



UK Politics Debate

From a Semantic Standpoint Did Brown, Cameron and Clegg Say the Same Things?

The data used for this report was taken from transcripts of the 2010 United Kingdom general election debates. We used our semantic software to analyze the answers that the three candidates, Brown, Cameron and Clegg had given.

Our analysis does not attempt to apply sentiment to the extracted data; we just focused on transcript text to construct an impartial picture of what the politicians had said. This report shows how the words and concepts used by the three candidates can be analyzed through semantic technology as well as from a quantitative perspective. We processed only what was actually said and then, asked ourselves a simple question:

From a semantic standpoint, did the three candidates
(Brown, Cameron and Clegg) say basically the same things?

The answer is, “No”.

In the first debate, Cameron and Brown had the most similar answers overall. While in the second debate, Cameron and Clegg had the most similarities between them. Of course, we should bear in mind that much of this similarity is to be expected given a natural overlap in language when answering the same questions). We're not saying that their speeches were identical. What they did state, however, was stated in the same way.

As expert speakers, their lexical frequency distribution covered about 80% of the most common terms of the English language (without any significant variations between the three of them). They used almost the same amount of words, phrases and prepositions and often, the rhythmic structures (taken out of their context) were identical when measured against the entire duration of any single debates.

Cameron tended to use phrases which were a little more articulated than the other two candidates (perhaps he has a greater aptitude in public speaking?). Clegg pronounced some very lengthy phrases (perhaps he is a more emotional speaker?). And Brown, tended to use variety smaller number and variety of adverbs (perhaps he is a more controlled speaker?).

If we make a closer examination of the adverbs (although arguably they may not deserve such emphasis because when we speak we tend to develop certain speech habits), we might just begin to think that Cameron was on the defensive in the second debate, closely followed by Clegg, while no one seemed to stand out in the first debate.

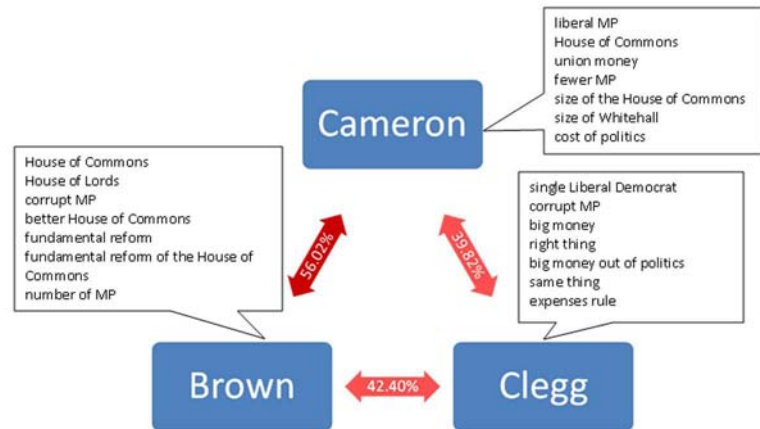
In the first debate, if we look at the verb forms, Brown was the most determined as to what actions should be taken to get things done. In the second debate, after analyzing the same type of data, the candidate with the most constructive ideas was Cameron, while Clegg seemed less optimistic about the future and tended to stay focused on the present.

One thing was rather curious...all three candidates used the adverb “not” (the most frequently used adverb by all of the candidates in all of the transcripts) and shortly after, all three used the word “now”. Another point in common, was the prevalent use of adjectives with a “moderately positive” connotation, followed by those with a “very negative” connotation. A loose interpretation of this phenomenon might lead us to think that their speeches want to transmit encouragement, but they also want to let people know that they are genuinely concerned. The three also tended to use the possessive adjective “our” (the most frequently used in both debates) followed at a distance by, “your”/“their” and with less frequency, “my”.

An analysis of the semantic context in the use of the adjectives “good”, “bad”, “right” and “wrong” proved to be very interesting. These words tend to accentuate the differences which cannot be noticed through a purely structural analysis...yet we must consider this data with a grain of salt...the algorithms of association used scoring mechanisms which are based on distances. So, in Cameron’s text we found “bad” near “immigration” and “good” near “public service”, in Brown’s text we found “right” near “bank” and “wrong” near “conclusion” and in Clegg’s text we found “bad” near “politician” and “wrong” near “energy company”. It is an interesting analysis, but it probably doesn’t deserve further interpretation.

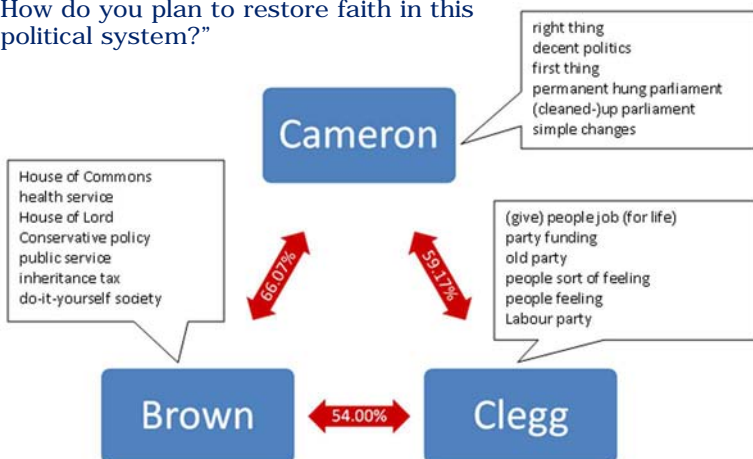
Debate # 1 : Political System / Politicians’ Expenses

“Nothing’s provoked more discussion than MPs’ expenses. Given the recent scandals involving all parties, how are you intending to re-establish the credibility of MPs in the eyes of the electorate?”



Debate #2 : Political System / Politicians’ Expenses

“Given the scandals of the last year, it is hard to find a person in my neighbourhood who believes in the power of their vote. How do you plan to restore faith in this political system?”



Analysis Observations

The second debate produced a marked increase in correlation between the answers of all three candidate leaders. If we read the answers, there was agreement on the need to “clean up” politics. In the first debate the significantly higher degree of correlation between Cameron and Brown than between Clegg and either of the other two appears to stem from both Brown and Cameron expressing similar intentions to reform the both Houses of Parliament.

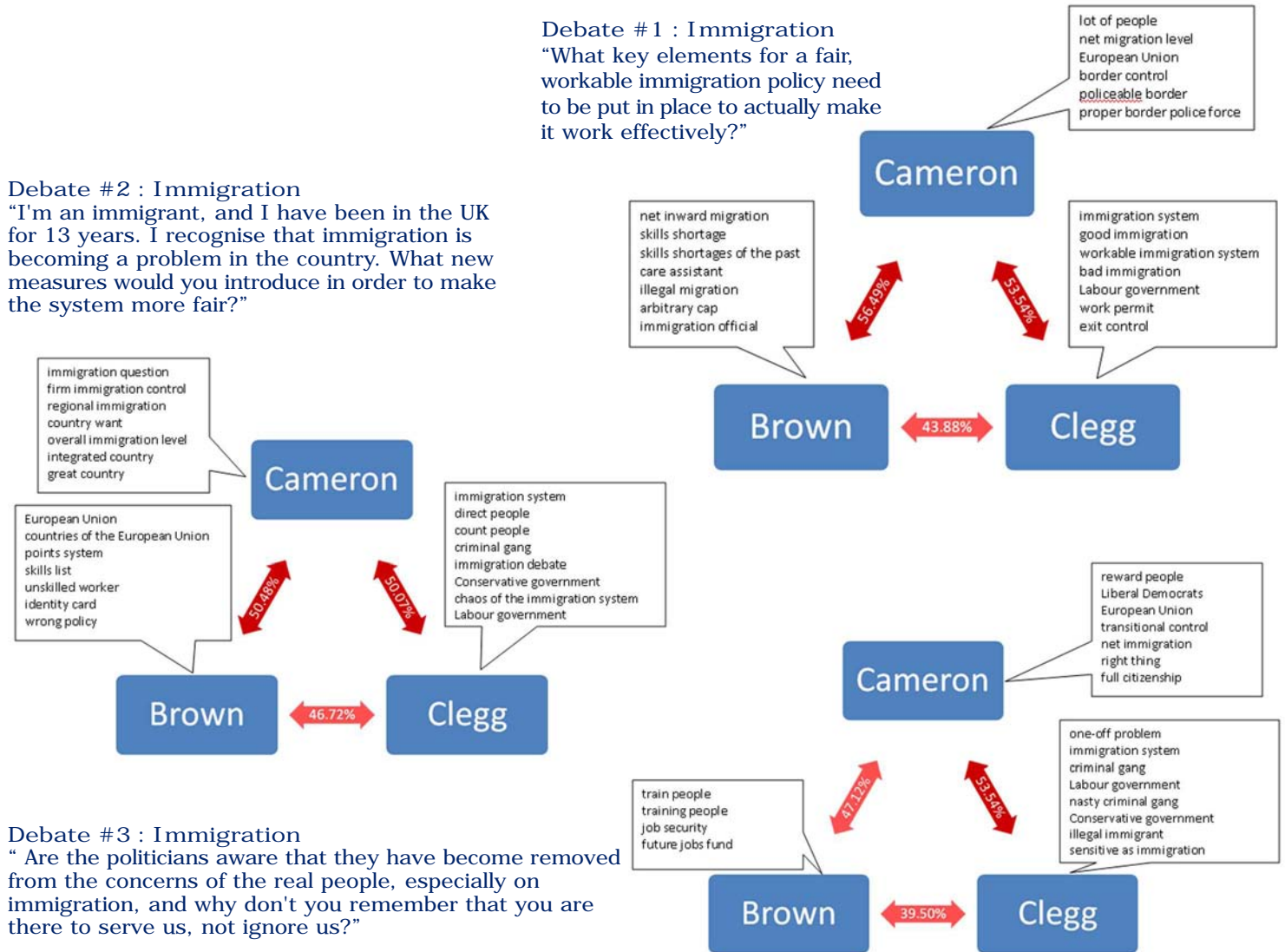
Nevertheless, although there is a greater correlation on this topic than others, there remains a considerable degree of difference between the content of the three candidate leaders and their expressions of it. Indeed we see that if we read their responses closely, with for example Cameron’s emphasis on cutting the cost of politics, Brown on House of Lords reform and Clegg on party funding.

Data which can be considered more “concrete” are what we call the “main elements”. If we take a look, we can immediately see that the references to “people” and “country” are staple concepts for all three candidates. We can go on to notice that they differ as each has a personal preference as they accentuate certain elements: Cameron focuses mainly on money, taxes, health care and change; Brown talks mainly about the economy, law enforcement, education and the European Union; Clegg favors the military, immigration, government and political parties.

Debate # 1 : Immigration
 “What key elements for a fair, workable immigration policy need to be put in place to actually make it work effectively?”

Debate # 2 : Immigration

“I’m an immigrant, and I have been in the UK for 13 years. I recognise that immigration is becoming a problem in the country. What new measures would you introduce in order to make the system more fair?”



Analysis Observations

Immigration was the only topic which appeared in an audience question in all three debates. Across the three debates, there was no very strong correlation between the three electoral leadership candidates.

Cameron had a stronger correlation with the other two candidates in all three debates, than there was between Brown and Clegg. The degree of correlation between Brown and the other two candidates declined in the final debate, the analysis indicating that Brown emphasised training and jobs rather than immigration itself. (Arguably the focus of the question placed in the last debate was not immigration, since the main clause was about remoteness of politicians from other people, but the candidates largely latched on to the immigration subject). Brown also seems to have placed some emphasis on issues related to jobs and training in the first two debates (“skills shortage”, “unskilled worker”).

Through the three debates, but especially in the first two, the analysis indicates that Cameron emphasises control (“border control”, “firm immigration control” and “transitional control”), whereas the common thread in all three debates for Clegg was the “immigration system”. For Clegg the word group “criminal gang” is also significant in both debates 2 and 3. Overall the analysis shows that while there is a degree of overlap between the three candidates (they all agree on the need for management of immigration, for example), there is diversity in the emphasis placed by each on different facets of the issue.

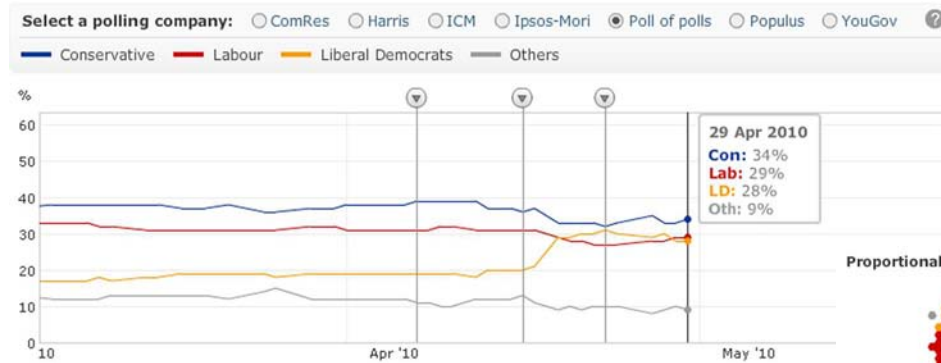
From a categorization standpoint (if we analyze the answers on the whole), there is more uniformity in the second debate with only slightly different percentages between the candidates. While, in the first debate, we can see how the candidates' overall coverage (starting with common elements like politics and finance) fluctuates from education to crime to social issues to industry. It should be noted that the fact that the candidates had to respond to the same questions provided a sufficiently ordered system for the topics discussed and left only a small margin for the program priorities of each single party.

We also examined the distribution of semantic use and found that the three candidates practically share the same agenda. The most used meanings concern: abstract concepts, followed by concrete objects, then people as a group and finally, people as single individuals. As far as verbs go, mainly actions and communication were discussed. While these observations sound quite "political" in nature, we cannot deduct that these indicate something positive rather than negative.

A final analysis was conducted on the similarities between the individual answers. Based on our automatic system, the most similar responses came from Cameron and Brown when responding to the question of 'how to regain voters' trust after last year's scandal' (second debate, fifth question) and the most diverse responses came from Brown and Clegg when responding to the question about 'care for the elderly' (first debate, final question).

Furthermore, while examining the third (and most important) debate, we discovered yet another interesting occurrence. At the end of campaign, the two peaks which measure the most similar and the most diverse responses represent the same two politicians: Cameron and Clegg. After automatically analyzing the responses to the first question (concerning the future demand on taxpayers' pockets right after the election), we found the two to have the largest divergence among all three debates. Their responses to the third question however (concerning the banks which have been sustained by taxpayers' money and the bonuses which the bank directors received), gave us the highest reading of semantic similarity for the entire third debate. What we can gather from this is that even if there doesn't appear to be any convergence on how they will be collecting money in the near future, there does seem to be a correlation on one issue of popular concern.

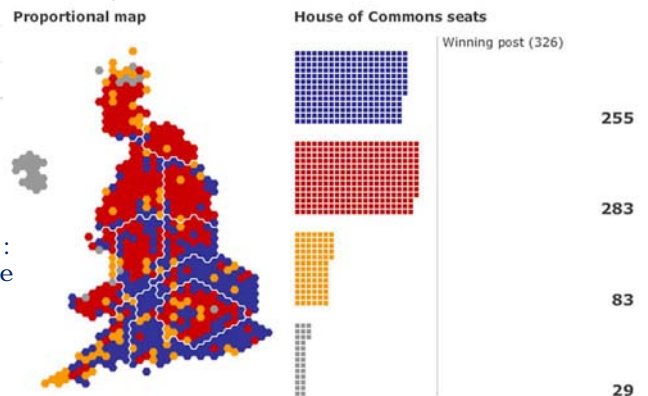
Overall, this report (an extremely reduced version of the extracted data) really seems to give hope for a small, but useful study of complex discussions. Even if we can't use this data to predict the winner of this election (nor can we unmask who's "telling stories"), we can still have reason to believe that if we apply similar algorithms to forums of discussion, we might be able to gain some interesting information in addition to the commonly cited statistics.



Source BBC website:
http://news.bbc.co.uk/2/hi/uk_news/politics/election_2010/8280050.stm

Poll tracker (29 Apr 2010) measures opinion poll support for Labour, the Conservatives and the Lib Dems.

Election seat calculator (29 Apr 2010): it allows you to get an idea of what the next parliament might look like.



Hung parliament

Poll of polls poll. 29 April 2010. If people voted like this at the general election there would be a hung parliament. Labour would be the largest party, but would be short of a majority by 43 seats.

Source BBC website:
http://news.bbc.co.uk/2/hi/uk_news/politics/election_2010/8609989.stm

Expert System Contacts

Bill Porter, Expert System Business Development Director UK
 bporter@expertsystem.net - Mobile: +44 (0) 7782 167831
 www.expertsystem.net