibmacro{title}%
3113 \setunit{\addspace}%
3114 \iftoggle{bbx@commissiondecision}{%
3115 \usebibmacro{eucommissiondecision}}{}%
3116 \setunit{\addspace}%
3117 \usebibmacro{eu:reportinfo}%
3118 \iftoggle{bbx@commissiondecision}{%
3119 \setunit{\addcomma\space}%
3120 }{%
3121 \setunit{\addspace}}%
3122 \usebibmacro{altreportdetails}%
3123 \usebibmacro{court-note}%
3124 }
3125 \newcommand*{\oxrefand{ and }}
3126 \newbibmacro{eucasetype}{%
3127 \iffieldundef{type}{%
3128 \ifboolexpr{
3129 test {\IfSubStr{\thefield{number}}{,}}
3130 or
3131 test {\IfSubStr{\thefield{number}}{--}}
3132 or
3133 test {\IfSubStr{\thefield{number}}{\oxrefand}}}
3134 }{%
3135 \bibstring{eujoinedcases}%
3136 }{%
3137 \bibstring{eucase}}%
3138 }{%
3139 \printfield{type}}%
3140 }
3141 \newbibmacro{eucasenumber}{%
3142 \usebibmacro{eucasetype}%
3143 \setunit{\addnbspace}%
3144 \printfield{number}%
3145 \setunit{\addspace}}
3146 \newbibmacro{eucommissiondecision}{%
3147 \iffieldundef{userb}{%

```

```

3148     \iffielddundef{number}{}{%
3149         \printtext[parens]{%
3150             \usebibmacro{eucasetype}%
3151             \setunit{\addnbspace}%
3152             \printfield{number}}}%
3153     }{%
3154         \printtext[parens]{%
3155             \printfield{userb}}%
3156         \setunit{\addspace}%
3157         \iffielddundef{number}{}{%
3158             \iffielddundef{type} {%
3159                 \setunit{\addspace\bibstring{commissiondecision}\addspace}%
3160             }{%
3161                 \setunit{\addspace\printfield{type}\addspace}}%
3162             \printfield{number}}}%
3163     }%
3164 }
3165 \newbibmacro*{eu:reportinfo}{%
3166     \iftoggle{bbx@ecionly}{%
3167         \iffielddundef{verba}{%
3168             \usebibmacro{eu:osreport}
3169         }{%
3170             \printfield{verba}}%
3171     }{%
3172         \usebibmacro{eu:osreport}}}
3173 \newbibmacro*{eu:osreport}{%
3174     \iftoggle{bbx@ecliuse}{%
3175         \iffielddundef{verba}{}{%
3176             \printfield{verba}%
3177             \setunit{\addcomma\space}}%
3178     }{}%
3179     \iffielddundef{journaltitle}{%
3180         \usebibmacro{unreported}%
3181     }{%
3182         \usebibmacro{eu:year+vol+report}}}
3183 \newcommand*{\officialjournaltitle{OJ}}
3184 \newcommand*{\ecrreporttitle{ECR}}
3185 \newbibmacro*{eu:year+vol+report}{%
3186     \iffieldequals{journaltitle}{\ecrreporttitle}{%
3187         \printfield[brackets]{year}%
3188         \setunit{\addspace}%
3189         \printfield{journaltitle}%
3190         \setunit{\addspace}%
3191         \printfield{volume}%
3192         \setunit*{\printtext{--\allowbreak}}}%
3193         \printfield{pages}%
3194     }{%
3195         \iffieldequals{journaltitle}{\officialjournaltitle}{%
3196             \printfield[brackets]{year}%
3197             \setunit{\addspace}%
3198             \printfield{journaltitle}%
3199             \setunit{\addspace}%
3200             \printfield[default]{series}%
3201             \usebibmacro{issue/volume}%
3202             \setunit{\printtext{\slash}}%
3203             \printfield{pages}%
3204         }{%
3205             \usebibmacro{year+vol+report}}}
3206

```

Here is the format for European Human Rights cases.

```

3207 \newbibmacro*{echrjuriscitation}{%
3208   \usebibmacro{title}%
3209   \setunit{\addspace}\newblock
3210   \iffielddundef{number}{}{%
3211     \printtext[parens]{%
3212       \def\adddot{}%
3213       \bibstring{application}\space
3214       \bibstring{number}\space
3215       \printfield{number}}%
3216     \setunit{\addspace}\newblock}%
3217 \iffielddundef{journaltitle}{%
3218   \usebibmacro{unreported}[echrinst]%
3219 }{%
3220   \usebibmacro{echr:year+vol+report}
3221   \setunit{\addspace}\newblock
3222   \usebibmacro{echr:courtid}}%
3223 \setunit{\addspace}%
3224 \usebibmacro{court-note}%
3225 \newblock
3226 \setunit{\addspace}}
3227 \newcommand*{\seriesa}{Series A}
3228 \newcommand*{\echrreports}{ECHR}
3229 \newbibmacro*{echr:year+vol+report}{%
3230   \iffieldequals{journaltitle}{\seriesa}{%
3231     \usebibmacro{seriesareport}%
3232   }{%
3233     \iffieldequals{journaltitle}{\echrreports}{%
3234       \usebibmacro{echrreports}%
3235     }{%
3236       \usebibmacro{year+vol+report}
3237       \setunit{\addspace}%
3238       \printfield{pages}}}}
3239 \newbibmacro*{seriesareport}{%
3240   \printfield[parens]{year}%
3241   \setunit{\addspace}%
3242   \printfield{journaltitle}%
3243   \setunit{\addspace}%
3244   \printtext{\def\adddot{}\bibstring{number}\addspace}%
3245   \printfield{pages}}
3246 \newbibmacro*{echrreports}{%
3247   \printfield{journaltitle}%
3248   \setunit{\addspace}%
3249   \printfield{year}%
3250   \iffielddundef{volume}{}{%
3251     \printtext{--}\printfield[romanvol]{volume}}
3252   \setunit{\addspace}%
3253   \printfield{pages}}
3254 \newcommand*{\decisionsandreports}{DR}
3255 \newcommand*{\collectionofdecisions}{CD}
3256 \newbibmacro*{echr:courtid}{%
3257   \ifboolexpr{
3258     test {\iffieldequals{journaltitle}{\decisionsandreports}}
3259     or
3260     test {\iffieldequals{journaltitle}{\collectionofdecisions}}}%
3261   }{%
3262     \printlist[ecthr]{institution}}
3263

```

Here is the format for international cases.

```

3264 \newbibmacro*{intjuriscitation}{%
3265   \iflistundef{institution}{%
3266     \setunit{}\printtext{}%

```

```

3267 }{%
3268   \printlist{institution}%
3269   \setunit{\addcomma\space}}%
3270 \usebibmacro{int:title}%
3271 \setunit{\addspace}\newblock
3272 \iffieldundef{journaltitle}{%
3273   \printfield{number}%
3274   \setunit{\addspace}\newblock
3275   \printtext[parens]{\printdate}%
3276 }{%
3277   \usebibmacro{year+vol+report}[international]%
3278 }%
3279 \setunit{\addspace}%
3280 \usebibmacro{int:jurisdictionpages}%
3281 \setunit{\addspace}\newblock
3282 \usebibmacro{court-note}%
3283 }
3284 \newbibmacro*{int:title}{%
3285   \ifboolexpr{
3286     test {\iffieldundef{title}}
3287     and
3288     test {\iffieldundef{subtitle}}
3289   }{%
3290     \printtext[title]{%
3291       \printfield[titlecase]{title}%
3292       \setunit{\addspace}%
3293       \printfield[parens]{subtitle}}}%
3294   \setunit{\addspace}%
3295   \printfield{titleaddon}%
3296 }
3297 \newbibmacro*{int:jurisdictionpages}{%
3298   \let\origaddot\adddot
3299   \def\adddot{}%
3300   \iffieldequals{journaltitle}{\pcijrep}{%
3301     \printtext{\bibcpstring{number}\addspace}%
3302     \iffieldundef{pages}{%
3303       \printfield{number}%
3304     }{%
3305       \printfield{pages}}}%
3306   }{%
3307     \printfield{pages}}%
3308   \let\addot\origaddot
3309 }
3310

```

Here is the format for Canadian cases.

```

3311 \newbibmacro{cajuriscitation}{%
3312   \usebibmacro{title}%
3313   \setunit{\cacasetitlepunct}\newblock
3314   \printfield{number}%
3315   \setunit{\addcomma\space}%
3316   \iffieldundef{journaltitle}{%
3317     \usebibmacro{can:year+vol+report}}%
3318   \usebibmacro{jurisdictionpages}%
3319   \usebibmacro{pcitenote}%
3320   \usebibmacro{altreportdetails}%
3321   \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
3322   \newunit\newblock
3323   \usebibmacro{courtid}%
3324   \newunit%
3325   \usebibmacro{court-note}%
3326   \newblock%

```



```

3327 \newunit}
3328 \newbibmacro*{can:year+vol+report}{%
3329 \iffieldundef{number}{%
3330 \setunit{\addspace}%
3331 }{%
3332 \ifboolexpr{
3333 test {\iffieldundef{volume}}
3334 or
3335 bool {bbx@year-essential}}%
3336 }{}%
3337 \clearfield{year}}}%
3338 \iffieldequals{entrysubtype}{\subtypenewsp}{}{%
3339 \iffieldundef{year}{}%
3340 \usebibmacro{journaldate}%
3341 \setunit{\addspace}}%
3342 \printfield{volume}%
3343 \setunit{\addspace}%
3344 \printfield{journaltitle}%
3345 \setunit*{\addspace}%
3346 \iffieldundef{series}{}%
3347 \setunit{\addspace}%
3348 \printtext[parens]{\printfield[usseries]{series}}%
3349 \setunit{\addspace}%
3350 \iffieldequals{entrysubtype}{\subtypenewsp}{%
3351 \setunit{\addcomma\space}%
3352 \usebibmacro{newspaperdate}%
3353 }{}%

```

Here is the format for American cases.

```

3354 \newbibmacro{usjuriscitation}{%
3355 \usebibmacro{title}%
3356 \setunit{\uscasetitlepunct}\newblock%
3357 \iffieldundef{journaltitle}{%
3358 \printfield{number}%
3359 \setunit{\addcomma\space}%
3360 \printfield[default]{eprint}%
3361 \clearfield{eprint}%
3362 }{
3363 \usebibmacro{us:vol+report}}%
3364 \setunit{\addspace}%
3365 \usebibmacro{jurisdictionpages}%
3366 \usebibmacro{us:postnote}%
3367 \usebibmacro{altreportdetails}%
3368 \setunit{\addspace}\newblock
3369 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
3370 \setunit{\addspace}%
3371 \usebibmacro{us:courtid+date}%
3372 \setunit{\addspace}%
3373 \usebibmacro{court-note}%
3374 \newblock
3375 \setunit{\addspace}}
3376 \newbibmacro{us:vol+report}{%
3377 \printfield{volume}%
3378 \setunit{\addspace}%
3379 \printfield{journaltitle}%
3380 \iffieldundef{series}{}%
3381 \setunit{\addspace}%
3382 \printfield[usseries]{series}}%
3383 \newbibmacro{us:postnote}{%
3384 \iffieldundef{postnote}{}%
3385 \setunit{\addcomma\space}%
3386 \printfield{postnote}%

```

```

3387     \clearfield{postnote}%
3388   }}
3389 \newbibmacro{us:courtid+date}{%
3390   \ifbool{expr{
3391     test {\iflistundef{institution}}
3392     and
3393     test {\iflistundef{location}}
3394     and
3395     test {\iffieldundef{year}}
3396   }}{%
3397     \printtext[parens]{%
3398       \printlist{location}%
3399       \setunit*\addspace%
3400       \printlist{institution}%
3401       \setunit*\addspace%
3402       \printfield{year}%
3403       \nopunct}}}
3404

```

Here is the format for English cases.

```

3405 \newbibmacro{enjuriscitation}{%
3406   \usebibmacro{title}%
3407   \setunit*\addspace\newblock
3408   \printfield{neutralcite}%
3409   \setunit*\addcomma\space%
3410   \printfield{number}%
3411   \setunit*\addcomma\space%
3412   \iffieldundef{journaltitle}{%
3413     \usebibmacro{year+vol+report}}%
3414   \usebibmacro{jurisdictionpages}%
3415   \usebibmacro{pcitenote}%
3416   \usebibmacro{altreportdetails}%
3417   \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}% additional reports
3418   \setunit*\addspace\newblock
3419   \usebibmacro{courtid}%
3420   \setunit*\addspace%
3421   \usebibmacro{court-note}}
3422 \newbibmacro{altreportdetails}{%
3423   \restorefield{prenote}{\postnotessecond}%
3424   \iffieldundef{parreporter}{%
3425     \usebibmacro{journaldate}[par}%
3426     \setunit*\addspace\newblock
3427     \usebibmacro{altreportvolume}%
3428     \setunit*\addspace\newblock
3429     \usebibmacro{altjournaltitle}%
3430     \setunit*\addspace\newblock
3431     \usebibmacro{altseries}%
3432     \setunit*\addspace\newblock
3433     \usebibmacro{altjurisdictionpages}%
3434     \iffieldundef{prenote}{%
3435       \setunit*\addcomma\space%
3436       \printfield[postnote]{prenote}}}}
3437 \newbibmacro*{altreportvolume}{%
3438   \iffieldundef{parvolume}{%
3439     \printfield{parvolume}}}
3440 \newbibmacro*{altjournaltitle}{%
3441   \iffieldundef{parreporter}{%
3442     \printfield{parreporter}}}
3443 \newbibmacro*{altseries}{%
3444   \iffieldundef{parseries}{%
3445     \printfield{parseries}}}
3446 \newbibmacro*{altjurisdictionpages}{%

```

```

3447 \iffielddundef{parpages}}{%
3448 \printfield{parpages}}}%
3449

```

Legislation

Legislation tends to have a more consistent format, though European entries need special handling.

```

3450 \newcommand*{\subtypecourtrules}{procedure-rule}
3451 \DeclareBibliographyDriver{legislation}{%
3452   \usebibmacro{bibindex}%
3453   \usebibmacro{begentry}%
3454   \iffieldequals{entrysubtype}{\subtypecourtrules}{%
3455     \usebibmacro{courtrules}%
3456   }{%
3457     \ifkeyword{draft}{%
3458       \usebibmacro{legislation:bill}%
3459     }{%
3460       \ifkeyword{eu}{%
3461         \usebibmacro{eulegislation}%
3462       }{%
3463         \printfield[default]{title}%
3464         \setunit{\addspace}%
3465         \printfield[default]{year}%
3466         \setunit*{\addspace}%
3467         \usebibmacro{legnumber}%
3468         \setunit{\addspace}\newblock
3469         \usebibmacro{legsupp}}}%
3470     \setunit{\addcomma\space}%
3471     \printfield{note}%
3472     \setunit{\bibpagerefpunct}\newblock
3473     \usebibmacro{pageref}%
3474     \usebibmacro{finentry}}
3475 \newbibmacro*{courtrules}{%
3476   \restorefield{prenote}{\postnotessecond}%
3477   \iffieldequalstr{shorttitle}{PD}{%
3478     \printfield{postnote}%
3479     \clearfield{postnote}%
3480     \setunit{\addspace}%
3481   }{%
3482     \iffielddundef{shorttitle}{%
3483       \printfield[default]{title}%
3484     }{%
3485       \printfield[default]{shorttitle}}%
3486     \setunit{\addspace}\newblock
3487   \iffielddundef{postnote}{%
3488     \toggletrue{blx@ox@nopostnotedelim}%
3489   }{%
3490     \iffieldequalstr{shorttitle}{CPR}{%
3491       \printfield{postnote}%
3492       \setunit{\addspace}%
3493     }{%
3494       \printtext{%
3495         \bibstring{order}\space
3496         \printfield{postnote}%
3497         \setunit{\addcomma\space}}}%
3498     \restorefield{postnote}{\postnotessecond}%
3499     \usebibmacro{postnote}%
3500     \clearfield{postnote}%
3501     \setunit{\addspace}\newblock}

```

```

3502 \newcommand*{\subtypeprimarylegislation}{primary}
3503 \newbibmacro*{legislation:bill}{%
3504   \printfield[draftleg]{title}%
3505   \setunit{\addspace}%
3506   \printlist{institution}%
3507   \setunit*{\addspace}%
3508   \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
3509     \bibcpstring{bill}%
3510     \setunit{\addspace}%
3511     \printtext[parens]{\usebibmacro{sessionyear}}%
3512     \setunit{\addspace}%
3513     \iffieldundef{number}{}{%
3514       \printlist[billprinting]{institution}}%
3515   }{%
3516     \printtext[parens]{%
3517       \bibstring{draft}\space
3518       \printdate}}
3519   \setunit{\addspace}}
3520 \newbibmacro*{sessionyear}{%
3521   \iffieldundef{year}{}{%
3522     \printfield{year}%
3523     \iffieldundef{endyear}{}{%
3524       \bibdaterangesep
3525       \blx@ox@compyear{\thefield{year}}{\thefield{endyear}}}}
3526 \newbibmacro{eulegislation}{%
3527   \printfield[default]{title}%
3528   \setunit{\addspace}\newblock%
3529   \usebibmacro{eulegref}}
3530 \newcommand*{\ojsspecedtitle}{OJ Spec Ed}
3531 \newbibmacro*{eulegref}{%
3532   \iffieldequals{journaltitle}{\officialjournaltitle}{%
3533     \printfield[brackets]{year}%
3534     \setunit{\addspace}%
3535     \printfield{journaltitle}%
3536     \setunit{\addspace}%
3537     \iffieldundef{series}{%
3538       \printtext{L}%
3539     }{%
3540       \printfield[default]{series}}%
3541   \usebibmacro{issue/volume}%
3542   \setunit*{\addslash}%
3543   \printfield{pages}%
3544   \togglefalse{blx@ox@nopostnotedelim}%
3545 }{%
3546   \usebibmacro{year+vol+report}%
3547   \setunit*{\addspace}%
3548   \printfield{pages}}
3549 \newbibmacro*{legnumber}{%
3550   \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
3551     \ifboolexpr{(
3552       test {\iffieldundef{number}}
3553       or
3554       not test {\iffieldundef{title}} )
3555     and not (
3556       test {\ifkeyword{cy}}
3557       or
3558       test {\ifkeyword{sc}}
3559       or
3560       test {\ifkeyword{ni}} )
3561     )}{%
3562     \printtext[parens]{\printfield{number}}%
3563     \toggletrue{blx@ox@nopostnotedelim}}%
3564   }{%

```

```

3565 \iffielddundef{number}{}{
3566 \setunit{\addcomma\addspace}%
3567 \printfield{number}%
3568 \togglefalse{blx@ox@nopostnotedelim}}}}

```

This adds additional material for Welsh statutory instruments.

```

3569 \newbibmacro*{legsupp}{
3570 \ifkeyword{cy}
3571 {\iffielddundef{userb}
3572 {}
3573 {\printtext{\mkbibparens{\printfield{userb}}}\toggletrue{blx@ox@nopostnotedelim}}}
3574 {}
3575 }

```

Treaties, explanatory notes and Hansard

```

3576 \newcommand*{\explanatorynote}{explanatory note}
3577 \newcommand*{\parliamentarytype}{parliamentary}
3578 \newcommand*{\treatysubtype}{piltreaty}
3579 \DeclareBibliographyDriver{legal}{
3580 \usebibmacro{bibindex}%
3581 \usebibmacro{begentry}%
3582 \iffieldequals{entrysubtype}{\explanatorynote}{
3583 \printfield[default]{title}%
3584 \setunit{\addspace}\newblock
3585 }{
3586 \iffieldequals{entrysubtype}{\parliamentarytype}{
3587 \usebibmacro{legal:parliamentary}%
3588 }{
3589 \usebibmacro{treatycitation}}}%
3590 \setunit{\addcomma\space}\newblock
3591 \printfield[default]{note}
3592 \setunit{\addspace}\newblock
3593 \iftoggle{bbx:related}
3594 {\usebibmacro{related:init}%
3595 \usebibmacro{related}}
3596 {}%
3597 \setunit{\bibpagerefpunct}%
3598 \usebibmacro{pageref}%
3599 \usebibmacro{finentry}}
3600 \newbibmacro{legal:parliamentary}{
3601 \printfield[default]{title}%
3602 \newunit\newblock
3603 \printfield{type}%
3604 \setunit{\addspace}%
3605 \iffielddundef{series}{}{
3606 \printtext[parens]{
3607 \biblstring{jourser}\space
3608 \printfield{series}}}%
3609 \setunit{\addspace}%
3610 \printfield{volume}%
3611 \setunit{\addcomma\space}%
3612 \usebibmacro{hansard-ref}%
3613 \setunit{\addspace}%
3614 \iffielddundef{year}{}{
3615 \printtext[parens]{\usebibmacro{date}}}%
3616 \togglefalse{blx@ox@nopostnotedelim}}
3617 \newbibmacro*{hansard-ref}{
3618 \iffielddundef{postnote}{
3619 \iffielddundef{pages}{}{

```

```

3620     \printfield{pages}}%
3621   }{}%
3622 \newbibmacro{treatycitation}{%
3623   \printfield[default]{title}%
3624   \setunit{\addspace}\newblock%
3625   \printlist[treaty]{institution}%
3626   \setunit{\addspace}\newblock
3627   \usebibmacro{treatyinfo}%
3628   \setunit{\addspace}\newblock
3629   \usebibmacro{treaty:year+vol+report}}
3630 \newbibmacro{treatyinfo}{%
3631   \iflistundef{lista}{% execution
3632     \iffieldundef{year}{}%
3633     \iffieldundef{volume}{}%
3634     \printtext[parens]{\printdate}}}%
3635   }{%
3636     \printtext[parens]{\printlist[treatydates]{lista}}}}
3637 \newbibmacro{treaty:year+vol+report}{%
3638   \iffieldequals{journaltitle}{\officialjournaltitle}{%
3639     \usebibmacro{eulegref}%
3640   }{%
3641     \usebibmacro{treaty:date}%
3642     \setunit{\addspace}%
3643     \printfield[default]{volume}%
3644     \setunit{\addspace}%
3645     \printfield{journaltitle}%
3646     \setunit*{\addspace}%
3647     \iffieldundef{series}{%
3648       \printfield{type}%
3649       \setunit*{\addspace}%
3650     }{%
3651       \printfield{series}%
3652       \iffieldundef{type}{%
3653         \setunit{\addspace}%
3654         \bibcpstring{number}%
3655         \setunit{\addspace}%
3656       }{%
3657         \setunit{\addcomma\space}%
3658       }}
3659     \printfield{number}%
3660     \setunit*{\addspace}%
3661     \printfield{pages}}}%
3662 \newbibmacro*{treaty:date}{%
3663   \ifboolexpr{
3664     test {\iffieldundef{volume}}
3665     or
3666     bool {bbx@year-essential}}
3667   }{%
3668     \ifboolexpr{
3669       test {\ifkeyword{sc}}
3670       or
3671       test {\iftoggle{bbx:scotstyle}}
3672     }{%
3673       \printfield{year}%
3674     }{%
3675       \printfield[brackets]{year}%
3676     }}}%
3677

```

We don't really deal with commentaries as distinct from books.

```

3678 \DeclareBibliographyAlias{commentary}{book}

```

2.1.16 MANUSCRIPTS

In the spirit of compatibility, this code is adapted from biblatex-manuscripts-philology by Maïeul Rouquette.

Here are the additional punctuation commands.

```
3679 \newcommand{\locationlibrarypunct}{\addcomma\addspace}
3680 \newcommand{\collectionshelfmarkpunct}{\addspace}
3681 \newcommand{\datingpagespunct}{\addcomma\addspace}
3682 \newcommand{\librarycollectionpunct}{\addcomma\addspace}
3683 \newcommand{\pagetotalpagespunct}{\addcomma\addspace}
3684 \newcommand{\columnslayerpunct}{\addsemicolon\addspace}%
```

Here are the configurable macros for the two sides of a folio.

```
3685 \def\recto{r}
3686 \def\verso{v}
3687 \NumCheckSetup{\def\recto{}\def\verso{}}
```

Here are some special field formats for the manuscript driver. Note that the title is transformed into a descriptor by means of an annotation, rather than using a dedicated field. This greatly simplifies the code used elsewhere.

```
3688 \DeclareFieldFormat[manuscript,unpublished]{title}{%
3689   \def\currentfield{title}%
3690   \iffielddannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}%
3691   \undef\currentfield}
3692 \DeclareFieldFormat{columns+layer}{\mkbibparens{#1}}
3693 \DeclareFieldFormat{columns}{\mkbibparens{#1}}
3694 \DeclareFieldFormat{layer}{\mkbibparens{#1}}
3695 \DeclareFieldFormat{dating}{#1\isdot}%
3696 \DeclareFieldFormat{support}{\iffibstring{#1}{\bibstring{#1}}{#1}}
```

Here are the unique bibmacros used by the manuscripts driver. We hide the date if there is no author or title to prevent it appearing as the first element in the reference. Similarly, we hide the (vague) dating field if the (exact) date is displayed.

```
3697 \newbibmacro{manuscript:date}{%
3698   \ifboolexpr{
3699     test {\ifnameundef{author}}
3700     and
3701     test {\iffieldundef{title}}
3702     and
3703     test {\iffieldundef{label}}
3704   }{\usebibmacro{date}}
3705 \newbibmacro{dating}{%
3706   \ifboolexpr{(
3707     test {\ifnameundef{author}}
3708     and
3709     test {\iffieldundef{title}}
3710     and
3711     test {\iffieldundef{label}}
3712   ) or
3713     test {\iffieldundef{year}}
3714   }{%
3715     \printfield{dating}%
3716   }}}
```

We follow the structure of the biblatex-manuscripts-philology approach to allow special formatting to be applied to the collection and shelfmark, but we do not actually apply any.

```

3717 \newbibmacro{location+library+collection+shelfmark}{%
3718   \printfield{library}%
3719   \setunit{\locationlibrarypunct}%
3720   \printlist{location}%
3721   \setunit{\librarycollectionpunct}%
3722   \usebibmacro{collection+shelfmark}}
3723 \newbibmacro{collection+shelfmark}{%
3724   \ifboolexpr{
3725     test {\iffieldundef{collection}}
3726     and
3727     test {\iffieldundef{shelfmark}}
3728   }{%
3729     \printtext[collection+shelfmark]{%
3730       \printfield{collection}%
3731       \setunit*{\collectionshelfmarkpunct}%
3732       \printfield{shelfmark}}}%

```

Again, following biblatex-manuscripts-philology, we allow different formatting to be applied to columns and layers according to whether they occur adjacently or not, as they might be separated by a page specification.

```

3733 \newbibmacro{manuscript:pages}{%
3734   \printfield{pagetotal}%
3735   \setunit{\addspace}%
3736   \iffieldundef{pages}{%
3737     \usebibmacro{manuscript:columns+layer}%
3738   }{%
3739     \usebibmacro{manuscript:columns}%
3740     \setunit{\pagetotalpagespunct}%
3741     \printfield{pages}%
3742     \setunit{\addspace}%
3743     \usebibmacro{manuscript:layer}}}
3744 \newbibmacro{manuscript:columns}{%
3745   \iffieldundef{columns}{}%
3746   \printtext[columns]{\bibstring{\strfield{columns}column}}}%
3747 }%
3748 \newbibmacro{manuscript:layer}{%
3749   \iffieldundef{layer}{}%
3750   \printtext[layer]{\bibstring{\strfield{layer}layer}}}%
3751 }%
3752 \newbibmacro{manuscript:columns+layer}{%
3753   \ifboolexpr{
3754     test {\iffieldundef{columns}}
3755     or
3756     test{\iffieldundef{layer}}
3757   }{%
3758     \usebibmacro{manuscript:columns}%
3759     \usebibmacro{manuscript:layer}%
3760   }{%
3761     \printtext[columns+layer]{%
3762       \bibstring{\strfield{columns}column}%
3763       \setunit*{\columnslayerpunct}%
3764       \bibstring{\strfield{layer}layer}}}%

```

Putting it all together, here is the manuscript driver.

```

3765 \DeclareBibliographyDriver{manuscript}{%
3766   \usebibmacro{bibindex}%
3767   \usebibmacro{begentry}%
3768   \usebibmacro{author}%
3769   \setunit{\printdelim{nametitledelim}}\newblock
3770   \usebibmacro{title}%

```



```

3771 \setunit{\titlebyauthordelim}\newblock
3772 \usebibmacro{byauthor}%
3773 \newunit\newblock
3774 \printfield{howpublished}%
3775 \newunit\newblock
3776 \printfield{note}%
3777 \newunit\newblock
3778 \usebibmacro{manuscript:date}%
3779 \newunit\newblock
3780 \usebibmacro{location+library+collection+shelfmark}%
3781 \newunit
3782 \printfield{support}%
3783 \newunit
3784 \usebibmacro{dating}%
3785 \setunit{\datingpagespunct}
3786 \usebibmacro{manuscript:pages}
3787 \newunit\newblock%
3788 \iftoggle{bbx:url}{%
3789   \usebibmacro{url+urldate}%
3790 }{%
3791 \iftoggle{bbx:related}{%
3792   \usebibmacro{related:init}%
3793   \usebibmacro{related}%
3794 }{%
3795 \setunit{\bibpagerefpunct}\newblock
3796 \usebibmacro{pageref}%
3797 \usebibmacro{finentry}}

```

We provide an alternative bibmacro for doing much the same but with the regular biblatex fields.

```

3798 \newbibmacro*{library+location+series+number}{%
3799   \printfield{library}%
3800   \setunit{\locationlibrarypunct}%
3801   \printlist{location}%
3802   \setunit{\librarycollectionpunct}%
3803   \ifboolexpr{
3804     test {\iffieldundef{series}}
3805     and
3806     test {\iffieldundef{number}}
3807   }{%
3808     \printtext[collection+shelfmark]{%
3809       \printfield{series}%
3810       \setunit*{\collectionshelfmarkpunct}%
3811       \printfield{number}}}%

```

Lastly, we adapt the unpublished driver to allow it to do a similar thing but with the regular biblatex fields. The presence of the library field is what triggers ‘manuscript mode’.

```

3812 \newtoggle{blx@ox@ms}
3813 \DeclareBibliographyDriver{unpublished}{%
3814   \usebibmacro{bibindex}%
3815   \usebibmacro{begentry}%
3816   \iffieldundef{library}{\togglefalse{blx@ox@ms}}{\toggletrue{blx@ox@ms}}%
3817   \usebibmacro{author}%
3818   \setunit{\printdelim{nametitledelim}}\newblock
3819   \usebibmacro{title}%
3820   \setunit{\titlebyauthordelim}\newblock
3821   \usebibmacro{byauthor}%
3822   \newunit\newblock
3823   \printfield{note}%
3824   \newunit\newblock
3825   \printfield{howpublished}%

```

```

3826 \newunit\newblock
3827 \iftoggle{blx@ox@ms}{%
3828 \usebibmacro{manuscript:date}%
3829 \newunit\newblock
3830 \usebibmacro{library+location+series+number}%
3831 \newunit
3832 \printfield{support}%
3833 \newunit
3834 \usebibmacro{dating}%
3835 \setunit{\datingpagespunct}
3836 \usebibmacro{manuscript:pages}
3837 }{%
3838 \usebibmacro{location+date}%
3839 }%
3840 \newunit\newblock
3841 \iftoggle{bbx:url}
3842 { \usebibmacro{url+urldate}}
3843 {}%
3844 \newunit\newblock
3845 \usebibmacro{addendum+pubstate}%
3846 \iftoggle{bbx:related}
3847 { \usebibmacro{related:init}%
3848 \usebibmacro{related}}
3849 {}%
3850 \setunit{\bibpagerefpunct}\newblock
3851 \usebibmacro{pageref}%
3852 \usebibmacro{finentry}}

```

2.1.17 LETTERS

The driver for letters is similar to the one for other unpublished materials.

```

3853 \DeclareBibliographyDriver{letter}{%
3854 \usebibmacro{bibindex}%
3855 \usebibmacro{begentry}%
3856 \iffielddundef{library}{\togglefalse{blx@ox@ms}}{\toggletrue{blx@ox@ms}}%
3857 \usebibmacro{author}%
3858 \setunit{\printdelim{nametitledelim}}\newblock
3859 \usebibmacro{title}%
3860 \setunit{\titlebyauthordelim}\newblock
3861 \usebibmacro{byauthor}%
3862 \newunit\newblock
3863 \printfield{note}%
3864 \iffielddundef{howpublished}{\nopunct\printfield{howpublished}}%
3865 \newunit\newblock
3866 \iftoggle{blx@ox@ms}{%
3867 \usebibmacro{manuscript:date}%
3868 \newunit\newblock
3869 \usebibmacro{library+location+series+number}%
3870 \newunit
3871 \printfield{support}%
3872 \newunit
3873 \usebibmacro{dating}%
3874 \setunit{\datingpagespunct}
3875 \usebibmacro{manuscript:pages}
3876 }{%
3877 \usebibmacro{location+date}%
3878 }%
3879 \newunit\newblock
3880 \iftoggle{bbx:url}
3881 { \usebibmacro{url+urldate}}
3882 {}%

```

```

3883 \newunit\newblock
3884 \usebibmacro{addendum+pubstate}%
3885 \iftoggle{bbx:related}
3886   {\usebibmacro{related:init}%
3887    \usebibmacro{related}}
3888   {}%
3889 \setunit{\bibpagerefpunct}\newblock
3890 \usebibmacro{pageref}%
3891 \usebibmacro{finentry}}
3892 \DeclareFieldFormat[letter]{title}{%
3893   \def\currentfield{title}%
3894   \iffieldannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}%
3895   \undef\currentfield}
3896 \DeclareFieldFormat[letter]{date}{%
3897   \iffieldundef{url}{#1}{\mkbibparens{#1}}}

```

2.1.18 RELATED ENTRIES

We make the punctuation before related items configurable in remaining drivers inherited from the standard style, and move the pageref macro to the end.

```

3898 \xpatchbibdriver{booklet}{%
3899   \setunit{\bibpagerefpunct}\newblock
3900   \usebibmacro{pageref}%
3901   \newunit\newblock
3902   \iftoggle{bbx:related}
3903     {\usebibmacro{related:init}%
3904      \usebibmacro{related}}
3905     {}%
3906 }{%
3907   \iftoggle{bbx:related}
3908     {\usebibmacro{related:init}%
3909      \usebibmacro{related}}
3910     {}%
3911   \setunit{\bibpagerefpunct}\newblock
3912   \usebibmacro{pageref}%
3913 }{}{\wlog{WARNING: biblatex-oxref failed to patch booklet}}

```

```

3914 \xpatchbibdriver{misc}{%
3915   \setunit{\bibpagerefpunct}\newblock
3916   \usebibmacro{pageref}%
3917   \newunit\newblock
3918   \iftoggle{bbx:related}
3919     {\usebibmacro{related:init}%
3920      \usebibmacro{related}}
3921     {}%
3922 }{%
3923   \iftoggle{bbx:related}
3924     {\usebibmacro{related:init}%
3925      \usebibmacro{related}}
3926     {}%
3927   \setunit{\bibpagerefpunct}\newblock
3928   \usebibmacro{pageref}%
3929 }{}{\wlog{WARNING: biblatex-oxref failed to patch misc}}

```

We provide an option for setting the relatedtype punctuation.

```

3930 \DeclareDelimFormat{begrelateddelimamendedby}{\addcomma\space}
3931 \DeclareDelimFormat{begrelateddelimequals}{\addspace}
3932 \DeclareDelimFormat{begrelateddelimin}{\addcomma\space}

```

```

3933 \DeclareDelimFormat{begrelateddelimincludes}{\addcomma\space}
3934 \DeclareDelimFormat{begrelateddelimreprintfrom}{\addperiod\space}
3935 \DeclareDelimFormat{begrelateddelimreviewof}{\newunitpunct}
3936 \DeclareDelimFormat{begrelateddelimtranslationof}{\addspace}
3937 \DeclareDelimFormat{begrelateddelimmultivolume}{\newunitpunct}
3938 \DeclareDelimFormat{relateddelimmultivolume}{\newunitpunct}
3939 \newtoggle{blx@ox@success}
3940 \DeclareBiblatexOption{global,type}[string]{relationpunct}[semicolon]{%
3941   \bgroup\blx@blx@init
3942   \ifcsdef{add#1}{\global\toggletrue{blx@ox@success}}{%
3943     \global\togglefalse{blx@ox@success}%
3944     \PackageError{biblatex-oxref}{%
3945       Invalid option 'relationpunct=#1'%
3946     }{%
3947       Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3948       'period', 'exclam', 'question', and 'space'.}}%
3949   \egroup
3950   \iftoggle{blx@ox@success}{\ifstrequal{#1}{space}}{%
3951     \DeclareDelimFormat{begrelateddelim}{\addspace}%
3952   }{%
3953     \DeclareDelimFormat{begrelateddelim}{\csuse{add#1}\space}}%
3954   }{}
3955 \DeclareEntryOption[string]{relationpunct}[semicolon]{%
3956   \bgroup\blx@blx@init
3957   \ifcsdef{add#1}{\global\toggletrue{blx@ox@success}}{%
3958     \global\togglefalse{blx@ox@success}%
3959     \PackageError{biblatex-oxref}{%
3960       Invalid option 'relationpunct=#1'%
3961     }{%
3962       Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3963       'period', 'exclam', 'question', and 'space'.}}%
3964   \egroup
3965   \iftoggle{blx@ox@success}{\ifstrequal{#1}{space}}{%
3966     \DeclareDelimFormat{begrelateddelim}{\addspace}%
3967     \DeclareDelimFormat{begrelateddelimamendedby}{\addspace}%
3968     \DeclareDelimFormat{begrelateddelimequals}{\addspace}%
3969     \DeclareDelimFormat{begrelateddelimin}{\addspace}%
3970     \DeclareDelimFormat{begrelateddelimincludes}{\addspace}%
3971     \DeclareDelimFormat{begrelateddelimreprintfrom}{\addspace}%
3972     \DeclareDelimFormat{begrelateddelimreviewof}{\addspace}%
3973     \DeclareDelimFormat{begrelateddelimtranslationof}{\addspace}%
3974     \DeclareDelimFormat{begrelateddelimmultivolume}{\addspace}%
3975   }{%
3976     \DeclareDelimFormat{begrelateddelim}{\csuse{add#1}\space}%
3977     \DeclareDelimFormat{begrelateddelimamendedby}{\csuse{add#1}\space}%
3978     \DeclareDelimFormat{begrelateddelimequals}{\csuse{add#1}\space}%
3979     \DeclareDelimFormat{begrelateddelimin}{\csuse{add#1}\space}%
3980     \DeclareDelimFormat{begrelateddelimincludes}{\csuse{add#1}\space}%
3981     \DeclareDelimFormat{begrelateddelimreprintfrom}{\csuse{add#1}\space}%
3982     \DeclareDelimFormat{begrelateddelimreviewof}{\csuse{add#1}\space}%
3983     \DeclareDelimFormat{begrelateddelimtranslationof}{\csuse{add#1}\space}%
3984     \DeclareDelimFormat{begrelateddelimmultivolume}{\csuse{add#1}\space}}%
3985   }{}
3986 \ExecuteBibliographyOptions{relationpunct}
3987 \newcounter{blx@ox@relitem}
3988 \xapptobibmacro{begrelated}{%
3989   \setcounter{blx@ox@relitem}{0}%
3990 }{}{\wlog{WARNING: biblatex-oxref failed to append to begrelated}}

```

We provide an option to prevent a related item beginning with "in".

```

3991 \newtoggle{blx@ox@norelin}
3992 \DeclareBiblatexOption{global,type,entry}{norelatedin}[true]{%
3993   \settoggle{blx@ox@norelin}{#1}}
3994 \xapptobibmacro{begrelatedloop}{%
3995   \iftoggle{blx@ox@norelin}{%
3996     \renewbibmacro*{in:}{%
3997       \ifboolexpr{
3998         test {\iffieldequalstr{entrysubtype}{yearbook}}
3999         or (
4000           test {\ifnameundef{author}}
4001           and
4002           test {\ifnameundef{translator}}
4003           and
4004           test {\iffieldundef{title}}
4005         )}{%
4006           \bibstring{in}%
4007           \printunit{\intitlepunct}%
4008         }}{%
4009       }{\wlog{WARNING: biblatex-oxref failed to append to begrelatedloop}}
4010

```

Translations

Where the related item is the translation, the related string is (by default, in English at least) prefaced with the language.

```

4011 \newbibmacro*{rellanguage}{%
4012   \def\do##1{%
4013     \entrydata{##1}{%
4014       \printlist{language}}}%
4015   \docsvfield{related}%
4016 }
4017 \DeclareFieldFormat{relatedstring:translationof}{%
4018   \iffieldundef{relatedstring}{%
4019     \blx@ox@langbibstring{\usebibmacro{rellanguage}}{original}%
4020     \printunit{\addcomma\space}
4021   }{%
4022     \thefield{relatedstring}\printunit{\relatedpunct}}}%
4023
4024 \DeclareFieldFormat{related:translationof}{%
4025   \mkbibbrackets{#1}}

```

Co-publications

This relation simply prints what would go in the publication block.

```

4026 \newbibmacro*{related:copub}[1]{%
4027   \entrydata*{#1}{%
4028     \usebibmacro{publisher+location+date}%
4029     \setunit{\relateddelim}}%

```

Reprints

The standard styles define a special driver for the reprintfrom relation. For *oxref*, the standard generic driver is sufficient, so this code reverts the specialization.

```

4030 \renewbibmacro*{related:reprintfrom}[1]{%
4031   \entrydata*{#1}{%

```

```

4032 \nopunct
4033 \usedriver{%
4034   \ifnameundef{savedauthor}{%
4035     \ifnameundef{savededitor}{}%
4036     \ifnamesequal{editor}{savededitor}{%
4037       \clearname{editor}%
4038     }{}%
4039   }{%
4040     \ifnamesequal{author}{savedauthor}{%
4041       \clearname{author}%
4042     }{}%
4043   \iffieldundef{savedtitle}{}%
4044     \iffieldsequal{savedtitle}{title}{%
4045       \clearfield{title}%
4046     }{}%
4047   \renewbibmacro*{related:init}{}%
4048   \DeclareNameAlias{sortname}{default}%
4049   \ifbibmacroundef{date+extradate}{}%
4050     \renewbibmacro*{date+extradate}{}%
4051     \renewbibmacro*{date}{\printdate}%
4052   \renewbibmacro*{pageref}{}%
4053 }{%
4054   \thefield{entrytype}}}%

```

Articles that span issues

If an article spans several issues of a journal, we print the second reference after the first, omitting any information in common.

```

4055 \newbibmacro*{related:serialarticle}[1]{%
4056   \entrydata*{#1}{%
4057     \iffieldundef{savedjournaltitle}{}%
4058     \iffieldsequal{journaltitle}{savedjournaltitle}{%
4059       \clearfield{journaltitle}%
4060     }{}%
4061     \iffieldundef{savedjournalsubtitle}{}%
4062     \iffieldsequal{journalsubtitle}{savedjournalsubtitle}{%
4063       \clearfield{journalsubtitle}%
4064     }{}%
4065     \iffieldundef{savedseries}{}%
4066     \iffieldsequal{series}{savedseries}{%
4067       \clearfield{series}%
4068     }{}%
4069     \iffieldundef{savedyear}{\clearfield{year}}{
4070       \iffieldsequal{year}{savedyear}{%
4071         \clearfield{year}%
4072       }{}%
4073     \usebibmacro{journal+issuetitle}%
4074     \newunit
4075     \usebibmacro{note+pages}%
4076     \newunit\newblock
4077     \usebibmacro{doi+eprint+url}%
4078     \newunit\newblock
4079     \usebibmacro{addendum+pubstate}}}%

```

Reviews

We ensure that the field formatting for review entries matches that for article entries.

```

4080 \DeclareFieldFormat[review]{title}{\mkbibquote{#1\isdot}}
4081 \DeclareFieldFormat[review]{volume}{#1}% volume of a journal
4082 \DeclareFieldFormat[review]{number}{#1}% number of a journal
4083 \DeclareFieldFormat[review]{series}{% series of a journal
4084   \ifinteger{#1}
4085     {\mkbibordseries{#1}~\bibstring{jourser}}
4086     {\ifbibstring{#1}{\bibstring{#1}}{#1}}}

```

We take advantage of the Biber-specific mechanism of relating items in order to handle reviews. Compared to the default code, this is simpler in that we don't check for repeated authors/editors (it would be a rather biased review!), we directly set the author format, and we don't nullify the date+extradate macro.

```

4087 \newbibmacro*{related:reviewof}[1]{%
4088   \entrydata*{#1}{%
4089     \usedriver{%
4090       \renewbibmacro*{related:init}{}%
4091       \DeclareNameAlias{author}{given-family}%
4092       \renewbibmacro*{pageref}{}%
4093     }{\thefield{entrytype}}%
4094   }%
4095 }

```

Since a review is a special kind of journal article, the review driver is based on the article one, the difference being that the related macro comes just before journal+issuetitle. Oxford style links the two with 'in'.

```

4096 \DeclareBibliographyDriver{review}{%
4097   \usebibmacro{bibindex}%
4098   \usebibmacro{begentry}%
4099   \usebibmacro{author/translator+others}%
4100   \setunit{\printdelim{nametitle}}\newblock
4101   \usebibmacro{title}%
4102   \setunit{\titlebyauthor}\newblock
4103   \usebibmacro{byauthor}%
4104   \newunit\newblock
4105   \usebibmacro{bytranslator+others}%
4106   \newunit\newblock
4107   \printfield{version}%
4108   \newunit\newblock
4109   \iftoggle{bbx:related}{%
4110     \usebibmacro{related:init}%
4111     \usebibmacro{related}%
4112   }{}%
4113   \newunit\newblock
4114   \usebibmacro{in:}%
4115   \setunit{\addspace}%
4116   \usebibmacro{journal+issuetitle}%
4117   \newunit
4118   \usebibmacro{byeditor+others}%
4119   \iffieldundef{note}%
4120     {\newunit}%
4121     {\setunit{\addsemicolon\addspace}}%
4122   \usebibmacro{note+pages}%
4123   \newunit\newblock
4124   \iftoggle{bbx:isbn}{
4125     {\printfield{issn}}
4126   }{}%
4127   \newunit\newblock
4128   \usebibmacro{doi+eprint+url}%
4129   \newunit\newblock

```

```

4130 \usebibmacro{addendum+pubstate}%
4131 \setunit{\bibpagerefpunct}\newblock
4132 \usebibmacro{pageref}%
4133 \usebibmacro{finentry}}
4134

```

Multiple volumes

Standard biblatex provides the `multivolume` relation for different volumes of the same work that have slightly different publication details, but it doesn't quite work for Oxford style. This works better.

```

4135 \DeclareFieldFormat{related:multivolume}{#1}
4136 \renewbibmacro*{related:multivolume}[1]{%
4137   \entrydata*{#1}{%
4138     \printtext{%
4139       \printfield{volume}%
4140       \printfield{part}%
4141       \iffielddsequal{savedtitle}{title}{}{%
4142         \setunit{\addcolon\space}%
4143         \usebibmacro{title}}}%
4144     }%
4145     \setunit*\addspace}%
4146     \iffielddsequal{savedseries}{series}{\clearfield{series}}{}%
4147     \iffielddsequal{savednumber}{number}{\clearfield{number}}{}%
4148     \iffielddsequal{savededition}{edition}{\clearfield{edition}}{}%
4149     \ifboolexpr{
4150       test {\iflistsequal{savedpublisher}{publisher}}
4151       and
4152       test {\iflistsequal{savedlocation}{location}}
4153     }{\clearlist{publisher}\clearlist{location}}{}%
4154     \iffielddsequal{saveddate}{date}{\clearfield{date}}{}%
4155     \usebibmacro{series+number+edition+publisher+location+date}%
4156   }}
4157

```

Related editions

This macro is based on the 'bytranslator' one, but more general. Note that `\mkrelatedstringtext` was introduced in `biblatex` v3.16, so we backport it if an earlier version is used.

```

4158 \providecommand*\mkrelatedstringtext[1][{\mainlang #1}]
4159 \newbibmacro*{related:editas}[1]{%
4160   \entrydata{#1}{%
4161     \renewbibmacro*{name:hook}[1]{%
4162       \ifnumequal{\value{listcount}}{1}
4163       {\mkrelatedstringtext{\lbx@initnamehook{#1}}}
4164       {}}%
4165     \printfield{edition}%
4166     \setunit{\addspace}%
4167     \usebibmacro{byeditor+others}%
4168     \setunit*\addcomma\space\bibstring[\mkrelatedstringtext]{astitle}\space}%
4169     \usebibmacro{maintitle+title}%
4170     \setunit{\addspace}%
4171     \printfield{note}%
4172     \newunit\newblock
4173     \printfield{volumes}%
4174     \newunit
4175     \usebibmacro{series+number+publisher+location+date}}%
4176   \renewbibmacro*{related:bytranslator}[1]{%

```



```

4177 \entrydata{#1}{%
4178   \renewbibmacro*{name:hook}[1]{%
4179     \ifnumequal{\value{listcount}}{1}
4180       {\mkrelatedstringtext{\lbx@initnamehook{#1}}}
4181     }{}%
4182   \printnames[bytranslator]{translator}%
4183   \setunit*{\addspace\bibstring[\mkrelatedstringtext]{astitle}\space}%
4184   \usebibmacro{maintitle+title}%
4185   \setunit{\addspace}%
4186   \printfield{note}%
4187   \newunit\newblock
4188   \printfield{volumes}%
4189   \newunit
4190   \usebibmacro{series+number+publisher+location+date}}}
4191

```

Joint releases

We provide support for CDs (for example) which contain more than one work.

```

4192 \newbibmacro*{related:includes}[1]{%
4193   \stepcounter{blx@ox@relitem}%
4194   \ifnumequal{\value{blx@ox@relitem}}{\value{bbx:relatedtotal}}%
4195     {\bibstring{and}\addspace}{}%
4196   \entrydata{#1}{%
4197     \ifbibmacroundef{date+extradate}{}{%
4198       \renewbibmacro*{date+extradate}{}%
4199       \usebibmacro{author}%
4200       \setunit{\printdelim{nametitledelim}}\newblock
4201       \usebibmacro{title}}}

```

Subitems

We provide support for items in items in items. The outer two layers should be taken care of with an incollection entry or equivalent. The innermost item should be a misc entry. While we're at it, we provide descriptor support for misc entries.

```

4202 \DeclareFieldFormat[misc]{title}{%
4203   \def\currentfield{title}%
4204   \iffielddannotation{descriptor}{#1}{%
4205     \iffieldequalstr{relatedtype}{in}{%
4206       \mkbibquote{#1\isdot}%
4207     }{%
4208       \mkbibemph{#1}%
4209     }}%
4210   \undef\currentfield}
4211 \newbibmacro*{related:in}[1]{%
4212   \entrydata*{#1}{%
4213     \usedriver
4214       {\ifnameundef{savedauthor}
4215         {\ifnameundef{savededitor}
4216           {}
4217           {\ifnameequal{editor}{savededitor}
4218             {\clearname{editor}}
4219             {}}}}
4220         {\ifnameequal{author}{savedauthor}
4221           {\clearname{author}}
4222           {}}}%
4223     \renewbibmacro*{related:init}{}%
4224     \DeclareNameAlias{sortname}{default}%

```

```

4225     \ifbibmacroundef{date+extradate}
4226     {}
4227     {\renewbibmacro*{date+extradate}{}%
4228      \renewbibmacro*{date}{\printdate}}%
4229     \renewbibmacro*{pageref}{}%
4230     {\thefield{entrytype}}%
4231     \ifboolexpr{
4232       test {\iffieldundef{pages}}
4233       or
4234       test {\iffieldundef{savedpages}}}
4235     {%
4236       \newunit\newblock
4237     }%
4238     \setunit{\addspace}%
4239     \bibstring{thiscite}%
4240     \printunit{\addspace}%
4241   }%
4242 }%
4243 \usebibmacro{chapter+pages}%
4244 }
4245

```

2.1.19 SOURCE MAPS

We use the source mapping capabilities of Biber to fix the following issues.

```

4246 \DeclareStyleSourcemap{%
4247   \maps[datatype=bibtex]{%

```

Sort order

proceedings and mvproceedings entries allow an organization to be printed in the author position.

```

4248   \map{
4249     \pertype{proceedings}
4250     \pertype{mvproceedings}
4251     \step[notfield=author,
4252           fieldsource=organization,
4253           fieldtarget=author]
4254   }

```

Descriptors

This map provides a helpful descriptor field that can simplify the provision of descriptors, being notes that can act as titles.

```

4255   \map[overwrite=false]{
4256     \step[fieldsource=descriptor, final]
4257     \step[notfield=title,
4258           fieldset=title+an,
4259           fieldvalue={=descriptor}]
4260     \step[notfield=title,
4261           fieldsource=descriptor,
4262           fieldtarget=title]
4263     \step[fieldsource=descriptor,
4264           fieldtarget=note]
4265   }

```

Pseudonyms and inferred authorship

These help ensure compatibility with biblatex-realauthor.

```

4266 \map[overwrite=false]{
4267   \step[fieldsource=realauthor, final]
4268   \step[notfield=author,
4269     fieldset=author+an,
4270     fieldvalue={inferred}]
4271   \step[notfield=author,
4272     fieldsource=realauthor,
4273     fieldtarget=author]
4274   \step[fieldsource=realauthor,
4275     fieldtarget=authoraddon]
4276 }
4277 \map[overwrite=false]{
4278   \step[fieldsource=realeditor, final]
4279   \step[notfield=editor,
4280     fieldset=editor+an,
4281     fieldvalue={inferred}]
4282   \step[notfield=editor,
4283     fieldsource=realeditor,
4284     fieldtarget=editor]
4285   \step[fieldsource=realeditor,
4286     fieldtarget=editoraddon]
4287 }
```

Editors as joint authors

This map provides a more portable interface for declaring a translator or revisor to be a joint author.

```

4288 \map[overwrite=false]{
4289   \step[fieldsource=editor+an,
4290     match=\regexp{jointauthor},
4291     final]
4292   \step[fieldsource=editor,
4293     fieldtarget=jointauthor]
4294   \step[fieldsource=editortype,
4295     fieldtarget=jointauthortype]
4296 }
4297 \map[overwrite=false]{
4298   \step[fieldsource=translator+an,
4299     match=\regexp{jointauthor},
4300     final]
4301   \step[fieldsource=translator,
4302     fieldtarget=jointauthor]
4303   \step[fieldset=jointauthortype,
4304     fieldvalue={translator}]
4305 }
```

Standards

The purpose of this map is to move the number to the head of the reference in the absence of an author, and try to fix the sorting accordingly.

```

4306 \map[overwrite=false]{
4307   \pertype{standard}
4308   \step[notfield=author,
4309     fieldsource=number,
```

```

4310         final]
4311     \step[fieldset=sortkey,
4312           origfieldval]
4313 }

```

Audiovisual materials

For audiovisual materials, `origdatatype` defaults to ‘recorded’.

```

4314 \map[overwrite=false]{
4315     \pertype{audio}
4316     \pertype{music}
4317     \pertype{movie}
4318     \pertype{video}
4319     \pertype{inaudio}
4320     \pertype{inmusic}
4321     \pertype{inmovie}
4322     \pertype{invideo}
4323     \step[fieldset=origdatatype, fieldvalue={recorded}]
4324 }

```

Legal references

These help ensure compatibility with `oscola`.

```

4325 \map[overwrite=false]{
4326     \pertype{jurisdiction}
4327     \step[fieldsource=reporter,
4328           fieldtarget=journaltitle]
4329     \step[fieldsource=court,
4330           fieldtarget=institution]
4331     \step[fieldsource=additionalreports,
4332           fieldtarget=listb]
4333     \step[fieldsource=ecli,
4334           fieldtarget=verba]
4335 }%
4336 \map[overwrite=false]{
4337     \pertype{legal}
4338     \step[fieldsource=reporter,
4339           fieldtarget=journaltitle]
4340 }
4341 \map[overwrite=true]{
4342     \pertype{legal}
4343     \step[fieldsource=parties,
4344           fieldtarget=institution]
4345     \step[fieldsource=execution,
4346           fieldtarget=lista]
4347 }

```

This is how `oscola` removes dots from entries.

```

4348 \map[overwrite=true]{
4349     \pertype{jurisdiction}
4350     \pertype{legislation}
4351     \pertype{legal}
4352     \step[fieldsource=title,
4353           match=\regexp{(\\d)\\. (\\d)},
4354           replace=\regexp{$1.$2}]
4355     \step[fieldsource=title,
4356           match=\regexp{(\\D)\\. (\\d)},

```

```

4357         replace=\regexp{$1 $2}]
4358 \step[fieldsource=title,
4359       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},
4360       replace=\regexp{$1}]
4361 \step [fieldsource=title,
4362       match=\regexp{([{}]\.[^{}]}},
4363       replace=\regexp{$1}]
4364 \step[fieldsource=shorttitle,
4365       match=\regexp{(\d)\.(\d)},
4366       replace=\regexp{$1.$2}]
4367 \step[fieldsource=shorttitle,
4368       match=\regexp{(\D)\.(\d)},
4369       replace=\regexp{$1 $2}]
4370 \step[fieldsource=shorttitle,
4371       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},
4372       replace=\regexp{$1}]
4373 \step [fieldsource=shorttitle,
4374       match=\regexp{([{}]\.[^{}]}},
4375       replace=\regexp{$1}]
4376 \step[fieldsource=parreporter,
4377       match=\regexp{(\d)\.(\d)},
4378       replace=\regexp{$1.$2}]
4379 \step[fieldsource=parreporter,
4380       match=\regexp{(\D)\.(\d)},
4381       replace=\regexp{$1 $2}]
4382 \step[fieldsource=parreporter,
4383       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},
4384       replace=\regexp{$1}]
4385 \step [fieldsource=parreporter,
4386       match=\regexp{([{}]\.[^{}]}},
4387       replace=\regexp{$1}]
4388 \step[fieldsource=journaltitle,
4389       match=\regexp{(\d)\.(\d)},
4390       replace=\regexp{$1.$2}]
4391 \step[fieldsource=journaltitle,
4392       match=\regexp{(\D)\.(\d)},
4393       replace=\regexp{$1 $2}]
4394 \step[fieldsource=journaltitle,
4395       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},
4396       replace=\regexp{$1}]
4397 \step [fieldsource=journaltitle,
4398       match=\regexp{([{}]\.[^{}]}},
4399       replace=\regexp{$1}]
4400 \step[fieldsource=institution,
4401       match=\regexp{(\d)\.(\d)},
4402       replace=\regexp{$1.$2}]
4403 \step[fieldsource=institution,
4404       match=\regexp{(\D)\.(\d)},
4405       replace=\regexp{$1 $2}]
4406 \step[fieldsource=institution,
4407       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},
4408       replace=\regexp{$1}]
4409 \step[fieldsource=institution,
4410       match=\regexp{([{}]\.[^{}]}},
4411       replace=\regexp{$1}]
4412 \step[fieldsource=publisher,
4413       match=\regexp{(\d)\.(\d)},
4414       replace=\regexp{$1.$2}]
4415 \step[fieldsource=publisher,
4416       match=\regexp{(\D)\.(\d)},
4417       replace=\regexp{$1 $2}]
4418 \step[fieldsource=publisher,
4419       match=\regexp{(?:\A|[^{}]\K\.[^{}]}},

```

```

4420         replace=\regexp{$1}]
4421 \step [fieldsource=publisher,
4422       match=\regexp{([^\d])\.(?![!])},
4423       replace=\regexp{$1}]
4424 \step[fieldsource=location,
4425       match=\regexp{(\d)\.(\d)},
4426       replace=\regexp{$1.$2}]
4427 \step[fieldsource=location,
4428       match=\regexp{(\D)\.(\d)},
4429       replace=\regexp{$1 $2}]
4430 \step[fieldsource=location,
4431       match=\regexp{(?:\A|[^{])\K\.[^\d]}},
4432       replace=\regexp{$1}]
4433 \step [fieldsource=location,
4434       match=\regexp{([^\d])\.(?![!])},
4435       replace=\regexp{$1}]
4436 \step[fieldsource=series,
4437       match=\regexp{(\d)\.(\d)},
4438       replace=\regexp{$1.$2}]
4439 \step[fieldsource=series,
4440       match=\regexp{(\D)\.(\d)},
4441       replace=\regexp{$1 $2}]
4442 \step[fieldsource=series,
4443       match=\regexp{(?:\A|[^{])\K\.[^\d]}},
4444       replace=\regexp{$1}]
4445 \step [fieldsource=series,
4446       match=\regexp{([^\d])\.(?![!])},
4447       replace=\regexp{$1}]
4448 \step[fieldsource=indextitle,
4449       match=\regexp{(\d)\.(\d)},
4450       replace=\regexp{$1.$2}]
4451 \step[fieldsource=indextitle,
4452       match=\regexp{(\D)\.(\d)},
4453       replace=\regexp{$1 $2}]
4454 \step[fieldsource=indextitle,
4455       match=\regexp{(?:\A|[^{])\K\.[^\d]}},
4456       replace=\regexp{$1}]
4457 \step [fieldsource=indextitle,
4458       match=\regexp{([^\d])\.(?![!])},
4459       replace=\regexp{$1}]
4460 }

```

If casenumber is given, it is converted to number or, if the number is already set, userb.

```

4461 \map[overwrite=false]{
4462   \step[fieldsource=casenumber, final]
4463   \step[notfield=number, fieldsource=casenumber, fieldtarget=number]
4464   \step[fieldsource=casenumber, fieldtarget=userb]
4465 }
4466 }%
4467 }
4468

```

2.1.20 SORTING SCHEMES

We adjust the sort order to take into account some other fields that might end up at the front (library, collection, series). The ‘nty’ scheme is used by oxnotes.

```

4469 \DeclareSortingTemplate{nty}{
4470   \sort{
4471     \field{presort}

```

```

4472     }
4473     \sort[final]{
4474       \field{sortkey}
4475     }
4476     \sort{
4477       \field{sortname}
4478       \field{author}
4479       \field{editor}
4480       \field{translator}
4481       \field{sorttitle}
4482       \field{title}
4483       \field{library}
4484     }
4485     \sort{
4486       \field{sorttitle}
4487       \field{title}
4488     }
4489     \sort{
4490       \field{sortyear}
4491       \field{year}
4492     }
4493     \sort{
4494       \field{volume}
4495       \literal{0}
4496     }
4497     \sort{
4498       \field{location}
4499     }
4500     \sort{
4501       \field{collection}
4502       \field{series}
4503     }
4504   }

```

The ‘nyt’ scheme is used by oxyear.

```

4505   \DeclareSortingTemplate{nyt}{
4506     \sort{
4507       \field{presort}
4508     }
4509     \sort[final]{
4510       \field{sortkey}
4511     }
4512     \sort{
4513       \field{sortname}
4514       \field{author}
4515       \field{editor}
4516       \field{translator}
4517       \field{sorttitle}
4518       \field{title}
4519       \field{library}
4520     }
4521     \sort{
4522       \field{sortyear}
4523       \field{labelyear}
4524       \field{year}
4525     }
4526     \sort{
4527       \field{sorttitle}
4528       \field{title}
4529     }
4530     \sort{
4531       \field{volume}

```

```

4532     \literal{0}
4533   }
4534   \sort{
4535     \field{location}
4536   }
4537   \sort{
4538     \field{collection}
4539     \field{series}
4540   }
4541 }

```

The ‘anyt’ scheme is used by oxalaph.

```

4542 \DeclareSortingTemplate{anyt}{
4543   \sort{
4544     \field{presort}
4545   }
4546   \sort{
4547     \field{labelalpha}
4548   }
4549   \sort[final]{
4550     \field{sortkey}
4551   }
4552   \sort{
4553     \field{sortname}
4554     \field{author}
4555     \field{editor}
4556     \field{translator}
4557     \field{sorttitle}
4558     \field{title}
4559     \field{library}
4560   }
4561   \sort{
4562     \field{sortyear}
4563     \field{labelyear}
4564     \field{year}
4565   }
4566   \sort{
4567     \field{sorttitle}
4568     \field{title}
4569   }
4570   \sort{
4571     \field{volume}
4572     \literal{0}
4573   }
4574   \sort{
4575     \field{location}
4576   }
4577   \sort{
4578     \field{collection}
4579     \field{series}
4580   }
4581 }

```

The following entry types never put editors first.

```

4582 \ExecuteBibliographyOptions
4583   [proceedings,report,artwork,audio,image,music,movie,performance,video,%
4584   manuscript,unpublished,review]{useeditor=false}

```


2.2 Notes style: oxnotes.bbx

2.2.1 PRELIMINARIES

First we load the common `oxref` features.

```
20 \RequireBibliographyStyle{oxref}
```

2.2.2 NAMES

We apply our special name format to names likely to appear at the start of an entry.

```
21 \DeclareNameAlias{author}{bib-family-given/cite-given-family}
22 \DeclareNameAlias[related:reviewof]{author}{given-family}
23 \DeclareNameAlias{editor}{bib-family-given/cite-given-family}
24 \DeclareNameAlias[related:reviewof]{editor}{given-family}
```

We ensure the printing of the anon localization string matches.

```
25 \xpatchbibmacro{author}{%
26   \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
27 }{%
28   \iftoggle{blx@ox@abbranon}{%
29     \iftoggle{blx@ox@scnames}{\bibcpsstring[\textsc]{anon}}{\bibcpsstring{anon}}%
30   }{%
31     \iftoggle{blx@ox@scnames}{\bibcplstring[\textsc]{anon}}{\bibcplstring{anon}}%
32   }%
33 }{}{\wlog{WARNING: biblatex-oxref (oxnotes) failed to patch author}}
```

2.2.3 MULTIVOLUME DATES

For the very particular use case of breaking down multivolume works into their constituent volumes, we remove the overall date, assuming that the individual volume dates will be used instead.

```
34 \xpretobibmacro{series+number+edition+publisher+location+date}{%
35   \iffieldequalstr{relatedtype}{multivolume}{%
36     \clearfield{year}\clearfield{month}\clearfield{day}%
37   }}{}{}
```

2.2.4 SOURCE MAPS

```
38 \DeclareStyleSourceMap{%
39   \maps[datatype=bibtex]{%
```

Sort order

For entry types that print the maintitle and volume before the title, we need to make sure this is reflected in the sort order.

```
40 \map{
41   \pertype{mvbook}
42   \pertype{mvcollection}
43   \pertype{mvreference}
44   \pertype{proceedings}
45   \pertype{mvproceedings}
```

```

46     \pertype{report}
47     \step[fieldsource=maintitle]%
48     \step[fieldset=sorttitle, origfieldval]%
49     \step[fieldsource=volume]%
50     \step[fieldset=sorttitle, append, origfieldval]%
51     \step[fieldsource=title]%
52     \step[fieldset=sorttitle, append, origfieldval]%
53   }%
54 }%
55 }

```

2.3 Numeric style: oxnum.bbx

2.3.1 PRELIMINARIES

First we load the common `oxref` features.

```

20 \RequireBibliographyStyle{oxref}

```

2.3.2 NAMES

We apply our special name format to names likely to appear at the start of an entry.

```

21 \DeclareNameAlias{author}{bib-family-given/cite-given-family}
22 \DeclareNameAlias[related:reviewof]{author}{given-family}
23 \DeclareNameAlias{editor}{bib-family-given/cite-given-family}
24 \DeclareNameAlias[related:reviewof]{editor}{given-family}

```

We ensure the printing of the anon localization string matches.

```

25 \xpatchbibmacro{author}{%
26   \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}}%
27 }{%
28   \iftoggle{blx@ox@abbranon}{%
29     \iftoggle{blx@ox@scnames}{\bibcpsstring[\textsc]{anon}}{\bibcpsstring{anon}}%
30   }{%
31     \iftoggle{blx@ox@scnames}{\bibcplstring[\textsc]{anon}}{\bibcplstring{anon}}%
32   }%
33 }{}{\wlog{WARNING: biblatex-oxref (oxnum) failed to patch author}}

```

2.3.3 MULTIVOLUME DATES

For the very particular use case of breaking down multivolume works into their constituent volumes, we remove the overall date, assuming that the individual volume dates will be used instead.

```

34 \xpretobibmacro{series+number+edition+publisher+location+date}{%
35   \iffieldequalstr{relatedtype}{multivolume}{%
36     \clearfield{year}\clearfield{month}\clearfield{day}%
37   }{}{}

```

2.3.4 LABEL NUMBERS

This next code is extracted from the standard numeric style.

```

38 \ExecuteBibliographyOptions{labelnumber}
39
40 \providebool{bbx:subentry}
41
42 \DeclareBibliographyOption{subentry}[true]{%
43   \setbool{bbx:subentry}{#1}}
44
45 \DeclareFieldFormat{bibentrysetcount}{\mkbibparens{\mknumalph{#1}}}
46 \DeclareFieldFormat{labelnumberwidth}{\mkbibbrackets{#1}}
47 \DeclareFieldFormat{shorthandwidth}{\mkbibbrackets{#1}}
48
49 \defbibenvironment{bibliography}
50   {\list
51     {\printtext[labelnumberwidth]{%
52       \printfield{labelprefix}%
53       \printfield{labelnumber}}}
54     {\setlength{\labelwidth}{\labelnumberwidth}%
55      \setlength{\leftmargin}{\labelwidth}%
56      \setlength{\labelsep}{\biblabelsep}%
57      \addtolength{\leftmargin}{\labelsep}%
58      \setlength{\itemsep}{\bibitemsep}%
59      \setlength{\parsep}{\bibparsep}}%
60      \renewcommand*{\makelabel}[1]{\hss#1}}
61   {\endlist}
62   {\item}
63
64 \defbibenvironment{shorthand}
65   {\list
66     {\printfield[shorthandwidth]{shorthand}}
67     {\setlength{\labelwidth}{\shorthandwidth}%
68      \setlength{\leftmargin}{\labelwidth}%
69      \setlength{\labelsep}{\biblabelsep}%
70      \addtolength{\leftmargin}{\labelsep}%
71      \setlength{\itemsep}{\bibitemsep}%
72      \setlength{\parsep}{\bibparsep}}%
73      \renewcommand*{\makelabel}[1]{\hss#1}}
74   {\endlist}
75   {\item}
76
77 \DeclareBibliographyDriver{set}{%
78   \entryset
79     {\ifbool{bbx:subentry}
80      {\printfield[bibentrysetcount]{entrysetcount}%
81       \printunit*{\addnbspace}}
82      {}}
83   {}%
84   \newunit\newblock
85   \usebibmacro{setpageref}%
86   \finentry}

```

2.4 Author–year style: oxyear.bbx

2.4.1 PRELIMINARIES

First we load the common `oxref` features.

```

20 \RequireBibliographyStyle{oxref}

```

Here we set some defaults different to the standard ones. The author can still override them.

```

21 \ExecuteBibliographyOptions{giveninits,labeldateparts,sorting=nyt,pagetracker,maxcitenames=2}

```

2.4.2 DATE MERGING OPTION

We provide the `mergedate` option from the `authoryear` style. In case it isn't clear from the standard documentation, the purpose of this option is twofold: it determines whether the date printed at the head of the reference is the same as or different from `labeldate` as used in the citations, and to what extent the date information at the head of the reference is repeated later on. The OGS and NHR consistently use a variant that is between the basic and compact options, in that the year is always moved to the head of the reference (matching `labeldate`) but the month and day are never moved; this is implemented as the `year` value.

```

22 \DeclareBiblatexOption{global,type,entry}{mergedate}[true]{%
23   \ifcsdef{bbx@opt@mergedate@#1}
24     {\csuse{bbx@opt@mergedate@#1}}
25     {\PackageError{biblatex-oxref}
26       {Invalid option 'mergedate=#1'}
27       {Valid values are 'maximum', 'compact', 'basic', 'minimum',\MessageBreak
28       'year', 'true' (=year), and 'false'.}}}
```

The various values affect the definition of the following macro, used at the head of the reference, for which we coin the `dateLabel` field format.

```

29 \providebibmacro*{date+extradate}{}
30 \DeclareFieldFormat{dateLabel}{\mkbibparens{#1}}
31 \DeclareFieldFormat{labeldate}{%
32   \iflabeldateisdate{%
33     \def\currentfield{date}%
34   }{%
35     \iflabeldateisanydate{%
36       \def\currentfield{\thefield{labeldatesource}date}%
37     }{%
38       \def\currentfield{\thefield{labeldatesource}}}%
39   \iffielddannotation{inferred}{\mkbibbrackets{#1}}{#1}%
40   \undef\currentfield}
```

On a related note, the `labeldate` uses the `origdate` if provided in preference to `date`, and falls back to `pubstate` if provided.

```

41 \DeclareLabeldate{%
42   \field{origdate}
43   \field{date}
44   \field{year}
45   \field{eventdate}
46   \field{pubstate}
47   \literal{nodate}
48 }
```

The `extradate` string should be printed bare.

```

49 \DeclareFieldFormat{extradate}{%
50   \iffieldundef{\thefield{labeldatesource}}{%
51     \iffielddnums{\thefield{labeldatesource}year}{~}%
52   }{%
53     \iffielddnums{\thefield{labeldatesource}}{~}%
54   }%
55   \mkbibemph{\mknumalph{#1}}}%
56
```

We provide tests similar to `\labeldateisdate` to tell if the `labeldate` is (a) any type of date, and (b) neither a date nor `pubstate`.

```

57 \def\iflabeldateisanydate{%
58   \ifboolexpr{%
59     togl {blx@labeldateparts}
60     and not test {\iffieldundef{labeldatesource}}
61     and (
62       test {\iffieldequalstr{labeldatesource}{year}}
63       or not test {\iffieldundef{\thefield{labeldatesource}year}}
64     )}}
65 \def\iflabeldateispubstate{%
66   \ifboolexpr{%
67     not test {\iffieldundef{labeldatesource}}
68     and test {\iffieldequalstr{labeldatesource}{pubstate}}}}

```

We also provide a wrapper around `\printlabeldateextra` that does nothing if the label date is the ‘nodate’ literal *and* sortyear is defined. Sadly sortyear is consumed before we get to this point, so we need a proxy toggle.

```

69 \newtoggle{blx@ox@nonodate}
70 \DeclareBiblatexOption{global,type,entry}{nonodate}[true]{%
71   \settoggle{blx@ox@nonodate}{#1}}
72 \newbibmacro*{labeldate}{%
73   \ifboolexpr{
74     test {\iffieldequalstr{labeldatesource}{nodate}}
75     and
76     togl {blx@ox@nonodate}
77   }{\printtext[dateLabel]{\printlabeldateextra}}}

```

Since v3.12, `authoryear.bbx` has had an `bbx:ifmergeddate` test. We don’t use it, but if we define it too it suppresses redefinition warnings later.

```

78 \newbibmacro*{bbx:ifmergeddate}{\@secondoftwo}
79

```

Here we provide the various possible definitions. The `authoryear` implementation does it by clearing, changing or restoring the normal definitions of the date and issue+date macros. This is not so great for us as our versions of those macros are quite complex (too much to keep repeating). There are additional complications that arise from us using `origdate` in preference to `date` for the label year, and from our option that requires us to print some dates without years. Conceptually it is more straightforward to clear the data fields instead.

- `true` is the same as `year` (see below).

```

80 \def\bbx@opt@mergeddate@true{\bbx@opt@mergeddate@year}

```

- `maximum` merges the issue and the whole date with the date label. Therefore, we clear year, month, and day from the date used for the label, as well as the issue field.

```

81 \def\bbx@opt@mergeddate@maximum{%
82   \renewbibmacro*{date+extradate}{%
83     \iffieldundef{labelyear}}{%
84     \iflabeldateisdate{%
85       \printtext[dateLabel]{%
86         \printfield{issue}\clearfield{issue}%
87         \setunit*{\addspace}%
88         \printdateextra}%
89       \clearfield{year}\clearfield{yeardivision}\clearfield{month}\clearfield{day}%
90     }{%

```

```

91 \iflabeldateisanydate{%
92   \printtext[datelabel]{%
93     \csuse{print\thefield{labeldatesource}dateextra}}%
94   \clearfield{\thefield{labeldatesource}year}%
95   \clearfield{\thefield{labeldatesource}yeardivision}%
96   \clearfield{\thefield{labeldatesource}month}%
97   \clearfield{\thefield{labeldatesource}day}%
98 }{%
99   \usebibmacro{labeldate}%
100   \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}}}%

```

- compact merges the whole date (but not issue) with date label. Therefore, we clear year, month, and day from the date used for the label, but leave the issue field alone.

```

101 \def\bbx@opt@mergedate@compact{%
102   \renewbibmacro*{date+extradate}{%
103     \iffieldundef{labelyear}{}{%
104       \iflabeldateisdate{%
105         \printtext[datelabel]{\printdateextra}%
106         \clearfield{year}\clearfield{yeardivision}\clearfield{month}\clearfield{day}%
107       }{%
108         \iflabeldateisanydate{%
109           \printtext[datelabel]{%
110             \csuse{print\thefield{labeldatesource}dateextra}}%
111           \clearfield{\thefield{labeldatesource}year}%
112           \clearfield{\thefield{labeldatesource}yeardivision}%
113           \clearfield{\thefield{labeldatesource}month}%
114           \clearfield{\thefield{labeldatesource}day}%
115         }{%
116           \usebibmacro{labeldate}%
117           \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}}}%

```

- year always merges the year, and only the year, with the label date. Other date and time components are displayed later in the reference. Therefore we clear the year from the date used for the label, but leave the month and day alone.

```

118 \def\bbx@opt@mergedate@year{%
119   \renewbibmacro*{date+extradate}{%
120     \iffieldundef{labelyear}{}{%
121       \usebibmacro{labeldate}%
122       \iflabeldateisdate{%
123         \clearfield{year}
124       }{%
125         \iflabeldateisanydate{%
126           \clearfield{\thefield{labeldatesource}year}%
127         }{%
128           \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
129         }}}}%

```

- basic will merge a year-only date with the date label, but will otherwise display the label year at the head of the reference and the full date later. Therefore we clear the year if and only if there is no month component *and* (if this is the regular date) no issue.

```

130 \def\bbx@opt@mergedate@basic{%
131   \renewbibmacro*{date+extradate}{%
132     \iffieldundef{labelyear}{}{%
133       \usebibmacro{labeldate}%
134       \iflabeldateisdate{%

```

```

135 \ifbool{expr}{
136   test {\ifdateshavedifferentprecision{label}}{}
137   or
138   not test {\iffieldundef{issue}}
139 }{}{
140   \clearfield{year}}%
141 }{}{
142   \iflabeldateisanydate{
143     \ifdateshavedifferentprecision{label}{\thefield{labeldatesource}}{}{
144       \clearfield{\thefield{labeldatesource}year}}%
145   }{}{
146     \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
147   }}}}

```

- minimum will only merge the date with the label date if the two are identical, that is, a bare year with no month or disambiguating suffix. Therefore we clear the year if and only if there is no month component, no extradata, *and* (if this is the regular date) no issue.

```

148 \def\bbx@opt@mergedate@minimum{%
149   \renewbibmacro*{date+extradata}{%
150     \iffieldundef{labelyear}{}{
151       \usebibmacro{labeldate}%
152       \iflabeldateisdate{
153         \ifbool{expr}{
154           test {\ifdateshavedifferentprecision{label}}{}
155           or
156           not test {\iffieldundef{extradata}}
157           or
158           not test {\iffieldundef{issue}}
159         }{}{
160           \clearfield{year}}%
161       }{}{
162         \iflabeldateisanydate{
163           \ifbool{expr}{
164             test {\ifdateshavedifferentprecision{label}{\thefield{labeldatesource}}}
165             or
166             not test {\iffieldundef{extradata}}
167           }{}{
168             \clearfield{\thefield{labeldatesource}year}}%
169         }{}{
170           \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
171         }}}}

```

- false suppresses any merging. We only clear the label date source if it is a non-date field other than pubstate.

```

172 \def\bbx@opt@mergedate@false{%
173   \renewbibmacro*{date+extradata}{%
174     \iffieldundef{labelyear}{}{
175       \usebibmacro{labeldate}%
176       \iflabeldateisanydate{
177         \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
178       }}}}

```

We set the default to be true/year.

```

179 \ExecuteBibliographyOptions{mergedate}

```

The problem with moving years but leaving months and days behind is that the regular date range macros in `biblatex.sty` do nothing at all if no year is printed. We therefore need to patch

the macros with extra routines for printing year-free date ranges: the rather extravagantly named `\mknoyeardaterangefull` and `\mknoyeardaterangetrunc`.

```

180 \newrobustcmd*{\mknoyeardaterangefull}[2]{%
181   \iffieldundef{#2month}{}%
182   \printtext[#2date]{}%
183   \datecircaprint
184   \iffieldundef{#2yeardivision}{%
185     \csuse{mkbibdate#1}{#2month}{#2day}%
186     \blx@printtime{#2}{}%
187   }{%
188     \csuse{mkbibyeardivisiondate#1}{#2yeardivision}%
189     \dateuncertainprint
190     \iffieldundef{#2endmonth}{}%
191     \iffieldequalstr{#2endmonth}{}%
192     \mbox{\bibdaterangesep}%
193   }{%
194     \bibdaterangesep
195     \enddatecircaprint
196     \iffieldundef{#2yeardivision}{%
197       \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
198       \blx@printtime{#2}{end}%
199     }{%
200       \csuse{mkbibyeardivisiondate#1}{#2endyeardivision}%
201       \enddateuncertainprint}}}%

```

There is a potential problem for `\mknoyeardaterangetrunc`, in that if the year and endyear are missing, it cannot tell if they are the same, so if the months are the same but the years are different, the range would be erroneously compressed. However, the only reason the year should be missing is that it is in the label, so we test `labelyear` instead.

```

202 \newrobustcmd*{\mknoyeardaterangetrunc}[2]{%
203   \iffieldundef{#2month}{}%
204   \printtext[#2date]{}%
205   \datecircaprint
206   \iffieldundef{#2yeardivision}{%
207     \ifboolexpr{
208       test {\ifdateyearsequal{label}{labelend}}
209       and
210       test {\iffieldsequal{#2month}{#2endmonth}}
211     }{%
212       \csuse{mkbibdate#1}{#2day}%
213     }{%
214       \csuse{mkbibdate#1}{#2month}{#2day}%
215     }{%
216       \csuse{mkbibyeardivisiondate#1}{#2yeardivision}%
217       \dateuncertainprint
218       \iffieldundef{#2endmonth}{}%
219       \iffieldequalstr{#2endmonth}{}%
220       \mbox{\bibdaterangesep}%
221     }{%
222       \bibdaterangesep
223       \enddatecircaprint
224       \iffieldundef{#2yeardivision}{%
225         \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
226       }{%
227         \csuse{mkbibyeardivisiondate#1}{#2endyeardivision}%
228         \enddateuncertainprint}}}%

```

Now we patch the four date range commands. The extra commands, which print disambiguating labels as well, should only print those labels if the year is present, so they can use the same non-year date range functions as the non-extra commands.


```

229 \xpatchcmd{\mkdaterangefull}{%
230 \iffieldundef{#2year} {\blx@nunit}%
231 }{%
232 \iffieldundef{#2year} {\mknoyeardaterangefull{#1}{#2}}%
233 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch mkdaterangefull}}
234 \xpatchcmd{\mkdaterangetrunc@i}{%
235 \iffieldundef{#2year} {\blx@nunit}%
236 }{%
237 \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
238 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch mkdaterangetrunc@i}}
239 \xpatchcmd{\mkdaterangefullextra}{%
240 \iffieldundef{#2year} {\blx@nunit}%
241 }{%
242 \iffieldundef{#2year} {\mknoyeardaterangefull{#1}{#2}}%
243 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch mkdaterangefullextra}}
244 \xpatchcmd{\mkdaterangetruncextra@i}{%
245 \iffieldundef{#2year} {\blx@nunit}%
246 }{%
247 \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
248 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch mkdaterangetruncextra@i}}
249

```

2.4.3 BIBLIOGRAPHY FORMATTING

We let `biblatex` measure shorthands so we can use `\shorthandwidth` later.

```

250 \DeclareFieldFormat{shorthandwidth}{#1}

```

We enhance the family-given name format to handle the pseudo and inferred annotations.

```

251 \xpretolnameformat{family-given}{%
252 \iffieldannotation{inferred}{\ifnumequal{\value{listcount}}{1}{\bibopenbracket}}{}{}%
253 \ifitemannotation{inferred}{\bibopenbracket}}{}{}%
254 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to prepend to family-given}}
255 \xpatchnameformat{family-given}{%
256 \usebibmacro{name:andothers}%
257 }{%
258 \ifitemannotation{pseudo}{%
259 \addspace\printtext[pars]{\bibsstring{pseudo}}%
260 }{}%
261 \ifitemannotation{inferred}{\bibclosebracket}}{}{}%
262 \usebibmacro{name:andothers}%
263 \iffieldannotation{inferred}{%
264 \ifboolexpr{
265 test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
266 or
267 test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
268 or (
269 test {\ifnumequal{\value{listcount}}{\value{minnames}}}
270 and
271 test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}} )
272 }{\bibclosebracket}}{}%
273 }{}%
274 }{}{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch family-given}}
275 \DeclareNameAlias{shortauthor}{family-given}
276 \DeclareNameAlias{shorteditor}{family-given}

```

Names at the head of the reference are family-given, but names elsewhere are given-family.

```

277 \DeclareNameAlias{sortname}{family-given}
278 \DeclareNameAlias{author}{family-given}
279 \DeclareNameAlias{editor}{family-given}
280 \DeclareNameAlias{translator}{family-given}

```

The bibliography formatting is just like authoryear except we do not eliminate item separation by default.

```

281 \defbibenvironment{bibliography}
282   {\list
283     {}
284     {\setlength{\leftmargin}{\bibhang}%
285      \setlength{\itemindent}{-\leftmargin}%
286      \setlength{\itemsep}{\bibitemsep}%
287      \setlength{\parsep}{\bibparsep}}}
288   {\endlist}
289   {\item}

```

The shorthand formatting is just like authoryear.

```

290 \defbibenvironment{shorthand}
291   {\list
292     {\printfield[shorthandwidth]{shorthand}}
293     {\setlength{\labelwidth}{\shorthandwidth}%
294      \setlength{\leftmargin}{\labelwidth}%
295      \setlength{\labelsep}{\biblabelsep}%
296      \addtolength{\leftmargin}{\labelsep}%
297      \setlength{\itemsep}{\bibitemsep}%
298      \setlength{\parsep}{\bibparsep}%
299      \renewcommand*{\makeLabel}[1]{##1\hss}}}
300   {\endlist}
301   {\item}

```

2.4.4 NAME AND DATE FORMATTING

We set up hashing just as in authoryear.

```

302 \InitializeBibliographyStyle{\global\undef\bbx@lasthash}

```

We ensure related entries do not interfere with the hashing.

```

303 \xapptobibmacro{begrelated}{%
304   \booltrue{bbx@inset}}%
305 {}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to append to begrelated}}
306 \xapptobibmacro{endrelated}{%
307   \usebibmacro*{bbx:savehash}}%
308 {}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to append to endrelated}}

```

We patch the author macro so that the date label information appears at the end (as in authoryear).

```

309 \xpatchbibmacro{author}{%
310   \iffieldundef{author type}%
311 }{%
312   \usebibmacro{date+extradate}%
313   \setunit*{\addspace}%
314   \iffieldundef{author type}%
315 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch author (author type)}}%
316 \xpatchbibmacro{author}{%
317   \global\undef\bbx@lasthash

```

```

318 }{%
319   \global\undef\bbx@lasthash
320   \usebibmacro{labeltitle}%
321   \setunit*{\addspace}%
322   \usebibmacro{date+extradate}%
323 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch author (lasthash)}}%

```

We patch it further so that, where an author name has a corresponding (different) short author name, the short name is given first and the long name given in parentheses. Note that this only affects cases where `authoraddon` has not been provided.

```

324 \xpatchbibmacro{author+altauthor}{%
325   \printnames{author}%
326 }{%
327   \ifbool{expr}{%
328     ( not test {\ifnameundef{shortauthor}} )
329     and
330     test {\ifnumequal{\value{shortauthor}}{\value{author}}}
331   }{%
332     \usebibmacro{namepairs}{author}{shortauthor}%
333   }{%
334     \printnames{author}%
335   }%
336 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch author+altauthor}}%

```

We apply the same patches to `bbx:editor`, but also move the editor string to after the date label.

```

337 \xpatchbibmacro{bbx:editor}{%
338   \usebibmacro{#1}%
339 }{%
340   \usebibmacro{date+extradate}%
341   \setunit*{\addspace}%
342   \usebibmacro{#1}%
343 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch bbx:editor}}%
344 \xpatchbibmacro{bbx:editor}{%
345   \global\undef\bbx@lasthash
346 }{%
347   \global\undef\bbx@lasthash
348   \usebibmacro{labeltitle}%
349   \setunit*{\addspace}%
350   \usebibmacro{date+extradate}%
351 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch bbx:editor (lasthash)}}%
352 \xpatchbibmacro{editor+alteditor}{%
353   \printnames[byeditor]%
354 }{%
355   \printnames[editor]%
356 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch editor+alteditor}}%
357 \xpatchbibmacro{editor+alteditor}{%
358   \printnames{editor}%
359 }{%
360   \ifbool{expr}{%
361     ( not test {\ifnameundef{shorteditor}} )
362     and
363     test {\ifnumequal{\value{shorteditor}}{\value{editor}}}
364   }{%
365     \usebibmacro{namepairs}{editor}{shorteditor}%
366   }{%
367     \printnames{editor}%
368   }%
369 }{}{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch editor+alteditor (shorteditor)}}%

```

We apply the same patches to `bbx:translator` as we do for `bbx:editor`, except for the shortening one.

```

370 \xpatchbibmacro{bbx:translator}{%
371   \global\undef\bbx@lasthash
372 }{%
373   \global\undef\bbx@lasthash
374   \usebibmacro{labeltitle}%
375   \setunit*\addspace}%
376 \usebibmacro{date+extradate}%
377 }{{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch bbx:translator (lasthash)}}}%
378 \xpatchbibmacro{bbx:translator}{%
379   \usebibmacro{#1}%
380 }{%
381   \usebibmacro{date+extradate}%
382   \setunit*\addspace}%
383   \usebibmacro{#1}%
384 }{{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch bbx:translator}}}%

```

The `labeltitle` macro differs from the one from `authoryear` in that it also includes the subtitle. We record the fact that we have cleared the title.

```

385 \newtoggle{blx@ox@clearedtitle}
386 \newbibmacro*{labeltitle}{%
387   \iffieldundef{label}{%
388     \iffieldundef{shorttitle}{%
389       \ifboolexpr{
390         test {\iffieldundef{title}}
391         and
392         test {\iffieldundef{subtitle}}
393       }{%
394         \printfield{library}%
395         \clearfield{library}%
396       }{%
397         \printtext[title]{%
398           \printfield[titlecase]{title}%
399           \setunit{\subtitlepunct}%
400           \printfield[titlecase]{subtitle}}%
401         \clearfield{title}%
402         \clearfield{subtitle}%
403         \toggletrue{blx@ox@clearedtitle}%
404         \setunit{\addspace}%
405       }%
406     }{%
407       \printtext[title]{\printfield[titlecase]{shorttitle}}%
408     }%
409   }{%
410     \printfield{label}%
411   }%
412 }

```

If the `labeltitle` pulls the title from a `maintitle+title` macro, we flick a switch to make the driver use `maintitle+volume` instead.

```

413 \xpretobibmacro{maintitle+title}{%
414   \iftoggle{blx@ox@clearedtitle}{%
415     \usebibmacro{maintitle+volume}%
416     \clearfield{maintitle}%
417     \clearfield{volume}%
418   }{%
419     }{{\wlog{WARNING: biblatex-oxref (oxyyear) failed to prepend to maintitle+title}}}%
420   \DeclareFieldFormat[mvbook,mvcollection,mvreference,mvproceedings]{maintitle+volume}{#1}

```

The date of online entries is printed in parentheses; as the year is moved after the author, this can lead to empty parentheses unless a month is printed, so we change the test accordingly.

```

421 \xpatchbibdriver{online}{%
422   \iffieldundef{year}%
423 }{%
424   \ifbool{expr{
425     test {\iffieldundef{yeardivision}}
426     and
427     test {\iffieldundef{month}}
428   }}%
429 }{\wlog{WARNING: biblatex-oxref (oxyyear) failed to patch online}}

```

We ensure the label title in citations matches the formatting used for the equivalent information in the bibliography entry.

```

430 \DeclareFieldFormat[bookinbook]{citetitle}{%
431   \ifbool{expr{
432     test {\iffieldequalstr{entrysubtype}{poem}}
433     or
434     test {\iffieldequalstr{entrysubtype}{play}}
435   }}%
436   \mkbibemph{#1}%
437 }{%
438   \mkbibquote{#1\isdot}}%
439 \DeclareFieldFormat[supperiodical,inaudio,inmusic,inmovie,invideo,online,%
440   image,manuscript,unpublished]{citetitle}{%
441   \def\currentfield{title}%
442   \ifbool{expr{
443     test {\iffieldannotation{descriptor}}
444     or (
445       test {\iffieldundef{shorttitle}}
446       and
447       test {\iffieldundef{title}}
448     )
449   }}{#1}{\mkbibquote{#1\isdot}}%
450   \undef\currentfield}
451 \DeclareFieldFormat[supperiodical,inaudio,inmusic,inmovie,invideo,online,%
452   image,manuscript,unpublished]{citetitle}{%
453   \def\currentfield{title}%
454   \ifbool{expr{
455     test {\iffieldannotation{descriptor}}
456     or (
457       test {\iffieldundef{shorttitle}}
458       and
459       test {\iffieldundef{title}}
460     )
461   }}{#1}{\mkbibquote{#1\isdot}}%
462   \undef\currentfield}
463 \DeclareFieldFormat[audio,music]{citetitle}{%
464   \def\currentfield{title}%
465   \ifbool{expr{
466     test {\iffieldannotation{descriptor}}
467     or (
468       test {\iffieldundef{shorttitle}}
469       and
470       test {\iffieldundef{title}}
471     )
472   }}{#1}{%
473     \iffieldequalstr{entrysubtype}{podcast}{%
474       \mkbibquote{#1\isdot}}%
475   }%

```

```

476     \mkbibemph{#1}}}%
477 \undef\currentfield}
478 \DeclareFieldFormat[movie,video]{citetitle}{%
479 \def\currentfield{title}%
480 \ifboolexpr{
481   test {\iffieldannotation{descriptor}}
482   or (
483     test {\iffieldundef{shorttitle}}
484     and
485     test {\iffieldundef{title}}
486   )
487 }{#1}{%
488   \ifboolexpr{
489     test {\iffieldequalstr{entrysubtype}{episode}}
490     or
491     test {\iffieldequalstr{entrysubtype}{clip}}
492     or
493     test {\iffieldequalstr{entrysubtype}{webcast}}
494   }{%
495     \mkbibquote{#1\isdot}%
496   }{%
497     \mkbibemph{#1}}}%
498 \undef\currentfield}
499 \DeclareFieldFormat[legislation,legal]{citetitle}{#1}
500 \DeclareFieldFormat[misc]%
501   {citetitle}{%
502 \def\currentfield{title}%
503 \ifboolexpr{
504   test {\iffieldannotation{descriptor}}
505   or (
506     test {\iffieldundef{shorttitle}}
507     and
508     test {\iffieldundef{title}}
509   )
510 }{#1}{%
511   \iffieldequalstr{relatedtype}{in}{%
512     \mkbibquote{#1\isdot}%
513   }{%
514     \mkbibemph{#1}%
515   }}%
516 \undef\currentfield}
517

```

2.4.5 JOURNAL DIVISION FORMATTING

Oxyear uses a colon to demarcate page numbers in journal articles.

```

518 \renewcommand*{\bibpagespunct}{%
519 \ifboolexpr{
520   test {\ifentrytype{article}}
521   or
522   test {\ifentrytype{supperperiodical}}
523   or
524   test {\ifentrytype{review}}
525 }{%
526   \addcolon\space
527 }{%
528   \addcomma\space
529 }%
530 }

```

2.4.6 MANUSCRIPTS

Since we clear the title, we need a more sophisticated test for whether to suppress the date.

```

531 \renewbibmacro{manuscript:date}{%
532   \ifbool{expr}{
533     test {\ifnameundef{author}}
534     and
535     not togl {blx@ox@clearedtitle}
536     and
537     test {\iffieldundef{label}}
538   }{\usebibmacro{date}}}
```

We include the library field as a fallback title.

```

539 \DeclareLabeltitle{%
540   \field{shorttitle}
541   \field{title}
542   \field{maintitle}
543   \field{library}
544 }
```

2.4.7 SOURCE MAPS

We use the source mapping capabilities of Biber to fix the following issues.

```

545 \DeclareStyleSourcemap{%
546   \maps[datatype=bibtex]{%
```

Suppressing a ‘nodate’ label

Unless already set, the `nonodate` option is inserted if `sortyear` is used. We accomplish this with source maps; the first one works where options (not including `nonodate`) have been set, the second where no options have been set.

```

547 \map[overwrite=true]{
548   \step[notmatch=\regexp{nonodate}, fieldsource=options, final]
549   \step[fieldsource=sortyear, final]
550   \step[fieldset=options, append, fieldvalue={,nonodate}]
551 }
552 \map[overwrite=true]{
553   \step[notfield=options, final]
554   \step[fieldsource=sortyear, final]
555   \step[fieldset=options, fieldvalue={nonodate}]
556 }
```

Standards

The purpose of this map is to change the number into a label in the absence of an author, so that the citations come out right and the date is positioned correctly.

```

557 \map[overwrite=false]{
558   \pertype{standard}
559   \step[notfield=author,
560     fieldsource=number,
561     fieldtarget=label]
562 }
563 }}
```

564

2.5 Alphabetic style: oxalph.bbx

2.5.1 PRELIMINARIES

This style is based on oxyear.

20

```
\RequireBibliographyStyle{oxyear}
```

2.5.2 SUPPRESSING LABELEXTRA

Since the label codes do all the disambiguation, it is not necessary for the date at the head of the reference to have a disambiguation component.

21

```
\xpatchcmd{\bbx@opt@mergedate@maximum}{%
```

22

```
\printdateextra
```

23

```
}{%
```

24

```
\printdate
```

25

```
}{}{\wlog{WARNING: biblatex-oxref (oxalph) failed to patch bbx@opt@mergedate@maximum  
↪ (print)}}
```

26

```
\xpatchcmd{\bbx@opt@mergedate@maximum}{%
```

27

```
\csuse{print\thefield{labeldatesource}dateextra}%
```

28

```
}{%
```

29

```
\csuse{print\thefield{labeldatesource}date}%
```

30

```
}{}{\wlog{WARNING: biblatex-oxref (oxalph) failed to patch bbx@opt@mergedate@maximum  
↪ (label)}}
```

31

```
\xpatchcmd{\bbx@opt@mergedate@compact}{%
```

32

```
\csuse{print\thefield{labeldatesource}dateextra}%
```

33

```
}{%
```

34

```
\csuse{print\thefield{labeldatesource}date}%
```

35

```
}{}{\wlog{WARNING: biblatex-oxref (oxalph) failed to patch bbx@opt@mergedate@compact}}
```

36

```
\xpatchbibmacro{labeldate}{%
```

37

```
\printlabeldateextra
```

38

```
}{%
```

39

```
\printlabeldate
```

40

```
}{}{\wlog{WARNING: biblatex-oxref (oxalph) failed to patch labeldate}}
```

41

```
\ExecuteBibliographyOptions{mergedate}
```

42

2.5.3 LABEL CODES: PRINTING

This next code is extracted from the standard alphabetic style, and among other things ensures the citation labels are printed in the bibliography.

43

```
\ExecuteBibliographyOptions{labelalpha,sorting=anyt}
```

44

```
\DeclareFieldFormat{labelalphawidth}{\mkbibbrackets{#1}}
```

45

```
\DeclareFieldFormat{shorthandwidth}{\mkbibbrackets{#1}}
```

46

```
\defbibenvironment{bibliography}
```

47

```
{\list
```

48

```
{\printtext[labelalphawidth]{%
```

49

```
\printfield{labelprefix}%
```

50

```
\printfield{labelalpha}%
```

51

```
\printfield{extraalpha}}}
```

52

```
{\setlength{\labelwidth}{\labelalphawidth}%
```

53

```
\setlength{\leftmargin}{\labelwidth}%
```

54

```
\setlength{\leftmargin}{\labelwidth}%
```

55


```

56     \setlength{\labelsep}{\biblabelsep}%
57     \addtolength{\leftmargin}{\labelsep}%
58     \setlength{\itemsep}{\bibitemsep}%
59     \setlength{\parsep}{\bibparsep}%
60     \renewcommand*{\makelabel}[1]{##1\hss}}
61 {\endlist}
62 {\item}
63
64 \defbibenvironment{shorthand}
65 {\list
66   {\printfield[shorthandwidth]{shorthand}}
67   {\setlength{\labelwidth}{\shorthandwidth}%
68    \setlength{\leftmargin}{\labelwidth}%
69    \setlength{\labelsep}{\biblabelsep}%
70    \addtolength{\leftmargin}{\labelsep}%
71    \setlength{\itemsep}{\bibitemsep}%
72    \setlength{\parsep}{\bibparsep}%
73    \renewcommand*{\makelabel}[1]{##1\hss}}}
74 {\endlist}
75 {\item}

```

2.5.4 LABEL CODES: GENERATING

The standard labels are generated from the `labelname` and `year`. We widen the net a bit, so that if there is no `labelname`, we fall back to the `shortlabeltitle` or `labeltitle`; also we use `labelyear` in place of `year`. The `shortlabeltitle` is generated from all the capital letters in the title and subtitle, with the help of a source map.

```

76 \DeclareStyleSourcemap{%
77   \maps[datatype=bibtex]{%
78     \map[overwrite=false]{%
79       \step[fieldsource=title, final]
80       \step[fieldset=shortlabeltitle, origfieldval]
81       \step[fieldsource=subtitle]
82       \step[fieldset=shortlabeltitle, origfieldval, append=true]
83       \step[fieldsource=shortlabeltitle,
84         match=\regexp{[^\p{Lu}]},
85         replace=\regexp{}}
86     }}}
87 \DeclareLabelalphaTemplate{%
88   \labelelement{
89     \field[final]{shorthand}
90     \field[label]
91     \field[strwidth=3, strside=left, ifnames=1]{labelname}
92     \field[strwidth=1, strside=left]{labelname}
93     \field[strwidth=3, strside=left]{shortlabeltitle}
94     \field[strwidth=4, strside=left]{labeltitle}
95   }
96   \labelelement{
97     \field[strwidth=2, strside=right]{labelyear}
98   }
99 }

```

Citation styles

3.1 Notes style: oxnotes.cbx

The standard verbose style is a close match for what we need.

```
20 \RequireCitationStyle{verbose}
```

Variants are also provided that load the respective variant of verbose at this point.

The main difference is that the `citepages` option from these styles needs to be `separate` by default, and the `\postnotedelim` before the bibliography string `thiscite` ('at') is replaced by a simple space.

```
21 \newbibmacro*{cite:postnote:pages}{%
22   \setunit{\addspace}%
23   \bibstring{thiscite}%
24   \setunit{\addspace}%
25   \printfield{postnote}}
26 \ExecuteBibliographyOptions{citepages=separate}
```

3.2 Numeric style: oxnum.cbx

The standard numeric style works, needing only a little configuration.

```
20 \RequireCitationStyle{numeric-comp}
```

Compressed citations are delimited with a semicolon, just like non-compressed citations.

```
21 \renewcommand*{\multicitedelim}{\addsemicolon\space}
22 \renewcommand*{\compcitedelim}{\addsemicolon\space}
```

The page reference postnote is given after a colon.

```
23 \renewcommand*{\postnotedelim}{\addcolon\space}
```

3.3 Author–year style: oxyyear.cbx

The standard authoryear-comp style is a close match for what we need.

```
20 \RequireCitationStyle{authoryear-comp}
```

This sets `uniquename` to `full`, but that conflicts with `giveninits` set by the bibliography style, so we set it to `init` instead. If left alone, `biblatex` would do this anyway, but if we do it explicitly, we avoid the warning message.

```
21 \ExecuteBibliographyOptions{uniquename=init}
```

We provide a slightly different `labeldate` macro that obeys the `nonodate` option.

```
22 \renewbibmacro*{cite:labeldate+extradate}{%
23   \ifbool{expr}{
24     test {\iffielddundef{labelyear}}
25     or
26     ( test {\iffieldequalstr{labeldatesource}{nodate}}
27       and
28       togl {blx@ox@nonodate} )
29   }{\printtext[bibhyperref]{\printlabeldateextra}}
```

We insert anonymous author handling into `cite`.

```
30 \xpatchbibmacro{cite}{%
31   \printnames{labelname}%
32 }{%
33   \ifbool{expr}{
34     test {\iffieldequalstr{labelnamesource}{author}}
35     and
36     togl {blx@ox@autoanon}
37     and
38     test {\iffieldequals{rawauthor}{\oxrefanon}}
39   }{%
40     \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
41   }%
42   \printnames{labelname}%
43 }%
44 }{\wlog{WARNING: biblatex-oxref (oxyear) failed to patch cite}}
```

The name and year are usually separated by a space, but if the date is replaced by a word (e.g. ‘forthcoming’, ‘n.d.’), they are separated by a comma.

```
45 \DeclareDelimFormat{nameyeardelim}{%
46   \iflabeldateisanydate
47   {\addspace}%
48   {\addcomma\space}}
49 \DeclareDelimFormat{nonameyeardelim}{%
50   \iflabeldateisanydate
51   {\addspace}%
52   {\addcomma\space}}
```

Compressed citations are delimited with a semicolon, just like non-compressed citations.

```
53 \renewcommand*{\multicitedelim}{\addsemicolon\space}
54 \renewcommand*{\compitedelim}{\addsemicolon\space}
```

The page reference postnote is given after a colon.

```
55 \renewcommand*{\postnotedelim}{\addcolon\space}
```

3.4 Alphabetic style: oxalph.cbx

The standard alphabetic style works, needing only a little configuration.

```
20 \RequireCitationStyle{alphabetic}
```

Compressed citations are delimited with a semicolon, just like non-compressed citations.

```
21 \renewcommand*{\multicitedelim}{\addsemicolon\space}
22 \renewcommand*{\compitedelim}{\addsemicolon\space}
```

The page reference postnote is given after a colon.

```
23 \renewcommand*{\postnotedelim}{\addcolon\space}
```

3.5 Common citation fixes

This code is appended to all the citation style files.

Just in case someone loaded this without loading oxref.bbx, we ensure the necessary definitions are in place.

```
1 \RequirePackage{etoolbox}
2 \RequirePackage{xpatch}
3 \providetoggle{blx@ox@autoanon}
4 \providetoggle{blx@ox@abbranon}
```

We fix the textcite macro so if the anon option is set to long or short, a value of ‘Anonymous’ is replaced by the bibliography string anon.

```
5 \xpatchbibmacro{textcite}{%
6   \printnames{labelname}%
7 }{%
8   \ifbool{expr}{
9     test {\iffieldequalstr{labelnamesource}{author}}
10    and
11    togl {blx@ox@autoanon}
12    and
13    test {\iffieldequals{rawauthor}{\oxrefanon}}
14  }{%
15    \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
16  }{%
17    \printnames{labelname}%
18  }%
19 }{\wlog{WARNING: biblatex-oxref failed to patch textcite}}
```

Data model adjustments

4.1 oxnotes.dbx, oxyyear.dbx, oxnum.dbx, and oxalph.dbx

We provide an additional name part for handling titles.

```
20 \DeclareDatamodelConstant[type=list]{nameparts}{prefix,family,suffix,given,title}
```

The datatype and origdatatype fields are used for prefixing the date with a description.

```
21 \DeclareDatamodelFields[type=field,datatype=literal]{datatype,origdatatype}
```

We add the inaudio entry type and friends.

```
22 \DeclareDatamodelEntrytypes{inaudio,inmusic,inmovie,invideo}
```

The authoraddon and editoraddon fields are used for handling pseudonyms. The serieseditor field is used for the editor of a book series, as opposed to the editor of the particular cited work.

```
23 \DeclareDatamodelFields[type=list,datatype=name]{authoraddon,editoraddon,serieseditor}
```

The jointauthor and jointauthortype fields are used for internally for handling editors/translators who can be considered joint authors.

```
24 \DeclareDatamodelFields[type=list,datatype=name]{jointauthor}
25 \DeclareDatamodelFields[type=field,datatype=literal]{jointauthortype}
```

The rawauthor field is used internally for checking whether an the name given in the author field is a keyword meaning ‘anonymous’.

```
26 \DeclareDatamodelFields[type=field,datatype=literal]{rawauthor}
27 \DeclareDatamodelEntryfields{datatype,origdatatype,authoraddon,editoraddon,%
28 serieseditor,jointauthor,jointauthortype,rawauthor}
```

We provide a shortlabeltitle field to contain our custom reduction of the labeltitle.

```
29 \DeclareDatamodelFields[type=field,datatype=literal]{shortlabeltitle}
```

This data model is borrowed from biblatex-manuscripts-philology.

```

30 \DeclareDatamodelEntrytypes{manuscript}
31 \DeclareDatamodelFields[type=field,datatype=literal]{catalog,dating,%
32   shortlibrary,columns, collection,shortcollection,usualtitle,shelfmark,%
33   sortshelfmark,support,columns,layer}
34 \DeclareDatamodelFields[type=list,datatype=name]{scribe,owner}
35 \DeclareDatamodelFields[type=list,datatype=literal]{origin}
36 \DeclareDatamodelEntryfields[manuscript]{catalog,dating,shortlibrary,%
37   shortcollection,columns, languages, collection,usualtitle,shelfmark,%
38   sortshelfmark,support,columns,origin,scribe,owner}

```

This data model helps with legal citations.

```

39 \DeclareDatamodelFields[type=field,datatype=date]{pardate}
40 \DeclareDatamodelFields[type=field,datatype=literal]{%
41   parreporter,parseries,neutralcite}
42 \DeclareDatamodelFields[type=field,datatype=integer]{parvolume}
43 \DeclareDatamodelFields[type=field,datatype=range]{parpages}
44 \DeclareDatamodelEntryfields[jurisdiction]{neutralcite,pardate,%
45   parreporter,parseries,parvolume,parpages}

```

Localization modules

5.1 English: english-oxref.lbx

Here we set some language-specific punctuation and date formatting. In particular, we set `\blx@ox@langbibstring` to use its first argument.

```

20 \InheritBibliographyExtras{english}
21 \DeclareBibliographyExtras{%
22   \def\finalandcomma{\addcomma}%
23   \def\blx@ox@langbibstring#1#2{\setunit*{\addspace}\bibstring{#2}}%
24 }
25 \UndeclareBibliographyExtras{%
26   \def\blx@ox@langbibstring#1#2{\bibstring{#2}}%
27 }

```

We load the standard set of localization strings, then add our adjustments.

```

28 \DeclareBibliographyStrings{%
29   inherit      = {english},

```

These are new strings defined by `oxref`:

- Roles expressed as functions

```

30 director      = {{director}}{dir\adddot}},
31 directors     = {{directors}}{dirs\adddot}},
32 performer     = {{}},
33 performers    = {{}},
34 reader        = {{reader}}{reader}},
35 readers       = {{readers}}{readers}},
36 conductor     = {{conductor}}{cond\adddot}},
37 conductors    = {{conductors}}{cond\adddot}},
38 serieseditor  = {{series editor}}{ser\adddotsspace ed\adddot}},
39 serieseditors = {{series editors}}{ser\adddotsspace eds\adddot}},
40 holder        = {{holder}}{holder}},
41 holders       = {{holders}}{holders}},
42 editorcm      = {{editor and compiler}}{ed\adddotsspace and comp\adddot}},
43 editorcms     = {{editors and compilers}}{eds\adddotsspace and comp\adddot}},

```

- Roles expressed as actions

```

44 byperformer = {{}},
45 bydirector  = {{directed by}{dir\addot}},
46 byreader    = {{read by}{read by}},
47 byconductor = {{conducted by}{cond\addot}},
48 byserieseditor = {{edited by}{ed\addot}},
49 byholder    = {{held by}{held by}},
50 byeditorcm  = {{edited and compiled by}{ed\addotsspace and comp\addot}},

```

- Publication details

```

51 facsimile    = {{facsimile edition}{facs\addotsspace edn\addot}},
52 revised     = {{revised edition}{rev\addotsspace edn\addot}},
53 revisedenlarged = {{revised and enlarged edition}{rev\addotsspace and enl\addotsspace
↪ edn\addot}},
54 revisedreprint = {{revised reprint}{rev\addotsspace repr\addot}},
55 suppto       = {{Supplement to}{Supplement to}},
56 equals       = {{=}{=}},
57 original     = {{original}{orig\addot}},
58 amendedby    = {{as amended by}{as amended by}},

```

- Publication state

```

59 inpressin    = {{to be published in}{to be published in}},

```

- Pagination

```

60 book         = {{book}{bk\addot}},
61 books        = {{books}{bks\addot}},
62 canto        = {{canto}{canto}},
63 cantos       = {{cantos}{cantos}},
64 stanza       = {{stanza}{stanza}},
65 stanzas      = {{stanzas}{stanzas}},
66 act          = {{Act}{Act}},
67 acts         = {{Acts}{Acts}},
68 scene        = {{Scene}{Scene}},
69 scenes       = {{Scenes}{Scenes}},
70 folio        = {{folio}{fo\addot}},
71 folios       = {{folios}{fos\addot}},
72 article      = {{article}{art\addot}},
73 articles     = {{articles}{arts\addot}},
74 clause       = {{clause}{cl\addot}},
75 clauses      = {{clauses}{cls\addot}},
76 regulation   = {{regulation}{reg\addot}},
77 regulations  = {{regulations}{regs\addot}},
78 rule         = {{rule}{r\addot}},
79 rules        = {{rules}{rr\addot}},
80 booktotal    = {{book}{bk\addot}},
81 booktotals   = {{books}{bks\addot}},
82 cantototal   = {{canto}{canto}},
83 cantototals  = {{cantos}{cantos}},
84 stanzatotal  = {{stanza}{stanza}},
85 stanzatotals = {{stanzas}{stanzas}},
86 acttotal     = {{Act}{Act}},
87 acttotals    = {{Acts}{Acts}},
88 scenetotal   = {{Scene}{Scene}},
89 scenetotals  = {{Scenes}{Scenes}},
90 foliototal   = {{folio}{fo\addot}},
91 foliototals  = {{folios}{fos\addot}},
92 articletotal = {{article}{art\addot}},
93 articletotals = {{articles}{arts\addot}},

```



```

94   clausetotal      = {{clause}}{cl\adddot}},
95   clausetotals     = {{clauses}}{cls\adddot}},
96   regulationtotal  = {{regulation}}{reg\adddot}},
97   regulationtotals = {{regulations}}{regs\adddot}},
98   ruletotal       = {{rule}}{r\adddot}},
99   ruletotals      = {{rules}}{rr\adddot}},

```

- Types

```

100  facebook         = {{Facebook post}}{Facebook post}},
101  tweet            = {{Twitter post}}{Twitter post}},
102  podcast          = {{podcast}}{podcast}},
103  clip             = {{video}}{video}},
104  webcast          = {{webcast}}{webcast}},
105  poster           = {{poster}}{poster}},

```

- Miscellaneous

```

106  nolocation       = {{no place}}{n\adddot p\adddot}},
107  modified          = {{last modified}}{last modified}},
108  recorded          = {{recorded}}{recorded}},
109  uploaded          = {{uploaded}}{uploaded}},
110  filed             = {{filed}}{filed}},
111  issued            = {{issued}}{issued}},

```

- Labels

```

112  anon             = {{Anonymous}}{Anon\adddot}},
113  pseudo            = {{Pseudo-}}{Ps\adddot-}},
114  urldown           = {{downloaded}}{downloaded}},

```

- Country names, patents, and patent requests,

```

115  countryjp        = {{Japan}}{JP}},
116  patentjp         = {{Japanese patent}}{Japanese pat.\adddot}},
117  patreqjp         = {{Japanese patent request}}{Japanese pat.\adddot req.\adddot}},

```

- These are borrowed from other styles.

```

118  1column           = {{one column}}{1\addnbspace col\adddot}},
119  2column           = {{two columns}}{2\addnbspace col\adddot}},
120  inflayer          = {{inferior layer}}{inf\adddotsspace lay\adddot}},
121  suplayer          = {{superior layer}}{sup\adddotsspace lay\adddot}},
122  paper             = {{paper}}{pap\adddot}},
123  papyrus           = {{papyrus}}{papy\adddot}},
124  parchment         = {{parchment}}{parch\adddot}},
125  eucase            = {{Case}}{Case}},
126  eujoinedcases     = {{Joined Cases}}{Joined Cases}},
127  commissiondecision = {{Commission Decision}}{Commission Decision}},
128  application       = {{Application}}{App\adddot}},
129  order             = {{Order}}{Ord\adddot}},
130  bill              = {{Bill}}{Bill}},
131  draft            = {{draft}}{draft}},
132  opened            = {{opened for signature}}{opened for signature}},
133  signed            = {{signed}}{signed}},
134  adopted           = {{adopted}}{adopted}},
135  inforce           = {{entered into force}}{entered into force}},

```

The rest of these strings are the standard ones, overridden to match the examples in the *Oxford Guide to Style* and *New Hart's Rules*. Many of these are guesses extrapolated from what is given.

The roles expressed as functions do not need adjusting. The roles expressed as actions do not typically end in 'by' when abbreviated; the 'with' parts go first when abbreviated if there is more than one editorial role (at least, that is one way of interpreting the examples).

```

136 byeditor      = {{edited by}}{ed\adddot}},
137 bycompiler    = {{compiled by}}{comp\adddot}},
138 byfounder     = {{founded by}}{found\adddot}},
139 bycontinuator = {{continued by}}{cont\adddot}},
140 byredactor    = {{redacted by}}{red\adddot}},
141 byreviser     = {{revised by}}{rev\adddot}},
142 byreviewer    = {{reviewed by}}{rev\adddot}},
143 bycollaborator = {{in collaboration with}}{in collab\adddotspace with}},
144 bytranslator  = {{translated by}}{trans\adddot}},
145 bycommentator = {{commented by}}{comm\adddot}},
146 byannotator   = {{annotated by}}{annot\adddot}},
147 byeditortr    = {{edited and translated by}}%
148               {ed\adddotspace and trans\adddot}},
149 byeditorco    = {{edited and commented by}}%
150               {ed\adddotspace and comm\adddot}},
151 byeditoran     = {{edited and annotated by}}%
152               {ed\adddotspace and annot\adddot}},
153 byeditorin     = {{edited, with an introduction, by}}%
154               {ed.\adddotspace with introduction}},
155 byeditorfo     = {{edited, with a foreword, by}}%
156               {ed.\adddotspace with foreword}},
157 byeditoraf     = {{edited, with an afterword, by}}%
158               {ed.\adddotspace with afterword}},
159 byeditortrco   = {{edited, translated\finalandcomma\ and commented by}}%
160               {ed.\addabrvspace trans\adddot\finalandcomma\ and comm\adddot}},
161 byeditortran   = {{edited, translated\finalandcomma\ and annotated by}}%
162               {ed.\addabrvspace trans\adddot\finalandcomma\ and annot\adddot}},
163 byeditortrin   = {{edited and translated, with an introduction, by}}%
164               {with introduction, ed\adddotspace and trans\adddot}},
165 byeditortrfo   = {{edited and translated, with a foreword, by}}%
166               {with foreword, ed\adddotspace and trans\adddot}},
167 byeditortraf   = {{edited and translated, with an afterword, by}}%
168               {with afterword, ed\adddotspace and trans\adddot}},
169 byeditorcoin   = {{edited and commented, with an introduction, by}}%
170               {with introduction, ed\adddotspace and comm\adddot}},
171 byeditorcofo   = {{edited and commented, with a foreword, by}}%
172               {with foreword, ed\adddotspace and comm\adddot}},
173 byeditorcoaf   = {{edited and commented, with an afterword, by}}%
174               {with afterword, ed\adddotspace and comm\adddot}},
175 byeditoranin   = {{edited and annotated, with an introduction, by}}%
176               {with introduction, ed\adddotspace and annot\adddot}},
177 byeditoranfo   = {{edited and annotated, with a foreword, by}}%
178               {with foreword, ed\adddotspace and annot\adddot}},
179 byeditoranaf   = {{edited and annotated, with an afterword, by}}%
180               {with afterword, ed\adddotspace and annot\adddot}},
181 byeditortrcoin ↪ by}%
182               {with introduction, ed.\addabrvspace trans\adddot\finalandcomma\ and
183               ↪ comm\adddot}},
183 byeditortrcofo = {{edited, translated\finalandcomma\ and commented, with a foreword, by}}%
184               {with foreword, ed.\addabrvspace trans\adddot\finalandcomma\ and
185               ↪ comm\adddot}},
185 byeditortrcoaf = {{edited, translated\finalandcomma\ and commented, with an afterword,
186               ↪ by}%
               {with afterword, ed.\addabrvspace trans\adddot\finalandcomma\ and
               ↪ comm\adddot}},

```

```

187 byeditortranin = {{edited, translated\finalandcomma\ and annotated, with an introduction,
↪ by}%
188               {with introduction, ed.,\addabrvspace trans\adddot\finalandcomma\ and
↪ annot\adddot}},
189 byeditortranfo = {{edited, translated\finalandcomma\ and annotated, with a foreword, by}%
190               {with foreword, ed.,\addabrvspace trans\adddot\finalandcomma\ and
↪ annot\adddot}},
191 byeditortranaf = {{edited, translated\finalandcomma\ and annotated, with an afterword,
↪ by}%
192               {with afterword, ed.,\addabrvspace trans\adddot\finalandcomma\ and
↪ annot\adddot}},
193 bytranslatorco = {{translated and commented by}%
194               {trans\adddotsspace and comm\adddot}},
195 bytranslatoran = {{translated and annotated by}%
196               {trans\adddotsspace and annot\adddot}},
197 bytranslatorin = {{translated, with an introduction, by}%
198               {trans\adddotsspace with introduction}},
199 bytranslatorfo = {{translated, with a foreword, by}%
200               {trans\adddotsspace with foreword}},
201 bytranslatoraf = {{translated, with an afterword, by}%
202               {trans\adddotsspace with afterword}},
203 bytranslatorcoin = {{translated and commented, with an introduction, by}%
204               {with introduction, trans\adddotsspace and comm\adddot}},
205 bytranslatorcofo = {{translated and commented, with a foreword, by}%
206               {with foreword, trans\adddotsspace and comm\adddot}},
207 bytranslatorcoaf = {{translated and commented, with an afterword, by}%
208               {with afterword, trans\adddotsspace and comm\adddot}},
209 bytranslatoranin = {{translated and annotated, with an introduction, by}%
210               {with introduction, trans\adddotsspace and annot\adddot}},
211 bytranslatoranfo = {{translated and annotated, with a foreword, by}%
212               {with foreword, trans\adddotsspace and annot\adddot}},
213 bytranslatoranaf = {{translated and annotated, with an afterword, by}%
214               {with afterword, trans\adddotsspace and annot\adddot}},

```

The roles expressed as objects and terms for supplementary material are not abbreviated.

```

215 withcommentator = {{with a commentary by}{with a commentary by}},
216 withannotator   = {{with annotations by}{with annotations by}},
217 withintroduction = {{with an introduction by}{with an introduction by}},
218 withforeword    = {{with a foreword by}{with a foreword by}},
219 withafterword   = {{with an afterword by}{with an afterword by}},
220 introduction     = {{introduction}{introduction}},

```

The abbreviations for some publication details are different.

```

221 newseries      = {{new series}{\mkbibacro{NS}}},
222 oldseries      = {{old series}{\mkbibacro{OS}}},
223 edition        = {{edition}{edn\adddot}},
224 reprint        = {{reprint\nopunct}{repr\adddot\nopunct}},
225 reviewof       = {{review of}{review of}},
226 reprintas      = {{reprinted as}{repr\adddotsspace as}},
227 reprintfrom     = {{from}{from}},
228 translationas  = {{English translation as}{Eng\adddotsspace trans\adddotsspace as}},
229 origpubin      = {{originally published in}{originally pub\adddot}},

```

There is also a different abbreviation for ‘paragraph’.

```

230 paragraph      = {{paragraph}{para\adddot}},
231 paragraphs     = {{paragraphs}{paras\adddot}},

```

New Hart’s Rules uses ‘accessed’ for URL dates.

```
232 urlseen = {{accessed}}{accessed}},
```

Scholarly citation terms are abbreviated. Oxford style is to use ‘henceforth’ for shorthands and ‘at’ to cite a page within a range.

```
233 idem = {{idem}}{id\adddot}},
234 idemsm = {{idem}}{id\adddot}},
235 idemsf = {{eadem}}{ead\adddot}},
236 idemsn = {{idem}}{id\adddot}},
237 idempm = {{eidem}}{eid\adddot}},
238 idempf = {{eaedem}}{eaed\adddot}},
239 idempn = {{eadem}}{ead\adddot}},
240 idempp = {{eidem}}{eid\adddot}},
241 citedas = {{henceforth}}{henceforth}},
242 thiscite = {{at}}{at}},
```

Languages are abbreviated.

```
243 langamerican = {{American English}}{Amer\adddot Eng\adddot}},
244 langbasque = {{Basque}}{Basq\adddot}},
245 langbrazilian = {{Brazilian Portuguese}}{Braz\adddot Port\adddot}},
246 langbulgarian = {{Bulgarian}}{Bulg\adddot}},
247 langcatalan = {{Catalan}}{Catal\adddot}},
248 langcroatian = {{Croatian}}{Croat\adddot}},
249 langczech = {{Czech}}{Czech}},
250 langdanish = {{Danish}}{Dan\adddot}},
251 langdutch = {{Dutch}}{Dutch}},
252 langenglish = {{English}}{Eng\adddot}},
253 langestonian = {{Estonian}}{Eston\adddot}},
254 langfinnish = {{Finnish}}{Finn\adddot}},
255 langfrench = {{French}}{Fr\adddot}},
256 langgalician = {{Galician}}{Galic\adddot}},
257 langgerman = {{German}}{Ger\adddot}},
258 langgreek = {{Greek}}{Gr\adddot}},
259 langhungarian = {{Hungarian}}{Hung\adddot}},
260 langitalian = {{Italian}}{It\adddot}},
261 langjapanese = {{Japanese}}{Jap\adddot}},
262 langlatin = {{Latin}}{Lat\adddot}},
263 langlatvian = {{Latvian}}{Latv\adddot}},
264 langlithuanian = {{Lithuanian}}{Lith\adddot}},
265 langmarathi = {{Marathi}}{Mar\adddot}},
266 langnorwegian = {{Norwegian}}{Norw\adddot}},
267 langpolish = {{Polish}}{Pol\adddot}},
268 langportuguese = {{Portuguese}}{Port\adddot}},
269 langromanian = {{Romanian}}{Rom\adddot}},
270 langrussian = {{Russian}}{Russ\adddot}},
271 langserbian = {{Serbian}}{Serb\adddot}},
272 langslovak = {{Slovak}}{Slovak}},
273 langslovene = {{Slovene}}{Slov\adddot}},
274 langspanish = {{Spanish}}{Sp\adddot}},
275 langswedish = {{Swedish}}{Swed\adddot}},
276 langturkish = {{Turkish}}{Turk\adddot}},
277 langukrainian = {{Ukrainian}}{Ukr\adddot}},
278 }
```

5.2 British English: british-oxref.lbx

Here we set some language-specific punctuation and date formatting.

```

20 \InheritBibliographyExtras{british}
21 \DeclareBibliographyExtras{%

```

The only difference from the standard British date format is that we print it ‘clean’, with a cardinal instead of an ordinal day.

```

22 \protected\def\mkbibdateLong#1#2#3{%
23   \iffielddundef{#3}%
24   {}
25   {\stripzeros{\thefield{#3}}}%
26   \iffielddundef{#2}{}{\nobreakspace}}%
27   \iffielddundef{#2}%
28   {}
29   {\mkbibmonth{\thefield{#2}}}%
30   \iffielddundef{#1}{}{\space}}%
31   \iffieldbibstring{#1}%
32   {\bibstring{\thefield{#1}}}
33   {\dateeraprintpre{#1}\stripzeros{\thefield{#1}}}%

```

As you’d expect from an Oxford style, we use the Oxford comma, and use a period as the time separator. The redefinition of `\blx@ox@langbibstring` is given here as well.

```

34 \def\finalandcomma{\addcomma}%
35 \def\bibtimesep{\addperiod}%
36 \def\blx@ox@langbibstring#1#2{#1\addspace\bibstring{#2}}%
37 }
38 \UndeclareBibliographyExtras{%
39   \def\blx@ox@langbibstring#1#2{\bibstring{#2}}%
40 }

```

We use the British abbreviations for 12-hour clock times.

```

41 \DeclareBibliographyStrings{%
42   inherit      = {english},
43   am           = {{a\adddot m\adddot}{a\adddot m\adddot}},
44   pm           = {{p\adddot m\adddot}{p\adddot m\adddot}},
45 }

```

5.3 American English: `american-oxref.lbx`

```

20 \InheritBibliographyExtras{english}
21 \DeclareBibliographyExtras{\uspunctuation}
22 \InheritBibliographyStrings{english}

```

5.4 Spanish: `spanish-oxref.lbx`

Thanks to Bruno Maltras for contributing these translations.

We load the standard language-specific punctuation and date formatting.

```

20 \InheritBibliographyExtras{spanish}

```

We load the standard set of localization strings, then add our adjustments.

```

21 \DeclareBibliographyStrings{%
22   inherit      = {spanish},

```

These are new strings defined by `oxref`:

- Roles expressed as functions

```

23   director      = {{direcci\on}{dir\adddot}},
24   directors     = {{directores}{dirs\adddot}},
25   performer     = {{int\erprete}{int\adddot}},
26   performers    = {{int\erpretes}{ints\adddot}},
27   reader        = {{narraci\on}{narr\adddot}},
28   readers       = {{narradores}{narrs\adddot}},
29   conductor     = {{direcci\on}{dir\adddot}},
30   conductors    = {{directores}{dirs\adddot}},
31   serieseditor  = {{editor de la serie}{ed\adddotsspace ser\adddot}},
32   serieseditors = {{editores de la serie}{eds\adddotsspace ser\adddot}},
33   holder        = {{titular}{tit\adddot}},
34   holders       = {{titulares}{tits\adddot}},
35   editorcm      = {{editor y compilador}{ed\adddotsspace y comp\adddot}},
36   editorcms     = {{editores y compiladores}{eds\adddotsspace y comps\adddot}},

```

- Roles expressed as actions

```

37   byperformer   = {{interpretado por}{int\adddot}},
38   bydirector    = {{dirigido por}{dir\adddot}},
39   byreader      = {{narrado por}{narr\adddotsspace por}},
40   byconductor   = {{dirigido por}{dir\adddot}},
41   byserieseditor = {{editado por}{ed\adddot}},
42   byholder      = {{derechos de}{held by}},
43   byeditorcm    = {{editado y compilado por}{ed\adddotsspace y comp\adddot}},

```

- Publication details

```

44   facsimile     = {{edici\on facs\imil}{ed\adddotsspace facs\adddot}},
45   revised       = {{edici\on revisada}{ed\adddotsspace rev\adddot}},
46   revisedenlarged = {{edici\on revisada y ampliada}{ed\adddotsspace rev\adddotsspace y
↪ amp\adddot}},
47   revisedreprint = {{reimpresi\on revisada}{reimpr\adddotsspace rev\adddot}},
48   suppto       = {{Suplemento de}{Supl\adddot de}},
49   equals        = {{=}{=}},
50   original      = {{original}{orig\adddot}},
51   amendedby     = {{enmendado por}{enmendado por}},

```

- Publication state

```

52   inpressin     = {{de pr\oxima publicaci\on en}{de pr\ox\adddotsspace publ\adddot}},

```

- Pagination

```

53   book          = {{libro}{lib\adddot}},
54   books         = {{libros}{libs\adddot}},
55   canto         = {{canto}{canto}},
56   cantos        = {{cantos}{cantos}},
57   stanza        = {{estrofa}{estr\adddot}},
58   stanzas       = {{estrofas}{estr\adddot}},
59   act           = {{Acto}{Acto}},

```

```

60 acts      = {{Actos}}{Actos}},
61 scene     = {{Escena}}{Escena}},
62 scenes    = {{Escenas}}{Escenas}},
63 folio     = {{folio}}{fol\adddot}},
64 folios    = {{folios}}{fols\adddot}},
65 article   = {{art\'iculo}}{art\adddot}},
66 articles  = {{art\'iculos}}{arts\adddot}},
67 clause    = {{cl\'ausula}}{cl\adddot}},
68 clauses   = {{cl\'ausulas}}{cls\adddot}},
69 regulation = {{regulaci\'on}}{reg\adddot}},
70 regulations = {{regulaciones}}{regs\adddot}},
71 rule      = {{norma}}{nrm\adddot}},
72 rules     = {{normas}}{nrms\adddot}},
73 booktotal = {{libro}}{lib\adddot}},
74 booktotals = {{libros}}{libs\adddot}},
75 cantototal = {{canto}}{canto}},
76 cantototals = {{cantos}}{cantos}},
77 stanzatotal = {{estrofa}}{estr\adddot}},
78 stanzatotals = {{estrofes}}{estr\adddot}},
79 acttotal   = {{Acto}}{Acto}},
80 acttotals  = {{Actos}}{Actos}},
81 scenetotal = {{Escena}}{Escena}},
82 scenetotals = {{Escenas}}{Escenas}},
83 foliototal = {{folio}}{fol\adddot}},
84 foliototals = {{folios}}{fols\adddot}},
85 articletotal = {{art\'iculo}}{art\adddot}},
86 articletotals = {{art\'iculos}}{arts\adddot}},
87 clausetotal = {{cl\'ausula}}{cl\adddot}},
88 clausetotals = {{cl\'ausulas}}{cls\adddot}},
89 regulationtotal = {{regulaci\'on}}{reg\adddot}},
90 regulationtotals = {{regulaciones}}{regs\adddot}},
91 ruletotal   = {{norma}}{nrm\adddot}},
92 ruletotals  = {{normas}}{nrms\adddot}},

```

• Types

```

93 facebook = {{Facebook post}}{Facebook post}},
94 tweet    = {{tweet}}{tweet}},
95 podcast  = {{podcast}}{podcast}},
96 clip     = {{video}}{video}},
97 webcast  = {{webcast}}{webcast}},
98 poster   = {{poster}}{poster}},

```

• Miscellaneous

```

99 nolocation = {{sin lugar}}{s\adddot l\adddot}},
100 modified  = {{\'ultima modificaci\'on}}{\'ult\adddot space modif\adddot}},
101 recorded   = {{registrado}}{registrado}},
102 uploaded   = {{subido}}{subido}},
103 filed      = {{archivado}}{archivado}},
104 issued     = {{publicado}}{publicado}},

```

• Labels

```

105 anon      = {{An\'onimo}}{An\'on\adddot}},
106 pseudo    = {{Pseudo-}}{Ps\adddot-}},
107 urldown    = {{descargado}}{descargado}},

```

• Country names, patents, and patent requests,

```

108 countryjp      = {{Jap\'on}}{JP}},
109 patentjp       = {{Patente japonesa}}{Pat\addotspace japonesa}},
110 patreqjp       = {{Solicitud de patente japonesa}}{Sol\addotspace pat\addotspace
    ↪ japonesa}},

```

- These are borrowed from other styles.

```

111 1column        = {{una columna}}{1\addnbspace col\adddot}},
112 2column        = {{dos columnas}}{2\addnbspace col\adddot}},
113 inflayer       = {{norma subordinada}}{norm\addotspace sub\adddot}},
114 suplayer       = {{norma superior}}{norm\addotspace sup\adddot}},
115 paper          = {{hoja}}{h\adddot}},
116 papyrus        = {{papiro}}{papiro}},
117 parchment      = {{pergamino}}{pergam\adddot}},
118 eucase         = {{Caso}}{Caso}},
119 eujoinedcases  = {{Casos agrupados}}{Casos agrupados}},
120 commissiondecision = {{Decisi/\'on de la Comisi/\'on}}{Decisi/\'on de la Comisi/\'on}},
121 application     = {{Solicitud}}{Solic\adddot}},
122 order          = {{Orden}}{Ord\adddot}},
123 bill           = {{Proyecto de ley}}{Proy\addotspace de ley}},
124 draft          = {{anteproyecto}}{anteproyecto}},
125 opened         = {{abierto a la firma}}{abierto a la firma}},
126 signed         = {{aprobada}}{aprobada}},
127 adopted        = {{adoptada}}{adoptada}},
128 inforce        = {{en vigor}}{en vigor}},

```

The rest of these strings are overrides for the standard ones.

In parallel with the English versions, we remove the final ‘por’ from the abbreviated versions of the roles expressed as actions.

```

129 byeditor       = {{editado por}}{ed\addotspace}},
130 byredactor     = {{redacci\'on de}}{red\addotspace de}},
131 byreviser      = {{revisado por}}{rev\addotspace}},
132 byreviewer     = {{rese\'nado por}}{res\addotspace}},
133 byfounder      = {{fundado por}}{fund\addotspace}},
134 bycontinuator = {{continuado por}}{cont\addotspace}},
135 bycollaborator = {{colaboraci\'on de}}{col\addotspace de}},
136 bytranslator   = {{traducido por}}{trad\addotspace}},
137 bycommentator = {{comentado por}}{com\addotspace}},
138 byannotator    = {{anotado por}}{anot\addotspace}},
139 byeditortr     = {{editado y traducido por}}%
140                 {ed\addotspace y trad\addotspace}},
141 byeditorco     = {{editado y comentado por}}%
142                 {ed\addotspace y com\addotspace }},
143 byeditoran     = {{edici\'on y notas de}}%
144                 {ed\addotspace y not\addotspace}},
145 byeditorin     = {{edici\'on e introducci\'on de}}%
146                 {ed\addotspace e intr\addotspace}},
147 byeditorfo     = {{edici\'on y pr\'ologo de}}%
148                 {ed\addotspace y pr\'ol\addotspace}},
149 byeditoraf     = {{edici\'on y ep\'ilogo de}}%
150                 {ed\addotspace y ep\'il\addotspace}},
151 byeditortrco   = {{editado, traducido y comentado por}}%
152                 {ed.,\addabrvspace trad\addotspace y com\addotspace}},
153 byeditortran   = {{edici\'on, traducci\'on y notas de}}%
154                 {ed.,\addabrvspace trad\addotspace y not\addotspace}},
155 byeditortrin   = {{edici\'on, traducci\'on e introducci\'on de}}%
156                 {ed.,\addabrvspace trad\addotspace e intr\addotspace}},
157 byeditortrfo   = {{edici\'on, traducci\'on y pr\'ologo de}}%
158                 {ed.,\addabrvspace trad\addotspace y pr\'ol\addotspace}},
159 byeditortraf   = {{editado, traducido y epilogado}}%

```



```

160      {ed.,\addabrvspace trad\adddotspace y ep\'il\adddotspace}},
161  byeditorcoin = {{editado, comentado e introducido}%
162      {ed.,\addabrvspace com\adddotspace e intr\adddotspace}},
163  byeditorcofo = {{edici\'on, comentarios y pr\'ologo de}%
164      {ed.,\addabrvspace com\adddotspace y pr\'ol\adddotspace}},
165  byeditorcoaf = {{edici\'on, comentarios y ep\'ilogo de}%
166      {ed.,\addabrvspace com\adddotspace y ep\'il\adddotspace}},
167  byeditoranin = {{edici\'on, notas e introducci\'on de}%
168      {ed.,\addabrvspace anot\adddotspace e intr\adddotspace}},
169  byeditoranfo = {{edici\'on, notas y pr\'ologo de}%
170      {ed.,\addabrvspace anot\adddotspace y pr\'ol\adddotspace}},
171  byeditoranaf = {{edici\'on, notas y ep\'ilogo de}%
172      {ed.,\addabrvspace anot\adddotspace y ep\'il\adddotspace}},
173  byeditortrcoin = {{edici\'on, traducci\'on, comentarios e introducci\'on de}%
174      {ed.,\addabrvspace trad.,\addabrvspace com\adddotspace e
175      ↪ intr\adddotspace}},
176  byeditortrcofo = {{edici\'on, traducci\'on, comentarios y pr\'ologo de}%
177      {ed.,\addabrvspace trad.,\addabrvspace com\adddotspace y
178      ↪ pr\'ol\adddotspace}},
179  byeditortrcoaf = {{edici\'on, traducci\'on, comentarios y ep\'ilogo de}%
180      {ed.,\addabrvspace trad.,\addabrvspace com\adddotspace y
181      ↪ ep\'il\adddotspace}},
182  byeditortranin = {{edici\'on, traducci\'on, notas e introducci\'on de}%
183      {ed.,\addabrvspace trad.,\addabrvspace anot\adddotspace e
184      ↪ intr\adddotspace}},
185  byeditortranfo = {{edici\'on, traducci\'on, notas y pr\'ologo de}%
186      {ed.,\addabrvspace trad.,\addabrvspace anot\adddotspace y
187      ↪ pr\'ol\adddotspace}},
188  byeditortranaf = {{edici\'on, traducci\'on, notas y ep\'ilogo de}%
189      {ed.,\addabrvspace trad.,\addabrvspace anot\adddotspace y
190      ↪ ep\'il\adddotspace}},
191  bytranslatorco = {{traducci\'on y comentarios de}%
192      {trad\adddotspace y com\adddotspace}},
193  bytranslatoran = {{traducci\'on y notas de}%
194      {trad\adddotspace y not\adddotspace}},
195  bytranslatorin = {{traducci\'on e introducci\'on de}%
196      {trad\adddotspace e introd\adddotspace}},
197  bytranslatorfo = {{traducci\'on y pr\'ologo de}%
198      {trad\adddotspace y pr\'ol\adddotspace}},
199  bytranslatoraf = {{traducci\'on y ep\'ilogo de}%
200      {trad\adddotspace y ep\'il\adddotspace}},
201  bytranslatorcoin = {{traducci\'on, comentarios e introducci\'on de}%
202      {trad.,\addabrvspace com\adddotspace e intr\adddotspace}},
203  bytranslatorcofo = {{traducci\'on, comentarios y pr\'ologo de}%
204      {trad.,\addabrvspace com\adddotspace y pr\'ol\adddotspace}},
205  bytranslatorcoaf = {{traducci\'on, comentarios y ep\'ilogo de}%
206      {trad.,\addabrvspace com\adddotspace y ep\'il\adddotspace}},
207  bytranslatoranin = {{traducci\'on, notas e introducci\'on de}%
208      {trad.,\addabrvspace anot\adddotspace e intr\adddotspace}},
209  bytranslatoranfo = {{traducci\'on, notas y pr\'ologo de}%
210      {trad.,\addabrvspace anot\adddotspace y pr\'ol\adddotspace}},
211  bytranslatoranaf = {{traducci\'on, notas y ep\'ilogo de}%
212      {trad.,\addabrvspace anot\adddotspace y ep\'il\adddotspace}},

```

The roles expressed as objects and terms for supplementary material are not abbreviated.

```

207  withcommentator = {{con comentario de}{con comentario de}},
208  withannotator   = {{con notas de}{con notas de}},
209  withintroduction = {{con introduci\'on de}{con introduci\'on de}},
210  withforeword    = {{con pr\'ologo de}{con pr\'ologo de}},
211  withafterword   = {{con ep\'ilogo de}{con ep\'ilogo de}},
212  introduction     = {{introduci\'on}{introduci\'on}},

```

The abbreviations for some publication details are different.

```

213 newseries      = {{nueva \ 'epoca}{\mkbibacro{N\ 'E}}},
214 oldseries      = {{antigua \ 'epoca}{\mkbibacro{A\ 'E}}},
215 edition        = {{edici\ 'on}{edn\adddot}},
216 reprintfrom    = {{de}{de}},
217 translationas   = {{traducido espa\~nol como}{trad\adddot space espa\~nol como}},
218 origpubin      = {{publicado originalmente en}{pub\adddot orig\adddot space}},

```

New Hart's Rules uses 'accessed' for URL dates.

```

219 urlseen        = {{accedido}{accedido}},

```

Oxford style is to use 'henceforth' for shorthands and 'at' to cite a page within a range.

```

220 idem           = {{idem}{id\adddot}},
221 idemsm         = {{idem}{id\adddot}},
222 idemsf         = {{eadem}{ead\adddot}},
223 idemsn         = {{idem}{id\adddot}},
224 idempm         = {{eidem}{eid\adddot}},
225 idempf         = {{eaedem}{eaed\adddot}},
226 idempn         = {{eadem}{ead\adddot}},
227 idemp          = {{eidem}{eid\adddot}},
228 citedas        = {{en adelante}{en adelante}},
229 thiscite       = {{en}{en}},

```

Languages are abbreviated.

```

230 langamerican   = {{ingl\ 'es americano}{ing\adddot space amer\adddot}},
231 langbasque     = {{vasco}{vasc\adddot}},
232 langbrazilian  = {{portugu\ 'es brasile\~no}{por\adddot space bras\adddot}},
233 langbulgarian  = {{b\ 'ulgaro}{bul\adddot}},
234 langcatalan    = {{catal\ 'an}{cat\adddot}},
235 langcroatian   = {{croata}{hrv\adddot}},
236 langczech      = {{checo}{ces\adddot}},
237 langdanish     = {{dan\ 'es}{dan\adddot}},
238 langdutch      = {{neerland\ 'es}{nld\adddot}},
239 langenglish    = {{ingl\ 'es}{ing\adddot}},
240 langestonian   = {{estonio}{est\adddot}},
241 langfinnish    = {{fin\ 'es}{fin\adddot}},
242 langfrench     = {{franc\ 'es}{fra\adddot}},
243 langgalician   = {{gallego}{glg\adddot}},
244 langgerman     = {{alem\ 'an}{ale\adddot}},
245 langgreek      = {{griego}{gr\adddot}},
246 langhungarian  = {{h\ 'ungaro}{hun\adddot}},
247 langitalian    = {{italiano}{ita\adddot}},
248 langjapanese   = {{japon\ 'es}{jap\adddot}},
249 langlatin      = {{lat\ 'in}{lat\adddot}},
250 langlatvian    = {{let\ 'on}{let\adddot}},
251 langlithuanian = {{lituano}{lit\adddot}},
252 langmarathi    = {{marathi}{mar\adddot}},
253 langnorwegian  = {{noruego}{nor\adddot}},
254 langpolish     = {{polaco}{pol\adddot}},
255 langportuguese = {{portugu\ 'es}{port\adddot}},
256 langrussian    = {{ruso}{rus\adddot}},
257 langserbian    = {{serbio}{srp\adddot}},
258 langslovak     = {{eslovaco}{slk\adddot}},
259 langslovene    = {{esloveno}{slv\adddot}},
260 langspanish    = {{espa\~nol}{esp\adddot}},
261 langswedish    = {{sueco}{sueco}},
262 langturkish    = {{turco}{turco}},
263 langukrainian  = {{ucraniano}{ucr\adddot}},

```

```
264 }
```

5.5 Polish: polish-oxref.lbx

Thanks to Sebastian Wasiuta for contributing these translations and extras.

We load the standard language-specific punctuation and date formatting.

```
20 \InheritBibliographyExtras{polish}
```

Here are some additional specific settings we need.

There is no comma after forenames in the inverted position.

```
21 \DeclareBibliographyExtras{%
22 \DeclareDelimFormat{revsdnamedelim}{}%
```

We need to use the right case for month names in treaty execution dates.

```
23 \savecommand\makebbx@dateii
24 \def\makebbx@dateii#1#2#3{%
25 \blx@imc@stripzeros{#3}~\lbx@pl@mkbibmonth{#2}%
26 \space
27 #1}%
```

Volume numbers are expressed in uppercase Roman numerals.

```
28 \savecommand\mkvolroman
29 \renewcommand*{\mkvolroman}[1]{\RN{#1}}%
```

There is no compression of years.

```
30 \savecommand\blx@ox@compyear
31 \renewcommand*{\blx@ox@compyear}[2]{#2}%
```

There is no compression of pagination ranges.

```
32 \savefieldformat{pages}%
33 \DeclareFieldFormat{pages}{%
34 \iffieldundef{bookpagination}%
35 {\mknormrange{#1}}%
36 {\mkpageprefix[bookpagination][\mknormrange]{#1}}%
37 }%
38 \savefieldformat{postnote}%
39 \DeclareFieldFormat{postnote}{%
40 \iffieldundef{pagination}%
41 {\mknormrange{#1}}%
42 {\mkpageprefix[pagination][\mknormrange]{#1}}%
43 }%
```

We flip the word order when specifying the edition.

```
44 \savefieldformat{edition}%
45 \DeclareFieldFormat{edition}{%
46 \ifinteger{#1}
47 {\bibstring{edition}~\mkbibordedition{#1}}
48 {\ifbibstring{#1}{\bibstring{#1}}{#1\isdot}}}%
```

```
49 }
```

Lastly we add code to undo these changes before switching to another language.

```
50 \UndeclareBibliographyExtras{%
51   \DeclareDelimFormat{revsdnamedelim}{\addcomma}%
52   \restorecommand\makebbx@dateii
53   \restorecommand\mkvolroman
54   \restorecommand\blx@ox@compyear
55   \restorefieldformat{pages}%
56   \restorefieldformat{postnote}%
57   \restorefieldformat{edition}%
58 }
```

We load the standard set of localization strings, then add our adjustments.

```
59 \DeclareBibliographyStrings{%
60   inherit      = {polish},
```

These are new strings defined by `oxref`:

- Roles expressed as functions

```
61 director      = {{re\.{z}yser}{re\.{z}\adddot}},
62 directors     = {{re\.{z}yserzy}{re\.{z}\adddot}},
63 performer     = {{wykonawca}{wyk\adddot}},
64 performers    = {{wykonawcy}{wyk\adddot}},
65 reader        = {{czytelnik}{czytelnik}},
66 readers       = {{czytelnicy}{czytelnicy}},
67 conductor     = {{dyrygent}{dyr\adddot}},
68 conductors    = {{dyrygenci}{dyr\adddot}},
69 serieseditor  = {{redaktor serii}{red\adddotsspace serii}},
70 serieseditors = {{redaktor serii}{red\adddotsspace serii}},
71 holder        = {{w\l a\'s}ciciel}{w\l a\'s}ciciel}},
72 holders       = {{w\l a\'s}ciele}{w\l a\'s}ciele}},
73 editorcm      = {{redaktor i~kompilator}{red\adddotsspace i~kompilator}},
74 editorcms     = {{redaktorzy i~kompilatorzy}{red\adddotsspace i~kompilatorzy}},
```

- Roles expressed as actions

```
75 byperformer   = {{wykonawca}{wyk\adddot}},
76 bydirector    = {{re\.{z}yseria}{re\.{z}\adddot}},
77 byreader      = {{czyta}{czyta}},
78 byconductor   = {{kieruje}{kier\adddot}},
79 byserieseditor = {{redakcja}{red\adddot}},
80 byholder      = {{w~posiadaniu}{w~posiadaniu}},
81 byeditorcm    = {{redakcja i~opracowanie}{red\adddotsspace i~oprac\adddot}},
```

- Publication details

```
82 facsimile      = {{wydanie faksymile}{wyd\adddotsspace faksymile}},
83 revised        = {{wydanie poprawione}{wyd\adddotsspace popr\adddot}},
84 revisedenlarged = {{wydanie poprawione i~rozszerzone}{wyd\adddotsspace popr\adddotsspace
85   ↪ i~rozszerz\adddot}},
86 revisedreprint = {{przedruk poprawiony}{przedr\adddotsspace popr\adddot}},
87 suppto         = {{dodatek do}{dod\adddotsspace do}},
88 equals         = {{=}{=}},
89 original       = {{oryginalny}{oryg\adddot}},
```

```
89 amendedby = {{zmienione przez}{zmien\addotsspace przez}},
```

- Publication state

```
90 inpressin = {{z\l o\.{z}one do}{z\l o\.{z}one do}},
```

- Pagination

```
91 book = {{ksi\k{e}ga}{ks\addot}},
92 books = {{ksi\k{e}gi}{ks\addot}},
93 canto = {{pie\'{s}\{n}}{pie\'{s}\{n}}},
94 cantos = {{pie\'{s}ni}{pie\'{s}ni}},
95 stanza = {{zwrotka}{zwr\addot}},
96 stanzas = {{zwrotki}{zwr\addot}},
97 act = {{akt}{a\addot}},
98 acts = {{akty}{aa\addot}},
99 scene = {{scena}{sc\addot}},
100 scenes = {{sceny}{sc\addot}},
101 folio = {{karta}{k\addot}},
102 folios = {{karty}{kk\addot}},
103 article = {{artyku\l }{art\addot}},
104 articles = {{artyku\l y}{art\addot}},
105 clause = {{klauzula}{klauz\addot}},
106 clauses = {{klauzule}{klauz\addot}},
107 regulation = {{rozporz\k{a}dzenie}{rozp\addot}},
108 regulations = {{rozporz\k{a}dzenia}{rozp\addot}},
109 rule = {{przepis}{przep\addot}},
110 rules = {{przepisy}{przep\addot}},
111 booktotal = {{ksi\k{e}ga}{ks\addot}},
112 booktotals = {{ksi\k{e}gi}{ks\addot}},
113 cantototal = {{pie\'{s}\{n}}{pie\'{s}\{n}}},
114 cantototals = {{pie\'{s}ni}{pie\'{s}ni}},
115 stanzatotal = {{zwrotka}{zwr\addot}},
116 stanzatotals = {{zwrotki}{zwr\addot}},
117 acttotal = {{akt}{a\addot}},
118 acttotals = {{akty}{aa\addot}},
119 scenetotal = {{scena}{sc\addot}},
120 scenetotals = {{sceny}{sc\addot}},
121 foliototal = {{karta}{k\addot}},
122 foliototals = {{karty}{kk\addot}},
123 articletotal = {{artyku\l }{art\addot}},
124 articletotals = {{artyku\l y}{art\addot}},
125 clausetotal = {{klauzula}{klauz\addot}},
126 clausetotals = {{klauzule}{klauz\addot}},
127 regulationtotal = {{rozporz\k{a}dzenie}{rozp\addot}},
128 regulationtotals = {{rozporz\k{a}dzenia}{rozp\addot}},
129 ruletotal = {{przepis}{przep\addot}},
130 ruletotals = {{przepisy}{przep\addot}},
```

- Types

```
131 facebook = {{wpis na Facebooku}{wpis na Facebooku}},
132 tweet = {{wpis na Twitterze}{wpis na Twitterze}},
133 podcast = {{podcast}{podcast}},
134 clip = {{wideo}{wideo}},
135 webcast = {{webcast}{webcast}},
136 poster = {{plakat}{plakat}},
```

- Miscellaneous

```

137 nolocation      = {{bez miejsca}{b\adddot m\adddot}},
138 modified        = {{ostatnio zmodyfikowany}{ostatnio zmodyf\adddot}},
139 recorded        = {{nagrane}{nagr\adddot}},
140 uploaded        = {{za\l adowane}{za\l ad\adddot}},
141 filed           = {{wniesione}{wniesione}},
142 issued          = {{wydany}{wyd\adddot}},

```

- Labels

```

143 anon            = {{Anonim}{Anon\adddot}},
144 pseudo         = {{Pseudo-}{Ps\adddot-}},
145 urldown        = {{pobrane}{pobrane}},

```

- Country names, patents, and patent requests,

```

146 countryjp      = {{Japonia}{JP}},
147 patentjp       = {{japo\'{n}ski patent}{jap\adddotsspace pat\adddot}},
148 patreqjp       = {{japo\'{n}ski wniosek patentowy}{jap\adddotsspace wniosek pat\adddot}},

```

- These are borrowed from other styles.

```

149 1column        = {{jedna kolumna}{1\addnbspace kol\adddot}},
150 2column        = {{dwie kolumny}{2\addnbspace kol\adddot}},
151 inflayer       = {{warstwa ni\.{z}sza}{warstwa ni\.{z}sza}},
152 suplayer       = {{warstwa wy\.{z}sza}{warstwa wy\.{z}sza}},
153 paper          = {{gazeta}{gazeta}},
154 papyrus        = {{papiirus}{papiirus}},
155 parchment      = {{pergamin}{pergamin}},
156 eucase         = {{sprawa}{sprawa}},
157 eujoinedcases  = {{po\l \k{a}czone sprawy}{po\l \k{a}czone sprawy}},
158 commissiondecision = {{decyzja komisji}{decyzja komisji}},
159 application    = {{wniosek}{wniosek}},
160 order          = {{polecenie}{polecenie}},
161 bill           = {{rachunek}{rachunek}},
162 draft          = {{projekt}{proj\adddot}},
163 opened         = {{przed\l o\.{z}one do podpisu}{przed\l\adddotsspace do podp\adddot}},
164 signed         = {{podpisane}{podpisane}},
165 adopted        = {{przyj\k{e}te}{przyj\k{e}te}},
166 inforce        = {{wesz\l o w\.{z}ycie}{wesz\l o w\.{z}ycie}},

```

The rest of these strings are overrides for the standard ones.

```

167 byeditor       = {{redakcja}{red\adddot}},
168 bycompiler     = {{opracowanie}{oprac\adddot}},
169 byfounder      = {{za\l o\.{z}one przez}{za\l o\.{z}\adddotsspace przez}},
170 bycontinuator  = {{kontynuowane przez}{kont\adddotsspace przez}},
171 byredactor     = {{redakcja}{red\adddot}},
172 byreviser      = {{poprawki}{popr\adddot}},
173 byreviewer     = {{recenzja}{rec\adddot}},
174 bycollaborator = {{we wsp\'{o}\l pracy z}{we wsp\'{o}\l pr\adddotsspace z}},
175 bytranslator   = {{t\l umaczenie}{t\l um\adddot}},
176 bycommentator = {{komentarz}{kom\adddot}},
177 byannotator    = {{obja\'{s}nienia}{obja\'{s}n\adddot}},
178 byeditortr     = {{redakcja i~t\l umaczenie}%
179                 {red\adddotsspace i~t\l um\adddot}},
180 byeditorco     = {{redakcja i~komentarz}%
181                 {red\adddotsspace i~kom\adddot}},
182 byeditoran     = {{redakcja i~obja\'{s}nienia}%
183                 {red\adddotsspace i~obja\'{s}n\adddot}},

```

```

184 byeditorin = {{redakcja i~wst\k{e}p}%
185             {red\adddotsspace i~wst\k{e}p}},
186 byeditorfo = {{redakcja i~przedmowa}%
187             {red\adddotsspace i~przedm\adddot}},
188 byeditoraf = {{redakcja i~pos\l owie}%
189             {red\adddotsspace i~pos\l \adddot}},
190 byeditortrco = {{redakcja, t\l umaczenie i~komentarz}%
191             {red.,\addabrvspace t\l um.,\addabrvspace kom\adddot}},
192 byeditortran = {{redakcja, t\l umaczenie i~obja\{s}nienia}%
193             {red.,\addabrvspace t\l um.,\addabrvspace obja\{s}n\adddot}},
194 byeditortrin = {{redakcja, t\l umaczenie, wst\k{e}p}%
195             {red.,\addabrvspace t\l um.,\addabrvspace wst\k{e}p}},
196 byeditortrfo = {{redakcja, t\l umaczenie, przedmowa}%
197             {red.,\addabrvspace t\l um.,\addabrvspace przedm\adddot}},
198 byeditortraf = {{redakcja, t\l umaczenie, pos\l \adddot}%
199             {red.,\addabrvspace t\l um.,\addabrvspace pos\l \adddot}},
200 byeditorcoin = {{redakcja, komentarz, wst\k{e}p}%
201             {red.,\addabrvspace kom.,\addabrvspace wst\k{e}p}},
202 byeditorcofo = {{redakcja, komentarz i~przedmowa}%
203             {red.,\addabrvspace kom.,\addabrvspace przedm\adddot}},
204 byeditorcoaf = {{redakcja, komentarz, pos\l owie}%
205             {red.,\addabrvspace kom.,\addabrvspace pos\l \adddot}},
206 byeditoranin = {{redakcja, obja\{s}nienia, wst\k{e}p}%
207             {red.,\addabrvspace obja\{s}n.,\addabrvspace wst\k{e}p}},
208 byeditoranfo = {{redakcja, obja\{s}nienia, przedmowa}%
209             {red.,\addabrvspace obja\{s}n.,\addabrvspace przedm\adddot}},
210 byeditoranaf = {{redakcja, obja\{s}nienia, pos\l owie}%
211             {red.,\addabrvspace obja\{s}n.,\addabrvspace pos\l \adddot}},
212 byeditortrcoin = {{redakcja, t\l umaczenie, komentarz, wst\k{e}p}%
213             {red.,\addabrvspace t\l um.,\addabrvspace kom.,\addabrvspace
214             ↪ wst\k{e}p}},
214 byeditortrcofo = {{redakcja, t\l umaczenie, komentarz, przedmowa}%
215             {red.,\addabrvspace t\l um.,\addabrvspace kom.,\addabrvspace
216             ↪ przedm\adddot}},
216 byeditortrcoaf = {{redakcja, t\l umaczenie, komentarz, pos\l owie}%
217             {red.,\addabrvspace t\l um.,\addabrvspace kom.,\addabrvspace pos\l
218             ↪ \adddot}},
218 byeditortranin = {{redakcja, t\l umaczenie, obja\{s}nienia, wst\k{e}p}%
219             {red.,\addabrvspace t\l um.,\addabrvspace obja\{s}n.,\addabrvspace
220             ↪ wst\k{e}p}},
220 byeditortranfo = {{redakcja, t\l umaczenie, obja\{s}nienia, przedmowa}%
221             {red.,\addabrvspace t\l um.,\addabrvspace obja\{s}n.,\addabrvspace
222             ↪ przedm\adddot}},
222 byeditortranaf = {{redakcja, t\l umaczenie, obja\{s}nienia, pos\l owie}%
223             {red.,\addabrvspace t\l um.,\addabrvspace obja\{s}n.,\addabrvspace
224             ↪ pos\l \adddot}},
224 bytranslatorco = {{t\l umaczenie i~komentarz}%
225             {t\l um\adddotsspace i~kom\adddot}},
226 bytranslatoran = {{t\l umaczenie i~obja\{s}nienia}%
227             {t\l um\adddotsspace i~obja\{s}n\adddot}},
228 bytranslatorin = {{t\l umaczenie i~wst\k{e}p}%
229             {t\l um.,\addabrvspace wst\k{e}p}},
230 bytranslatorfo = {{t\l umaczenie i~przedmowa}%
231             {t\l um.,\addabrvspace przedm\adddot}},
232 bytranslatoraf = {{t\l umaczenie i~pos\l owie}%
233             {t\l um.,\addabrvspace pos\l \adddot}},
234 bytranslatorcoin = {{t\l umaczenie, komentarz i~wst\k{e}p}%
235             {t\l um.,\addabrvspace kom.,\addabrvspace wst\k{e}p}},
236 bytranslatorcofo = {{t\l umaczenie, komentarz i~przedmowa}%
237             {t\l um.,\addabrvspace kom.,\addabrvspace przedm\adddot}},
238 bytranslatorcoaf = {{t\l umaczenie, komentarz i~pos\l owie}%
239             {t\l um.,\addabrvspace kom.,\addabrvspace pos\l \adddot}},
240 bytranslatoranin = {{t\l umaczenie, obja\{s}nienia i~wst\k{e}p}%

```



```

241      {t\l um.,\addabrvspace obja\'{s}n.,\addabrvspace wst\k{e}p}},
242 bytranslatoranfo = {{t\l umaczenie, obja\'{s}nienia i~przedmowa}%
243      {t\l um.,\addabrvspace obja\'{s}n.,\addabrvspace przedm\adddot}},
244 bytranslatoranaf = {{t\l umaczenie, obja\'{s}nienia i~pos\l owie}%
245      {t\l um.,\addabrvspace obja\'{s}n.,\addabrvspace pos\l \adddot}},

```

The roles expressed as objects and terms for supplementary material are not abbreviated.

```

246 withcommentator = {{komentarz}{komentarz}},
247 withannotator   = {{obja\'{s}nienia}{obja\'{s}nienia}},
248 withintroduction = {{wst\k{e}p}{wst\k{e}p}},
249 withforeword    = {{przedmowa}{przedmowa}},
250 withafterword   = {{pos\l owie}{pos\l owie}},
251 introduction     = {{wst\k{e}p}{wst\k{e}p}},

```

The translations and abbreviations for some publication details are different.

```

252 newseries      = {{nowa seria}{nowa seria}},
253 oldseries      = {{dawna seria}{dawna seria}},
254 edition        = {{wydanie}{wyd\adddot}},
255 reviewof       = {{recenzja}{rec\adddot}},
256 reprintfrom    = {{przedruk z}{przedr\adddotsspace z}},
257 translationas  = {{t\l umaczenie polskie}{t\l um\adddotsspace pol\adddotsspace}},
258 origpubin      = {{pierwodruk w}{pierwodr\adddotsspace w}},

```

We use a different translation for ‘paragraph’.

```

259 paragraph      = {{ust\k{e}p}{ust\adddot}},
260 paragraphs      = {{ust\k{e}py}{ust\adddot}},

```

New Hart’s Rules uses ‘accessed’ for URL dates.

```

261 urlseen        = {{dost\k{e}p}{dost\k{e}p}},

```

Scholarly citation terms are abbreviated. Oxford style is to use ‘henceforth’ for shorthands and ‘at’ to cite a page within a range.

```

262 idem           = {{idem}{id\adddot}},
263 idemsm         = {{idem}{id\adddot}},
264 idemsf         = {{eadem}{ead\adddot}},
265 idemsn         = {{idem}{id\adddot}},
266 idempm         = {{eidem}{eid\adddot}},
267 idempf         = {{eaedem}{eaed\adddot}},
268 idempn         = {{eadem}{ead\adddot}},
269 idempp         = {{eidem}{eid\adddot}},
270 citedas        = {{dalej}{dalej}},
271 thiscite       = {{na}{na}},

```

Languages are abbreviated.

```

272 langamerican   = {{ameryka\'{n}ski angielski}{amer\adddotsspace ang\adddot}},
273 langbasque     = {{baskijski}{bask\adddot}},
274 langbrazilian  = {{brazylijski portugalski}{braz\adddot port\adddot}},
275 langbulgarian  = {{bu\l garski}{bu\l g\adddot}},
276 langcatalan    = {{katalo\'{n}ski}{katal\adddot}},
277 langcroatian   = {{chorwacki}{chorw\adddot}},
278 langczech      = {{czeski}{czeski}},
279 langdanish     = {{du\'{n}ski}{du\'{n}\adddot}},
280 langdutch      = {{holenderski}{holend\adddot}},

```



```

281 langenglish      = {{angielski}{ang\adddot}},
282 langestonian     = {{esto\'{n}ski}{est\adddot}},
283 langfinnish      = {{fi\'{n}ski}{fi\'{n}\adddot}},
284 langfrench       = {{francuski}{fr\adddot}},
285 langgalician     = {{galicyjski}{galic\adddot}},
286 langgerman       = {{niemiecki}{niem\adddot}},
287 langgreek        = {{grecki}{gr\adddot}},
288 langhungarian    = {{w\k{e}gierski}{w\k{e}g\adddot}},
289 langitalian      = {{w\l oski}{w\l \adddot}},
290 langjapanese     = {{japo\'{n}ski}{jap\adddot}},
291 langlatin        = {{\l aci\'{n}ski}{\l ac\adddot}},
292 langlatvian      = {{\l otewski}{\l ot\adddot}},
293 langlithuanian   = {{litewski}{lit\adddot}},
294 langmarathi      = {{marathi}{mar\adddot}},
295 langnorwegian    = {{norweski}{norw\adddot}},
296 langpolish       = {{polski}{pol\adddot}},
297 langportuguese   = {{portugalski}{port\adddot}},
298 langromanian     = {{rumu\'{n}ski}{rum\adddot}},
299 langrussian      = {{rosyjski}{ros\adddot}},
300 langserbian      = {{serbski}{serb\adddot}},
301 langslovak       = {{s\l owacki}{s\l c\adddot}},
302 langslovene      = {{s\l owe\'{n}ski}{s\l owe\'{n}\adddot}},
303 langspanish      = {{hiszpa\'{n}ski}{hiszp\adddot}},
304 langswedish      = {{szwedzki}{szw\adddot}},
305 langturkish      = {{turecki}{tur\adddot}},
306 langukrainian    = {{ukrai\'{n}ski}{ukr\adddot}},
307 }

```

5.6 Other languages

Currently [oxref](#) only supports English (British and American), Spanish, and Polish explicitly, but if there is demand more languages may be added. If you would like to contribute support for your language, a list of the non-standard bibliography strings requiring definition may be found in section 2.1.1.