Computational analysis of 140 years of US political speeches reveals more positive but increasingly polarized framing of immigration

Immigration is one of the most important and divisive topics in American public life. From the rise of vocal antiimmigrant politicians in recent years, it is tempting to conclude that attitudes toward immigration are more negative—or at least more polarized—than ever before. We instead turn to the Congressional Record and other sources of political speech, using quantitative text analysis methods to systematically investigate the language used in congressional and presidential speeches about immigration over the past 140 y. Background For the 43rd through the 111th sessions of Congress, we used a digitized copy of the Congressional Record from Gentzkow et al.. For the 112th throughthe116thCongress, we used the "congressional-record" tool provided by the @united states project to download and extract the text of the Congressional Record from public HTML files. Data For presidential communications, we downloaded all available presidential documents from The Materials American Presidency Project. For immigration statistics, we combined data from table Ad354-443 of the Historical Statistics of the United States Millennial Edition Online and census data compiled by the Migration Policy Institute. First, average sentiment toward immigration in Congress and the executive branch is negative throughout the late 19th and early 20th centuries Second, attitudes toward immigration became more positive around the start of WWII, rising steadily from 1940 until the end of the Johnson administration (1969). Third, beginning about a decade after the reopening of the border with the 1965 Immigration and Nationality Act, there has been a growing partisan divide, larger year-toyear variations, and an overall decline in sentiment toward immigration among Republicans. In recent years, presidents have been Tone of Immigration Speeches uniformly more proimmigration than the average member of Congress, including both Republicans like Ronald Reagan and Democrats like Jimmy Carter. Speeches mentioning Chinese immigrants were overwhelmingly negative during the period of Chinese exclusion (1882 to 1943), while the tone toward Italian immigrants was slightly more favorable (yet still negative) at the time. Attitudes toward all groups improved from Although the difference in tone between the 1940 to 1970, with mentions of Chinese and parties today is larger than at any point in the Mexican immigrants remaining relatively more past, tone also varies dramatically depending negative overall. on which groups of immigrants are being discussed. Mentions of Italian immigrants are overwhelmingly positive today, but since the late 1970s, the average gap in tone between speeches mentioning Mexican as opposed to Italian immigrants has remained approximately as large as the gap in tone that exists between Republicans and Democrats To better understand the language that is suggestive of proimmigration or antiimmigration tone in the full corpus of immigration speeches, we train interpretable logistic regression models to approximate the predictions of our contextual embedding models and determine feature importance using Shapley values. Language In order to understand the rhetorical divergence between parties in terms of how they characterize immigration at a more general level, we focus on several important aspects (i.e., frames) of the debate on immigration. As a direct and transparent way of measuring the prevalence of these frames, we build and share a series of lexicons for this Framing Language, Framing, and Dehumanization In addition to these frames that appear explicitly in the text, we also measure more implicit dehumanizing metaphors. To be able to study more subtle dehumanizing language, we develop a way of measuring metaphors based on how probable such terms are as substitutes, according to contextual embedding models (Identifying Mentions and Measuring Dehumanization). Dehumanization As shown above, the differences in tone between mentions of immigrants of different nationalities can be as large as the modern Differences by Country of Origin differences between parties.

Not only has party polarization been growing steadily over time, attitudes among Republican legislators are as negative toward immigration as members of Congress were during the push for restrictive quotas. Moreover, although Chinese immigrants are spoken of in largely favorable terms today, they are still discussed more negatively than immigrants from Europe.

Discussion

Results

The United States truly is a nation of immigrants, with a complicated history that is both celebrated and condemned, but attitudes in Congress reveal that nationality and geography remain important factors in who is considered, by the US government, to be a desirable as opposed to undesirable part of the population.