This program took data on the last 3,200 tweets from each Twitter account and created word clouds based on the frequency of the words found in these tweets. Common stopwords such as "a" and "the" were filtered out in addition to more specific stopwords such as "https", "RT", and "people". Pictures of or relating to each of the Twitter users selected were used as masks to create the outlines for these word clouds.

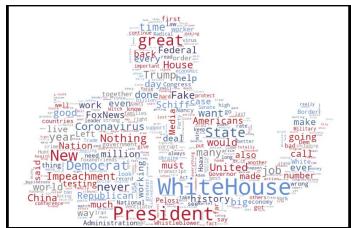
For the first component of this project, the base word clouds were created just based on the user's tweets as shown below:

\*The second component is shown below after all these word clouds

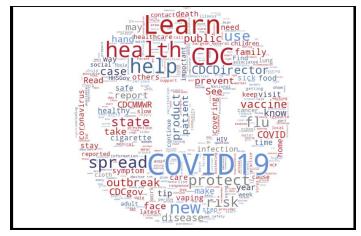
**POTUS44: Barack Obama** 

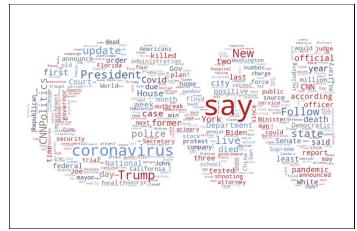


**POTUS: Donald Trump** 

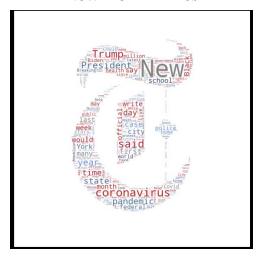


CDC CNN





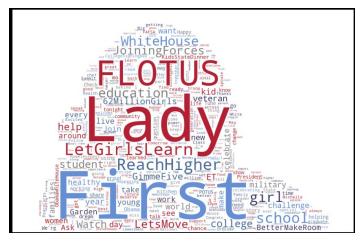
**New York Times** 



**FLOTUS: Melania Trump** 



**FLOTUS44: Michelle Obama** 



Joe Biden



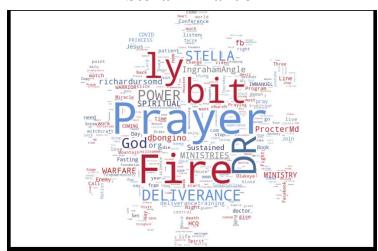
**Alexandria Ocasio-Cortez** 



**Sean Spicer** 



## Stella Immanuel



The second component of this project was filtering the tweets for specific topics to see how the users tweeted about these topics. For example, for tweets related to news sites, the keywords:

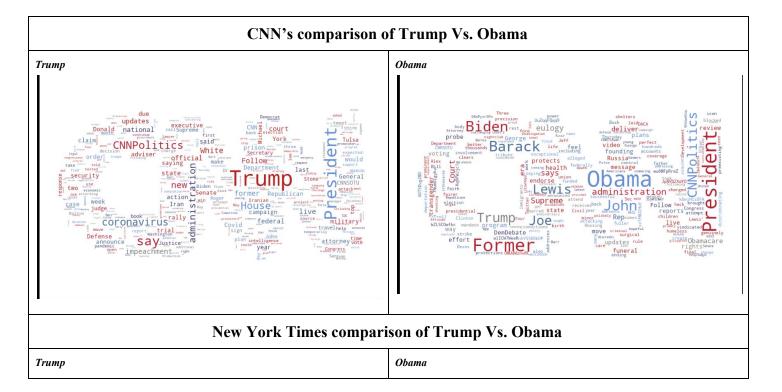
cnn, abc, foxnews, nytimes, usatoday, washingtonpost, media, report, reporter, reporters, media, press, interview

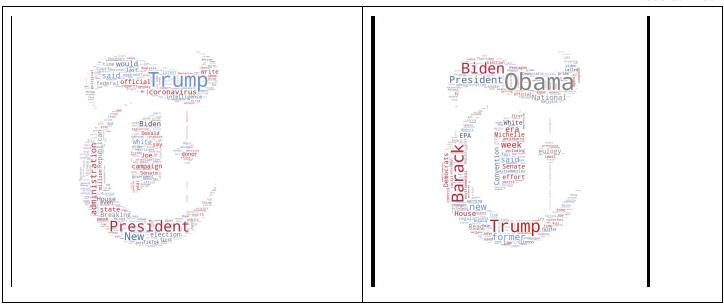
The tweets were lowercased when checking for keywords to ensure the keywords were not case sensitive. The topics chosen for this data visualization had to do with current events such as Black Lives Matter, COVID-19, and relations with China. By displaying these word clouds, we are able to see in what context these Twitter users are discussing these current issues or people.

Four comparisons will be shown below, but word clouds were made for all of these users on all of these topics as long as there were enough tweets to create a word cloud about the subject. However, for the Obamas' Twitter accounts, their archived accounts from the 44th presidency were used instead of their current accounts so the word clouds on more modern subjects like COVID-19 were either sparse, didn't have any tweets related to the keywords, or the words associated are dated. For example, when discussing Chinese relations, the relationship with China was different between the Trump and Obama presidencies which is something interesting to evaluate in and of itself.

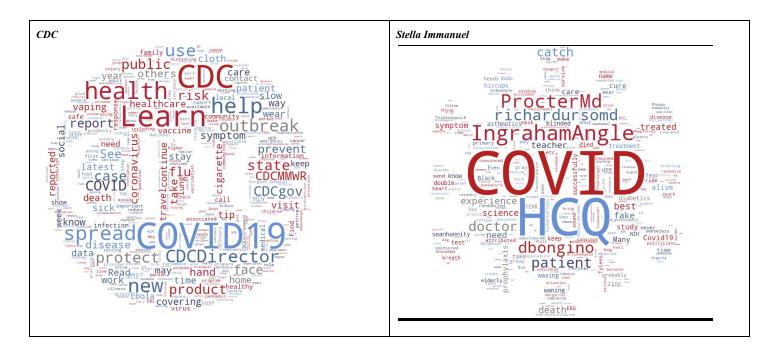
All of these graphs can be found in the word clouds folder and all have been organized into subfolders named by their Twitter username. Furthermore, once in these folders, the files have been named by their username followed by the topic that the word cloud is about. For example, Sean Spicer's (@seanspicer) word cloud for his view of President Trump would be the file "seanspicer\_Trump.png". Only a couple of many word clouds were selected for the following examples.

Comparison 1: Events/Statements about Trump vs. Obama by various news outlets



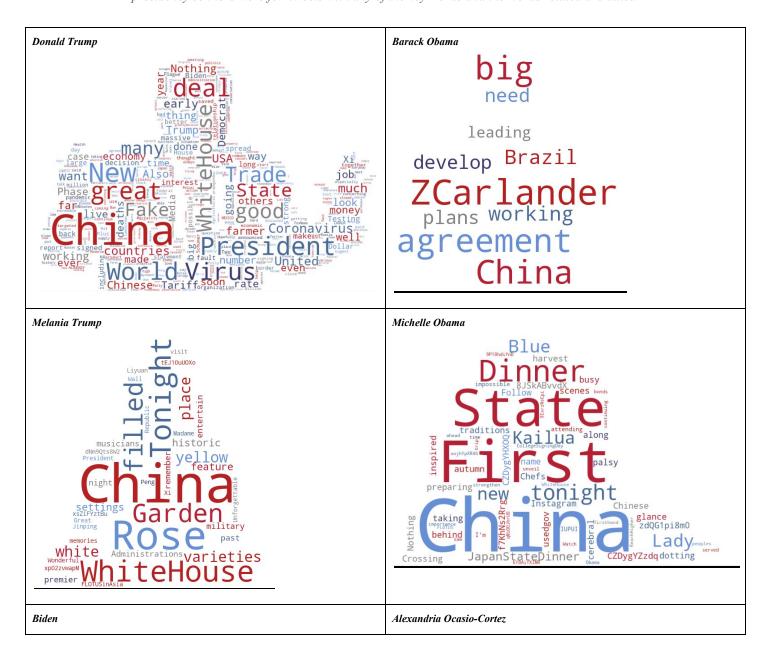


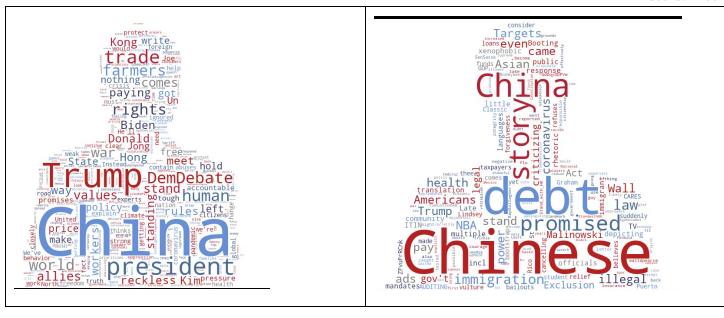
Comparison 2: How the coronavirus is addressed by CDC vs. Stella Immanuel



## Comparison 3: How Trumps vs. Obamas vs. Joe Biden vs. Alexandria Ocasio-Cortez vs. addresses Chinese relations

\*President Obama's and Michelle Obama's Twitters used for these Word Clouds are their archived accounts from the 44th presidency so there were few tweets with any of the key words and the words related are dated





## Comparison 4: How Donald Trump vs. Melania Trump vs. Sean Spicer vs. Alexandria Ocasio-Cortez addresses Black Lives in America

