The biblatex-chicago package: Style files for biblatex

David Fussner Version 0.9.9b (beta) djf027@googlemail.com

December 6, 2012

Contents

C	ontents	5	The Specification: Author-Date 5	;6
1	Notice 1		5.2 Entry Fields	57 72 99
2	Quickstart12.1License42.2Acknowledgements4		5.3.1Formatting Commands95.3.2Citation Commands105.4Package Options105.4.1Pre-set biblatex Options10)9)1)2)2
3	Detailed Introduction 5		5.4.2 Pre-set chicago Options . 10 5.4.3 Style Options – Preamble . 10	6
4	The Specification: Notes & Bibliography64.1Entry Types64.2Entry Fields21		5.4.4Style Options - Entry 105.5General Usage Hints 105.5.1Loading the Styles 105.5.2Other Hints 10	08 08
	4.3 Commands	6	Internationalization 11	0
	4.3.2 Citation Commands 47 4.4 Package Options 49 4.4.1 Pre-Set biblatex Options 49 4.4.2 Pre-Set chicago Options 51		One .bib Database, Two Chicago Styles 117.1Notes -> Author-Date7.2Author-date -> Notes11	2
	4.4.3 Style Options – Preamble . 53	8	Interaction with Other Packages 11	3
	4.5General Usage Hints544.5.1Loading the Style54	9	TODO & Known Bugs 11	3
	4.5.2 Other Hints 55	10	Revision History 11	5

1 Notice

Please be advised that this package is beta software. Philipp Lehman's biblatex package has now reached a stable state, and is unlikely to require wholesale changes to styles written for it. This release of biblatex-chicago implements, for the first time, the 16th edition of the Chicago Manual of Style. I shall continue, for the moment, to maintain the 15th-edition files for those who need or want them, but I encourage all users to switch to the newer specification. If the title-formatting changes in the author-date style have been an obstacle, please note that the new authordate-trad style keeps the traditional title formatting but switches everything else to the 16th edition spec. The 15th-edition documentation is still available, also, in biblatex-chicago15.pdf. I have summarized the changes between the two editions in section 10 below, especially the ones that may require alterations to your .bib files.

I have tried to implement as much of the *Manual's* specification as possible, though undoubtedly some gaps remain. One user has recently argued that I should attempt to include legal citations, so in the long term it may be that I return to this issue. In the meantime, if it seems like this package could be of use to you, yet it doesn't do something you need/want it to do, please feel free to let me know, and of course any suggestions for solving problems more elegantly or accurately would be most welcome.

Important Note: If you have used biblatex-chicago before, please make sure you have read the RELEASE file that came with the package. It details the changes you'll need to make to your .bib database in order for it to work properly with this release. If you are new to these styles, please read on.

2 Quickstart

The biblatex-chicago package is designed for writers who wish to use LATEX and biblatex, and who either want or need to format their references according to one of the specifications defined by the *Chicago Manual of Style*. This package includes two versions of the *Manual's* "author-date" system, favored by many disciplines in the sciences and social sciences, and also its "notes & bibliography" style, generally favored in the humanities. The latter code produces a full reference in a first footnote, shorter references in subsequent notes, and a full reference in the bibliography. Some authors prefer to use the shorter note form even for the first occurrence, relying on the bibliography to provide the full information. This, too, is supported by the code. The author-date styles produce a short, in-text citation inside parentheses — (Author Year) — keyed to a list of references where entries start with the same name and year.

The documentation you are reading covers all three of these Chicago styles and their variants. Much of what follows is relevant to all users, but I have decided, after some experimentation, to keep the instructions for the two author-date styles separate from those pertaining to the notes & bibliography style, at least in sections 4 and 5. Information provided under one style will often duplicate that found under the other, but efficiency's loss should, I hope, be clarity's gain, and much of what you learn using one style will be applicable without alteration to the other. Within the author-date section, the authordate-trad information really only appears separately in section 5.2, s.v. "title." Throughout the documentation, any green text indicates something new in this release.

New!

Here's a list of things you will need in order to use biblatex-chicago:

- Philipp Lehman's biblatex package, of course! You should use the latest version(s) 1.7 or 2.4 at the time of writing as those versions have been tested more thoroughly than any other, meaning that these style files may well not function properly with some earlier iterations of biblatex. Lehman's tools require several packages, and he strongly recommends several more:
 - e-T_EX (required)
 - etoolbox available from CTAN (required)
 - keyval a standard package (required)
 - ifthen a standard package (required)
 - url a standard package (required)
 - babel a standard package (strongly recommended)
 - csquotes available from CTAN (recommended). Please upgrade to the latest version of csquotes (5.1b).
 - bibtex8 a replacement for BIBTEX, which can, with the right command-line switches, process very large .bib files. It also does the right thing when alphabetizing non-ASCII entries. It is available from CTAN, but please be aware that this database parser no longer suffices if you are using the Chicago author-date style with any version of biblatex from version 1.5 onwards. For that style you must use the following:
 - Biber the next-generation BIBTEX replacement, called Biber, which is available from SourceForge. You should use the latest version, 1.4, to work with biblatex-chicago and biblatex 2.4, or 0.9.9 with biblatex 1.7, and it is required for users who are either using the author-date styles or processing a .bib file in Unicode. See cms-dates-sample.pdf for more details.
- The line:

```
\usepackage[notes]{biblatex-chicago}
```

in your document preamble to load the notes & bibliography style, the line:

\usepackage[authordate,backend=biber]{biblatex-chicago}

to load the author-date style, or the line:

\usepackage[authordate-trad,backend=biber]{biblatex-chicago}

to load the traditional variant of the author-date style. (You can use notes15 or authordate15 to load the 15th-edition styles. Please see biblatex-chicago15.pdf for the details.) Any other options you usually pass to biblatex can be given to biblatex-chicago instead, but loading it this way sets up a number of other parameters automatically. You can also load the pack-age via the usual \usepackage{biblatex}, adding either style=chicago-notes or style=chicago-authordate, but this is mainly for those who wish to set much of the low-level formatting of their document themselves. Please see sections 4.5.1 and 5.5.1 below for a fuller discussion of the issues involved here.

- You can use \usepackage[notes, short] {biblatex-chicago} to get the short note format even in the first reference of a notes & bibliography document, letting the bibliography provide the full reference.
- If you are accustomed to using the natbib compatibility option with biblatex, then you can continue to do so with biblatex-chicago. If you are using \usepackage{biblatex-chicago} to load the package, then the option must be the plain natbib rather than natbib=true. If you use the latter, you'll get a keyval error. Please see sections 4.4.3 and 5.4.3, below.
- By far the simplest setup is to use babel, and to have american as the main text language. As before, babel-less setups, and also those choosing english as the main text language, should work out of the box. Biblatex-chicago also now provides support for British, French, German, Icelandic, and Norwegian. Please see below (section 6) for a fuller explanation of all the options.
- chicago-authordate.cbx, chicago-authordate.bbx, chicago-authordate-trad.cbx, chicago-authordate-trad.bbx, chicago-notes.bbx, chicago-notes.cbx, cms-american.lbx, cms-british.lbx, cms-french.lbx, cms-german.lbx, cms-icelandic.lbx, cms-ngerman.lbx, cms-norsk.lbx, cms-norwegian.lbx, cms-nynorsk.lbx, and biblatex-chicago.sty, all from biblatex-chicago, installed either in a systemwide TEX directory, or in the working directory where you keep your *.tex files. (To use the 15th-edition styles, you'll also require chicagonotes15.bbx, chicago-notes15.cbx, chicago-authordate15.bbx, and chicagoauthordate15.cbx.) The .zip file from CTAN contains several subdirectories to help keep the growing number of files organized, so the files listed above can be found in the latex/ subdirectory, itself further divided into the bbx/, cbx/, and lbx/ subdirectories. If you install in a system-wide directory, I suggest using the standard layout and creating <TEXMFLOCAL>/tex/latex/biblatex-contrib/biblatex-chicago, where <TEXMFLOCAL> is the root of your local TFX installation — for example, and depending on your system and preferences, /usr/share/texmflocal, /usr/local/share/texmf, or C:\Local TeX Files\. Then you can copy the contents of the latex/ directory there, subdirectories and all. (If you install into your working directory, then you'll need to copy the files directly there, without subdirectories.) Of course, if you choose to place them anywhere in the texmf tree, you'll need to update the file name database to make sure T_EX can find them.
- Philipp Lehman's very clear and detailed documentation of the biblatex system, available in his package as biblatex.pdf. Here he explains why you might want to use the system, the rules for constructing .bib files for it, and the (numerous) methods at your disposal for modifying the formatted output.

- The annotated bibliography files notes-test.bib and dates-test.bib, which will acquaint you with most of the details on how to get started constructing your own .bib files for use with the two biblatex-chicago styles.
- The files cms-notes-sample.pdf, cms-dates-sample.pdf, and cms-trad-sample.pdf. The first shows how my system processes notes-test.bib and cmsnotes-sample.tex, in both footnotes and bibliography, the second and third are the result of processing dates-test.bib with cms-dates-sample.tex or cms-trad-sample.tex. All of these files are in doc/examples/.
- The file you are reading, biblatex-chicago.pdf, which aims to be as complete a description as possible of the rules for creating a .bib file that will, when processed by LATEX and BIBTEX, at least somewhat ease the burden when you try to implement the Chicago Manual of Style's specifications. These docs may seem frustratingly over-long, but remember that you only need to read the part(s) that apply to the style in which you are interested. Much of the information in section 4 is duplicated in section 5, so even if you have a need for multiple styles then using one will be excellent preparation for the others. If you have used a previous version of this package, please pay particular attention to the sections on Obsolete and Deprecated Features, starting on page 115. You will find the seven previous files in the doc/ subdirectory once you've extracted biblatex-chicago.zip. If you wish to place them in a system-wide directory, I would recommend <TEXMFLOCAL>/doc/latex/biblatex-contrib/biblatex-chicago, all the while remembering, of course, to update the file name database afterward. (Let me reiterate, also, that if you currently have quoted material in your .bib file, and are using \enquote or the standard LATEX mechanisms there, then the simplest procedure is always to use \mkbibquote instead in order to ensure that punctuation works out right.)
- Access to a copy of *The Chicago Manual of Style* itself, which naturally contains incomparably more information than I can hope to present here. It should always be your first port of call when any doubts arise as to exactly what the specification requires.

2.1 License

Copyright © 2008–2012 David Fussner. This package is author-maintained. This work may be copied, distributed and/or modified under the conditions of the LATEX Project Public License, either version 1.3 of this license or (at your option) any later version. The latest version of this license is in http://www.latex-project.org/lppl.txt and version 1.3 or later is part of all distributions of LATEX version 2005/12/01 or later. This software is provided "as is," without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

2.2 Acknowledgements

Even a cursory glance at the cbx and bbx files in the package will demonstrate how much of Lehman's code from biblatex I've adapted and re-used, and I've also followed some of the advice he gave to others in the comp.text.tex newsgroup. He has been instrumental in improving the contextual capitalization procedures of which the style makes such frequent use, and his advice on constructing biblatex-chicago.sty was invaluable. The code for formatting the footnote marks, and that for printing the separating rule only after a run-on note, I've adapted from the footmisc package by Robin Fairbairns, and I've borrowed ideas for the shorthandibid option from Dominik Waßenhoven's biblatex-dw package. I've adapted Audrey Boruvka's \textcite code from Stackexchange for the notes & bibliography style. I am very grateful to Baldur Kristinsson for providing the Icelandic localization, and to Håkon Malmedal for the Norwegian localizations. Kazuo Teramoto and Gildas Hamel both sent patches to improve the package, and there may be other LATEX code I've appropriated and forgotten, in which case please remind me. Finally, Charles Schaum and Joseph Reagle Jr. were both extremely generous with their help and advice during the development of this package, and have both continued indefatigably to test it and suggest needed improvements. They were particularly instrumental in encouraging the greatest possible degree of compatibility with other biblatex styles. Indeed, if the task of adapting .bib files for use with the Chicago style seems onerous now, you should have tried it before they got their hands on it.

3 Detailed Introduction

The *Chicago Manual of Style*, implemented here in its 16th edition, has long, in America at least, been one of the most influential style guides for writers and publishers. While one's choices are now perhaps more extensive than ever, the *Manual* at least still provides a widely-recognized, and widely-utilized, standard. Indeed, when you add to this the sheer completeness of the specification, its detailed instructions for referencing an enormous number of different kinds of source material, then your choice (or your publisher's choice) of the *Manual* as a style guide seems set to be a happy one.

These very strengths, however, also make the style difficult to use. Admittedly, the *Manual* emphasizes consistency within a work, as opposed to rigid adherence to the specification, at least when writer and publisher agree (14.70). Sometimes a publisher demands such adherence, however, and anyone who has attempted to produce it may well come away with the impression that the specification itself is somewhat idiosyncratic in its complexity, and I can't help but agree. In the notes & bibliography style, the numerous differences in punctuation (and strings identifying translators, editors, and the like) between footnotes and bibliographies and the sometimes unusual location of page numbers; in both styles the distinction between "journal" and "magazine," and the formatting differences between (e.g.) a work from antiquity and one from the Renaissance, all of these tend to overburden the writer who wants to comply with the standard. Many of these complexities, in truth, make the specification very nearly impossible to implement straightforwardly in a system like BIBTEX - options multiply, each requiring a particular sort of formatting, until one almost reaches the point of believing that every individual book or article should have its own entry type. Completeness and usability tend each to exclude the other, so the code you have before you is a first attempt to achieve the former without utterly sacrificing the latter.

What biblatex-chicago can and can't do

In short, the biblatex style files in this package try to simplify the task of following the two Chicago specifications along with their major variants. In the notes & bibliography style, the two sorts of reference are treated separately (as are the two different note forms, long and short), and you can choose always to use the short note form, even at the first citation. In the two author-date styles, a series of options allows you to choose which date (original printing, reprint, or both) appears in citations and at the head of entries in the list of references. In all styles, punctuation is placed within quotation marks when needed, and as a general rule as many parts of the style as possible are implemented as transparently as possible. Thanks to advice I received from Joseph Reagle Jr. and Charles Schaum while these files were a work in progress, I have attended as carefully as I can to backward compatibility with the standard biblatex styles, and have attempted to minimize both any changes you need to make to achieve compliance with the Chicago specification, and indeed also any changes necessary to switch between the two Chicago styles. There is no doubt room for improvement on this score, but even now, for a substantial number of entries, any well-constructed .bib file that works for other biblatex styles will "just work" under biblatex-chicago. By no means, however, will all entries in such a .bib file produce equally satisfactory results. Using this documentation and the examples in dates-test.bib and/or notes-test.bib, it should be possible to achieve compliance, though the amount of revision necessary to do so will vary significantly from .bib file to .bib file. Conversely, once you have created a database for biblatex-chicago, it won't necessarily work well with other biblatex styles. Indeed, most, quite possibly all, users will find that they need to use special formatting macros within the .bib file that would make such a file unusable in any other context. I strongly recommend, if you want to experiment with this style, that you work on a copy of any .bib files that are important to you, until you have determined that this package does what you need/want it to do.

When I first began working on this package, I made the decision to alter as little as possible the main files from Lehman's biblatex, so that my .bbx and .cbx files would use his original LATEX .sty file and BIBTEX .bst file. As you proceed, you will no doubt encounter some of the consequences of this decision, with certain fields and entry types in the .bib file having less-than-memorable names because I chose to use the supplementary ones provided by biblatex.bst rather than alter that file. I intended then, if it turned out that anyone besides myself actually used biblatex-chicago, to ask Mr. Lehman to include more descriptive names for these few entry types and fields in biblatex.bst, if he were willing. As luck would have it, several new types appeared in biblatex o.8, many of which I have incorporated as replacements for the custom entry types I defined before. If a consensus emerges about how best to assign the data to various fields in such entries, then I shall adopt it. In the meantime, as you will see below, I have made two of the old custom types obsolete, and recycled the third for an entirely new purpose. Needless to say, I'm open to advice and suggestions on this score.

4 The Specification: Notes & Bibliography

In what follows, I attempt to explain all the parts of biblatex-chicago-notes that might be considered somehow "non standard," at least with respect to the styles included with biblatex itself, though in the section on entry fields I have also duplicated a lot of the information in biblatex.pdf, which I hope won't badly annoy expert users of the system. Headings in green indicate material new to this release, or occasionally old material that has undergone significant revision. Numbers in parentheses refer to sections of the *Chicago Manual of Style*, 16th edition. The file notes-test.bib contains many examples from the *Manual* which, when processed using biblatex-chicago-notes, should produce the same output as you see in the *Manual* itself, or at least compliant output, where the specifications are vague or open to interpretation, a state of affairs which does sometimes occur. I have provided cms-notes-sample.pdf, which shows how my system processes notes-test.bib, and I have also included the reference keys from the latter file below in parentheses.

4.1 Entry Types

The complete list of entry types currently available in biblatex-chicago-notes, minus the odd biblatex alias, is as follows: **article**, **artwork**, **audio**, **book**, **bookinbook**, **booklet**, **collection**, **customc**, **image**, **inbook**, **incollection**, **inproceedings**, **inreference**, **letter**, **manual**,**misc**, **music**, **online** (with its alias **www**), **patent**, **periodical**, **proceedings**, **reference**, **report** (with its alias **techreport**), **review**, **suppbook**, **suppcollection**, **supperiodical**, **thesis** (with its aliases **mastersthesis** and **phdthesis**), **unpublished**, and **video**.

What follows is an attempt to specify all the differences between these types and the standard provided by biblatex. If an entry type isn't discussed here, then it is safe to assume that it works as it does in the standard styles. In general, I have attempted not to discuss specific entry fields here, unless such a field is crucial to the overall operation of a given entry type. As a general and important rule,

New in this release

most entry types require very few fields when you use biblatex-chicago-notes, so it seemed to me better to gather information pertaining to fields in the next section.

article The *Chicago Manual of Style* (14.170) recognizes three different sorts of periodical publication, "journals," "magazines," and "newspapers." The first (14.172) includes "scholarly or professional periodicals available mainly by subscription," while the second refers to "weekly or monthly" publications that are "available either by subscription or in individual issues at bookstores or newsstands or online." "Magazines" will tend to be "more accessible to general readers," and typically won't have a volume number. Indeed, by fiat I declare that should you need to refer to a journal that identifies its issues mainly by year, month, or week, then for the purposes of biblatex-chicago-notes such a publication is a "magazine," and not a "journal."

Now, for articles in "journals" you can simply use the traditional BIBTEX — and indeed biblatex — article entry type, which will work as expected and set off the page numbers with a colon, as required by the *Manual*. If, however, you need to refer to a "magazine" or a "newspaper," then you need to add an entrysubtype field containing the exact string magazine. The main formatting differences between a magazine (which includes both "magazines" and "newspapers") and a plain article are that the year isn't placed within parentheses, and that page numbers are set off by a comma rather than a colon. Otherwise, the two sorts of reference have much in common. (For article, see *Manual* 14.175–198; batson, beattie:crime, friedman:learning, garaud:gatine, garrett, hlatky:hrt, kern, lewis, loften:hamlet, mcmillen:antebellum, warr:ellison, white:callimachus. For entry-subtype magazine, see 14.181, 14.199–202; assocpress:gun, morgenson:market, reaves:rosen, rozner:liberation, stenger:privacy.)

It gets worse. The *Manual* treats reviews (of books, plays, performances, etc.) as a sort of recognizable subset of "journals," "magazines," and "newspapers," distinguished mainly by the way one formats the title of the review itself. In biblatex 0.7, happily, Lehman provided a review entry type which will handle a large subset of such citations, though not all. The key rule is this: if a review has a separate, non-generic title (gibbard; osborne:poison) in addition to something that reads like "review of ...," then you need an article entry, with or without the magazine entrysubtype, depending on the sort of publication containing the review. If the only title is the generic "review of ...," for example, then you'll need the review entry type, with or without this same entrysubtype toggle using magazine. On review entries, see below. (The curious reader will no doubt notice that the code for formatting any sort of review still exists in article, as it was initially designed for biblatex 0.6, but this new arrangement is somewhat simpler and therefore, I hope, better.)

In the case of a review with a specific as well as a generic title, the former goes in the title field, and the latter in the titleaddon field. Standard biblatex intends this field for use with additions to titles that may need to be formatted differently from the titles themselves, and biblatex-chicago-notes uses it in just this way, with the additional wrinkle that it can, if needed, replace the title entirely, and this in, effectively, any entry type, providing a fairly powerful, if somewhat complicated, tool for getting BibTeX to do what you want. Here, however, if all you need is a titleaddon, then you want to switch to the review type, where you can simply use the title field instead.

No less than seven more things need explication here. First, since the *Manual* specifies that much of what goes into a titleaddon field stays unformatted — no italics, no quotation marks — this plain style is the default for such text, which means that you'll have to format any titles within titleaddon yourself, e.g., with \mkbibemph{}. Second, the *Manual* specifies a similar plain style for the titles of other sorts of material found in "magazines" and "newspapers," e.g., obituaries, letters to the editor, interviews, the names of regular columns,

and the like. References may contain both the title of an individual article and the name of the regular column, in which case the former should go, as usual, in a title field, and the latter in titleaddon. As with reviews proper, if there is only the generic title, then you want the review entry type. (See 14.203, 14.205, 14.208; morgenson:market, reaves:rosen.)

Third, the 16th edition of the Manual has, I believe, subtly changed its recommendations in the case of "unsigned newspaper articles or features" (14.207). Unfortunately, these changes aren't entirely clear to me. First, it suggests that such pieces are "best dealt with in text or notes." If, however, "a bibliography entry should be needed, the name of the newspaper stands in place of the author." The examples it provides, therefore, suggest quite different treatments of the same material in notes and bibliography, and they don't at any point that I can see recommend a format for short notes. I've implemented these recommendations fairly literally, which means that in an article entry, entrysubtype magazine, or in a review entry, entrysubtype magazine, and only in such entries, a missing author field results in the name of the periodical (in the journaltitle field) being used as the missing author, but *only* in the bibliography and in short notes. In long notes, the title will appear first, before the journaltitle. Note that the use of the name of the newspaper as an author creates sorting issues in the bibliography, issues that will mostly be solved for you if you use Biber as the backend. If you don't, or if the journaltitle begins with a definite or indefinite article with which you can't dispense, then you'll need a sortkey field to ensure that the bibliography entry is alphabetized correctly. (See lakeforester:pushcarts and, for the sorting issue, \DeclareSortingScheme in section 4.4.1 below.)

Fourth, if you've been using biblatex-chicago-notes for a while, you may remember using the single-letter \bibstring mechanism in order to help biblatex decide where to capitalize a wide variety of strings in numerous entry fields. This mechanism was particularly common in all the periodical types, but if you've had a look in notes-test.bib while following this documentation, you'll have noticed that it no longer appears there. The regular whole-word bibstrings still work as normal, but the single-letter ones are now obsolete, replaced by Lehman's macro \autocap, which itself only occurs twice in notes-test.bib. Basically, in certain fields, just beginning your data with a lowercase letter activates the mechanism for capitalizing that letter depending on its context within a note or bibliography entry. Please see \autocap below for the details, but both the titleaddon and note fields are among those treating their data this way, and since both appear regularly in article entries, I thought the problem merited a preliminary mention here.

Fifth, if you need to cite an entire issue of any sort of periodical, rather than one article in an issue, then the periodical entry type, once again with or without the magazine toggle in entrysubtype, is what you'll need. (You can also use the article type, placing what would normally be the issuetitle in the title field and retaining the usual journaltitle field, but this arrangement isn't compatible with standard biblatex.) The note field is where you place something like "special issue" (with the small "s" enabling the automatic capitalization routines), whether you are citing one article or the whole issue (conley:fifthgrade, good:wholeissue). Indeed, this is a somewhat specialized use of note, and if you have other sorts of information you need to include in an article, periodical, or review entry, then you shouldn't put it in the note field, but rather in titleaddon or perhaps addendum (brown:bremer).

Sixth, if you wish to cite a television or radio broadcast, the article type, entrysubtype magazine is the place for it. The name of the program would go in journaltitle, with the name of the episode in title, and the network's name in the usera field. Of course, if the piece you are citing has only a generic name (an interview, for example), then the review type would be the best place for it. (8.185, 14.221; see bundy:macneil for an example of how this all might look in a .bib file. Commercial recordings of such material would need one of the audiovisual entry types, probably audio or video [friends:leia], while recordings from archives fit best into misc entries with an entrysubtype [coolidge:speech, roosevelt:speech].)

Finally, the 16th edition of the *Manual* (14.243–6) specifies that blogs and other, similar online material should be presented like articles, with magazine entry-subtype (ellis:blog). The title of the specific entry goes in title, the general title of the blog goes in journaltitle, and the word "blog" in the location field (though you could just use special formatting in the journaltitle field itself, which may sometimes be necessary). Comments on blogs, with generic titles like "comment on" or "reply to," need a review entry with the same entrysubtype. Such comments make particular use of the eventdate and of the nameaddon fields; please see the documentation of **review**, below.

If you're still with me, allow me to recommend that you browse through notestest.bib to get a feel for just how many of the *Manual*'s complexities the article and review (and, indeed, periodical) types attempt to address. It may be that in future releases of biblatex-chicago-notes I'll be able to simplify these procedures somewhat, but in the meantime it might be of some comfort that I have found in my own research that the unusual and/or limit cases are really rather rare, and that the vast majority of sources won't require any knowledge of these onerous details.

artwork Arne Kjell Vikhagen has pointed out to me that none of the standard entry types were straightforwardly adaptable when referring to visual artworks. The *Manual* doesn't give any thorough specifications for such references, and indeed it's unclear that it believes it necessary to include them in the bibliographical apparatus at all. Still, it's easy to conceive of contexts in which a list of artworks studied might be desirable, and biblatex includes entry types for just this purpose, though the standard styles leave them undefined. The two I chose to include in previous releases were artwork and image, the former intended for paintings, sculptures, etchings, and the like, the latter for photographs. The 16th edition of the *Manual* has modified its specifications for presenting photographs so that they are the same as for works in all other media. The image type, therefore, is now merely a clone of the artwork type, maintained mainly to provide backward compatibility for users migrating from the old specification to the current one.

Constructing an entry is fairly straightforward. As one might expect, the artist goes in author and the name of the work in title. The type field is intended for the medium — e.g., oil on canvas, charcoal on paper, albumen print — and the version field might contain the state of an etching. You can place the dimensions of the work in note, and the current location in organization, institution, and/or location, in ascending order of generality. The type field, as in several other entry types, uses biblatex's automatic capitalization routines, so if the first word only needs a capital letter at the beginning of a sentence, use lowercase in the .bib file and let biblatex handle it for you. (See *Manual* 3.22, 8.193; leo:madonna, bedford:photo.)

As a final complication, the *Manual* (8.193) says that "the names of works of antiquity ... are usually set in roman." If you should need to include such a work in the reference apparatus, you can either define an entrysubtype for an artwork entry — anything will do — or you could use the misc entry type with an entrysubtype. Fortunately, in this instance the other fields in a misc entry function pretty much as in artwork.

audio Following the request of Johan Nordstrom, I have included three entry types, all undefined by the standard styles, designed to allow users to present audiovisual sources in accordance with the Chicago specifications. The *Manual's* presentation of such sources (14.274–280), though admirably brief, seems to me somewhat inconsistent; the proliferation of online sources has made the task

yet more complex. For the 15th edition I attempted to condense all the requirements into two new entry types, but ended up relying on three. For the 16th edition, in particular, I also need to include the **online** and even the **misc** entry types, which see, under the audiovisual rubric. I shall attempt to delineate the main differences here, and though there are likely to be occasions when your choice of entry type is not obvious, at the very least biblatex-chicago should help you maintain consistency.

The **music** type is intended for all musical recordings that do not have a video component. This means, for example, digital media (whether on CD or hard drive), vinyl records, and tapes. The video type includes most visual media, whether it be films, TV shows, tapes and DVDs of the preceding or of any sort of performance (including music), or online multimedia. The Manual's treatment (14.280) of the latter suggests that online video excerpts, short pieces, and interviews should generally use the online type (harwood:biden, horowitz:youtube, pollan:plant). The audio type, our current concern, fills gaps in the others, and presents its sources in a more "book-like" manner. Published musical scores need this type — unpublished ones would use misc with an entrysubtype (shapey:partita) — as do such favorite educational formats as the slideshow and the filmstrip (greek:filmstrip, schubert:muellerin, verdi:corsaro). The Manual (14.277-280) sometimes uses a similar format for audio books (twain:audio), though, depending on the sorts of publication facts you wish to present, this sort of material may fall under music (auden:reading). Dated audio recordings that are part of an archive, online or no, may best be presented in a **misc** entry with an entrysubtype (coolidge:speech, roosevelt:speech).

Once you've accepted the analogy of composer to author, constructing an audio entry should be fairly straightforward, since many of the fields function just as they do in book or inbook entries. Indeed, please note that I compare it to both these other types as, in common with the other audiovisual types, audio has to do double duty as an analogue for both books and collections, so while there will normally be an author, a title, a publisher, a date, and a location, there may also be a booktitle and/or a maintitle — see schubert:muellerin for an entry that uses all three in citing one song from a cycle. If the medium in question needs specifying, the type field is the place for it. Finally, the titleaddon field can specify functions for which biblatex-chicago provides no automated handling, e.g., a librettist (verdi:corsaro).

bookinbook This type provides the means of referring to parts of books that are considered, in other contexts, themselves to be books, rather than chapters, essays, or articles. Such an entry can have a title and a maintitle, but it can also contain a booktitle, all three of which will be italicized when printed. In general usage it is, therefore, rather like the traditional inbook type, only with its title in italics rather than in quotation marks. (See *Manual* 14.114, 14.127, 14.130; bernard:boris, euripides:orestes, plato:republic:gr.)

NB: The Euripides play receives slightly different presentations in 14.127 and 14.130. Although the specification is very detailed, it doesn't eliminate all choice or variation. Using a system like BIBT_EX should help to maintain consistency.

- **booklet** This is the first of two entry types the other being manual, on which see below which are traditional in BIBTEX styles, but which the *Manual* (14.249) suggests may well be treated basically as books. In the interests of backward compatibility, biblatex-chicago-notes will so format such an entry, which uses the howpublished field instead of a standard publisher, though of course if you do decide just to use a book entry then any information you might have given in a howpublished field should instead go in publisher. (See clark:mesopot.)
- **customa** This entry type is now obsolete, and any such entries in your .bib file will trigger an error. Please use the standard biblatex letter type instead.

- **customb** This entry type is now obsolete, and any such entries in your .bib file will trigger an error. Please use the standard biblatex **bookinbook** type instead.
- **customc** This entry type allows you to include alphabetized cross-references to other, separate entries in the bibliography, particularly to other names or pseudonyms, as recommended by the *Manual*. (This is different from the usual crossref, xref, and userf mechanisms, all primarily designed to include cross-references to other works. Cf. 14.84,86). The lecarre:cornwell entry, for example, would allow your readers to find the more-commonly-used pseudonym "John Le Carré" even if they were, for some reason, looking under his real name "David John Moore Cornwell." As I read the specification, these cross-references are particularly encouraged, bordering on required, when "a bibliography includes two or more works published by the same author but under different pseudonyms." The following entries in notes-test.bib show one way of addressing this: creasey:ashe:blast, creasey:york:death, creasey:morton:hide, ashe:creasey, york:creasey and morton:creasey.

In these latter cases, you would need merely to place the pseudonym in the author field, and the author's real name, under which his or her works are presented in the bibliography, in the title field. To make sure the cross-reference also appears in the bibliography, you can either manually include the entry key in a *\nocite* command, or you can put that entry key in the **userc** field in the main .bib entry, in which case biblatex-chicago will print the expanded abbreviation if and only if you cite the main entry. (Cf. userc, below.)

Under ordinary circumstances, biblatex-chicago will connect the two parts of the cross-reference with the word "*See*" — or its equivalent in the document's language — in italics. If you wish to present the cross-reference differently, you can put the connecting word(s) into the nameaddon field.

- image This entry type, left undefined in the standard styles, was in previous releases of biblatex-chicago intended for referring to photographs, but the 16th edition of the *Manual* has changed its specifications for such works, which are now treated the same as works in all other media. This means that this entry type is now a clone of the artwork type, which see. I retain it here as a convenience for users migrating from the old to the new specification. (See 3.22, 8.193; bedford:photo.)
- inbook These two standard biblatex types have very nearly identical formatting requireincollection ments as far as the Chicago specification is concerned, but I have retained both of them for compatibility. Biblatex.pdf (§ 2.1.1) intends the first for "a part of a book which forms a self-contained unit with its own title," while the second would hold "a contribution to a collection which forms a self-contained unit with a distinct author and its own title." The title of both sorts will be placed within quotation marks, and in general you can use either type for most material falling into these categories. There is, however, an important difference between them, as it is only in incollection entries that I implement the Manual's recommendations for space-saving abbreviations in notes and bibliography when you cite multiple pieces from the same collection. These abbreviations are activated when you use the crossref or xref field in incollection entries, and not in inbook entries, mainly because the Manual (14.113) here specifies a "multiauthor book." (For more on this mechanism see crossref, below, and note that it is also active in letter and inproceedings entries. There is, of course, nothing to prevent you from using the mechanism when referring to, e.g., chapters from a single-author book, but you'll have to use incollection instead of inbook.) If the part of a book to which you are referring has had a separate publishing history as a book in its own right, then you may wish to use the bookinbook type, instead, on which see above. (See Manual 14.111–114; inbook: ashbrook:brain, phibbs:diary, will:cohere; incollection: centinel:letters, contrib:contrib, sirosh:visualcortex; ellet:galena, keating:dearborn, and lippincott:chicago [and the collection entry prairie:state] demonstrate the use of the crossref field with its attendant abbreviations in notes and bibliography.)

NB: The *Manual* suggests that, when referring to a chapter, one use either a chapter number or the inclusive page numbers, not both. If, however, you wish to refer in a footnote to a specific page within the chapter, biblatex-chicago-notes will always print the optional, postnote argument of a \cite command — the page number, say — instead of any inclusive page numbers given in the .bib file incollection entry. This mechanism is quite general, that is, any specific page reference given in any sort of \cite command overrides the contents of a pages field in a .bib file entry.

- **inproceedings** This entry type works pretty much as in standard biblatex. Indeed, the main differences between it and incollection are the lack of an edition field and the possibility that an organization may be cited alongside the publisher, even though the *Manual* doesn't specify its use (14.226). Please note, also, that the crossref and xref mechanism for shortening citations of multiple pieces from the same proceedings is operative here, just as it is in incollection entries. See crossref, below, for more details.
 - inreference This entry type is aliased to incollection in the standard styles, but the *Manual* has particular requirements, so if you are citing "[w]ell-known reference books, such as major dictionaries and encyclopedias," then this type should simplify the task of conforming to the specifications (14.247–248). The main thing to keep in mind is that I have designed this entry type for "alphabetically arranged" works, which you shouldn't cite by page, but rather by the name(s) of the article(s). Because of the formatting required by the Manual, we need one of biblatex's list fields for this purpose, and in order to keep all this out of the way of the standard styles, I have chosen the lista field. You should present these article names just as they appear in the work, separated by the keyword "and" if there is more than one, and biblatex-chicago-notes will provide the appropriate prefatory string (s.v., plural s.vv.), and enclose each in its own set of quotation marks (ency:britannica). In a typical inreference entry, very few other fields are needed, as "the facts of publication are often omitted, but the edition (if not the first) must be specified." In practice, this means a title and possibly an edition field.

There are quite a few other peculiarities to explain here. First of all, you should present any well-known works *only* in notes, not in a bibliography, as your readers are assumed to know where to go for such a reference. You can use the skipbib option or the keywords mechanism I discuss below under **crossref** and **keywords**. For such works, and given how little information will be present even in a full note, you may wish to use \fullcite or \footfullcite in place of the short form, especially if, for example, you are citing different versions of an article appearing in different editions.

If the work is slightly less well known, it may be that full publication details are appropriate (times:guide), but this makes things more complicated. In previous releases of biblatex-chicago-notes, you would have had to format the postnote field of short notes appropriately, including the prefatory string and quotation marks I mentioned above. Now you can put an article name in the postnote field of inreference entries and have it formatted for you, and this holds for both long and short notes, which could allow you to refer separately to many different articles from the same reference work using only one .bib entry. (In a long note, any postnote field stops the printing of the contents of lista.) The only limitation on this system is that the postnote field, unlike lista, is not a list, and therefore for the formatting to work correctly you can only put one article name in it. Despite this limitation, I hope that the current system might simplify things for users who cite numerous works of reference.

If it seems appropriate to include such a work in the bibliography, be aware that the contents of the lista field will also be presented there, which may not be what you want. A separate reference entry might solve this problem, but you may also need a sortkey field to ensure proper alphabetization, as biblatex will attempt to use an editor or author name, if either is present. (Cf. mla:style, a reference entry that uses section numbers instead of alphabetized headings, and useeditor=false in the options field instead of a sortkey to ensure the correct alphabetization.)

Speaking of the author, this field holds the author of the specific entry (in lista), not the author of the title as a whole. This name will be printed after the entry's name (grove:sibelius). If you wish to refer to a reference work by author or indeed by editor, having either appear at the head of the note (long or short) or bibliography entry, then you'll need to use a book entry instead (cf. schellinger:novel), where the lista mechanism will also work in the bibliography, but which in every other way will be treated as a normal book, often a good choice for unfamiliar or non-standard reference works.

Finally, all of these rules apply to online reference works, as well, for which you need to provide not only a url but also, always, a urldate, as these sources are in constant flux (wikiped:bibtex, grove:sibelius).

letter This is the entry type to use for citing letters, memoranda, or similar texts, but *only* when they appear in a published collection. (Unpublished material of this nature needs a misc entry, for which see below.) Depending on what sort of information you need to present in a citation, you may simply be able to get away with a standard book entry, which may then be cited by page number (see *Manual* 14.78, 14.88; meredith:letters, adorno:benj). If, however, for whatever reason, you need to give full details of a specific letter, then you'll need to use the letter entry type, which attempts to simplify for you the *Manual*'s rather complicated rules for formatting such references. (See 14.117; jack-son:paulina:letter, white:ross:memo, white:russ [a completely fictitious entry to show the xref mechanism], white:total [a book entry, for the bibliography]).

To start, the name of the letter writer goes in the author field, while the title field contains both the name of the writer and that of the recipient, in the form Author to Recipient. The titleaddon field contains, optionally, the type of correspondence involved. If it's a letter, the type needn't be given, but if it's a memorandum or report or the like, then this is the place to specify that fact. Also, because the origdate field only accepts numbers, if you want to use the abbreviation "n.d." (or \bibstring{nodate}) for undated letters, then this is where you should put it. If you need to specify where a letter was written, then you can also use this field, and, if both are present, remember to separate the location from the type with a comma, like so: memorandum, London. Alternatively, you can put the place of writing into the origlocation field. Most importantly, the date of the letter itself goes in the origdate field (year-month-day), which now allows a full date specification, while the publishing date of the whole collection goes in the date field, instead of in the obsolete origyear. As in other entry types, then, the date field now has its ordinary meaning of "date of publication." (You may have noticed here that the presentation of the origdate in this sort of reference is different from the date format required elsewhere by the Manual. This appears to result from some recent changes to the specification, and it may be that we could get away with choosing one or the other format for all occurrences [6.45], but for the moment I hope this mixed solution will suffice.) Another difficulty arises when producing the short footnote form, which requires you to provide a shorttitle field of the form "to Recipient," the latter name as short as possible while avoiding ambiguity. The remaining fields are fairly self explanatory, but do remember that the title of the published collection belongs in booktitle rather than in title.

Finally, the *Manual* specifies that if you cite more than one letter from a given published collection, then the bibliography should contain only a reference to said collection, rather than to each individual letter, while the form of footnotes would remain the same. This should be possible using BIBTEX's standard cross-ref field, with each letter entry pointing to a collection or book entry, for example.

I shall discuss cross references at length later (**crossref** and **xref**, below), but I should mention here that letter is one of the entry types in which a **crossref** or an xref field automatically results in special shortened forms in notes and bibliography if more than one piece from a single collection is cited. (The other entry types are incollection and inproceedings; see 14.113 for the *Manual*'s specification.) This ordinarily won't be an issue for letter entries in the bibliography, as individual letters aren't included there, but it is operative in notes, where you can disable it simply by not using a crossref or an xref field. In the crossref docs, below, I recommend a way of keeping the individual letters from turning up in the bibliography, involving the use of the keywords field.

- **manual** This is the second of two traditional BIBTEX entry types that the *Manual* suggests formatting as books, the other being booklet. As with this latter, I have retained it in biblatex-chicago-notes for backward compatibility, its main peculiarity being that, in the absence of a named author, the organization producing the manual will be printed both as author and as publisher. If you are using Biber you no longer need a sortkey field to aid biblatex's alphabetization routines, as the style takes care of this for you (cf. section 4.4.1, below). You also don't need to provide a shortauthor field, as the style will automatically use organization in the absence of anything else. Of course, if you were to use a book entry for such a reference, then you would need to define both author and publisher using the name you here might have put in organization. (See 14.92; chicago:manual, dyna:browser, natrecoff:camera.)
 - **misc** As its name suggests, the misc entry type was designed as a hold-all for citations that didn't quite fit into other categories. In biblatex-chicago-notes, I have somewhat extended its applicability, while retaining its traditional use. Put simply, with no entrysubtype field, a misc entry will retain backward compatibility with the standard styles, so the usual howpublished, version, and type fields are all available for specifying an otherwise unclassifiable text, and the title will be italicized. (The *Manual*, you may wish to note, doesn't give specific instructions on how such citations should be formatted, so when using the Chicago style I would recommend you have recourse to this traditional entry type as sparingly as possible.)

If you do provide an entrysubtype field, the misc type provides a means for citing unpublished letters, memoranda, private contracts, wills, interviews, and the like, making it something of an unpublished analogue to the letter, article, and review entry types (which see). It also works well for presenting online audio pieces, particularly dated ones, like speeches. Typically, such an entry will cite part of an archive, and equally typically the text cited won't have a specific title, but only a generic one, whereas an unpublished entry will ordinarily have a specific author and title, and won't come from a named archive. The misc type with an entrysubtype defined is the least formatted of all those specified by the *Manual*, so titles are in plain text, and any location details take no parentheses in full footnotes. (It is quite possible, though somewhat unusual, for archival material to have a specific title, rather than a generic one. In these cases, you will need to enclose the title inside a \mkbibquote command manually. Cf. coolidge:speech, roosevelt:speech, shapey:partita.)

If you are wondering what to put in entrysubtype, the answer is, currently, anything at all. You no longer need to put the exact string letter there in order to move the date into closer proximity with the title. Indeed, recent reconsideration of the *Manual* has suggested that the distinction to be drawn in this class of material hasn't to do with *where* the date is presented but, rather, with *how* it is presented. As I now understand the specification, it draws a distinction between archival material that is "letter-like" (letters, memoranda, reports, telegrams) and that which isn't (interviews, wills, contracts, speeches, or even personal communications you've received and which you wish to cite). This may not always be the easiest distinction to draw, and in previous releases of biblatex-chicago I have been ignoring it, but once you've decided to classify it one way or the other you put the date in the origdate field for letters, etc., and into the date field for the others.

In effect, whether it's a letter entry or a "letter-like" misc entry (with entrysubtype), it is by using the origdate field that you identify when it was written, and the origlocation, if needed, identifies where it was written. Other sorts of misc entry (with entrysubtype) use the date field (but still the origlocation). This maintains consistency of usage across entry types and also, I hope, improves compliance when using the misc type for citing archival material. Remember, however, that without an entrysubtype the entry will be treated as traditional misc, and the title italicized. In addition, defining entrysubtype activates the automatic capitalization mechanism in the title field of misc entries, on which see **\autocap** below. (See 14.219-220, 14.231, 14.232-242; creel:house, dinkel:agassiz, spock:interview.)

As in letter entries, the titles of unpublished letters are of the form Author to Recipient, and further information can be given in the titleaddon field, including the abbreviation "n.d." (or \bibstring{nodate}) for undated examples. The note, organization, institution, and location fields (in ascending order of generality) allow the specification of which manuscript collection now holds the letter, though the *Manual* specifies (14.238) that well-known depositories don't usually need a city, state or country specified. (The traditional misc fields are all still available, also.) Both the long and short note forms can use the same title, but in both cases you may need to use the \headlesscite command to avoid the awkward repetition of the author's name, though that name will always appear in the bibliography (creel:house). If you want to include the date of a letter in a short note, I have provided the \letterdatelong command for inclusion in the postnote field of the citation command. (The standard biblatex command \printdate will work if you need to do the same for interviews.)

As with letter entries, the *Manual* (14.233) suggests that bibliography entries contain only the name of the manuscript collection, unless only one item from that collection is cited. The crossref field can be used, as well as the keywords mechanism (or skipbib option) for preventing the individual items from turning up in the bibliography. Obviously, this is a matter for your discretion, and if you're using only short notes (see the short option, section 4.4.3 below), you may feel the need to include more information in the note if the bibliography doesn't contain a full reference to an individual item.

Finally, if the misc entry isn't a letter, remember that, as in article and review entries, words like interview or memorandum needn't be capitalized unless they follow a period — the automatic capitalization routines (with the title field starting with a lowercase letter [see dinkel:agassiz, spock:interview, and **\autocap**]) will ensure correctness. In all this class of archived material, the *Manual* (14.232) quite specifically requires more consistency within your own work than conformity to some external standard, so it is the former which you should pursue. I hope that biblatex-chicago-notes proves helpful in this regard.

music The 16th edition of the *Manual* has revised its recommendations more for this type than for any other, so the notes which follow present several large changes that you'll need to make to your .bib files. The good news is that some, though by no means all, of those changes involve considerable simplifications. Music is one of three audiovisual entry types, and is intended primarily to aid in the presentation of musical recordings that do not have a video component, though it can also include audio books (auden:reading). A DVD or VHS of an opera or other performance, by contrast, should use the **video** type instead, while an online music video will probably need an **online** entry. (Cf. online and video; handel:messiah, horowitz:youtube.) Because biblatex — and BIBTEX before it — were designed primarily for citing book-like objects, some choices needed to be made in assigning the various roles found on the back of a CD to the

fields in a typical .bib entry. I have also implemented several bibstrings to help in identifying these roles within entries. If you can think of a simpler way to distribute the roles, please let me know, so that I can consider making changes before anyone gets used to the current equivalences.

These equivalences, in summary form, are:

- author = composer, songwriter, or performer(s), depending on whom you wish to emphasize by placing them at the head of the entry.
- editor, editora, editorb = conductor, director or performer(s). These will ordinarily follow the title of the work, though the usual useauthor and useeditor options can alter the presentation within an entry. Because these are non-standard roles, you will need to identify them using the following:
- editortype, editoratype, editorbtype: The most common roles, all associated with specific bibstrings (or their absence), will be conductor, director, producer, and, oddly, none. The last is particularly useful when identifying the group performing a piece, as it usually doesn't need further specifying and this role prevents biblatex from falling back on the default editor bibstring.
- title, booktitle, maintitle: As with the other audiovisual types, music serves as an analogue both to books and to collections, so the title will either be, e.g., the album title or a song title, in which latter case the album title would go into booktitle. The maintitle might be necessary for something like a box set of *Complete Symphonies*.
- publisher, series, number: These three closely-associated fields are intended for presenting the catalog information provided by the music publisher. The 16th edition generally only requires the series and number fields (nytrumpet:art), which hold the record label and catalog number, respectively. Alternatively, publisher would function as a synonym for series (holiday:fool), but there may be cases when you need or want to specify a publisher in addition to a label, as was the general requirement in the 15th edition. (This might happen, for example, when a single publisher oversees more than one label.) You can certainly put all of this information into one of the above fields, but separating it may help make the .bib entry more readable.
- howpublished/pubstate: The 16th edition of the *Manual* (14.276) has rather helpfully eliminated any reference to the specialized symbols (& C) found in the 15th edition for presenting publishing information for musical recordings. This means that the howpublished field is now obsolete, and you can remove it from music entries in your .bib files. The pubstate field, therefore, can revert to its standard use for identifying reprints. In music entries, putting reprint here will transform the origdate from a recording date for an entire album into an original release date for that album, notice of which will be printed towards the end of a note or bibliography entry.
- date, eventdate, origdate: As though to compensate for the simplification I've just mentioned, the Manual now states that "citations without a date are generally unacceptable" (14.276). Finding a date may take some research, but they will basically fall into two types, i.e., the date(s) of the recording or the copyright / publishing date(s). Recording dates go either in origdate (for complete albums) or eventdate (for individual tracks). The copyright or publishing dates go either in the date field (which applies to the current medium you are citing) or in the origdate field (which refers to the original release date). You may have noticed that the origdate has two slightly different uses you can tell biblatex-chicago which sort you intend by using the string reprint in the publistate field, which transforms the origdate

from a recording date into an original release date. The style will automatically prepend the bibstring recorded to the eventdate or, in the absence of this pubstate mechanism, to the origdate, or even to both, but you can modify what is printed there using the new userd field, which acts as a sort of date type modifier. In music entries, userd will be prepended to an eventdate if there is one, barring that to the origdate, and to a possible urldate absent those two, the latter behavior being the standard across most other entry types. (See floyd:atom, nytrumpet:art.)

type: As in all the audiovisual entry types, the type field holds the medium of the recording, e.g., vinyl, 33 rpm, 8-track tape, cassette, compact disc, mp3, ogg vorbis.

The entries in notes-test.bib should at least give you a good idea of how this all works, and that file also contains an example of an audio book presented in a music entry. If you browse the examples in the *Manual* you will see some variations in the formatting choices there, from which I have made selections for biblatex-chicago. It wasn't always clear to me that these variations were rules as opposed to possibilities, so I've ignored some of them in the code. Arguments as to why I'm wrong will, of course, be entertained. (Cf. 14.276–77; eventdate, origdate, userd; auden:reading, beethoven:sonata29, bernstein:shostakovich, floyd:atom, holiday:fool, nytrumpet:art, rubinstein:chopin.)

online The Manual's scattered instructions (14.4–13, 14.166–169, 14.184–185, 14.200, 14.223, 14.243–246) for citing online materials are slightly different from those suggested by standard biblatex. Indeed, this is a case where complete backward compatibility with other biblatex styles may be impossible, because as a general rule the Manual considers relevant not only where a source is found, but also the nature of that source, e.g., if it's an online edition of a book (james:ambassadors), then it calls for a book entry. Even if you cite an intrinsically online source, if that source is structured more or less like a conventional printed periodical, then you'll probably want to use article or review instead of online (stenger:privacy, which cites CNN.com). The 16th edition's suggestions for blogs lend themselves well to the article type, too, while comments become, logically, reviews (14.243-6; ellis:blog, ac:comment). Otherwise, for online documents not "formally published," the online type is usually the best choice (evanston:library, powell:email). Online videos, in particular short pieces or those that present excerpts of some longer event or work, and also online interviews, usually require this type, too. (See harwood:biden, horowitz:youtube, pollan:plant, but cp. weed:flatiron, a complete film, which requires a video entry. Online audio pieces, particularly dated ones from an archive, work best as misc entries with an entrysubtype: coolidge:speech, roosevelt:speech.) Some online materials will, no doubt, make it difficult to choose an entry type, but so long as all locating information is present, then perhaps that is enough to fulfill the specification, or at least so I'd like to hope.

Constructing an online .bib file entry is much the same as in biblatex. The title field would contain the title of the page, the organization field could hold the title or owner of the whole site. If there is no specific title for a page, but only a generic one (powell:email), then such a title should go in titleaddon, not forgetting to begin that field with a lowercase letter so that capitalization will work out correctly. It is worth remarking here, too, that the 16th edition of the *Manual* (14.7–8) prefers, if they're available, revision dates to access dates when documenting online material. See urldate and userd, below.

patent The *Manual* is very brief on this subject (14.230), but very clear about which information it wants you to present, so such entries may not work well with other biblatex styles. The important date, as far as Chicago is concerned, is the filing date. If a patent has been filed but not yet granted, then you can place the filing date in either the date field or the origdate field, and biblatex-chicago-notes will automatically prepend the bibstring patentfiled to it. If

the patent has been granted, then you put the filing date in the origdate field, and you put the date it was issued in the date field, to which the bibstring patentissued will automatically be prepended. (In other words, you no longer need to use a hand-formatted addendum field, though you can place additional information in that field if desired, and it will be printed in close association with the dates.) The patent number goes in the number field, and you should use the standard biblatex bibstrings in the type field. Though it isn't mentioned by the *Manual*, biblatex-chicago-notes will print the holder after the author, if you provide one. Finally, the 16th edition of the *Manual* has removed the quotation marks from around patent titles, and also capitalized them sentence-style, both of which seem to be the generally-accepted conventions. The former requires no intervention from you, but the latter may mean revision of the title field to provide the lowercase letters manually. See petroff:impurity.

- **periodical** This is the standard biblatex entry type for presenting an entire issue of a periodical, rather than one article within it. It has the same function in biblatexchicago-notes, and in the main uses the same fields, though in keeping with the system established in the article entry type (which see) you'll need to provide entrysubtype magazine if the periodical you are citing is a "newspaper" or "magazine" instead of a "journal." Also, remember that the note field is the place for identifying strings like "special issue," with its initial lowercase letter to activate the automatic capitalization routines. (See *Manual* 14.187; good:wholeissue.)
- **reference** This entry type is aliased to collection by the standard biblatex styles, but I intend it to be used in cases where you need to cite a reference work but not an alphabetized entry or entries in that work. This could be because it doesn't contain such entries, or perhaps because you intend the citation to appear in a bibliography rather than in notes. Indeed, the only differences between it and inreference are the lack of a lista field to present an alphabetized entry, and the fact that any postnote field will be printed verbatim, rather than formatted as an alphabetized entry. (See mla:style for an example of a reference work that uses numbered sections rather than alphabetized entries, and that appears in the bibliography as well.)
 - **report** This entry type is a biblatex generalization of the traditional BIBTEX type techreport. Instructions for such entries are rather thin on the ground in the *Manual* (14.249), so I have followed the generic advice about formatting it like a book, and hope that the results conform to the specification. Its main peculiarities are the institution field in place of a publisher, the type field for identifying the kind of report in question, and the isrn field containing the International Standard Technical Report Number of a technical report. As in standard biblatex, if you use a techreport entry, then the type field automatically defaults to \bibstring{techreport}. As with booklet and manual, you can also use a book entry, putting the report type in note and the institution in publisher. (See herwign:office.)
 - **review** The review entry type was added to biblatex 0.7, and it certainly eases the task of coping with the *Manual*'s complicated requirements for citing periodicals of all sorts, though it doesn't, I admit, eliminate all difficulties. As its name suggests, this entry type was designed for reviews published in periodicals, and if you've already read the article instructions above if you haven't, I recommend doing so now you'll know that review serves as well for citing other sorts of material with generic titles, like letters to the editor, obituaries, interviews, online comments and the like. The primary rule is that any piece that has only a generic title, like "review of …," "interview with …," or "obituary of …," calls for the review type. Any piece that also has a specific title, e.g., "Lost in BIBT_EX,' an interview with …," requires an article entry. (This assumes the text is found in a periodical of some sort. Were it found in a book, then the incollection type would serve your needs, and you could use title and titleaddon there. While

we're on the topic of exceptions, the *Manual* includes an example — 14.221 — where the "Interview" part of the title is considered a subtitle rather than a titleaddon, said part therefore being included inside the quotation marks and capitalized accordingly. Not having the journal in front of me I'm not sure what prompted that decision, but biblatex-chicago would obviously have no difficulty coping with such a situation.)

Once you've decided to use review, then you need to determine which sort of periodical you are citing, the rules for which are the same as for an article entry. If it is a "magazine" or a "newspaper", then you need an entry-subtype magazine. The generic title goes in title and the other fields work just as as they do in an article entry with the same entrysubtype, including the substitution of the journaltitle for the author if the latter is missing. (See 14.202–203, 14.205, 14.208, 14.214–217, 14.221; barcott:review, bundy:macneil, Clemens:letter, gourmet:052006, kozinn:review, nyt:obittrevor, nyt:trevorobit, unsigned:ranke, wallraff:word.) If, on the other hand, the piece comes from a "journal," then you don't need an entrysubtype. The generic title goes in title, and the remaining fields work just as they do in a plain article entry. (See 14.215; ratliff:review.)

Most of the onerous details are the same as I described them in the **article** section above, but I'll repeat some of them briefly here. If anything in the title needs formatting, you need to provide those instructions yourself, as the default is completely plain. Author-less reviews are treated just like similar newspaper articles — in short notes and in the bibliography the journaltitle replaces the author and heads the entry, while in long notes the title comes first. The sorting of such entries is an issue, solved if you use Biber as your backend, and otherwise requiring manual intervention with a sortkey or the like (14.217; gourmet:052006, nyt:trevorobit, unsigned:ranke, and see \DeclareSortingScheme in section 4.4.1, below.). As in misc entries with an entrysubtype, words like "interview," "review," and "letter" only need capitalization after a full stop, i.e., ordinarily in a bibliography and not a note, so biblatex-chicago-notes automatically deals with this problem itself if you start the title field with a lowercase letter. The file notes-test.bib and the documentation of \autocap will provide guidance here.

One detail of the review type is new, and responds to the needs of the 16th edition of the *Manual*. As I mentioned above, blogs are best treated as articles with magazine entrysubtype, whereas comments on those blogs — or on any similar sort of online content — need the review type with the same entrysubtype. What they will frequently also need is a date of some sort closely associated with the comment (14.246; ac:comment), so I have now included the eventdate in review entries for just this purpose. It will be printed just after the author and before the title. If you need a timestamp in addition, then the nameaddon field is the place for it, but you'll have to provide your own parentheses, in order to preserve the possibility of providing pseudonyms in square brackets that is the standard function of this field in all other entry types, and possibly in the the review type as well.

suppbook This is the entry type to use if the main focus of a reference is supplemental material in a book or in a collection, e.g., an introduction, afterword, or forward, either by the same or a different author. In previous releases of biblatex-chicago these three just-mentioned types of material, and only these three types, could be referenced using the introduction, afterword, or foreword fields, a system that required you simply to define one of them in any way and leave the others undefined. The macros don't use the text provided by such an entry, they merely check to see if one of them is defined, in order to decide which sort of preor post-matter is at stake, and to print the appropriate string before the title in long notes, short notes, list of shorthands, and bibliography. I have retained this mechanism both for backward compatibility and because it works without modification across multiple languages, but have also added functionality which allows you to cite any sort of supplemental material whatever, using the

type field. Under this system, simply put the nature of the material, including the relevant preposition, in that field, beginning with a lowercase letter so biblatex can decide whether it needs capitalization depending on the context. Examples might be "preface to" or "colophon of." (Please note, however, that unless you use a \bibstring command in the type field, the resultant entry will not be portable across languages.)

There are a few other rules for constructing your .bib entry. The author field refers to the author of the introduction or afterword, while bookauthor refers to the author of the main text of the work, if the two differ. For the 16th edition, the *Manual* requires the inclusion of the page range of the part in question, though *only* in the bibliography. I have followed this advice literally, so the pages field of a suppbook entry won't automatically appear in a long note. If you wish to include those pages in a note, then you'll need to repeat them in the postnote field of the citation command.

Finally, if the focus of the reference is the main text of the book, but you want to mention the name of the writer of an introduction or afterword for bibliographical completeness, then the normal biblatex rules apply, and you can just put their name in the appropriate field of a book entry, that is, in the foreword, afterword, or introduction field. (See *Manual* 14.116; polakow:afterw, prose:intro).

- **suppcollection** This fulfills a function analogous to **suppbook**. Indeed, I believe the **suppbook** type can serve to present supplemental material in both types of work, so this entry type is an alias to **suppbook**, which see.
- **suppperiodical** This type, new in biblatex o.8, is intended to allow reference to generically-titled works in periodicals, such as regular columns or letters to the editor. Previous releases of biblatex-chicago-notes provided the review type for this purpose, and now you can use either of these, as I've added suppperiodical as an alias of review. Please see above under **review** for the full instructions on how to construct a .bib entry for such a reference.
 - **unpublished** The unpublished entry type works largely as it does in standard biblatex, though it's worth remembering that you should use a lowercase letter at the start of your note field (or perhaps an \autocap command in the somewhat contradictory howpublished, if you have one) for material that wouldn't ordinarily be capitalized except at the beginning of a sentence (nass:address).
 - video This is the last of the three audiovisual entry types, and as its name suggests it is intended for citing visual media, be it films of any sort or TV shows, broadcast, on the Net, on VHS, DVD, or Blu-ray. As with the music type discussed above, certain choices had to be made when associating the production roles found, e.g., on a DVD, to those bookish ones provided by biblatex. Here are the main correspondences:
 - author: This will not infrequently be left undefined, as the director of a film should be identified as such and therefore placed in the editor field with the appropriate editortype (see below). You will need it, however, to identify the composer of, e.g., an oratorio on VHS (handel:messiah), or perhaps the provider of commentaries or other extras on a film DVD (cleese:holygrail).
 - editor, editora, editorb = director or producer, or possibly the performer or conductor in recorded musical performances. These will ordinarily follow the title of the work, though the usual useauthor and useeditor options can alter the presentation within an entry. Because these are non-standard roles, you will need to identify them using the following:
 - editortype, editoratype, editorbtype: The most common roles, all associated with specific bibstrings (or their absence), will likely be director, produ-

cer, and, oddly, none. The last is particularly useful if you want to identify performers, as they usually don't need further specifying and this role prevents biblatex from falling back on the default editor bibstring.

- title, titleaddon, booktitle, booktitleaddon, maintitle: As with the other audiovisual types, video serves as an analogue both to books and to collections, so the title may be of a whole film DVD or of a TV series, or it may identify one episode in a series or one scene in a film. In the latter cases, the title of the whole would go in booktitle. The booktitleaddon field, in a change from the 15th edition, may be useful for specifying the season and/or episode number of a TV series, while the titleaddon is for for any information that needs to come between the title and the booktitle (cleese:holygrail, friends:leia, handel:messiah). As in the music type, maintitle may be necessary for a boxed set or something similar.
- date, eventdate, origdate: As with music entries, in order to follow the specifications of the 16th edition of the Manual, I have had to provide three separate date fields for citing video sources, but their uses differ somewhat between the two types. In both, the date will generally provide the publishing or copyright date of the medium you are referencing. The eventdate will most commonly present either the broadcast date of a particular TV program, or the recording/performance date of, for example, an opera on DVD. The style will automatically prepend the bibstring broadcast to such a date, though you can use the new field userd to change the string printed there. (Absent an eventdate, the userd field in video entries will revert to modifying the urldate, the standard behavior in all but these and music entries.) The origdate has more or less the same function, and appears in the same places, as it does in standard booklike entries, providing the date of first release of a film, though there isn't any reprint string associated with it in this entry type. Cf. friends:leia, handel:messiah, hitchcock:nbynw.

type: As in all the audiovisual entry types, the type field holds the medium of the title, e.g., 8 mm, VHS, DVD, Blu-ray, MPEG.

As with the music type, entries in notes-test.bib should at least give you a good idea of how all this works. (Cf. 14.279–80; loc:city, weed:flatiron.)

4.2 Entry Fields

The following discussion presents, in alphabetical order, a complete list of the entry fields you will need to use biblatex-chicago-notes. As in section 4.1, I shall include references to the numbered paragraphs of the *Chicago Manual of Style*, and also to the entries in notes-test.bib. Many fields are most easily understood with reference to other, related fields. In such cases, cross references should allow you to find the information you need.

- addendum As in standard biblatex, this field allows you to add miscellaneous information to the end of an entry, after publication data but before any url or doi field. In the patent entry type (which see), it will be printed in close association with the filing and issue dates. In any entry type, if your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and the style will take care of the rest. Cf. note. (See *Manual* 14.119, 14.166–168; davenport:attention, natrecoff:camera.)
- afterword In most circumstances, this field will function as it does in standard biblatex, i.e., you should include here the author(s) of an afterword to a given work. The *Manual* suggests that, as a general rule, the afterword would need to be of significant importance in its own right to require mentioning in the reference apparatus, but this is clearly a matter for the user's judgment. As in biblatex, if the name given here exactly matches that of an editor and/or a translator, then biblatex-chicago-notes will concatenate these fields in the formatted references.

As noted above, however, this field has a special meaning in the suppbook entry type, used to make an afterword, foreword, or introduction the main focus of a citation. If it's an afterword at issue, simply define afterword any way you please, leave foreword and introduction undefined, and biblatex-chicago-notes will do the rest. Cf. foreword and introduction. (See *Manual* 14.91, 14.116; polakow:afterw.)

- annotation At the request of Emil Salim, biblatex-chicago-notes has, as of version 0.9, added a package option (see annotation below, section 4.4.3) to allow you to produce annotated bibliographies. The formatting of such a bibliography is currently fairly basic, though it conforms with the *Manual's* minimal guidelines (14.59). The default in chicago-notes.cbx is to define \DeclareFieldFormat{annotation} using \par\nobreak \vskip \bibitemsep, though you can alter it by re-declaring the format in your preamble. The page-breaking algorithms don't always give perfect results here, but the default formatting looks, to my eyes, fairly decent. In addition to tweaking the field formatting you can also insert \par (or even \vadjust{\eject}) commands into the text of your annotations to improve the appearance. Please consider the annotation option a work in progress, but it is usable now. (N.B.: The BIBTEX field annote serves as an alias for this.)
 - **annotator** I have implemented this biblatex field pretty much as that package's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. commentator.
 - author For the most part, I have implemented this field in a completely standard BIBTEX fashion. Remember that corporate or organizational authors need to have an extra set of curly braces around them (e.g., {{Associated Press}}) to prevent BIBTEX from treating one part of the name as a surname (14.92, 14.212; assocpress:gun, chicago:manual). If there is no author, then biblatex-chicago-notes will look, in sequence, for an editor, translator, or compiler (actually namec, currently) and use that name (or those names) instead, followed by the appropriate identifying string (esp. 14.87, also 14.76, 14.126, 14.132, 14.189; boxer:china, brown:bremer, harley:cartography, schellinger:novel, sechzer:women, silver:gawain, soltes: georgia). Please note that when a namec appears at the head of an entry, and you're not using Biber, you'll need to assist biblatex's sorting algorithms by providing a sortkey field to ensure correct alphabetization in the bibliography. (See \DeclareSortingScheme in section 4.4.1, below.) A shortauthor entry is no longer necessary to provide a namec at the head of the short note form — biblatex-chicago now takes care of this automatically.

In the rare cases when this substitution mechanism isn't appropriate, you have two options: either you can (chaucer:liferecords) put all the information into a note field rather than individual fields, or you can use the biblatex options useauthor=false, useeditor=false, usetranslator=false, and usecompiler= false in the options field (chaucer:alt). If you look at the chaucer:alt entry in notes-test.bib, you'll notice a peculiarity of this system of toggles. In order to ensure that the title of the book appears at the head of the entry, you need to use all four of the toggles, even though the entry contains no translator. Internally, biblatex-chicago is either searching for an author-substitute, or it is skipping over elements of the ordered, unidirectional chain author -> editor -> translator -> compiler -> title. If you don't include usetranslator=false in the options field, then the package begins its search at translator and continues on to namec, even though you have usecompiler=false in options. The result will be that the compilers' names will appear at the head of the entry. If you want to skip over parts of the chain, you must turn off *all* of the parts up to the one you wish printed. (Another peculiarity of the system, if you're using Biber, is that setting the Chicago-specific usecompiler option to false doesn't remove namec from the sorting list, whereas the other standard biblatex toggles do remove their names from the sorting list, so in the chaucer:alt case you need the sortkey field. See \DeclareSortingScheme in section 4.4.1, below.)

This system of toggles, then, can turn off biblatex-chicago-notes's mechanism for finding a name to place at the head of an entry, but it also very usefully adds the possibility of citing a work with an author by its editor, compiler or translator instead (14.90; eliot:pound), something that wasn't possible before. For full details of how this works, see the editortype documentation below. (Of course, in collection and proceedings entry types, an author isn't expected, so there the editor is required, as in standard biblatex. Also, in article or review entries with entrysubtype magazine, the absence of an author triggers the use of the journaltitle in its stead. See those entry types for further details.)

NB: The *Manual* provides specific instructions for formatting the names of both anonymous and pseudonymous authors (14.79–84). In the former case, if no author is known or guessed at, then it may simply be omitted (virginia:plantation). The use of "Anonymous" as the name is "generally to be avoided," but may in some cases be useful "in a bibliography in which several anonymous works need to be grouped." If, on the other hand, "the authorship is known or guessed at but was omitted on the title page," then you need to use the authortype field to let biblatex-chicago-notes know this fact. If the author is known (hors-ley:prosodies), then put anon in the authortype field, if guessed at (cook:sotweed) put anon? there. (In both cases, biblatex-chicago-notes tests for these *exact* strings, so check your typing if it doesn't work.) This will have the effect of enclosing the name in square brackets, with or without the question mark indicating doubt. As long as you have the right string in the authortype field, biblatex-chicago-notes will also do the right thing automatically in the short note form.

In nameaddon most entry types (except customc and review, which see), this field furnishes the means to cope with the case of pseudonymous authorship. If the author's real name isn't known, simply put pseud. (or \bibstring{pseudonym}) in that field (centinel:letters). If you wish to give a pseudonymous author's real name, simply include it there, formatted as you wish it to appear, as the contents of this field won't be manipulated as a name by biblatex (lecarre:quest). If you have given the author's real name in the author field, then the pseudonym goes in nameaddon, in the form Firstname Lastname, pseud. (creasey:ashe:blast, creasey:morton:hide, creasey:york:death). This latter method will allow you to keep all references to one author's work under different pseudonyms grouped together in the bibliography, as recommended by the *Manual*, though it is now recommended that, whichever system you employ, you include a crossreference from one name to the other in the bibliography. You can do this using a customc entry (ashe:creasey, morton:creasey, york:creasey).

- authortype In biblatex-chicago, this field serves a function very much in keeping with the spirit of standard biblatex, if not with its letter. Instead of allowing you to change the string used to identify an author, the field allows you to indicate when an author is anonymous, that is, when his or her name doesn't appear on the title page of the work you are citing. As I've just detailed under author, the Manual generally discourages the use of "Anonymous" as an author, preferring that you simply omit it. If, however, the name of the author is known or guessed at, then you're supposed to enclose that name within square brackets, which is exactly what biblatex-chicago does for you when you put either anon (author known) or anon? (author guessed at) in the authortype field. (Putting the square brackets in yourself doesn't work right, hence this mechanism.) The macros test for these exact strings, so check your typing if you don't see the brackets. Assuming the strings are correct, biblatex-chicago-notes will also automatically do the right thing in the short note form. Cf. author. (See 14.80-81; cook:sotweed, horsley:prosodies.)
- **bookauthor** For the most part, as in biblatex, a bookauthor is the author of a booktitle, so that, for example, if one chapter in a book has different authorship from the book as a whole, you can include that fact in a reference (will:cohere). Keep in mind, however, that the entry type for introductions, forewords and afterwords (suppbook) uses bookauthor as the author of title (polakow:afterw, prose:intro).

bookpagination This, a standard biblatex field, allows you automatically to prefix the appropriate string to information you provide in a pages field. If you leave it blank, the default is to print no identifying string (the equivalent of setting it to none), as this is the practice the *Manual* recommends for nearly all page numbers. Even if the numbers you cite aren't pages, but it is otherwise clear from the context what they represent, you can still leave this blank. If, however, you specifically need to identify what sort of unit the pages field represents, then you can either hand-format that field yourself, or use one of the provided bibstrings in the bookpagination field. These bibstrings currently are column, line, paragraph, page, section, and verse, all of which are used by biblatex's standard styles.

There are two points that may need explaining here. First, all the bibstrings I have just listed follow the Chicago specification, which may be confusing if they don't produce the strings you expect. Second, remember that bookpagination applies only to the pages field — if you need to format a citation's postnote field, then you must use pagination, which see (10.43–44, 14.154–163).

- **booksubtitle** The subtitle for a booktitle. See the next entry for further information.
 - **booktitle** In the bookinbook, incollection, inproceedings, and letter entry types, the booktitle field holds the title of the larger volume in which the title itself is contained as one part. It is important not to confuse this with the maintitle, which holds the more general title of multiple volumes, e.g., *Collected Works*. It is perfectly possible for one .bib file entry to contain all three sorts of title (euripides:orestes, plato:republic:gr). You may also find a booktitle in other sorts of entries (e.g., book or collection), but there it will almost invariably be providing information for the BIBTEX cross-referencing apparatus (prairie:state), which I discuss below (**crossref**).
- **booktitleaddon** An annex to the booktitle. It will be printed in the main text font, without quotation marks. If your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago-notes will automatically do the right thing.
 - **chapter** This field holds the chapter number, mainly useful only in an inbook or an incollection entry where you wish to cite a specific chapter of a book (ashbrook:brain).
 - **commentator** I have implemented this biblatex field pretty much as that package's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. annotator.
 - Biblatex uses the standard BIBTFX cross-referencing mechanism, and has also crossref introduced a modified one of its own (xref). The crossref field works exactly the same as it always has, while xref attempts to remedy some of the deficiencies of the usual mechanism by ensuring that child entries will inherit no data at all from their parents. Having said all that, a few further instructions may be in order for users of both biblatex and biblatex-chicago. First, remember that fields in a collection entry, for example, differ from those in an incollection entry. In order for the latter to inherit the booktitle field from the former, the former needs to have such a field defined, even though a collection entry has no use itself for such an entry (see ellet:galena, keating:dearborn, lippincott:chicago, and prairie:state). Note also that an entry with a crossref field will mechanically try to inherit all applicable fields from the entry it cross-references. In the case of ellet:galena et al., you can see that this includes the subtitle field found in prairie:state, which would then, quite incorrectly, be added to the title of ellet:galena. In cases like these, you could just make sure that prairie:state didn't contain such a field, by placing the entire title + subtitle in the title field, separated by a colon. You'd certainly need to provide a shorttitle field for short footnotes, if you chose this solution. Alternatively, as you can see in ellet:galena, you can just define an empty subtitle field to prevent it inheriting the unwanted subtitle from prairie:state.

Turning now more narrowly to biblatex-chicago-notes, the *Manual* (14.113) specifies that if you cite several contributions to the same collection, all (including the collection itself) may be listed separately in the bibliography, which the package does automatically, using the default inclusion threshold of 2 in the case both of crossref'ed and xref'ed entries. (The familiar \nocite command may also help in some circumstances.) In footnotes the specification suggests that, after a citation of any one contribution to the collection, all subsequent contributions may, even in the first, long footnote, be cited using a slightly shortened form, thus "avoiding clutter." In the bibliography the abbreviated form is appropriate for all the child entries. The current version of biblatex-chicago-notes implements these instructions, but only if you use a crossref or an xref field, and only in incollection, inproceedings, or letter entries (on the last named, see just below). If you look at ellet:galena, keating:dearborn, lippincott:chicago, and prairie:state you'll see this mechanism in action in both notes and bibliography. If you wish to disable this, then simply don't use a crossref or xref field in your entries.

There is a subtlety involved in this mechanism that I should address here. Andrew Goldstone has pointed out to me some inaccuracies in the package's treatment of these abbreviated citations, both in notes and bibliography. Most of the changes I've made won't affect users in any way, only the actual printed output, but if you refer separately to chapters in a single-author book, then the shortened part of the reference, to the whole book, won't repeat the author's name before the title of the whole. If, however, you refer separately to parts of a collection or proceedings, even when the editor of the collection is the same as the author of an essay in the collection, you will see the name repeated before the abbreviated part referencing the whole parent volume. Because the code tests for entry type, if you don't use collection or proceedings for the whole volume, you'll not get the repeated name, so there may be corner cases where careful choice of the parent entry type gets you what you want.

A published collection of letters requires somewhat different treatment (14.117). If you cite more than one letter from the same collection, then the Manual specifies that only the collection itself should appear in the bibliography. In footnotes, you can use the letter entry type, documented above, for each individual letter, while the collection as a whole may well require a book entry. I have, after some consideration, implemented the system of shortened references in letter entries, even though the Manual doesn't explicitly require it. As with incollection and inproceedings, mere use of a crossref or xref field will activate this mechanism, while avoidance of said fields will disable it. (See white:ross:memo, white:russ, and white:total, for examples of the xref field in action in this way, and please note that the second of these entries is entirely fictitious, provided merely for the sake of example.) How then to keep the individual letters from appearing in the bibliography? The simplest mechanism is one provided by biblatex, which involves the keywords field. Choose a keyword for any entry you wish excluded from the bibliography — I've chosen original, for reasons that will become clearer later — then in the optional argument to the \printbibliography command in your document include, e.g., notkeyword=original. (Cf. keywords and userf.)

If you look closely at the .bib entries for white:ross:memo and white:russ, you'll see that, despite using xref instead of crossref, the notes referring to them inherit data from the parent (white:total). The citation mechanism is making a separate call to the parent's .bib entry, formatting the information there to fill out the bare data provided by the child, but this only happens in letter, incollection, and inproceedings entries. It is perfectly possible that other sorts of entries may make use of crossref or xref fields — inbook and bookinbook come to mind — but such entries will not result in the activation of shortened references in notes and bibliography, nor, when using xref, in the inheritance I have just pointed out. This is how I interpret the specification, though I'm open to persuasion on this score.

I should also take this opportunity to mention that you need to be careful when using the shorthand field in conjunction with the crossref or xref fields, bearing in mind the complicated questions of inheritance posed by all such cross-references, most especially in letter, incollection, and inproceedings entries. A shorthand field in a parent entry is, at least in the current state of biblatex-chicago-notes, a bad idea.

date This field may be used to specify an item's complete date of publication, in Iso8601 format, i.e., yyyy-mm-dd. It may also be used to specify a date range, according to Lehman's instructions in § 2.3.8 of biblatex.pdf. Please be aware, however, that Biber is somewhat more exacting when parsing the date field than BIBTEX, so a field looking like 1968/75 will simply be ignored — you need 1968/1975 instead. If you want to present a more compressed year range, or more generally if only part of a date is required, then the month and year fields may be more convenient. The latter may be particularly useful in some entries because it can hold more than just numerical data, in contrast to date itself. Cf. the misc entry type in section 4.1 above for how to use this field to distinguish between two classes of archival material. See also origdate and urldate.

(Users of the Chicago author-date style who wish to minimize the labor needed to convert a .bib database for the notes & bibliography style should be aware that, in this release, the latter style includes compatibility code for the cmsdate (silently ignored) and switchdates options, along with the mechanism for reversing date and origdate. This means that you can, in theory, leave all of this alone in your .bib file when making the conversion, though I'm retaining the right to revoke this if the code in question demonstrably interferes with the functioning of the notes & bibliography style.)

- **day** This field, as of biblatex 0.9, is obsolete, and will be ignored if you use it in your .bib files. Use date instead.
- doi Standard biblatex field, providing the Digital Object Identifier of the work. The 16th edition of the *Manual* specifies that, given their relative permanence compared to URLs, "authors should include DOIs rather than URLs for sources that make them readily available" (14.6). (14.184; friedman:learning). Cf. url.
- edition Standard biblatex field. If you enter a plain cardinal number, biblatex will convert it to an ordinal (chicago:manual), followed by the appropriate string. Any other sort of edition information will be printed as is, though if your data begins with a word (or abbreviation) that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word (or abbreviation) is in lowercase, and biblatex-chicago-notes will automatically do the right thing (babb:peru, times:guide). In most situations, the *Manual* generally recommends the use of abbreviations in both bibliography and notes, but there is room for the user's discretion in specific citations (emerson:nature).

In a previous release of biblatex-chicago-notes, I introduced the userd field to hold this non-numeric information, as biblatex only accepted an integer in the edition field, but this changed in version o.8. The userd field now has an entirely different function — please see its documentation below.

editor As far as possible, I have implemented this field as biblatex's standard styles do, but the requirements specified by the *Manual* present certain complications that need explaining. Lehman points out in his documentation that the editor field will be associated with a title, a booktitle, or a maintitle, depending on the sort of entry. More specifically, biblatex-chicago associates the editor with the most comprehensive of those titles, that is, maintitle if there is one, otherwise booktitle, otherwise title, if the other two are lacking. In a large number of cases, this is exactly the correct behavior (adorno:benj, centinel:letters, plato:republic:gr, among others). Predictably, however, there are numerous cases that require, for

example, an additional editor for one part of a collection or for one volume of a multi-volume work. For these cases I have provided the namea field. You should format names for this field as you would for author or editor, and these names will always be associated with the title (donne:var).

As you will see below, I have also provided a nameb field, which holds the translator of a given title (euripides:orestes). If namea and nameb are the same, biblatex-chicago will concatenate them, just as biblatex already does for editor, translator, and namec (i.e., the compiler). Furthermore, it is conceivable that a given entry will need separate editors for each of the three sorts of title. For this, and for various other tricky situations, there is the \partedit macro (and its siblings), designed to be used in a note field or in one of the titleaddon fields (chaucer:liferecords). (Because the strings identifying an editor differ in notes and bibliography, one can't simply write them out in such a field, hence the need for a macro, which I discuss further in the commands section below [4.3.1].) Cf. namea, nameb, namec, and translator.

- editora The newer releases of biblatex provide these fields as a means to specify addieditorb tional contributors to texts in a number of editorial roles. In the Chicago styles they seem most relevant for the audiovisual types, especially music and video, where they help to identify conductors, directors, producers, and performers. To specify the role, use the fields editoratype, editorbype, and editorctype, which see. (Cf. bernstein:shostakovich, handel:messiah.)
- Normally, with the exception of the article and review types, biblatex-chicagoeditortype notes will automatically find a name to put at the head of an entry, starting with an author, and proceeding in order through editor, translator, and namec (the compiler). If all four are missing, then the title will be placed at the head. (In article and review entries with a magazine entrysubtype, a missing author immediately prompts the use of journaltitle at the head of an entry. See above under article for details.) The editortype field, added in biblatex 0.7, provides even greater flexibility, giving you the ability to put a compiler at the head of an entry without using namec, freeing you from the need to use a sortkey and a shortauthor. You can do this even though an author is named (eliot:pound shows this mechanism in action for a standard editor, rather than a compiler). Two things are necessary for this to happen. First, in the options field you need to set useauthor=false, then you need to put the name you wish to see at the head of your entry into the editor or the namea field. If the "editor" is in fact a compiler, then you need to put compiler into the editortype field, and biblatex will print the correct string after the name in both the bibliography and in the long note form.

There are a few details of which you need to be aware. Because biblatex-chicago has added the namea field, which gives you the ability to identify the editor specifically of a title as opposed to a maintitle or a booktitle, the editortype mechanism checks first to see whether a namea is defined. If it is, that name will be used at the head of the entry, if it isn't it will go ahead and look for an editor. When the editor field is used, biblatex's sorting algorithms will work properly, and also its labelname mechanism, meaning that a shortened form of the editor will be used in the short note form. If, however, the namea field provides the name, then your .bib entry will need to have a sortkey field to aid in alphabetizing, and it will also need a shorteditor defined to help with the short note form, not a shortauthor, ruled out because useauthor=false.

In biblatex 0.9 Lehman reworked the string concatenation mechanism, for reasons he outlined in his RELEASE file, and I have followed his lead. In short, if you define the editortype field, then concatenation is turned off, even if the name of the editor matches, for example, that of the translator. In the absence of an editortype, the usual mechanisms remain in place, that is, if the editor exactly matches a translator and/or a namec, or alternatively if namea exactly matches a nameb and/or a namec, then biblatex will print the appropriate strings. The *Manual* specifically (14.87) recommends not using these identifying strings in the short note form, and biblatex-chicago-notes follows their recommendation. If you nevertheless need to provide such a string, you'll have to do it manually in the shorteditor field, or perhaps, in a different sort of entry, in a shortauthor field.

It may also be worth noting that because of certain requirements in the specification – absence of an author, for example – the useauthor mechanism won't work properly in the following entry types: collection, letter, patent, periodical, proceedings, review, suppbook, suppcollection, and suppperiodical.

editoratype editorbype editorctype teditorctype editorctype editorctype teditorctype editorctype editor(a-c) field. Note that they are not part of the string concatenation mechanism. I have implemented them just as the standard styles do, and they have now found a use particularly in music and video entries. Cf. bernstein:shostakovich, handel:messiah.

- **eid** Standard biblatex field, providing a string or number some journals use uniquely to identify a particular article. Only applicable to the article entry type. Not typically required by the *Manual*.
- **entrysubtype** Standard and very powerful biblatex field, left undefined by the standard styles. In biblatex-chicago-notes it has four very specific uses, the first three of which I have designed in order to maintain, as much as possible, backward compatibility with the standard styles. First, in article, periodical, and review entries, the field allows you to differentiate between scholarly "journals," on the one hand, and "magazines" and "newspapers" on the other. Usage is fairly simple: you need to put the exact string magazine into the entrysubtype field if you are citing one of the latter two types of source, whereas if your source is a "journal," then you need do nothing.

The second use involves references to works from classical antiquity and, according to the Manual, from the Middle Ages, as well. When you cite such a work using the traditional divisions into books, sections, lines, etc., divisions which are presumed to be the same across all editions, then you need to put the exact string classical into the entrysubtype field. This has no effect in long notes or in the bibliography, but it does affect the formatting of short notes, where it suppresses some of the punctuation. Ordinarily, you will use this toggle in a book or a bookinbook entry, but it is possible that a journal might well also present an edition of such a work. Given the tradition of using italics for the titles of such works, this may require using a titleaddon field (with hand formatting) instead of a title. If you wish to reference a classical or medieval work by the page numbers of a particular, non-standard edition, then you shouldn't use the entrysubtype toggle. Also, and the specification is reasonably clear about this, works from the Renaissance and later, even if cited by the traditional divisions, have short notes formatted normally, and therefore don't need an entrysubtype field. (See Manual 14.256–268; aristotle:metaphy:gr, plato:republic:gr; euripides:orestes is an example of a translation cited by page number in a modern edition.)

The third use occurs in misc entries. If such an entry contains no entrysubtype field, then the citation will be treated just as the standard biblatex styles would, including the use of italics for the title. Any string at all in entrysubtype tells biblatex-chicago-notes to treat the source as part of an unpublished archive. A misc entry with entrysubtype defined is the least formatted of all those specified by the *Manual* — see section 4.1 above under **misc** for all the details on how these citations work.

Fourth, and finally, the field can be defined in the new artwork entry type in order to refer to a work from antiquity whose title you do not wish to be italicized. Please see the documentation of artwork above for the details.

- eprint Kazuo Teramoto suggested adding biblatex's excellent eprint handling to biblatexeprintclass chicago, and he sent me a patch implementing it. With minor alterations, I have applied it to this release, so these three fields now work more or less as they do in standard biblatex. They may prove helpful in providing more abbreviated references to online content than conventional URLs, though I can find no specific reference to them in the *Manual*.
- eventdate This is a standard biblatex field. In the 15th edition it was barely used, but in order to comply with changes in the 16th edition of the *Manual* it can now play a significant role in music, review, and video entries. In music entries, it identifies the recording or performance date of a particular song (rather than of a whole disc, for which you would use origdate), whereas in video entries it identifies either the original broadcast date of a particular episode of a TV series or the date of a filmed musical performance. In both these cases biblatex-chicago will automatically prepend a bibstring recorded and aired, respectively to the date, but you can change this string using the new userd field, something you'll definitely want to do for filmed musical performances (friends:leia, handel:messiah, holiday:fool).

The field's use in review entries is somewhat different. There, it helps to identify a particular comment within an online thread. There isn't a particular string associated with it, but you can further specify a comment by placing a timestamp in parentheses in the nameaddon field, in case the date alone isn't enough (ac:comment).

- **foreword** As with the afterword field above, foreword will in general function as it does in standard biblatex. Like afterword (and introduction), however, it has a special meaning in a suppbook entry, where you simply need to define it somehow (and leave afterword and introduction undefined) to make a foreword the focus of a citation.
 - **holder** A standard biblatex field for identifying a patent's holder(s), if they differ from the author. The *Manual* has nothing to say on the subject, but biblatex-chicagonotes prints it (them), in parentheses, just after the author(s).
- **howpublished** Standard biblatex field, mainly applicable in the booklet entry type, where it replaces the publisher. I have also retained it in the misc and unpublished entry types, for historical reasons.
 - **institution** Standard biblatex field. In the thesis entry type, it will usually identify the university for which the thesis was written, while in a report entry it may identify any sort of institution issuing the report.
 - introduction As with the afterword and foreword fields above, introduction will in general function as it does in standard biblatex. Like those fields, however, it has a special meaning in a suppbook entry, where you simply need to define it somehow (and leave afterword and foreword undefined) to make an introduction the focus of a citation.
 - **isbn** Standard biblatex field, for providing the International Standard Book Number of a publication. Not typically required by the *Manual*.
 - **isrn** Standard biblatex field, for providing the International Standard Technical Report Number of a report. Only relevant to the **report** entry type, and not typically required by the *Manual*.
 - **issn** Standard biblatex field, for providing the International Standard Serial Number of a periodical in an article or a periodical entry. Not typically required by the *Manual*.

- **issue** Standard biblatex field, designed for article, periodical, or review entries identified by something like "Spring" or "Summer" rather than by the usual month or number fields (brown:bremer).
- **issuesubtitle** The subtitle for an issuetitle see next entry.
 - **issuetitle** Standard biblatex field, intended to contain the title of a special issue of any sort of periodical. If the reference is to one article within the special issue, then this field should be used in an article entry (conley:fifthgrade), whereas if you are citing the entire issue as a whole, then it would go in a periodical entry, instead (good:wholeissue). The note field is the proper place to identify the type of issue, e.g., special issue, with the initial letter lower-cased to enable automatic contextual capitalization.
- **journalsubtitle** The subtitle for a journaltitle see next entry.
 - **journaltitle** Standard biblatex field, replacing the standard BIBTEX field journal, which, however, still works as an alias. It contains the name of any sort of periodical publication, and is found in the article and review entry types. In the case where a piece in an article or review (entrysubtype magazine) doesn't have an author, biblatex-chicago-notes provides for this field to be used as the author. See above (section 4.1) under **article** for details. The lakeforester:pushcarts and nyt:trevorobit entries in notes-test.bib will give you some idea of how this works.
 - keywords This field is biblatex's extremely powerful and flexible technique for filtering bibliography entries, allowing you to subdivide a bibliography according to just about any criteria you care to invent. See biblatex.pdf (3.10.4) for thorough documentation. In biblatex-chicago, the field can provide a convenient means to exclude certain entries from making their way into a bibliography. We have already seen (letter, above) how the Manual (14.117) requires, in the case of published collections of letters, that when more than one letter from the same collected is cited, the bibliography should contain only a reference to the collection as a whole (white:ross:memo, white:russ, white:total). Similarly, when citing both an original text and its translation (see **userf**, below), the *Manual* (14.109) suggests including the original at the end of the translation's bibliography entry, a procedure which requires that the original not also be printed as a separate bibliography entry (furet:passing:eng, furet:passing:fr, aristotle:metaphy:trans, aristotle:metaphy:gr). Finally, citations of well-known reference works (like the Encyclopaedia Britannica, for example), need only be presented in notes, and not in the bibliography (14.247-248; ency:britannica, wikiped:bibtex; see inreference, above). In all these cases, I have suggested the inclusion of original in the keywords field, along with a notkeyword=original in the optional argument to the \printbibliography command, though of course you can choose any key you wish.
 - language A standard biblatex field, designed to allow you to specify the language(s) in which a work is written. As a general rule, the Chicago style doesn't require you to provide this information, though it may well be useful for clarifying the nature of certain works, such as bilingual editions, for example. There is at least one situation, however, when the Manual does specify this data, and that is when the title of a work is given in translation, even though no translation of the work has been published, something that might happen when a title is in a language deemed to be unparseable by a majority of your expected readership (14.108, 14.110, 14.194; pirumova, rozner:liberation). In such a case, you should provide the language(s) involved using this field, connecting multiple languages using the keyword and. (I have retained biblatex's \bibstring mechanism here, which means that you can use the standard bibstrings or, if one doesn't exist for the language you need, just give the name of the language, capitalized as it should appear in your text. You can also mix these two modes inside one entry without apparent harm.)

An alternative arrangement suggested by the *Manual* is to retain the original title of a piece but then to provide its translation, as well. If you choose this option, you'll need to make use of the **usere** field, on which see below. In effect, you'll probably only ever need to use one of these two fields in any given entry, and in fact biblatex-chicago-notes will only print one of them if both are present, preferring usere over language for this purpose (see kern and weresz). Note also that both of these fields are universally associated with the title of a work, rather than with a booktitle or a maintitle. If you need to attach a language or a translation to either of the latter two, you could probably manage it with special formatting inside those fields themselves.

- **lista** I intend this field specifically for presenting citations from reference works that are arranged alphabetically, where the name of the item rather than a page or volume number should be given. The field is a biblatex list, which means you should separate multiple items with the keyword and. Each item receives its own set of quotation marks, and the whole list will be prefixed by the appropriate string ("s.v.," *sub verbo*, pl. "s.vv."). Biblatex-chicago-notes will only print such a field in a book or an inreference entry, and you should look at the documentation of these entry types for further details. (See *Manual* 14.247–248; ency:britannica, grove:sibelius, times:guide, wikiped:bibtex.)
- **location** This is biblatex's version of the usual BIBTEX field address, though the latter is accepted as an alias if that simplifies the modification of older .bib files. According to the *Manual* (14.135), a citation usually need only provide the first city listed on any title page, though a list of cities separated by the keyword "and" will be formatted appropriately. If the place of publication is unknown, you can use \autocap{n}.p. instead (14.138). For all cities, you should use the common English version of the name, if such exists (14.137).

Three more details need explanation here. In article, periodical, and review entries, there is usually no need for a location field, but "if a journal might be confused with another with a similar title, or if it might not be known to the users of a bibliography," then this field can present the place or institution where it is published (14.191, 14.203; lakeforester:pushcarts, kimluu:diethyl, and garrett). For blogs cited using article entries, this is a good place to identify the nature of the source — i.e., the word "blog" — letting the style automatically provide the parentheses (14.246; ellis:blog). Less predictably, it is here that *Manual* indicates that a particular book is a reprint edition (14.119), so in such a case you can use the biblatex-chicago macro \reprint, followed by a comma, space, and the location (aristotle:metaphy:gr, schweitzer:bach). (You can also now, somewhat more simply, just put the string reprint into the pubstate field to achieve the same result. See the pubstate documentation below.) The origdate field may be used to give the original date of publication, and of course more complicated situations should usually be amenable to inclusion in the note field (emerson:nature).

- mainsubtitle The subtitle for a maintitle see next entry.
 - **maintitle** The main title for a multi-volume work, e.g., "Opera" or "Collected Works." (See donne:var, euripides:orestes, harley:cartography, lach:asia, pelikan:christian, and plato:republic:gr.)
- **maintitleaddon** An annex to the maintitle, for which see previous entry. Such an annex would be printed in the main text font. If your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago-notes will automatically do the right thing.
 - **month** Standard biblatex field, containing the month of publication. This should be an integer, i.e., month={3} not month={March}. See date for more information.

- namea This is one of the fields biblatex provides for style writers to use, but which it leaves undefined itself. In biblatex-chicago it contains the name(s) of the editor(s) of a title, if the entry has a booktitle or maintitle, or both, in which situation the editor would be associated with one of these latter fields (donne:var). You should present names in this field exactly as you would those in an author or editor field, and the package will concatenate this field with nameb if they are identical. See under editor above for the full details. Cf. also nameb, namec, translator, and the macros \partedit, \parttrans, \parteditandtrans, \partcomp, \parteditandcomp, \parttransandcomp, and \partedittransand-comp, for which see section 4.3.1.
- nameaddon This field is provided by biblatex, though not used by the standard styles. In biblatex-chicago, it allows you, in most entry types, to specify that an author's name is a pseudonym, or to provide either the real name or the pseudonym itself, if the other is being provided in the author field. The abbreviation "pseud." (always lowercase in English) is specified, either on its own or after the pseudo-nym (centinel:letters, creasey:ashe:blast, creasey:morton:hide, creasey:york:death, and lecarre:quest); \bibstring{pseudonym} does the work for you. See under author above for the full details.

In review entries, I have removed the automatic provision of square brackets from the field, allowing it to be used in at least two ways. First, if you provide your own square brackets, then it can have its standard function, as above. Second, and new to the 16th edition of the *Manual*, you can further specify comments to blogs and other online content using a timestamp (in parentheses) that supplements the eventdate, particularly when the latter is too coarse a specification to identify a comment unambiguously. Cf. ac:comment.

In the customc entry type, finally, which is used to create alphabetized crossreferences to other bibliography entries, the nameaddon field allows you to change the default string linking the two parts of the cross-reference. The code automatically tests for a known bibstring, which it will italicize. Otherwise, it prints the string as is.

- nameb Like namea, above, this is a field left undefined by the standard biblatex styles. In biblatex-chicago, it contains the name(s) of the translator(s) of a title, if the entry has a booktitle or maintitle, or both, in which situation the translator would be associated with one of these latter fields (euripides:orestes). You should present names in this field exactly as you would those in an author or translator field, and the package will concatenate this field with namea if they are identical. See under the translator field below for the full details. Cf. also namea, namec, origlanguage, translator, userf and the macros \partedit, \parttrans, \parteditandtrans, \partcomp, \parteditandcomp, \parttransandcomp, and \partedittransandcomp in section 4.3.1.
- The Manual (14.87) specifies that works without an author may be listed under namec an editor, translator, or compiler, assuming that one is available, and it also specifies the strings to be used with the name(s) of compiler(s). All this suggests that the Manual considers this to be standard information that should be made available in a bibliographic reference, so I have added that possibility to the many that biblatex already provides, such as the editor, translator, commentator, annotator, and redactor, along with writers of an introduction, foreword, or afterword. Since biblatex doesn't offer a compiler field, I have adopted for this purpose the otherwise unused field namec. It is important to understand that, despite the analogous name, this field does not function like namea or nameb, but rather like editor or translator, and therefore if used will be associated with whichever title field these latter two would be were they present in the same entry. Identical fields among these three will be concatenated by the package, and concatenated too with the (usually) unnecessary commentator, annotator and the rest. Also please note that I've arranged the concatenation algorithms

to include namec in the same test as namea and nameb, so in this particular circumstance you can, if needed, make namec analogous to these two latter, title-only fields. (See above under **editortype** for details of how you may, in certain circumstances, use that field to identify a compiler. This method will be particularly useful if you don't need to concatenate the namec with any other role, because if you use the editor field biblatex will automatically attend to alphabetization and name-replacement in the bibliography, and will also provide a name for short notes.)

It might conceivably be necessary at some point to identify the compiler(s) of a title separate from the compiler(s) of a booktitle or maintitle, but for the moment I've run out of available name fields, so you'll have to fall back on the \partcomp macro or the related \parteditandcomp, \parttransandcomp, and \partedittransandcomp, on which see Commands (section 4.3.1) below. (Future releases may be able to remedy this.) It may be as well to mention here too that of the three names that can be substituted for the missing author at the head of an entry, biblatex-chicago-notes will choose an editor if present, then a translator if present, falling back to namec only in the absence of the other two, and assuming that the fields aren't identical, and therefore to be concatenated. In a change from the previous behavior, these algorithms also now test for namea or nameb, which will be used instead of editor and translator, respectively, giving the package the greatest likelihood of finding a name to place at the head of an entry. Please remember, however, that if this name is supplied by any of the non-standard fields name[a-c], and you're not using Biber, then you will need to provide a sortkey to assist with alphabetization in the bibliography (cf. \DeclareSortingScheme in section 4.4.1, below.) A shortauthor is no longer necessary for the short note form, as the style will provide it automatically.

- **note** As in standard biblatex, this field allows you to provide bibliographic data that doesn't easily fit into any other field. In this sense, it's very like addendum, but the information provided here will be printed just before the publication data. (See chaucer:alt, chaucer:liferecords, cook:sotweed, emerson:nature, and rodman:walk for examples of this usage in action.) It also has a specialized use in all the periodical types (article, periodical, and review), where it holds supplemental information about a journaltitle, such as "special issue" (conley:fifthgrade, good:wholeissue). In all uses, if your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago-notes will automatically do the right thing. Cf. addendum.
- **number** This is a standard biblatex field, containing the number of a journaltitle in an article or review entry, the number of a title in a periodical entry, or the volume/number of a book in a series. Generally, in an article, periodical, or review entry, this will be a plain cardinal number, but in such entries biblatex-chicago now does the right thing if you have a list or range of numbers (unsigned:ranke). In any book-like entry the field may well contain considerably more information, including even a reference to "2nd ser.," for example, while the series field in such an entry will contain the name of the series, rather than a number. This field is also the place for the patent number in a patent entry. Cf. issue and series. (See *Manual* 14.128–132 and boxer:china, palmatary:pottery, wau-chope:ceramics; 14.180–181 and beattie:crime, conley:fifthgrade, friedman:learning, garrett, gibbard, hlatky:hrt, mcmillen:antebellum, rozner:liberation, warr:ellison.)

NB: This may be an opportune place to point out that the *Manual* (14.154) prefers arabic to roman numerals in most circumstances (chapters, volumes, series numbers, etc.), even when such numbers might be roman in the work cited. The obvious exception is page numbers, in which roman numerals indicate that the citation came from the front matter, and should therefore be retained.

- **options** A standard biblatex field, for setting certain options on a per-entry basis rather than globally. Information about some of the more common options may be found above under author and below in section 4.4. See chaucer:alt, eliot:pound, herwign:office, lecarre:quest, and mla:style for examples of the field in use.
- **organization** A standard biblatex field, retained mainly for use in the misc, online, and manual entry types, where it may be of use to specify a publishing body that might not easily fit in other categories. In biblatex, it is also used to identify the organization sponsoring a conference in a proceedings or inproceedings entry, and I have retained this as a possibility, though the *Manual* is silent on the matter.
 - This biblatex field allows you to provide more than one full date specification for origdate those references which need it. As with the analogous date field, you provide the date (or range of dates) in ISO8601 format, i.e., yyyy-mm-dd. In most entry types, you would use origdate to provide the date of first publication of a work, most usually needed only in the case of reprint editions, but also recommended by the Manual for electronic editions of older works (14.119, 14.166, 14.169; aristotle:metaphy:gr, emerson:nature, james:ambassadors, schweitzer:bach). In the letter and misc (with entrysubtype) entry types, the origdate identifies when a letter (or similar) was written. In such misc entries, some "non-letter-like" materials (like interviews) need the date field for this purpose, while in letter entries the date applies to the publication of the whole collection. If such a published collection were itself a reprint, improvisation in the location field might be able to rescue the situation. (See jackson:paulina:letter, white:ross:memo, white:russ, and white:total for how letter entries usually work; creel:house shows the field in action in a misc entry, while spock:interview uses date.)

In music entries, you can use the origdate in two separate but related ways. First, it can identify the recording date of an entire disc, rather than of one track on that disc, which would go in eventdate. (Compare holiday:fool with nytrumpet:art.) The style will automatically prepend the bibstring recorded to the date, but you can change it with the new userd field. Be aware, however, that if an entry also has an eventdate, then userd will apply to that, instead, and you'll be forced to accept the default string. Second, the origdate can provide the original release date of an album. For this to happen, you need to put the string reprint in the pubstate field, which is a standard mechanism across many other entry types for identifying a reprinted work. (See floyd:atom.)

Because the origdate field only accepts numbers, some improvisation may be needed if you wish to include "n.d." (\bibstring{nodate}) in an entry. In letter and misc, this information can be placed in titleaddon, but in other entry types you may need to use the location field.

origlanguage In keeping with the Manual's specifications, I have fairly thoroughly redefined biblatex's facilities for treating translations. The origtitle field isn't used, while the language and origdate fields have been press-ganged for other duties. The origlanguage field, for its part, retains a dual role in presenting translations in a bibliography. The details of the Manual's suggested treatment when both a translation and an original are cited may be found below under userf. Here, however, I simply note that the introductory string used to connect the translation's citation with the original's is "Originally published as," which I suggest may well be inaccurate in a great many cases, as for instance when citing a work from classical antiquity, which will most certainly not "originally" have been published in the Loeb Classical Library. Although not, strictly speaking, authorized by the Manual, I have provided another way to introduce the original text, using the origlanguage field, which must be provided in the entry for the translation, not the original text (aristotle:metaphy:trans). If you put one of the standard biblatex bibstrings there (enumerated below), then the entry will work properly across multiple languages. Otherwise, just put the name of the language there, localized as necessary, and biblatex-chicago will eschew "Originally published as" in favor of, e.g., "Greek edition:" or "French edition:". This has no effect in notes, where only the work cited — original or translation — will be printed, but it may help to make the *Manual*'s suggestions for the bibliography more palatable.

That was the first usage, in keeping at least with the spirit of the *Manual*. I have also, perhaps less in keeping with that specification, retained some of biblatex's functionality for this field. If an entry doesn't have a userf field, and therefore won't be combining a text and its translation in the bibliography, you can also use origlanguage as Lehman intended it, so that instead of saying, e.g., "translated by X," the entry will read "translated from the German by X." The *Manual* doesn't mention this, but it may conceivably help avoid certain ambiguities in some citations. As in biblatex, if you wish to use this functionality, you have to provide *not* the name of the language, but rather a bibliography string, which may, at the time of writing, be one of american, brazilian, danish, dutch, english, french, german, greek, italian, latin, norwegian, portuguese, spanish, or swedish, to which I've added russian.

- **origlocation** The 16th edition of the *Manual* has somewhat clarified issues pertaining to the documentation of reprint editions and their corresponding originals (14.166). Starting with this release of biblatex-chicago, you can provide both an origlocation and an origpublisher to go along with the origdate, should you so wish, and all of this information will be printed in long notes and bibliography. You can now also use this field in a letter or misc (with entrysubtype) entry to give the place where a published or unpublished letter was written (14.117). (Jonathan Robinson has suggested that the origlocation may in some circumstances actually be necessary for disambiguation, his example being early printed editions of the same material printed in the same year but in different cities. The new functionality should make this simple to achieve. Cf. origdate, origpublisher and pubstate; schweitzer:bach.)
- origpublisher As with the origlocation field just above, the 16th edition of the *Manual* has clarified issues pertaining to reprint editions and their corresponding originals (14.166). You can now provide an origpublisher and/or an origlocation in addition to the origdate, and all will be presented in long notes and bibliography. (Cf. origdate, origlocation, and pubstate; schweitzer:bach.)
 - **pages** This is the standard biblatex field for providing page references. In many article and review entries you'll find this contains something other than a page number, e.g. a section name or edition specification (14.203, 14.209; kozinn:review, nyt:obittrevor, nyt:trevorobit). Of course, the same may be true of almost any sort of entry, though perhaps with less frequency. Curious readers may wish to look at brown:bremer (14.189) for an example of a pages field used to facilitate reference to a two-part journal article. Cf. number for more information on the *Manual*'s preferences regarding the formatting of numerals; bookpagination and pagination provide details about biblatex's mechanisms for specifying what sort of division a given pages field contains; and usera discusses a different way to present the section information pertaining to a newspaper article.
 - **pagination** This, a standard biblatex field, allows you automatically to prefix the appropriate identifying string to information you provide in the postnote field of a citation command, whereas bookpagination allows you to prefix a string to the pages field. Please see **bookpagination** above for all the details on this functionality, as aside from the difference just mentioned the two fields are equivalent.
 - **part** Standard biblatex field, which identifies physical parts of a single logical volume in book-like entries, not in periodicals. It has the same purpose in biblatexchicago-notes, but because the *Manual* (14.126) calls such a thing a "book" and not a "part," the string printed in notes and bibliography will, at least in English, be "bk." instead of the plain dot between volume number and part num-

ber (harley:cartography, lach:asia). This field should only be used in association with a volume number, so if you need to identify "parts" or "books" that are part of a published **series**, for example, then you'll need to use a different field, (which in this case would be number [palmatary:pottery]). Cf. volume.

publisher Standard biblatex field. Remember that "and" is a keyword for connecting multiple publishers, so if a publisher's name contains "and," then you should either use the ampersand (&) or enclose the whole name in additional braces. (See *Manual* 14.139–148; aristotle:metaphy:gr, cohen:schiff, creasey:ashe:blast, dunn:revolutions.)

There are, as one might expect, a couple of further subtleties involved here. Two publishers will be separated by a forward slash in both notes and bibliography, and you no longer, in the 16th edition, need to provide hand formatting if a company issues "certain books through a special publishing division or under a special imprint," as these, too, should be separated by a forward slash. If a book has two co-publishers, "usually in different countries," (14.147) then the simplest thing to do is to choose one, probably the nearest one geographically. If you feel it necessary to include both, then levistrauss:savage demonstrates one way of doing so, using a combination of the publisher and location fields. Finally, if the publisher is unknown, then the *Manual* recommends (14.143) simply using the place (if known) and the date. If for some reason you need to indicate the absence of a publisher, the abbreviation given by the *Manual* is n.p., though this can also stand for "no place." Some style guides apparently suggest using s.n. (= *sine nomine*) to specify the lack of a publisher, but the *Manual* doesn't mention this.

pubstate Due to specific requirements in the author-date style, I have implemented this field there as a way of providing accurate citations of reprinted books. As the functionality seemed useful, I have also included some of it in biblatex-chicago-notes. In previous releases you could identify a reprint by placing \bibstring{reprint} in the location field, followed by a comma, and the style would print the appropriate string in notes and bibliography. Now, if it is more convenient, easier to remember, or if you want to reuse your .bib database for the author-date style, you can simply put the string reprint into the pubstate field, and the package will take care of everything for you. Both of these methods will now work just fine, but please choose only one per entry, otherwise the string will be printed twice.

There are a couple of exceptions to this basic functionality. In video entries, no bibstring will be printed, as it's not appropriate there, so in effect the pubstate field will be ignored. In music entries, the mechanism transforms the origdate from a recording date for an album into the original release date for that album. Whereas a recording date will be printed in the middle of the note or bibliography entry, the original release date will be printed near the end, preceded by the appropriate string. (Cf. 14.276; floyd:atom.) Please remember that, currently, if you put anything besides reprint in the pubstate field it will silently be ignored, but this may change in future releases.

- **redactor** I have implemented this field just as biblatex's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. annotator and commentator.
- reprinttitle NB: Please note that this feature is in an alpha state, and that I'm contemplating using a different field in the future for this functionality. I include it here in the hope that it might receive some testing in the meantime. At the request of Will Small, I have included a means of providing the original publication details of an essay or a chapter that you are citing from a subsequent reprint, e.g., a *Collected Essays* volume. In such a case, at least according to the *Manual* (14.115), such details needn't be provided in notes, only in the bibliography, and

then only if these details are "of particular interest." The data would follow an introductory phrase like "originally published as," making the problem strictly parallel to that of including details of a work in the original language alongside the details of its translation. I have addressed the latter problem with the userf field, which provides a sort of cross-referencing method for this purpose, and reprinttitle works in *exactly* the same way. In the .bib entry for the reprint you include a cross-reference to the cite key of the original location using the reprinttitle field (which it may help mnemonically to think of as a "reprinted title" field). The main difference between the two forms is that userf prints all but the author of the original work, whereas reprinttitle suppresses both the author and the title of the original, giving only the more general details, beginning with, e.g., the journaltitle or booktitle and continuing from there. The string prefacing this information will be "Originally published in." Please see the documentation on userf below for all the details on how to create .bib entries for presenting your data.

- A standard biblatex field, usually just a number in an article, periodical, or review series entry, almost always the name of a publication series in book-like entries. If you need to attach further information to the series name in a book-like entry, then the number field is the place for it, whether it be a volume, a number, or even something like "2nd ser." or "\bibstring{oldseries}." Of course, you can also use \bibstring{oldseries} or \bibstring{newseries} in an article entry, but there you would place it in the series field itself. (In fact, the series field in article, periodical, and review entries is one of the places where biblatex allows you just to use the plain bibstring oldseries, for example, rather than making you type \bibstring{oldseries}. The type field in manual, patent, report, and thesis entries also has this auto-detection mechanism in place; see the discussion of \bibstring below for details.) In whatever entry type, these bibstrings produce the required abbreviation, which thankfully is the same in both notes and bibliography. (For books and similar entries, see Manual 14.128– 132; boxer:china, browning:aurora, palmatary:pottery, plato:republic:gr, wauchope:ceramics; for periodicals, see 14.195; garaud:gatine, sewall:letter.) Cf. number for more information on the Manual's preferences regarding the formatting of numerals.
- shortauthor This is a standard biblatex field, but biblatex-chicago-notes makes considerably greater use of it than the standard styles. For the purposes of the Chicago style, the field provides the name to be used in the short form of a footnote. In the vast majority of cases, you don't need to specify it, because the biblatex system selects the author's last name from the author field and uses it in such a reference, and if there is no author it will search namea, editor, nameb, translator, and namec, in that order. (In the case of the non-standard names name[a-c], you will need to provide a sortkey if you aren't using Biber. Cf. \DeclareSortingScheme and \DeclareLabelname in section 4.4.1, below.) In an author-less article or review entry (entrysubtype magazine), where biblatex-chicago-notes will use the journaltitle as the author, or in author-less manual entries, where the organization will be so used, the style automatically provides the same substitution in the short note form, though you'll still need to help the alphabetization routines by providing a sortkey field in such cases (dyna:browser, gourmet:052006, lakeforester:pushcarts, nyt:trevorobit).

As mentioned under editortype, the *Manual* (14.87) recommends against providing the identifying string (e.g., ed. or trans.) in the short note form, and biblatex-chicago-notes follows their recommendation. If you need to provide these strings in such a citation, then you'll have to do so by hand in the short-author field, or in the shorteditor field, whichever you are using.

shorteditor Like shortauthor, a field to provide a name for a short footnote, in this case for, e.g., a collection entry that typically lacks an author. The shortauthor field works just as well in most situations, but if you have set useauthor=false (and not useeditor=false) in an entry's options field, then only shorteditor will be recognized. Cf. editortype, above.

shorthand This is biblatex's mechanism for using abbreviations in place of the usual short note form, and in previous releases I left it effectively unmodified in biblatex-chicago-notes, apart from a few formatting tweaks. For this release, at the request of Kenneth Pearce and following some hints in the *Manual*, I have made the system considerably more flexible, which I hope might be useful for those with specialized formatting needs. In the default configuration, any entry which contains a shorthand field will produce a normal first note, either long or short according to your package options, informing the reader that the work will hereafter be cited by this abbreviation. As in biblatex, the \printshorthands command will produce a formatted list of abbreviations for reference purposes, a list which the *Manual* suggests should be placed either in the front matter (when using footnotes) or before the endnotes, in case these are used.

For this release, I have provided three new options to alter these defaults. First, there is a new citation command, \shorthandcite, which will print the shorthand even at the first citation. I have only provided the most general form of this command, so you'll need to put it inside parentheses or in a \footnote command yourself. Next, I have included two new bibenvironments for use with the env option to the \printshorthands command: losnotes is designed to allow a list of shorthands to appear inside footnotes, while losendnotes does the same for endnotes. Their main effect is to change the font size, and in the latter case to clear up some spurious punctuation and white space that I see on my system when using endnotes. (You'll probably also want to use the option heading=none in order to get rid of the [oversized] default, providing your own within the \footnote command.) Finally, I have provided a new package option, shorthandfull, which prints entries in the list of shorthands which contain full bibliographical information, effectively allowing you to eschew the bibliography in favor of a fortified shorthand list. (See 13.65, 14.54-55, and also biblatex.pdf for more information.)

As I mentioned above under **crossref**, extra care is needed when using shorthands with cross-references, and I would avoid them in all parent entries, at least in the current state of biblatex-chicago-notes.

- shorthandintro When you include a shorthand in an entry, it will ordinarily appear the first time you cite the work, at the end of a long note, surrounded by parentheses and prefaced by the phrase "hereafter cited as." With this standard biblatex field, you can change that formatting and that phrase to suit your needs. Please note, first, that you need to include the shorthand in this field as you intend it to appear and, second, that you still need the shorthand field present in order to ensure the appropriate presentation of that shorthand in later citations and in the list of shorthands. Finally, I've tried to allow for as many different styles of notification as possible, so by default the only punctuation that will appear between the rest of the citation and the shorthandintro is a space. If you are not enclosing the whole phrase in parentheses, you may need to provide additional punctuation in the field itself, e.g., {\addperiod\space Cited as...}.
 - shorttitle A standard biblatex field, primarily used to provide an abbreviated title for short notes. In biblatex-chicago-notes, you need to take particular care with letter entries, where, as explained above, the *Manual* requires a special format ("to Recipient"). (See 14.117; jackson:paulina:letter, white:ross:memo, white:russ.) Some misc entries (with an entrysubtype) also need special attention. (See creel:house, where the full title is used as the shortauthor + shorttitle by using \headlesscite commands. Placing \isdot into the shortauthor field no longer works in biblatex 1.6, so be sure to check your .bib files when you upgrade.) Remember, also, that the generic titles in review and misc entries may

not want capitalization in all contexts, so, as with the title field, if you begin a shorttitle with a lowercase letter the style will do the right thing (barcott:review, bundy:macneil, Clemens:letter, kozinn:review, ratliff:review, unsigned:ranke).

- sortkey A standard biblatex field, designed to allow you to specify how you want an entry alphabetized in a bibliography. In general, if an entry doesn't turn up where you expect or want it, this field should provide the solution. Entries with a corporate author can now omit the definite or indefinite article, which should help (14.85; cotton:manufacture, nytrumpet:art). If you use Biber as your backend, biblatex-chicago also now includes the three supplemental name fields (name[a-c]) in the sorting algorithm, so once again you should find that this field is needed less than before. Still, many entries without a name field of any sort, particularly those with a definite or indefinite article beginning the title, may require assistance (chaucer:alt, dyna:browser, gourmet:052006, greek:filmstrip, grove:sibelius, lakeforester:pushcarts, nyt:trevorobit, silver:gawain, unsigned:ranke, virginia:plantation). Lehman also provides sortname, sorttitle, and sortyear for more fine-grained control. Please consult biblatex.pdf and the remarks on \DeclareSortingScheme in section 4.4.1, below.
- **subtitle** The subtitle for a title see next entry.
 - title In the vast majority of cases, this field works just as it always has in BIBTEX, and just as it does in biblatex. Nearly every entry will have one, the most likely exceptions being incollection or online entries with a merely generic title, instead of a specific one (centinel:letters, powell:email). The main source of difficulties flows from the *Manual*'s rules for formatting titles, rules which also hold for booktitles and maintitles. The whole point of using a BIBTEX-based system is for it to do the formatting for you, and in most cases biblatex-chicago-notes does just that, surrounding titles with quotation marks, italicizing them, or occasionally just leaving them alone. When, however, a title is quoted within a title, then you need to know some of the rules. A summary here should serve to clarify them, and help you to understand when biblatex-chicago-notes might need your help in order to comply with them.

The internal rules of biblatex-chicago-notes are as follows:

- **Italics:** booktitle, maintitle, and journaltitle in all entry types; title of artwork, book, bookinbook, booklet, collection, image, inbook, manual, misc (with no entrysubtype), periodical, proceedings, report, suppbook, and suppcollection entry types.
- **Quotation Marks:** title of article, incollection, inproceedings, online, periodical, thesis, and unpublished entry types, issuetitle in article, periodical, and review entry types.
- **Unformatted:** booktitleaddon, maintitleaddon, and titleaddon in all entry types, title of customc, letter, misc (with an entrysubtype), patent, review, and supperiodical entry types.
- **Italics or Quotation Marks:** All of the audiovisual entry types audio, music, and video have to serve as analogues both to book and to inbook. Therefore, if there is both a title and a booktitle, then the title will be in quotation marks. If there is no booktitle, then the title will be italicized.

Now, the rules for which entry type to use for which sort of work tend to be fairly straightforward, but in cases of doubt you can consult section 4.1 above, the examples in notes-test.bib, or go to the *Manual* itself, 8.154–195. Assuming, then, that you want to present a title within a title, and you know what sort of formatting each of the two would, on its own, require, then the following rules apply:

- Inside an italicized title, all other titles are enclosed in quotation marks and italicized, so in such cases all you need to do is provide the quotation marks using \mkbibquote, which will take care of any following punctuation that needs to be brought within the closing quotation mark(s) (14.102; donne:var, mchugh:wake).
- 2. Inside a quoted title, you should present another title as it would appear if it were on its own, so in such cases you'll need to do the formatting yourself. Within the double quotes of the title another quoted title would take single quotes — the \mkbibquote command does this for you automatically, and also, I repeat, takes care of any following punctuation that needs to be brought within the closing quotation mark(s). (See 14.177; garrett, loften:hamlet, murphy:silent, white:callimachus.)
- 3. Inside a plain title (most likely in a review entry or a titleaddon field), you should present another title as it would appear on its own, once again formatting it yourself using \mkbibemph or \mkbibquote. (barcott:review, gibbard, osborne:poison, ratliff:review, unsigned:ranke).

The *Manual* provides a few more rules, as well. A word normally italicized in text should also be italicized in a quoted or plain-text title, but should be in roman ("reverse italics") in an italicized title. A quotation used as a (whole) title (with or without a subtitle) retains its quotation marks in an italicized title "only if it appears that way in the source," but always retains them when the surrounding title is quoted or plain (14.104, 14.177; lewis). A word or phrase in quotation marks, but that isn't a quotation, retains those marks in all title types (kimluu:diethyl).

Finally, please note that in all review (and suppperiodical) entries, and in misc entries with an entrysubtype, and only in those entries, biblatex-chicago-notes will automatically capitalize the first word of the title after sentence-ending punctuation, assuming that such a title begins with a lowercase letter in your .bib database. See **\autocap** below for more details.

- titleaddon Standard biblatex intends this field for use with additions to titles that may need to be formatted differently from the titles themselves, and biblatex-chicago-notes uses it in just this way, with the additional wrinkle that it can, if needed, replace the title entirely, and this in, effectively, any entry type, providing a fairly powerful, if somewhat complicated, tool for getting BIBTEX to do what you want (cf. centinel:letters, powell:email). This field will always be unformatted, that is, neither italicized nor placed within quotation marks, so any formatting you may need within it you'll need to provide manually yourself. The single exception to this rule is when your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, in which case you need then simply ensure that that word is in lowercase, and biblatex-chicago-notes will automatically do the right thing. See \autocap, below. (Cf. brown:bremer, osborne:poison, reaves:rosen, and white:ross:memo for examples where the field starts with a lowercase letter; morgenson:market provides an example where the titleaddon field, holding the name of a regular column in a newspaper, is capitalized, a situation that is handled as you would expect.)
- **translator** As far as possible, I have implemented this field as biblatex's standard styles do, but the requirements specified by the *Manual* present certain complications that need explaining. Lehman points out in his documentation that the translator field will be associated with a title, a booktitle, or a maintitle, depending on the sort of entry. More specifically, biblatex-chicago associates the translator with the most comprehensive of those titles, that is, maintitle if there is one, otherwise booktitle, otherwise title, if the other two are lacking. In a large number of cases, this is exactly the correct behavior (adorno:benj, centinel:letters, plato:republic:gr, among others). Predictably, however, there are numerous

cases that require, for example, an additional translator for one part of a collection or for one volume of a multi-volume work. For these cases I have provided the nameb field. You should format names for this field as you would for author or editor, and these names will always be associated with the title (euripides:orestes).

I have also provided a namea field, which holds the editor of a given title (euripides:orestes). If namea and nameb are the same, biblatex-chicago will concatenate them, just as biblatex already does for editor, translator, and namec (i.e., the compiler). Furthermore, it is conceivable that a given entry will need separate translators for each of the three sorts of title. For this, and for various other tricky situations, there is the \parttrans macro (and its siblings), designed to be used in a note field or in one of the titleaddon fields (ratliff:review). (Because the strings identifying a translator differ in notes and bibliography, one can't simply write them out in such a field, hence the need for a macro, which I discuss further in the commands section below [4.3.1].)

Finally, as I detailed above under **author**, in the absence of an **author** or an editor, the translator will be used at the head of an entry (silver:gawain), and the bibliography entry alphabetized by the translator's name, behavior that can be controlled with the usetranslator switch in the options field. Cf. author, editor, namea, nameb, and namec.

type This is a standard biblatex field, and in its normal usage serves to identify the type of a manual, patent, report, or thesis entry. Biblatex 0.7 introduced the ability, in some circumstances, to use a bibstring without inserting it in a \bibstring command, and in these entry types the type field works this way, allowing you simply to input, e.g., patentus rather than \bibstring{patentus}, though both will work. (See petroff:impurity; herwign:office, murphy:silent, and ross:thesis all demonstrate how the type field may sometimes be automatically set in such entries by using one of the standard entry-type aliases).

In the suppbook entry type, and in its alias suppcollection, you can use the type field to specify what sort of supplemental material you are citing, e.g., "preface to" or "postscript to." Cf. suppbook above for the details. (See *Manual* 14.116; polakow:afterw, prose:intro).

You can also use the type field in artwork, audio, image, music, and video entries to identify the medium of the work, e.g., oil on canvas, albumen print, compact disc or MPEG. If the first word in this field would normally only be capitalized at the beginning of a sentence, then leave it in lowercase in your .bib file and biblatex will automatically do the right thing in citations. Cf. artwork, audio, image, music, and video, above, for all the details. (See auden:reading, bedford:photo, cleese:holygrail, leo:madonna, nytrumpet:art.)

- **url** A standard biblatex field, it holds the url of an online publication, though you can provide one for all entry types. The 16th edition of the Manual expresses a strong preference for DOIs over URLs if the former is available cf. doi above, and also urldate just below. The required LATEX package url will ensure that your documents format such references properly, in the text and in the reference apparatus.
- **urldate** A standard biblatex field, it identifies exactly when you accessed a given url, and is given in Iso8601 format. The 16th edition of the *Manual* prefers DOIs to URLs; in the latter case it allows the use of access dates, particularly in contexts that require it, but prefers that you use revision dates, if these are available. To enable you to specify which date is at stake, I have provided the userd field, documented below. If an entry doesn't have a userd, then the urldate will be treated, as before, as an access date (14.6–8, 14.184; evanston:library, grove:sibelius, hlatky:hrt, osborne:poison, sirosh:visualcortex, wikiped:bibtex).

- **usera** A supplemental biblatex field which functions in biblatex-chicago almost as a "journaltitleaddon" field. In article, periodical, and review entries with entrysub-type magazine, the contents of this field will be placed, unformatted and between commas, after the journaltitle and before the date. The main use is for identifying the broadcast network when you cite a radio or television program (14.221; bundy:macneil).
- **userc** I have now implemented this supplemental biblatex field as part of Chicago's name cross-referencing system. (The "c" part is meant as a sort of mnemonic for this function, though it's perfectly possible to use the field in other contexts.) If you use the **customc** entry type to include alphabetized cross-references to other, separate entries in a bibliography, it is unlikely that you will cite the customc entry in the body of your text. Therefore, in order for it to appear in the bibliography, you have two choices. You can either include the entry key of the customc entry in a \nocite command inside your document, or you can place that entry key in the userc field of another .bib entry that you will be citing. In the latter case, biblatex-chicago will call \nocite for you, and this method should ensure that there will be at least one entry in the bibliography to which the cross-reference will point. (See 14.84, 14.86; creasey:ashe:blast, creasey:morton:hide, creasey:york:death, lecarre:quest.)
- userd The userd field, new in this release, acts as a sort of "datetype" field, allowing you in most entry types to identify whether a urldate is an access date or a revision date. The general usage is fairly simple. If this field is absent, then a urldate will be treated as an access date, as has long been the default in biblatex and in biblatex-chicago. If you need to identify it in any other way, what you include in userd will be printed *before* the urldate, so phrases like "last modified" or "last revised" are what the field will typically contain (14.7–8; wikiped:bibtex).

Because of the rather specialized needs of some audio-visual references, this basic schema changes for music and video entries. In music entries where an eventdate is present, userd will modify that date instead of any urldate that may also be present, and it will modify an origdate if it is present and there is no eventdate. In video entries it will modify an eventdate if it is present, and in its absence the urldate. Please see the documentation of the music and video entry types, and especially of the eventdate, origdate, and urldate fields, above (14.276–279; nytrumpet:art).

In all cases, you can start the userd field with a lowercase letter, and biblatex will take care of automatic contextual capitalization for you.

- **usere** Another supplemental biblatex field, which biblatex-chicago uses specifically to provide a translated title of a work, something that may be needed if you deem the original language unparseable by a significant portion of your likely readership. The *Manual* offers two alternatives in such a situation: either you can translate the title and use that translation in your title field, providing the original language in language, or you can give the original title in title and the translation in usere. If you choose the latter, you may need to provide a shorttitle so that the short note form is also parseable. Cf. **language**, above. (See 14.108–110, 14.194; kern, weresz.)
- **userf** This is the last of the supplemental fields which biblatex provides, and is used by biblatex-chicago for a very specific purpose. When you cite both a translation and its original, the *Manual* (14.109) recommends that, in the bibliography at least, you combine references to both texts in one entry, though the presentation in notes is pretty much up to you. In order to follow this specification, I have provided a third cross-referencing system (the others being crossref and xref), and have chosen the name userf because it might act as a mnemonic for its function.

In order to use this system, you should start by entering both the original and its translation into your .bib file, just as you normally would. The mechanism works for any entry type, and the two entries need not be of the same type. In the entry for the translation, you put the cite key of the original into the userf field. In the original's entry, you need to include a toggle in the keywords field that will prevent that entry from being printed separately in the bibliography - I have chosen the string original, and use notkeyword=original in the \printbibliography command, though you can use anything you want. In this standard case, the data for the translation will be printed first, followed by the string originally published as, followed by the original, author omitted, in what amounts to the same format that the Manual uses for long footnotes (furet:passing:eng, furet:passing:fr). As explained above (origlanguage), I have also included a way to modify the string printed before the original. In the entry for the *translation*, you put the original's language in origlanguage, and instead of originally published as, you'll get French edition: or Latin edition:, etc. (aristotle:metaphy:gr, aristotle:metaphy:trans).

- **venue** Standard biblatex offers this field for use in proceedings and inproceedings entries, but I haven't yet implemented it, mainly because the *Manual* has nothing to say about it. Perhaps the organization field could be used, for the moment, instead. Anything in a venue field will be ignored.
- version Standard biblatex field, currently only available in misc and patent entries in biblatex-chicago-notes.
- **volume** Standard biblatex field. It holds the volume of a journaltitle in article (and some review) entries, and also the volume of a multi-volume work in many other sorts of entry. Cf. part.
- **volumes** Standard biblatex field. It holds the total number of volumes of a multi-volume work, and in the 16th edition of the *Manual* no longer triggers any odd changes to the punctuation of short notes (14.159; meredith:letters).
 - xref A modified crossref field provided by biblatex. See crossref, above.
 - year Standard biblatex field. It usually identifies the year of publication, though unlike the date field it allows non-numeric input, so you can put "n.d." (or, to be language agnostic, \bibstring{nodate}) here if required, or indeed any other sort of non-numerical date information. If you can guess the date then you can include that guess in square brackets instead of, or after, the "n.d." abbreviation. Cf. bedford:photo, clark:mesopot, leo:madonna, ross:thesis.

4.3 Commands

In this section I shall attempt to document all those commands you may need when using biblatex-chicago-notes that I have either altered with respect to the standard provided by biblatex or that I have provided myself. Some of these, unfortunately, will make your .bib file incompatible with other biblatex styles, but I've been unable to avoid this. Any ideas for more elegant, and more compatible, solutions will be warmly welcomed.

4.3.1 Formatting Commands

These commands allow you to fine-tune the presentation of your references in both notes and bibliography. You can find many examples of their usage in notes-test.bib, and I shall try to point you toward a few such entries in what follows. **NB:** biblatex's \mkbibquote command is now mandatory in some situations. See its entry below.

\autocap Version 0.8 of biblatex introduced the \autocap command, which capitalizes a word inside a note or bibliography entry if that word follows sentence-ending

punctuation, and leaves it lowercase otherwise. As this command is both more powerful and more elegant than the kludge I designed for a previous version of biblatex-chicago-notes (see **\bibstring** below), you should be aware that the use of the single-letter \bibstring commands in your .bib file is obsolete.

In order somewhat to reduce the burden on users even further, I have, following Lehman's example, implemented a new system which automatically tracks the capitalization of certain fields in your .bib file. I chose these fields after a non-scientific survey of entries in my own databases, so of course if you have ideas for the extension of this facility I would be most interested to hear them. In order to take advantage of this functionality, all you need do is begin the data in the appropriate field with a lowercase letter, e.g., note = {with the assistance of X}. If the data begins with a capital letter — and this is not infrequent — that capital will always be retained. (cf., e.g., creel:house, morgenson:market.) If, on the other hand, you for some reason need such a field always to start with a lowercase letter, then you can try using the \isdot macro at the start, which turns off the mechanism without printing anything itself. Here, then, is the complete list of fields where this functionality is active:

- 1. The addendum field in all entry types.
- 2. The **booktitleaddon** field in all entry types.
- 3. The **edition** field in all entry types. (Numerals work as you expect them to here.)
- 4. The maintitleaddon field in all entry types.
- 5. The **note** field in all entry types.
- 6. The **shorttitle** field in the review (suppperiodical) entry type and in the misc type, in the latter case, however, only when there is an entrysubtype defined, indicating that the work cited is from an archive.
- 7. The **title** field in the review (supperiodical) entry type and in the misc type, in the latter case, however, only when there is an entrysubtype defined, indicating that the work cited is from an archive.
- 8. The **titleaddon** field in all entry types.
- 9. The **type** field in artwork, audio, image, music, suppbook, suppcollection, and video entry types.

In any other cases — and there are only two examples of this in notes-test.bib (centinel:letters, powell:email) — you'll need to provide the \autocap command yourself. Indeed, if you accidentally do so in one of the above fields, it shouldn't matter at all, and you'll still get what you want, but taking advantage of the automatic provisions should at least save some typing.

\bibstring This is Lehman's very powerful mechanism to allow biblatex automatically to provide a localized version of a string, and to determine whether that string needs capitalization, depending on where it falls in an entry. In the first release of biblatex-chicago-notes, the style relied very heavily on this macro, particularly on an extension I provided by defining all 26 letters of the (ASCII) alphabet as bibstrings (\bibstring{a}, \bibstring{b}, etc.) While you should continue to use the standard, whole-word bibstrings, all use of the single-letter variants I formerly provided is obsolete, and will generate an error. This functionality has been replaced by the \autocap command, which does the same thing, only more elegantly. This command was designed by Philipp Lehman, and has now been included in version o.8 of biblatex. For yet greater convenience I have implemented, following Lehman's example, a system automating this functionality in all of the entry fields where its use was, by my reckoning, most frequent. This means that, when you require this functionality, all you need do is input the

data in such a field starting with a lowercase letter, and biblatex-chicago-notes will do the rest with no further assistance. In my notes-test.bib file, this new mechanism in effect eliminated all need for the single-letter bibstrings and very nearly all need for the \autocap command — centinel:letters and powell:email being the only exceptions. Please see \autocap above for full details.

I should also mention here that biblatex 0.7 introduced a new functionality which sometimes allows you simply to input, for example, newseries instead of \bibstring{newseries}, the package auto-detecting when a bibstring is involved and doing the right thing, though in all such cases either form will work. This functionality is available in the series field of article, periodical, and review entries; in the type field of manual, patent, report, and thesis entries; in the location field of patent entries; in the language field in all entry types; and in the nameaddon field in customc entries. These are the places, as far as I can make out, where biblatex's standard styles support this feature, and I have added the last, style-specific, one. If Lehman generalizes it still further in a future release, I shall do the same, if possible.

\custpunct In common with other American citation styles, the Manual requires that the \custpunctb commas and periods separating units of a reference go inside any quotation marks that happen to be present. As of version o.8c, biblatex contains truly remarkable code that handles this situation in very nearly complete generality, detecting punctuation after the closing quotation mark and moving it inside when necessary, and also controlling which punctuation marks can be printed after which other punctuation marks, whether quotation marks intervene or not. This functionality is now mature, and biblatex-chicago-notes relies on this code to place punctuation in the "American style," rather than on complicated \DeclareFieldFormat instructions that attempt to anticipate all possible permutations. One result of this, thankfully, is that both \custpunct and \custpunctb are now basically unnecessary, as their only purpose was to supply context-appropriate punctuation inside any quotation marks that users themselves provided as part of various entry fields. A second consequence, and I've already recommended this in previous releases anyway, is that users now must use \mkbibquote instead of \enquote or the usual LATEX mechanisms inside their .bib files. For further details, please see the \mkbibquote entry below.

I have retained the code for the \custpunct commands in chicago-notes.cbx, in case a particularly gnarly entry might still require them, but I have already started to re-use the type field, which formerly served as a switch for \custpunct, in other contexts (see **artwork**, **image**, and **suppbook** above).

- \isdot This is a standard biblatex macro, which in previous releases of biblatex-chicago could function as a convenient placeholder in entry fields that, for one reason or another, you may have wanted to have defined and yet to print nothing. With the release of biblatex 1.6, this no longer works as before, a situation which has revealed a number of inconsistencies and bugs in my code, the rectification of which may therefore require some changes to your .bib files, assuming you've taken advantage of this mechanism. I believe that all the situations formerly calling for this specific use of the macro can now be addressed by more standard means, i.e., the \headlesscite commands and the useauthor=false declaration in the options field. (See creel:house, nyt:obittrevor, sewall:letter, unsigned:ranke, and white:total.)
- \letterdatelong I have provided this macro mainly for use in the optional postnote field of the various citation commands. When citing a letter (published or unpublished, letter or misc), it may be useful to append the date to the usual short note form in order to disambiguate references. This macro simply prints the date of a letter, or indeed of any other sort of correspondence. (If your main document language isn't English, it's better just to use the standard biblatex command \printorigdate.)

\mkbibquote This is the standard biblatex command, which requires attention here because it is a crucial part of the mechanism of Lehman's "American" punctuation system. If you look in chicago-notes.cbx you'll see that the quoted fields, e.g., an article or incollection title, have this command in their formatting, which does most of the work for you. If, however, you need to provide additional quotation marks in a field — a quoted title within a title, for example — then you may need to use this command so that any following period or comma will be brought within the closing quotation marks. Its use is *required* when the quoted material comes at the end of a field, and I recommend always using it in your .bib database, as it does no harm even when that condition is not fulfilled. A few examples from notes-test.bib should help to clarify this.

In an article entry, the title contains a quoted phrase:

title = {Diethylstilbestrol and Media Coverage of the
 \mkbibquote{Morning After} Pill}

Here, because the quoted text doesn't come at the end of title, and no punctuation will ever need to be drawn within the closing quotation mark, you could instead use \enquote{Morning After} or even 'Morning After'. (Note the single quotation marks here — the other two methods have the virtue of taking care of nesting for you.) All of these will produce the formatted "Diethylstilbestrol and Media Coverage of the 'Morning After' Pill." Here, by contrast, is a book title:

title = {Annotations to \mkbibquote{Finnegans Wake}}

Because the quoted title within the title comes at the end of the field, and because this bibliographical unit will be separated from what follows by a period in the bibliography, then the \mkbibquote command is necessary to bring that period within the final quotation marks, like so: *Annotations to "Finnegans Wake."*

Let me also add that this command interacts well with Lehman's csquotes package, which I highly recommend, though the latter isn't strictly necessary in texts using an American style, to which biblatex defaults when csquotes isn't loaded.

\reprint This and the following 7 macros all help biblatex-chicago-notes cope with the fact that many bibstrings in the Chicago system differ between notes and bibliography, the former sometimes using abbreviated forms when the latter prints them in full. In the current case, if a book is a reprint, then the macro \reprint, followed by a comma, should go in the location field before the city of publication (aristotle:metaphy:gr, schweitzer:bach). See **location**, above.

NB: The rules for employing abbreviated or full bibstrings in the *Manual* are remarkably complex, but I have attempted to make them as transparent for users as possible. In biblatex-chicago-notes, if you don't see it mentioned in this section, then in theory you should always provide an abbreviated version, using the \bibstring mechanism, if necessary (babb:peru). The standard biblatex bibstrings should also work (palmatary:pottery), and any that won't should be covered by the series of macros beginning here with \reprint and ending below with \parttransandcomp.

\partcomp Since the *Manual* specifies that the strings editor, translator, and compiler all require different forms in notes and bibliography, and since it mentions these three apart from all the others biblatex provides (annotator, commentator, et al.), and further since it may indeed happen that the available fields (editor, namea, translator, nameb, and namec) aren't adequate for presenting some entries, I have provided 7 macros to allow you to print the correct strings for these functions in both notes and bibliography. Their names all begin with \part, as originally I intended them for use when a particular name applied only to a specific title, rather than to a maintitle or booktitle (cf. namea and nameb, above).

In the present instance, you can use \partcomp to identify a compiler when namec won't do, e.g., in a note field or the like. In such a case, biblatex-chicago-notes will print the appropriate string in your references.

\partedit Use this macro when identifying an editor whose name doesn't conveniently fit into the usual fields (editor or namea). (N.B.: If you are writing in French and using cms-french.lbx, then currently you'll need to add either de or d' after this command in your .bib files to make the references come out right. I'm working on this.) See chaucer:liferecords.

 \parteditandcomp
 \parteditandtrans
 \parteditandtrans
 \parteditandtrans
 \partedittransandcomp
 \parttrans
 As before, but for when an editor is also a translator (ratliff:review).
 As before, but for when an editor is also a translator and a compiler.
 translator
 As before, but for use when identifying a translator whose name doesn't conveniently fit into the usual fields (translator and nameb).

\parttransandcomp

s- As before, but for when a translator is also a compiler.

4.3.2 Citation Commands

The biblatex package is particularly rich in citation commands, some of which (e.g., \supercite(s), \citeyear) provide functionality that isn't really needed by the Chicago notes and bibliography style offered here. If you are getting unexpected behavior when using them please have a look in your .log file — there may be warnings there that alert you to undefined citation commands. Other biblatex-provided commands, though I haven't tested them extensively, should pretty much work out of the box. What remains are the commands I have found most useful and necessary for following the *Manual*'s specifications, and I document in this section any alterations I have made to these. As always, if there are standard commands that don't work for you, or new commands that would be useful, please let me know, and it should be possible to fix or add them.

A number of users have run into a problem that appears when they've used a command like \cite inside a \footnote macro. In this situation, the automatic capitalization routines will not be in operation at the start of the footnote, so instead of "Ibid.," for example, you'll see "ibid." If you need to use the \cite command within a \footnote command, the solution is to use \Cite instead. Alternatively, don't use a \footnote macro at all, rather try \footcite or \autocite with the optional prenote and postnote arguments. Cf. \Citetitle below, and also section 3.6 of biblatex.pdf.

- **\autocite** I haven't adapted this in the slightest, but I thought it worth pointing out that biblatex-chicago-notes sets this command to use \footcite as the default option. It is, in my experience, much the most common citation command you will use, and also works fine in its multicite form, **\autocites**.
 - \cite* While the \cite command works just as you would expect it to, I have also provided a starred version for the rare situations when you might need to turn off the ibidem tracking mechanism. Biblatex provides very sophisticated algorithms for using "Ibid" in notes, so in general you won't find a need for this command, but in case you'd prefer a longer citation where you might automatically find "Ibid," I've provided this. Of course, you'll need to put it inside a \footnote command manually. (See also section 4.4.3, below.)
- **\citeauthor** I have adapted this standard biblatex command only very slightly to bring it into line with biblatex-chicago's needs. Its main usage will probably be for references

to works from classical antiquity, when an author's name (abbreviated or not) sometimes suffices in the absence of a title, e.g., Thuc. 2.40.2–3 (14.258). You'll need to put it inside a \footnote command manually. (Cf. also entrysubtype in section 4.2, above.)

- \citejournal This command provides an alternative short form when citing journal articles, giving the journaltitle and volume number instead of the article title after the author's name. The *Manual* suggests that this format might be helpful "in the absence of a full bibliography" (14.196). It may also prove useful when you want to provide parenthetical references to newspaper articles within the text rather than in the bibliography, a style endorsed by the *Manual* (14.206). In such a case, an article's author, if there is one, could form part of the running text. As usual with these general citation commands, if you want the reference to appear in a footnote you need to put it inside a \footnote command manually.
 - **\Citetitle** This simply prepends \bibsentence to the usual \citetitle command. Some titles may need this for the automatic contextual capitalization facility to work correctly. (Included as standard from biblatex o.8d.)
 - \citetitles Joseph Reagle noticed that, because of the way biblatex-chicago-notes formats titles in quotation marks, using the \citetitle command will often get you punctuation you don't want, especially when presenting a list of titles. I've included this multicite command to enable you to present such a list, if the need arises. Remember that you'll have to put it inside a \footnote command manually.
- \footfullcite Another standard biblatex command, modified to work properly with biblatexchicago-notes, and provided in case you find yourself in a situation where you really need the full citation in a footnote, but where \autocite would print a short note or even "Ibid." This may be particularly useful if you've chosen to use all short notes by setting the short option in the arguments to \usepackage{biblatex}, yet still feel the need for the occasional full citation.
 - \fullcite This, too, is a standard command, and it too provides a full citation, but unlike the previous command it doesn't automatically place it in a footnote. It may be useful within long textual notes.
- **\headlesscite** Matthew Lundin requested a more generalized \headlesscite macro, suppressing the author's name in specific contexts while allowing users not to worry about whether a particular citation needs the long or short form, a responsibility thereby handed over to biblatex's tracking mechanisms. This citation command attempts to fulfill this request. Please note that, in the short form, the result will be rather like a \citetitle command, which may or may not be what you want. Note, also, that as I have provided only the most flexible form of the command, you'll have to wrap it in a \footnote yourself. Please see the next entry for further discussion of some of the needs this command might help address.
 - **headlessfullcite** I have provided this command in case you want to print a full citation without the author's name. The *Manual* (14.78, 14.88) suggests this for brevity's sake in cases where that name is already obvious enough from the title, and where repetition might seem awkward (creel:house, feydeau:farces, meredith:letters, and sewall:letter). Letter entries — and only such entries — do this for you automatically, and of course the repetition is tolerated in bibliographies for the sake of alphabetization, but in notes this command may help achieve greater elegance, even if it isn't strictly necessary. As I've provided only the most flexible form of the command, you'll have to wrap it in a \footnote yourself.

- **\shortcite** I have provided this command in case, for any reason, you specifically require the short form of a note, and biblatex thinks you want something else. Again, I've provided only the most flexible form of the command, so you'll have to wrap it in a \footnote manually.
- \shorthandcite At the request of Kenneth Pearce, I have included this command which always prints the shorthand, even at the first citation of a given work. Again, I've only provided the most flexible form of the command, so you'll need to place it inside parentheses or wrap it in a \footnote manually.
 - \surnamecite This command is analogous to \headlesscite, but whereas the latter allows you to omit an author's name when that name is obvious from the title of a work, \surnamecite allows you to shorten a full note citation in contexts where the full name(s) of the author have already been provided in the text. In short notes this falls back to the standard format, but in long notes it simply omits the given names of the author and provides only the surname, along with the full data of the entry. (Cf. 14.52.)
 - \textcite Norman Gray started a discussion on Stackexchange which established both that biblatex had begun including a \textcite command in its verbose styles and that biblatex-chicago-notes hadn't kept up. In that thread the user Audrey provided some code, adapted from verbose.cbx, to provide such a command for the Chicago notes & bibliography style. I'm still not entirely certain how best to accommodate this request within the package, but there are now at least commands (\textcite and \textcites) for users to test. Their functionality is a little complicated. In the main text, they will provide an author's name, followed immediately by a foot- or endnote which contains the full (or short) reference, following the usual rules. If you use \textcite inside a foot- or endnote, then you'll get the author's name followed by the bibstring "in," then the headless citation. This latter usage is slightly awkward when the citation is a full one, but works reasonably well for short notes, and I'm as yet unconvinced that putting the citation inside parentheses, generally discouraged by the Manual (14.33), helps this situation much. If you disagree, please let me know.

If you look at chicago-notes.cbx, you'll see a number of other citation commands, but those are intended for internal use only, mainly in cross-references of various sorts. Use at your own risk.

4.4 Package Options

4.4.1 Pre-Set biblatex Options

Although a quick glance through biblatex-chicago.sty will tell you which biblatex options the package sets for you, I thought I might gather them here also for your perusal. These settings are, I believe, consistent with the specification, but you can alter them in the options to biblatex-chicago in your preamble or by loading the package via \usepackage[style=chicago-notes]{biblatex}, which gives you the biblatex defaults unless you redefine them yourself inside the square brackets.

abbreviate= false	By default, biblatex-chicago-notes prints the longer bibstrings, mainly for use in the bibliography, but since notes require the shorter forms of many of them, I've had to define many new strings for use there.
autocite= footnote	Biblatex-chicago-notes places references in footnotes by default.
citetracker= true	The citetracker for the <i>\ifciteseen</i> test is enabled globally.
alldates=comp	The specification calls for the long format when presenting dates, slightly short- ened when presenting date ranges.
dateabbrev= false	The Manual prefers full month names in the notes & bibliography style.

ibidtracker= constrict	This enables the use of "Ibid" in notes, but only in the most strictly-defined circumstances. Whenever there might be any ambiguity, biblatex should default to printing a more informative reference. Remember also that you can use the \cite* command to disable this functionality in any given reference, or indeed one of the fullcite commands if you need the long note form for any reason.
loccittracker =constrict	This allows the package to determine whether two consecutive citations of the same source also cite the same page of that source. In such a case, Ibid alone will be printed, without the page reference, following the specification (14.29).
maxbibnames =10 minbibnames =7	These two options are new, and control the number of names printed in the bibliography when that number exceeds 10. These numbers follow the recommendations of the <i>Manual</i> (14.76), and they are different from those for use in notes. With biblatex 1.6 you can no longer redefine maxnames and minnames in the \printbibliography command at the bottom of your document, so biblatex-chicago now does this automatically for you, though of course you can change them in your document preamble.
pagetracker= true	This enables page tracking for the <code>\iffirstonpage</code> and <code>\ifsamepage</code> commands for controlling, among other things, the printing of "Ibid." It tracks individual pages if LATEX is in oneside mode, or whole spreads in twoside mode.
sortcase= false	This turns off the sorting of uppercase and lowercase letters separately, a practice which the <i>Manual</i> doesn't appear to recommend.
sorting= \cms@choose	This new setting tests whether you are using Biber as your backend, and if so enables a custom biblatex-chicago sorting scheme for the bibliography (cms). If you are using any other backend, it reverts to the biblatex default (nty). Please see the discussion of \DeclareSortingScheme just below.
usetranslator =true	This enables automatic use of the translator at the head of entries in the absence of an author or an editor. In the bibliography, the entry will be alphabetized by the translator's surname. You can disable this functionality on a per-entry basis by setting usetranslator=false in the options field. Cf. silver:gawain.

Other biblatex Formatting Options

I've chosen defaults for many of the general formatting commands provided by biblatex, including the vertical space between bibliography items and between items in the list of shorthands (\bibitemsep and \lositemsep). I define many of these in biblatex-chicago.sty, and of course you may want to redefine them to your own needs and tastes. It may be as well you know that the *Manual* does state a preference for two of the formatting options I've implemented by default: the 3-em dash as a replacement for repeated names in the bibliography (14.63–67, and just below); and the formatting of note numbers, both in the main text and at the bottom of the page / end of the essay (superscript in the text, in-line in the notes; 14.19). The code for this last formatting is also in biblatex-chicago.sty, and I've wrapped it in a test that disables it if you are using the memoir class, which I believe has its own commands for defining these parameters. You can also disable it by using the footmarkoff package option, on which see below.

Gildas Hamel pointed out that my default definition, in biblatex-chicago.sty, of biblatex's \bibnamedash didn't work well with many fonts, leaving a line of three dashes separated by gaps. He suggested an alternative, which I've adopted, with a minor tweak to make the dash thicker, though you can toy with all the parameters to find what looks right with your chosen font. The default definition is: \renewcommand*{\bibnamedash}{\rule[.4ex]{3em}{.6pt}}.

losnotes & With this release, and at the request of Kenneth Pearce, I have added two losendnotes With this release, and at the request of Kenneth Pearce, I have added two new bibenvironments to chicago-notes.bbx, for use with the env option to the \printshorthands command. The first, losnotes, is designed to allow a list of shorthands to appear inside footnotes, while losendnotes does the same for endnotes. Their main effect is to change the font size, and in the latter case to clear up some spurious punctuation and white space that I see on my system when using endnotes. (You'll probably also want to use the option heading=none in order to get rid of the [oversized] default, providing your own within the \footnote command.) Please see the documentation of shorthand in section 4.2 above for further options available to you for presenting and formatting the list of shorthands.

\Declare-Labelname The next-generation backend Biber offers enhanced functionality in many areas, two of which I've implemented in this release. \DeclareLabelname allows you to add name fields for consideration when biblatex is attempting to find a shortened name for short notes. This, for example, allows a compiler (=namec) to appear at the head of short notes without any other intervention from the user, rather than requiring a shortauthor field as previous releases of biblatex-chicago did. In point of fact, I have implemented this functionality in such a way as to make it available even to users of other backends, but this required reducing its flexibility considerably. When biblatex reaches version 2.0, Biber will become a requirement, so I recommend getting to know it sooner rather than later.

\Declare-SortingScheme The second Biber enhancement I have implemented allows you to include almost any field whatsoever in biblatex's sorting algorithms for the bibliography, so that a great many more entries will be sorted correctly automatically rather than requiring manual intervention in the form of a sortkey field or the like. Code in biblatex-chicago.sty detects whether you are using Biber, and if and only if this is the case changes the sorting scheme to a custom one (cms), a Chicago-specific variant of the default nty. (You can find its definition in chicago-notes.cbx.) Users of all other backends will still be using nty.

The advantages of this scheme are, specifically, that any entry headed by one of the supplemental name fields (name[a-c]), a manual entry headed by an organization, or an article or review entry headed by a journaltitle will no longer need a sortkey set. The main disadvantage should only occur very rarely, and appears because the supplemental name fields are treated differently from the standard name fields by biblatex. Ordinarily, you can set, for example, useauthor=false in the options field to remove the author's name from consideration for sorting purposes. The Chicago-specific option usecompiler=false, however, doesn't remove namec from such consideration, so in an entry like chaucer:alt you *do* need a sortkey or else it will be alphabetized by namec rather than by title.

4.4.2 Pre-Set chicago Options

- bookpages= At the request of Scot Becker, I have included this rather specialized option, true which controls the printing of the pages field in book entries. Some bibliographic managers, apparently, place the total page count in that field by default, and this option allows you to stop the printing of this information in notes and bibliography. It defaults to true, which means the field is printed, but it can be set to false either in the preamble, for the whole document, or on a per-entry basis in the options field (though rather than use this latter method it would make sense to eliminate the pages field from the affected entries).
- doi=true This option controls whether any doi fields present in the .bib file will be printed in notes and bibliography. At the request of Daniel Possenriede, and keeping in mind the *Manual's* preference for this field instead of a url (14.6), I have added a third switch, only, which prints the doi if it is present and the url only if there is no doi. The package default remains the same, however — it defaults to true, which will print both doi and url if both are present. The option can be set to only or to false either in the preamble, for the whole document, or on a per-entry basis in the options field. In online entries, the doi field will always be printed, but the only switch will still eliminate any url.
- eprint=true This option controls whether any eprint fields present in the .bib file will be printed in notes and bibliography. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. In online entries, the eprint field will always be printed.

- isbn=true This option controls whether any isan, isbn, ismn, isrn, issn, and iswc fields present in the .bib file will be printed in notes and bibliography. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field.
- numbermonth= Once again at the request of Scot Becker, I have included this option, which true controls the printing of the month field in all the periodical-type entries when a number field is also present. Some bibliographic software, apparently, always includes the month of publication even when a number is present. When all this information is available the *Manual* (14.180, 14.185) prints everything, so this option defaults to true, which means the field is printed, but it can be set to false either in the preamble, for the whole document, or on a per-entry basis in the options field.
 - url=true This option controls whether any url fields present in the .bib file will be printed in notes and bibliography. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. Please note that, as in standard biblatex, the url field is always printed in online entries, regardless of the state of this option.
- includeall= This is the one option that rules the six preceding, either printing all the fields under consideration the default or excluding all of them. It is set to true in chicago-notes.cbx, but you can change it either in the preamble for the whole document or, for specific fields, in the options field of individual entries. The rationale for all of these options is the availability of bibliographic managers that helpfully present as much data as possible, in every entry, some of which may not be felt to be entirely necessary. Setting includeall to true probably works just fine for those compiling their .bib databases by hand, but others may find that some automatic pruning helps clear things up, at least to a first approximation. Some per-entry work afterward may then polish up the details.
- addendum= At the request of Roger Hart, I have included this option, which controls the printing of the addendum field, but *only* in long notes. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field.
- bookseries= According to the *Manual* (14.128), the series field in book-like entries "may be true omitted to save space (especially in a footnote)." This option allows you to control the printing of that field in long notes. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. Several entry types don't use this field, so the option will have no effect in them, and it is also ignored in article, misc, music, periodical, and review entries.
- notefield= As with the previous two options, Roger Hart requested an option to control true the printing of the note field in long notes. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. The option will be ignored in article, misc, periodical, and review fields.
- completenotes This is the one option that rules the three preceding, either printing all the fields under consideration the default or excluding all of them from long notes. It is set to true in chicago-notes.cbx, but you can change it either in the preamble for the whole document or, for specific fields, in the options field of individual entries.
- usecompiler= This option enables automatic use of the name of the compiler (in the namec true field) at the head of an entry, usually in the absence of an author, editor, or translator, in accordance with the specification (*Manual* 14.87). It may also, like useauthor, useeditor, and usetranslator, be disabled on a per-entry basis by setting usecompiler=false in the options field. Please remember that, because namec isn't a standard biblatex field, it may take a little extra effort to get it to work smoothly. The package should now automatically take care of

finding a name for short notes, but it will alphabetize by this name in the bibliography only if you use Biber, failing which you'll need to provide a sortkey for this purpose. (These rules don't apply when you modify the editor's identifying string using the editortype field, which is the procedure I recommend if the entry-heading compiler is only a compiler, and not also, e.g., an editor or a translator.) Cf. \DeclareSortingScheme and \DeclareLabelname in section 4.4.1, above; also, chaucer:alt for an entry where, because none of the names provided appear at the head of the reference, you will need to provide a sortkey to stop Biber using the namec — because it's not a standard name field, you can stop it being printed at the head of the entry, but you can't stop it turning up in the sorting algorithms.

4.4.3 Style Options – Preamble

These are parts of the specification that not everyone will wish to enable. All except the second can be used even if you load the package in the old way via a call to biblatex, but most users can just place the appropriate string(s) in the options to the \usepackage{biblatex-chicago} call in your preamble.

- annotation At the request of Emil Salim, I included in biblatex-chicago the ability to produce annotated bibliographies. If you turn this option on then the contents of your annotation (or annote) field will be printed after the bibliographical reference. (You can also use external files to store annotations – please see biblatex.pdf § 3.10.7 for details on how to do this.) This functionality is currently in a beta state, so before you use it please have a look at the documentation for the annotation field, on page 22 above.
- footmarkoff Although the *Manual* (14.19) recommends specific formatting for footnote (and endnote) marks, i.e., superscript in the text and in-line in foot- or endnotes, Charles Schaum has brought it to my attention that not all publishers follow this practice, even when requiring Chicago style. I have retained this formatting as the default setup, but if you include the footmarkoff option, biblatexchicago-notes will not alter LATEX's (or the endnote package's) defaults in any way, leaving you free to follow the specifications of your publisher. I have placed all of this code in biblatex-chicago.sty, so if you load the package with a call to biblatex instead, then once again footnote marks will revert to the LATEX default, but of course you also lose a fair amount of other formatting, as well. See section 4.5.1, below.
- juniorcomma The *Manual* (6.47) states that "commas are not required around *Jr.* and *Sr.*," so by default biblatex-chicago has followed standard biblatex in using a simple space in names like "John Doe Jr." Charles Schaum has pointed out that traditional BiBT_EX practice was to include the comma, and since the *Manual* has no objections to this, I have provided an option which allows you to turn this behavior back on, either for the whole document or on a per-entry basis. Please note, first, that numerical suffixes (John Doe III) never take the comma. The code tests for this situation, and detects cardinal numbers well, but if you are using ordinals you may need to set this to false in the options field of some entries. Second, I have fixed a bug in older releases which always printed the "Jr." part of the name immediately after the surname, even when the surname came before the given names (as in a bibliography). The package now correctly puts the "Jr." part at the end, after the given names, and in this position it always takes a comma, the presence of which is unaffected by this option.
 - natbib This may look like the standard biblatex option, but to keep the coding of biblatex-chicago.sty simpler for the moment I have reimplemented it there, from whence it is merely passed on to biblatex. If you load the Chicago style with \usepackage{biblatex-chicago}, then the option should simply read natbib, rather than natbib=true. The shorter form also works if you load the style using \usepackage[style=chicago-notes]{biblatex}, so I hope this requirement isn't too onerous.

- noibid At the request of an early tester, I have included this option to allow you globally to turn off the ibidem mechanism that biblatex-chicago-notes uses by default. Some publishers, it would appear, require this. Setting this option will mean that all possible instances of *ibid*. will be replaced by the short note form. For more fine-grained control of individual citations you'll probably want to use specialized citation commands, instead. See section 4.3.2.
- short This option means that your text will only use the short note form, even in the first citation of a particular work. The *Manual* (14.14) recommends this space-saving format only when you provide a *full* bibliography, though even with such a bibliography you may feel it easier for your readers to present long first citations. If you do use the short option, remember that there are several citation commands which allow you to present the full reference in specific cases (see section 4.3.2). If your bibliography is not complete, then you should not use this option.
- shorthandfull Kenneth Pearce has suggested that, in some fields of study, a list of shorthands providing full bibliographical information may replace the bibliography itself. This option prints this full information in the list of shorthands, though of course you should remember that any .bib entry not containing a shorthand field won't appear in such a list. Please see the documentation of the shorthand field in section 4.2 above for information on further options available to you for presenting and formatting the list of shorthands.
- shorthandibid Chris Sparks pointed out that biblatex-chicago-notes would never use *ibid.* in the case of entries containing a shorthand field, but rather that consecutive references to such an entry continued to provide the shorthand, instead. The *Manual* isn't, as far as I can tell, completely clear on this question. In 14.258, discussing references to works from classical antiquity, it states that "when abbreviations are used, these rather than *ibid.* should be used in succeeding references to the same work," but I can't make out whether this rule is specific to classical references or has more general scope. Given this ambiguity, I don't think it unreasonable to provide an option to allow printing of *ibid.* instead of the same as it always has.
 - strict This still-experimental option attempts to follow the *Manual*'s recommendations (14.36) for formatting footnotes on the page, using no rule between them and the main text unless there is a run-on note, in which case a short rule intervenes to emphasize this continuation. I haven't tested this code very thoroughly, and it's possible that frequent use of floats might interfere with it. Let me know if it causes problems.

4.5 General Usage Hints

4.5.1 Loading the Style

With the addition of the author-date style to the package, I have provided two keys for choosing which style to load, notes and authordate, one of which you put in the options to the \usepackage command. The default way of loading the notes + bibliography style has therefore slightly changed. With early versions of biblatex-chicago-notes, the standard way of loading the package was via a call to biblatex, e.g.:

```
\usepackage[style=chicago-notes,strict,backend=bibtex8,%
babel=other,bibencoding=inputenc]{biblatex}
```

Now, the default way to load the style, and one that will in the vast majority of standard cases produce the same results as the old invocation, will look like this:

```
\usepackage[notes,strict,backend=bibtex8,babel=other,%
bibencoding=inputenc]{biblatex-chicago}
```

(In point of fact, the previous biblatex-chicago loading method without the notes option will still work, but only because I've made the notes & bibliography style the default if no style is explicitly requested.) If you read through biblatex-chicago.sty, you'll see that it sets a number of biblatex options aimed at following the Chicago specification, as well as setting a few formatting variables intended as reasonable defaults (see section 4.4.1, above). Some parts of this specification, however, are plainly more "suggested" than "required," and indeed many publishers, while adopting the main skeleton of the Chicago style in citations, nonetheless maintain their own house styles to which the defaults I have provided do not conform.

If you only need to change one or two parameters, this can easily be done by putting different options in the call to biblatex-chicago or redefining other formatting variables in the preamble, thereby overriding the package defaults. If, however, you wish more substantially to alter the output of the package, perhaps to use it as a base for constructing another style altogether, then you may want to revert to the old style of invocation above. You'll lose all the definitions in biblatex-chicago.sty, including those to which I've already alluded and also the code that sets the note number in-line rather than superscript in endnotes or footnotes. Also in this file is the code that calls cms-american.lbx, which means that you'll lose all the Chicago-specific bibstrings I've defined unless you provide, in your preamble, a \DeclareLanguageMapping command adapted for your setup, on which see section 6 below and also §§ 4.9.1 and 4.11.7 in Lehman's biblatex.pdf.

What you *will not* lose is the ability to call the package options annotation, strict, short, and noibid (section 4.4.3, above), in case these continue to be useful to you when constructing your own modifications. There's very little code, therefore, actually in biblatex-chicago.sty, but I hope that even this minimal separation will make the package somewhat more adaptable. Any suggestions on this score are, of course, welcome.

4.5.2 Other Hints

One useful rule, when you are having difficulty creating a .bib entry, is to ask yourself whether all the information you are providing is strictly necessary. The Chicago specification is a very full one, but the *Manual* is actually, in many circumstances, fairly relaxed about how much of the data from a work's title page you need to fit into a reference. Authors of introductions and afterwords, multiple publishers in different countries, the real names of authors more commonly known under pseudonyms, all of these are candidates for exclusion if you aren't making specific reference to them, and if you judge that their inclusion won't be of particular interest to your readers. Of course, any data that may be of such interest, and especially any needed to identify and track down a reference, has to be present, but sometimes it pays to step back and reevaluate how much information you're providing. I've tried to make biblatex-chicago-notes robust enough to handle the most complex, data-rich citations, but there may be instances where you can save yourself some typing by keeping it simple.

Scot Becker has pointed out to me that the inverse problem not only exists but may well become increasingly common, to wit, .bib database entries generated by bibliographic managers which helpfully provide as much information as is available, including fields that users may well wish not to have printed (ISBN, URL, DOI, pagetotal, inter alia). The standard biblatex styles contain a series of options, detailed in biblatex.pdf §3.1.2.2, for controlling the printing of some of these fields, and with this release I have implemented the ones that are relevant to biblatex-chicago, along with a couple that Scot requested and that may be of more general usefulness. There is also a general option to excise with one command all the fields under consideration – please see section 4.4.2 above.

If you are having problems with the interaction of punctuation and quotation marks in notes or bibliography, first please check that you've used \mkbibquote

in the relevant part of your .bib file. If you are still getting errors, please let me know, as it may well be a bug.

For the biblatex-chicago-notes style, I have fully adopted biblatex's system for providing punctuation at the end of entries. Several users noted insufficiencies in previous releases of biblatex-chicago, sometimes related to the semicolon between multiple citations, sometimes to ineradicable periods after long notes, bugs that were byproducts of my attempt to fix other end-of-entry errors. One of the side effects of this older code was (wrongly) to put a period after a long note produced, e.g., by a command like \footnote{\headlessfullcite}, whereas only the "foot" cite commands (including \autocite in the default biblatex-chicago-notes set up) should do so. If you came to rely on this side effect, please note now that you'll have to put the period in yourself when explicitly calling \footnote, like so: \footnote{\headlessfullcite{key}.}

When you use abbreviations at the ends of fields in your .bib file (e.g., "n.d." or "Inc.,") biblatex-chicago-notes should deal automatically with adding (or suppressing) appropriate punctuation after the final dot. This includes retaining periods after such dots when a closing parenthesis intervenes, as in (n.d.). Merely entering the abbreviation without informing biblatex that the final dot is a dot and not a period should always work, though you do have to provide manual formatting in those rare cases when you need a comma after the author's initials in a bibliography, usually in a misc entry (see house:papers). If you find you need to provide such formatting elsewhere, please let me know.

Finally, allow me to reiterate what Philipp Lehman says in biblatex.pdf, to wit, use bibtex8, rather than standard BIBT_EX, and avoid the cryptic errors that ensue when your .bib file gets to a certain size.

5 The Specification: Author-Date

The biblatex-chicago package now contains two different author-date styles. The first, biblatex-chicago-authordate, implements the specifications of the 16th edition of the Chicago Manual of Style. Numbers in parentheses refer to sections of the Manual, though as this latest edition now recommends "a uniform treatment for the main elements of citation in both of its systems of documentation" (15.2), many of these references will in fact be to the chapter on the notes & bibliography style (chap. 14), which chapter is, by design, considerably more detailed than that devoted to the author-date style. The second, biblatex-chicagoauthordate-trad, implements that same specification but with a markedly different style of title presentation, including sentence-style capitalization and an absence of quotation marks around the (plain-text) titles of article or incollection entries, *inter alia*. The trad style is so named because older versions of the Manual, up to and including the 15th edition, recommended this plainer style for author-date titles, and the 16th edition itself suggests the possibility, when needed, of retaining such title presentation in combination with its own recommendations for other parts of the reference apparatus (15.45). In practice, the differences between the two styles necessitate separate discussions of the title field and one extra package option (headline), and that's about it.

Generally, then, the following documentation covers both Chicago author-date styles, and attempts to explain all the parts of the specification that might be considered somehow "non standard," at least with respect to the styles included with biblatex itself. In the section on entry fields I admit I have also duplicated a lot of the information in biblatex.pdf, which I hope won't badly annoy expert users of the system. As usual, headings in green indicate material new to this release, or occasionally old material that has undergone significant revision. The file dates-test.bib contains many examples from the *Manual* which, when processed using biblatex-chicago-authordate, should produce the same output as you see in the *Manual* itself, or at least compliant output, where the specifications are vague or open to interpretation, a state of affairs which does some-

New in this release

times occur. If you are using biblatex-chicago-authordate-trad the same basically holds, but you'd have to keep one eye on the 15th edition of the *Manual* (chap. 17) for the titles. I have provided cms-dates-sample.pdf and cms-trad-sample.pdf, which show how my system processes dates-test.bib, and I have also included the reference keys from the latter file below in parentheses.

5.1 Entry Types

The complete list of entry types currently available in biblatex-chicago-authordate and authordate-trad, minus the odd biblatex alias, is as follows: article, artwork, audio, book, bookinbook, booklet, collection, customc, image, inbook, incollection, inproceedings, inreference, letter, manual, misc, music, online (with its alias www), patent, periodical, proceedings, reference, report (with its alias techreport), review, suppbook, suppcollection, supperiodical, thesis (with its aliases mastersthesis and phdthesis), unpublished, and video.

What follows is an attempt to specify all the differences between these types and the standard provided by biblatex. If an entry type isn't discussed here, then it is safe to assume that it works as it does in the standard styles. In general, I have attempted not to discuss specific entry fields here, unless such a field is crucial to the overall operation of a given entry type. As a general and important rule, most entry types require very few fields when you use biblatexchicago-authordate, so it seemed to me better to gather information pertaining to fields in the next section.

article The *Chicago Manual of Style* (14.170) recognizes three different sorts of periodical publication, "journals," "magazines," and "newspapers." The first (14.172) includes "scholarly or professional periodicals available mainly by subscription," while the second refers to "weekly or monthly" publications that are "available either by subscription or in individual issues at bookstores or newsstands." "Magazines" will tend to be "more accessible to general readers," and typically won't have a volume number. The following paragraphs detail how to construct your .bib entries for all these sorts of periodical publication.

For articles in "journals" you can simply use the traditional BIBTEX — and indeed biblatex - article entry type, which will work as expected and set off the page numbers with a colon in the list of references, as required by the Manual. If, however, you wish to cite a "magazine" or a "newspaper", then you need to add an entrysubtype field containing the exact string magazine. The main formatting differences between a magazine (which includes both "magazines" and "newspapers") and a plain article are that time specifications (month, day, season) aren't placed within parentheses, and that page numbers are set off by a comma rather than a colon. Otherwise, the two sorts of reference have much in common. (For article, see Manual 14.175-198, 15.9, 15.43-46; batson, beattie:crime, chu:panda, connell:chronic, conway:evolution, friedman:learning, garaud:gatine, garrett, hlatky:hrt, kern, lewis, loften:hamlet, loomis:structure, rozner:liberation, schneider:mittelpleistozaene, terborgh:preservation, wall:radio, warr:ellison, white:callimachus. With entrysubtype magazine, cf. 14.181, 14.199-202, 15.47; assocpress:gun, lakeforester:pushcarts, morgenson:market, reaves:rosen, stenger:privacy.)

The *Manual* now suggests that, no matter which citation style you are using, it is "usually sufficient to cite newspaper and magazine articles entirely within the text" (15.47). This involves giving the title of the journal and the full date of publication in a parenthetical reference, including any other information in the main text (14.206), thereby obviating the need to present such an entry in the list of references. To utilize this method in the author-date styles, in addition to a magazine entrysubtype, you'll need to place cmsdate=full into the options field, including skipbib there as well to stop the entry printing in the list of references. If the entry only contains a date and journaltitle that's enough, but if it's a fuller entry also containing an author then you'll also need

useauthor=false in the options field. Other surplus fields will be ignored. (See osborne:poison.)

If you are familiar with the notes & bibliography style, you'll know that the Manual treats reviews (of books, plays, performances, etc.) as a sort of recognizable subset of "journals," "magazines," and "newspapers," distinguished mainly by the way one formats the title of the review itself. With the 16th edition's changes to the way titles are presented in the authordate style, users need to learn how to present this sort of material, which involves using an entry type (review) that wasn't necessary in the 15th edition. The key rule is this: if a review has a separate, non-generic title (gibbard; osborne:poison) in addition to something that reads like "review of ...," then you need an article entry, with or without the magazine entrysubtype, depending on the sort of publication containing the review. If the only title is the generic "review of \ldots ," for example, then you'll need the review entry type, with or without this same entrysubtype toggle using magazine. On review entries, see below. (The curious reader will no doubt notice that the code for formatting any sort of review still exists in article, as it was initially designed for biblatex 0.6, but this new arrangement is somewhat simpler and therefore, I hope, better.)

In the case of a review with a specific as well as a generic title, the former goes in the title field, and the latter in the titleaddon field. Standard biblatex intends this field for use with additions to titles that may need to be formatted differently from the titles themselves, and biblatex-chicago-authordate uses it in just this way, with the additional wrinkle that it can, if needed, replace the title entirely, and this in, effectively, any entry type, providing a fairly powerful, if somewhat complicated, tool for getting BIBTEX to do what you want. Here, however, if all you need is a generic title like "review of ...," then you want to switch to the review type, where you can simply use the title field for it.

No less than seven more things need explication under this heading. First, since the *Manual* specifies that what goes into the titleaddon field of article entries stays unformatted — no italics, no quotation marks — this plain style is the default for such text, which means that you'll have to format any titles within titleaddon yourself, e.g., with \mkbibemph{}. Second, the *Manual* specifies a similar plain style for the titles of other sorts of material found in "magazines" and "newspapers," e.g., obituaries, letters to the editor, interviews, the names of regular columns, and the like. References may contain both the title of an individual article and the name of the regular column, in which case the former should go, as usual, in a title field, and the latter in titleaddon. As with reviews proper, if there is only the generic title, then you want the review entry type. (See 14.203, 14.205, 14.208; morgenson:market, reaves:rosen.)

Third, the 16th edition of the Manual suggests that "unsigned newspaper articles or features are best dealt with in text ... " (14.207). As with newspaper or magazine articles in general, you can place cmsdate=full and skipbib into the options field to produce an augmented in-text citation whilst keeping this material out of the reference list. If you do use the reference list, then the standard shorter citation will be sufficient, and in both cases the name of the periodical (in the journaltitle field) will be used in place of the missing author. Just to clarify: in article or review entries, entrysubtype magazine, and only in such entries, a missing author field results in the name of the periodical (in the journaltitle field) being used as the missing author. The new default sorting scheme in biblatex-chicago-authordate means that you no longer need the sortkey field to alphabetize by journaltitle instead of title, though you will still need one if you retain the definite or indefinite article at the beginning of the journaltitle. Also, if you want to abbreviate the journaltitle for use in citations, but give the full name in the list of references, then the shortauthor field, somewhat surprisingly, is the place for it. (See section 5.4.1, below; lakeforester:pushcarts, nyt:trevorobit, unsigned:ranke.)

Fourth, in certain fields, just beginning your data with a lowercase letter activates the mechanism for capitalizing that letter depending on its context within

a list of references entry. This is less important in the author-date styles, where this information only turns up in the reference list and not in citations, but you can consult **\autocap** below for all the details. Both the titleaddon and note fields are among those treating their data this way, and since both appear regularly in article entries, I thought the problem merited a preliminary mention here.

Fifth, if you need to cite an entire issue of any sort of periodical, rather than one article in an issue, then the periodical entry type, once again with or without the magazine toggle in entrysubtype, is what you'll need. (You can also use the article type, placing what would normally be the issuetitle in the title field and retaining the usual journaltitle field, but this arrangement isn't compatible with standard biblatex.) The note field is where you place something like "special issue" (with the small "s" enabling the automatic capitalization routines), whether you are citing one article or the whole issue (conley:fifthgrade, good:wholeissue). Indeed, this is a somewhat specialized use of note, and if you have other sorts of information you need to include in an article or periodical entry, then you shouldn't put it in the note field, but rather in titleaddon or perhaps addendum (brown:bremer).

Sixth, I would suggest that if you wish to cite a television or radio broadcast, the article type, entrysubtype magazine is the place for it. The name of the program would go in journaltitle, with the name of the episode in title. The network's name goes into the usera field. (8.185, 14.221; see bundy:macneil for an example of how this all might look in a .bib file. Commercial recordings of such material would need one of the audiovisual entry types, probably audio or video [friends:leia], while recordings from archives fit best into misc entries with an entrysubtype [coolidge:speech, roosevelt:speech].)

Finally, the 16th edition of the *Manual* (14.243–6) specifies that blogs and other, similar online material should be presented like articles, with magazine entry-subtype (ellis:blog). The title of the specific entry goes in title, the general title of the blog goes in journaltitle, and the word "blog" in the location field (though you could just use special formatting in the journaltitle field itself, which may sometimes be necessary). Comments on blogs, with generic titles like "comment on" or "reply to," need a review entry with the same entrysubtype. Such comments make particular use of the eventdate and of the nameaddon fields; please see the documentation of **review**, below.

If you're still with me, allow me to recommend that you browse through datestest.bib to get a feel for just how many of the *Manual*'s complexities the article, periodical, and review types attempt to address. It may be that in future releases of biblatex-chicago I'll be able to simplify these procedures somewhat, but with any luck the vast majority of sources won't require knowledge of these onerous details.

artwork Arne Kjell Vikhagen has pointed out to me that none of the standard entry types were straightforwardly adaptable when referring to visual artworks. The *Manual* doesn't give any thorough specifications for such references, and indeed it's unclear that it believes it necessary to include them in the reference apparatus at all. Still, it's easy to conceive of contexts in which a list of artworks studied might be desirable, and biblatex includes entry types for just this purpose, though the standard styles leave them undefined. The two I chose to include in previous releases were artwork and image, the former intended for paintings, sculptures, etchings, and the like, the latter for photographs. The 16th edition of the *Manual* has modified its specifications for presenting photographs so that they are the same as for works in all other media. The image type, therefore, is now merely a clone of the artwork type, maintained mainly to provide backward compatibility for users migrating from the old specification to the current one.

As one might expect, the artist goes in author and the name of the work in title. The type field is intended for the medium — e.g., oil on canvas, charcoal on paper — and the version field might contain the state of an etching. You can

place the dimensions of the work in note, and the current location in organization, institution, and/or location, in ascending order of generality. The type field, as in several other entry types, uses biblatex's automatic capitalization routines, so if the first word only needs a capital letter at the beginning of a sentence, use lowercase in the .bib file and let biblatex handle it for you. (See *Manual* 3.22, 8.193; leo:madonna, bedford:photo.)

As a final complication, the *Manual* (8.193) says that "the names of works of antiquity ... are usually set in roman." If you should need to include such a work in the reference apparatus, you can either define an entrysubtype for an artwork entry — anything will do — or you could use the image type, or you could try the misc entry type with an entrysubtype. Fortunately, in this instance the other fields in a misc entry function pretty much as in artwork or image.

audio Following the request of Johan Nordstrom, I have included three entry types, all undefined by the standard styles, designed to allow users to present audiovisual sources in accordance with the Chicago specifications. The *Manual's* presentation of such sources (14.263–273, 15.53), though admirably brief, seems to me somewhat inconsistent; the proliferation of online sources has made the task yet more complex. For the 15th edition I attempted to condense all the requirements into two new entry types, but ended up relying on three. For the 16th edition, in particular, I also need to include the **online** and even the **misc** entry types, which see, under the audiovisual rubric. I shall attempt to delineate the main differences here, and though there are likely to be occasions when your choice of entry type is not obvious, at the very least biblatex-chicago should help you maintain consistency.

For users of the author-date styles, the 16th edition of the *Manual* (15.53) "recommends a more comprehensive approach to dating audiovisual materials than in previous editions," meaning that nearly all such entries will have some sort of dating information and will therefore fit better stylistically with other references. In particular, "the date of the original recording should be privileged in the citation." Guidance for supplying dates for this class of material will be found below under the different entry types in use, though it will also be worthwhile to look at the documentation of date, eventdate, origdate, and urldate, in section 5.2, below. The *Manual* continues to suggest, also, that "it is often more appropriate to list such materials in running text and group them in a separate section or discography".

The **music** type is intended for all musical recordings that do not have a video component. This means, for example, digital media (whether on CD or hard drive), vinyl records, and tapes. The video type includes most visual media, whether it be films, TV shows, tapes and DVDs of the preceding or of any sort of performance (including music), or online multimedia. The Manual's treatment (14.280) of the latter suggests that online video excerpts, short pieces, and interviews should generally use the online type (harwood:biden, horowitz:youtube, pollan:plant). The audio type, our current concern, fills gaps in the others, and presents its sources in a more "book-like" manner. Published musical scores need this type - unpublished ones would use misc with an entrysubtype (shapey:partita) — as do such favorite educational formats as the slideshow and the filmstrip (greek:filmstrip, schubert:muellerin, verdi:corsaro). The Manual (14.277–280) sometimes uses a similar format for audio books (twain:audio), though, depending on the sorts of publication facts you wish to present, this sort of material may fall under music (auden:reading). Dated audio recordings that are part of an archive, online or no, may best be presented in a **misc** entry with an entrysubtype (coolidge:speech, roosevelt:speech).

Once you've accepted the analogy of composer to author, constructing an audio entry should be fairly straightforward, since many of the fields function just as they do in book or inbook entries. Indeed, please note that I compare it to both these other types as, in common with the other audiovisual types, audio has to do double duty as an analogue for both books and collections, so while there will normally be an author, a title, a publisher, a date, and a location, there may also be a booktitle and/or a maintitle — see schubert:muellerin for an entry that uses all three in citing one song from a cycle. If the medium in question needs specifying, the type field is the place for it. Finally, the titleaddon field can specify functions for which biblatex-chicago provides no automated handling, e.g., a librettist (verdi:corsaro).

bookinbook This type provides the means of referring to parts of books that are considered, in other contexts, themselves to be books, rather than chapters, essays, or articles. (Older versions of biblatex-chicago used **customb** for this purpose, but this is now deprecated.) Such an entry can have a title and a maintitle, but it can also contain a booktitle, all three of which will be italicized in the reference matter. In general usage it is, therefore, rather like the traditional inbook type, only with its title in italics rather than in quotation marks. (See *Manual* 14.114, 14.127, 14.130; bernard:boris, euripides:orestes, plato:republic:gr.)

NB: The Euripides play receives slightly different presentations in 14.127 and 14.130. Although the specification is very detailed, it doesn't eliminate all choice or variation. Using a system like BIBT_EX should help to maintain consistency.

- **booklet** This is the first of two entry types the other being manual, on which see below which are traditional in BIBTEX styles, but which the *Manual* (14.249) suggests may well be treated basically as books. In the interests of backward compatibility, biblatex-chicago-authordate will so format such an entry, which uses the howpublished field instead of a standard publisher, though of course if you do decide just to use a book entry then any information you might have given in a howpublished field should instead go in publisher. (See clark:mesopot.)
- **customa** This entry type is now obsolete, and any such entries in your .bib file will trigger an error. Please use the standard biblatex letter type instead.
- **customb** This entry type is now obsolete, and any such entries in your .bib file will trigger an error. Please use the standard biblatex **bookinbook** type instead.
- **customc** This entry type allows you to include alphabetized cross-references to other, separate entries in the bibliography, particularly to other names or pseudonyms, as recommended by the *Manual*. (This is different from the usual crossref, xref, and userf mechanisms, all primarily designed to include cross-references to other works. Cf. 14.84,86). In the 15th edition's specification of the author-date style, it allowed you, in particular, to include the expansions of abbreviations and shorthands usually of corporate authors *inside* the list of references itself, rather than in the list of shorthands. The 16th edition of the *Manual* (15.36), however, has a new specification for such corporate authors. As in the old specification, the shorthand appears in citations and at the head of the entry in the list of references, but its expansion now appears within parentheses *directly after* the shorthand, i.e., *within* the same entry. This means you no longer need the customc entry for shorthands of this sort. (See shorthand, below; bsi:abbreviation, iso:electrodoc.)

I should add immediately that, as I read the specification (14.84,86, 15.34), the alphabetized cross-references provided by customc are particularly encouraged, bordering on required, when a reference list "includes two or more works published by the same author but under different pseudonyms." The following entries in dates-test.bib show one way of addressing this: creasey:ashe:blast, creasey:york:death, creasey:morton:hide, ashe:creasey, york:creasey and morton:creasey. In these latter cases, you would need merely to place the pseudonym in the author field, and the author's real name, under which his or her works are presented in the bibliography, in the title field. To make sure the cross-reference also appears in the bibliography, you can either manually in-

clude the entry key in a \nocite command, or you can put that entry key in the **userc** field in the main .bib entry, in which case biblatex-chicago will print the expanded abbreviation if and only if you cite the main entry. (Cf. userc, below.)

Under ordinary circumstances, biblatex-chicago will connect the two parts of the cross-reference with the word "*See*" — or its equivalent in the document's language — in italics. If you wish to present the cross-reference differently, you can put the connecting word(s) into the nameaddon field.

Finally, you may need to use this entry type if you wish to include a comment inside the parentheses of a citation, as specified by the *Manual* (15.23). If you have a postnote, then you can manually provide the punctuation and comment there, e.g., \autocite[4; the unrevised trans.]{stendhal:parma}. Without a postnote, you'll need a separate misc or customc entry containing just the text of the comment in the title field, entrysubtype classical, and options skipbib. An \autocites command calling both the main text and the comment will do the trick, e.g., \autocites{chicago:manual}{chicago:comment}.

- **image** This entry type, left undefined in the standard styles, was in previous releases of biblatex-chicago intended for referring to photographs, but the 16th edition of the *Manual* has changed its specifications for such works, which are now treated the same as works in all other media. This means that this entry type is now a clone of the artwork type, which see. I retain it here as a convenience for users migrating from the old to the new specification. (See 3.22, 8.193; bedford:photo.)
- inbook These two standard biblatex types have very nearly identical formatting requireincollection ments as far as the Chicago specification is concerned, but I have retained both of them for compatibility. Biblatex.pdf (§ 2.1.1) intends the first for "a part of a book which forms a self-contained unit with its own title," while the second would hold "a contribution to a collection which forms a self-contained unit with a distinct author and its own title." The title of both sorts will be placed within quotation marks, and in general you can use either type for most material falling into these categories. There is, however, an important difference between them, as it is only in incollection entries that I implement the Manual's recommendations for space-saving abbreviations in the list of references when you cite multiple pieces from the same collection. These abbreviations are activated when you use the crossref or xref field in incollection entries, and not in inbook entries, mainly because the Manual (14.113) specifies a "multiauthor book," at least in the chapter devoted to the notes & bibliography style. The author-date chapter (15.37) is less clear, but the intent seems similar. (For more on this mechanism see crossref, below, and note that it is also active in letter and inproceedings entries. There is, of course, nothing to prevent you from using the mechanism when referring to, e.g., chapters from a single-author book, but you'll have to use incollection instead of inbook.) If the part of a book to which you are referring has had a separate publishing history as a book in its own right, then you may wish to use the bookinbook type, instead, on which see above. (See Manual 14.111–114, 15.37; inbook: ashbrook:brain, phibbs:diary, will:cohere; incollection: centinel:letters, contrib:contrib, sirosh:visualcortex; ellet:galena, keating:dearborn, and lippincott:chicago [and the collection entry prairie:state] demonstrate the use of the crossref field with its attendant abbreviations in the list of references.)

NB: The *Manual* suggests that, when referring to a chapter, one use either a chapter number or the inclusive page numbers, not both. In-text citations, of course, require any **postnote** field to specify if it is a whole chapter to which you are referring.

inproceedings This entry type works pretty much as in standard biblatex. Indeed, the main differences between it and incollection are the lack of an edition field and the possibility that an organization may be cited alongside the publisher, even though the *Manual* doesn't specify its use (14.226). Please note, also, that the crossref

and xref mechanism for shortening citations of multiple pieces from the same proceedings is operative here, just as it is in incollection entries. See **crossref**, below, for more details.

inreference This entry type is aliased to incollection in the standard styles, but the *Manual's* requirements for the notes & bibliography style prompted a thoroughgoing revision. Unfortunately, instructions for the author-date style are considerably less copious, so parts of what follows are my best guess at following the specification (14.247–248).

One thing, at least, seems clear. If your reference work can easily or conveniently be presented like a regular book, that is, with an author or editor, a year of publication, and a title, and if you you will be citing it by page or section number, then you should almost certainly simply choose the book entry type for your .bib entry. (Cf. mla:style, schellinger:novel, times:guide. The latter was presented as an inreference entry for the notes & bibliography style, but because the book entry type can also present references to alphabetized headings [see below], at least in the list of references, then it seemed better just to choose a book entry for the author-date styles.)

If you simply cannot make your source fit the template for a book, then you may need to use the inreference type, the main feature of which is the lista field, which you use to present citations from "alphabetically arranged" works by named article rather than by page number. You should present these article names just as they appear in the work, separated by the keyword "and" if there is more than one, and biblatex-chicago-authordate will provide the appropriate prefatory string (s.v., plural s.vv.), and enclose each in its own set of quotation marks (times:guide). More relevant to the author-date styles is the fact that the postnote field works the same way in inreference entries, the only limitation on this system being that this field, unlike lista, is not a list, and therefore for the formatting to work correctly you can only put one article name in it. In the case of "[w]ell-known reference books, such as major dictionaries and encyclopedias," you are encouraged not to include them in the list of references, so the lista field actually may be of less use than this special formatting of postnote. You may want to look at ency:britannica, where only a (carefully-formatted) shorttitle and an options field are necessary to allow you to produce in-text citations that look like (Ency. Brit. 15th ed., s.v. "Article").

If it seems appropriate to include such a work in the list of references, perhaps because the work is not so well known that a short citation will be parseable by your readers, or perhaps because it is an online work, which requires you to provide a urldate (see below), be aware that the contents of the lista field will also be presented there, which may not be what you want. A separate inreference or reference entry might solve this problem, but you may also need a sortkey field to ensure proper alphabetization, as biblatex will attempt to use an editor or author name, if either is present. In a typical inreference entry, very few fields are needed, as "the facts of publication are often omitted, but the edition (if not the first) must be specified." In practice, this means a title and possibly an edition field. The author field holds the author of the specific article (in lista), not the author of the title as a whole. This name will be printed in parentheses after the entry's name (grove:sibelius).

All of these rules apply to online reference works, as well, for which you need to provide not only a url but also, always, a urldate, as these sources are in constant flux (wikiped:bibtex, grove:sibelius). The author-date styles will automatically use this as the identifying date in citations and the list of references, assuming a more conventional date isn't available. Please note, however, that the automatic provision of the "n.d." abbreviation, in the absence of any sort of date whatsoever, has been turned off for inreference entries, as for misc and reference entries.

letter This entry type was designed to be used for citing letters, memoranda, or similar texts, but *only* when they appear in a published collection. (Unpublished material of this nature needs a misc entry, for which see below.) The author-date specification (15.40), however, recommends against individual letters appearing in a list of references, suggesting instead that you put the whole published collection in a book entry and use a notice in the text to specify the letter (white:total).

If you absolutely must include individual letters in the list of references, for whatever reason, then the instructions above for the notes & bibliography style in section 4.1, s.v. "letter," should get you started. There are a few wrinkles, related to date specifications, that I shall attempt to clarify here. If you look at white:ross:memo and white:russ, you'll see two letters from the same published collection, both written in the same year. You can now simply use the origdate field in both of them, because in the absence of a date (or an eventdate) Biber and biblatex will use the origyear as the labelyear, putting it at the head of the entry and in the citation, and also ensuring that the letters a,b,c are appended to disambiguate the two sources. You no longer need anything in the options field at all, thanks to the way \DeclareLabelyear works through the possibilities and finds a date to head the entry. In this case, it works because we are using the xref mechanism to refer to the whole published collection (white:total), so a separate citation of that entry provides the date for the shortened cross-reference included in the list of references, and the letter entry never sees that date at all.

If this all seems clear as mud, I'm not surprised, but let me suggest that you experiment with the different date settings to see what kinds of effects they have on the final result, and also read the documentation of the date field in section 5.2 below.

- **manual** This is the second of two traditional BIBTEX entry types that the *Manual* suggests formatting as books, the other being booklet. As with this latter, I have retained it in biblatex-chicago-authordate for backward compatibility, its main peculiarity being that, in the absence of a named author, the organization producing the manual will be provided both as author and as publisher. (You can give a shortened form of the organization in the shortauthor field for text citations, if needed.) Of course, if you were to use a book entry for such a reference, then you would need to define both author and publisher using the name you here might have put in organization. (See 14.92; chicago:manual, dyna:browser, natrecoff:camera.)
 - **misc** As its name suggests, the misc entry type was designed as a hold-all for citations that didn't quite fit into other categories. In biblatex-chicago, I have somewhat extended its applicability, while retaining its traditional use. Put simply, with no entrysubtype field, a misc entry will retain backward compatibility with the standard styles, so the usual howpublished, version, and type fields are all available for specifying an otherwise unclassifiable text, and the title will be italicized. (The *Manual*, you may wish to note, doesn't give specific instructions on how such citations should be formatted, so when using the Chicago style I would recommend you have recourse to this traditional entry type as sparingly as possible.)

If you do provide an entrysubtype field, the misc type provides a means for citing unpublished letters, memoranda, private contracts, wills, interviews, and the like, making it something of an unpublished analogue to the letter, article, and review entry types (which see). Typically, such an entry will cite part of an archive, and equally typically the text cited won't have a specific title, but only a generic one, whereas an unpublished entry will ordinarily have a specific author and title, and won't come from a named archive. The misc type with an entrysubtype defined is the least formatted of all those specified by the *Manual*, so titles are in plain text by default. It is quite possible, though somewhat unusual, for archival material to have a specific title, rather than a generic one.

In these cases, you will need to enclose the title inside a \mkbibquote command manually. Cf. coolidge:speech, roosevelt:speech, shapey:partita. As a rule, and as with the letter type, the *Manual* (15.49) suggests that the list of references will usually contain only the name of the whole archived collection, with more specific information about individual items provided in the text, outside the parentheses. If, on the other hand, "only one item from a collection has been mentioned in text, the entry may begin with the writer's name (if known)." (See 14.219-220, 14.231, 14.232-242; house:papers cites a whole archive, while creel:house, dinkel:agassiz, and spock:interview cite individual pieces.)

As far as constructing your .bib entry goes, you should first know that, like the inreference and reference types, the absence of any date will not result in the "n.d." abbreviation automatically being provided. As for presenting the date, the Manual draws a distinction between archival material that is "letterlike" (letters, memoranda, reports, telegrams) and that which isn't (interviews, wills, contracts, or even personal communications you've received and which you wish to cite). This may not always be the easiest distinction to draw, and in previous releases of biblatex-chicago I have been ignoring it, but once you've decided to classify it one way or the other you put the date in the origdate field for letters, etc. (creel:house), and into the date field for the others (spock:interview). Like with the letter type, if the only date present is an origdate, you no longer need to set the cmsdate option in your .bib entry to make sure that that year appears at the head of the entry (and in citations) — this now happens automatically. (Cf. particularly the documentation in section 5.2 below, s.v. "date", and also the letter type above for some of the date-related complications that can arise, and how you can address them with judicious use of the options, date, and origdate fields.)

As in letter entries, the titles of unpublished letters are of the form Author to Recipient, further information can be given in the titleaddon field, while the origlocation field can hold the place where the letter was written. Interviews or similar pieces will have a different sort of title, but all types will use the note, organization, institution, and location fields (in ascending order of generality) to identify the archive, though the *Manual* specifies (14.238) that well-known depositories don't usually need a city, state or country specified. (The traditional misc fields are all still available, also.)

When your .bib entry refers to an entire archived collection, then you may wish to use the word "classical" as your entrysubtype, which will have no effect on the list of references but will change the look of the in-text citations (house:papers). Instead of any date, the citation will include the title, separated from the author's name by a space, e.g., (House Papers). This same arrangement, happily, allows you easily to cite individual books of the Bible, and also certain other sacred texts (14.252–55; genesis). Please see under entrysubtype in section 5.2 below for all the details of the classical toggle.

In all this class of archived material, the *Manual* (14.232) quite specifically requires more consistency within your own work than conformity to some external standard, so it is the former which you should pursue. I hope that biblatexchicago proves helpful in this regard.

music The 16th edition of the manual has revised its recommendations more for this type than for any other, so the notes which follow present several large changes that you'll need to make to your .bib files. The good news is that some, though by no means all, of those changes involve considerable simplifications. **Music** is one of three audiovisual entry types, and is intended primarily to aid in the presentation of musical recordings that do not have a video component, though it can also include audio books (auden:reading). A DVD or VHS of an opera or other performance, by contrast, should use the **video** type instead (handel:messiah). Because biblatex — and BIBTEX before it — were designed primarily for citing book-like objects, some choices needed to be made in as-

signing the various roles found on the back of a CD to the fields in a typical .bib entry. I have also implemented several bibstrings to help in identifying these roles within entries. If you can think of a simpler way to distribute the roles, please let me know, so that I can consider making changes before anyone gets used to the current equivalences.

These equivalences, in summary form, are:

- author = composer, songwriter, or performer(s), depending on whom you wish to emphasize by placing them at the head of the entry.
- editor, editora, editorb = conductor, director or performer(s). These will ordinarily follow the title of the work, though the usual useauthor and useeditor options can alter the presentation within an entry. Because these are non-standard roles, you will need to identify them using the following:
- editortype, editoratype, editorbtype: The most common roles, all associated with specific bibstrings (or their absence), will be conductor, director, producer, and, oddly, none. The last is particularly useful when identifying the group performing a piece, as it usually doesn't need further specifying and this role prevents biblatex from falling back on the default editor bibstring.
- title, booktitle, maintitle: As with the other audiovisual types, music serves as an analogue both to books and to collections, so the title will either be, e.g., the album title or a song title, in which latter case the album title would go into booktitle. The maintitle might be necessary for something like a box set of *Complete Symphonies*.
- publisher, series, number: These three closely- associated fields are intended for presenting the catalog information provided by the music publisher. The 16th edition generally only requires the series and number fields (nytrumpet:art), which hold the record label and catalog number, respectively. Alternatively, publisher would function as a synonym for series (holiday:fool), but there may be cases when you need or want to specify a publisher in addition to a label, as was the general requirement in the 15th edition. (This might happen, for example, when a single publisher oversees more than one label.) You can certainly put all of this information into one of the above fields, but separating it may help make the .bib entry more readable.
- howpublished/pubstate: The 16th edition of the *Manual* (14.276, 15.53) has rather helpfully eliminated any reference to the specialized symbols (**P** & **©**) found in the 15th edition for presenting publishing information for musical recordings. This means that the howpublished field is now obsolete, and you can remove it from music entries in your .bib files. The pubstate field, therefore, can revert to its standard use for identifying reprints. In music entries, putting reprint here will transform the origdate from a recording date for an entire album into an original release date for that album, notice of which will be printed towards the end of a reference list entry, always assuming that the origdate hasn't already appeared at the head of the entry and in citations.
- date, eventdate, origdate: As though to compensate for the simplification I've just mentioned, the Manual now "recommends a more comprehensive approach to dating audiovisual materials than in previous editions" (15.53). Indeed, "citations without a date are generally unacceptable" (14.276), while if there is more than one date "the date of the original recording should be privileged" (15.53). Finding these dates may take some research, but they will basically fall into two types, i.e., the date of the recording or the copyright / publishing date. Recording dates go either

in origdate (for complete albums) or eventdate (for individual tracks). The current copyright or publishing date goes in the date field, while the original release date goes in origdate. You may have noticed that the origdate has two slightly different uses - you can tell biblatex-chicago which sort you intend by using the string reprint in the pubstate field, which transforms the origdate from a recording date into an original release date. The style will automatically use the eventdate or the origdate in citations and at the head of the list of references, falling back on a date or even a urldate in their absence. It will also prepend the bibstring recorded to any part of the eventdate that doesn't appear at the head of the list of references or, in the absence of the pubstate mechanism, to the origdate, or indeed to both. You can modify what is printed here using the new userd field, which acts as a sort of date type modifier. In music entries, userd will be prepended to an eventdate if there is one, barring that to the origdate, and to a possible urldate absent those two, the latter behavior being the standard across most other entry types. (See holiday:fool, nytrumpet:art.)

type: As in all the audiovisual entry types, the type field holds the medium of the recording, e.g., vinyl, 33 rpm, 8-track tape, cassette, compact disc, mp3, ogg vorbis.

The entries in dates-test.bib should at least give you a good idea of how this all works, and that file also contains an example of an audio book presented in a music entry. If you browse the examples in the *Manual* you will see some variations in the formatting choices there, from which I have made selections for biblatex-chicago. It wasn't always clear to me that these variations were rules as opposed to possibilities, so I've ignored some of them in the code. Arguments as to why I'm wrong will, of course, be entertained. (Cf. 14.276–77, 15.53; eventdate, origdate, userd; \DeclareLabelyear in section 5.4.1 and avdate in section 5.4.2; auden:reading, beethoven:sonata29, bernstein:shostakovich, floyd:atom, holiday:fool, nytrumpet:art, rubinstein:chopin.)

online The Manual's scattered instructions (14.4–13, 14.166–169, 14.184–185, 14.200, 14.223, 14.243-246, 15.4, 15.9) for citing online materials are slightly different from those suggested by standard biblatex. Indeed, this is a case where complete backward compatibility with other biblatex styles may be impossible, because as a general rule the *Manual* considers relevant not only where a source is found, but also the nature of that source, e.g., if it's an online edition of a book (james:ambassadors), then it calls for a book entry. Even if you cite an intrinsically online source, if that source is structured more or less like a conventional printed periodical, then you'll probably want to use article or review instead of online (stenger:privacy, which cites CNN.com). The 16th edition's suggestions for blogs lend themselves well to the article type, too, while comments become, logically, reviews (14.243-6; ellisiblog, accomment). Otherwise, for online documents not "formally published," the online type is usually the best choice (evanston:library, powell:email). Online videos, in particular short pieces or those that present excerpts of some longer event or work, and also online interviews, usually require this type, too. (See harwood:biden, horowitz:youtube, pollan:plant, but cp. weed:flatiron, a complete film, which requires a video entry. Online audio pieces, particularly dated ones from an archive, work best as misc entries with an entrysubtype: coolidge:speech, roosevelt:speech.) Some online materials will, no doubt, make it difficult to choose an entry type, but so long as all locating information is present, then perhaps that is enough to fulfill the specification, or at least so I'd like to hope.

Constructing an online .bib file entry is much the same as in biblatex. The title field would contain the title of the page, the organization field could hold the title or owner of the whole site. If there is no specific title for a page, but only a generic one (powell:email), then such a title should go in titleaddon, not forgetting to begin that field with a lowercase letter so that capitalization will work out correctly. It is worth remarking here, too, that the 16th edition of the

Manual (14.7–8) prefers, if they're available, revision dates to access dates when documenting online material. See urldate and userd, below.

- patent The Manual is very brief on the subject of patents (15.50), but very clear about which information it wants you to present, so such entries may not work well with other biblatex styles. In a change to previous practice, the 16th edition of Chicago's author-date style prefers the *later* of the two possible dates to appear in citations and at the head of the entry in the list of references. If a patent has been filed but not yet granted, then you can place the filing date in either the date field or the origdate field, and biblatex-chicago-authordate will automatically prepend the bibstring patentfiled to it. If the patent has been granted, then you put the filing date in the origdate field, and you put the date it was issued in the date field, to which the bibstring patentissued will automatically be prepended, and it is this later date that will head the entry and appear in citations. The patent number goes in the number field, and you should use the standard biblatex bibstrings in the type field. Though it isn't mentioned by the Manual, biblatex-chicago-authordate will print the holder after the author, if you provide one. Finally, the 16th edition of the Manual capitalizes the title sentencestyle, which seems to be the generally-accepted convention, across both Chicago styles. As I've removed all of the automatic down-casing code from previous editions, you may need manually to revise the title field to provide the lowercase letters. See petroff:impurity.
- **periodical** This is the standard biblatex entry type for presenting an entire issue of a periodical, rather than one article within it. It has the same function in biblatex-chicago, and in the main uses the same fields, though in keeping with the system established in the article entry type (which see) you'll need to provide entrysubtype magazine if the periodical you are citing is a "newspaper" or "magazine" instead of a "journal." Also, remember that the note field is the place for identifying strings like "special issue," with its initial lowercase letter to activate the automatic capitalization routines, though this isn't strictly necessary in the author-date styles. (See *Manual* 14.187; good:wholeissue.)
- **reference** This entry type is aliased to collection by the standard biblatex styles, but I intend it to be used in cases where you need to cite a reference work but not an alphabetized article or articles in that work. This could be because it doesn't contain such articles, and yet you still want the entry in the list of references to start with the title. Indeed, the only differences between it and inreference are the lack of a lista field to present an alphabetized entry, and the fact that any postnote field will be printed verbatim, rather than formatted as an alphabetized entry. (Cf. inreference, above.)
 - **report** This entry type is a biblatex generalization of the traditional BIBTEX type techreport. Instructions for such entries are rather thin on the ground in the *Manual* (14.249), so I have followed the generic advice about formatting it like a book, and hope that the results conform to the specification. Its main peculiarities are the institution field in place of a publisher, the type field for identifying the kind of report in question, and the isrn field containing the International Standard Technical Report Number of a technical report. As in standard biblatex, if you use a techreport entry, then the type field automatically defaults to \bibstring{techreport}. As with booklet and manual, you can also use a book entry, putting the report type in note and the institution in publisher. (See herwign:office.)
 - **review** The review entry type wasn't, strictly speaking, necessary for the 15th edition author-date specification. With the major changes to the presentation of the title fields in the 16th edition, however, it has now become necessary for authordate users, if not authordate-trad users, to familiarize themselves with it as a means of coping with the *Manual*'s complicated requirements for citing periodicals of all

sorts. As its name suggests, this entry type was designed for reviews published in periodicals, and if you've already read the article instructions above — if you haven't, I recommend doing so now - you'll know that review serves as well for citing other sorts of material with generic titles, like letters to the editor, obituaries, interviews, online comments and the like. The primary rule is that any piece that has only a generic title, like "review of ...," "interview with ...," or "obituary of ...," calls for the review type. Any piece that also has a specific title, e.g., "Lost in BIBTEX,' an interview with ...," requires an article entry. (This assumes the text is found in a periodical of some sort. Were it found in a book, then the incollection type would serve your needs, and you could use title and titleaddon there. While we're on the topic of exceptions, the Manual includes an example — 14.221 — where the "Interview" part of the title is considered a subtitle rather than a titleaddon, said part therefore being included inside the quotation marks and capitalized accordingly. Not having the journal in front of me I'm not sure what prompted that decision, but biblatex-chicago would obviously have no difficulty coping with such a situation.)

Once you've decided to use review, then you need to determine which sort of periodical you are citing, the rules for which are the same as for an article entry. If it is a "magazine" or a "newspaper", then you need an entrysubtype magazine. The generic title goes in title and the other fields work just as as they do in an article entry with the same entrysubtype, including the substitution of the journaltitle for the author if the latter is missing. (See 14.202–203, 14.205, 14.208, 14.214–217, 14.221, 15.47; barcott:review, bundy:macneil, Clemens:letter, gourmet:052006, kozinn:review, nyt:trevorobit, unsigned:ranke, wallraff:word.) If, on the other hand, the piece comes from a "journal," then you don't need an entrysubtype. The generic title goes in title, and the remaining fields work just as they do in a plain article entry. (See 14.215; ratliff:review.)

The *Manual* now suggests that, no matter which citation style you are using, it is "usually sufficient to cite newspaper and magazine articles entirely within the text" (15.47). This involves giving the title of the journal and the full date of publication in a parenthetical reference, including any other information in the main text (14.206), thereby obviating the need to present such an entry in the list of references. To utilize this method in the author-date styles, in addition to a magazine entrysubtype, you'll need to place cmsdate=full into the options field, including skipbib there as well to stop the entry printing in the list of references. If the entry only contains a date and journaltitle that's enough, but if it's a fuller entry also containing an author then you'll also need useauthor=false in the options field. Other surplus fields will be ignored. (See osborne:poison.)

Most of the onerous details are the same as I described them in the **article** section above, but I'll repeat some of them briefly here. If anything in the title needs formatting, you need to provide those instructions yourself, as the default is completely plain. Author-less reviews are treated just like similar newspaper articles — the journaltitle replaces the author in citations and heads the entry in the list of references. The sorting of such entries isn't an issue, as it's solved by Biber (14.217; gourmet:o52006, nyt:trevorobit, unsigned:ranke, and see \DeclareSortingScheme in section 5.4.1, below.). As in misc entries with an entrysubtype, words like "interview," "review," and "letter" only need capitalization after a full stop, so you can start the title field with a lowercase letter and let the automatic field formatting with \autocap do its work, though this isn't strictly necessary with biblatex-chicago-authordate.

One detail of the review type is new to both specifications, and responds to the needs of the 16th edition of the *Manual*. As I mentioned above, blogs are best treated as articles with magazine entrysubtype, whereas comments on those blogs — or on any similar sort of online content — need the review type with the same entrysubtype. What they will frequently also need is a date of some sort closely associated with the comment (14.246; ac:comment), so I have now

included the eventdate in review entries for just this purpose. The eventyear will appear in citations and at the head of the reference list entry, while the remainder of the eventdate will be printed just after the title. If, in addition, you need an identifying timestamp, then the nameaddon field is the place for it, but you'll have to provide your own parentheses, in order to preserve the possibility of providing pseudonyms in square brackets that is the standard function of this field in all other entry types, and possibly in the the review type as well. (Cf. the documentation of eventdate in section 5.2, \DeclareLabelyear in section 5.4.1, and avdate in section 5.4.2.)

suppbook This is the entry type to use if the main focus of a reference is supplemental material in a book or in a collection, e.g., an introduction, afterword, or forward, either by the same or by a different author. There are two mechanisms in biblatex-chicago for producing such a citation. First, these three just-mentioned types of material, and only these three types, can be referenced using the introduction, afterword, or foreword fields, a system that requires you simply to define one of them in any way and leave the others undefined. The macros don't use the text provided by such an entry, they merely check to see if one of them is defined, in order to decide which sort of pre- or post-matter is at stake, and to print the appropriate string before the title in the list of references, and possibly also in the list of shorthands. This mechanism works without modification across multiple languages, but I have also provided functionality which allows you to cite any sort of supplemental material whatever, using the type field. Under this second system, simply put the nature of the material, including the relevant preposition, in that field, beginning with a lowercase letter so biblatex can decide whether it needs capitalization depending on the context. Examples might be "preface to" or "colophon of." (Please note, however, that unless you use a \bibstring command in the type field, the resultant entry will not be portable across languages.)

The other rules for constructing your .bib entry remain the same. The author field refers to the author of the introduction or afterword, while bookauthor refers to the author of the main text of the work, if the two differ. For the 16th edition , the *Manual* requires that you include the page range for the cited part in the list of references. As ever, if the focus of the reference is the main text of the book, but you want to mention the name of the writer of an introduction or afterword for completeness, then the normal biblatex rules apply, and you can just put their name in the appropriate field of a book entry, that is, in the foreword, afterword, or introduction field. (See *Manual* 14.116; friedman:intro, polakow:afterw, prose:intro).

- **suppcollection** This fulfills a function analogous to **suppbook**. Indeed, I believe the **suppbook** type can serve to present supplemental material in both types of work, so this entry type is an alias to **suppbook**, which see.
- **suppperiodical** This type is intended to allow reference to generically-titled works in periodicals, such as regular columns or letters to the editor. Biblatex also provides the review type for this purpose, so in both Chicago styles suppperiodical is an alias of review. In the 16th edition of the authordate style, as discussed above, the use of this latter entry type has become necessary, so please see its documentation for instructions on how to construct a .bib entry for such works.
 - video This is the last of the three audiovisual entry types, and as its name suggests it is intended for citing visual media, be it films of any sort or TV shows, broadcast, on the Net, on VHS, DVD, or Blu-ray. As with the music type discussed above, certain choices had to be made when associating the production roles found, e.g., on a DVD, to those bookish ones provided by biblatex. Here are the main correspondences:

author: This will not infrequently be left undefined, as the director of a film should be identified as such and therefore placed in the editor field

with the appropriate editortype (see below). You will need it, however, to identify the composer of, e.g., an oratorio on VHS (handel:messiah), or perhaps the provider of commentaries or other extras on a film DVD (cleese:holygrail).

- editor, editora, editorb: The director or producer, or possibly the performer or conductor in recorded musical performances. These will ordinarily follow the title of the work, though the usual useauthor and useeditor options can alter the presentation within an entry. Because these are non-standard roles, you will need to identify them using the following:
- editortype, editoratype, editorbtype: The most common roles, all associated with specific bibstrings (or their absence), will likely be director, producer, and, oddly, none. The last is particularly useful if you want to identify performers, as they usually don't need further specifying and this role prevents biblatex from falling back on the default editor bibstring.
- title, titleaddon, booktitle, booktitleaddon, maintitle: As with the other audiovisual types, video serves as an analogue both to books and to collections, so the title may be of a whole film DVD or of a TV series, or it may identify one episode in a series or one scene in a film. In the latter cases, the title of the whole would go in booktitle. The booktitleaddon field, in a change from the 15th edition, may be useful for specifying the season and/or episode number of a TV series, while the titleaddon is for any information that needs to come between the title and the booktitle (cleese:holygrail, episode:tv, handel:messiah). As in the music type, maintitle may be necessary for a boxed set or something similar.
- date, eventdate, origdate, pubstate: The 16th edition of the Manual now "recommends a more comprehensive approach to dating audiovisual materials than in previous editions" (15.53). Indeed, "citations without a date are generally unacceptable" (14.276), while if there is more than one date "the date of the original recording should be privileged" (15.53). As with music entries, in order to follow these specifications I have had to provide three separate date fields for citing video sources, but their uses differ somewhat between the two types. In both, the date will generally provide the publishing or copyright date of the medium you are referencing. More specific to this entry type, the origdate will generally hold the date of the original theatrical release of a film, while the eventdate will most commonly present either the broadcast date of a particular TV program, or the recording/performance date of, for example, an opera on DVD. The style will automatically prepend the bibstring broadcast to such a date, though you can use the new field userd to change the string printed there. (Absent an eventdate, the userd field in video entries will revert to modifying the urldate, the standard behavior in all but these and music entries.) Typically, any given video entry will only need an eventdate or an origdate, and it is this date that will appear in citations and at the head of the entry in the reference list. It's conceivable that you may need all three dates, in which case you can also use the standard pubstate field with reprint in it to control the printing of the origdate at the end of the entry, though I have altered the string that is printed there. Cf. friends:leia, handel:messiah, hitchcock:nbynw; pubstate, below.
- entrysubtype: With the changes to the date fields detailed just above, this field is no longer needed for video entries, and will be ignored.
- type: As in all the audiovisual entry types, the type field holds the medium of the title, e.g., 8 mm, VHS, DVD, Blu-ray, MPEG.

As with the music type, entries in dates-test.bib should at least give you a good idea of how all this works. (Cf. 14.279–80; eventdate, origdate, userd; \DeclareLabelyear in section 5.4.1, and avdate in section 5.4.2; cleese:holygrail, friends:leia, handel:messiah, hitchcock:nbynw, loc:city.)

5.2 Entry Fields

The following discussion presents, in alphabetical order, a complete list of the entry fields you will need to use biblatex-chicago-authordate. As in section 5.1, I shall include references to the numbered paragraphs of the *Chicago Manual of Style*, and also to the entries in dates-test.bib. Many fields are most easily understood with reference to other, related fields. In such cases, cross references should allow you to find the information you need.

- **addendum** As in standard biblatex, this field allows you to add miscellaneous information to the end of an entry, after publication data but before any url or doi field. In the patent entry type (which see), it will be printed in close association with the filing and issue dates. In any entry type, if your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and the style will take care of the rest. Cf. note. (See *Manual* 14.119, 14.166–68; davenport:attention, natrecoff:camera.)
- **afterword** In most circumstances, this field will function as it does in standard biblatex, i.e., you should include here the author(s) of an afterword to a given work. The *Manual* suggests that, as a general rule, the afterword would need to be of significant importance in its own right to require mentioning in the reference apparatus, but this is clearly a matter for the user's judgment. As in biblatex, if the name given here exactly matches that of an editor and/or a translator, then biblatex-chicago will concatenate these fields in the formatted references.

As noted above, however, this field has a special meaning in the suppbook entry type, used to make an afterword, foreword, or introduction the main focus of a citation. If it's an afterword at issue, simply define afterword any way you please, leave foreword and introduction undefined, and biblatex-chicago will do the rest. Cf. foreword and introduction. (See *Manual* 14.91, 14.116; polakow:afterw.)

- annotation At the request of Emil Salim, biblatex-chicago has, as of version 0.9, added a package option (see annotation below, section 4.4.3) to allow you to produce annotated lists of references. The formatting of such a list is currently fairly basic, though it conforms with the *Manual's* minimal guidelines (14.59). The default in chicago-authordate.cbx is to define \DeclareFieldFormat{annotation} using \par\nobreak \vskip \bibitemsep, though you can alter it by re-declaring the format in your preamble. The page-breaking algorithms don't always give perfect results here, but the default formatting looks, to my eyes, fairly decent. In addition to tweaking the field formatting you can also insert \par (or even \vadjust{\eject}) commands into the text of your annotations to improve the appearance. Please consider the annotation option a work in progress, but it is usable now. (N.B.: The BIBTEX field annote serves as an alias for this.)
 - **annotator** I have implemented this biblatex field pretty much as that package's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. commentator.
 - author For the most part, I have implemented this field in a completely standard BIBTEX fashion. Remember that corporate or organizational authors need to have an extra set of curly braces around them (e.g., {{Associated Press}}) to prevent BIBTEX from treating one part of the name as a surname (14.92, 14.212, 15.36; assocpress:gun, chicago:manual). If there is no author, then biblatex-chicago will look, in sequence, for an editor, translator, or compiler (actually namec, currently) and use that name (or those names) instead, followed by the appropriate identifying string (esp. 15.35, also 14.76, 14.87, 14.126, 14.132, 14.189; boxer:china, brown:bremer, harley:cartography, schellinger:novel, sechzer:women, silver:gawain, soltes:georgia). Biber now takes care of alphabetizing entries no matter which name appears at their head, and the package also automatically provides a name for citations.

If you wish to emphasize the activity of an editor or a translator, you can use the biblatex and biblatex-chicago options useauthor=false, useeditor=false, usetranslator=false, and usecompiler=false in the options field to choose which one appears at the head of an entry. A peculiarity of this system of toggles is that in order to ensure that the title of a book appears at the head of an entry, you would need to use *all four* of the toggles, even though the hypothetical entry contains no translator. Internally, biblatex-chicago is either searching for an author-substitute, or it is skipping over elements of the ordered, unidirectional chain author -> editor -> translator -> compiler -> title. If you don't include usetranslator=false in the options field, then the package begins its search at translator and continues on to namec, even though you have usecompiler=false in options. The result will be that the compilers' names will appear at the head of the entry. If you want to skip over parts of the chain, you must turn off all of the parts up to the one you wish printed. Another peculiarity of the system is that setting the Chicago-specific usecompiler option to false doesn't remove namec from the sorting list, whereas the other standard biblatex toggles do remove their names from the sorting list, so in some corner cases you may need the sortkey field. See \DeclareSortingScheme in section 5.4.1, below.

This system of toggles, then, can turn off biblatex-chicago's mechanism for finding a name to place at the head of an entry, but it also very usefully adds the possibility of citing a work with an author by its editor, compiler or translator instead (14.90; eliot:pound), something that wasn't possible before. For full details of how this works, see the editortype documentation below. (Of course, in collection and proceedings entry types, an author isn't expected, so there the editor is required, as in standard biblatex. Also, in article entries with entrysubtype magazine, the absence of an author triggers the use of the journaltitle in its stead. See the next paragraph, and those entry types, for further details.)

As its name suggests, the author-date style very much wants to have a name of some sort present both for the entries in the list of references and for the intext citations. The *Manual* is nothing if not flexible, however, so with unsigned articles or encyclopedia entries the journaltitle or title may take the place of the author (gourmet:052006, lakeforester:pushcarts, nyt:trevorobit, unsigned:ranke, wikipedia:bibtex). Even in such article entries, however, it may be advantageous to provide a (formatted and abbreviated) shortauthor field to keep the in-text citations to a reasonable length, though not at the expense of making it hard to find the relevant entries in the reference list.

New! Recommendations concerning anonymous authors in other kinds of references have changed somewhat in the 16th edition of the *Manual* (15.32), placing greater emphasis on using the title in citations and at the head of reference list entries, rather than "Anonymous." The latter may still in some cases be useful "in a bibliography in which several anonymous works need to be grouped" (14.79), but even with a source like virginia:plantation, "the reference list entry should normally begin with the title... Text citations may refer to a short form of the title but must include the first word (other than an initial article)" (15.32). The shorttitle field is the place for the short form, and you'll also need a sortkey of some sort if the full title begins with an article that is to be ignored when alphabetizing.

If "the authorship is known or guessed at but was omitted on the title page," then you need to use the authortype field to let biblatex-chicago know this fact (15.33). If the author is known (horsley:prosodies), then put anon in the authortype field, if guessed at (cook:sotweed) put anon? there. (In both cases, biblatex-chicago tests for these *exact* strings, so check your typing if it doesn't work.) This will have the effect of enclosing the name in square brackets, with or without the question mark indicating doubt. As long as you have the right string in the authortype field, biblatex-chicago-authordate will also do the right thing automatically in text citations. The nameaddon field furnishes the means to cope with the case of pseudonymous authorship. If the author's real name isn't known, simply put pseud. (or \bibstring{pseudonym}) in that field (centinel:letters). If you wish to give a pseudonymous author's real name, simply include it there, formatted as you wish it to appear, as the contents of this field won't be manipulated as a name by biblatex (lecarre:quest, stendhal:parma). If you have given the author's real name in the author field, then the pseudonym goes in nameaddon, in the form Firstname Lastname, pseud. (creasey:ashe:blast, creasey:morton:hide, creasey: york:death). This latter method will allow you to keep all references to one author's work under different pseudonyms grouped together in the list of references, a method recommended by the *Manual*. The 16th edition of the *Manual* (14.84) has now strengthened its policies about cross-references from author to pseudonym or vice versa, so in these latter examples I have included such references from the various pseudonyms back to the author's name, using the customc entry type, which see (ashe:creasey, morton:creasey, york:creasey).

One final piece of advice. An institutional author's name, or a journal's name being used in place of an author, can be rather too long for in-text citations. In unsigned:ranke I placed an abbreviated form of the journaltitle into shortauthor, adapting for a periodical the practice recommended for books in 15.32. In iso:electrodoc, I provided a shorthand field, which by default in biblatex-chicago-authordate will appear in text citations. Pursuant to the 16th edition's specifications, this shorthand will now also appear at the head of the entry in the list of references, followed, within the entry, by its expansion, this latter placed within parentheses. You no longer, therefore, need to use a customc entry to provide the expansion — please see shorthand below for the details. (You can also still utilize the list of shorthands to clarify the abbreviation, if you wish.)

- authortype In biblatex-chicago, this field serves a function very much in keeping with the spirit of standard biblatex, if not with its letter. Instead of allowing you to change the string used to identify an author, the field allows you to indicate when an author is anonymous, that is, when his or her name doesn't appear on the title page of the work you are citing. As I've just detailed under author, the Manual generally discourages the use of "Anonymous" (or "Anon." as an author, though in some cases it may well be your best option. If, however, the name of the author is known or guessed at, then you're supposed to enclose that name within square brackets, which is exactly what biblatex-chicago does for you when you put either anon (author known) or anon? (author guessed at) in the authortype field. (Putting the square brackets in yourself doesn't work right, hence this mechanism.) The macros test for these exact strings, so check your typing if you don't see the brackets. Assuming the strings are correct, biblatex-chicago will also automatically do the right thing in citations. (See the author docs just above. Also Manual 15.33; cook:sotweed, horsley:prosodies.)
- **bookauthor** For the most part, as in biblatex, a bookauthor is the author of a booktitle, so that, for example, if one chapter in a book has different authorship from the book as a whole, you can include that fact in a reference (will:cohere). Keep in mind, however, that the entry type for introductions, forewords and afterwords (suppbook) uses bookauthor as the author of title (polakow:afterw, prose:intro).
- **bookpagination** This, a standard biblatex field, allows you automatically to prefix the appropriate string to information you provide in a pages field. If you leave it blank, the default is to print no identifying string (the equivalent of setting it to none), as this is the practice the *Manual* recommends for nearly all page numbers. Even if the numbers you cite aren't pages, but it is otherwise clear from the context what they represent, you can still leave this blank. If, however, you specifically need to identify what sort of unit the pages field represents, then you can either hand-format that field yourself, or use one of the provided bibstrings in the bookpagination field. These bibstrings currently are column, line, paragraph, page, section, and verse, all of which are used by biblatex's standard styles.

There are two points that may need explaining here. First, all the bibstrings I have just listed follow the Chicago specification, which may be confusing if they don't produce the strings you expect. Second, remember that bookpagination applies only to the pages field — if you need to format a citation's postnote field, then you must use pagination, which see (10.43–44, 14.154–163).

- **booksubtitle** The subtitle for a **booktitle**. See the next entry for further information.
 - **booktitle** In the bookinbook, incollection, inproceedings, and letter entry types, the booktitle field holds the title of the larger volume in which the title itself is contained as one part. It is important not to confuse this with the maintitle, which holds the more general title of multiple volumes, e.g., *Collected Works*. It is perfectly possible for one .bib file entry to contain all three sorts of title (euripides:orestes, plato:republic:gr). You may also find a booktitle in other sorts of entries (e.g., book or collection), but there it will almost invariably be providing information for the BIBTEX cross-referencing apparatus (prairie:state), which I discuss below (**crossref**). The booktitle no longer takes sentence-style capitalization in authordate, though it does in authordate-trad.
- **booktitleaddon** An annex to the booktitle. It will be printed in the main text font, without quotation marks. If your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago will automatically do the right thing.
 - **chapter** This field holds the chapter number, mainly useful only in an inbook or an incollection entry where you wish to cite a specific chapter of a book (ashbrook:brain).
 - **commentator** I have implemented this biblatex field pretty much as that package's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. annotator.
 - crossref Biblatex uses the standard BIBTFX cross-referencing mechanism, and has also introduced a modified one of its own (xref). The crossref field works exactly the same as it always has, while xref attempts to remedy some of the deficiencies of the usual mechanism by ensuring that child entries will inherit no data at all from their parents. Having said all that, a few further instructions may be in order for users of both biblatex and biblatex-chicago. First, remember that fields in a collection entry, for example, differ from those in an incollection entry. In order for the latter to inherit the booktitle field from the former, the former needs to have such a field defined, even though a collection entry has no use itself for such an entry (see ellet:galena, keating:dearborn, lippincott:chicago, and prairie:state). Note also that an entry with a crossref field will mechanically try to inherit all applicable fields from the entry it cross-references. In the case of ellet:galena et al., you can see that this includes the subtitle field found in prairie:state, which would then, quite incorrectly, be added to the title of ellet:galena. In cases like these, you could just make sure that prairie:state didn't contain such a field, by placing the entire title + subtitle in the title field, separated by a colon. Alternatively, as you can see in ellet:galena, you can just define an empty subtitle field to prevent it inheriting the unwanted subtitle from prairie:state.

Turning now more narrowly to biblatex-chicago, the *Manual* (15.37) specifies that if you cite several contributions to the same collection, all (including the collection itself) may be listed separately in the list of references, which the package does automatically, using the default inclusion threshold of 2 in the case both of crossref'ed and xref'ed entries. (The familiar \nocite command may also help in some circumstances.) In the list of references an abbreviated form will be appropriate for all the child entries. The current version of biblatex-chicagoauthordate implements these instructions, but only if you use a crossref or an xref field, and only in incollection, inproceedings, or letter entries (on the last named, see just below). If you look at ellet:galena, keating:dearborn, lippincott:chicago, and prairie:state you'll see this mechanism in action in the list of references. If you wish to disable this, then simply don't use a crossref or xref field in your entries.

A published collection of letters requires a somewhat different treatment (15.40). In the author-date style, the *Manual* discourages individual letters from appearing in the list of references at all, preferring that the "dates of individual correspondence should be woven into the text." If you have special reason to do so, however, you can still present individual published letters there (using the letter entry type), and they too can use the system of shortened references just outlined, even though the *Manual* doesn't explicitly require it. As with incollection and inproceedings, mere use of a crossref or xref field will activate this mechanism, while avoidance of said fields will disable it. (See white:ross:memo, white:russ, and white:total, for examples of the xref field in action in this way, and please note that the second of these entries is entirely fictitious, provided merely for the sake of example.)

I should also take this opportunity to mention that you need to be careful when using the shorthand field in conjunction with the crossref or xref fields, bearing in mind the complicated questions of inheritance posed by all such cross-references, most especially in letter, incollection, and inproceedings entries. A shorthand field in a parent entry is, at least in the current state of biblatex-chicago, a bad idea.

date Predictably, this is one of the key fields for the author-date styles, and one which, as a general rule, every .bib entry designed for this system ought to contain. So important is it, that biblatex-chicago-authordate will, in most entry types, supply a missing \bibstring{nodate} if there is no date otherwise provided (15.41); citations will look like (Author n.d.), and entries in the list of references will begin: Author, Firstname. n.d. This seems simple enough, but there are a surprising number of complications which require attention.

First, with Biber, an absent date will automatically provoke it into searching for other sorts of dates in the entry, in the order date, eventdate, origdate, urldate. (In music and video entries, the default order has been changed, in the 16th edition, to eventdate, origdate, date, urldate.) Only when it finds no year at all will it fall back on \bibstring{nodate}. You can eliminate some of these dates from the running, or change the search order, using the \DeclareLabelyear command in your preamble, but please be aware that I have hard-coded this order into the author-date styles in order to cope with some tricky corners of the specification. If you reorder these dates, and your references enter these tricky corners, the results might be surprising. (Cf. section 4.5.2 in biblatex.pdf for the \DeclareLabelyear command, and avdate in section 5.4.2, below.) Second, the entry types in which this automatic provision is turned off are inreference, misc, and reference, none of which may be expected in the standard case to have a date provided. In all other entry types "n.d." will appear if no date is provided, though you can turn this off throughout the document in all entry types with the option nodates=false when loading biblatex-chicago in your preamble. (See section 5.4.2, below.) Third, if you wish to provide the "n.d." yourself in the year field, please instead put \bibstring{nodate} there, as otherwise the punctuation in citations will come out (subtly) wrong. Fourth, while we're on the subject, the year field is also the place for things like "forthcoming," though you should use the \autocap macro there to make sure the word comes out correctly in both citations and the list of references. The reason for this is that the date field accepts only numerical data, in ISO8601 format (yyyy-mm-dd), whereas year can, conveniently, hold just about anything. It may be worth noting here that Biber is somewhat more exacting when parsing the date field than BIBT_FX, so a field looking like 1968/75 will simply be ignored, producing "n.d." in the output - you need 1968/1975 instead. If you want a more compressed year range, then you'll want to use the year field.

Fifth, for most entry types, only a year is really necessary, and in most situations only the year - or year range - will be printed in text citations and at the head of entries in the list of references. More specific date fields are often present, however, in article, misc, music, online, patent, unpublished, and video entries, for all of which any day or month provided will be printed later in the reference list entry. If you follow the recommendations of the 16th edition of the Manual and present newspaper and magazine articles "entirely within the text" (15.47), then the citations need to contain the complete date along with the journaltitle. Placing cmsdate=full (and skipbib) in the options field of an article or a review entry, alongside a possible useauthor=false, should allow you to achieve this. While we're on this subject, the Manual is flexible (in both specifications) on abbreviating the names of months (14.180). By default, biblatexchicago-authordate uses the full names, which you can change by setting the option dateabbrev=true in your document preamble. (Cf. assocpress:gun, barcott:review, batson, creel:house, friends:leia, holiday:fool, nass:address, petroff:impurity, powell:email.)

Sixth, the 16th edition of the *Manual* (15.38) has simplified the options for when a particular entry — a reprinted edition, say — has more than one date, and biblatex-chicago-authordate allows you to tailor the presentation on an entry-byentry basis. (Music and video entries have their own rules, and their own version of \DeclareLabelyear, so please see their documentation above in section 5.1 for the details of how multiple dates will be treated in such entries.) The user interface is a little more streamlined than in previous releases, and I shall attempt to explain it here as clearly as I can. If a reprinted book, say, has both a date of publication for the reprint edition and an origdate for the original edition, then by default biblatex-chicago-authordate will use the date in citations and at the head of the entry in the reference list. If you inform biblatex-chicago that the book is a reprint by putting the string reprint in the pubstate field, then a notice will be printed at the end of the entry saying "First published 1898." With no pubstate field (and no cmsdate option), the algorithms will ignore the origdate.

If, for any reason, you wish the origdate to appear at the head of the entry, then you need to use the cmsdate toggle in the options field. This has 3 possible states relevant to this context, though there is a fourth state (full) which I've discussed two paragraphs up:

- 1. cmsdate=both prints both the origdate and the date, using the *Manual's* standard format: (Author [1898] 1952) in parenthetical citations, Author (1898) 1952 outside parentheses, e.g., in the reference list.
- 2. cmsdate=off is the default, discussed above: (Author 1952).
- 3. cmsdate=on prints the origdate at the head of the entry in the list of references and in citations: (Author 1898). NB: The Manual no longer includes this among the acceptable options. If you want to present the origdate at the head of an entry, then generally speaking you should use cmsdate=both. I have retained this option for corner cases where it might be useful. The 15th-edition options new and old now work like both.

In the first and third cases, if you put the string reprint in the pubstate field, then the publication data in the list of references will include a notice, formatted according to the specifications, that the modern edition is a reprint. In the third case, since the date hasn't yet been printed, this publication data will also include the date of the modern reprint.

Let us imagine, however, that your list of references contains another book by the same author, also a reprint edition: (Author [1896] 1974). How will these two works be ordered in the list of references? By whatever appears in the date field, which appears first in the default definition of \DeclareLabelyear, and which in this case will be wrong, because the entries should always be ordered by the *first* date to appear there, in this case the contents of origdate. In this example, the solution can be as simple as a **sortyear** field set to something earlier than the date of the other work, e.g., 1951.

And if the reprint dates of the two works are the same? Just as when it is ordering entries, biblatex will always first process the contents of the date field when it is deciding whether to add the alphabetical suffix (a,b,c etc.) to the year to distinguish different works by the same author published in the same year. Our hypothetical examples would look like this: ([1896] 1974a) and ([1898] 1974b), with the suffixes unnecessary, strictly-speaking, either for ordering or for disambiguating the entries. If the original publication dates are the same, and the reprint dates different, you may prefer citations of the two works to read, e.g., (Author [1898a] 1952) and (Author [1898b] 1974), when they in fact read (Author [1898] 1952) and (Author [1898] 1974). These latter forms aren't ambiguous, and even if the reprints themselves appeared in the same year then the alphabetical suffix would appear attached to the date, again avoiding ambiguity. The Manual doesn't give clear instructions for how to cope with these situations, but biblatex-chicago-authordate provides help. You can't manually put the alphabetical suffix on an origdate yourself because that field only accepts numerical data. Indeed, we are forced to resort to an unusual expedient, which amounts to switching the two date fields, placing the earlier date in date and the later one in origdate. The style tests for this condition using a simple arithmetical comparison between the two years, then prints the two dates according to the state of the cmsdate toggle. The three relevant states of this toggle are the same as before, but there are only two possible outcomes, as follows:

- 1. cmsdate=off (the default) and cmsdate=on *both* print the date at the head of the entry in the list of references and in citations: (Author 1898a), (Author 1898b). As noted above, **this style is no longer recommended by the 16th edition of the** *Manual*.
- 2. cmsdate=both prints both the date and the origdate, using the *Manual's* preferred format: (Author [1898a] 1952), (Author [1898b] 1974). The 15th-edition options old and new are now synonyms for this.

If, for some reason, the automatic switching of the dates cannot be achieved, perhaps in crossref'd letter entries that you really want to have in your list of references (white:ross:memo, white:russ), or perhaps in a reprint edition that hasn't yet appeared in print (preventing the comparison between a year and the word "forthcoming"), then you can use the per-entry option switchdates in the options field to achieve the required effects. It's difficult to imagine these date-switching options often being required, but their presence at least should allow maximum flexibility in reference lists that contain a lot of origdates.

Finally, in the misc entry type this field can help to distinguish between two classes of archival material, letters and "letter-like" sources using origdate while others (interviews, wills, contracts) use date. (See misc in section 5.1 for the details.) If such an entry, as may well occur, contains only an origdate, as can also be the case in the letter entries I mentioned in the previous para-graph, Biber and the default \DeclareLabelyear definition now make it possible to do without a cmsdate option, as biblatex will in such a case use the origdate to order the entries in a reference list, and will also append the alphabetical suffix if more than one entry by the same author has the same origyear. I recommend that you have a look through dates-test.bib to see how all these complications will affect the construction of your .bib database, especially at aristotle:metaphy:gr, creel:house, emerson:nature, james:ambassadors, maitland:canon, maitland:equity, schweitzer:bach, spock:interview, white:ross:memo, and white:russ. Cf. also origdate and year, below, and the cmsdate, nodates, and switchdates options in sections 5.4.1 and 5.4.4.

day This field, as of biblatex 0.9, is obsolete, and will be ignored if you use it in your .bib files. Use date instead.

- doi Standard biblatex field, providing the Digital Object Identifier of the work. The 16th edition of the *Manual* specifies that, given their relative permanence compared to URLs, "authors should include DOIs rather than URLs for sources that make them readily available" (14.6; cf. 15.9). (14.184; friedman:learning). Cf. url.
- edition Standard biblatex field. If you enter a plain cardinal number, biblatex will convert it to an ordinal (chicago:manual), followed by the appropriate string. Any other sort of edition information will be printed as is, though if your data begins with a word (or abbreviation) that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word (or abbreviation) is in lowercase, and biblatex-chicago will automatically do the right thing (babb:peru, times:guide). In most situations, the *Manual* generally recommends the use of abbreviations in the list of references, but there is room for the user's discretion in specific citations (emerson:nature).
- editor As far as possible, I have implemented this field as biblatex's standard styles do, but the requirements specified by the *Manual* present certain complications that need explaining. Lehman points out in his documentation that the editor field will be associated with a title, a booktitle, or a maintitle, depending on the sort of entry. More specifically, biblatex-chicago associates the editor with the most comprehensive of those titles, that is, maintitle if there is one, otherwise booktitle, otherwise title, if the other two are lacking. In a large number of cases, this is exactly the correct behavior (adorno:benj, centinel:letters, plato:republic:gr, among others). Predictably, however, there are numerous cases that require, for example, an additional editor for one part of a collection or for one volume of a multi-volume work. For these cases I have provided the namea field. You should format names for this field as you would for author or editor, and these names will always be associated with the title (donne:var).

As you will see below, I have also provided a nameb field, which holds the translator of a given title (euripides:orestes). If namea and nameb are the same, biblatex-chicago will concatenate them, just as biblatex already does for editor, translator, and namec (i.e., the compiler). Furthermore, it is conceivable that a given entry will need separate editors for each of the three sorts of title. For this, and for various other tricky situations, there is the \partedit macro (and its siblings), designed to be used in a note field, in one of the titleaddon fields, or even in a number field (howell:marriage). (Because the strings identifying an editor differ in notes and bibliography, one can't simply write them out in such a field when using the notes & bibliography style, but you can certainly do so in the author-date styles, if you wish. Using the macros will make your .bib file more portable across both Chicago specifications, and also across multiple languages, but they are otherwise unnecessary. Cf. section 6, and also namea, nameb, namec, and translator.)

- editora The newer releases of biblatex provide these fields as a means to specify addieditorb tional contributors to texts in a number of editorial roles. In the Chicago styles they seem most relevant for the audiovisual types, especially music and video, where they help to identify conductors, directors, producers, and performers. To specify the role, use the fields editoratype, editorbtype, and editorctype, which see. (Cf. bernstein:shostakovich, handel:messiah.)
- editortype Normally, with the exception of the article type, biblatex-chicago-authordate will automatically find a name to put at the head of an entry, starting with an author, and proceeding in order through editor, translator, and namec (the compiler). If all four are missing, then the title will be placed at the head. (In article entries with a magazine entrysubtype, a missing author immediately prompts the use of journaltitle at the head of an entry. See above under article for details.) The editortype field provides even greater flexibility, allowing you to choose from a variety of editorial roles while only using the editor field. You can do this even though an author is named (eliot:pound shows this mechanism in action for a

standard editor, rather than for some other role). Two things are necessary for this to happen. First, in the options field you need to set useauthor=false (if there is an author), then you need to put the name you wish to see at the head of your entry into the editor or the namea field. If the "editor" is in fact, e.g., a compiler, then you need to put compiler into the editortype field, and biblatex will print the correct string after the name in the list of references.

There are a few details of which you need to be aware. Because biblatexchicago has added the namea field, which gives you the ability to identify the editor specifically of a title as opposed to a maintitle or a booktitle, the editortype mechanism checks first to see whether a namea is defined. If it is, that name will be used at the head of the entry, if it isn't it will go ahead and look for an editor. Biblatex's sorting algorithms, and also its labelname mechanism, should both work properly no matter sort of name you provide, thanks to Biber and the (default) Chicago-specific definitions of \DeclareLabelname and \DeclareSortingScheme. (Cf. section 5.4.1, below). If, however, the namea field provides the name, and that name isn't automatically shortened properly by biblatex, then your .bib entry will need to have a shorteditor defined to help with in-text citations, not a shortauthor, possibly ruled out because useauthor=false.

In biblatex 0.9 Lehman reworked the string concatenation mechanism, for reasons he outlines in his RELEASE file, and I have followed his lead. In short, if you define the editortype field, then concatenation is turned off, even if the name of the editor matches, for example, that of the translator. In the absence of an editortype, the usual mechanisms remain in place, that is, if the editor exactly matches a translator and/or a namec, or alternatively if namea exactly matches a nameb and/or a namec, then biblatex will print the appropriate strings. The *Manual* specifically (15.7) recommends not using these identifying strings in citations, and biblatex-chicago-authordate follows that recommendation. If you nevertheless need to provide such a string, you'll have to do it manually in the shorteditor field, or perhaps, in a different sort of entry, in a shortauthor field.

It may also be worth noting that because of certain requirements in the specification – absence of an author, for example – the useauthor mechanism won't work properly in the following entry types: collection, letter, patent, periodical, proceedings, suppbook, suppcollection, and supperiodical.

editoratype editorbype editorctype teditorctype editorctype editorctype teditorctype editorctype editorctype teditorctype teditorctype

- **eid** Standard biblatex field, providing a string or number some journals use uniquely to identify a particular article. Only applicable to the article entry type. Not typically required by the *Manual*.
- **entrysubtype** Standard and very powerful biblatex field, left undefined by the standard styles. In biblatex-chicago-authordate it has four very specific uses, the first three of which I have designed in order to maintain, as much as possible, backward compatibility with the standard styles. First, in article and periodical entries, the field allows you to differentiate between scholarly "journals," on the one hand, and "magazines" and "newspapers" on the other. Usage is fairly simple: you need to put the exact string magazine into the entrysubtype field if you are citing one of the latter two types of source, whereas if your source is a "journal," then you need do nothing.

The second use involves references to works from classical antiquity and, according to the *Manual*, from the Middle Ages, as well. When you cite such a work using the traditional divisions into books, sections, lines, etc., divisions which are presumed to be the same across all editions, then you need to put the exact string classical into the entrysubtype field. This has no effect in the list of references, which will still present the particular edition you are using, but it does affect the formatting of in-text citations, in two ways. First, it suppresses some of the punctuation. Second, and more importantly, it suppresses the date field in favor of the title, so that citations look like (Aristotle *Metaphysics* 3.2.996b5–8) instead of (Aristotle 1997, 3.2.996b5–8). This mechanism may also prove useful in misc entries for citations from the Bible or other sacred texts (cf. genesis), and for citing archival collections (house:papers), where it produces citations of the form (House Papers). (Cf. the next but one paragraph.)

If you wish to reference a classical or medieval work by the page numbers of a particular, non-standard edition, then you shouldn't use the classical entrysubtype toggle. Also, and the specification isn't entirely clear about this, works from the Renaissance and later, even if cited by the traditional divisions, seem to have citations formatted normally, and therefore don't need an entrysubtype field. (See *Manual* 14.256–268; aristotle:metaphy:gr, plato:republic:gr; euripides:orestes is an example of a translation cited by page number in a modern edition.)

The third use of the entrysubtype field occurs in misc entries. If such an entry contains no such field, then the citation will be treated just as the standard biblatex styles would, including the use of italics for the title. Any string at all in entrysubtype tells biblatex-chicago to treat the source as part of an unpublished archive. Please see section 5.1 above under **misc** for all the details on how these citations work.

Fourth, the field can be defined in the artwork entry type in order to refer to a work from antiquity whose title you do not wish to be italicized. Please see the documentation of artwork above for the details. (In previous releases, there was a special tv entrysubtype for video entries. This is no longer necessary. Please see the documentation of video in section 5.1 above, and that of userd below.)

eprint Kazuo Teramoto suggested adding biblatex's excellent eprint handling to biblatexeprintclass chicago, and he sent me a patch implementing it. With minor alterations, I have applied it to this release, so these three fields now work more or less as they do in standard biblatex. They may prove helpful in providing more abbreviated references to online content than conventional URLs, though I can find no specific reference to them in the *Manual*.

eventdate This is a standard biblatex field. In the 15th edition it was barely used, but in order to comply with changes in the 16th edition of the *Manual* it will now play a significant role in music, review, and video entries. In music entries, it identifies the recording or performance date of a particular song (rather than of a whole disc, for which you would use origdate), whereas in video entries it identifies either the original broadcast date of a particular episode of a TV series or the date of a filmed musical performance. In both these cases biblatex-chicago will automatically prepend a bibstring — recorded and aired, respectively — to the date, but you can change this string using the new userd field, something you'll definitely want to do for filmed musical performances (friends:leia, handel:messiah, holiday:fool).

In the default configuration of \DeclareLabelyear, dates for citations and for the head of reference list entries are searched for in the order date, eventdate, origdate, urldate. This suits the Chicago author-date styles very well, except for music and video entries, where the general rule is to emphasize the earliest date, whether that be, for example, the recording date or original release date (15.53). For these two entry types, then, \DeclareLabelyear uses the order eventdate, origdate, date, urldate.

For review entries I use the same, custom definition of \DeclareLabelyear, but for somewhat different reasons. In general, such an entry will only have a date, but an eventdate can be used to identify a particular comment within an online thread. The year of the comment will therefore appear at the head of the entry and in citations, while the remainder of the eventdate will appear just after the title, and the date after the journaltitle. There isn't a particular string associated with the eventdate, but you can further specify a comment by placing a timestamp in parentheses in the nameaddon field, in case the date alone isn't enough (14.246; ac:comment, ellis:blog).

- **foreword** As with the afterword field above, foreword will in general function as it does in standard biblatex. Like afterword (and introduction), however, it has a special meaning in a suppbook entry, where you simply need to define it somehow (and leave afterword and introduction undefined) to make a foreword the focus of a citation.
 - **holder** A standard biblatex field for identifying a patent's holder(s), if they differ from the author. The *Manual* has nothing to say on the subject, but biblatex-chicago prints it (them), in parentheses, just after the author(s).
- **howpublished** Standard biblatex field, mainly applicable in the booklet entry type, where it replaces the publisher. I have also retained it in the misc and unpublished entry types, for historical reasons.
 - **institution** Standard biblatex field. In the thesis entry type, it will usually identify the university for which the thesis was written, while in a report entry it may identify any sort of institution issuing the report.
 - introduction As with the afterword and foreword fields above, introduction will in general function as it does in standard biblatex. Like those fields, however, it has a special meaning in a suppbook entry, where you simply need to define it somehow (and leave afterword and foreword undefined) to make an introduction the focus of a citation.
 - **isbn** Standard biblatex field, for providing the International Standard Book Number of a publication. Not typically required by the *Manual*.
 - **isrn** Standard biblatex field, for providing the International Standard Technical Report Number of a report. Only relevant to the **report** entry type, and not typically required by the *Manual*.
 - **issn** Standard biblatex field, for providing the International Standard Serial Number of a periodical in an article or a periodical entry. Not typically required by the *Manual*.
 - **issue** Standard biblatex field, designed for article or periodical entries identified by something like "Spring" or "Summer" rather than by the usual month or number fields (brown:bremer).
 - **issuesubtitle** The subtitle for an **issuetitle** see next entry.
 - **issuetitle** Standard biblatex field, intended to contain the title of a special issue of any sort of periodical. If the reference is to one article within the special issue, then this field should be used in an article entry (conley:fifthgrade), whereas if you are citing the entire issue as a whole, then it would go in a periodical entry, instead (good:wholeissue). The note field is the proper place to identify the type of issue, e.g., special issue, with the initial letter lower-cased to enable automatic contextual capitalization.
- **journalsubtitle** The subtitle for a journaltitle see next entry.
 - journaltitle Standard biblatex field, replacing the standard BIBTEX field journal, which, however, still works as an alias. It contains the name of any sort of periodical

publication, and is found in the article and review entry types. In the case where a piece in an article or review (entrysubtype magazine) doesn't have an author, biblatex-chicago provides for this field to be used as the author. See above (section 5.2) under **article** for details. The lakeforester:pushcarts and nyt:trevorobit entries in dates-test.bib will give you some idea of how this works.

- **keywords** This field is biblatex's extremely powerful and flexible technique for filtering entries in a list of references, allowing you to subdivide it according to just about any criteria you care to invent. See biblatex.pdf (3.10.4) for thorough documentation. In biblatex-chicago, the field provides one convenient means to exclude certain entries from making their way into a list of references, though the toggle skipbib in the options field works just as well, and perhaps more simply. There are a few reasons for so excluding entries. When citing both an original text and its translation (see **userf**, below), the *Manual* (14.109) suggests including the original at the end of the translation's reference list entry, a procedure which requires that the original not also be printed as a separate entry (furet:passing:eng, furet:passing:fr, aristotle:metaphy:trans, aristotle:metaphy:gr). Well-known reference works (like the *Encyclopaedia Britannica*, for example) and many sacred texts need only be presented in citations, and not in the list of references (14.247–248; ency:britannica, genesis, wikiped:bibtex; see inreference and misc, above).
- language A standard biblatex field, designed to allow you to specify the language(s) in which a work is written. As a general rule, the Chicago style doesn't require you to provide this information, though it may well be useful for clarifying the nature of certain works, such as bilingual editions, for example. There is at least one situation, however, when the Manual does specify this data, and that is when the title of a work is given in translation, even though no translation of the work has been published, something that might happen when a title is in a language deemed to be unparseable by a majority of your expected readership (14.108, 14.110, 14.194; chu:panda, pirumova, rozner:liberation). In such a case, you should provide the language(s) involved using this field, connecting multiple languages using the keyword and. (I have retained biblatex's \bibstring mechanism here, which means that you can use the standard bibstrings or, if one doesn't exist for the language you need, just give the name of the language, capitalized as it should appear in your text. You can also mix these two modes inside one entry without apparent harm.)

An alternative arrangement suggested by the *Manual* is to retain the original title of a piece but then to provide its translation, as well. If you choose this option, you'll need to make use of the **usere** field, on which see below. In effect, you'll probably only ever need to use one of these two fields in any given entry, and in fact biblatex-chicago will only print one of them if both are present, preferring usere over language for this purpose (see kern, pirumova:russian, and weresz). Note also that both of these fields are universally associated with the title of a work, rather than with a booktitle or a maintitle. If you need to attach a language or a translation to either of the latter two, you could probably manage it with special formatting inside those fields themselves.

- **lista** I intend this field specifically for presenting citations from reference works that are arranged alphabetically, where the name of the article rather than a page or volume number should be given. The field is a biblatex list, which means you should separate multiple items with the keyword and. Each item receives its own set of quotation marks, and the whole list will be prefixed by the appropriate string ("s.v.," *sub verbo*, pl. "s.vv."). Biblatex-chicago will only print such a field in a book or an inreference entry, and you should look at the documentation of these entry types for further details. (See *Manual* 14.247–248; grove:sibelius, times:guide, wikiped:bibtex.)
- **location** This is biblatex's version of the usual BIBTEX field address, though the latter is accepted as an alias if that simplifies the modification of older .bib files. Ac-

cording to the *Manual* (14.135), a citation usually need only provide the first city listed on any title page, though a list of cities separated by the keyword "and" will be formatted appropriately. If the place of publication is unknown, you can use \autocap{n}.p. instead (14.138). For all cities, you should use the common English version of the name, if such exists (14.137).

Two other uses need explanation here. In article, periodical, and review entries, there is usually no need for a location field, but "if a journal might be confused with another with a similar title, or if it might not be known to the users of a bibliography," then this field can present the place or institution where it is published (14.191, 14.203; garrett, kimluu:diethyl, and lakeforester:pushcarts). For blogs cited using article entries, this is a good place to identify the nature of the source — i.e., the word "blog" — letting the style automatically provide the parentheses (14.246; ellis:blog).

- **mainsubtitle** The subtitle for a maintitle see next entry.
 - maintitle The main title for a multi-volume work, e.g., "Opera" or "Collected Works." It no longer takes sentence-style capitalization in authordate, though it does in authordate-trad. (See donne:var, euripides:orestes, harley:cartography, lach:asia, pelikan:christian, and plato:republic:gr.)
- **maintitleaddon** An annex to the maintitle, for which see previous entry. Such an annex would be printed in the main text font. If your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago will automatically do the right thing.
 - **month** Standard biblatex field, containing the month of publication. This should be an integer, i.e., month={3} not month={March}. See date for more information.
 - namea This is one of the fields biblatex provides for style writers to use, but which it leaves undefined itself. In biblatex-chicago it contains the name(s) of the editor(s) of a title, if the entry has a booktitle or maintitle, or both, in which situation the editor would be associated with one of these latter fields (donne:var). You should present names in this field exactly as you would those in an author or editor field, and the package will concatenate this field with nameb if they are identical. See under editor and editortype above for the full details. Cf. also nameb, namec, translator, and the macros \partedit, \parttrans, \parteditandtrans, \partcomp, \parteditandcomp, \parttransandcomp, and \partedittransand-comp, for which see section 5.3.1.
 - nameaddon This field is provided by biblatex, though not used by the standard styles. In biblatex-chicago, it allows you to specify that an author's name is a pseudonym, or to provide either the real name or the pseudonym itself, if the other is being provided in the author field. The abbreviation "pseud." (always lowercase in English) is specified, either on its own or after the pseudonym (centinel:letters, creasey:ashe:blast, creasey:morton:hide, creasey:york:death, and lecarre:quest); \bibstring{pseudonym} does the work for you. See under author above for the full details.

In review entries, I have removed the automatic provision of square brackets from the field, allowing it to be used in at least two ways. First, if you provide your own square brackets, then it can have its standard function, as above. Second, and new to the 16th edition of the *Manual*, you can further specify comments to blogs and other online content using a timestamp (in parentheses) that supplements the eventdate, particularly when the latter is too coarse a specification to identify a comment unambiguously. Cf. ac:comment.

In the customc entry type, finally, which is used to create alphabetized crossreferences to other entries in the reference list, the nameaddon field allows you to change the default string linking the two parts of the cross-reference. The code automatically tests for a known bibstring, which it will italicize. Otherwise, it prints the string as is.

- nameb Like namea, above, this is a field left undefined by the standard biblatex styles. In biblatex-chicago, it contains the name(s) of the translator(s) of a title, if the entry has a booktitle or maintitle, or both, in which situation the translator would be associated with one of these latter fields (euripides:orestes). You should present names in this field exactly as you would those in an author or translator field, and the package will concatenate this field with namea if they are identical. See under the translator field below for the full details. Cf. also namea, namec, origlanguage, translator, userf and the macros \partedit, \parttrans, \parteditandtrans, \partcomp, \parteditandcomp, \parttransandcomp, and \partedittransandcomp in section 5.3.1.
- namec The Manual (15.35) specifies that works without an author may be listed under an editor, translator, or compiler, assuming that one is available, and it also specifies the strings to be used with the name(s) of compiler(s). All this suggests that the Manual considers this to be standard information that should be made available in a bibliographic reference, so I have added that possibility to the many that biblatex already provides, such as the editor, translator, commentator, annotator, and redactor, along with writers of an introduction, foreword, or afterword. Since biblatex.bst doesn't offer a compiler field, I have adopted for this purpose the otherwise unused field namec. It is important to understand that, despite the analogous name, this field does not function like namea or nameb, but rather like editor or translator, and therefore if used will be associated with whichever title field these latter two would be were they present in the same entry. Identical fields among these three will be concatenated by the package, and concatenated too with the (usually) unnecessary commentator, annotator and the rest. Also please note that I've arranged the concatenation algorithms to include namec in the same test as namea and nameb, so in this particular circumstance you can, if needed, make namec analogous to these two latter, title-only fields. (See above under editortype for details of how you can use that field to identify a compiler.)

It might conceivably be necessary at some point to identify the compiler(s) of a title separate from the compiler(s) of a booktitle or maintitle, but for the moment I've run out of available name fields, so you'll have to fall back on the \partcomp macro or the related \parteditandcomp, \parttransandcomp, and \partedittransandcomp, on which see Commands (section 5.3.1) below. (Future releases may be able to remedy this.) It may be as well to mention here too that of the three names that can be substituted for the missing author at the head of an entry, biblatex-chicago will choose an editor if present, then a translator if present, falling back to namec only in the absence of the other two, and assuming that the fields aren't identical, and therefore to be concatenated. In a change from the previous behavior, these algorithms also now test for namea or nameb, which will be used instead of editor and translator, respectively, giving the package the greatest likelihood of finding a name to place at the head of an entry. Biblatex's sorting algorithms, and also its labelname mechanism, should both work properly no matter sort of name you provide, thanks to Biber and the (default) Chicago-specific definitions of \DeclareLabelname and \DeclareSortingScheme. (Cf. section 5.4.1, below).

note As in standard biblatex, this field allows you to provide bibliographic data that doesn't easily fit into any other field. In this sense, it's very like addendum, but the information provided here will be printed just before the publication data. (See chaucer:alt, cook:sotweed, emerson:nature, and rodman:walk for examples of this usage in action.) It also has a specialized use in the periodical types (article, periodical, and review), where it holds supplemental information about a journaltitle, such as "special issue" (conley:fifthgrade, good:wholeissue). In all

uses, if your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, then simply ensure that that word is in lowercase, and biblatex-chicago will automatically do the right thing. Cf. addendum.

number This is a standard biblatex field, containing the number of a journaltitle in an article or review entry, the number of a title in a periodical entry, or the volume/number of a book in a series. Generally, in an article, periodical, or review entry, this will be a plain cardinal number, but in such entries biblatex-chicago now does the right thing if you have a list or range of numbers (unsigned:ranke). In any book-like entry it may well contain considerably more information, including even a reference to "2nd ser.," for example, while the series field in such an entry will contain the name of the series, rather than a number. This field is also the place for the patent number in a patent entry. Cf. issue and series. (See *Manual* 14.128–132 and boxer:china, palmatary:pottery, wau-chope:ceramics; 14.180–181 and beattie:crime, conley:fifthgrade, friedman:learning, garrett, gibbard, hlatky:hrt, mcmillen:antebellum, rozner:liberation, warr:el-lison.)

NB: This may be an opportune place to point out that the *Manual* (14.154) prefers arabic to roman numerals in most circumstances (chapters, volumes, series numbers, etc.), even when such numbers might be roman in the work cited. The obvious exception is page numbers, in which roman numerals indicate that the citation came from the front matter, and should therefore be retained.

- **options** A standard biblatex field, for setting certain options on a per-entry basis rather than globally. Information about some of the more common options may be found above under author and date, and below in section 5.4.3. See creel:house, eliot:pound, emerson:nature, ency:britannica, herwign:office, lecarre:quest, and maitland:canon for examples of the field in use.
- **organization** A standard biblatex field, retained mainly for use in the misc, online, and manual entry types, where it may be of use to specify a publishing body that might not easily fit in other categories. In biblatex, it is also used to identify the organization sponsoring a conference in a proceedings or inproceedings entry, and I have retained this as a possibility, though the *Manual* is silent on the matter.
 - This is a standard biblatex field which allows more than one full date specificaorigdate tion for those references which need to provide more than just one. As with the analogous date field, you provide the date (or range of dates) in ISO8601 format, i.e., yyyy-mm-dd. In most entry types, you would use origdate to provide the date of first publication of a work, most usually needed only in the case of reprint editions, but also recommended by the Manual for electronic editions of older works (15.38, 14.119, 14.166, 14.169; aristotle:metaphy:gr, emerson:nature, james:ambassadors, schweitzer:bach). In both the letter and misc (with entrysubtype) entry types, the origdate identifies when a letter (or similar) was written. In such misc entries, some "non-letter-like" materials (like interviews) need the date field for this purpose, while in letter entries the date applies to the publication of the whole collection. If such a published collection were itself a reprint, judicious use of the pubstate field or perhaps improvisation in the location field might be able to rescue the situation. (See white:ross:memo, white:russ, and white:total for how letter entries can work; creel:house shows the field in action in a misc entry, while spock:interview uses date instead.)

Because of the importance of date specifications in the author-date styles, biblatex-chicago-authordate and authordate-trad provide options and automated behaviors that allow you to emphasize the origdate in citations and at the head of entries in the list of references. In entries which have *only* an origdate usually misc with an entrysubtype — Biber and the default \DeclareLabelyear configuration now make it possible to do without a cmsdate option, as the origdate will automatically appear where and as it should. In book-like entries with New! both a date and an origdate, and this has changed from the 15th edition, the 16th edition of the *Manual* recommends that you present, in citations and at the head of reference list entries, only the date or both dates together. The latter is accomplished using the cmsdate entry option. In some cases it may even be necessary to reverse the two date fields, putting the earlier year in date and the later in origdate. Please see above under **date** for all the details on how these options interact.

In the default configuration of \DeclareLabelyear, dates for citations and for the head of reference list entries are searched for in the order date, eventdate, origdate, urldate. This suits the Chicago author-date styles very well, except for music and video entries, and, exceptionally, some review entries. Here the general rule is to emphasize the earliest date. For these three entry types, then, \DeclareLabelyear uses the order eventdate, origdate, date, urldate. In music entries, you can use the origdate in two separate but related ways. First, it can identify the recording date of an entire disc, rather than of one track on that disc, which would go in eventdate. (Compare holiday:fool with nytrumpet:art.) Second, the origidate can provide the original release date of an album. For this to happen, you need to put the string reprint in the pubstate field, which is the standard mechanism across many other entry types for identifying a reprinted work. (See floyd:atom.) In video entries, the origidate is intended for the original release date of a film, whereas the eventdate would hold the original broadcast date of, e.g., an episode of a TV series. In both these two entry types, the style will, depending on the context, automatically prepend appropriate bibstrings to the origdate. You can, assuming you've not activated the pubstate mechanism in a music entry, choose a different string using the new userd field, but please be aware that if an entry also has an eventdate, then userd will apply to that, instead, and you'll be forced to accept the default string. (Compare friends:leia with hitchcock:nbynw; 15.53, 14.279-280; cf. \DeclareLabelyear below in section 5.4.1, and avdate in section 5.4.2.)

Because the origdate field only accepts numbers, some improvisation may be needed if you wish to include "n.d." (\bibstring{nodate}) in an entry. In letter and misc, this information can be placed in titleaddon, but in other entry types you may need to use the location field.

origlanguage In keeping with the Manual's specifications, I have fairly thoroughly redefined biblatex's facilities for treating translations. The origitile field isn't used, while the language and origdate fields have been press-ganged for other duties. The origlanguage field, for its part, retains a dual role in presenting translations in a list of references. The details of the *Manual's* suggested treatment when both a translation and an original are cited may be found below under userf. Here, however, I simply note that the introductory string used to connect the translation's citation with the original's is "Originally published as," which I suggest may well be inaccurate in a great many cases, as for instance when citing a work from classical antiquity, which will most certainly not "originally" have been published in the Loeb Classical Library. Although not, strictly speaking, authorized by the Manual, I have provided another way to introduce the original text, using the origlanguage field, which must be provided in the entry for the translation, not the original text (aristotle:metaphy:trans). If you put one of the standard biblatex bibstrings there (enumerated below), then the entry will work properly across multiple languages. Otherwise, just put the name of the language there, localized as necessary, and biblatex-chicago will eschew "Originally published as" in favor of, e.g., "Greek edition:" or "French edition:". This has no effect in citations, where only the work cited — original or translation - will be printed, but it may help to make the Manual's suggestions for the list of references more palatable.

That was the first usage, in keeping at least with the spirit of the *Manual*. I have also, perhaps less in keeping with that specification, retained some of biblatex's

87

functionality for this field. If an entry doesn't have a userf field, and therefore won't be combining a text and its translation in the list of references, you can also use origlanguage as Lehman intended it, so that instead of saying, e.g., "translated by X," the entry will read "translated from the German by X." The *Manual* doesn't mention this, but it may conceivably help avoid certain ambiguities in some citations. As in biblatex, if you wish to use this functionality, you have to provide *not* the name of the language, but rather a bibstring, which may, at the time of writing, be one of american, brazilian, danish, dutch, english, french, german, greek, italian, latin, norwegian, portuguese, spanish, or swedish, to which I've added russian.

- origlocation The 16th edition of the *Manual* has somewhat clarified issues pertaining to the documentation of reprint editions and their corresponding originals (14.166, 15.38). Starting with this release of biblatex-chicago, you can provide both an origlocation and an origpublisher to go along with the origdate, should you so wish, and all of this information will be printed in the reference list. You can now also use this field in a letter or misc (with entrysubtype) entry to give the place where a published or unpublished letter was written (14.117). (Jonathan Robinson has suggested that the origlocation may in some circumstances actually be helpful for disambiguation, his example being early printed editions of the same material printed in the same year but in different cities. The new functionality should make this simple to achieve. Cf. origdate, origpublisher and pubstate; schweitzer:bach.)
- origpublisher As with the origlocation field just above, the 16th edition of the *Manual* has clarified issues pertaining to reprint editions and their corresponding originals (14.166, 15.38). You can now provide an origpublisher and/or an origlocation in addition to the origdate, and all will be presented in long notes and bibliography. (Cf. origdate, origlocation, and pubstate; schweitzer:bach.)
 - **pages** This is the standard biblatex field for providing page references. In many article entries you'll find this contains something other than a page number, e.g. a section name or edition specification (14.203, 14.209; kozinn:review, nyt:trevorobit). Of course, the same may be true of almost any sort of entry, though perhaps with less frequency. Curious readers may wish to look at brown:bremer (14.189) for an example of a pages field used to facilitate reference to a two-part journal article. Cf. number for more information on the *Manual's* preferences regarding the formatting of numerals; bookpagination and pagination provide details about biblatex's mechanisms for specifying what sort of division a given pages field contains; and usera discusses a different way to present the section information pertaining to a newspaper article.
 - **pagination** This, a standard biblatex field, allows you automatically to prefix the appropriate identifying string to information you provide in the postnote field of a citation command, whereas bookpagination allows you to prefix a string to the pages field. Please see **bookpagination** above for all the details on this functionality, as aside from the difference just mentioned the two fields are equivalent.
 - **part** Standard biblatex field, which identifies physical parts of a single logical volume in book-like entries, not in periodicals. It has the same purpose in biblatex-chicago, but because the *Manual* (14.126) calls such a thing a "book" and not a "part," the string printed in the list of references will, at least in English, be "bk." instead of the plain dot between volume number and part number (harley:cartography, lach:asia). This field should only be used in association with a volume number, so if you need to identify "parts" or "books" that are part of a published series, for example, then you'll need to use a different field, (which in the case of a series would be number [palmatary:pottery]). Cf. volume; iso:electrodoc.

publisher Standard biblatex field. Remember that "and" is a keyword for connecting multiple publishers, so if a publisher's name contains "and," then you should either use the ampersand (&) or enclose the whole name in additional braces. (See *Manual* 14.139–148; aristotle:metaphy:gr, cohen:schiff, creasey:ashe:blast, dunn:revolutions.)

There are, as one might expect, a couple of further subtleties involved here. Two publishers will be separated by a forward slash in the list of references, and you no longer, in the 16th edition, need to provide hand formatting if a company issues "certain books through a special publishing division or under a special imprint," as these, too, should be separated by a forward slash. If a book has two co-publishers, "usually in different countries," (14.147) then the simplest thing to do is to choose one, probably the nearest one geographically. If you feel it necessary to include both, then levistrauss:savage demonstrates one way of doing so, using a combination of the publisher and location fields. Finally, if the publisher is unknown, then the *Manual* recommends (14.143) simply using the place (if known) and the date. If for some reason you need to indicate the absence of a publisher, the abbreviation given by the *Manual* is n.p., though this can also stand for "no place." Some style guides apparently suggest using s.n. (= *sine nomine*) to specify the lack of a publisher, but the *Manual* doesn't mention this.

pubstate A standard biblatex field, introduced in version 0.9. Because the author-date specification has fairly complicated rules about presenting reprinted editions, I have adopted this field as a means of simplifying the problem for users. Instead of hand-formatting in the location field, you can now simply put the string reprint into the pubstate field, and depending on which date(s) you have chosen to appear at the head of the entry, biblatex-chicago-authordate will either print the (localized) string Reprint in the proper place or otherwise provide a parenthesized notice at the end of the entry detailing the original publication date. See under date above for the available permutations. (Cf. aristotle:metaphy:gr, maitland:canon, maitland:equity, schweitzer:bach.) If the field contains something other than the word reprint, then it will be treated as in the standard styles, and printed after the publication information.

There is one subtlety of which you ought to be aware. In music entries, the pubstate mechanism transforms the origdate from a recording date for an album into the original release date for that album. If that date appears in citations and at the head of reference-list entries, then this mechanism won't generally make much difference, but if it appears elsewhere then a recording date will be printed in the middle of the reference list entry, the original release date will be printed near the end, preceded by the appropriate string.

- **redactor** I have implemented this field just as biblatex's standard styles do, even though the *Manual* doesn't actually mention it. It may be useful for some purposes. Cf. annotator and commentator.
- reprinttitle NB: Please note that this feature is in an alpha state, and that I'm contemplating using a different field in the future for this functionality. I include it here in the hope that it might receive some testing in the meantime. At the request of Will Small, I have included a means of providing the original publication details of an essay or a chapter that you are citing from a subsequent reprint, e.g., a *Collected Essays* volume. In such a case, at least according to the *Manual* (14.115), such details need be provided only if they are "of particular interest." The data would follow an introductory phrase like "originally published as," making the problem strictly parallel to that of including details of a work in the original language alongside the details of its translation. I have addressed the latter problem with the userf field, which provides a sort of cross-referencing method for this purpose, and reprinttitle works in *exactly* the same way. In the .bib entry for the reprint you include a cross-reference to the cite key of the

original location using the reprinttitle field (which it may help mnemonically to think of as a "reprinted title" field). The main difference between the two forms is that userf prints all but the author of the original work, whereas reprinttitle suppresses both the author and the title of the original, giving only the more general details, beginning with, e.g., the journaltitle or booktitle and continuing from there. The string prefacing this information will be "Orig. pub. in." Please see the documentation on userf below for all the details on how to create .bib entries for presenting your data.

- series A standard biblatex field, usually just a number in an article, periodical, or review entry, almost always the name of a publication series in book-like entries. If you need to attach further information to the series name in a book-like entry, then the number field is the place for it, whether it be a volume, a number, or even something like "2nd ser." or "\bibstring{oldseries}." Of course, you can also use \bibstring{oldseries} or \bibstring{newseries} in an article entry, but there you would place it in the series field itself. (In fact, the series field in article and periodical entries is one of the places where biblatex allows you just to use the plain bibstring oldseries, for example, rather than making you type \bibstring{oldseries}. The type field in manual, patent, report, and thesis entries also has this auto-detection mechanism in place; see the discussion of \bibstring below for details.) In whatever entry type, these bibstrings produce the required abbreviation. (For books and similar entries, see Manual 14.128–132; boxer:china, browning:aurora, palmatary:pottery, plato:republic:gr, wauchope:ceramics; for periodicals, see 14.195; garaud:gatine, sewall:letter.) Cf. number for more information on the Manual's preferences regarding the formatting of numerals.
- shortauthor This is a standard biblatex field, but biblatex-chicago makes considerably greater use of it than the standard styles. For the purposes of the author-date specification, the field provides the name to be used in text citations. In the vast majority of cases, you don't need to specify it, because the biblatex system selects the author's last name from the author field and uses it in such a reference, and if there is no author it will search namea, editor, nameb, translator, and namec, in that order. The current versions of biblatex and biber will now automatically alphabetize by any of these names if they appear at the head of an entry. If, in an author-less article entry (entrysubtype magazine), you allow biblatex-chicago to use the title of the periodical as the author — the default behavior — then your shortauthor field can optionally contain an abbreviated form of the periodical name, formatted appropriately, which usually means something like "\mkbibemph{Abbrev. Period. Title}" (gourmet:052006, lakeforester:pushcarts, nyt:trevorobit, unsigned:ranke). Indeed, with long, institutional authors, a shortened version in shortauthor may save space in the running text (evanston:library). See just below under **shorthand** for another method of saving space.

As mentioned under editortype, the *Manual* (15.21) recommends against providing the identifying string (e.g., ed. or trans.) in text citations, and biblatex-chicago follows their recommendation. If you need to provide these strings in such a citation, then you'll have to do so by hand in the shortauthor field, or in the shorteditor field, whichever you are using.

- shorteditor Like shortauthor, a field to provide a name for a text citation, in this case for, e.g., a collection entry that typically lacks an author. The shortauthor field works just as well in most situations, but if you have set useauthor=false (and not useeditor=false) in an entry's options field, then only shorteditor will be recognized. Cf. editortype, above.
- **shorthand** This is biblatex's mechanism for using abbreviations in citations. For biblatexchicago-authordate I have modified it somewhat to conform to the needs of the specification, though there is a package option to revert the behavior to some-

thing closer to the biblatex standard — see below and under cmslos in section 5.4.2. The main problem when presenting readers with an abbreviation is to ensure that they know how to expand it. In the notes & bibliography style this is accomplished with a notice in the first footnote citing a given work, which explains that henceforth the abbreviation will be used instead, and also, if needed, with a list of shorthands that summarizes all the abbreviations used in a particular text. The first part of this system isn't available in the author-date style of citation, and indeed these citations are in themselves already highlyabbreviated keys to the fuller information to be found in the list of references. There are cases, however, particularly when institutions or journaltitles appear as authors, when you may feel the need to provide a shortened version for citations. I have already discussed one option available to you just above (cf. **shortauthor**), but for this to work the abbreviation must either be instantly recognizable to your readership or at least easily parseable by them.

New! The *Manual's* recommendation (15.36), and this has changed for the 16th edition, involves using an abbreviation for long institutional names, an abbreviation which will appear not only in citations but also at the head of the entry in the list of references. Such an entry should therefore be alphabetized by the abbreviation, which will be expanded within the same entry and placed (inside parentheses) between the abbreviation and the date. This new formatting can be produced in one of two ways: either you can provide a specially-formatted author field (for the reference list, and including both the abbreviation and the parenthesized expansion) + a shortauthor (for the citations), or you can use a normal author field + a shorthand, in which case biblatex-chicago-authordate will automatically use the shorthand in text citations and also place it at the head of the reference list entry, followed by the author within parentheses. This method is simpler and more compatible with other styles, though you do need a sortkey when you use the shorthand field this way. (Cf. bsi:abbreviation, iso:electrodoc.)

I should clarify here that this automatic placement of the shorthand at the head of the entry will *not* occur if you set the package option cmslos=false in your preamble. This allows you to implement other systems of shorthand expansion using either a list of shorthands (via \printshorthands, which is always available no matter what the state of cmslos) or cross-references (via customc) within the reference list itself. You can place skiplos in the options field to exclude a particular entry from the list of shorthands if you do decide to print that list, giving maximum flexibility.

New! Indeed, for this release, I have provided two new options to add to this flexibility. First, I have included two new bibenvironments for use with the env option to the \printshorthands command: losnotes is designed to allow a list of shorthands to appear inside footnotes, while losendnotes does the same for endnotes. Their main effect is to change the font size, and in the latter case to clear up some spurious punctuation and white space that I see on my system when using endnotes. (You'll probably also want to use the option heading=none in order to get rid of the [oversized] default, providing your own within the \footnote command.) Second, I have provided a new package option, shorthandfull, which prints entries in the list of shorthands which contain full bibliographical information, effectively allowing you to eschew the list of references in favor of a fortified shorthand list. This option will only work if used in tandem with cmslos=false, as otherwise the shorthand will be printed twice. (See 15.36, 13.65, 14.54–55, and also biblatex.pdf for more information.)

As I mentioned above under **crossref**, extra care is needed when using shorthands with cross-references, and I would avoid them in all parent entries, at least in the current state of biblatex-chicago.

shorttitle A standard biblatex field, primarily used to provide an abbreviated title for citation styles that need one. In biblatex-chicago-authordate such a field will be necessary only very rarely (unlike in the notes & bibliography style), and is

most likely to turn up in inreference or reference entries (where the title takes the place of the author), or in any sort of entry with a classical entrysubtype. This latter toggle makes citations use author and title instead of author and year, and if an abbreviated version of that title would save space in your running text this is the field where you can provide it. (Cf. ency:britannica, grove:sibelius, aristotle:metaphy:gr.)

- **sortkey** A standard biblatex field, designed to allow you to specify how you want an entry alphabetized in a list of references. In general, if an entry doesn't turn up where you expect or want it, this field should provide the solution. Entries with a corporate author can now omit the definite or indefinite article, which should help (14.85; cotton:manufacture, nytrumpet:art). The default settings of \DeclareSortingScheme now include the three supplemental name fields (name[a-c]) and also the journaltitle in the sorting algorithm, so once again you should find those algorithms needing less help than before. Entries using a shorthand, and entries headed by a title beginning with the definite or indefinite article, may well now require such assistance (bsi:abbreviation, grove:sibelius, iso:electrodoc). There may be circumstances several reprinted books by the same author, for example when the sortyear field is more appropriate, on which see below. Lehman also provides sortname and sorttile for equally fine-grained control. Please consult biblatex.pdf for the details.
- **sortyear** A standard biblatex field, provided by Lehman for more fine-grained control over the sorting of entries in a list of references, and possibly useful in biblatex-chicago-authordate to help present several reprinted books by the same author. See sortkey and date above.
- **subtitle** The subtitle for a title see next entry.
 - title This release of biblatex-chicago now includes the authordate-trad style, designed as a kind of hybrid style according to indications contained in the 16th edition of the *Manual* (14.45). This trad style differs *only* in the way it treats the title and related fields, which retain the forms they have traditionally had in the Chicago author-date specifications prior to the latest edition. Where the new edition uses headline-style capitalization, the older editions used sentence-style; where the new edition places article or incollection titles within quotation marks, the older editions presented them in plain text. If you have been using the 15th-edition author-date style, then your title fields won't need any changes for authordatetrad, but I shall include just below, under a separate rubric, full documentation for trad title fields for those just coming to the package. First, though, I document the same field(s) for the standard author-date style.

In the vast majority of cases, this field works just as it always has in BIBTEX, and just as it does in biblatex. In a major change to previous editions of the Manual, the 16th edition now recommends that titles be treated more or less identically across both its systems of documentation (15.2, 15.6, 15.13). This means that users of the author-date style no longer need to worry about sentence-style capitalization when compiling their .bib databases, and so can eschew the extra curly braces needed to preserve uppercase letters in this context. The other new rules, however, mean that a few new complications, familiar to users of the notes & bibliography style, will arise. First, although nearly every entry will have a title, there are some exceptions, particularly incollection or online entries with a merely generic title, instead of a specific one (centinel:letters, powell:email). Second, the Manual's rules for formatting titles, which also hold for booktitles and maintitles, require additional attention. The whole point of using a BIBTEX-based system is for it to do the formatting for you, and in most cases biblatex-chicago-authordate does just that, surrounding titles with quotation marks, italicizing them, or occasionally just leaving them alone. When, however, a title is quoted within a title, then you need to know some of the rules. A summary here should serve to clarify them, and help you to understand when biblatex-chicago-authordate might need your help in order to comply with them.

The internal rules of biblatex-chicago-authordate are as follows:

- **Italics:** booktitle, maintitle, and journaltitle in all entry types; title of artwork, book, bookinbook, booklet, collection, image, inbook, manual, misc (with no entrysubtype), periodical, proceedings, report, suppbook, and suppcollection entry types.
- **Quotation Marks:** title of article, incollection, inproceedings, online, periodical, thesis, and unpublished entry types, issuetitle in article, periodical, and review entry types.
- **Unformatted:** booktitleaddon, maintitleaddon, and titleaddon in all entry types, title of customc, letter, misc (with an entrysubtype), patent, review, and supperiodical entry types.
- **Italics or Quotation Marks:** All of the audiovisual entry types audio, music, and video have to serve as analogues both to book and to inbook. Therefore, if there is both a title and a booktitle, then the title will be in quotation marks. If there is no booktitle, then the title will be italicized.

Now, the rules for which entry type to use for which sort of work tend to be fairly straightforward, but in cases of doubt you can consult section 5.1 above, the examples in dates-test.bib, or go to the *Manual* itself, 8.154–195. Assuming, then, that you want to present a title within a title, and you know what sort of formatting each of the two would, on its own, require, then the following rules apply:

- Inside an italicized title, all other titles are enclosed in quotation marks and italicized, so in such cases all you need to do is provide the quotation marks using \mkbibquote, which will take care of any following punctuation that needs to be brought within the closing quotation mark(s) (14.102; donne:var, mchugh:wake).
- 2. Inside a quoted title, you should present another title as it would appear if it were on its own, so in such cases you'll need to do the formatting yourself. Within the double quotes of the title another quoted title would take single quotes — the \mkbibquote command does this for you automatically, and also, I repeat, takes care of any following punctuation that needs to be brought within the closing quotation mark(s). (See 14.177; garrett, loften:hamlet, murphy:silent, white:callimachus.)
- 3. Inside a plain title (most likely in a review entry or a titleaddon field), you should present another title as it would appear on its own, once again formatting it yourself using \mkbibemph or \mkbibquote. (barcott:review, gibbard, osborne:poison, ratliff:review, unsigned:ranke).

The *Manual* provides a few more rules, as well. A word normally italicized in text should also be italicized in a quoted or plain-text title, but should be in roman ("reverse italics") in an italicized title. A quotation used as a (whole) title (with or without a subtitle) retains its quotation marks in an italicized title "only if it appears that way in the source," but always retains them when the surrounding title is quoted or plain (14.104, 14.177; lewis). A word or phrase in quotation marks, but that isn't a quotation, retains those marks in all title types (kimluu:diethyl).

Finally, please note that in all review (and suppperiodical) entries, and in misc entries with an entrysubtype, and only in those entries, biblatex-chicago-authordate will automatically capitalize the first word of the title after sentence-ending punctuation, assuming that such a title begins with a lowercase letter in your .bib database. See **\autocap** below for more details. title (trad) When you choose the new authordate-trad style, your title and related fields will need extra care, familiar to users of the 15th-edition author-date style. The whole point of using a BIBTEX-based system is for it to do the formatting for you, and in most cases biblatex-chicago-authordate-trad does just that, capitalizing them sentence-style, italicizing them, and sometimes both. There are two situations that require user intervention. First, in titles that take sentence-style capitalization, you need, as always in traditional BIBTEX, to assist the algorithms by placing anything that needs to remain capitalized within an extra pair of curly braces. Second, when a title is quoted within a title, you need to know some of the rules of the Chicago style. A summary here should serve to clarify them, and help you to understand when biblatex-chicago-authordate-trad might need your help in order to comply with them.

> With regard to sentence-style capitalization, the rules of the Chicago authordatetrad style are fairly simple:

- **Headline Style:** journaltitle in all types, series in all book-like entries (i.e., not in articles), and title in periodical entries.
- **Sentence Style:** every other title, *except* in letter entries, review entries, and in misc entries with an entrysubtype. Also, the booktitle, issuetitle, and maintitle in all entry types use sentence style.
- **Contextual Capitalization of First Word:** titleaddon, booktitleaddon, maintitleaddon in all entry types, also the title of review entries and of misc entries with an entrysubtype.

Plain: title in letter entries.

What this means in practice is that to get a title like *The Chicago manual of style*, your .bib entry needs to have a field that looks something like this:

title = {The {Chicago} Manual of Style}

This is completely straightforward, but remember that if an article has a title like: Review of *The Chicago manual of style*, then the curly braces enclosing material to be formatted in italics will cause the capitalization algorithm to stop and leave all of that material as it is, so your .bib entry would need to have a field something like this:

```
title = {\bibstring{reviewof} \mkbibemph{The Chicago manual
of style}}
```

(As an aside, the use of the reviewof bibstring isn't strictly necessary here, but it helps with portability across languages and across the two Chicago styles. If you've noticed a lot of lowercase letters starting fields in dates-test.bib, they're present because in the notes & bibliography style capitalization is complicated by notes using commas where the bibliography uses periods, and words like "review" start in uppercase only if the context demands it. There's considerably less of this in the author-date styles [note the *titleaddon fields], but it still pays to be aware of the issue.)

With regard to italics, the rules of biblatex-chicago-authordate-trad are as follows:

- **Italics:** booktitle, maintitle, and journaltitle in all entry types; title of artwork, book, bookinbook, booklet, collection, inbook, manual, misc (with no entry-subtype), periodical, proceedings, report, suppbook, and suppcollection entry types.
- **Main Text Font (Roman):** title of article, image, incollection, inproceedings, letter, misc (with an entrysubtype), online, patent, periodical, review, suppperiodical, thesis, and unpublished entry types, issuetitle in article and periodical entry types. booktitleaddon, maintitleaddon, and titleaddon in all entry types.

Italics or Roman: All of the audiovisual entry types — audio, music, and video — have to serve as analogues both to book and to inbook. Therefore, if there is both a title and a booktitle, then the title will be in the main text font. If there is no booktitle, then the title will be italicized.

Now, the rules for which entry type to use for which sort of work tend to be fairly straightforward, but in cases of doubt you can consult section 5.1 above, the examples in dates-test.bib, or go to the *Manual* itself, 8.154–195. Assuming, then, that you want to present a title within a title, and you know what sort of formatting each of the two would, on its own, require, then the following rules apply:

- Inside an italicized title, all other titles are enclosed in quotation marks and italicized, so in such cases all you need to do is provide the quotation marks using \mkbibquote, which will take care of any following punctuation that needs to be brought within the closing quotation mark(s) (14.102; donne:var, mchugh:wake).
- 2. Inside a plain-text title, you should set off other plain-text titles with quotation marks, while italicized titles should appear as they would if they were on their own. In such cases you'll need to do the formatting yourself, using \mkbibemph or \mkbibquote. (See barcott:review, garrett, gibbard, loften:hamlet, loomis:structure, murphy:silent, osborne:poison, ratliff:review, unsigned:ranke, white:callimachus.)

The *Manual* provides a few more rules, as well. A word normally italicized in text should also be italicized in a plain-text title, but should be in roman ("reverse italics") in an italicized title. A quotation used as a (whole) title (with or without a subtitle) retains its quotation marks when it is plain, but loses them when it is italicized, unless it specifically retains them in the source (14.104, 14.177; lewis). A word or phrase in quotation marks, but that isn't a quotation, retains those marks in all title types (kimluu:diethyl).

Finally, please note that there is also a preamble option — headline — that disables the automatic sentence-style capitalization routines in authordate-trad. If you set this option, the word case in your title fields will not be changed in any way, that is, this doesn't automatically transform your titles into headline-style, but rather allows the .bib file to determine capitalization. It works by redefining the command \MakeSentenceCase, so in the unlikely event you are using the latter anywhere in your document please be aware that it will also be turned off there. See section 5.4.3, below.

- titleaddon Standard biblatex intends this field for use with additions to titles that may need to be formatted differently from the titles themselves, and biblatex-chicago uses it in just this way, with the additional wrinkle that it can, if needed, replace the title entirely, and this in, effectively, any entry type, providing a fairly powerful, if somewhat complicated, tool for getting BIBTEX to do what you want (cf. centinel:letters). This field will always be unformatted, that is, neither italicized nor placed within quotation marks, so any formatting you may need within it you'll need to provide manually yourself. The single exception to this rule is when your data begins with a word that would ordinarily only be capitalized at the beginning of a sentence, in which case you need then simply ensure that that word is in lowercase, and biblatex-chicago will automatically do the right thing. See \autocap, below. (Cf. brown:bremer, osborne:poison, reaves:rosen, and white:ross:memo for examples where the field starts with a lowercase letter; morgenson:market provides an example where the titleaddon field, holding the name of a regular column in a newspaper, is capitalized, a situation that is handled as you would expect.)
- **translator** As far as possible, I have implemented this field as biblatex's standard styles do, but the requirements specified by the *Manual* present certain complications

that need explaining. Lehman points out in his documentation that the translator field will be associated with a title, a booktitle, or a maintitle, depending on the sort of entry. More specifically, biblatex-chicago associates the translator with the most comprehensive of those titles, that is, maintitle if there is one, otherwise booktitle, otherwise title, if the other two are lacking. In a large number of cases, this is exactly the correct behavior (adorno:benj, centinel:letters, plato:republic:gr, among others). Predictably, however, there are numerous cases that require, for example, an additional translator for one part of a collection or for one volume of a multi-volume work. For these cases I have provided the nameb field. You should format names for this field as you would for author or editor, and these names will always be associated with the title (euripides:orestes).

I have also provided a namea field, which holds the editor of a given title (euripides:orestes). If namea and nameb are the same, biblatex-chicago will concatenate them, just as biblatex already does for editor, translator, and namec (i.e., the compiler). Furthermore, it is conceivable that a given entry will need separate translators for each of the three sorts of title. For this, and for various other tricky situations, there is the \parttrans macro (and its siblings), designed to be used in a note field or in one of the titleaddon fields (ratliff:review). (Because the strings identifying a translator differ in notes and bibliography, one can't simply write them out in such a field when using the notes & bibliography style, but you can certainly do so in the author-date styles, if you wish. Using the macros will make your .bib file more portable across both Chicago specifications, and also across multiple languages, but they are otherwise unnecessary. [See section 6].)

Finally, as I detailed above under **author**, in the absence of an author or an editor, the translator will be used at the head of an entry (silver:gawain), and the reference list entry alphabetized by the translator's name, behavior that can be controlled with the usetranslator switch in the options field. Cf. author, editor, namea, nameb, and namec.

type This is a standard biblatex field, and in its normal usage serves to identify the type of a manual, patent, report, or thesis entry. Biblatex implements the possibility, in some circumstances, to use a bibstring without inserting it in a \bibstring command, and in these entry types the type field works this way, allowing you simply to input, e.g., patentus rather than \bibstring{patentus}, though both will work. (See petroff:impurity; herwign:office, murphy:silent, and ross:thesis all demonstrate how the type field may sometimes be automatically set in such entries by using one of the standard entry-type aliases).

Another use for the field is to generalize the functioning of the suppbook entry type, and of its alias suppcollection. In such entries, the type field can specify what sort of supplemental material you are citing, e.g., "preface to" or "postscript to." Cf. suppbook above for the details. (See *Manual* 17.74–75; polakow:afterw, prose:intro).

You can also use the type field in artwork, audio, image, music, and video entries to identify the medium of the work, e.g., oil on canvas, albumen print, compact disc, or MPEG. If the first word in this field would normally only be capitalized at the beginning of a sentence, then leave it in lowercase in your .bib file and biblatex will automatically do the right thing in citations. Cf. artwork, audio, image, music, and video, above, for all the details. (See auden:reading, bedford:photo, cleese:holygrail, leo:madonna, nytrumpet:art.)

url Standard biblatex field, it holds the url of an online publication, though you can provide one for all entry types. The 16th edition of the Manual expresses a strong preference for DOIs over URLs if the former is available — cf. doi above, and also urldate just below. The required LATEX package url will ensure that your documents format such references properly, in the text and in the reference apparatus.

- urldate Standard biblatex field, it identifies exactly when you accessed a given url. The 16th edition of the *Manual* prefers DOIs to URLs; in the latter case it allows the use of access dates, particularly in contexts that require it, but prefers that you use revision dates, if these are available. To enable you to specify which date is at stake, I have provided the userd field, documented below. If an entry doesn't have a userd, then the urldate will be treated, as before, as an access date (14.6–8, 14.184, 15.9; evanston:library, grove:sibelius, hlatky:hrt, osborne:poison, sirosh:visualcortex, wikiped:bibtex). In the default setting of \DeclareLabelyear, any entry without a date, eventdate, or origdate will now use the urldate to find a year for citations and the list of references (grove:sibelius, wikiped:bibtex).
 - **usera** A supplemental biblatex field which functions in biblatex-chicago almost as a "journaltitleaddon" field. In article, periodical, and review entries with entrysub-type magazine, the contents of this field will be placed, unformatted and between commas, after the journaltitle and before the date. The main use is for identifying the broadcast network when you cite a radio or television program (14:221; bundy:macneil).
 - I have now implemented this supplemental biblatex field as part of the Chicago userc author-date style's handling of cross-references within the list of references. (The "c" part is meant as a sort of mnemonic for this latter function.) In the 16th edition of the Manual, you no longer need to use the customc entry type to include alphabetized expansions of shorthands in the reference list, but you may still need to provide cross-references of some sort to separate entries in that list, perhaps when a single author uses multiple pseudonyms. In such a case it is unlikely that you will cite the customc entry itself in the body of your text. Therefore, in order for it to appear in the reference list, you have two choices. You can either include the entry key of the customc entry in a \nocite command inside your document, or you can place that entry key in the userc field of the .bib entry that actually contains one of the full citations. In the latter case, biblatex-chicago will call \nocite for you when you cite the main entry. (See 14.84, 14.86; creasey:ashe:blast, creasey:morton:hide, creasey:york:death, lecarre:quest.)
- **userd** The userd field, new in this release, acts as a sort of "datetype" field, allowing you in most entry types to identify whether a urldate is an access date or a revision date. The general usage is fairly simple. If this field is absent, then a urldate will be treated as an access date, as has long been the default in biblatex and in biblatex-chicago. If you need to identify it in any other way, what you include in userd will be printed *before* the urldate, so phrases like "last modified" or "last revised" are what the field will typically contain (14.7–8; wikiped:bibtex).

Because of the rather specialized needs of some audio-visual references, this basic schema changes for music and video entries. In music entries where an eventdate is present, userd will modify that date instead of any urldate that may also be present, and it will modify an origdate if it is present and there is no eventdate. In video entries it will modify an eventdate if it is present, and in its absence the urldate. In all these cases, userd will modify what remains of any date, i.e., the month and the day, if that date's year has been printed at the head of the entry. Please see the documentation of the music and video entry types, and especially of the eventdate, origdate, and urldate fields, above (14.276–279, 15.53; nytrumpet:art).

In all cases, you can start the userd field with a lowercase letter, and biblatex will take care of automatic contextual capitalization for you.

usere Another supplemental biblatex field, which biblatex-chicago uses specifically to provide a translated title of a work, something that may be needed if you deem

the original language unparseable by a significant portion of your likely readership. The *Manual* offers two alternatives in such a situation: either you can translate the title and use that translation in your title field, providing the original language in language, or you can give the original title in title and the translation in usere. Cf. **language**, above. (See 14.108–110, 14.194; kern, pirumova:russian, weresz.)

userf This is the last of the supplemental fields which biblatex provides, and is used by biblatex-chicago for a very specific purpose. When you cite both a translation and its original, the *Manual* (14.109) recommends that, in a reference list at least, you combine references to both texts in one entry. Lacking specific instructions about the author-date style, I have nonetheless chosen to implement this possibility also for a list of references, though in-text citations will still only refer to individual works. In order to follow this specification, I have provided a third cross-referencing system (the others being crossref and xref), and have chosen the name userf because it might act as a mnemonic for its function.

In order to use this system, you should start by entering both the original and its translation into your .bib file, just as you normally would. The mechanism works for any entry type, and the two entries need not be of the same type. In the entry for the *translation*, you put the cite key of the original into the userf field. In the *original's* entry, you need to include some means of preventing it appearing separately in the list of references, either a toggle in the keywords field or perhaps skipbib in the options field. In this standard case, the data for the translation will be printed first, followed by the string orig. pub. as, followed by the original, author omitted (furet:passing:eng, furet:passing:fr). As explained above (origlanguage), I have also included a way to modify the string printed before the original. In the entry for the *translation*, you put the original's language in origlanguage, and instead of originally published as, you'll get French edition: or Latin edition:, etc. (aristotle:metaphy:gr, aristotle:metaphy:trans).

- **venue** Standard biblatex offers this field for use in proceedings and inproceedings entries, but I haven't yet implemented it, mainly because the *Manual* has nothing to say about it. Perhaps the organization field could be used, for the moment, instead. Anything in a venue field will be ignored.
- version Standard biblatex field, currently only available in misc and patent entries in biblatex-chicago.
- **volume** Standard biblatex field. It holds the volume of a journaltitle in article entries, and also the volume of a multi-volume work in many other sorts of entry. Cf. part; conway:evolution shows how sometimes this field may hold series information, as well.
- **volumes** Standard biblatex field. It holds the total number of volumes of a multi-volume work, and in such references you should provide the volume and page numbers in the postnote field of the relevant \cite command, e.g.:

\autocite[3:25]{bibfile:key}.

Cf. 15.22; meredith:letters, tillich:system, weber:saugetiere, wright:evolution. The entry wright:theory presents one volume of such a multi-volume work, so you would no longer need to give the volume in any postnote field when citing it.

- **xref** A modified crossref field provided by biblatex. See **crossref**, above.
- **year** Standard biblatex field, especially important for the author-date specification. Please see all the details under **date** above. Unlike the **date** field **year** allows nonnumeric input, so you can put \bibstring{nodate} here if required, or indeed

any other sort of non-numerical date information. If you can guess the date then you can include that guess in square brackets instead of \bibstring{nodate}. Cf. bedford:photo, clark:mesopot, leo:madonna, ross:thesis.

5.3 Commands

In this section I shall attempt to document all those commands you may need when using biblatex-chicago-authordate that I have either altered with respect to the standard provided by biblatex or that I have provided myself. Some of these, unfortunately, will make your .bib file incompatible with other biblatex styles, but I've been unable to avoid this. Any ideas for more elegant, and more compatible, solutions will be warmly welcomed.

5.3.1 Formatting Commands

These commands allow you to fine-tune the presentation of your references in both citations and list of references. You can find many examples of their usage in dates-test.bib, and I shall try to point you toward a few such entries in what follows. **NB:** biblatex's \mkbibquote command is now mandatory in some situations. See its entry below.

\autocap Version 0.8 of biblatex introduced the \autocap command, which capitalizes a word inside a citation or list of references entry if that word follows sentenceending punctuation, and leaves it lowercase otherwise. The whole question of capitalization is considerably more complicated in the notes & bibliography style, where the former uses commas and the latter (often) periods to separate blocks of information, whereas the more streamlined author-date specification has few such issues. In dates-test.bib there are only two places where the \autocap macro is necessary, and they both involve the string forthcoming in the year field (author:forthcoming, contrib:contrib).

I have nonetheless retained the system developed, following Lehman's example, for the notes & bibliography style, which automatically tracks the capitalization of certain fields in your .bib file. I chose these fields after a non-scientific survey of entries in my own databases, so of course if you have ideas for the extension of this facility I would be most interested to hear them. In order to take advantage of this functionality, all you need do is begin the data in the appropriate field with a lowercase letter, e.g., note = {with the assistance of X}. If the data begins with a capital letter — and this is not infrequent — that capital will always be retained. (cf., e.g., creel:house, morgenson:market.) If, on the other hand, you for some reason need such a field always to start with a lowercase letter, then you can try using the \isdot macro at the start, which turns off the mechanism without printing anything itself. Here, then, for reference purposes, is the complete list of fields where this functionality is active:

- 1. The **addendum** field in all entry types.
- 2. The **booktitleaddon** field in all entry types.
- 3. The **edition** field in all entry types. (Numerals work as you expect them to here.)
- 4. The **maintitleaddon** field in all entry types.
- 5. The **note** field in all entry types.
- 6. The **shorttitle** field in the review (suppperiodical) entry type and in the misc type, in the latter case, however, only when there is an entrysubtype defined, indicating that the work cited is from an archive.
- 7. The **title** field in the review (supperiodical) entry type and in the misc type, in the latter case, however, only when there is an entrysubtype defined, indicating that the work cited is from an archive.

- 8. The **titleaddon** field in all entry types.
- 9. The **type** field in artwork, audio, image, music, suppbook, suppcollection, and video entry types.

If you accidentally use the \autocap macro in one of the above fields, it frankly shouldn't matter at all, and you'll still get what you want, but taking advantage of the automatic provisions should at least save some typing.

- **\bibstring** This is Lehman's very powerful mechanism to allow biblatex automatically to provide a localized version of a string, and to determine whether that string needs capitalization, depending on where it falls in an entry. Biblatex also provides functionality which allows you sometimes simply to input, for example, newseries instead of \bibstring{newseries}, the package auto-detecting when a bibstring is involved and doing the right thing, though in all such cases either form will work. This functionality is available in the series field of article, periodical, and review entries; in the type field of manual, patent, report, and thesis entries; in the location field of patent entries; in the language field in all entry types; and in the nameaddon field in customc entries. These are the places, as far as I can make out, where biblatex's standard styles support this feature, though I have added the last, style-specific, one. If Lehman generalizes it still further in a future release, I shall do the same, if possible.
- **\mkbibquote** This is the standard biblatex command, which requires attention here because it is a crucial part of the mechanism of Lehman's "American" punctuation system. Quotation marks around the title field in various entry types are automatically provided by biblatex-chicago, but titles-within-titles frequently also require them, so it is best to get accustomed to using this command to make sure any periods or commas appearing in the neighborhood of the closing quotes will appear inside them automatically. A few examples from dates-test.bib should help to clarify this.

In an article entry, the title contains a quoted phrase:

title = {Diethylstilbestrol and Media Coverage of the
 \mkbibquote{Morning After} Pill}

Here, because the quoted text doesn't come at the end of title, and no punctuation will ever need to be drawn within the closing quotation mark, you could instead use \enquote{Morning After} or even 'Morning After'. (Note the single quotation marks here — the other two methods have the virtue of taking care of nesting for you.) All of these will produce the formatted: "Diethylstilbestrol and Media Coverage of the 'Morning After' Pill."

Here, by contrast, is a book title:

title = {Annotations to \mkbibquote{Finnegans Wake}}

Because the quoted title within the title comes at the end of the field, and because this reference unit will be separated from what follows by a period in the list of references, then the \mkbibquote command is necessary to bring that period within the final quotation marks, like so: *Annotations to "Finnegans Wake.*"

Note in both cases how you no longer need to be careful with the capitalization inside the curly brackets, as the 16th edition of the Manual has unified the title formatting of both its styles, which means that all lower- and uppercase letters remain as they are typed in your .bib file.

Let me also add that this command interacts well with Lehman's csquotes package, which I highly recommend, though the latter isn't strictly necessary in texts using an American style, to which biblatex defaults when csquotes isn't loaded. **\partcomp** This and the following 6 macros were all designed to help biblatex-chicago cope with the fact that many bibstrings in the notes & bibliography style differ between notes and bibliography, the former sometimes using abbreviated forms when the latter prints them in full. These problems do not arise in the authordate styles, but using these macros will make your .bib database more portable across languages and across both Chicago styles, and may be slightly easier to remember than the strings themselves. On the other hand, of course, they will make your .bib file less portable across multiple biblatex styles.

These macros allow you to provide an editor, a translator, and/or a compiler in situations where the available fields (editor, namea, translator, nameb, and namec) aren't adequate. Their names all begin with \part, as originally I intended them for use when a particular name applied only to a specific title, rather than to a maintitle or booktitle (cf. **namea** and **nameb**, above).

In the present instance, you can use \partcomp to identify a compiler when namec (or editortype) won't do, e.g., in a note field or the like. In such a case, biblatex-chicago will print the appropriate string in your references.

\partedit Use this macro when identifying an editor whose name doesn't conveniently fit into the usual fields (editor or namea). (N.B.: If you are writing in French and using cms-french.lbx, then currently you'll need to add either de or d' after this command in your .bib files to make the references come out right. I'm working on this.) See howell:marriage.

\partedit- andcomp	As before, but for use when an editor is also a compiler.
\partedit- andtrans	As before, but for when when an editor is also a translator (ratliff:review).
\partedit- transandcomp	As before, but for when an editor is also a translator and a compiler.
\parttrans	As before, but for use when identifying a translator whose name doesn't conveniently fit into the usual fields (translator and nameb).

\parttrans- As before, but for when a translator is also a compiler.

andcomp

5.3.2 Citation Commands

The biblatex package is particularly rich in citation commands, most of which, in biblatex-chicago-authordate and authordate-trad, function as they do in the standard author-date styles. If you are getting unexpected behavior when using them please have a look in your .log file. A command like \supercite, listed in § 3.6.2 of the biblatex manual but not defined by biblatex-chicago-authordate or by core biblatex, defaults to \cite, and leaves a warning in the .log. The following commands may require some minimal explanation, but if there are standard commands that don't work for you, or new commands that would be useful, please let me know, and it should be possible to fix or add them.

- **\autocite** I haven't adapted this in the slightest, but I thought it worth pointing out that biblatex-chicago-authordate sets this command to use \parencite as the default option. It is, in my experience, much the most common citation command you will use, and also works fine in its multicite form, **\autocites**.
- \textcite In standard biblatex this command searches first for a labelname, usually taken from the author or shortauthor field, then uses the shorthand field if the former doesn't exist. Because of the way the Chicago author-date specification recommends handling abbreviations, I have switched this around, and the command now searches for a shorthand first. This holds also for the multicite form \textcites, though both commands revert to their standard biblatex behavior when you give the cmslos=false option in the preamble.

5.4 Package Options

5.4.1 Pre-set biblatex Options

Although a quick glance through biblatex-chicago.sty will tell you which biblatex options the package sets for you, I thought I might gather them here also for your perusal. These settings are, I believe, consistent with the specification, but you can alter them in the options to biblatex-chicago in your preamble or by loading the package using \usepackage[style=chicago-authordate]{biblatex}, which gives you the biblatex defaults unless you redefine them yourself inside the square brackets.

autocite= Biblatex-chicago-authordate and authordate-trad place references in parentheses
inline by default.

- true
- alldates=comp The specification calls for the long format when presenting dates, slightly shortened when presenting date ranges. Please note that because of the author-date style's complicated requirements with respect to dates, there will be cases when printed ranges don't look exactly right — cf., e.g., nass:address. I'm working on this.
- ibidtracker= This enables an *ibidem* mechanism in citations, but only in the most strictlyconstrict defined circumstances. The Chicago author-date style doesn't print "Ibid" in citations, but in general a repeated citation on the same page will print only the page reference. Technically, this should only occur when a source is cited "more than once in one paragraph" (15.26), so you can use the \citereset command from biblatex to achieve the greatest compliance, as the package only offers automatic resetting on part, chapter, section, and subsection boundaries, while biblatex-chicago automatically resets the tracker at page breaks. (Cf. biblatex.pdf §3.1.2.1.) Whenever there might be any ambiguity, biblatex should default to printing a more informative reference.

If you are going to repeat a source, make sure that the cite command provides a postnote — from this release of biblatex-chicago you'll no longer get any annoying empty parentheses, but you will get another standard citation, which may add too much clutter.

labelyear= This option tells biblatex to provide the special labelyear and extrayear fields for true author-date styles.

maxbibnames
=10
list of references when that number exceeds 10. These numbers follow the recommendations of the *Manual* (17.29–30), and they are different from those for use in citations. With biblatex 1.6 you can no longer redefine maxnames and minnames in the \printbibliography command at the bottom of your docu-

- minimum so biblatex-chicago now does this automatically for you, though of course you can change them in your document preamble. Please see section 5.5.2 below (and the file cms-dates-sample.pdf) for hints on dealing with entries with more than three authors.
- pagetracker= This enables page tracking for the \iffirstonpage and \ifsamepage comtrue mands for controlling, among other things, the *ibidem* mechanism. It tracks individual pages if LATEX is in oneside mode, or whole spreads in twoside mode.
 - punctfont= This fixes a minor problem with punctuation in titles, ensuring that the colon
 true between a title and a subtitle appears in the correct, matching font.
 - sortcase= This turns off the sorting of uppercase and lowercase letters separately, a pracfalse tice which the Manual doesn't appear to recommend.
- sorting=cms This setting, new in this release, takes advantage of the \DeclareSortingScheme command provided by biblatex and biber, in effect implementing a default sorting order in the list of references tailored to comply with the Chicago author-

citetracker= The citetracker for the \ifciteseen test is enabled globally.

date specification. Please see the documentation of \DeclareSortingScheme in section 5.4.1, below.

- uniquelist= This option enables biblatex-chicago-authordate to disambiguate entries which minyear have more than three authors, but which differ *after* the first name in the list. This will only occur when two such entries have the same year (15.28). The option is Biber-only, like the following, which means that this next-generation BIBTEX replacement is required for the author-date styles. Please see cms-datessample.pdf (or cms-trad-sample.pdf) and section 5.5.2, below, for further details.
- usetranslator This enables automatic use of the translator at the head of entries in the absence etrue of an author or an editor. In the list of references, the entry will be alphabetized by the translator's surname. You can disable this functionality on a per-entry basis by setting usetranslator=false in the options field. Cf. silver:gawain.

Other biblatex Formatting Options

I've chosen defaults for many of the general formatting commands provided by biblatex, including the vertical space between items in the list of references and between items in the list of shorthands (\bibitemsep and \lositemsep). I define many of these in biblatex-chicago.sty, and of course you may want to redefine them to your own needs and tastes. It may be as well you know that the *Manual* does state a preference for two of the formatting options I've implemented by default: the 3-em dash as a replacement for repeated names in the list of references (15.17–19, and just below); and the formatting of note numbers, both in the main text and at the bottom of the page / end of the essay (superscript in the text, in-line in the notes; 14.19). The code for this last formatting is also in biblatex-chicago.sty, and I've wrapped it in a test that disables it if you are using the memoir class, which I believe has its own commands for defining these parameters. You can also disable it by using the footmarkoff package option, on which see below.

Gildas Hamel pointed out that my default definition, in biblatex-chicago.sty, of biblatex's \bibnamedash didn't work well with many fonts, leaving a line of three dashes separated by gaps. He suggested an alternative, which I've adopted, with a minor tweak to make the dash thicker, though you can toy with all the parameters to find what looks right with your chosen font. The default definition is: \renewcommand*{\bibnamedash}{\rule[.4ex]{3em}{.6pt}}.

losnotes & With this release, and at the request of Kenneth Pearce, I have added two new losendnotes bibenvironments to chicago-authordate.bbx, for use with the env option to the \printshorthands command. The first, losnotes, is designed to allow a list of shorthands to appear inside footnotes, while losendnotes does the same for endnotes. Their main effect is to change the font size, and in the latter case to clear up some spurious punctuation and white space that I see on my system when using endnotes. (You'll probably also want to use the option heading=none in order to get rid of the [oversized] default, providing your own within the \footnote command.) Please see the documentation of shorthand in section 5.2 above for further options available to you for presenting and formatting the list of shorthands.

The next-generation backend Biber offers enhanced functionality in many areas, three of which I've implemented in this release. If the default definitions don't work well for you, you can redefine all of them in your document preamble — see biblatex.pdf §§4.5.1 and 4.5.2.

\Declare-Labelname This option allows you to add name fields for consideration when biblatex is attempting to find a shortened name for in-text citations. This, for example, allows a compiler (=namec) to appear in citations without any other intervention from the user, rather than requiring a shortauthor field as previous releases of biblatex-chicago did. The default definition currently is {shortauthor,author, shorteditor,namea,editor,nameb,translator,namec}.

\Declare-Labelyear This option allows you to alter the order in which Biber and biblatex search for the year to use both in citations and at the head of entries in the list of references. (This will also be the year to which an alphabetical suffix will be appended when an author has published more than one work in the same year.) In the default configuration, a year will be searched for in the order date, eventdate, origdate, urldate. This suits the Chicago author-date styles very well, except for music and video entries, and, exceptionally, some review entries. Here the general rule is to emphasize the earliest date. For these three entry types, then, \DeclareLabelyear uses the order eventdate, origdate, date, urldate. See avdate in section 5.4.2, just below.

\Declare-SortingScheme The third Biber enhancement I have implemented allows you to include almost any field whatsoever in biblatex's sorting algorithms for the list of references, so that a great many more entries will be sorted correctly automatically rather than requiring manual intervention in the form of a sortkey field or the like. Code in biblatex-chicago.sty sets the biblatex option sorting=cms, which is a custom scheme, basically a Chicago-specific variant of the default nyt. You can find its definition in chicago-authordate.cbx.

The advantages of this scheme are, specifically, that any entry headed by one of the supplemental name fields (name[a-c]), a manual entry headed by an organization, or an article or review entry headed by a journaltitle will no longer need a sortkey set. The main disadvantage should only occur very rarely, and appears because the supplemental name fields are treated differently from the standard name fields by biblatex. Ordinarily, you can set, for example, useauthor=false in the options field to remove the author's name from consideration for sorting purposes. The Chicago-specific option usecompiler=false, however, doesn't remove namec from such consideration, so in some rare corner cases you may need a sortkey.

5.4.2 Pre-set chicago Options

- bookpages= At the request of Scot Becker, I have included this rather specialized option, true which controls the printing of the pages field in book entries. Some bibliographic managers, apparently, place the total page count in that field by default, and this option allows you to stop the printing of this information in the reference list. It defaults to true, which means the field is printed, but it can be set to false either in the preamble, for the whole document, or on a per-entry basis in the options field (though rather than use this latter method it would make sense to eliminate the pages field from the affected entries).
 - doi=true This option controls whether any doi fields present in the .bib file will be printed in the reference list. At the request of Daniel Possenriede, and keeping in mind the *Manual's* preference for this field instead of a url (15.9), I have added a third switch, only, which prints the doi if it is present and the url only if there is no doi. The package default remains the same, however — it defaults to true, which will print both doi and url if both are present. The option can be set to only or to false either in the preamble, for the whole document, or on a per-entry basis in the options field. In online entries, the doi field will always be printed, but the only switch will still eliminate any url.
- eprint=true This option controls whether any eprint fields present in the .bib file will be printed in the list of references. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. In online entries, the eprint field will always be printed.
 - isbn=true This option controls whether any isan, isbn, ismn, isrn, issn, and iswc fields present in the .bib file will be printed in the list of references. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field.

- numbermonth= Once again at the request of Scot Becker, I have included this option, which true controls the printing of the month field in all the periodical-type entries when a number field is also present. Some bibliographic software, apparently, always includes the month of publication even when a number is present. When all this information is available the *Manual* (17.181) prints everything, so this option defaults to true, which means the field is printed, but it can be set to false either in the preamble, for the whole document, or on a per-entry basis in the options field.
 - url=true This option controls whether any url fields present in the .bib file will be printed in the reference list. It defaults to true, and can be set to false either in the preamble, for the whole document, or on a per-entry basis, in the options field. Please note that, as in standard biblatex, the url field is always printed in online entries, regardless of the state of this option.
 - includeall= This is the one option that rules the six preceding, either printing all the fields under consideration the default or excluding all of them. It is set to true in chicago-authordate.cbx, but you can change it either in the preamble for the whole document or, for specific fields, in the options field of individual entries. The rationale for all of these options is the availability of bibliographic managers that helpfully present as much data as possible, in every entry, some of which may not be felt to be entirely necessary. Setting includeall to true probably works just fine for those compiling their .bib databases by hand, but others may find that some automatic pruning helps clear things up, at least to a first approximation. Some per-entry work afterward may then polish up the details.
 - For music and video entries, the 16th edition of the Manual (15.53) strongly recavdate=true ommends both that you provide a recording, release, or broadcast date for your references and also that this earlier date should appear in citations and at the head of reference list entries. In the default setting of \DeclareLabelyear, biblatex searches for dates in the following order: year, eventyear, origyear, urlyear. This option changes the default ordering in music and video entries to the following: eventyear, origyear, year, urlyear. Review entries presenting on-line comments have similar needs, so the same reordering applies to that entry type, too. If you simply want to apply the defaults to these three entry types, you can use avdate=false in the options when loading biblatex-chicago. If, however, you want to tailor the algorithm to your own needs, then you can use \DeclareLabelyear commands in your preamble. Please be aware, however, that some parts of the style hard-code the search syntax, and although they take account of the avdate setting, if you use your own definitions of \DeclareLabelyear the results may, in some corner cases, surprise. Please see music, review, and video in section 5.1; date, eventdate, origdate, and urldate in section 5.2; and \DeclareLabelyear in section 5.4.1.
 - Cmslos=true This option alters biblatex's standard behavior when processing the shorthand field. Chicago's author-date style only seems to recommend the use of shorthands as abbreviations for long authors' names, particularly institutional names, which means the shorthand will replace only the name part in citations rather than the whole citation (15.36; bsi:abbreviation, iso:electrodoc). The 16th edition now suggests placing the abbreviation at the head of the entry, followed by its expansion inside parentheses, an arrangement automatically provided by biblatex-chicago-authordate when you use the shorthand field, assuming you retain the default setting of this option. Please note that you can still print a list of shorthands if you wish, and you can also get back something approaching the "standard" behavior of shorthands if you give the cmslos=false option to biblatex-chicago in your document preamble. Cf. section 5.2, s.v. "shorthand" above, and also cms-dates-sample.pdf.
- nodates=true This option means that for all entry types except inreference, misc, and reference, biblatex-chicago will automatically provide \bibstring{nodates} for any entry that doesn't otherwise provide a date for citations and for the heads of entries in the list of references. If you set nodates=false in your preamble, then the

package won't perform this substitution in any entry type whatsoever. (The bibstring expands to "n.d." in English.)

usecompiler=

Iler= This option enables automatic use of the name of the compiler (in the namec true field) at the head of an entry, usually in the absence of an author, editor, or translator, in accordance with the specification (*Manual* 15.35). It may also, like useauthor, useeditor, and usetranslator, be disabled on a per-entry basis by setting usecompiler=false in the options field. The only, subtle, difference between this switch and those standard biblatex switches is that this one won't remove namec from the sorting list, whereas useauthor=false and useeditor=false do remove the author and editor. You may, therefore, in corner cases, require a sortkey in the entry.

5.4.3 Style Options – Preamble

These are parts of the specification that not everyone will wish to enable. All except the second can be used even if you load the package in the old way via a call to biblatex, but most users can just place the appropriate string(s) in the options to the \usepackage{biblatex-chicago} call in your preamble.

- annotation At the request of Emil Salim, I have added to this version of biblatex-chicago the ability to produce annotated reference lists. If you turn this option on then the contents of your annotation (or annote) field will be printed after the reference. (You can also use external files to store annotations please see biblatex.pdf § 3.10.7 for details on how to do this.) This functionality is currently in a beta state, so before you use it please have a look at the documentation for the annotation field, in section 5.2 above.
- footmarkoff Although the *Manual* (14.19) recommends specific formatting for footnote (and endnote) marks, i.e., superscript in the text and in-line in foot- or endnotes, Charles Schaum has brought it to my attention that not all publishers follow this practice, even when requiring Chicago style. I have retained this formatting as the default setup, but if you include the footmarkoff option, biblatex-chicago will not alter LATEX's (or the endnote package's) defaults in any way, leaving you free to follow the specifications of your publisher. I have placed all of this code in biblatex-chicago.sty, so if you load the package with a call to biblatex instead, then once again footnote marks will revert to the LATEX default, but of course you also lose a fair amount of other formatting, as well. See section 5.5.1, below.
- headline Several users requested an option that turned off the automatic transformations (trad only) that produce sentence-style capitalization in the title fields of the 15th-edition author-date style. I have, therefore, also included it in authordate-trad. If you set this option, the word case in your title fields will not be changed in any way, that is, this doesn't automatically transform your titles into headline-style, but rather allows the .bib file to determine capitalization. It works by redefining the command \MakeSentenceCase, so in the unlikely event you are using the latter anywhere in your document please be aware that it will also be turned off there.
- juniorcomma The *Manual* (6.47) states that "commas are not required around *Jr.* and *Sr.*," so by default biblatex-chicago has followed standard biblatex in using a simple space in names like "John Doe Jr." Charles Schaum has pointed out that traditional BIBTEX practice was to include the comma, and since the *Manual* has no objections to this, I have provided an option which allows you to turn this behavior back on, either for the whole document or on a per-entry basis. Please note, first, that numerical suffixes (John Doe III) never take the comma. The code tests for this situation, and detects cardinal numbers well, but if you are using ordinals you may need to set this to false in the options field of some entries. Second, I have fixed a bug in older releases which always printed the "Jr." part of the name immediately after the surname, even when the surname came before the given names (as in a reference list). The package now correctly puts the "Jr." part at the end, after the given names, and in this position it always takes a comma, the presence of which is unaffected by this option.

- natbib This may look like the standard biblatex option, but to keep the coding of biblatex-chicago.sty simpler for the moment I have reimplemented it there, from whence it is merely passed on to biblatex. If you load the Chicago style with \usepackage{biblatex-chicago}, then the option should simply read natbib, rather than natbib=true. The shorter form also works if you use \usepackage [style=chicago-authordate]{biblatex}, so I hope this requirement isn't too onerous.
- noibid At the request of an early tester, I have included this option to allow you globally to turn off the ibidem mechanism that biblatex-chicago-authordate uses by default. This mechanism doesn't actually print "Ibid," but rather includes only the postnote information in a citation, i.e., it will print (224) instead of (Author 2000, 224). Setting this option will mean that none of these shortened citations will appear automatically. For more fine-grained control of individual citations you'll probably want to use the \citereset command, allied possibly with the biblatex citereset option, on which see biblatex.pdf §3.1.2.1.
- shorthandfull Kenneth Pearce has suggested that, in some fields of study, a list of shorthands providing full bibliographical information may replace the list of references itself. This option, which must be used in tandem with cmslos=false, prints this full information in the list of shorthands, though of course you should remember that any .bib entry not containing a shorthand field won't appear in such a list. Please see the documentation of the shorthand field in section 5.2 above for information on further options available to you for presenting and formatting the list of shorthands.
 - strict This still-experimental option attempts to follow the *Manual*'s recommendations (14.36) for formatting footnotes on the page, using no rule between them and the main text unless there is a run-on note, in which case a short rule intervenes to emphasize this continuation. I haven't tested this code very thoroughly, and it's possible that frequent use of floats might interfere with it. Let me know if it causes problems.

5.4.4 Style Options – Entry

These options are settable on a per-entry basis in the **options** field; both relate to the presentation of dates in citations and the list of references.

Cmsdate The 16th edition of the Manual has simplified the options for entries with more than one date (15.38). You can choose among them using the cmsdate entry option. It has 3 possible states relevant to this problem, alongside a fourth which I discuss below. An example should make this clearer. Let us assume that an entry presents a reprinted edition of a work by Smith, first published in 1926 (the origdate) and reprinted in 1985 (the date):

off: This is the default. The citation will look like (Smith 1985).

both: The citation will look like (Smith [1926] 1985).

on: The citation will look like (Smith 1926). NB: The Manual no longer includes this among the acceptable options. If you want to present the origdate at the head of an entry, then generally speaking you should use cmsdate=both. I have retained this option for corner cases where it might be useful. The 15th-edition options new and old now work like both.

As I explained in detail above in section 5.2, s.v. "date," because biblatex's sorting algorithms and automatic creation of the extrayear field refer by default to the date before the origdate when both are present, there may be situations when you need to have the *earlier* year in the date field, and the later one in origdate, e.g., if you have another reprinted work by the same author originally printed in the same year. Biblatex-chicago-authordate will automatically detect this switch, and given the same reprinted work as above, the results will be as follows:

off: This is the default. The citation will look like (Smith 1926a). This style is no longer recommended by the 16th edition of the *Manual*.

both: The citation will look like (Smith [1926a] 1985). The 15th-edition options old and new are now synonyms for this.

on: The citation will look like (Smith 1926a). As noted above, this style is no longer recommended by the 16th edition of the *Manual*.

- switchdates If, for any reason, simply switching the date and the origdate isn't possible in a given entry, then you can put switchdates in the options field to achieve the same result. Please take a look at the full documentation of the **date** field to which I referred just above, and also at cms-dates-sample.pdf and dates-test.bib for examples of how all this works.
- New! The 16th edition of the *Manual* now specifies that it is "usually sufficient to cite newspaper and magazine articles entirely within the text" (15.47). This will apply mainly to article and review entries with entrysubtype magazine, and involves a parenthetical citation giving the journaltitle and then the full date, not just the year, with any other relevant identifying information incorporated into running text. (Cf. 14.206.) In order to facilitate this, I have added a further switch to the cmsdate option full which *only* affects the presentation of citations, and causes the printing of the full date specification there. You can use the standard biblatex skipbib option to keep such entries from appearing in the list of references, and you may, if your .bib entry is a complete one, also need useauthor=false in order to ensure that the journaltitle appears in the citations rather than the author.

As a final note, I should point out that the code in chicago-authordate.cbx allows cmsdate to be used in the document preamble as a general setting. This leads to a world of pain, so I very strongly advise against it, though I'm leaving it in for testing purposes.

5.5 General Usage Hints

5.5.1 Loading the Styles

With the addition of the authordate-trad style to the package, there are now three keys for choosing which style to load, notes, authordate, and authordate-trad, one of which you put in the options to the \usepackage command. With early versions of biblatex-chicago, the standard way of loading the package was via a call to biblatex, e.g.:

\usepackage[style=chicago-authordate,strict,backend=biber,%
babel=other,bibencoding=inputenc]{biblatex}

Now, the default way to load the style, and one that will in the vast majority of standard cases produce the same results as the old invocation, will look like this:

```
\usepackage[authordate,strict,backend=biber,babel=other,%
bibencoding=inputenc]{biblatex-chicago}
```

If you read through biblatex-chicago.sty, you'll see that it sets a number of biblatex options aimed at following the Chicago specification, as well as setting a few formatting variables intended as reasonable defaults (see section 5.4.1, above). Some parts of this specification, however, are plainly more "suggested" than "required," and indeed many publishers, while adopting the main skeleton of the Chicago style in citations, nonetheless maintain their own house styles to which the defaults I have provided do not conform.

If you only need to change one or two parameters, this can easily be done by putting different options in the call to biblatex-chicago or redefining other formatting variables in the preamble, thereby overriding the package defaults. If, however, you wish more substantially to alter the output of the package, perhaps to use it as a base for constructing another style altogether, then you may want to revert to the old style of invocation above. You'll lose all the definitions in biblatex-chicago.sty, including those to which I've already alluded and also the code that sets the note number in-line rather than superscript in endnotes or footnotes. Also in this file is the code that calls all of the package's localization files, which means that you'll lose all the Chicago-specific bibstrings I've defined unless you provide, in your preamble, a \DeclareLanguageMapping command, or several, adapted for your setup, on which see section 6 below and also §§ 4.9.1 and 4.11.7 in Lehman's biblatex.pdf.

What you *will not* lose is the ability to call the package options annotation, strict, cmslos=false and noibid (section 5.4.3, above), in case these continue to be useful to you when constructing your own modifications. There's very little code, therefore, actually in biblatex-chicago.sty, but I hope that even this minimal separation will make the package somewhat more adaptable. Any suggestions on this score are, of course, welcome.

5.5.2 Other Hints

Starting with biblatex version 1.5, in order to adhere to the author-date specification you will need to use Biber to process your .bib files, as BIBTEX (and its more recent variants) will no longer provide all the required features. This document assumes that you are using Biber; if you wish to continue using BIBTEX then you need biblatex version 1.4c and, if you have any problems with the current release, possibly biblatex-chicago 0.9.7a.

If your .bib file contains a large number of entries with more than three authors, then you may run into some limitations of the biblatex-chicago code. The default settings in the package are maxnames=3,minnames=1 in citations and maxbibnames=10, minbibnames=7 in the list of references. In practice, this means that an entry like hlatky:hrt, with 5 authors, will present all of them in the list of references but will truncate to one in citations, like so: (Hlatky et al. 2002). For the vast majority of circumstances, these settings are exactly right for the Chicago author-date specification. However, if "a reference list includes another work of the same date that would also be abbreviated as ['Hlatky et al.'] but whose coauthors are different persons or listed in a different order, the text citations must distinguish between them" (15.28). The new (Biber-only) biblatex option uniquelist, set for you in biblatex-chicago.sty, will automatically handle many of these situations for you, but it is as well to understand that it does so by temporarily suspending the limits, listed above, on how many names to print in a citation. Without uniquelist, biblatex would present such a work as, e.g., (Hlatky et al. 2002b), while hlatky:hrt would be (Hlatky et al. 2002a). This does distinguish between them, but inaccurately, as it suggests that the two different author lists are exactly the same. With uniquelist, the two citations might look like (Hlatky, Boothroyd et al. 2002) and (Hlatky, Smith et al. 2002), which is what the specification requires.

If, however, the distinguishing name occurs further down the author list — in fourth or fifth position in our examples — then the default settings would produce citations with all 4 or 5 names printed, which can become awkwardly long. In such a situation, you can provide shortauthor fields that look like this: {{Hlatky et al., \mkbibquote{Quality of Life,}}} and {{Hlatky et al., \mkbibquote{Depressive Symptoms,}}}, using a shortened title to distinguish the references. This would produce (Hlatky et al., "Quality of Life," 2002) and (Hlatky et al., "Depressive Symptoms," 2002), again as the spec requires. There is, unfortunately, no simpler way that I know of to deal with this situation.

One useful rule, when you are having difficulty creating a .bib entry, is to ask yourself whether all the information you are providing is strictly necessary. The Chicago specification is a very full one, but the *Manual* is actually, in many circumstances, fairly relaxed about how much of the data from a work's title page you need to fit into a reference. Authors of introductions and afterwords, multiple publishers in different countries, the real names of authors more commonly known under pseudonyms, all of these are candidates for exclusion if you aren't making specific reference to them, and if you judge that their inclusion won't be of particular interest to your readers. Of course, any data that may be of such interest, and especially any needed to identify and track down a reference, has to be present, but sometimes it pays to step back and reevaluate how much information you're providing. I've tried to make biblatex-chicago robust enough to handle the most complex, data-rich citations, but there may be instances where you can save yourself some typing by keeping it simple.

Scot Becker has pointed out to me that the inverse problem not only exists but may well become increasingly common, to wit, .bib database entries generated by bibliographic managers which helpfully provide as much information as is available, including fields that users may well wish not to have printed (ISBN, URL, DOI, pagetotal, inter alia). The standard biblatex styles contain a series of options, detailed in biblatex.pdf §3.1.2.2, for controlling the printing of some of these fields, and with this release I have implemented the ones that are relevant to biblatex-chicago, along with a couple that Scot requested and that may be of more general usefulness. There is also a general option to excise with one command all the fields under consideration – please see section 5.4.2 above.

Finally, allow me to reiterate what Philipp Lehman says in biblatex.pdf, to wit, if you aren't going to use Biber, use bibtex8, rather than standard BIBT_EX, and avoid the cryptic errors that ensue when your .bib file gets to a certain size.

6 Internationalization

Several users have requested that, in line with analogous provisions in other "American" biblatex styles (e.g., biblatex-apa and biblatex-mla), I include facilities for producing a Chicago-like style in other languages. I have supplied three lbx files, cms-german.lbx, its clone cms-ngerman.lbx, and cms-french.lbx, in at least partial fulfillment of this request. For this release, Baldur Kristinsson has very kindly provided cms-icelandic.lbx for speakers of that language, while Håkon Malmedal has equally kindly provided cms-norsk.lbx, cms-norwegian.lbx, and cms-nynorsk.lbx. I have added cms-british.lbx in order to simplify and to improve the package's handling of non-American typographical conventions in English. This means that all — or at least most — of the Chicago-specific bib-strings are now available for documents and reference apparatuses written in these languages, with, as I intend, more languages to follow, limited mainly by my finite time and even-more-finite competence. (If you would like to provide bibstrings for a language in which you want to work, or indeed correct deficiencies in the lbx files contained in the package, please contact me.)

- **babel** Using these facilities is fairly simple. By default, and this functionality remains the same as it was in the previous release of biblatex-chicago, calls to \DeclareLanguageMapping in biblatex-chicago.sty will automatically load the American strings, and also biblatex's American-style punctuation tracking, when you:
 - 1. Load babel with american as the main text language.
 - 2. Load babel with english as the main text language.

or

3. Do not load babel at all.

(This last is a change from the biblatex defaults — cp. § 3.9.1 in biblatex.pdf — but it seems to me reasonable, in an American citation style, to expect this arrangement to work well for the majority of users.)

New! If, for whatever reason, you wanted to use biblatex-chicago but retain British typographical conventions — punctuation outside of quotation marks, outer

quotes single rather than double, etc. — then you no longer need to follow the complicated rules outlined in previous releases of biblatex-chicago. Instead, simply load babel with the british option.

If you want to use French, German, Icelandic, or Norwegian strings in the reference apparatus, then you can load babel with french, german, icelandic, ngerman, norsk, or nynorsk as the main document language. You no longer need any calls to \DeclareLanguageMapping in your document preamble, since biblatex-chicago.sty now automatically provides these if you load the package in the standard way.

You can also define which bibstrings to use on an entry-by-entry basis by using the hyphenation field in your bib file, but you will have to make sure that the Chicago-specific strings for the given language are loaded using a \DeclareLanguageMapping call in the preamble. Indeed, if american isn't the main text language when loading babel, then in order to have access to those strings you'll need \DeclareLanguageMapping{american}{cms-american} in your preamble, as biblatex-chicago.sty won't load it for you.

Three other hints may be in order here. Please note, first, that I haven't altered the standard punctuation procedures used in any of the other available languages, so commas and full stops will appear outside of quotation marks, and those quotation marks themselves will be language-specific. If, for whatever reason, you wish to follow the Chicago specification and move punctuation inside quotation marks, then you'll need a declaration of this sort in your preamble:

```
\DefineBibliographyExtras{german}{%
    \DeclareQuotePunctuation{.,}}
```

Second, depending on the nature of your bibliography database, it will only rarely be possible to process the same bib file in different languages and obtain completely satisfactory results. Fields like note and addendum will often contain language-specific information that won't be translated when you switch languages, so manual intervention will be necessary. If you suspect you may have a need to use the same bib file in different languages, you can minimize the amount of manual intervention required by using the bibstrings defined either by biblatex or by biblatex-chicago. Here, a quick read through notestest.bib and/or dates-test.bib should give you an idea of what is available for this purpose — see esp. the strings by, nodate, newseries, number, numbers, oldseries, pseudonym, reviewof, revisededition, and volume, and also section 4.3.1 above, esp. s.v. "\partedit."

Finally, the French and German bibstrings I have provided may well break with established bibliographical traditions in those languages, but my main concern when choosing them was to remain as close as possible to the quirks of the Chicago specification. I have entirely relied on the judgment of the creators of the Icelandic and Norwegian localizations in those instances. If you have strong objections to any of the strings, or indeed to any of my formatting decisions, please let me know.

7 One .bib Database, Two Chicago Styles

I have, when designing this package, attempted to keep at least half an eye on the possibility that users might want to re-use a .bib database in documents using the two different Chicago styles. The extensive unification of the two styles in the 16th edition of the *Manual* has simplified things, and though I have no idea whether this will even be a common concern, I still thought I might gather in this section the issues that a hypothetical user might face. The two possible conversion vectors are by no means symmetrical, so I provide two lists, items within the lists appearing in no particular order. These may well be incomplete, so any additions are welcome.

7.1 Notes -> Author-Date

This is, I believe, the simpler conversion, as most well-constructed .bib entries for the notes & bibliography style will nearly "just work" in author-date, but here are a few caveats nonetheless:

- 1. NB: Unless you are using authordate-trad, the formatting of titles in the two styles is now the same, which means you would no longer need to worry about extra curly brackets and their affects on capitalization. If you are using authordate-trad, please see the caveats in the documentation of the title field in section 5.2, above.
- 2. You may need to reevaluate your use of shorthands, given that by default the author-date styles use them in place of authors rather than in place of the whole citation. The preamble option cmslos=false may help, but this may leave your document out-of-spec.
- 3. The potential problem with multiple author lists containing more than three names doesn't arise in the notes & bibliography style, so the shortauthor fields in such entries may need alteration according to the instructions in section 5.5.2 above.
- 4. Date presentation is relatively simple in notes & bibliography, so you'll need to contemplate the cmsdate options from section 5.4.4 when doing the conversion to author-date.

7.2 Author-date -> Notes

It is my impression that an author-date .bib database is somewhat easier to construct in the first instance, but subsequently converting it to notes & bibliography is a little more onerous. Here are some of the things you may need to address:

- If you've decided against using the \partedit macro and friends from section 5.3.1 above, commands not strictly necessary for author-date, you'll need to insert them now.
- 2. In general, you need to be more careful in notes & bibliography about capitalization issues. Fields which only appear once in author-date — in the list of references — may appear in both long notes and in the bibliography, in different syntactic contexts, so a quick perusal of the documentation of the \autocap macro in section 5.3.1 above may help.
- 3. You also need to be more careful about the use of abbreviations, e.g., in journal names, where the author-date style is more liberal in their use than the notes & bibliography style. (Cf. 14.179.) The bibstrings mechanism and package options sort much of this out automatically, but not all.
- 4. The shorttitle field is used extensively in notes & bibliography to keep short notes short, so you may find that you need to add a fair number of these to an author-date database. In general this field is ignored by the latter style, so this, too, will be a one-time conversion.
- 5. You may need to add letter entries if you are citing just one letter from a published collection. See section 4.1, s.v. "letter," above.
- 6. The default shorthand presentation differs from one style to the other. You may need to reconsider how you use this field when making the conversion.
- 7. As I explained above in section 4.2, s.v. "date," I have included compatibility code in biblatex-chicago-notes for the cmsdate (silently ignored) and switchdates options, along with the automatic mechanism for reversing date and origdate. This means that you can, in theory, leave all of this

alone in your .bib file when making the conversion, though I'm retaining the right to revise this if the code in question demonstrably interferes with the functioning of the notes & bibliography style.

8 Interaction with Other Packages

- endnotes For users of the endnotes package or of pagenote biblatex 0.9 offers considerably enhanced functionality. Please read Lehman's RELEASE file and the documentation of the notetype option in biblatex.pdf § 3.1.2.1.
- **memoir** Another problem I have found occurs because the memoir class provides its own commands for the formatting of foot- and end-note marks. By default, biblatex-chicago uses superscript numbers in the text, and in-line numbers in foot- or end-notes, but I have turned this off when the memoir class is loaded, reasoning that users of that package may well have their own ideas about such formatting.
- **ragged2e** The footnote mark code I've just mentioned also causes problems for the ragged2e package, but in this case a simple workaround is to load biblatex *after* you've loaded ragged2e in your document preamble.
- XeLAT_EX Nick Andrewes alerted me to problems that appeared when he used the XeLAT_EX engine to process his files. These included spurious punctuation after quotation marks in some situations, and also failures in the automatic capitalization routines. Some of these problems disappeared when I switched to using Lehman's punctuation-tracking code for "American" styles, but some remained. A bug report from J. P. E. Harper-Scott suggested a new way of addressing the issue, and newer versions of Lehman's csquotes package incorporate a full fix. This, thankfully, doesn't require turning off any of XeLAT_EX's features, and indeed merely involves upgrading to the latest version of csquotes, which I recommend doing in any case. Compatibility with the EU1 encoding is now standard in that package.

9 TODO & Known Bugs

This release implements the 16th edition of the *Chicago Manual of Style*. It now also contains a version of the author-date style (authordate-trad) with traditional title formatting, alongside the authordate code which unifies the treatment of titles between itself and the notes & bibliography style. I hope that users will migrate to one of these styles implementing the most recent specification, so that I can focus my development and testing there. For the moment, I shall call the 15th-edition styles "mildly deprecated," but if you still have urgent feature requests for them, I'll do what I can.

Regardless of which edition you are considering, there are a number of things I haven't implemented. The solution in brown:bremer to multi-part journal articles obviously isn't optimal, and I should investigate a way of making it simpler. If the kludge presented there doesn't appeal, you can always, for the time being, refer separately to the various parts. Legal citations are another thorny issue, and implementing them would involve choosing a particular documentation scheme (for which there exist at least three widely-used standards in the US), then providing what would be, it has seemed to me, an entirely separate biblatex style, bearing little or no relation to the usual look of Chicago citations. Indeed, the Manual (14.281) even makes it clear that you should be using a different reference book if you are presenting work in the field, so I've thought it prudent to stay clear of those waters so far. I have received a request for this feature, however, so when I have finished the updates for the 16th edition I shall look at it more closely. If you have other issues with particular sorts of citation, I'm of course happy to take them on board. The Manual covers an enormous range of materials, but if we exclude the legal citations it seems to me that the available entry types could be pressed into service to address the vast majority of them. If this optimism proves misguided, please let me know.

Kenneth L. Pearce has reported a bug that appears when using multiple citation commands inside the annotation field of annotated bibliographies. As late as I am with the file for the 16th edition, I shall attempt to address this in a future release. If you run into this problem, he suggests placing all the citations together in parentheses at the end of the annotation, though on my machine this doesn't always work too well, either.

The same user has requested a way to provide shortened citations not just of essays in one collection, but also of multiple books in, for example, a collected works. I shall be looking into this for future releases.

Version 1.5 of biblatex revised the way the package deals with breaking long URLs and DOIs across lines. The new code is designed to deal as elegantly as possible with as wide a variety of cases as possible, but in a few of my test entries it has caused some line-breaking issues of its own. Depending on the nature of your cited sources, it may be useful for you to revert to the older, pre-1.5 biblatex behavior, something which is easily done by copying and pasting the old definition of the \biburlsetup command into your document preamble. If you look in the preambles of cms-notes-sample.tex or cms-dates-sample.tex, you can see the redefinition and copy it from there, just to see whether it helps your situation. If it would be generally useful, I could also easily turn it into a package option. Feedback welcome.

The switch to Biber for the author-date specification means that biblatex now provides considerably enhanced handling of the various date fields. I have attempted to document the relevant changes in cms-dates-sample.pdf and in the **date** discussion in section 5.2, above, but it's possible the package may need some changes to cope with all the permutations. Please let me know if you find something that looks like a bug.

Roger Hart, Pierric Sans, and a number of other users have reported a bug in the formatting of title fields. This, as far as I can tell, has to do with the interaction between \MakeSentenceCase and certain characters at the start of the title, particularly Unicode ones. If you are using authordate-trad, it may help for the moment to put an empty set of curly braces {} at the start of the field, but I shall look into this further.

Recent versions of biblatex have introduced some new entry types for citing multi-volume works. These are largely aimed at those already using Biber, which provides much-improved functionality for the crossref field compared to standard $BibT_EX$ or bibtex8. Depending upon the time required to implement the changes for the 16th edition, these types may make it into the package for the next major release, or they may have to wait until the one after.

Roger Hart has requested that I incorporate some means of changing the punctuation before titleaddon fields, perhaps using a customizable command like \titleaddonpunct. I hope to provide this in the next release. He has also requested, despite the *Manual's* objections, the possibility of using both Idem and Ibid. in notes. I shall look into this for the next release.

This release fixes the formatting errors of which I am aware, though users writing in French should be aware of problems with the \partedit command in section 4.3.1 above. There also remain the larger issues I've discussed throughout this documentation, which mainly represent my inability to make all of biblatexchicago's formatting functions transparent for the user, but thankfully Lehman's superb punctuation-tracking code has preemptively fixed a great many small errors, some of which I hadn't even noticed before I began testing that functionality. That there are other micro-bugs seems certain — if you report them I'll do my best to fix them.

I haven't looked closely at the standard BIBT_EX style by Glenn Paulley, contained in the chicago package on CTAN, which implements the author-date specification from the 13th edition of the *Manual*. If anyone is still using the style, and requires some compatibility code for it, let me know, and I'll look into it.

10 Revision History

0.9.9b: Released December 6, 2012

- This release contains a new variant of the author-date style, available as the authordate-trad option when loading biblatex-chicago. This provides the traditional, plain, pre-16th-edition Chicago title handling sentence-style capitalization, absence of quotation marks in article titles and the like but in all other respects follows the 16th-edition specification, as suggested by the *Manual* (15.45). Remember that the headline package option can be used to turn off the automatic sentence-style capitalization, meaning that titles will appear as presented in the .bib file, at least as far as capitalization is concerned. Please see especially the documentation of **title** in section 5.2, above, for the details.
- I have updated calls to \DeclareLabelname and \DeclareLabelyear in several .cbx files so that the package works correctly with the most recent version (2.4) of biblatex.
- Following a request by Norman Gray, I have included a \textcite (and a \textcites) command in the notes & bibliography style for the first time. Please see section 4.3.2, above, for the details.
- Following a request by Daniel Possenriede, I have added in all three 16thedition styles a new switch, only, to the doi option, which prints the doi when present and the url only when there is no doi. The package default remains, however, true.
- I am grateful to Baldur Kristinsson for providing an Icelandic localization file for biblatex-chicago, called cms-icelandic.lbx. You'll see if you look through it that it is still something of a work in progress, but it should cover most needs in that language very well. If you would like to fill in some of the gaps please let me know.
- I am also grateful to Håkon Malmedal for providing Norwegian localizations for biblatex-chicago, contained in the files cms-norsk.lbx, cms-norwegian.lbx, and cms-nynorsk.lbx.
- I have added a new British localization (cms-british.lbx) that should make it much simpler for users to produce documents adhering to that tradition. For further details on the usage of all these localizations please see section 6, above.
- Several users have reported a bug that resulted in doubled bibstrings in certain contexts. This happened only when using localizations for which biblatex-chicago didn't have explicit support, and it should now be fixed.
- I have changed the way the 16th-edition author-date styles handle the *Ibidem* mechanism. In the absence of a postnote field you no longer get empty parentheses, but rather a standard in-text citation. If you do have a postnote field, then only that will appear.

0.9.9a: Released July 30, 2012

• I have made a few changes to biblatex-chicago.sty to allow the package to work with the latest version (2.0) of biblatex. In all other respects this release is identical to 0.9.9. If you do use the package with biblatex 2.0, please let me know if there are issues I need to address. Thanks to Charles Schaum for alerting me to some of them.

0.9.9: Released July 5, 2012

Converting 15th-Edition .bib Files to Use the 16th Edition:

Notes and Bibliography Style

- The specification for **music** entries has been significantly altered for the new edition. You no longer need to worry about the () and () signs in the howpublished field, which will be silently ignored, and the pubstate field now reverts to its usual function of identifying reprints or, in this case, reissues. The spec really only requires a record label (series) and catalog number (number), though publisher is still available if you need it. There is a new emphasis, finally, on the dating of musical recordings, so that the eventdate gives the recording date of a particular song or other portion of a recording, the origdate the recording date of an entire album, and the date the publishing date of that album. Please see the full documentation in section 4.1, above.
- The specification for **video** entries has also been clarified. For television series, the episode and series numbers go in booktitleaddon instead of titleaddon and, as with music entries, the eventdate will hold the original broadcast date of such an episode, or perhaps the recording/performance date of, e.g., an opera on DVD. The origdate will still hold the original release date of a film, and the date the publishing or copyright date of the medium you are referencing. Please see the full documentation in section 4.1, above.
- You should add **customc** entries to provide bibliographical cross-references from multiple pseudonyms back to the author's name.
- In **suppbook** entries, the *Manual* now requires you to provide the page range (in the pages field) for the specific part you are citing, e.g., an introduction, foreword, or afterword.
- In **patent** entries, the *Manual* now prefers sentence-style capitalization for titles, which you'll need to provide yourself by hand.
- When a descriptive phrase is used as an author, you can now omit an initial definite or indefinite article, which will help with alphabetization in the bibliography.
- A DOI is now preferred to a URL, if both are available.
- On the same subject, a revision date (or similar) is preferred to an access date for online material. You can use the new **userd** field to change the string introducing the urldate, which defaults to being an access date.
- Special imprints are now separated from their parent press by a forward slash rather than a comma, so can just be added to the publisher field with the usual keyword and.
- I have implemented a reasonable, less-flexible facsimile of the Biber-only command \DeclareLabelname which should work for those using any backend. It allows biblatex to find a name for short notes outside the standard name fields, including, notably, in the name[a-c] fields. This should reduce the instances where you need a shortauthor field to provide such a name.
- The Chicago-specific setting of another Biber-only command, \Declare-SortingScheme=cms, allows non-standard fields to be considered by biblatex's sorting algorithms, which should reduce the instances where you need a sortkey or the like in your entries. If you aren't using Biber, the package reverts to the standard nty sorting scheme.

Author-Date Style

- All title fields now follow the rules for the notes & bibliography style as far as punctuation, formatting, and capitalization are concerned. Biblatexchicago-authordate will deal with most of this automatically, but if you have any hand formatting of lowercase letters within curly braces in your .bib file, you will need to restore the headline-style capitalization there. Also, you'll need to be more careful when you provide quotation marks inside titles, remembering to use \mkbibquote so that punctuation can be brought inside nested quotation marks. These revisions will apply particularly to title, booktitle, and maintitle fields.
- The one exception to these rules is in **patent** entries, where sentence-style capitalization of the title is now specified. You'll have to provide this by hand yourself, as in the notes & bibliography style.
- Because of these changes to title formatting, you'll need to observe the difference between **article** and **review** entries, where the latter contain generic, "Review of ..." titles and the former standard, specific titles.
- The presentation of **shorthand** fields has changed. You no longer need to use the **customc** entry type to include cross-references from shorthands to expansions in the list of references. Now, simply using a shorthand field in an entry places that shorthand in citations and at the head of the entry in the list of references, where it will be followed by its expansion within parentheses. The new system will require help with sorting in the reference list placing the shorthand also in a sortkey should do the trick.
- On the subject of **customc** entries, the *Manual* now recommends using cross-references in several contexts, particularly when a single author uses more than one pseudonym. Adding customc entries makes this happen.
- There have been significant changes when presenting book-like entries with more than one date. If you are using the cmsdate=on option, or indeed simply placing the earlier date in the **date** field and the later one in **origdate**, the presentation will be the same as before, but you should understand that the *Manual* no longer recommends this **origdate**-only style. It prefers, instead, to present either the date alone or both dates in citations and at the head of reference list entries. When presenting both dates, there is now no longer a choice between the old and new options for cmsdate, but only the both option. If you have old or new in your .bib files, they will be treated as synonyms of both.
- The specification for **music** entries has been significantly altered for the new edition. You no longer need to worry about the () and () signs in the howpublished field, which will be silently ignored, and the pubstate field reverts to its more usual function of identifying reprints or, in this case, reissues. The spec really only requires a record label (series) and catalog number (number), though publisher is still available if you need it. There is a new emphasis, finally, on the dating of musical recordings, which means that such entries will fit better with the author-date style. It also means that I have had to redefine the various date fields. The eventdate gives the recording date of a particular song or other portion of a recording, the origdate the recording date of an entire album, and the date the publishing date of that album. The earlier date is the one that will appear in citations and at the head of reference list entries. Please see the full documentation in section 5.1, above.
- The specification for **video** entries has also been clarified. For television series, the episode and series numbers go in booktitleaddon instead of titleaddon and, as with music entries, the eventdate will hold the original broadcast date of such an episode, or perhaps the recording/performance

date of, e.g., an opera on DVD. The origdate will still hold the original release date of a film, and the date the publishing or copyright date of the medium you are referencing. The earlier date, once again, is the one that will appear in citations and at the head of reference list entries. Please see the full documentation in section 5.1, above.

- In **suppbook** entries, the *Manual* now requires you to provide the page range (in the pages field) for the specific part you are citing, e.g., an introduction, foreword, or afterword.
- The author-date style now prefers longer bibstrings in the list of references, bringing it into line with the notes & bibliography style. Generally, the package will take care of this for you, but if you've been using abbreviated strings in note fields, for example, you may want to change them so that they conform with the strings the package provides. In some circumstances the \partedit macro, and its relatives, may help. See section 5.3.1.
- When a descriptive phrase is used as an author, you can now omit an initial definite or indefinite article, which will help with alphabetization in the bibliography.
- A DOI is now preferred to a URL, if both are available.
- On the same subject, a revision date (or similar) is preferred to an access date for online material. You can use the new **userd** field to change the string introducing the urldate, which defaults to being an access date.
- Special imprints are now separated from their parent press by a forward slash rather than a comma, so can just be added to the publisher field with the usual keyword and.
- The 16th edition of the *Manual* is less than enthusiastic about the use of "Anon." as the author, preferring instead that the title or the journaltitle take its place. If you do decide to get rid of "Anon.," new facilities provided by Biber see next entry should mean that biblatex no longer requires assistance when alphabetizing such author-less entries.
- The Chicago-specific setting of the Biber-only command, \DeclareSortingScheme=cms, allows non-standard fields to be considered by biblatex's sorting algorithms, which should reduce the instances where you need a sortkey or the like in your entries.
- The Chicago-specific setting of the Biber-only command \DeclareLabelname allows biblatex to find a name ("label") for citations outside the standard name fields, including, notably, in the name[a-c] fields. This should reduce the instances where you need a shortauthor field to provide such a name.

Other New Features:

- For reprinted books, you can now present more detailed publishing information about the original edition using the new **origlocation** and **origpublisher** fields. You can also use the origlocation in letter or misc (with entrysubtype) entries to identify where a published or unpublished letter was written. These uses apply to both Chicago styles.
- Thanks to a patch sent by Kazuo Teramoto, you can now take advantage of biblatex's facilities for citing eprint resources. There is also a new eprint option, set to true by default, which controls the printing of this field in both Chicago styles. You can set the option both in the preamble and in the options field of individual entries. The field will always print in **online** entries.

- I have added a new citation command, \citejournal, to the notes & bibliography style to allow you to present journal articles using an alternative short note form, which may be a clearer form of reference in certain circumstances. Such short notes will present the name of the author, the journaltitle, and the volume number.
- I have included a very slightly modified version of the standard biblatex \citeauthor command, which may be useful for references to works from classical antiquity.
- I have added a new cmsdate=full switch to the author-date style, which only affects citations in the text, and means that a full date specification will appear there, rather than just the year. If you follow the *Manual's* recommendations concerning newspaper and magazine articles only appearing in running text and not in the reference list, this option will help.
- I have added a new avdate option to the author-date style, set to true by default in biblatex-chicago.sty. This alters the default setting of \Declare-Labelyear in **music**, **review**, and **video** entries to take account of specialized instructions in the *Manual* for finding dates to appear in citations and at the head of reference list entries. Setting avdate=false in the options when you load biblatex-chicago restores the default settings for all entry types. See avdate in section 5.4.2.
- The *Manual* has added recommendations for citing blogs, which generally will need an **article** entry with magazine entrysubtype. You can identify a blog as such by placing "blog" in the location field. If you want to cite a comment to a blog or to other online material, the **review** entry type, entrysubtype magazine will serve. The **eventdate** dates the comment, and any timestamp that is required can go in nameaddon. These instructions work in both specifications.
- Photographs are no longer presented differently from other sorts of artworks so, in effect, in both styles, the **image** type is now a clone of **artwork**, though retained for backward compatibility.
- Following a request by Kenneth Pearce, I have added new facilities for presenting **shorthands** in both Chicago styles. In both, there are two new bibenvironments which you can set using the env option to the \printshorthands command: losnotes formats the list of shorthands so that it can be presented in a footnote, while losendnotes does the same for endnotes. In both styles, there is a new preamble option, shorthandfull, which prints the full bibliographical information of each entry inside the list of shorthands, allowing such a list effectively to replace a bibliography or list of references. In the author-date style, you need to set the cmslos=false option as well, in order for this to work. In the notes & bibliography style, I have added a new citation command, \shorthandcite, which prints the shorthand even in the first citation of a given work.
- Following suggestions by Roger Hart, I have implemented three new fieldexclusion options in the notes & bibliography style. In all three cases, the field in question will always appear in the bibliography, but not in long notes, which may help to save space. The fields at stake are addendum, note, and series, controlled respectively by the new addendum, notefield, and bookseries options. All of these are set to true using the new completenotes option in chicago-notes.cbx, but you can change the settings either in the preamble or in the options field of individual entries. Please see the documentation of these options in section 4.4.2, above, for details on which entry types are excluded from their scope.
- Thanks to a coding suggestion from Gildas Hamel, I have redefined the \bibnamedash in biblatex-chicago.sty, which should now by default look a little better in a wider variety of fonts.

- At the request of Baldur Kristinsson, I have added \DeclareLanguageMapping commands to biblatex-chicago.sty for all the languages biblatex-chicago currently provides. If you load the style in the standard way, you no longer need to provide these mappings manually yourself.
- I have improved the date handling in both styles, particularly with regard to date ranges.

0.9.8d: Released November 15, 2011

- Some minor fixes to both styles for compatibility with biblatex 1.7.
- Kenneth Pearce found an error in the formatting of bookinbook titles in the author-date style's list of shorthands. This should work properly now.
- Jonathan Robinson spotted some inconsistencies in the way the notes & bibliography style interacts with the hyperref package. Following his suggestion, short notes now point to long notes when the latter are available, but to bibliography entries instead when you have set the short option.

0.9.8c: Released October 12, 2011

- Emil Salim pointed out some rather basic errors in the presentation of inproceedings and proceedings entries, errors that have been present from the first release of the style(s). These should now, belatedly, have been put right.
- Minor improvements to coding and documentation.

0.9.8b: Released September 29, 2011

- Bad Dates: Christian Boesch alerted me to some date-formatting errors produced when using the styles with the german option to babel. A little further investigation revealed similar problems with french, and before long it became clear that date handling in biblatex-chicago was generally, and significantly, sub-optimal. The whole system should now be more robust and more accurate.
- The new date-handling code shouldn't require any changes to your .bib files, but users of the author-date style may want to have a look at the documentation of the letter and misc entry types, and of the four date fields, for some information about how the changes could simplify the creation of their databases.
- Various other minor improvements.

0.9.8a: Released September 21, 2011

- Fixed a series of unsightly errors in the author-date style, discovered while working on the pending update to the 16th edition.
- Fixed bugs uncovered in both the author-date and the notes & bibliography styles thanks to Charles Schaum's adventurous use of the origyear field.
- Added two new bibstrings to the cms-*.lbx files to fix potential bugs in some of the audiovisual entry types.

0.9.8: Released August 31, 2011

• Starting with biblatex version 1.5, in order to adhere to the author-date specification you will need to use Biber to process your .bib files, as BIBTEX (and its more recent variants) will no longer provide all the required features. Unfortunately, however, the current release of Biber (0.9.5) contains bugs that make it tricky to use with biblatex-chicago. These bugs have been addressed in 0.9.6 beta, which is available for various operating systems in

the development subdirectory of your SourceForge mirror, e.g., UK mirror. (If, by the time you read this, Biber 0.9.6 has already been released, then so much the better.) Please see the start of cms-dates-sample.pdf for more details.

- The switch to Biber for the author-date specification means that biblatex now provides considerably enhanced handling of the various date fields. I have attempted to document the relevant changes in cms-dates-sample.pdf and in the **date** discussion in section 5.2, above, but in my testing the only alterations I've so far had to make to my .bib files involve adhering more closely to the instructions for specifying date ranges. Biber doesn't like {1968/75}, and will ignore it. Either use {1968/1975} or use {1968--75} in the year field.
- In the notes & bibliography style, and mainly in article, letter, misc, and review entries, previous releases of biblatex-chicago recommended using the \isdot macro when you needed both to define a field and not have it appear in the printed output. This mechanism no longer works in biblatex 1.6, and while addressing the problem I realized that relying on it covered over some inconsistencies and bugs in my code, so from this release forward you will need to modify your .bib and .tex files to use other, more standard mechanisms to achieve the same ends, in particular the \headlesscite commands and declaring useauthor=false in the options field. Please consult the documentation in section 4.3.1, s.v. "\isdot," for a list of example entries where you can see these changes at work.

Other New Features:

- Fixed the \smartcite citation command in, and added a \smartcites command to, chicago-notes.cbx, so that the notes & bibliography style no longer prints parentheses around citations produced using \autocite(s) commands inside \footnote commands. Many thanks to Louis-Dominique Dubeau for pointing out this error.
- Rembrandt Wolpert and Aaron Lambert pointed out an issue with a command (\lbx@fromlang) that biblatex no longer defines, and Charles Schaum very kindly suggested a temporary workaround in a newsgroup post, a workaround that should no longer be necessary.
- Version 1.6 of biblatex no longer allows you to redefine the minnames and maxnames options in the \printbibliography command, so I've defined minbibnames and maxbibnames in biblatex-chicago.sty, instead. These parameters have been available since version 1.1, so this is now the earliest version of biblatex that will work with the Chicago styles. Of course, if the (Chicago-recommended) values of these options don't suit your needs, you can redefine them in your document preamble.

0.9.7a: Released March 17, 2011

- Added \smartcite command to chicago-notes.cbx so that the notes & bibliography style will work with biblatex 1.3.
- Added bibstrings byconductor and cbyconductor to the .lbx files, mistakenly omitted in version 0.9.7.
- Minor fixes to the docs.

0.9.7: Released February 15, 2011

Obsolete and Deprecated Features:

• The **customa** and **customb** entry types are now obsolete. Any such entries will be ignored. Please change any that remain to **letter** and **bookinbook**, respectively.

• If you still have any **customc** entries containing introductions, prefaces, or the like, please change them to **suppbook**. I have recycled **customc** for another purpose, on which see below.

Other New Features:

- At the request of Johan Nordstrom, I have added three new audiovisual entry types to both styles, **audio**, **music**, and **video**. The documentation of **audio** in sections **4.1** and **5.1** above contains an overview of the three, and the details for each type are to be found under their individual headings.
- I have transformed the **customc** entry type to enable alphabetized crossreferences — the "c" is meant to be mnemonic — to other, separate entries in a reference list or bibliography. In particular, this facilitates crossreferences to other names in a list, rather than to other works. In authordate, in a procedure recommended by the *Manual*, this now allows you to expand shorthands inside the reference list rather than in a list of shorthands. In both styles, you can now provide a pointer to the main entry if a reader is looking an author up under, e.g., a pseudonym or other alternative name.
- I have introduced the **userc** field, intended to simplify the printing of the cross-references provided by **customc** entries. The standard \nocite command works as well, but the additional mechanism may be more convenient in some circumstances.
- You can now provide an **eventdate** in music entries to identify, e.g., a particular recording session. It will be printed just after the title.
- In the notes & bibliography style, I have now implemented the **shorthandintro** field, which allows you to change the string introducing a shorthand in the first, long note. It works just as it does in the standard biblatex styles.
- At the request of Scot Becker, I have added six new field-exclusion options to both styles, all of which can be set both in the document preamble and/or in the options field of individual .bib entries. Three of these doi, isbn, and url are standard biblatex options, the others bookpages, includeall, and numbermonth are chicago-specific. See the docs in sections 4.4.2 and 5.4.2, above.
- At the request of Charles Schaum, I've added the juniorcomma option to both styles, which can be set in the document preamble and/or in the options field of individual entries. It allows you to get the traditional comma between a surname and "Jr." or "Sr."
- Fixed an old inaccuracy in the presentation of "Jr." and "Sr.," so that they now appear at the end of names printed surname first in bibliographies and reference lists.
- Thanks to Andrew Goldstone, I fixed some old inaccuracies in the syntax of shortened notes and bibliography entries presenting multiple contributions to one multi-author (or single-author) volume.
- I've altered the directory structure of the archive containing this release. Files were multiplying, and look set to multiply still further, so I've copied the structure used by Lehman for biblatex itself.
- Fixed an old bug, which I'd guess was triggered quite rarely, in the formatting of publication information in long notes.
- Fixed another bug in author-date where the colon separating titles and subtitles was in the wrong font. The biblatex punctfont option solved this.

- Fixed a punctuation bug in InReference entries in the notes & bibliography style. Also fixed title presentation in Reference entries in author-date.
- Fixed some inaccuracies in the tests establishing priority between date and origdate fields. These arose when date ranges were involved, and it's possible I haven't yet addressed all possible permutations of the problem.
- Added several new bibstrings to the cms-*.lbx files for the new audiovisual entry types. This means that the editortype fields can now be set to director, producer, or conductor, depending on your needs. You can also set the fields to none, which eliminates all identifying strings, and which is useful for identifying performers of various sorts.
- Minor improvements to documentation.

0.9.5a: Released September 7, 2010

• Quick fix for an elementary and show-stopping mistake in biblatex-chicago.sty, a mistake disguised if you load csquotes, which I do in all my test files. Mea culpa. Many thanks indeed to Israel Jacques and Emil Salim for pointing this out to me.

0.9.5: Released September 3, 2010

Obsolete and Deprecated Features:

- All the custom entry types **customa**, **customb**, and **customc** are now deprecated. They will still work for the time being, but please be aware that in the next major release they will no longer function, at least not as you might be expecting. Please change your .bib files to use **letter** (=**customa**), **bookinbook** (=**customb**), and **suppbook** (=**customc**) instead.
- If by some chance anyone is still using the old \custpunctc macro, it is now obsolete. It really shouldn't be needed, but let me know if I'm wrong.

Other New Features:

- The Chicago author-date style is now implemented in the package, and is fully documented in section 5, above.
- The default way of loading the style(s) has slightly changed. You should put either notes or authordate in the options to biblatex-chicago, e.g.:

\usepackage[authordate,more options...]{biblatex-chicago}

- With the addition of the second Chicago style, I have thought it appropriate to alter both the name of the package and the names of the files it contains. The package is now biblatex-chicago instead of biblatex-chicago-notes-df, and the following files have been renamed:
 - chicago-notes-df.cbx is now chicago-notes.cbx
 - chicago-notes-df.bbx is now chicago-notes.bbx
 - sample.tex is now cms-notes-sample.tex
 - sample.pdf is now cms-notes-sample.pdf
 - chicago-test.bib is now notes-test.bib
 - biblatex-chicago-notes-df.pdf (this file) is now biblatex-chicago.pdf

The following files have been added:

- chicago-authordate.cbx
- chicago-authordate.bbx
- cms-dates-sample.tex
- cms-dates-sample.pdf

- dates-test.bib

The following files have retained their old names:

- cms-american.lbx
- cms-french.lbx
- cms-german.lbx
- cms-ngerman.lbx
- biblatex-chicago.sty
- I have implemented the pubstate field, slightly differently yet compatibly in the two styles, to provide a simpler mechanism for identifying a reprinted book. In the author-date style, it is highly recommended you use it, as it sorts out some complicated formatting questions automatically. In the notes & bibliography style it isn't strictly necessary, but may be useful anyway and easier to remember than the old system. See the documentation under pubstate in sections 4.2 and 5.2, above.
- Users of biblatex-chicago-notes no longer need a shortauthor field in authorless manual entries, or in author-less article or review entries with a magazine entrysubtype. The package will now automatically take an author for short notes from the organization field for manual entries and from the journaltitle field for the others. You can still use a shortauthor field if you want, but it's no longer necessary. (This also holds for chicago-authordate.)
- Date presentation in the misc entry type (with entrysubtype) has changed to fix an inaccuracy. You can now use the date and origdate fields to distinguish between two sorts of archival source: letters and "letter-like" sources use origdate, interviews and other non-letters use date. The only difference is in how the date is printed, so current .bib entries will continue to work fine, albeit with minor inaccuracies in the case of non-letter-like sources. See the docs on **misc** in sections 4.1 and 5.1, above.
- When only one date is presented in a patent entry either in the date or origdate field this will now always be used as the filing date. In biblatex-chicago-notes, this makes a change from the previous (incorrect) behavior.
- I have included the option dateabbrev=false in the default settings for biblatex-chicago-notes. This ensures that the long month names are printed, as otherwise recent releases of biblatex print the abbreviated ones by default.
- The provision of punctuation in entrysubtype classical entries has been improved, allowing the comma to appear before certain kinds of location specifiers even when citing works by their traditional divisions. See *Manual* 17.253. (This applies to both Chicago styles.)
- The number field in article, periodical, and review entries now allows you to include a series or range of numbers in the field, with the style automatically providing the correct bibstring (singular or plural).
- I have removed and altered bibstrings in the .lbx files to take advantage of the new \bibsstring and \biblstring commands in biblatex, and added one new string (origpubyear) needed by biblatex-chicago-authordate.

0.9a: Released March 20, 2010

• Quick fixes for compatibility with biblatex 0.9a.

0.9: Released March 18, 2010

Obsolete and Deprecated Features:

- The **userd** field is now obsolete. All information it used to hold should be placed in the **edition** field.
- The origyear field is now obsolete in biblatex. It has been replaced by origdate, and because the latter allows a full date specification, I have been able to make the operation of customa (=letter), misc (with an entry-subtype), and patent entries more intuitive. The RELEASE file contained in this package gives the short instructions on how to update your .bib files, and you can also consult the documentation of those entry types above.
- The modified csquotes.cfg file I provided in earlier releases is now obsolete, and has been removed from the package. Please upgrade to the latest version of csquotes and, if you are still using my modified .cfg file, remove it from your TEX search path, or at the very least excise the code I provided.

Other New Features:

- Added the files cms-german.lbx (with its clone cms-ngerman.lbx) and cmsfrench.lbx, which allow the creation of Chicago-like references in those languages. See section 6 above for details on usage.
- Added the annotation package option to allow the creation of annotated bibliographies. This code is still not entirely polished yet, but it is usable. Please see page 22 above for instructions and hints.
- Added biblatex's new **bookinbook** entry type, which currently functions as an alias of the customb type. As biblatex now provides standard equivalents for all of the custom types I initially found it necessary to provide letter = customa, bookinbook = customb, and suppbook & suppcollection = customc it may soon be time to prune out the custom types to enhance compatibility with other biblatex styles. I shall give plenty of warning before I do so.
- In line with the new system adopted in biblatex o.9, using the editortype field turns off the usual string concatenation mechanisms of the Chicago style. See Lehman's RELEASE file for a discussion of this.
- I have added support for the new editor[a–c] and editor[a–c]type fields, and they work just as in standard biblatex, though I'm uncertain how much use they'll get from users of the Chicago style.
- I have added many bibstrings to the .lbx files to help with internationalization. The new ones that you might want to use in your .bib files include: pseudonym, nodate, revisededition, numbers, and reviewof. Please see section 6 for a fuller list.

0.8.9d: Released February 17, 2010

• Chris Sparks and Aaron Lambert both found formatting bugs in the o.8.9c code. I've fixed these bugs, and am releasing this version now, the last in the o.8.9 series. The next release of biblatex-chicago-notes-df, due as soon as possible, will contain many more significant changes, including those necessary for it to function properly with the recently-released biblatex version o.9. In the meantime, at least version o.8.9d should produce more accurate output.

o.8.9c: Released November 4, 2009

• Emil Salim noticed that the *ibidem* mechanism wasn't working properly, printing the page number after "Ibid" even when the page reference of the preceding citation was identical. The fix for this involved setting loccittracker=constrict in biblatex-chicago.sty, something you'll have to do manually yourself if you're loading the package via a call to biblatex rather than to biblatex-chicago.

• Several users have reported unwanted behavior when repeated names in bibliographies are replaced with the bibnamedash. This release should fix both when the bibnamedash appears and what punctuation follows it.

o.8.9b: Released September 9, 2009

- Fixed a long-standing bug in formatting names in the bibliography. The package now correctly places a comma after the reversed name that begins the entry, using biblatex's \revsdnamedelim command. Many thanks to Johanna Pink for catching my rather egregious error.
- While fixing some formatting errors that cropped up when using the newest version of biblatex (o.8h at time of writing), I also spotted some more venerable bugs in the code for using shortened cross-references for citing multiple entries in a collection of essays or letters. I believe this now works correctly, but please let me know if you discover differently.
- Joseph Reagle noticed that endnote marks (produced using the endnotes package) did not receive the same treatment as footnote marks. I have rectified this, placing the code in biblatex-chicago.sty so that you can turn it off either by using the old package-loading system or by setting the footmarkoff package option when loading biblatex-chicago.
- Updates to Lehman's csquotes package have rendered my modifications in csquotes.cfg obsolete. Please use the latest version of csquotes (4.4a at time of writing) and ignore my file, which will disappear in a later release.
- At the request of Will Small, I have included some code, still in an alpha state, to allow you to specify, in the bibliography, the original publication details of essays which you are citing from later reprints (a *Collected Essays* volume, for example). See the documentation above under the reprinttitle field if you would like to test this functionality.

0.8.9a: Released July 5, 2009

• Slight changes for compatibility with biblatex o.8e. The package still works with o.8c and o.8d, as well.

0.8.9: Released July 2, 2009

Obsolete and Deprecated Features:

• The single-letter bibstrings (\bibstring{a}, \bibstring{b}, etc.) are now obsolete. You should replace any still present in your .bib file with \autocap commands — see § 3.8.4 of biblatex.pdf.

Other New Features:

• The default way of loading the package is now with

\usepackage[further-options]{biblatex-chicago}

rather than

\usepackage[style=chicago-notes-df,further-options]{biblatex}.

Please see section 4.5.1 above for details and hints.

- Package-specific bibstrings have been removed from the .cbx and .bbx files and are now gathered in a new file, **cms-american.lbx**, which changes the way the package interacts with **babel**. It is now somewhat simpler if you want the defaults, but somewhat more complex if you require non-standard features. Please see section 8 above for more details.
- Two new entry types have been added: **artwork** for works of visual art excluding photographs, and **image** for photographs. See the documentation of **artwork** for how to create .bib entries for both types.

- Added the new bibliography and entry option usecompiler, set to true by default. This streamlines the code that finds a name to head an entry (author -> editor [or namea] -> translator [or nameb] -> compiler [namec]
 -> title). The whole system should work more consistently now, but do see the author and namec documentation for improved notes on how to use it.
- Added the new bibliography option **footmarkoff**, to turn off the optional in-line (as opposed to superscript) formatting of the marks in foot- or endnotes. You only need this if you load the package with the new default \usepackage{biblatex-chicago}; users loading it the old way get default LATEX formatting.
- At Matthew Lundin's request, I have added the citation command **head-lesscite**, which works like **headlessfullcite** but allows biblatex to decide whether to print the full or the short note.
- Fully adopted biblatex's system for providing end-of-entry punctuation, which should solve some of the bugs users have been finding. See section 4.5.2, above, and do please let me know if inconsistencies remain.
- Added a modified **csquotes.cfg** file to address issues users were having when using the **XelAT**_E**X** engine in combination with biblatex-chicago. See section 8, above.
- Added natbib option to allow users of the default setup to continue to benefit from biblatex's natbib compatibility code. Thanks to Bennett Helm for pointing out this issue.
- Added a **shorthandibid** option to allow the printing of *ibid*. in consecutive references to an entry that contains a shorthand field. Thanks to Chris Sparks for calling my attention to this problem.
- While investigating the preceding, I noticed failures when combining the short option with a shorthand field. The package now actually does what it has always claimed to do under **shorthand**.
- Many small bug fixes and improvements to the documentation.

To Do:

- The shorthand vs *ibid.* question may need more careful addressing in some cross references, and also in relation to the noibid package option.
- Charles Schaum has quite rightly pointed out the inconsistency in my naming conventions biblatex-chicago.sty as opposed to chicago-notes-df.cbx, for example. I'm going to delay a decision on which way to go with this until a later release.

0.8.5a: Released June 14, 2009

• Quick and dirty fixes to bibliography strings to allow compatibility with biblatex version o.8d. If you are still using o.8c, then I would wait for the next version of biblatex-chicago-notes-df, which is due soon. See README.

0.8.5: Released January 10, 2009

Obsolete and Deprecated Features:

• The \custpunct commands are now deprecated — Lehman's "American" punctuation tracking facilities should handle quoted text automatically, assuming you remember always to use \mkbibquote in your database. If you still need \custpunct, please let me know, as it may be an error in the style.

• With \custpunct no longer needed, the toggles activated by placing "plain" in the **type** or **userb** fields are also deprecated.

Other New Features:

- At least **biblatex 0.8b** is now required 0.8c works fine, as well.
- I now *strongly recommend* that you use **babel** with "american" as the main text language. See section 8 above for further details.
- The **customc** entry type has been revised, allowing you to cite any sort of supplementary material using the **type** field instead of relying on toggles in the introduction, afterword, and foreword fields, though these latter still work. The two new entry types **suppbook** and **suppcollection** are both aliased to customc, and therefore work in exactly the same way.
- The new entry type **suppperiodical** is aliased to **review**.
- The new entry type **letter** is aliased to **customa**.
- In **inreference** entries the postnote field of all \cite commands is now treated like data in lista, that is, it will be placed within quotation marks and prefaced with the appropriate string. The only difference is that you can only put one such article name in postnote, as it isn't a list field.
- I've set the new biblatex option usetranslator to true by default, which means entries will automatically be alphabetized by their translator in the absence of an author or an editor.
- A host of small formatting errors were eliminated, nearly all of them through adopting Lehman's punctuation tracker.
- In the main body of this documentation, I've added some color coding to help you more quickly to identify entry types and fields that are either new or that have undergone significant revision.

To Do:

• Separate out "options" from the basic citation "style," using a LATEX style file. This is an architectural change recommended by Lehman.

0.8.2.2: Released November 24, 2008

- Fixed spurious commas appearing in some bibliography entries, spotted by Nick Andrewes. While investigating this I noticed a more general problem with punctuation after italicized titles ending with question marks or exclamation points. This will be addressed in forthcoming revisions both of biblatex and of this package.
- Nick also reported some problems with spurious punctuation in the bibliography when using XeLaTeX. I haven't yet been able to pin down the exact cause of these, but if you are using XeLaTeX and are having (or have solved) similar problems I'd be interested to hear from you.

0.8.2: Released November 3, 2008

• Fixed several formatting glitches between citations in multicite commands (spotted by Joseph Reagle) and also after some prenotes.

0.8.1: Released October 22, 2008

Obsolete and Deprecated Features:

• The **origlocation** field is now obsolete, and has been replaced by **lista**. Please update your .bib files accordingly.

- The single-letter **\bibstring** commands I provided in version 0.7 are now deprecated. In most cases, you'll be able to take advantage of the automatic contextual capitalization facilities introduced in this release, but if you still need the single-letter \bibstring functionality then you should switch to \autocap, as I shall be removing the single-letter bibstrings in a future release. See above under **\autocap** for all the details.
- The **userd** field is now deprecated, as biblatex o.8 allows all forms of data to be included in the edition field. I shall be removing userd in a future release, so please update your .bib files as soon as is convenient.

Other New Features:

- Updated the .bbx and .cbx files to work with biblatex o.8. This most recent version of biblatex is now required for biblatex-chicago-notes-df to work.
- Added the **usera** field, which holds supplemental information about a journaltitle in article and review entries. See the documentation of the field for details.
- Added the **\citetitles** multicite command to fix a problem with spurious punctuation when multiple titles were listed.
- Added the **\Citetitle** command to help with automatic capitalization of titles when they occur at the beginning of a note.
- Minor punctuation fixes in biblatex-chicago-notes-df.bbx.

To Do:

- Integrate biblatex's American punctuation facilities.
- Separate out "options" from the basic citation "style," using a LATEX style file. This is an architectural change recommended by Lehman.
- Investigate and possibly integrate the new entry types provided in biblatex o.8.

0.7: First public release, September 18, 2008