

An opinion about opinions about opinions

Subjectivity and the aggregate reader

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Q: Dude, what's your problem?

A: I don't believe that sentiment analysis can be evaluated "objectively" .

Q: But... but... κ !

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



Opinion source

and some opinion text

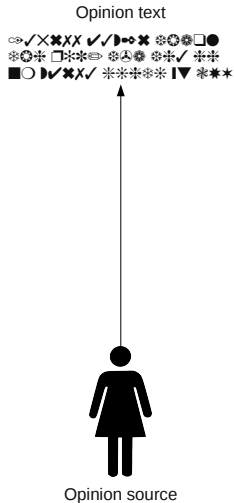
Opinion text

©✓×××× ✓✓▶⇒× ☉☉☉☐●
☉☉*☐*:*⇒ ☉☉☉☉ ✓*
■○▶✓×× ✓**:*:* *!▼***



Opinion source

generated by the source.



Parts of the text indicate intensity, polarity, etc.

Opinion text



A collection of various symbols including checkmarks, crosses, asterisks, and geometric shapes in red and black.



Opinion source

But consider a reader

Opinion "receiver"/reader



Opinion text



Opinion source

whose understanding of the opinion in the text is different.

Opinion "receiver"/reader



Opinion text



Opinion source

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Opinion "receiver"/reader



Opinion text



Opinion source

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Opinion "receiver"/reader

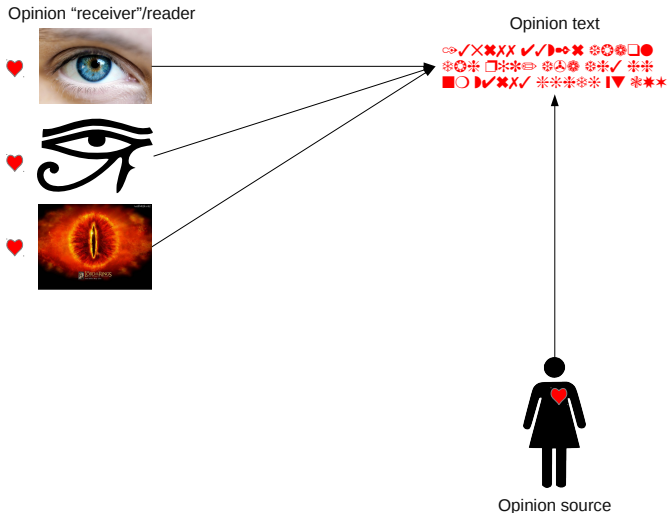


Opinion text

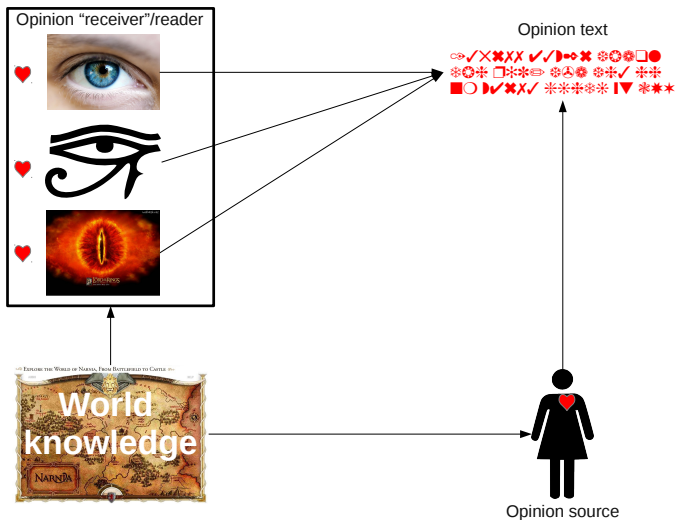


Opinion source

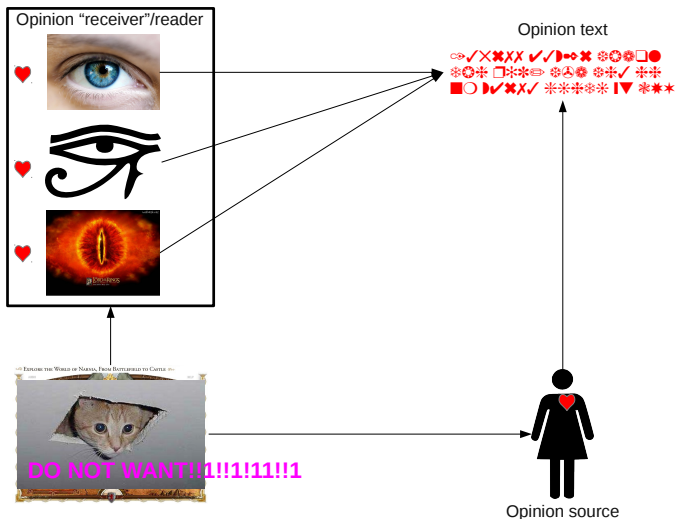
Thus it becomes hard to identify the important bits.



Disentangling them takes pragmatics.



But pragmatics is hard.



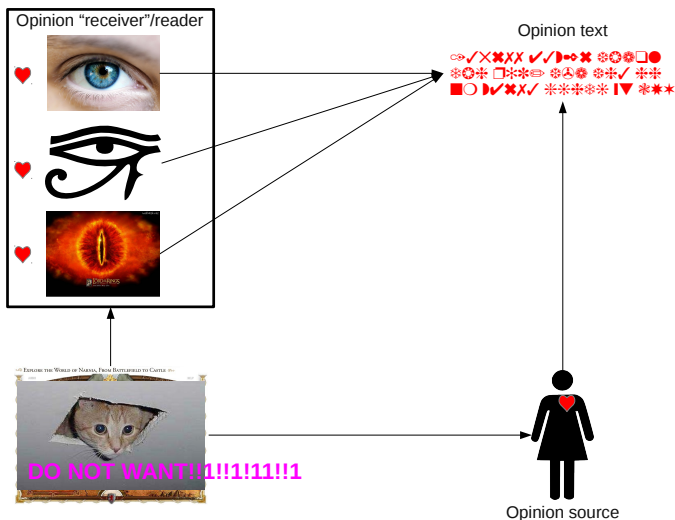
Encoding the knowledge is not easy.

Example from Somasundaran and Wiebe (2009)

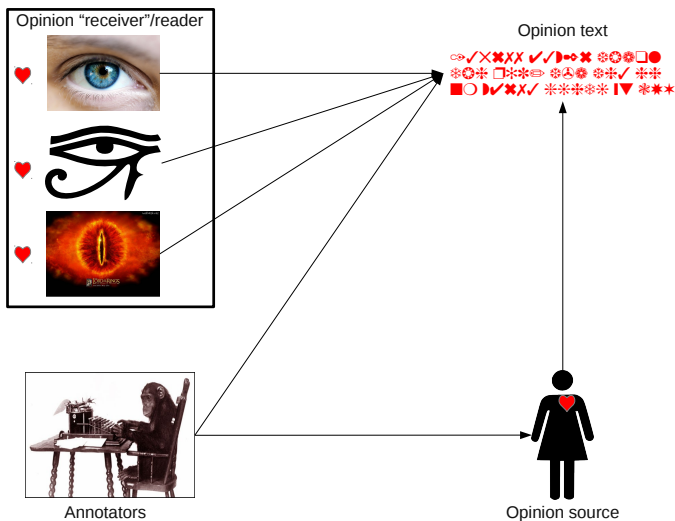
The blackberry is something like \$150 and the iPhone is something like \$500.

Detect that cheaper is better. (Or is it...?)

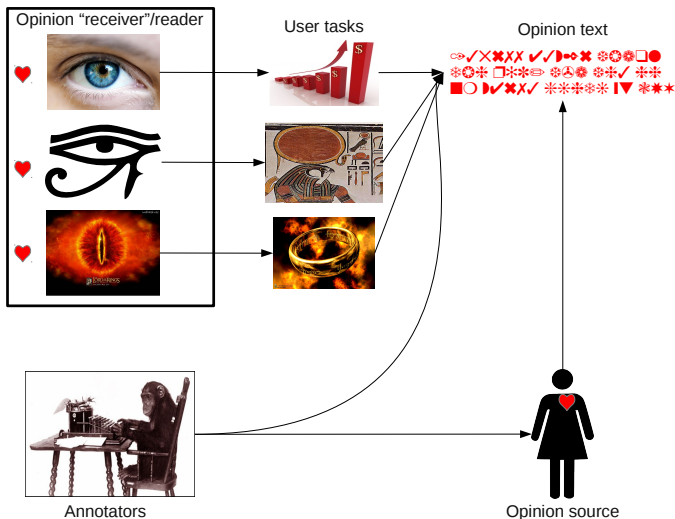
So, yeah, pragmatics is hard.



Annotators contain some world knowledge,



but are they annotating something useful for opinion mining users?



Say you're the opinion source.

Example: information technology business press

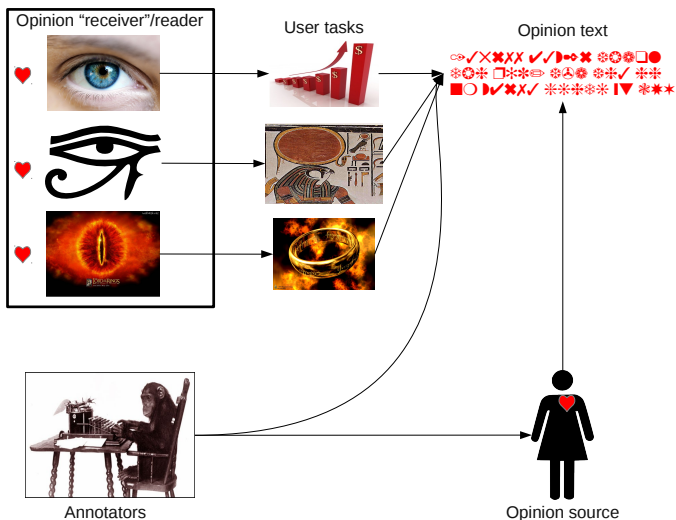
*Lloyd Hession, chief security officer at BT Radianz in New York, said that **virtualization** also opens up a **slew** of potential network access control **issues**.*

But you might be an investor in a security company.

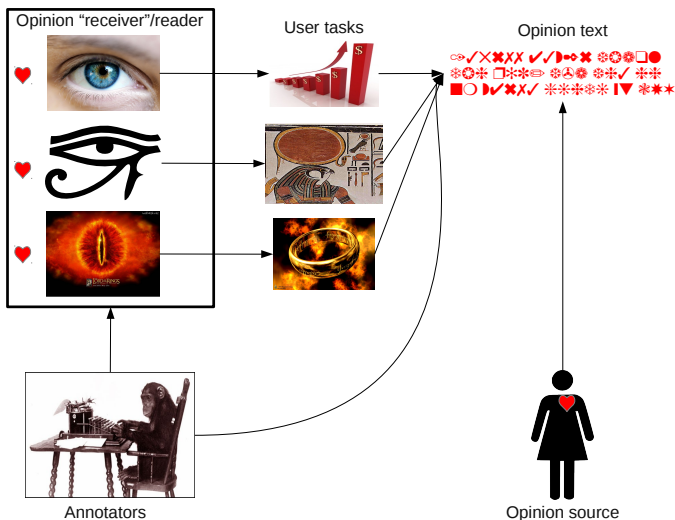
Example: information technology business press

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.

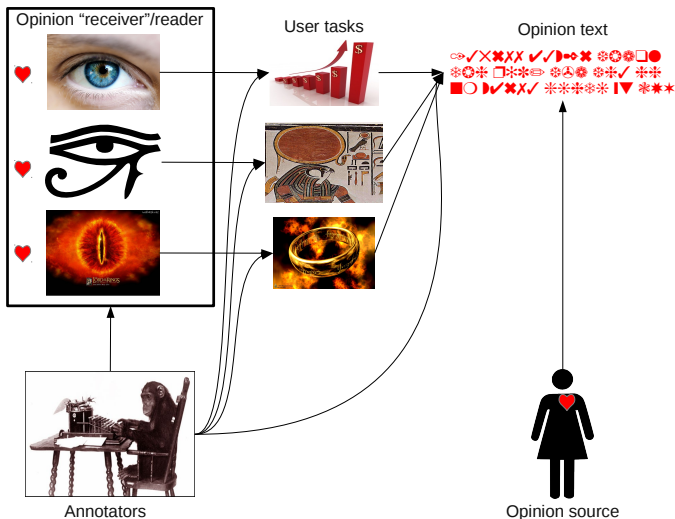
It's not obvious annotation is getting what users need.



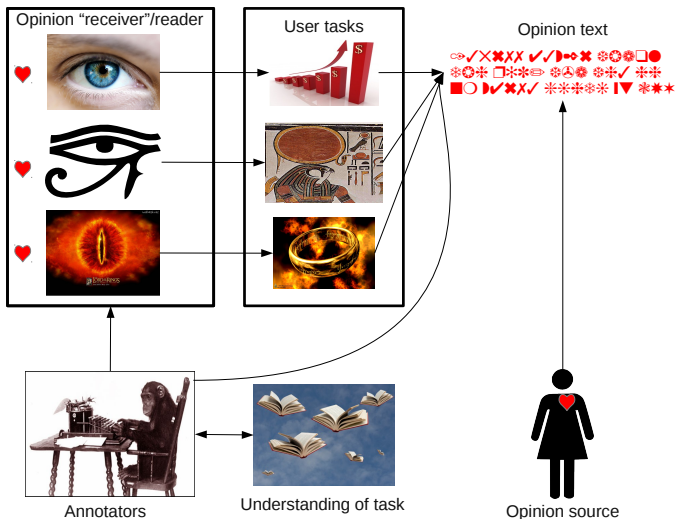
So we need to find a way to connect annotation to the users,



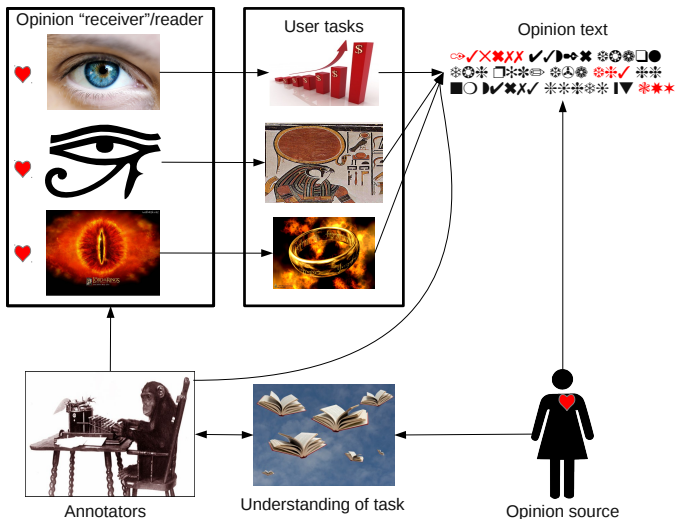
and that involves understanding the tasks.



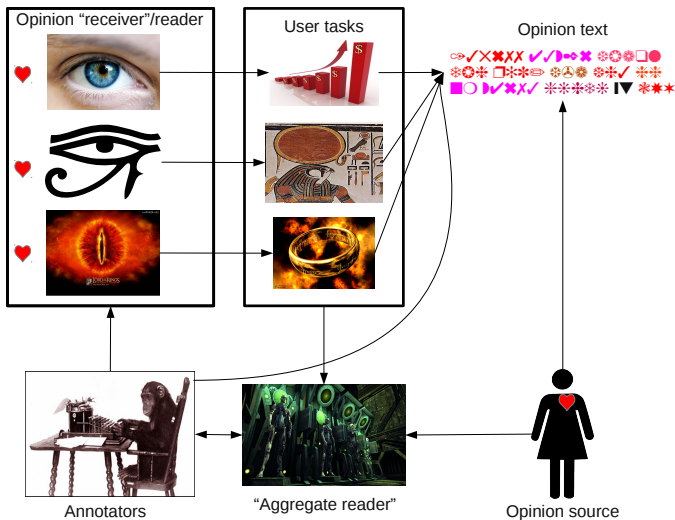
But no two users are alike in knowledge and understanding,



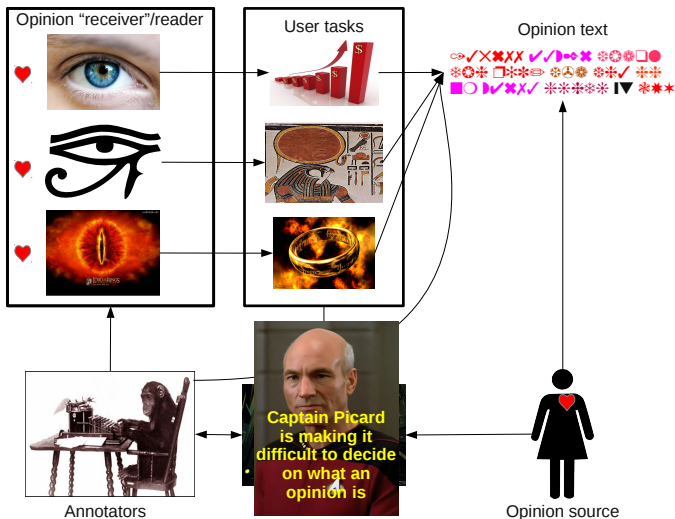
although they seem to match opinion sources relatively well.



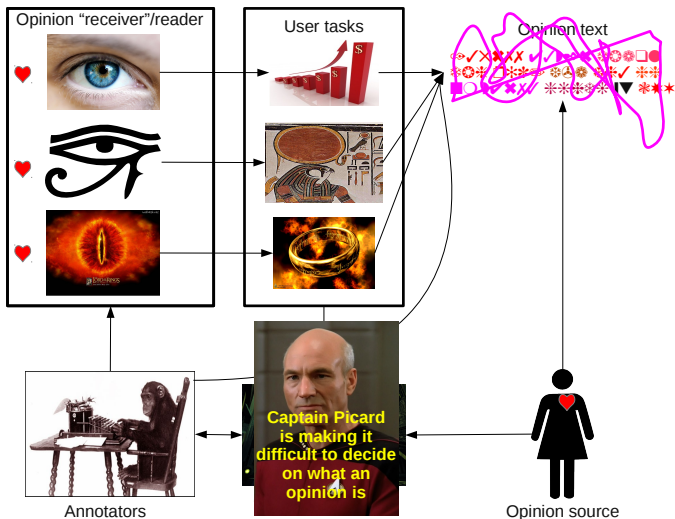
How to bring task understanding into the mix?



Ensuring multiple annotators agree on what an opinion is



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.)