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EULALIA

European Latin Linguistic Assessment

Erasmus+ Strategic Partnership for Higher Education
(2019-1-IT02-KA203-062286)

European Latin Language Certification
Advanced Level: methodological and pedagogical
tools, multimedia practical tools (IO3)

LEXICON (VERPOT)

(language version : EN)

Project Coordinator:

Alma Mater Studiorum – University of Bologna (Italy)

Project Partners:

University of Köln (Germany)

Catholic University of the Sacred Heart – Milan (Italy)

University of Rouen (France)

University of Salamanca (Spain)

University of Uppsala (Sweden)

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More info at: <https://site.unibo.it/eulalia/en>



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Verpot manual

version 1.0.1

Guido Milanese*

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1 What is Verpot

VERPOT is a tool designed to use the Latin core lexicon list of words (hence “CLW”) developed by the Liège-Besançon research groups (see CAUQUIL and GUILLAUMIN 1984). The features offered by VERPOT are the following ones:

- output a range of words in the CLW (e.g. words from 100 to 200 in the frequency order);
- output all the entries featuring a given part of speech, e.g. all the adverbs, listed in the CLW;
- find if a single lemma is listed in the CLW;
- parse a text chosen by user with a lemmatiser and find:
 - words listed in the CWL
 - words not listed in the CWL but known to the lemmatiser
 - words unknown to the lemmatiser

1.1 Role within the Eulalia project

One of the main tasks of the Eulalia project¹ is to standardise a core vocabulary of Latin in order to make it possible a European certification of Latin. This tool is designed to help teachers and students use the CLW as effectively as possible.

*Università Cattolica del Sacro Cuore, Dipartimento di Scienze Storiche e Filologiche, via Trieste 17, I-25121 Brescia BS – email guido.milanese@unicatt.it

¹European Latin Linguistic Assessment: Erasmus+ Strategic Partnership for Higher Education (2019-2022). See <https://site.unibo.it/eulalia/en>.

1.2 License

VERPOT is free software. The chosen license is the MIT license (see <https://opensource.org/licenses/MIT>). The text of the license is available both online (see above) and is distributed with VERPOT. Please notice that “free” means the freedom to use, study, distribute, modify the programme; it is not a synonymous of “gratis (= zero price)” software (unavoidable reference: STALLMAN 2004).

2 Requirements

VERPOT is a script, not a stand-alone programme, and requires the following programmes (all of them are free software):

- a **Snobol4** compiler. The reason of choosing this programming language is its great flexibility as a tool for text analysis. The most recent version is dated March 2022 (see <http://www.regressive.org/snobol4/csnobol4/curr/>). On this language, one of the “great classics” of the ’70, a good introduction is still HOCKEY 1985. Most recently, see MILANESE 2020, pp. 241-243.
- the lemmatiser used by VERPOT is **treetagger**: see <https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/>
- the graphical user interface (GUI) is provided by **zenity**, that allows the execution of dialog boxes, information windows, warnings and so on. It is cross platform; simple but effective (<https://wiki.gnome.org/action/show/Projects/Zenity>).

3 Linux version

The Linux version is distributed leaving to users the task of installing the required software. Detailed instruction follows.

3.1 Installation: Linux

- Install **snobol4**.
 - Read the install file at <http://www.regressive.org/snobol4/csnobol4/curr/INSTALL>
 - Download the most recent version, at the date of writing <http://ftp.regressive.org/snobol4/snobol4-2.3.1.tar.gz>.

- make sure to have **m4** installed: if not, all the package managers, e.g. **synaptic** in Debian/Ubuntu distributions, will install **m4** in a few seconds;
- unzip the package: open a shell and type `tar -xf snobol4-2.3.1.tar.gz`.
- change directory to `snobol4-2.3.1`.
- run `./configure`
- run `make`
- as superuser run `make install`
- test the compiler: open a shell and type `snobol4`. The compiler should output a version message and a prompt. Type `end` or hit `Control-c` to exit.
- Install **tree-tagger**.
 - Follow the detailed instruction provided here: <https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/>. The Latin parameter file is <https://www.cis.uni-muenchen.de/~schmid/tools/TreeTagger/data/latin.par.gz>.
 - To test the lemmatiser, type in a shell: `echo "Filii et filiae amant patrem et matrem" | tree-tagger-latin`. The lemmatiser should output a list of tagged words, as `Filii N:nom filius`.
- To install **zenity** use your package manager. Make sure that the installed version is recent. Old versions do not offer all the features required by VERPOT.
- To install VERPOT unpack the zipped archive **verpot-source** in any directory you can access. Personally I would recommend `/home//bin`, provided it is listed in your `PATH` (or add this folder to your `PATH`): the result will be a folder labeled `/home//bin/Verpot`, such as `/home/john/bin/Verpot`. The VERPOT icon can be copied to your desktop and the programme will run from desktop with no need to open a shell; just edit the properties according to the folder you have chosen to host the programme.

3.2 Usage: Linux

Either (1) call the programme clicking on the VERPOT icon on desktop or (2) open a shell, go to the directory where you have unzipped the package, and type `./corelex.sno`. If it does not work, try `snobol4 corelex.sno` or mark **corelex.sno** as executable (`chmod +x corelex.sno`). The menus should be self-explanatory, but see the images at the end of this manual.

4 Windows version

The source file is basically the same, with some necessary changes². I provide two different installation methods.

4.1 Installation: Windows: complete procedure

In this case, the installation follows the same steps necessary for the installation under Linux. Advantage: all the tools installed (**snobol**, **tree-tagger**...) will be available also *outside* VERPOT. Disadvantage: the procedure requires some time and some attention. Follow the same steps described above about Linux, but before everything else make sure to have a **Perl** interpreter already installed, necessary to run **tree-tagger**. If you don't, don't panic: the installation for Windows is very simple, a one-click procedure: see e.g. <https://strawberryperl.com/>, click on <https://strawberryperl.com/download/5.32.1.1/strawberry-perl-5.32.1.1-64bit.msi> and wait for the installer to do its work.

4.2 Installation: Windows: quick and dirty

- First, install Perl (see above). This is necessary to run **tree-tagger**.
- Then, copy **verpot-win-install.exe** and **verpot-win-files.exe** to your home directory, for example `c:\Users\john`. You can also run the installer from any other folder, e.g. from your Download directory, but make sure to extract files to your personal directory.
- Now click on **verpot-win-install**. The script will extract all the necessary files to your personal directory, such as `c:\Users\john`. *Make sure of this when prompted by the installation windows*. The installer defaults to unpack the archive in that folder; this is essential because the programmes are hard-coded to work from this folder. If you try to install the programme to another folder, VERPOT the programme will not work.
- The installation script should install a link icon to your desktop. If not, to add a link with icon to your desktop you can either click on **verpot.bat**, right mouse button, “add link to desktop”, or simply copy **verpot.lnk** to the desktop. Change the icon as you prefer.
- The interpreter (**snobol4**), the tagger and VERPOT itself will be installed in the same directory and its sub-directories. This system is really quick and dirty, does not need any tricky operation and should work immediately.

²For those who are familiar with Unix/Windows commands: for example **grep** was changed to **findstr**, the syntax of **sort** was changed, and so on.

Disadvantage: for example you will not be able to use **tree-tagger** outside that particular folder.

4.3 Usage: Windows

- Click on the VERPOT icon on desktop and run the programme, or
- open a shell (command prompt: write cmd on the little window where you write commands). This will open a shell windows; type for example `cd c:\Users\john\Verpot`, and then `verpot.bat`. This will run the programme and call the tagger and **zenity**.

5 History

- 2020 (January-June): first draft
- 2021.06.01: programme working, with some problems (hanging on some loops, could not recognize proper nouns)
- 2022.06.01: draft of a Windows version
- 2022.09.20: Windows version ready, PDF manual, README and man page for Linux.
- 2022.09.24: Windows installation file ready

6 Problems, bugs, “todo”

- Windows version: run the programme to any folder chosen by user. The problem is given by the unpredictable permissions in many Windows installations.
- a Mac version is still a *desideratum*
- users could contribute to the programme improving the Latin parameter file, i.s. adding unknown words to the words recognised by **tree-tagger**. Instructions on the home page of the tagger.
- very difficult issue: different orthography for the same word. For example, *CLW* lists *adolescens* but not *adulescens*. A good idea would be to add “double entries” to the word list.
- make VERPOT a more general teaching tool. With some adaptation the tool could be used for any language. Beginning with Greek could be a good idea.

7 Contacts

Please write to `guido.milanese@unicatt.it`. Thank you.

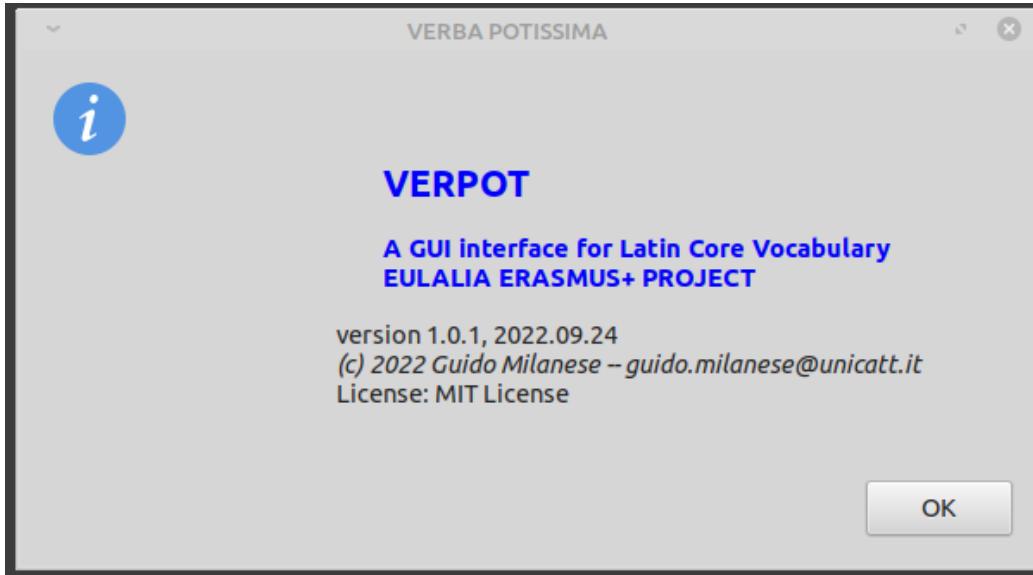


Figure 1: Title window (Linux version)

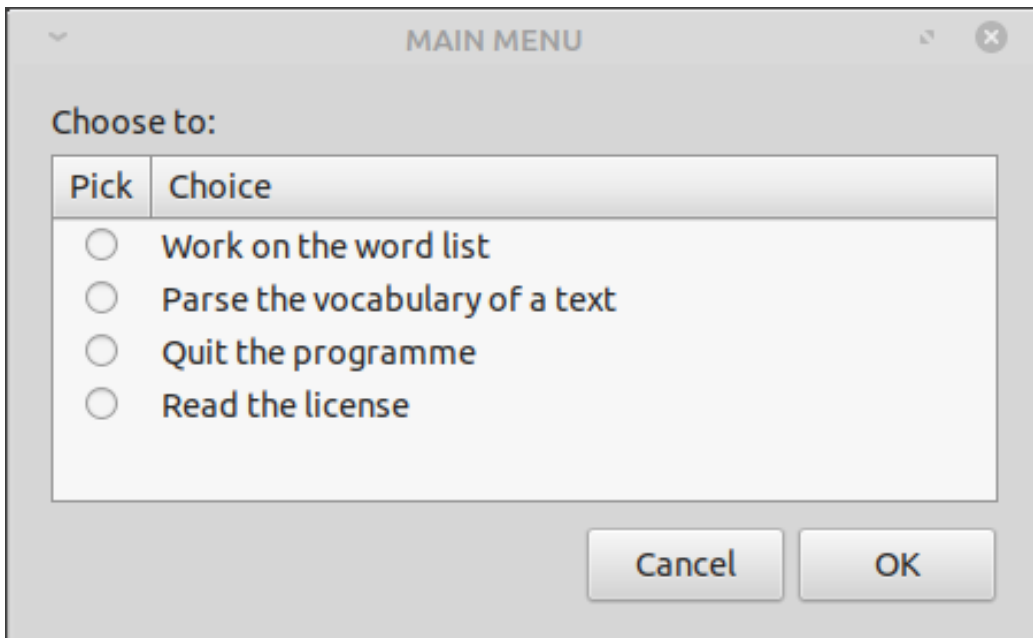


Figure 2: Main menu

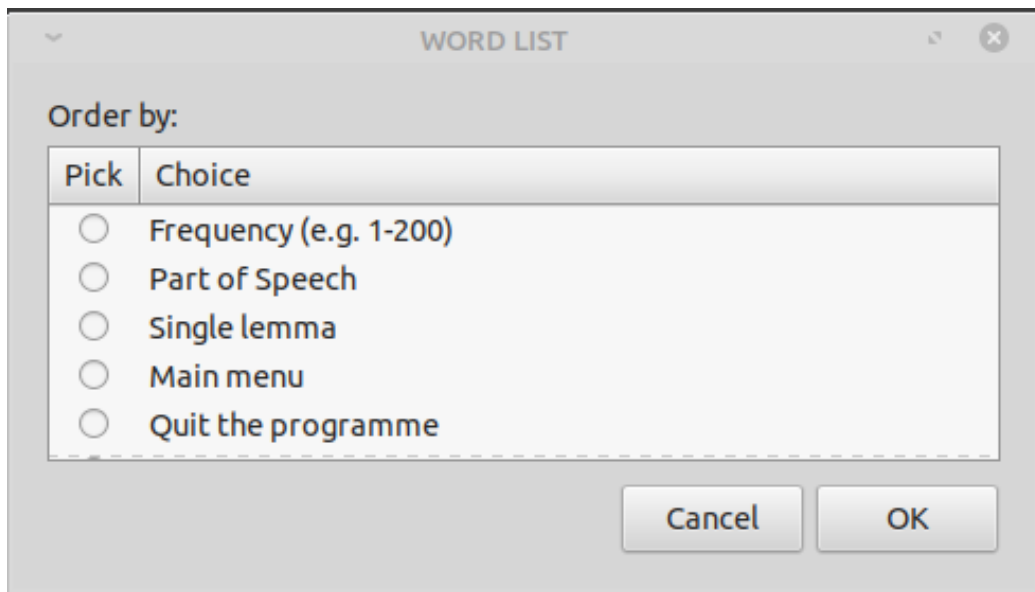


Figure 3: Word lists

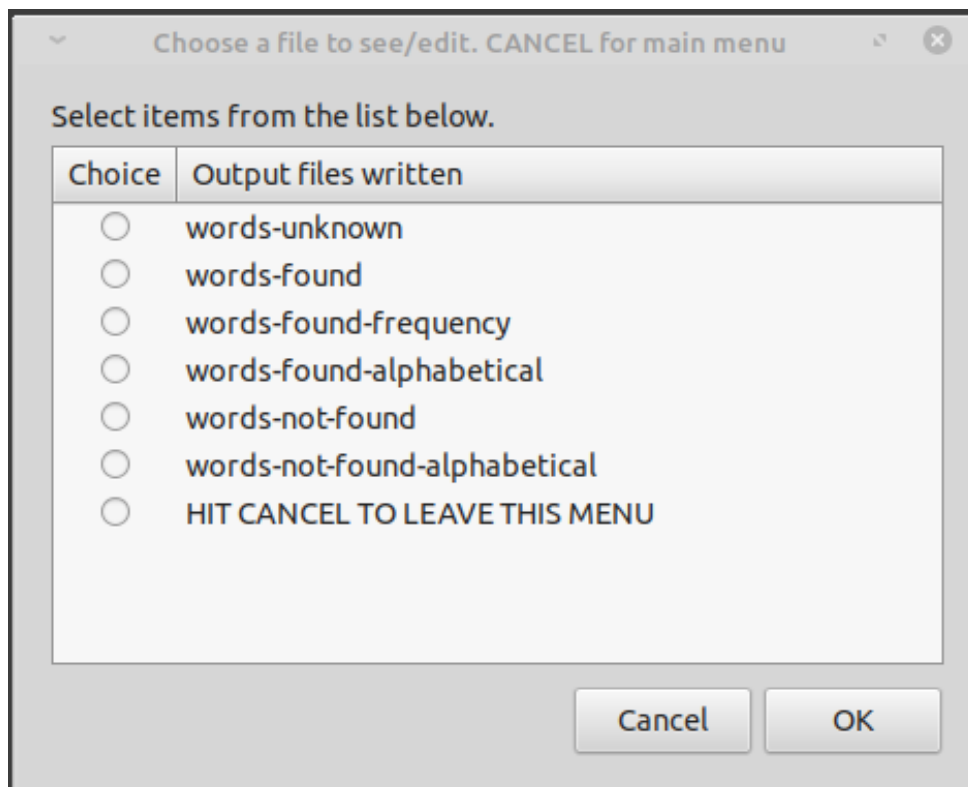


Figure 4: Files written after parsing a text

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