Creating Corpus-Based Materials

Sarah Deutchman Waseda University

Agenda

- Overview of what corpora are
- How the worksheets were created
- Participants get a chance to do corpus searches

What are corpora?

- "A corpus is a large, principled collection of naturally occurring examples of language stored electronically" (Bennett, 2010, p. 2).
- It is possible to create a corpus for anything
 - The English corpora website added a corona virus corpus
- Electronic corpora are easily searchable
- Cannot analyze themselves

How can corpora be used?

- O Corpora can help students better understand how to correctly use the language:
 - To check collocates
 - To check for connotations
 - O Grammatical patterns
 - Where and when a word is used
 - O Infer meaning of a new word from concordance lines
 - Create specific word lists for ESP

Studies Using Corpora as learning tools

- Cobb (1997)
 - Met words through computer game activities either through concordances or definition-based entries
 - concordance learning showed less decay vs. definition-based learners
- Boulton (2009)
 - Learning styles did not significantly affect ability to work with corpora
 - Visual learners slightly more receptive

Studies Using Corpora as learning tools

- Boulton (2010)
 - Learners given paper-based corpus materials and others given dictionary entries.
 - Lower-level students did better with corpora than with standard dictionary entries
- Cobb and Boulton (2015)
 - Meta-analysis showed that corpora can benefit L2 learners receptive and productive skills (e.g., extensive reading and writing tasks) for collocations and idioms

Word Profilers

- Can be used to input text and see the frequency of each word in a text against corpus-based frequency lists.
- Can check how complex your text is
- Vocab Profiler
 - https://www.lextutor.ca/vp/
- AntWordProfiler
 - https://www.laurenceanthony.net/software/antwordprofiler/
- Analyze Text
 - https://www.english-corpora.org/coca/

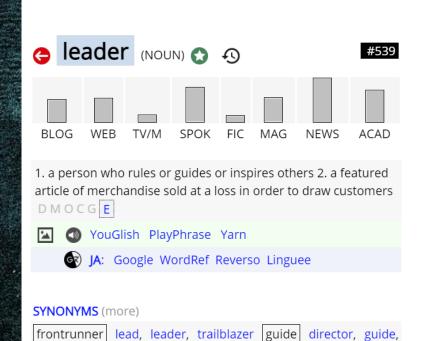
Considerations when designing worksheets

- It is necessary for learners to test their hypotheses based on their expectations and refine those hypotheses when presented with evidence (Johns, 1988).
- For there to be benefits of students looking at corpora a long period of practice with scaffolding is necessary (Cobb & Boulton, 2015)
- Purpose of the worksheet
- How advanced are your students' skills

Choosing your corpora

- Sketch Engine for Language Learning
 - Concordance lines easier than Coca
 - -Simpler interface
 - Login not required
- Corpus of Contemporary American English
 - More detailed information
 - Can compare with different corpora
 - Better for lower frequency words

COCA Word



guru, leader, mentor, organizer head chief, head, kingpin,

leader, manager, principal, superior, supervisor

See in iWeb 🝙 Collocates Clusters Topics Dictionary Texts KWIC

HEL

TOPICS (more)

leadership, minister, senate, prime, democratic, republican, democrat, majority, election, reform, opposition, official, party, meeting, congress, diplomat, peace, minority, vote, military

COLLOCATES (more)

NOUN majority, senate, party, business, community, republican, minority, church

VERB elect, urge, gop, assassinate, laden, vow, denounce, overthrow

ADJ political, religious, democratic, military, local, congressional, civil, palestinian

ADV democratically, eg, up-country, popularly

Click here to continue with your search

简体中文 中文 한국어 Русский العربية

<u>There is no cost for basic access to English-Corpora.org</u>. But you will occasionally see this message, which asks you to consider upgrading to a "premium" account.

If you have a **premium account** (\$10.00 per month, \$30.00 for one year, \$55.00 for two years, or \$75.00 for three years), then you will not see this message anymore. You will also have increased access to the corpora, more features, and you will help to support English-Corpora.org.

If you are a student, your school or university can also get an **academic license**, and all of you will have the benefits of a premium account.

Thanks for your support.

How I made the worksheet

- 1) Needs analysis
- 2) Do searches ahead of time
- 3) Take screen shots
- 4) Create specific instructions on how to do the searches

Sketch Engine for Language Learning

https://skell.sketchengine.eu/#home

Collocations

- Words neighbors
 - Take (a shower, a bath, medicine, a walk)
- How to search for them
 - Grammar
 - ____ (adj) mind (n.)
 - Walk (v.) _____ (modifier/adverb)
 - Pretty(adj.)_____ (noun)

adjectives with mind

sharp mind sharp

2. pure mind is pure

3. **busy** mind busy

4. full mind full of

5. **open** mind open

6. active mind active

7. quiet the mind is quiet

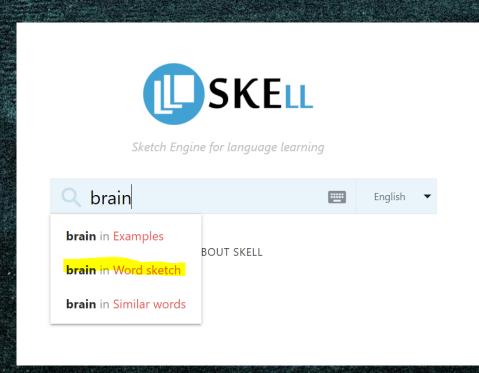
8. empty mind is empty

free mind free

10. capable mind is capable

11. clear mind clear

How to do a collocates search



- 1) Search for the word and select word sketch
- 2) Analyze the results

Connotations

- Feeling associated with the word
 - Is it positive or negative
- Cause
 - Is it positive or negative?

object of cause

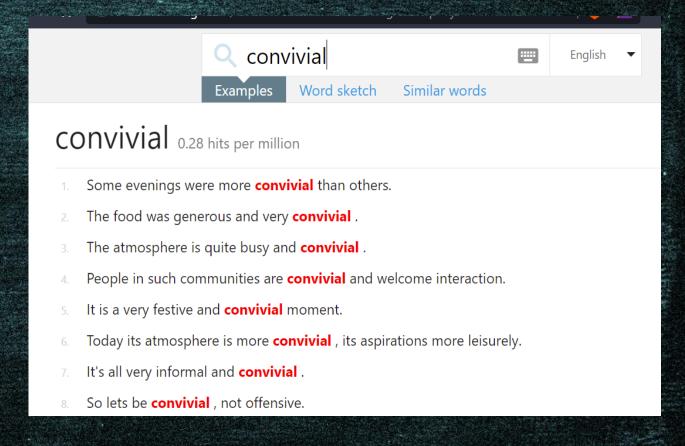
1. C	lamage	damage	caused

- 2. problem cause problems
- death cause death
- 4. harm cause harm
- loss losses caused
- 6. **injury** cause injury
- 7. disease disease caused
- 8. **pain** cause pain
- 9. **controversy** caused controversy
- 10. **change** cause changes

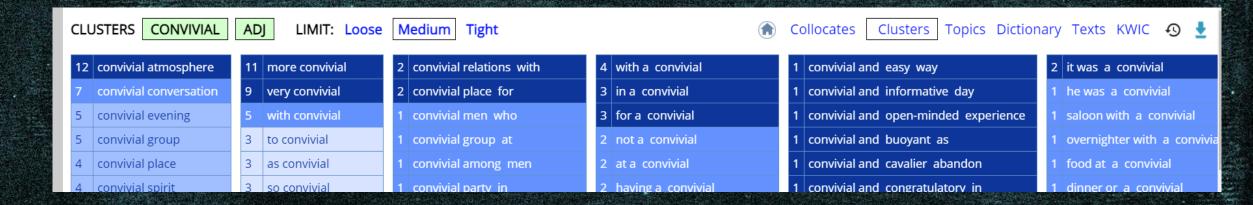
How to search for connotations



object of cause 1. damage damage caused 2. problem cause problems 3. death cause death 4. harm cause harm 5. loss losses caused

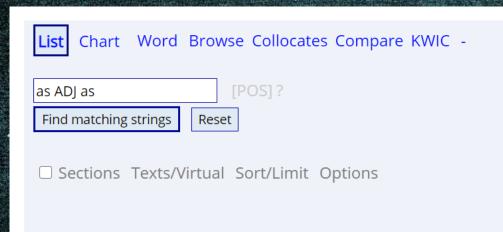


Can be done in COCA



Frames in COCA

1) Type in your frame and click matching strings





LOGGED IN

LIST display

Find single words like mysterious, all forms of a word like JUMP, words matching patterns like *break*, phrases like more * than or rough NOUN. You can also search by synonyms (e.g. gorgeous), and customized wordlists like clothes. In each case, you see each individual matching string.

More information: basic syntax, part of speech, lemmas (forms of words), synonyms, customized word lists, and combining words.

2) Results are based on frequency



3) Look at the frame in context

_							
CLICK FOR MORE CONTEXT.							LIST CHOOSE LIST Leadership CREATE NEW LIST [?] SHOW DUPLICATE
1	2019	MAG	ESPN	Α	В	С	Providence, in which Sam Hauser scored 56 combined points. # " And as good as he is off ball screens, we'll live with him trying to break
2	2019	MAG	ESPN	Α	В	С	the Big East, I didn't play against a guy like that. As good as Gerry McNamara was coming off screens, he didn't do the things that
3	2017	NEWS	Arizona Daily Star	Α	В	С	been plagued by back issues throughout his career, said his body is feeling as good as his game looks. But he didn't have to look far to know
4	2017	MOV	DC Super Hero Girls: Brain Drain	Α	В	С	are supes gaudy How's it going over there? - About as good as you could expect. Oh, that bad, huh? Too scared to
5	2016	TV	NCIS: New Orleans	Α	В	С	' Cause the man's got a heck of a poker face. Almost as good as Pride's. That bill of goods you sold about Mateo's video?
6	2015	FIC	ParisRev	Α	В	С	religious affiliation, et cetera. And even though his suc cess rate was as good as any of the other top dating sites, he went to jail, and
7	2015	MAG	Essence	Α	В	С	colorful print flat iron. # 27 # Created under-water, these candles smell as good as they look! # 28 # lt's a great time to try these

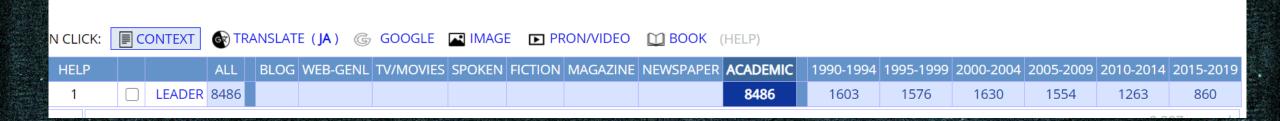
Creating ESP Lists with COCA

https://www.english-corpora.org/coca/

1) Put in your search term in the list



2)Click on the word this search is for academic words only



3) Save your list

PAGE	: << < 1/8	> >>	***	456	
CLIC	K FOR MORE	CONTEXT [?]	SA	AVE I	ST CHOOSE LIST CREATE NEW LIST Leadership [?] SHOW DUPLICATES
1	2019 ACAD	Business and Economic Horizons	A B	С	the case of Gabon in 1995, and the country appears to be the productivity leader in the region. Very high values of productivity are noted also in
2	2019 ACAD	Business and Economic Horizons	АВ	С	Namibia (number 13). Large economies, such as South Africa (regional leader in terms of economic development and industrialization) and Nige
3	2019 ACAD	Business and Economic Horizons	A B	С	in the region is lesser - even in the case of Gabon that was the leader in the previous categories. Apart from the South Africa, the highest value of
4	2019 ACAD	Global Education Review	АВ	С	and socially constructed identities. # Sinead Harmey is lecturer in literacy education and national leader for reading recovery at the International
5	2019 ACAD	rve Bank of New Zealand Bulletin	АВ	С	5822 # She was a mission leader, serving as an area director for East Asia, supervising Southern Baptist mission work
6	2019 ACAD	Baptist History and Heritage	АВ	С	than Lottie Moon. She was primarily an evangelist but also was a respected mission leader, looked to for guidance by her colleagues and FMB le
7	2019 ACAD	Baptist History and Heritage	АВ	С	Area Director for East Asia # When Sam James was elected as the new regional leader for Europe in 1992, Pearson performed the work of the ar
8	2019 ACAD	European Research Studies	АВ	С	leadership, and different attitudes and behaviors of employees. Some are trust in the leader (Zeinabadi and Rastegarpour, 2010), citizen behavior
9	2019 ACAD	European Research Studies	АВ	С	latter is generated precisely by the perception of injustice. The opposite occurs when the leader understands and offers a personalized treatment
10	2019 ACAD	European Research Studies	АВ	С	of organizational justice represents the psychological mechanism by means of which the behavior of the leader contributes to reduce the employee
11	2019 ACAD	European Research Studies	АВ	С	297-313. # Fleishman, E.A. and Salter, J.A. 1963. Relation between the leader's behaviour and his empathy towards subordinates. Journal of Indu
12	2019 ACAD	European Research Studies	АВ	С	among five ASEAN countries found co-movement among them. Hence, Malaysia has become the leader because it creates a spillover effect in all

4) Choose the words you want to keep

RETI	JRN TO	KWIC PAGE: SAME NEXT [7	7]	USAGE: 24 HOURS	STORED
Lea	dership	v E S	UBMIT RESET		[HELF
	[?]	#	O DELETE ENTRIES O MOVE ENTRIES	EXPAND ENTRIES [?]	
1		COCA:2019:ACAD Business and Economic Horizons	the case of Gabon in 1995, and the count	ry appears to be the productivity <mark>leader</mark> in the region. Very high values o	f productivity are noted also in the o
2		COCA:2019:ACAD Business and Economic Horizons	Namibia (number 13). Large economies, s	such as South Africa (regional <mark>leader</mark> in terms of economic development	and industrialization) and Nigeria (la
3		COCA:2019:ACAD Business and Economic Horizons	in the region is lesser - even in the case o	f Gabon that was the <mark>leader</mark> in the previous categories. Apart from the So	outh Africa, the highest value of
4		COCA:2019:ACAD Global Education Review	and socially constructed identities. # Sine	ad Harmey is lecturer in literacy education and national <mark>leader</mark> for readii	ng recovery at the International Liter
5		COCA:2019:ACAD rve Bank of New Zealand Bulletin	5822 # She was a mission leader, serving	as an area director for East Asia, supervising Southern Baptist mission w	vork
6		COCA:2019:ACAD Baptist History and Heritage	than Lottie Moon. She was primarily an e	vangelist but also was a respected mission <mark>leader</mark> , looked to for guidance	e by her colleagues and FMB leaders

Different View

You can add or remove texts below, and then either save these texts as a new virtual corpus, or else add them to an existing virtual corpus.

SAVE AS:	AVE AS: leadership									
HELP	100	YEAR	GENRE	SOURCE	TITLE					
1	✓	1990	ACAD	AfricaToday	AngolaProspects for Peace Seem Brighter					
2	~	1990	ACAD	AfricaToday	Apartheid, the law and reform in South Africa					
3	~	1990	ACAD	AfricaToday	The impending demise of Nigeria's forthcoming third republic					
4	✓	1990	ACAD	AfricaToday	The right to foodas a weapon?					
5	✓	1990	ACAD	AfricaToday	Why is participation a dirty word in South African politics?					
6	✓	1990	ACAD	AmerEthnicHis	A stage in the emergence of the Americanized synagogue among East European Jews: 1890-1910					
7	✓	1990	ACAD	AmerEthnicHis	Unintentional immigrants: Chicago's Filipino foreign students become settlers, 1900-1941					
8	✓	1990	ACAD	AmerIndianQ	`He was going along': Motion in the novels of James Welch					
9	✓	1990	ACAD	AmerIndianQ	In search of recognition: Federal Indian policy and the landless tribes of Western Washington					

4) Your virtual corpus has been created

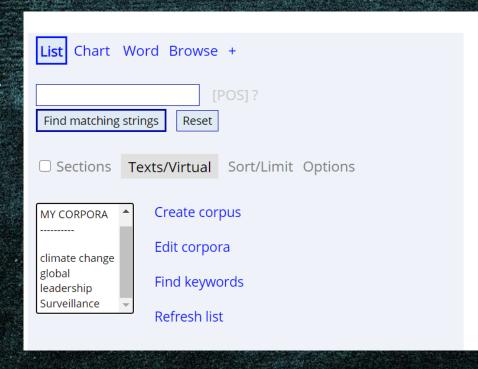
MY VIRTUAL CORPORA Detailed overview (NEW: Aug 2020)

HELP		‡	‡	LIST NAME ‡	#TEXTS \$	# WORDS ‡	FIND KEYWORDS SPECIFIC FREQ	CREATED ‡
1					8	29,362	NOUN VERB ADJ ADV N+N ADJ+N	108 d
2				CLIMATE CHANGE	100	1,463,917	NOUN VERB ADJ ADV N+N ADJ+N	121 d
3				GLOBAL	41	568,414	NOUN VERB ADJ ADV N+N ADJ+N	121 d
4				LEADERSHIP	3631	22,161,893	NOUN VERB ADJ ADV N+N ADJ+N	0 h
5	î			SURVEILLANCE	38	253,492	NOUN VERB ADJ ADV N+N ADJ+N	90 d

This could be used as a vocab list

LEADERSHIP [22,161,893 WORDS, 3631 TEXTS] (2.2% OF TOTAL) NOUN VERB ADJ ADV N+N ADJ+N [ALL CORPORA] SAVE LIST									
HELP	WORD (CLICK FOR CONTEXT)	FREQ	# TEXTS	FREQ 90 100 TEXTS	ENTIRE CORPUS	EXPECTED			
1	DESTINED	176	155	96.2	82	1.8			
2	MULTI-PARTY	339	130	46.7	325	7.3			
3	SOCIOPOLITICAL	310	160	13.7	1,013	22.6			
4	NATIONALIST	1313	405	13.0	4,532	101.1			
5	POST-COLD	325	143	11.7	1,248	27.9			
6	POSTCOLONIAL	338	140	11.6	1,304	29.1			
7	HEGEMONIC	354	172	11.5	1,377	30.7			
8	AGRARIAN	406	117	10.7	1,703	38.0			
9	MULTILATERAL	561	214	9.9	2,548	56.9			
10	AUTHORITARIAN	1160	413	9.8	5,299	118.3			

Your corpus is also searchable





VIRTUAL CORPORA

Create a "virtual corpus" -- essentially your own personalized corpus within COCA. You can create the corpus either by keywords in the texts (e.g. texts with the words investments, basketball, or biology), or information about the texts (e.g. date, title, or source), or a combination of keyword and text information.

You can then edit your virtual corpora, search within a particular virtual corpus, compare the frequency of a word, phrase or grammatical construction in your different virtual corpora, and also create "keyword lists" based on the texts in your virtual corpus.

Click on any of the links above for more information.



Detailed overview (NEW: Aug 2020)

Your Turn

In your groups first try working with the corpus searches yourself and then try to think of your own examples.

Answers

nouns modified by few

1. **month** a few months

year a few years

day a few days

4. **week** a few weeks

5. **minute** a few minutes

5. **hour** a few hours

7. people few people

Answers

- Castigate means to reprimand someone severely
- It has a negative connotation

Conclusion

- Corpora can be useful for beginners
- Allows learners to produce their own hypotheses on word usage and lets learners test them
- Targeted focus or words to teach by frequency

References

Baísa, V., & Suchomel, V., (2014) SkELL: Web interface for English language learning. In Horák, A. & Rychlý, P. (ed.), Proceedings of Recent Advances in Slavonic Natural Language Processing. Karlova Studánka, Czech Republic, 5–7 December, 63–70.

Bennett, G.R. (2010). Using Corpora in the language learning classroom: Corpus linguistics for teachers. University of Michigan Press

Boulton, A. 2009. Corpora for all? Learning styles and data-driven learning. In M. Mahlberg, V. González-Díaz and C. Smith (eds.), *Proceedings of 5th Corpus Linguistics Conference*. http://ucrel.lancs.ac.uk/publications/cl2009/150 FullPaper.doc

Boulton, A. (2010) Data-driven learning: Taking the computer out of the equation. Language Learning, 60(3): 534-572.

Cobb, T. (1997). Is there any measurable learning from hands-on concordancing? System, 25(3): 301-315.

Cobb, T. & Boulton, A. (2015). Classroom applications of corpus analysis. In D. Biber & R. Reppen (eds), Cambridge Handbook of English Corpus Linguistics. Cambridge: Cambridge University Press, p. 478-497. doi: 10.1017/CBO9781139764377.027

Davies, M. (2020). English-Corpora.org: a guided tour. English Corpora.org. https://www.english-corpora.org/pdf/english-corpora.pdf

Johns, T. (1988). Whence and whither classroom concordancing? In T. Bongaerts, P. de Haan, S. Lobbe and H. Wekker (eds.), Computer applications in language learning, 9-27. Dordrecht: Foris.

Contact Information

sarah@aoni.waseda.jp