

# Tableau Visualization: Newspaper Coverage of Clinton/Trump Tweets During the 2016 Presidential Race

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## 1 Josh Knows Tableau and Data Visualization

This document should provide a basic demonstration of data visualization abilities. First, I'll describe a brief research question and then display data visualizations that answer that research question<sup>1</sup>.

### Research Question

Of course, everyone is quite familiar with the 2016 presidential election and all the strong feelings that went along with it. I was curious about the candidates' use of Twitter during the 2016 presidential campaign and media coverage of the candidate's twitter accounts. I personally perceived much more media coverage of Donald Trump's tweets than Clinton's tweets during the 2016 campaign, which caused me to be surprised when I learned Hillary Clinton actually tweeted more than Donald Trump. I wondered if my perception that Trump's tweets received more coverage than Clinton's was actually correct, so I collected Twitter data and newspaper article data to make an empirical finding. The basic finding is that while Hillary Clinton tweeted much more than Donald Trump during the 2016 election, the media didn't seem to care as much about her tweets. IN other words, Donald Trump's tweets were simply deemed more newsworthy by publications.

I isolated the period of study to the general presidential election of 2016. While the specific date boundary for when the general election started is somewhat flexible given factors like nominating conventions and delegate votes, I consider the general election period as June 8, 2016 to November 9, 2016. I chose this date because June 8 is the date Hillary Clinton was considered the presumptive nominee for the Democratic Party and November 9 is the day the election was officially decided. I collected the tweets made during this period from both Hillary Clinton and Donald trump using the Twitter API. Hillary Clinton tweeted 3,963 times during this period while Donald Trump tweeted 1,804 times. To measure newspaper coverage of candidate's twitter usage, I searched for newspaper articles across the Proquest U.S. Newsstream, a database containing articles from 1109 unique publications. Specifically, I searched for the words "Trump" and "Clinton" located within 5 words of the terms "Twitter" or "Tweet", all terms being case insensitive. This is of course not a perfect measure, but it works as a broad tool to collect newspaper articles that mention the candidate's twitter usage or dicuss the candidate's tweets.

For the period of the general election, the searches yielded 4,504 articles for Trump and 1,550 articles for Clinton. I isolated the articles published by the state they were published in and created state-by-state coverage maps displaying the newspaper coverage of tweets by Clinton and Trump, as well as a figure displaying the difference in coverage to visualize which candidate received more coverage. Those figures were generated using Tableau and are reported below.

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<sup>1</sup>I do not include data or code source files here simply for sake of parsimony, but I would be quite happy to share any and all data sources/code files upon request! Email me @ jtimm@usc.edu

Figure 1: Clinton Tweet Coverage Map, June 08, 2016 - Nov 09, 2016

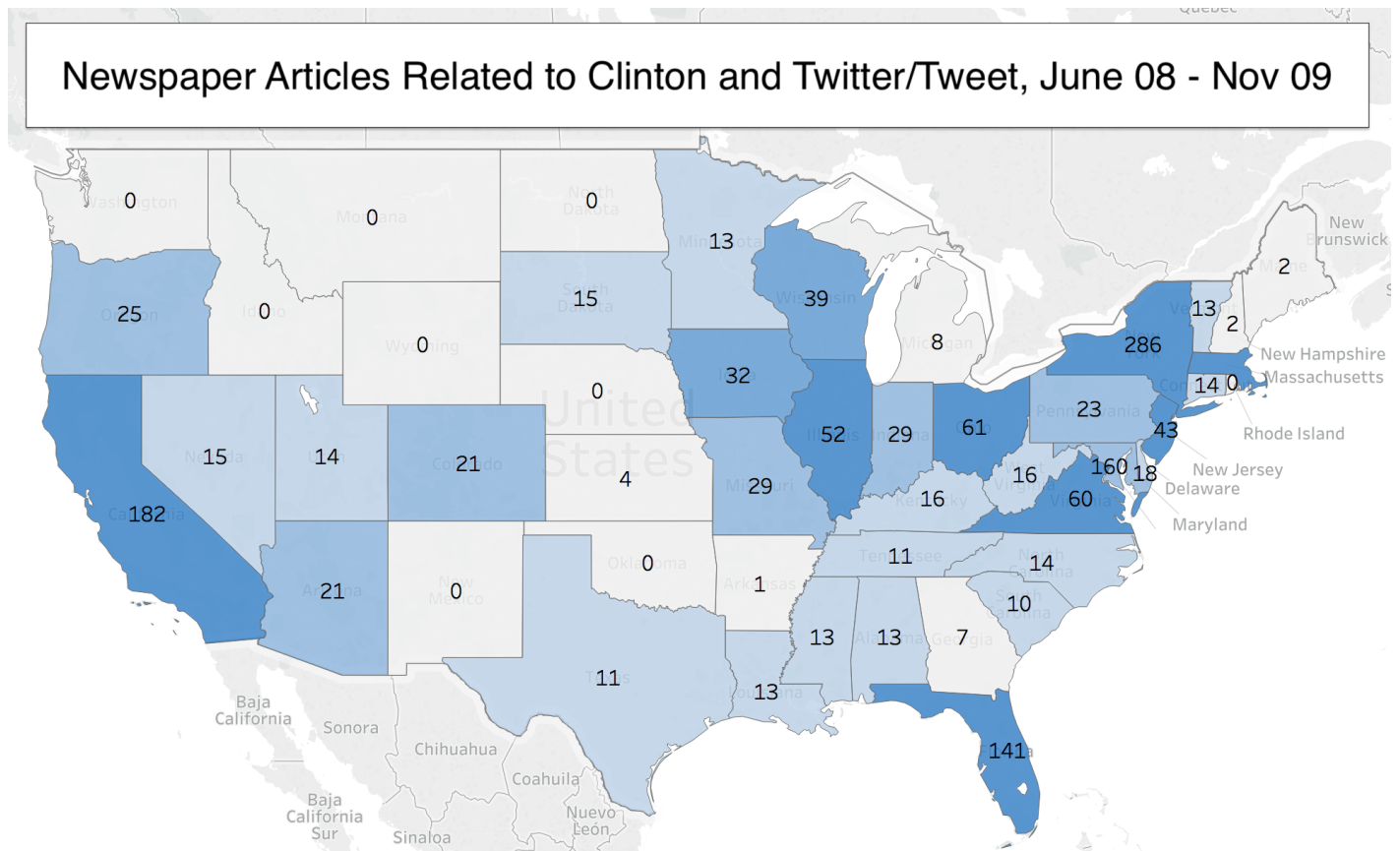
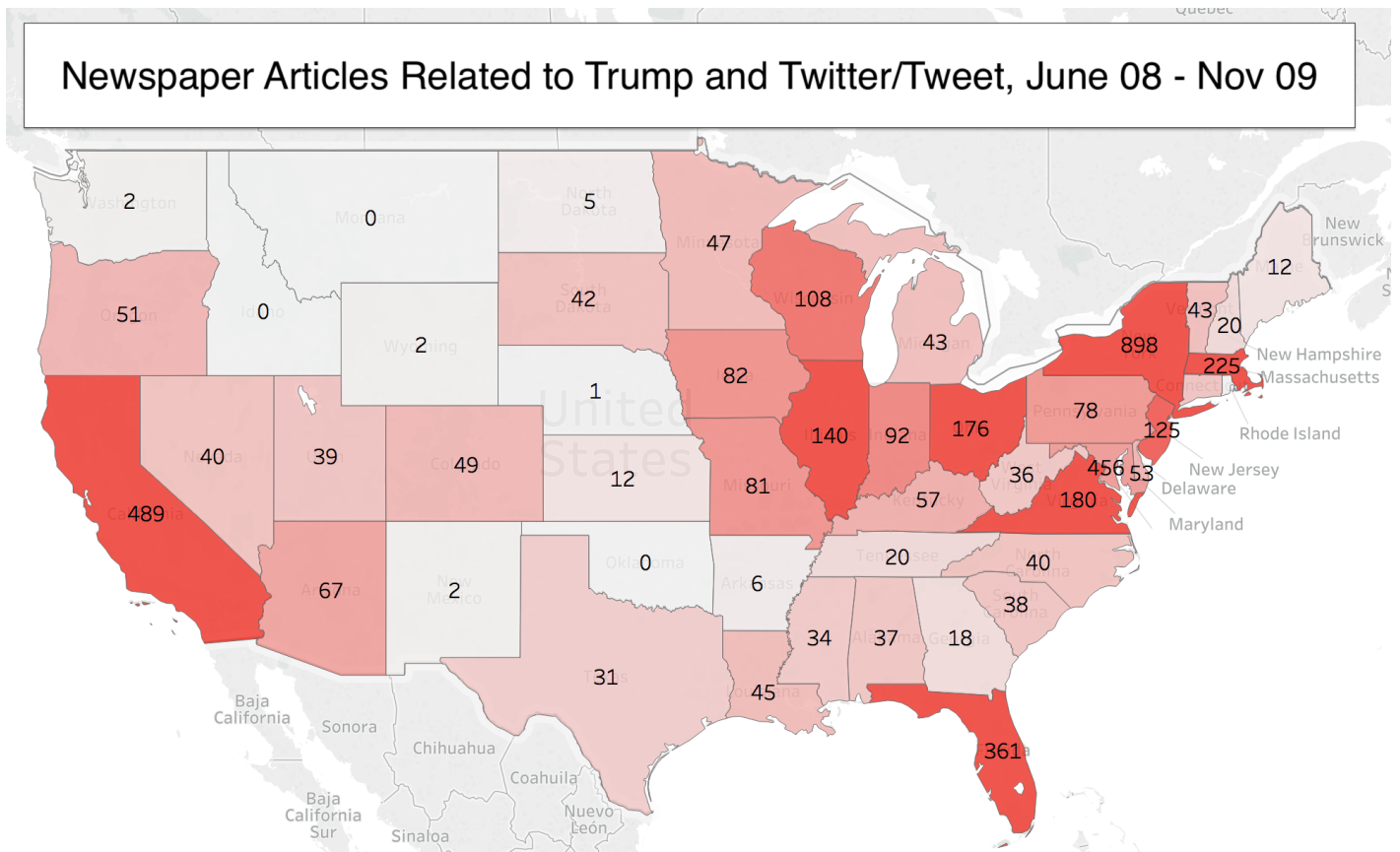


Figure 2: Trump Tweet Coverage Map, June 08, 2016 - Nov 09, 2016



These maps may be interpreted as follows: Take the state of California as an example. The map for Clinton displays the number 182 to show that there were 182 articles published in California publications that contained the word “Clinton” within 5 words of the term “Twitter” or “Tweet” (case-insensitive). Similarly for Trump, the number displays 489 which means there were 489 articles published in California publications that contained the word “Trump” within 5 words of the term “Twitter” or “Tweet” (case-insensitive). In the map that displays the difference between the two candidates, the number for California is 307, representing that there were 307 more newspaper articles ostensibly about Trump’s tweets than about Clinton’s tweets.

While it is abundantly clear from these two maps that the media covered Donald Trump’s tweets more than Hillary Clinton’s, I also include a map to clearly display how much more coverage Donald Trump received.

Figure 3: Trump Tweet Coverage Map, June 08, 2016 - Nov 09, 2016

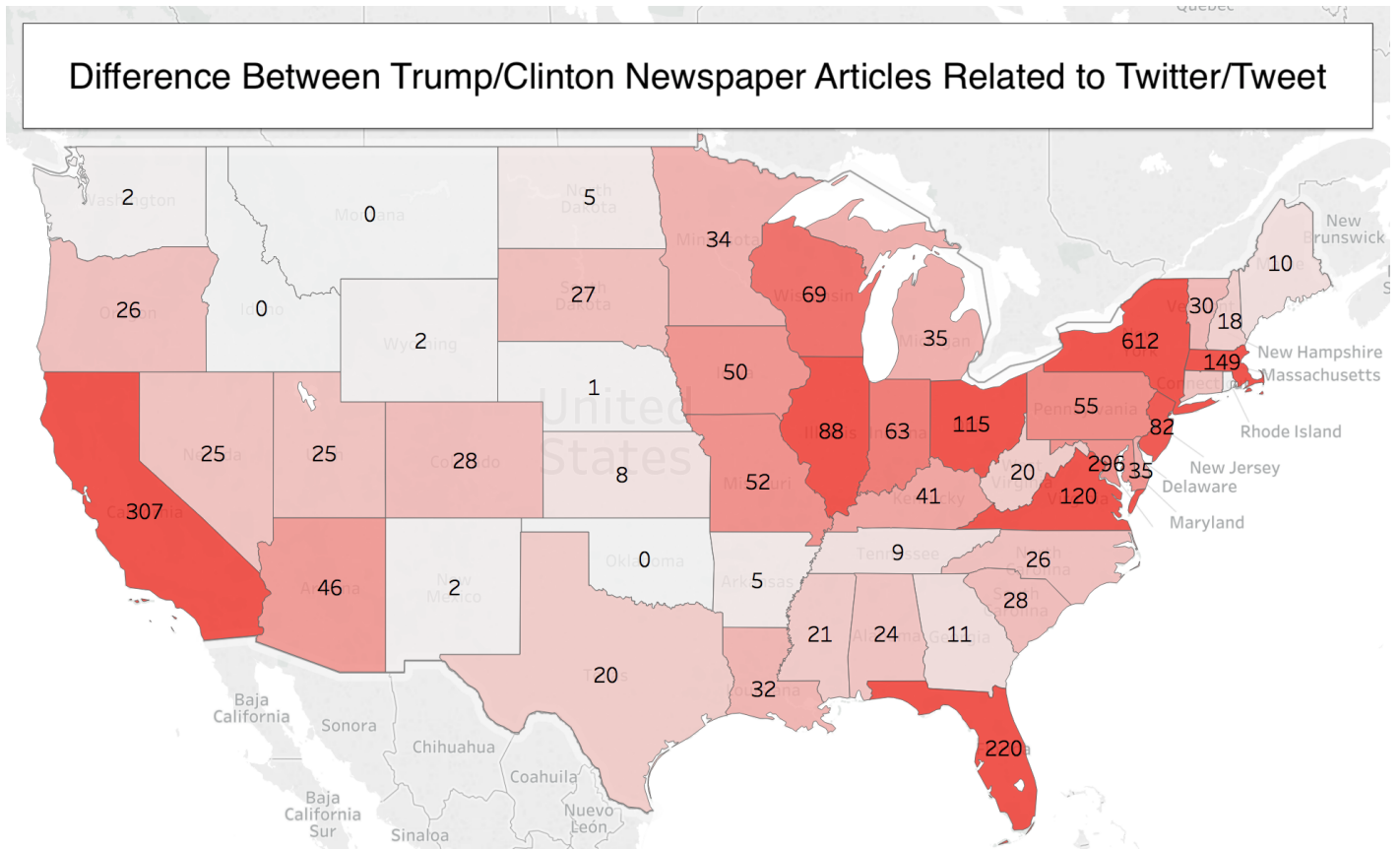
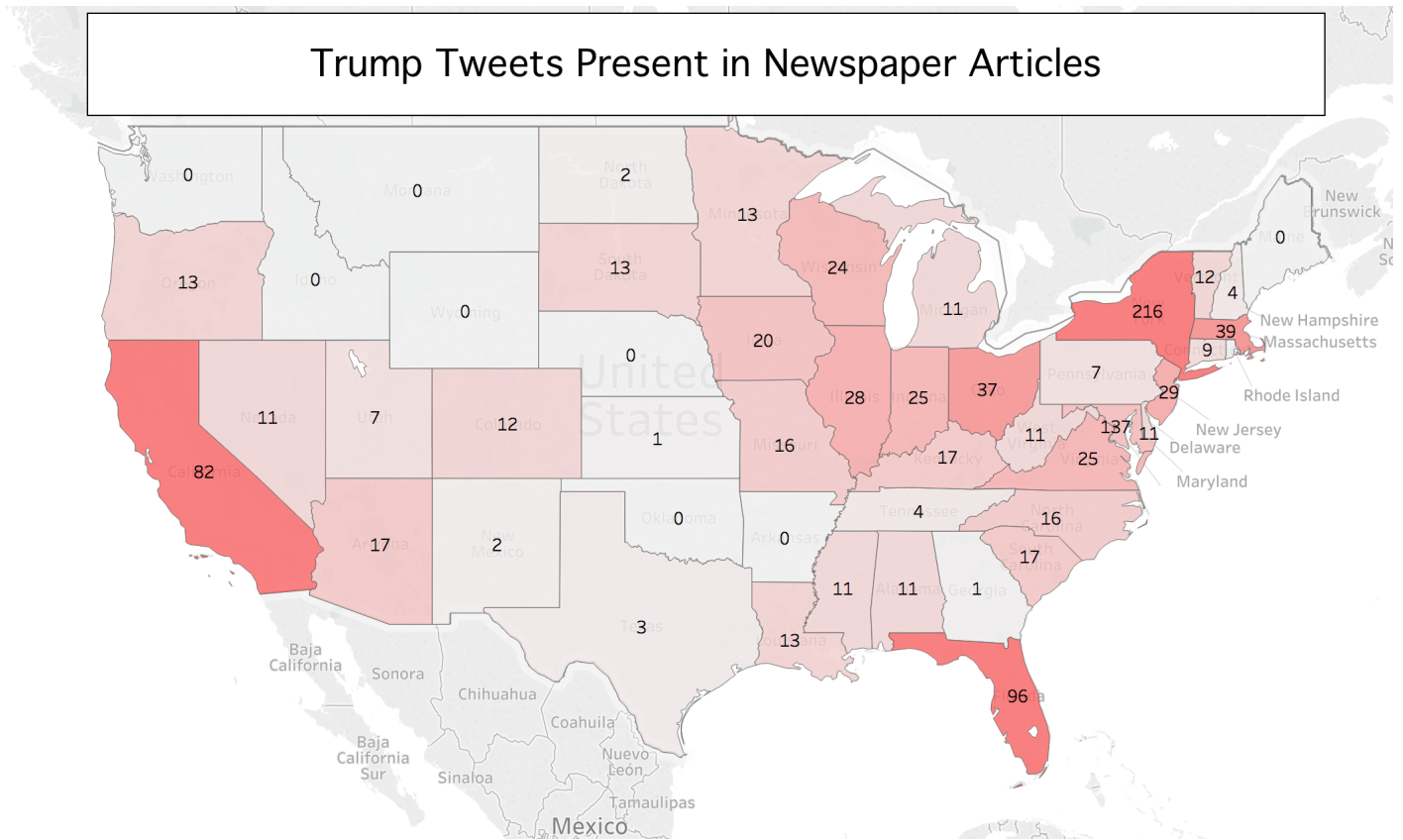




Figure 5: Number of Trump Tweets Quoted in Newspaper Articles



The picture here is quite clear and I won't spend much time clearly describing the results. In every single state, newspaper articles quoted tweets posted by Donald Trump at considerably higher rates than they quoted tweets posted by Hillary Clinton. This offers further support to the notion that Donald Trump was better at handling the media during his presidential campaign, which contributed to his likelihood of being elected.



Figure 6: Difference in Number of Tweets Quoted in Newspapers, Trump-Clinton

