

Project Presentation

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Task

Analyze sentiment in subordinating and coordinating conjunctions with respect to cue phrase.

Hypothesis:

- Cue phrases are strong signal of sentiment relationship between clauses
- Because cue phrases are strong indicators RST relationships (e.g. contrast [BOS ...][but ... EOS])

Example

(S
 (SBAR Although (S What Time offers Tsai 's usual style (CC and) themes))
 , it has a more colorful , more playful tone than his other films .
)

Sentiment:

SBAR = 0.56

SBAR clause = 0.72

Whole sentence = 0.81

Method

I am using Socher at al dataset because it has sentiment annotations on phrase level

However I still have to identify cue phrases and clauses:

1. Run parser and recover S, SBAR and CC labels
2. Identify clauses and cue phrases by matching simple patterns like: [S ... [SBAR cue phrase [S ...]]

Metrics

Metrics should:

- Quantify relationship strength
- Qualify kind of relationship

Metrics

1. Mutual information
2. Sentiment delta (mean, std)
3. Count of + to - and - to +
4. Count of + to ++ and - to --

Progress

Done so far:

- Extraction of subordinate / main clause and extraction of coordinate clauses
- Merging of extractions with sentiments
- Mutual information calculation

To do:

- Rest of the metrics
- Analysis

The End