Conversational Analysis of Daily Dialog Data using Polite Emotional Dialogue Acts

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Conversational Analysis
- Socio-linguistic cues
- Dialogue Acts, Emotion, Politeness, etc.
- Relationship of Emotions and Dialogue Acts [1]
- Emotional Dialogue Acts
- Co-relation between cues are helpful
- Drive the dialogue flow - dialogue system
- Pragmatic conversational analysis
- Human-robot/computer interaction

DailyDialog Dataset
- Conversation topics of daily life [2]
- Ordinary life and Financial topics
- Manually labelled with
- Emotion and Dialogue Act classes
- Bi-turn dialogue flows of dialogue acts
- Question & Inform and
- Directive & Commissive
- Annotate with Politeness values between scale of 1 and 5

Emotions vs Politeness

Dialogue Acts vs Politeness

Concluding on Politeness for Conversational Analysis
- Discover how politeness functions in a dialogue
- Behavioural analysis of conversation partners

References

BERT for Politeness Analysis
- Politeness regressor model [3]
- Combine two politeness datasets [4] and [5]
- Pre-training a BERT-based model [6]

Annotated Utterances from DailyDialog

Emotions

Dialogue Acts

Politeness

DoP Dialogue Act Emotion Utterance
4.63 Inform Happiness Sure, that would be great! Thank you!
4.63 Commissive Happiness That would be great! Thanks a lot!
4.62 Inform Happiness This is exciting! Thank you so much!
3.34 Inform no_emotion Just a minute. It’s ten to nine by my watch.
3.34 Inform no_emotion You may check out books or videos.
3.34 Question no_emotion That’s a small fee?
1.59 Inform Disgust Don’t dress like that. You’ll make fool yourself.
1.47 Directive no_emotion Get up, you lazybones!
1.46 Directive Surprise You idiot! Don’t say that! Do you want this job, or not?
1.37 Directive Anger Get out of my store, you jerk!

Annotated dataset, code and other information is available at: https://github.com/bothe/politeEDAs