Abstract

The paper proposes a framework---the Debate Graph Extraction (DGE) framework---for extracting debate graphs from transcripts of political debates. The idea is to represent the structure of a debate as a graph with speakers as nodes and "exchanges" as links. Links between nodes are established according to the semantic similarity between the speeches and indicate an alignment of content between them. Nodes are labelled according to the "attitude" (sentiment) of the speakers, positive or negative, using a lexicon based technique founded on SentiWordNet. The attitude of the speakers is then used to label the graph links as being either "supporting" or "opposing". If both speakers have the same attitude (both negative or both positive) the link is labelled as being supporting; otherwise the link is labelled as being opposing. The resulting graphs capture the abstract representation of a debate as two opposing fractions exchanging arguments on related content.