

# Zbl-build: a GUI interface for Biblatex

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## Abstract

A set of dialogues and questions helps the user in setting a basic configuration of Biblatex, and in selecting the required BIB<sub>T</sub>E<sub>X</sub> archive(s). A more detailed choice is offered for the “philosophy” bundle of styles.

## Sommario

Una serie di dialoghi e di domande aiuta l’utente nella preparazione della configurazione di base per Biblatex nella scelta degli archivi BIB<sub>T</sub>E<sub>X</sub> necessari. Per la famiglia di stile “philosophy” viene presentata una maggiore ricchezza di parametri.

## 1 Why a GUI for Biblatex

Almost ten years ago, in 2006, the first version of Biblatex showed that a new approach to bibliographical issues was possible. BIB<sub>T</sub>E<sub>X</sub>, a venerable tool published in 1988, was still the only engine available to L<sup>A</sup>T<sub>E</sub>X users – the famous and expected “version 1.0” never saw the light of day<sup>1</sup>. Biblatex is a very powerful tool<sup>2</sup>, but it is not easy to deal with: even its manual, at more than 260 pages, discourages many users. Googling the Web it is not difficult to find examples and tutorials, and the package itself offers a substantial amount of examples. Particularly in the area of the humanities, where most users are not comfortable neither with writing nor with reading source code, and where most of them are accustomed to a synchronous WYSIWYG approach, even realising the advantages of asynchronous composition and of a real control of one’s writing is far from being easy. Bibliography is likely to be a sort of nightmare in several areas, such as philosophy, philology, or linguistics, where even books or articles written centuries ago may have their *place d’honneur* in a bibliography, because they are still useful. Many scholars save their bibliographic records using pitiful and highly inefficient approaches, generally not strongly structured or even memory-based.

1. See the clear analysis of HUFFLEN (2012). On L<sup>A</sup>T<sub>E</sub>X and bibliographies, see – in Italian – PANTIERI (2009); in German VOSS (2011); VOSS (2014, 195-230); SCHLOSSER (2014, 71-206). In English I would refer to the manuals I also refer to within Zbl-build: LEHMAN *et al.* (2015) and VALBUSA (2015). The historical sketch of HUFFLEN (2011) is enlightening.

2. See the advanced features described by VALBUSA (2014).

A BIB<sub>T</sub>E<sub>X</sub> database can be easily managed and maintained using one of the several GUI(s) available, such as the very popular Jabref<sup>3</sup>. Users with little or no technical skills are normally comfortable with Jabref and the like, while they would feel uneasy using a text editor such as vim or emacs. Unfortunately, the bibliographic styles are often not easy to deal with; Biblatex is a very powerful tool for the generation of almost any bibliographical style, but the work must be done “by hand”, i.e. studying the manuals and trying to find the most suitable style.

There were some questions posted to T<sub>E</sub>X / L<sup>A</sup>T<sub>E</sub>X user groups asking if a graphical “generator” of Biblatex styles is available<sup>4</sup> – something similar to the command line tool `makebst`, used to generate the *bst* BIB<sub>T</sub>E<sub>X</sub> style files, often combined with `merlin` master bibliographical style<sup>5</sup>. Zbl-build is a simple graphical interface geared towards making the choice of a Biblatex style less frustrating, setting Biblatex basic features and selecting one or more BIB<sub>T</sub>E<sub>X</sub> archives.

## 2 Basic description

The rather strange name Zbl-build is easily explained: *bl-build* means «Biblatex build», and «z» refers to the GUI programme called *zenity*, used to write the dialogue and selection windows.

### 2.1 Why Zenity, and why not

The aim of Zbl-build is to be multi-platform: the first choice was therefore a tcl-tk script. But I must frankly admit that, undoubtedly due to my lack of technical ability, I found some aspects of this language quite difficult to control, and I tried other GUI approaches. Given the down-to-earth nature of Zbl-build, and no bells and whistles being required, I took a look at some possible solutions. *Zenity*, a Gnome GUI tool, looked very promising, and the results within my Linux xubuntu box are excellent. *Zenity* has been ported to Windows and to OSX, while the excellent program called *yad* is apparently a Linux only solution. *zenity* has been ported to OSX both through MacPorts and Homebrew, and the information given by the Wikipedia

3. See <http://jabref.sourceforge.net/>

4. See, e.g., «Is there a WYSIWYG editor for biblatex styles?», <http://tex.stackexchange.com/questions/67248/is-there-a-wysiwyg-editor-for-biblatex-styles>.

5. See <http://www.ctan.org/tex-archive/macros/latex/contrib/custom-bib>. The most recent version of *makebst* is labelled «version 4.1 from 2003/09/0».

page («the homebrew-zenity project has been discontinued») is outdated<sup>6</sup>. Much more promising is the situation of the Windows version; the first porting looks definitely frozen<sup>7</sup>, but a newer porting is now at version 3.6: the maintainer wrote on the 28<sup>th</sup> of August 2015 that he hopes to update to the most recent version<sup>8</sup>.

A possible alternative is a java porting of zenity, called wenity<sup>9</sup>, but it does not offer a choice of dialogues as needed by the Zbl-build project. If the Windows and/or OSX versions will not meet the expectations, I think I could move to a different multi-platform approach, such as using the PyZenity library<sup>10</sup> or embedding zenity calls into a higher level scripting language such as Snobol<sup>11</sup>.

### 3 Zbl-build workflow

The programme displays a set of windows, thus setting basic Biblatex options in this order:

1. options for csquotes
2. backend, offering biber, bibtex, and bibtex8 as options. Biber is given as default choice
3. basic style family: authordate, numeric, philosophy, reading, verbose, debug, draft. These options are all the basic Biblatex style families plus the philosophy style. No default choice.
4. a sub-style selection matching the previous choice. For example, the style *numeric* offers numeric, numeric-comp, numeric-verb, alphabetic, alphabetic-verb.
5. Sorting order: nty, nyt, nyvt, anyt, anyvt, ynt, ydnt, none, debug. Nty is given as default choice
6. Optional additional options: Isbn, Url, DOI, Eprint (yes/no choice)
7. Additional options for the chosen family

6. See <https://wiki.gnome.org/action/show/Projects/Zenity> (zenity homepage); the homebrew porting was updated in 2014: see <https://github.com/Homebrew/homebrew/commit/90e35255a9e22f7236a86ca3d4820e3b845577e2>. It needs a re-installation of gnome-doc-utils: see <https://github.com/Homebrew/homebrew/issues/33680>. Wikipedia wrongly gives the project as discontinued (<https://en.wikipedia.org/wiki/Zenity>).

7. See <http://www.placella.com/software/zenity/>. No hope to receive information: comments have been disabled and the most recent comment was written on the 31<sup>st</sup> of March 2013.

8. See <http://opensourcepack.blogspot.it/2013/02/zenity-360-portable.html>

9. See <http://kksu.eu/wenity.html>.

10. See [http://brianramos.com/?page\\_id=38](http://brianramos.com/?page_id=38).

11. See e.g. my copac-clean script (<https://www.ctan.org/pkg/copac-clean>, using Snobol with tcl-tk). On Snobol/Spitbol see <http://www.snobol4.org/>. Both the Snobol and the Spitbolx64 programming languages are updated to 2015.

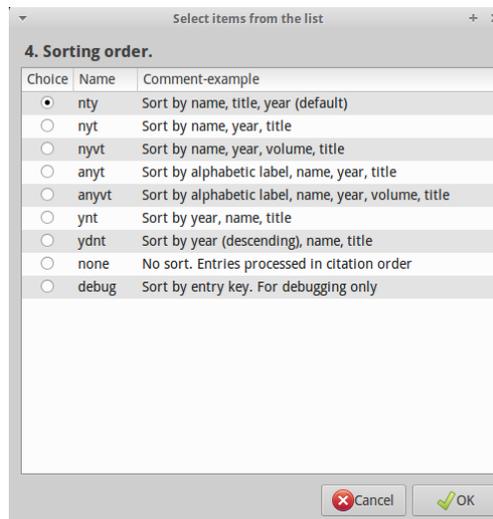


FIGURE 1: The Sorting Order window

8. Selection of one or more BIBTEX archives.
9. Finally, an editable window displays the configuration and the user can easily copy/paste it to his L<sup>A</sup>T<sub>E</sub>X source file, or input the resulting file, called `biblatex.opt`.

#### 3.1 Information provided to user

All the windows show basic information, copied from the Biblatex manual. For example, see figure 1: even not opening the Biblatex manual, the user is able to make sense of the variety of sorting orders. The default choice is *nty* because it is default in the Biblatex manual (LEHMAN *et al.*, 2015, 45).

The basic style families are the ones provided by the Biblatex manual (LEHMAN *et al.*, 2015, 63 ff.). All the basic style families are provided, but *numeric* is not given as default, because in many areas this is not the case. See also section 4.

The standard style options described by the manual at page 55 (3.1.2.2) are offered by a yes/no window, offering a true/false alternative. Style specific options are offered only for the *philosophy* styles: for all the other styles a message informs that further developments are planned for the forthcoming versions of Zbl-build (see also 4.2). Figure 6 shows the final editing window, where the user can add fine tuning to his configuration,

#### 3.2 The “philosophy” styles

The choice of offering style specific options only for the *philosophy* styles was motivated by the maturity of Ivan Valbusa’s *philosophy* package, but also because it is a sort of killer application in the field of bibliography management for the humanities. A “warning” window (see figure 2) informs the reader that only the basic options are set up by Zbl-build, thus encouraging him to study the manual if not

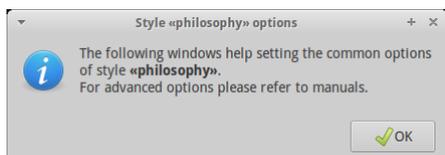


FIGURE 2: A “warning” window



FIGURE 5: The “Cancelled–Exiting” window

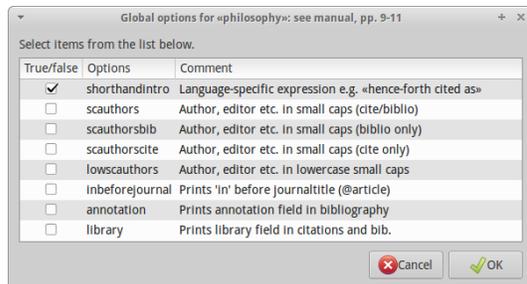


FIGURE 3: Global options for the “philosophy” bundle

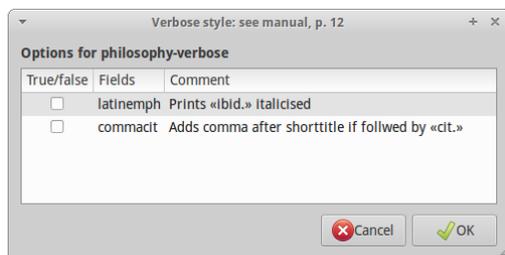


FIGURE 4: Options for the “philosophy–verbose” style

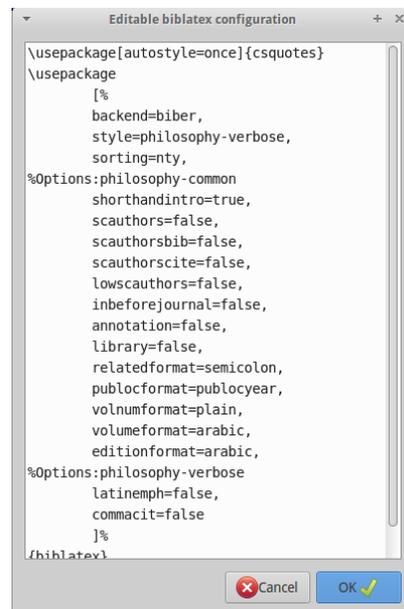


FIGURE 6: The configuration editing window

completely satisfied with the results. Figure 3 shows the options common to all the styles of the bundle; figure 4 shows the options of the *philosophy–verbose* style. In both of the windows, please notice the reference to Valbusa’s manual in the title – again an anti-laziness procedure. Needless to say, most of the refinements offered by the *philosophy* styles are not yet achievable through Zbl-build.

## 4 Todo

I would like to split the *todo* section into urgent matter, refinements, and doubts.

### 4.1 Urgent matter

At the moment, the user is offered the option to leave the programme, and if he confirms a message informs that he had actually closed it (see fig. 5.). It would be important to leave the user an opportunity to go back and review his choices.

### 4.2 Refinements

1. Add for all the styles that support further options the choice given for *philosophy* (see section 3.1).
2. Add support at least for the *chicago* bundle.
3. Support the *natbib* option of Biblatex.

### 4.3 Doubts

1. One substantial doubt is *zenity* itself. Will this programme be really usable under OSX? Will the new Windows porting be developed in the foreseeable future?
2. Remove from the configuration all the default choices whenever they take the form of a true/false choice? I’m not sure, because the configuration would be shorter, but an explicit list makes it more helpful.
3. Give to the user the choice of distinguishing citation style and bibliographic style? Or is this option too rarely used to be interesting?

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