Wordscore

The last method to locate the positions of political parties is the Wordscore computer program recently developed by Michael Laver and his co-researchers (Laver, Benoit and Garry 2003). Unlike the CMP and the dictionary techniques which treat texts as discourse to be understood and interpreted for meaning either by a human coder or by a computer, the Wordscore technique treats texts (more precisely the words contained in those texts) as data containing information about the position of the texts' authors on predefined policy dimensions. Starting from a set of "reference" texts whose policy positions are determined a priori, the technique extracts data from these reference texts in the form of word frequencies and uses this information to estimate the policy positions of "virgin" texts about which nothing is known. To paraphrase Laver, Benoit and Garry (2003: 313) what we know of a virgin text is limited to the words which it contains.

The Wordscore program compares these words with the words contained in the reference texts which are taken to symbolize the extreme positions on a priori defined scale (say the left-right scale, with the left reference text given a score of 0 and right 10). A data processing program generates a first score (called a wordscore) for each word according to the relative frequency of its appearance in the reference text, then a second score for the relative frequency of all the wordscores in a virgin text (this second score is called a textscore). The final step consists of transforming the virgin textscores to their original metric. It is this calculation which makes it possible to locate the position of a political text on a space.

The main advantage of the Wordscore method is that it produces a distribution of scores around an estimated mean score. This makes it possible to come up with a standard error and therefore, to establish a confidence interval around the estimated mean score. The Wordscore method has the unique advantage among the methods reviewed here of providing a statistical measure of how different two virgin texts are from one another in their vocabulary. In fact, two texts are statistically different if their confidence intervals do not overlap. Of course, the scores are all the more valid if one has confidence in the choice of the references texts and in the measure used to decide what

their positions are on a given scale or cleavage. Laver, Benoit and Garry (2003) make several important recommendations concerning the selection and scoring of references texts, one of them being that the virgin texts and the reference texts must share a similar frame of reference.

One limit of the Wordscore methods is that it allows comparison only between texts that are of very similar ilk (party platforms in the same election for example). The method is not a good instrument to compare two political texts intended for different purposes (a party platform and a throne speech for example).

Reference

Laver, M., K. Benoit, and J. Garry (2003). "Extracting Policy Positions from Political Texts Using Words as Data." The American Political Science Review **97**(2): 311-331.