## SHORT ESSAY #2 - "How Congress Talked About the Environment II"



What's exciting about this challenge: This is another powerful approach to figuring out what people in Congress actually said.

**The challenge in a nutshell:** take the next steps in analyzing how Congress talked about the environment, 1970-2010. Begin by reviewing the assigned reading from *The Dangerous Art of Text Mining*, Chapter 12 and Naomi Oreskes' *Merchants of Doubt*. You will investigate the "moral discourse" about environmentalists in the speeches of members of Congress, i.e., how words such as "despoil" or "kook" were used during the peak moments of 1970-5 and 2005-9.

What's challenging about this challenge: The word embeddings table below (Table 1) shows the terms that most frequently were co-located with the keyword "environmentalist" for each five-year period between 1970 and 2010. You will choose one term from Table 1 to investigate in detail. Your challenge is to interpret with meaning and accurate *how* that term was used in any periods in which it appears on the table, as it coincided with the keyword "environmentalist." What sorts of arguments, norms, beliefs, and ideas were those words used to convey?

1970	1975	1980	1985	1990	1995	2000	2005
pollute	unconcerned	ardent	esthetics	alike	elitist	cash cow	enthusiast
vociferous	overly	combative	scenic	extremist	despoil	pollute	populist
despoilation	vociferous	supporter	avid	ideologue		backer	alarmism
loudly	vehemently	intensely		overzealous		dupe	advocate
bandwagon	death_knell	vociferous		adamantly		despoil	alike

alarmist	irreconcilable	naysayer	elitist	kowtow	pristine
adamantly	selfish	recreation	academician	elitist	pander
kook	extremism	outcry	supporter	demonize	frenzy
zealot	despoil		pollute	extremist	activist
howl	vociferously		Stirred up	special interest	cozy
crazy	opponent			pristine	denier
selfish	lock_up			advocate	hardheaded
vigorously	gullible			ardent	populism
retort	uninformed			alarmist	dirty
hesitant	promoter			vilify	zealot
vehemently	spout				lover
critic	alike				rabid
crusade	pressure_group	)			vociferously
quibble	overzealous				alarmist
unconcerned	special_interest				
	yell				



Table 1: The Moral Discourse Associated With the Word 'Environmentalist,' U.S. Congress, 1970-2009

Your interpretation should take into account the fact that that congressional speech is often "contested" -- meaning that people talk in Congress because they disagree with each other. For instance, one reason why the word "kook" appears with the keyword "environmentalist" with frequency is that one party might refer to environmentalists as "kooks," while their opponents may retort that they are "not kooks." A high count doesn't necessarily mean that everyone agrees that environmentalists were kooks; indeed, a high word count is likely to signal that parties strongly disagreed about the kookiness of environmentalism.

Such insights are hard to get at with text mining alone, i.e. without reading. The challenging part of this exercise is the reading – there is potentially a lot of it to boil down. Excerpting a few sentences at random will cause you to fail the assignment. You need to read everything and summarize meaningfully.

Where to get the data: The notebook "hit3368-short-essay-2.ipynb" allows you to take any 5-yr period, filter it for "environmentalist\*" and "kook" in the speech, produce list of speeches, and save them as a .csv file.

You will need to change the code to reference the term of your choice from Table 1 and the

periods of time appropriate for finding your term, also visible in Table 1.

You will use the code from the 'KWIC' notebook to produce a KWIC for environmentalist + the term of your choice. To do this, you will need to cut and paste elements of the 'KWIC' notebook into the notebook for searching for 'environmentalist' + your term.

You will count lemmas and ngrams where your term appears in the debates of Congress, 1970-2010.

Using code examples from the notebooks on 'counting,' 'lemmas,' and 'ngrams,' you will make a bar plot of the words that co-occur with your term of choice, both collocates from the same speech and words that are in the same n-gram as your term.

You will embed the two figures produced into your essay, labeling them, and referring to them in the text. You should describe in words what you see in these figures. Some elements of these figures should factor into your conclusions about how the term of your choice was used in discussions of environmentalists.

**Length and format:** 4-6 pages, double-spaced, excluding visualizations. Embed visualizations in word document and label their axes, providing a title like "Figure 1." In the paper's introduction, detailed prose should explain what Figure 1 is and describe *all* of the data in Figure 1. In the paper's body, detailed descriptions should both quote *and* summarize all appearances of the keyword-term combination in the relevant time periods, comprising a series of well-structured paragraphs whose introduction and conclusion sentences draw insight from the speeches. All quotations should be cited in Turabian format, giving the location in the original primary sources of the quotation.

The paper's conclusion should include observations about the role of each keyword-term pair in American politics, including an examination of how the two periods differ over time. Pages should be numbered.

Points 10

**Submitting** a file upload

File Types doc and pdf

Due For Available from Until

Feb 25 Everyone

First Short Essay								
Criteria		Ratings						
prose style  Text is formed into sentences and paragraphs which are well structured and well punctuated. Paragraphs have introductory and conclusion sentences that state arguments, in between which are factual observations that refer to the original text, the data analysis, and the visualization. There is a brief introduction and conclusion that make an argument about why this analysis is important and what you learned from looking at the data.	2 pts Full Marks	1.2 pts ok missing one feature of the criterion	1 pts wanting missing more than one feature of the criterion	0 pts No Marks Serious wanting in this category	2 pts			
An argument is made about change over time.  An argument should be made about how the speaker's use of the keyword changed over time.	2 pts Full Marks	1.2 pts ok	1 pts ok 2 missing more than one feature of the criterion	0 pts No Marks	2 pts			
Information shown in table is integrated into essay  Details from the tables should be explicitly referred to in such detail that an individual reading the essay can easily follow along.  Words and short passages should be quoted in the process of making an argument about how the speaker's use of the keyword changed over time.	1 pts Full Marks	0.6 pts ok	0.5 pts ok 2 missing more than one feature of the criterion	0 pts No Marks	1 pts			
All historical facts and quotations are properly cited  Every historical fact and quotation needs a footnote	1 pts Full	0.6 pts ok	0.5 pts ok 2	0 pts No				

citation in Chicago Turabian "notes" style explaining where the word first appeared, who said it, where, and when, so that a skeptical reader could look up your argument and become themselves convinced that the facts are true.	Marks		missing more than one feature of the criterion	Marks	1 pts
Two to three well-formatted tables condense information about how the keywords are used at two to three important points in each speaker's career 2-3 tables, each referring to a period in the speaker's career, should be made available to reader of a word document: embedded in the document, labeled "Table 1" etc., given a title that explains where the data is from, and referred to by name in the prose. The keyword should be bolded. Each line of the table should contain one sentence or two showing how the keyword was used.  The point of the table is to provide skeptical readers with an easy, visual demonstration that the analyst isn't just reading numbers and making arguments. The table shows that the analyst knows how the keyword was actually used in context.	2 pts Full Marks	1.2 pts ok	0.8 pts ok 2 missing more than one feature of the criterion	0 pts No Marks	2 pts
Strong Support is Given to Each Argument in the Form of Facts  The argument about change over time should be supported by detailed facts. The facts will come from carefully reading the full speeches from the 2-3 points in time you have chosen.  Your facts should include each of the following:  - summaries of speeches what was the speaker arguing? why did he use the keyword in this argument?  - explanations of the speech's historical context, for instance, what bill or scandal motivated this speech.  - short, quoted passages where the speaker powerfully gives the thrust of their argument in language that is worth repeating (for instance, if the speaker explains that environmentalists have been "deeply irresponsible," this	2 pts Full Marks	1.3 pts ok	0.8 pts ok 2	0 pts No Marks	2 pts

language is powerful enough to quote). Do not include long quotations in a short paper.					
		Total Points: 10			