

Analysis

There are many interesting differences between Democratic and Republican speech in the Senate throughout 2020 that can be found in their respective bigram frequencies. However, looking only at the most frequent bigrams among each group, there is little of great interest, other than that Republicans apparently love to use the phrase 'unanimous consent'. Both Democrats and Republican, unsurprisingly say 'United States' frequently. But what I believe to be of real interest is the ratio of the usage of certain phrases between the political groups.

Surprisingly, Democrats used the phrase 'Trump Administration' 203% more than Republicans. Less surprisingly, Democrats used phrases related to government programs and humanitarian causes more than their Republican counterparts. Democrats used the phrase 'public health' 110% more than Republicans, 'trade agreement' 110% more frequently, 'local governments' 108% more often, 'police departments' 66% more often, and 'human rights' 40% more often. Also, unsurprisingly, Republican speech reflected a hyper-focus on nationalism and privatization. Republican's used the phrase 'great American' 263% more often, 'American outdoors' 262% more often, 'outdoors act' 260% more often, 'public lands' 121% more often, and 'world war' 66% more often.

	bigram	dem	rep	rep_perc
54	great_american	69	251	2.637681
58	american_outdoors	67	243	2.626866
62	outdoors_act	64	231	2.609375
76	national_parks	54	193	2.574074
9	unanimous_consent	356	1218	2.421348
73	speaker_pelosi	58	190	2.275862
72	national_park	58	181	2.120690
90	protection_program	44	117	1.659091
83	paycheck_protection	48	124	1.583333
46	conservation_fund	84	201	1.392857
43	water_conservation	89	210	1.359551
101	inspector_general	40	91	1.275000

Figure 1 Highest percentage Republican bigrams

	bigram	dem	rep	dem_perc
	trump_administration	221	73	2.027397
	donald_trump	162	55	1.945455
	senate_republicans	140	56	1.500000
	trump_'s	264	113	1.336283
	war_powers	122	55	1.218182
	public_health	401	191	1.099476
	trade_agreement	130	62	1.096774
	local_governments	175	84	1.083333
	police_departments	95	57	0.666667
	president_'s	580	394	0.472081
	president_trump	969	669	0.448430
	human_rights	78	56	0.392857

Figure 2 Highest percentage Democrat bigrams.

Some of the most telling divisions came from phrases only used by one party or the other. During the time period of this data, which I will remind the reader was in 2020 during the height of a global pandemic, the phrase 'health crisis' was used 129 times by Senate Democrats and not used a single time by Senate Republicans. Republican's also never uttered the phrase 'health insurance' while their counterparts did 85 times. Absent amongst senate republican's vocabulary was the phrase 'climate change' during a time that saw devastating wildfires in Australia and 100-

year floods in the United States. Similarly, the phrase 'civil rights' was used 172 times by senate Democrats and not used once by Republicans, all while American's filled the streets to protest law enforcement killings of unarmed African Americans.