

Text analysis of Trump's tweets

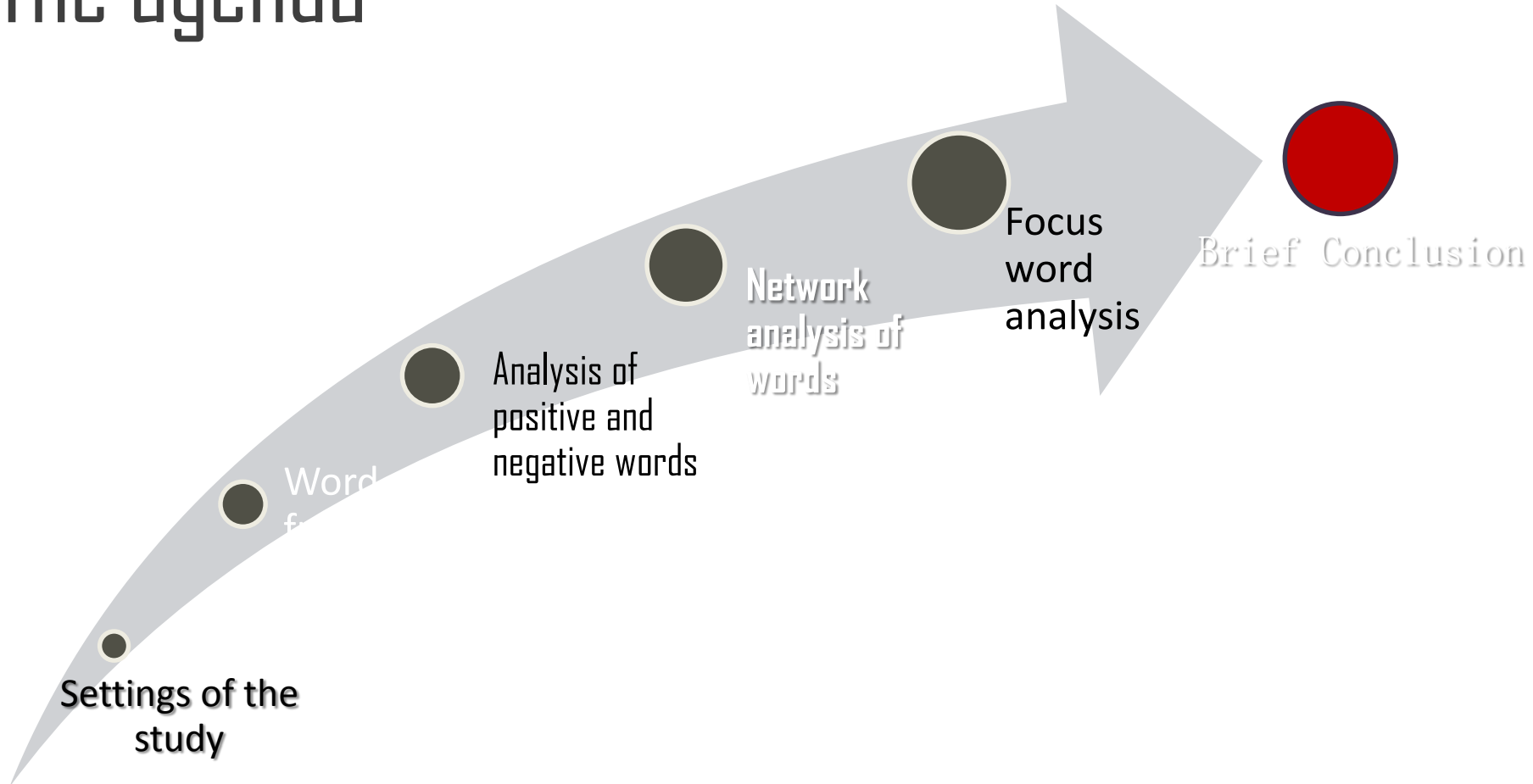
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The agenda



Settings of the study



- This study makes a text analysis of the newly elected US President Donald Trump. The focus is of utmost importance since the hierarchical structure of the global society is a structure in which several layers are nested.
- Levels: individual → household → ethnic or local government → nation → regional integration body → super national system and international norms.
- We believe the US elected President Donald Trump's remarks, mostly done through Tweets, can have a great influence on the meso (the US national) and the macro (global) levels in the form of the prevalence of “my country first”, or “populism” put simply.



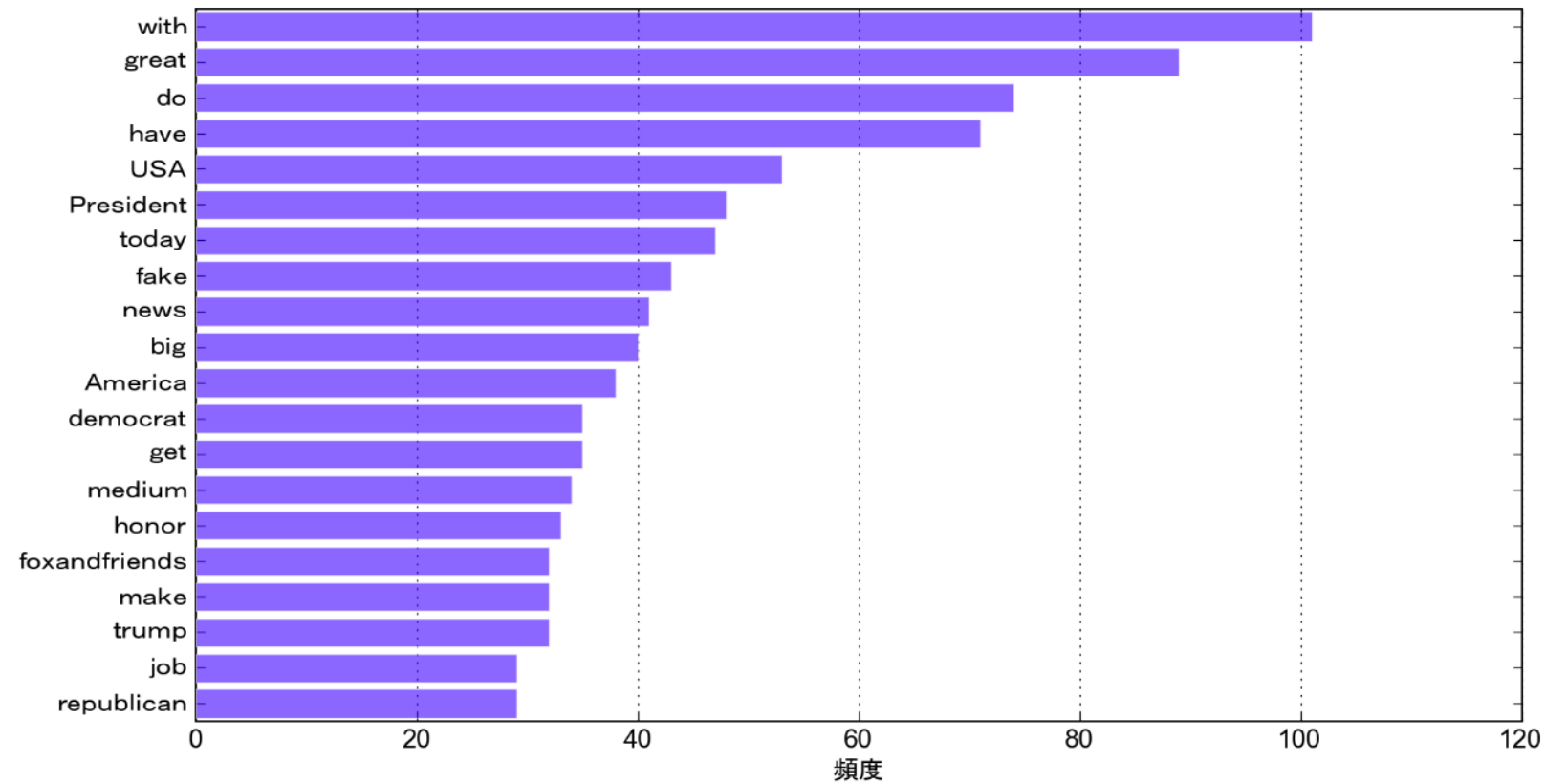
More details about the study

- With the above observation (interactions among micro, meso and macro levels) in mind, this paper makes a text mining analysis of Trump's Twitter-based remarks.
- For the period of April-July 2017, within the first term of Donald Trump's US presidency, there are totally 577 items of twitters (12,954 words in total) extracted for this study.
- The analytic tool: this study tries to provide related implications on Trump's domestic and international policies based on the text analysis (the tool was developed by NTT Mathematical Systems).



Word frequency analysis

Figure 1. Word frequency (after the election)



Word frequency analysis

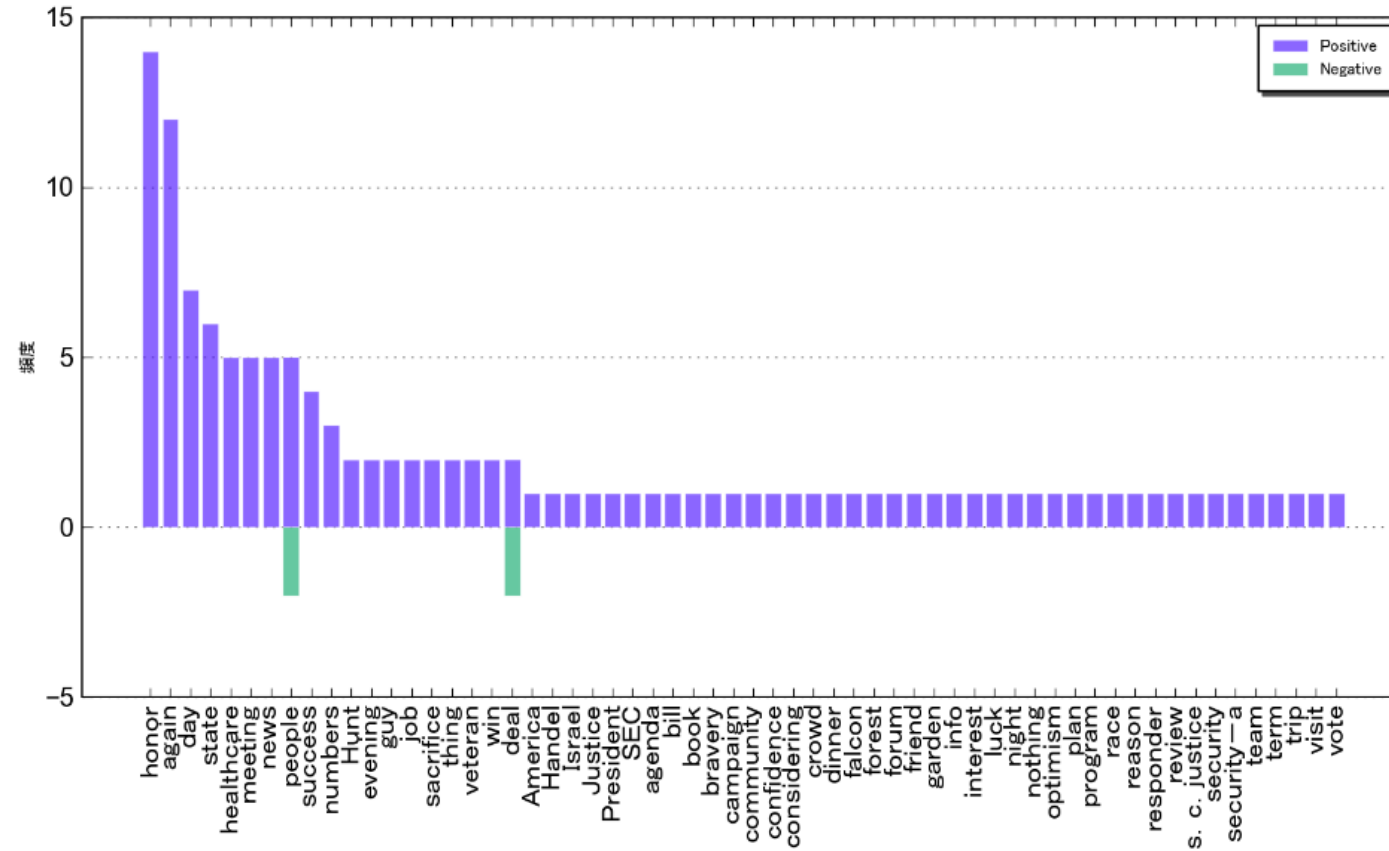


- Figure 1 shows the results of word frequency analysis. In contrast with twitters before getting elected, the tone of Trump's twitters in his first presidency term is getting a bit changed.
- After getting elected, main focus changed compared to that before the election. Such as, converting his attention from his opponent Hillary Clinton to other issues which are less satisfactory.
- Different attitudes toward medias

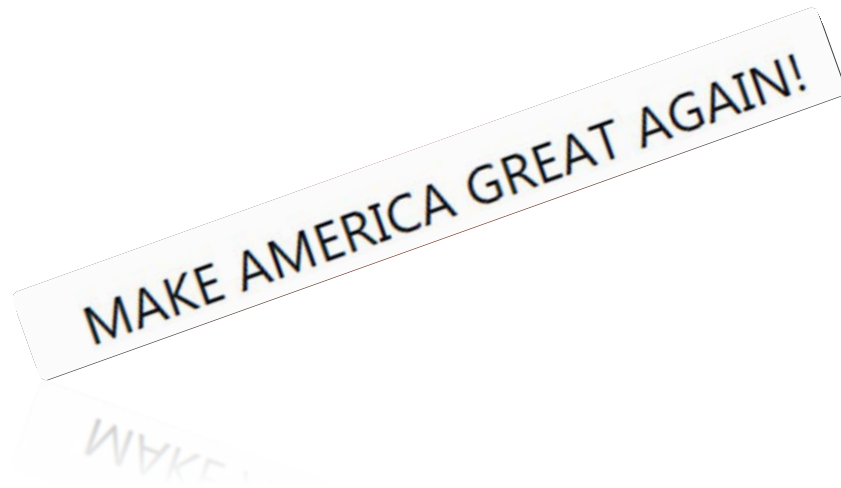
Analysis of positive and negative words



Figure 2. Positively evaluated words



Analysis of positive and negative words

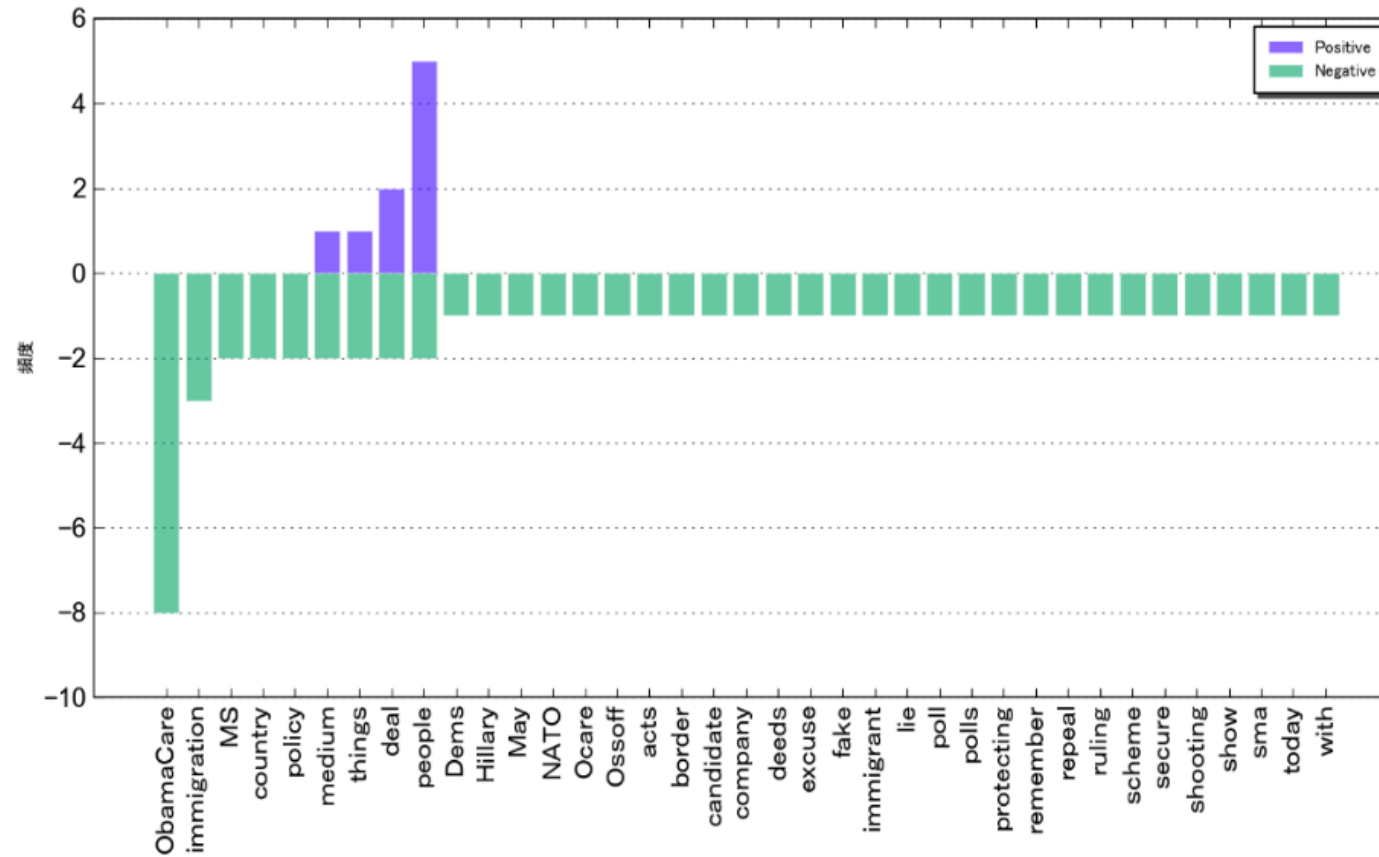


- Figure 2 shows positively evaluated words by the order of frequency, and high-frequency words with positive indications are mostly shown by this Figure.
- Words such as Justice, optimism, honor and luck were always appearing in Trump's expressions with a positive attitude.

Analysis of positive and negative words



Figure 3. Negatively evaluated words



Analysis of positive and negative words



- As shown in Figure 3, negative words are plotted according to their frequency.
- The negative word appearing with the most frequency is “Obama Care”, obviously, it became a hotspot when Trump and the congress passed the bill to replace and repeal Obama care on May,
- Meanwhile, it reflects Trump’s strong negative attitude towards the current migration policy.

Network analysis of words



- Next, the word linkage analysis is made, as in Figure 4. Positive words are circled in blue, and negative words are circled in red. Pink ones are the ones receiving positive or negative evaluations.
- In contrast with the tweets before election, we can find that negative words came out more frequently.

Donald J. Trump ✓ @realDonaldTrump · 7月1日
I am thinking about changing the name #FakeNews CNN to #FraudNewsCNN!

Donald J. Trump ✓ @realDonaldTrump · 7月14日
After all of these years of suffering thru ObamaCare, Republican Senators must come through as they have promised!



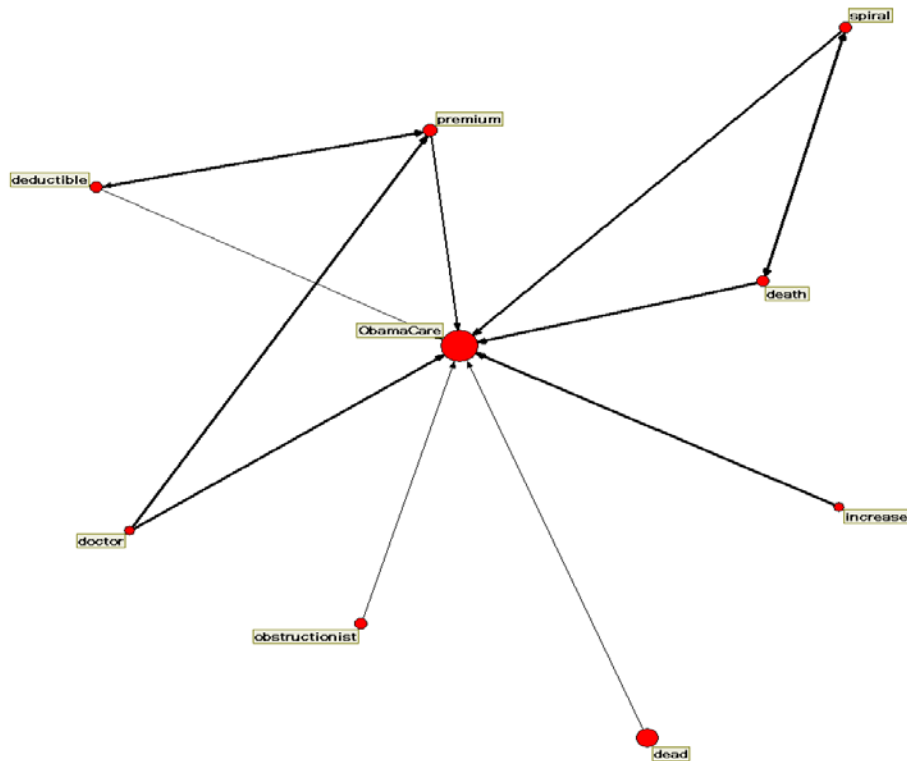
Network analysis of words

- From the word “great” in Figure 5 (the part for “great” magnified), there are so many relevant words shown around it, and some of which refer to specific objects, as veteran, Israel, security and so on, showing that he made lots of comments with positive feeling on such issues.
- On the other hand, having said that, the much higher frequency of the central word “great” signifies that instead of using intricate logic concerning those policy agendas, President Trump simply wants to appeal to the people of the US by pledging to make America “great” again.

Focus words analysis



Figure 7. Focus words analysis (with “ObamaCare” as the focus)



- As shown in Figure 7, an outcome of focus word analysis, many negative words are connected with the central word “ObamaCare”, implying that Trump had a strong negative feeling when he mentioned about the Obama Care.
- Trump accused democrats were “obstructionist” when he tried to pass a health care bill to replace Obama care, so this word appeared simultaneously with “Obama care”.
- Other examples are also included in this case.

Focus words analysis

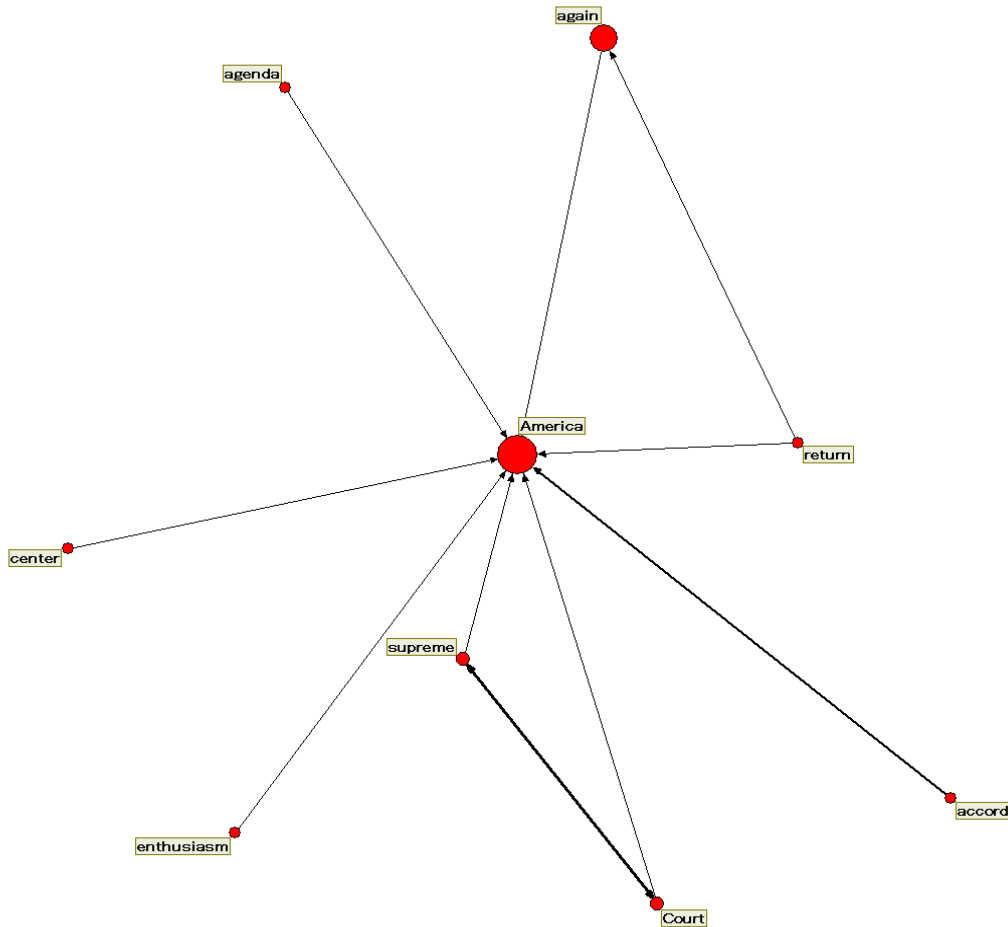


Figure 9. Focus words analysis (with “America” as the focus)

- In Figure 9, in addition to the old phrase “make America great again”, there are some new phrases “supreme court”, “center”, which can be seen as a evident of Isolationism held by the Trump’s government.

Brief conclusion



Overall, Donald Trump's remarks on the Twitter reveal his "populism" characterized by the use of simple words and simple rhetoric, as shown most symbolically in the phrase "make America great again".

The text mining method applied in this paper discloses Donald Trump's method of appealing to people's heart simply and directly.

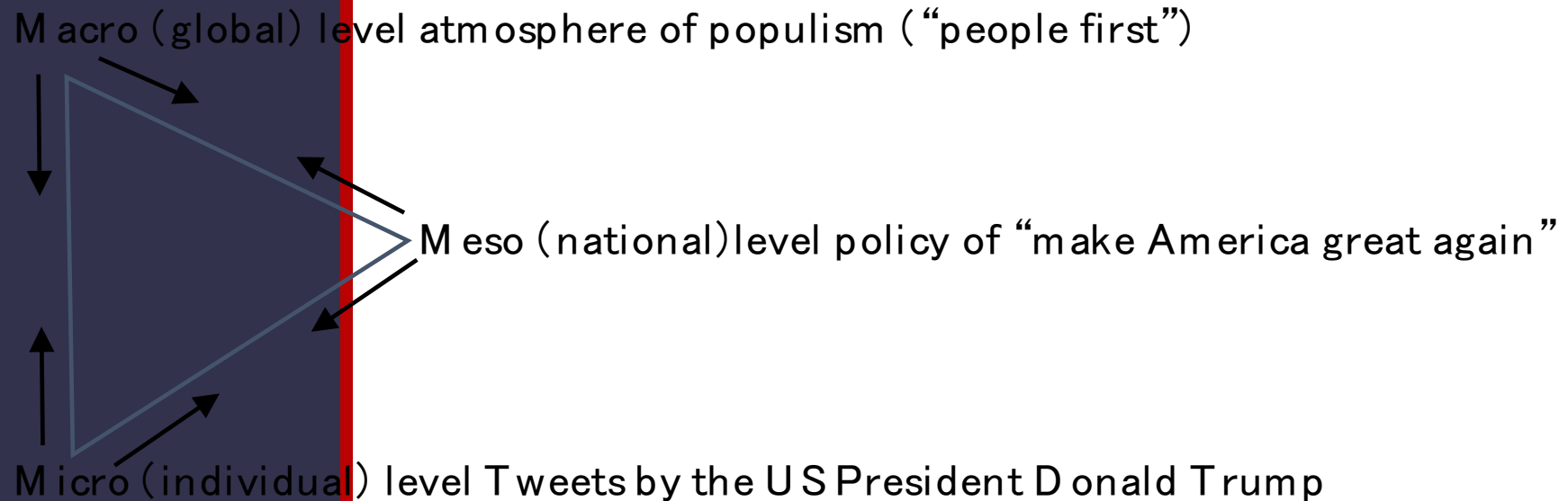
As shown in the Figure-10 below, this indeed is what is meant by "populism", an important character of his administration (at the meso level) which exerts a large impact on the global (or macro) political and economic landscape.

Brief conclusion



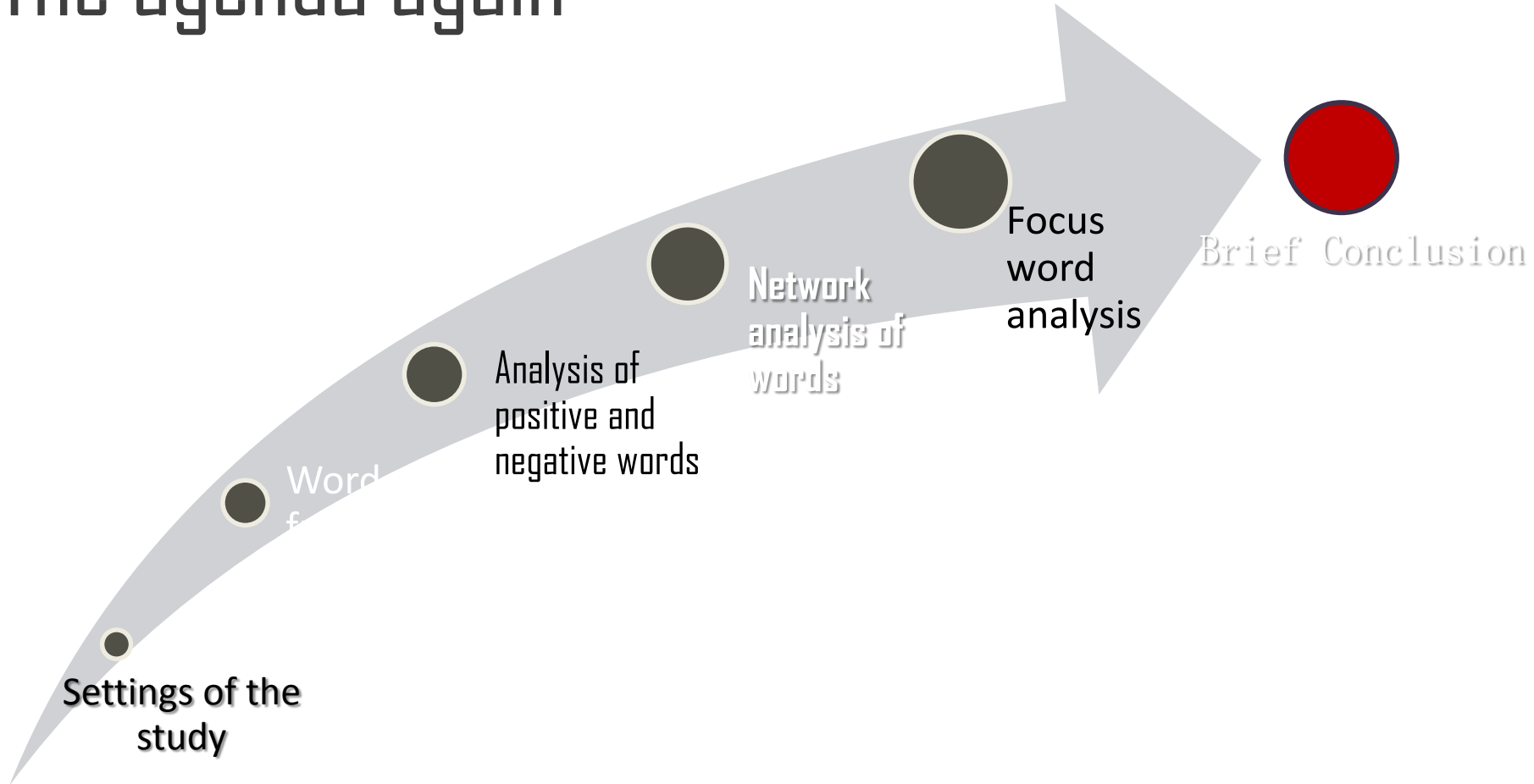
- Such large-scale impacts can be generated by micro (individual level) remarks by Donald Trump. Put differently, the macro, meso and micro interaction can be observed by analyzing Donald Trump's Twitter texts

Figure 10. An interactive “field” among macro, meso and micro



Note: The arrows indicate a causal direction.

The agenda again



THANK YOU!