

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;
- oxnum: a style similar to the standard numeric, intended for use with numeric in-text citation labels;
- oxalph: a style similar to the standard alphabetic, intended for use with alphabetic in-text citation labels;
- oxyear: a style similar to the standard authoryear, intended for use with parenthetical in-text citations.

1.1 Quick start

The styles are self-contained, so you can load them with biblatex:

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

```
1 \usepackage[style=oxalph]{biblatex}
```

```
1 \usepackage[style=oxnum]{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`, `oxnum-doc.pdf`, `oxalph-doc.pdf`, and `oxyear-doc.pdf` respectively.

1.2 Installation

1.2.1 DEPENDENCIES

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

1.2.2 MANAGED WAY

The latest stable release of the biblatex-oxref bundle has been packaged for TeX Live and MiKTeX. If you are running TeX Live and have `tlmgr` installed, you can install the bundle simply by running `tlmgr install biblatex-oxref`. If you are running MiKTeX, you can install the bundle by running `mpm --install=biblatex-oxref`. Both `tlmgr` and `mpm` have GUI versions that you might find friendlier.

1.2.3 AUTOMATED WAY

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

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

1.2.4 MANUAL WAY

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

1. Run `luatex oxref.dtx` to generate the source files. (You can safely skip this step if you are confident about step 2.)
2. Compile `oxref.dtx`, `oxnotes-doc.tex`, `oxyear-doc.tex`, and `oxnum-doc.tex` with LuaLaTeX and Biber to generate the documentation. You will need to enable shell escape so that minted can typeset the listings.
3. Move the files to your TeX tree as follows:
 - `source/latex/biblatex-oxref`: `oxref.dtx`, `(oxref.ins)`
 - `tex/latex/biblatex-oxref`: `american-oxref.lbx`, `british-oxref.lbx`, `english-oxref.lbx`, `oxalph.bbx`, `oxalph.cbx`, `oxalph.dbx`, `oxnotes.bbx`, `oxnotes.cbx`, `oxnotes.dbx`, `oxnum.bbx`, `oxnum.cbx`, `oxnum.dbx`, `oxref.bbx`, `oxyear.bbx`, `oxyear.cbx`, `oxyear.dbx`
 - `doc/latex/biblatex-oxref`: `README.md`, `oxalph-doc.pdf`, `oxalph-doc.tex`, `oxnotes-doc.pdf`, `oxnotes-doc.tex`, `oxnum-doc.pdf`, `oxnum-doc.tex`, `oxref.bib`, `oxref.pdf`, `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 2016–2018 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 British and American English. Adapted language files have the following suffix.

```
23 \DeclareLanguageMappingSuffix{-oxref}
```

We provide some additional bibliography strings:

- roles expressed as functions;

```
24 \NewBibliographyString{%
25   director, performer, reader, conductor,
```

- roles expressed as actions;

```
26   bydirector, byperformer, byreader, byconductor, byserieseditor,
```

- publication details;

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

- publication state;

28 `inpressin,`

- pagination;

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

- types;

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

- miscellaneous;

36 `nolocation, modified, recorded, uploaded,`

- labels;

37 `anon, pseudo, urldown,`

- borrowed from other styles.

38 `1column, 2column, inflayer, suplayer, paper, papyrus, parchment,`
 39 `eucause, eujoinedcases, commissiondecision, application,`
 40 `order, bill, draft, opened, signed, adopted, inforce,`
 41 `}`

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.

42 `\RequireBibliographyStyle{standard}`
 43 `\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, while `\recordseriespunct` is used for audiovisual resources.

44 `\renewcommand*{\labelnamepunct}{\addcomma\space}`
 45 `\renewcommand*{\newunitpunct}{\addcomma\space}`
 46 `\renewcommand*{\subtitlepunct}{\addcolon\space}`
 47 `\renewcommand*{\intitlepunct}{\nopunct\space}`
 48 `\renewcommand*{\bibnamedash}{\resizebox{2em}{\height}{\textemdash}\addthinspace}`
 49 `\newcommand*{\recordseriespunct}{\addcomma\space}`
 50 `\newcommand*{\relatedtypepunct}{\addsemicolon\space}`
 51 `\renewcommand*{\relateddelim}{\addsemicolon\space}`
 52 `\DeclareDelimFormat{revsdnamedelim}{\addcomma}`
 53 `\DeclareDelimFormat{authortypedelim}{\addspace}`
 54 `\DeclareDelimFormat{editortypedelim}{\addspace}`
 55 `\DeclareDelimFormat{translatortypedelim}{\addspace}`

2.1.2 NAMES

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

```
56 \DeclareNameAlias{bookauthor}{default}
57 \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.

```
58 \newtoggle{blx@ox@scnames}
59 \DeclareBibliographyOption[boolean]{scnames}[true]{%
60   \settoggle{blx@ox@scnames}{#1}
61 }
```

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.

```
62 \newtoggle{blx@ox@nametitle}\toggletrue{blx@ox@nametitle}%
63 \DeclareBibliographyOption[boolean]{usenametitles}[true]{%
64   \settoggle{blx@ox@nametitle}{#1}}
65 \DeclareEntryOption[boolean]{usenametitles}[true]{%
66   \settoggle{blx@ox@nametitle}{#1}}
```

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

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

Here is the one for inverted name order.

```
79 \newbibmacro*{name:family-title-given}[5]{%
80   \ifuseprefix{%
81     \usebibmacro{name:delim}{#3#1}%
82     \usebibmacro{name:hook}{#3#1}%
83     \ifdefvoid{#3}{}{%
84       \ifcapital{%
85         \mkbibnameprefix{\MakeCapital{#3}}\isdot
86       }{%
87         \mkbibnameprefix{#3}\isdot}%
88     \ifprefchar{}{\bibnamedelimc}}%
89   \mkbibnamefamily{#1}\isdot
90   \ifdefvoid{#4}{}{\ifnumeral{#4}{}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%
91   \ifboolexpe{%
92     (test {\ifdefvoid{#5}} or not togl {blx@ox@nametitle})
```

```

93     and
94     test {\ifdefvoid{#2}}%
95   }{}{%
96     \revsdnamepunct}%
97   \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\bibnamedelimd\mkbibnametitle{#5}\isdot}{}}%
98   \ifdefvoid{#2}{}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
99 }{%
100   \usebibmacro{name:delim}{#1}%
101   \usebibmacro{name:hook}{#1}%
102   \mkbibnamefamily{#1}\isdot
103   \ifdefvoid{#4}{}{\bibnamedelimd\mkbibnamesuffix{#4}\isdot}%
104   \ifboolexpe{%
105     (test {\ifdefvoid{#5}} or not togl {blx@ox@nametitle})
106     and
107     test {\ifdefvoid{#2}}
108     and
109     test {\ifdefvoid{#3}}%
110   }{}{%
111     \revsdnamepunct}%
112   \ifdefvoid{#5}{}{\iftoggle{blx@ox@nametitle}{\bibnamedelimd\mkbibnametitle{#5}\isdot}{}}%
113   \ifdefvoid{#2}{}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
114   \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.

```

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

```

```

148     \bibsstring{pseudo}%
149   }}%
150 }{}%
151 \iftoggle{blx@ox@scnames}{%
152   \renewcommand*{\mkbibnamefamily}[1]{##1}%
153   \renewcommand*{\mkbibnamegiven}[1]{##1}%
154   \renewcommand*{\mkbibnameprefix}[1]{##1}%
155   \renewcommand*{\mkbibnamesuffix}[1]{##1}%
156   \renewcommand*{\mkbibnametitle}[1]{##1}%
157 }{}%
158 }{%
159   \ifgiveninits{%
160     \usebibmacro{name:title-given-family}%
161     {\ifitemannotation{pseudo}{\biblstring{pseudo}}{\namepartfamily}}%
162     {\namepartgiveni}%
163     {\namepartprefix}%
164     {\namepartsuffix}%
165     {\nameparttitle}%
166   }{%
167     \usebibmacro{name:title-given-family}%
168     {\ifitemannotation{pseudo}{\biblstring{pseudo}}{\namepartfamily}}%
169     {\namepartgiven}%
170     {\namepartprefix}%
171     {\namepartsuffix}%
172     {\nameparttitle}%
173   }%
174   \savefield{hash}{\blx@ox@lasthash}%
175 }%
176 \ifitemannotation{inferred}{\bibclosebracket}{}%
177 \usebibmacro{name:andothers}%
178 \iffieldannotation{inferred}{%
179   \ifboolexpr{
180     test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
181     or
182     test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
183     or (
184       test {\ifnumequal{\value{listcount}}{\value{minnames}}}
185       and
186       test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}}
187     )
188   }{\bibclosebracket}{}%
189 }{}%
190 }

```

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`.

```

191 \newtoggle{blx@ox@variantname}
192 \DeclareNameFormat{given-family}{%
193   \ifgiveninits
194     {\usebibmacro{name:title-given-family}
195      {\namepartfamily}
196      {\namepartgiveni}
197      {\namepartprefix}
198      {\namepartsuffix}
199      {\nameparttitle}}
200     {\usebibmacro{name:title-given-family}
201      {\namepartfamily}
202      {\namepartgiven}
203      {\namepartprefix}

```

```

204     {\namepartsuffix}
205     {\nameparttitle}}%
206 \savefield{hash}{\blx@ox@lasthash}%
207 \ifitemannotation{variant}{%
208     \global\settoggle{blx@ox@variantname}{true}%
209 }{%
210     \global\settoggle{blx@ox@variantname}{false}}%
211 \usebibmacro{name:andothers}}

```

We do likewise for the regular family-given format.

```

212 \DeclareNameFormat{family-given}{%
213     \ifgiveninits
214     {\usebibmacro{name:family-title-given}
215         {\namepartfamily}
216         {\namepartgiveni}
217         {\namepartprefix}
218         {\namepartsuffix}
219         {\nameparttitle}}
220     {\usebibmacro{name:family-title-given}
221         {\namepartfamily}
222         {\namepartgiven}
223         {\namepartprefix}
224         {\namepartsuffix}
225         {\nameparttitle}}%
226 \savefield{hash}{\blx@ox@lasthash}%
227 \ifitemannotation{variant}{%
228     \global\settoggle{blx@ox@variantname}{true}%
229 }{%
230     \global\settoggle{blx@ox@variantname}{false}}%
231 \usebibmacro{name:andothers}}

```

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

```

232 \xpatchbibmacro{name:given-family}%
233     {\bibnamedelimd\mkbibnamesuffix{#4}}%
234     {\ifnumeral{#4}{\addcomma}\bibnamedelimd\mkbibnamesuffix{#4}}{}
235 \xpatchbibmacro{name:family-given}%
236     {\bibnamedelimd\mkbibnamesuffix{#4}}%
237     {\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).

```

238 \DeclareFieldFormat{nameaddon}{\mkbibbrackets{#1}}
239 \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.

```

240 \newcounter{namepairs}
241 \newsavebox{\blx@ox@namebox}
242 \newsavebox{\blx@ox@altnamebox}
243 \newbibmacro*{namepairs}[2]{%
244   \setcounter{namepairs}{0}%
245   \savebibmacro{name:andothers}%
246   \renewbibmacro*{name:andothers}{}%
247   \whileboolexpr{%
248     test {\ifnumless{\value{namepairs}}{\value{#1}}}
249     and (
250       test {\ifdefvoid{\c@maxnames}}
251       or
252       test {\ifnumequal{\c@maxnames}{0}}
253       or
254       test {\ifnumless{\value{#1}}{\c@maxnames}}
255       or
256       test {\ifnumequal{\value{#1}}{\c@maxnames}}
257       or
258       test {\ifdefvoid{\c@minnames}}
259       or
260       test {\ifnumequal{\c@minnames}{0}}
261       or
262       test {\ifnumless{\value{namepairs}}{\c@minnames}}
263     )
264   }{%
265     \stepcounter{namepairs}%
266     \ifnumgreater{\value{namepairs}}{1}{%
267       \ifnumequal{\value{#1}}{2}{%
268         \setunit*{\addspace\bibstring{and}\addspace}%
269       }{%
270         \ifnumequal{\value{namepairs}}{\value{#1}}{%
271           \setunit*{\addcomma\space\bibstring{and}\addspace}%
272         }{%
273           \setunit*{\addcomma\space}%
274         }%
275       }%
276     }{%
277       \savebox{\blx@ox@namebox}{%
278         \printnames[#1][\value{namepairs}]{\value{namepairs}}{#1}%
279       }%
280       \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.

```

281 \IfEndWith{#2}{addon}{%
282   \savebox{\blx@ox@altnamebox}{%
283     \printnames[by#1][\value{namepairs}]{\value{namepairs}}{#2}%
284   }%
285   \let\blx@ox@secondhash=\blx@ox@lasthash
286   \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
287     \unhbox\blx@ox@namebox
288   }{%
289     \unhbox\blx@ox@namebox\addspace
290     \iftoggle{blx@ox@variantname}{%
291       \ifbibliography{%
292         ↪ \printtext[namevariant]{\printnames[#1][\value{namepairs}]{\value{namepairs}}{#2}}%
293       }{%
294         \printtext[nameaddon]{\unhbox\blx@ox@altnamebox}%
295       }

```

```

296     }%
297 }%

```

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.

```

298   }%
299   \savebox{\blx@ox@altnamebox}{%
300     \printnames[#1]{\value{namepairs}}-\value{namepairs}}{#2}%
301   }%
302   \let\blx@ox@secondhash=\blx@ox@lasthash
303   \ifdefstrequal{\blx@ox@firsthash}{\blx@ox@secondhash}{%
304     \unhbox\blx@ox@namebox
305   }{%
306     \unhbox\blx@ox@altnamebox
307     \addspace\mkbibparens{\unhbox\blx@ox@namebox}%
308   }%
309 }%
310 }%

```

Now we return to common code.

```

311 \ifboolexpr{
312   test {\ifnumequal{\value{namepairs}}{\c@minnames}}
313   and
314   test {\ifnumgreater{\value{#1}}{\c@maxnames}}
315 }{%
316   \ifnumgreater{\c@minnames}{1}{%
317     \finalandcomma
318   }{}%
319   \printdelim{andothersdelim}\bibstring{andothers}%
320 }{%
321   \restorebibmacro{name:andothers}%
322 }

```

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

```

323 \newbibmacro*{author+altauthor}{%
324   \ifboolexpr{
325     test {\ifnameundef{authoraddon}}
326     and
327     test {\ifnameundef{jointauthor}}
328   }{%
329     \printnames{author}%
330   }{%
331     \ifnumequal{\value{authoraddon}}{\value{author}}{%
332       \usebibmacro{namepairs}{author}{authoraddon}%
333     }{%
334       \printnames{author}%
335       \ifnameundef{authoraddon}{}%
336       \setunit*{\addspace}%
337       \printtext[nameaddon]{\printnames[byauthor]{authoraddon}}}%
338     }%
339     \ifnameundef{jointauthor}{}%
340     \setunit{\addcomma\space}%
341     \iffieldundef{jointauthortype}{%
342       \bibstring{byeditor}%
343     }{%
344       \printfield{jointauthortype}%

```

```

345     \setunit{\addspace}%
346     \printnames[author]{jointauthor}%
347   }%
348 }%
349 }
350 \DeclareFieldFormat{jointauthortype}{%
351   \ifbibstring{by#1}{\bibstring{by#1}}{#1}}

```

This is the (simpler) implementation for editors.

```

352 \newbibmacro*{editor+alteditor}{%
353   \ifnameundef{editoraddon}{%
354     \printnames{editor}%
355   }{
356     \ifnumequal{\value{editoraddon}}{\value{editor}}{%
357       \usebibmacro{namepairs}{editor}{editoraddon}%
358     }{%
359       \printnames{editor}%
360       \setunit*\addspace%
361       \printtext[nameaddon]{\printnames[byeditor]{editoraddon}}%
362     }%
363   }%
364 }

```

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`.

```

365 \newbibmacro*{bbx:savehash}{}
366 \DeclareBibliographyOption{dashed}[true]{%
367   \ifstrequal{#1}{true}{%
368     \ExecuteBibliographyOptions{pagetracker}%
369     \renewbibmacro*{bbx:savehash}{\savefield{fullhash}{\bbx@lasthash}}%
370   }%
371   \renewbibmacro*{bbx:savehash}{}%
372 }%
373 }
374 \InitializeBibliographyStyle{%
375   \global\undef\bbx@lasthash}
376 \newbibmacro*{bbx:dashcheck}[2]{%
377   \ifboolexpr{
378     test {\iffieldequals{fullhash}{\bbx@lasthash}}
379     and
380     not test \iffirstonpage
381     and
382     (
383       not bool {bbx@inset}
384       or
385       test {\iffieldequalstr{entrysetcount}{1}}
386     )
387   }{#1}{#2}%
388 }

```

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

```

389 \newbool{bbx@inset}
390 \DeclareBibliographyDriver{set}{%
391   \booltrue{bbx@inset}%
392   \entryset{}%

```

```

393 \newunit\newblock
394 \usebibmacro{setpageref}%
395 \finentry}

```

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

```

396 \newtoggle{blx@ox@autoanon}
397 \newtoggle{blx@ox@abbranon}
398 \DeclareBibliographyOption[string]{anon}[short]{%
399 \ifcsdef{blx@ox@opt@anon@#1}{%
400 \csuse{blx@ox@opt@anon@#1}%
401 }{%
402 \PackageError{oxref}
403 {Invalid option 'anon=#1'}
404 {Valid values are 'long', 'short', and 'literal'.}}%
405 \csdef{blx@ox@opt@anon@literal}{\togglefalse{blx@ox@autoanon}}
406 \csdef{blx@ox@opt@anon@long}{\toggletrue{blx@ox@autoanon}\togglefalse{blx@ox@abbranon}}
407 \csdef{blx@ox@opt@anon@short}{\toggletrue{blx@ox@autoanon}\toggletrue{blx@ox@abbranon}}

```

We copy the author to rawauthor for easier testing.

```

408 \DeclareStyleSourceMap{
409 \maps[datatype=bibtex]{%
410 \map{%
411 \step[fieldsource=author]%
412 \step[fieldset=rawauthor, origfieldval]%
413 }
414 }%
415 }

```

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).

```

416 \newcommand*{\oxrefanon}{Anonymous}
417 \newtoggle{blx@ox@isanon}
418 \renewbibmacro*{author}{%
419 \iffieldequals{rawauthor}{\oxrefanon}{%
420 \toggletrue{blx@ox@isanon}%
421 }{%
422 \togglefalse{blx@ox@isanon}}%
423 \ifbool{expr}{
424 test \ifuseauthor
425 and
426 ( not test {\ifnameundef{author}} )
427 and (
428 ( not togl {blx@ox@isanon} )
429 or
430 ( not togl {blx@ox@autoanon} )
431 or
432 test {\ifbibliography}
433 )
434 }
435 {\usebibmacro{bbx:dashcheck}

```



```

436     {\bibnamedash}
437     {\usebibmacro{bbx:savehash}}%
438     \ifbool{expr{
439         togl {blx@ox@autoanon}
440         and
441         togl {blx@ox@isanon}
442     }}{
443         \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
444     }{
445         \usebibmacro{author+altauthor}%
446     }%
447     \iffieldundef{nameaddon}
448     {}
449     {\setunit{\addspace}}%
450     \printfield{nameaddon}}%
451     \setunit{\printdelim{authortypedelim}}}%
452     \iffieldundef{authortype}
453     {}
454     {\usebibmacro{authorstrg}}%
455     \setunit{\addspace}}}%
456     {\global\undef\bbx@lasthash}}
457     \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 similar to the normal one except we delegate printing editor names to `editor+alteditor`, and we don't yet add the year label.

```

458     \renewbibmacro*{editor}{%
459         \usebibmacro{bbx:editor}{editorstrg}}
460     \renewbibmacro*{editor+others}{%
461         \usebibmacro{bbx:editor}{editor+othersstrg}}
462     \newbibmacro*{bbx:editor}[1]{%
463         \ifbool{expr{
464             test \ifuseeditor
465             and
466             not test {\ifnameundef{editor}}
467         }}{
468             {\usebibmacro{bbx:dashcheck}
469             {\bibnamedash}
470             {\usebibmacro{editor+alteditor}}%
471             \setunit{\printdelim{editortypedelim}}%
472             \usebibmacro{bbx:savehash}}%
473             \usebibmacro{#1}%
474             \clearname{editor}}
475             {\global\undef\bbx@lasthash}}
476     \DeclareFieldFormat{editortype}{\mkbibparens{#1}}

```

We do the same for `translator` as well.

```

477     \renewbibmacro*{translator}{%
478         \usebibmacro{bbx:translator}{translatorstrg}}
479     \renewbibmacro*{translator+others}{%
480         \usebibmacro{bbx:translator}{translator+othersstrg}}
481     \newbibmacro*{bbx:translator}[1]{%
482         \ifbool{expr{
483             test \ifusetranslator
484             and
485             not test {\ifnameundef{translator}}
486         }}{
487             {\usebibmacro{bbx:dashcheck}
488             {\bibnamedash}

```

```

489     {\printnames{translator}%
490      \setunit{\printdelim{translatortypedelim}}}%
491     \usebibmacro{bbx:savehash}%
492     \usebibmacro{#1}%
493     \clearname{translator}%
494     \setunit{\addspace}%
495     {\global\undef\bbx@lasthash}}
496 \xpatchbibmacro{translatorstrg}%
497 {\bibstring}%
498 {\bibstring[\mkbibparens]}{}{}%
499 \xpatchbibmacro{translator+othersstrg}%
500 {\bibstring}%
501 {\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).

```

502 \renewbibmacro*{bybookauthor}{%
503   \ifnamesequal{author}{bookauthor}%
504   {\bibstring{idem\thefield{gender}}}%
505   {\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.

```

506 \newbibmacro*{bookeditor}{%
507   \global\undef\bbx@lasthash
508   \ifboolexpr{
509     test \ifuseeditor
510     and
511     not test {\ifnameundef{editor}}
512   }{%
513     \ifnamesequal{author}{editor}{%
514       \bibstring{idem\thefield{gender}}%
515       \setunit{\addspace}%
516       \usebibmacro{editor+othersstrg}%
517       \clearname{editor}%
518     }{%
519       \printnames[bookeditor]{editor}%
520       \setunit*\addspace%
521       \usebibmacro{editor+othersstrg}%
522       \clearname{editor}%
523     }%
524   }{}

```

We provide a macro for printing series editors.

```

525 \newbibmacro*{byserieseditor}{%
526   \ifnameundef{serieseditor}
527   {}
528   {\usebibmacro{bytypestrg}{serieseditor}{serieseditor}%
529     \setunit{\addspace}%
530     \printnames[byeditor]{serieseditor}%
531     \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.

```

532 \renewbibmacro*{title}{%
533   \ifboolexpr{
534     test {\iffieldundef{title}}
535     and
536     test {\iffieldundef{subtitle}}
537   }
538   {}
539   {\printtext[title]{%
540     \printfield[titlecase]{title}%
541     \setunit{\subtitlepunct}%
542     \printfield[titlecase]{subtitle}%
543     \setunit{\addspace}%
544     \usebibmacro{origtitle}%
545     \setunit*\addspace%
546     \printfield{titleaddon}%
547     \iffieldequalstr{relatedtype}{equals}{%
548       \iftoggle{bbx:related}{%
549         \usebibmacro{related:init}%
550         \usebibmacro{related}%
551         \clearfield{related}%
552       }{}%
553     }{}%
554   }
555   \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’.

```

556 \DeclareFieldFormat{origtitle}{\mkbibemph{#1}}
557 \newbibmacro*{origtitle}{%
558   \iffieldundef{origtitle}{}{%
559     \iflistundef{language}{%
560       \printtext[parens]{\printfield{origtitle}}%
561     }{%
562       \printtext[brackets]{%
563         \printlist{language}\space
564         \bibstring{translationof}\space
565         \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

```

566 \newcommand{\bLx@ox@compyear}[2]{%
567   \def\num@one{#1}%
568   \def\num@two{#2}%
569   \StrLen{\num@one}[\num@one@len]%
570   \StrLen{\num@two}[\num@two@len]%

```

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

```

571 \IfEq{\num@one@len}{\num@two@len}%
572 {\StrCompare{\num@one}{\num@two}[\Result]}%
573 \ifnum\num@two@len>3%
574 \IfStrEq{\Result}{2}{\def\Result{1}}}%
575 \fi
576 \StrGobbleLeft{0\num@two}{\Result}%
577 {\num@two}%
578 }

```

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

```

579 \patchcmd{\mkdaterangefull}{%
580 \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
581 }{%
582 \iffieldundef{#2endmonth}%
583 {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
584 {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
585 }{}%
586 \patchcmd{\mkdaterangefullextra}{%
587 \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
588 }{%
589 \iffieldundef{#2endmonth}%
590 {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
591 {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
592 }{}%
593 \patchcmd{\mkdaterangetrunc}{%
594 \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
595 }{%
596 \iffieldundef{#2endmonth}%
597 {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
598 {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
599 }{}%
600 \patchcmd{\mkdaterangetruncextra}{%
601 \csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}%
602 }{%
603 \iffieldundef{#2endmonth}%
604 {\blx@ox@compyear{\thefield{#2year}}{\thefield{#2endyear}}}%
605 {\csuse{mkbibdate#1}{#2endyear}{#2endmonth}{#2endday}}%
606 }{}%

```

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

```

607 \DeclareFieldFormat{datatype}{%
608 \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
609 }
610 \newtoggle{blx@ox@timefirst}
611 \DeclareBibliographyOption{timefirst}[true]{%
612 \settoggle{blx@ox@timefirst}{#1}}
613 \DeclareEntryOption{timefirst}[true]{%
614 \settoggle{blx@ox@timefirst}{#1}}
615 \newbibmacro*{date+time}{%
616 \ifboolexpr{
617 test {\iffieldundef{year}}
618 and
619 test {\iffieldundef{season}}
620 and
621 test {\iffieldundef{month}}
622 and
623 test {\iffieldundef{hour}}
624 }{}%

```

```

625     \printfield{datetype}}%
626     \setunit*{\addspace}%
627     \iftoggle{blx@ox@timefirst}{%
628         \printtime
629         \setunit*{\addcomma\space}}{}%
630     \printdate
631     \iftoggle{blx@ox@timefirst}{}{%
632         \setunit*{\addcomma\space}%
633         \printtime}%
634 }
635 \renewbibmacro*{date}{\usebibmacro{date+time}}

```

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

```

636 \DeclareFieldFormat{origdatetype}{%
637     \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
638 }
639 \newbibmacro*{origdate+time}{%
640     \ifboolexpr{
641         test {\iffieldundef{origyear}}
642         and
643         test {\iffieldundef{origseason}}
644         and
645         test {\iffieldundef{origmonth}}
646         and
647         test {\iffieldundef{orighour}}
648     }{}%
649     \printfield{origdatetype}}%
650     \setunit*{\addspace}%
651     \iftoggle{blx@ox@timefirst}{%
652         \printorigtime
653         \setunit*{\addcomma\space}}{}%
654     \printorigdate
655     \iftoggle{blx@ox@timefirst}{}{%
656         \setunit*{\addcomma\space}%
657         \printorigtime}%
658 }

```

2.1.5 EDITIONS, PAGES, AND OTHER NUMBER-LIKE FIELDS

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

```

659 \xpatchfieldformat{edition}{%
660     #1\isdot
661 }{%
662     \ifbibstring{#1}{\bibstring{#1}}{#1\isdot}%
663 }{}

```

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

```

664 \DeclareFieldFormat{pages}{%
665     \iffieldundef{bookpagination}%
666     {\mkcomprange{#1}}%
667     {\mkcomprange[{\mkpageprefix[bookpagination]}]{#1}}%
668 }

```

The same is true in citations.

```

669 \DeclareFieldFormat{postnote}{%
670 \iffielddundef{pagination}%
671 {\mkcomprange{#1}}%
672 {\mkcomprange[\mkpageprefix]{#1}}%
673 }

```

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.

```

674 \DeclareBibliographyOption{nopublisher}[true]{%
675 \DeclareFieldInputHandler{publisher}{\def\NewValue{}}%
676 }

```

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.

```

677 \DeclareBibliographyOption{nolocation}[true]{%
678 \DeclareStyleSourceMap{
679 \maps[datatype=bibtex]{
680 \map{
681 \pertype{book}
682 \pertype{mvbook}
683 \pertype{bookinbook}
684 \pertype{inbook}
685 \pertype{suppbook}
686 \pertype{collection}
687 \pertype{mvcollection}
688 \pertype{incollection}
689 \pertype{suppcollection}
690 \pertype{reference}
691 \pertype{mvreference}
692 \pertype{inreference}
693 \pertype{proceedings}
694 \pertype{mvproceedings}
695 \pertype{inproceedings}
696 \step[notfield=location, fieldset=location,
↪ fieldvalue={\noexpand\bibstring{nolocation}}]
697 }
698 }
699 }%
700 }

```

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

```

701 \newtoggle{blx@ox@noloc}
702 \def\blx@ox@noloc{{\bibstring{nolocation}}}
703 \DeclareEntryOption{nolocation}[true]{%
704 \settoggle{blx@ox@noloc}{#1}%
705 \iflistundef{location}{%
706 \iftoggle{blx@ox@noloc}{\restorelist{location}{\blx@ox@noloc}}{}%
707 }{}

```

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.

```

708 \DeclareBibliographyOption{isourls}[true]{%
709   \ifstrequal{#1}{true}
710     {\DeclareFieldFormat{url}{$\angle$\url{##1}$\rangle$}}
711     {\DeclareFieldFormat{url}{\url{##1}}}%
712 }
713 \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.

```

714 \renewcommand*{\biburlsetup}{%
715   \Urlmuskip=0mu plus 2mu\relax
716   \mathchardef\UrlBigBreakPenalty=100\relax
717   \mathchardef\UrlBreakPenalty=200\relax
718   \def\UrlBigBreaks{\do/\\do:}%
719   \def\UrlNoBreaks{\do\(\do\[\do\{\do\<}%
720   \def\UrlBreaks{%
721     \do\>\do\}\do\]\do\)\do\\\do\|}%
722     \do\' \do\$ \do\* \do\^ \do\"}%
723   \appto\UrlSpecials{%
724     \do!\{\mathbin{\mskip-\Urlmuskip\mathchar`\!\mskip\Urlmuskip}}%
725     \do\&\{\mathbin{\mskip-\Urlmuskip\mathchar`\&\mskip\Urlmuskip}}%
726     \do\+\{\mathbin{\mskip-\Urlmuskip\mathchar`\+\mskip\Urlmuskip}}%
727     \do\,\{\mathbin{\mskip-\Urlmuskip\mathchar`\,\mskip\Urlmuskip}}%
728     \do\-\{\mathbin{\mskip-\Urlmuskip\mathchar`\-\mskip\Urlmuskip}}%
729     \do\.\{\mathbin{\mskip-\Urlmuskip\mathchar`\.\mskip\Urlmuskip}}%
730     \do\;\{\mathbin{\mskip-\Urlmuskip\mathchar`\;\mskip\Urlmuskip}}%
731     \do\=\{\mathbin{\mskip-\Urlmuskip\mathchar`\=\mskip\Urlmuskip}}%
732     \do\?\{\mathbin{\mskip-\Urlmuskip\mathchar`\?\mskip\Urlmuskip}}%
733     \do\_ \{\mathbin{\mskip-\Urlmuskip\mathchar`\_\mskip\Urlmuskip}}%
734     \do\@ \{\mathbin{\mskip-\Urlmuskip\mathchar`\@\mskip\Urlmuskip}}%
735     \do\# \{\mathbin{\mskip-\Urlmuskip\mathchar`\#\mskip\Urlmuskip}}%
736   }%
737   \ifnumgreater{\value{biburlnumpenalty}}{0}{
738     {\def\do##1{\appto\UrlSpecials{\do##1{\mathchar`##1 \penalty\value{biburlnumpenalty}}}}%
739     \do\1\do\2\do\3\do\4\do\5\do\6\do\7\do\8\do\9\do\0}
740   }%
741   \ifnumgreater{\value{biburlucpenalty}}{0}{
742     {\def\do##1{\appto\UrlSpecials{\do##1{\mathchar`##1 \penalty\value{biburlucpenalty}}}}%
743     \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J
744     \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T
745     \do\U\do\V\do\W\do\X\do\Y\do\Z}
746   }%
747   \ifnumgreater{\value{biburlllcpenalty}}{0}{
748     {\def\do##1{\appto\UrlSpecials{\do##1{\mathchar`##1 \penalty\value{biburlllcpenalty}}}}%
749     \do\A\do\B\do\C\do\D\do\E\do\F\do\G\do\H\do\I\do\J
750     \do\K\do\L\do\M\do\N\do\O\do\P\do\Q\do\R\do\S\do\T
751     \do\U\do\V\do\W\do\X\do\Y\do\Z}
752   }%
753   \let\do=noexpand}

```

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

```

754 \DeclareFieldFormat{urldate}{\bibstring{urlseen}\space#1}
755 \xpatchbibmacro{url+urldate}%
756   {\setunit*{\addspace}}%

```

```
757 \setunit*{\addcomma\addspace}}{}{}
```

The DOI is introduced by ‘doi’ in lowercase.

```
758 \xpatchfieldformat{doi}%
759 {\mkbibacro{DOI}}%
760 {\printtext{doi}}{}{}
```

Unlike URLs, DOIs are preceded by a full stop.

```
761 \xpatchbibmacro{doi+eprint+url}%
762 {\printfield{doi}}%
763 {\setunit{\addperiod\space}\printfield{doi}}{}{}
```

2.1.8 ADDENDA

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

```
764 \renewbibmacro*{addendum+pubstate}{%
765 \ifbool{expr}{
766 test {\iffieldundef{pubstate}}
767 or
768 test {\iffieldequalstr{labeldatesource}{pubstate}}
769 }{}{%
770 \nopunct
771 \ifbibstring{\thefield{pubstate}}{%
772 \printtext[pubstate]{\bibstring{\thefield{pubstate}}}%
773 }{%
774 \printfield{pubstate}}}%
775 \setunit{\addsemicolon\addspace}\newblock
776 \printfield{addendum}}
777 \DeclareFieldFormat{pubstate}{\mkbibparens{#1}}
```

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

```
778 \DeclareFieldFormat{howpublished}{\mkbibbrackets{#1}}
779 \DeclareFieldFormat[misc,unpublished]{howpublished}{#1}
```

2.1.9 ARTICLES AND PERIODICALS

Subtypes for articles and similar are in square brackets.

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

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

```
781 \newcommand*{\ifabbrev}[3]{%
782 \StrRight{#1}[1][\blx@ox@lastchar]%
783 \IfSubStr{AÂBCÇDEFGGHIÎJKLMNOÔPQRSSTUÛÜVWXYZ. }{\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.


```

784 \renewbibmacro*{journal+issuetitle}{%
785   \ifboolexpr{
786     test {\iffieldundef{title}}
787     and
788     not test {\iffieldundef{issuetitle}}
789   }{%
790     \usebibmacro{issue}%
791     \setunit{\addspace =\addspace}%
792   }{%
793     \ifboolexpr{
794       ( not test {\iffieldundef{pubstate}} )
795       and
796       test {\ifbibtstring{\thefield{pubstate}in}}
797     }{%
798       \printtext{\bibstring{\thefield{pubstate}in}\space}%
799       \clearfield{pubstate}%
800     }{}%
801     \usebibmacro{journal}%
802     \iffieldundef{journalsubtitle}{%
803       \ifabbrev{\thefield{journaltitle}}{\setunit{\addspace}}{\newunit}%
804     }{%
805       \ifabbrev{\thefield{journalsubtitle}}{\setunit{\addspace}}{\newunit}}%
806     \iffieldundef{series}{}{%
807       \newunit\newblock
808       \printfield{series}%
809       \ifbibtstring{\thefield{series}}{%
810         \setunit{\addspace}%
811       }{%
812         \newunit}}%
813     \usebibmacro{volume+number+eid}%
814     \setunit{\addspace}%
815     \usebibmacro{issue+date}%
816     \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.

```

817 \renewbibmacro*{title+issuetitle}{%
818   \usebibmacro{periodical}%
819   \iffieldundef{subtitle}{%
820     \ifabbrev{\thefield{title}}{\setunit{\addspace}}{\newunit}%
821   }{%
822     \ifabbrev{\thefield{subtitle}}{\setunit{\addspace}}{\newunit}}%
823   \iffieldundef{series}{}{%
824     \newunit\newblock
825     \printfield{series}%
826     \ifbibtstring{\thefield{series}}{%
827       \setunit{\addspace}%
828     }{%
829       \newunit}}%
830   \usebibmacro{volume+number+eid}%
831   \setunit{\addspace}%
832   \usebibmacro{issue+date}%
833   \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).

```

834 \DeclareBibliographyOption{issuestyle}[slash]{%
835   \ifcsdef{blx@ox@issuestyle@#1}{%
836     \csuse{blx@ox@issuestyle@#1}%
837   }{%
838     \PackageError{biblatex}
839       {Invalid option 'issuestyle=#1'}
840       {Valid values are 'slash', 'colon', 'comma', 'parens'}%
841   }%
842 }
843 \csdef{blx@ox@issuestyle@slash}{%
844   \renewbibmacro*{volume+number+eid}{%
845     \printfield{volume}%
846     \setunit*{\addslash}%
847     \printfield{number}%
848   }%
849 }
850 \csdef{blx@ox@issuestyle@colon}{%
851   \renewbibmacro*{volume+number+eid}{%
852     \printfield{volume}%
853     \setunit*{\addcolon\space}%
854     \printfield{number}%
855   }%
856 }
857 \csdef{blx@ox@issuestyle@comma}{%
858   \renewbibmacro*{volume+number+eid}{%
859     \printfield{volume}%
860     \setunit*{\addcomma\space}%
861     \printfield{number}%
862   }%
863 }
864 \csdef{blx@ox@issuestyle@parens}{%
865   \renewbibmacro*{volume+number+eid}{%
866     \printfield{volume}%
867     \setunit*{\addspace}%
868     \printfield[parens]{number}%
869   }%
870 }
871 \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.

```

872 \newtoggle{blx@ox@varissuedate}
873 \DeclareBibliographyOption[boolean]{varissuedate}[true]{%
874   \settoggle{blx@ox@varissuedate}{#1}}
875 \DeclareEntryOption[boolean]{varissuedate}[true]{%
876   \settoggle{blx@ox@varissuedate}{#1}}
877 \renewbibmacro*{issue+date}{%
878   \ifboolexpr{
879     test {\iffielddundef{issue}}
880     and
881     test {\iffielddundef{year}}
882     and
883     test {\iffielddundef{season}}
884     and
885     test {\iffielddundef{month}}

```

```

886 }{ %
887   \ifbool{expr{
888     togl {blx@ox@varissuedate}
889     and
890     test {\iffielddundef{volume}}
891     and
892     test {\iffielddundef{number}}
893   }{ %
894     \newunit
895     \printtext{%
896       \iffielddundef{issue}{%
897         \usebibmacro{date}
898       }{ %
899         \printfield{issue}%
900         \setunit*{\addspace}%
901         \usebibmacro{date}}}%
902   }{ %
903     \printtext[parens]{%
904       \iffielddundef{issue}{%
905         \usebibmacro{date}%
906       }{ %
907         \printfield{issue}%
908         \setunit*{\addspace}%
909         \usebibmacro{date}}}}}%
910   \newunit
911   \printfield{eid}%
912 }

```

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.

```

913 \DeclareBibliographyDriver{article}{%
914   \usebibmacro{bibindex}%
915   \usebibmacro{begentry}%
916   \usebibmacro{author/translator+others}%
917   \setunit{\printdelim{nametitlelim}}\newblock
918   \usebibmacro{title}%
919   \newunit\newblock
920   \usebibmacro{byauthor}%
921   \newunit\newblock
922   \usebibmacro{bytranslator+others}%
923   \newunit\newblock
924   \printfield{version}%
925   \newunit\newblock
926   \usebibmacro{journal+issuetitle}%
927   \newunit
928   \usebibmacro{byeditor+others}%
929   \iffieldequalstr{relatedtype}{suppto}{%
930     \setunit{\addsemicolon\space}%
931     \iftoggle{bbx:related}{%
932       \usebibmacro{related:init}%
933       \usebibmacro{related}%
934       \clearfield{related}%
935     }{ }%
936   }{ %
937     \newunit

```

```

938 \usebibmacro{note+pages}%
939 \newunit\newblock
940 \iftoggle{bbx:isbn}
941   {\printfield{issn}}
942   {}%
943 \newunit\newblock
944 \usebibmacro{doi+eprint+url}%
945 \newunit\newblock
946 \usebibmacro{addendum+pubstate}%
947 \setunit{\bibpagerefpunct}\newblock
948 \usebibmacro{pageref}%
949 \setunit{\relatedtypepunct}\newblock
950 \iftoggle{bbx:related}
951   {\usebibmacro{related:init}%
952     \usebibmacro{related}}
953   {}%
954 \usebibmacro{finentry}}

```

Similar changes are made to the periodical driver.

```

955 \DeclareBibliographyDriver{periodical}{%
956   \usebibmacro{bibindex}%
957   \usebibmacro{begentry}%
958   \usebibmacro{editor}%
959   \setunit{\printdelim{nametitle}}\newblock
960   \usebibmacro{title+issuetitle}%
961   \newunit\newblock
962   \usebibmacro{byeditor}%
963   \newunit\newblock
964   \printfield{note}%
965   \newunit\newblock
966   \iftoggle{bbx:isbn}
967     {\printfield{issn}}
968     {}%
969   \newunit\newblock
970   \usebibmacro{doi+eprint+url}%
971   \newunit\newblock
972   \usebibmacro{addendum+pubstate}%
973   \setunit{\bibpagerefpunct}\newblock
974   \usebibmacro{pageref}%
975   \setunit{\relatedtypepunct}\newblock
976   \iftoggle{bbx:related}
977     {\usebibmacro{related:init}%
978       \usebibmacro{related}}
979     {}%
980   \usebibmacro{finentry}}

```

2.1.10 BOOKS AND WORKS IN BOOKS

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

```

981 \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.

```

982 \DeclareFieldFormat[bookinbook]{citetitle}{%
983   \ifboolexpr{
984     test {\iffieldequalstr{entrysubtype}{poem}}

```

```

985     or
986     test {\iffieldequalstr{entrysubtype}{play}}
987   }{%
988     \mkbibemph{#1}%
989   }{%
990     \mkbibquote{#1\isdot}}
991 \DeclareFieldFormat[bookinbook]{title}{%
992   \ifboolexpr{
993     test {\iffieldequalstr{entrysubtype}{poem}}
994     or
995     test {\iffieldequalstr{entrysubtype}{play}}
996   }{%
997     \mkbibemph{#1}%
998   }{%
999     \mkbibquote{#1\isdot}}}

```

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

```

1000 \DeclareFieldFormat[inference]{title}{\mkbibquote{#1\isdot}}

```

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

```

1001 \DeclareFieldFormat[book,mvbook,bookinbook,inbook,suppbook,%
1002 collection,mvcollection,incollection,suppcollection,%
1003 proceedings,mvproceedings,inproceedings,%
1004 reference,mvreference,inference]{volume}{%
1005   \IfSubStr{#1}{-}{%
1006     \StrCount{#1}{-}[\blx@ox@dashnum]%
1007     \StrBefore{#1}{-}[\blx@ox@volnum]%
1008     \Rn{\blx@ox@volnum}\bibrangedash
1009     \StrBehind[\blx@ox@dashnum]{#1}{-}[\blx@ox@volnum]%
1010     \Rn{\blx@ox@volnum}%
1011   }{%
1012     \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.

```

1013 \newbibmacro*{maintitle+volume}{%
1014   \ifboolexpr{
1015     test {\iffieldundef{maintitle}}
1016     or
1017     test {\iffieldundef{volume}}
1018   }{%
1019     {\printtext[maintitle+volume]{%
1020       \bibstring{volume}\addspace
1021       \printfield{volume}\printfield{part}\addspace
1022       \bibstring{ofseries}\addspace
1023       \usebibmacro{maintitle}}}
1024   }
1025 \DeclareFieldFormat{maintitle+volume}{\mkbibbrackets{#1}}

```

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

```

1026 \renewbibmacro*{in:}{%
1027   \iffieldequalstr{entrysubtype}{yearbook}{%
1028     \printtext{\bibstring{in}\intitlepunct}}

```

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

```
1029 \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.

```
1030 \renewbibmacro*{series+number}{%
1031 \printfield{series}%
1032 \setunit*{\addcomma\space}%
1033 \usebibmacro{byserieseditor}%
1034 \setunit*{\addcomma\space}%
1035 \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.

```
1036 \newcounter{locpubpairs}
1037 \newbibmacro*{edition+publisher+location+date}{%
1038 \printlist{origlocation}%
1039 \iflistundef{origpublisher}%
1040 {\setunit*{\addcomma\space}}%
1041 {\setunit*{\addcolon\space}}%
1042 \printlist{origpublisher}%
1043 \setunit*{\addcomma\space}%
1044 \ifboolexpr{
1045 test {\iflistundef{origlocation}}
1046 and
1047 test {\iflistundef{origpublisher}}
1048 and
1049 test {\iffieldundef{edition}}}
1050 {}{}%
1051 \printorigdate}%
1052 \setunit{\addsemicolon\space}%
1053 \printfield{edition}%
1054 \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.

```
1055 \ifboolexpr{%
1056 test {\ifnumcomp{\value{publisher}}{>}{1}}
1057 and
1058 test {\ifnumequal{\value{location}}{\value{publisher}}}
1059 }{%
1060 \setcounter{locpubpairs}{0}%
1061 \savebibmacro{list:andothers}%
1062 \renewbibmacro*{list:andothers}{}%
1063 \whileboolexpr{%
1064 test {\ifnumcomp{\value{locpubpairs}}{<}{\value{publisher}}}
1065 }{%
1066 \stepcounter{locpubpairs}%
1067 \ifnumcomp{\value{locpubpairs}}{>}{1}{%
1068 \ifnumequal{\value{publisher}}{2}{%
1069 \setunit*{\addspace\bibstring{and}\addspace}%
1070 }{%
1071 \ifnumequal{\value{locpubpairs}}{\value{publisher}}{%
1072 \setunit*{\addcomma\space\bibstring{and}\addspace}%
```

```

1073         }{%
1074         \setunit*{\addcomma\space}%
1075     }%
1076 }%
1077 }{%
1078 \printlist[][\value{locpubpairs}-\value{locpubpairs}]{location}%
1079 \setunit*{\addcolon\space}%
1080 \printlist[][\value{locpubpairs}-\value{locpubpairs}]{publisher}%
1081 }%
1082 \restorebibmacro{list:andothers}%
1083 }{%
1084 \printlist{location}%
1085 \iflistundef{publisher}%
1086 {\setunit*{\addcomma\space}}%
1087 {\setunit*{\addcolon\space}}%
1088 \printlist{publisher}%
1089 }%
1090 \setunit*{\addcomma\space}%
1091 \usebibmacro{date}%
1092 }

```

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

```

1093 \newbibmacro*{series+number+edition+publisher+location+date}{%
1094 \ifboolexpr{
1095     test {\iffieldundef{series}}
1096     and
1097     test {\iffieldundef{number}}
1098     and
1099     test {\iffieldundef{edition}}
1100     and
1101     test {\iflistundef{publisher}}
1102     and
1103     test {\iflistundef{location}}
1104     and
1105     test {\iffieldundef{year}}
1106     and
1107     test {\iffieldundef{season}}
1108     and
1109     test {\iffieldundef{month}}
1110 }{%
1111 \nopunct
1112 \printtext[publication]{%
1113 \usebibmacro{series+number}%
1114 \setunit{\addsemicolon\addspace}%
1115 \usebibmacro{edition+publisher+location+date}%
1116 \usebibmacro{copub}}}%
1117 \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1118 \setunit{\addspace}\newblock
1119 \usebibmacro{origpub}%
1120 }

```

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

```

1121 \newbibmacro*{series+number+publisher+location+date}{%
1122 \ifboolexpr{
1123     test {\iffieldundef{series}}
1124     and

```

```

1125     test {\iffielddundef{number}}
1126     and
1127     test {\iflistundef{publisher}}
1128     and
1129     test {\iflistundef{location}}
1130     and
1131     test {\iffielddundef{year}}
1132     and
1133     test {\iffielddundef{season}}
1134     and
1135     test {\iffielddundef{month}}
1136   }{}%
1137   \nopunct
1138   \printtext[publication]{%
1139     \usebibmacro{series+number}%
1140     \setunit{\addsemicolon\addspace}%
1141     \usebibmacro{publisher+location+date}%
1142     \usebibmacro{copub}}}%
1143   \iffieldequalstr{relatedtype}{copub}{\clearfield{related}}%
1144   \setunit{\addspace}\newblock
1145   \usebibmacro{origpub}%
1146 }

```

The copub macro prints co-publication details.

```

1147 \newbibmacro*{copub}{%
1148   \ifboolexpr{
1149     togl {bbx:related}
1150     and
1151     test {\iffieldequalstr{relatedtype}{copub}}
1152   }{%
1153     \setunit{\addsemicolon\space}%
1154     \usebibmacro{related:init}%
1155     \usebibmacro{related}%
1156   }{}%
1157 }

```

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

```

1158 \newbibmacro*{origpub}{%
1159   \ifboolexpr{
1160     test {\iflistundef{origlocation}}
1161     and
1162     test {\iflistundef{origpublisher}}
1163     and
1164     test {\iffielddundef{edition}}
1165     and
1166     ( not test {\iffielddundef{origyear}} )
1167   }{%
1168     \printtext[parens]{\bibstring{origpubin}\space\printorigdate}%
1169   }{}%
1170 }

```

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;

```

1171 \DeclareBibliographyDriver{book}{%
1172   \usebibmacro{bibindex}%
1173   \usebibmacro{begentry}%
1174   \usebibmacro{author/editor+others/translator+others}%
1175   \setunit{\printdelim{nametitledelim}}\newblock
1176   \usebibmacro{title}%
1177   \newunit\newblock
1178   \usebibmacro{byauthor}%
1179   \newunit\newblock
1180   \usebibmacro{byeditor+others}%
1181   \newunit\newblock
1182   \printfield{note}%
1183   \newunit\newblock
1184   \usebibmacro{maintitle+volume}%
1185   \newunit
1186   \usebibmacro{series+number+edition+publisher+location+date}%
1187   \setunit{\addspace}%
1188   \printfield{howpublished}%
1189   \newunit\newblock
1190   \usebibmacro{chapter+pages}%
1191   \newunit
1192   \printfield{pagetotal}%
1193   \newunit\newblock
1194   \iftoggle{bbx:isbn}
1195     {\printfield{isbn}}
1196     {}%
1197   \newunit\newblock
1198   \usebibmacro{doi+eprint+url}%
1199   \newunit\newblock
1200   \usebibmacro{addendum+pubstate}%
1201   \setunit{\bibpagerefpunct}\newblock
1202   \usebibmacro{pageref}%
1203   \setunit{\relatedtypepunct}\newblock
1204   \iftoggle{bbx:related}
1205     {\usebibmacro{related:init}%
1206      \usebibmacro{related}}
1207     {}%
1208   \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;

```

1209 \DeclareBibliographyDriver{mvbook}{%
1210   \usebibmacro{bibindex}%
1211   \usebibmacro{begentry}%
1212   \usebibmacro{author/editor+others/translator+others}%
1213   \setunit{\printdelim{nametitledelim}}\newblock
1214   \usebibmacro{maintitle+title}%
1215   \newunit
1216   \ifboolexpr{
1217     test {\iffieldequalstr{relatedtype}{multivolume}}
1218     or
1219     ( not test {\iffieldundef{maintitle}} )

```

```

1220 }{}%
1221   \printfield{volume}%
1222   \printfield{part}}%
1223 \newunit\newblock
1224 \usebibmacro{byauthor}%
1225 \newunit\newblock
1226 \usebibmacro{byeditor+others}%
1227 \newunit\newblock
1228 \printfield{volumes}%
1229 \newunit\newblock
1230 \printfield{note}%
1231 \newunit\newblock
1232 \ifboolexpr{
1233   test {\iffieldequalstr{relatedtype}{multivolume}}
1234   and
1235   test {\iffieldundef{maintitle}}
1236 }{}%
1237   \printfield{volume}%
1238   \printfield{part}}%
1239 }{}%
1240 \newunit\newblock
1241 \usebibmacro{series+number+edition+publisher+location+date}%
1242 \newunit\newblock
1243 \usebibmacro{chapter+pages}%
1244 \newunit
1245 \printfield{pagetotal}%
1246 \newunit\newblock
1247 \iftoggle{bbx:isbn}
1248 {\printfield{isbn}}
1249 {}%
1250 \newunit\newblock
1251 \usebibmacro{doi+eprint+url}%
1252 \newunit\newblock
1253 \usebibmacro{addendum+pubstate}%
1254 \setunit{\bibpagerefunct}\newblock
1255 \usebibmacro{pageref}%
1256 \setunit{\relatedtypepunct}\newblock
1257 \iftoggle{bbx:related}
1258 {\usebibmacro{related:init}%
1259   \usebibmacro{related}}
1260 {}%
1261 \usebibmacro{finentry}}

```

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

```

1262 \DeclareBibliographyDriver{inbook}{%
1263   \usebibmacro{bibindex}%
1264   \usebibmacro{begentry}%
1265   \usebibmacro{author/translator+others}%
1266   \setunit{\printdelim{nametitledelim}}\newblock
1267   \usebibmacro{title}%
1268   \newunit\newblock
1269   \usebibmacro{byauthor}%
1270   \newunit\newblock
1271   \usebibmacro{in:}%
1272   \usebibmacro{bybookauthor}%
1273   \newunit\newblock
1274   \usebibmacro{maintitle+booktitle}%
1275   \newunit
1276   \iffieldundef{maintitle}

```

```

1277 {\printfield{volume}%
1278 \printfield{part}}
1279 {}%
1280 \newunit\newblock
1281 \usebibmacro{byeditor+others}%
1282 \newunit\newblock
1283 \printfield{volumes}%
1284 \newunit\newblock
1285 \printfield{note}%
1286 \newunit\newblock%
1287 \usebibmacro{series+number+edition+publisher+location+date}%
1288 \newunit\newblock
1289 \usebibmacro{chapter+pages}%
1290 \newunit\newblock
1291 \iftoggle{bbx:isbn}
1292 {\printfield{isbn}}
1293 {}%
1294 \newunit\newblock
1295 \usebibmacro{doi+eprint+url}%
1296 \newunit\newblock
1297 \usebibmacro{addendum+pubstate}%
1298 \setunit{\bibpagerefpunct}\newblock
1299 \usebibmacro{pageref}%
1300 \setunit{\relatedtypepunct}\newblock
1301 \iftoggle{bbx:related}
1302 {\usebibmacro{related:init}%
1303 \usebibmacro{related}}
1304 {}%
1305 \usebibmacro{finentry}}
1306 \DeclareFieldFormat[supbook]{title}{#1\nopunct}

```

We also provide a bookinbook driver that handles origdate differently.

```

1307 \DeclareBibliographyDriver{bookinbook}{%
1308 \usebibmacro{bibindex}%
1309 \usebibmacro{begentry}%
1310 \usebibmacro{author/translator+others}%
1311 \setunit{\printdelim{nametitledelim}}\newblock
1312 \usebibmacro{title}%
1313 \newunit\newblock
1314 \usebibmacro{byauthor}%
1315 \newunit\newblock
1316 \usebibmacro{in:}%
1317 \usebibmacro{bybookauthor}%
1318 \newunit\newblock
1319 \usebibmacro{maintitle+booktitle}%
1320 \newunit
1321 \iffielddundef{maintitle}
1322 {\printfield{volume}%
1323 \printfield{part}}
1324 {}%
1325 \newunit\newblock
1326 \usebibmacro{byeditor+others}%
1327 \newunit\newblock
1328 \printfield{volumes}%
1329 \newunit\newblock
1330 \printfield{note}%
1331 \newunit\newblock
1332 \usebibmacro{series+number+publisher+location+date}%
1333 \newunit\newblock
1334 \usebibmacro{chapter+pages}%

```

```

1335 \newunit\newblock
1336 \iftoggle{bbx:isbn}
1337 {\printfield{isbn}}
1338 {}%
1339 \newunit\newblock
1340 \usebibmacro{doi+eprint+url}%
1341 \newunit\newblock
1342 \usebibmacro{addendum+pubstate}%
1343 \setunit{\bibpagerefpunct}\newblock
1344 \usebibmacro{pageref}%
1345 \setunit{\relatedtypepunct}\newblock
1346 \iftoggle{bbx:related}
1347 {\usebibmacro{related:init}%
1348 \usebibmacro{related}}
1349 {}%
1350 \usebibmacro{finentry}}

```

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

```

1351 \DeclareBibliographyDriver{collection}{%
1352 \usebibmacro{bibindex}%
1353 \usebibmacro{begentry}%
1354 \usebibmacro{editor+others}%
1355 \setunit{\printdelim{nametitledelim}}\newblock
1356 \usebibmacro{title}%
1357 \newunit\newblock
1358 \usebibmacro{byeditor+others}%
1359 \newunit\newblock
1360 \printfield{note}%
1361 \newunit\newblock
1362 \usebibmacro{maintitle+volume}%
1363 \newunit
1364 \usebibmacro{series+number+edition+publisher+location+date}%
1365 \newunit\newblock
1366 \usebibmacro{chapter+pages}%
1367 \newunit
1368 \printfield{pagetotal}%
1369 \newunit\newblock
1370 \iftoggle{bbx:isbn}
1371 {\printfield{isbn}}
1372 {}%
1373 \newunit\newblock
1374 \usebibmacro{doi+eprint+url}%
1375 \newunit\newblock
1376 \usebibmacro{addendum+pubstate}%
1377 \setunit{\bibpagerefpunct}\newblock
1378 \usebibmacro{pageref}%
1379 \setunit{\relatedtypepunct}\newblock
1380 \iftoggle{bbx:related}
1381 {\usebibmacro{related:init}%
1382 \usebibmacro{related}}
1383 {}%
1384 \usebibmacro{finentry}}

```

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

```

1385 \DeclareBibliographyDriver{mvcollection}{%
1386 \usebibmacro{bibindex}%
1387 \usebibmacro{begentry}%
1388 \usebibmacro{editor+others}%

```

```

1389 \setunit{\printdelim{nametitleldelim}}\newblock
1390 \usebibmacro{maintitle+title}%
1391 \newunit
1392 \ifboolexpr{
1393   test {\iffieldequalstr{relatedtype}{multivolume}}
1394   or
1395   ( not test {\iffieldundef{maintitle}} )
1396 }{\%
1397   \printfield{volume}%
1398   \printfield{part}}%
1399 \newunit\newblock
1400 \usebibmacro{byeditor+others}%
1401 \newunit\newblock
1402 \printfield{volumes}%
1403 \newunit\newblock
1404 \printfield{note}%
1405 \newunit\newblock
1406 \ifboolexpr{
1407   test {\iffieldequalstr{relatedtype}{multivolume}}
1408   and
1409   test {\iffieldundef{maintitle}}
1410 }{\%
1411   \printfield{volume}%
1412   \printfield{part}}%
1413 }{\%
1414 \newunit\newblock
1415 \usebibmacro{series+number+edition+publisher+location+date}%
1416 \newunit\newblock
1417 \usebibmacro{chapter+pages}%
1418 \newunit
1419 \printfield{pagetotal}%
1420 \newunit\newblock
1421 \iftoggle{bbx:isbn}
1422 {\printfield{isbn}}
1423 {}%
1424 \newunit\newblock
1425 \usebibmacro{doi+eprint+url}%
1426 \newunit\newblock
1427 \usebibmacro{addendum+pubstate}%
1428 \setunit{\bibpagerefunct}\newblock
1429 \usebibmacro{pageref}%
1430 \setunit{\relatedtypepunct}\newblock
1431 \iftoggle{bbx:related}
1432 {\usebibmacro{related:init}%
1433   \usebibmacro{related}}
1434 {}%
1435 \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.

```

1436 \DeclareBibliographyDriver{incollection}{%
1437   \usebibmacro{bibindex}%
1438   \usebibmacro{begentry}%
1439   \usebibmacro{author/translator+others}%
1440   \setunit{\printdelim{nametitleldelim}}\newblock
1441   \usebibmacro{title}%
1442   \newunit\newblock
1443   \usebibmacro{byauthor}%
1444   \newunit\newblock

```

```

1445 \usebibmacro{in:}%
1446 \usebibmacro{bookeditor}%
1447 \newunit\newblock
1448 \usebibmacro{maintitle+booktitle}%
1449 \newunit
1450 \iffielddundef{maintitle}
1451 {\printfield{volume}%
1452   \printfield{part}}
1453 {}%
1454 \newunit\newblock
1455 \printfield{volumes}%
1456 \newunit\newblock
1457 \printfield{note}%
1458 \newunit\newblock%
1459 \usebibmacro{series+number+edition+publisher+location+date}%
1460 \newunit\newblock
1461 \usebibmacro{chapter+pages}%
1462 \newunit\newblock
1463 \iftoggle{bbx:isbn}
1464 {\printfield{isbn}}
1465 {}%
1466 \newunit\newblock
1467 \usebibmacro{doi+eprint+url}%
1468 \newunit\newblock
1469 \usebibmacro{addendum+pubstate}%
1470 \setunit{\bibpagerefpunct}\newblock
1471 \usebibmacro{pageref}%
1472 \setunit{\relatedtypepunct}\newblock
1473 \iftoggle{bbx:related}
1474 {\usebibmacro{related:init}%
1475   \usebibmacro{related}}
1476 {}%
1477 \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.

```

1478 \DeclareBibliographyDriver{reference}{%
1479   \usebibmacro{bibindex}%
1480   \usebibmacro{begentry}%
1481   \usebibmacro{author/editor+others/translator+others}%
1482   \setunit{\printdelim{nametitledelim}}\newblock
1483   \usebibmacro{title}%
1484   \newunit\newblock
1485   \printfield{edition}%
1486   \newunit
1487   \usebibmacro{byauthor}%
1488   \newunit\newblock
1489   \usebibmacro{byeditor+others}%
1490   \newunit\newblock
1491   \printfield{note}%
1492   \newunit\newblock
1493   \usebibmacro{maintitle+volume}%
1494   \newunit
1495   \usebibmacro{series+number+publisher+location+date}%
1496   \newunit\newblock
1497   \usebibmacro{chapter+pages}%
1498   \newunit
1499   \printfield{pagetotal}%
1500   \newunit\newblock
1501   \iftoggle{bbx:isbn}

```

```

1502     {\printfield{isbn}}
1503     {}%
1504     \newunit\newblock
1505     \usebibmacro{doi+eprint+url}%
1506     \newunit\newblock
1507     \usebibmacro{addendum+pubstate}%
1508     \setunit{\bibpagerefpunct}\newblock
1509     \usebibmacro{pageref}%
1510     \setunit{\relatedtypepunct}\newblock
1511     \iftoggle{bbx:related}
1512     {\usebibmacro{related:init}%
1513      \usebibmacro{related}}
1514     {}%
1515     \usebibmacro{finentry}}

```

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

```

1516 \DeclareBibliographyDriver{mvreference}{%
1517   \usebibmacro{bibindex}%
1518   \usebibmacro{begentry}%
1519   \usebibmacro{author/editor+others/translator+others}%
1520   \setunit{\printdelim{nametitledelim}}\newblock
1521   \usebibmacro{maintitle+title}%
1522   \newunit
1523   \ifboolexpr{
1524     test {\iffieldequalstr{relatedtype}{multivolume}}
1525     or
1526     ( not test {\iffieldundef{maintitle}} )
1527   }{%
1528     \printfield{volume}%
1529     \printfield{part}%
1530     \newunit\newblock
1531     \printfield{edition}%
1532     \newunit
1533     \usebibmacro{byauthor}%
1534     \newunit\newblock
1535     \usebibmacro{byeditor+others}%
1536     \newunit\newblock
1537     \printfield{volumes}%
1538     \newunit\newblock
1539     \printfield{note}%
1540     \newunit\newblock
1541     \ifboolexpr{
1542       test {\iffieldequalstr{relatedtype}{multivolume}}
1543       and
1544       test {\iffieldundef{maintitle}}
1545     }{%
1546       \printfield{volume}%
1547       \printfield{part}%
1548     }%
1549     \newunit\newblock
1550     \usebibmacro{series+number+publisher+location+date}%
1551     \newunit\newblock
1552     \usebibmacro{chapter+pages}%
1553     \newunit
1554     \printfield{pagetotal}%
1555     \newunit\newblock
1556     \iftoggle{bbx:isbn}
1557     {\printfield{isbn}}
1558     {}%
1559     \newunit\newblock

```

```

1560 \usebibmacro{doi+eprint+url}%
1561 \newunit\newblock
1562 \usebibmacro{addendum+pubstate}%
1563 \setunit{\bibpagerefpunct}\newblock
1564 \usebibmacro{pageref}%
1565 \setunit{\relatedtypepunct}\newblock
1566 \iftoggle{bbx:related}
1567 {\usebibmacro{related:init}%
1568 \usebibmacro{related}}
1569 {}%
1570 \usebibmacro{finentry}}

```

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

```

1571 \DeclareBibliographyDriver{inference}{%
1572 \usebibmacro{bibindex}%
1573 \usebibmacro{begentry}%
1574 \usebibmacro{author/translator+others}%
1575 \setunit{\printdelim{nametitledelim}}\newblock
1576 \usebibmacro{title}%
1577 \newunit\newblock
1578 \usebibmacro{byauthor}%
1579 \newunit\newblock
1580 \iffieldundef{editor}{}{%
1581 \usebibmacro{in:}%
1582 \usebibmacro{bookeditor}%
1583 \newunit\newblock}%
1584 \usebibmacro{maintitle+booktitle}%
1585 \newunit
1586 \iffieldundef{maintitle}
1587 {\printfield{volume}%
1588 \printfield{part}}
1589 {}%
1590 \newunit\newblock
1591 \printfield{edition}%
1592 \newunit
1593 \usebibmacro{byeditor+others}%
1594 \newunit\newblock
1595 \printfield{volumes}%
1596 \newunit\newblock
1597 \printfield{note}%
1598 \newunit\newblock%
1599 \usebibmacro{series+number+publisher+location+date}%
1600 \newunit\newblock
1601 \usebibmacro{chapter+pages}%
1602 \newunit
1603 \printfield{pagetotal}%
1604 \newunit\newblock
1605 \iftoggle{bbx:isbn}
1606 {\printfield{isbn}}
1607 {}%
1608 \newunit\newblock
1609 \usebibmacro{doi+eprint+url}%
1610 \newunit\newblock
1611 \usebibmacro{addendum+pubstate}%
1612 \setunit{\bibpagerefpunct}\newblock
1613 \usebibmacro{pageref}%
1614 \setunit{\relatedtypepunct}\newblock
1615 \iftoggle{bbx:related}
1616 {\usebibmacro{related:init}%

```



```

1617 \usebibmacro{related}}
1618 {}%
1619 \usebibmacro{finentry}}

```

2.1.11 WORKS PRESENTED AT MEETINGS

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

```

1620 \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.

```

1621 \renewbibmacro*{event+venue+date}{%
1622 \printfield{eventtitle}%
1623 \newunit
1624 \printfield{eventtitleaddon}%
1625 \ifboolexpr{
1626   test {\iffieldundef{venue}}
1627   and
1628   test {\iffieldundef{eventyear}}
1629 }{%
1630   \iffieldundef{eventtitle}{%
1631     \setunit{\mkbibemph{\addcomma}\space}%
1632   }{%
1633     \newunit}%
1634   \printfield{venue}%
1635   \newunit%
1636   \printeventdate}%
1637 \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!

```

1638 \DeclareBibliographyDriver{proceedings}{%
1639 \usebibmacro{bibindex}%
1640 \usebibmacro{begentry}%
1641 \usebibmacro{author}%
1642 \newunit
1643 \usebibmacro{maintitle+title}%
1644 \newunit
1645 \iffieldundef{maintitle}
1646 {\printfield{volume}%
1647 \printfield{part}}
1648 }{%
1649 \newunit\newblock
1650 \usebibmacro{event+venue+date}%

```

```

1651 \newunit\newblock
1652 \usebibmacro{byeditor+others}%
1653 \newunit\newblock
1654 \printfield{volumes}%
1655 \newunit\newblock
1656 \printfield{note}%
1657 \newunit\newblock
1658 \printlist{organization}%
1659 \newunit
1660 \usebibmacro{series+number+edition+publisher+location+date}%
1661 \newunit\newblock
1662 \usebibmacro{chapter+pages}%
1663 \newunit
1664 \printfield{pagetotal}%
1665 \newunit\newblock
1666 \iftoggle{bbx:isbn}
1667 {\printfield{isbn}}
1668 {}%
1669 \newunit\newblock
1670 \usebibmacro{doi+eprint+url}%
1671 \newunit\newblock
1672 \usebibmacro{addendum+pubstate}%
1673 \setunit{\bibpagerefpunct}\newblock
1674 \usebibmacro{pageref}%
1675 \setunit{\relatedtypepunct}\newblock
1676 \iftoggle{bbx:related}
1677 {\usebibmacro{related:init}%
1678 \usebibmacro{related}}
1679 {}%
1680 \usebibmacro{finentry}}

```

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

```

1681 \DeclareBibliographyDriver{inproceedings}{%
1682 \usebibmacro{bibindex}%
1683 \usebibmacro{begentry}%
1684 \usebibmacro{author/translator+others}%
1685 \setunit{\printdelim{nametitledelim}}\newblock
1686 \usebibmacro{title}%
1687 \newunit\newblock
1688 \usebibmacro{byauthor}%
1689 \newunit\newblock
1690 \usebibmacro{in:}%
1691 \usebibmacro{maintitle+booktitle}%
1692 \newunit
1693 \iffieldundef{maintitle}
1694 {\printfield{volume}%
1695 \printfield{part}}
1696 {}%
1697 \newunit\newblock
1698 \usebibmacro{event+venue+date}%
1699 \newunit\newblock
1700 \usebibmacro{byeditor+others}%
1701 \newunit\newblock
1702 \printfield{volumes}%
1703 \newunit\newblock
1704 \printfield{note}%
1705 \newunit\newblock
1706 \printlist{organization}%
1707 \newunit

```

```

1708 \usebibmacro{series+number+publisher+location+date}%
1709 \newunit\newblock
1710 \usebibmacro{chapter+pages}%
1711 \newunit\newblock
1712 \iftoggle{bbx:isbn}
1713 {\printfield{isbn}}
1714 {}%
1715 \newunit\newblock
1716 \usebibmacro{doi+eprint+url}%
1717 \newunit\newblock
1718 \usebibmacro{addendum+pubstate}%
1719 \setunit{\bibpagerefpunct}\newblock
1720 \usebibmacro{pageref}%
1721 \setunit{\relatedtypepunct}\newblock
1722 \iftoggle{bbx:related}
1723 {\usebibmacro{related:init}%
1724 \usebibmacro{related}}
1725 {}%
1726 \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.

```

1727 \newbibmacro*{series+type+number}{%
1728 \ifboolexpr{
1729 test {\iffieldundef{series}}
1730 and
1731 test {\iffieldundef{type}}
1732 }{}{%
1733 \printfield{series}%
1734 \newunit
1735 \ifboolexpr{%
1736 test {\iffieldundef{type}}
1737 and
1738 not test {\iffieldundef{number}}}
1739 {%
1740 \bibcpstring{number}
1741 }{%
1742 \printfield{type}%
1743 }%
1744 \setunit*{\addspace}%
1745 \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.

```

1746 \renewbibmacro*{institution+location+date}{%
1747 \ifboolexpr{
1748 test {\iffieldundef{type}}
1749 and
1750 test {\iffieldundef{series}}
1751 and
1752 test {\iffieldundef{number}}
1753 and
1754 test {\iflistundef{institution}}
1755 and

```

```

1756     test {\iflistundef{location}}
1757     and
1758     test {\iffieldundef{year}}
1759     and
1760     test {\iffieldundef{season}}
1761     and
1762     test {\iffieldundef{month}}
1763   }{}%
1764   \nopunct
1765   \printtext[publication]{%
1766     \ifboolexpr{
1767       test {\iffieldundef{series}}
1768       and
1769       test {\iffieldundef{type}}
1770     }{%
1771       \printfield{number}%
1772       \setunit*{\addcomma\space}%
1773     }{}%
1774   \printlist{location}%
1775   \iflistundef{institution}%
1776   {\setunit*{\addcomma\space}}%
1777   {\setunit*{\addcolon\space}}%
1778   \printlist{institution}%
1779   \setunit*{\addcomma\space}%
1780   \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.

```

1781 \newtoggle{blx@ox@altthesis}
1782 \DeclareBibliographyOption[boolean]{altthesis}[true]{%
1783   \settoggle{blx@ox@altthesis}{#1}
1784 }
1785 \newbibmacro*{type+institution+location+date}{%
1786   \iftoggle{blx@ox@altthesis}{%
1787     \ifboolexpr{
1788       test {\iffieldundef{type}}
1789       and
1790       test {\iflistundef{institution}}
1791       and
1792       test {\iflistundef{location}}
1793       and
1794       test {\iffieldundef{year}}
1795       and
1796       test {\iffieldundef{season}}
1797       and
1798       test {\iffieldundef{month}}
1799     }{}%
1800     \nopunct
1801     \printtext[publication]{%
1802       \printfield{type}%
1803       \setunit*{\addcomma\space}%
1804       \printlist{location}%
1805       \iflistundef{institution}{%
1806         \setunit*{\addcomma\space}%
1807       }{%
1808         \setunit*{\addcolon\space}}%
1809       \printlist{institution}%
1810       \setunit*{\addcomma\space}%
1811       \usebibmacro{date}}}}

```

```

1812 }{%
1813   \printfield{type}%
1814   \newunit
1815   \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.

```

1816 \newbibmacro*{type+series+number+edition+organization+publisher+location+date}{%
1817   \ifbool{expr}{
1818     test {\iffieldundef{type}}
1819     and
1820     test {\iffieldundef{series}}
1821     and
1822     test {\iffieldundef{number}}
1823     and
1824     test {\iffieldundef{edition}}
1825     and
1826     test {\iflistundef{organization}}
1827     and
1828     test {\iflistundef{publisher}}
1829     and
1830     test {\iflistundef{location}}
1831     and
1832     test {\iffieldundef{year}}
1833     and
1834     test {\iffieldundef{season}}
1835     and
1836     test {\iffieldundef{month}}
1837   }{%
1838     \nopunct
1839     \printtext[publication]{%
1840       \usebibmacro{series+type+number}%
1841       \setunit{\addsemicolon\space}%
1842       \printfield{edition}%
1843       \setunit*{\addcomma\space}%
1844       \iflistundef{publisher}{%
1845         \printlist{organization}%
1846         \setunit*{\addcomma\space}}%
1847       \printlist{location}%
1848       \iflistundef{publisher}{%
1849         \iflistundef{organization}{%
1850           \setunit*{\addcomma\space}%
1851         }{%
1852           \setunit*{\addcolon\space}%
1853           \printlist{organization}}%
1854       }{%
1855         \setunit*{\addcolon\space}%
1856         \printlist{publisher}}%
1857       \setunit*{\addcomma\space}%
1858       \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.

```

1859 \newcommand*{\legreport}{legal}
1860 \DeclareBibliographyDriver{report}{%
1861   \usebibmacro{bibindex}%
1862   \usebibmacro{begentry}%
1863   \usebibmacro{author}%
1864   \setunit{\printdelim{nametitle}}\newblock
1865   \usebibmacro{maintitle+title}%
1866   \newunit
1867   \iffieldundef{maintitle}
1868   {\printfield{volume}%
1869     \printfield{part}}
1870   {}%
1871   \newunit\newblock
1872   \usebibmacro{byauthor}%
1873   \newunit\newblock
1874   \printfield{version}%
1875   \newunit\newblock
1876   \printfield{note}%
1877   \newunit\newblock
1878   \usebibmacro{series+type+number}%
1879   \setunit{\addspace}%
1880   \usebibmacro{institution+location+date}%
1881   \iffieldequals{entrysubtype}{\legreport}{%
1882     \setunit{\addspace}\nopunct
1883   }{%
1884     \newunit\newblock}%
1885   \usebibmacro{chapter+pages}%
1886   \newunit
1887   \printfield{pagetotal}%
1888   \newunit\newblock
1889   \iftoggle{bbx:isbn}
1890   {\printfield{isrn}}
1891   {}%
1892   \newunit\newblock
1893   \usebibmacro{doi+eprint+url}%
1894   \newunit\newblock
1895   \usebibmacro{addendum+pubstate}%
1896   \setunit{\bibpagerefpunct}\newblock
1897   \usebibmacro{pageref}%
1898   \setunit{\relatedtypepunct}\newblock
1899   \iftoggle{bbx:related}
1900   {\usebibmacro{related:init}%
1901     \usebibmacro{related}}
1902   {}%
1903   \usebibmacro{finentry}}

```

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

```

1904 \xpatchbibdriver{thesis}{%
1905   \printfield{type}%
1906   \newunit
1907   \usebibmacro{institution+location+date}%
1908 }{%
1909   \usebibmacro{type+institution+location+date}%
1910 }{}

```

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;

```

1911 \DeclareBibliographyDriver{manual}{%
1912   \usebibmacro{bibindex}%
1913   \usebibmacro{begentry}%
1914   \usebibmacro{author/editor}%
1915   \setunit{\printdelim{nametitle}}\newblock
1916   \usebibmacro{title}%
1917   \newunit\newblock
1918   \usebibmacro{byauthor}%
1919   \newunit\newblock
1920   \usebibmacro{byeditor}%
1921   \newunit\newblock
1922   \printfield{type}%
1923   \newunit
1924   \printfield{version}%
1925   \newunit
1926   \printfield{note}%
1927   \newunit\newblock
1928   \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
1929   \newunit\newblock
1930   \usebibmacro{chapter+pages}%
1931   \newunit
1932   \printfield{pagetotal}%
1933   \newunit\newblock
1934   \iftoggle{bbx:isbn}
1935   {\printfield{isbn}}
1936   {}%
1937   \newunit\newblock
1938   \usebibmacro{doi+eprint+url}%
1939   \newunit\newblock
1940   \usebibmacro{addendum+pubstate}%
1941   \setunit{\bibpagerefpunct}\newblock
1942   \usebibmacro{pageref}%
1943   \setunit{\relatedtypepunct}\newblock
1944   \iftoggle{bbx:related}
1945   {\usebibmacro{related:init}%
1946    \usebibmacro{related}}
1947   {}%
1948   \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.

```

1949 \newbibmacro*{publisher+type+series+number+date}{%
1950   \iffieldundef{number}{}{%
1951     \setunit{\addcomma\space}%
1952     \usebibmacro{origdate+time}%
1953   }%
1954   \ifboolexpr{%
1955     test {\iflistundef{origpublisher}}
1956     and
1957     test {\iflistundef{location}}
1958     and
1959     test {\iflistundef{publisher}}
1960     and
1961     test {\iffieldundef{type}}
1962     and

```

```

1963     test {\iffielddundef{series}}
1964     and
1965     test {\iffielddundef{number}}
1966     and
1967     test {\iffielddundef{year}}
1968     and
1969     test {\iffielddundef{season}}
1970     and
1971     test {\iffielddundef{month}}
1972     and
1973     test {\iffielddundef{eventyear}}
1974     and
1975     test {\iffielddundef{eventseason}}
1976     and
1977     test {\iffielddundef{eventmonth}}
1978     and
1979     test {\iffielddundef{hour}}
1980   }{}{%
1981     \nopunct
1982     \printtext[publication]{%
1983       \printlist{origpublisher}%
1984       \setunit*{\addsemicolon\space}%
1985       \printlist{location}%
1986       \iflistundef{publisher}%
1987         {\setunit*{\addcomma\space}}%
1988         {\setunit*{\addcolon\space}}%
1989       \printlist{publisher}%
1990       \iffielddundef{series}%
1991         {\setunit*{\addspace}}%
1992         {\setunit*{\recordseriespunct}}}%
1993     \printfield{series}%
1994     \setunit*{\addcomma\space}%
1995     \printfield{type}%
1996     \iflistundef{publisher}%
1997       {\setunit*{\addcomma\space}}%
1998       {\setunit*{\addspace}}%
1999     \printfield{number}%
2000     \iffielddundef{number}{%
2001       \setunit*{\addcomma\space}%
2002       \usebibmacro{origdate+time}%
2003     }{}%
2004     \setunit*{\addcomma\space}%
2005     \usebibmacro{date+time}}}}

```

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

```

2006   \newtoggle{blx@ox@endeditor}
2007   \DeclareEntryOption[boolean]{endeditor}[true]{%
2008     \settoggle{blx@ox@endeditor}{#1}}
2009   \newbibmacro*{pre-byeditor+others}{%
2010     \iftoggle{blx@ox@endeditor}{}{%
2011       \usebibmacro{byeditor+others}%
2012     }}
2013   \newbibmacro*{post-byeditor+others}{%
2014     \iftoggle{blx@ox@endeditor}{%
2015       \usebibmacro{byeditor+others}%
2016     }{}}

```

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


```

2017 \DeclareBibliographyDriver{audio}{%
2018   \usebibmacro{bibindex}%
2019   \usebibmacro{begentry}%
2020   \usebibmacro{author}%
2021   \setunit{\printdelim{nametitledelim}}\newblock
2022   \usebibmacro{title}%
2023   \newunit
2024   \usebibmacro{maintitle}%
2025   \iffieldequalstr{relatedtype}{includes}{%
2026     \iftoggle{bbx:related}{%
2027       \newunit\newblock
2028       \usebibmacro{related:init}%
2029       \usebibmacro{related}%
2030       \clearfield{related}%
2031     }{}%
2032   }{}%
2033   \setunit{\addspace}
2034   \usebibmacro{onlinetype}%
2035   \newunit\newblock
2036   \usebibmacro{byauthor}%
2037   \newunit\newblock
2038   \usebibmacro{pre-byeditor+others}%
2039   \newunit\newblock
2040   \printfield{volumes}%
2041   \newunit\newblock
2042   \printfield{note}%
2043   \newunit\newblock%
2044   \printlist{organization}%
2045   \newunit\newblock%
2046   \usebibmacro{publisher+type+series+number+date}%
2047   \setunit{\addspace}%
2048   \printfield{howpublished}%
2049   \newunit\newblock
2050   \usebibmacro{post-byeditor+others}%
2051   \newunit\newblock
2052   \iftoggle{bbx:isbn}
2053   {\printfield{isbn}}
2054   {}%
2055   \newunit\newblock
2056   \usebibmacro{doi+eprint+url}%
2057   \newunit\newblock
2058   \usebibmacro{addendum+pubstate}%
2059   \setunit{\bibpagerefpunct}\newblock
2060   \usebibmacro{pageref}%
2061   \setunit{\relatedtypepunct}\newblock
2062   \iftoggle{bbx:related}
2063   {\usebibmacro{related:init}%
2064     \usebibmacro{related}}
2065   {}%
2066   \usebibmacro{finentry}}

```

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

```

2067 \DeclareBibliographyAlias{music}{audio}
2068 \DeclareBibliographyAlias{movie}{audio}
2069 \DeclareBibliographyAlias{video}{audio}

```

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

```

2070 \DeclareBibliographyDriver{inaudio}{%
2071   \usebibmacro{bibindex}%
2072   \usebibmacro{begentry}%
2073   \usebibmacro{author}%
2074   \setunit{\printdelim{nametitledelim}}\newblock
2075   \usebibmacro{title}%
2076   \newunit\newblock
2077   \usebibmacro{byauthor}%
2078   \newunit\newblock
2079   \usebibmacro{in:}%
2080   \usebibmacro{bybookauthor}%
2081   \newunit\newblock
2082   \usebibmacro{maintitle+booktitle}%
2083   \iffieldequalstr{relatedtype}{includes}{%
2084     \iftoggle{bbx:related}{%
2085       \newunit\newblock
2086       \usebibmacro{related:init}%
2087       \usebibmacro{related}%
2088       \clearfield{related}%
2089     }{}%
2090   }{}%
2091   \setunit{\addspace}
2092   \usebibmacro{onlinetype}%
2093   \newunit\newblock
2094   \usebibmacro{pre-byeditor+others}%
2095   \newunit\newblock
2096   \printfield{volumes}%
2097   \newunit\newblock
2098   \printfield{note}%
2099   \newunit\newblock%
2100   \printlist{organization}%
2101   \newunit\newblock%
2102   \usebibmacro{publisher+type+series+number+date}%
2103   \setunit{\addspace}%
2104   \printfield{howpublished}%
2105   \newunit\newblock
2106   \usebibmacro{post-byeditor+others}%
2107   \newunit\newblock
2108   \iftoggle{bbx:isbn}
2109   {\printfield{isbn}}
2110   {}%
2111   \newunit\newblock
2112   \usebibmacro{doi+eprint+url}%
2113   \newunit\newblock
2114   \usebibmacro{addendum+pubstate}%
2115   \setunit{\bibpagerefunct}\newblock
2116   \usebibmacro{pageref}%
2117   \setunit{\relatedtypepunct}\newblock
2118   \iftoggle{bbx:related}
2119   {\usebibmacro{related:init}%
2120     \usebibmacro{related}}
2121   {}%
2122   \usebibmacro{finentry}}

```

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

```

2123 \DeclareBibliographyAlias{inmusic}{inaudio}
2124 \DeclareBibliographyAlias{inmovie}{inaudio}
2125 \DeclareBibliographyAlias{invideo}{inaudio}

```

We set up appropriate inheritance rules.

```

2126 \DeclareDataInheritance{audio,music,movie,video}{inaudio,inmusic,inmovie,invideo}{%
2127 \inherit{title}{booktitle}
2128 \inherit{subtitle}{booksubtitle}
2129 \inherit{titleaddon}{booktitleaddon}
2130 \noinherit{shorttitle}
2131 \noinherit{sorttitle}
2132 \noinherit{indextitle}
2133 \noinherit{indexsorttitle}
2134 }

```

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.

```

2135 \DeclareFieldFormat[audio,music]{title}{%
2136 \def\currentfield{title}%
2137 \iffielddannotation{descriptor}{#1}{%
2138 \iffieldequalstr{entrysubtype}{podcast}{%
2139 \mkbibquote{#1\isdot}%
2140 }{%
2141 \mkbibemph{#1}}}%
2142 \undef\currentfield}
2143 \DeclareFieldFormat[movie,video]{title}{%
2144 \def\currentfield{title}%
2145 \iffielddannotation{descriptor}{#1}{%
2146 \ifboolexpr{
2147 test {\iffieldequalstr{entrysubtype}{episode}}
2148 or
2149 test {\iffieldequalstr{entrysubtype}{clip}}
2150 or
2151 test {\iffieldequalstr{entrysubtype}{webcast}}
2152 }{%
2153 \mkbibquote{#1\isdot}%
2154 }{%
2155 \mkbibemph{#1}}}%
2156 \undef\currentfield}
2157 \DeclareFieldFormat[inaudio,inmusic,inmovie,invideo]{title}{%
2158 \def\currentfield{title}%
2159 \iffielddannotation{descriptor}{#1}{%
2160 \mkbibquote{#1\isdot}%
2161 }%
2162 \undef\currentfield}
2163 \DeclareFieldFormat[inaudio,inmusic]{booktitle}{%
2164 \def\currentfield{booktitle}%
2165 \iffielddannotation{descriptor}{#1}{%
2166 \iffieldequalstr{entrysubtype}{podcast}{%
2167 \mkbibquote{#1\isdot}%
2168 }{%
2169 \mkbibemph{#1}}}%
2170 \undef\currentfield}
2171 \DeclareFieldFormat[inmovie,invideo]{booktitle}{%
2172 \def\currentfield{booktitle}%
2173 \iffielddannotation{descriptor}{#1}{%
2174 \ifboolexpr{
2175 test {\iffieldequalstr{entrysubtype}{episode}}
2176 or
2177 test {\iffieldequalstr{entrysubtype}{clip}}
2178 or
2179 test {\iffieldequalstr{entrysubtype}{webcast}}
2180 }{%

```

```

2181 \mkbibquote{#1\isdot}%
2182 }{%
2183 \mkbibemph{#1}}}%
2184 \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.

```

2185 \DeclareBibliographyAlias{image}{online}
2186 \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.

```

2187 \DeclareFieldFormat[online]{title}{%
2188 \def\currentfield{title}%
2189 \iffieldannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}}%
2190 \undef\currentfield}

```

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

```

2191 \newbibmacro*{onlinetype}{%
2192 \ifboolexpr{
2193 test {\iffieldundef{url}}
2194 or
2195 test {\iffieldundef{entrysubtype}}
2196 }{%
2197 \ifbibxstring{\thefield{entrysubtype}}{%
2198 \printtext[brackets]{\bibstring{\thefield{entrysubtype}}}%
2199 }{}}

```

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.

```

2200 \DeclareBibliographyDriver{online}{%
2201 \usebibmacro{bibindex}%
2202 \usebibmacro{begentry}%
2203 \usebibmacro{author/editor+others/translator+others}%
2204 \setunit{\printdelim{nametitledelim}}\newblock
2205 \usebibmacro{title}%
2206 \newunit
2207 \usebibmacro{maintitle}
2208 \setunit{\addspace}%
2209 \usebibmacro{onlinetype}%

```

```

2210 \newunit\newblock
2211 \usebibmacro{byauthor}%
2212 \newunit\newblock
2213 \usebibmacro{byeditor+others}%
2214 \newunit\newblock
2215 \printfield{version}%
2216 \newunit
2217 \printfield{note}%
2218 \newunit\newblock
2219 \printlist{organization}%
2220 \iffieldundef{year}{}{%
2221   \setunit{\addspace}\newblock
2222   \printtext[parens]{\usebibmacro{date+time}}%
2223 }%
2224 \newunit\newblock
2225 \printlist{publisher}%
2226 \newunit\newblock
2227 \iftoggle{bbx:eprint}
2228 {\usebibmacro{eprint}}
2229 {}%
2230 \newunit\newblock
2231 \usebibmacro{url+urldate}%
2232 \newunit\newblock
2233 \usebibmacro{addendum+pubstate}%
2234 \setunit{\bibpagerefunct}\newblock
2235 \usebibmacro{pageref}%
2236 \setunit{\relatedtypepunct}\newblock
2237 \iftoggle{bbx:related}
2238 {\usebibmacro{related:init}%
2239   \usebibmacro{related}}
2240 {}%
2241 \usebibmacro{finentry}}

```

Software

The version for software goes between the title and titleaddon.

```

2242 \newbibmacro*{title+version}{%
2243   \ifboolexpr{
2244     test {\iffieldundef{title}}
2245     and
2246     test {\iffieldundef{subtitle}}
2247   }
2248   {}
2249   {\printtext[title]{%
2250     \printfield[titlecase]{title}%
2251     \setunit{\subtitlepunct}%
2252     \printfield[titlecase]{subtitle}}%
2253     \setunit{\addspace}}%
2254   \printfield{version}%
2255   \setunit{\addspace}%
2256   \printfield{titleaddon}%
2257 }
2258 \DeclareFieldFormat[software]{version}{\mkbibparens{\bibstring{version}~#1}}

```

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

```

2259 \DeclareFieldFormat[software]{urldate}{\bibstring{urldown}\space#1}

```

The software driver is based loosely on the manual driver.

```

2260 \DeclareBibliographyDriver{software}{%
2261   \usebibmacro{bibindex}%
2262   \usebibmacro{begentry}%
2263   \usebibmacro{author/editor}%
2264   \setunit{\printdelim{nametitledelim}}\newblock
2265   \usebibmacro{title+version}%
2266   \newunit\newblock
2267   \usebibmacro{byauthor}%
2268   \newunit\newblock
2269   \usebibmacro{byeditor}%
2270   \newunit\newblock
2271   \printfield{type}%
2272   \newunit
2273   \printfield{note}%
2274   \newunit\newblock
2275   \usebibmacro{type+series+number+edition+organization+publisher+location+date}%
2276   \newunit\newblock
2277   \usebibmacro{chapter+pages}%
2278   \newunit
2279   \printfield{pagetotal}%
2280   \newunit\newblock
2281   \iftoggle{bbx:isbn}
2282   {\printfield{isbn}}
2283   {}%
2284   \newunit\newblock
2285   \usebibmacro{doi+eprint+url}%
2286   \newunit\newblock
2287   \usebibmacro{addendum+pubstate}%
2288   \setunit{\bibpagerefunct}\newblock
2289   \usebibmacro{pageref}%
2290   \setunit{\relatedtypepunct}\newblock
2291   \iftoggle{bbx:related}
2292   {\usebibmacro{related:init}%
2293    \usebibmacro{related}}
2294   {}%
2295   \usebibmacro{finentry}}

```

Datasets

Datasets are currently treated like manuals

```

2296 \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

```

2297 \newtoggle{bbx:scotstyle}
2298 \DeclareEntryOption{scottish-style}[true]{%
2299   \settoggle{bbx:scotstyle}{#1}}
2300 \newboolean{bbx@year-essential}\setboolean{bbx@year-essential}{false}
2301 \DeclareEntryOption{year-essential}[true]{%
2302   \setboolean{bbx@year-essential}{#1}}
2303 \newboolean{bbx@paryear-essential}\setboolean{bbx@paryear-essential}{false}
2304 \DeclareEntryOption{paryear-essential}[true]{%

```

```

2305 \setboolean{bbx@paryear-essential}{#1}}
2306 \newtoggle{blx@ox@nopostnotedelim}
2307 \newtoggle{bbx:altcourt}
2308 \DeclareBibliographyOption{court-plain}[true]{%
2309 \settoggle{bbx:altcourt}{#1}}
2310 \DeclareEntryOption{court-plain}[true]{%
2311 \settoggle{bbx:altcourt}{#1}}
2312 \newtoggle{bbx@ecliuse}
2313 \newtoggle{bbx@eclionly}
2314 \DeclareBibliographyOption{ecli}[yes]{%
2315 \ifstrequal{#1}{no}{%
2316 \global\togglefalse{bbx@ecliuse}%
2317 \global\togglefalse{bbx@eclionly}%
2318 }{%
2319 \global\toggletrue{bbx@ecliuse}%
2320 \ifstrequal{#1}{only}{%
2321 \global\toggletrue{bbx@eclionly}%
2322 }{}}

```

Field formats

```

2323 \DeclareFieldFormat{casenotetitle}{\mkbibquote{\mkbibemph{#1}}}
2324 \DeclareFieldFormat[jurisdiction,legislation,legal]{journaltitle}{#1}
2325 \DeclareFieldFormat[jurisdiction]{volume}{#1}
2326 \DeclareFieldFormat[jurisdiction]{titleaddon}{\mkbibparens{#1}}
2327 \DeclareFieldFormat{romanvol}{\RN{#1}}
2328 \DeclareListFormat[jurisdiction]{listb}{}
2329 \DeclareFieldFormat{usseries}{\ifinteger{#1}{\mkusbibordinal{#1}}{#1}}
2330 \DeclareFieldFormat{verba}{#1}
2331
2332 \DeclareListFormat{echrinst}{%
2333 \ifboolexpr{%
2334 test {\ifnumequal{\value{listtotal}}{1}}
2335 or
2336 test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
2337 }{%
2338 \ifboolexpr{
2339 test {\ifdefstring{\Commission}{#1}}
2340 or
2341 test {\ifdefstring{\commission}{#1}}%
2342 }{%
2343 \bibstring{commissiondecision}%
2344 }{#1}%
2345 }{%
2346 \setcounter{blx@tmpcnt}{\value{listcount}}%
2347 \addtocounter{blx@tmpcnt}{1}%
2348 \ifnumequal{\value{blx@tmpcnt}}{\value{listtotal}}{%
2349 #1\space\bibstring{and}\addspace
2350 }{%
2351 #1\addcomma\space}}%
2352
2353 \newcommand*{\commission}{commission}
2354 \newcommand*{\Commission}{Commission}
2355 \DeclareListFormat{ecthr}{%
2356 \ifboolexpr{
2357 test {\ifdefstring{\Commission}{#1}}
2358 or
2359 test {\ifdefstring{\commission}{#1}}
2360 }{\bibstring{\mkbibparens}{commissiondecision}\toggletrue{blx@ox@nopostnotedelim}}{}}
2361

```

```

2362 \newcommand*{\pciirep}{PCIJ Rep}
2363 \DeclareFieldFormat{international}{%
2364   \iffieldequals{journaltitle}{\pciirep}{%
2365     \bibcplstring{jourser}\space #1%
2366   }{#1}}
2367
2368 \DeclareListFormat{checkcontains}{%
2369   \bbx@check{#1}}
2370 \newtoggle{bbx@institutiontoggle}
2371 \newcommand\iflistcontains[2]{%
2372   \global\togglefalse{bbx@institutiontoggle}%
2373   \def\bbx@check##1{%
2374     \ifdefstring{#2}{##1}{\global\toggletrue{bbx@institutiontoggle}}}%
2375   \printlist[checkcontains]{#1}%
2376   \iftoggle{bbx@institutiontoggle}}
2377
2378 \DeclareFieldFormat{draftleg}{%
2379   \StrBefore{#1}{ Bill}}
2380
2381 \DeclareListFormat{billprinting}{%
2382   \ifstrequal{#1}{HC}{%
2383     \mkbibbrackets{\strfield{number}}%
2384     \toggletrue{blx@ox@nopostnotedelim}%
2385   }{%
2386     \strfield{number}%
2387     \togglefalse{blx@ox@nopostnotedelim}}
2388
2389 \newcommand*{\treatypartysep}{\allowbreak ---\allowbreak}
2390 \DeclareListFormat{treaty}{%
2391   \ifmoreitems{%
2392     \ifnumequal{\value{listcount}}{1}{%
2393       \bibopenparen
2394     }{%
2395       \ifnumgreater{\value{liststop}}{\value{listcount}}{%
2396         #1\treatypartysep
2397       }{%
2398         #1\bibcloseparen}}
2399
2400 \def\siganddate#1{%
2401   \def\bbx@tempa{#1}%
2402   \expandafter\bbx@signeddatei#1/relax}
2403 \def\bbx@signeddatei#1=#2/relax{%
2404   \def\bbx@tempa{#2-}%
2405   \bibstring{#1}\space\expandafter\makebbx@datei\bbx@tempa}
2406 \def\makebbx@datei#1-#2-#3-{%
2407   \makebbx@dateii{#1}{#2}{#3}}
2408 \def\makebbx@dateii#1#2#3{%
2409   \blx@imc@stripzeros{#3}~\mkbibmonth{#2}%
2410   \space
2411   #1}
2412 \DeclareListFormat{treatydates}{%
2413   \ifnumequal{\value{listcount}}{1}{%
2414     \siganddate{#1}%
2415   }{%
2416     \addcomma\space\siganddate{#1}}}

```

Pagination formats

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


```

2417 \newrobustcmd*{\mkrawpageprefix}[1][none]{%
2418 \begingroup
2419 \def\blx@tempa{\blx@mkpageprefix@i}%
2420 \ifstrequal{#1}{none}{}{}%
2421 \ifbibstring{#1}{%
2422 \def\blx@tempa{\blx@mkpageprefix{#1}}%
2423 }{}%
2424 \blx@warning@entry{Unknown pagination type '#1'}}}%
2425 \@ifnextchar[%]
2426 {\blx@tempa}
2427 {\blx@tempa[\@firstofone]}}
2428
2429 \newcommand*\paragraphmarkings{[]}
2430 \DeclareFieldFormat[jurisdiction,legislation,legal]{postnote}{%
2431 \iffielddundef{pagination}{%
2432 \ifboolexpr{
2433 test {\ifkeyword{eu}}
2434 or
2435 test {\ifkeyword{echr}}
2436 }{}%
2437 \mkcomprange[\mkrawpageprefix[paragraph]]{#1}%
2438 }{}%
2439 \mkcomprange{#1}}}%
2440 }{}%
2441 \iffieldequals{pagination}{\paragraphmarkings}{%
2442 \mkcomprange[\mkbibbrackets]{#1}%
2443 }{}%
2444 \mkcomprange[\mkpageprefix[pagination]]{#1}}}%

```

Shorthands

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

```

2445 \renewbibmacro*{shorthandintro}{%
2446 \iffielddundef{shorthandintro}
2447 {\iffielddundef{shorthand}
2448 {}
2449 {\setunit{\addspace}%
2450 \printtext[parens]{%
2451 \ifboolexpr{
2452 test {\ifentrytype{jurisdiction}}
2453 or
2454 test {\ifentrytype{legal}}
2455 or
2456 test {\ifentrytype{legislation}}
2457 }{}{}%
2458 \bibstring{citedas}\space}%
2459 \printfield{shorthand}}}}
2460 {\setunit{\addspace}%
2461 \printtext[parens]{\printfield{shorthandintro}}}}

```

Common macros

```

2462 \newbibmacro*{issue/volume}{%
2463 \iffielddundef{volume}%
2464 {\iffielddundef{issue}%
2465 {}%
2466 {\printfield{issue}}}%
2467 {\printfield[default]{volume}}}%

```

```

2468 \newcommand*{\subtypenewsp}{newspaper}
2469 \newbibmacro*{year+vol+report}[1][default]{%
2470   \iffieldequals{entrysubtype}{\subtypenewsp}{%
2471     \setunit{\addcomma\space}%
2472   }{%
2473     \usebibmacro{journaldate}%
2474     \setunit{\addspace}%
2475     \printfield[parens]{origyear}%
2476     \setunit{\addspace}%
2477     \printfield{volume}%
2478     \setunit{\addspace}}%
2479   \printfield{journaltitle}%
2480   \setunit*{\addspace}%
2481   \iffieldundef{series}{}{%
2482     \setunit{\addspace}%
2483     \printfield[#1]{series}%
2484     \setunit{\addspace}}%
2485   \iffieldequals{entrysubtype}{\subtypenewsp}{%
2486     \setunit{\addcomma\space}%
2487     \printdate%
2488   }{}}
2489 \newbibmacro*{journaldate}[1][{%
2490   \ifboolexpr{
2491     test {\iffieldundef{#1volume}}
2492     or
2493     bool {bbx@#1year-essential}
2494   }{%
2495     \ifboolexpr{
2496       test {\ifkeyword{sc}}
2497       or
2498       test {\iftoggle{bbx:scotstyle}}
2499     }{%
2500       \setunit{\addcomma\space}%
2501       \printfield{#1year}%
2502     }{%
2503       \printfield[brackets]{#1year}}%
2504   }{%
2505     \printfield[parens]{#1year}}}%
2506 \newcommand*{\casenote}{casenote}
2507 \newcommand{\casenotetext}{\bibstring{casenote}}
2508 \newbibmacro{journaltitle}{%
2509   \iffieldequals{entrysubtype}{\casenote}{%
2510     \iffieldundef{crossref}{%
2511       \usebibmacro{title}%
2512     }{%
2513       \iffieldundef{note}{%
2514         \restorefield{note}{\casenotetext}%
2515       }{}%
2516       \ifboolexpr{
2517         test {\iffootnote}
2518         and test {\iftoggle{bbx@samefootnote}}
2519         and test {\iffieldequals{crossref}{\blx@lastkey@foot}}%
2520       }{}{\printfield[casenotetitle]{title}}}%
2521     }{%
2522       \usebibmacro{title}}}%
2523 \newbibmacro*{unreported}[1][default]{%
2524   \iffieldundef{verba}{%
2525     \ifboolexpr{
2526       test {\iflistundef{institution}}
2527       and
2528       test {\iffieldundef{date}}
2529       and

```

```

2530     test {\iffielddundef{year}}
2531   }{%
2532     \ifboolexpr{
2533       test {\iffielddundef{date}}
2534       and
2535       test {\iffielddundef{year}}
2536     }{%
2537       \mkbibparens{\printlist[jurisdiction]{institution}}%
2538     }{%
2539       \toggletrue{blx@ox@nopostnotedelim}%
2540       \iflistundef{institution}{%
2541         \mkbibparens{\usebibmacro{date}}%
2542       }{%
2543         \printtext[parens]{%
2544           \printlist[#1]{institution}%
2545           \setunit{\addcomma\space}
2546           \usebibmacro{date}}}%
2547     }{%
2548       \iftoggle{bbx@ecliuse}{%
2549         \printfield{verba}}}%
2550 \newbibmacro{court-note}{%
2551   \iffielddundef{note}%
2552   {%
2553     \printfield{note}%
2554     \toggletrue{blx@ox@nopostnotedelim}}%
2555 \newbibmacro*{jurisdictionpages}{%
2556   \iffieldequals{entrysubtype}{\subtypenewsp}{%
2557     \setunit{\addspace}%
2558     \printfield{pages}}%
2559 \newbibmacro{pcitenote}{%
2560   \iffielddundef{userc}{%
2561     \setunit{\addcomma\space}%
2562     \iffielddundef{postnote}{%
2563       \printfield{postnote}%
2564       \clearfield{postnote}%
2565       \setunit{\addsemicolon\space}}%
2566 \newbibmacro*{courtid}{%
2567   \iffielddundef{number}{%
2568     \ifboolexpr{
2569       test {\iflistundef{institution}}
2570       and
2571       test {\iffielddundef{location}}%
2572     }{%
2573       \togglefalse{blx@ox@nopostnotedelim}%
2574     }{%
2575       \ifboolexpr{%
2576         test {\iffielddundef{journaltitle}}
2577         or
2578         not togl {bbx:altcourt}
2579       }{%
2580         \printtext[parens]{%
2581           \printfield{location}%
2582           \setunit{\addspace}%
2583           \printlist{institution}%
2584           \usebibmacro{unrep:date}}%
2585         \toggletrue{blx@ox@nopostnotedelim}
2586       }{%
2587         \setunit{\addcomma\space}%
2588         \printfield{location}%
2589         \setunit*\addspace%
2590         \printlist{institution}}}%
2591     }{%

```

```

2592     \togglefalse{blx@ox@nopostnotedelim}}
2593 \newbibmacro*{unrep:date}{%
2594   \ifbool{expr{
2595     test {\iffieldundef{journaltitle}}%
2596     and
2597     test {\iffieldundef{number}}%
2598   }}{
2599     \setunit{\addcomma\space}%
2600     \usebibmacro{date}%
2601   }}

```

Legal cases

There are different formats depending on the jurisdiction.

```

2602 \DeclareBibliographyDriver{jurisdiction}{%
2603   \usebibmacro{bibindex}%
2604   \usebibmacro{begentry}%
2605   \usebibmacro{juriscitation}%
2606   \usebibmacro{doi+eprint+url}%
2607   \setunit{\addspace}%\newblock
2608   \usebibmacro{addendum+pubstate}%
2609   \setunit{\bibpagerefpunct}\newblock
2610   \usebibmacro{pageref}%
2611   \setunit{\addspace}%\newblock
2612   \iftoggle{bbx:related}
2613     {\usebibmacro{related:init}%
2614     \usebibmacro{related}}
2615     {}%
2616   \usebibmacro{finentry}}
2617 \newtoggle{bbx@juriscitedone}
2618 \newbibmacro{juriscitation}{%
2619   \togglefalse{bbx@juriscitedone}%
2620   \renewcommand{\do}[1]{%
2621     \ifkeyword{##1}{%
2622       \toggletrue{bbx@juriscitedone}\usebibmacro{##1juriscitation}%
2623       \listbreak
2624     }}%
2625   \docsvlist{eu,echr,int,ca,us}%
2626   \iftoggle{bbx@juriscitedone}{}{\usebibmacro{enjuriscitation}}%
2627 }

```

Here is the format for EU cases.

```

2628 \newbibmacro*{eujuriscitation}{%
2629   \iflistcontains{institution}{\commission}}{%
2630     \usebibmacro{eucasenumber}}{%
2631     \usebibmacro{title}%
2632     \setunit{\addspace}%
2633     \iflistcontains{institution}{\commission}}{%
2634       \usebibmacro{eucommissiondecision}}{%
2635       \setunit{\addspace}%
2636       \usebibmacro{eu:reportinfo}%
2637       \iflistcontains{institution}{\commission}}{%
2638         \setunit{\addcomma\space}%
2639       }{%
2640         \setunit{\addspace}}%
2641       \usebibmacro{court-note}%
2642     }
2643 \newbibmacro{eucasenumber}{%

```

```

2644 \iffielddundef{type}{%
2645 \ifbool{expr{
2646 test {\IfSubStr{\thefield{number}}{,}}
2647 or
2648 test {\IfSubStr{\thefield{number}}{--}}
2649 or
2650 test {\IfSubStr{\thefield{number}}{ and }}
2651 }{%
2652 \bibstring{eujoinedcases}%
2653 }{%
2654 \bibstring{eucase}%
2655 }{%
2656 \printfield{type}%
2657 \setunit{\adddspace}%
2658 \printfield{number}%
2659 \setunit{\adddspace}}
2660 \newbibmacro{eucommissiondecision}{%
2661 \iffielddundef{userb}{}%
2662 \printfield[parens]{userb}%
2663 \setunit{\adddspace}%
2664 \iffielddundef{number}{}%
2665 \iffielddundef{type}{%
2666 \setunit{\adddspace\bibstring{commissiondecision}\adddspace}%
2667 }{%
2668 \setunit{\adddspace\printfield{type}\adddspace}}%
2669 \printfield{number}}
2670 \newbibmacro*{eu:reportinfo}{%
2671 \iftoggle{bbx@eclionly}{%
2672 \iffielddundef{verba}{%
2673 \usebibmacro{eu:osreport}
2674 }{%
2675 \printfield{verba}}%
2676 }{%
2677 \usebibmacro{eu:osreport}}}
2678 \newbibmacro*{eu:osreport}{%
2679 \iftoggle{bbx@ecliuse}{%
2680 \iffielddundef{verba}{}%
2681 \printfield{verba}%
2682 \setunit{\adddspace}}%
2683 }{}%
2684 \iffielddundef{journaltitle}{%
2685 \usebibmacro{unreported}%
2686 }{%
2687 \usebibmacro{eu:year+vol+report}}}
2688 \newcommand*{\officialjournaltitle}{OJ}
2689 \newcommand*{\ecrreporttitle}{ECR}
2690 \newbibmacro*{eu:year+vol+report}{%
2691 \iffieldequals{journaltitle}{\ecrreporttitle}{%
2692 \printfield[brackets]{year}%
2693 \setunit{\adddspace}%
2694 \printfield{journaltitle}%
2695 \setunit{\adddspace}%
2696 \printfield{volume}%
2697 \setunit*{\printtext{--\allowbreak}}%
2698 \printfield{pages}%
2699 }{%
2700 \iffieldequals{journaltitle}{\officialjournaltitle}{%
2701 \printfield[brackets]{year}%
2702 \setunit{\adddspace}%
2703 \printfield{journaltitle}%
2704 \setunit{\adddspace}%
2705 \printfield[default]{series}%

```

```

2706 \usebibmacro{issue/volume}%
2707 \setunit{\printtext{\slash}}%
2708 \printfield{pages}%
2709 }{%
2710 \usebibmacro{year+vol+report}}}}

```

Here is the format for European Human Rights cases.

```

2711 \newbibmacro*{echrjuriscitation}{%
2712 \usebibmacro{title}%
2713 \setunit{\addspace}\newblock
2714 \iffieldundef{number}{}{%
2715 \printtext[parens]{%
2716 \def\adddot{}%
2717 \bibstring{application}\space
2718 \bibstring{number}\space
2719 \printfield{number}}}%
2720 \setunit{\addspace}\newblock}%
2721 \iffieldundef{journaltitle}{%
2722 \usebibmacro{unreported}[echrinst]%
2723 }{%
2724 \usebibmacro{echr:year+vol+report}
2725 \setunit{\addspace}\newblock
2726 \usebibmacro{echr:courtid}}%
2727 \setunit{\addspace}%
2728 \usebibmacro{court-note}%
2729 \newblock
2730 \setunit{\addspace}}
2731 \newcommand*{\seriesa}{Series A}
2732 \newcommand*{\echrreports}{ECHR}
2733 \newbibmacro*{echr:year+vol+report}{%
2734 \iffieldequals{journaltitle}{\seriesa}{%
2735 \usebibmacro{seriesareport}%
2736 }{%
2737 \iffieldequals{journaltitle}{\echrreports}{%
2738 \usebibmacro{echrreports}%
2739 }{%
2740 \usebibmacro{year+vol+report}
2741 \setunit{\addspace}%
2742 \printfield{pages}}}}
2743 \newbibmacro*{seriesareport}{%
2744 \printfield[parens]{year}%
2745 \setunit{\addspace}%
2746 \printfield{journaltitle}%
2747 \setunit{\addspace}%
2748 \printtext{\def\adddot{}\bibstring{number}\addspace}%
2749 \printfield{pages}}
2750 \newbibmacro*{echrreports}{%
2751 \printfield{journaltitle}%
2752 \setunit{\addspace}%
2753 \printfield{year}%
2754 \iffieldundef{volume}{}{%
2755 \printtext{--}\printfield[romanvol]{volume}}
2756 \setunit{\addspace}%
2757 \printfield{pages}}
2758 \newcommand*{\decisionsandreports}{DR}
2759 \newcommand*{\collectionofdecisions}{CD}
2760 \newbibmacro*{echr:courtid}{%
2761 \ifboolexpr{
2762 test {\iffieldequals{journaltitle}{\decisionsandreports}}
2763 or

```

```

2764     test {\iffieldequals{journaltitle}{\collectionofdecisions}}%
2765   }{}%
2766     \printlist[ecthr]{institution}}}

```

Here is the format for international cases.

```

2767 \newbibmacro*{intjuriscitation}{%
2768   \iflistundef{institution}{%
2769     \setunit{}\printtext{%
2770   }{%
2771     \printlist{institution}%
2772     \setunit{\addcomma\space}}%
2773   \usebibmacro{int:title}%
2774   \setunit{\addspace}\newblock
2775   \iffieldundef{journaltitle}{%
2776     \printfield{number}%
2777     \setunit{\addspace}\newblock
2778     \printtext[parens]{\printdate}%
2779   }{%
2780     \usebibmacro{year+vol+report}[international]%
2781   }%
2782   \setunit{\addspace}%
2783   \usebibmacro{int:jurisdictionpages}%
2784   \setunit{\addspace}\newblock
2785   \usebibmacro{court-note}%
2786 }
2787 \newbibmacro*{int:title}{%
2788   \ifboolexpr{
2789     test {\iffieldundef{title}}
2790     and
2791     test {\iffieldundef{subtitle}}
2792   }{}{%
2793     \printtext[title]{%
2794       \printfield[titlecase]{title}%
2795       \setunit{\addspace}%
2796       \printfield[parens]{subtitle}}}%
2797   \setunit{\addspace}%
2798   \printfield{titleaddon}%
2799 }
2800 \newbibmacro*{int:jurisdictionpages}{%
2801   \iffieldequals{journaltitle}{\pcijrep}{%
2802     \printtext{\bibcpstring{number}\addspace}%
2803     \iffieldundef{pages}{%
2804       \printfield{number}%
2805     }{%
2806       \printfield{pages}}}%
2807   }{%
2808     \printfield{pages}}

```

Here is the format for Canadian cases.

```

2809 \newbibmacro{canjuriscitation}{%
2810   \usebibmacro{title}%
2811   \setunit{\addspace}\newblock
2812   \printfield{number}%
2813   \setunit{\addcomma\space}%
2814   \iffieldundef{journaltitle}{%
2815     \usebibmacro{can:year+vol+report}}}%
2816   \usebibmacro{jurisdictionpages}%
2817   \usebibmacro{pcitenote}%
2818   \usebibmacro{altreportdetails}%

```

```

2819 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
2820 \newunit\newblock
2821 \usebibmacro{courtid}%
2822 \newunit%
2823 \usebibmacro{court-note}%
2824 \newblock%
2825 \newunit}
2826 \newbibmacro*{can:year+vol+report}{%
2827 \iffielddundef{number}{}%
2828 \setunit{\addspace}%
2829 }{%
2830 \ifboolexpr{
2831 test {\iffielddundef{volume}}
2832 or
2833 bool {bbx@year-essential}}%
2834 }{}{%
2835 \clearfield{year}}}%
2836 \iffieldequals{entrysubtype}{\subtypenewsp}{}{%
2837 \iffielddundef{year}{}{%
2838 \usebibmacro{journaldate}%
2839 \setunit{\addspace}}}
2840 \printfield{volume}%
2841 \setunit{\addspace}%
2842 \printfield{journaltitle}%
2843 \setunit*{\addspace}%
2844 \iffielddundef{series}{}{%
2845 \setunit{\addspace}%
2846 \printtext[pars]{\printfield[usseries]{series}}%
2847 \setunit{\addspace}}%
2848 \iffieldequals{entrysubtype}{\subtypenewsp}{}{%
2849 \setunit{\addcomma\space}%
2850 \usebibmacro{newspaperdate}%
2851 }{}%

```

Here is the format for American cases.

```

2852 \newbibmacro{usjuriscitation}{%
2853 \usebibmacro{title}%
2854 \setunit{\addcomma\space}\newblock%
2855 \iffielddundef{journaltitle}{%
2856 \printfield{number}%
2857 \setunit{\addcomma\space}%
2858 \printfield[default]{eprint}%
2859 \clearfield{eprint}%
2860 }%
2861 \usebibmacro{us:vol+report}}%
2862 \setunit{\addspace}%
2863 \usebibmacro{jurisdictionpages}%
2864 \usebibmacro{us:postnote}%
2865 \usebibmacro{altreportdetails}%
2866 \setunit{\addspace}\newblock
2867 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}%
2868 \setunit{\addspace}%
2869 \usebibmacro{us:courtid+date}%
2870 \setunit{\addspace}%
2871 \usebibmacro{court-note}%
2872 \newblock
2873 \setunit{\addspace}}
2874 \newbibmacro{us:vol+report}{%
2875 \printfield{volume}%
2876 \setunit{\addspace}%
2877 \printfield{journaltitle}%

```



```

2878 \iffielddundef{series}{}{%
2879 \setunit{\addspace}%
2880 \printfield[usseries]{series}}
2881 \newbibmacro{us:postnote}{%
2882 \iffielddundef{postnote}{}{%
2883 \setunit{\addcomma\space}%
2884 \printfield{postnote}%
2885 \clearfield{postnote}%
2886 }}
2887 \newbibmacro{us:courtid+date}{%
2888 \ifboolexpr{
2889 test {\iflistundef{institution}}
2890 and
2891 test {\iflistundef{location}}
2892 and
2893 test {\iffielddundef{year}}}
2894 }{}{%
2895 \printtext[parens]{%
2896 \printlist{location}%
2897 \setunit*{\addspace}%
2898 \printlist{institution}%
2899 \setunit{\addspace}%
2900 \printfield{year}%
2901 \nopunct}}}

```

Here is the format for English cases.

```

2902 \newbibmacro{enjuristicitation}{%
2903 \usebibmacro{title}%
2904 \setunit{\addspace}\newblock
2905 \printfield{number}%
2906 \setunit*{\addcomma\space}%
2907 \iffielddundef{journaltitle}{}{%
2908 \usebibmacro{year+vol+report}}%
2909 \usebibmacro{jurisdictionpages}%
2910 \usebibmacro{pcitenote}%
2911 \usebibmacro{altreportdetails}%
2912 \unspace\printlist[jurisdiction][1-\value{listtotal}]{listb}% additional reports
2913 \setunit{\addspace}\newblock
2914 \usebibmacro{courtid}%
2915 \setunit{\addspace}%
2916 \usebibmacro{court-note}}
2917 \newbibmacro{altreportdetails}{%
2918 \restorefield{prenote}{\postnotesecond}%
2919 \iffielddundef{userc}{}{% parreporter
2920 \usebibmacro{journaldate}[par]%
2921 \setunit{\addspace}\newblock
2922 \usebibmacro{altreportvolume}%
2923 \setunit{\addspace}\newblock
2924 \usebibmacro{altjournaltitle}%
2925 \setunit{\addspace}\newblock
2926 \usebibmacro{altseries}%
2927 \setunit{\addspace}\newblock
2928 \usebibmacro{altjurisdictionpages}%
2929 \iffielddundef{prenote}{}{%
2930 \setunit{\addcomma\space}%
2931 \printfield[postnote]{prenote}}}}
2932 \newbibmacro*{altreportvolume}{%
2933 \iffielddundef{userb}{}{% parvolume
2934 \printfield{volume}%
2935 }{}%

```

```

2936     \printfield{userb}}
2937 \newbibmacro*{altjournaltitle}{%
2938     \iffieldundef{userc}{% parreporter
2939         \printfield{journaltitle}%
2940         \setunit{\addspace}%
2941     }{
2942         \printfield{userc}}
2943 \newbibmacro*{altseries}{%
2944     \iffieldundef{userd}{% parseries
2945         \printfield{series}%
2946     }{%
2947         \printfield{userd}}
2948 \newbibmacro*{altjurisdictionpages}{%
2949     \iffieldundef{usere}{% parpages
2950         \usebibmacro{jurisdictionpages}%
2951     }{%
2952         \printfield{usere}}}%

```

Legislation

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

```

2953 \newcommand*{\subtypecourtrules}{procedure-rule}
2954 \DeclareBibliographyDriver{legislation}{%
2955     \usebibmacro{bibindex}%
2956     \usebibmacro{begentry}%
2957     \iffieldequals{entrysubtype}{\subtypecourtrules}{%
2958         \usebibmacro{courtrules}%
2959     }{%
2960         \ifkeyword{draft}{%
2961             \usebibmacro{legislation:bill}%
2962         }{%
2963             \ifkeyword{eu}{%
2964                 \usebibmacro{eulegislation}%
2965             }{%
2966                 \printfield[default]{title}%
2967                 \setunit{\addspace}%
2968                 \printfield[default]{year}%
2969                 \setunit*{\addspace}%
2970                 \usebibmacro{legnumber}%
2971                 \setunit{\addspace}\newblock
2972                 \usebibmacro{legsupp}}}%
2973     \setunit{\addcomma\space}%
2974     \printfield{note}%
2975     \setunit{\addspace}%
2976     \usebibmacro{finentry}}
2977 \newbibmacro*{courtrules}{%
2978     \restorefield{prenote}{\postnotesecond}%
2979     \iffieldequalstr{shorttitle}{PD}{%
2980         \printfield{postnote}%
2981         \clearfield{postnote}%
2982         \setunit{\addspace}%
2983     }{%
2984         \iffieldundef{shorttitle}{%
2985             \printfield[default]{title}%
2986         }{%
2987             \printfield[default]{shorttitle}%
2988         }\setunit{\addspace}\newblock
2989     \iffieldundef{postnote}{%

```

```

2990     \toggletrue{blx@ox@nopostnotedelim}%
2991 }{%
2992     \iffieldequalstr{shorttitle}{CPR}{%
2993         \printfield{postnote}%
2994         \setunit{\addspace}%
2995     }{%
2996         \printtext{%
2997             \bibstring{order}\space
2998             \printfield{postnote}%
2999             \setunit{\addcomma\space}}}%
3000     \restorefield{postnote}{\postnotesecond}%
3001     \usebibmacro{postnote}%
3002     \clearfield{postnote}%
3003     \setunit{\addspace}\newblock}
3004 \newcommand*{\subtypeprimarylegislation}{primary}
3005 \newbibmacro*{legislation:bill}{%
3006     \printfield[draftleg]{title}%
3007     \setunit{\addspace}%
3008     \printlist{institution}%
3009     \setunit*{\addspace}%
3010     \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
3011         \bibcpstring{bill}%
3012         \setunit{\addspace}%
3013         \printtext[parens]{\usebibmacro{sessionyear}}%
3014         \setunit{\addspace}%
3015         \iffieldundef{number}{}{%
3016             \printlist[billprinting]{institution}}%
3017     }{%
3018         \printtext[parens]{%
3019             \bibstring{draft}\space
3020             \printdate}%
3021         \setunit{\addspace}}
3022 \newbibmacro*{sessionyear}{%
3023     \iffieldundef{year}{}{%
3024         \printfield{year}%
3025         \iffieldundef{endyear}{}{%
3026             \bibdaterangesep
3027             \blx@ox@compyear{\thefield{year}}{\thefield{endyear}}}%
3028     }
3029 \newbibmacro{eulegislation}{%
3030     \printfield[default]{title}%
3031     \setunit{\addspace}\newblock%
3032     \usebibmacro{eulegref}}
3033 \newcommand*{\ojspecedtitle}{OJ Spec Ed}
3034 \newbibmacro*{eulegref}{%
3035     \iffieldequals{journaltitle}{\officialjournaltitle}{%
3036         \printfield[brackets]{year}%
3037         \setunit{\addspace}%
3038         \printfield{journaltitle}%
3039         \setunit{\addspace}%
3040         \iffieldundef{series}{}{%
3041             \printtext{L}%
3042         }{%
3043             \printfield[default]{series}}%
3044     \usebibmacro{issue/volume}%
3045     \setunit*{\addslash}%
3046     \printfield{pages}%
3047     \togglefalse{blx@ox@nopostnotedelim}%
3048 }{%
3049     \usebibmacro{year+vol+report}%
3050     \setunit*{\addspace}%
3051     \printfield{pages}}
\newbibmacro*{legnumber}{%

```

```

3052 \iffieldequals{entrysubtype}{\subtypeprimarylegislation}{%
3053 \ifboolexpr{(
3054     test {\iffieldundef{number}}
3055     or
3056     not test {\iffieldundef{title}} )
3057 and not (
3058     test {\ifkeyword{cy}}
3059     or
3060     test {\ifkeyword{sc}}
3061     or
3062     test {\ifkeyword{ni}} )
3063 }){%
3064 \printtext[parens]{\printfield{number}}%
3065 \toggletrue{blx@ox@nopostnotedelim}}%
3066 }{%
3067 \iffieldundef{number}}){%
3068 \setunit{\addcomma\addspace}%
3069 \printfield{number}%
3070 \togglefalse{blx@ox@nopostnotedelim}}}}

```

This adds additional material for Welsh statutory instruments.

```

3071 \newbibmacro*{legsupp}{%
3072 \ifkeyword{cy}
3073 {\iffieldundef{userb}
3074 }
3075 {\printtext{\mkbibparens{\printfield{userb}}}\toggletrue{blx@ox@nopostnotedelim}}}
3076 {}

```

Treaties, explanatory notes and Hansard

```

3077 \newcommand*{\explanatorynote}{explanatory note}
3078 \newcommand*{\parliamentarytype}{parliamentary}
3079 \newcommand*{\treatysubtype}{piltreaty}
3080 \DeclareBibliographyDriver{legal}{%
3081 \usebibmacro{bibindex}%
3082 \usebibmacro{begentry}%
3083 \iffieldequals{entrysubtype}{\explanatorynote}{%
3084 \printfield[default]{title}%
3085 \setunit{\addspace}\newblock
3086 }{%
3087 \iffieldequals{entrysubtype}{\parliamentarytype}{%
3088 \usebibmacro{legal:parliamentary}%
3089 }{%
3090 \usebibmacro{treatycitation}}}%
3091 \setunit{\addcomma\space}\newblock
3092 \printfield[default]{note}
3093 \setunit{\addspace}\newblock
3094 \setunit{\bibpagerefpunct}%
3095 \usebibmacro{pageref}%
3096 \usebibmacro{finentry}}
3097 \newbibmacro{legal:parliamentary}{%
3098 \printfield[default]{title}%
3099 \newunit\newblock
3100 \printfield{type}%
3101 \setunit{\addspace}%
3102 \iffieldundef{series}}){%
3103 \printtext[parens]{%
3104 \bibstring{jourser}\space
3105 \printfield{series}}}%

```

```

3106 \setunit{\addspace}%
3107 \printfield{volume}%
3108 \setunit{\addcomma\space}%
3109 \usebibmacro{hansard-ref}%
3110 \setunit{\addspace}%
3111 \iffieldundef{year}{}{%
3112   \printtext[parens]{\usebibmacro{date}}}%
3113 \togglefalse{blx@ox@nopostnotedelim}}
3114 \newbibmacro*{hansard-ref}{%
3115   \iffieldundef{postnote}{}%
3116   \iffieldundef{pages}{}%
3117   \printfield{pages}}%
3118 }{}%
3119 \newbibmacro{treatycitation}{%
3120   \printfield[default]{title}%
3121   \setunit{\addspace}\newblock%
3122   \printlist[treaty]{institution}
3123   \setunit{\addspace}\newblock
3124   \usebibmacro{treatyinfo}%
3125   \setunit{\addspace}\newblock
3126   \usebibmacro{treaty:year+vol+report}}
3127 \newbibmacro{treatyinfo}{%
3128   \iflistundef{lista}{% execution
3129     \iffieldundef{year}{}{%
3130       \iffieldundef{volume}{}{%
3131         \printtext[parens]{\printdate}}}%
3132   }{%
3133     \printtext[parens]{\printlist[treatydates]{lista}}}%
3134 \newbibmacro{treaty:year+vol+report}{%
3135   \iffieldequals{journaltitle}{\officialjournaltitle}{%
3136     \usebibmacro{eulegref}%
3137   }{%
3138     \usebibmacro{treaty:date}%
3139     \setunit{\addspace}%
3140     \printfield[default]{volume}%
3141     \setunit{\addspace}%
3142     \printfield{journaltitle}%
3143     \setunit*\addspace}%
3144   \iffieldundef{series}{}{%
3145     \setunit{\addspace}%
3146     \printfield{series}%
3147     \setunit{\addspace}}%
3148   \printfield{pages}}}%
3149 \newbibmacro*{treaty:date}{%
3150   \ifboolexpr{
3151     test {\iffieldundef{volume}}
3152     or
3153     bool {bbx@year-essential}
3154   }{%
3155     \ifboolexpr{
3156       test {\ifkeyword{sc}}
3157       or
3158       test {\iftoggle{bbx:scotstyle}}
3159     }{%
3160       \printfield{year}%
3161     }{%
3162       \printfield[brackets]{year}%
3163     }}%

```

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

```
3164 \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.

```
3165 \newcommand{\locationlibrarypunct}{\addcomma\addspace}
3166 \newcommand{\collectionshelfmarkpunct}{\addspace}
3167 \newcommand{\datingpagespunct}{\addcomma\addspace}
3168 \newcommand{\librarycollectionpunct}{\addcomma\addspace}
3169 \newcommand{\pagetotalpagespunct}{\addcomma\addspace}
3170 \newcommand{\columnslayerpunct}{\addsemicolon\addspace}%
```

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

```
3171 \def\recto{r}
3172 \def\verso{v}
3173 \NumCheckSetup{\def\recto{}\def\verso{}}
```

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

```
3174 \DeclareFieldFormat[manuscript,unpublished]{title}{%
3175   \def\currentfield{title}%
3176   \iffieldannotation{descriptor}{#1}{\mkbibquote{#1\isdot}}}%
3177   \undef\currentfield}
3178 \DeclareFieldFormat{columns+layer}{\mkbibparens{#1}}
3179 \DeclareFieldFormat{columns}{\mkbibparens{#1}}
3180 \DeclareFieldFormat{layer}{\mkbibparens{#1}}
3181 \DeclareFieldFormat{dating}{#1\isdot}%
3182 \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.

```
3183 \newbibmacro{manuscript:date}{%
3184   \ifboolexpr{
3185     test {\ifnameundef{author}}
3186     and
3187     test {\iffieldundef{title}}
3188   }{\usebibmacro{date}}
3189   \newbibmacro{dating}{%
3190     \ifboolexpr{(
3191       test {\ifnameundef{author}}
3192       and
3193       test {\iffieldundef{title}}
3194     ) or
3195     test {\iffieldundef{year}}}
3196   }{%
3197     \printfield{dating}%
3198   }}
```

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.

```

3199 \newbibmacro{location+library+collection+shelfmark}{%
3200   \printfield{library}%
3201   \setunit{\locationlibrarypunct}%
3202   \printlist{location}%
3203   \setunit{\librarycollectionpunct}%
3204   \usebibmacro{collection+shelfmark}}
3205 \newbibmacro{collection+shelfmark}{%
3206   \ifboolexpr{
3207     test {\iffieldundef{collection}}
3208     and
3209     test {\iffieldundef{shelfmark}}
3210   }{%
3211     \printtext[collection+shelfmark]{%
3212       \printfield{collection}%
3213       \setunit*{\collectionshelfmarkpunct}%
3214       \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.

```

3215 \newbibmacro{manuscript:pages}{%
3216   \printfield{pagetotal}%
3217   \setunit{\addspace}%
3218   \iffieldundef{pages}{%
3219     \usebibmacro{manuscript:columns+layer}%
3220   }{%
3221     \usebibmacro{manuscript:columns}%
3222     \setunit{\pagetotalpagespunct}%
3223     \printfield{pages}%
3224     \setunit{\addspace}%
3225     \usebibmacro{manuscript:layer}}}
3226 \newbibmacro{manuscript:columns}{%
3227   \iffieldundef{columns}{}%
3228   \printtext[columns]{\bibstring{\strfield{columns}column}}}%
3229 }%
3230 \newbibmacro{manuscript:layer}{%
3231   \iffieldundef{layer}{}%
3232   \printtext[layer]{\bibstring{\strfield{layer}layer}}}%
3233 }%
3234 \newbibmacro{manuscript:columns+layer}{%
3235   \ifboolexpr{
3236     test {\iffieldundef{columns}}
3237     or
3238     test {\iffieldundef{layer}}
3239   }{%
3240     \usebibmacro{manuscript:columns}%
3241     \usebibmacro{manuscript:layer}%
3242   }{%
3243     \printtext[columns+layer]{%
3244       \bibstring{\strfield{columns}column}%
3245       \setunit*{\columnslayerpunct}%
3246       \bibstring{\strfield{layer}layer}}}%

```

Putting it all together, here is the manuscript driver.

```

3247 \DeclareBibliographyDriver{manuscript}{%
3248   \usebibmacro{bibindex}%
3249   \usebibmacro{begentry}%
3250   \usebibmacro{author}%
3251   \setunit{\printdelim{nametitledelim}}\newblock
3252   \usebibmacro{title}%
3253   \newunit\newblock
3254   \usebibmacro{byauthor}%
3255   \newunit\newblock
3256   \printfield{howpublished}%
3257   \newunit\newblock
3258   \printfield{note}%
3259   \newunit\newblock
3260   \usebibmacro{manuscript:date}%
3261   \newunit\newblock
3262   \usebibmacro{location+library+collection+shelfmark}%
3263   \newunit
3264   \printfield{support}%
3265   \newunit
3266   \usebibmacro{dating}%
3267   \setunit{\datingpagespunct}
3268   \usebibmacro{manuscript:pages}
3269   \newunit\newblock%
3270   \iftoggle{bbx:url}{%
3271     \usebibmacro{url+urldate}%
3272   }{}%
3273   \setunit{\relatedtypepunct}\newblock
3274   \iftoggle{bbx:related}{%
3275     \usebibmacro{related:init}%
3276     \usebibmacro{related}%
3277   }{}%
3278   \usebibmacro{finentry}}

```

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

```

3279 \newbibmacro*{library+location+series+number}{%
3280   \printfield{library}%
3281   \setunit{\locationlibrarypunct}%
3282   \printlist{location}%
3283   \setunit{\librarycollectionpunct}%
3284   \ifboolexpr{
3285     test {\iffieldundef{series}}
3286     and
3287     test {\iffieldundef{number}}
3288   }{}{%
3289     \printtext[collection+shelfmark]{%
3290       \printfield{series}%
3291       \setunit*{\collectionshelfmarkpunct}%
3292       \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’.

```

3293 \newtoggle{blx@ox@ms}
3294 \DeclareBibliographyDriver{unpublished}{%
3295   \usebibmacro{bibindex}%
3296   \usebibmacro{begentry}%
3297   \iffieldundef{library}{\togglefalse{blx@ox@ms}}{\toggletrue{blx@ox@ms}}%
3298   \usebibmacro{author}%
3299   \setunit{\printdelim{nametitledelim}}\newblock
3300   \usebibmacro{title}%

```



```

3301 \newunit\newblock
3302 \usebibmacro{byauthor}%
3303 \newunit\newblock
3304 \printfield{howpublished}%
3305 \newunit\newblock
3306 \printfield{note}%
3307 \newunit\newblock
3308 \iftoggle{blx@ox@ms}{%
3309   \usebibmacro{manuscript:date}%
3310   \newunit\newblock
3311   \usebibmacro{library+location+series+number}%
3312   \newunit
3313   \printfield{support}%
3314   \newunit
3315   \usebibmacro{dating}%
3316   \setunit{\datingpagespunct}
3317   \usebibmacro{manuscript:pages}
3318 }{%
3319   \usebibmacro{location+date}%
3320 }%
3321 \newunit\newblock
3322 \iftoggle{bbx:url}
3323   {\usebibmacro{url+urldate}}
3324   {}%
3325 \newunit\newblock
3326 \usebibmacro{addendum+pubstate}%
3327 \setunit{\bibpagerefpunct}\newblock
3328 \usebibmacro{pageref}%
3329 \setunit{\relatedtypepunct}\newblock
3330 \iftoggle{bbx:related}
3331   {\usebibmacro{related:init}%
3332    \usebibmacro{related}}
3333   {}%
3334 \usebibmacro{finentry}}

```

2.1.17 RELATED ENTRIES

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

```

3335 \xpatchbibdriver{booklet}{%
3336   \newunit\newblock
3337   \iftoggle{bbx:related}
3338 }{%
3339   \setunit{\relatedtypepunct}\newblock
3340   \iftoggle{bbx:related}
3341 }{}%
3342 \xpatchbibdriver{misc}{%
3343   \newunit\newblock
3344   \iftoggle{bbx:related}
3345 }{%
3346   \setunit{\relatedtypepunct}\newblock
3347   \iftoggle{bbx:related}
3348 }{}%
3349 \xpatchbibdriver{patent}{%
3350   \newunit\newblock
3351   \iftoggle{bbx:related}
3352 }{%
3353   \setunit{\relatedtypepunct}\newblock
3354   \iftoggle{bbx:related}

```

3355 }{}{}

We provide an option for setting the relatedtype punctuation.

```

3356 \DeclareBibliographyOption{relationpunct}[semicolon]{%
3357   \ifcsdef{add#1}{%
3358     \ifstrequal{#1}{space}{%
3359       \renewcommand*{\relatedtypepunct}{\addspace}%
3360     }%
3361     \renewcommand*{\relatedtypepunct}{\csuse{add#1}\space}}%
3362   }%
3363   \PackageError{biblatex-oxref}{%
3364     Invalid option 'relationpunct=#1'%
3365   }%
3366   Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3367   'period', 'exclam', 'question', and 'space'.}}}
3368 \newtoggle{blx@ox@relpunctset}
3369 \DeclareEntryOption{relationpunct}[semicolon]{%
3370   \ifcsdef{add#1}{%
3371     \ifstrequal{#1}{space}{%
3372       \renewcommand*{\relatedtypepunct}{\addspace}%
3373     }%
3374     \renewcommand*{\relatedtypepunct}{\csuse{add#1}\space}}%
3375   \toggletrue{blx@ox@relpunctset}
3376 }%
3377   \PackageError{biblatex-oxref}{%
3378     Invalid option 'relationpunct=#1'%
3379   }%
3380   Valid values are 'dot', 'comma', 'semicolon', 'colon',\MessageBreak
3381   'period', 'exclam', 'question', and 'space'.}}}
3382 \newcounter{blx@ox@relitem}
3383 \xapptobibmacro{begrelated}{%
3384   \setcounter{blx@ox@relitem}{0}%
3385   \iftoggle{blx@ox@relpunctset}{%
3386     \iffieldequalstr{relatedtype}{in}{%
3387       \setunit{\addcomma\space}}{%
3388     \iffieldequalstr{relatedtype}{reprintfrom}{%
3389       \setunit{\addperiod\space}}{%
3390     \iffieldequalstr{relatedtype}{translationof}{%
3391       \setunit{\addspace}}{%
3392     \iffieldequalstr{relatedtype}{multivolume}{%
3393       \setunit{\addcomma\space}}{%
3394   }{}{}}

```

Translations

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

```

3395 \newbibmacro*{rellanguage}{%
3396   \def\do##1{%
3397     \entrydata{##1}{%
3398       \printlist{language}}}%
3399   \docsvfield{related}%
3400 }
3401 \DeclareFieldFormat{relatedstring:translationof}{%
3402   \usebibmacro{rellanguage}\space
3403   \bibstring{original}\addcomma\space}
3404
3405 \DeclareFieldFormat{related:translationof}{%
3406   \mkbibbrackets{#1}}

```

Co-publications

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

```

3407 \newbibmacro*{related:copub}[1]{%
3408   \entrydata*{#1}{%
3409     \usebibmacro{publisher+location+date}%
3410     \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.

```

3411 \renewbibmacro*{related:reprintfrom}[1]{%
3412   \entrydata*{#1}{%
3413     \nopunct
3414     \usedriver{%
3415       \ifnameundef{savedauthor}{%
3416         \ifnameundef{savededitor}{%
3417           \ifnameequal{editor}{savededitor}{%
3418             \clearname{editor}%
3419           }{}%
3420         }{}%
3421       \ifnameequal{author}{savedauthor}{%
3422         \clearname{author}%
3423       }{}%
3424       \iffieldundef{savedtitle}{%
3425         \iffieldsequal{savedtitle}{title}{%
3426           \clearfield{title}%
3427         }{}%
3428       }{}%
3429       \renewbibmacro*{related:init}{}%
3430       \DeclareNameAlias{sortname}{default}%
3431       \ifbibmacroundef{date+extradate}{%
3432         \renewbibmacro*{date+extradate}{%
3433           \renewbibmacro*{date}{\printdate}}%
3434       }{}%
3435       \renewbibmacro*{pageref}{%
3436         \thebibliography{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.

```

3436 \newbibmacro*{related:serialarticle}[1]{%
3437   \entrydata*{#1}{%
3438     \iffieldundef{savedjournaltitle}{%
3439       \iffieldsequal{journaltitle}{savedjournaltitle}{%
3440         \clearfield{journaltitle}%
3441       }{}%
3442     \iffieldundef{savedjournalsubtitle}{%
3443       \iffieldsequal{journalsubtitle}{savedjournalsubtitle}{%
3444         \clearfield{journalsubtitle}%
3445       }{}%
3446     \iffieldundef{savedseries}{%
3447       \iffieldsequal{series}{savedseries}{%
3448         \clearfield{series}%
3449       }{}%

```

```

3450 \iffielddundef{savedyear}{\clearfield{year}}{
3451 \iffielddsequal{year}{savedyear}{%
3452 \clearfield{year}%
3453 }}}%
3454 \usebibmacro{journal+issuetitle}%
3455 \newunit
3456 \usebibmacro{note+pages}%
3457 \newunit\newblock
3458 \usebibmacro{doi+eprint+url}%
3459 \newunit\newblock
3460 \usebibmacro{addendum+pubstate}}}
```

Reviews

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

```

3461 \DeclareFieldFormat[review]{title}{\mkbibquote{#1}\isdot}}
3462 \DeclareFieldFormat[review]{volume}{#1}% volume of a journal
3463 \DeclareFieldFormat[review]{number}{#1}% number of a journal
3464 \DeclareFieldFormat[review]{series}{% series of a journal
3465 \ifinteger{#1}
3466 {\mkbibordseries{#1}~\bibstring{jourser}}
3467 {\ifbibstring{#1}{\bibstring{#1}}{#1}}}
```

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

```

3468 \newbibmacro*{related:reviewof}[1]{%
3469 \entrydata*{#1}{%
3470 \usedriver{%
3471 \renewbibmacro*{related:init}{}%
3472 \DeclareNameAlias{author}{given-family}%
3473 \renewbibmacro*{pageref}{}%
3474 }{\thefield{entrytype}}%
3475 }%
3476 }
```

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'.

```

3477 \DeclareBibliographyDriver{review}{%
3478 \usebibmacro{bibindex}%
3479 \usebibmacro{begentry}%
3480 \usebibmacro{author/translator+others}%
3481 \setunit{\printdelim{nametitledelim}}\newblock
3482 \usebibmacro{title}%
3483 \newunit\newblock
3484 \usebibmacro{byauthor}%
3485 \newunit\newblock
3486 \usebibmacro{bytranslator+others}%
3487 \newunit\newblock
3488 \printfield{version}%
3489 \newunit\newblock
3490 \iftoggle{bbx:related}{%
3491 \usebibmacro{related:init}%
3492 \usebibmacro{related}%
```

```

3493     }{}%
3494     \newunit\newblock
3495     \usebibmacro{in:}%
3496     \setunit{\addspace}%
3497     \usebibmacro{journal+issuetitle}%
3498     \newunit
3499     \usebibmacro{byeditor+others}%
3500     \iffielddundef{note}%
3501         {\newunit}%
3502         {\setunit{\addsemicolon\addspace}}%
3503     \usebibmacro{note+pages}%
3504     \newunit\newblock
3505     \iftoggle{bbx:isbn}
3506         {\printfield{issn}}
3507         {}%
3508     \newunit\newblock
3509     \usebibmacro{doi+eprint+url}%
3510     \newunit\newblock
3511     \usebibmacro{addendum+pubstate}%
3512     \setunit{\bibpagerefpunct}\newblock
3513     \usebibmacro{pageref}%
3514     \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.

```

3515     \DeclareFieldFormat{related:multivolume}{#1}
3516     \renewbibmacro*{related:multivolume}[1]{%
3517         \entrydata*{#1}{%
3518             \printtext{%
3519                 \printfield{volume}%
3520                 \printfield{part}}%
3521             \setunit*\addspace}%
3522         \usebibmacro{series+number+edition+publisher+location+date}}}

```

Related editions

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

```

3523     \newbibmacro*{related:editedas}[1]{%
3524         \entrydata{#1}{%
3525             \renewbibmacro*{name:hook}[1]{%
3526                 \ifnumequal{\value{listcount}}{1}{%
3527                     \begingroup
3528                         \mkrelatedstring%
3529                         \lbx@initnamehook{#1}%
3530                     \endgroup
3531                 }{}%
3532                 \printfield{edition}%
3533                 \setunit{\addspace}%
3534                 \usebibmacro{byeditor+others}%
3535                 \setunit*\addcomma\space\bibstring[\mkrelatedstring]{astitle}\space}%
3536                 \usebibmacro{maintitle+title}%
3537                 \setunit{\addspace}%
3538                 \printfield{note}%
3539             \newunit\newblock

```

```

3540     \printfield{volumes}%
3541     \newunit
3542     \usebibmacro{series+number+publisher+location+date}}}
3543 \renewbibmacro*{related:bytranslator}[1]{%
3544 \entrydata{#1}{%
3545     \renewbibmacro*{name:hook}[1]{%
3546         \ifnumequal{\value{listcount}}{1}
3547         {\begingroup
3548             \mkrelatedstring%
3549             \lbx@initnamehook{#1}%
3550             \endgroup}
3551         {}}%
3552     \printnames[bytranslator]{translator}%
3553     \setunit*{\addspace\bibstring[\mkrelatedstring]{astitle}\space}%
3554     \usebibmacro{maintitle+title}%
3555     \setunit{\addspace}%
3556     \printfield{note}%
3557     \newunit\newblock
3558     \printfield{volumes}%
3559     \newunit
3560     \usebibmacro{series+number+publisher+location+date}}}

```

Joint releases

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

```

3561 \newbibmacro*{related:includes}[1]{%
3562     \stepcounter{blx@ox@relitem}%
3563     \ifnumequal{\value{blx@ox@relitem}}{\value{bbx:relatedtotal}}%
3564     {\bibstring{and}\addspace}%
3565     \entrydata{#1}{%
3566         \ifbibmacroundef{date+extradate}{}%
3567         \renewbibmacro*{date+extradate}{}%
3568         \usebibmacro{author}%
3569         \setunit{\printdelim{nametitledelim}}\newblock
3570         \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.

```

3571 \DeclareFieldFormat[misc]{title}{%
3572     \def\currentfield{title}%
3573     \iffielddannotation{descriptor}{#1}{%
3574         \iffieldequalstr{relatedtype}{in}{%
3575             \mkbibquote{#1\isdot}%
3576         }%
3577         \mkbibemph{#1}%
3578     }}%
3579 \undef\currentfield}
3580 \newbibmacro*{related:in}[1]{%
3581     \entrydata*{#1}{%
3582         \usedriver
3583         {\ifnameundef{savedauthor}
3584          {\ifnameundef{savededitor}
3585           {}
3586           {\ifnameequal{editor}{savededitor}

```

```

3587         {\clearname{editor}}
3588         {}}
3589     {\ifnamesequal{author}{savedauthor}
3590      {\clearname{author}}
3591      {}}%
3592     \renewbibmacro*{related:init}{}%
3593     \DeclareNameAlias{sortname}{default}%
3594     \ifbibmacroundef{date+extradate}
3595     {}
3596     {\renewbibmacro*{date+extradate}{}%
3597      \renewbibmacro*{date}{\printdate}}%
3598     \renewbibmacro*{pageref}{}
3599     {\thefield{entrytype}}%
3600     \ifboolexpr{
3601       test {\iffieldundef{pages}}
3602       or
3603       test {\iffieldundef{savedpages}}
3604     }{%
3605       \newunit\newblock
3606     }{%
3607       \setunit{\addspace}%
3608       \bibstring{thiscite}%
3609       \printunit{\addspace}%
3610     }%
3611   }%
3612   \usebibmacro{chapter+pages}%
3613 }

```

2.1.18 SOURCE MAPS

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

```

3614 \DeclareStyleSourceMap{%
3615   \maps[datatype=bibtex]{%

```

Sort order

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

```

3616   \map{
3617     \pertype{proceedings}
3618     \pertype{mvproceedings}
3619     \step[notfield=author,
3620           fieldsource=organization,
3621           fieldtarget=author]
3622   }

```

Descriptors

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

```

3623   \map[overwrite=false]{
3624     \step[fieldsource=descriptor, final]
3625     \step[notfield=title,
3626           fieldset=title+an,
3627           fieldvalue={-descriptor}]

```

```

3628     \step[notfield=title,
3629           fieldsource=descriptor,
3630           fieldtarget=title]
3631     \step[fieldsource=descriptor,
3632           fieldtarget=note]
3633   }

```

Pseudonyms and inferred authorship

These help ensure compatibility with biblatex-realauthor.

```

3634     \map[overwrite=false]{
3635       \step[fieldsource=realauthor, final]
3636       \step[notfield=author,
3637             fieldset=author+an,
3638             fieldvalue={inferred}]
3639       \step[notfield=author,
3640             fieldsource=realauthor,
3641             fieldtarget=author]
3642       \step[fieldsource=realauthor,
3643             fieldtarget=authoraddon]
3644     }
3645     \map[overwrite=false]{
3646       \step[fieldsource=reaeditor, final]
3647       \step[notfield=editor,
3648             fieldset=editor+an,
3649             fieldvalue={inferred}]
3650       \step[notfield=editor,
3651             fieldsource=reaeditor,
3652             fieldtarget=editor]
3653       \step[fieldsource=reaeditor,
3654             fieldtarget=editoraddon]
3655     }

```

Editors as joint authors

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

```

3656     \map[overwrite=false]{
3657       \step[fieldsource=editor+an,
3658             match=\regexp{=jointauthor},
3659             final]
3660       \step[fieldsource=editor,
3661             fieldtarget=jointauthor]
3662       \step[fieldsource=editortype,
3663             fieldtarget=jointauthortype]
3664     }
3665     \map[overwrite=false]{
3666       \step[fieldsource=translator+an,
3667             match=\regexp{=jointauthor},
3668             final]
3669       \step[fieldsource=translator,
3670             fieldtarget=jointauthor]
3671       \step[fieldset=jointauthortype,
3672             fieldvalue={translator}]
3673     }

```


Audiovisual materials

For audiovisual materials, origdatetype defaults to ‘recorded’.

```

3674 \map[overwrite=false]{
3675   \pertype{audio}
3676   \pertype{music}
3677   \pertype{movie}
3678   \pertype{video}
3679   \pertype{inaudio}
3680   \pertype{inmusic}
3681   \pertype{inmovie}
3682   \pertype{invideo}
3683   \step[fieldset=origdatetype,fieldvalue={recorded}]
3684 }

```

Legal references

These help ensure compatibility with oscola.

```

3685 \map[overwrite=false]{
3686   \pertype{jurisdiction}
3687   \step[fieldsource=reporter,
3688         fieldtarget=journaltitle]
3689   \step[fieldsource=parvolume,
3690         fieldtarget=userb]
3691   \step[fieldsource=parreporter,
3692         fieldtarget=userc]
3693   \step[fieldsource=parseries,
3694         fieldtarget=userd]
3695   \step[fieldsource=parpages,
3696         fieldtarget=usere]
3697   \step[fieldsource=court,
3698         fieldtarget=institution]
3699   \step[fieldsource=additionalreports,
3700         fieldtarget=listb]
3701   \step[fieldsource=ecli,
3702         fieldtarget=verba]
3703 }%
3704 \map[overwrite=false]{
3705   \pertype{legal}
3706   \step[fieldsource=reporter,
3707         fieldtarget=journaltitle]
3708 }
3709 \map[overwrite=true]{
3710   \pertype{legal}
3711   \step[fieldsource=parties,
3712         fieldtarget=institution]
3713   \step[fieldsource=execution,
3714         fieldtarget=lista]
3715 }

```

This is how oscola removes dots from entries.

```

3716 \map[overwrite=true]{
3717   \pertype{jurisdiction}
3718   \pertype{legislation}
3719   \pertype{legal}
3720   \step[fieldsource=title,
3721         match=\regexp{(\d)\.(\d)},
3722         replace=\regexp{$1.$2}]

```

```

3723 \step[fieldsource=title,
3724     match=\regexp{(\D)\.(\d)},
3725     replace=\regexp{$1 $2}]
3726 \step[fieldsource=title,
3727     match=\regexp{\.(\D)},
3728     replace=\regexp{$1}]
3729 \step [fieldsource=title,
3730     match=\regexp{(\D)\.},
3731     replace=\regexp{$1}]
3732 \step[fieldsource=shorttitle,
3733     match=\regexp{(\d)\.(\d)},
3734     replace=\regexp{$1.$2}]
3735 \step[fieldsource=shorttitle,
3736     match=\regexp{(\D)\.(\d)},
3737     replace=\regexp{$1 $2}]
3738 \step[fieldsource=shorttitle,
3739     match=\regexp{\.(\D)},
3740     replace=\regexp{$1}]
3741 \step [fieldsource=shorttitle,
3742     match=\regexp{(\D)\.},
3743     replace=\regexp{$1}]
3744 \step[fieldsource=userc,
3745     match=\regexp{(\d)\.(\d)},
3746     replace=\regexp{$1.$2}]
3747 \step[fieldsource=userc,
3748     match=\regexp{(\D)\.(\d)},
3749     replace=\regexp{$1 $2}]
3750 \step[fieldsource=userc,
3751     match=\regexp{\.(\D)},
3752     replace=\regexp{$1}]
3753 \step [fieldsource=userc,
3754     match=\regexp{(\D)\.},
3755     replace=\regexp{$1}]
3756 \step[fieldsource=journaltitle,
3757     match=\regexp{(\d)\.(\d)},
3758     replace=\regexp{$1.$2}]
3759 \step[fieldsource=journaltitle,
3760     match=\regexp{(\D)\.(\d)},
3761     replace=\regexp{$1 $2}]
3762 \step[fieldsource=journaltitle,
3763     match=\regexp{\.(\D)},
3764     replace=\regexp{$1}]
3765 \step [fieldsource=journaltitle,
3766     match=\regexp{(\D)\.},
3767     replace=\regexp{$1}]
3768 \step[fieldsource=institution,
3769     match=\regexp{(\d)\.(\d)},
3770     replace=\regexp{$1.$2}]
3771 \step[fieldsource=institution,
3772     match=\regexp{(\D)\.(\d)},
3773     replace=\regexp{$1 $2}]
3774 \step[fieldsource=institution,
3775     match=\regexp{\.(\D)},
3776     replace=\regexp{$1}]
3777 \step [fieldsource=institution,
3778     match=\regexp{(\D)\.},
3779     replace=\regexp{$1}]
3780 \step[fieldsource=publisher,
3781     match=\regexp{(\d)\.(\d)},
3782     replace=\regexp{$1.$2}]
3783 \step[fieldsource=publisher,
3784     match=\regexp{(\D)\.(\d)},

```

```

3785         replace=\regexp{$1 $2}]
3786 \step[fieldsource=publisher,
3787       match=\regexp{\.(\D)},
3788       replace=\regexp{$1}]
3789 \step [fieldsource=publisher,
3790       match=\regexp{(\D)\.},
3791       replace=\regexp{$1}]
3792 \step[fieldsource=location,
3793       match=\regexp{(\d)\.(\d)},
3794       replace=\regexp{$1.$2}]
3795 \step[fieldsource=location,
3796       match=\regexp{(\D)\.(\d)},
3797       replace=\regexp{$1 $2}]
3798 \step[fieldsource=location,
3799       match=\regexp{\.(\D)},
3800       replace=\regexp{$1}]
3801 \step [fieldsource=location,
3802       match=\regexp{(\D)\.},
3803       replace=\regexp{$1}]
3804 \step[fieldsource=series,
3805       match=\regexp{(\d)\.(\d)},
3806       replace=\regexp{$1.$2}]
3807 \step[fieldsource=series,
3808       match=\regexp{(\D)\.(\d)},
3809       replace=\regexp{$1 $2}]
3810 \step[fieldsource=series,
3811       match=\regexp{\.(\D)},
3812       replace=\regexp{$1}]
3813 \step [fieldsource=series,
3814       match=\regexp{(\D)\.},
3815       replace=\regexp{$1}]
3816 \step[fieldsource=indextitle,
3817       match=\regexp{(\d)\.(\d)},
3818       replace=\regexp{$1.$2}]
3819 \step[fieldsource=indextitle,
3820       match=\regexp{(\D)\.(\d)},
3821       replace=\regexp{$1 $2}]
3822 \step[fieldsource=indextitle,
3823       match=\regexp{\.(\D)},
3824       replace=\regexp{$1}]
3825 \step [fieldsource=indextitle,
3826       match=\regexp{(\D)\.},
3827       replace=\regexp{$1}]
3828 }
3829 }%
3830 }

```

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).

```

3831 \DeclareSortingTemplate{nty}{
3832   \sort{
3833     \field{presort}
3834   }
3835   \sort[final]{
3836     \field{sortkey}
3837   }
3838   \sort{

```

```

3839     \field{sortname}
3840     \field{author}
3841     \field{editor}
3842     \field{translator}
3843     \field{sorttitle}
3844     \field{title}
3845     \field{library}
3846   }
3847   \sort{
3848     \field{sorttitle}
3849     \field{title}
3850   }
3851   \sort{
3852     \field{sortyear}
3853     \field{year}
3854   }
3855   \sort{
3856     \field{volume}
3857     \literal{0}
3858   }
3859   \sort{
3860     \field{location}
3861   }
3862   \sort{
3863     \field{collection}
3864     \field{series}
3865   }
3866 }
3867
3868 \DeclareSortingTemplate{nyt}{
3869   \sort{
3870     \field{presort}
3871   }
3872   \sort[final]{
3873     \field{sortkey}
3874   }
3875   \sort{
3876     \field{sortname}
3877     \field{author}
3878     \field{editor}
3879     \field{translator}
3880     \field{sorttitle}
3881     \field{title}
3882     \field{library}
3883   }
3884   \sort{
3885     \field{sortyear}
3886     \field{year}
3887   }
3888   \sort{
3889     \field{sorttitle}
3890     \field{title}
3891   }
3892   \sort{
3893     \field{volume}
3894     \literal{0}
3895   }
3896   \sort{
3897     \field{location}
3898   }
3899   \sort{
3900     \field{collection}

```

```

3901     \field{series}
3902   }
3903 }
3904
3905 \DeclareSortingTemplate{anyt}{
3906   \sort{
3907     \field{presort}
3908   }
3909   \sort{
3910     \field{labelalpha}
3911   }
3912   \sort[final]{
3913     \field{sortkey}
3914   }
3915   \sort{
3916     \field{sortname}
3917     \field{author}
3918     \field{editor}
3919     \field{translator}
3920     \field{sorttitle}
3921     \field{title}
3922     \field{library}
3923   }
3924   \sort{
3925     \field{sortyear}
3926     \field{year}
3927   }
3928   \sort{
3929     \field{sorttitle}
3930     \field{title}
3931   }
3932   \sort{
3933     \field{volume}
3934     \literal{0}
3935   }
3936   \sort{
3937     \field{location}
3938   }
3939   \sort{
3940     \field{collection}
3941     \field{series}
3942   }
3943 }

```

The following entry types never put editors first.

```

3944 \ExecuteBibliographyOptions
3945   [proceedings,report,audio,music,movie,video,manuscript,unpublished,review]%
3946   {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   \iffielddundef{postnote}{}{}%
36   \iffielddundef{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 Numeric style: oxnum.bbx

2.3.1 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 }{}}
```

2.3.2 LABEL NUMBERS

This next code is extracted from the standard numeric style.

```
34 \ExecuteBibliographyOptions{LabelNumber}
35
36 \providebool{bbx:subentry}
37
38 \DeclareBibliographyOption[boolean]{subentry}[true]{%
39   \setbool{bbx:subentry}{#1}}
40
41 \DeclareFieldFormat{bibentrysetcount}{\mkbibparens{\mknumalph{#1}}}
42 \DeclareFieldFormat{labelnumberwidth}{\mkbibbrackets{#1}}
43 \DeclareFieldFormat{shorthandwidth}{\mkbibbrackets{#1}}
44
45 \defbibenvironment{bibliography}
46   {\list
47     {\printtext[labelnumberwidth]{%
48       \printfield{labelprefix}%
49       \printfield{labelnumber}}}
50     {\setlength{\labelwidth}{\labelnumberwidth}%
51      \setlength{\leftmargin}{\labelwidth}%
52      \setlength{\labelsep}{\biblabelsep}%
53      \addtolength{\leftmargin}{\labelsep}%
54      \setlength{\itemsep}{\bibitemsep}%
55      \setlength{\parsep}{\bibparsep}}%
56     \renewcommand*{\makelabel}[1]{\hss#1}}
57   {\endlist}
58   {\item}
59
60 \defbibenvironment{shorthand}
61   {\list
62     {\printfield[shorthandwidth]{shorthand}}}
```

```

63     {\setlength{\labelwidth}{\shorthandwidth}%
64     \setlength{\leftmargin}{\labelwidth}%
65     \setlength{\labelsep}{\biblabelsep}%
66     \addtolength{\leftmargin}{\labelsep}%
67     \setlength{\itemsep}{\bibitemsep}%
68     \setlength{\parsep}{\bibparsep}%
69     \renewcommand*{\makelabel}[1]{\hss##1}}
70 {\endlist}
71 {\item}
72
73 \DeclareBibliographyDriver{set}{%
74   \entryset
75   {\ifbool{bbx:subentry}
76     {\printfield[bibentrysetcount]{entrysetcount}%
77     \printunit*{\addnbspace}}
78     {}}
79   {}%
80   \newunit\newblock
81   \usebibmacro{setpageref}%
82   \finentry}

```

2.4 Author–year style: oxyear.bbx

2.4.1 PRELIMINARIES

First we load the common oxref features.

```

20 \RequireBibliographyStyle{oxref}

```

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

```

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

```

2.4.2 DATE MERGING OPTION

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

```

22 \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, used at the head of the reference, for which we coin the dateLabel field format.

```

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

```


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

```

31 \DeclareLabeldate{%
32   \field{origdate}
33   \field{date}
34   \field{year}
35   \field{eventdate}
36   \field{pubstate}
37   \literal{nodate}
38 }

```

The `extradate` string should be printed bare.

```

39 \DeclareFieldFormat{extradate}{%
40   \iffieldundef{\thefield{labeldatesource}}{%
41     \iffieldnums{\thefield{labeldatesource}year}{~}%
42   }{%
43     \iffieldnums{\thefield{labeldatesource}}{~}%
44   }%
45   \mkbibemph{\mknumalph{#1}}}%

```

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

```

46 \def\iflabeldateisanydate{%
47   \ifboolexpr{%
48     togl {blx@labeldateparts}
49     and not test {\iffieldundef{labeldatesource}}
50     and not test {\iffieldundef{\thefield{labeldatesource}year}}}%
51 \def\iflabeldateispubstate{%
52   \ifboolexpr{%
53     not test {\iffieldundef{labeldatesource}}
54     and test {\iffieldequalstr{labeldatesource}{pubstate}}}%

```

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).

```

55 \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.

```

56 \def\bbx@opt@mergedate@maximum{%
57   \renewbibmacro*{date+extradate}{%
58     \iffieldundef{labelyear}{%
59       \printtext[dateLabel]{%
60         \iflabeldateisdate{%
61           \printfield{issue}\clearfield{issue}%
62           \setunit*{\addspace}%
63           \printdateextra

```

```

64      \clearfield{year}\clearfield{season}\clearfield{month}\clearfield{day}%
65  }{%
66      \iflabeldateisanydate{%
67          \csuse{print\thefield{labeldatesource}dateextra}%
68          \clearfield{\thefield{labeldatesource}year}%
69          \clearfield{\thefield{labeldatesource}season}%
70          \clearfield{\thefield{labeldatesource}month}%
71          \clearfield{\thefield{labeldatesource}day}%
72      }{%
73          \printlabeldateextra
74          \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
75      }}}}

```

- 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.

```

76 \def\bbx@opt@mergedate@compact{%
77 \renewbibmacro*{date+extradate}{%
78 \iffielddundef{labelyear}}{%
79 \printtext[date\label]{%
80 \iflabeldateisanydate{%
81 \csuse{print\thefield{labeldatesource}dateextra}%
82 \clearfield{\thefield{labeldatesource}year}%
83 \clearfield{\thefield{labeldatesource}season}%
84 \clearfield{\thefield{labeldatesource}month}%
85 \clearfield{\thefield{labeldatesource}day}%
86 }{%
87 \printlabeldateextra
88 \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
89 }}}}

```

- 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.

```

90 \def\bbx@opt@mergedate@year{%
91 \renewbibmacro*{date+extradate}{%
92 \iffielddundef{labelyear}}{%
93 \printtext[date\label]{\printlabeldateextra}%
94 \iflabeldateisanydate{%
95 \clearfield{\thefield{labeldatesource}year}%
96 }{%
97 \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
98 }}}}

```

- 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.

```

99 \def\bbx@opt@mergedate@basic{%
100 \renewbibmacro*{date+extradate}{%
101 \iffielddundef{labelyear}}{%
102 \printtext[date\label]{\printlabeldateextra}%
103 \iflabeldateisanydate{%
104 \ifdateshavedifferentprecision{label}{\thefield{labeldatesource}}{%
105 \ifboolexpr{
106 test {\iffieldequalstr{labeldatesource}}{

```

```

107         and
108         not test {\iffieldundef{issue}}
109       }{}%
110       \clearfield{\thefield{labeldatesource}year}}}%
111   }{}%
112   \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
113   }}}

```

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

```

114 \def\bbx@opt@mergedate@minimum{%
115   \renewbibmacro*{date+extradata}{%
116     \iffieldundef{labelyear}}{}%
117     \printtext[datelabel]{\printlabeldateextra}%
118     \iflabeldateisanydate{%
119       \ifboolexpr{
120         test {\ifdateshavedifferentprecision{label}{\thefield{labeldatesource}}}
121         or
122         not test {\iffieldundef{extradata}}
123       }{}%
124       \ifboolexpr{
125         test {\iffieldequalstr{labeldatesource}{}}
126         and
127         not test {\iffieldundef{issue}}
128       }{}%
129       \clearfield{\thefield{labeldatesource}year}}}%
130   }{}%
131   \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
132   }}}

```

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

```

133 \def\bbx@opt@mergedate@false{%
134   \renewbibmacro*{date+extradata}{%
135     \iffieldundef{labelyear}}{}%
136     \printtext[datelabel]{\printlabeldateextra}%
137     \iflabeldateisanydate{}{}%
138     \iflabeldateispubstate{}{\clearfield{\thefield{labeldatesource}}}%
139     }}}

```

We set the default to be true/year.

```

140 \ExecuteBibliographyOptions{mergedate}

```

The problem with moving years but leaving months and days behind is that the regular date range macros in `biblatex.sty` do nothing at all if no year is printed. We therefore need to patch the macros with extra routines for printing year-free date ranges: the rather extravagantly named `\mknoyeardaterangefull` and `\mknoyeardaterangetrunc`.

```

141 \newrobustcmd*{\mknoyeardaterangefull}[2]{%
142   \iffieldundef{#2month}}{}%
143   \datecircaprint
144   \printtext[#2date]{%
145   \iffieldundef{#2season}}{}%

```

```

146 \csuse{mkbibdate#1}{#2month}{#2day}%
147 \blx@printtime{#2}%
148 }%
149 \csuse{mkbibseasondate#1}{#2season}%
150 \dateuncertainprint
151 \iffieldundef{#2endmonth}{%
152 \iffieldequalstr{#2endmonth}{%
153 \mbox{\bibdaterangesep}%
154 }%
155 \bibdaterangesep
156 \enddatecircaprint
157 \iffieldundef{#2season}{%
158 \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
159 \blx@printtime{#2}{end}%
160 }%
161 \csuse{mkbibseasondate#1}{#2endseason}%
162 \enddateuncertainprint}}}}

```

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

```

163 \newrobustcmd*{\mknoyeardaterangetrunc}[2]{%
164 \iffieldundef{#2month}{%
165 \datecircaprint
166 \printtext[#2date]{%
167 \iffieldundef{#2season}{%
168 \ifboolexpr{
169 test {\iffieldsequal{labelyear}{labelendyear}}
170 and
171 test {\iffieldsequal{#2month}{#2endmonth}}
172 }%
173 \csuse{mkbibdate#1}{#2day}%
174 }%
175 \csuse{mkbibdate#1}{#2month}{#2day}%
176 }%
177 \csuse{mkbibseasondate#1}{#2season}%
178 \dateuncertainprint
179 \iffieldundef{#2endmonth}{%
180 \iffieldequalstr{#2endmonth}{%
181 \mbox{\bibdaterangesep}%
182 }%
183 \bibdaterangesep
184 \enddatecircaprint
185 \iffieldundef{#2season}{%
186 \csuse{mkbibdate#1}{#2endmonth}{#2endday}%
187 }%
188 \csuse{mkbibseasondate#1}{#2endseason}%
189 \enddateuncertainprint}}}}

```

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

```

190 \xpatchcmd{\mkdaterangefull}{%
191 \iffieldundef{#2year}{%
192 }%
193 \iffieldundef{#2year}{\mknoyeardaterangefull{#1}{#2}}%
194 }{}

```

```

195 \xpatchcmd{\mkdaterangetrunc}{%
196 \iffieldundef{#2year} {}%
197 }{%
198 \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
199 }{}{}
200 \xpatchcmd{\mkdaterangefullextra}{%
201 \iffieldundef{#2year} {}%
202 }{%
203 \iffieldundef{#2year} {\mknoyeardaterangefull{#1}{#2}}%
204 }{}{}
205 \xpatchcmd{\mkdaterangetruncextra}{%
206 \iffieldundef{#2year} {}%
207 }{%
208 \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
209 }{}{}

```

2.4.3 BIBLIOGRAPHY FORMATTING

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

```

210 \DeclareFieldFormat{shorthandwidth}{#1}

```

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

```

211 \xpretonameformat{family-given}{%
212 \iffieldannotation{inferred}{\ifnumequal{\value{listcount}}{1}{\bibopenbracket}{}{}%
213 \ifitemannotation{inferred}{\bibopenbracket}{}%
214 }{}{}
215 \xpatchnameformat{family-given}{%
216 \usebibmacro{name:andothers}%
217 }{%
218 \ifitemannotation{pseudo}{%
219 \addspace\printtext[parens]{\bibsstring{pseudo}}%
220 }{}%
221 \ifitemannotation{inferred}{\bibclosebracket}{}%
222 \usebibmacro{name:andothers}%
223 \iffieldannotation{inferred}{%
224 \ifboolexpr{
225 test {\ifnumequal{\value{listcount}}{\value{maxnames}}}
226 or
227 test {\ifnumequal{\value{listcount}}{\value{listtotal}}}
228 or (
229 test {\ifnumequal{\value{listcount}}{\value{minnames}}}
230 and
231 test {\ifnumgreater{\value{listtotal}}{\value{maxnames}}} )
232 }{\bibclosebracket}{}%
233 }{}%
234 }{}{}
235 \DeclareNameAlias{shortauthor}{family-given}
236 \DeclareNameAlias{shorteditor}{family-given}

```

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

```

237 \DeclareNameAlias{sortname}{family-given}
238 \DeclareNameAlias{author}{family-given}
239 \DeclareNameAlias{editor}{family-given}
240 \DeclareNameAlias{translator}{family-given}

```

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

```

241 \defbibenvironment{bibliography}
242   {\list
243     {}
244     {\setlength{\leftmargin}{\bibhang}%
245      \setlength{\itemindent}{-\leftmargin}%
246      \setlength{\itemsep}{\bibitemsep}%
247      \setlength{\parsep}{\bibparsep}}}
248   {\endlist}
249   {\item}

```

The shorthand formatting is just like authoryear.

```

250 \defbibenvironment{shorthand}
251   {\list
252     {\printfield[shorthandwidth]{shorthand}}
253     {\setlength{\labelwidth}{\shorthandwidth}%
254      \setlength{\leftmargin}{\labelwidth}%
255      \setlength{\labelsep}{\biblabelsep}%
256      \addtolength{\leftmargin}{\labelsep}%
257      \setlength{\itemsep}{\bibitemsep}%
258      \setlength{\parsep}{\bibparsep}%
259      \renewcommand*{\makelabel}[1]{##1\hss}}}
260   {\endlist}
261   {\item}

```

2.4.4 NAME AND DATE FORMATTING

We set up hashing just as in authoryear.

```

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

```

We ensure related entries do not interfere with the hashing.

```

263 \xapptobibmacro{begrelated}{%
264   \booltrue{bbx@inset}}{}{}
265 \xapptobibmacro{endrelated}{%
266   \usebibmacro*{bbx:savehash}}{}{}

```

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

```

267 \xpatchbibmacro{author}{%
268   \iffieldundef{authortype}%
269 }{%
270   \usebibmacro{date+extradate}%
271   \setunit*{\addspace}%
272   \iffieldundef{authortype}%
273 }{}{}%
274 \xpatchbibmacro{author}{%
275   \global\undef\bbx@lasthash
276 }{%
277   \global\undef\bbx@lasthash
278   \usebibmacro{label+title}%
279   \setunit*{\addspace}%
280   \usebibmacro{date+extradate}%
281 }{}{}%

```

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.

```

282 \xpatchbibmacro{namepairs}{%
283   \printnames[by#1]%
284 }{%
285   \printnames[#1]%
286 }{}%
287 \xpatchbibmacro{author+altauthor}{%
288   \printnames{author}%
289 }{%
290   \ifbool{expr}{%
291     ( not test {\ifnameundef{shortauthor}} )
292     and
293     test {\ifnumequal{\value{shortauthor}}{\value{author}}}
294   }{%
295     \usebibmacro{namepairs}{author}{shortauthor}%
296   }{%
297     \printnames{author}%
298   }%
299 }{}%

```

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

```

300 \xpatchbibmacro{bbx:editor}{%
301   \usebibmacro{#1}%
302 }{%
303   \usebibmacro{date+extradate}%
304   \setunit*{\addspace}%
305   \usebibmacro{#1}%
306 }{}%
307 \xpatchbibmacro{bbx:editor}{%
308   \global\undef\bbx@lasthash
309 }{%
310   \global\undef\bbx@lasthash
311   \usebibmacro{labeltitle}%
312   \setunit*{\addspace}%
313   \usebibmacro{date+extradate}%
314 }{}%
315 \xpatchbibmacro{editor+alteditor}{%
316   \printnames[byeditor]%
317 }{%
318   \printnames{editor}%
319 }{}%
320 \xpatchbibmacro{editor+alteditor}{%
321   \printnames{editor}%
322 }{%
323   \ifbool{expr}{%
324     ( not test {\ifnameundef{shorteditor}} )
325     and
326     test {\ifnumequal{\value{shorteditor}}{\value{editor}}}
327   }{%
328     \usebibmacro{namepairs}{editor}{shorteditor}%
329   }{%
330     \printnames{editor}%
331   }%
332 }{}%

```

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

```

333 \xpatchbibmacro{bbx:translator}{%
334 \global\undef\bbx@lasthash
335 }{%
336 \global\undef\bbx@lasthash
337 \usebibmacro{labeltitle}%
338 \setunit*\addspace}%
339 \usebibmacro{date+extradate}%
340 }{}{}%
341 \xpatchbibmacro{bbx:translator}{%
342 \usebibmacro{#1}%
343 }{%
344 \usebibmacro{date+extradate}%
345 \setunit*\addspace}%
346 \usebibmacro{#1}%
347 }{}{}%

```

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.

```

348 \newtoggle{blx@ox@clearedtitle}
349 \newbibmacro*{labeltitle}{%
350 \iffieldundef{label}{%
351 \iffieldundef{shorttitle}{%
352 \ifboolexpr{
353 test {\iffieldundef{title}}
354 and
355 test {\iffieldundef{subtitle}}
356 }{%
357 \printfield{library}%
358 \clearfield{library}%
359 }{%
360 \printtext[title]{%
361 \printfield[titlecase]{title}%
362 \setunit{\subtitlepunct}%
363 \printfield[titlecase]{subtitle}}%
364 \clearfield{title}%
365 \clearfield{subtitle}%
366 \toggletrue{blx@ox@clearedtitle}%
367 \setunit{\addspace}%
368 }%
369 }{%
370 \printtext[title]{\printfield[titlecase]{shorttitle}}%
371 }%
372 }{%
373 \printfield{label}%
374 }%
375 }

```

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

```

376 \xpretobibmacro{maintitle+title}{%
377 \iftoggle{blx@ox@clearedtitle}{%
378 \usebibmacro{maintitle+volume}%
379 \clearfield{maintitle}%
380 \clearfield{volume}%
381 }{}%
382 }{}{}
383 \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.

```

384 \xpatchbibdriver{online}{%
385   \iffieldundef{year}%
386 }{%
387   \ifboolexpr{
388     test {\iffieldundef{season}}
389     and
390     test {\iffieldundef{month}}
391   }%
392 }{}

```

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

```

393 \DeclareFieldFormat[online,image]{citetitle}{\mkbibquote{#1\isdot}}
394 \DeclareFieldFormat[legislation,legal]{citetitle}{#1}
395 \DeclareFieldFormat[manuscript,unpublished]{citetitle}{%
396   \def\currentfield{title}%
397   \ifboolexpr{
398     test {\iffieldannotation{descriptor}}
399     or (
400       test {\iffieldundef{shorttitle}}
401       and
402       test {\iffieldundef{title}}
403     )
404   }{#1}{\mkbibquote{#1\isdot}}%
405   \undef\currentfield}

```

2.4.5 JOURNAL DIVISION FORMATTING

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

```

406 \renewcommand*{\bibpagespunct}{%
407   \ifboolexpr{
408     test {\ifentrytype{article}}
409     or
410     test {\ifentrytype{supperperiodical}}
411     or
412     test {\ifentrytype{review}}
413   }{%
414     \addcolon\space
415   }{%
416     \addcomma\space
417   }%
418 }

```

2.4.6 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.

```

419 \DeclareFieldFormat[manuscript]{dateLabel}{\mkbibbrackets{#1}}
420 \DeclareFieldFormat[unpublished]{dateLabel}{%
421   \iftoggle{blx@ox@ms}{\mkbibbrackets{#1}}{\mkbibparens{#1}}
422   \renewbibmacro*{manuscript:date}{\usebibmacro{date}}

```

We include the library field as a fallback title.

```

423 \DeclareLabeltitle{%
424   \field{shorttitle}
425   \field{title}
426   \field{maintitle}
427   \field{library}
428 }

```

2.5 Alphabetic style: oxalph.bbx

2.5.1 PRELIMINARIES

This style is based on oxyear.

```

20 \RequireBibliographyStyle{oxyear}

```

2.5.2 SUPPRESSING LABELEXTRA

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

```

21 \xpatchcmd{\bbx@opt@mergedate@maximum}{%
22   \printdateextra
23 }{%
24   \printdate
25 }{}
26 \xpatchcmd{\bbx@opt@mergedate@maximum}{%
27   \csuse{print\thefield{labeldatesource}dateextra}
28 }{%
29   \csuse{print\thefield{labeldatesource}date}
30 }{}
31 \xpatchcmd{\bbx@opt@mergedate@maximum}{%
32   \printlabeldateextra
33 }{%
34   \printlabeldate
35 }{}
36 \xpatchcmd{\bbx@opt@mergedate@compact}{%
37   \csuse{print\thefield{labeldatesource}dateextra}
38 }{%
39   \csuse{print\thefield{labeldatesource}date}
40 }{}
41 \xpatchcmd{\bbx@opt@mergedate@compact}{%
42   \printlabeldateextra
43 }{%
44   \printlabeldate
45 }{}
46 \xpatchcmd{\bbx@opt@mergedate@year}{%
47   \printlabeldateextra
48 }{%
49   \printlabeldate
50 }{}
51 \xpatchcmd{\bbx@opt@mergedate@basic}{%
52   \printlabeldateextra
53 }{%
54   \printlabeldate
55 }{}
56 \xpatchcmd{\bbx@opt@mergedate@minimum}{%
57   \printlabeldateextra
58 }{%

```

```

59   \printlabeldate
60 }{}{}
61 \xpatchcmd{\bbx@opt@mergedate@false}{%
62   \printlabeldateextra
63 }{%
64   \printlabeldate
65 }{}{}
66 \ExecuteBibliographyOptions{mergedate}

```

2.5.3 LABEL CODES: PRINTING

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

```

67 \ExecuteBibliographyOptions{labelalpha,sorting=anyt}
68
69 \DeclareFieldFormat{labelalphawidth}{\mkbibbrackets{#1}}
70 \DeclareFieldFormat{shorthandwidth}{\mkbibbrackets{#1}}
71
72 \defbibenvironment{bibliography}
73   {\list
74     {\printtext[labelalphawidth]{%
75       \printfield{labelprefix}%
76       \printfield{labelalpha}%
77       \printfield{extraalpha}}}
78     {\setlength{\labelwidth}{\labelalphawidth}%
79      \setlength{\leftmargin}{\labelwidth}%
80      \setlength{\labelsep}{\biblabelsep}%
81      \addtolength{\leftmargin}{\labelsep}%
82      \setlength{\itemsep}{\bibitemsep}%
83      \setlength{\parsep}{\bibparsep}}%
84      \renewcommand*{\makelabel}[1]{##1\hss}}
85   {\endlist}
86   {\item}
87
88 \defbibenvironment{shorthand}
89   {\list
90     {\printfield[shorthandwidth]{shorthand}}
91     {\setlength{\labelwidth}{\shorthandwidth}%
92      \setlength{\leftmargin}{\labelwidth}%
93      \setlength{\labelsep}{\biblabelsep}%
94      \addtolength{\leftmargin}{\labelsep}%
95      \setlength{\itemsep}{\bibitemsep}%
96      \setlength{\parsep}{\bibparsep}}%
97      \renewcommand*{\makelabel}[1]{##1\hss}}
98   {\endlist}
99   {\item}

```

2.5.4 LABEL CODES: GENERATING

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

```

100 \DeclareStyleSourceMap{%
101   \maps[datatype=bibtex]{%
102     \map[overwrite=false]{%

```

```
103     \step[fieldsource=title, final]
104     \step[fieldset=shortlabeltitle, origfieldval]
105     \step[fieldsource=subtitle]
106     \step[fieldset=shortlabeltitle, origfieldval, append=true]
107     \step[fieldsource=shortlabeltitle,
108           match=\regexp{[^\p{Lu}]},
109           replace=\regexp{}}]
110   }}}
111   \DeclareLabelalphaTemplate{%
112     \labelelement{
113       \field[final]{shorthand}
114       \field{label}
115       \field[strwidth=3, strside=left, ifnames=1]{labelname}
116       \field[strwidth=1, strside=left]{labelname}
117       \field[strwidth=3, strside=left]{shortlabeltitle}
118       \field[strwidth=4, strside=left]{labeltitle}
119     }
120     \labelelement{
121       \field[strwidth=2, strside=right]{labelyear}
122     }
123   }
```

Citation styles

3.1 Notes style: oxnotes.cbx

The standard verbose style works without further adjustment.

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

3.2 Author–year style: oxyear.cbx

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

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

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

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

We patch it with our version of year range compression.

```
22 \xpatchbibmacro{cite:labeldate+extradate}{%
23   \printfield{labelendyear}%
24 }{%
25   \iffielddundef{extradate}{%
26     \blx@ox@compyear
27     {\thefield{labelyear}}%
28     {\thefield{labelendyear}}%
29   }{%
30     \printfield{labelendyear}%
31   }{} }
```

We insert anonymous author handling into cite.

```
32 \xpatchbibmacro{cite}{%
33   \printnames{labelname}%
34 }{%
35   \ifboolexpr{
36     test {\iffieldequalstr{labelnamesource}{author}}
37     and
38     togl {\blx@ox@autoanon}
```

```

39     and
40     test {\iffieldequals{rawauthor}{\oxrefanon}}
41   }{%
42     \iftoggle{blx@ox@abbranon}{\bibsstring{anon}}{\bibrplstring{anon}}%
43   }{%
44     \printnames{labelname}%
45   }%
46 }{}

```

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.

```

47 \DeclareDelimFormat{nameyeardelim}{%
48   \iffieldundef{\thefield{labeldatesource}year}%
49   {\addcomma\space}%
50   {\addspace}}
51 \DeclareDelimFormat{nonameyeardelim}{%
52   \iffieldundef{\thefield{labeldatesource}year}%
53   {\addcomma\space}%
54   {\addspace}}

```

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

```

55 \renewcommand*{\compcitedelim}{\addsemicolon\space}

```

The page reference postnote is given after a colon.

```

56 \renewcommand*{\postnotedelim}{\addcolon\space}

```

3.3 Notes style: oxnum.cbx

The standard numeric style works without further adjustment.

```

20 \RequireCitationStyle{numeric-comp}

```

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

```

21 \renewcommand*{\compcitedelim}{\addsemicolon\space}

```

The page reference postnote is given after a colon.

```

22 \renewcommand*{\postnotedelim}{\addcolon\space}

```

3.4 Notes style: oxalph.cbx

The standard alphabetic style works without further adjustment.

```

20 \RequireCitationStyle{alphabetic}

```

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

```

21 \renewcommand*{\compcitedelim}{\addsemicolon\space}

```

The page reference postnote is given after a colon.

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

3.5 Common citation fixes

This code is appended to all the citation style files.

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

```
1 \xpatchbibmacro{textcite}{%
2 \printnames{labelname}%
3 }{%
4 \ifboolexpr{
5 test {\iffieldequalstr{labelnamesource}{author}}
6 and
7 togl {blx@ox@autoanon}
8 and
9 test {\iffieldequals{rawauthor}{\oxrefanon}}
10 }{%
11 \iftoggle{blx@ox@abbranon}{\bibcpsstring{anon}}{\bibcplstring{anon}}%
12 }{%
13 \printnames{labelname}%
14 }%
15 }{} }
```

Data model adjustments

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

We provide an additional name part for handling titles.

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

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

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

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}
```

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

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

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

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



```
34 \DeclareDatamodelFields[type=list,datatype=literal]{origin}  
35 \DeclareDatamodelEntryfields[manuscript]{catalog, dating, shortlibrary, %  
36     shortcollection, columns, languages, collection, usualtitle, shelfmark, %  
37     sortshelfmark, support, columns, origin, scribe, owner}
```

This data model helps with legal citations.

```
38 \DeclareDatamodelFields[type=field,datatype=date]{pardate}  
39 \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\addotsspace edn\adddot}},
45 revised       = {{revised edition}}{rev\addotsspace edn\adddot}},
46 revisedenlarged = {{revised and enlarged edition}}{rev\addotsspace ane enl\addotsspace
↪ edn\adddot}},
47 revisedreprint = {{revised reprint}}{rev\addotsspace repr\adddot}},
48 suppto        = {{Supplement to}}{Supplement to}},
49 equals        = {{=}}{=}},
50 original      = {{original}}{orig\adddot}},

```

- Publication state

```

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

```

- Pagination

```

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

```

- Types

```

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

```

- Miscellaneous

```

98     nolocation    = {{no place}}{n\addot p\addot}},
99     modified      = {{last modified}}{last modified}},
100    recorded       = {{recorded}}{recorded}},
101    uploaded       = {{uploaded}}{uploaded}},

```

- Labels

```

102    anon           = {{Anonymous}}{Anon\addot}},
103    pseudo         = {{Pseudo-}}{Ps\addot-}},
104    urldown        = {{downloaded}}{downloaded}},

```

- These are borrowed from other styles.

```

105    1column        = {{one column}}{1\addnbspace col\addot}},
106    2column        = {{two columns}}{2\addnbspace col\addot}},
107    inflayer       = {{inferior layer}}{inf\addotsspace lay\addot}},
108    suplayer       = {{superior layer}}{sup\addotsspace lay\addot}},
109    paper          = {{paper}}{pap\addot}},
110    papyrus        = {{papyrus}}{papy\addot}},
111    pergament      = {{pergament}}{perg\addot}},
112    eucase         = {{Case}}{Case}},
113    eujoinedcases  = {{Joined Cases}}{Joined Cases}},
114    commissiondecision = {{Commission Decision}}{Commission Decision}},
115    application    = {{Application}}{App\addot}},
116    order          = {{Order}}{Ord\addot}},
117    bill           = {{Bill}}{Bill}},
118    draft          = {{draft}}{draft}},
119    opened         = {{opened for signature}}{opened for signature}},
120    signed         = {{signed}}{signed}},
121    adopted        = {{adopted}}{adopted}},
122    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).

```

123    byeditor       = {{edited by}}{ed\addot}},
124    bycompiler     = {{compiled by}}{comp\addot}},
125    byfounder      = {{founded by}}{found\addot}},
126    bycontinuator = {{continued by}}{cont\addot}},
127    byredactor     = {{redacted by}}{red\addot}},
128    byreviser      = {{revised by}}{rev\addot}},
129    byreviewer     = {{reviewed by}}{rev\addot}},
130    bycollaborator = {{in collaboration with}}{in collab\addotsspace with}},
131    bytranslator   = {{translated \lbx@lfromlang\ by}}{trans\addot\ \lbx@lfromlang}},

```

```

132 bycommentator = {{commented by}}{comm\adddot}},
133 byannotator   = {{annotated by}}{annot\adddot}},
134 byeditortr    = {{edited and translated \lbx@lfromlang\ by}%
135               {ed\adddotsspace and trans\adddot\ \lbx@sfromlang}},
136 byeditorco    = {{edited and commented by}%
137               {ed\adddotsspace and comm\adddot}},
138 byeditoran    = {{edited and annotated by}%
139               {ed\adddotsspace and annot\adddot}},
140 byeditorin    = {{edited, with an introduction, by}%
141               {ed.\adddotsspace with introduction}},
142 byeditorfo    = {{edited, with a foreword, by}%
143               {ed.\adddotsspace with foreword}},
144 byeditoraf    = {{edited, with an afterword, by}%
145               {ed.\adddotsspace with afterword}},
146 byeditortrco  = {{edited, translated \lbx@lfromlang\finalandcomma\ and commented by}%
147               {ed.\addabrvspace trans\adddot\ \lbx@sfromlang\finalandcomma\ and
               ↪ comm\adddot}},
148 byeditortran  = {{edited, translated \lbx@lfromlang\finalandcomma\ and annotated by}%
149               {ed.\addabrvspace trans\adddot\ \lbx@sfromlang\finalandcomma\ and
               ↪ annot\adddot}},
150 byeditortrin  = {{edited and translated \lbx@lfromlang, with an introduction, by}%
151               {with introduction, ed\adddotsspace and trans\adddot\ \lbx@sfromlang}},
152 byeditortrfo  = {{edited and translated \lbx@lfromlang, with a foreword, by}%
153               {with foreword, ed\adddotsspace and trans\adddot\ \lbx@sfromlang}},
154 byeditortraf  = {{edited and translated \lbx@lfromlang, with an afterword, by}%
155               {with afterword, ed\adddotsspace and trans\adddot\ \lbx@sfromlang}},
156 byeditorcoin  = {{edited and commented, with an introduction, by}%
157               {with introduction, ed\adddotsspace and comm\adddot}},
158 byeditorcofo  = {{edited and commented, with a foreword, by}%
159               {with foreword, ed\adddotsspace and comm\adddot}},
160 byeditorcoaf  = {{edited and commented, with an afterword, by}%
161               {with afterword, ed\adddotsspace and comm\adddot}},
162 byeditoranin  = {{edited and annotated, with an introduction, by}%
163               {with introduction, ed\adddotsspace and annot\adddot}},
164 byeditoranfo  = {{edited and annotated, with a foreword, by}%
165               {with foreword, ed\adddotsspace and annot\adddot}},
166 byeditoranaf  = {{edited and annotated, with an afterword, by}%
167               {with afterword, ed\adddotsspace and annot\adddot}},
168 byeditortrcoin = {{edited, translated \lbx@lfromlang\finalandcomma\ and commented, with
169               ↪ an introduction, by}%
               {with introduction, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and comm\adddot}},
170 byeditortrcofo = {{edited, translated \lbx@lfromlang\finalandcomma\ and commented, with a
171               ↪ foreword, by}%
               {with foreword, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and comm\adddot}},
172 byeditortrcoaf = {{edited, translated \lbx@lfromlang\finalandcomma\ and commented, with
173               ↪ an afterword, by}%
               {with afterword, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and comm\adddot}},
174 byeditortranin = {{edited, translated \lbx@lfromlang\finalandcomma\ and annotated, with
175               ↪ an introduction, by}%
               {with introduction, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and annot\adddot}},
176 byeditortranfo = {{edited, translated \lbx@lfromlang\finalandcomma\ and annotated, with a
177               ↪ foreword, by}%
               {with foreword, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and annot\adddot}},
178 byeditortranaf = {{edited, translated \lbx@lfromlang\finalandcomma\ and annotated, with
179               ↪ an afterword, by}%
               {with afterword, ed.\addabrvspace trans\adddot\
               ↪ \lbx@sfromlang\finalandcomma\ and annot\adddot}},

```

```

180 bytranslatorco = {{translated \lbx@lfromlang\ and commented by}%
181                 {trans\addot\ \lbx@sfromlang\ and comm\addot}},
182 bytranslatoran = {{translated \lbx@lfromlang\ and annotated by}%
183                 {trans\addot\ \lbx@sfromlang\ and annot\addot}},
184 bytranslatorin = {{translated \lbx@lfromlang, with an introduction, by}%
185                 {trans\addot\ \lbx@sfromlang\ with introduction}},
186 bytranslatorfo = {{translated \lbx@lfromlang, with a foreword, by}%
187                 {trans\addot\ \lbx@sfromlang\ with foreword}},
188 bytranslatorsaf = {{translated \lbx@lfromlang, with an afterword, by}%
189                 {trans\addot\ \lbx@sfromlang\ with afterword}},
190 bytranslatorcoin = {{translated \lbx@lfromlang\ and commented, with an introduction, by}%
191                   {with introduction, trans\addot\ \lbx@sfromlang\ and comm\addot}},
192 bytranslatorcofo = {{translated \lbx@lfromlang\ and commented, with a foreword, by}%
193                   {with foreword, trans\addot\ \lbx@sfromlang\ and comm\addot}},
194 bytranslatorcoaf = {{translated \lbx@lfromlang\ and commented, with an afterword, by}%
195                   {with afterword, trans\addot\ \lbx@sfromlang\ and comm\addot}},
196 bytranslatoranin = {{translated \lbx@lfromlang\ and annotated, with an introduction, by}%
197                   {with introduction, trans\addot\ \lbx@sfromlang\ and annot\addot}},
198 bytranslatoranfo = {{translated \lbx@lfromlang\ and annotated, with a foreword, by}%
199                   {with foreword, trans\addot\ \lbx@sfromlang\ and annot\addot}},
200 bytranslatoranaf = {{translated \lbx@lfromlang\ and annotated, with an afterword, by}%
201                   {with afterword, trans\addot\ \lbx@sfromlang\ and annot\addot}},

```

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

```

202 withinintroduction = {{with an introduction by}{with an introduction by}},
203 withcommentator = {{with a commentary by}{with a commentary by}},
204 withannotator = {{with annotations by}{with annotations by}},
205 withinintroduction = {{with an introduction by}{with an introduction by}},
206 withforeword = {{with a foreword by}{with a foreword by}},
207 withafterword = {{with an afterword by}{with an afterword by}},
208 introduction = {{introduction}{introduction}},

```

The abbreviations for some publication details are different.

```

209 newseries = {{new series}{\mkbibacro{NS}}},
210 oldseries = {{old series}{\mkbibacro{OS}}},
211 edition = {{edition}{edn\addot}},
212 reprint = {{reprint\nopunct}{repr\addot\nopunct}},
213 reviewof = {{review of}{review of}},
214 reprintas = {{reprinted as}{repr\addotsspace as}},
215 reprintfrom = {{from}{from}},
216 translationas = {{English translation as}{Eng\addotsspace trans\addotsspace as}},
217 origpubin = {{originally published in}{originally pub\addot}},

```

There is also a different abbreviation for ‘paragraph’.

```

218 paragraph = {{paragraph}{para\addot}},
219 paragraphs = {{paragraphs}{paras\addot}},

```

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

```

220 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.

```

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

```

Languages are abbreviated.

```

231 langamerican  = {{English}}{Eng\adddot}},
232 langbrazilian = {{Brazilian}}{Braz\adddot}},
233 langcatalan   = {{Catalan}}{Catal\adddot}},
234 langcroatian  = {{Croatian}}{Croat\adddot}},
235 langczech     = {{Czech}}{Czech}},
236 langdanish    = {{Danish}}{Dan\adddot}},
237 langdutch     = {{Dutch}}{Dutch}},
238 langenglish   = {{English}}{Eng\adddot}},
239 langestonian  = {{Estonian}}{Eston\adddot}},
240 langfinnish   = {{Finnish}}{Finn\adddot}},
241 langfrench    = {{French}}{Fr\adddot}},
242 langgerman    = {{German}}{Ger\adddot}},
243 langgreek     = {{Greek}}{Gr\adddot}},
244 langitalian   = {{Italian}}{It\adddot}},
245 langlatin     = {{Latin}}{Lat\adddot}},
246 langnorwegian = {{Norwegian}}{Norw\adddot}},
247 langpolish    = {{Polish}}{Pol\adddot}},
248 langportuguese = {{Portuguese}}{Port\adddot}},
249 langrussian   = {{Russian}}{Russ\adddot}},
250 langslovene   = {{Slovene}}{Slov\adddot}},
251 langspanish   = {{Spanish}}{Sp\adddot}},
252 langswedish   = {{Swedish}}{Swed\adddot}},
253 }

```

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}
```