

Participants to
analyze sentiments to
beginwith, and we



Participants in the BLGNLP2017 shared task were invited to either build sentiment analysis systems (as a Builder team) or break them, by compiling linguistically motivated test cases that result in false predictions (as a Breaker team). A data set of movie reviews was provided as the domain for participating systems and as a source for generating breaking test cases. As a Breaker team, our goal was to construct minimal pairs consisting of a review from the source data set, and a modified version of the review that would be used to evaluate the robustness or sensitivity of the participating systems' predictions. The modified version of each review could either preserve the sentiment of the original review, or reverse it.

Movie reviews from Rotten Tomatoes are a good source for comments full of sentiment, as the informal setting provides for humor, pathos, wild comparisons, sarcasm, artistic expressions and the like. Hence, it was probably not an easy task for the Builder systems to analyze sentiments to begin with, and we tried to make it even harder. Based on the sentiment analysis of our linguistic examples it seems like there are several ways to trick the Builder systems. In our own judgments of the provided items, we followed a positive/negative sentiment dichotomy, which was not always straightforward given the complexity of the data. However, even if a neutral sentiment option was included (as found in the predictions of some of the Builder system) it would not have accounted for the whole variation, as some items could have multiple plausible interpretations, affecting their perceived valence. Thus, it is important to bear in mind that the judgments provided by us might not always coincide with those of other people.

We begin this paper by describing the general rationale we had employed in creating our testcases. We then present some examples of sentences that broke the Builder systems and discuss the nature of the errors, and the main difficulties in analyzing sentiment. In addition, we discuss the linguistic processes that take place in inferring sentiment from the various examples.