Drawing inferences

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Linguistics
Information is expressed implicitly

A: Do you like my new haircut?

B: It’s interesting.
Inferences are context-dependent

(1) The problem, I’m afraid, with my colleague here, he really doesn’t believe that it’s war.

Average: 5.5 (sd 1.7)
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(2) Transplanting an ecosystem can be risky, as history shows. Hellmann doesn’t believe that relocating species threatened by climate change is a panacea.

Average: 2.1 (sd 1.1)
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[Schlöder & Fernández 2014]

A: But it’s uh yeah it’s uh original idea.

B: Yes it is.
Inferences are context-dependent

A: But it’s uh yeah it’s uh original idea.

B: Yes it is.

A: The shape of a banana is not – it’s not really handy

B: Yes it is.

[Schlöder & Fernández 2014]
Q: God doesn’t take away sinful desires. You’ve never had sinful desires? I know I have.

R: Yes, God does take away sinful desires. (If you ask Him.) I’m not saying that it doesn’t take any work on your part, though.

Agreement score: -1.4
IAC is skewed towards disagreement
Data people work with: binary labels

[Abbott et al. 2011, Misra & Walker 2013, Gokcen & de Marneffe 2015]
Leveraging monolingual alignment

[Gokcen & de Marneffe 2015]

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## Improvement in disagreement recall

<table>
<thead>
<tr>
<th></th>
<th>Agreement</th>
<th>Disagreement</th>
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<tbody>
<tr>
<td></td>
<td>P</td>
<td>R</td>
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Incorporating world knowledge?

A says that he witnessed B murdering C.

Infer that the evidence that B actually did murder C is stronger:

- if the murder was well lit than if it was in the dark
- if A already knew B than if he was a stranger
- if A is testifying under oath than if he is talking casually

Contributed by Ernie Davis, New York University, U.S.A.
(19th September 1997)
Thank you!