

biblatex-bath: Harvard referencing style as recommended by the University of Bath Library

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Package v2.0.1 – 17 October 2018

1 Introduction

This package provides a **biblatex** style to format reference lists in the **Harvard style** recommended by the University of Bath Library.

1.1 Installation

You can use this style simply by copying all the `.bbx`, `.cbx`, `.dbx` and `.lbx` files into your working directory, that is, the directory holding the main `.tex` file for your document. If you want the style to be available for all your documents without having to copy the files over each time, you can install them using the instructions below.

1.1.1 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`
 - `bath.bbx`, `bath.cbx`, `bath.dbx`
 - `american-bath.lbx`, `british-bath.lbx`
 - `biblatex-bath.bib`
 - `biblatex-bath.ins`
- Running `make` generates the above files and also `biblatex-bath.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`.

1.1.2 Manual way

You only need to follow the first two steps if you have made your own changes to the `.dtx` file. The compiled files you need are included in the zip archive.

1. Run `luatex biblatex-bath.dtx` to generate the source files.
2. Compile `biblatex-bath.dtx` with **LuaLaTeX** and **Biber** to generate the documentation. You will need, among other things, the **luatexja**, **adobemapping** and **ipaex** packages installed; this is just for the documentation, not for the biblatex style itself.

*To contact the maintainer about this package, please visit the repository where the code is hosted: <https://github.com/alex-ball/bathbib>.

3. If you are using TeX Live, find your home TeX tree using the following command at the command prompt/terminal:

```
kpsewhich -var-value=TEXMFHOME
```

If you are using MikTeX, consult the MikTeX manual entry for [integrating local additions](#). You can use one of the roots (TeX trees) already defined – preferably one of the User roots – or set up a new one.

4. Move the files to your TeX tree as follows:
 - source/latex/biblatex-bath: biblatex-bath.dtx, (biblatex-bath.ins)
 - tex/latex/biblatex-bath: bath.bbx, bath.cbx, bath.dbx, american-bath.lbx, british-bath.lbx
 - doc/latex/biblatex-bath: biblatex-bath.pdf, README.md
5. You may then have to update your installation’s file name database before TeX and friends can see the files.

2 Using the style

To use the style, specify it when you load `biblatex`. To get the sorting order of your *citations* right, specify the `ynt` sorting scheme. To avoid possible inconsistencies (e.g. in how disambiguation letters are assigned), force all entries to use the global reference context:

```
\usepackage[style=bath,sorting=ynt]{biblatex}
\assignrefcontextentries[]{*}
```

Remember also to specify your `.bib` file in the preamble:

```
\addbibresource{file.bib}
```

To get the sorting order of your *references* right, create a new reference context just before you print your bibliography, using the `nyt` sorting scheme:

```
\newrefcontext[sorting=nyt]
\printbibliography
```

If you forget these extra steps, the `nyt` sorting scheme will be used throughout. To make a citation in the text, use the key that corresponds to the entry in your `.bib` file:

```
While collections can be supplemented by other means \autocite{williams1997edd},
the absence of an invisible collection amongst historians is noted by
\textcite[556]{stieg1981inh}. It may be, as \textcite{burchard1965hhl} points
out, that they have no assistants or are reluctant to delegate, or it may be
down to economic factors \autocite{adams2009tc1, adams2014tc2, adams2017tc3,
gb.pa2014}\dots
```

While collections can be supplemented by other means (Williams, 1997), the absence of an invisible collection amongst historians is noted by Stieg (1981b, p.556). It may be, as Burchard (1965) points out, that they have no assistants or are reluctant to delegate, or it may be down to economic factors (Adams, 2009; 2014; *Pensions Act 2014*; Adams, 2017)...

Please refer to the documentation for `biblatex` for the full range of commands available for in-text citations.

It is strongly recommended to use Biber in place of BibTeX to process your references, as the style relies on Biber functionality to deal with some of the more exotic types of entry.

3 Change history

3.1 Version 1 to version 2

If you have previously used version 1 of this style, there are some changes you need to be aware of.

- The code for styling legal references has been completely overhauled, so you can represent them more semantically in your bibliography file. The examples below show the fields you should now use. As far as possible they have been made consistent with the `biblatex-oscola` style, a specialist style implementing the *Oxford Standard for the Citation of Legal Authorities*, to enable the same entries to be used with both styles.

For the sake of backwards compatibility, the version 1 semantics still work, but should be considered deprecated; support may be withdrawn in future (major) versions of this style.

- In version 1, the `titleaddon` field was printed unadorned, so you had to supply your own brackets. This was to allow greater freedom to ‘hack’ entries.

With version 2, you should not need to resort to such dirty tricks, so the style now applies the brackets for you, in common with styles such as `biblatex-apa`. Again, for the sake of backwards compatibility, before it does this it strips off any brackets you may have added by hand around your field value.

- Since version 1 was released, there have been improvements made both to the Harvard (Bath) style itself and to `biblatex` internals. You may therefore notice some changes in how certain entries are styled, and if you have made your own adaptations to the style, these may no longer work with version 2.

There is now a companion BibTeX style available (`bathx` in version 2+ of the `bath-bst` package) which is compatible with this style in the sense that it will render the same `.bib` file the same way, so long as some adjustments are made that won’t affect the `biblatex` rendering (mainly concerning the handling of dates).

4 Examples

The examples below are shown in three parts. The first, marked with , shows an extract from the *Harvard (Bath) guide to citing and referencing* or *Referencing images*. The second, marked with , shows the reference as formatted by `biblatex`. The last shows how the reference was entered in the `.bib` file. The bottom right corner shows the source of the example: ‘HBS’ indicates the ‘Specific examples’ section of the Guide (followed by the number of the example); ‘ref. list’ indicates the ‘How to organise a reference list’ section of the Guide; ‘RI’ indicates *Referencing images*.

You may notice that the examples tend to use BibTeX aliases and conventions for fields (e.g. `address`, `journal`, `year`) rather than the native `biblatex` fields. This is simply to ease transitions to and from BibTeX, and not a symptom of recalcitrance on the part of the author.

4.1 Books and book chapters

Book with author(s)

 Rang, H.P., Dale, M.M., Ritter, J.M., Flower, R.J. and Henderson, G., 2012. *Rang and Dale’s pharmacology*. 7th ed. Edinburgh: Elsevier Churchill Livingstone.

 Rang, H.P., Dale, M.M., Ritter, J.M., Flower, R.J. and Henderson, G., 2012. *Rang and Dale’s pharmacology*. 7th ed. Edinburgh: Elsevier Churchill Livingstone.

```
@book{rang.etal2012rdp,
  author = {Rang, H. P. and Dale, M. M. and Ritter, J. M. and Flower, R. J. and Henderson, G.},
  year = {2012},
  title = {Rang and {Dale's} Pharmacology},
  edition = {7},
  address = {Edinburgh},
  publisher = {Elsevier Churchill Livingstone}}
```

HBS 1

- 📖 Open University, 1972. *Electricity and magnetism*. Bletchley: Open University Press.
- ⚙️ Open University, 1972. *Electricity and magnetism*. Bletchley: Open University Press.

```
@book{ou1972em,
  author = {Open University},
  year = {1972},
  title = {Electricity and Magnetism},
  address = {Bletchley},
  publisher = {Open University Press}}
```

HBS 1

Book with editor(s) instead of author(s)

- 📖 Rothman, K.J., Greenland, S. and Lash, T.L., eds., 2008. *Modern epidemiology*. 3rd ed. Philadelphia, Pa.: Lippincott Williams & Wilkins.
- ⚙️ Rothman, K.J., Greenland, S. and Lash, T.L., eds., 2008. *Modern epidemiology*. 3rd ed. Philadelphia, Pa.: Lippincott Williams & Wilkins.

```
@book{rothman.etal2008me,
  editor = {Kenneth J. Rothman and Sander Greenland and Timothy L. Lash},
  year = {2008},
  title = {Modern Epidemiology},
  edition = {3},
  address = {Philadelphia, Pa.},
  publisher = {Lippincott Williams & Wilkins}}
```

HBS 4

Book usually known by title rather than author

- 📖 *Oxford English dictionary*, 1989. 2nd ed. Oxford: Clarendon Press.
- ⚙️ *Oxford English dictionary*, 1989. 2nd ed. Oxford: Clarendon Press.

```
@book{oed1989,
  title = {Oxford {English} Dictionary},
  year = {1989},
  edition = {2},
  address = {Oxford},
  publisher = {Clarendon Press}}
```

HBS 5

- 📖 *The Merck index online*, n.d. [Online]. London: RSC Publishing. Available from: <http://www.rsc.org/Merck-Index> [Accessed 16 June 2016].
- ⚙️ *The Merck index online*, n.d. [Online]. London: RSC Publishing. Available from: <http://www.rsc.org/Merck-Index> [Accessed 16 June 2016].

```
@book{merckNDidx,
  title = {The {Merck} Index Online},
  address = {London},
  publisher = {RSC Publishing},
  url = {http://www.rsc.org/Merck-Index},
  urldate = {2016-06-16}}
```

HBS 5

Electronic book

 Haynes, W.M., ed., 2014. *CRC handbook of chemistry and physics* [Online]. 94th ed. Boca Raton, Fla.: CRC Press/Taylor and Francis. Available from: <http://www.hbcnetbase.com> [Accessed 16 June 2016].

 Haynes, W.M., ed., 2014. *CRC handbook of chemistry and physics* [Online]. 94th ed. Boca Raton, Fla.: CRC Press/Taylor and Francis. Available from: <http://www.hbcnetbase.com> [Accessed 16 June 2016].

```
@book{haynes2014crc,  
  editor = {Haynes, W. M.},  
  year = {2014},  
  title = {{CRC} Handbook of Chemistry and Physics},  
  edition = {94},  
  address = {Boca Raton, Fla.},  
  publisher = {CRC Press/{Taylor and Francis}},  
  url = {http://www.hbcnetbase.com},  
  urldate = {2016-06-16}}
```

HBS 3

 Hodds, J., 2016. *Referencing ebooks* [Kindle version 4.18]. Bath: University of Bath.

 Hodds, J., 2016. *Referencing ebooks* [Kindle version 4.18]. Bath: University of Bath.

```
@book{hodds2016re,  
  author = {Hodds, J.},  
  year = {2016},  
  title = {Referencing ebooks},  
  titleaddon = {Kindle version 4.18},  
  address = {Bath},  
  publisher = {University of Bath}}
```

HBS 3

One chapter/paper from a collection (by different authors) in an edited book

 Burchard, J.E., 1965. How humanists use a library. In: C.F.J. Overhage and J.R. Harman, eds. *Intrex: report on a planning conference and information transfer experiments*. Cambridge, Mass.: MIT Press, pp.41–87.

 Burchard, J.E., 1965. How humanists use a library. In: Overhage, C.F.J. and Harman, J.R. eds. *Intrex: report on a planning conference and information transfer experiments*. Cambridge, Mass.: MIT Press, pp.41–87.

```
@incollection{burchard1965hhl,  
  author = {Burchard, J. E.},  
  year = {1965},  
  title = {How Humanists use a Library},  
  editor = {C. F. J. Overhage and J. R. Harman},  
  booktitle = {Intrex},  
  booksubtitle = {Report on a Planning Conference and Information Transfer Experiments},  
  address = {Cambridge, Mass.},  
  publisher = {MIT Press},  
  pages = {41-87}}
```

ref. list

- 📖 Reid, D.R., 1967. Physical testing of polymer films. In: S.H. Pinner, ed. *Modern packaging films*. London: Butterworths, pp.143–183.
- ⚙️ Reid, D.R., 1967. Physical testing of polymer films. In: Pinner, S.H. ed. *Modern packaging films*. London: Butterworths, pp.143–183.

```
@incollection{reid1967ptp,
  author = {D. R. Reid},
  year = {1967},
  title = {Physical Testing of Polymer Films},
  editor = {S. H. Pinner},
  booktitle = {Modern Packaging Films},
  address = {London},
  publisher = {Butterworths},
  pages = {143-183}}
```

HBS 2

4.2 Articles and periodicals

Journal article

- 📖 Stieg, M.F., 1981a. Continuing education and the reference librarian in the academic and research library. *Library Journal*, 105(22), pp.2547–2551.
- ⚙️ Stieg, M.F., 1981a. Continuing education and the reference librarian in the academic and research library. *Library Journal*, 105(22), pp.2547–2551.

```
@article{stieg1981cer,
  author = {Stieg, M. F.},
  year = {1981},
  title = {Continuing Education and the Reference Librarian in the Academic and Research Library},
  journal = {Library Journal},
  volume = {105},
  number = {22},
  pages = {2547-2551}}
```

[ref. list](#)

- 📖 Stieg, M.F., 1981b. The information needs of historians. *College and research libraries*, 42(6), pp.549–560.
- ⚙️ Stieg, M.F., 1981b. The information needs of historians. *College and Research Libraries*, 42(6), pp.549–560.

```
@article{stieg1981inh,
  author = {Stieg, M. F.},
  year = {1981},
  title = {The Information Needs of Historians},
  journal = {College and Research Libraries},
  volume = {42},
  number = {6},
  pages = {549-560}}
```

[ref. list](#)

- 📖 Newman, R., 2010. Malaria control beyond 2010. *Brit. Med. J.*, 341(7765), pp.157–208.
- ⚙️ Newman, R., 2010. Malaria control beyond 2010. *Brit. Med. J.* 341(7765), pp.157–208.

```
@article{newman2010mcb,
  author = {Newman, R.},
  year = {2010},
  title = {Malaria control beyond 2010},
  journal = {Brit.\@ Med.\@ J.},
  volume = {341},
  number = {7765},
  pages = {157-208}}
```

HBS 6

Electronic journal article

📄 Williams, F., 1997. Electronic document delivery: a trial in an academic library. *Ariadne* [Online], 10. Available from: <http://www.ariadne.ac.uk/issue10/edd/> [Accessed 5 December 1997].

⚙️ Williams, F., 1997. Electronic document delivery: a trial in an academic library. *Ariadne* [Online], 10. Available from: <http://www.ariadne.ac.uk/issue10/edd/> [Accessed 5 December 1997].

```
@article{williams1997edd,  
  author = {Williams, F.},  
  year = {1997},  
  title = {Electronic Document Delivery},  
  subtitle = {A Trial in an Academic Library},  
  journal = {Ariadne},  
  volume = {10},  
  url = {http://www.ariadne.ac.uk/issue10/edd/},  
  urldate = {1997-12-05}}
```

HBS 7

Preprint in a digital repository

📄 Shah, I. and Corrick, I. 2016. *How should central banks respond to non-neutral inflation expectations?* Bath: University of Bath. *OPUS* [Online]. Available from: <http://opus.bath.ac.uk> [Accessed 4 May 2016].

⚙️ Shah, I. and Corrick, I., 2016. *How should central banks respond to non-neutral inflation expectations?* Bath: University of Bath. *OPUS* [Online]. Available from: <http://opus.bath.ac.uk> [Accessed 4 May 2016].

```
@report{shah.corrick2016hsc,  
  author = {Shah, I. and Corrick, I.},  
  year = {2016},  
  title = {How should central banks respond to non-neutral inflation expectations?},  
  address = {Bath},  
  institution = {University of Bath},  
  library = {OPUS},  
  url = {http://opus.bath.ac.uk},  
  urldate = {2016-05-04}}
```

HBS 8

💡 The Harvard (Bath) style treats preprints as grey literature, and so the `report` entry type is the best match semantically. Use `library` to specify the name of the preprint repository.

In standard `biblatex`, you would typically use the natural entry type for the work and provide preprint details using the `eprinttype`, `eprintclass` and `eprint` fields.

Newspaper article

📄 Haurant, S., 2004. Britain's borrowing hits £1 trillion. *The Guardian*, 29 July, p.16c.

⚙️ Haurant, S., 2004. Britain's borrowing hits £1 trillion. *The Guardian*, 29 July, p.16c.

```
@article{haurant2004bbh,  
  author = {Haurant, S.},  
  date = {2004-07-29},  
  title = {Britain's Borrowing Hits \pounds 1 Trillion},  
  journal = {The Guardian},  
  pages = {16c}}
```

HBS 12

- 📖 The Independent, 1992. Picking up the bills. *The Independent*, 4 June, p.28a.
- ⚙️ The Independent, 1992. Picking up the bills. *The Independent*, 4 June, p.28a.

```
@article{independent1992pub,
  author = {{The Independent}},
  date = {1992-06-04},
  title = {Picking Up the Bills},
  journal = {The Independent},
  pages = {28a}}
```

HBS 12

4.3 Conference papers

Conference paper (when proceedings have a named editor)

- 📖 Crawford, G.I., 1965. Oxygen in metals. In: J.M.A. Lenihan and S.J. Thompson, eds. *Activation analysis: proceedings of a NATO Advanced Study Institute*, 2–4 August 1964 Glasgow. London: Academic Press, pp.113–118.
- ⚙️ Crawford, G.I., 1965. Oxygen in metals. In: Lenihan, J.M.A. and Thompson, S.J. eds. *Activation analysis: proceedings of a NATO Advanced Study Institute*, 2–4 August 1964 Glasgow. London: Academic Press, pp.113–118.

```
@inproceedings{crawford1965oim,
  author = {Crawford, G. I.},
  year = {1965},
  title = {Oxygen in Metals},
  editor = {J. M. A. Lenihan and S. J. Thompson},
  booktitle = {Activation Analysis},
  booksubtitle = {Proceedings of a {NATO} {Advanced} {Study} {Institute}},
  eventdate = {1964-08-02/1964-08-04},
  venue = {Glasgow},
  address = {London},
  publisher = {Academic Press},
  pages = {113-118}}
```

HBS 10

Conference paper (when proceedings have no named editor or are part of a major series)

- 📖 Soper, D., 1972. Review of bracken control experiments with asulam. *Proceedings of the 11th British Weed Control Conference*, 15–17 November 1972 Brighton. Brighton: University of Sussex, pp.24–31.
- ⚙️ Soper, D., 1972. Review of bracken control experiments with asulam. *Proceedings of the 11th British Weed Control Conference*, 15–17 November 1972 Brighton. Brighton: University of Sussex, pp.24–31.

```
@inproceedings{soper1972rbc,
  author = {Soper, D.},
  year = {1972},
  title = {Review of Bracken Control Experiments with Asulam},
  booktitle = {Proceedings of the 11th {British} {Weed} {Control} {Conference}},
  eventdate = {1972-11-15/1972-11-17},
  venue = {Brighton},
  address = {Brighton},
  publisher = {University of Sussex},
  pages = {24-31}}
```

HBS 11

4.4 Grey literature

Thesis/dissertation

 Burrell, J.G., 1973. *The importance of school tours in education*. Thesis (M.A.). Queen's University, Belfast.

 Burrell, J.G., 1973. *The importance of school tours in education*. Thesis (M.A.) Queen's University, Belfast.

```
@thesis{burrell1973ist,  
  author = {Burrell, J. G.},  
  year = {1973},  
  title = {The Importance of School Tours in Education},  
  type = {Thesis (M.A.)},  
  school = {Queen's University, Belfast}}
```

HBS 13

Report

 UNESCO, 1993. *General information programme and UNISIST*. Paris: UNESCO, (PGI-93/WS/22).

 UNESCO, 1993. *General information programme and UNISIST*. Paris: UNESCO, (PGI-93/WS/22).

```
@report{unesco1993gip,  
  author = {{UNESCO}},  
  year = {1993},  
  title = {General Information Programme and {UNISIST}},  
  address = {Paris},  
  institution = {UNESCO},  
  number = {PGI-93/WS/22}}
```

HBS 14

Standard

 BS 5605:1990. *Recommendations for citing and referencing published material*. BSI.

 BS 5605:1990. *Recommendations for citing and referencing published material*. BSI.

```
@standard{bs5605:1990,  
  number = {BS-5605:1990},  
  sortyear = {1990},  
  title = {Recommendations for citing and referencing published material},  
  organization = {BSI}}
```

HBS 15

- 💡 Use `label` to specify the standard identifier; this will print it at the start of the entry and in citations. The entry will, however, be sorted by `title` in the bibliography unless you fix this with `sortkey`; you should normally repeat the identifier but you might want to adjust it, e.g. by adding zeroes to the start of the number to put several standards in numerical order. If you are using Biber, you can put the standard identifier in the more semantically correct `number` field and the value will be moved into `label` and `sortkey` for you (unless these or `author` are already specified). If you need compatibility with BibTeX you could put the identifier in `author` with much the same effect.
- 💡 If the date forms part of the identifier, don't repeat it in `year` or `date`; put it in `sortyear` instead. This will make sure it is still positioned correctly within a citation of multiple sources. If you are using Biber, it will also stop an erroneous 'n.d.' being printed; otherwise you will need to do this manually by setting the (Boolean) entry option `nonodate`.

Patent

- 📄 Phillipp Morris Inc., 1981. *Optical perforating apparatus and system*. European patent application 0021165A1. 1981-01-07.
- ⚙️ Phillipp Morris Inc., 1981. *Optical perforating apparatus and system*. European patent application 0021165A1. 1981-01-07.

```
@patent{pm1981opa,  
  author = {{Phillipp Morris Inc.}},  
  year = {1981},  
  title = {Optical perforating apparatus and system},  
  type = {European patent application},  
  number = {0021165A1. 1981-01-07}}
```

HBS 16

- 📌 Note that biblatex has special localisation keys for full patents and patent requests/applications.

4.5 Audiovisual materials

Image

- 📄 NASA, 2015, *NASA Astronaut Tim Kopra on Dec. 21 Spacewalk*. Washington: NASA. Available from: <http://www.nasa.gov/image-feature/nasa-astronaut-tim-kopra-on-dec-21-spacewalk> [Accessed 7 January 2015].
- ⚙️ NASA, 2015. *NASA astronaut Tim Kopra on Dec. 21 spacewalk* [Online]. Washington: NASA. Available from: <http://www.nasa.gov/image-feature/nasa-astronaut-tim-kopra-on-dec-21-spacewalk> [Accessed 7 January 2015].

```
@image{nasa2015nat,  
  author = {{NASA}},  
  year = {2015},  
  title = {{NASA} Astronaut {Tim} {Kopra} on {Dec.\@} 21 Spacewalk},  
  address = {Washington},  
  publisher = {NASA},  
  url = {http://www.nasa.gov/image-feature/nasa-astronaut-tim-kopra-on-dec-21-spacewalk},  
  urldate = {2015-01-07}}
```

RI

- 💡 You can use either the `publisher` or the `organization` field to record the source of the image. If you use both, `organization` will be ignored.

- 📄 Iliff, D., 2006. *Royal Crescent in Bath, England - July 2006*, San Francisco: Wikimedia Foundation. Available from: https://commons.wikimedia.org/wiki/File:Royal_Crescent_in_Bath,_England_-_July_2006.jpg [Accessed 7 January 2016].
- ⚙️ Iliff, D., 2006. *Royal Crescent in Bath, England - July 2006* [Online]. San Francisco: Wikimedia Foundation. Available from: https://commons.wikimedia.org/wiki/File:Royal_Crescent_in_Bath,_England_-_July_2006.jpg [Accessed 7 January 2015].

```
@image{iliff2006rcb,  
  author = {D. Iliff},  
  year = {2006},  
  title = {{Royal} {Crescent} in {Bath,} {England} - {July} 2006},  
  address = {San Francisco},  
  organization = {Wikimedia Foundation},  
  url = {https://commons.wikimedia.org/wiki/File:Royal_Crescent_in_Bath,_England_-_July_2006.jpg},  
  urldate = {2015-01-07}}
```

RI

📄 Anon., 1946. *Prototype electric bicycle displayed at the ‘Britain Can Make It’ exhibition organised by the Council of Industrial Design and held at the Victoria and Albert Museum, London, 1946. Designed by B. G. Bowden* [photograph]. At: London. Design Council Slide Collection.

⚙️ Anon., 1946. *Prototype electric bicycle displayed at the ‘Britain Can Make It’ exhibition organised by the Council of Industrial Design and held at the Victoria and Albert Museum, London, 1946. Designed by B. G. Bowden* [photograph]. At: London. Design Council Slide Collection.

```
@image{anon1946peb,  
  author = {Anon\addot},  
  year = {1946},  
  title = {Prototype electric bicycle displayed at the \enquote{Britain Can Make It} exhibition  
    organised by the {Council} of {Industrial} {Design} and held at the {Victoria} and {Albert}  
    {Museum}, {London}, 1946. {Designed} by {B.-G.} {Bowden}},  
  titleaddon = {photograph},  
  address = {London},  
  library = {Design Council Slide Collection}}
```

RI

💡 Use the `library` field to record the archive and register number. If the image is on display rather than archived, use `institution` instead for the museum, gallery or building. If you also wish to provide the name of the organisation that published the image, use the `publisher` field if the location you provide relates to the publisher, but the `organization` field if the location relates to the archive.

Map

📄 Andrews, J. and Dury, A., 1773. *Map of Wiltshire*, 1 inch to 2 miles. Devizes: Wiltshire Record Society.

⚙️ Andrews, J. and Dury, A., 1773. *Map of Wiltshire*, 1 inch to 2 miles. Devizes: Wiltshire Record Society.

```
@manual{andrews.dury1773wilts,  
  author = {Andrews, J. and Dury, A.},  
  year = {1773},  
  title = {Map of {Wiltshire}},  
  series = {1 inch to 2 miles},  
  address = {Devizes},  
  publisher = {Wiltshire Record Society}}
```

HBS 18

❗ The book entry type would also work for this reference.

Film, video or DVD

📄 *Macbeth*, 1948. Film. Directed by Orson Welles. USA: Republic Pictures.

⚙️ *Macbeth*, 1948. Film. Directed by Orson Welles. USA: Republic Pictures.

```
@video{macbeth1948,  
  year = {1948},  
  title = {Macbeth},  
  type = {Film},  
  note = {Directed by Orson Welles},  
  address = {USA},  
  publisher = {Republic Pictures}}
```

HBS 19

❗ In the above entry, the following would also work instead of using `note`:

```
editor = {Orson Welles},
editortype = {director},
```

i You can also use `movie` as an alias for `video`.

Streamed video (YouTube, TED Talks, etc.)

 Moran, C., 2016. *Save Our Libraries* [Online]. Available from: <https://www.youtube.com/watch?v=gKTfCz4JtVE&feature=youtu.be> [Accessed 29 April 2016]

 Moran, C., 2016. *Save Our Libraries* [Online]. Available from: <https://www.youtube.com/watch?v=gKTfCz4JtVE&feature=youtu.be> [Accessed 29 April 2016].

```
@video{moran2016sol,
author = {Moran, C.},
year = {2016},
title = {Save {Our} {Libraries}},
url = {https://www.youtube.com/watch?v=gKTfCz4JtVE&feature=youtu.be},
urldate = {2016-04-29}}
```

HBS 20

 University of Bath, 2015. *What is engineering?* Available from: <https://www.youtube.com/watch?v=NoyZarq-Zbo> [Accessed 12 January 2016].

 University of Bath, 2015. *What is engineering?* [Online]. Available from: <https://www.youtube.com/watch?v=NoyZarq-Zbo> [Accessed 12 January 2016].

```
@video{uob2015wie,
author = {{University of Bath}},
year = {2015},
title = {What is Engineering?},
url = {https://www.youtube.com/watch?v=NoyZarq-Zbo},
urldate = {2016-01-12}}
```

RI

Television or radio broadcast

 *Rick Stein's French Odyssey: Episode 5*, 2006. TV. BBC2, 23 August. 20.30 hrs.

 *Rick Stein's French Odyssey: Episode 5*, 2006. TV. BBC2, 23 August. 20.30 hrs.

```
@video{rsfo2006ep5,
date = {2006-08-23T20:30:00},
title = {Rick {Stein's} {French} {Odyssey}},
subtitle = {{Episode} 5},
type = {TV},
publisher = {BBC2}}
```

HBS 21

 Use `type` for the medium and `publisher` for the channel.

 *The Archers*, 2006. Radio. BBC Radio 4, 23 August. 19.02 hrs.

 *The Archers*, 2006. Radio. BBC Radio 4, 23 August. 19.02 hrs.

```
@audio{archers20060823,
date = {2006-08-23T19:02:00},
title = {The {Archers}},
type = {Radio},
publisher = {BBC Radio 4}}
```

HBS 21

i You can also use `music` as an alias for `audio`.

Music score

- 📖 Beethoven, L. van, 1950. *Symphony no.1 in C, Op.21*. Harmondsworth: Penguin.
- ⚙️ Beethoven, L. van, 1950. *Symphony no.1 in C, Op.21*. Harmondsworth: Penguin.

```
@book{beethoven1950symp1,  
  author = {Ludwig van Beethoven},  
  year = {1950},  
  title = {Symphony no.1 in {C,} {Op.21}},  
  address = {Harmondsworth},  
  publisher = {Penguin}}
```

HBS 22

4.6 Digital media

Website/webpage

- 📖 Holland, M., 2002. *Guide to citing internet sources* [Online]. Poole: Bournemouth University. Available from: http://www.bournemouth.ac.uk/library/using/guide_to_citing_internet_sourc.html [Accessed 4 November 2002].
- ⚙️ Holland, M., 2002. *Guide to citing internet sources* [Online]. Poole: Bournemouth University. Available from: http://www.bournemouth.ac.uk/library/using/guide_to_citing_internet_sourc.html [Accessed 4 November 2002].

```
@online{holland2002gci,  
  author = {Holland, M.},  
  year = {2002},  
  title = {Guide to Citing Internet Sources},  
  address = {Poole},  
  organization = {Bournemouth University},  
  url = {http://www.bournemouth.ac.uk/library/using/guide_to_citing_internet_sourc.html},  
  urldate = {2002-11-04}}
```

HBS 9

- 📖 Wiltshire Council, 2015. *Get Wiltshire walking* [Online]. Trowbridge: Wiltshire Council. Available from: <http://www.wiltshire.gov.uk/leisureandrecreation/sportphysicalactivity/getwiltshirewalking.html> [Accessed 19 August 2015].
- ⚙️ Wiltshire Council, 2015. *Get Wiltshire walking* [Online]. Trowbridge: Wiltshire Council. Available from: <http://www.wiltshire.gov.uk/leisureandrecreation/sportphysicalactivity/getwiltshirewalking.html> [Accessed 19 August 2015].

```
@online{wiltshire2015gww,  
  author = {{Wiltshire Council}},  
  year = {2015},  
  title = {Get {Wiltshire} walking},  
  address = {Trowbridge},  
  organization = {Wiltshire Council},  
  url = {http://www.wiltshire.gov.uk/leisureandrecreation/sportphysicalactivity/getwiltshirewalking.html},  
  urldate = {2015-08-19}}
```

HBS 9

Email discussion lists (jiscmail/listserv etc.)

 Clark, T., 5 July 2004. A European UK Libraries Plus? *Lis-link* [Online]. Available from: lis-link@jiscmail.ac.uk [Accessed 30 July 2004].

 Clark, T., 5 July 2004. A European UK Libraries Plus? *Lis-link* [Online]. Available from: lis-link@jiscmail.ac.uk [Accessed 30 July 2004].

```
@letter{clark2004euk,  
  author = {Clark, T.},  
  date = {2004-07-05},  
  title = {A {European} {UK} {Libraries} {Plus}?},  
  journal = {Lis-link},  
  url = {lis-link@jiscmail.ac.uk},  
  urldate = {2004-07-30}}
```

HBS 23

 Use the `journal` field to specify the mailing list. This triggers the change in formatting with respect to the following example.

Personal emails

 Alston, S., 19 July 2004. *Society of Architectural Historians of GB*. Email to K.M. Jordan.

 Alston, S., 19 July 2004. *Society of Architectural Historians of GB*. Email to K.M. Jordan.

```
@letter{alston2004sah,  
  author = {Alston, S.},  
  date = {2004-07-19},  
  title = {Society of {Architectural} {Historians} of {GB}},  
  howpublished = {Email to K.M. Jordan}}
```

HBS 24

Database

 Bureau van Dijk, 2008. *BT Group plc company report. FAME* [Online]. London: Bureau van Dijk. Available from: <http://www.portal.euromonitor.com> [Accessed 6 November 2014].

 Bureau van Dijk, 2008. *BT Group plc company report. FAME* [Online]. London: Bureau van Dijk. Available from: <http://www.portal.euromonitor.com> [Accessed 6 November 2014].

```
@online{bvd2008bt,  
  author = {{Bureau van Dijk}},  
  year = {2008},  
  title = {{BT} {Group} PLC Company Report},  
  library = {FAME},  
  address = {London},  
  organization = {Bureau van Dijk},  
  url = {http://www.portal.euromonitor.com},  
  urldate = {2014-11-06}}
```

HBS 40

 Use the `title` field for the entry title, and the `library` field for the name of the database itself.

Dataset

-  Wilson, D., 2013. *Real geometry and connectedness via triangular description: CAD example bank* [Online]. Bath: University of Bath. Available from: <https://doi.org/10.15125/BATH-00069> [Accessed 20 April 2016].
-  Wilson, D., 2013. *Real geometry and connectedness via triangular description: CAD example bank* [Online]. Bath: University of Bath. Available from: <https://doi.org/10.15125/BATH-00069> [Accessed 20 April 2016].

```
@online{wilson2013rgc,  
  author = {Wilson, D.},  
  year = {2013},  
  title = {Real Geometry and Connectedness via Triangular Description},  
  subtitle = {{CAD} Example Bank},  
  address = {Bath},  
  organization = {University of Bath},  
  doi = {10.15125/BATH-00069},  
  urldate = {2016-04-20}}
```

HBS 41

 You can also use `dataset` as an alias for `online`.

Computer program

-  @screencasto, n.d. *Screencast-O-Matic* (v.2) [computer program]. Available from: <https://screencast-o-matic.com/> [Accessed 16 May 2016].
-  @screencasto, n.d. *Screencast-O-Matic* (v.2) [computer program]. Available from: <https://screencast-o-matic.com/> [Accessed 16 May 2016].

```
@software{screencasto,  
  author = {@screencasto},  
  title = {{Screencast-O-Matic}},  
  version = {2},  
  titleaddon = {computer program},  
  url = {https://screencast-o-matic.com/},  
  urldate = {2016-05-16}}
```

HBS 42

4.7 Works in languages other than English

Work in translation

-  Aristotle, 2007. *Nicomachean ethics* (W.D. Ross. Trans.). South Dakota: NuVisions.
-  Aristotle, 2007. *Nicomachean ethics* (W.D. Ross. Trans.). South Dakota: NuVisions.

```
@book{aristotle2007ne,  
  author = {Aristotle},  
  year = {2007},  
  title = {Nicomachean Ethics},  
  translator = {W. D. Ross},  
  address = {South Dakota},  
  publisher = {NuVisions}}
```

HBS 26

Work in the Roman alphabet

📖 Esquivel, L., 2003. *Como agua para chocolate* [Like water for chocolate]. Barcelona: Debolsillo.

⚙️ Esquivel, L., 2003. *Como agua para chocolate* [Like water for chocolate]. Barcelona: Debolsillo.

```
@book{esquivel2003cap,  
  author = {Esquivel, L.},  
  year = {2003},  
  title = {Como Agua para Chocolate},  
  titleaddon = {Like water for chocolate},  
  address = {Barcelona},  
  publisher = {Debolsillo}}
```

HBS 27

💡 Use the `titleaddon` field to supply the English translation of the title.

📖 Thurfjell, W., 1975. Vart har våran doktor tagit vägen? [Where has our doctor gone?] *Läkartidningen* 72, p.789.

⚙️ Thurfjell, W., 1975. Vart har våran doktor tagit vägen? [Where has our doctor gone?]. *Läkartidningen*, 72, p.789.

```
@article{thurfjell1975vhv,  
  author = {Thurfjell, W.},  
  year = {1975},  
  title = {Vart har våran doktor tagit vägen?},  
  titleaddon = {Where has our doctor gone?},  
  journal = {Läkartidningen},  
  volume = {72},  
  pages = {789}}
```

HBS 27

Work in a non-Roman alphabet

📖 Hua, L. 華林甫, 1999. Qingdai yilai Sanxia diqu shuihan zaihai de chubu yanjiu 清代以來三峽地區水旱災害的初步研 [A preliminary study of floods and droughts in the Three Gorges region since the Qing dynasty], *Zhongguo shehui kexue* 中國社會科學, 1, pp.168–79.

⚙️ Hua, L. 華林甫, 1999b. Qingdai yilai Sanxia diqu shuihan zaihai de chubu yanjiu 清代以來三峽地區水旱災害的初步研 [A preliminary study of floods and droughts in the Three Gorges region since the Qing dynasty]. *Zhongguo shehui kexue* 中國社會科學, 1, pp.168–79.

```
@article{hua1999qys1,  
  author = {given=Linfu, family=Hua, cjk=華林甫},  
  year = {1999},  
  title = {Qingdai yilai {Sanxia} diqu shuihan zaihai de chubu yanjiu  
    {清代以來三峽地區水旱災害的初步研}},  
  titleaddon = {A preliminary study of floods and droughts in the {Three} {Gorges} region since  
    the {Qing} dynasty},  
  journal = {Zhongguo shehui kexue \textup{中國社會科學}},  
  volume = {1},  
  pages = {168-79}}
```

HBS 28

💡 To supply a transliterated version of an author name, specify the name using the name parts `family`, `given` and `cjk`. Please note that if you do supply a `cjk` component, any `prefix` or `suffix` component you may supply will be ignored.

- 📖 Hua, L., 1999. Qingdai yilai Sanxia diqu shuihan zaihai de chubu yanjiu [A preliminary study of floods and droughts in the Three Gorges region since the Qing dynasty], *Zhongguo shehui kexue*, 1, pp.168–79.
- ⚙️ Hua, L., 1999a. Qingdai yilai Sanxia diqu shuihan zaihai de chubu yanjiu [A preliminary study of floods and droughts in the Three Gorges region since the Qing dynasty]. *Zhongguo shehui kexue*, 1, pp.168–79.

```
@article{hua1999qys2,
  author = {Hua, Linfu},
  year = {1999},
  title = {Qingdai yilai {Sanxia} diqu shuihan zaihai de chubu yanjiu},
  titleaddon = {A preliminary study of floods and droughts in the {Three} {Gorges} region since the {Qing} dynasty},
  journal = {Zhongguo shehui kexue},
  volume = {1},
  pages = {168-79}}
```

HBS 28

- 💡 Although not a feature of the Harvard (Bath) Style, if you want to suppress the punctuation between the family name and the initial (and thereby be more faithful to the original orthography), you can specify this using biblatex's data annotations feature, using the keyword `cjk`:

- 📖 Hua L. 華林甫, 2001. *Lorem ipsum*.
- ⚙️ Hua L. 華林甫, 2001. *Lorem ipsum*.

```
@book{hua2001foo,
  author = {given=Linfu, family=Hua, cjk=華林甫},
  author+an = {1=cjk},
  year = {2001},
  title = {Lorem ipsum}}
```

4.8 Legal references: UK legislation and parliamentary reports

Act of Parliament (UK Statutes) before 1963

- 📖 *Witchcraft Act 1735* (9 Geo.2, c.5).
- ⚙️ *Witchcraft Act 1735* (9 Geo.2, c.5).

```
@legislation{gb.wa1735,
  title = {Witchcraft {Act}},
  year = {1735},
  series = {9 Geo.2},
  chapter = {5}}
```

HBS 32

- ❗ You could instead combine the series and chapter in the `number` field:

```
number = {9 Geo.2, c.5}
```

Act of Parliament (UK Statutes) 1963 onwards

- 📖 *Pensions Act 2014*, c.19. London: TSO.
- ⚙️ *Pensions Act 2014*, c.19. London: TSO.

```
@legislation{gb.pa2014,  
  title = {Pensions {Act}},  
  year = {2014},  
  chapter = {19},  
  address = {London},  
  publisher = {TSO}}
```

HBS 33

House of Commons/House of Lords bill

- 📖 Great Britain. Parliament. House of Commons, 1988. *Local government finance bill*. London: HMSO (Bills | 1987/88, 66).
- ⚙️ Great Britain. Parliament. House of Commons, 1988. *Local government finance bill*. London: HMSO (Bills | 1987/88, 66).

```
@legislation{gb.bill1987/88-66,  
  author = {{Great Britain. Parliament. House of Commons}},  
  year = {1988},  
  title = {Local Government Finance Bill},  
  address = {London},  
  publisher = {HMSO},  
  series = {{Bills | 1987/88}},  
  number = {66}}
```

HBS 31

Statutory instrument

- 📖 *The Human Medicines Regulations 2012* [Online], No.1916, United Kingdom: HMSO. Available from: http://www.legislation.gov.uk/uksi/2012/1916/pdfs/uksi_20121916_en.pdf [Accessed 17 April 2016].
- ⚙️ *The Human Medicines Regulations 2012* [Online], No.1916, United Kingdom: HMSO. Available from: http://www.legislation.gov.uk/uksi/2012/1916/pdfs/uksi_20121916_en.pdf [Accessed 17 April 2016].

```
@legislation{gb.hmr2012,  
  entrysubtype = {secondary},  
  title = {The {Human} {Medicines} {Regulations}},  
  year = {2012},  
  number = {No.1916},  
  address = {United Kingdom},  
  publisher = {HMSO},  
  url = {http://www.legislation.gov.uk/uksi/2012/1916/pdfs/uksi_20121916_en.pdf},  
  urldate = {2016-04-17}}
```

HBS 35

💡 Use the entrysubtype 'secondary' to put the number in the right place.

House of Commons paper

💡 Use this form for reports of House of Commons select committees.

- 📖 Great Britain. Parliament. House of Commons, 2004. *National Savings investment deposits: account 2002–2003*. London: National Audit Office (HC 2003/04, 30).
- ⚙️ Great Britain. Parliament. House of Commons, 2004. *National Savings investment deposits: account 2002–2003*. London: National Audit Office (HC 2003/04, 30).

```
@report{gb.hc2003/04-30,
  author = {{Great Britain. Parliament. House of Commons}},
  year = {2004},
  title = {National {Savings} Investment Deposits},
  subtitle = {Account 2002--2003},
  address = {London},
  publisher = {National Audit Office},
  series = {HC 2003/04},
  number = {30}}
```

HBS 29

House of Lords paper

- 🔗 Use this form for reports of House of Lords select committees.

- 📖 Great Britain. Parliament. House of Lords, 1987. *Social fund (Maternity and Funeral Expenses) Bill*. London: HMSO (HL 1986/87, (66)).
- ⚙️ Great Britain. Parliament. House of Lords, 1987. *Social fund (Maternity and Funeral Expenses) Bill*. London: HMSO (HL 1986/87, (66)).

```
@report{gb.hl1986/87-66,
  author = {{Great Britain. Parliament. House of Lords}},
  year = {1987},
  title = {Social Fund ({Maternity} and {Funeral} {Expenses}) {Bill}},
  address = {London},
  publisher = {HMSO},
  series = {HL 1986/87},
  number = {66}}
```

HBS 30

- 🔑 For joint committees, you will have to hack this slightly, putting the session years in **series** and the HL and HC numbers in **number**.

Command paper

- 📖 Great Britain. Ministry of Defence, 2004. *Delivering security in a changing world: defence white paper*. London: TSO (Cm. 6041).
- ⚙️ Great Britain. Ministry of Defence, 2004. *Delivering security in a changing world: defence white paper*. London: TSO (Cm. 6041).

```
@report{gb.cm6041,
  author = {{Great Britain. Ministry of Defence}},
  year = {2004},
  title = {Delivering Security in a Changing World},
  subtitle = {Defence White Paper},
  address = {London},
  publisher = {TSO},
  series = {Cm},
  number = {6041}}
```

HBS 34

4.9 Legal references: EU legislation and reports

EU regulation or directive, decision, recommendation or opinion

- 📄 Directive (EU) 2015/413 of the European Parliament and of the Council of 11th March 2015 facilitating cross-border exchange of information on road-safety-related traffic offences [2015] *OJ* L68/9.
- ⚙️ Directive (EU) 2015/413 of the European Parliament and of the Council of 11th March 2015 facilitating cross-border exchange of information on road-safety-related traffic offences [2015] *OJ* L68/9.

```
@legislation{eu.dir2015/413,
  title = {Directive ({EU}) 2015/413 of the {European} {Parliament} and of the {Council} of
    11th {March} 2015 Facilitating Cross-Border Exchange of Information on Road-Safety-Related
    Traffic Offences},
  shorttitle = {Directive ({EU}) 2015/413},
  year = {2015},
  journal = {OJ},
  series = {L},
  volume = {68},
  pages = {9}}
```

HBS 38

- ❗ The `shorttitle` will be used in citations instead of the full title.

EU publication

- 📄 European Commission, 2015. *General report on the activities of the European Union 2014*. Luxembourg: Publications Office of the European Union.
- ⚙️ European Commission, 2015. *General report on the activities of the European Union 2014*. Luxembourg: Publications Office of the European Union.

```
@report{ec2015gra,
  author = {{European Commission}},
  year = {2015},
  title = {General Report on the Activities of the {European} {Union} 2014},
  address = {Luxembourg},
  publisher = {Publications Office of the European Union}}
```

HBS 37

4.10 Legal references: case reports

Legal case study

- 📄 *Seldon v Clarkson Wright & Jakes*. [2012]. UKSC 16.
- ⚙️ *Seldon v Clarkson Wright & Jakes*. [2012]. UKSC 16.

```
@jurisdiction{seldon-v-c.w.j2012,
  title = {Seldon v {Clarkson} {Wright} \& {Jakes}},
  year = {2012},
  journal = {UKSC},
  pages = {16}}
```

HBS 36

- ❗ Generally speaking, the year should be in square brackets if it is essential to the citation (unless it is a Scottish case, in which case it is printed bare), and in parentheses if it is not.
- 🔗 By default, the style assumes the year is essential if and only if a volume number is *not* provided; to override this, you can use the `year-essential` option:

```
options = {year-essential=true},
```

To use Scottish style for a case, you can either use the `scottish-style` option or the keyword `sc`:

```
options = {scottish-style},
keywords = {sc},
```

🔑 This should cover most cases, but legal references tend to enforce their own conventions no matter what the rest of the reference list is doing, and it is out of scope for this style to cater for every variation. Therefore if you need a different format (e.g. for an American case), you may prefer to format the reference more-or-less by hand:

```
title = {Seldon v {Clarkson} {Wright} \& {Jakes}},
sortyear = {2012},
note = {[2012]. UKSC 16}
```

Judgment of the European Court of Justice

📄 *Alessandrini Srl and others v. Commission* (C-295/03 P) [2005] ECR I-5700.
⚙️ *Alessandrini Srl and others v. Commission* (C-295/03 P) [2005] ECR I-5700.

```
@jurisdiction{srl.etal-v-comm2005,
title = {Alessandrini {Srl} and others v.\@ {Commission}},
number = {C-295/03 P},
year = {2005},
journal = {ECR},
volume = {I},
pages = {5700}}
```

HBS 39

💡 Use the `number` field (or the non-standard `casenumber` field) for the case number. For Commission Decisions, use the (non-standard) `casenumber` or (bibtex-oscola) `userb` field for the Commission case number, `number` for the formal decision number, and give ‘Commission’ as the `institution`.

5 References

@screencasto, n.d. *Screencast-O-Matic* (v.2) [computer program]. Available from: <https://screencast-o-matic.com/> [Accessed 16 May 2016].

Adams, G., 2009. *Test citation one*. London: Imperial College Bookstall.

Adams, G., 2014. *Test citation two*. Oxford: Oxford University Press.

Adams, G., 2017. *Test citation three*. Cambridge: Cambridge University Press.

Alessandrini Srl and others v. Commission (C-295/03 P) [2005] ECR I-5700.

Alston, S., 19 July 2004. *Society of Architectural Historians of GB*. Email to K.M. Jordan.

Andrews, J. and Dury, A., 1773. *Map of Wiltshire*, 1 inch to 2 miles. Devizes: Wiltshire Record Society.

Anon., 1946. *Prototype electric bicycle displayed at the ‘Britain Can Make It’ exhibition organised by the Council of Industrial Design and held at the Victoria and Albert Museum, London, 1946. Designed by B. G. Bowden* [photograph]. At: London. Design Council Slide Collection.

Aristotle, 2007. *Nicomachean ethics* (W.D. Ross. Trans.). South Dakota: NuVisions.

Beethoven, L. van, 1950. *Symphony no.1 in C, Op.21*. Harmondsworth: Penguin.

- BS 5605:1990. *Recommendations for citing and referencing published material*. BSI.
- Burchard, J.E., 1965. How humanists use a library. In: Overhage, C.F.J. and Harman, J.R. eds. *Intrex: report on a planning conference and information transfer experiments*. Cambridge, Mass.: MIT Press, pp.41–87.
- Bureau van Dijk, 2008. *BT Group plc company report. FAME* [Online]. London: Bureau van Dijk. Available from: <http://www.portal.euromonitor.com> [Accessed 6 November 2014].
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- Clark, T., 5 July 2004. A European UK Libraries Plus? *Lis-link* [Online]. Available from: lis-link@jiscmail.ac.uk [Accessed 30 July 2004].
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- Directive (EU) 2015/413 of the European Parliament and of the Council of 11th March 2015 facilitating cross-border exchange of information on road-safety-related traffic offences [2015] OJ L68/9.
- Esquivel, L., 2003. *Como agua para chocolate* [Like water for chocolate]. Barcelona: Debolsillo.
- European Commission, 2015. *General report on the activities of the European Union 2014*. Luxembourg: Publications Office of the European Union.
- Great Britain. Ministry of Defence, 2004. *Delivering security in a changing world: defence white paper*. London: TSO (Cm. 6041).
- Great Britain. Parliament. House of Commons, 1988. *Local government finance bill*. London: HMSO (Bills | 1987/88, 66).
- Great Britain. Parliament. House of Commons, 2004. *National Savings investment deposits: account 2002–2003*. London: National Audit Office (HC 2003/04, 30).
- Great Britain. Parliament. House of Lords, 1987. *Social fund (Maternity and Funeral Expenses) Bill*. London: HMSO (HL 1986/87, (66)).
- Haurant, S., 2004. Britain’s borrowing hits £1 trillion. *The Guardian*, 29 July, p.16c.
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6 Licence

This work consists of the documented LaTeX file `biblatex-bath.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](#).

7 Implementation: bibliography style

7.1 Preliminaries

For ease of maintenance, we will patch some definitions with `xpatch` instead of writing out our own in full.

```
16 \RequirePackage{xpatch}
```

Some string analysis is required.

```
17 \RequirePackage{xstring}
```

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

```
18 \DeclareLanguageMappingSuffix{-bath}
```

We begin by loading the default author–year style.

```
19 \RequireBibliographyStyle{authoryear}
20 \ExecuteBibliographyOptions{%
21   maxcitenames=3,maxbibnames=9999,isbn=false,giveninits=true,dashed=false,
22   alldates=comp,labeldate=year}
23 \ExecuteBibliographyOptions[audio,video,music,movie]{%
24   useeditor=false}
```

We provide some additional bibliography strings.

```
25 \NewBibliographyString{%
26   online, hours, at, legalchapter,
27   director, performer, reader, conductor,
28   directors, performers, readers, conductors,
29   bydirector, byperformer, byreader, byconductor,
30 }
```

We allow the bibliography look more like the BibTeX default.

```
31 \setlength{\bibitemsep}{1em plus 0.2em minus 0.2em}
32 \renewcommand*{\bibfont}{\normalfont\normalsize}
```

7.2 Name handling

Names are usually reversed. There are no spaces between initials.

```
34 \DeclareNameAlias{author}{family-given}
35 \DeclareNameAlias{editor}{family-given}
36 \renewcommand*{\bibinitdelim}{}
```

The handling of CJK names is based on code supplied to TeX.sx by user Moewe in answer to [question 320738](#).

The CJK part is printed after the anglicized name. If the name is also annotated as ‘cjk’ (see ‘Data Annotations’ in the biblatex manual), it is always printed in family-given order with no intermediate punctuation.

```
37 \newbibmacro*{name:cjk-given-family}[3]{%
38   \ifitemannotation{cjk}{%
39     \usebibmacro{name:delim}{#2#1#3}%
40     \usebibmacro{name:hook}{#2#1#3}%
41     \mkbibnamefamily{#1}\isdot
42     \ifdefvoid{#2}{\bibnamedelimd\mkbibnamegiven{#2}}%
43     \ifdefvoid{#3}{\bibnamedelimd\mkbibnamecjk{#3}}%
44   }{%
45     \usebibmacro{name:delim}{#2#1#3}%
46     \usebibmacro{name:hook}{#2#1#3}%
47     \ifdefvoid{#2}{\mkbibnamegiven{#2}\isdot\bibnamedelimd}%

```

```

48   \mkbibnamefamily{#1}\isdot
49   \ifdefvoid{#3}{\bibnamedelimd\mkbibnamecjk{#3}}%
50   }%
51   }
52   \newbibmacro*{name:cjk-family-given}[3]{%
53   \ifitemannotation{cjk}{%
54     \usebibmacro{name:delim}{#2#1#3}%
55     \usebibmacro{name:hook}{#2#1#3}%
56     \mkbibnamefamily{#1}\isdot
57     \ifdefvoid{#2}{\bibnamedelimd\mkbibnamegiven{#2}}%
58     \ifdefvoid{#3}{\bibnamedelimd\mkbibnamecjk{#3}}%
59   }{%
60     \usebibmacro{name:delim}{#1}%
61     \usebibmacro{name:hook}{#1}%
62     \mkbibnamefamily{#1}\isdot
63     \ifboolexpe{%
64       test {\ifdefvoid{#2}}
65       and
66       test {\ifdefvoid{#3}}
67     }{
68       {\revsnamepunct}%
69       \ifdefvoid{#2}{\bibnamedelimd\mkbibnamegiven{#2}\isdot}%
70       \ifdefvoid{#3}{\bibnamedelimd\mkbibnamecjk{#3}}%
71     }%
72   }
73
74   \DeclareNameFormat{given-family}{%
75   \ifdefvoid{\namepartcjk}{%
76     \ifgiveninits{%
77       \usebibmacro{name:given-family}
78       {\namepartfamily}
79       {\namepartgiveni}
80       {\namepartprefix}
81       {\namepartsuffix}%
82     }{%
83       \usebibmacro{name:given-family}
84       {\namepartfamily}
85       {\namepartgiven}
86       {\namepartprefix}
87       {\namepartsuffix}%
88     }%
89   }{%
90     \ifgiveninits{%
91       \usebibmacro{name:cjk-given-family}
92       {\namepartfamily}
93       {\namepartgiveni}
94       {\namepartcjk}%
95     }{%
96       \usebibmacro{name:cjk-given-family}
97       {\namepartfamily}
98       {\namepartgiven}
99       {\namepartcjk}%
100    }%
101  }%
102  \usebibmacro{name:andothers}%
103  }
104
105  \DeclareNameFormat{family-given}{%
106  \ifdefvoid{\namepartcjk}{%
107    \ifgiveninits{%
108      \usebibmacro{name:family-given}
109      {\namepartfamily}
110      {\namepartgiveni}

```

```

111     {\namepartprefix}
112     {\namepartsuffix}%
113 }{%
114   \usebibmacro{name:family-given}
115     {\namepartfamily}
116     {\namepartgiven}
117     {\namepartprefix}
118     {\namepartsuffix}%
119 }%
120 }{%
121   \ifgiveninits{%
122     \usebibmacro{name:cjk-family-given}
123       {\namepartfamily}
124       {\namepartgiveni}
125       {\namepartcjk}%
126 }{%
127   \usebibmacro{name:cjk-family-given}
128     {\namepartfamily}
129     {\namepartgiven}
130     {\namepartcjk}%
131 }%
132 }
133 \usebibmacro{name:andothers}%
134 }

```

With videos, names in credits are printed in full.

```

136 \DeclareNameFormat{given-family:full}{%
137   \usebibmacro{name:given-family}
138     {\namepartfamily}
139     {\namepartgiven}
140     {\namepartprefix}
141     {\namepartsuffix}%
142   \usebibmacro{name:andothers}}
143
144 \renewbibmacro*{byauthor}[1][byauthor]{%
145   \ifboolexpr{
146     test \ifuseauthor
147     or
148     test {\ifnameundef{author}}
149   }{
150     {\usebibmacro{bytypestrg}{author}{author}%
151     \setunit{\addspace}%
152     \printnames[#1]{author}}}
153
154 \renewbibmacro*{byeditor}[1][byeditor]{%
155   \ifnameundef{editor}
156   {}
157   {\usebibmacro{bytypestrg}{editor}{editor}%
158   \setunit{\addspace}%
159   \printnames[#1]{editor}%
160   \newunit}%
161   \ifstrequal{#1}{byeditor}{%
162     \usebibmacro{byeditora}%
163     \usebibmacro{byeditorb}%
164     \usebibmacro{byeditorc}
165   }{%
166     \usebibmacro{byeditora}[#1]%
167     \usebibmacro{byeditorb}[#1]%
168     \usebibmacro{byeditorc}[#1]}
169
170 \newbibmacro*{byeditora}[1][byeditora]{%
171   \ifnameundef{editora}

```

```

172 {}
173 {\usebibmacro{bytypestrg}{editora}{editor}%
174 \setunit{\addspace}%
175 \printnames[#1]{editora}%
176 \newunit}}
177 \newbibmacro*{byeditorb}[1][byeditorb]{%
178 \ifnameundef{editorb}
179 {}
180 {\usebibmacro{bytypestrg}{editorb}{editor}%
181 \setunit{\addspace}%
182 \printnames[#1]{editorb}%
183 \newunit}}
184 \newbibmacro*{byeditorc}[1][byeditorc]{%
185 \ifnameundef{editorc}
186 {}
187 {\usebibmacro{bytypestrg}{editorc}{editor}%
188 \setunit{\addspace}%
189 \printnames[#1]{editorc}%
190 \newunit}}
191
192 \renewbibmacro*{bytranslator}[1][bytranslator]{%
193 \ifnameundef{translator}
194 {}
195 {\setunit{\addspace}%
196 \printtext[parens]{%
197 \printnames[#1]{translator}%
198 \newunit
199 \bibstring{translator}%
200 \clearname{translator}}}}
201
202 \renewbibmacro*{byeditor+others}[1][byeditor]{%
203 \ifnameundef{editor}
204 {}
205 {\usebibmacro{byeditor+othersstrg}%
206 \setunit{\addspace}%
207 \printnames[#1]{editor}%
208 \clearname{editor}%
209 \newunit}%
210 \ifstrequal{#1}{byeditor}{%
211 \usebibmacro{byeditorx}%
212 \usebibmacro{bytranslator+others}%
213 }{%
214 \usebibmacro{byeditora}[#1]%
215 \usebibmacro{byeditorb}[#1]%
216 \usebibmacro{byeditorc}[#1]%
217 \usebibmacro{bytranslator+others}[#1]}%
218
219 \renewbibmacro*{bytranslator+others}[1][bytranslator]{%
220 \ifnameundef{translator}
221 {\usebibmacro{withothers}}
222 {\setunit{\addspace}%
223 \printtext[parens]{%
224 \printnames[bytranslator]{translator}%
225 \newunit
226 \bibstring{translator}%
227 \clearname{translator}%
228 \newunit
229 \usebibmacro{withothers}}}}

```

With collections, editors appear in natural order between ‘In’ and the title, followed by ‘ed.’

```

231 \newbibmacro*{bookeditor}{%
232 \ifnameundef{editor}{-}{%

```

```

233 \printnames[bookeditor]{editor}%
234 \setunit*{\addspace}%
235 \usebibmacro{editor+othersstrg}%
236 \clearname{editor}%
237 }}

```

7.3 Titles

Most titles are set in italics, but some are set roman and unquoted.

```

239 \DeclareFieldFormat{sentencecase}{\MakeSentenceCase*{#1}}
240 \DeclareFieldFormat{midsentencecase}{\MakeSentenceCase*{#1}}
241 \DeclareFieldFormat{title}{\mkbibemph{#1}}
242 \DeclareFieldFormat
243 [article,inbook,incollection,inproceedings]%
244 {title}{#1}
245 \DeclareFieldFormat
246 [patent,thesis,unpublished]%
247 {title}{\mkbibemph{#1}}

```

Online resources are clearly tarred and feathered with an ‘[Online]’ label. The `isonline` macro prints this label if the resource has a URL and does nothing otherwise. We add a safeguard to stop it being used repeatedly.

```

249 \newtoggle{bbx:onlineshown}
250 \newbibmacro*{isonline}{%
251 \ifboolexpr{(
252 test {\iffieldundef{url}}
253 and
254 not test {\ifentrytype{online}}
255 ) or
256 togl {bbx:onlineshown}
257 }){%
258 \bibstring[\mkbibbrackets]{online}%
259 \toggletrue{bbx:onlineshown}}

```

The `titleaddon` field follows the title after a space and wrapped in brackets. Version 1 of this style encouraged people to supply the brackets manually, so we strip them off if they have been supplied.

```

261 \DeclareFieldFormat{titleaddon}{\mkbibbrackets{%
262 \IfBeginWith{#1}{[ ]}{%
263 \IfEndWith{#1}{ ] }{%
264 \StrBetween{#1}{[ ]}{ }%
265 }{#1}%
266 }{#1}%
267 }}

```

We need to supply a new `title` macro. The standard version hard-codes the case used (we use sentence case, not title case) and puts default unit punctuation between the `title` and `titleaddon` fields. We also need to add conditional code for printing the automatic ‘[Online]’ label.

```

269 \renewbibmacro*{title}{%
270 \printtext{%
271 \ifboolexpr{
272 test {\iffieldundef{title}}
273 and
274 test {\iffieldundef{subtitle}}
275 }){%
276 \printtext [title]{%
277 \printfield[sentencecase]{title}%
278 \setunit{\subtitlepunct}%
279 \printfield[midsentencecase]{subtitle}%

```

```

280     \setunit{\addspace}%
281   }%
282   \printfield{version}%
283   \clearfield{version}%
284   \setunit*{\addspace}%
285   \printfield{titleaddon}%
286   \ifboolexpr{
287     test {\iffieldundef{journaltitle}}
288     and
289     test {\iffieldundef{booktitle}}
290     and
291     test {\iffieldundef{library}}
292     and
293     not test {\ifentrytype{software}}
294   }{%
295     \setunit*{\addspace}%
296     \usebibmacro{isonline}%
297   }{}%
298   }%
299 }%
300 }

```

Similar changes are needed for the `booktitle` and `maintitle` macros.

```

302 \renewbibmacro*{booktitle}{%
303   \ifboolexpr{
304     test {\iffieldundef{booktitle}}
305     and
306     test {\iffieldundef{booksubtitle}}
307   }{}{%
308     \printtext[booktitle]{%
309       \printfield[sentencecase]{booktitle}%
310       \setunit{\subtitlepunct}%
311       \printfield[midsentencecase]{booksubtitle}%
312       \setunit{\addspace}%
313     }%
314     \printfield{booktitleaddon}
315     \setunit*{\addspace}%
316     \usebibmacro{isonline}%
317   }%
318 }
319
320 \renewbibmacro*{maintitle}{%
321   \ifboolexpr{
322     test {\iffieldundef{maintitle}}
323     and
324     test {\iffieldundef{mainsubtitle}}
325   }{}{
326     \printtext[maintitle]{%
327       \printfield[sentencecase]{maintitle}%
328       \setunit{\subtitlepunct}%
329       \printfield[midsentencecase]{mainsubtitle}%
330       \setunit{\addspace}%
331     }%
332     \printfield{maintitleaddon}%
333   }%
334 }

```

Subtitles are set off with a colon

```

336 \renewcommand*{\subtitlepunct}{\addcolon\space}

```

In the standard author–year styles, if a title is promoted to the head of a reference (due to missing authors/editors), the subtitle and titleaddon fields are discarded. We want to show the subtitle directly after the title, and show titleaddon after the `date+extradate` macro.

```

338 \providetoggle{bbx:labelistitle}
339 \renewbibmacro*{labeltitle}{%
340   \iffieldundef{label}{%
341     \ifboolexpr{
342       test {\iffieldundef{title}}
343       and
344       test {\iffieldundef{subtitle}}
345     }{}{%
346       \printtext [title]{%
347         \printfield[sentencecase]{title}%
348         \setunit{\subtitlepunct}%
349         \printfield[midsentencecase]{subtitle}}%
350       \clearfield{title}\clearfield{subtitle}%
351       \toggletrue{bbx:labelistitle}}%
352   }{%
353     \printfield{label}%
354   }%
355 }
356 \DeclareDelimFormat{yearlabeltitleaddondelim}{\addspace}
357 \newbibmacro*{labeltitleaddon}{%
358   \iftoggle{bbx:labelistitle}{%
359     \setunit{\printdelim{yearlabeltitleaddondelim}}%
360     \printfield{version}%
361     \clearfield{version}%
362     \setunit*{\addspace}%
363     \printfield{titleaddon}%
364     \clearfield{titleaddon}%
365     \ifboolexpr{
366       test {\iffieldundef{journaltitle}}
367       and
368       test {\iffieldundef{booktitle}}
369       and (
370         test {\iffieldundef{library}}
371         or
372         test {\ifentrytype{image}}
373       ) and
374       not test {\ifentrytype{software}}
375     }{%
376       \setunit*{\addspace}%
377       \usebibmacro{isonline}%
378     }{}%
379   }{}%
380 }
381 \xapptobibmacro{author}{\usebibmacro{labeltitleaddon}}{}{}
382 \xapptobibmacro{bbx:editor}{\usebibmacro{labeltitleaddon}}{}{}
383 \xapptobibmacro{bbx:translator}{\usebibmacro{labeltitleaddon}}{}{}

```

7.4 Dates

If the main publication date is missing, we fall back immediately to ‘n.d.’ rather than use URL date or anything like that. However, for some resources (ISO standards, Acts of Parliament), the date is part of the label and should not be repeated, so we declare an option for removing the ‘n.d.’ Unless already set, the option is inserted if `sortyear` is used.

```

385 \DeclareLabeldate{%
386   \field{date}
387   \field{year}
388   \literal{nodate}
389 }
390 \newtoggle{bbx:nonodate}
391 \DeclareBibliographyOption[boolean]{nonodate}[true]{%
392   \settoggle{bbx:nonodate}{#1}}

```

```

393 \DeclareTypeOption[boolean]{nonodate}[true]{%
394   \settoggle{bbx:nonodate}{#1}}
395 \DeclareEntryOption[boolean]{nonodate}[true]{%
396   \settoggle{bbx:nonodate}{#1}}

```

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

```

397 \DeclareStyleSourcemap{
398   \maps[datatype=bibtex]{
399     \map[overwrite=true]{
400       \step[notmatch=\regexp{nonodate}, fieldsource=options, final]
401       \step[fieldsource=sortyear, final]
402       \step[fieldset=options, append, fieldvalue={,nonodate}]
403     }
404     \map[overwrite=true]{
405       \step[notfield=options, final]
406       \step[fieldsource=sortyear, final]
407       \step[fieldset=options, fieldvalue={nonodate}]
408     }
409   }
410 }

```

The punctuation before the label year is controlled by the following commands, and should be a comma. The exceptions to this are `legislation` entries, where there should just be a space, and English/Welsh legal case reports, where there should be a period.

```

412 \DeclareDelimFormat{nameyeardelimiter}{\addcomma\space}
413 \DeclareDelimFormat[parencite,bib,biblist]{nameyeardelimiter}{\addcomma\space}
414 \newcommand{\dononameyeardelimiter}{%
415   \ifentrytype{legislation}{%
416     \addspace
417   }{%
418     \ifentrytype{jurisdiction}{%
419       \ifboolexpr{
420         togl {bbx:eu-oj}
421         or
422         test {\iffieldequalstr{journaltitle}{ECR}}
423         or
424         test {\iffieldequalstr{type}{ECR}}
425       }{%
426         \addspace
427       }{%
428         \ifboolexpr{
429           test {\ifkeyword{sc}}
430           or
431           togl {bbx:scotstyle}
432         }{%
433           \addcomma\space
434         }{%
435           \addperiod\space}}}%
436     }{%
437       \addcomma\space}}}}
438 \DeclareDelimFormat{nonameyeardelimiter}{\dononameyeardelimiter}
439 \DeclareDelimFormat[bib,biblist]{nonameyeardelimiter}{\dononameyeardelimiter}
440 \DeclareDelimFormat[parencite]{nonameyeardelimiter}{%
441   \ifboolexpr{
442     test {\ifentrytype{jurisdiction}}
443     or
444     test {\ifentrytype{legislation}}
445   }{\addspace}{\addcomma\space}}

```

The punctuation after the label year is controlled by the following commands, and should be

a comma. The exceptions to this are `legislation` and `jurisdiction` entries, where there should just be a space if the label is the title.

```

447 \DeclareDelimFormat{nametitledelim}{%
448   \ifboolexpr{
449     (
450       test {\ifentrytype{jurisdiction}}
451       or
452       test {\ifentrytype{legislation}}
453     ) and
454     togl {bbx:labelistitle}
455   }{\addspace}{\addcomma\space}}
456 \DeclareDelimFormat[bib,biblist]{nametitledelim}{%
457   \ifboolexpr{
458     (
459       test {\ifentrytype{jurisdiction}}
460       or
461       test {\ifentrytype{legislation}}
462     ) and
463     togl {bbx:labelistitle}
464   }{\addspace}{\labelnamepunct}}

```

We allow the date macro to print the time as well.

```

467 \renewbibmacro*{date}{%
468   \printdate
469   \setunit*{\bibdatetimesep}
470   \printtime
471 }
472 \DeclareFieldFormat{time}{#1-\bibstring{hours}}

```

We provide a new date merging option that moves the year but leaves the month and day in place, and set this as the default. Note that dates are preceded by a comma, and are given bare rather than in parentheses.

We start by patching the error message of the existing option code, then add a per-type version of the option.

```

474 \xpatchcmd{\KV@blx@opt@pre@mergedate}{%
475   'true' (=compact)%
476 }{%
477   'year', 'true' (=year)%
478 }{}{}
479 \DeclareTypeOption[boolean]{mergedate}[true]{%
480   \ifcsdef{bbx@opt@mergedate@#1}{%
481     \csuse{bbx@opt@mergedate@#1}%
482   }{%
483     \PackageError{biblatex}
484       {Invalid option 'mergedate=#1'}
485       {Valid values are 'maximum', 'compact', 'basic', 'minimum',\MessageBreak
486         'year', 'true' (=year), and 'false'.}}

```

We define a configurable field format for date labels to replace the hard-coded parentheses in the options from the standard author–year style. We also amend the logic for printing the label date so the `nonodate` option is respected.

```

487 \DeclareFieldFormat{datelabel}{#1}
488 \xpatchcmd{\bbx@opt@mergedate@maximum}{%
489   \iffieldundef{labelyear}%
490 }{%
491   \ifboolexpr{
492     togl {bbx:nonodate}
493     and
494     not test {\iflabeldateisdate}}%
495 }{}{}
496 \xpatchcmd{\bbx@opt@mergedate@maximum}{%

```

```

497 \printtext[parens]%
498 }{%
499 \printtext[datelabel]%
500 }{}{}
501 \xpatchcmd{\bbx@opt@mergedate@compact}{%
502 \iffieldundef{labelyear}%
503 }{%
504 \ifboolexpr{
505 togl {bbx:nonodate}
506 and
507 not test {\iflabeldateisdate}}%
508 }{}{}
509 \xpatchcmd{\bbx@opt@mergedate@compact}{%
510 \printtext[parens]%
511 }{%
512 \printtext[datelabel]%
513 }{}{}
514 \xpatchcmd{\bbx@opt@mergedate@basic}{%
515 \iffieldundef{labelyear}%
516 }{%
517 \ifboolexpr{
518 togl {bbx:nonodate}
519 and
520 not test {\iflabeldateisdate}}%
521 }{}{}
522 \xpatchcmd{\bbx@opt@mergedate@basic}{%
523 \printtext[parens]%
524 }{%
525 \printtext[datelabel]%
526 }{}{}
527 \xpatchcmd{\bbx@opt@mergedate@minimum}{%
528 \iffieldundef{labelyear}%
529 }{%
530 \ifboolexpr{
531 togl {bbx:nonodate}
532 and
533 not test {\iflabeldateisdate}}%
534 }{}{}
535 \xpatchcmd{\bbx@opt@mergedate@minimum}{%
536 \printtext[parens]%
537 }{%
538 \printtext[datelabel]%
539 }{}{}
540 \xpatchcmd{\bbx@opt@mergedate@false}{%
541 \iffieldundef{labelyear}%
542 }{%
543 \ifboolexpr{
544 togl {bbx:nonodate}
545 and
546 not test {\iflabeldateisdate}}%
547 }{}{}
548 \xpatchcmd{\bbx@opt@mergedate@false}{%
549 \printtext[parens]%
550 }{%
551 \printtext[datelabel]%
552 }{}{}

```

Lastly, here is our new (default) option, which 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.

```

554 \def\bbx@opt@mergedate@year{%
555 \renewbibmacro*{date+extradate}{%

```

```

556 \iffieldundef{labelyear}{}{%
557 \ifboolexpr{
558   togl {bbx:nonodate}
559   and
560   not test {\iflabeldateisdate}
561 }{}{%
562   \printtext[datelabel]{\printlabeldateextra}%
563 }%
564 \iflabeldateisdate{%
565   \clearfield{year}%
566 }{}}
567 \renewbibmacro*{issue+date}{%
568 \ifboolexpr{
569   test {\iffieldundef{issue}}
570   and
571   test {\iffieldundef{month}}
572 }{}{%
573   \ifboolexpr{(
574     test {\iffieldundef{volume}}
575     and
576     test {\iffieldundef{number}}
577   ) and
578     test {\iffieldundef{eid}}
579 }{%
580   \newunit
581   \printfield{issue}%
582 }{%
583   \printtext[parens]{%
584     \printfield{issue}%
585   }%
586 }
587 \setunit{\addcomma\space}%
588 \printdate
589 }%
590 \newunit
591 }%
592 }%
593
594 \def\bbx@opt@mergedate@true{\bbx@opt@mergedate@year}
595 \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`.

```

597 \newrobustcmd*{\mknoyeardaterangefull}[2]{%
598 \iffieldundef{#2month}{}{%
599 \datecircaprint
600 \printtext[#2date]{%
601 \iffieldundef{#2season}{%
602   \cuse{mkbibdate#1}{#2month}{#2day}%
603   \blx@printtime{#2}{}%
604 }{%
605   \cuse{mkbibseasondate#1}{#2season}}%
606 \dateuncertainprint
607 \iffieldundef{#2endmonth}{}{%
608   \iffieldequalstr{#2endmonth}{}%
609   \mbox{\bibdaterangesep}%
610 }{%
611   \bibdaterangesep
612   \enddatecircaprint
613   \iffieldundef{#2season}{%

```

```

614     \csuse{mkbibdate#1}{-}{#2endmonth}{#2endday}%
615     \blx@printtime{#2}{end}%
616   }{%
617     \csuse{mkbibseasondate#1}{-}{#2endseason}}%
618   \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.

```

619 \newrobustcmd*{\mknoyeardaterangetrunc}[2]{%
620   \iffieldundef{#2month}{-}{%
621     \datecircaprint
622     \printtext[#2date]{%
623       \iffieldundef{#2season}{-}{%
624         \ifboolexpr{
625           test {\iffieldsequal{labelyear}{labelendyear}}
626           and
627           test {\iffieldsequal{#2month}{#2endmonth}}
628         }{%
629           \csuse{mkbibdate#1}{-}{-}{#2day}%
630         }{%
631           \csuse{mkbibdate#1}{-}{#2month}{#2day}}%
632       }{%
633         \csuse{mkbibseasondate#1}{-}{#2season}}%
634       \dateuncertainprint
635       \iffieldundef{#2endmonth}{-}{-}{%
636         \iffieldequalstr{#2endmonth}{-}{-}{%
637           \mbox{\bibdaterangesep}%
638         }{%
639           \bibdaterangesep
640           \enddatecircaprint
641           \iffieldundef{#2season}{-}{-}{%
642             \csuse{mkbibdate#1}{-}{#2endmonth}{#2endday}%
643           }{%
644             \csuse{mkbibseasondate#1}{-}{#2endseason}}%
645           \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.

```

646 \xpatchcmd{\mkdaterangefull}{%
647   \iffieldundef{#2year} {}%
648 }{%
649   \iffieldundef{#2year} {\mknoyeardaterangefull{#1}{#2}}%
650 }{}{}
651 \xpatchcmd{\mkdaterangetrunc}{%
652   \iffieldundef{#2year} {}%
653 }{%
654   \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
655 }{}{}
656 \xpatchcmd{\mkdaterangefullexta}{%
657   \iffieldundef{#2year} {}%
658 }{%
659   \iffieldundef{#2year} {\mknoyeardaterangefull{#1}{#2}}%
660 }{}{}
661 \xpatchcmd{\mkdaterangetruncextra}{%
662   \iffieldundef{#2year} {}%
663 }{%
664   \iffieldundef{#2year} {\mknoyeardaterangetrunc{#1}{#2}}%
665 }{}{}

```

7.5 Versions

Versions are printed with ‘v.’ in parentheses.

```
667 \DeclareFieldFormat{version}{\mkbibparens{\bibstring{version}#1}}
```

7.6 Types

Types are always printed longhand.

```
668 \DeclareFieldFormat{type}{\ifbibstring{#1}{\biblstring{#1}}{#1}}
```

7.7 Events

Events are printed as date then venue with no intermediate punctuation.

```
669 \renewbibmacro*{event+venue+date}{%
670   \printfield{eventtitle}%
671   \setunit*{\addspace}%
672   \printfield{eventtitleaddon}%
673   \ifboolexpr{
674     test {\iffieldundef{venue}}
675     and
676     test {\iffieldundef{eventyear}}
677   }
678   {}
679   {\setunit{\addcomma\space}%
680     \printeventdate
681     \setunit*{\addspace}%
682     \printfield{venue}%
683     \newunit}}
```

7.8 Publishers

We patch the secondary publication macros so they will use the publisher list instead, if provided.

```
685 \renewbibmacro*{institution+location+date}{%
686   \printlist{location}%
687   \iflistundef{publisher}{%
688     \iflistundef{institution}{%
689       \setunit*{\addcomma\space}%
690     }{%
691       \setunit*{\addcolon\space}%
692       \printlist{institution}%
693     }%
694   }{%
695     \setunit*{\addcolon\space}%
696     \printlist{publisher}%
697   }%
698   \setunit*{\addcomma\space}%
699   \usebibmacro{date}%
700   \newunit}
701 \renewbibmacro*{organization+location+date}{%
702   \printlist{location}%
703   \iflistundef{publisher}{%
704     \iflistundef{organization}{%
705       \setunit*{\addcomma\space}%
706     }{%
707       \setunit*{\addcolon\space}%
708       \printlist{organization}%
709     }%
710   }{%
```

```

711 \setunit*{\addcolon\space}%
712 \printlist{publisher}%
713 }%
714 \setunit*{\addcomma\space}%
715 \usebibmacro{date}%
716 \newunit}

```

We use the library field for databases and preprint repositories.

```

718 \DeclareFieldFormat{library}{\mkbibemph{#1}}
719 \newbibmacro*{library}{%
720 \iffieldundef{library}{}{%
721 \printfield{library}%
722 \setunit*{\addspace}%
723 \usebibmacro{isonline}%
724 }%
725 }

```

7.9 Page numbers

```

727 \renewcommand*{\ppspace}{}
728 \DeclareNumChars{ab}

```

7.10 URLs

URLs are prefaced by a ‘from’ statement, and the URL date is enclosed in brackets rather than parentheses.

```

729 \DeclareFieldFormat{url}{\bibsentence\bibstring{urlfrom}\addcolon\space\url{#1}}
730 \DeclareFieldFormat{doi}{\bibsentence\bibstring{urlfrom}\addcolon\space\url{https://doi.org/#1}}
731 \DeclareFieldFormat{urldate}{\mkbibbrackets{\bibstring{urlseen}\space#1}}
732 \renewbibmacro*{doi+eprint+url}{%
733 \iftoggle{bbx:eprint}
734 {\usebibmacro{eprint}}
735 {}%
736 \newunit\newblock
737 \iftoggle{bbx:url}
738 {\usebibmacro{url+urldate}}
739 {}%
740 \renewbibmacro*{url}{%
741 \iffieldundef{doi}%
742 {\printfield{url}}%
743 {\printfield{doi}}%
744 }

```

7.11 Articles

Compared with the standard styles, the main difference in the driver is the omission of ‘in’.

```

746 \xpatchbibdriver{article}{%
747 \usebibmacro{in:}\usebibmacro{journal+issuetitle}%
748 }{%
749 \usebibmacro{journal+issuetitle}%
750 }{}{}

```

The journal title is followed by a comma. The issue number is separated from the volume by parentheses rather than a dot.

```

751 \renewbibmacro*{journal+issuetitle}{%
752 \usebibmacro{journal}%
753 \setunit*{\addspace}%

```

```

754 \usebibmacro{isonline}%
755 \setunit*{\addcomma\space}%
756 \iffieldundef{series}
757 {}
758 {\newunit
759 \printfield{series}%
760 \setunit{\addcomma\space}}%
761 \usebibmacro{volume+number+eid}%
762 \setunit{\addspace}%
763 \usebibmacro{issue+date}%
764 \setunit{\addcolon\space}%
765 \usebibmacro{issue}%
766 \newunit}
767 \renewbibmacro*{volume+number+eid}{%
768 \printfield{volume}%
769 \printfield[parens]{number}%
770 \setunit{\addcomma\space}%
771 \printfield{eid}}

```

7.12 Books

Compared with the standard styles, the main difference is that the series is separated by a comma rather than a period. This also affects proceedings and certain forms of grey literature.

```

773 \xpatchbibdriver{book}{%
774 \newunit\newblock
775 \usebibmacro{series+number}%
776 }{%
777 \setunit{\addcomma\space}%
778 \usebibmacro{series+number}%
779 }{}{}
780
781 \xpatchbibdriver{collection}{%
782 \newunit\newblock
783 \usebibmacro{series+number}%
784 }{%
785 \setunit{\addcomma\space}%
786 \usebibmacro{series+number}%
787 }{}{}
788
789 \xpatchbibdriver{inbook}{%
790 \newunit\newblock
791 \usebibmacro{series+number}%
792 }{%
793 \setunit{\addcomma\space}%
794 \usebibmacro{series+number}%
795 }{}{}
796
797 \xpatchbibdriver{incollection}{%
798 \newunit\newblock
799 \usebibmacro{series+number}%
800 }{%
801 \setunit{\addcomma\space}%
802 \usebibmacro{series+number}%
803 }{}{}
804
805 \xpatchbibdriver{inproceedings}{%
806 \newunit\newblock
807 \usebibmacro{series+number}%
808 }{%
809 \setunit{\addcomma\space}%
810 \usebibmacro{series+number}%

```

```

811 }{}{}
812
813 \xpatchbibdriver{proceedings}{%
814   \newunit\newblock
815   \usebibmacro{series+number}%
816 }{%
817   \setunit{\addcomma\space}%
818   \usebibmacro{series+number}%
819 }{}{}

```

7.13 Works in collections

Compared with the standard styles, the main difference is that the editors precede the booktitle.

```

821 \xpatchbibdriver{incollection}{%
822   \usebibmacro{in:}%
823   \usebibmacro{maintitle+booktitle}%
824   \newunit\newblock
825   \usebibmacro{byeditor+others}%
826 }{%
827   \ifnameundef{editor}{}{\usebibmacro{in:}}%
828   \usebibmacro{bookeditor}%
829   \newunit\newblock
830   \usebibmacro{maintitle+booktitle}%
831   \usebibmacro{byeditor+others}%
832 }{}{}
833
834 \xpatchbibdriver{inproceedings}{%
835   \usebibmacro{in:}%
836   \usebibmacro{maintitle+booktitle}%
837   \newunit\newblock
838   \usebibmacro{event+venue+date}%
839   \newunit\newblock
840   \usebibmacro{byeditor+others}%
841 }{%
842   \ifnameundef{editor}{}{\usebibmacro{in:}}%
843   \usebibmacro{bookeditor}%
844   \newunit\newblock
845   \usebibmacro{maintitle+booktitle}%
846   \usebibmacro{byeditor+others}%
847   \newunit
848   \usebibmacro{event+venue+date}%
849 }{}{}

```

7.14 Online works

Compared with the standard styles, the main difference is that the organization's address is printed.

```

851 \xpatchbibdriver{online}{%
852   \printlist{organization}%
853 }{%
854   \usebibmacro{library}%
855   \newunit\newblock
856   \usebibmacro{organization+location+date}%
857 }{}{}

```

7.15 Reports

Compared with the standard styles, the main difference is that the type and number are printed in parentheses after the publisher. The delimiter is either a comma (normal) or a space (legal, triggered by using series instead of type). House of Lords report numbers are written in parentheses.

```

859 \DeclareFieldFormat{forceparens}{(#1)}
860 \newbibmacro{series+type+number}{%
861   \ifboolexpr{
862     test {\iffieldundef{series}}
863     and
864     test {\iffieldundef{type}}
865     and
866     test {\iffieldundef{number}}
867   }{-%
868     \printtext[parens]{%
869       \printfield{series}%
870       \IfStrEqCase{\thefield{series}}{%
871         {C}{\printunit*{\addot\space}}%
872         {Cd}{\printunit*{\addot\space}}%
873         {Cmd}{\printunit*{\addot\space}}%
874         {Cmnd}{\printunit*{\addot\space}}%
875         {Cm}{\printunit*{\addot\space}}%
876       }{-%
877         \setunit*{\addcomma\space}}%
878       \printfield{type}%
879       \setunit*{\addspace}%
880       \IfBeginWith{\thefield{series}}{HL}{-%
881         \printfield[forceparens]{number}%
882       }{-%
883         \printfield{number}%
884       }}}}
885
886 \DeclareBibliographyDriver{report}{%
887   \usebibmacro{bibindex}%
888   \usebibmacro{begentry}%
889   \usebibmacro{author}%
890   \setunit{\printdelim{nametitledelim}}\newblock
891   \usebibmacro{title}%
892   \newunit
893   \printlist{language}%
894   \newunit\newblock
895   \usebibmacro{byauthor}%
896   \newunit\newblock
897   \printfield{note}%
898   \newunit\newblock
899   \usebibmacro{institution+location+date}%
900   \iffieldundef{series}{%
901     \setunit{\addcomma\space}%
902   }{-%
903     \setunit{\addspace}}%
904   \usebibmacro{series+type+number}%
905   \newunit\newblock
906   \usebibmacro{chapter+pages}%
907   \newunit
908   \printfield{pagetotal}%
909   \newunit\newblock
910   \iftoggle{bbx:isbn}
911     {\printfield{isrn}}
912     {}%
913   \newunit\newblock
914   \usebibmacro{library}%
915   \newunit\newblock
916   \usebibmacro{doi+eprint+url}%
917   \newunit\newblock
918   \usebibmacro{addendum+pubstate}%
919   \setunit{\bibpagerefpunct}\newblock
920   \usebibmacro{pageref}%
921   \newunit\newblock

```

```

922 \iftoggle{bbx:related}
923   {\usebibmacro{related:init}}%
924   \usebibmacro{related}}
925   {}%
926 \usebibmacro{finentry}}

```

7.16 Manuals

The `manual` driver is useful for a variety of technical publications, such as standards, patents and maps. (Patents have their own driver, in fact, but we set things up so the `manual` driver can be used instead if needed for compatibility.)

```

928 \newbibmacro{manual:series+type+number}{%
929   \iffieldundef{series}{%
930     \newunit\newblock
931     \printfield{type}%
932     \setunit{\addspace}%
933     \printfield{number}%
934   }{%
935     \setunit{\addcomma\space}%
936     \usebibmacro{series+number}%
937     \newunit\newblock
938     \printfield{type}%
939   }%
940 }
941 \xpatchbibdriver{manual}{%
942   \newunit\newblock
943   \usebibmacro{series+number}%
944   \newunit\newblock
945   \printfield{type}%
946 }{%
947   \usebibmacro{manual:series+type+number}%
948 }{}{}

```

7.17 Standards

A special quirk with standards is that they are often best known by their number, so it comes at the head of the reference if no authors are specified.

To achieve this cleanly with correct sorting, we copy the number into `sortkey` as a simple fix (providing neither `author` nor `sortkey` are already specified). We then move the number to `label` so that citations come out correctly and the date (if given) is put in the right place.

```

950 \DeclareStyleSourcemap{%
951   \maps[datatype=bibtex]{%
952     \map[overwrite=false]{
953       \pertype{standard}
954       \step[notfield=author,
955         fieldsource=number,
956         final]
957       \step[fieldset=sortkey,
958         origfieldval]
959     }
960     \map[overwrite=false]{
961       \pertype{standard}
962       \step[notfield=author,
963         fieldsource=number,
964         fieldtarget=label]
965     }
966   }}
967 \ExecuteBibliographyOptions[standard]{useeditor=false}

```

7.18 Audiovisual materials

The audio and video drivers are based on misc.

```
969 \DeclareBibliographyDriver{audio}{%
970   \usebibmacro{bibindex}%
971   \usebibmacro{begentry}%
972   \usebibmacro{author/editor+others/translator+others}%
973   \setunit{\printdelim{nametitledelim}}\newblock
974   \usebibmacro{title}%
975   \newunit
976   \printlist{language}%
977   \newunit\newblock
978   \printfield{type}%
979   \newunit\newblock
980   \usebibmacro{byauthor}[given-family:full]%
981   \newunit\newblock
982   \usebibmacro{byeditor+others}[given-family:full]%
983   \newunit\newblock
984   \printfield{howpublished}%
985   \newunit\newblock
986   \printfield{note}%
987   \newunit\newblock
988   \usebibmacro{publisher+location+date}%
989   \newunit\newblock
990   \usebibmacro{doi+eprint+url}%
991   \newunit\newblock
992   \usebibmacro{addendum+pubstate}%
993   \setunit{\bibpagerefpunct}\newblock
994   \usebibmacro{pageref}%
995   \newunit\newblock
996   \iftoggle{bbx:related}
997     {\usebibmacro{related:init}%
998     \usebibmacro{related}}
999     {}%
1000   \usebibmacro{finentry}}
1001 \DeclareBibliographyAlias{movie}{audio}
1002 \DeclareBibliographyAlias{music}{audio}
1003 \DeclareBibliographyAlias{video}{audio}
```

7.19 Case reports

We provide a test to see if a work was published in the Official Journal of the EU; if so, the title is not italic (unless reporting a decision of the European Commission).

```
1004 \newtoggle{bbx:eu-oj}
1005 \newbibmacro*{eucheck}{%
1006   \IfBeginWith{\thefield{journaltitle}}{OJ}{%
1007     \toggletrue{bbx:eu-oj}%
1008   }{}}
1009 \DeclareFieldFormat[jurisdiction,legislation]{title}{%
1010   \ifboolexpr{
1011     togl{bbx:eu-oj}
1012     and
1013     not test {\iffieldequalstr{type}{Commission Decision}}
1014   }{#1}{\mkbibemph{#1}}}
```

The year is printed in square brackets, unless the case is Scottish, in which case the year is printed bare, or a volume number is present, in which case the year is printed in parentheses. With ECR and OJ cases, however, the year is always printed in square brackets despite the presence of a volume number. We provide a `year-essential` option for forcing the brackets/parentheses choice, and `scottish-style` for activating Scottish style.

```

1016 \newtoggle{bbx:scotstyle}
1017 \DeclareEntryOption[boolean]{scottish-style}[true]{%
1018   \settoggle{bbx:scotstyle}{#1}}
1019 \newtoggle{bbx:year-essential}
1020 \DeclareEntryOption[boolean]{year-essential}[true]{%
1021   \settoggle{bbx:year-essential}{#1}}
1022 \DeclareFieldFormat[jurisdiction]{datelabel}{%
1023   \ifboolexpr{
1024     test {\iffieldundef{volume}}
1025     or
1026     togl {bbx:year-essential}
1027     or
1028     togl {bbx:eu-oj}
1029     or
1030     test {\iffieldequalstr{journaltitle}{ECR}}
1031   }{%
1032     \ifboolexpr{
1033       test {\ifkeyword{sc}}
1034       or
1035       togl {bbx:scotstyle}
1036     }{%
1037       #1%
1038     }{%
1039       \mkbibbrackets{#1}}%
1040   }{%
1041     \mkbibparens{#1}}}}

```

A case number should normally go after the title and before the year, but Version 1 of this style used `number with type` at the end of the reference. (It relied on the case number being given in the `issue` field.) To maintain backwards compatibility, we rely on a ‘trick’ that case numbers are usually only present in EU cases where a page number is always provided. (And we support the `oscola` semantics for numbering European Commission cases.) We have to be a bit careful to ensure the last print command prints something otherwise `(no)nameyear delim` will not be triggered.

```

1043 \DeclareFieldFormat[jurisdiction]{issue}{\mkbibparens{#1}}
1044 \newbibmacro*{casenumber}{%
1045   \iffieldundef{issue}{%
1046     \ifboolexpr{
1047       test {\iffieldundef{pages}}
1048       or
1049       test {\iffieldundef{number}}
1050     }{}{%
1051       \iffieldundef{userb}{%
1052         \printfield[parens]{number}%
1053         \clearfield{number}%
1054       }{%
1055         \printfield[parens]{userb}%
1056         \setunit{\addspace}%
1057         \printfield{type}%
1058         \setunit*{\addspace}%
1059         \printfield{number}%
1060         \clearfield{type}\clearfield{number}}}%
1061   }{%
1062     \printfield{issue}}}}

```

For ease, if ‘Commission’ is given as the `institution`, this is deleted but the `type` is set to ‘Commission Decision’.

```

1063 \DeclareStyleSourcemap{
1064   \maps[datatype=bibtex]{
1065     \map[overwrite=false]{
1066       \step[match=\regex{Commission}, fieldsource=institution, final]
1067       \step[fieldset=type, fieldvalue={Commission Decision}]
1068       \step[fieldset=institution, null]

```

```

1069   }
1070   \map[overwrite=false]{
1071     \step[fieldsource=casenumber, final]
1072     \step[notfield=number, fieldsource=casenumber, fieldtarget=number]
1073     \step[fieldsource=casenumber, fieldtarget=userb]
1074   }
1075 }
1076 }

```

Law reports have a special way of printing journals, volume and page numbers. Here are several macros implementing this: a deprecated one using `type/number` and three proper ones using `journaltitle`, for UK journals, ECR and OJ respectively. The `reporter` macro chooses between them (again, this is a little messy for backwards compatibility).

```

1078 \newbibmacro{jurisdiction:type+number}{%
1079   \usebibmacro{journal}%
1080   \setunit*{\addspace}%
1081   \ifboolexpr{
1082     test {\iffieldundef{type}}
1083     and
1084     test {\iffieldundef{number}}
1085   }{ }{%
1086     \printfield{volume}%
1087     \setunit*{\addperiod\space}%
1088     \printfield{type}%
1089     \setunit*{\addspace}%
1090     \printfield{number}}%
1091 \DeclareFieldFormat[jurisdiction]{journaltitle}{%
1092   \iftoggle{bbx:eu-oj}{\mkbibemph{#1}}{#1}}
1093 \DeclareFieldFormat[jurisdiction,legislation]{volume}{#1}
1094 \DeclareFieldFormat[jurisdiction,legislation]{pages}{#1}
1095 \newbibmacro{journal+volume+pages}{%
1096   \printfield{volume}%
1097   \setunit{\addperiod\space}%
1098   \printfield{journaltitle}%
1099   \setunit*{\addspace}%
1100   \printfield{pages}%
1101 }
1102 \newbibmacro{eu:journal+volume+pages}{%
1103   \printfield{journaltitle}%
1104   \setunit{\addspace}%
1105   \printfield{volume}%
1106   \setunit*{\printtext{--\allowbreak}}}%
1107   \printfield{pages}%
1108 }
1109 \newbibmacro{eu:journal+series+volume+pages}{%
1110   \printfield{journaltitle}%
1111   \setunit{\addspace}%
1112   \printfield{series}%
1113   \clearfield{series}%
1114   \printfield{volume}%
1115   \setunit*{\printtext{/}}}%
1116   \printfield{pages}%
1117 }
1118 \newbibmacro{reporter}{%
1119   \iffieldundef{journaltitle}{%
1120     \usebibmacro{jurisdiction:type+number}%
1121   }{%
1122     \iffieldequalstr{journaltitle}{ECR}{%
1123       \usebibmacro{eu:journal+volume+pages}%
1124     }{%
1125       \iffieldequalstr{journaltitle}{OJ}{%
1126         \iffieldundef{series}{%

```

```

1127     \usebibmacro{jurisdiction:type+number}%
1128     }{%
1129     \usebibmacro{eu:journal+series+volume+pages}%
1130     }%
1131     }{%
1132     \usebibmacro{journal+volume+pages}%
1133     }}}

```

It's not a feature of Harvard (Bath), but OSCOLA puts the institution in parentheses at the end.

```

1135 \DeclareFieldFormat[jurisdiction]{institution}{\mkbibparens{#1}}
1136
1137 \DeclareBibliographyDriver{jurisdiction}{%
1138   \savebibmacro{title}%
1139   \xapptobibmacro{labeltitle}{%
1140     \setunit*{\addspace}%
1141     \usebibmacro{casenumber}%
1142   }{}{}%
1143   \usebibmacro{bibindex}%
1144   \usebibmacro{begentry}%
1145   \usebibmacro{eucheck}%
1146   \usebibmacro{author}%
1147   \setunit{\printdelim{nametitledelim}}\newblock
1148   \usebibmacro{title}%
1149   \newunit
1150   \printlist{language}%
1151   \newunit\newblock
1152   \usebibmacro{byauthor}%
1153   \newunit\newblock
1154   \printfield{note}%
1155   \setunit{\addspace}%
1156   \usebibmacro{reporter}%
1157   \newunit
1158   \printfield{pagetotal}%
1159   \newunit\newblock
1160   \printfield{institution}%
1161   \newunit\newblock
1162   \iftoggle{bbx:isbn}
1163     {\printfield{isrn}}
1164     {}%
1165   \newunit\newblock
1166   \usebibmacro{doi+eprint+url}%
1167   \newunit\newblock
1168   \usebibmacro{addendum+pubstate}%
1169   \setunit{\bibpagerefpunct}\newblock
1170   \usebibmacro{pageref}%
1171   \newunit\newblock
1172   \iftoggle{bbx:related}
1173     {\usebibmacro{related:init}%
1174     \usebibmacro{related}}
1175     {}%
1176   \usebibmacro{finentry}%
1177   \restorebibmacro{title}}

```

7.20 Legislation

Legislation is mostly formatted like a report, except there is no comma between the publisher and the type/number (and no `nametitledelim` if there is no `date+extradate`).

```

1179 \DeclareFieldFormat[legislation]{datelabel}{%
1180   \iftoggle{bbx:eu-obj}{%
1181     \mkbibbrackets{#1}%

```

```

1182 }{%
1183 #1}}
1184 \DeclareFieldFormat[legislation]{labeldate}{%
1185 \iftoggle{bbx:labelistitle}{\mkbibemph{#1}}{#1}}
1186 \DeclareFieldFormat[legislation]{chapter}{\biblcsstring[legalchapter]#1}
1187 \newbibmacro*{series+chapter}{%
1188 \iffieldundef{chapter}{}{%
1189 \iffieldundef{series}{%
1190 \printfield{chapter}%
1191 }{%
1192 \printtext[parens]{%
1193 \printfield{series}%
1194 \setunit{\addcomma\space}%
1195 \printfield{chapter}}}%
1196 \clearfield{series}}}}
1197
1198 \DeclareBibliographyDriver{legislation}{%
1199 \usebibmacro{bibindex}%
1200 \usebibmacro{begentry}%
1201 \usebibmacro{eucheck}%
1202 \usebibmacro{author}%
1203 \setunit{\printdelim{nametitledelim}}\newblock
1204 \usebibmacro{title}%
1205 \newunit
1206 \printlist{language}%
1207 \newunit\newblock
1208 \usebibmacro{byauthor}%
1209 \iffieldequalstr{entrysubtype}{secondary}{%
1210 \setunit{\addcomma\space}%
1211 \printfield{number}%
1212 \clearfield{number}%
1213 \printunit{\addcomma\space}%
1214 }{%
1215 \setunit{\addcomma\space}%
1216 }%
1217 \printfield{note}%
1218 \iffieldundef{series}{%
1219 \setunit{\addcomma\space}%
1220 }{%
1221 \setunit{\addspace}}%
1222 \iftoggle{bbx:eu-oj}{%
1223 \usebibmacro{eu:journal+series+volume+pages}%
1224 }{%
1225 \usebibmacro{series+chapter}%
1226 }
1227 \newunit\newblock
1228 \usebibmacro{institution+location+date}%
1229 \setunit{\addspace}%
1230 \usebibmacro{series+type+number}%
1231 \newunit\newblock
1232 \printfield{pagetotal}%
1233 \newunit\newblock
1234 \iftoggle{bbx:isbn}
1235 {\printfield{isrn}}
1236 {}%
1237 \newunit\newblock
1238 \usebibmacro{doi+eprint+url}%
1239 \newunit\newblock
1240 \usebibmacro{addendum+pubstate}%
1241 \setunit{\bibpagerefpunct}\newblock
1242 \usebibmacro{pageref}%
1243 \newunit\newblock
1244 \iftoggle{bbx:related}

```

```

1245     {\usebibmacro{related:init}}%
1246     \usebibmacro{related}}
1247     {}%
1248     \usebibmacro{finentry}}

```

7.21 Letters

This driver is used for emails. It is based loosely on the one for articles. The particular foible with this type is that the date must be printed complete at the start.

```

1250 \DeclareFieldFormat[letter]{title}{\iffielddundef{journaltitle}{\emph{#1}}{#1}}
1251 \ExecuteBibliographyOptions[letter]{mergedate=maximum}
1252 \DeclareBibliographyDriver{letter}{%
1253     \usebibmacro{bibindex}%
1254     \usebibmacro{begentry}%
1255     \usebibmacro{author/translator+others}%
1256     \setunit{\printdelim{nametitledelim}}\newblock
1257     \usebibmacro{title}%
1258     \newunit
1259     \printlist{language}%
1260     \newunit\newblock
1261     \usebibmacro{byauthor}%
1262     \newunit\newblock
1263     \usebibmacro{bytranslator+others}%
1264     \newunit\newblock
1265     \usebibmacro{journal+issuetitle}%
1266     \newunit\newblock
1267     \printfield{howpublished}%
1268     \newunit
1269     \printfield{note}%
1270     \newunit\newblock
1271     \usebibmacro{doi+eprint+url}%
1272     \newunit\newblock
1273     \usebibmacro{addendum+pubstate}%
1274     \setunit{\bibpagerefpunct}\newblock
1275     \usebibmacro{pageref}%
1276     \newunit\newblock
1277     \iftoggle{bbx:related}
1278         {\usebibmacro{related:init}}%
1279         \usebibmacro{related}}
1280     {}%
1281     \usebibmacro{finentry}%
1282 }

```

7.22 Software

The driver for software entries is based on misc. The main difference is in how the type is printed.

```

1284 \DeclareFieldFormat[software]{type}{\mkbibbrackets{#1}}
1285 \DeclareBibliographyDriver{software}{%
1286     \usebibmacro{bibindex}%
1287     \usebibmacro{begentry}%
1288     \usebibmacro{author/editor+others/translator+others}%
1289     \setunit{\printdelim{nametitledelim}}\newblock
1290     \usebibmacro{title}%
1291     \setunit{\addspace}
1292     \printfield{type}%
1293     \newunit
1294     \printlist{language}%
1295     \newunit\newblock
1296     \usebibmacro{byauthor}%
1297     \newunit\newblock

```

```

1298 \usebibmacro{byeditor+others}%
1299 \newunit\newblock
1300 \printfield{howpublished}%
1301 \newunit\newblock
1302 \printfield{note}%
1303 \newunit\newblock
1304 \usebibmacro{organization+location+date}%
1305 \newunit\newblock
1306 \usebibmacro{doi+eprint+url}%
1307 \newunit\newblock
1308 \usebibmacro{addendum+pubstate}%
1309 \setunit{\bibpagerefpunct}\newblock
1310 \usebibmacro{pageref}%
1311 \newunit\newblock
1312 \iftoggle{bbx:related}
1313   {\usebibmacro{related:init}%
1314   \usebibmacro{related}}
1315   {}%
1316 \usebibmacro{finentry}}

```

7.23 Images

The driver for image is based on misc. The main difference is the support for the library field.

```

1318 \DeclareFieldFormat[image]{library}{#1}
1319 \DeclareBibliographyDriver[image]{%
1320   \usebibmacro{bibindex}%
1321   \usebibmacro{begentry}%
1322   \usebibmacro{author/editor+others/translator+others}%
1323   \setunit{\printdelim{nametitledelim}}\newblock
1324   \usebibmacro{title}%
1325   \newunit
1326   \printlist{language}%
1327   \newunit\newblock
1328   \usebibmacro{byauthor}%
1329   \newunit\newblock
1330   \usebibmacro{byeditor+others}%
1331   \newunit\newblock
1332   \printfield{howpublished}%
1333   \newunit\newblock
1334   \printfield{type}%
1335   \newunit
1336   \printfield{note}%
1337   \newunit\newblock
1338   \usebibmacro{organization+location+date+library}%
1339   \newunit\newblock
1340   \usebibmacro{doi+eprint+url}%
1341   \newunit\newblock
1342   \usebibmacro{addendum+pubstate}%
1343   \setunit{\bibpagerefpunct}\newblock
1344   \usebibmacro{pageref}%
1345   \newunit\newblock
1346   \iftoggle{bbx:related}
1347     {\usebibmacro{related:init}%
1348     \usebibmacro{related}}
1349     {}%
1350   \usebibmacro{finentry}}

```

The following code works slightly differently

```

1351 \newbibmacro*{organization+location+date+library}{%
1352   \ifboolexpr
1353     test {\iffieldundef{library}}

```

```

1354     or
1355     not test {\iflistundef{publisher}}
1356 }{%
1357   \printlist{location}%
1358   \setunit*{\addcolon\space}%
1359   \clearfield{location}%
1360 }{%
1361   \iflistundef{publisher}{%
1362     \printlist{organization}%
1363   }{%
1364     \printlist{publisher}%
1365   }%
1366   \setunit{\addcomma\space}%
1367   \usebibmacro{date}%
1368   \newunit
1369   \iffieldundef{library}{%
1370     \iffieldundef{institution}{}%
1371     \bibsentence
1372     \bibstring{at}%
1373     \setunit{\addcolon\space}%
1374     \printlist{location}%
1375     \setunit*{\addperiod\space}%
1376     \printfield{institution}%
1377   }%
1378 }{%
1379   \bibsentence
1380   \bibstring{at}%
1381   \setunit{\addcolon\space}%
1382   \printlist{location}%
1383   \setunit*{\addperiod\space}%
1384   \printfield{library}%
1385 }%
1386 }

```

7.24 Aliases

We define some handy semantic aliases.

```

1388 \DeclareBibliographyAlias{standard}{manual}
1389 \DeclareBibliographyAlias{dataset}{online}

```

8 Implementation: data model

```

16 \DeclareDatamodelConstant[type=list]{nameparts}{prefix,family,suffix,given,cjk}

```

9 Implementation: British English language localization

We use the standard version with a few changes. We display the day as a cardinal number instead of an ordinal. The date is separated from the time by a period, not just a space, and the time separator is a period instead of a colon.

```

16 \InheritBibliographyExtras{british}
17 \DeclareBibliographyExtras{%
18   \protected\def\mkbibdatelong#1#2#3{%
19     \iffieldundef{#3}
20     {}
21     {\thefield{#3}%
22     \iffieldundef{#2}{}\{\nobreakspace}}%
23   \iffieldundef{#2}

```

```

24     {}
25     {\mkbibmonth{\thefield{#2}}%
26      \iffieldundef{#1}{\space}}%
27     \iffieldbibstring{#1}
28     {\bibstring{\thefield{#1}}}
29     {\dateeraprintpref{#1}\stripzeros{\thefield{#1}}}%
30     \renewrobustcmd*{\bibdatetimesep}{\addperiod\space}%
31     \renewrobustcmd*{\bibtimesep}{\addperiod}%
32     }

```

The strings are mostly the same except for the following changes. Note that month names are never abbreviated.

```

34 \DeclareBibliographyStrings
35 {inherit          = {british}
36 ,urlseen         = {{Accessed}{Accessed}}
37 ,version         = {{version~}{v\adddot}}
38 ,january         = {{January}{January}}
39 ,february       = {{February}{February}}
40 ,march          = {{March}{March}}
41 ,april          = {{April}{April}}
42 ,may            = {{May}{May}}
43 ,june           = {{June}{June}}
44 ,july           = {{July}{July}}
45 ,august         = {{August}{August}}
46 ,september      = {{September}{September}}
47 ,october        = {{October}{October}}
48 ,november       = {{November}{November}}
49 ,december       = {{December}{December}}
50 ,patreq         = {{patent application}{pat\adddot\ appl\adddot}}
51 ,patreqde       = {{German patent application}{German pat\adddot\ appl\adddot}}
52 ,patreqeu       = {{European patent application}{European pat\adddot\ appl\adddot}}
53 ,patreqfr       = {{French patent application}{French pat\adddot\ appl\adddot}}
54 ,patrequk       = {{British patent application}{British pat\adddot\ appl\adddot}}
55 ,patrequs       = {{U.S\addotsspace patent application}{U.S\addotsspace pat\adddot\
    appl\adddot}}

```

These are the new strings we define in this style.

```

56 ,online         = {{Online}{Online}}
57 ,hours         = {{hours}{hrs\adddot}}
58 ,at            = {{at}{at}}
59 ,legalchapter  = {{chapter}{c\adddot}}
60 ,director      = {{director}{dir\adddot}}
61 ,directors     = {{directors}{dir\adddot}}
62 ,bydirector    = {{directed by}{directed by}}
63 ,performer     = {{}}{}
64 ,performers    = {{}}{}
65 ,byperformer  = {{}}{}
66 ,reader       = {{reader}{reader}}
67 ,readers      = {{readers}{readers}}
68 ,byreader     = {{read by}{read by}}
69 ,conductor    = {{conductor}{cond\adddot}}
70 ,conductors   = {{conductors}{cond\adddot}}
71 ,byconductor  = {{conducted by}{conducted by}}
72 }

```

10 Implementation: American English language localization

We use the standard version with a few changes. The date is separated from the time by a period, not just a space.

```

16 \InheritBibliographyExtras{american}
17 \DeclareBibliographyExtras{%
18   \renewrobustcmd*{\bibdatetimesep}{\addperiod\space}%
19 }

```

The strings are mostly the same except for the following changes. Note that month names are never abbreviated.

```

21 \DeclareBibliographyStrings
22 {inherit          = {american}
23 ,urlseen         = {{Accessed}{Accessed}}
24 ,version         = {{version~}{v\addot}}
25 ,january         = {{January}{January}}
26 ,february       = {{February}{February}}
27 ,march          = {{March}{March}}
28 ,april          = {{April}{April}}
29 ,may            = {{May}{May}}
30 ,june           = {{June}{June}}
31 ,july           = {{July}{July}}
32 ,august         = {{August}{August}}
33 ,september      = {{September}{September}}
34 ,october        = {{October}{October}}
35 ,november       = {{November}{November}}
36 ,december       = {{December}{December}}
37 ,patreq         = {{patent application}{pat\addot\ appl\addot}}
38 ,patreqde       = {{German patent application}{German pat\addot\ appl\addot}}
39 ,patreqeu       = {{European patent application}{European pat\addot\ appl\addot}}
40 ,patreqfr       = {{French patent application}{French pat\addot\ appl\addot}}
41 ,patrequk       = {{British patent application}{British pat\addot\ appl\addot}}
42 ,patrequs       = {{U.S\addot\space patent application}{U.S\addot\space pat\addot\
  appl\addot}}

```

These are the new strings we define in this style.

```

43 ,online          = {{Online}{Online}}
44 ,hours           = {{hours}{hrs\addot}}
45 ,at              = {{at}{at}}
46 ,legalchapter   = {{chapter}{c\addot}}
47 }

```

11 Implementation: citation style

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

```

16 \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.

```

17 \ExecuteBibliographyOptions{uniquename=init}

```

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

```

18 \renewcommand*{\compctedelim}{\addsemicolon\space}

```

We need to suppress the display of ‘n.d.’ in citations if the `nonodate` toggle is true.

```

19 \xpatchbibmacro{cite:labeldate+extradate}{%
20   \iffieldundef{labelyear}%
21 }{%
22   \ifboolexpr{
23     togl {bbx:nonodate}
24     and

```

```
25     not test {\iflabeldateisdate}}%  
26 }{}{}
```

We activate the label-is-title toggle if the `labeltitle` is printed.

```
27 \providetoggle{bbx:labelistitle}  
28 \xpatchbibmacro{cite:label}{%  
29   \printtext[bibhyperref]{\printfield[citetitle]{labeltitle}}%  
30 }{%  
31   \printtext[bibhyperref]{\printfield[citetitle]{labeltitle}}%  
32   \toggletrue{bbx:labelistitle}%  
33 }{}{}
```