An opinion about opinions about opinions

Subjectivity and the aggregate reader

Asad Sayeed

Uni-Saarland
Q: Dude, what’s your problem?
A: I don’t believe that sentiment analysis can be evaluated “objectively”.
Q: But... but... $\kappa$!
A: It’s not about inter-annotator agreement.
A: It’s not about inter-annotator agreement.
(Well, not entirely.)
The issue is what sentiment analysis is FOR.
Start by considering the opinion source
and some opinion text

Opinion text

Opinion source

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generated by the source.
Parts of the text indicate intensity, polarity, etc.
But consider a reader

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whose understanding of the opinion in the text is different.
whose understanding of the opinion in the text is different.
whose understanding of the opinion in the text is different.
Thus it becomes hard to identify the important bits.
Disentangling them takes pragmatics.

Opinion text

Opinion source

World knowledge

Opinion “receiver”/reader
But pragmatics is hard.
Encoding the knowledge is not easy.

Example from Somasundaran and Wiebe (2009)
The blackberry is something like $150 and the iPhone is something like $500.

Detect that cheaper is better. (Or is it . . . ?)
So, yeah, pragmatics is hard.
Annotators contain some world knowledge,

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but are they annotating something useful for opinion mining users?

Opinion “receiver”/reader

User tasks

Opinion text

Opinion source

Annotators

Opinion “receiver”/reader

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Lloyd Hession, chief security officer at BT Radianz in New York, said that virtualization also opens up a slew of potential network access control issues.
But you might be an investor in a security company.

Example: information technology business press

*Lloyd Hession, chief security officer at BT Radianz in New York, said that virtualization also opens up a slew of potential network access control issues.*
It’s not obvious annotation is getting what users need.
So we need to find a way to connect annotation to the users,

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and that involves understanding the tasks.
But no two users are alike in knowledge and understanding,
although they seem to match opinion sources relatively well.
How to bring task understanding into the mix?

Opinion "receiver"/reader

Opinion "Aggregate reader"

User tasks

Opinion source

Opinion text

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Ensuring multiple annotators agree on what an opinion is

Opinion source
Opinion text
Opinion “receiver”/reader
Annotators
User tasks

Captain Picard is making it difficult to decide on what an opinion is

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is crucial to consistently identifying opinion-relevant text.
I’ll admit now that I don’t have the answers, except...
to make a plea for more vague theoretical handwaving and less “empirical” “evaluation”.
to make a plea for more vague theoretical handwaving and less “empirical” “evaluation”.

(Just like this talk.)