Tools and Methods A5

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Request: The semantics of the presidential language

What patterns can we discern in the key terms used in Obama's and/or Trump's Twitter rhetorics: a change over time, a contrast in word preferences between the two former presidents, an introduction of new word meanings, etc. Compare those key terms / collocations with the word embeddings of these terms represented in TensorFlow's Embedding Projector. Write a brief essay (800 words max) in which you propose an interpretation of your findings substantiated by the data and visualisations offered by either Voyant or TensorFlow.

The data used are Obama's tweets between 2011-2016 for Twitter and Trump's tweets between 2011-2019.

The employment rate has always been a sore point in the US. This article will focus on the changes in employment rates during Obama's (2008-2016) and Trump (2017-2021)'s time in office. We tried to find out from Twitter, but did more people lose their jobs during their inauguration? Has the gap between rich and poor narrowed? Because the narrowing of the gap between rich and poor is generally considered an important factor in social stability. Trump's term actually ends in 2021, but the lack of data on the situation after 2019 may have affected the statistics due to Covid-19. When they are in a campaign, they sell themselves with the words 'tax, jobs etc.'

(Data from Forbes)

The previous and updated job growth yearly totals for Obama's last six years in office after the Great Recession and Trump's first three years, along with the revisions, are:

2011: 2.075 million fell to 2.074 million, down 1,000 jobs

2012: 2.174 million fell to 2.176 million, up 2,000 jobs

2013: 2.302 million fell to 2.301 million, down 1,000 jobs

2014: 3.006 million fell to 3.004 million, down 2,000 jobs

2015: 2.729 million fell to 2.72 million, down 9,000 jobs

2016: 2.318 million increased to 2.345 million, up 27,000 jobs

2017: 2.153 million fell to 2.109 million, down 44,000 jobs

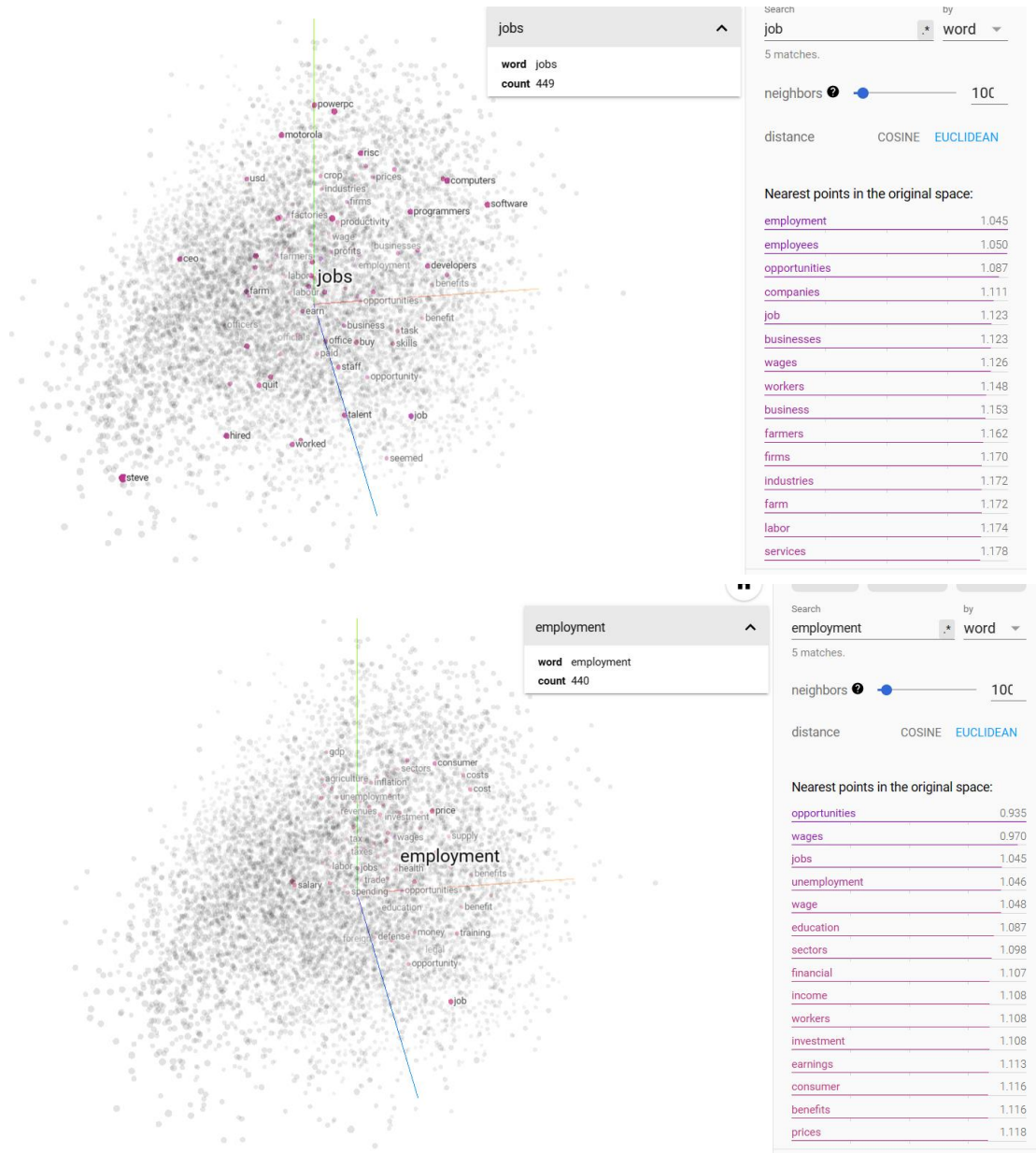2018: 2.679 million fell to 2.314 million, down 365,000 jobs (Trump's year)

2019: 2.115 million fell to 2.096 million, down 19,000 jobs

Trump's bragging about how many jobs he has added does not include the fact that he created 6.5 million jobs during his presidency, while Obama created 8.1 million jobs in the same time frame, 1.6 million less than Obama did in the same time frame. Obama created an average of 43,000 more jobs per month than Trump.
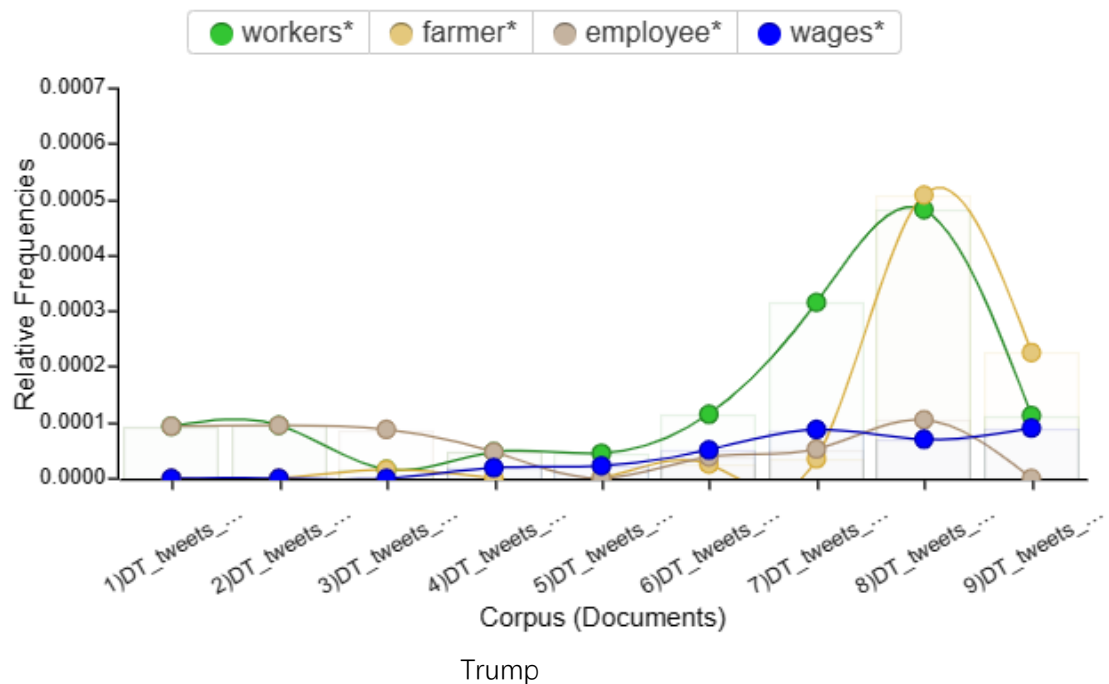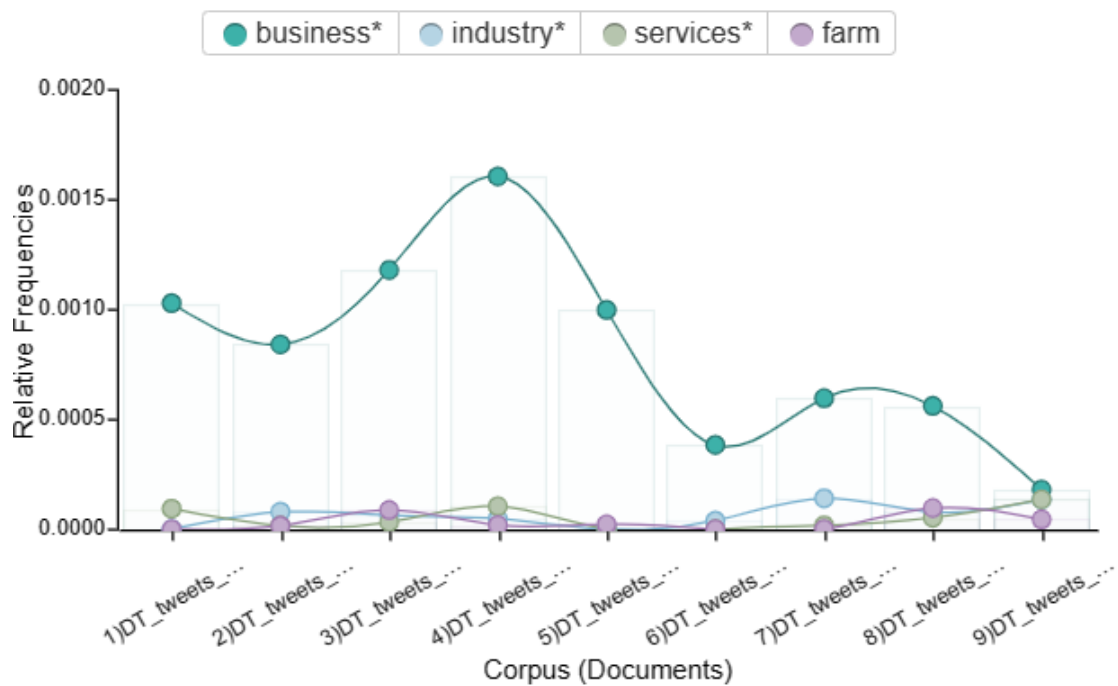
But that's also not a very fair comparison; the immediate Trump administration may have

had a better record than the previous president, but it wasn't too lucky that a three-year epidemic got him impeached twice.

1. TensorFlow Embedding Projector

First, we looked for the most relevant words "job" and "employment" from the TensorFlow Embedding Projector. The probability of "employment" was high, being the first and third most relevant words. A few words were selected and placed in the Voyant corpus of Trump and Obama.
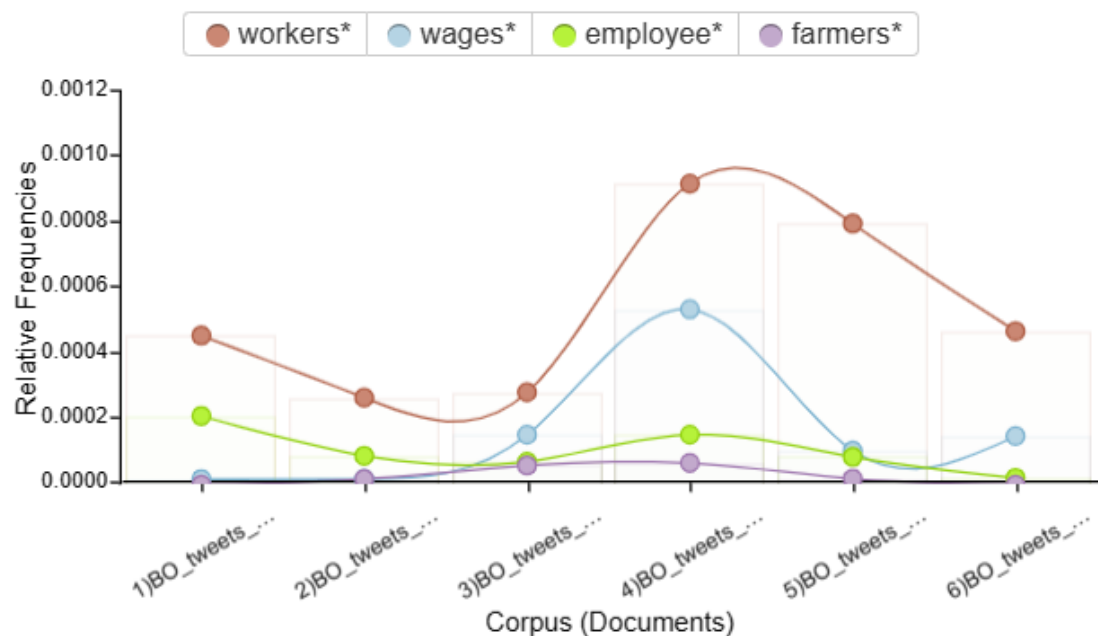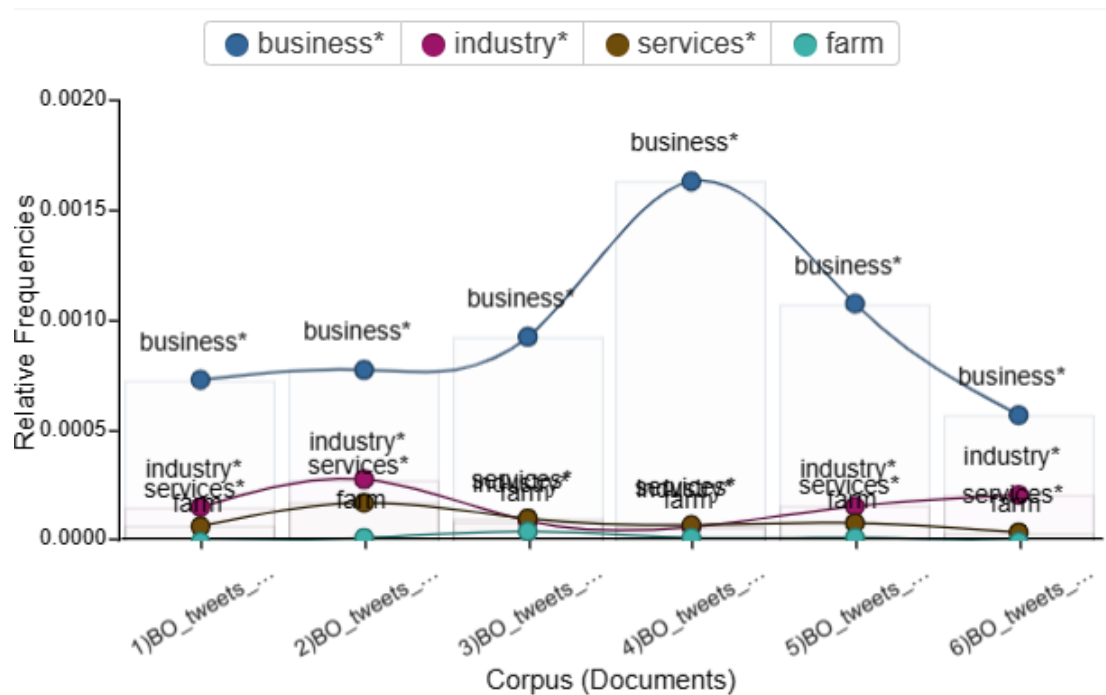
Trump

I have chosen two groups of words here, 'business, industry, services, farm' being the more macro policy-related words. The other group, "workers, farmers, employees, wages", are more people-related words. The comparison of the frequency of these words may reveal the different approaches of the two presidents to boosting employment rates.

In 2018, the frequency of workers and farmers increased dramatically, with "farmer" even outpacing "workers". In early 2018, Trump tweeted about this, "2018 is being called "THE YEAR OF THE WORKER" by Steve Moore co-author of "This set the stage for his 2018 war on trade friction between the US and China.

"There will be great and fast economic retaliation against China if our farmers ranchers
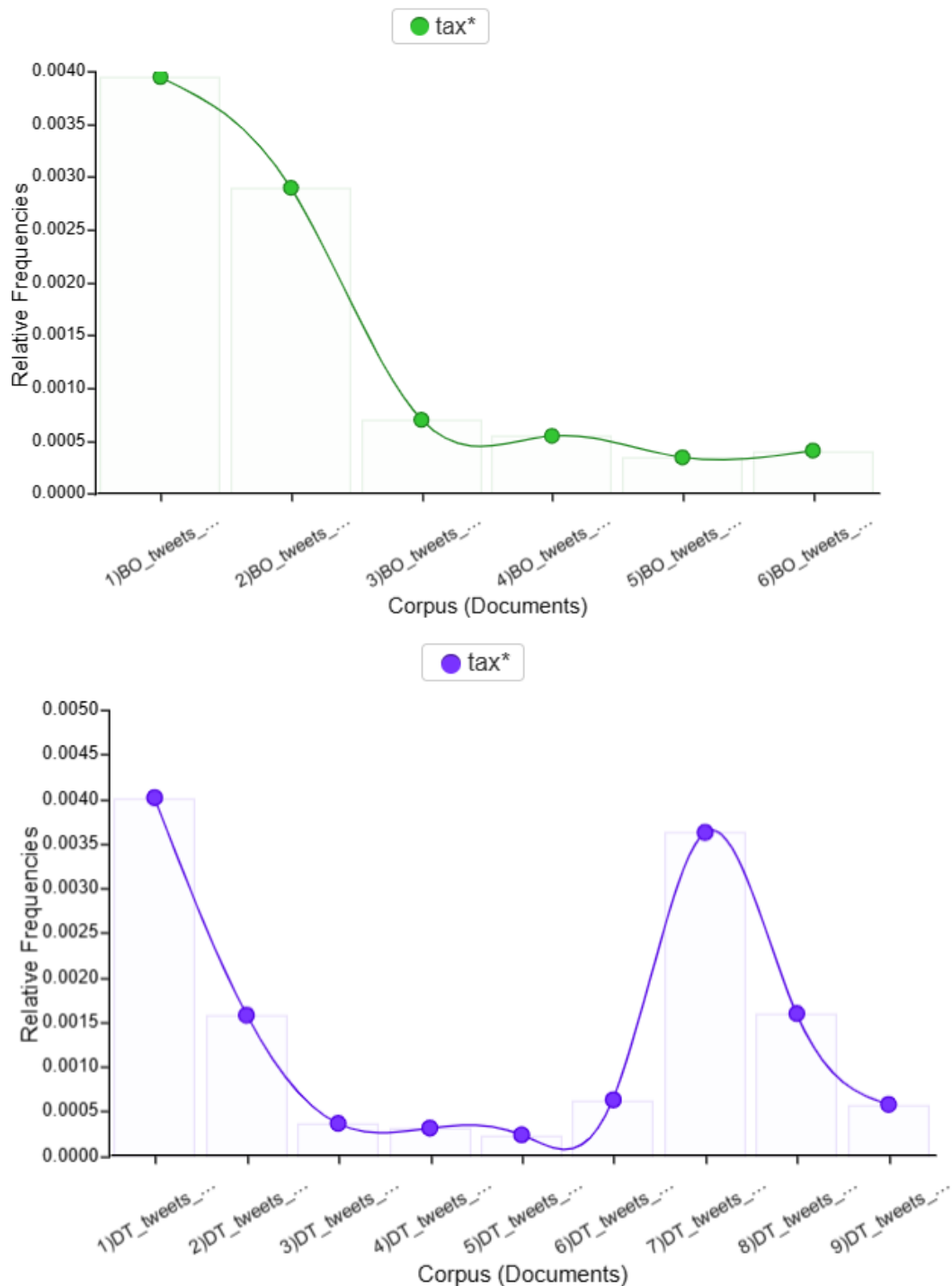
and/or industrial workers are targeted!" "Today we broke ground on a plant that will provide jobs for up to 15000 Wisconsin Workers!" Seemingly launched by Trump to increase employment and protect workers' rights, this war of trade friction between the US and China has not only failed to bring benefits to the working and farming classes but has resulted in 365,000 fewer jobs in the US. So after this battle was lost, Trump's references to "worker" and "farmer" dropped again in 2019.
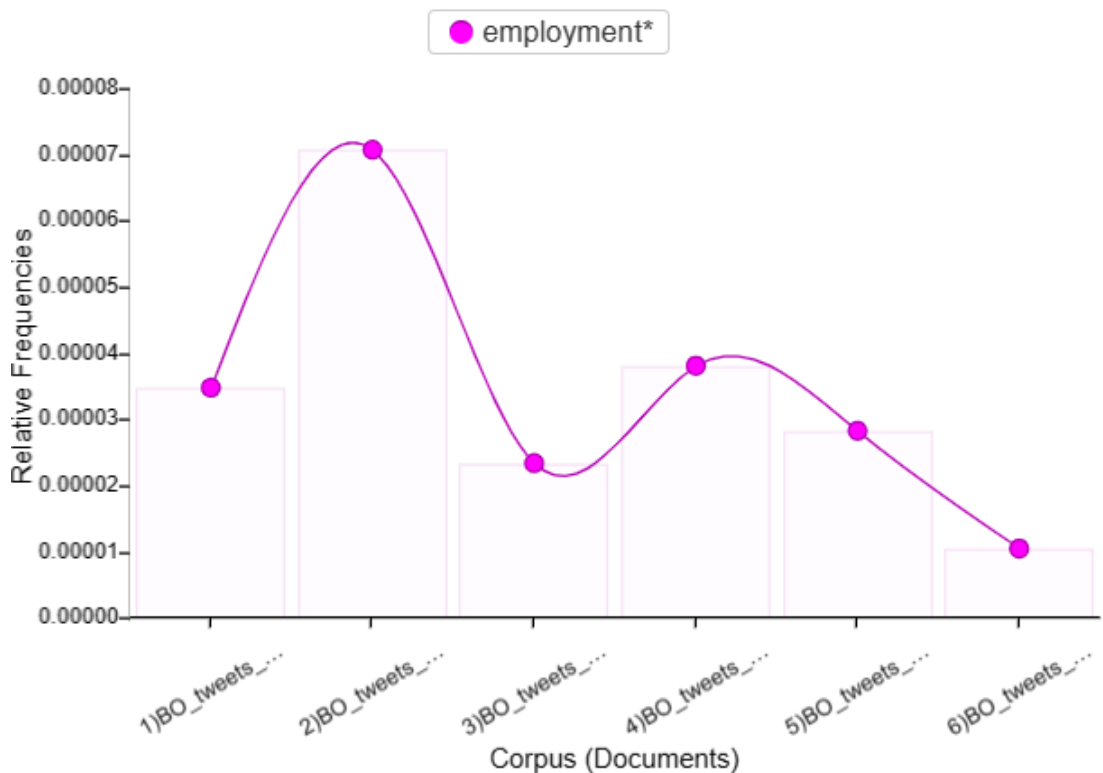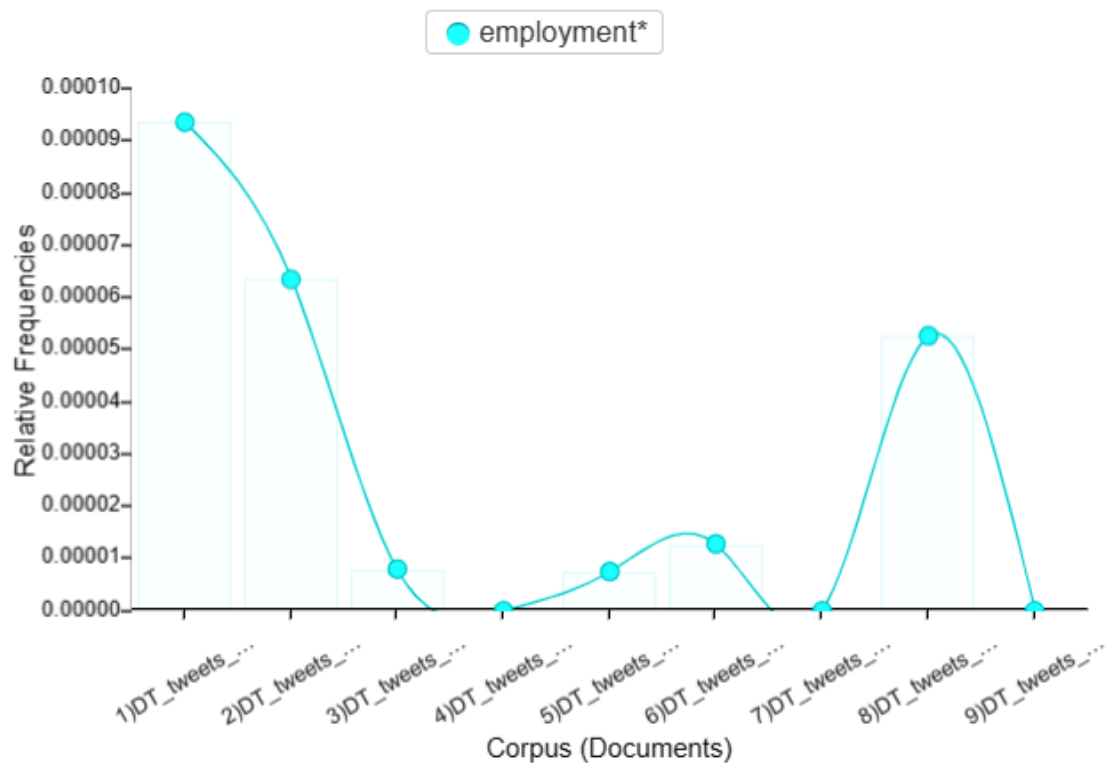
Then Obama.

Obama

"Good news: Our businesses added 314,000 jobs last month and 2.6 million so far in 2014" "Our businesses have now created 10.9 million jobs over the past 57 months in a row...the longest streak...on record." In the first half of the year, Obama tweeted a lot about business creating jobs, so there was a lot of "small business" in his mid-year tweets, and he also created "Small Business Saturday". "It was easy to see that Obama wanted to promote the role of business again. The following year, however, the effect was not so obvious.
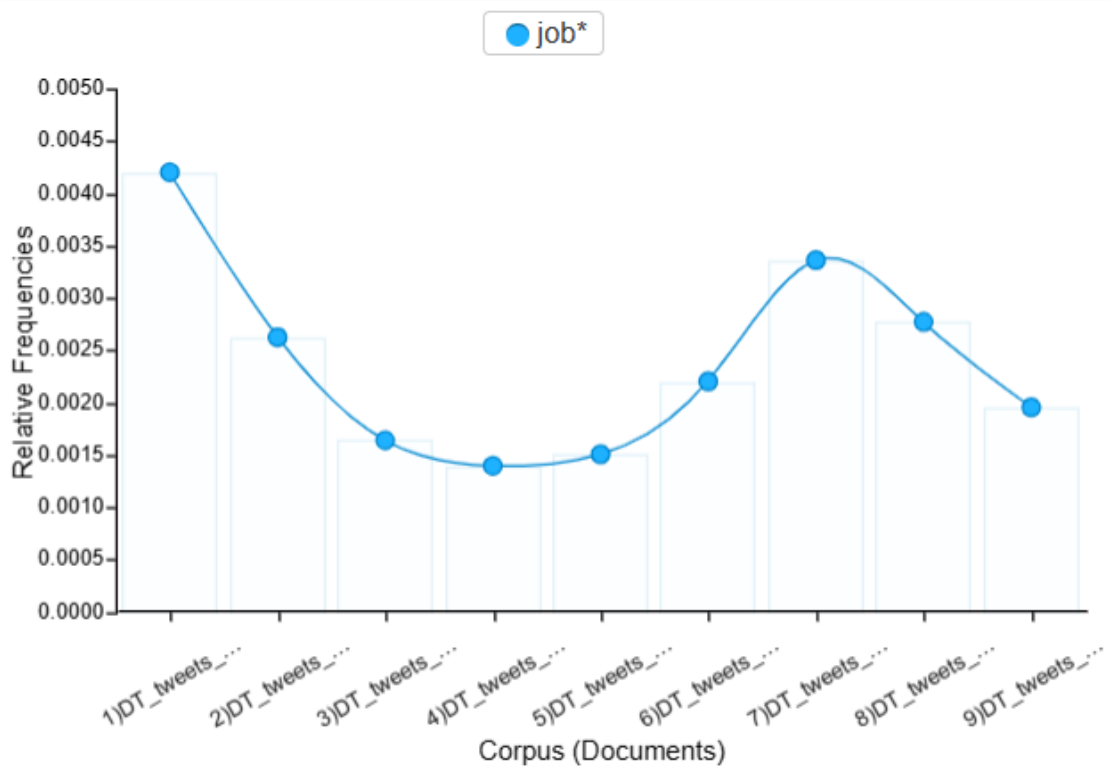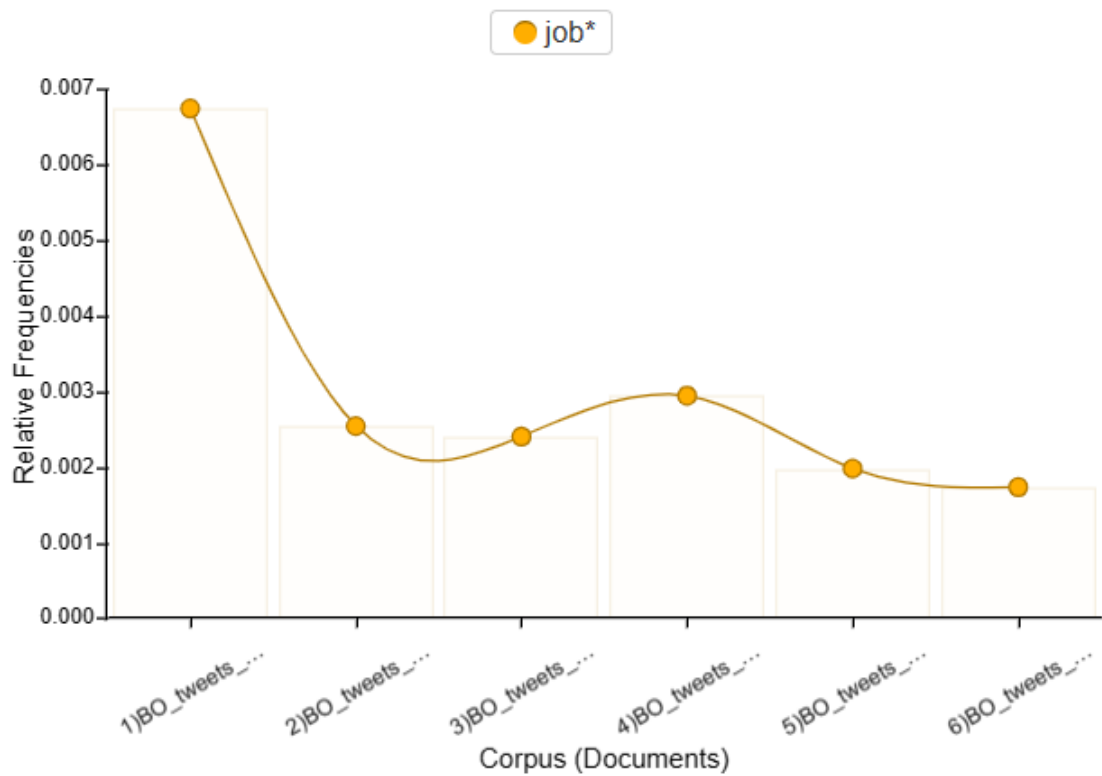

Obama's "tax" trend was down year on year, while Trump's had peaked in 2017. The 2011 tax reform added jobs, but this method lapsed by 2017, adding to Trump's case for a
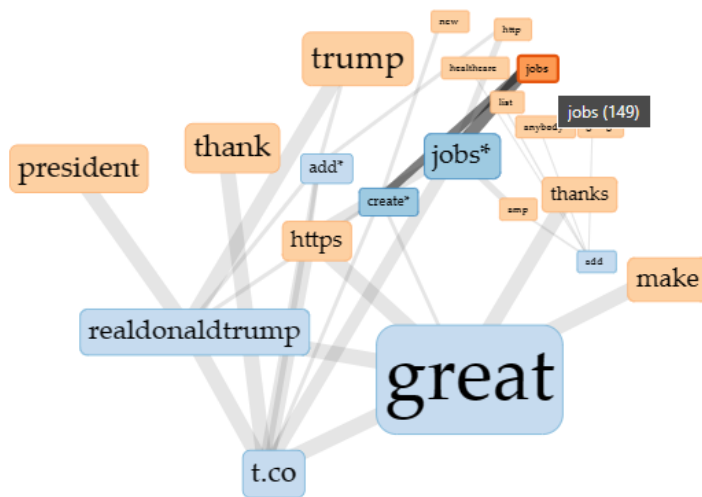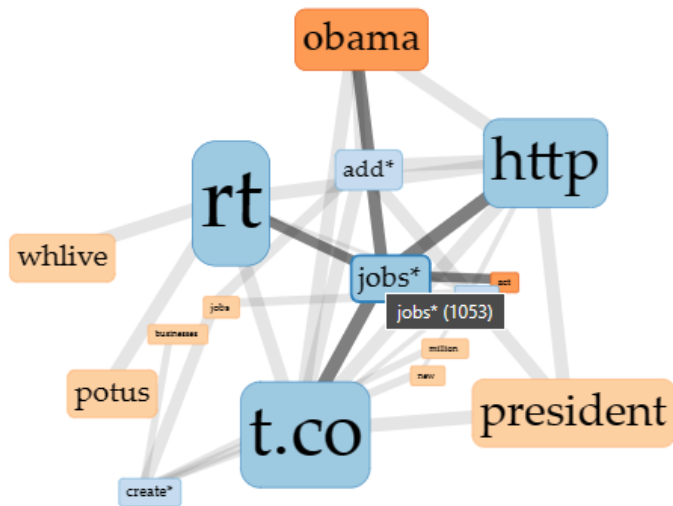
trade war.

There is a clear trend that before every change of election, the word about employment rate is mentioned frequently,

Overall, employ appears more frequently with Trump because of the greater value of the y-axis. Obama, on the other hand, shows fluctuations but is not higher overall.

'Job' is a typical example. It was mentioned repeatedly in 2011 and 2017 and was gradually forgotten when they took office.

In terms of the combination with jobs, Obama preferred to add, while Trump preferred to create. zooming in, there is still a difference between the two verbs, with add preferring to add numbers to existing fields, while create seems more like discovering new fields and jobs. There are many industries that have changed radically from 2011 to 2017, such as big data, AI, etc. And the policy of creating jobs for these new industries during Trump's tenure seems to be the right one.