

L2TReC Webinar Series

Corpus Linguistics for Language Teachers: An Introduction

Speaker: Dr. Elnaz Kia

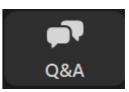
Friday, March 5, 2021, 4:00-6:00 PM MST



Webinar Layout & Zoom Features

• Three sections





• Discussion breaks



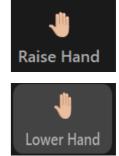
• Chat



• A coffee break



• Raise/lower hand



Reflection Stops



Reflect: Activity Ideas

• Polls



• Q&A





Where in the world are you located?





Salt Lake City, UT



Flagstaff, AZ





Outline

- 1. Introduction to Corpus Linguistics
- 2. Pedagogical Applications of Corpora
- 3. Basic Corpus Linguistic Tools for Language Teachers
 - a. Ready-made resources
 - b. Sources with built-in CL tools
 - c. Offline corpora and concordancers





How much do you know about corpus linguistics?







Section 1

Introduction to Corpus Linguistics

Corpus \rightarrow Corpora (plural)

A large, principled collection of natural texts

Analyzed using both automatic and interactive

computer techniques

(Biber, Conrad & Reppen, 1998)

Corpus \rightarrow Corpora (plural)

- Large:
 - Depending on the type and purpose of the corpus
- Text: any language produced spoken or written
- Principled: organized around your goals
- Natural Language
- Interactive

Corpus Linguistics

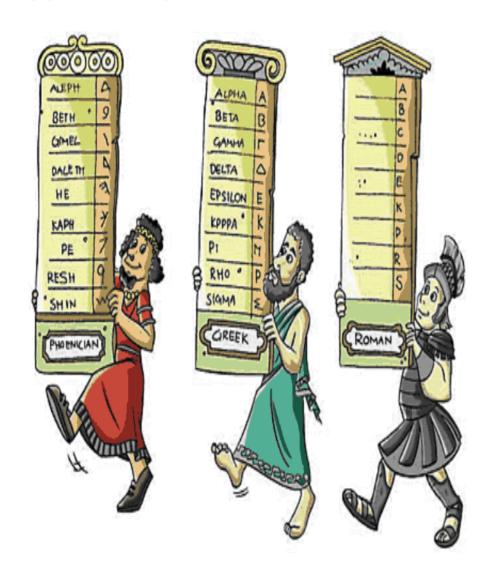
- How we use language
- How our language use varies
 - Audience
 - Production
 - Purpose

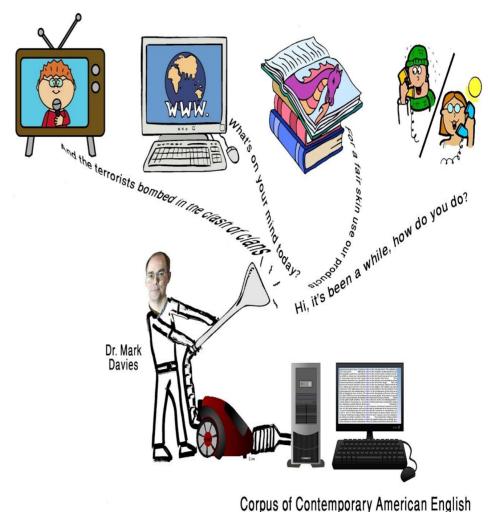
• Look at collections of texts and see how texts use different linguistic features to accomplish different purposes

PAST

PRESENT

Applied Linguistics in Ancient Times





Corpus of Contemporary American English (COCA)

http://ola-onyx.blogspot.com/

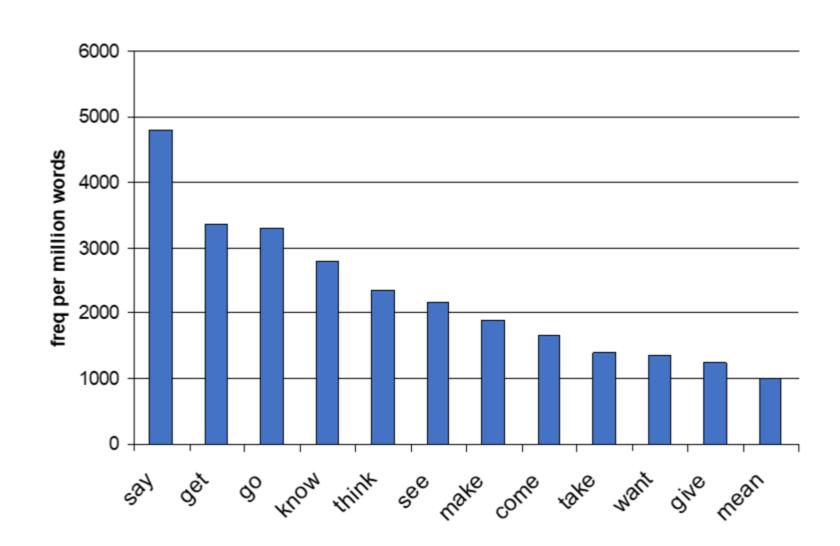
Why Corpus Linguistics

Intuition Empirical Evidence

Most Common Lexical Verbs in English

(LGSWE; Biber et al., 1999)





Lexical Verbs in Academic Discourse vs. Conversation

(LGSWE; Biber et al., 1999, p. 375)

Figure 5.12

Frequencies of the most common lexical verbs—academic prose

10000

| 10000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000

Figure 5.9
Frequencies of the most common lexical verbs—conversation

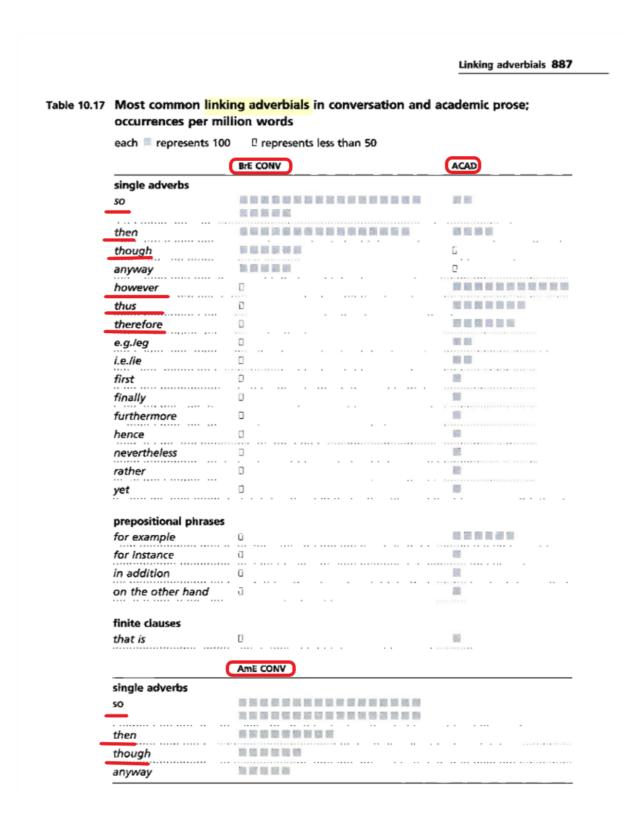
10000
8000
4000
4000

say get go know think see make come take want give mean

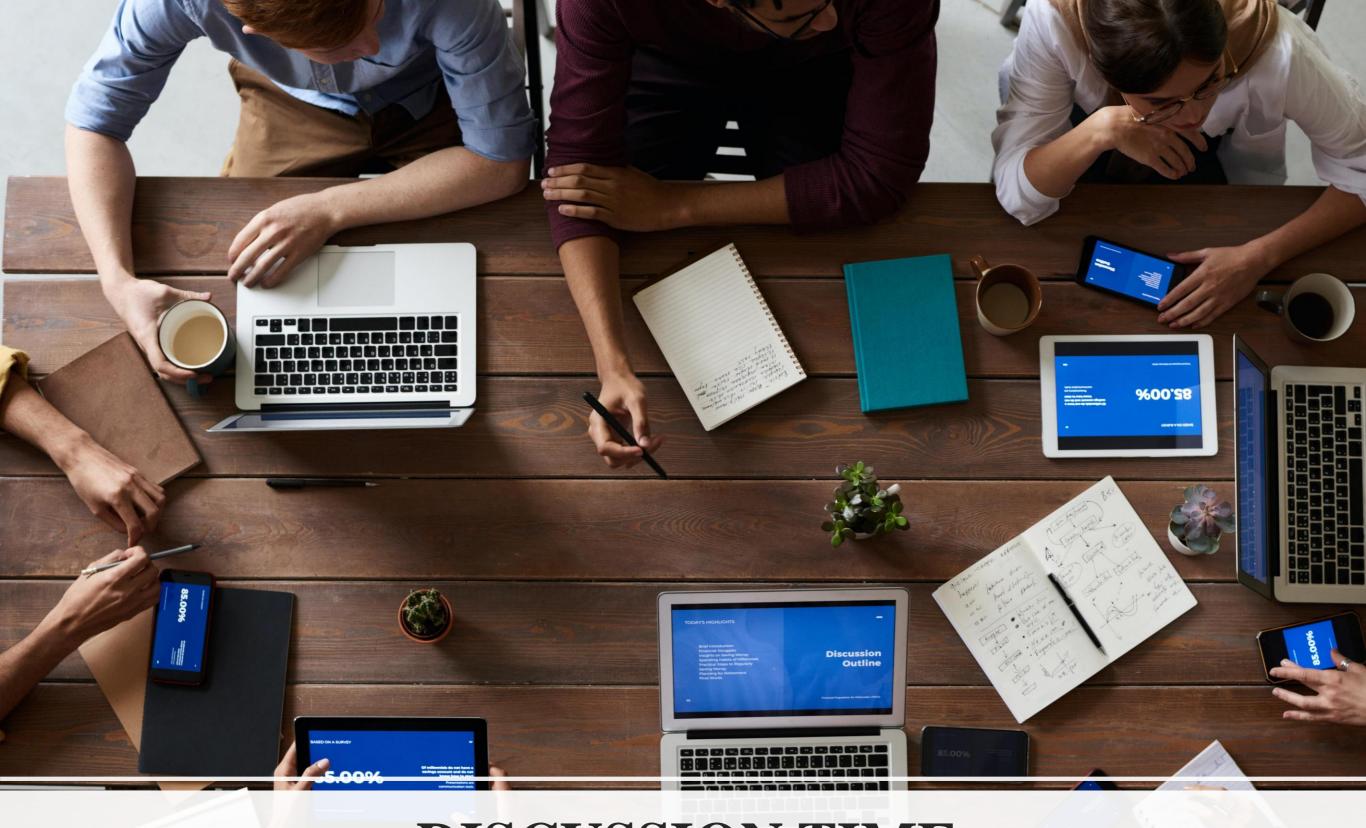
2000

Linking Adverbials in Academic and Conversation Discourse

(LGSWE; Biber et al., 1999, p. 887)







DISCUSSION TIME



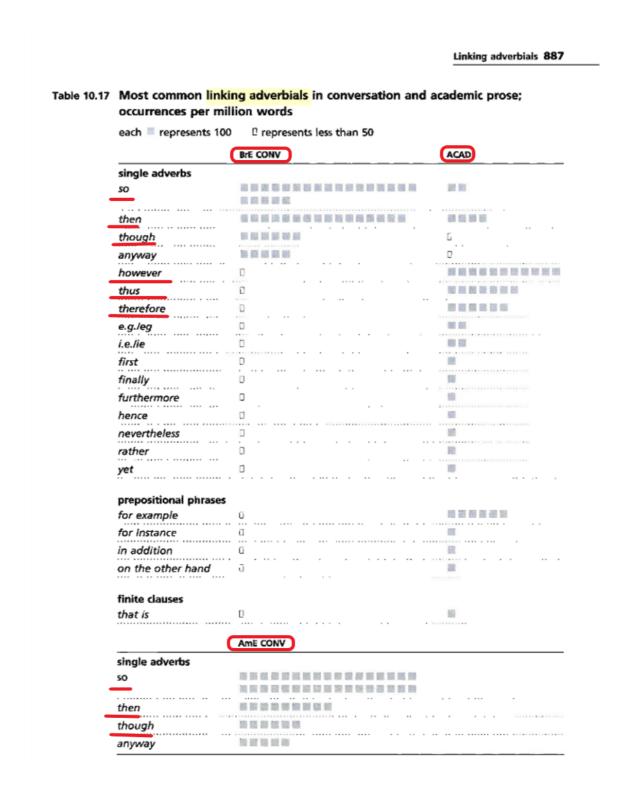
Section 2

Pedagogical Applications of Corpora

Corpus Linguistics for Language Teachers

- Self-reflection (O'keeffe, McCarthy & Carter, 2007)
- Provide insights into language use where intuitions mislead us
- Improve understanding of curricular needs (e.g., ESP, EAP)
- Develop Materials for different skills and language features

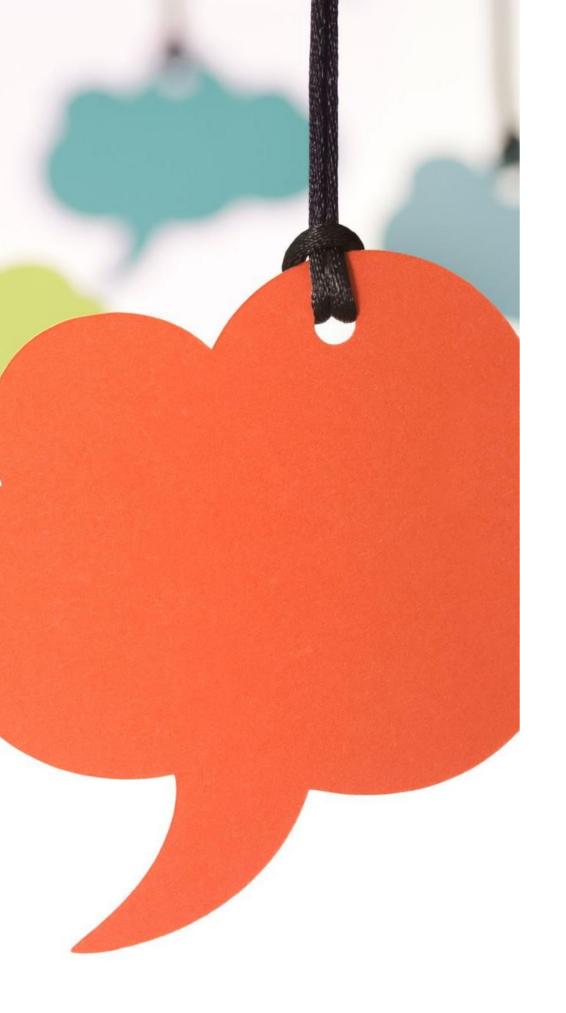
Linking Adverbials in Academic and Conversation Discourse (LGSWE; Biber et al., 1999, p. 887)



Prefixes vs. Suffixes

- Suffixes are more productive than prefixes
- Not all suffixes are equally productive when it comes to academic words.
- The six most productive suffixes are:

~tion, ~ity, ~er, ~ness, ~ism, and ~ment (Biber et al, 1999)



Reflect: Activity Ideas

Example Activity (Reppen, 2010)

- Give students a copy of a page from a textbook.
- Then, ask students to circle all of the nouns that they find with any of the six suffixes listed above.
- Discuss the words: Look how words may change from verbs to nouns when the suffixes are added

act
$$\rightarrow$$
 action = verb \rightarrow noun
govern \rightarrow government = verb \rightarrow noun

Using Corpora to Inform EAP Instruction



• Common Academic Group Discussions

Using Corpora to Inform EAP Instruction

Paired speaking task

Situation: You and your partner are roommates sharing an apartment. You only have one small refrigerator so you need to plan your meals, and do your shopping together. You need to make a grocery list for the week.

Directions: You will have **3 minutes** to prepare with your partner. Please do the following things:

- Decide who will be partner A and who will be partner B
- Talk about why you want to buy **each** food or drink in your list
- Talk about why it's a good idea or bad idea to buy the foods/drinks your partner suggests
- Together, you should **agree on any 2 items** you will buy at the store

After preparing, you and your partner will have 2 minutes to record your conversation.

Items to put on the grocery list

PARTNER A

- cookies
- fruit
- energy drinks
- milk

PARTNER B

- bread
- vegetables
- coffee
- yoghurt

Useful Phrases for Paired Speaking Tasks

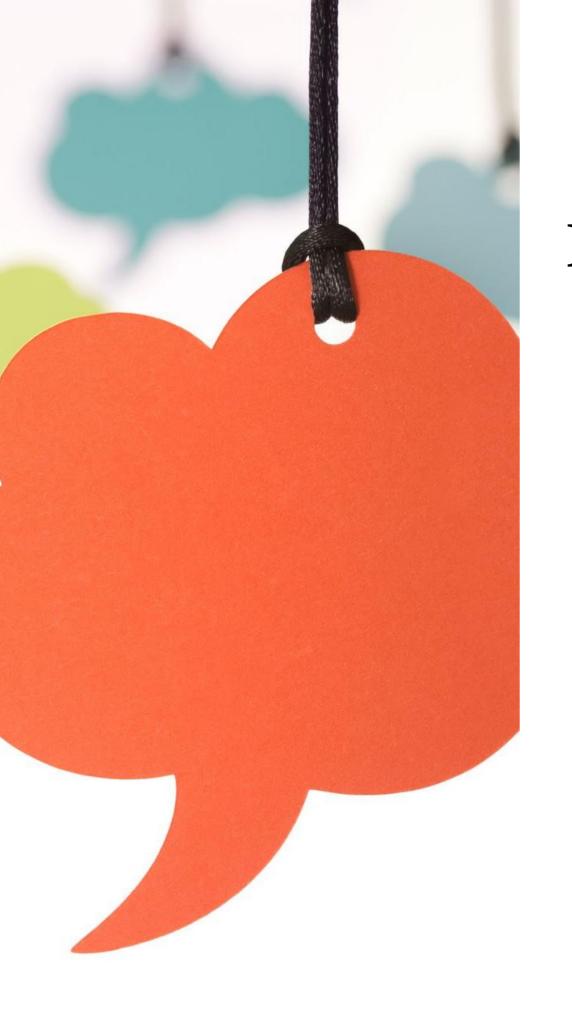
Agree	Disagree	Show	Ask for a clarification	Give clarification	Comprehension
		understanding			check
Yeah, maybe you	I see your point	Oh, I see your	What exactly do you	Let me explain	Do you see what I
are right.	but	point.	mean?	What I mean is	mean?
Oh, good idea!	I like the idea but	Oh, I see now.	Do you mean	Let me say it another	
I like the idea!	I don't think it is	Got it!	What is	way	
Sure, we can do	very important, Let's	Oh, now I	Could you explain	It's like this	
that!		understand!	more?	What I'm trying to	
Nice! That sounds	Well, we can think	I see.	I still don't	say is	
good!	about it.	Yeah!	understand.		
Yeah, why not. We	Hmmm, I see but I	Right!	Why do you think so?		
can	think it is better to		Can you be more		
Sounds like a plan!	I don't think that's		specific?		
	gonna work.				

Common Academic Group Discussion Expressions

#	Expression	MICASE	Expression	T2K-SWAL
1	Yeah, but	120	That's right	116
2	What I mean	100	Yeah, but	93
3	OK, but	90	What I mean	54
4	You're saying	90	That's true	53
5	That's right	90	You're right	46
6	You're right	75	In other words	37
7	That's true	65	OK, but	29
8	I agree	35	You're saying	26
9	Do you mean	35	What you're saying	26
10	I have a question	35	I have a question	23
11	What you're saying	35	I don't think so	18
12	I don't think so	30	Good point	16
13	What do you mean?	27	What do you mean?	12
14	Good point	18	Sounds good	12
15	Your point	18	Me too	12
16	I agree with	15	I agree	11
17	Sounds good	13	I agree with	9
18	In other words	12	Your point	4
19	Are you saying	12	Are you saying	4
20	Me too	12	Do you mean	2
21	I agree but	10	I agree but	1

Functions of High-Frequency Expressions in MICASE (Simpson et al., 2002) and T2K-SWAL (Biber et al., 2002)

#	Expressions	Functions
1	Yeah, but	Disagreement, (clarification)
2	What I mean	Clarification, (checking understanding)
3	OK, but	Disagreement
4	You're saying	Asking for / giving clarification
5	That's right	Agreement
6	You're right	Agreement
7	That's true	Agreement
8	I agree (, but)	Agreement, (disagreement)
9	Do you mean	Asking for clarification
10	I have a question	Asking for clarification/information
11	(I see) what you're saying	Asking for clarification, (showing understanding)
12	I don't think so	Disagreement
13	What do you mean?	Asking for clarification
14	Good point	Agreement
15	(I see) your point (, but)	Agreement, (disagreement)
16	I agree with (, but)	Agreement, (disagreement)
17	Sounds good	Agreement
18	In other words	Asking for / giving clarification
19	Are you saying	Asking for clarification
20	Me too (, but)	Agreement, (disagreement)
21	I agree but	Disagreement



Reflect: Activity Ideas

Noticing from Reading

(Bogorevich & Kia, forthcoming)

Activity 1. Noticing from reading

Directions: Form groups of 2. Read the dialogues. What expressions do interlocutors use to agree, disagree, and give or ask for a clarification.

Transcript 1: SGR385SU057

S1: it's part of the real numbers...?

S2: A-D minus B-C otherwise it would be orientation-reversing.

S1: yeah but just we're also in the real numbers so you can't have a complex conjugate.

S2: right.

S1: but

S2: oh i see.

S1: but that doesn't help us though. like, because it's an inequality.

Transcript 2: OFC270MG048

S9: okay so, what, do you mean by path by paths? i mean, (i was) talking about (xx)

S2: well, what i mean by pa- let's- let's look at one that is dependent. let's say node four is given as evidence, and you're trying to see if node two and node five, are independent of each other. okay. so you start at node two and you say well, okay is node two, dependent on node four, yes? is node two dependent on node one? yes, because rule three doesn't apply anymore.

Transcript 3: LES425JG077

S1: why wouldn't you account for the probability of the egg staying as an egg?

S2: ah, good point good point that's right. if your if your uh time unit was sufficiently small then there might, there might be uh, a loop here as well. that's a good point right.

Transcript 4: OFC195SU116

S1: okay so if you divide that flux by area again

\$18: yeah so i don't want that there if i ha- say Q is like that. yeah

S1: so you don't wanna do this. now

S18: i didn't really mean that. <LAUGH>

S1: okay

S18: cuz i haven't (written it yet.)

S1: so, and you're saying like energy over time right?

S18: mhm

Agree			
Disagree			
Give a clarification			
Ask for a clarification	on		

29

Noticing from Listening

(Bogorevich & Kia, forthcoming)

Noticing from Listening

Directions: Work individually. Listen to three short dialogs. Identify what expression(s) the speakers use to agree, disagree, or ask/give a clarification. Each dialog can have one or more expression types. Next, check in pairs.

Dialog 1: (MICASE SGR175SU123, 10:14-11:18) http://media.talkbank.org/TalkBank/CABank/MICASE/study%20groups/sgr175su123.mp3 Give a clarification Ask for a clarification Dialog 2 (MICASE SGR999MX115, 1:16:50-1:18:17) http://media.talkbank.org/TalkBank/CABank/MICASE/study%20groups/sgr999mx115.mp3 Disagree Give a clarification Ask for a clarification Dialog 3 (MICASE SGR175SU123, 1:08:30-1:09:55) http://media.talkbank.org/TalkBank/CABank/MICASE/study%20groups/sgr175su123.mp3 Give a clarification Ask for a clarification

¹All three dialogs have been extracted from MICASE.

Scaffolded Practice

(Bogorevich & Kia, forthcoming)

Scaffolded Practice: Clarification

Directions: Use the cards to role-play the dialogs.

#1	Partner A - You say: "There are no active drug ingredients in placebos." - Provide a clarification. Use: "Well, you know, what I mean is" - Check understanding. Use: "You know what I mean?"	#1	Partner B - Ask for a clarification. Use: "What do you mean?" -Show understanding. Use: "Oh, I see what you are saying."
#2	Partner B - Ask for a clarification. Use: "Double major?" - Show understanding. Use: "Oh, ok."	#2	Partner A - You say: "You can do a double major." - Provide a clarification. Use: "You know, in other words" - Check understanding. Use: "You see what I'm saying?"
#3	Partner A - You say: "You need to construct a figure." - Provide a clarification. Use: "Well, what I am saying"	#3	Partner B - Ask for a clarification. Use: "What do you mean by that?" - Show understanding. Use: "Ok, got it."
#4	Partner B - Ask for a clarification. Use: "Poster sessions?" - Show understanding. Use: "That's right."	#4	Partner A - You say: "We will have poster sessions." - Provide a clarification, use: "Well, I mean"
#5	Partner A - You say: "I need to see a doctor to have my leg x-rayed." - Provide a clarification, use: "Well, I mean" - Check understanding, use: "You see what I'm saying?"	#5	Partner B - Ask for a clarification, use: "What do you mean x-rayed?" -Show understanding, use: "Oh, I see."

31

Group Academic Discussion: Paired-Speaking Task (Bogorevich & Kia, forthcoming)

Paired Speaking Task

Directions: You will have **3 minutes** to prepare with your partner and **2 minutes** to record your dialog for the teacher to grade.

Situation: You and your partner have a presentation next week. You are going to give advice to your classmates on how to conserve energy.

Preparation:

- Decide who will be partner A and who will be partner B.
- Decide on only two topics that you will cover in your presentation.
- Choose at least 6 phrases from the list of useful expressions. Each partner needs to use 3 of them.
- Discuss different ways to conserve energy at home and use the expressions.

PARTNER A

- Replace light bulbs with energy efficient LED bulbs.
- Install solar panels.

PARTNER B

- Take shorter showers.
- Replace all appliances with new efficient ones.

	Useful Expressions:	Use this space to write notes:
	Ask for/give clarification:	
	Do you mean?	
	What do you mean?	
	You are saying?	
	What I mean	
	In other <u>words</u>	
	Show/check understanding:	
	I see (what you're saying)	
	You see what I mean?	
	You know what I mean?	
	To agree/disagree:	
	Yeah, (but)	
	Ok, (but)	
	That's right (but)	
	You're right (but)	
	Sounds good! (but)	
	Good point/idea! (but)	
1		

32



DISCUSSION TIME





Section 3

Basic Corpus Linguistic Tools for Language Teachers

- a. Ready-made resources
- b. Sources with built-in CL tools
- c. Offline corpora and concordancers

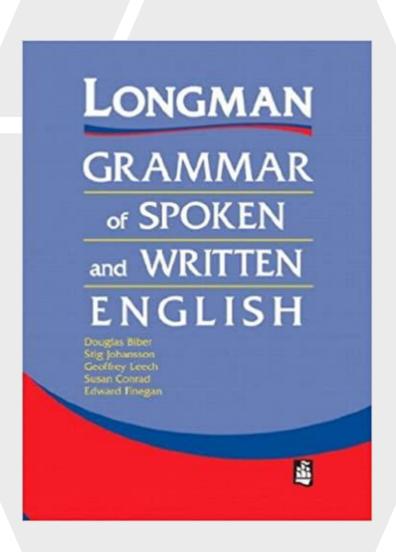
Ready-Made Resources

• Corpus-based research

- Longman Grammar of Spoken and Written
 English (Biber et al. 1999)
- Cambridge grammar of English
 (Huddleston & Pullum, 2002)

• Corpus-informed teaching materials

- Grammar and Beyond (4 level series)
- Cambridge Real Grammar



Sources with Built-In CL Tools

- 1. The English Corpora (e.g., COCA, MICASE)
- 2. Word and Phrase

3. SKELL

Ideas for Using Corpus Linguistics in the Classroom

- Frequency lists (Reppen, 2010)
 - Ask students to mark unfamiliar words in the list and make vocabulary lessons based on those vocabulary terms
 - Use the most frequent words to make vocab activities such as sentence scramble, fill in the blank
- Collocations (Reppen, 2010)
 - Find problematic word collocates for the students
 - Show them examples of the most common collocations in context
 - Make activities → matching, multiple choice, true or false



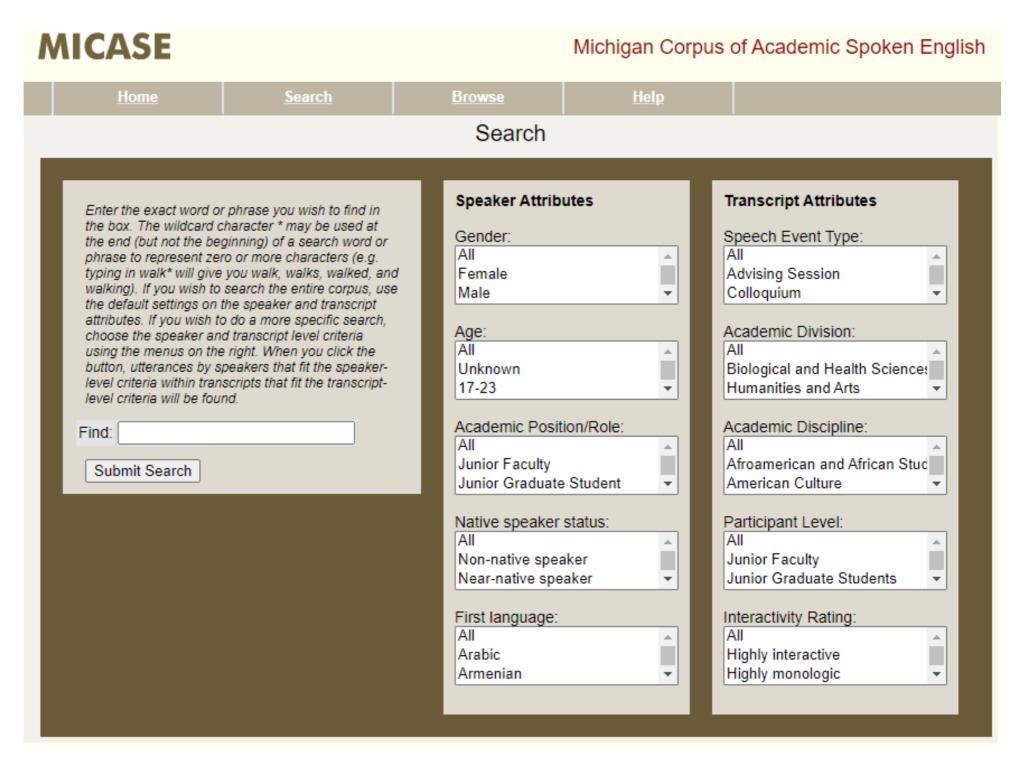


Corpus (online access)	Download	# words	Dialect	Time period	Genre(s)
iWeb: The Intelligent Web-based Corpus	•	14 billion	6 countries	2017	Web
News on the Web (NOW)	•	8.7 billion+	20 countries	2010-last month	Web: News
Global Web-Based English (GloWbE)	•	1.9 billion	20 countries	2012-13	Web (incl blogs)
Wikipedia Corpus	•	1.9 billion	(Various)	2014	Wikipedia
Corpus of Contemporary American English (COCA)	•	1.0 billion	American	1990- 2019	Balanced
Corpus of Historical American English (COHA)	•	400 million	American	1810-2009	Balanced
The TV Corpus	•	325 million	6 countries	1950-2018	TV shows
The Movie Corpus	•	200 million	6 countries	1930-2018	Movies
Corpus of American Soap Operas	0	100 million	American	2001-2012	TV shows
Hansard Corpus		1.6 billion	British	1803-2005	Parliament
Early English Books Online		755 million	British	1470s-1690s	(Various)
Corpus of US Supreme Court Opinions		130 million	American	1790s-present	Legal opinions
TIME Magazine Corpus		100 million	American	1923-2006	Magazine
British National Corpus (BNC) *		100 million	British	1980s-1993	Balanced
Strathy Corpus (Canada)		50 million	Canadian	1970s-2000s	Balanced

Michigan Corpus of Academic Spoken English

(MICASE; Simpson et al., 2002)



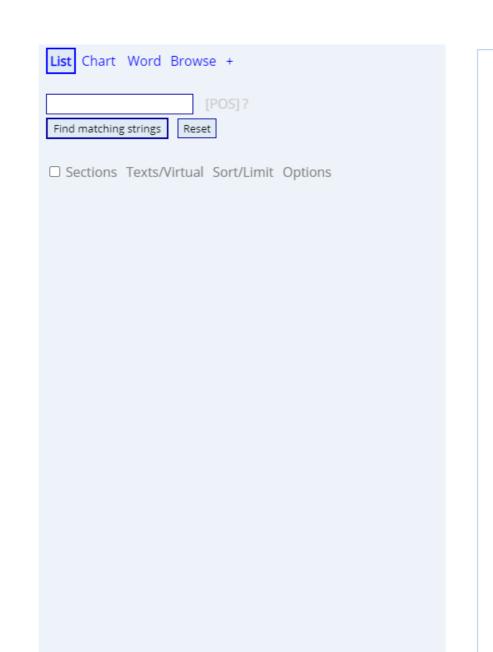


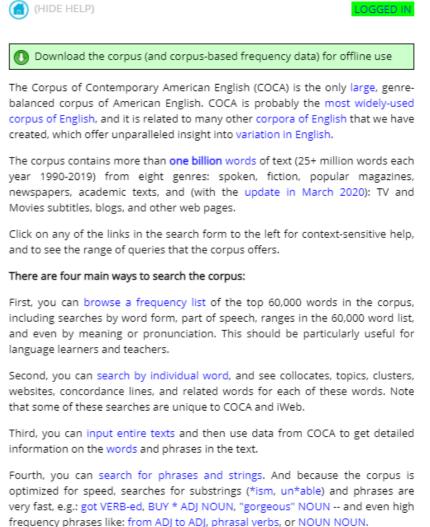
Corpus of Contemporary American English

(COCA; Davies, 2008-)









You might pay special attention to the comparisons between genres and years and virtual corpora, which allow you to create personalized collections of texts

related to a particular area of interest.

Multi-word vs. single word verbs

- Single word verbs are usually preferred over multi-word verbs in formal writing.
- Matching or chart exercise for students
 look into → investigate
 put up with → tolerate
- Students as active explorers of language
 An example using the online corpus COCA



English-Corpora.org

home corpora users related resources my account upgrade help

The most widely used online corpora. Tour (new: Nov 2020), overview, search types, variation, Virtual Corpora, corpus-based resources.

The links below are for the online interface. But you can also 🕟 download the corpora for use on your own computer.

Corpus (online access)	Download	# words	Dialect	Time period	Genre(s)
iWeb: The Intelligent Web-based Corpus	•	14 billion	6 countries	2017	Web
News on the Web (NOW)	•	11.4 billion+	20 countries	2010-yesterday	Web: News
Global Web-Based English (GloWbE)	•	1.9 billion	20 countries	2012-13	Web (incl blogs)
Wikipedia Corpus	•	1.9 billion	(Various)	2014	Wikipedia
Corpus of Contemporary American English (COCA)	•	1.0 billion	American	1990-2019	Balanced
Coronavirus Corpus	•	708 million+	20 countries	Jan 2020-yesterday	Web: News
Corpus of Historical American English (COHA)	•	400 million	American	1810-2009	Balanced
The TV Corpus	•	325 million	6 countries	1950-2018	TV shows
The Movie Corpus	•	200 million	6 countries	1930-2018	Movies
Corpus of American Soap Operas	•	100 million	American	2001-2012	TV shows
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TIME Magazine Corpus		100 million	American	1923-2006	Magazine
British National Corpus (BNC) *		100 million	British	1980s-1993	Balanced
Strathy Corpus (Canada)		50 million	Canadian	1970s-2000s	Balanced
CORE Corpus		50 million	6 countries	2014	Web
From Google Books n-grams (compare)					
American English		155 billion	American	1500s-2000s	(Various)
British English		34 billion	British	1500s-2000	(Various)

Look Into



CHANGE TO VERTICAL CHART / CLICK TO SEE CONTEXT

SECTION ALL FREQ 9324	BLOG 1495	WEB 1367	TV/M	SPOK	FIC	MAG	NEWS	ACAD	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19
FREQ 9324	1495	1367	4004								2000 0 1	2005 05	2010 17	2015
		1507	1804	1698	1181	725	754	300	1015	1127	987	1059	1016	1258
WORDS (M) 993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8	139.1	147.8	146.6	144.9	145.3	144.7
PER MIL 9.39	11.62	11.00	14.09	13.46	9.98	5.75	6.19	2.50	7.30	7.63	6.73	7.31	6.99	8.69
SEE ALL SUB-SECTIONS AT ONCE														

Investigate



CHANGE TO VERTICAL CHART / CLICK TO SEE CONTEXT

SECTION	ALL	BLOG	WEB	TV/M	SPOK	FIC	MAG	NEWS	ACAD	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19
FREQ	20095	1877	2735	1553	3016	1030	2158	2547	5179	2210	2287	2221	2390	2545	3830
WORDS (M)	993	128.6	124.3	128.1	126.1	118.3	126.1	121.7	119.8	139.1	147.8	146.6	144.9	145.3	144.7
PER MIL	20.24	14.59	22.01	12.13	23.91	8.71	17.11	20,92	43.23	15.89	15.48	15.15	16.49	17.52	26.46
SEE ALL SUB-SECTIONS AT ONCE															

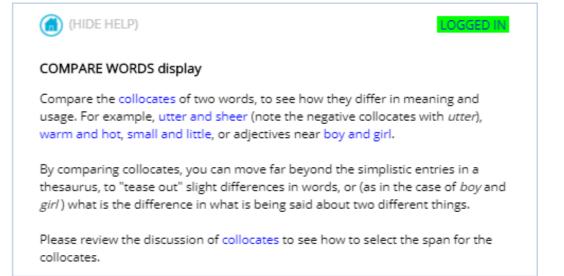
SECTION: ACADEMIC **(5,179)** FIND SAMPLE: <u>100</u> <u>200</u> <u>500</u> <u>1000</u>

PAG	AGE: << 1/52 > >>						
CLIC	K FOR	MORE (CONTEXT [7]	2	AVE	LIS	T CHOOSE LIST CREATE NEW LIST [?] SHOW DUPLICATES
1	2019	ACAD	Business and Economic Horizons	Α	В (С	attitudes to development aid, in the article we reconsider the impact of aid and investigate whether the declarations to increase aid effectiven
2	2019	ACAD	PLoS ONE	Α	В (С	$. They can be compared with the space syntax centrality measures that were proposed to {\it investigate} the performance of the introduced metric of the compared with the space syntax centrality measures that were proposed to {\it investigate} the performance of the introduced metric of the compared with the space syntax centrality measures that were proposed to {\it investigate} the performance of the introduced metric of the compared with the space syntax centrality measures that were proposed to {\it investigate} the performance of the introduced metric of the {\it investigate} the {\it$
3	2019	ACAD	PLoS ONE	Α	В	С	bias caused by the scarceness of the data. Future research with larger data-sets could investigate the use of shorter time intervals to produce
4	2019	ACAD	PeerJ	Α	В (С	way different from younger adults is not entirely clear. The present study intended to investigate the age differences in the use of animacy cut
5	2019	ACAD	Pacific Journal of Reproduction	Α	В (С	Nwannenna. Ifeyinwa, Ubah. Azubuike, Ogwu. David # Objective: To investigate the effect of different fractions from the aqueous methanolic
6	2019	ACAD	Saudi J Anaesthesia	Α	В (С	three key methods for creating a list of potential journal names, and strategies to investigate the details of each. # Your Reference List # The f
7	2019	ACAD	Saudi J Anaesthesia	Α	В (С	and Scope # Once you have a list of journal titles you will need to investigate further to determine how suitable these journals really are for you
8	2019	ACAD	Media and Communication	Α	В (С	in home and host countries. # Amanda Alencar and Vasilki Tsagkroni (2019) investigate integration as a two-way process. In their work " Prosp
9	2019	ACAD	uter Applications in Archaeology	Α	В (С	of 20 experiments were conducted. Several parameters were varied between experiments in order to investigate their influence on the perfor
10	2019	ACAD	Construction Building Mat	Α	В	С	# 39 JA Canfield and IG Clator Development of a scaling law and techniques to investigate penetration in concrete. NEL Report No 2057, U.S. N
11	2019	ACAD	PeerJ	Α	В (С	EVI (plant productivity) in conjunction with land cover data will allow us to investigate the productivity-diversity relationship at large spatial sca
12	2019	ACAD	PeerJ	Α	В	С	the observable impact of the accumulation of local scale effects. This will let us $investigate$ how human modified landscapes might modulate ϵ
13	2019	ACAD	PeerJ	Α	В (С	a covariate within the model as recommended by Wood (2006). To further $investigate$ the mechanisms underlying the impact of land cover on
14	2019	ACAD	PeerJ	Α	В (С	pasture across the island of Ireland provides a useful, large-scale opportunity with which to investigate this impact as high levels of nutrient at
15	2019	ACAD	Construction Building Mat	Α	В (С	concrete 4,6,9,18-20. # In the last few decades, studies have been carried out to investigate the inhibiting effectiveness of different organic an
16	2019	ACAD	Construction Building Mat	Α	В (С	solution such as saturated calcium hydroxide solution. Therefore, there is a need to investigate the effect of cation type of chloride salts on co
17	2019	ACAD	ter Science & Technology	Α	В (С	4. Solution Approach # 4.1 Overview # Our objective in this research is to investigate the suitability of employing semi-supervised learning tec
18	2019	ACAD	ter Science & Technology	Α	В (С	$datasets \ with \ different \ distributions \ would \ result \ in \ the \ same \ classification \ accuracy. \ We \ could \ not \ investigate \ this \ matter \ further \ because \ the$
19	2019	ACAD	ter Science & Technology	Α	В	С	sample adequate enough to classify the overall input data. Moreover, future work could investigate developing cluster-based technique for pa
20	2019	ACAD	Landscape Architecture Frontiers	Α	В (С	daily activity patterns. Amber L. Pearson et al. 26 used wearable cameras to investigate children's daily access to water areas. By analyzing the
21	2019	ACAD	Health Services Research	Α	В	С	In what follows, we use a difference-in-difference approach and a Poisson count model to investigate the effects of GS policies on drug overdo
22	2019	ACAD	Health Services Research	Α	В (С	, Table 2). Since GS policies target controlled substance possession, we specifically investigate controlled substances (all and prescription, as ill
23	2019	ACAD	European Research Studies	Α	В	С	effect among markets has been extensively studied in recent years. Some studies try to investigate the spillover effect across developed mark
24	2019	ACAD	European Research Studies	Α	В (С	and Politis 2011). Christopoulos et al. (2014) will try to investigate the long-term spillover effect in the European markets represented by Portu
25	2019	ACAD	European Research Studies	Α	В (С	at all these studies, this research will try to complete the literature review by investigate the relationship of Islamic stock markets in the short
26	2019	ACAD	European Research Studies	А	В	С	. # 5. Conclusion # The main objective of this study has been to investigate the spillover effect and correlation among Islamic stock indices in I
						T	

Compare Words

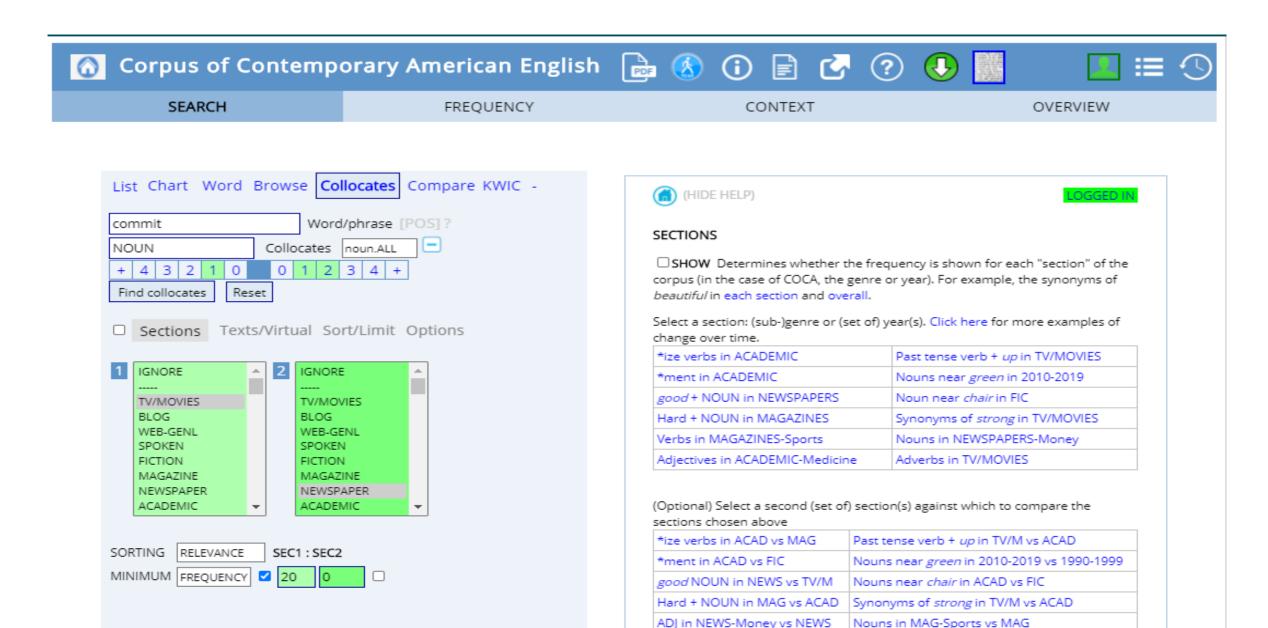






Collocations

Words that commonly go together

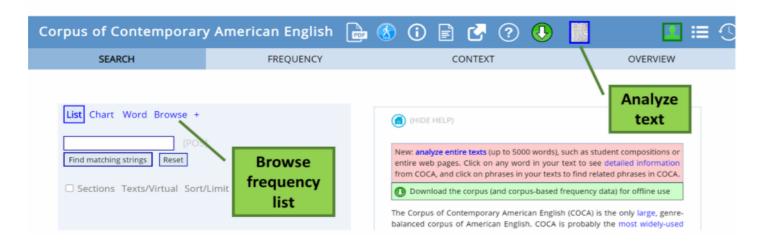


ADJ in ACAD-Medicine vs ACAD | VERB + up in 2010-2019 vs 1990-1999

2. Word and Phrase (Davies, 2011-)

WordAndPhrase has always been based on data from the Corpus of Contemporary American English (COCA).

But now it is integrated right into COCA itself.





All of the previous functionality from WordAndPhrase is still there, but much more has been added as well.

Compare the two versions

WORD AND PHRASE .INFO

MARK DAVIES | BYU | COCA CORPUS

Frequency list

	RANK #	PoS	WORD		SPOK	FIC	MAG	NEWS	ACAD
1	27000	J	EXTRACTIVE	225	19	2	43	16	145
2	27001	N	ENDOCRINOLOGIST	222	33	7	115	45	22
3	27002	N	FROLIC	207	16	57	61	52	21
4	27003	J	ATTIC	226	1	48	62	81	34
5	27004	N	VAMP	265	23	156	37	35	14
6	27005	N	NEATNESS	217	12	77	55	25	48
7	27006	3	FIELD-GOAL	236	0	5	45	183	3
8	27007	N	ARRANGER	214	46	8	62	59	39
9	27008	N	SPLURGE	260	23	19	158	58	2
10	27009	N	UNDERGRAD	233	33	38	70	84	8

SAMPLE FREQUENCY RANGE FROM TOP 60,000 WORDS IN COCA [SEE MORE]

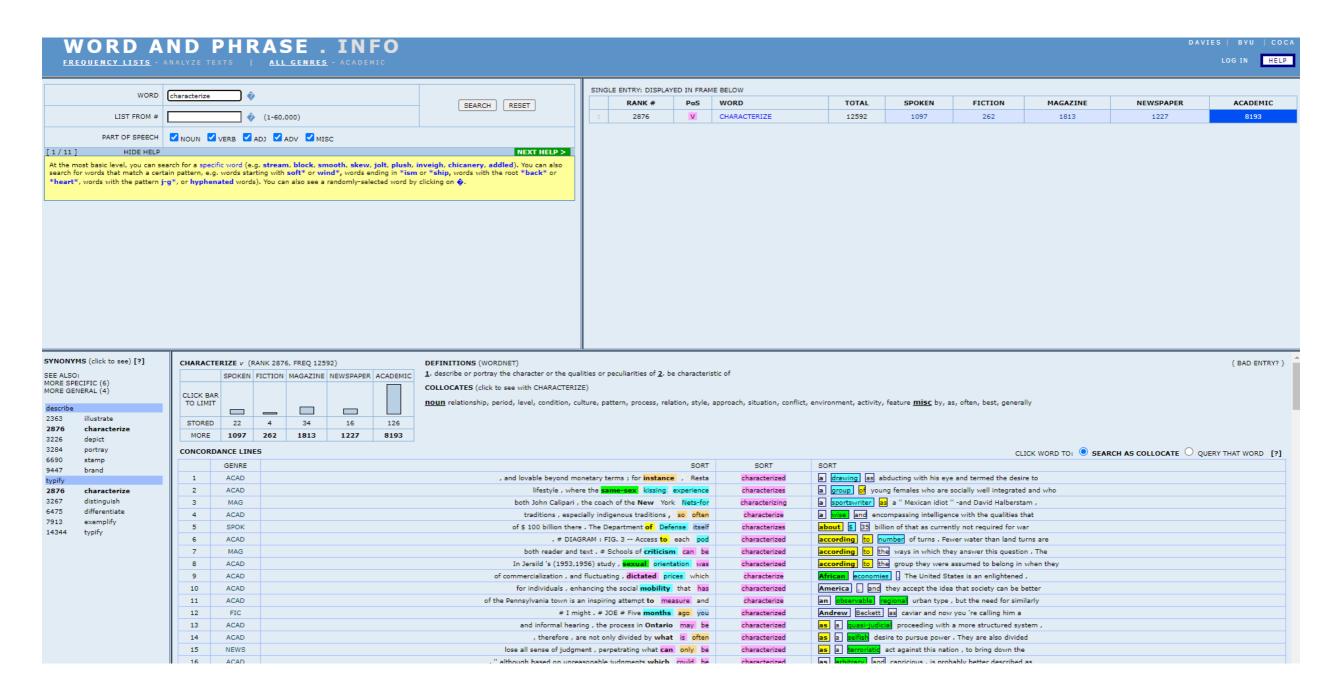
Input/analyze texts

is optimistic that there will be harmony, it also makes clear that Americans have lower expectations about what they view as particularly intractable problems facing the nation. Far fewer than half of those polled expect progress toward balancing the budget, restraining entitlement costs and reforming the way campaigns are financed. In another manifestation of the public's upbeat feeling but caution about the future, Americans give a higher rating to the way things are going in the country today than they did four years ago. But they are more uncertain about the future than they were when Mr. Clinton took the oath four years ago. Even as the ethics accusations against Speaker Newt Gingrich and the campaign finance problems that confront the Democrats draw attention away from the inaugural festivities and exacerbate partisan hostilities, 66 percent of the Americans polled said that they thought Mr. Clinton and the Republicans who control Congress would be able to work together on the most important issues. The poll of 1,307 adults

SAMPLE FROM 170,000 TEXTS IN COCA [SEE MORE] [NEWSPAPER] New York Times (1997)

NOTE: This old version of WordAndPhrase (from 2010) will only be available through Dec 2020. Please transition to the new version, which is built right into COCA itself. (More)

2. Word and Phrase: Frequency Lists



2. Word and Phrase: Analyze Texts



2. Word and Phrase: Analyze Texts

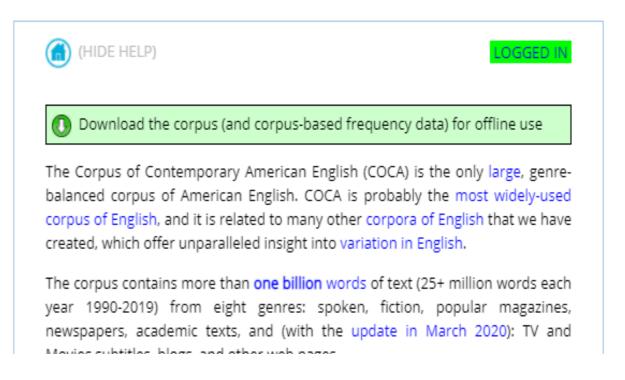
RANGE	WORDS in COCA
1	1-500
2	501-3000
3	> 3000

CHARACTERIZE v (RANK 2876, FREQ 12592)						
	SPOKEN	FICTION	MAGAZINE	NEWSPAPER	ACADEMIC	
CLICK BAR TO LIMIT						
STORED	22	4	34	16	126	
MORE	1097	262	1813	1227	8193	

2. Word and Phrase







2. Word and Phrase





Corpus of Contemporary American English

















SEARCH WORD

CONTEXT

ANALYZE TEXT

-SAMPLES- MY TEXTS

At first glance, Hermia of Midsummer Night's Dream and Jessica of Merchant of Venice appear to be similar characters. Both women run away from homes characterized by commanding fathers and absent mothers in order to marry their lovers. Patriarchy is blatantly defied in both situations, but Hermia and Jessica have very different relationships with their fathers and defy them to varying degrees. If the term defy is used in its most malignant context, it means, to renounce faith, allegiance, or affiance to (any one); to declare hostilities or war against (Oxford English Dictionary). By this definition, and assuming that more rebellion equals more success, Jessica is more successful in defying her

SEARCH CLEAR

HELP	Compare to previous WordAndPhrase (PDF)
0	Overview
0	Word-oriented functions
•	Phrase-oriented functions



You can always get to this page by clicking this icon above.

You can enter any text that you would like in the form at the left -- for example, a paper that you've written, or a newspaper article that you've copied from another website. After inputting the text, you can then see useful information about words and phrases in that text, based on data from COCA.

First, it will **highlight** all of the medium and lower-frequency words in your text and create lists of these words that you can use offline. This **frequency data** can help language learners focus on new words, and it can allow you to see "what the text is about" (i.e. text-specific words).

Second, you can click through the **words** in the text to see a detailed "word sketch" of any of the words -- showing their definition and their translation (in more than 100 languages); links to pronunciation, images, and videos; related topics, collocates, "clusters" (2, 3, and 4-word phrases); and concordance lines.

Finally, you can do powerful searches on selected **phrases** in your text, to show related phrases in COCA. In this way, this resource is like a "**collocational thesaurus**" to see what related phrases are most likely in different styles of English.

Just enter some text, and there will be more help files on the next page.



Corpus of Contemporary American English



















SEARCH WORD CONTEXT ANALYZE TEXT

EDIT TEXT	SAVE TEXT	WORD	PHRASE	
FREQ RANGE	1-500	501-3	3000 >3000	
1654 WORDS	54 %	10	19 %	

CLICK ON ANY WORD BELOW FOR A FULL WORD SKETCH

At first glance, Hermia of Midsummer Night's Dream and Jessica of Merchant of Venice appear to be similar characters. Both women run away from homes characterized by commanding fathers and absent mothers in order to marry their lovers. Patriarchy is **blatantly defied** in both situations, but Hermia and Jessica have very different relationships with their fathers and defy them to varying degrees. If the term defy is used in its most malignant context, it means, to renounce faith, allegiance, or affiance to (any one); to declare hostilities or war against (Oxford English Dictionary). By this definition, and assuming that more rebellion equals more success, Jessica is more successful in defying her father. This can be seen through Jessica's hostile relationship with her father, her renunciation of Judaism, and her cruel robbery of Shylock that includes trading his ring for a monkey

Jessica has a negative relationship with her father, Shylock, which Shakespeare never fully explains. In her second line of the play she declares, Our house is hell (II.iii.2, Merchant). Before she even mentions Lorenzo, Jessica speaks of her father with distain. She goes on to say, Alack, what a heinous sin is it in me/ To be ashamed to be my father's child! But though I am a daughter to his blood ,/ I am not to his manners (II.iii .16-19, Merchant). Jessica openly states that she is ashamed to be Shylock's daughter, and though she admits that her feelings are sinful, she does not show any signs of guilt or remorse. She takes comfort that she is not like her father, but she never elaborates on what she finds

(CLICK ANY WORD FOR FULL WORD SKETCH)

LOW FREQ	MID FREQ	HIGH FREQ
6: lovers	7: faith	49: of, the
5: defiance	6: successful	45: her
3: defy, defying, wedding	4: daughter, marry,	43: and
2: accusation, ashamed, blessing,	ring, success, wife	42: to
careless, consent, conversely,	3: character, scene,	29: a, is
convert, cruel, damned, defied,	upon	27: father
definition, happiness, inflicts, merry,	2: achieves, beyond,	25: in
monkey, outsider, rebellion,	certainly, choice,	24: she
renounce, severe, shrow, sin, sins,	commanding,	20: that
sympathetic, treason, unhappy,	declares, degree,	18: for
vows	enter, escape, famous,	17: not
1: absent, affiance, allegiance,	feed, herself,	14: be, his, i, it, with
alleviating, ambiguous, arbitrary,	measured, possibly,	13: as
assumption, bachelor, bait, banter,	replies, rings, risk,	12: but
beg, berate, betraying, betrays,	serious, speech, sweet,	10: he, my, this
blatantly, blind, bode, boldly, bursts,	ultimately	9: at, never
casket, ceremony, characterized,	1: accepted, actions,	8: are, away, does,
comfort, consequently, construed,	admits, applies,	have, more
converts, cruelty, damn, damnation,	approach, argument,	7: end, from, him, if, on,
defeated, defiant, disapprove,	associated, assuming,	their, when
discerning, disconnected, dispense,	barred, blame, blood,	6: both, by, gives, or,
disregard, distain, distasteful,	born, chance,	would
doomed, eagerly, egeus, elaborates,	characters,	5: after, house, man,
encompassing, entitled, exclusion,	communication,	may, one, play
false, farfetched, flesh, fopp, grave,	compare, conclude,	4; against, am, first, has,

2. Word and Phrase

Egeus's character or oppose him beyond his choice for her husband. His favor for Demetrius appears arbitrary and he lacks a valid argument against Lysander's character, family, or wealth. This portrays Hermia's defiance as less severe and more sympathetic than Jessica's.

mirth, monkeys, musicians, ne, openly, oppose, overrules, patriarchy, playful, pleads, portrayed, portrays, reaps, rebel, relent, remorse, renouncing, renunciation, resents, robbery, robs, examined, explains, fair, favor, feelings, fish, fit, flight, full, fully, glance, heart, hell, hide, husband, husbands.

remains, run, running, they, well, which 2: any, appears, becomes, being, can, could, different, each, else, even, ever, eyes,















WORD SEARCH CONTEXT ANALYZE TEXT

See in iWeb 📦 Collocates Clusters Topics Dictionary Texts KWIC





1. describe or portray the character or the qualities or peculiarities of 2. be characteristic of DMOCGE



YouGlish PlayPhrase Yarn



Translate: choose language

SYNONYMS (more)

describe characterize, depict, describe, illustrate, portray, stamp typify differentiate, distinguish, exemplify, indicate, typify

TOPICS (more)

eg, ie, correspond, consequently, correlate, empirical, summarize, similarity, systematic, explicitly, articulate, conception, subsequently, inherent, explicit, problematic, developmental, constraint, embody, linear

COLLOCATES (more)

NOUN relationship, disorder, period, condition, disease, behavior, approach, pattern

isolate, quantify, infiltrate, clone, mismanage, purify, cfs, re-imagining VERB

chronic, complex, extreme, rapid, contemporary, distinct, intellectual, intense ADJ

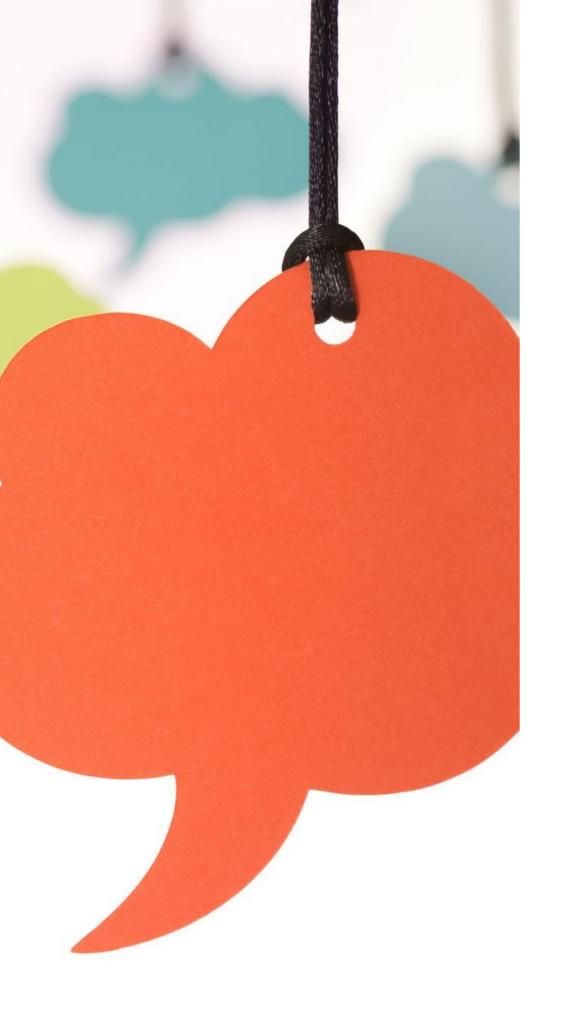
often, best, generally, accurately, typically, primarily, correctly, initially ADV

CLUSTERS (more)

characterize •	characterized by a characterized as a characterised by a characterize it a characterized in a characterized it a characterized as a characterize them
characterize	has characterized • you characterize • have characterized • would characterize • he characterized • often characterized • also characterized • had characterized
characterize • •	characterized by high • characterize it as • characterized by its • characterized by low • characterized as having • characterize it as • characterized in terms • characterized by two
	can be characterized a has been characterized, would you characterize a used to characterize a I would characterize a have been characterized at it is characterized may be characterized. Word and Phrase
characterize • • •	characterized by a high * characterized by the presence * characterized by high levels * characterized by a lack * characterized by the absence * characterized by a sense * characterized by the use * characterize it that way
• • • characterize	how would you characterize • i would n't characterize • how do you characterize • can not be characterized • can only be characterized • n't want to characterize • likely to be characterized • has come to characterize

CONCORDANCE LINES (more)

	CONCORDANCE LINES (ITIOTE)				
1	ACAD: 2017: Genetics	the available deep next-generation sequencing resources to	characterize	and identify conserved AS events across species within	
2	ACAD: 2019: Health Services Rese	for this wide , unexplained variation ; however , attempts to	characterize	and measure differences in hospital culture in relation to	
3	FIC: 2014: Bk:MurderInRetributi	still feeling their way and it was not what anyone would	characterize	as a normal marriagethey were not your average mister and missus	
4	BLOG: 2012: timwise.org	Bill Clinton , whom the right dearly loathed , never was	characterized	as a would-be dictator , whose re-election would potentially	
5	ACAD: 2001: Symposium	attachment and Mme. de Chartres . The two former elements are	characterized	as dangerous the two latter ones are associated with " safe	
6	ACAD: 1992: PublicInterest	surprise , there were very few decisions that were difficult to	characterize	as liberal conservative , or neither . I treated separation of	
7	ACAD: 2001: Symposium	such references to the double nature of Poe 's work ,	characterized	as literature qui potise la science (189).	
8	WEB: 2012: billboard.biz	cross-section of audience members , including some who could be	characterized	as plus-size # The episode also generated another	
9	ACAD: 1994: Environment	dates for their achievement , although these are realistically	characterized	as tentative . To aid measurement of progress toward a	
10	SPOK: 1992: PBS_Newshour	around him , civilians and bystanders that Israel will probably	characterize	as terrorists , including the six year old son of that man	
11	MAG: 2013: NewRepublic	she called it , is not what the philosopher S0ren Kierkegaard	characterized	as the shut-upness " and solitariness of the civilized . Nor	
12	SPOK: 1999: CBS_Early	by the press more than the substance . CLAYSON : So	characterize	beyond what political writers are talking about this campaign	
13	MAG: 2006: ArtAmerica	exhibition of 20 sculptures and 20 works on paper . In	characterizing	Bourgeois 's oeuvre , Larratt-Smith wrote in the catalogue , "	
14	BLOG: 2012: greenbookblog.org	l can remember , the 2012 presidential election has been	characterized	by a growing overabundance of polls , poll results , and	
15	WEB: 2012: nps.gov	Staircase . " Such exemplary stair-step river morphology is	characterized	by a large variability in river movement and flow , from	
16	ACAD: 2005: HealthSocialW	percent from Asia and Africa) . Medically , they were	characterized	by a relapsing-remitting disease course (73 percent) and mean	
17	ACAD: 2002: Symposium	break with tradition as a distinct mode of experimental writing	characterized	by a resistance to metaphor and a decisive embrace of the	
18	ACAD: 2017: The American Journal	modified version of the ongitudinal pancreaticojejunostomy	characterized	by a side-to-side anastomosis between a surgically opened main	
19	MAG: 2019: News-Medical.net	heart attack . # Sleep disordered breathing (SDB) is	characterised	by abnormal respiratory patterns or pauses in breathing during	
20	ACAD: 2007: AsthmaAllergy	thus , the airway wall of patient with asthma will be	characterized	by an increased thickness and a markedly and permanently	
21	ACAD: 2005: HealthSocialW	A pattern emerged of coping and adjustment over time that was	characterized	by an initial high level of anxiety , which motivated the parents	
22	ACAD: 2014: LangSpeechHearing	lead to decreases in their use . Seven children with SSD	characterized	by stypical error pattern use , ages 3 ; 0 (years	
23	ACAD: 2019: Health Services Rese	we conclude that a culture that supports vaginal birth is one	characterized	by belief in the value of vaginal birth both for its	
24	MAG: 2012: ChristCentury	, the professors believed , envisioned harmonious families	characterized	by companionate marriage , a somewhat elevated role for women ,	
25	ACAD: 1991: CommCollegeR	cultural events " (p. 112) . # A century	characterized	by dramatic changes in the types of postsecondary educational	
26	MAG: 1992: Essence	the skull may be a factor . " Cluster headache is	characterized	by excruciating pain localized in the eye and radiating to the	
27	ACAD: 2013: ReadingImprovement	beginning with familiarization , the most basic stage , which is	characterized	by first interactions with technology and learning basic	
28	MAG: 1990: Conservation	" with stunted and ill-thriven pines , as the region was	characterized	by George Washington , once stretched for nearly 60,000 acres	
29	ACAD: 2017: Human Organization	younger men and women facilitated emigration from regions	characterized	by goat herding economies . Limited employment options and risk	
30	MAG: 2007: MotherEarth	can do harm . For instance , first-generation antihistamines (characterized	by greater drowsiness) were designed to reduce nasal	
31	ACAD: 2019: Journal of Emergenci	others were given due weightage for their authenticity , SCI is	characterized	by oss of motor , sensory , and autonomic function with partial	
32	ACAD: 2014: PhysicalEduc	to other participants , one urban teacher 's profile was	characterized	by scores in three CLASS domains , relatively high	
33	WEB: 2012: blog.garrytan.com	83335 # By definition , inflection points are	characterized	by maximum weakness . # Many US economic readings are again	
34	ACAD: 1991: CommCollegeR	or organization . This study defines a team as an entity	characterized	by people who understand and accept their roles and how they fit	
35	ACAD: 2015: ClinicalRehab	? 0.27) . Short-term persistence followed a similar pattern	characterized	by significant increases in the Nine-hole Peg Test performance	

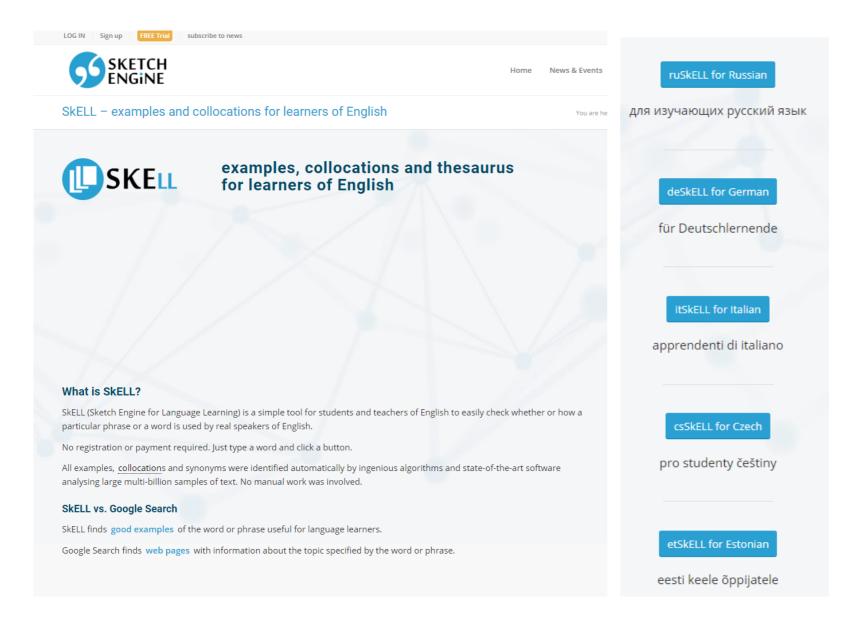


Reflect: Activity Ideas

- Analyze readings to assure level-appropriate vocabulary use
- Analyze student writings for vocabulary use
- Create activities for target vocabulary

3. SkELL (Baisa & Suchomel, 2014)

SkELL: https://www.sketchengine.eu/skell/





3. SkELL

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



Sketch Engine for language learning



ABOUT SKELL



SkELL: Examples



acclaimed 8.08 hits per million



- 1. The game has been critically **acclaimed** since release.
- 2. Thornton has had many acclaimed movie performances.
- 3. The highly acclaimed 24 hour news and current affairs channel.
- 4. The museum also features acclaimed international exhibitions.
- The soundtrack was critically acclaimed by critics.
- The website acclaimed the "perfect" difficulty level.
- 7. Both collaborations were eagerly awaited and critically acclaimed.
- 8. The character has been acclaimed by critics.
- The anime adaptation has also been critically acclaimed.
- The movie has been widely acclaimed by critics.
- The film has also been highly acclaimed overseas.
- The film was acclaimed and won prestigious national awards.
- The release was widely acclaimed by critics.
- 14. The film was widely acclaimed by major critics.
- The band quickly became widely acclaimed under his direction.
- 16. Both movies were critically and commercially acclaimed.
- 17. The album was critically and commercially acclaimed.
- Industrial metal groups have produced many acclaimed music videos.
- 19. The university boasts many nationally acclaimed academic colleges and programs.
- The critically acclaimed album reached double platinum certification in 2008.
- 21. The show was both acclaimed and commercially successful.
- 22. Both versions were critically acclaimed and commercially successful.
- 23. The production was extraordinarily profitable and highly acclaimed.
- 24. The film was highly acclaimed around the world.
- Her critically acclaimed songwriting has already turned heads across the globe.

SkELL: Word Sketch

acclaimed

adjective *



Show context

words with property acclaimed

- performance performance was critically acclaimed .
- film
 - the film was critically acclaimed

modifiers of acclaimed

- critically critically acclaimed
- internationally internationally acclaimed
- nationally
 - nationally acclaimed highly
- universally
- highly acclaimed universally acclaimed
- widely

widely acclaimed

nouns modified by acclaimed

- filmmaker acclaimed filmmaker
- author acclaimed author of
- acclaimed album album
- drama acclaimed drama
- documentary acclaimed documentary
- novel acclaimed novel
- biography acclaimed biography of
- chef acclaimed chefs
- film acclaimed film
- writer acclaimed writer
- an acclaimed poet poet
- musician acclaimed musicians
- artist acclaimed artists
- actress acclaimed actress
- series acclaimed series

words and

- award-winning acclaimed and award-winning
- successful critically acclaimed and commercially successful
- popular critically acclaimed and popular
- independent critically acclaimed independent
- first
- critically acclaimed first

acclaimed British

- British
- acclaimed new
- acclaimed American American

or acclaimed

- successful successful and critically acclaimed
- popular popular and critically acclaimed
- much the much acclaimed
- several critically acclaimed several
- 's acclaimed
- many acclaimed many
- other other acclaimed

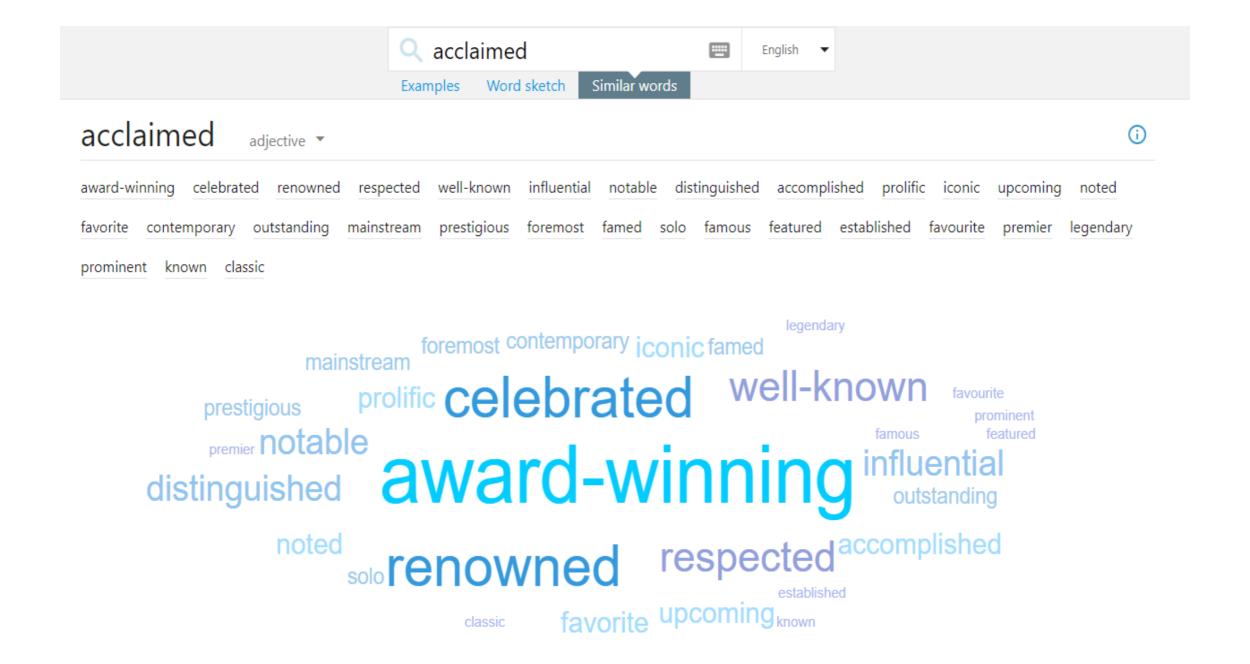
62

verbs with acclaimed

become became widely acclaimed

was critically acclaimed

SkELL: Similar Words





Reflect: Activity Ideas

Offline Corpora and Concordancers

English Spoken Corpora

- London-Lund corpus (Conversation, interviews, news broadcasts)
- Longman corpus (American and British conversation)
- BNC (British conversation and planned speech)
- Hong Kong Corpus of Spoken English (various registers)
- T2K-SWAL (university classroom teaching, office hours)
- MICASE (teaching, office hours, presentations, study groups, service encounters)
- LINDSEI (learner corpus of interviews)
- Switchboard (telephone conversations)
- Santa Barbara Corpus

English Written Corpora

- Corpus of Journal Articles (CJA)
- Corpus of Historical American English (COHA)
- British Academic Written English Corpus (BAWE)
- British National Corpus (BNC)-Spoken and Written
- Business Letter Corpus
- Michigan Corpus of Upper-Level Student Papers (MICUSP)
- State of the Union Corpus
- Time Magazine Corpus
- Wikipedia Corpus

Corpora in Other Languages

- https://www.sketchengine.eu/corpora-and-languages/ (Links to an external site.)
- https://www.ldc.upenn.edu/new-corpora (Links to an external site.)
- http://fa.persianspeechcorpus.com/

Learner Corpora in Other Languages

• The Multilingual Academic Corpus of Assignments – Writing & Speech (MACAWS; Staples et al., 2019)

https://sites.google.com/email.arizona.edu/macawswebinar/home



https://l2trec.utah.edu/multi-Lingual_Speech_Corpus.php





Coming soon:

• The Written Corpus of Utah Dual Language Immersion (CUDLI)

https://l2trec.utah.edu/corpus-of-utah-dual-language-immersion/

Concordance Programs

WordSmith MonoConc AntConc

(Anthony, 2019)

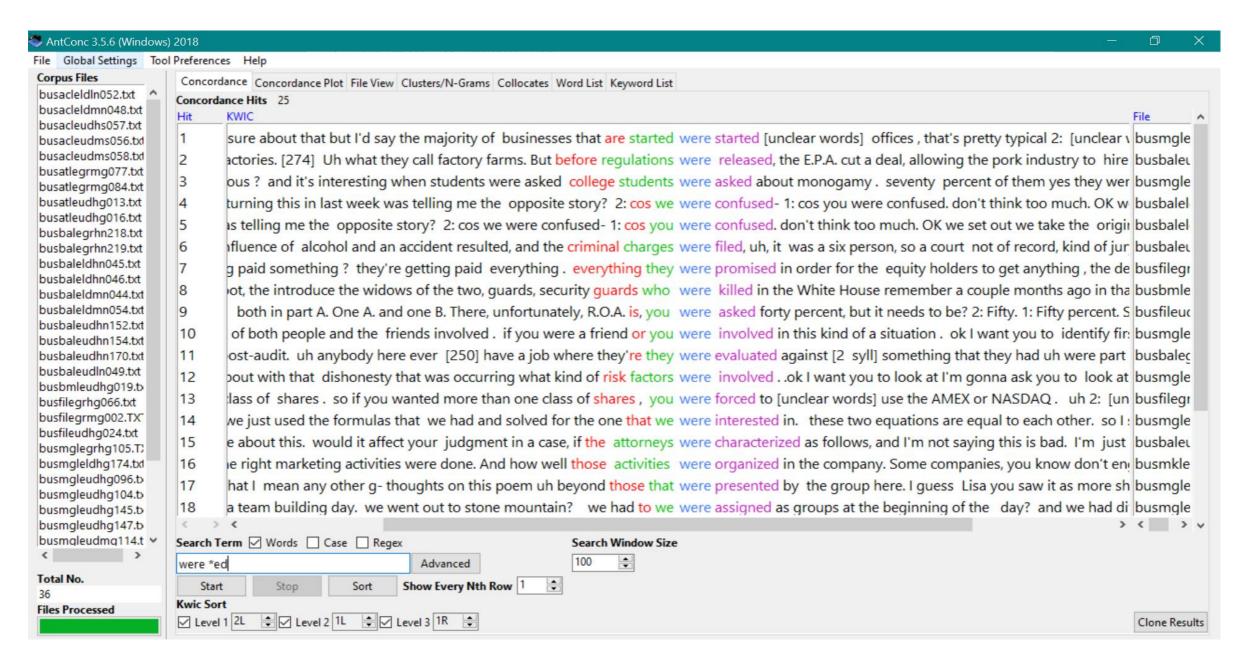
- Word lists frequency & alphabetic
- Concordances KWICs (Key Word in Context) sorting; case; wildcards;
 regular expressions

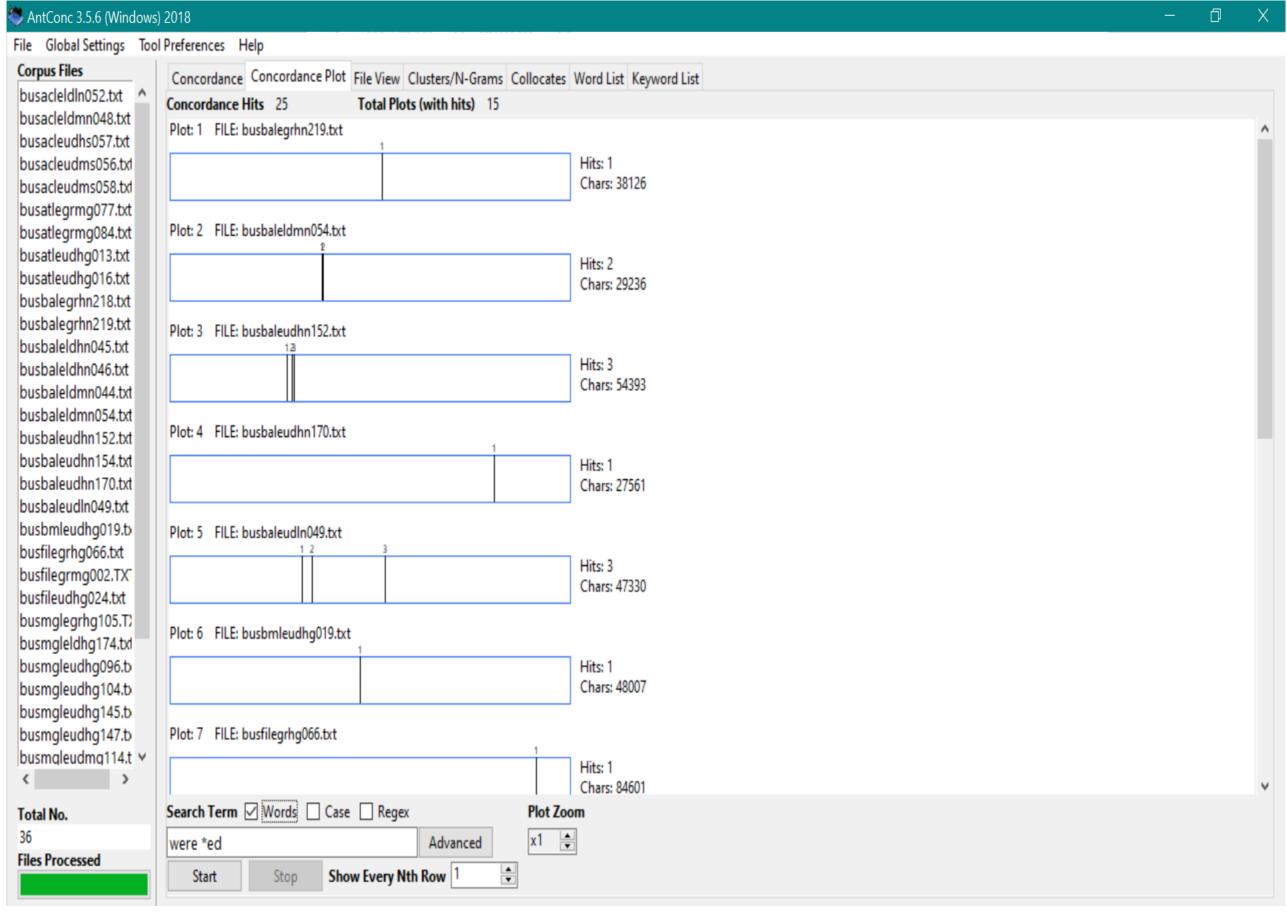


- Distributions
- AntConc tutorial videos by Laurence Anthony
 - https://www.youtube.com/playlist?list=PLiRIDpYmiC0Ta0-Hdvc1D7hG6dmiS_TZj

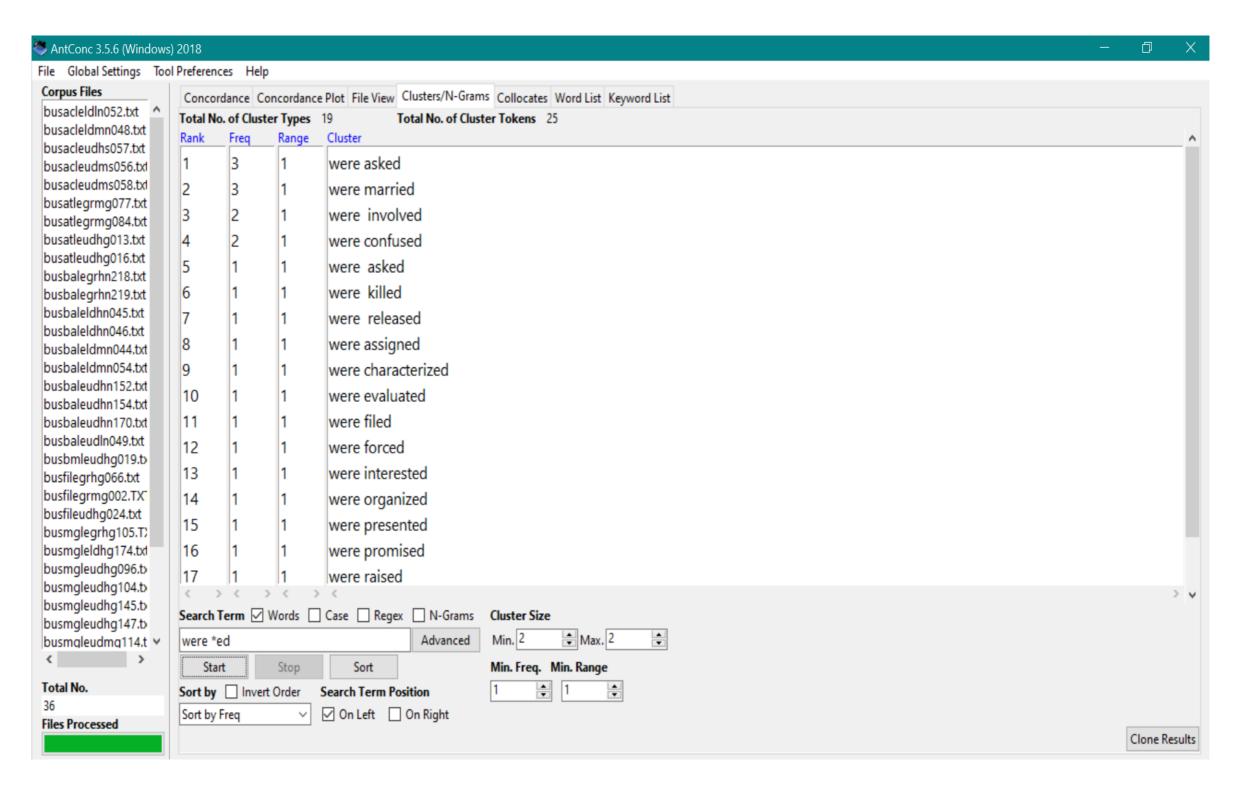
AntConc

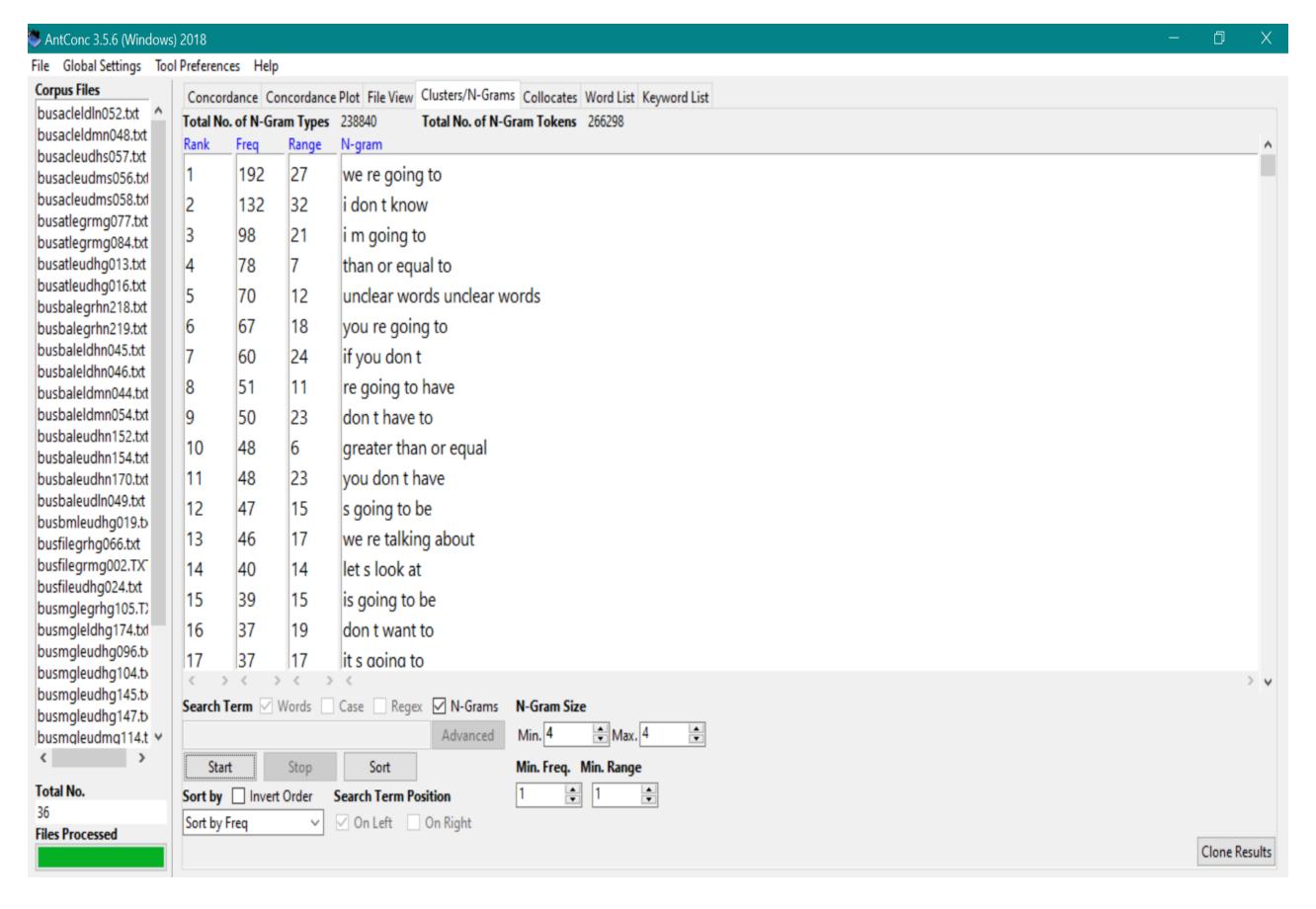
- See the distribution across texts and within texts
- Example: Passives (were *ed)





N-grams/Clusters/Lexical Bundles words that co-occur





Checklist for Developing Activities (Reppen, 2010)

- Know what you want to teach!
- Select the best corpus resource for your lesson.
- Explore the corpus **completely** for the point you want to teach.
- Have complete and easy to follow directions
- Provide a variety of ways for interacting with the materials.
- If you are using computers ALWAYS have an alternative plan or activity.



QUESTIONS?



L2TReC Webinar Series

Corpus Linguistics for Language Teachers: An Introduction

Speaker: Dr. Elnaz Kia

Friday, March 5, 2021, 4:00-6:00 PM MST

