Frequency List: Practice

Gede Primahadi Wijaya Rajeg 2024-07-20

For this practice, we will use the Brown Family (CLAWS + TreeTagger tags) corpus.

The source code files for all materials are available here: https://github.com/complexico/dipscorling 2024

Practice 1: Words beginning with certain strings

We will compare the results of retrieving words starting with certain strings/character using two approaches:

- a. Retrieving all words then filter
- b. Directly using BASIC's starting with approach

Pay attention to the results. Why do you think they differ?

- IMPLICATION 1: some limitation of SE regarding their result outputs.
- IMPLICATION 2: important for our aim to target/generate specific list with certain criteria using more targeted feature.

First approach: The basic, find all approach then filtering

- 1. In the BASIC tab (Figure 1), select: words > all > GO
- 2. On the output page of the Wordlist (see Figure 2), click on the Filter feature (i.e., the up-side-down triangle lines, to the right of the "eye-like" symbol on the upper right corner).
- 3. Select the option Starting with as shown in Figure 2 below.
- 4. Type in "kn" in the field

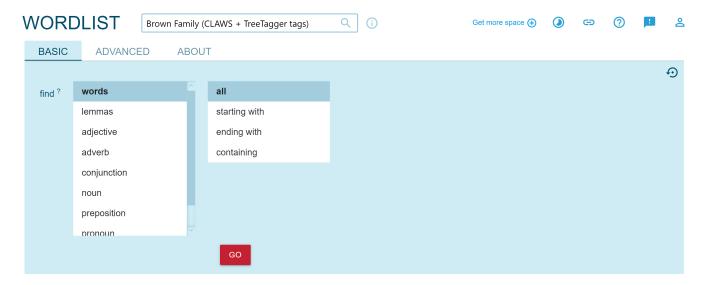


Figure 1: Wordlist BASIC interface searching for all words

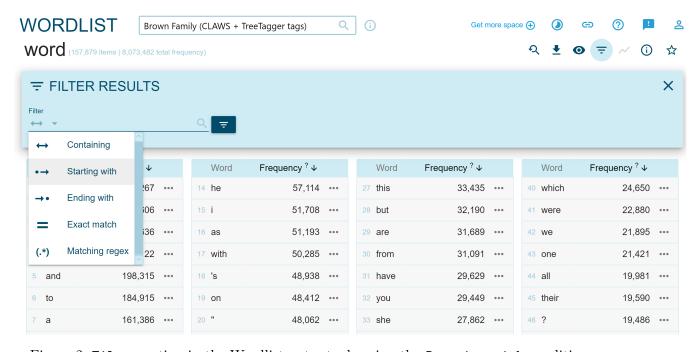


Figure 2: Filter option in the Wordlist output, choosing the Starting with condition.

5. Press Enter; the result is shown in Figure 3

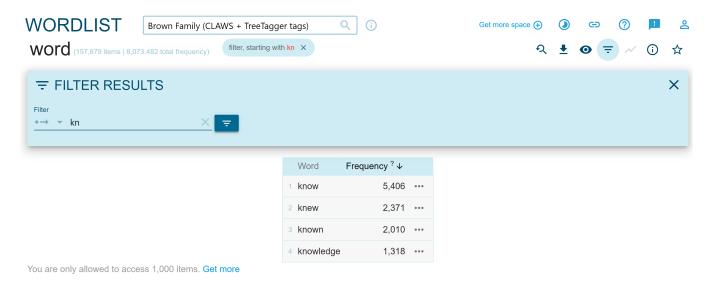


Figure 3: Output of filtering words starting with kn in the all word list.

You will get five items.

Second approach (your turn): The basic, Starting with feature

- 1. In the BASIC tab, instead of using words > all, use words > starting with
- 2. Then, type kn then hit GO
- 3. Compare the current results with that in Figure 3. How many do you get? (Answer key (you need to LOGIN): https://ske.li/15i)
 - 3.1. Why do they differ?

Practice 2: Words of certain word-class/part-of-speech containing certain affixes

We are still in the BASIC tab. We will explore the productivity (the number of different items/type frequency) of English adjectives containing suffixes. We focus on suffixes meaning 'having a resemblance of', particularly comparing -esque (which has a more specialised meaning of 'in the style of \sim ') and -ish (see Bauer 2022: 55).

Requirement

- IMPORTANT: This involves results from two searches: one for each suffix
- Later, in the output interface, look at the upper left corner to find basic quantitative information:
 - the number of items (i.e., the type frequency)
 - the total frequency of these items (i.e., the token frequency especially of adjectives having these suffixes)

Task

- Conceptual aspect:
 - try to intuite which suffix would be more productive, in terms of their type and token frequency, in the corpus we use (later check this intuition with the results).
- Operationalisation:
 - How would you devise a targeted search using just the BASIC feature to retrieve only adjectives ending with these suffixes?
 - REMEMBER: you need to run two searches for each suffix
- Results:
 - How many items are there for -esque and what is the total frequency of these -esque adjectives? (Answer key: https://ske.li/15k)
 - How many items are there for -ish and what is the total frequency of these -ish adjectives? (Answer key: https://ske.li/15l)
 - Which suffix is more productive (in terms of the total number of items) in this Brown Family (CLAWS + TreeTagger tags) corpus? Is your intuition supported by the data?

Practice 3: windshield vs. windscreen

We are now in the ADVANCED tab of Wordlist.

Task

- Conceptual aspect:
 - these two words refer roughly to the same objects (see Google Image results for windscreen and windshield)
 - are they different in terms of their frequency?

Operationalisation:

- try to check their frequency in ALL Brown Family first (think about how you would devise the search)
- then, check their frequency in the combined region corpus.
 - American: BROWN, FROWN, AE06 (AmE)
 - British: FLOB, BLOB, LOB, BE06 (BrE)
 - Do you learn a pattern of use of these two words from their frequency searches? Let's discuss!

Results

- Overall frequency in the WHOLE BROWN FAMILY of
 - windshield (answer key: https://ske.li/15n)
 - windscreen (answer key: https://ske.li/150)
- Frequency by the combined sub-corpus
 - windsheild in BROWN, FROWN, AE06 (AmE) (answer key: https://ske.li/15p)
 - windsheild in FLOB, BLOB, LOB, BE06 (BrE) (answer key: https://ske.li/15r)
 - windscreen in BROWN, FROWN, AE06 (AmE) (answer key: https://ske.li/15t)
 - windscreen in FLOB, BLOB, LOB, BE06 (BrE) (answer key: https://ske.li/15s)
- Do you learn a pattern of use of these two words from their frequency searches? Let's discuss!

This practice is inspired from Stefanowitsch (2020).

Practice 4: Frequency of lexical-verb tags in American (AmE) vs. British (BrE) English for the Press: Editorial (AmE & BrE) vs. Press: Reportage (AmE & BrE)

Requirements

- We need to run four searches (and hence download four search results):
 - lexical verb tags for Editorial in AmE
 - lexical verb tags for Reportage in BrE
 - lexical verb tags for Editorial in BrE
 - lexical verb tags for Reportage in AmE

Task

- Conceptual aspect:
 - Do these sub-genres differ in the use of certain classes of lexical verbs across the two English varieties?
 - * We can look at certain tag, for instance the simple past tag
- Operationalisation:
 - Advanced
 - Select tags (Layer 1)
 - matching regex (Layer 2)
 - click the TAGS to reveal the pattern to get tag for "lexical verb" (i.e., the VV.*)
 - Text types? select:
 - * doc.genre: Press > Editorial
 - * doc.region: American
 - Hit GO
- Results:
 - NOTE: it takes a while, even for this small, less than 10 million tokens BROWN Family.
 - In the View options, check the Frequency per million words to see the relative frequency

- Answer key: https://ske.li/15m
- There are several list of verb tags, focus on comparing a given tag between Editorial and Reportage (within variety) and between the same sub-genre across variety.
- For more insightful analyses, we need to further process these datasets in Excel or in statistical programming language such as R.
 - * Most of the time, corpus tools like Sketch Engine or AntConc are just part of the means (e.g., providing raw data) to an end. For example, we might want to directly visualise the distribution (i.e., relative frequency) of selected tags by genres between varieties as shown in Figure 4. This requires processing the output of corpus tool further that these two corpus tools cannot do. The graph in Figure 4 is produced in R (code file) based on the data in the repository here (see the .csv files starting with lex-verb-...).

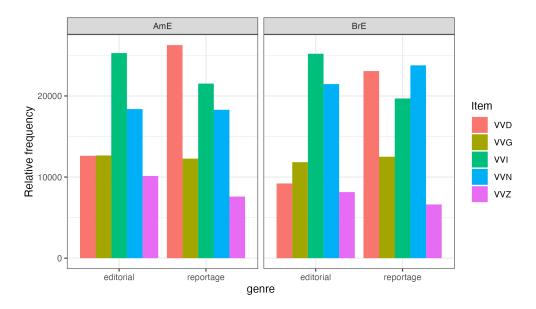


Figure 4: Relative frequency of selected verb tags with absolute frequency greater than 1,000

Reference(s)

Bauer, Laurie. 2022. An introduction to English lexicology (Edinburgh textbooks on the English language). Edinburgh: Edinburgh University Press.

Stefanowitsch, Anatol. 2020. Corpus linguistics: A guide to the methodology. Berlin: Language Science Press.