voca-builder Documentation

Release 0.2.0

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voca-builder is an Emacs package that was developed to help you build up your vocabulary. It automates most of the steps in the lookup and recording processes, and therefore improve your efficiency and productivity. By using it, you could

1. see the meaning of vocabulary immediately on your screen with a single keystroke,
2. spent more time in actually learning and memorising new words, and leave the manual organising tasks to voca-builder.
3. extract vocabularies by the tags you create or vocabularies recored in a period for an intensive revision,
4. import/export vocabularies from/to various flashcard platform,
5. focus on your reading with minimal distribution without switching app to check dictionary.

If you are Emacs user and trying to build up your vocabulary, you definitely should give it a try.

CHAPTER 1

Introduction - Why use voca-builder

1.1 Feel Free to Handoff

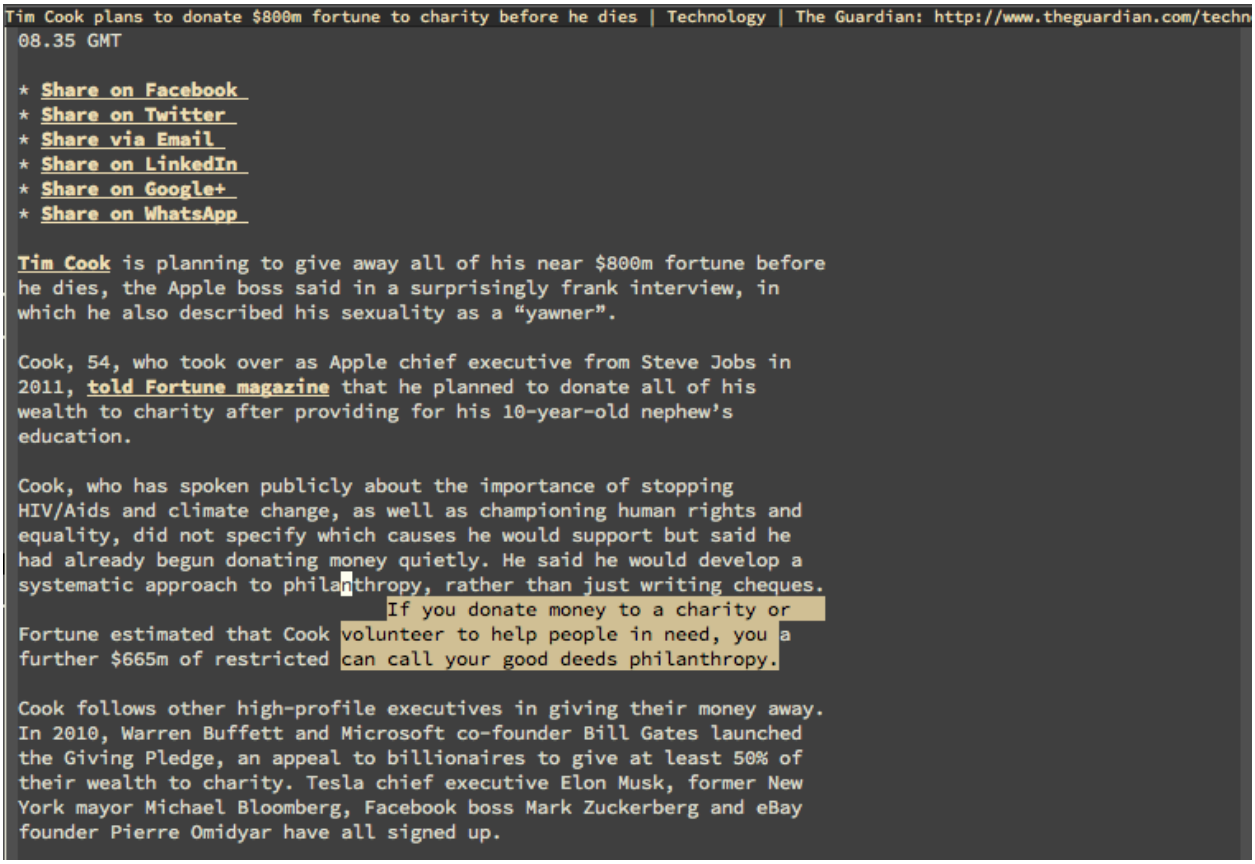
If you are learning a foreign language, you know how tedious and time-consuming it is to check a new word that you are not familiar with. The full process of lookup and recording can take up to 6 steps:

1. stop reading if you are not familiar with the word but you know it is really important,
2. fetch a dictionary or a gadget,
3. look for the word,
4. try to comprehensive it,
5. then you write it down in your vocabulary book, with the meaning,
6. if you are very serious, you probably write down the sentence as an example.

After all these, you go back to continue reading but lost the flow. voca-builder can do all the tasks, except from 4, for you without your involvement, all you need to do is press F4 key or any other you prefer.

1.2 Stay Focused in Reading

After you search a word, voca-builde will first look-up the dictionary database, ususally take less than 0.5 seconds, then popup the meaning of a vocabulary just above the or below the sentence you were reading. Because it is so quick, you don't have to move your eyeballs, and therefore stay focus on.



1.3 Help To Revise

Whenever you searched a vocabulary, in addition to fetch and show the meaning, voca-builder also

1. save the meaning to a file
2. record the sentence you were reading to a file
3. record the time you lookup at the time,
4. tag the vocabulary

These information about enables gives you idea of what you have learn and study it, save you time to manually write it down.

Even more important, you can quary your vocbaulary database, and search, for example, if you are prepare an interview in banking sector, you can bring up all the banking related terminology, and study them all together, or you wanna strength your memmoery and wants to remmeber again before you forget, you can bring up all the words you learnt last week, or this month etc.

More how to use it exactly, please refer to the Usage section.

1.4 Enjoy Human-Friendly Dictionary

Most of the dictionaries are boring. Take consciousness for example, definition from Oxford Dictionary is

```
[MASS NOUN] The state of being aware of and responsive to one's surroundings
```

The excellent educators in vocabulary.com makes it fun! For consciousness, it has short and long meanings, as shown below.

```
When you are awake and aware of your surroundings, that's
consciousness. There are different types of consciousness, including
social consciousness, being aware of injustices in society.
```

```
The early Latin word conscius meant "with knowing," but it meant a
shared knowledge, a meaning that was retained through the 16th
Century. John Locke was the first to describe consciousness in
relation to the individual, referring to it as "the perception of what
passes in a man's own mind." If you lose consciousness during the
performance, we'll wake you up with some smelling salts!
```

You'd agree with me they are fun, and easy to read. We not only know the meaning of the word, but also the roots and how to use it in an excellent situation.

CHAPTER 2

Installation

2.1 Package Manager in Emacs

The recommended way to install voca-builder is via `package.el`, the build-in package manager in Emacs.

voca-builder.el is available on the major community maintained repository http://melpa.org/. You can install `voca-builder` with the following command:

`M-x package-install [RET] voca-builder [RET]`

or by execute this bit of Emacs Lisp code

```
(unless (package-installed-p 'voca-builder)
  (package-install 'voca-builder))
```

If the installation doesn't work try to refresh the package list:

`M-x package-refresh-contents [RET]`

2.2 Install Manually

You can also install manually with two steps: first clone this repository,

```
git clone https://github.com/yitang/voca-builder.git
```

then add the directory containing voca-builder.el to Emacs's search path as follows:

```
(add-to-list 'load-path "~/path/to/voca-builder.el/")
(require 'voca-builder)
```

CHAPTER 3

Configuration

To see all the configurable settings in voca-builder, type

`M-x customize-group [RET] voca-builder [RET]`

and you are able to customise these variables directly. However, the recommended way to do is to add the non-interactive way.

The important variables are:

voca-builder/voca-file where you wanna to save the new vocabulary and their meanings to, the default is ~/.vocabulary

voca-builder/current-tag which tags should added to the vocabulary nodes. The default is "GENE" (general).

voca-builder/export-file where to save the exported vocabularies.

The following is a sample.

```
(setq voca-builder/voca-file "~/git/Learning/Emacs_Voca/voca_example.org")
(setq voca-builder/current-tag "Demo")
(setq voca-builder/export-file "~/voca-builder-temp.org")
```

I read all the time and frequently confront words that I am not familiar with, so I bind the keystroke `F4` to shows the meaning quickly.

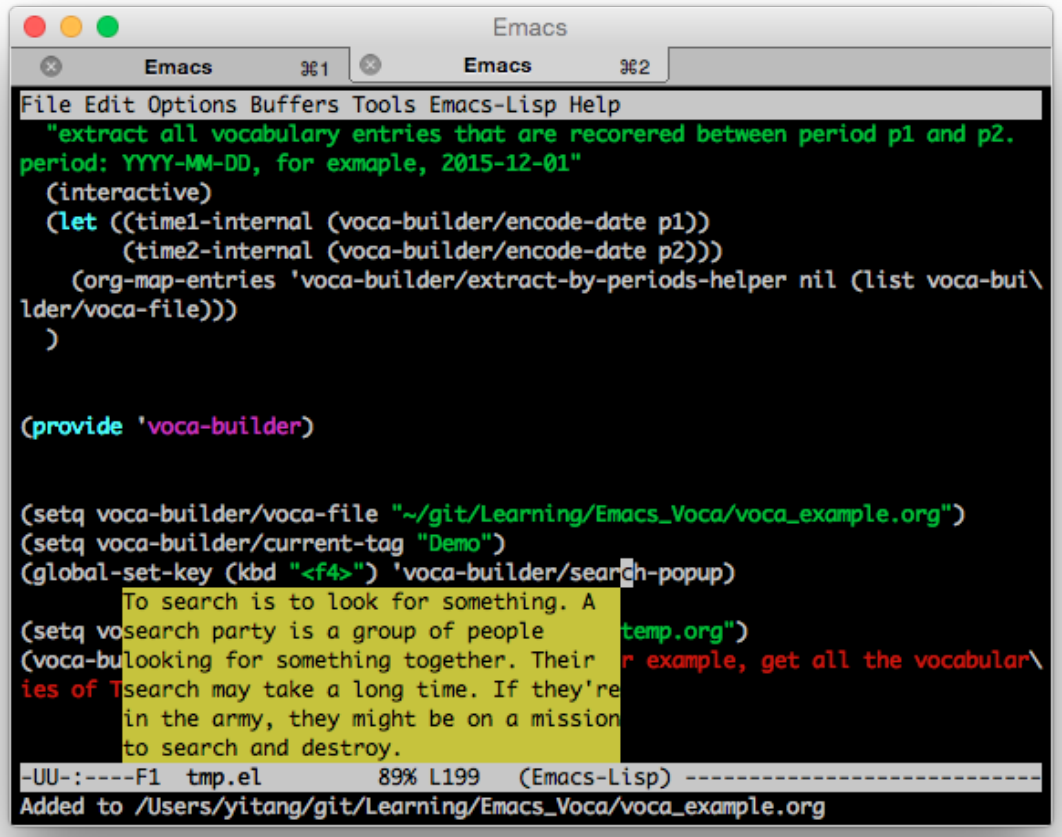
```
(global-set-key (kbd "<f4>") 'voca-builder/search-popup)
```

CHAPTER 4

Usage

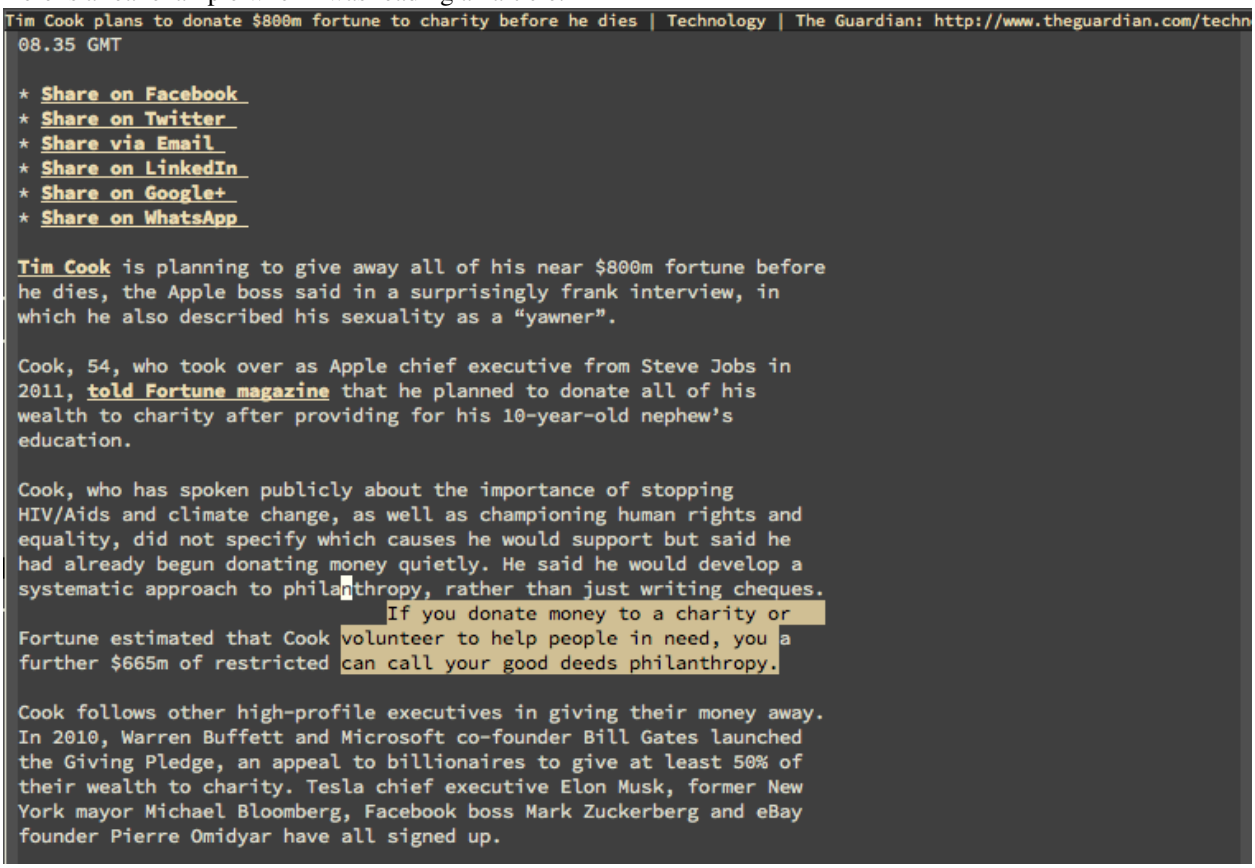
4.1 Fetch the meaning

If I would like to know what the meaning of **search** means in English, I moved the cursor to *c* under *search*, and press `F4`. The meaning will popup up under the word, as shown below. I don't have to switch to a dictionary app and it won't break my read-flow.



Also, as the echo area shows, the full meaning and also the full sentence will be added to the voca-file.

Here is a real example when I was reading an article.

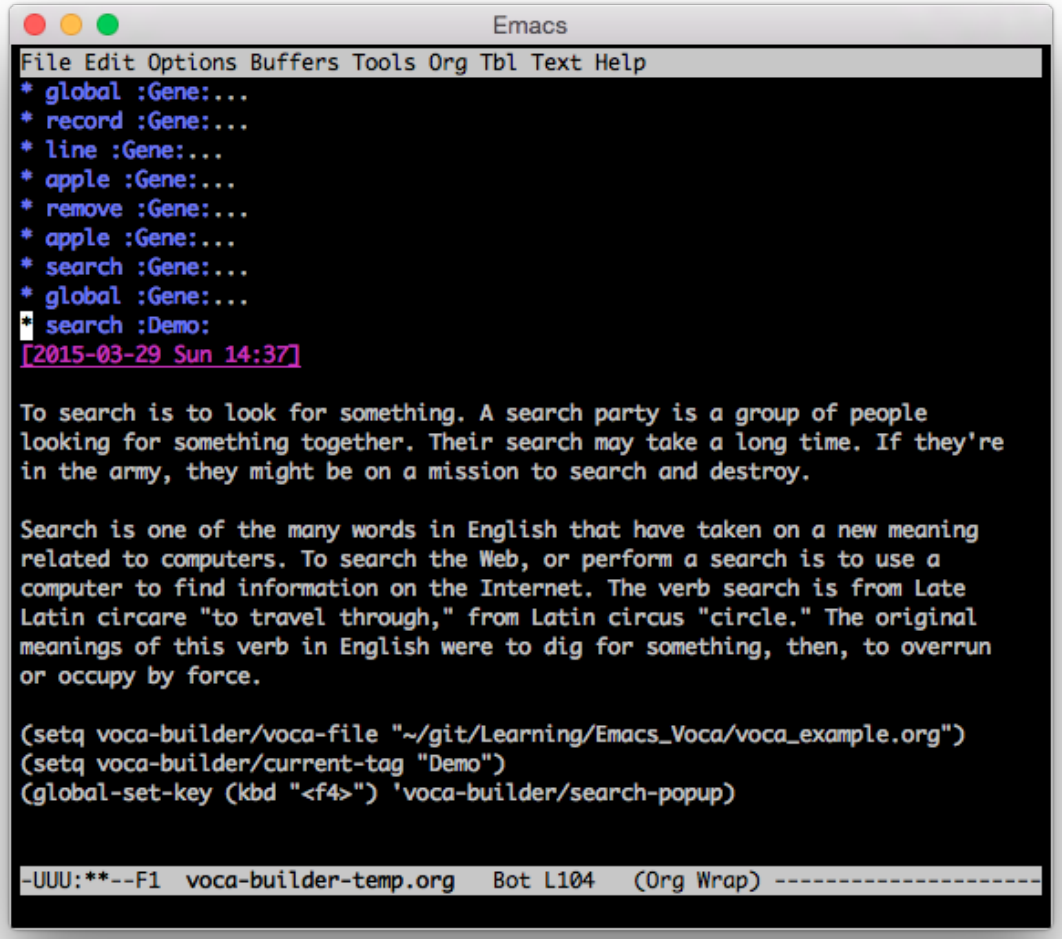


4.2 Export by tags

It is useful when you want to group vocabularies and revise them altogether, for example, all the biology terms. You can do it using `voca-builder/extract-by-tags` function. For example,

```
(voca-builder/extract-by-tags "Demo")
```

will export all the vocabularies that are tagged by “Demo” to ~/voca-builder-temp.org.

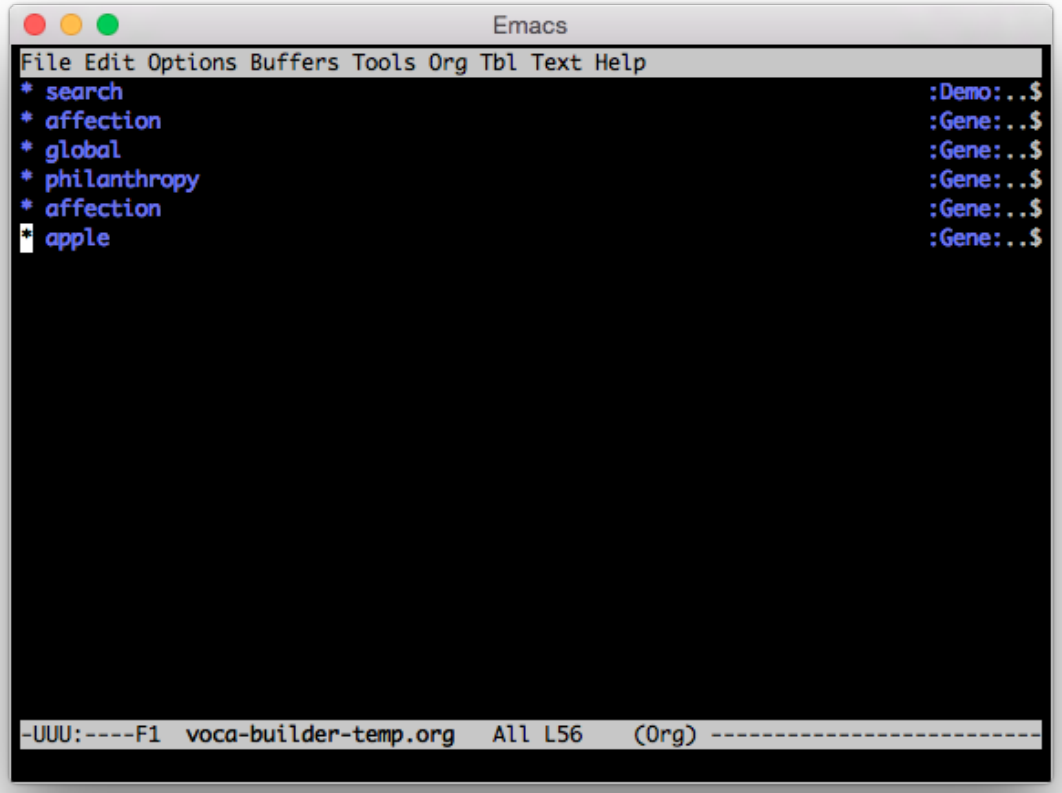


4.3 Export by date

You may also want to export all the new vocbaulary you learnt during one particular period, like a semaster, an academic year using `voca-builder/extract-period` function. For example

```
(voca-builder/extract-period "2015-01-05" "2015-04-01")
```

will export all the vocabularies that are recorded between “2015-01-05” and “2014-04-01”.



Note you can combine these two function together.

CHAPTER 5

Development

The mission of voca-builder is to help user to improve their English language skills by building up their vocabularies. It depends on the open software and free-of-charge online dictionary database, and therefore it is an open software. The source code can be found at the yitang/voca-builder repository on GitHub.

I intent to update it regularly to account for its dependence's upgrading, and also to provides more features. But I am not an Emacs Lisp expert and I am actively seek collaboration. Any contribution to this package in terms of suggestion or implementation will be highly appreciated.

My current development plan:

5.1 First Release

The first release of voca-builder has built a platform that user can look-up and records with new vocabularies.

5.2 Second Release (now)

Clean up the code base and complete the first set of documentations so that it would be easier for others to take on

5.3 Third Release

The second release of voca-builder should focus on helping user to memorise the vocabulary.

5.3.1 Memory Algorithm

Integrate a scientific algorithms to improve user's learning and memorising.

Both features can be in write an front-end for org-drill.

5.3.2 Flash Card

To help user to revise the new vocabulary by using flash card to stimulate one's memory.

5.4 Fourth Release

The third release of voca-builder should focus on the API and talking with other platform that has similar mission, like http://www.cram.com/, https://quizlet.com etc.