

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, intended for use with footnotes;
- 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:

1

```
\usepackage[style=oxnotes]{biblatex}
```

1

```
\usepackage[style=oxyear]{biblatex}
```

For further information, including some additional options you can set, please refer to the separate documentation files `oxnotes-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 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, oxyear.bbx
 - oxnotes.cbx, oxyear.cbx
 - american-oxref.lbx, british-oxref.lbx, english-oxref.lbx
 - oxnotes.dbx, oxyear.dbx
 - oxref.bib
 - oxref.ins
 - oxnotes-doc.tex, oxyear-doc.tex

- Running `make` generates the above files and also `oxref.pdf`, `oxnotes-doc.pdf`, and `oxyear-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.

1.2.3 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` and `oxyear-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`, `oxnotes.bbx`, `oxnotes.cbx`, `oxnotes.dbx`, `oxref.bbx`, `oxyear.bbx`, `oxyear.cbx`, `oxyear.dbx`
 - `doc/latex/biblatex-oxref`: `README.md`, `oxnotes-doc.pdf`, `oxnotes-doc.tex`, `oxref.bib`, `oxref.pdf`, `oxyear-doc.pdf`, `oxyear-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 2016–7 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{xpatch}
21 \RequirePackage{xstring}
22 \RequirePackage{graphicx}
```

Language support may be widened in future, but for now we support the following:

```
23 \DeclareLanguageMapping{english}{british-oxref}
24 \DeclareLanguageMapping{british}{british-oxref}
25 \DeclareLanguageMapping{american}{american-oxref}
```

We provide some additional bibliography strings:

- roles expressed as functions;

```
26 \NewBibliographyString{%
27   director, performer, reader, conductor,
```

- roles expressed as actions;

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

- publication details;

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

- 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,`

- types;

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

- miscellaneous;

34 `nolocation, recorded, uploaded,`

- labels;

35 `anon, pseudo, urldown,`

- borrowed from other styles.

36 `1column, 2column, inflayer, suplayer, paper, papyrus, parchment,`
 37 `eucase, eujoinedcases, commissiondecision, application,`
 38 `order, bill, draft, opened, signed, adopted, inforce,`
 39 `}`

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.

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

Here are the new default punctuation conventions. The new `\relatedtypepunct` is for before the `relatedtype` localization string.

42 `\renewcommand*{\labelnamepunct}{\addcomma\space}`
 43 `\renewcommand*{\newunitpunct}{\addcomma\space}`
 44 `\renewcommand*{\subtitlepunct}{\addcolon\space}`
 45 `\renewcommand*{\intitlepunct}{\nopunct\space}`
 46 `\renewcommand*{\bibnamedash}{\resizebox{2em}{\height}{\textendash}\addthinspace}`
 47 `\renewcommand*{\revsdnamedelim}{\addcomma}`
 48 `\newcommand*{\recordseriespunct}{\addcomma\space}`
 49 `\newcommand*{\relatedtypepunct}{\addsemicolon\space}`
 50 `\renewcommand*{\relateddelim}{\addsemicolon\space}`

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.

```

51 \DeclareNameAlias{bookauthor}{default}
52 \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.

```

53 \newtoggle{blx@ox@scnames}
54 \DeclareBibliographyOption[boolean]{scnames}[true]{%
55   \settoggle{blx@ox@scnames}{#1}
56 }

```

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.

```

57 \newtoggle{blx@ox@nametitle}\toggletrue{blx@ox@nametitle}%
58 \DeclareBibliographyOption[boolean]{usenametitles}[true]{%
59   \settoggle{blx@ox@nametitle}{#1}
60 \DeclareEntryOption[boolean]{usenametitles}[true]{%
61   \settoggle{blx@ox@nametitle}{#1}

```

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

```

62 \newbibmacro*{name:title-given-family}[5]{%
63   \usebibmacro{name:delim}{#2#3#1}%
64   \usebibmacro{name:hook}{#2#3#1}%
65   \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\mkbibnametitle{#5}\isdot\bibnamedelimd}{}}%
66   \ifdefvoid{#2}{}{\mkbibnamegiven{#2}\isdot\bibnamedelimd}%
67   \ifdefvoid{#3}{}{%
68     \mkbibnameprefix{#3}\isdot
69     \ifprefchar
70       {}
71       {\ifuseprefix{\bibnamedelimc}{\bibnamedelimd}}}%
72   \mkbibnamefamily{#1}\isdot
73   \ifdefvoid{#4}{}{\ifnumeral{#4}{}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}}

```

Here is the one for inverted name order.

```

74 \newbibmacro*{name:family-title-given}[5]{%
75   \ifuseprefix{%
76     \usebibmacro{name:delim}{#3#1}%
77     \usebibmacro{name:hook}{#3#1}%
78     \ifdefvoid{#3}{}{%
79       \ifcapital{%
80         \mkbibnameprefix{\MakeCapital{#3}}\isdot
81       }{%
82         \mkbibnameprefix{#3}\isdot}%
83     \ifprefchar{}{\bibnamedelimc}%
84     \mkbibnamefamily{#1}\isdot
85     \ifdefvoid{#4}{}{\ifnumeral{#4}{}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%
86     \ifdefvoid{#5}{}{\ifgiveninits{}{\mkbibnametitle{#5}\isdot\bibnamedelimd}}%
87     \ifdefvoid{#2}{}{\revsenamepunct\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
88   }{%
89     \usebibmacro{name:delim}{#1}%
90     \usebibmacro{name:hook}{#1}%
91     \mkbibnamefamily{#1}\isdot
92     \ifdefvoid{#4}{}{\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%

```



```

93 \ifboolexpe{%
94   test {\ifdefvoid{#2}}
95   and
96   test {\ifdefvoid{#3}}%
97 }{}{%
98   \revsdnamepunct}%
99 \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\mkbibnametitle{#5}\isdot\bibnamedelimd}{}}%
100 \ifdefvoid{#2}{}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
101 \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.

```

102 \def\blx@ox@lasthash{}
103 \DeclareNameFormat{bib-family-given/cite-given-family}{%
104   \iffieldannotation{inferred}{\ifnumequal{\value{listcount}}{1}{\bibopenbracket}{}{}%
105   \ifitemannotation{inferred}{\bibopenbracket}{}%
106   \ifbibliography{%
107     \iftoggle{blx@ox@scnames}{%
108       \renewcommand*{\mkbibnamefamily}[1]{\textsc{##1}}%
109       \renewcommand*{\mkbibnamegiven}[1]{\textsc{##1}}%
110       \renewcommand*{\mkbibnameprefix}[1]{\textsc{##1}}%
111       \renewcommand*{\mkbibnamesuffix}[1]{\textsc{##1}}%
112       \renewcommand*{\mkbibnametitle}[1]{##1}%
113     }{}%
114     \ifgiveninits{%
115       \usebibmacro{name:family-title-given}%
116       {\namepartfamily}%
117       {\namepartgiveni}%
118       {\namepartprefix}%
119       {\namepartsuffix}%
120       {\nameparttitle}%
121     }%
122     \usebibmacro{name:family-title-given}%
123     {\namepartfamily}%
124     {\namepartgiven}%
125     {\namepartprefix}%
126     {\namepartsuffix}%
127     {\nameparttitle}%
128   }%
129   \savefield{hash}{\blx@ox@lasthash}%
130   \ifitemannotation{pseudo}{%
131     \addspace\printtext[parens]{%
132       \iftoggle{blx@ox@scnames}{%
133         \textsc{\bibsstring{pseudo}}%
134       }{}%
135       \bibsstring{pseudo}%
136     }%
137   }{}%
138   \iftoggle{blx@ox@scnames}{%
139     \renewcommand*{\mkbibnamefamily}[1]{##1}%
140     \renewcommand*{\mkbibnamegiven}[1]{##1}%
141     \renewcommand*{\mkbibnameprefix}[1]{##1}%
142     \renewcommand*{\mkbibnamesuffix}[1]{##1}%
143     \renewcommand*{\mkbibnametitle}[1]{##1}%
144   }{}%
145 }{%
146   \ifgiveninits{%
147     \usebibmacro{name:title-given-family}%

```

```

148     {\ifitemannotation{pseudo}{\biblstring{pseudo}}{\namepartfamily}%
149     {\namepartgiveni}%
150     {\namepartprefix}%
151     {\namepartsuffix}%
152     {\nameparttitle}%
153   }%
154   \usebibmacro{name:title-given-family}%
155   {\ifitemannotation{pseudo}{\biblstring{pseudo}}{\namepartfamily}%
156   {\namepartgiven}%
157   {\namepartprefix}%
158   {\namepartsuffix}%
159   {\nameparttitle}%
160   }%
161   \savefield{hash}{\blx@ox@lasthash}%
162 }%
163 \ifitemannotation{inferred}{\bibclosebracket}{}%
164 \usebibmacro{name:andothers}%
165 \iffieldannotation{inferred}{%
166   \ifboolexpr{
167     test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
168     or
169     test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
170     or (
171       test {\ifnumequal{\value{listcount}}{\value{minnames}}}
172       and
173       test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}}
174     )
175   }{\bibclosebracket}{}%
176 }{}%
177 }

```

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`.

```

178 \newtoggle{blx@ox@variantname}
179 \DeclareNameFormat{given-family}{%
180   \ifgiveninits
181     {\usebibmacro{name:title-given-family}
182     {\namepartfamily}
183     {\namepartgiveni}
184     {\namepartprefix}
185     {\namepartsuffix}
186     {\nameparttitle}}
187     {\usebibmacro{name:title-given-family}
188     {\namepartfamily}
189     {\namepartgiven}
190     {\namepartprefix}
191     {\namepartsuffix}
192     {\nameparttitle}}%
193   \savefield{hash}{\blx@ox@lasthash}%
194   \ifitemannotation{variant}{%
195     \global\settoggle{blx@ox@variantname}{true}%
196   }%
197   \global\settoggle{blx@ox@variantname}{false}%
198   \usebibmacro{name:andothers}}

```

We do likewise for the regular family-given format.

```

199 \DeclareNameFormat{family-given}{%
200   \ifgiveninits
201     {\usebibmacro{name:family-title-given}
202       {\namepartfamily}
203       {\namepartgiveni}
204       {\namepartprefix}
205       {\namepartsuffix}
206       {\nameparttitle}}
207     {\usebibmacro{name:family-title-given}
208       {\namepartfamily}
209       {\namepartgiven}
210       {\namepartsuffix}
211       {\nameparttitle}}}%
212 \savefield{hash}{\blx@ox@lasthash}%
213 \ifitemannotation{variant}{%
214   \global\settoggle{blx@ox@variantname}{true}%
215 }{%
216   \global\settoggle{blx@ox@variantname}{false}}%
217 \usebibmacro{name:andothers}}

```

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

```

218 \xpatchbibmacro{name:given-family}%
219   {\bibnamedelimd\mkbibnamesuffix{#4}}%
220   {\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}}{}
221 \xpatchbibmacro{name:family-given}%
222   {\bibnamedelimd\mkbibnamesuffix{#4}}%
223   {\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}}{}

```

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).

```

224 \DeclareFieldFormat{nameaddon}{\mkbibbrackets{#1}}
225 \DeclareFieldFormat{namevariant}{\mkbibparens{\bibstring{equals}}\space #1}}

```

We provide an alternative method that uses new name fields authoraddon and editoraddon. To do this, we define a bibmacro that reimplements the loopcode logic of `\printnames`, but operates on two name lists simultaneously; we use saveboxes to extract the hashes, and only print the alternative name if it has a different hash. The same technique is used by `oxyear` below to pair up names with the short form used in references, so this bibmacro is written to handle both cases.

The `namepairs` bibmacro takes two arguments: the data fields holding the main name and alternative name respectively.

```

226 \newcounter{namepairs}
227 \newsavebox{\blx@ox@namebox}
228 \newsavebox{\blx@ox@altnamebox}
229 \newbibmacro*{namepairs}[2]{%
230   \setcounter{namepairs}{0}%
231   \savebibmacro{name:andothers}%
232   \renewbibmacro*{name:andothers}{}%
233   \whileboolexpr{%
234     test {\ifnumless{\value{namepairs}}{\value{#1}}}
235     and (
236       test {\ifdefvoid{\c@maxnames}}
237       or
238       test {\ifnumequal{\c@maxnames}{0}}
239       or

```

```

240     test {\ifnumless{\value{#1}}{\c@maxnames}}
241     or
242     test {\ifnumequal{\value{#1}}{\c@maxnames}}
243     or
244     test {\ifdefvoid{\c@minnames}}
245     or
246     test {\ifnumequal{\c@minnames}{0}}
247     or
248     test {\ifnumless{\value{namepairs}}{\c@minnames}}
249 )
250 }{%
251   \stepcounter{namepairs}%
252   \ifnumgreater{\value{namepairs}}{1}{%
253     \ifnumequal{\value{#1}}{2}{%
254       \setunit*{\addspace\bibstring{and}\addspace}%
255     }{%
256       \ifnumequal{\value{namepairs}}{\value{#1}}{%
257         \setunit*{\addcomma\space\bibstring{and}\addspace}%
258       }{%
259         \setunit*{\addcomma\space}%
260       }%
261     }%
262   }{%
263     \savebox{\blx@ox@namebox}{%
264       \printnames[#1][\value{namepairs}-\value{namepairs}]{#1}%
265     }%
266     \let\blx@ox@firsthash=\blx@ox@lasthash

```

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

```

267   \IfEndWith{#2}{addon}{%
268     \savebox{\blx@ox@altnamebox}{%
269       \printnames[by#1][\value{namepairs}-\value{namepairs}]{#2}%
270     }%
271     \let\blx@ox@secondhash=\blx@ox@lasthash
272     \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
273       \unhbox\blx@ox@namebox
274     }{%
275       \unhbox\blx@ox@namebox\addspace
276       \iftoggle{blx@ox@variantname}{%
277         \ifbibliography{%
278           \printtext[namevariant]{\printnames[#1][\value{namepairs}-
279             ↪ \value{namepairs}]{#2}}%
280         }{%
281           \printtext[nameaddon]{\unhbox\blx@ox@altnamebox}%
282         }%
283       }%

```

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.

```

284   }{%
285     \savebox{\blx@ox@altnamebox}{%
286       \printnames[#1][\value{namepairs}-\value{namepairs}]{#2}%
287     }%
288     \let\blx@ox@secondhash=\blx@ox@lasthash
289     \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
290       \unhbox\blx@ox@namebox

```

```

291     }%
292     \unhbox\blx@ox@altnamex
293     \addspace\mkbibparens{\unhbox\blx@ox@namex}%
294   }%
295 }%
296 }%

```

Now we return to common code.

```

297 \ifbool{expr}{
298   test {\ifnumequal{\value{namepairs}}{\c@minnames}}
299   and
300   test {\ifnumgreater{\value{#1}}{\c@maxnames}}
301 }%
302 \ifnumgreater{\c@minnames}{1}{%
303   \finalandcomma
304 }%
305 \andothersdelim\bibstring{andothers}%
306 }%
307 \restorebibmacro{name:andothers}%
308 }

```

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

```

309 \newbibmacro*{author+altauthor}{%
310   \ifbool{expr}{
311     test {\ifnameundef{authoraddon}}
312     and
313     test {\ifnameundef{jointauthor}}
314   }%
315   \printnames{author}%
316 }%
317 \ifnumequal{\value{authoraddon}}{\value{author}}{%
318   \usebibmacro{namepairs}{author}{authoraddon}%
319 }%
320 \printnames{author}%
321 \ifnameundef{authoraddon}{%
322   \setunit*\addspace%
323   \printtext[nameaddon]{\printnames[byauthor]{authoraddon}}%
324 }%
325 \ifnameundef{jointauthor}{%
326   \setunit{\addcomma\space}%
327   \iffieldundef{jointauthortype}{%
328     \bibstring{byeditor}%
329   }%
330   \printfield{jointauthortype}%
331   \setunit{\addspace}%
332   \printnames[author]{jointauthor}%
333 }%
334 }%
335 }
336 \DeclareFieldFormat{jointauthortype}{%
337   \ifbibstring{by#1}{\bibstring{by#1}}{#1}

```

This is the (simpler) implementation for editors.

```

338 \newbibmacro*{editor+alteditor}{%
339   \ifnameundef{editoraddon}{%
340     \printnames{editor}%

```

```

341   }{
342     \ifnumequal{\value{editoraddon}}{\value{editor}}{%
343       \usebibmacro{namepairs}{editor}{editoraddon}%
344     }{%
345       \printnames{editor}%
346       \setunit*{\addspace}%
347       \printtext[nameaddon]{\printnames[byeditor]{editoraddon}}%
348     }%
349   }%
350 }

```

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`.

```

351 \newbibmacro*{bbx:savehash}{}
352 \DeclareBibliographyOption{dashed}[true]{%
353   \ifstrequal{#1}{true}{%
354     \ExecuteBibliographyOptions{pagetracker}%
355     \renewbibmacro*{bbx:savehash}{\savefield{fullhash}{\bbx@lasthash}}%
356   }%
357   \renewbibmacro*{bbx:savehash}{}%
358 }%
359 }
360 \InitializeBibliographyStyle{%
361   \global\undef\bbx@lasthash}
362 \newbibmacro*{bbx:dashcheck}[2]{%
363   \ifboolexpr{
364     test {\iffieldequals{fullhash}{\bbx@lasthash}}
365     and
366     not test \iffirstonpage
367     and
368     (
369       not bool {bbx@inset}
370       or
371       test {\iffieldequalstr{entrysetcount}{1}}
372     )
373   }{#1}{#2}%
374 }

```

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

```

375 \newbool{bbx@inset}
376 \DeclareBibliographyDriver{set}{%
377   \booltrue{bbx@inset}%
378   \entryset{}{}%
379   \newunit\newblock
380   \usebibmacro{setpageref}%
381   \finentry}

```

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

```

382 \newtoggle{blx@ox@autoanon}
383 \newtoggle{blx@ox@abbranon}
384 \DeclareBibliographyOption[string]{anon}[short]{%
385   \ifcsdef{blx@ox@opt@anon@#1}{%
386     \csuse{blx@ox@opt@anon@#1}%
387   }%
388   \PackageError{oxref}

```

```

389     {Invalid option 'anon=#1'}
390     {Valid values are 'long', 'short', and 'literal'.}}
391 \csdef{blx@ox@opt@anon@literal}{\togglefalse{blx@ox@autoanon}}
392 \csdef{blx@ox@opt@anon@long}{\toggletrue{blx@ox@autoanon}\togglefalse{blx@ox@abbranon}}
393 \csdef{blx@ox@opt@anon@short}{\toggletrue{blx@ox@autoanon}\toggletrue{blx@ox@abbranon}}

```

We copy the author to rawauthor for easier testing.

```

394 \DeclareStyleSourceMap{
395   \maps[datatype=bibtex]{%
396     \map{%
397       \step[fieldsource=author]%
398       \step[fieldset=rawauthor, origfieldval]%
399     }
400   }%
401 }

```

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 authortitle and authoryear);
- inserting the nameaddon field if provided;
- inserting the author type if provided (as in authoryear).

```

402 \newcommand*{\oxrefanon}{Anonymous}
403 \newtoggle{blx@ox@isanon}
404 \renewbibmacro*{author}{%
405   \iffieldequals{rawauthor}{\oxrefanon}{%
406     \toggletrue{blx@ox@isanon}%
407   }{%
408     \togglefalse{blx@ox@isanon}%
409   }
410   \ifboolexpr{
411     test \ifuseauthor
412     and
413     ( not test {\ifnameundef{author}} )
414     and (
415       ( not togl {blx@ox@isanon} )
416       or
417       ( not togl {blx@ox@autoanon} )
418       or
419       test {\ifbibliography}
420     )
421   }{
422     \usebibmacro{bbx:dashcheck}
423     {\bibnamedash}
424     {\usebibmacro{bbx:savehash}%
425       \ifboolexpr{
426         togl {blx@ox@autoanon}
427         and
428         togl {blx@ox@isanon}
429       }{%
430         \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
431       }%
432       \usebibmacro{author+altauthor}%
433     }%
434     \iffieldundef{nameaddon}
435     {}
436     {\setunit{\addspace}%

```

```

436     \printfield{nameaddon}}%
437     \setunit{\addspace}}%
438     \iffieldundef{authortype}
439     {}
440     {\usebibmacro{authorstrg}%
441     \setunit{\addspace}}}%
442     {\global\undef\bbx@lasthash}}
443     \DeclareFieldFormat{authortype}{\mkbibparens{#1}}

```

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 same as the usual one except the editor type is set off using parentheses instead of a comma.

```

444 \renewbibmacro*{editor}{%
445 \usebibmacro{bbx:editor}{editorstrg}}
446 \renewbibmacro*{editor+others}{%
447 \usebibmacro{bbx:editor}{editor+othersstrg}}
448 \newbibmacro*{bbx:editor}[1]{%
449 \ifboolexpr{
450   test \ifuseeditor
451   and
452   not test {\ifnameundef{editor}}
453 }
454 {\usebibmacro{bbx:dashcheck}
455 {\bibnamedash}
456 {\usebibmacro{editor+altdeditor}%
457 \setunit{\addspace}%
458 \usebibmacro{bbx:savehash}}%
459 \usebibmacro{#1}%
460 \clearname{editor}}
461 {\global\undef\bbx@lasthash}}
462 \DeclareFieldFormat{editortype}{\mkbibparens{#1}}

```

We do the same for translator as well.

```

463 \renewbibmacro*{translator}{%
464 \usebibmacro{bbx:translator}{translatorstrg}}
465 \renewbibmacro*{translator+others}{%
466 \usebibmacro{bbx:translator}{translator+othersstrg}}
467 \newbibmacro*{bbx:translator}[1]{%
468 \ifboolexpr{
469   test \ifusetranslator
470   and
471   not test {\ifnameundef{translator}}
472 }
473 {\usebibmacro{bbx:dashcheck}
474 {\bibnamedash}
475 {\printnames{translator}%
476 \setunit{\addspace}%
477 \usebibmacro{bbx:savehash}}%
478 \usebibmacro{#1}%
479 \clearname{translator}%
480 \setunit{\addspace}}%
481 {\global\undef\bbx@lasthash}}
482 \xpatchbibmacro{translatorstrg}%
483 {\bibstring}%
484 {\bibstring[\mkbibparens]}{}{}%
485 \xpatchbibmacro{translator+othersstrg}%
486 {\bibstring}%
487 {\bibstring[\mkbibparens]}{}{}%

```


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).

```

488 \renewbibmacro*{bybookauthor}{%
489   \ifnamesequal{author}{bookauthor}%
490   {\bibstring{idem\thefield{gender}}}%
491   {\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 oyear.

```

492 \newbibmacro*{bookeditor}{%
493   \global\undef\bbx@lasthash
494   \ifboolexpr{
495     test \ifuseeditor
496     and
497     not test {\ifnameundef{editor}}
498   }{%
499     \ifnamesequal{author}{editor}{%
500       \bibstring{idem\thefield{gender}}%
501       \setunit{\addspace}%
502       \usebibmacro{editor+othersstrg}%
503       \clearname{editor}%
504     }{%
505       \printnames[bookeditor]{editor}%
506       \setunit*\addspace%
507       \usebibmacro{editor+othersstrg}%
508       \clearname{editor}%
509     }%
510   }{}

```

We provide a macro for printing series editors.

```

511 \newbibmacro*{byserieseditor}{%
512   \ifnameundef{serieseditor}
513   {}
514   {\usebibmacro{bytypestrg}{serieseditor}{serieseditor}%
515     \setunit{\addspace}%
516     \printnames[byeditor]{serieseditor}%
517     \newunit}}

```

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.

```

518 \renewbibmacro*{title}{%
519   \ifboolexpr{
520     test {\iffieldundef{title}}
521     and
522     test {\iffieldundef{subtitle}}
523   }
524   {}
525   {\printtext[tile]{%
526     \printfield[titlecase]{title}%
527     \setunit{\subtitlepunct}%
528     \printfield[titlecase]{subtitle}}%
529     \setunit{\addspace}}%

```

```

530 \usebibmacro{origtitle}%
531 \setunit*{\addspace}%
532 \printfield{titleaddon}%
533 \iffieldequalstr{relatedtype}{equals}{%
534   \iftoggle{bbx:related}{%
535     \usebibmacro{related:init}%
536     \usebibmacro{related}%
537     \clearfield{related}%
538   }{}%
539 }{}%
540 }
541 \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 and ‘translation of’.

```

542 \DeclareFieldFormat{origtitle}{\mkbibemph{#1}}
543 \newbibmacro*{origtitle}{%
544   \iffieldundef{origtitle}{}{}%
545   \iflistundef{language}{}%
546   \printtext[parens]{\printfield{origtitle}}%
547 }{}%
548 \printtext[brackets]{%
549   \printlist{language}\space
550   \bibstring{translationof}\space
551   \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 extracted and adapted from code by Marco Daniel.¹

```

552 \newcommand{\blx@ox@compyear}[2]{%
553   \def\num@one{#1}%
554   \def\num@two{#2}%
555   \StrLen{\num@one}[\num@one@len]%
556   \StrLen{\num@two}[\num@two@len]%
557   \IfEq{\num@one@len}{\num@two@len}{%
558     {\StrCompare{\num@one}{\num@two}[\Result]}%
559     \ifnum\num@two@len>3%
560     \IfStrEq{\Result}{2}{\def\Result{1}}}%
561   \fi
562   \StrGobbleLeft{0\num@two}{\Result}}%
563   {\num@two}%
564 }

```

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

```

565 \patchcmd{\mkdaterangetrunc}{%
566   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
567 }{}%
568 \iffieldundef{#2endmonth}{%
569   {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%

```

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

```

570      {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
571    }{}%
572    \patchcmd{\mkdaterangetruncextra}{%
573      \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
574    }{%
575      \iffieldundef{#2endmonth}%
576      {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
577      {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
578    }{}%

```

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

```

579    \DeclareFieldFormat{datatype}{%
580      \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
581    }
582    \newtoggle{blx@ox@timefirst}
583    \DeclareBibliographyOption{timefirst}[true]{%
584      \settoggle{blx@ox@timefirst}{#1}}
585    \DeclareEntryOption{timefirst}[true]{%
586      \settoggle{blx@ox@timefirst}{#1}}
587    \newbibmacro*{date+time}{%
588      \ifboolexpr{
589        test {\iffieldundef{year}}
590        and
591        test {\iffieldundef{month}}
592        and
593        test {\iffieldundef{hour}}
594      }{}%
595      \printfield{datatype}%
596      \setunit*{\addspace}%
597      \iftoggle{blx@ox@timefirst}{%
598        \printtime
599        \setunit*{\addcomma\space}}{}%
600      \printdate
601      \iftoggle{blx@ox@timefirst}{%
602        \setunit*{\addcomma\space}%
603        \printtime}%
604    }
605    \renewbibmacro*{date}{\usebibmacro{date+time}}

```

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

```

606    \DeclareFieldFormat{origdatatype}{%
607      \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
608    }
609    \newbibmacro*{origdate+time}[1][%
610      \ifboolexpr{
611        test {\iffieldundef{origyear}}
612        and
613        test {\iffieldundef{origmonth}}
614        and
615        test {\iffieldundef{orighour}}
616      }{}%
617      \ifstrempy{#1}{%
618        \printfield{origdatatype}%
619      }{%
620        \iffieldundef{origdatatype}%
621        {\bibstring{#1}}%
622        {\printfield{origdatatype}}}%

```

```

623 \setunit*{\addspace}%
624 \iftoggle{blx@ox@timefirst}{%
625 \printorigtime
626 \setunit*{\addcomma\space}}{}%
627 \printorigdate
628 \iftoggle{blx@ox@timefirst}{}{
629 \setunit*{\addcomma\space}%
630 \printorigtime}%
631 }

```

2.1.5 EDITIONS, PAGES, AND OTHER NUMBER-LIKE FIELDS

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

```

632 \xpatchfieldformat{edition}{%
633 #1\isdot
634 }{%
635 \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
636 }{}

```

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

```

637 \DeclareFieldFormat{pages}{%
638 \iffieldundef{bookpagination}%
639 {\mkcomprange{#1}}%
640 {\mkcomprange[{\mkpageprefix[bookpagination]}]{#1}}%
641 }

```

The same is true in citations.

```

642 \DeclareFieldFormat{postnote}{%
643 \iffieldundef{pagination}%
644 {\mkcomprange{#1}}%
645 {\mkcomprange[{\mkpageprefix}]{#1}}%
646 }

```

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.

```

647 \DeclareBibliographyOption{nopublisher}[true]{%
648 \DeclareFieldInputHandler{publisher}{\def\NewValue{}}%
649 }

```

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.

```

650 \DeclareBibliographyOption{nolocation}[true]{%
651 \DeclareStyleSourceMap{
652 \maps[datatype=bibtex]{
653 \map{
654 \pertype{book}

```

```

655     \pertype{mvbook}
656     \pertype{bookinbook}
657     \pertype{inbook}
658     \pertype{suppbook}
659     \pertype{collection}
660     \pertype{mvcollection}
661     \pertype{incollection}
662     \pertype{suppcollection}
663     \pertype{reference}
664     \pertype{mvreference}
665     \pertype{inreference}
666     \pertype{proceedings}
667     \pertype{mvproceedings}
668     \pertype{inproceedings}
669     \step[notfield=location, fieldset=location,
    ↪   fieldvalue={\noexpand\bibstring{location}}]
670   }
671 }
672 }%
673 }

```

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

```

674 \newtoggle{blx@ox@noloc}
675 \def\blx@ox@noloc{{\bibstring{location}}}
676 \DeclareEntryOption{location}[true]{%
677   \settoggle{blx@ox@noloc}{#1}%
678   \iflistundef{location}{%
679     \iftoggle{blx@ox@noloc}{\restorelist{location}{\blx@ox@noloc}}{}%
680   }}

```

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.

```

681 \DeclareBibliographyOption{isourls}[true]{%
682   \ifstrequal{#1}{true}
683     {\DeclareFieldFormat{url}{$\langage$\url{##1}$\rangle$}}
684     {\DeclareFieldFormat{url}{\url{##1}}}%
685 }
686 \ExecuteBibliographyOptions{isourls=false}

```

NHR specifies that URLs should be broken across lines after slashes and percents, and before other punctuation. They should never break after hyphens.

```

687 \renewcommand*{\biburlsetup}{%
688   \Urlmuskip=0mu plus 2mu\relax
689   \mathchardef\UrlBigBreakPenalty=100\relax
690   \mathchardef\UrlBreakPenalty=200\relax
691   \def\UrlBigBreaks{\do\/\do\:}%
692   \def\UrlNoBreaks{\do\(\do\[\do\{\do\<%
693   \def\UrlBreaks{%
694     \do\>\do\}\do\)\do\\do\|}%
695     \do\'do\$do\*do\^do\"}%
696   \appto\UrlSpecials{%
697     \do\!\mathbin{}\mskip-\Urlmuskip\mathchar`\!\mskip\Urlmuskip}%
698     \do\&\mathbin{}\mskip-\Urlmuskip\mathchar`\&\mskip\Urlmuskip}%

```

```

699 \do\+{\mathbin{} \mskip-\Urlmuskip\mathchar`+\mskip\Urlmuskip}%
700 \do\,{\mathbin{} \mskip-\Urlmuskip\mathchar`\,\mskip\Urlmuskip}%
701 \do\-{\mathbin{} \mskip-\Urlmuskip\mathchar`\-\mskip\Urlmuskip}%
702 \do\.\{\mathbin{} \mskip-\Urlmuskip\mathchar`\.\mskip\Urlmuskip}%
703 \do\;{\mathbin{} \mskip-\Urlmuskip\mathchar`\;\mskip\Urlmuskip}%
704 \do\={\mathbin{} \mskip-\Urlmuskip\mathchar`\=\mskip\Urlmuskip}%
705 \do\?{\mathbin{} \mskip-\Urlmuskip\mathchar`\?\mskip\Urlmuskip}%
706 \do\_ {\mathbin{} \mskip-\Urlmuskip\mathchar`\_\mskip\Urlmuskip}%
707 \do\@{\mathbin{} \mskip-\Urlmuskip\mathchar`\@\mskip\Urlmuskip}%
708 \do\#{\mathbin{} \mskip-\Urlmuskip\mathchar`\#\mskip\Urlmuskip}%
709 }%
710 \ifnumgreater{\value{biburlnumpenalty}}{0}{
711   {\def\do##1{\appto\URLSpecials{\do##1{\mathchar`##1 \penalty\value{biburlnumpenalty}}}}%
712   \do\1\do\2\do\3\do\4\do\5\do\6\do\7\do\8\do\9\do\0}
713 }%
714 \ifnumgreater{\value{biburlucpenalty}}{0}{
715   {\def\do##1{\appto\URLSpecials{\do##1{\mathchar`##1 \penalty\value{biburlucpenalty}}}}%
716   \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J
717   \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T
718   \do\U\do\V\do\W\do\X\do\Y\do\Z}
719 }%
720 \ifnumgreater{\value{biburlcpenalty}}{0}{
721   {\def\do##1{\appto\URLSpecials{\do##1{\mathchar`##1 \penalty\value{biburlcpenalty}}}}%
722   \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J
723   \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T
724   \do\U\do\V\do\W\do\X\do\Y\do\Z}
725 }%
726 \let\do=\noexpand}

```

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

```

727 \DeclareFieldFormat{urldate}{\bibstring{urlseen}\space#1}
728 \xpatchbibmacro{url+urldate}%
729   {\setunit*{\addspace}}%
730   {\setunit*{\addcomma\addspace}}{}{}

```

The DOI is introduced by ‘doi’ in lowercase.

```

731 \xpatchfieldformat{doi}%
732   {\mkbibacro{DOI}}%
733   {\printtext{doi}}{}{}

```

Unlike URLs, DOIs are preceded by a full stop.

```

734 \xpatchbibmacro{doi+eprint+url}%
735   {\printfield{doi}}%
736   {\setunit{\addperiod\space}\printfield{doi}}{}{}

```

2.1.8 ADDENDA

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

```

737 \renewbibmacro*{addendum+pubstate}{%
738   \ifboolexpr{
739     test {\iffielddundef{pubstate}}
740     or
741     test {\iffieldequalstr{labeldatesource}{pubstate}}
742   }{}%
743   \nopunct

```

```

744 \ifbibstring{\thefield{pubstate}}{%
745 \printtext{pubstate}{\bibstring{\thefield{pubstate}}}%
746 }{%
747 \printfield{pubstate}}}%
748 \setunit{\addsemicolon\addspace}\newblock
749 \printfield{addendum}}
750 \DeclareFieldFormat{pubstate}{\mkbibparens{#1}}

```

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

```

751 \DeclareFieldFormat{howpublished}{\mkbibbrackets{#1}}
752 \DeclareFieldFormat[misc,unpublished]{howpublished}{#1}

```

2.1.9 ARTICLES AND PERIODICALS

Subtypes for articles and similar are in square brackets.

```

753 \DeclareFieldFormat[article,periodical,review]{entrysubtype}{\mkbibbrackets{#1}}

```

We provide a command for testing if a title is abbreviated.

```

754 \newcommand*{\ifabbrev}[3]{%
755 \StrRight{#1}{1}[\blx@ox@lastchar]%
756 \IfSubStr{AÂBCÇDEFGĤHÎĴKLMNOÏPQRSSTUÛÜVWXYZ. }{\blx@ox@lastchar}{#2}{#3}}

```

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.

```

757 \renewbibmacro*{journal+issuetitle}{%
758 \ifboolexpr{
759 test {\iffieldundef{title}}
760 and
761 not test {\iffieldundef{issuetitle}}
762 }{%
763 \usebibmacro{issue}%
764 \setunit{\addspace =\addspace}%
765 }{%
766 \ifboolexpr{
767 ( not test {\iffieldundef{pubstate}} )
768 and
769 test {\ifbibxstring{\thefield{pubstate}in}}
770 }{%
771 \printtext{\bibstring{\thefield{pubstate}in}\space}%
772 \clearfield{pubstate}%
773 }{}%
774 \usebibmacro{journal}%
775 \iffieldundef{journalsubtitle}{%
776 \ifabbrev{\thefield{journaltitle}}{\setunit{\addspace}}{\newunit}%
777 }{%
778 \ifabbrev{\thefield{journalsubtitle}}{\setunit{\addspace}}{\newunit}}%
779 \iffieldundef{series}{}%
780 \newunit\newblock
781 \printfield{series}%
782 \ifbibxstring{\thefield{series}}{%

```

```

783     \setunit{\addspace}%
784   }{%
785     \newunit}}%
786 \usebibmacro{volume+number+eid}%
787 \setunit{\addspace}%
788 \usebibmacro{issue+date}%
789 \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.

```

790 \renewbibmacro*{title+issuetitle}{%
791   \usebibmacro{periodical}%
792   \iffieldundef{subtitle}{%
793     \ifabbrev{\thefield{title}}{\setunit{\addspace}}{\newunit}%
794   }{%
795     \ifabbrev{\thefield{subtitle}}{\setunit{\addspace}}{\newunit}}%
796   \iffieldundef{series}{%
797     \newunit\newblock
798     \printfield{series}%
799     \ifbibtstring{\thefield{series}}{%
800       \setunit{\addspace}%
801     }{%
802       \newunit}}%
803   \usebibmacro{volume+number+eid}%
804   \setunit{\addspace}%
805   \usebibmacro{issue+date}%
806   \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).

```

807 \DeclareBibliographyOption{issuestyle}[slash]{%
808   \ifcsdef{blx@ox@issuestyle@#1}{%
809     \csuse{blx@ox@issuestyle@#1}%
810   }{%
811     \PackageError{biblatex}
812       {Invalid option 'issuestyle=#1'}
813       {Valid values are 'slash', 'colon', 'comma', 'parens'}%
814   }%
815 }
816 \csdef{blx@ox@issuestyle@slash}{%
817   \renewbibmacro*{volume+number+eid}{%
818     \printfield{volume}%
819     \setunit*{\addslash}%
820     \printfield{number}%
821   }%
822 }
823 \csdef{blx@ox@issuestyle@colon}{%
824   \renewbibmacro*{volume+number+eid}{%
825     \printfield{volume}%
826     \setunit*{\addcolon\space}%
827     \printfield{number}%
828   }%
829 }
830 \csdef{blx@ox@issuestyle@comma}{%
831   \renewbibmacro*{volume+number+eid}{%

```



```

832     \printfield{volume}%
833     \setunit*{\addcomma\space}%
834     \printfield{number}%
835   }%
836 }
837 \csdef{blx@ox@issuestyle@parens}{%
838   \renewbibmacro*{volume+number+eid}{%
839     \printfield{volume}%
840     \setunit*{\addspace}%
841     \printfield[parens]{number}%
842   }%
843 }
844 \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 season and date are printed bare. Otherwise (second block) they are printed in parentheses just as in the standard version of the macro.

```

845 \newtoggle{blx@ox@varissuedate}
846 \DeclareBibliographyOption[boolean]{varissuedate}[true]{%
847   \settoggle{blx@ox@varissuedate}{#1}}
848 \DeclareEntryOption[boolean]{varissuedate}[true]{%
849   \settoggle{blx@ox@varissuedate}{#1}}
850 \renewbibmacro*{issue+date}{%
851   \ifboolexpr{
852     test {\iffieldundef{issue}}
853     and
854     test {\iffieldundef{year}}
855     and
856     test {\iffieldundef{month}}
857   }{%
858     \ifboolexpr{
859       togl {blx@ox@varissuedate}
860       and
861       test {\iffieldundef{volume}}
862       and
863       test {\iffieldundef{number}}
864     }{%
865       \newunit
866       \printtext{%
867         \iffieldundef{issue}{%
868           \usebibmacro{date}
869         }%
870         \printfield{issue}%
871         \setunit*{\addspace}%
872         \usebibmacro{date}}}%
873     }{%
874       \printtext[parens]{%
875         \iffieldundef{issue}{%
876           \usebibmacro{date}%
877         }%
878         \printfield{issue}%
879         \setunit*{\addspace}%
880         \usebibmacro{date}}}%
881     }
882   \newunit
883   \printfield{eid}%
884 }

```

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.

```

884 \DeclareBibliographyDriver{article}{%
885   \usebibmacro{bibindex}%
886   \usebibmacro{begentry}%
887   \usebibmacro{author/translator+others}%
888   \setunit{\printdelim{nametitle}}\newblock
889   \usebibmacro{title}%
890   \newunit\newblock
891   \usebibmacro{byauthor}%
892   \newunit\newblock
893   \usebibmacro{bytranslator+others}%
894   \newunit\newblock
895   \printfield{version}%
896   \newunit\newblock
897   \usebibmacro{journal+issuetitle}%
898   \newunit
899   \usebibmacro{byeditor+others}%
900   \iffieldequalstr{relatedtype}{suppto}{%
901     \setunit{\addsemicolon\space}%
902     \iftoggle{bbx:related}{%
903       \usebibmacro{related:init}%
904       \usebibmacro{related}%
905       \clearfield{related}%
906     }{}%
907   }{}%
908   \newunit
909   \usebibmacro{note+pages}%
910   \newunit\newblock
911   \iftoggle{bbx:isbn}
912     {\printfield{issn}}
913     {}%
914   \newunit\newblock
915   \usebibmacro{doi+eprint+url}%
916   \newunit\newblock
917   \usebibmacro{addendum+pubstate}%
918   \setunit{\bibpagerefpunct}\newblock
919   \usebibmacro{pageref}%
920   \setunit{\relatedtypepunct}\newblock
921   \iftoggle{bbx:related}
922     {\usebibmacro{related:init}%
923       \usebibmacro{related}}
924     {}%
925   \usebibmacro{finentry}}

```

Similar changes are made to the periodical driver.

```

926 \DeclareBibliographyDriver{periodical}{%
927   \usebibmacro{bibindex}%
928   \usebibmacro{begentry}%
929   \usebibmacro{editor}%
930   \setunit{\printdelim{nametitle}}\newblock
931   \usebibmacro{title+issuetitle}%
932   \newunit\newblock
933   \usebibmacro{byeditor}%

```

```

934 \newunit\newblock
935 \printfield{note}%
936 \newunit\newblock
937 \iftoggle{bbx:isbn}
938   {\printfield{issn}}
939   {}%
940 \newunit\newblock
941 \usebibmacro{doi+eprint+url}%
942 \newunit\newblock
943 \usebibmacro{addendum+pubstate}%
944 \setunit{\bibpagerefunct}\newblock
945 \usebibmacro{pageref}%
946 \setunit{\relatedtypepunct}\newblock
947 \iftoggle{bbx:related}
948   {\usebibmacro{related:init}%
949     \usebibmacro{related}}
950   {}%
951 \usebibmacro{finentry}}

```

2.1.10 BOOKS AND WORKS IN BOOKS

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

```

952 \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.

```

953 \DeclareFieldFormat[bookinbook]{citetitle}{%
954   \ifboolexpr{
955     test {\iffieldequalstr{entrysubtype}{poem}}
956     or
957     test {\iffieldequalstr{entrysubtype}{play}}
958   }{%
959     \mkbibemph{#1}%
960   }{%
961     \mkbibquote{#1\isdot}}}%
962 \DeclareFieldFormat[bookinbook]{title}{%
963   \ifboolexpr{
964     test {\iffieldequalstr{entrysubtype}{poem}}
965     or
966     test {\iffieldequalstr{entrysubtype}{play}}
967   }{%
968     \mkbibemph{#1}%
969   }{%
970     \mkbibquote{#1\isdot}}}%

```

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

```

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

```

Volume numbers in monograph-style entries are formatted as roman numerals.

```

972 \DeclareFieldFormat[book,mvbook,bookinbook,inbook,suppbook,%
973 collection,mvcollection,incollection,suppcollection,%
974 proceedings,mvproceedings,inproceedings,%
975 reference,mvreference,inference]{volume}{%

```

```

976 \IfSubStr{#1}{-}{%
977   \StrCount{#1}{-}[\blx@ox@dashnum]%
978   \StrBefore{#1}{-}[\blx@ox@volnum]%
979   \Rn{\blx@ox@volnum}\bibrangedash
980   \StrBehind[\blx@ox@dashnum]{#1}{-}[\blx@ox@volnum]%
981   \Rn{\blx@ox@volnum}%
982 }{%
983   \Rn{#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.

```

984 \newbibmacro*{maintitle+volume}{%
985   \ifboolexpr{
986     test {\iffieldundef{maintitle}}
987     or
988     test {\iffieldundef{volume}}
989   }{%
990     {\printtext[maintitle+volume]{%
991       \bibstring{volume}\addspace
992       \printfield{volume}\printfield{part}\addspace
993       \bibstring{ofseries}\addspace
994       \usebibmacro{maintitle}}}
995   }
996   \DeclareFieldFormat{maintitle+volume}{\mkbibbrackets{#1}}
```

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

```

997 \renewbibmacro*{in:}{%
998   \iffieldequalstr{entrysubtype}{yearbook}{}{}%
999   \printtext{\bibstring{in}\intitlepunct}}
```

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

```

1000 \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.

```

1001 \renewbibmacro*{series+number}{%
1002   \printfield{series}%
1003   \setunit*{\addcomma\space}%
1004   \usebibmacro{byserieseditor}%
1005   \setunit*{\addcomma\space}%
1006   \printfield{number}}
```

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.

```

1007 \newcounter{locpubpairs}
1008 \newbibmacro*{edition+publisher+location+date}{%
1009   \printlist{origlocation}%
1010   \iflistundef{origpublisher}%
1011     {\setunit*{\addcomma\space}}%
1012     {\setunit*{\addcolon\space}}%
1013   \printlist{origpublisher}%
```

```

1014 \setunit*{\addcomma\space}%
1015 \ifboolexpr{
1016   test {\iflistundef{origlocation}}
1017   and
1018   test {\iflistundef{origpublisher}}
1019   and
1020   test {\iffieldundef{edition}}
1021 }{\%
1022   \printorigdate}%
1023 \setunit{\addsemicolon\space}%
1024 \printfield{edition}%
1025 \setunit*{\addcomma\space}%

```

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.

```

1026 \ifboolexpr{%
1027   test {\ifnumcomp{\value{publisher}}{>}{1}}
1028   and
1029   test {\ifnumequal{\value{location}}{\value{publisher}}}
1030 }{%
1031   \setcounter{locpubpairs}{0}%
1032   \savebibmacro{list:andothers}%
1033   \renewbibmacro*{list:andothers}{}%
1034   \whileboolexpr{%
1035     test {\ifnumcomp{\value{locpubpairs}}{<}{\value{publisher}}}
1036   }{%
1037     \stepcounter{locpubpairs}%
1038     \ifnumcomp{\value{locpubpairs}}{>}{1}{%
1039       \ifnumequal{\value{publisher}}{2}{%
1040         \setunit*{\addspace\bibstring{and}\addspace}%
1041       }{%
1042         \ifnumequal{\value{locpubpairs}}{\value{publisher}}{%
1043           \setunit*{\addcomma\space\bibstring{and}\addspace}%
1044         }{%
1045           \setunit*{\addcomma\space}%
1046         }%
1047       }%
1048     }%
1049     \printlist[][{\value{locpubpairs}-\value{locpubpairs}}]{location}%
1050     \setunit*{\addcolon\space}%
1051     \printlist[][{\value{locpubpairs}-\value{locpubpairs}}]{publisher}%
1052   }%
1053   \restorebibmacro{list:andothers}%
1054 }{%
1055   \printlist{location}%
1056   \iflistundef{publisher}%
1057   {\setunit*{\addcomma\space}}%
1058   {\setunit*{\addcolon\space}}%
1059   \printlist{publisher}%
1060 }%
1061 \setunit*{\addcomma\space}%
1062 \usebibmacro{date}%
1063 }

```

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

```

1064 \newbibmacro*{series+number+edition+publisher+location+date}{%
1065   \ifbool{expr}{
1066     test {\iffieldundef{series}}
1067     and
1068     test {\iffieldundef{number}}
1069     and
1070     test {\iffieldundef{edition}}
1071     and
1072     test {\iflistundef{publisher}}
1073     and
1074     test {\iflistundef{location}}
1075     and
1076     test {\iffieldundef{year}}
1077     and
1078     test {\iffieldundef{month}}
1079   }{}{%
1080     \nopunct
1081     \printtext[publication]{%
1082       \usebibmacro{series+number}%
1083       \setunit{\addsemicolon\addspace}%
1084       \usebibmacro{edition+publisher+location+date}%
1085       \usebibmacro{copub}}}%
1086   \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1087   \setunit{\addspace}\newblock
1088   \usebibmacro{origpub}%
1089 }

```

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

```

1090 \newbibmacro*{series+number+publisher+location+date}{%
1091   \ifbool{expr}{
1092     test {\iffieldundef{series}}
1093     and
1094     test {\iffieldundef{number}}
1095     and
1096     test {\iflistundef{publisher}}
1097     and
1098     test {\iflistundef{location}}
1099     and
1100     test {\iffieldundef{year}}
1101     and
1102     test {\iffieldundef{month}}
1103   }{}{%
1104     \nopunct
1105     \printtext[publication]{%
1106       \usebibmacro{series+number}%
1107       \setunit{\addsemicolon\addspace}%
1108       \usebibmacro{publisher+location+date}%
1109       \usebibmacro{copub}}}%
1110   \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1111   \setunit{\addspace}\newblock
1112   \usebibmacro{origpub}%
1113 }

```

The copub macro prints co-publication details.

```

1114 \newbibmacro*{copub}{%
1115   \ifbool{expr}{
1116     togl {bbx:related}
1117     and

```

```

1118     test {\iffieldequalstr{relatedtype}{copub}}
1119   }{%
1120     \setunit{\addsemicolon\space}%
1121     \usebibmacro{related:init}%
1122     \usebibmacro{related}%
1123   }{%
1124 }

```

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

```

1125 \newbibmacro*{origpub}{%
1126   \ifboolexpr{
1127     test {\iflistundef{origlocation}}
1128     and
1129     test {\iflistundef{origpublisher}}
1130     and
1131     test {\iffieldundef{edition}}
1132     and
1133     ( not test {\iffieldundef{origyear}} )
1134   }{%
1135     \printtext[parens]{\bibstring{origpubin}\space\printorigdate}%
1136   }{%
1137 }

```

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;

```

1138 \DeclareBibliographyDriver{book}{%
1139   \usebibmacro{bibindex}%
1140   \usebibmacro{begentry}%
1141   \usebibmacro{author/editor+others/translator+others}%
1142   \setunit{\printdelim{nametitledelim}}\newblock
1143   \usebibmacro{title}%
1144   \newunit\newblock
1145   \usebibmacro{byauthor}%
1146   \newunit\newblock
1147   \usebibmacro{byeditor+others}%
1148   \newunit\newblock
1149   \printfield{note}%
1150   \newunit\newblock
1151   \usebibmacro{maintitle+volume}%
1152   \newunit
1153   \usebibmacro{series+number+edition+publisher+location+date}%
1154   \setunit{\addspace}%
1155   \printfield{howpublished}%
1156   \newunit\newblock
1157   \usebibmacro{chapter+pages}%
1158   \newunit
1159   \printfield{pagetotal}%
1160   \newunit\newblock
1161   \iftoggle{bbx:isbn}
1162     {\printfield{isbn}}
1163     {}%

```

```

1164 \newunit\newblock
1165 \usebibmacro{doi+eprint+url}%
1166 \newunit\newblock
1167 \usebibmacro{addendum+pubstate}%
1168 \setunit{\bibpagerefunct}\newblock
1169 \usebibmacro{pageref}%
1170 \setunit{\relatedtypepunct}\newblock
1171 \iftoggle{bbx:related}
1172   {\usebibmacro{related:init}%
1173    \usebibmacro{related}}
1174   {}%
1175 \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;

```

1176 \DeclareBibliographyDriver{mvbook}{%
1177   \usebibmacro{bibindex}%
1178   \usebibmacro{begentry}%
1179   \usebibmacro{author/editor+others/translator+others}%
1180   \setunit{\printdelim{nametitledelim}}\newblock
1181   \usebibmacro{maintitle+title}%
1182   \newunit
1183   \ifboolexpr{
1184     test {\iffieldequalstr{relatedtype}{multivolume}}
1185     or
1186     ( not test {\iffieldundef{maintitle}} )
1187   }{%
1188     \printfield{volume}%
1189     \printfield{part}%
1190     \newunit\newblock
1191     \usebibmacro{byauthor}%
1192     \newunit\newblock
1193     \usebibmacro{byeditor+others}%
1194     \newunit\newblock
1195     \printfield{volumes}%
1196     \newunit\newblock
1197     \printfield{note}%
1198     \newunit\newblock
1199     \ifboolexpr{
1200       test {\iffieldequalstr{relatedtype}{multivolume}}
1201       and
1202       test {\iffieldundef{maintitle}}
1203     }{%
1204       \printfield{volume}%
1205       \printfield{part}%
1206     }%
1207     \newunit\newblock
1208     \usebibmacro{series+number+edition+publisher+location+date}%
1209     \newunit\newblock
1210     \usebibmacro{chapter+pages}%
1211     \newunit
1212     \printfield{pagetotal}%
1213     \newunit\newblock
1214     \iftoggle{bbx:isbn}

```



```

1215     {\printfield{isbn}}
1216     {}%
1217     \newunit\newblock
1218     \usebibmacro{doi+eprint+url}%
1219     \newunit\newblock
1220     \usebibmacro{addendum+pubstate}%
1221     \setunit{\bibpagerefunct}\newblock
1222     \usebibmacro{pageref}%
1223     \setunit{\relatedtypepunct}\newblock
1224     \iftoggle{bbx:related}
1225     {\usebibmacro{related:init}%
1226      \usebibmacro{related}}
1227     {}%
1228     \usebibmacro{finentry}}

```

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

```

1229 \DeclareBibliographyDriver{inbook}{%
1230   \usebibmacro{bibindex}%
1231   \usebibmacro{begentry}%
1232   \usebibmacro{author/translator+others}%
1233   \setunit{\printdelim{nametitledelim}}\newblock
1234   \usebibmacro{title}%
1235   \newunit\newblock
1236   \usebibmacro{byauthor}%
1237   \newunit\newblock
1238   \usebibmacro{in:}%
1239   \usebibmacro{bybookauthor}%
1240   \newunit\newblock
1241   \usebibmacro{maintitle+booktitle}%
1242   \newunit
1243   \iffieldundef{maintitle}
1244   {\printfield{volume}%
1245    \printfield{part}}
1246   {}%
1247   \newunit\newblock
1248   \usebibmacro{byeditor+others}%
1249   \newunit\newblock
1250   \printfield{volumes}%
1251   \newunit\newblock
1252   \printfield{note}%
1253   \newunit\newblock%
1254   \usebibmacro{series+number+edition+publisher+location+date}%
1255   \newunit\newblock
1256   \usebibmacro{chapter+pages}%
1257   \newunit\newblock
1258   \iftoggle{bbx:isbn}
1259   {\printfield{isbn}}
1260   {}%
1261   \newunit\newblock
1262   \usebibmacro{doi+eprint+url}%
1263   \newunit\newblock
1264   \usebibmacro{addendum+pubstate}%
1265   \setunit{\bibpagerefunct}\newblock
1266   \usebibmacro{pageref}%
1267   \setunit{\relatedtypepunct}\newblock
1268   \iftoggle{bbx:related}
1269   {\usebibmacro{related:init}%
1270    \usebibmacro{related}}
1271   {}%

```

```

1272 \usebibmacro{finentry}}
1273 \DeclareFieldFormat[suppbook]{title}{#1\nopunct}

```

We also provide a bookinbook driver that handles origdate differently.

```

1274 \DeclareBibliographyDriver{bookinbook}{%
1275 \usebibmacro{bibindex}%
1276 \usebibmacro{begentry}%
1277 \usebibmacro{author/translator+others}%
1278 \setunit{\printdelim{nametitledelim}}\newblock
1279 \usebibmacro{title}%
1280 \newunit\newblock
1281 \usebibmacro{byauthor}%
1282 \newunit\newblock
1283 \usebibmacro{in:}%
1284 \usebibmacro{bybookauthor}%
1285 \newunit\newblock
1286 \usebibmacro{maintitle+booktitle}%
1287 \newunit
1288 \iffieldundef{maintitle}
1289 {\printfield{volume}%
1290 \printfield{part}}
1291 {}%
1292 \newunit\newblock
1293 \usebibmacro{byeditor+others}%
1294 \newunit\newblock
1295 \printfield{volumes}%
1296 \newunit\newblock
1297 \printfield{note}%
1298 \newunit\newblock
1299 \usebibmacro{series+number+publisher+location+date}%
1300 \newunit\newblock
1301 \usebibmacro{chapter+pages}%
1302 \newunit\newblock
1303 \iftoggle{bbx:isbn}
1304 {\printfield{isbn}}
1305 {}%
1306 \newunit\newblock
1307 \usebibmacro{doi+eprint+url}%
1308 \newunit\newblock
1309 \usebibmacro{addendum+pubstate}%
1310 \setunit{\bibpagerefpunct}\newblock
1311 \usebibmacro{pageref}%
1312 \setunit{\relatedtypepunct}\newblock
1313 \iftoggle{bbx:related}
1314 {\usebibmacro{related:init}%
1315 \usebibmacro{related}}
1316 {}%
1317 \usebibmacro{finentry}}

```

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

```

1318 \DeclareBibliographyDriver{collection}{%
1319 \usebibmacro{bibindex}%
1320 \usebibmacro{begentry}%
1321 \usebibmacro{editor+others}%
1322 \setunit{\printdelim{nametitledelim}}\newblock
1323 \usebibmacro{title}%
1324 \newunit\newblock
1325 \usebibmacro{byeditor+others}%
1326 \newunit\newblock

```

```

1327 \printfield{note}%
1328 \newunit\newblock
1329 \usebibmacro{maintitle+volume}%
1330 \newunit
1331 \usebibmacro{series+number+edition+publisher+location+date}%
1332 \newunit\newblock
1333 \usebibmacro{chapter+pages}%
1334 \newunit
1335 \printfield{pagetotal}%
1336 \newunit\newblock
1337 \iftoggle{bbx:isbn}
1338 {\printfield{isbn}}
1339 {}%
1340 \newunit\newblock
1341 \usebibmacro{doi+eprint+url}%
1342 \newunit\newblock
1343 \usebibmacro{addendum+pubstate}%
1344 \setunit{\bibpagerefpunct}\newblock
1345 \usebibmacro{pageref}%
1346 \setunit{\relatedtypepunct}\newblock
1347 \iftoggle{bbx:related}
1348 {\usebibmacro{related:init}%
1349 \usebibmacro{related}}
1350 {}%
1351 \usebibmacro{finentry}}

```

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

```

1352 \DeclareBibliographyDriver{mvcollection}{%
1353 \usebibmacro{bibindex}%
1354 \usebibmacro{begentry}%
1355 \usebibmacro{editor+others}%
1356 \setunit{\printdelim{nametitledelim}}\newblock
1357 \usebibmacro{maintitle+title}%
1358 \newunit
1359 \ifboolexpr{
1360 test {\iffieldequalstr{relatedtype}{multivolume}}
1361 or
1362 ( not test {\iffieldundef{maintitle}} )
1363 }{\%
1364 \printfield{volume}%
1365 \printfield{part}}%
1366 \newunit\newblock
1367 \usebibmacro{byeditor+others}%
1368 \newunit\newblock
1369 \printfield{volumes}%
1370 \newunit\newblock
1371 \printfield{note}%
1372 \newunit\newblock
1373 \ifboolexpr{
1374 test {\iffieldequalstr{relatedtype}{multivolume}}
1375 and
1376 test {\iffieldundef{maintitle}}
1377 }{\%
1378 \printfield{volume}%
1379 \printfield{part}}%
1380 }{\%
1381 \newunit\newblock
1382 \usebibmacro{series+number+edition+publisher+location+date}%
1383 \newunit\newblock

```

```

1384 \usebibmacro{chapter+pages}%
1385 \newunit
1386 \printfield{pagetotal}%
1387 \newunit\newblock
1388 \iftoggle{bbx:isbn}
1389 {\printfield{isbn}}
1390 {}%
1391 \newunit\newblock
1392 \usebibmacro{doi+eprint+url}%
1393 \newunit\newblock
1394 \usebibmacro{addendum+pubstate}%
1395 \setunit{\bibpagerefunct}\newblock
1396 \usebibmacro{pageref}%
1397 \setunit{\relatedtypepunct}\newblock
1398 \iftoggle{bbx:related}
1399 {\usebibmacro{related:init}%
1400 \usebibmacro{related}}
1401 {}%
1402 \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.

```

1403 \DeclareBibliographyDriver{incollection}{%
1404 \usebibmacro{bibindex}%
1405 \usebibmacro{begentry}%
1406 \usebibmacro{author/translator+others}%
1407 \setunit{\printdelim{nametitledelim}}\newblock
1408 \usebibmacro{title}%
1409 \newunit\newblock
1410 \usebibmacro{byauthor}%
1411 \newunit\newblock
1412 \usebibmacro{in:}%
1413 \usebibmacro{bookeditor}%
1414 \newunit\newblock
1415 \usebibmacro{maintitle+booktitle}%
1416 \newunit
1417 \iffieldundef{maintitle}
1418 {\printfield{volume}%
1419 \printfield{part}}
1420 {}%
1421 \newunit\newblock
1422 \printfield{volumes}%
1423 \newunit\newblock
1424 \printfield{note}%
1425 \newunit\newblock%
1426 \usebibmacro{series+number+edition+publisher+location+date}%
1427 \newunit\newblock
1428 \usebibmacro{chapter+pages}%
1429 \newunit\newblock
1430 \iftoggle{bbx:isbn}
1431 {\printfield{isbn}}
1432 {}%
1433 \newunit\newblock
1434 \usebibmacro{doi+eprint+url}%
1435 \newunit\newblock
1436 \usebibmacro{addendum+pubstate}%
1437 \setunit{\bibpagerefunct}\newblock
1438 \usebibmacro{pageref}%
1439 \setunit{\relatedtypepunct}\newblock

```

```

1440 \iftoggle{bbx:related}
1441 {\usebibmacro{related:init}%
1442 \usebibmacro{related}}
1443 {}%
1444 \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.

```

1445 \DeclareBibliographyDriver{reference}{%
1446 \usebibmacro{bibindex}%
1447 \usebibmacro{begentry}%
1448 \usebibmacro{author/editor+others/translator+others}%
1449 \setunit{\printdelim{nametitledelim}}\newblock
1450 \usebibmacro{title}%
1451 \newunit\newblock
1452 \printfield{edition}%
1453 \newunit
1454 \usebibmacro{byauthor}%
1455 \newunit\newblock
1456 \usebibmacro{byeditor+others}%
1457 \newunit\newblock
1458 \printfield{note}%
1459 \newunit\newblock
1460 \usebibmacro{maintitle+volume}%
1461 \newunit
1462 \usebibmacro{series+number+publisher+location+date}%
1463 \newunit\newblock
1464 \usebibmacro{chapter+pages}%
1465 \newunit
1466 \printfield{pagetotal}%
1467 \newunit\newblock
1468 \iftoggle{bbx:isbn}
1469 {\printfield{isbn}}
1470 {}%
1471 \newunit\newblock
1472 \usebibmacro{doi+eprint+url}%
1473 \newunit\newblock
1474 \usebibmacro{addendum+pubstate}%
1475 \setunit{\bibpagerefpunct}\newblock
1476 \usebibmacro{pageref}%
1477 \setunit{\relatedtypepunct}\newblock
1478 \iftoggle{bbx:related}
1479 {\usebibmacro{related:init}%
1480 \usebibmacro{related}}
1481 {}%
1482 \usebibmacro{finentry}}

```

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

```

1483 \DeclareBibliographyDriver{mvreference}{%
1484 \usebibmacro{bibindex}%
1485 \usebibmacro{begentry}%
1486 \usebibmacro{author/editor+others/translator+others}%
1487 \setunit{\printdelim{nametitledelim}}\newblock
1488 \usebibmacro{maintitle+title}%
1489 \newunit
1490 \ifboolexpr{
1491 test {\iffieldequalstr{relatedtype}{multivolume}}
1492 or
1493 ( not test {\iffieldundef{maintitle}} )

```

```

1494   }{}%
1495   \printfield{volume}%
1496   \printfield{part}}%
1497   \newunit\newblock
1498   \printfield{edition}%
1499   \newunit
1500   \usebibmacro{byauthor}%
1501   \newunit\newblock
1502   \usebibmacro{byeditor+others}%
1503   \newunit\newblock
1504   \printfield{volumes}%
1505   \newunit\newblock
1506   \printfield{note}%
1507   \newunit\newblock
1508   \ifboolexpr{
1509     test {\iffieldequalstr{relatedtype}{multivolume}}
1510     and
1511     test {\iffieldundef{maintitle}}
1512   }{%
1513     \printfield{volume}%
1514     \printfield{part}%
1515   }{}%
1516   \newunit\newblock
1517   \usebibmacro{series+number+publisher+location+date}%
1518   \newunit\newblock
1519   \usebibmacro{chapter+pages}%
1520   \newunit
1521   \printfield{pagetotal}%
1522   \newunit\newblock
1523   \iftoggle{bbx:isbn}
1524   {\printfield{isbn}}
1525   {}%
1526   \newunit\newblock
1527   \usebibmacro{doi+eprint+url}%
1528   \newunit\newblock
1529   \usebibmacro{addendum+pubstate}%
1530   \setunit{\bibpagerefpunct}\newblock
1531   \usebibmacro{pageref}%
1532   \setunit{\relatedtypepunct}\newblock
1533   \iftoggle{bbx:related}
1534   {\usebibmacro{related:init}%
1535     \usebibmacro{related}}
1536   {}%
1537   \usebibmacro{finentry}}

```

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

```

1538   \DeclareBibliographyDriver{inference}{%
1539     \usebibmacro{bibindex}%
1540     \usebibmacro{begentry}%
1541     \usebibmacro{author/translator+others}%
1542     \setunit{\printdelim{nametitledelim}}\newblock
1543     \usebibmacro{title}%
1544     \newunit\newblock
1545     \usebibmacro{byauthor}%
1546     \newunit\newblock
1547     \iffieldundef{editor}{}{}%
1548     \usebibmacro{in:}%
1549     \usebibmacro{bookeditor}%
1550     \newunit\newblock}%

```

```

1551 \usebibmacro{maintitle+booktitle}%
1552 \newunit
1553 \iffieldundef{maintitle}
1554 {\printfield{volume}%
1555   \printfield{part}}
1556 {}%
1557 \newunit\newblock
1558 \printfield{edition}%
1559 \newunit
1560 \usebibmacro{byeditor+others}%
1561 \newunit\newblock
1562 \printfield{volumes}%
1563 \newunit\newblock
1564 \printfield{note}%
1565 \newunit\newblock%
1566 \usebibmacro{series+number+publisher+location+date}%
1567 \newunit\newblock
1568 \usebibmacro{chapter+pages}%
1569 \newunit
1570 \printfield{pagetotal}%
1571 \newunit\newblock
1572 \iftoggle{bbx:isbn}
1573 {\printfield{isbn}}
1574 {}%
1575 \newunit\newblock
1576 \usebibmacro{doi+eprint+url}%
1577 \newunit\newblock
1578 \usebibmacro{addendum+pubstate}%
1579 \setunit{\bibpagerefunct}\newblock
1580 \usebibmacro{pageref}%
1581 \setunit{\relatedtypepunct}\newblock
1582 \iftoggle{bbx:related}
1583 {\usebibmacro{related:init}%
1584   \usebibmacro{related}}
1585 {}%
1586 \usebibmacro{finentry}}

```

2.1.11 WORKS PRESENTED AT MEETINGS

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

```

1587 \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. A bit of jiggery-pokery is used to make the colon italic if it follows italic text.

```

1588 \renewbibmacro*{event+venue+date}{%
1589   \printfield{eventtitle}%
1590   \newunit
1591   \printfield{eventtitleaddon}%
1592   \ifboolexpr{
1593     test {\iffieldundef{venue}}
1594     and
1595     test {\iffieldundef{eventyear}}
1596   }{%
1597     \iffieldundef{eventtitle}{%
1598       \setunit{\mkbibemph{\addcomma}\space}%
1599     }{%
1600       \newunit}%

```

```

1601 \printfield{venue}%
1602 \newunit%
1603 \printeventdate}%
1604 \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!

```

1605 \DeclareBibliographyDriver{proceedings}{%
1606 \usebibmacro{bibindex}%
1607 \usebibmacro{begentry}%
1608 \usebibmacro{author}%
1609 \newunit
1610 \usebibmacro{maintitle+title}%
1611 \newunit
1612 \iffieldundef{maintitle}
1613 {\printfield{volume}%
1614 \printfield{part}}
1615 {}%
1616 \newunit\newblock
1617 \usebibmacro{event+venue+date}%
1618 \newunit\newblock
1619 \usebibmacro{byeditor+others}%
1620 \newunit\newblock
1621 \printfield{volumes}%
1622 \newunit\newblock
1623 \printfield{note}%
1624 \newunit\newblock
1625 \printlist{organization}%
1626 \newunit
1627 \usebibmacro{series+number+edition+publisher+location+date}%
1628 \newunit\newblock
1629 \usebibmacro{chapter+pages}%
1630 \newunit
1631 \printfield{pagetotal}%
1632 \newunit\newblock
1633 \iftoggle{bbx:isbn}
1634 {\printfield{isbn}}
1635 {}%
1636 \newunit\newblock
1637 \usebibmacro{doi+eprint+url}%
1638 \newunit\newblock
1639 \usebibmacro{addendum+pubstate}%
1640 \setunit{\bibpagerefpunct}\newblock
1641 \usebibmacro{pageref}%
1642 \setunit{\relatedtypepunct}\newblock
1643 \iftoggle{bbx:related}
1644 {\usebibmacro{related:init}%
1645 \usebibmacro{related}}
1646 {}%

```



```
1647 \usebibmacro{finentry}}
```

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

```
1648 \DeclareBibliographyDriver{inproceedings}{%
1649 \usebibmacro{bibindex}%
1650 \usebibmacro{begentry}%
1651 \usebibmacro{author/translator+others}%
1652 \setunit{\printdelim{nametitledelim}}\newblock
1653 \usebibmacro{title}%
1654 \newunit\newblock
1655 \usebibmacro{byauthor}%
1656 \newunit\newblock
1657 \usebibmacro{in:}%
1658 \usebibmacro{maintitle+booktitle}%
1659 \newunit
1660 \iffielddundef{maintitle}
1661 {\printfield{volume}%
1662 \printfield{part}}
1663 {}%
1664 \newunit\newblock
1665 \usebibmacro{event+venue+date}%
1666 \newunit\newblock
1667 \usebibmacro{byeditor+others}%
1668 \newunit\newblock
1669 \printfield{volumes}%
1670 \newunit\newblock
1671 \printfield{note}%
1672 \newunit\newblock
1673 \printlist{organization}%
1674 \newunit
1675 \usebibmacro{series+number+publisher+location+date}%
1676 \newunit\newblock
1677 \usebibmacro{chapter+pages}%
1678 \newunit\newblock
1679 \iftoggle{bbx:isbn}
1680 {\printfield{isbn}}
1681 {}%
1682 \newunit\newblock
1683 \usebibmacro{doi+eprint+url}%
1684 \newunit\newblock
1685 \usebibmacro{addendum+pubstate}%
1686 \setunit{\bibpagerefpunct}\newblock
1687 \usebibmacro{pageref}%
1688 \setunit{\relatedtypepunct}\newblock
1689 \iftoggle{bbx:related}
1690 {\usebibmacro{related:init}%
1691 \usebibmacro{related}}
1692 {}%
1693 \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.

```
1694 \newbibmacro*{series+type+number}{%
1695 \ifbool{expr}
1696 test {\iffielddundef{series}}
```

```

1697     and
1698     test {\iffieldundef{type}}
1699   }{\%
1700     \printfield{series}%
1701     \newunit
1702     \ifboolexpr{%
1703       test {\iffieldundef{type}}
1704       and
1705       not test {\iffieldundef{number}}
1706     }{\%
1707       \bibcpstring{number}
1708     }{\%
1709       \printfield{type}%
1710     }%
1711     \setunit*{\addspace}%
1712     \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 standard thesis driver, which also works well for us, and the report driver.

```

1713 \renewbibmacro*{institution+location+date}{\%
1714   \ifboolexpr{
1715     test {\iffieldundef{type}}
1716     and
1717     test {\iffieldundef{series}}
1718     and
1719     test {\iffieldundef{number}}
1720     and
1721     test {\iflistundef{institution}}
1722     and
1723     test {\iflistundef{location}}
1724     and
1725     test {\iffieldundef{year}}
1726     and
1727     test {\iffieldundef{month}}
1728   }{\%
1729     \nopunct
1730     \printtext[publication]{\%
1731       \ifboolexpr{
1732         test {\iffieldundef{series}}
1733         and
1734         test {\iffieldundef{type}}
1735       }{\%
1736         \printfield{number}%
1737         \setunit*{\addcomma\space}%
1738       }{\%
1739         \printlist{location}%
1740         \iflistundef{institution}%
1741         {\setunit*{\addcomma\space}}%
1742         {\setunit*{\addcolon\space}}%
1743         \printlist{institution}%
1744         \setunit*{\addcomma\space}%
1745         \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.

```

1746 \newtoggle{blx@ox@altthesis}
1747 \DeclareBibliographyOption[boolean]{altthesis}[true]{%
1748   \settoggle{blx@ox@altthesis}{#1}
1749 }
1750 \newbibmacro*{type+institution+location+date}{%
1751   \iftoggle{blx@ox@altthesis}{%
1752     \ifboolexpr{
1753       test {\iffieldundef{type}}
1754       and
1755       test {\iflistundef{institution}}
1756       and
1757       test {\iflistundef{location}}
1758       and
1759       test {\iffieldundef{year}}
1760       and
1761       test {\iffieldundef{month}}
1762     }{}{%
1763       \nopunct
1764       \printtext[publication]{%
1765         \printfield{type}%
1766         \setunit*{\addcomma\space}%
1767         \printlist{location}%
1768         \iflistundef{institution}{%
1769           \setunit*{\addcomma\space}%
1770         }{%
1771           \setunit*{\addcolon\space}}%
1772         \printlist{institution}%
1773         \setunit*{\addcomma\space}%
1774         \usebibmacro{date}}}
1775     }{%
1776       \printfield{type}%
1777       \newunit
1778       \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.

```

1779 \newbibmacro*{type+series+number+edition+organization+publisher+location+date}{%
1780   \ifboolexpr{
1781     test {\iffieldundef{type}}
1782     and
1783     test {\iffieldundef{series}}
1784     and
1785     test {\iffieldundef{number}}
1786     and
1787     test {\iffieldundef{edition}}
1788     and
1789     test {\iflistundef{organization}}
1790     and
1791     test {\iflistundef{publisher}}
1792     and
1793     test {\iflistundef{location}}
1794     and
1795     test {\iffieldundef{year}}
1796     and
1797     test {\iffieldundef{month}}
1798   }{}{%
1799     \nopunct
1800     \printtext[publication]{%

```

```

1801 \usebibmacro{series+type+number}%
1802 \setunit{\addsemicolon\space}%
1803 \printfield{edition}%
1804 \setunit*{\addcomma\space}%
1805 \iflistundef{publisher}{ }{%
1806 \printlist{organization}%
1807 \setunit*{\addcomma\space}}%
1808 \printlist{location}%
1809 \iflistundef{publisher}{ }{%
1810 \iflistundef{organization}{ }%
1811 \setunit*{\addcomma\space}%
1812 }{%
1813 \setunit*{\addcolon\space}%
1814 \printlist{organization}}%
1815 }{%
1816 \setunit*{\addcolon\space}%
1817 \printlist{publisher}}%
1818 \setunit*{\addcomma\space}%
1819 \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.

```

1820 \newcommand*{\legreport}{legal}
1821 \DeclareBibliographyDriver{report}{%
1822 \usebibmacro{bibindex}%
1823 \usebibmacro{begentry}%
1824 \usebibmacro{author}%
1825 \setunit{\printdelim{nametitledelim}}\newblock
1826 \usebibmacro{maintitle+title}%
1827 \newunit
1828 \iffieldundef{maintitle}
1829 { \printfield{volume}%
1830 \printfield{part}}
1831 {}%
1832 \newunit\newblock
1833 \usebibmacro{byauthor}%
1834 \newunit\newblock
1835 \printfield{version}%
1836 \newunit\newblock
1837 \printfield{note}%
1838 \newunit\newblock
1839 \usebibmacro{series+type+number}%
1840 \setunit{\addspace}%
1841 \usebibmacro{institution+location+date}%
1842 \iffieldequals{entrysubtype}{\legreport}{%
1843 \setunit{\addspace}\nopunct
1844 }{%
1845 \newunit\newblock}%
1846 \usebibmacro{chapter+pages}%
1847 \newunit
1848 \printfield{pagetotal}%
1849 \newunit\newblock
1850 \iftoggle{bbx:isbn}
1851 { \printfield{isrn}}
1852 {}%
1853 \newunit\newblock

```

```

1854 \usebibmacro{doi+eprint+url}%
1855 \newunit\newblock
1856 \usebibmacro{addendum+pubstate}%
1857 \setunit{\bibpagerefpunct}\newblock
1858 \usebibmacro{pageref}%
1859 \setunit{\relatedtypepunct}\newblock
1860 \iftoggle{bbx:related}
1861 {\usebibmacro{related:init}%
1862 \usebibmacro{related}}
1863 {}%
1864 \usebibmacro{finentry}}

```

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

```

1865 \xpatchbibdriver{thesis}{%
1866 \printfield{type}%
1867 \newunit
1868 \usebibmacro{institution+location+date}%
1869 }{%
1870 \usebibmacro{type+institution+location+date}%
1871 }{}{}

```

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;

```

1872 \DeclareBibliographyDriver{manual}{%
1873 \usebibmacro{bibindex}%
1874 \usebibmacro{begentry}%
1875 \usebibmacro{author/editor}%
1876 \setunit{\printdelim{nametitledelim}}\newblock
1877 \usebibmacro{title}%
1878 \newunit\newblock
1879 \usebibmacro{byauthor}%
1880 \newunit\newblock
1881 \usebibmacro{byeditor}%
1882 \newunit\newblock
1883 \printfield{type}%
1884 \newunit
1885 \printfield{version}%
1886 \newunit
1887 \printfield{note}%
1888 \newunit\newblock
1889 \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
1890 \newunit\newblock
1891 \usebibmacro{chapter+pages}%
1892 \newunit
1893 \printfield{pagetotal}%
1894 \newunit\newblock
1895 \iftoggle{bbx:isbn}
1896 {\printfield{isbn}}
1897 {}%
1898 \newunit\newblock
1899 \usebibmacro{doi+eprint+url}%
1900 \newunit\newblock
1901 \usebibmacro{addendum+pubstate}%
1902 \setunit{\bibpagerefpunct}\newblock
1903 \usebibmacro{pageref}%
1904 \setunit{\relatedtypepunct}\newblock
1905 \iftoggle{bbx:related}

```

```

1906 {\usebibmacro{related:init}%
1907 \usebibmacro{related}}
1908 {}%
1909 \usebibmacro{finentry}}

```

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.

```

1910 \newbibmacro*{publisher+type+series+number+date}{%
1911 \iffieldundef{number}}{%
1912 \setunit{\addcomma\space}%
1913 \usebibmacro{origdate+time}[recorded]%
1914 }%
1915 \ifboolexpr{%
1916 test {\iflistundef{origpublisher}}
1917 and
1918 test {\iflistundef{location}}
1919 and
1920 test {\iflistundef{publisher}}
1921 and
1922 test {\iffieldundef{type}}
1923 and
1924 test {\iffieldundef{series}}
1925 and
1926 test {\iffieldundef{number}}
1927 and
1928 test {\iffieldundef{year}}
1929 and
1930 test {\iffieldundef{month}}
1931 and
1932 test {\iffieldundef{eventyear}}
1933 and
1934 test {\iffieldundef{eventmonth}}
1935 and
1936 test {\iffieldundef{hour}}
1937 }{%
1938 \nopunct
1939 \printtext[publication]{%
1940 \printlist{origpublisher}%
1941 \setunit*\addsemicolon\space}%
1942 \printlist{location}%
1943 \iflistundef{publisher}%
1944 {\setunit*\addcomma\space}%
1945 {\setunit*\addcolon\space}%
1946 \printlist{publisher}%
1947 \iffieldundef{series}%
1948 {\setunit*\addspace}%
1949 {\setunit*\recordseriespunct}}%
1950 \printfield{series}%
1951 \setunit*\addcomma\space}%
1952 \printfield{type}%
1953 \iflistundef{publisher}%
1954 {\setunit*\addcomma\space}%
1955 {\setunit*\addspace}%
1956 \printfield{number}%
1957 \iffieldundef{number}}{%

```

```

1958      \setunit{\addcomma\space}%
1959      \usebibmacro{origdate+time}[recorded]%
1960    }{}%
1961      \setunit{\addcomma\space}%
1962      \usebibmacro{date+time}}}}

```

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

```

1963      \newtoggle{blx@ox@endeditor}
1964      \DeclareEntryOption[boolean]{endeditor}[true]{%
1965        \settoggle{blx@ox@endeditor}{#1}}
1966      \newbibmacro*{pre-byeditor+others}{%
1967        \iftoggle{blx@ox@endeditor}{%
1968          \usebibmacro{byeditor+others}%
1969        }%
1970      }
1971      \newbibmacro*{post-byeditor+others}{%
1972        \iftoggle{blx@ox@endeditor}{%
1973          \usebibmacro{byeditor+others}%
1974        }%
1975      }

```

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

```

1974      \DeclareBibliographyDriver{audio}{%
1975        \usebibmacro{bibindex}%
1976        \usebibmacro{begentry}%
1977        \usebibmacro{author}%
1978        \setunit{\printdelim{nametitle}}\newblock
1979        \usebibmacro{title}%
1980        \newunit
1981        \usebibmacro{maintitle}%
1982        \iffieldequalstr{relatedtype}{includes}{%
1983          \iftoggle{bbx:related}{%
1984            \newunit\newblock
1985            \usebibmacro{related:init}%
1986            \usebibmacro{related}%
1987            \clearfield{related}%
1988          }{}%
1989        }{}%
1990        \setunit{\addspace}
1991        \usebibmacro{onlinetype}%
1992        \newunit\newblock
1993        \usebibmacro{byauthor}%
1994        \newunit\newblock
1995        \usebibmacro{pre-byeditor+others}%
1996        \newunit\newblock
1997        \printfield{volumes}%
1998        \newunit\newblock
1999        \printfield{note}%
2000        \newunit\newblock%
2001        \printlist{organization}%
2002        \newunit\newblock%
2003        \usebibmacro{publisher+type+series+number+date}%
2004        \setunit{\addspace}%
2005        \printfield{howpublished}%
2006        \newunit\newblock
2007        \usebibmacro{post-byeditor+others}%
2008        \newunit\newblock
2009        \iftoggle{bbx:isbn}

```

```

2010     {\printfield{isbn}}
2011     {}%
2012     \newunit\newblock
2013     \usebibmacro{doi+eprint+url}%
2014     \newunit\newblock
2015     \usebibmacro{addendum+pubstate}%
2016     \setunit{\bibpagerefpunct}\newblock
2017     \usebibmacro{pageref}%
2018     \setunit{\relatedtypepunct}\newblock
2019     \iftoggle{bbx:related}
2020     {\usebibmacro{related:init}%
2021      \usebibmacro{related}}
2022     {}%
2023     \usebibmacro{finentry}}

```

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

```

2024     \DeclareBibliographyAlias{music}{audio}
2025     \DeclareBibliographyAlias{movie}{audio}
2026     \DeclareBibliographyAlias{video}{audio}

```

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

```

2027     \DeclareBibliographyDriver{inaudio}{%
2028       \usebibmacro{bibindex}%
2029       \usebibmacro{begentry}%
2030       \usebibmacro{author}%
2031       \setunit{\printdelim{nametitledelim}}\newblock
2032       \usebibmacro{title}%
2033       \newunit\newblock
2034       \usebibmacro{byauthor}%
2035       \newunit\newblock
2036       \usebibmacro{in:}%
2037       \usebibmacro{bybookauthor}%
2038       \newunit\newblock
2039       \usebibmacro{maintitle+booktitle}%
2040       \iffieldequalstr{relatedtype}{includes}{%
2041         \iftoggle{bbx:related}{%
2042           \newunit\newblock
2043           \usebibmacro{related:init}%
2044           \usebibmacro{related}%
2045           \clearfield{related}%
2046         }{}%
2047       }{}%
2048       \setunit{\addspace}
2049       \usebibmacro{onlinetype}%
2050       \newunit\newblock
2051       \usebibmacro{pre-byeditor+others}%
2052       \newunit\newblock
2053       \printfield{volumes}%
2054       \newunit\newblock
2055       \printfield{note}%
2056       \newunit\newblock%
2057       \printlist{organization}%
2058       \newunit\newblock%
2059       \usebibmacro{publisher+type+series+number+date}%
2060       \setunit{\addspace}%
2061       \printfield{howpublished}%
2062       \newunit\newblock
2063       \usebibmacro{post-byeditor+others}%
2064       \newunit\newblock

```



```

2065 \iftoggle{bbx:isbn}
2066 {\printfield{isbn}}
2067 {}%
2068 \newunit\newblock
2069 \usebibmacro{doi+eprint+url}%
2070 \newunit\newblock
2071 \usebibmacro{addendum+pubstate}%
2072 \setunit{\bibpagerefunct}\newblock
2073 \usebibmacro{pageref}%
2074 \setunit{\relatedtypepunct}\newblock
2075 \iftoggle{bbx:related}
2076 {\usebibmacro{related:init}%
2077 \usebibmacro{related}}
2078 {}%
2079 \usebibmacro{finentry}}

```

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

```

2080 \DeclareBibliographyAlias{inmusic}{inaudio}
2081 \DeclareBibliographyAlias{inmovie}{inaudio}
2082 \DeclareBibliographyAlias{invideo}{inaudio}

```

We set up appropriate inheritance rules.

```

2083 \DeclareDataInheritance{audio,music,movie,video}{inaudio,inmusic,inmovie,invideo}{%
2084 \inherit{title}{booktitle}
2085 \inherit{subtitle}{booksubtitle}
2086 \inherit{titleaddon}{booktitleaddon}
2087 \noinherit{shorttitle}
2088 \noinherit{sorttitle}
2089 \noinherit{indextitle}
2090 \noinherit{indexsorttitle}
2091 }

```

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.

```

2092 \DeclareFieldFormat{audio,music}{title}{%
2093 \def\currentfield{title}%
2094 \iffielddannotation{descriptor}{#1}{%
2095 \iffieldequalstr{entrysubtype}{podcast}{%
2096 \mkbibquote{#1\isdot}%
2097 }%
2098 \mkbibemph{#1}}}%
2099 \undef\currentfield}
2100 \DeclareFieldFormat{movie,video}{title}{%
2101 \def\currentfield{title}%
2102 \iffielddannotation{descriptor}{#1}{%
2103 \ifboolexpr{
2104 test {\iffieldequalstr{entrysubtype}{episode}}
2105 or
2106 test {\iffieldequalstr{entrysubtype}{clip}}
2107 or
2108 test {\iffieldequalstr{entrysubtype}{webcast}}
2109 }%
2110 \mkbibquote{#1\isdot}%
2111 }%

```

```

2112     \mkbibemph{#1}}}%
2113     \undef\currentfield}
2114 \DeclareFieldFormat[inaudio,inmusic,inmovie,invideo]{title}{%
2115     \def\currentfield{title}%
2116     \iffielddannotation{descriptor}{#1}{%
2117         \mkbibquote{#1\isdot}%
2118     }%
2119     \undef\currentfield}
2120 \DeclareFieldFormat[inaudio,inmusic]{booktitle}{%
2121     \def\currentfield{booktitle}%
2122     \iffielddannotation{descriptor}{#1}{%
2123         \iffieldequalstr{entrysubtype}{podcast}{%
2124             \mkbibquote{#1\isdot}%
2125         }%
2126         \mkbibemph{#1}}}%
2127     \undef\currentfield}
2128 \DeclareFieldFormat[inmovie,invideo]{booktitle}{%
2129     \def\currentfield{booktitle}%
2130     \iffielddannotation{descriptor}{#1}{%
2131         \ifboolexpr{
2132             test {\iffieldequalstr{entrysubtype}{episode}}
2133             or
2134             test {\iffieldequalstr{entrysubtype}{clip}}
2135             or
2136             test {\iffieldequalstr{entrysubtype}{webcast}}
2137         }{%
2138             \mkbibquote{#1\isdot}%
2139         }%
2140         \mkbibemph{#1}}}%
2141     \undef\currentfield}

```

The examples of image references in *New Hart's Rules* are all for online images, and the online driver seems to work well for them. The main difference is that they use a different format for the title.

```

2142 \DeclareBibliographyAlias{image}{online}
2143 \DeclareFieldFormat[image]{title}{\mkbibquote{#1\isdot}}

```

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.

```

2144 \DeclareFieldFormat[online]{title}{%
2145     \def\currentfield{title}%
2146     \iffielddannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}}%
2147     \undef\currentfield}

```

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

```

2148 \newbibmacro*{onlinetype}{%
2149     \ifboolexpr{
2150         test {\iffielddundef{url}}
2151         or
2152         test {\iffielddundef{entrysubtype}}
2153     }{%

```

```

2154 \ifbibxstring{\thefield{entrysubtype}}{%
2155 \printtext[brackets]{\bibstring{\thefield{entrysubtype}}}%
2156 }{}}

```

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.

```

2157 \DeclareBibliographyDriver{online}{%
2158 \usebibmacro{bibindex}%
2159 \usebibmacro{begentry}%
2160 \usebibmacro{author/editor+others/translator+others}%
2161 \setunit{\printdelim{nametitledelim}}\newblock
2162 \usebibmacro{title}%
2163 \newunit
2164 \usebibmacro{maintitle}
2165 \setunit{\addspace}%
2166 \usebibmacro{onlinetype}%
2167 \newunit\newblock
2168 \usebibmacro{byauthor}%
2169 \newunit\newblock
2170 \usebibmacro{byeditor+others}%
2171 \newunit\newblock
2172 \printfield{version}%
2173 \newunit
2174 \printfield{note}%
2175 \newunit\newblock
2176 \printlist{organization}%
2177 \iffieldundef{year}{}%
2178 \setunit{\addspace}\newblock
2179 \printtext[parens]{\usebibmacro{date+time}}%
2180 }%
2181 \newunit\newblock
2182 \printlist{publisher}%
2183 \newunit\newblock
2184 \iftoggle{bbx:eprint}
2185 {\usebibmacro{eprint}}
2186 {}%
2187 \newunit\newblock
2188 \usebibmacro{url+urldate}%
2189 \newunit\newblock
2190 \usebibmacro{addendum+pubstate}%
2191 \setunit{\bibpagerefunct}\newblock
2192 \usebibmacro{pageref}%
2193 \setunit{\relatedtypepunct}\newblock
2194 \iftoggle{bbx:related}
2195 {\usebibmacro{related:init}%
2196 \usebibmacro{related}}
2197 {}%
2198 \usebibmacro{finentry}}

```

Software

The version for software goes between the title and titleaddon.

```

2199 \newbibmacro*{title+version}{%
2200   \ifbool{expr}{
2201     test {\iffieldundef{title}}
2202     and
2203     test {\iffieldundef{subtitle}}
2204   }
2205   {}
2206   {\printtext[title]{%
2207     \printfield[titlecase]{title}%
2208     \setunit{\subtitlepunct}%
2209     \printfield[titlecase]{subtitle}}%
2210     \setunit{\addspace}}%
2211   \printfield{version}%
2212   \setunit{\addspace}%
2213   \printfield{titleaddon}%
2214 }
2215 \DeclareFieldFormat[software]{version}{\mkbibparens{\bibstring{version}~#1}}

```

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

```

2216 \DeclareFieldFormat[software]{urldate}{\bibstring{urldown}\space#1}

```

The software driver is based loosely on the manual driver.

```

2217 \DeclareBibliographyDriver{software}{%
2218   \usebibmacro{bibindex}%
2219   \usebibmacro{begentry}%
2220   \usebibmacro{author/editor}%
2221   \setunit{\printdelim{nametitle}{delim}}\newblock
2222   \usebibmacro{title+version}%
2223   \newunit\newblock
2224   \usebibmacro{byauthor}%
2225   \newunit\newblock
2226   \usebibmacro{byeditor}%
2227   \newunit\newblock
2228   \printfield{type}%
2229   \newunit
2230   \printfield{note}%
2231   \newunit\newblock
2232   \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
2233   \newunit\newblock
2234   \usebibmacro{chapter+pages}%
2235   \newunit
2236   \printfield{pagetotal}%
2237   \newunit\newblock
2238   \iftoggle{bbx:isbn}
2239   {\printfield{isbn}}
2240   {}%
2241   \newunit\newblock
2242   \usebibmacro{doi+eprint+url}%
2243   \newunit\newblock
2244   \usebibmacro{addendum+pubstate}%
2245   \setunit{\bibpagerefpunct}\newblock
2246   \usebibmacro{pageref}%
2247   \setunit{\relatedtypepunct}\newblock
2248   \iftoggle{bbx:related}
2249   {\usebibmacro{related:init}%
2250     \usebibmacro{related}}
2251   {}%
2252   \usebibmacro{finentry}}

```

Datasets

Datasets are currently treated like manuals

```
2253 \DeclareBibliographyAlias{dataset}{manual}
```

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

```
2254 \newtoggle{bbx:scotstyle}
2255 \DeclareEntryOption{scottish-style}[true]{%
2256   \settoggle{bbx:scotstyle}{#1}}
2257 \newboolean{bbx@year-essential}\setboolean{bbx@year-essential}{false}
2258 \DeclareEntryOption{year-essential}[true]{%
2259   \setboolean{bbx@year-essential}{#1}}
2260 \newboolean{bbx@paryear-essential}\setboolean{bbx@paryear-essential}{false}
2261 \DeclareEntryOption{paryear-essential}[true]{%
2262   \setboolean{bbx@paryear-essential}{#1}}
2263 \newtoggle{blx@ox@nopostnotedelim}
2264 \newtoggle{bbx:altcourt}
2265 \DeclareBibliographyOption{court-plain}[true]{%
2266   \settoggle{bbx:altcourt}{#1}}
2267 \DeclareEntryOption{court-plain}[true]{%
2268   \settoggle{bbx:altcourt}{#1}}
2269 \newtoggle{bbx@ecliuse}
2270 \newtoggle{bbx@eclionly}
2271 \DeclareBibliographyOption{ecli}[yes]{%
2272   \ifstrequal{#1}{no}{%
2273     \global\togglefalse{bbx@ecliuse}%
2274     \global\togglefalse{bbx@eclionly}%
2275   }{%
2276     \global\toggletrue{bbx@ecliuse}%
2277     \ifstrequal{#1}{only}{%
2278       \global\toggletrue{bbx@eclionly}%
2279     }{}}}
```

Field formats

```
2280 \DeclareFieldFormat{casenotetitle}{\mkbibquote{\mkbibemph{#1}}}
2281 \DeclareFieldFormat[jurisdiction,legislation,legal]{journaltitle}{#1}
2282 \DeclareFieldFormat[jurisdiction]{volume}{#1}
2283 \DeclareFieldFormat[jurisdiction]{titleaddon}{\mkbibparens{#1}}
2284 \DeclareFieldFormat{romanvol}{\RN{#1}}
2285 \DeclareListFormat[jurisdiction]{listb}{}
2286 \DeclareFieldFormat{usseries}{\ifinteger{#1}{\mkusbibordinal{#1}}{#1}}
2287 \DeclareFieldFormat{verba}{#1}
2288
2289 \DeclareListFormat{echrinst}{%
2290   \ifboolexpr{%
2291     test {\ifnumequal{\value{listtotal}}{1}}
2292     or
2293     test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
2294   }{%
2295     \ifboolexpr{
```

```

2296     test {\ifdefstring{\Commission}{#1}}
2297     or
2298     test {\ifdefstring{\commission}{#1}}%
2299   }{%
2300     \bibstring{commissiondecision}%
2301   }{#1}%
2302 }{%
2303   \setcounter{blx@tmpcnt}{\value{listcount}}%
2304   \addtocounter{blx@tmpcnt}{1}%
2305   \ifnumequal{\value{blx@tmpcnt}}{\value{listtotal}}{%
2306     #1\space\bibstring{and}\addspace
2307   }{%
2308     #1\addcomma\space}}}%
2309
2310 \newcommand*{\commission}{commission}
2311 \newcommand*{\Commission}{Commission}
2312 \DeclareListFormat{ecthr}{%
2313   \ifboolexpr{
2314     test {\ifdefstring{\Commission}{#1}}
2315     or
2316     test {\ifdefstring{\commission}{#1}}
2317   }{\bibstring{\mkbibparens}{commissiondecision}\toggletrue{blx@ox@nopostnotedelim}}{}}
2318
2319 \newcommand*{\pcijrep}{PCIJ Rep}
2320 \DeclareFieldFormat{international}{%
2321   \iffieldequals{journaltitle}{\pcijrep}{%
2322     \bibcplstring{jourser}\space #1%
2323   }{#1}}
2324
2325 \DeclareListFormat{checkcontains}{%
2326   \bbx@check{#1}}
2327 \newtoggle{bbx@institutiontoggle}
2328 \newcommand\iflistcontains[2]{%
2329   \global\togglefalse{bbx@institutiontoggle}%
2330   \def\bbx@check##1{%
2331     \ifdefstring{#2}{##1}{\global\toggletrue{bbx@institutiontoggle}}{}}%
2332   \printlist[checkcontains]{#1}%
2333   \iftoggle{bbx@institutiontoggle}}
2334
2335 \DeclareFieldFormat{draftleg}{%
2336   \StrBefore{#1}{ Bill}}
2337
2338 \DeclareListFormat{billprinting}{%
2339   \ifstrequal{#1}{HC}{%
2340     \mkbibbrackets{\strfield{number}}%
2341     \toggletrue{blx@ox@nopostnotedelim}%
2342   }{%
2343     \strfield{number}%
2344     \togglefalse{blx@ox@nopostnotedelim}}}
2345
2346 \newcommand*{\treatypartysep}{\allowbreak ---\allowbreak}
2347 \DeclareListFormat{treaty}{%
2348   \ifmoreitems{%
2349     \ifnumequal{\value{listcount}}{1}{%
2350       \bibopenparen
2351     }{%
2352       \ifnumgreater{\value{liststop}}{\value{listcount}}{%
2353         #1\treatypartysep
2354       }{%
2355         #1\bibcloseparen}}}
2356
2357 \def\siganddate#1{%

```

```

2358 \def\bbx@tempa{#1}%
2359 \expandafter\bbx@signeddatei#1/relax}
2360 \def\bbx@signeddatei#1=#2/relax{%
2361 \def\bbx@tempa{#2-}%
2362 \bibstring{#1}\space\expandafter\makebbx@datei\bbx@tempa}
2363 \def\makebbx@datei#1-#2-#3-{%
2364 \makebbx@datei{#1}{#2}{#3}}
2365 \def\makebbx@datei#1#2#3{%
2366 \blx@imc@stripzeros{#3}~\mkbibmonth{#2}%
2367 \space
2368 #1}
2369 \DeclareListFormat{treatydates}{%
2370 \ifnumequal{\value{listcount}}{1}{%
2371 \siganddate{#1}%
2372 }{%
2373 \addcomma\space\siganddate{#1}}}

```

Pagination formats

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

```

2374 \newrobustcmd*{\mkrawpageprefix}[1][none]{%
2375 \begingroup
2376 \def\blx@tempa{\blx@mkpageprefix@i}%
2377 \ifstrequal{#1}{none}{}{%
2378 \ifbibstring{#1}{%
2379 \def\blx@tempa{\blx@mkpageprefix{#1}}%
2380 }%
2381 \blx@warning@entry{Unknown pagination type '#1'}}%
2382 \@ifnextchar[%]
2383 {\blx@tempa}
2384 {\blx@tempa[\@firstofone]}
2385
2386 \newcommand*\paragraphmarkings{[]}
2387 \DeclareFieldFormat[jurisdiction,legislation,legal]{postnote}{%
2388 \iffielddundef{pagination}{%
2389 \ifboolexpr{
2390 test {\ifkeyword{eu}}
2391 or
2392 test {\ifkeyword{echr}}
2393 }{%
2394 \mkcomprange[\mkrawpageprefix[paragraph]]{#1}%
2395 }{%
2396 \mkcomprange{#1}%
2397 }%
2398 \iffieldequals{pagination}{\paragraphmarkings}{%
2399 \mkcomprange[\mkbibbrackets]{#1}%
2400 }{%
2401 \mkcomprange[\mkpageprefix[pagination]]{#1}}}

```

Shorthands

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

```

2402 \renewbibmacro*{shorthandintro}{%
2403 \iffielddundef{shorthandintro}
2404 {\iffielddundef{shorthand}
2405 {}
2406 {\setunit{\addspace}%

```

```

2407     \printtext[parens]{%
2408     \ifboolexpr{
2409         test {\ifentrytype{jurisdiction}}
2410         or
2411         test {\ifentrytype{legal}}
2412         or
2413         test {\ifentrytype{legislation}}
2414     }{%
2415         \bibstring{citedas}\space}%
2416     \printfield{shorthand}}}}
2417 {\setunit{\addspace}%
2418 \printtext[parens]{\printfield{shorthandintro}}}}

```

Common macros

```

2419 \newbibmacro*{issue/volume}{%
2420 \iffieldundef{volume}%
2421 {\iffieldundef{issue}%
2422 {}%
2423 {\printfield{issue}}}%
2424 {\printfield[default]{volume}}}
2425 \newcommand*{\subtypenewsp}{newspaper}
2426 \newbibmacro*{year+vol+report}[1][default]{%
2427 \iffieldequals{entrysubtype}{\subtypenewsp}{%
2428 \setunit{\addcomma\space}%
2429 }{%
2430 \usebibmacro{journaldate}%
2431 \setunit{\addspace}%
2432 \printfield[parens]{origyear}%
2433 \setunit{\addspace}%
2434 \printfield{volume}%
2435 \setunit{\addspace}}}%
2436 \printfield{journaltitle}%
2437 \setunit*{\addspace}%
2438 \iffieldundef{series}{%
2439 \setunit{\addspace}%
2440 \printfield[#1]{series}%
2441 \setunit{\addspace}}}%
2442 \iffieldequals{entrysubtype}{\subtypenewsp}{%
2443 \setunit{\addcomma\space}%
2444 \printdate%
2445 }%
2446 \newbibmacro*{journaldate}[1][%
2447 \ifboolexpr{
2448 test {\iffieldundef{#1volume}}
2449 or
2450 bool {bbx@#1year-essential}
2451 }{%
2452 \ifboolexpr{
2453 test {\ifkeyword{sc}}
2454 or
2455 test {\iftoggle{bbx:scotstyle}}
2456 }{%
2457 \setunit{\addcomma\space}%
2458 \printfield{#1year}%
2459 }{%
2460 \printfield[brackets]{#1year}}}%
2461 }{%
2462 \printfield[parens]{#1year}}}
2463 \newcommand*{\casenote}{casenote}

```



```

2464 \newcommand{\casenotetext}{\bibstring{casenote}}
2465 \newbibmacro{journaltitle}{%
2466   \iffieldequals{entrysubtype}{\casenote}{%
2467     \iffieldundef{crossref}{%
2468       \usebibmacro{title}%
2469     }%
2470     \iffieldundef{note}{%
2471       \restorefield{note}{\casenotetext}%
2472     }%
2473     \ifboolexpr{
2474       test {\iffootnote}
2475       and test {\iftoggle{bbx@samefootnote}}
2476       and test {\iffieldequals{crossref}{\blx@lastkey@foot}}%
2477     }{\printfield[casenotetitle]{title}}%
2478   }{%
2479     \usebibmacro{title}}
2480 \newbibmacro*{unreported}[1][default]{%
2481   \iffieldundef{verba}{%
2482     \ifboolexpr{
2483       test {\iflistundef{institution}}
2484       and
2485       test {\iffieldundef{date}}
2486       and
2487       test {\iffieldundef{year}}
2488     }{%
2489       \ifboolexpr{
2490         test {\iffieldundef{date}}
2491         and
2492         test {\iffieldundef{year}}
2493       }{%
2494         \mkbibparens{\printlist[jurisdiction]{institution}}%
2495       }{%
2496         \toggletrue{blx@ox@nopostnotedelim}%
2497         \iflistundef{institution}{%
2498           \mkbibparens{\usebibmacro{date}}%
2499         }{%
2500           \printtext[parens]{%
2501             \printlist[#1]{institution}%
2502             \setunit{\addcomma\space}
2503             \usebibmacro{date}}}%
2504         }%
2505         \iftoggle{bbx@ecliuse}{%
2506           \printfield{verba}}%
2507     }%
2508   \iffieldundef{note}{%
2509     }%
2510     {\printfield{note}%
2511      \toggletrue{blx@ox@nopostnotedelim}}
2512 \newbibmacro*{jurisdictionpages}{%
2513   \iffieldequals{entrysubtype}{\subtypenewsp}{%
2514     \setunit{\addspace}%
2515     \printfield{pages}}
2516 \newbibmacro{pcitenote}{%
2517   \iffieldundef{userc}{% parreporter
2518     \setunit{\addcomma\space}%
2519     \iffieldundef{postnote}{%
2520       \printfield{postnote}%
2521       \clearfield{postnote}%
2522       \setunit{\addsemicolon\space}}
2523   \iffieldundef{number}{%
2524     \ifboolexpr{

```

```

2526     test {\iflistundef{institution}}
2527     and
2528     test {\iffieldundef{location}}%
2529   }{%
2530     \togglefalse{blx@ox@nopostnotedelim}%
2531   }{%
2532     \ifboolexpr{%
2533       test {\iffieldundef{journaltitle}}
2534       or
2535       not togl {bbx:altcourt}
2536     }{%
2537       \printtext[parens]{%
2538         \printfield{location}%
2539         \setunit{\addspace}%
2540         \printlist{institution}%
2541         \usebibmacro{unrep:date}}%
2542       \toggletrue{blx@ox@nopostnotedelim}
2543     }{%
2544       \setunit{\addcomma\space}%
2545       \printfield{location}%
2546       \setunit*{\addspace}%
2547       \printlist{institution}}}%
2548   }{%
2549     \togglefalse{blx@ox@nopostnotedelim}}%
2550 \newbibmacro*{unrep:date}{%
2551   \ifboolexpr{
2552     test {\iffieldundef{journaltitle}}%
2553     and
2554     test {\iffieldundef{number}}%
2555   }{%
2556     \setunit{\addcomma\space}%
2557     \usebibmacro{date}%
2558   }{}

```

Legal cases

There are different formats depending on the jurisdiction.

```

2559 \DeclareBibliographyDriver{jurisdiction}{%
2560   \usebibmacro{bibindex}%
2561   \usebibmacro{begentry}%
2562   \usebibmacro{juriscitation}%
2563   \usebibmacro{doi+eprint+url}%
2564   \setunit{\addspace}%\newblock
2565   \usebibmacro{addendum+pubstate}%
2566   \setunit{\bibpagerefunct}\newblock
2567   \usebibmacro{pageref}%
2568   \setunit{\addspace}%\newblock
2569   \iftoggle{bbx:related}
2570     {\usebibmacro{related:init}%
2571      \usebibmacro{related}}
2572     {}%
2573   \usebibmacro{finentry}}
2574 \newtoggle{bbx@juriscitedone}
2575 \newbibmacro{juriscitation}{%
2576   \togglefalse{bbx@juriscitedone}%
2577   \renewcommand{\do}[1]{%
2578     \ifkeyword{##1}{%
2579       \toggletrue{bbx@juriscitedone}\usebibmacro{##1juriscitation}%
2580       \listbreak

```

```

2581     }{}%
2582     \docsvlist{eu,echr,int,ca,us}%
2583     \iftoggle{bbx@juriscitedone}{\usebibmacro{enjuriscitation}}%
2584 }

```

Here is the format for EU cases.

```

2585 \newbibmacro*{ejuriscitation}{%
2586   \iflistcontains{institution}{\commission}{%
2587     \usebibmacro{eucasenumber}%
2588     \usebibmacro{title}%
2589     \setunit{\addspace}%
2590     \iflistcontains{institution}{\commission}{%
2591       \usebibmacro{eucommissiondecision}}{%
2592       \setunit{\addspace}%
2593       \usebibmacro{eu:reportinfo}%
2594       \iflistcontains{institution}{\commission}{%
2595         \setunit{\addcomma\space}%
2596       }{%
2597         \setunit{\addspace}%
2598         \usebibmacro{court-note}%
2599       }
2600 \newbibmacro{eucasenumber}{%
2601   \iffieldundef{type}{%
2602     \ifboolexpr{
2603       test {\IfSubStr{\thefield{number}}{,}}
2604       or
2605       test {\IfSubStr{\thefield{number}}{--}}
2606       or
2607       test {\IfSubStr{\thefield{number}}{ and }}
2608     }{%
2609       \bibstring{eujoinedcases}%
2610     }{%
2611       \bibstring{eucase}%
2612     }{%
2613       \printfield{type}%
2614       \setunit{\adddnbspace}%
2615       \printfield{number}%
2616       \setunit{\addspace}%
2617 \newbibmacro{eucommissiondecision}{%
2618   \iffieldundef{userb}{%
2619     \printfield[parens]{userb}%
2620     \setunit{\addspace}%
2621     \iffieldundef{number}{%
2622       \iffieldundef{type}{%
2623         \setunit{\addspace\bibstring{commissiondecision}\addspace}%
2624       }{%
2625         \setunit{\addspace\printfield{type}\addspace}%
2626         \printfield{number}}
2627 \newbibmacro*{eu:reportinfo}{%
2628   \iftoggle{bbx@eclionly}{%
2629     \iffieldundef{verba}{%
2630       \usebibmacro{eu:osreport}
2631     }{%
2632       \printfield{verba}%
2633     }{%
2634       \usebibmacro{eu:osreport}}
2635 \newbibmacro*{eu:osreport}{%
2636   \iftoggle{bbx@ecliuse}{%
2637     \iffieldundef{verba}{%
2638       \printfield{verba}%
2639       \setunit{\addcomma\space}%

```

```

2640     }{}%
2641     \iffielddundef{journaltitle}{%
2642       \usebibmacro{unreported}%
2643     }{%
2644       \usebibmacro{eu:year+vol+report}}}
2645     \newcommand*\officialjournaltitle{OJ}
2646     \newcommand*\ecrreporttitle{ECR}
2647     \newbibmacro*{eu:year+vol+report}{%
2648       \iffieldequals{journaltitle}{\ecrreporttitle}{%
2649         \printfield[brackets]{year}%
2650         \setunit{\addspace}%
2651         \printfield{journaltitle}%
2652         \setunit{\addspace}%
2653         \printfield{volume}%
2654         \setunit*\printtext{--\allowbreak}}%
2655         \printfield{pages}%
2656       }{%
2657         \iffieldequals{journaltitle}{\officialjournaltitle}{%
2658           \printfield[brackets]{year}%
2659           \setunit{\addspace}%
2660           \printfield{journaltitle}%
2661           \setunit{\addspace}%
2662           \printfield[default]{series}%
2663           \usebibmacro{issue/volume}%
2664           \setunit{\printtext{\slash}}%
2665           \printfield{pages}%
2666         }{%
2667           \usebibmacro{year+vol+report}}}}

```

Here is the format for European Human Rights cases.

```

2668     \newbibmacro*{echrjuriscitation}{%
2669       \usebibmacro{title}%
2670       \setunit{\addspace}\newblock
2671       \iffielddundef{number}{}{%
2672         \printtext[parens]{%
2673           \def\adddot{}%
2674           \bibstring{application}\space
2675           \bibstring{number}\space
2676           \printfield{number}}%
2677         \setunit{\addspace}\newblock}%
2678       \iffielddundef{journaltitle}{%
2679         \usebibmacro{unreported}[echrinst]%
2680       }{%
2681         \usebibmacro{echr:year+vol+report}
2682         \setunit{\addspace}\newblock
2683         \usebibmacro{echr:courtid}}%
2684       \setunit{\addspace}%
2685       \usebibmacro{court-note}%
2686       \newblock
2687       \setunit{\addspace}}
2688     \newcommand*\seriesa{Series A}
2689     \newcommand*\echrreports{ECHR}
2690     \newbibmacro*{echr:year+vol+report}{%
2691       \iffieldequals{journaltitle}{\seriesa}{%
2692         \usebibmacro{seriesareport}%
2693       }{%
2694         \iffieldequals{journaltitle}{\echrreports}{%
2695           \usebibmacro{echrreports}%
2696         }{%
2697           \usebibmacro{year+vol+report}

```

```

2698     \setunit{\addspace}%
2699     \printfield{pages}}}}
2700 \newbibmacro*{seriesareport}{%
2701     \printfield[parens]{year}%
2702     \setunit{\addspace}%
2703     \printfield{journaltitle}%
2704     \setunit{\addspace}%
2705     \printtext{\def\adddot{}\bibstring{number}\addspace}%
2706     \printfield{pages}}
2707 \newbibmacro*{echrreports}{%
2708     \printfield{journaltitle}%
2709     \setunit{\addspace}%
2710     \printfield{year}%
2711     \iffieldundef{volume}{}{%
2712         \printtext{--}\printfield[romanvol]{volume}}
2713     \setunit{\addspace}%
2714     \printfield{pages}}
2715 \newcommand*{\decisionsandreports}{DR}
2716 \newcommand*{\collectionofdecisions}{CD}
2717 \newbibmacro*{echr:courtid}{%
2718     \ifboolexpr{
2719         test {\iffieldequals{journaltitle}{\decisionsandreports}}
2720         or
2721         test {\iffieldequals{journaltitle}{\collectionofdecisions}}}
2722     }{%
2723         \printlist[ecthr]{institution}}}

```

Here is the format for international cases.

```

2724 \newbibmacro*{intjuriscitation}{%
2725     \iflistundef{institution}{%
2726         \setunit{} \printtext{}%
2727     }{%
2728         \printlist{institution}%
2729         \setunit{\addcomma\space}%
2730         \usebibmacro{int:title}%
2731         \setunit{\addspace} \newblock
2732         \iffieldundef{journaltitle}{%
2733             \printfield{number}%
2734             \setunit{\addspace} \newblock
2735             \printtext[parens]{\printdate}%
2736         }{%
2737             \usebibmacro{year+vol+report}[international]%
2738         }%
2739         \setunit{\addspace}%
2740         \usebibmacro{int:jurisdictionpages}%
2741         \setunit{\addspace} \newblock
2742         \usebibmacro{court-note}%
2743     }
2744 \newbibmacro*{int:title}{%
2745     \ifboolexpr{
2746         test {\iffieldundef{title}}
2747         and
2748         test {\iffieldundef{subtitle}}
2749     }{%
2750         \printtext[title]{%
2751             \printfield[titlecase]{title}%
2752             \setunit{\addspace}%
2753             \printfield[parens]{subtitle}}}%
2754     \setunit{\addspace}%
2755     \printfield{titleaddon}%
2756 }

```

```

2757 \newbibmacro*{int:jurisdictionpages}{%
2758 \iffieldequals{journaltitle}{\pciirep}{%
2759 \printtext{\bibcpstring{number}\addspace}%
2760 \iffieldundef{pages}{%
2761 \printfield{number}%
2762 }{%
2763 \printfield{pages}}%
2764 }{%
2765 \printfield{pages}}}

```

Here is the format for Canadian cases.

```

2766 \newbibmacro{canjuriscitation}{%
2767 \usebibmacro{title}%
2768 \setunit{\addspace}\newblock
2769 \printfield{number}%
2770 \setunit{\addcomma\space}%
2771 \iffieldundef{journaltitle}{}{%
2772 \usebibmacro{can:year+vol+report}}%
2773 \usebibmacro{jurisdictionpages}%
2774 \usebibmacro{pcitenote}%
2775 \usebibmacro{altreportdetails}%
2776 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
2777 \newunit\newblock
2778 \usebibmacro{courtid}%
2779 \newunit%
2780 \usebibmacro{court-note}%
2781 \newblock%
2782 \newunit}
2783 \newbibmacro*{can:year+vol+report}{%
2784 \iffieldundef{number}{%
2785 \setunit{\addspace}%
2786 }{%
2787 \ifboolexpr{
2788 test {\iffieldundef{volume}}
2789 or
2790 bool {bbx@year-essential}}%
2791 }{}{%
2792 \clearfield{year}}}%
2793 \iffieldequals{entrysubtype}{\subtypenewsp}{}{%
2794 \iffieldundef{year}{}{%
2795 \usebibmacro{journaldate}%
2796 \setunit{\addspace}}}
2797 \printfield{volume}%
2798 \setunit{\addspace}%
2799 \printfield{journaltitle}%
2800 \setunit*\addspace%
2801 \iffieldundef{series}{}{%
2802 \setunit{\addspace}%
2803 \printtext[pars]{\printfield[usseries]{series}}%
2804 \setunit{\addspace}}%
2805 \iffieldequals{entrysubtype}{\subtypenewsp}{%
2806 \setunit{\addcomma\space}%
2807 \usebibmacro{newspaperdate}%
2808 }{}

```

Here is the format for American cases.

```

2809 \newbibmacro{usjuriscitation}{%
2810 \usebibmacro{title}%
2811 \setunit{\addcomma\space}\newblock%

```

```

2812 \iffielddundef{journaltitle}{%
2813 \printfield{number}%
2814 \setunit{\addcomma\space}%
2815 \printfield[default]{eprint}%
2816 \clearfield{eprint}%
2817 }{
2818 \usebibmacro{us:vol+report}}%
2819 \setunit{\addspace}%
2820 \usebibmacro{jurisdictionpages}%
2821 \usebibmacro{us:postnote}%
2822 \usebibmacro{altreportdetails}%
2823 \setunit{\addspace}\newblock
2824 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
2825 \setunit{\addspace}%
2826 \usebibmacro{us:courtid+date}%
2827 \setunit{\addspace}%
2828 \usebibmacro{court-note}%
2829 \newblock
2830 \setunit{\addspace}}
2831 \newbibmacro{us:vol+report}{%
2832 \printfield{volume}%
2833 \setunit{\addspace}%
2834 \printfield{journaltitle}%
2835 \iffielddundef{series}{}{%
2836 \setunit{\addspace}%
2837 \printfield[usseries]{series}}}
2838 \newbibmacro{us:postnote}{%
2839 \iffielddundef{postnote}{}{%
2840 \setunit{\addcomma\space}%
2841 \printfield{postnote}%
2842 \clearfield{postnote}%
2843 }}
2844 \newbibmacro{us:courtid+date}{%
2845 \ifboolexpr{
2846 test {\iflistundef{institution}}
2847 and
2848 test {\iflistundef{location}}
2849 and
2850 test {\iffielddundef{year}}}
2851 }{}{%
2852 \printtext[parens]{%
2853 \printlist{location}%
2854 \setunit*\addspace}%
2855 \printlist{institution}%
2856 \setunit{\addspace}%
2857 \printfield{year}%
2858 \nopunct}}}

```

Here is the format for English cases.

```

2859 \newbibmacro{enjuristicitation}{%
2860 \usebibmacro{title}%
2861 \setunit{\addspace}\newblock
2862 \printfield{number}%
2863 \setunit*\addcomma\space}%
2864 \iffielddundef{journaltitle}{}{%
2865 \usebibmacro{year+vol+report}}%
2866 \usebibmacro{jurisdictionpages}%
2867 \usebibmacro{pcitenote}%
2868 \usebibmacro{altreportdetails}%
2869 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}% additional reports

```

```

2870 \setunit{\addspace}\newblock
2871 \usebibmacro{courtid}%
2872 \setunit{\addspace}%
2873 \usebibmacro{court-note}}
2874 \newbibmacro{altreportdetails}{%
2875 \restorefield{prenote}{\postnotesecond}%
2876 \iffieldundef{userc}{\% parreporter
2877 \usebibmacro{journaldate}[par]%
2878 \setunit{\addspace}\newblock
2879 \usebibmacro{altreportvolume}%
2880 \setunit{\addspace}\newblock
2881 \usebibmacro{altjournaltitle}%
2882 \setunit{\addspace}\newblock
2883 \usebibmacro{altseries}%
2884 \setunit{\addspace}\newblock
2885 \usebibmacro{altjurisdictionpages}%
2886 \iffieldundef{prenote}{\%
2887 \setunit{\addcomma\space}%
2888 \printfield[postnote]{prenote}}}}
2889 \newbibmacro*{altreportvolume}{%
2890 \iffieldundef{userb}{\% parvolume
2891 \printfield{volume}%
2892 }{\%
2893 \printfield{userb}}}
2894 \newbibmacro*{altjournaltitle}{%
2895 \iffieldundef{userc}{\% parreporter
2896 \printfield{journaltitle}%
2897 \setunit{\addspace}%
2898 }{
2899 \printfield{userc}}}
2900 \newbibmacro*{altseries}{%
2901 \iffieldundef{userd}{\% parseries
2902 \printfield{series}%
2903 }{\%
2904 \printfield{userd}}}
2905 \newbibmacro*{altjurisdictionpages}{%
2906 \iffieldundef{usere}{\% parpages
2907 \usebibmacro{jurisdictionpages}%
2908 }{\%
2909 \printfield{usere}}}%

```

Legislation

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

```

2910 \newcommand*{\subtypecourtrules}{procedure-rule}
2911 \DeclareBibliographyDriver{legislation}{%
2912 \usebibmacro{bibindex}%
2913 \usebibmacro{begentry}%
2914 \iffieldequals{entrysubtype}{\subtypecourtrules}{%
2915 \usebibmacro{courtrules}%
2916 }{\%
2917 \ifkeyword{draft}{\%
2918 \usebibmacro{legislation:bill}%
2919 }{\%
2920 \ifkeyword{eu}{\%
2921 \usebibmacro{eulegislation}%
2922 }{\%
2923 \printfield[default]{title}%

```



```

2924         \setunit{\addspace}%
2925         \printfield[default]{year}%
2926         \setunit*{\addspace}%
2927         \usebibmacro{legnumber}%
2928         \setunit{\addspace}\newblock
2929         \usebibmacro{legsupp}}}%
2930 \setunit{\addcomma\space}%
2931 \printfield{note}%
2932 \setunit{\addspace}%
2933 \usebibmacro{finentry}}
2934 \newbibmacro*{courtrules}{%
2935 \restorefield{prenote}{\postnotesecond}%
2936 \iffieldequalstr{shorttitle}{PD}{%
2937 \printfield{postnote}%
2938 \clearfield{postnote}%
2939 \setunit{\addspace}%
2940 }{%
2941 \iffieldundef{shorttitle}{%
2942 \printfield[default]{title}%
2943 }{%
2944 \printfield[default]{shorttitle}}%
2945 \setunit{\addspace}\newblock
2946 \iffieldundef{postnote}{%
2947 \toggletrue{blx@ox@nopostnotedelim}%
2948 }{%
2949 \iffieldequalstr{shorttitle}{CPR}{%
2950 \printfield{postnote}%
2951 \setunit{\addspace}%
2952 }{%
2953 \printtext{%
2954 \bibstring{order}\space
2955 \printfield{postnote}%
2956 \setunit{\addcomma\space}}}%
2957 \restorefield{postnote}{\postnotesecond}%
2958 \usebibmacro{postnote}%
2959 \clearfield{postnote}%
2960 \setunit{\addspace}\newblock}
2961 \newcommand*{\subtypeprimarylegislation}{primary}
2962 \newbibmacro*{legislation:bill}{%
2963 \printfield[draftleg]{title}%
2964 \setunit{\addspace}%
2965 \printlist{institution}%
2966 \setunit*{\addspace}%
2967 \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
2968 \bibcpstring{bill}%
2969 \setunit{\addspace}%
2970 \printtext[parens]{\usebibmacro{sessionyear}}%
2971 \setunit{\addspace}%
2972 \iffieldundef{number}{}%
2973 \printlist[billprinting]{institution}}%
2974 }{%
2975 \printtext[parens]{%
2976 \bibstring{draft}\space
2977 \printdate}}
2978 \setunit{\addspace}}
2979 \newbibmacro*{sessionyear}{%
2980 \iffieldundef{year}{}%
2981 \printfield{year}%
2982 \iffieldundef{endyear}{}%
2983 \bibdaterangesep
2984 \blx@ox@compyear{\thefield{year}}{\thefield{endyear}}}%
2985 \newbibmacro{eulegislation}{%

```

```

2986 \printfield[default]{title}%
2987 \setunit{\addspace}\newblock%
2988 \usebibmacro{eulegref}}
2989 \newcommand*{\ojspecedtitle}{OJ Spec Ed}
2990 \newbibmacro*{eulegref}{%
2991 \iffieldequals{journaltitle}{\officialjournaltitle}{%
2992 \printfield[brackets]{year}%
2993 \setunit{\addspace}%
2994 \printfield{journaltitle}%
2995 \setunit{\addspace}%
2996 \iffieldundef{series}{%
2997 \printtext{L}%
2998 }{%
2999 \printfield[default]{series}}%
3000 \usebibmacro{issue/volume}%
3001 \setunit*{\addslash}%
3002 \printfield{pages}%
3003 \togglefalse{blx@ox@nopostnotedelim}%
3004 }{%
3005 \usebibmacro{year+vol+report}%
3006 \setunit*{\addspace}%
3007 \printfield{pages}}}
3008 \newbibmacro*{legnumber}{%
3009 \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
3010 \ifboolexpr{(
3011 test {\iffieldundef{number}}
3012 or
3013 not test {\iffieldundef{title}} )
3014 and not (
3015 test {\ifkeyword{cy}}
3016 or
3017 test {\ifkeyword{sc}}
3018 or
3019 test {\ifkeyword{ni}} )
3020 }){%
3021 \printtext[parens]{\printfield{number}}%
3022 \toggletrue{blx@ox@nopostnotedelim}}%
3023 }{%
3024 \iffieldundef{number}{}%
3025 \setunit{\addcomma\addspace}%
3026 \printfield{number}%
3027 \togglefalse{blx@ox@nopostnotedelim}}}}

```

This adds additional material for Welsh statutory instruments.

```

3028 \newbibmacro*{legsupp}{%
3029 \ifkeyword{cy}
3030 {\iffieldundef{userb}
3031 {}
3032 {\printtext{\mkbibparens{\printfield{userb}}}\toggletrue{blx@ox@nopostnotedelim}}}
3033 {}

```

Treaties, explanatory notes and Hansard

```

3034 \newcommand*{\explanatorynote}{explanatory note}
3035 \newcommand*{\parliamentarytype}{parliamentary}
3036 \newcommand*{\treatysubtype}{piltreaty}
3037 \DeclareBibliographyDriver{legal}{%
3038 \usebibmacro{bibindex}%
3039 \usebibmacro{begentry}%

```

```

3040 \iffieldequals{entrysubtype}{\explanatorynote}{%
3041 \printfield[default]{title}%
3042 \setunit{\addspace}\newblock
3043 }{%
3044 \iffieldequals{entrysubtype}{\parliamentarytype}{%
3045 \usebibmacro{legal:parliamentary}%
3046 }{%
3047 \usebibmacro{treatycitation}}}%
3048 \setunit{\addcomma\space}\newblock
3049 \printfield[default]{note}
3050 \setunit{\addspace}\newblock
3051 \setunit{\bibpagerefunct}%
3052 \usebibmacro{pageref}%
3053 \usebibmacro{finentry}}
3054 \newbibmacro{legal:parliamentary}{%
3055 \printfield[default]{title}%
3056 \newunit\newblock
3057 \printfield{type}%
3058 \setunit{\addspace}%
3059 \iffieldundef{series}{}{%
3060 \printtext[parens]{%
3061 \biblstring{jourser}\space
3062 \printfield{series}}}%
3063 \setunit{\addspace}%
3064 \printfield{volume}%
3065 \setunit{\addcomma\space}%
3066 \usebibmacro{hansard-ref}%
3067 \setunit{\addspace}%
3068 \iffieldundef{year}{}{%
3069 \printtext[parens]{\usebibmacro{date}}}%
3070 \togglefalse{blx@ox@nopostnotedelim}}
3071 \newbibmacro*{hansard-ref}{%
3072 \iffieldundef{postnote}{%
3073 \iffieldundef{pages}{}{%
3074 \printfield{pages}}%
3075 }{}%
3076 \newbibmacro{treatycitation}{%
3077 \printfield[default]{title}%
3078 \setunit{\addspace}\newblock%
3079 \printlist[treaty]{institution}
3080 \setunit{\addspace}\newblock
3081 \usebibmacro{treatyinfo}%
3082 \setunit{\addspace}\newblock
3083 \usebibmacro{treaty:year+vol+report}}
3084 \newbibmacro{treatyinfo}{%
3085 \iflistundef{lista}{% execution
3086 \iffieldundef{year}{}{%
3087 \iffieldundef{volume}{}{%
3088 \printtext[parens]{\printdate}}}%
3089 }{%
3090 \printtext[parens]{\printlist[treatydates]{lista}}}}
3091 \newbibmacro{treaty:year+vol+report}{%
3092 \iffieldequals{journaltitle}{\officialjournaltitle}{%
3093 \usebibmacro{eulegref}%
3094 }{%
3095 \usebibmacro{treaty:date}%
3096 \setunit{\addspace}%
3097 \printfield[default]{volume}%
3098 \setunit{\addspace}%
3099 \printfield{journaltitle}%
3100 \setunit*{\addspace}%
3101 \iffieldundef{series}{}{%

```

```

3102     \setunit{\addspace}%
3103     \printfield{series}%
3104     \setunit{\addspace}%
3105     \printfield{pages}}}%
3106 \newbibmacro*{treaty:date}{%
3107   \ifboolexpr{
3108     test {\iffieldundef{volume}}
3109     or
3110     bool {bbx@year-essential}
3111   }{%
3112     \ifboolexpr{
3113       test {\ifkeyword{sc}}
3114       or
3115       test {\iftoggle{bbx:scotstyle}}
3116     }{%
3117       \printfield{year}%
3118     }%
3119     \printfield[brackets]{year}%
3120   }}{}

```

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

```

3121 \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.

```

3122 \newcommand{\locationlibrarypunct}{\addcomma\addspace}
3123 \newcommand{\collectionshelfmarkpunct}{\addspace}
3124 \newcommand{\datingpagespunct}{\addcomma\addspace}
3125 \newcommand{\librarycollectionpunct}{\addcomma\addspace}
3126 \newcommand{\pagetotalpagespunct}{\addcomma\addspace}
3127 \newcommand{\columnslayerpunct}{\addsemicolon\addspace}%

```

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

```

3128 \def\recto{r}
3129 \def\verso{v}
3130 \NumCheckSetup{\def\recto{r}\def\verso{v}}
3131 \DeclareNumChars*{rv}

```

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.

```

3132 \DeclareFieldFormat[manuscript,unpublished]{title}{%
3133   \def\currentfield{title}%
3134   \iffieldannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}%
3135   \undef\currentfield}
3136 \DeclareFieldFormat{columns+layer}{\mkbibparens{#1}}
3137 \DeclareFieldFormat{columns}{\mkbibparens{#1}}
3138 \DeclareFieldFormat{layer}{\mkbibparens{#1}}
3139 \DeclareFieldFormat{dating}{#1\isdot}%
3140 \DeclareFieldFormat{support}{\ifbibstring{#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.

```

3141 \newbibmacro{manuscript:date}{%
3142   \ifboolexpr{
3143     test {\ifnameundef{author}}
3144     and
3145     test {\iffieldundef{title}}
3146   }{\usebibmacro{date}}
3147 \newbibmacro{dating}{%
3148   \ifboolexpr{
3149     test {\ifnameundef{author}}
3150     and
3151     test {\iffieldundef{title}}
3152   } or
3153     test {\iffieldundef{year}}
3154 }{%
3155   \printfield{dating}%
3156 }%

```

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.

```

3157 \newbibmacro{location+library+collection+shelfmark}{%
3158   \printfield{library}%
3159   \setunit{\locationlibrarypunct}%
3160   \printlist{location}%
3161   \setunit{\librarycollectionpunct}%
3162   \usebibmacro{collection+shelfmark}}
3163 \newbibmacro{collection+shelfmark}{%
3164   \ifboolexpr{
3165     test {\iffieldundef{collection}}
3166     and
3167     test {\iffieldundef{shelfmark}}
3168   }{%
3169     \printtext[collection+shelfmark]{%
3170       \printfield{collection}%
3171       \setunit*\{collectionshelfmarkpunct}%
3172       \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.

```

3173 \newbibmacro{manuscript:pages}{%
3174   \printfield{pagetotal}%
3175   \setunit{\addspace}%
3176   \iffieldundef{pages}{%
3177     \usebibmacro{manuscript:columns+layer}%
3178   }{%
3179     \usebibmacro{manuscript:columns}%
3180     \setunit{\pagetotalpagespunct}%
3181     \printfield{pages}%
3182     \setunit{\addspace}%
3183     \usebibmacro{manuscript:layer}}}
3184 \newbibmacro{manuscript:columns}{%
3185   \iffieldundef{columns}{%
3186     \printtext[columns]{\bibstring{\strfield{columns}column}}%
3187   }%

```

```

3188 \newbibmacro{manuscript:layer}{%
3189   \iffieldundef{layer}{}{%
3190     \printtext[layer]{\bibstring{\strfield{layer}layer}}}%
3191   }%
3192 \newbibmacro{manuscript:columns+layer}{%
3193   \ifboolexpr{
3194     test {\iffieldundef{columns}}
3195     or
3196     test{\iffieldundef{layer}}
3197   }{%
3198     \usebibmacro{manuscript:columns}%
3199     \usebibmacro{manuscript:layer}%
3200   }{%
3201     \printtext[columns+layer]{%
3202       \bibstring{\strfield{columns}column}%
3203       \setunit*{\columnslayerpunct}%
3204       \bibstring{\strfield{layer}layer}}}%

```

Putting it all together, here is the manuscript driver.

```

3205 \DeclareBibliographyDriver{manuscript}{%
3206   \usebibmacro{bibindex}%
3207   \usebibmacro{begentry}%
3208   \usebibmacro{author}%
3209   \setunit{\printdelim{nametitledelim}}\newblock
3210   \usebibmacro{title}%
3211   \newunit\newblock
3212   \usebibmacro{byauthor}%
3213   \newunit\newblock
3214   \printfield{howpublished}%
3215   \newunit\newblock
3216   \printfield{note}%
3217   \newunit\newblock
3218   \usebibmacro{manuscript:date}%
3219   \newunit\newblock
3220   \usebibmacro{location+library+collection+shelfmark}%
3221   \newunit
3222   \printfield{support}%
3223   \newunit
3224   \usebibmacro{dating}%
3225   \setunit{\datingpagespunct}%
3226   \usebibmacro{manuscript:pages}%
3227   \newunit\newblock%
3228   \iftoggle{bbx:url}{%
3229     \usebibmacro{url+urldate}%
3230   }{}%
3231   \setunit{\relatedtypepunct}\newblock
3232   \iftoggle{bbx:related}{%
3233     \usebibmacro{related:init}%
3234     \usebibmacro{related}%
3235   }{}%
3236   \usebibmacro{finentry}}

```

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

```

3237 \newbibmacro*{library+location+series+number}{%
3238   \printfield{library}%
3239   \setunit{\locationlibrarypunct}%
3240   \printlist{location}%
3241   \setunit{\librarycollectionpunct}%
3242   \ifboolexpr{

```

```

3243     test {\iffielddundef{series}}
3244     and
3245     test {\iffielddundef{number}}
3246   }{\%
3247     \printtext[collection+shelfmark]{%
3248       \printfield{series}%
3249       \setunit*{\collectionshelfmarkpunct}%
3250       \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’.

```

3251 \newtoggle{blx@ox@ms}
3252 \DeclareBibliographyDriver{unpublished}{%
3253   \usebibmacro{bibindex}%
3254   \usebibmacro{begentry}%
3255   \iffielddundef{library}{\togglefalse{blx@ox@ms}}{\toggletrue{blx@ox@ms}}%
3256   \usebibmacro{author}%
3257   \setunit{\printdelim{nametitledelim}}\newblock
3258   \usebibmacro{title}%
3259   \newunit\newblock
3260   \usebibmacro{byauthor}%
3261   \newunit\newblock
3262   \printfield{howpublished}%
3263   \newunit\newblock
3264   \printfield{note}%
3265   \newunit\newblock
3266   \iftoggle{blx@ox@ms}{%
3267     \usebibmacro{manuscript:date}%
3268     \newunit\newblock
3269     \usebibmacro{library+location+series+number}%
3270     \newunit
3271     \printfield{support}%
3272     \newunit
3273     \usebibmacro{dating}%
3274     \setunit{\datingpagespunct}
3275     \usebibmacro{manuscript:pages}
3276   }{%
3277     \usebibmacro{location+date}%
3278   }%
3279   \newunit\newblock
3280   \iftoggle{bbx:url}{
3281     {\usebibmacro{url+urldate}}
3282   }%
3283   \newunit\newblock
3284   \usebibmacro{addendum+pubstate}%
3285   \setunit{\bibpagerefpunct}\newblock
3286   \usebibmacro{pageref}%
3287   \setunit{\relatedtypepunct}\newblock
3288   \iftoggle{bbx:related}{
3289     {\usebibmacro{related:init}}%
3290     \usebibmacro{related}}
3291   {}%
3292   \usebibmacro{finentry}}

```

2.1.17 RELATED ENTRIES

We make the punctuation before related items configurable in remaining drivers inherited from the standard style.

```

3293 \xpatchbibdriver{booklet}{%
3294   \newunit\newblock
3295   \iftoggle{bbx:related}
3296 }{%
3297   \setunit{\relatedtypepunct}\newblock
3298   \iftoggle{bbx:related}
3299 }{}
3300 \xpatchbibdriver{misc}{%
3301   \newunit\newblock
3302   \iftoggle{bbx:related}
3303 }{%
3304   \setunit{\relatedtypepunct}\newblock
3305   \iftoggle{bbx:related}
3306 }{}
3307 \xpatchbibdriver{patent}{%
3308   \newunit\newblock
3309   \iftoggle{bbx:related}
3310 }{%
3311   \setunit{\relatedtypepunct}\newblock
3312   \iftoggle{bbx:related}
3313 }{}

```

We provide an option for setting the relatedtype punctuation.

```

3314 \DeclareBibliographyOption{relationpunct}[semicolon]{%
3315   \ifcsdef{add#1}{%
3316     \ifstrequal{#1}{space}{%
3317       \renewcommand*{\relatedtypepunct}{\addspace}%
3318     }{%
3319       \renewcommand*{\relatedtypepunct}{\csuse{add#1}\space}}%
3320   }{%
3321     \PackageError{biblatex-oxref}{%
3322       Invalid option 'relationpunct=#1'%
3323     }{%
3324       Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3325       'period', 'exclam', 'question', and 'space'.}}
3326 \newtoggle{blx@ox@relpunctset}
3327 \DeclareEntryOption{relationpunct}[semicolon]{%
3328   \ifcsdef{add#1}{%
3329     \ifstrequal{#1}{space}{%
3330       \renewcommand*{\relatedtypepunct}{\addspace}%
3331     }{%
3332       \renewcommand*{\relatedtypepunct}{\csuse{add#1}\space}}%
3333   \toggletrue{blx@ox@relpunctset}
3334   }{%
3335     \PackageError{biblatex-oxref}{%
3336       Invalid option 'relationpunct=#1'%
3337     }{%
3338       Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3339       'period', 'exclam', 'question', and 'space'.}}
3340 \newcounter{blx@ox@relitem}
3341 \xapptobibmacro{begrelated}{%
3342   \setcounter{blx@ox@relitem}{0}%
3343   \iftoggle{blx@ox@relpunctset}{}{%
3344     \iffieldequalstr{relatedtype}{in}{%
3345       \setunit{\addcomma\space}}{}%
3346     \iffieldequalstr{relatedtype}{reprintfrom}{%
3347       \setunit{\addperiod\space}}{}%
3348     \iffieldequalstr{relatedtype}{translationof}{%
3349       \setunit{\addspace}}{}%
3350     \iffieldequalstr{relatedtype}{multivolume}{%

```



```

3351 \setunit{\addcomma\space}{}%
3352 {}{}

```

Translations

Where related item is the translation, the related string is prefaced with the language.

```

3353 \newbibmacro*{rellanguage}{%
3354 \def\do##1{%
3355 \entrydata{##1}{%
3356 \printlist{language}}}%
3357 \docsvfield{related}%
3358 }
3359 \DeclareFieldFormat{relatedstring:translationof}{%
3360 \usebibmacro{rellanguage}\space
3361 \bibstring{original}\addcomma\space}
3362
3363 \DeclareFieldFormat{related:translationof}{%
3364 \mkbibbrackets{#1}}

```

Co-publications

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

```

3365 \newbibmacro*{related:copub}[1]{%
3366 \entrydata*{#1}{%
3367 \usebibmacro{publisher+location+date}%
3368 \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.

```

3369 \renewbibmacro*{related:reprintfrom}[1]{%
3370 \entrydata*{#1}{%
3371 \nopunct
3372 \usedriver{%
3373 \ifnameundef{savedauthor}{%
3374 \ifnameundef{savededitor}{}{%
3375 \ifnamesequal{editor}{savededitor}{%
3376 \clearname{editor}%
3377 }{}%
3378 }{%
3379 \ifnamesequal{author}{savedauthor}{%
3380 \clearname{author}%
3381 }{}%
3382 \iffieldundef{savedtitle}{}{%
3383 \iffieldsequal{savedtitle}{title}{%
3384 \clearfield{title}%
3385 }{}%
3386 \renewbibmacro*{related:init}{}%
3387 \DeclareNameAlias{sortname}{default}%
3388 \ifbibmacroundef{date+extrayear}{}{%
3389 \renewbibmacro*{date+extrayear}{}%
3390 \renewbibmacro*{date}{\printdate}%
3391 \renewbibmacro*{pageref}{}%
3392 }%

```

```
3393 \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.

```
3394 \newbibmacro*{related:serialarticle}[1]{%
3395 \entrydata*{#1}{%
3396 \iffieldundef{savedjournaltitle}{}{%
3397 \iffieldsequal{journaltitle}{savedjournaltitle}{%
3398 \clearfield{journaltitle}%
3399 }{}%
3400 \iffieldundef{savedjournalsubtitle}{}{%
3401 \iffieldsequal{journalsubtitle}{savedjournalsubtitle}{%
3402 \clearfield{journalsubtitle}%
3403 }{}%
3404 \iffieldundef{savedseries}{}{%
3405 \iffieldsequal{series}{savedseries}{%
3406 \clearfield{series}%
3407 }{}%
3408 \iffieldundef{savedyear}{\clearfield{year}}{
3409 \iffieldsequal{year}{savedyear}{%
3410 \clearfield{year}%
3411 }{}%
3412 \usebibmacro{journal+issuetitle}%
3413 \newunit
3414 \usebibmacro{note+pages}%
3415 \newunit\newblock
3416 \usebibmacro{doi+eprint+url}%
3417 \newunit\newblock
3418 \usebibmacro{addendum+pubstate}}}
```

Reviews

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

```
3419 \DeclareFieldFormat[review]{title}{\mkbibquote{#1\isdot}}
3420 \DeclareFieldFormat[review]{volume}{#1}% volume of a journal
3421 \DeclareFieldFormat[review]{number}{#1}% number of a journal
3422 \DeclareFieldFormat[review]{series}{% series of a journal
3423 \ifinteger{#1}
3424 {\mkbibordseries{#1}~\bibstring{jourser}}
3425 {\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+extrayear macro.

```
3426 \newbibmacro*{related:reviewof}[1]{%
3427 \entrydata*{#1}{%
3428 \usedriver{%
3429 \renewbibmacro*{related:init}{}%
3430 \DeclareNameAlias{author}{given-family}%
3431 \renewbibmacro*{pageref}{}%
3432 }{\thefield{entrytype}}%
3433 }%
```

3434 }

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’.

```

3435 \DeclareBibliographyDriver{review}{%
3436   \usebibmacro{bibindex}%
3437   \usebibmacro{begentry}%
3438   \usebibmacro{author/translator+others}%
3439   \setunit{\printdelim{nametitleledelim}}\newblock
3440   \usebibmacro{title}%
3441   \newunit\newblock
3442   \usebibmacro{byauthor}%
3443   \newunit\newblock
3444   \usebibmacro{bytranslator+others}%
3445   \newunit\newblock
3446   \printfield{version}%
3447   \newunit\newblock
3448   \iftoggle{bbx:related}{%
3449     \usebibmacro{related:init}%
3450     \usebibmacro{related}%
3451   }{}%
3452   \newunit\newblock
3453   \usebibmacro{in:}%
3454   \setunit{\addspace}%
3455   \usebibmacro{journal+issuetitle}%
3456   \newunit
3457   \usebibmacro{byeditor+others}%
3458   \iffielddundef{note}%
3459     {\newunit}%
3460     {\setunit{\addsemicolon\addspace}}%
3461   \usebibmacro{note+pages}%
3462   \newunit\newblock
3463   \iftoggle{bbx:isbn}
3464     {\printfield{issn}}
3465     {}%
3466   \newunit\newblock
3467   \usebibmacro{doi+eprint+url}%
3468   \newunit\newblock
3469   \usebibmacro{addendum+pubstate}%
3470   \setunit{\bibpagerefpunct}\newblock
3471   \usebibmacro{pageref}%
3472   \usebibmacro{finentry}}

```

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.

```

3473 \DeclareFieldFormat{related:multivolume}{#1}
3474 \newbibmacro*{related:multivolume}[1]{%
3475   \entrydata*{#1}{%
3476     \printtext{%
3477       \printfield{volume}%
3478       \printfield{part}}%
3479   \setunit*{\addspace}%
3480   \usebibmacro{series+number+edition+publisher+location+date}}}

```

Related editions

This macro is based on the ‘bytranslator’ one, but more general.

```

3481 \newbibmacro*{related:editedas}[1]{%
3482   \entrydata{#1}{%
3483     \renewbibmacro*{name:hook}[1]{%
3484       \ifnumequal{\value{listcount}}{1}{%
3485         \begingroup
3486         \mkrelatedstring%
3487         \lbx@initnamehook{#1}%
3488         \endgroup
3489       }{}%
3490       \printfield{edition}%
3491       \setunit{\addspace}%
3492       \usebibmacro{byeditor+others}%
3493       \setunit*{\addcomma\space\bibstring[\mkrelatedstring]{astitle}\space}%
3494       \usebibmacro{maintitle+title}%
3495       \setunit{\addspace}%
3496       \printfield{note}%
3497       \newunit\newblock
3498       \printfield{volumes}%
3499       \newunit
3500       \usebibmacro{series+number+publisher+location+date}}%
3501 \newbibmacro*{related:bytranslator}[1]{%
3502   \entrydata{#1}{%
3503     \renewbibmacro*{name:hook}[1]{%
3504       \ifnumequal{\value{listcount}}{1}{
3505         {\begingroup
3506           \mkrelatedstring%
3507           \lbx@initnamehook{#1}%
3508           \endgroup}
3509         }{}%
3510         \printnames{bytranslator}{translator}%
3511         \setunit*{\addspace\bibstring[\mkrelatedstring]{astitle}\space}%
3512         \usebibmacro{maintitle+title}%
3513         \setunit{\addspace}%
3514         \printfield{note}%
3515         \newunit\newblock
3516         \printfield{volumes}%
3517         \newunit
3518         \usebibmacro{series+number+publisher+location+date}}%

```

Joint releases

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

```

3519 \newbibmacro*{related:includes}[1]{%
3520   \stepcounter{blx@ox@relitem}%
3521   \ifnumequal{\value{blx@ox@relitem}}{\value{bbx:relatedtotal}}%
3522     {\bibstring{and}\addspace}{}%
3523   \entrydata{#1}{%
3524     \ifbibmacroundef{date+extrayear}{}{%
3525       \renewbibmacro*{date+extrayear}{}%
3526       \usebibmacro{author}%
3527       \setunit{\printdelim{nametitledelim}}\newblock
3528       \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.

```

3529 \DeclareFieldFormat[misc]{title}{%
3530 \def\currentfield{title}%
3531 \iffielddannotation{descriptor}{#1}{%
3532 \iffieldequalstr{relatedtype}{in}{%
3533 \mkbibquote{#1\isdot}%
3534 }{%
3535 \mkbibemph{#1}%
3536 }}%
3537 \undef\currentfield}
3538 \newbibmacro*{related:in}[1]{%
3539 \entrydata*{#1}{%
3540 \usedriver
3541 {\ifnameundef{savedauthor}
3542 {\ifnameundef{savededitor}
3543 {}
3544 {\ifnamesequal{editor}{savededitor}
3545 {\clearname{editor}}
3546 {}}}
3547 {\ifnamesequal{author}{savedauthor}
3548 {\clearname{author}}
3549 {}}}%
3550 \renewbibmacro*{related:init}{}%
3551 \DeclareNameAlias{sortname}{default}%
3552 \ifbibmacroundef{date+extrayear}
3553 {}
3554 {\renewbibmacro*{date+extrayear}{}%
3555 \renewbibmacro*{date}{\printdate}}%
3556 \renewbibmacro*{pageref}{}
3557 {\thefield{entrytype}}%
3558 \ifboolexpr{
3559 test {\iffielddundef{pages}}
3560 or
3561 test {\iffielddundef{savedpages}}
3562 }{%
3563 \newunit\newblock
3564 }{%
3565 \setunit{\addspace}%
3566 \bibstring{thiscite}%
3567 \printunit{\addspace}%
3568 }%
3569 }%
3570 \usebibmacro{chapter+pages}%
3571 }

```

2.1.18 SOURCE MAPS

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

```

3572 \DeclareStyleSourcemap{
3573 \maps[datatype=bibtex]{%

```

Sort order

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

```

3574 \map{
3575   \pertype{proceedings}
3576   \pertype{mvproceedings}
3577   \step[notfield=author,
3578         fieldsource=organization,
3579         fieldtarget=author]
3580 }
```

Descriptors

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

```

3581 \map[overwrite=false]{
3582   \step[fieldsource=descriptor, final]
3583   \step[notfield=title,
3584         fieldset=title+an,
3585         fieldvalue={=descriptor}]
3586   \step[notfield=title,
3587         fieldsource=descriptor,
3588         fieldtarget=title]
3589   \step[fieldsource=descriptor,
3590         fieldtarget=note]
3591 }
```

Pseudonyms and inferred authorship

These help ensure compatibility with biblatex-realauthor.

```

3592 \map[overwrite=false]{
3593   \step[fieldsource=realauthor, final]
3594   \step[notfield=author,
3595         fieldset=author+an,
3596         fieldvalue={=inferred}]
3597   \step[notfield=author,
3598         fieldsource=realauthor,
3599         fieldtarget=author]
3600   \step[fieldsource=realauthor,
3601         fieldtarget=authoraddon]
3602 }
3603 \map[overwrite=false]{
3604   \step[fieldsource=realeditor, final]
3605   \step[notfield=editor,
3606         fieldset=editor+an,
3607         fieldvalue={=inferred}]
3608   \step[notfield=editor,
3609         fieldsource=realeditor,
3610         fieldtarget=editor]
3611   \step[fieldsource=realeditor,
3612         fieldtarget=editoraddon]
3613 }
```

Editors as joint authors

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

```

3614 \map[overwrite=false]{
3615   \step[fieldsource=editor+an,
3616     match=\regexp{=jointauthor},
3617     final]
3618   \step[fieldsource=editor,
3619     fieldtarget=jointauthor]
3620   \step[fieldsource=editortype,
3621     fieldtarget=jointauthortype]
3622 }
3623 \map[overwrite=false]{
3624   \step[fieldsource=translator+an,
3625     match=\regexp{=jointauthor},
3626     final]
3627   \step[fieldsource=translator,
3628     fieldtarget=jointauthor]
3629   \step[fieldset=jointauthortype,
3630     fieldvalue={=translator}]
3631 }
```

Legal references

These help ensure compatibility with oscola.

```

3632 \map[overwrite=false]{
3633   \pertype{jurisdiction}
3634   \step[fieldsource=reporter,
3635     fieldtarget=journaltitle]
3636   \step[fieldsource=parvolume,
3637     fieldtarget=userb]
3638   \step[fieldsource=parreporter,
3639     fieldtarget=userc]
3640   \step[fieldsource=parseries,
3641     fieldtarget=userd]
3642   \step[fieldsource=parpages,
3643     fieldtarget=usere]
3644   \step[fieldsource=court,
3645     fieldtarget=institution]
3646   \step[fieldsource=additionalreports,
3647     fieldtarget=listb]
3648   \step[fieldsource=ecli,
3649     fieldtarget=verba]
3650 }%
3651 \map[overwrite=false]{
3652   \pertype{legal}
3653   \step[fieldsource=reporter,
3654     fieldtarget=journaltitle]
3655 }
3656 \map[overwrite=true]{
3657   \pertype{legal}
3658   \step[fieldsource=parties,
3659     fieldtarget=institution]
3660   \step[fieldsource=execution,
3661     fieldtarget=lista]
3662 }
```

This is how oscola removes dots from entries.

```

3663 \map[overwrite=true]{
3664 \pertype{jurisdiction}
3665 \pertype{legislation}
3666 \pertype{legal}
3667 \step[fieldsource=title,
3668 match=\regexp{(\d)\.(\d)},
3669 replace=\regexp{$1.$2}]
3670 \step[fieldsource=title,
3671 match=\regexp{(\D)\.(\d)},
3672 replace=\regexp{$1 $2}]
3673 \step[fieldsource=title,
3674 match=\regexp{\.(\D)},
3675 replace=\regexp{$1}]
3676 \step [fieldsource=title,
3677 match=\regexp{(\D)\.},
3678 replace=\regexp{$1}]
3679 \step[fieldsource=shorttitle,
3680 match=\regexp{(\d)\.(\d)},
3681 replace=\regexp{$1.$2}]
3682 \step[fieldsource=shorttitle,
3683 match=\regexp{(\D)\.(\d)},
3684 replace=\regexp{$1 $2}]
3685 \step[fieldsource=shorttitle,
3686 match=\regexp{\.(\D)},
3687 replace=\regexp{$1}]
3688 \step [fieldsource=shorttitle,
3689 match=\regexp{(\D)\.},
3690 replace=\regexp{$1}]
3691 \step[fieldsource=userc,
3692 match=\regexp{(\d)\.(\d)},
3693 replace=\regexp{$1.$2}]
3694 \step[fieldsource=userc,
3695 match=\regexp{(\D)\.(\d)},
3696 replace=\regexp{$1 $2}]
3697 \step[fieldsource=userc,
3698 match=\regexp{\.(\D)},
3699 replace=\regexp{$1}]
3700 \step [fieldsource=userc,
3701 match=\regexp{(\D)\.},
3702 replace=\regexp{$1}]
3703 \step[fieldsource=journaltitle,
3704 match=\regexp{(\d)\.(\d)},
3705 replace=\regexp{$1.$2}]
3706 \step[fieldsource=journaltitle,
3707 match=\regexp{(\D)\.(\d)},
3708 replace=\regexp{$1 $2}]
3709 \step[fieldsource=journaltitle,
3710 match=\regexp{\.(\D)},
3711 replace=\regexp{$1}]
3712 \step [fieldsource=journaltitle,
3713 match=\regexp{(\D)\.},
3714 replace=\regexp{$1}]
3715 \step[fieldsource=institution,
3716 match=\regexp{(\d)\.(\d)},
3717 replace=\regexp{$1.$2}]
3718 \step[fieldsource=institution,
3719 match=\regexp{(\D)\.(\d)},
3720 replace=\regexp{$1 $2}]
3721 \step[fieldsource=institution,
3722 match=\regexp{\.(\D)},
3723 replace=\regexp{$1}]
3724 \step[fieldsource=institution,

```



```

3725         match=\regexp{(\D)\.},
3726         replace=\regexp{$1}]
3727 \step[fieldsource=publisher,
3728       match=\regexp{(\d)\.(\d)},
3729       replace=\regexp{$1.$2}]
3730 \step[fieldsource=publisher,
3731       match=\regexp{(\D)\.(\d)},
3732       replace=\regexp{$1 $2}]
3733 \step[fieldsource=publisher,
3734       match=\regexp{\.(\D)},
3735       replace=\regexp{$1}]
3736 \step [fieldsource=publisher,
3737       match=\regexp{(\D)\.},
3738       replace=\regexp{$1}]
3739 \step[fieldsource=location,
3740       match=\regexp{(\d)\.(\d)},
3741       replace=\regexp{$1.$2}]
3742 \step[fieldsource=location,
3743       match=\regexp{(\D)\.(\d)},
3744       replace=\regexp{$1 $2}]
3745 \step[fieldsource=location,
3746       match=\regexp{\.(\D)},
3747       replace=\regexp{$1}]
3748 \step [fieldsource=location,
3749       match=\regexp{(\D)\.},
3750       replace=\regexp{$1}]
3751 \step[fieldsource=series,
3752       match=\regexp{(\d)\.(\d)},
3753       replace=\regexp{$1.$2}]
3754 \step[fieldsource=series,
3755       match=\regexp{(\D)\.(\d)},
3756       replace=\regexp{$1 $2}]
3757 \step[fieldsource=series,
3758       match=\regexp{\.(\D)},
3759       replace=\regexp{$1}]
3760 \step [fieldsource=series,
3761       match=\regexp{(\D)\.},
3762       replace=\regexp{$1}]
3763 \step[fieldsource=indextitle,
3764       match=\regexp{(\d)\.(\d)},
3765       replace=\regexp{$1.$2}]
3766 \step[fieldsource=indextitle,
3767       match=\regexp{(\D)\.(\d)},
3768       replace=\regexp{$1 $2}]
3769 \step[fieldsource=indextitle,
3770       match=\regexp{\.(\D)},
3771       replace=\regexp{$1}]
3772 \step [fieldsource=indextitle,
3773       match=\regexp{(\D)\.},
3774       replace=\regexp{$1}]
3775 }
3776 }%
3777 }

```

2.1.19 SORTING SCHEMES

We adjust the sort order to take into account some other fields that might end up at the front (library, collection, series).

```

3778 \DeclareSortingScheme{nty}{
3779   \sort{
3780     \field{presort}
3781   }
3782   \sort[final]{
3783     \field{sortkey}
3784   }
3785   \sort{
3786     \field{sortname}
3787     \field{author}
3788     \field{editor}
3789     \field{translator}
3790     \field{sorttitle}
3791     \field{title}
3792     \field{library}
3793   }
3794   \sort{
3795     \field{sorttitle}
3796     \field{title}
3797   }
3798   \sort{
3799     \field{sortyear}
3800     \field{year}
3801   }
3802   \sort{
3803     \field{volume}
3804     \literal{0}
3805   }
3806   \sort{
3807     \field{location}
3808   }
3809   \sort{
3810     \field{collection}
3811     \field{series}
3812   }
3813 }
3814
3815 \DeclareSortingScheme{nyt}{
3816   \sort{
3817     \field{presort}
3818   }
3819   \sort[final]{
3820     \field{sortkey}
3821   }
3822   \sort{
3823     \field{sortname}
3824     \field{author}
3825     \field{editor}
3826     \field{translator}
3827     \field{sorttitle}
3828     \field{title}
3829     \field{library}
3830   }
3831   \sort{
3832     \field{sortyear}
3833     \field{year}
3834   }
3835   \sort{
3836     \field{sorttitle}
3837     \field{title}
3838   }
3839   \sort{

```

```

3840     \field{volume}
3841     \literal{0}
3842   }
3843   \sort{
3844     \field{location}
3845   }
3846   \sort{
3847     \field{collection}
3848     \field{series}
3849   }
3850 }

```

The following entry types never put editors first.

```

3851 \ExecuteBibliographyOptions
3852 [proceedings,report,audio,music,movie,video,manuscript,unpublished,review]%
3853 {useeditor=false}

```

2.2 Notes style: oxnotes.bbx

2.2.1 PRELIMINARIES

First we load the common oxref features.

```

20 \RequireBibliographyStyle{oxref}

```

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 }{}

```

2.2.2 PAGE RANGES IN CITATIONS

If specifying a page within a range in the course of a citation note, Oxford style is to format that as ‘range at page’; if no page range is specified, the page is printed as normal.

```

34 \renewbibmacro*{postnote}{%
35   \iffieldundef{postnote}{}{%
36     \iffieldundef{pages}{%
37       \setunit{\postnotedelim}%
38       \printfield{postnote}%
39     }{%
40       \printtext{\addspace\bibstring{thiscite}\space}%

```

```
41 \printfield{postnote}}}}
```

2.2.3 SOURCE MAPS

```
42 \DeclareStyleSourcemap{%
43 \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.

```
44 \map{
45 \pertype{mvbook}
46 \pertype{mvcollection}
47 \pertype{mvreference}
48 \pertype{proceedings}
49 \pertype{mvproceedings}
50 \pertype{report}
51 \step[fieldsource=maintitle]%
52 \step[fieldset=sorttitle, origfieldval]%
53 \step[fieldsource=volume]%
54 \step[fieldset=sorttitle, append, origfieldval]%
55 \step[fieldsource=title]%
56 \step[fieldset=sorttitle, append, origfieldval]%
57 }%
58 }%
59 }
```

2.3 Author–year style: oxyear.bbx

2.3.1 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{uniquename=init,giveninits,labeldateparts,sorting=nyt,pagetracker,maxcitenames=2}
```

2.3.2 DATE MERGING OPTION

We provide the mergedate option from the authoryear style. The OGS and NHR consistently use a variant that is between basic and compact, in that the year is always moved but the month and day are never moved; this is implemented as the year value.

```
22 \DeclareBibliographyOption{mergedate}[true]{%
23 \ifcsdef{bbx@opt@mergedate@#1}
24 {\csuse{bbx@opt@mergedate@#1}}
25 {\PackageError{biblatex}
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, for which we coin the `dateLabel` field format.

```
29 \providebibmacro*{date+extrayear}{}
30 \DeclareFieldFormat{dateLabel}{\mkbibparens{#1}}
```

We provide a convenience macro for printing date ranges as the date label.

```
31 \newbibmacro*{labelyearrange}{%
32   \printfield{labelyear}%
33   \printfield{extrayear}%
34   \iffieldundef{labelendyear}{%
35     \iffieldsequal{labelyear}{labelendyear}{%
36       \iffieldequalstr{labelendyear}{%
37         \mbox{\bibdaterangesep}%
38       }{%
39         \bibdaterangesep
40         \iffieldundef{extrayear}{%
41           \blx@ox@compyear
42             {\thefield{labelyear}}%
43             {\thefield{labelendyear}}%
44         }{%
45           \printfield{labelendyear}}}}}}
```

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).

```
46 \def\bbx@opt@mergedate@true{\bbx@opt@mergedate@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.

```
47 \def\bbx@opt@mergedate@maximum{%
48   \renewbibmacro*{date+extrayear}{%
49     \iffieldundef{labelyear}{%
50       \printtext[dateLabel]{%
51         \printfield{issue}%
52         \setunit*{\addspace}%
53         \ifboolexpr{%
54           not test {\iffieldundef{\thefield{labeldatesource}year}}
55           and
56           test {\iffieldsequal{\thefield{labeldatesource}year}{labelyear}}
57         }{%
58           \printlabeldateextra
59         }{%
60           \printfield{labelyear}%
61           \printfield{extrayear}}}%
62     \iffieldundef{\thefield{labeldatesource}year}{%
63       \iffieldundef{\thefield{labeldatesource}}{%
64         \iffieldequalstr{labeldatesource}{pubstate}{%
65           \clearfield{\thefield{labeldatesource}}}%
66       }{%
```

```

67      \clearfield{\thefield{labeldatesource}year}%
68      \clearfield{end\thefield{labeldatesource}year}%
69      \clearfield{\thefield{labeldatesource}month}%
70      \clearfield{end\thefield{labeldatesource}month}%
71      \clearfield{\thefield{labeldatesource}day}%
72      \clearfield{end\thefield{labeldatesource}day}%
73  }%
74  \clearfield{issue}}}%

```

- 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.

```

75  \def\bbx@opt@mergedate@compact{%
76    \renewbibmacro*{date+extrayear}{%
77      \iffielddundef{labelyear}}{%
78        \printtext[datelabel]{%
79          \ifboolexpr{%
80            not test {\iffielddundef{\thefield{labeldatesource}year}}
81            and
82            test {\iffielddsequal{\thefield{labeldatesource}year}{labelyear}}
83          }{%
84            \printlabeldateextra
85          }{%
86            \printfield{labelyear}%
87            \printfield{extrayear}}}%
88      \iffielddundef{\thefield{labeldatesource}year}{%
89        \iffielddundef{\thefield{labeldatesource}}{%
90          \iffieldequalstr{labeldatesource}{pubstate}}{%
91            \clearfield{\thefield{labeldatesource}}}%
92      }{%
93        \clearfield{\thefield{labeldatesource}year}%
94        \clearfield{end\thefield{labeldatesource}year}%
95        \clearfield{\thefield{labeldatesource}month}%
96        \clearfield{end\thefield{labeldatesource}month}%
97        \clearfield{\thefield{labeldatesource}day}%
98        \clearfield{end\thefield{labeldatesource}day}%
99      }}}}

```

- 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.

```

100  \def\bbx@opt@mergedate@year{%
101    \renewbibmacro*{date+extrayear}{%
102      \iffielddundef{labelyear}}{%
103        \printtext[datelabel]{%
104          \usebibmacro{labelyearrange}}%
105      \iffielddundef{\thefield{labeldatesource}year}{%
106        \iffielddundef{\thefield{labeldatesource}}{%
107          \iffieldequalstr{labeldatesource}{pubstate}}{%
108          \clearfield{\thefield{labeldatesource}}}%
109      }{%
110        \clearfield{\thefield{labeldatesource}year}%
111        \clearfield{end\thefield{labeldatesource}year}%
112      }}}}

```

- 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.

```

113 \def\bbx@opt@mergedate@basic{%
114 \renewbibmacro*{date+extrayear}{%
115 \iffielddundef{Labelyear}}{%
116 \printtext[datelabel]{%
117 \usebibmacro{Labelyearrange}}%
118 \iffielddundef{\thefield{labeldatesource}year}{%
119 \iffielddundef{\thefield{labeldatesource}}}{%
120 \iffieldequalstr{labeldatesource}{pubstate}}{%
121 \clearfield{\thefield{labeldatesource}}}%
122 }{%
123 \ifboolexpr{
124 test {\iffielddundef{\thefield{labeldatesource}month}}
125 and (
126 test {\iffielddundef{issue}}
127 or
128 not test {\iffieldequalstr{labeldatesource}}
129 )}{%
130 \clearfield{\thefield{labeldatesource}year}%
131 \clearfield{end\thefield{labeldatesource}year}%
132 }{}{}{}%

```

- 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 extrayear, *and* (if this is the regular date) no issue.

```

133 \def\bbx@opt@mergedate@minimum{%
134 \renewbibmacro*{date+extrayear}{%
135 \iffielddundef{Labelyear}}{%
136 \printtext[datelabel]{%
137 \usebibmacro{Labelyearrange}}%
138 \iffielddundef{\thefield{labeldatesource}year}{%
139 \iffielddundef{\thefield{labeldatesource}}}{%
140 \iffieldequalstr{labeldatesource}{pubstate}}{%
141 \clearfield{\thefield{labeldatesource}}}%
142 }{%
143 \ifboolexpr{
144 test {\iffielddundef{\thefield{labeldatesource}month}}
145 and
146 test {\iffielddundef{extrayear}}
147 and (
148 test {\iffielddundef{issue}}
149 or
150 not test {\iffieldequalstr{labeldatesource}}
151 )}{%
152 \clearfield{\thefield{labeldatesource}year}%
153 \clearfield{end\thefield{labeldatesource}year}%
154 }{}{}{}%

```

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

```

155 \def\bbx@opt@mergedate@false{%
156 \renewbibmacro*{date+extrayear}{%
157 \iffielddundef{Labelyear}}{%
158 \printtext[datelabel]{%
159 \usebibmacro{Labelyearrange}}}%
160 \iffielddundef{\thefield{labeldatesource}year}{%
161 \iffielddundef{\thefield{labeldatesource}}}{%
162 \iffieldequalstr{labeldatesource}{pubstate}}{%

```

```
163 \clearfield{\thefield{labeldatesource}}}{}}
```

We set the default to be true/year.

```
164 \ExecuteBibliographyOptions{mergedate}
```

The `\clearfield` commands in the year option code would suppress any further date information being printed, but we need to allow months and days to be printed in the absence of a year. This means adapting the range calculation commands defined in `biblatex.sty` for use by `\printdate` and friends.

```
165 \DeclareRobustCommand*\mkdaterangefull[2]{%
166   \blx@metadateinfo{#2}%
167   \iffieldundef{#2year}{%
168     \iffieldundef{#2month}{}%
169     \datecircaprint
170     \printtext[#2date]{%
171       \iffieldundef{#2season}{%
172         \csuse{mkbibdate#1}{#2month}{#2day}%
173         \blx@printtime{#2}{}%
174       }%
175       \csuse{mkbibseasondate#1}{#2season}}%
176   \dateuncertainprint
177   \iffieldundef{#2endmonth}{}%
178   \iffieldequalstr{#2endmonth}{}%
179   \mbox{\bibdaterangesep}%
180 }%
181 \bibdaterangesep
182 \enddatecircaprint
183 \iffieldundef{#2season}{%
184   \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
185   \blx@printtime{#2}{end}%
186 }%
187 \csuse{mkbibseasondate#1}{#2endseason}}%
188 \enddateuncertainprint}}}%
189 }%
190 \datecircaprint
191 \printtext[#2date]{%
192   \iffieldundef{#2season}{%
193     \csuse{mkbibdate#1}{#2year}{#2month}{#2day}%
194     \blx@printtime{#2}{}%
195   }%
196   \csuse{mkbibseasondate#1}{#2year}{#2season}}%
197 \dateuncertainprint
198 \dateeraprint{#2year}%
199 \iffieldundef{#2endyear}{}%
200 \iffieldequalstr{#2endyear}{}%
201 \mbox{\bibdaterangesep}%
202 }%
203 \bibdaterangesep
204 \enddatecircaprint
205 \iffieldundef{#2season}{%
206   \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
207   \blx@printtime{#2}{end}%
208 }%
209 \csuse{mkbibseasondate#1}{#2endyear}{#2endseason}}%
210 \enddateuncertainprint
211 \dateeraprint{#2endyear}}}}}
```

There is a potential problem for the code below, 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.

```

212 \DeclareRobustCommand*\mkdaterangetrunc}[2]{%
213 \blx@metadateinfo{#2}%
214 \iffieldundef{#2year}{%
215 \iffieldundef{#2month}{}%
216 \datecircaprint
217 \printtext[#2date]{%
218 \iffieldundef{#2season}{%
219 \ifboolexpr{
220 test {\iffieldsequal{labelyear}{labelendyear}}
221 and
222 test {\iffieldsequal{#2month}{#2endmonth}}
223 }{%
224 \csuse{mkbibdate#1}{#2day}%
225 }{%
226 \csuse{mkbibdate#1}{#2month}{#2day}%
227 }{%
228 \csuse{mkbibseasondate#1}{#2season}%
229 \dateuncertainprint
230 \iffieldundef{#2endmonth}{}%
231 \iffieldequalstr{#2endmonth}{}%
232 \mbox{\bibdaterangesep}%
233 }{%
234 \bibdaterangesep
235 \enddatecircaprint
236 \iffieldundef{#2season}{%
237 \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
238 }{%
239 \csuse{mkbibseasondate#1}{#2endseason}%
240 \enddateuncertainprint}}}%
241 }{%
242 \datecircaprint
243 \printtext[#2date]{%
244 \iffieldundef{#2season}{%
245 \iffieldsequal{#2year}{#2endyear}{%
246 \iffieldsequal{#2month}{#2endmonth}{%
247 \csuse{mkbibdate#1}{#2day}%
248 }{%
249 \csuse{mkbibdate#1}{#2month}{#2day}%
250 }{%
251 \csuse{mkbibdate#1}{#2year}{#2month}{#2day}%
252 \iffieldsequal{#2dateera}{#2enddateera}{}%
253 \dateeraprint{#2year}}}%
254 }{%
255 \iffieldsequal{#2year}{#2endyear}{%
256 \csuse{mkbibseasondate#1}{#2season}%
257 }{%
258 \csuse{mkbibseasondate#1}{#2year}{#2season}%
259 \iffieldsequal{#2dateera}{#2enddateera}{}%
260 \dateeraprint{#2year}}}%
261 \dateuncertainprint
262 \iffieldundef{#2endyear}{}%
263 \iffieldequalstr{#2endyear}{}%
264 \mbox{\bibdaterangesep}%
265 }{%
266 \bibdaterangesep
267 \enddatecircaprint
268 \iffieldundef{#2season}{%
269 \iffieldundef{#2endmonth}{%
270 \blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}%

```

```

271         }{%
272         \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
273     }{%
274     \csuse{mkbibseasondate#1}{#2endyear}{#2endseason}}%
275     \enddateuncertainprint
276     \dateeraprint{#2endyear}}}}}}

```

The extra commands, which print disambiguating labels, should only print those labels if the year is present, so the first conditional block is the same as for the non-extra commands above.

```

277 \DeclareRobustCommand*\mkdaterangefullextra[2]{%
278 \blx@metadateinfo{#2}%
279 \iffieldundef{#2year}{%
280 \iffieldundef{#2month}{}%
281 \datecircaprint
282 \printtext[#2date]{%
283 \iffieldundef{#2season}{%
284 \csuse{mkbibdate#1}{#2month}{#2day}%
285 \blx@printtime{#2}{}%
286 }{%
287 \csuse{mkbibseasondate#1}{#2season}}%
288 \dateuncertainprint
289 \iffieldundef{#2endmonth}{}%
290 \iffieldequalstr{#2endmonth}{}%
291 \mbox{\bibdaterangesep}%
292 }{%
293 \bibdaterangesep
294 \enddatecircaprint
295 \iffieldundef{#2season}{%
296 \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
297 \blx@printtime{#2}{end}%
298 }{%
299 \csuse{mkbibseasondate#1}{#2endseason}}%
300 \enddateuncertainprint}}}%
301 }{%
302 \datecircaprint
303 \printtext[#2date]{%
304 \printtext{%
305 \iffieldundef{#2season}{%
306 \csuse{mkbibdate#1}{#2year}{#2month}{#2day}%
307 \blx@printtime{#2}{}%
308 }{%
309 \csuse{mkbibseasondate#1}{#2year}{#2season}}%
310 \dateuncertainprint
311 \dateeraprint{#2year}%
312 \iffieldundef{#2endyear}{%
313 \printfield{extrayear}%
314 }{%
315 \iffieldequalstr{#2endyear}{}%
316 \printfield{extrayear}%
317 \printtext{\mbox{\bibdaterangesep}}%
318 }{%
319 \printtext{%
320 \bibdaterangesep
321 \enddatecircaprint
322 \iffieldundef{#2season}{%
323 \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
324 \blx@printtime{#2}{end}%
325 }{%
326 \csuse{mkbibseasondate#1}{#2endyear}{#2endseason}}%
327 \printfield{extrayear}%

```

```

328         \enddateuncertainprint
329         \dateeraprint{#2endyear}}}}}}
330
331 \DeclareRobustCommand*\mkdaterangetruncextra[2]{%
332 \blx@metadateinfo{#2}%
333 \iffieldundef{#2year}{%
334 \iffieldundef{#2month}}{%
335 \datecircaprint
336 \printtext[#2date]{%
337 \iffieldundef{#2season}{%
338 \iffieldsequal{#2month}{#2endmonth}{%
339 \csuse{mkbibdate#1}}{#2day}%
340 }{%
341 \csuse{mkbibdate#1}}{#2month}{#2day}}%
342 }{%
343 \csuse{mkbibseasondate#1}}{#2season}}%
344 \dateuncertainprint
345 \iffieldundef{#2endmonth}}{%
346 \iffieldequalstr{#2endmonth}}{%
347 \mbox{\bibdaterangesep}%
348 }{%
349 \bibdaterangesep
350 \enddatecircaprint
351 \iffieldundef{#2season}{%
352 \csuse{mkbibdate#1}}{#2endmonth}{#2endday}%
353 }{%
354 \csuse{mkbibseasondate#1}}{#2endseason}}%
355 \enddateuncertainprint}}}}%
356 }{%
357 \datecircaprint
358 \printtext[#2date]{%
359 \iffieldundef{#2season}{%
360 \iffieldsequal{#2year}{#2endyear}{%
361 \iffieldsequal{#2month}{#2endmonth}{%
362 \csuse{mkbibdate#1}}{#2day}%
363 }{%
364 \csuse{mkbibdate#1}}{#2month}{#2day}}%
365 }{%
366 \csuse{mkbibdate#1}}{#2year}{#2month}{#2day}%
367 \iffieldsequal{#2dateera}{#2enddateera}}{%
368 \dateeraprint{#2year}}}%
369 }{%
370 \iffieldsequal{#2year}{#2endyear}{%
371 \csuse{mkbibseasondate#1}}{#2season}%
372 }{%
373 \csuse{mkbibseasondate#1}}{#2year}{#2season}%
374 \iffieldsequal{#2dateera}{#2enddateera}}{%
375 \dateeraprint{#2year}}}}%
376 \dateuncertainprint
377 \iffieldundef{#2endyear}{%
378 \printfield{extrayear}%
379 }{%
380 \iffieldequalstr{#2endyear}}{%
381 \printfield{extrayear}%
382 \printtext{\mbox{\bibdaterangesep}}}%
383 }{%
384 \printtext{%
385 \bibdaterangesep
386 \enddatecircaprint
387 \iffieldundef{#2season}{%
388 \iffieldundef{#2endmonth}{%
389 \blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}%

```

```

390         }%
391         \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
392     }%
393     \csuse{mkbibseasondate#1}{#2endyear}{#2endseason}}%
394     \printfield{extrayear}%
395     \enddateuncertainprint
396     \dateeraprint{#2endyear}}}}}}

```

The labelyear falls back to pubstate if provided.

```

397 \DeclareLabeldate{%
398   \field{origdate}
399   \field{date}
400   \field{year}
401   \field{eventdate}
402   \field{pubstate}
403   \literal{nodate}
404 }

```

The extrayear string should be printed bare.

```

405 \DeclareFieldFormat{extrayear}{%
406   \iffieldundef{\thefield{labeldatesource}}{%
407     \iffieldnums{\thefield{labeldatesource}year}{~}%
408   }%
409   \iffieldnums{\thefield{labeldatesource}}{~}%
410 }%
411 \mkbibemph{\mknumalph{#1}}}%

```

2.3.3 BIBLIOGRAPHY FORMATTING

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

```

412 \DeclareFieldFormat{shorthandwidth}{#1}

```

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

```

413 \xpretonameformat{family-given}{%
414   \iffieldannotation{inferred}{\ifnumequal{\value{listcount}}{1}{\bibopenbracket}{}}%
415   \ifitemannotation{inferred}{\bibopenbracket}{}%
416 }{}%
417 \xpatchnameformat{family-given}{%
418   \usebibmacro{name:andothers}%
419 }{%
420   \ifitemannotation{pseudo}{%
421     \addspace\printtext[parens]{\bibsstring{pseudo}}%
422   }%
423   \ifitemannotation{inferred}{\bibclosebracket}{}%
424   \usebibmacro{name:andothers}%
425   \iffieldannotation{inferred}{%
426     \ifboolexpr{
427       test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
428       or
429       test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
430       or (
431         test {\ifnumequal{\value{listcount}}{\value{minnames}}}
432         and
433         test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}} )
434     }{\bibclosebracket}{}%

```

```

435     }{}%
436   }{}
437   \DeclareNameAlias{shortauthor}{family-given}
438   \DeclareNameAlias{shorteditor}{family-given}

```

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

```

439   \DeclareNameAlias{sortname}{family-given}
440   \DeclareNameAlias{author}{family-given}
441   \DeclareNameAlias{editor}{family-given}
442   \DeclareNameAlias{translator}{family-given}

```

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

```

443   \defbibenvironment{bibliography}
444     {\list
445       {}
446       {\setlength{\leftmargin}{\bibhang}%
447         \setlength{\itemindent}{-\leftmargin}%
448         \setlength{\itemsep}{\bibitemsep}%
449         \setlength{\parsep}{\bibparsep}}
450       {\endlist}
451       {\item}

```

The shorthand formatting is just like authoryear.

```

452   \defbibenvironment{shorthand}
453     {\list
454       {\printfield[shorthandwidth]{shorthand}}
455       {\setlength{\labelwidth}{\shorthandwidth}%
456         \setlength{\leftmargin}{\labelwidth}%
457         \setlength{\labelsep}{\biblabelsep}%
458         \addtolength{\leftmargin}{\labelsep}%
459         \setlength{\itemsep}{\bibitemsep}%
460         \setlength{\parsep}{\bibparsep}%
461         \renewcommand*{\makelabel}[1]{\##1\hss}}
462     {\endlist}
463     {\item}

```

2.3.4 NAME AND DATE FORMATTING

We set up hashing just as in authoryear.

```

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

```

We ensure related entries do not interfere with the hashing.

```

465   \xapptobibmacro{begrelated}{%
466     \booltrue{bbx@inset}}{}{}
467   \xapptobibmacro{endrelated}{%
468     \usebibmacro*{bbx:savehash}}{}{}

```

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

```

469 \xpatchbibmacro{author}{%
470   \iffielddundef{authortype}%
471 }{%
472   \usebibmacro{date+extrayear}%
473   \setunit*{\addspace}%
474   \iffielddundef{authortype}%
475 }{}{}%
476 \xpatchbibmacro{author}{%
477   \global\undef\bbx@lasthash
478 }{%
479   \global\undef\bbx@lasthash
480   \usebibmacro{labeltitle}%
481   \setunit*{\addspace}%
482   \usebibmacro{date+extrayear}%
483 }{}{}%

```

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.

```

484 \xpatchbibmacro{namepairs}{%
485   \printnames[by#1]%
486 }{%
487   \printnames[#1]%
488 }{}{}
489 \xpatchbibmacro{author+altauthor}{%
490   \printnames{author}%
491 }{%
492   \ifboolexpr{%
493     ( not test {\ifnameundef{shortauthor}} )
494     and
495     test {\ifnumequal{\value{shortauthor}}{\value{author}}}
496   }{%
497     \usebibmacro{namepairs}{author}{shortauthor}%
498   }{%
499     \printnames{author}%
500   }%
501 }{}{}%

```

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

```

502 \xpatchbibmacro{bbx:editor}{%
503   \usebibmacro{#1}%
504 }{%
505   \usebibmacro{date+extrayear}%
506   \setunit*{\addspace}%
507   \usebibmacro{#1}%
508 }{}{}%
509 \xpatchbibmacro{bbx:editor}{%
510   \global\undef\bbx@lasthash
511 }{%
512   \global\undef\bbx@lasthash
513   \usebibmacro{labeltitle}%
514   \setunit*{\addspace}%
515   \usebibmacro{date+extrayear}%
516 }{}{}%
517 \xpatchbibmacro{editor+alteditor}{%
518   \printnames[byeditor]%
519 }{%
520   \printnames[editor]%

```

```

521 }{}
522 \xpatchbibmacro{editor+altditor}{%
523   \printnames{editor}%
524 }{%
525   \ifboolexpr{%
526     ( not test {\ifnameundef{shorteditor}} )
527     and
528     test {\ifnumequal{\value{shorteditor}}{\value{editor}}}
529   }{%
530     \usebibmacro{namepairs}{editor}{shorteditor}%
531   }{%
532     \printnames{editor}%
533   }%
534 }{}%

```

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

```

535 \xpatchbibmacro{bbx:translator}{%
536   \global\undef\bbx@lasthash
537 }{%
538   \global\undef\bbx@lasthash
539   \usebibmacro{labeltitle}%
540   \setunit*\addspace%
541   \usebibmacro{date+extrayear}%
542 }{}%
543 \xpatchbibmacro{bbx:translator}{%
544   \usebibmacro{#1}%
545 }{%
546   \usebibmacro{date+extrayear}%
547   \setunit*\addspace%
548   \usebibmacro{#1}%
549 }{}%

```

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.

```

550 \newtoggle{blx@ox@clearedtitle}
551 \newbibmacro*{labeltitle}{%
552   \iffieldundef{label}{%
553     \iffieldundef{shorttitle}{%
554       \ifboolexpr{
555         test {\iffieldundef{title}}
556         and
557         test {\iffieldundef{subtitle}}
558       }{%
559         \printfield{library}%
560         \clearfield{library}%
561       }%
562       \printtext[title]{%
563         \printfield[titlecase]{title}%
564         \setunit{\subtitlepunct}%
565         \printfield[titlecase]{subtitle}}%
566       \clearfield{title}%
567       \clearfield{subtitle}%
568       \toggletrue{blx@ox@clearedtitle}%
569       \setunit{\addspace}%
570     }%
571   }%
572   \printtext[title]{\printfield[titlecase]{shorttitle}}%
573 }%

```

```

574 }{%
575   \printfield{label}%
576 }%
577 }

```

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

```

578 \xpretobibmacro{maintitle+title}{%
579   \iftoggle{blx@ox@clearedtitle}{%
580     \usebibmacro{maintitle+volume}%
581     \clearfield{maintitle}%
582     \clearfield{volume}%
583   }{%
584     {}{}
585     \DeclareFieldFormat[mvbook,mvcollection,mvreference,proceedings,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.

```

586 \xpatchbibdriver{online}{%
587   \iffieldundef{year}%
588 }{%
589   \iffieldundef{month}%
590 }{}{}

```

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

```

591 \DeclareFieldFormat[online,image]{citetitle}{\mkbibquote{#1\isdot}}
592 \DeclareFieldFormat[legislation,legal]{citetitle}{#1}
593 \DeclareFieldFormat[manuscript,unpublished]{citetitle}{%
594   \def\currentfield{title}%
595   \ifboolexpr{
596     test {\iffieldannotation{descriptor}}
597     or (
598       test {\iffieldundef{shorttitle}}
599       and
600       test {\iffieldundef{title}}
601     )
602   }{#1}{\mkbibquote{#1\isdot}}%
603   \undef\currentfield}

```

2.3.5 JOURNAL DIVISION FORMATTING

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

```

604 \renewcommand*{\bibpagespunct}{%
605   \ifboolexpr{
606     test {\ifentrytype{article}}
607     or
608     test {\ifentrytype{supperperiodical}}
609     or
610     test {\ifentrytype{review}}
611   }{%
612     \addcolon\space
613   }{%
614     \addcomma\space

```



```

615     }%
616 }

```

2.3.6 MANUSCRIPTS

The dates for manuscripts should not really be in parentheses, but it looks really odd to have them bare, when compared to other entries. As a compromise, we use square brackets.

```

617 \DeclareFieldFormat[manuscript]{datelabel}{\mkbibbrackets{#1}}
618 \DeclareFieldFormat[unpublished]{datelabel}{%
619     \iftoggle{blx@ox@ms}{\mkbibbrackets{#1}}{\mkbibparens{#1}}}
620 \renewbibmacro*{manuscript:date}{\usebibmacro{date}}

```

We include the library field as a fallback title.

```

621 \DeclareLabeltitle{%
622     \field{shorttitle}
623     \field{title}
624     \field{maintitle}
625     \field{library}
626 }

```

Citation styles

3.1 Notes style: oxnotes.cbx

The standard verbose style works without further adjustment.

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

3.2 Author–year style: oxyyear.cbx

The standard authoryear-comp style is a close match for what we need. We patch it with our version of year range compression.

```
20 \RequireCitationStyle{authoryear-comp}
21 \xpatchbibmacro{cite:labelyear+extrayear}{%
22   \printfield{labelendyear}%
23 }{%
24   \iffieldundef{extrayear}{%
25     \blx@ox@compyear
26     {\thefield{labelyear}}%
27     {\thefield{labelendyear}}%
28   }{%
29     \printfield{labelendyear}%
30   }{} }
```

We insert anonymous author handling into cite.

```
31 \xpatchbibmacro{cite}{%
32   \printnames{labelname}%
33 }{%
34   \ifbool{expr{
35     test {\iffieldequalstr{labelnamesource}{author}}
36     and
37     togl {blx@ox@autoanon}
38     and
39     test {\iffieldequals{rawauthor}{\oxrefanon}}
40   }}{
41     \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
42   }{
43     \printnames{labelname}%
44   }%
45 }
```

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.

```
46 \renewcommand*{\nameyear delim}{%  
47 \iffieldundef{\thefield{label datesource}year}%  
48 {\addcomma\space}%  
49 {\addspace}}  
50 \renewcommand*{\nonameyear delim}{%  
51 \iffieldundef{\thefield{label datesource}year}%  
52 {\addcomma\space}%  
53 {\addspace}}
```

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

```
54 \renewcommand*{\comp citedelim}{\addsemicolon\space}
```

The page reference postnote is given after a colon.

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

Data model adjustments

4.1 oxnotes.dbx and oxyyear.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}
```

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.

```
22 \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.

```
23 \DeclareDatamodelFields[type=list,datatype=name]{jointauthor}
24 \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’.

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

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

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

This data model helps with legal citations.

```
37 \DeclareDatamodelFields[type=field,datatype=date]{pardate}  
38 \DeclareDatamodelEntryfields[jurisdiction]{pardate}
```

Localization modules

5.1 English: english-oxref.lbx

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

```

20 \InheritBibliographyExtras{english}
21 \DeclareBibliographyExtras{%
22   \def\finalandcomma{\addcomma}%
23   \protected\def\mkusbibordinal#1{%
24     \begingroup
25     \@tempcnta0#1\relax\number\@tempcnta
26     \@whilenum\@tempcnta>100\do{\advance\@tempcnta-100\relax}%
27     \ifnum\@tempcnta>20
28       \@whilenum\@tempcnta>9\do{\advance\@tempcnta-10\relax}%
29     \fi
30     \ifcase\@tempcnta th\or st\or d\or d\else th\fi
31     \endgroup}%
32 }

```

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

```

33 \DeclareBibliographyStrings{%
34   inherit      = {english},

```

These are new strings defined by oxref:

- Roles expressed as functions

```

35   director      = {{director}}{dir\adddot}},
36   performer     = {{}},
37   reader        = {{reader}}{reader}},
38   conductor      = {{conductor}}{cond\adddot}},

```

- Roles expressed as actions

```

39   byperformer   = {{}},
40   bydirector    = {{directed by}}{dir\adddot}},
41   byreader      = {{read by}}{read by}},
42   byconductor   = {{conducted by}}{cond\adddot}},
43   byserieseditor = {{edited by}}{ed\adddot}},

```

- Publication details

```

44 facsimile      = {{facsimile edition}}{facs\addodotspace edn\addodot}},
45 revised       = {{revised edition}}{rev\addodotspace edn\addodot}},
46 revisedenlarged = {{revised and enlarged edition}}{rev\addodotspace ane enl\addodotspace
↪ edn\addodot}},
47 revisedreprint = {{revised reprint}}{rev\addodotspace repr\addodot}},
48 suppto        = {{Supplement to}}{Supplement to}},
49 equals        = {{=}}{=}},
50 original      = {{original}}{orig\addodot}},

```

- Publication state

```

51 impressin     = {{to be published in}}{to be published in}},

```

- Pagination

```

52 book          = {{book}}{bk\addodot}},
53 books         = {{books}}{bks\addodot}},
54 canto         = {{canto}}{canto}},
55 cantos        = {{cantos}}{cantos}},
56 stanza        = {{stanza}}{stanza}},
57 stanzas       = {{stanzas}}{stanzas}},
58 act           = {{Act}}{Act}},
59 acts          = {{Acts}}{Acts}},
60 scene         = {{Scene}}{Scene}},
61 scenes        = {{Scenes}}{Scenes}},
62 folio         = {{folio}}{fo\addodot}},
63 folios        = {{folios}}{fos\addodot}},
64 article       = {{article}}{art\addodot}},
65 articles      = {{articles}}{arts\addodot}},
66 clause        = {{clause}}{cl\addodot}},
67 clauses       = {{clauses}}{cls\addodot}},
68 regulation    = {{regulation}}{reg\addodot}},
69 regulations    = {{regulations}}{regs\addodot}},
70 rule          = {{rule}}{r\addodot}},
71 rules         = {{rules}}{rr\addodot}},

```

- Types

```

72 facebook     = {{Facebook post}}{Facebook post}},
73 tweet        = {{Twitter post}}{Twitter post}},
74 podcast      = {{podcast}}{podcast}},
75 clip         = {{video}}{video}},
76 webcast      = {{webcast}}{webcast}},
77 poster       = {{poster}}{poster}},

```

- Miscellaneous

```

78 nolocation    = {{no place}}{n\addodot p\addodot}},
79 recorded     = {{recorded}}{recorded}},
80 uploaded     = {{uploaded}}{uploaded}},

```

- Labels

```

81 anon         = {{Anonymous}}{Anon\addodot}},
82 pseudo       = {{Pseudo-}}{Ps\addodot-}},
83 urldown      = {{downloaded}}{downloaded}},

```

- These are borrowed from other styles.

```

84 1column      = {{one column}}{1\addnbspace col\adddot}},
85 2column      = {{two columns}}{2\addnbspace col\adddot}},
86 inflayer     = {{inferior layer}}{inf\adddotsspace lay\adddot}},
87 suplayer     = {{superior layer}}{sup\adddotsspace lay\adddot}},
88 paper        = {{paper}}{pap\adddot}},
89 papyrus      = {{papyrus}}{papy\adddot}},
90 parchment    = {{parchment}}{perg\adddot}},
91 eucase       = {{Case}}{Case}},
92 eujoinedcases = {{Joined Cases}}{Joined Cases}},
93 commissiondecision = {{Commission Decision}}{Commission Decision}},
94 application   = {{Application}}{App\adddot}},
95 order        = {{Order}}{Ord\adddot}},
96 bill         = {{Bill}}{Bill}},
97 draft        = {{draft}}{draft}},
98 opened       = {{opened for signature}}{opened for signature}},
99 signed       = {{signed}}{signed}},
100 adopted     = {{adopted}}{adopted}},
101 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).

```

102 byeditor      = {{edited by}}{ed\adddot}},
103 bycompiler    = {{compiled by}}{comp\adddot}},
104 byfounder     = {{founded by}}{found\adddot}},
105 bycontinuator = {{continued by}}{cont\adddot}},
106 byredactor    = {{redacted by}}{red\adddot}},
107 byreviser     = {{revised by}}{rev\adddot}},
108 byreviewer    = {{reviewed by}}{rev\adddot}},
109 bycollaborator = {{in collaboration with}}{in collab\adddotsspace with}},
110 bytranslator  = {{translated \lbox@lfromlang\ by}}{trans\adddot\ \lbox@sfromlang}},
111 bycommentator = {{commented by}}{comm\adddot}},
112 byannotator   = {{annotated by}}{annot\adddot}},
113 byeditortr    = {{edited and translated \lbox@lfromlang\ by}}%
114               {ed\adddotsspace and trans\adddot\ \lbox@sfromlang}},
115 byeditorco    = {{edited and commented by}}%
116               {ed\adddotsspace and comm\adddot}},
117 byeditoran    = {{edited and annotated by}}%
118               {ed\adddotsspace and annot\adddot}},
119 byeditorin    = {{edited, with an introduction, by}}%
120               {ed.\adddotsspace with introduction}},
121 byeditorfo    = {{edited, with a foreword, by}}%
122               {ed.\adddotsspace with foreword}},
123 byeditoraf    = {{edited, with an afterword, by}}%
124               {ed.\adddotsspace with afterword}},
125 byeditortrco  = {{edited, translated \lbox@lfromlang\finalandcomma\ and commented by}}%
126               {ed.,\addabbrvspace trans\adddot\ \lbox@sfromlang\finalandcomma\ and
               ↪ comm\adddot}},
127 byeditortran  = {{edited, translated \lbox@lfromlang\finalandcomma\ and annotated by}}%
128               {ed.,\addabbrvspace trans\adddot\ \lbox@sfromlang\finalandcomma\ and
               ↪ annot\adddot}},
129 byeditortrin  = {{edited and translated \lbox@lfromlang, with an introduction, by}}%
130               {with introduction, ed\adddotsspace and trans\adddot\ \lbox@sfromlang}},
131 byeditortrfo  = {{edited and translated \lbox@lfromlang, with a foreword, by}}%
132               {with foreword, ed\adddotsspace and trans\adddot\ \lbox@sfromlang}},
133 byeditortraf  = {{edited and translated \lbox@lfromlang, with an afterword, by}}%
134               {with afterword, ed\adddotsspace and trans\adddot\ \lbox@sfromlang}},

```



```

135 byeditorcoin = {{edited and commented, with an introduction, by}%
136               {with introduction, ed\adddotsspace and comm\adddot}},
137 byeditorcofo = {{edited and commented, with a foreword, by}%
138               {with foreword, ed\adddotsspace and comm\adddot}},
139 byeditorcoaf = {{edited and commented, with an afterword, by}%
140               {with afterword, ed\adddotsspace and comm\adddot}},
141 byeditoranin = {{edited and annotated, with an introduction, by}%
142               {with introduction, ed\adddotsspace and annot\adddot}},
143 byeditoranfo = {{edited and annotated, with a foreword, by}%
144               {with foreword, ed\adddotsspace and annot\adddot}},
145 byeditoranaf = {{edited and annotated, with an afterword, by}%
146               {with afterword, ed\adddotsspace and annot\adddot}},
147 byeditortrcoin = {{edited, translated \lbox@lfromlang\finalandcomma\ and commented, with
148   ↪ an introduction, by}%
149               {with introduction, ed.,\addabrvspace trans\adddot\
150   ↪ \lbox@sfromlang\finalandcomma\ and comm\adddot}},
151 byeditortrcofo = {{edited, translated \lbox@lfromlang\finalandcomma\ and commented, with a
152   ↪ foreword, by}%
153               {with foreword, ed.,\addabrvspace trans\adddot\
154   ↪ \lbox@sfromlang\finalandcomma\ and comm\adddot}},
155 byeditortrcoaf = {{edited, translated \lbox@lfromlang\finalandcomma\ and commented, with
156   ↪ an afterword, by}%
157               {with afterword, ed.,\addabrvspace trans\adddot\
158   ↪ \lbox@sfromlang\finalandcomma\ and comm\adddot}},
159 byeditortranin = {{edited, translated \lbox@lfromlang\finalandcomma\ and annotated, with
160   ↪ an introduction, by}%
161               {with introduction, ed.,\addabrvspace trans\adddot\
162   ↪ \lbox@sfromlang\finalandcomma\ and annot\adddot}},
163 byeditortranfo = {{edited, translated \lbox@lfromlang\finalandcomma\ and annotated, with a
164   ↪ foreword, by}%
165               {with foreword, ed.,\addabrvspace trans\adddot\
166   ↪ \lbox@sfromlang\finalandcomma\ and annot\adddot}},
167 byeditortranaf = {{edited, translated \lbox@lfromlang\finalandcomma\ and annotated, with
168   ↪ an afterword, by}%
169               {with afterword, ed.,\addabrvspace trans\adddot\
170   ↪ \lbox@sfromlang\finalandcomma\ and annot\adddot}},
171 bytranslatorco = {{translated \lbox@lfromlang\ and commented by}%
172               {trans\adddot\ \lbox@sfromlang\ and comm\adddot}},
173 bytranslatoran = {{translated \lbox@lfromlang\ and annotated by}%
174               {trans\adddot\ \lbox@sfromlang\ and annot\adddot}},
175 bytranslatorin = {{translated \lbox@lfromlang, with an introduction, by}%
176               {trans\adddot\ \lbox@sfromlang\ with introduction}},
177 bytranslatorfo = {{translated \lbox@lfromlang, with a foreword, by}%
178               {trans\adddot\ \lbox@sfromlang\ with foreword}},
179 bytranslatoraf = {{translated \lbox@lfromlang, with an afterword, by}%
180               {trans\adddot\ \lbox@sfromlang\ with afterword}},
181 bytranslatorcoin = {{translated \lbox@lfromlang\ and commented, with an introduction, by}%
182               {with introduction, trans\adddot\ \lbox@sfromlang\ and comm\adddot}},
183 bytranslatorcofo = {{translated \lbox@lfromlang\ and commented, with a foreword, by}%
184               {with foreword, trans\adddot\ \lbox@sfromlang\ and comm\adddot}},
185 bytranslatorcoaf = {{translated \lbox@lfromlang\ and commented, with an afterword, by}%
186               {with afterword, trans\adddot\ \lbox@sfromlang\ and comm\adddot}},
187 bytranslatoranin = {{translated \lbox@lfromlang\ and annotated, with an introduction, by}%
188               {with introduction, trans\adddot\ \lbox@sfromlang\ and annot\adddot}},
189 bytranslatoranfo = {{translated \lbox@lfromlang\ and annotated, with a foreword, by}%
190               {with foreword, trans\adddot\ \lbox@sfromlang\ and annot\adddot}},
191 bytranslatoranaf = {{translated \lbox@lfromlang\ and annotated, with an afterword, by}%
192               {with afterword, trans\adddot\ \lbox@sfromlang\ and annot\adddot}},

```

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

```

181   withinintroduction = {{with an introduction by}}{with an introduction by}},
182   withcommentator    = {{with a commentary by}}{with a commentary by}},
183   withannotator      = {{with annotations by}}{with annotations by}},
184   withinintroduction = {{with an introduction by}}{with an introduction by}},
185   withforeword       = {{with a foreword by}}{with a foreword by}},
186   withafterword      = {{with an afterword by}}{with an afterword by}},
187   introduction       = {{introduction}}{introduction}},

```

The abbreviations for some publication details are different.

```

188   newseries          = {{new series}}{\mkbibacro{NS}},
189   oldseries          = {{old series}}{\mkbibacro{OS}},
190   edition            = {{edition}}{edn\adddot}},
191   reprint            = {{reprint\nopunct}}{repr\adddot\nopunct}},
192   reviewof           = {{review of}}{review of}},
193   reprintas          = {{reprinted as}}{repr\adddot\space as}},
194   reprintfrom        = {{from}}{from}},
195   translationas      = {{English translation as}}{Eng\adddot\space trans\adddot\space as}},
196   origpubin         = {{originally published in}}{originally pub\adddot}},

```

There is also a different abbreviation for ‘paragraph’.

```

197   paragraph          = {{paragraph}}{para\adddot}},
198   paragraphs         = {{paragraphs}}{paras\adddot}},

```

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

```

199   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.

```

200   idem               = {{idem}}{id\adddot}},
201   idemsm             = {{idem}}{id\adddot}},
202   idemsf             = {{eadem}}{ead\adddot}},
203   idemsn             = {{idem}}{id\adddot}},
204   idempm             = {{eidem}}{eid\adddot}},
205   idempf             = {{eadem}}{eaid\adddot}},
206   idempn             = {{eadem}}{ead\adddot}},
207   idemp              = {{eidem}}{eid\adddot}},
208   citedas            = {{henceforth}}{henceforth}},
209   thiscite           = {{at}}{at}},

```

Languages are abbreviated.

```

210   langamerican       = {{English}}{Eng\adddot}},
211   langbrazilian      = {{Brazilian}}{Braz\adddot}},
212   langcatalan        = {{Catalan}}{Catal\adddot}},
213   langcroatian       = {{Croatian}}{Croat\adddot}},
214   langczech          = {{Czech}}{Czech}},
215   langdanish         = {{Danish}}{Dan\adddot}},
216   langdutch          = {{Dutch}}{Dutch}},
217   langenglish        = {{English}}{Eng\adddot}},
218   langestonian       = {{Estonian}}{Eston\adddot}},
219   langfinnish        = {{Finnish}}{Finn\adddot}},
220   langfrench         = {{French}}{Fr\adddot}},
221   langgerman         = {{German}}{Ger\adddot}},
222   langgreek          = {{Greek}}{Gr\adddot}},
223   langitalian        = {{Italian}}{It\adddot}},

```

```

224   langlatin      = {{Latin}}{Lat\addot}},
225   langnorwegian = {{Norwegian}}{Norw\addot}},
226   langpolish    = {{Polish}}{Pol\addot}},
227   langportuguese = {{Portuguese}}{Port\addot}},
228   langrussian   = {{Russian}}{Russ\addot}},
229   langslovene   = {{Slovene}}{Slov\addot}},
230   langspanish   = {{Spanish}}{Sp\addot}},
231   langswedish   = {{Swedish}}{Swed\addot}},
232 }

```

5.2 British English: british-oxref.lbx

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

```

20   \InheritBibliographyExtras{british}
21   \DeclareBibliographyExtras{%
22     \protected\def\mkbibdatelong#1#2#3{%
23       \iffieldundef{#3}
24       {}
25       {\stripzeros{\thefield{#3}}}%
26       \iffieldundef{#2}{}{\nobreakspace}}%
27     \iffieldundef{#2}
28     {}
29     {\mkbibmonth{\thefield{#2}}}%
30     \iffieldundef{#1}{}{\space}}%
31     \stripzeros{\thefield{#1}}}%
32     \def\finalandcomma{\addcomma}%
33     \def\bibtimesep{\addperiod}%
34   }

```

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

```

35   \DeclareBibliographyStrings{%
36     inherit      = {english-oxref},
37     am           = {{a\addot m\addot}}{a\addot m\addot}},
38     pm           = {{p\addot m\addot}}{p\addot m\addot}},
39   }

```

5.3 American English: american-oxref.lbx

```

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

```