## **Using Learner Corpus Data for Language Teaching: Introduction to Antconc**

AntConc is a free downloadable program, constantly being updated:

http://www.laurenceanthony.net/software/antconc/

- o It was created by Laurence Anthony→ if you have questions, email him!
- But first, watch these tutorials: <u>Getting started</u>; <u>Basic features</u>; <u>Advanced features</u>;
- o Concordance plot tool; File view tool; Clusters tool; N-grams tool; Collocates tool;
- o Word list tool; Keyword list tool; Working with tagged data

AntConc can be used with any group of texts. However, your files need to be in .txt format or .xml format. You can use the free programs Zilla Word-to-Text Converter or AntFileConverter to convert word files and other common file formats to plain text.

#### Useful terminology:

- **Keyword**: words that occur more often in one text or corpus than in another. This is useful because it helps us to identify words that are more associated with one particular group of texts in relation to another.
- **Cluster/n-gram**: also called lexical bundles, groups of words that appear frequently in sequence in a text.
- **Collocation**: collocations are words that frequently appear together; when two/more words collocate with each other, it means they appear together in language use, e.g., *tea* collocates with *black*, or *green*; *pizza* collocates with *pepperoni*.
- **Concordance**: words to the right and to the left from a word you search for; programs usually allow you to include a specific number of words to the left and/or to the right of the search word.
- **KWIC (Key Word in Context)**: is what you see in the concordance line when the searched word/phrase (or key word) is put in the middle to see the left and the right concordances.
- **Range**: the number of texts that the word is found in.

#### Arizona Second Language Writing Corpus (ASLW)

ASLW is part of the <u>Crow</u> corpus. It is a corpus of first year writing texts from UA's English 106, 107 and 108 courses. The corpus consists of 14 written assignments each semester and multiple drafts of each assignment. The processed corpus contains over 700,000 words (Fall 2016 - Spring 2017) and is available as plain text for University of Arizona students and researchers. The corpus continues to grow each semester. The corpus is available to researchers at University of Arizona. Please contact Shelley Staples at <u>slstaples@email.arizona.edu</u> if you are interested in gaining access.

#### Spanish Learner Language Oral Corpora (SPLLOC)

<u>SPLLOC</u> is a corpus of spoken Spanish produced by 60 L1 English speakers, from beginners to advanced level, who have learned L2 Spanish in educational contexts within the UK. For comparison purposes, native speakers were also recorded undertaking the same tasks. The resulting database of L2 Spanish contains digital sound files of learner speech, in varying genres, accompanied by transcripts in CHILDES format. SPLLOC is freely available to researchers.

## **Practice using AntConc - Activities**

**Before** doing any of the activities below, make sure you have your tags hidden:

- 1. Go to "Global Setting," choose the "Tags" category.
- 2. Click on "Hide Tags."
- 3. Click "Apply."

## \*\*\*\* Activities with Learner Data using ASLW \*\*\*\*

## **Activity 1:** Word list

- 1. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 2. Go to "Word List" tab (at the top of the window), and click "sort by Freq."
- 3. Click "Start."
- 4. What are the top 5 function words? What about the top 5 content words?
- 5. Let's compare these results with the word list obtained from texts in a different genre. To do this, first click on "File" and then choose "Clear All Tools and Files".
- 6. Click on "File" and then choose "Open Dir...", navigate to the folder where your alternative genre text files are (click arrow on a Mac), and Press "Open."
- 7. Follow steps 2 to 4 above.
- 8. What are the main differences in results? Why?

## **Activity 2:** Clusters function (What are the most common lexical bundles/n-grams in the task?)

- 1. Keep the same files you have already loaded in step 6 in Activity 1 In other words, don't do anything. Go to the next step.
- 2. Go to the "Clusters" tab.
- 3. Check the "N-Grams" box under Search Term. Change the minimum size to "3" and maximum size to "4." Click "Start."
- 4. Under "Sort by" choose "Sort by Range."
- 5. Click "Start."
- 6. Note the most common n-grams.

## **Activity 3:** Concordance function (what rhetorical function do the n-grams have)?

- 1. Using the same files from Activity 2 (step 1 above)
- 2. Go to the "Concordance" tab.
- 3. Type "because" in the Search Term box.
- 4. Click "Start."
- 5. Then under "Kwic Sort" keep Level 1 on 1R, and deselect Levels 2 and 3. Click "Sort."
- 6. Scroll down to see the environment in which "because" is used.
- 7. Type "if" in the Search Term box, follow steps 4-6.
- 8. Once finished, click "file" and then "Clear all tools and files" to clear your AntConc program for the next activity. (This sometimes causes AntConc to act weirdly. If this happens, restart AntConc).

**Activity 4:** Creating a keyword list—what words are more associated with one corpus when compared with another?

- 1. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 2. Go to "Tool preferences" and choose "Keyword List."
- 3. Under "Reference Corpus," click "Add Directory." Navigate to a different folder and select it and press "Open."
- 4. Click "Load."
- 5. Click "Apply."
- 6. Go to the "Keyword List" tab.
- 7. Click "Start."
- 8. Once finished, click "file" and then "Clear all tools and files" to clear your AntConc program for the next activity. (This sometimes causes AntConc to act weirdly. If this happens, restart AntConc).

## **Activity 5:** Concordance plot function (Where are citations located in student papers)?

- 1. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 2. Go to the "Concordance" tab.
- 3. Type (\* in the Search Term box.
- 4. Click "Start."
- 5. Click on "Concordance Plot" to see where in the paper the student has a citation (or actually potential citation). You can toggle back and forth between the concordance plot and the concordance function.

#### \*\*\*\* Activities with Learner Data using SPLLOC \*\*\*\*

(http://www.splloc.soton.ac.uk/)

#### **Activity 1:** Word list

- 1. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 2. Go to "Word List" tab (at the top of the window), and click "sort by Freq."
- 3. Click "Start."
- 4. What are the top 5 function words? What about the top 5 content words?
- 5. Let's compare these results with the word list obtained from texts in a different genre. To do this, first click on "File" and then choose "Clear All Tools and Files".
- 6. Click on "File" and then choose "Open Dir...", navigate to the folder where your alternative genre text files are (click arrow on a Mac), and Press "Open."
- 7. Follow steps 2 to 4 above.
- 8. What are the main differences in results? Why?

## **Activity 2:** Clusters function (What are the most common lexical bundles/n-grams in the task?)

1. Keep the same files you have already loaded in step 6 in Activity 1. In other words don't do anything. Go to the next step.

- 2. Go to the "Clusters" tab.
- 3. Check the "N-Grams" box under Search Term. Change the minimum size to "2" and maximum size to "3." Click "Start."
- 4. Under "Sort by" choose "Sort by Range."
- 5. Click "Start."
- 6. What are the most common clusters?

## **Activity 3:** Concordance function (what rhetorical function do the n-grams have)?

- 1. Keep the same files from Activity 2.
- 2. Go to the "Concordance" tab.
- 3. Type "después" in the Search Term box (without the quotation marks).
- 4. Click "Start."
- 5. Then under "Kwic Sort" keep Level 1 on 1R, and deselect Levels 2 and 3. Click "Sort."
- 6. Scroll down to see the environment in which "después" is used.
- 7. Type "esta\*" or "habí\*" in the Search Term box, follow steps 4-6.
- 8. What are the most common verb forms used by learners?

# **Activity 4:** Creating a keyword list—what words are more associated with one corpus when compared with another?

- 9. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 10. Go to "Tool preferences" and choose "Keyword List."
- 11. Under "Reference Corpus," click "Add Directory." Navigate to a different folder and select it and press "Open."
- 12. Click "Load."
- 13. Click "Apply."
- 14. Go to the "Keyword List" tab.
- 15. Click "Start."
- 16. Once finished, click "file" and then "Clear all tools and files" to clear your AntConc program for the next activity. (This sometimes causes AntConc to act weirdly. If this happens, restart AntConc).

## **Activity 5:** Concordance plot function (Where are citations located in student papers)?

- 6. Click on "File" and then choose "Open Dir...", navigate to the folder where your text files are (click arrow on a Mac). Once you have your file folder selected, press "OK."
- 7. Go to the "Concordance" tab.
- 8. Type a discourse marker in the Search Term box.
- 9. Click "Start."
- 10. Click on "Concordance Plot" to see where in the interaction the discourse marker is used. You can toggle back and forth between the concordance plot and the concordance function.

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# What if I want to export these examples for my students (or for further analysis)?

1. Go to File, then choose "Save Output to Text File." Save file.

- 2. Open Excel and open the txt document. Click through the options to format the txt file as an Excel file.
- 3. Note that you cannot directly export from the Concordance Plot function. For this, you can use a screenshot instead.