Emily Bogen

Zach Horton

Project Seminar

Graph Over Time:

"National Debt" and the 1982 Recession

For this week's mini project, I focused on the graph of "national debt" between 1864 and 2016. I selected this graph out of several others based on its irregular shape. While the graphs for "public," "jobs," "political parties," and "social welfare" seemed to follow particular patterns—be it a consistent increase, decrease, or bell curve—"national debt" did no such thing. Rather, there was a spike in the topic followed a dramatic drop, and then a relative balancing out. I thought, then, that there must be some more complex reasons for such volatility and was curious as to what they might be. With that in mind, I began a bit of research. The jump begins in 1980 and continues until 1984—this is, for the most part, during Ronald Reagan's presidency. While Jimmy Carter was president until 1981, the majority of the graph's incline occurs while Reagan holds office. In order to find out more about possible causes of this increase in dialogue regarding national debt, I researched what the debt actually was during that period of time. I had assumed that a rise in mentions of the topic would imply a major jump or decrease in the national debt—why else would it be such a major talking piece? As it turns out, this was not the case. Rather, the cumulative national debt in 1980 was $907,701,000,000 and $1,572,226,000,000 in 1984. That is, while the debt grew, the increase was not so

much more significant than other years as to imply this change in focus during presidential campaigns.

After having come up dry, I continued to research, hoping for some tipoff as to what might've occurred. As it turns out, the United States was right on the brink of a recession—it officially began in 1982, but the year before laid the foundation for such an economic downturn. In 1982, the GDP fell 6.4% in the first quarter, and in 1983 unemployment peaked at 10.8%. in 1984, the graph declines significantly. Though not technically referring to national debt and seemingly not in direct connection with it, this information gave the impression of being significant in relation to my graph. After much consideration, I came to the conclusion that this recession, along with the Iran oil embargo from 1981, must have something to do with the national debt graph—both in its severe incline and decline stages. Still, I didn't quite understand how the two were associated. Finally, I remembered how the topic modeling algorithm worked. In order to come up with justifiable conclusions in this research process, it's important to keep in mind how the topic modeling tool functions; after coming up with several clouds of words that seem to occur in a similar sphere, the class labels the clusters which words that seemed appropriate. That is, thought the algorithm figures out which clusters seem related, *we* determine what to call them. In my mind, this means that we may have mislabeled the cluster. With this in mind, I decided to take a second look at the word cluster—it included the following: "president years tax audience congress spending members taxes increase budget cut back control business reduce choice deficit rates bill laughter." After a closer look at the cloud, it seemed to me that, more than

anything, we may have mislabeled the topic. Instead of being called "national debt," it might have something to do with the recession, how tax rates would be effected, what budget cuts in public programs might look like (as well as school systems, etc.). This may not be the case—there are likely several other explanations for the outcome that are justifiable and worth exploring—but after research and analysis, such is my conclusion.