#### **Drawing inferences**

#### Marie-Catherine de Marneffe



## Information is expressed implicitly

A: Do you like my new haircut?

B: It's interesting.

(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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[Schlöder & Fernández 2014]

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

B: Yes it is.

[Schlöder & Fernández 2014]

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

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

B: Yes it is.

B: Yes it is.

# **Internet Argument Corpus (IAC)**

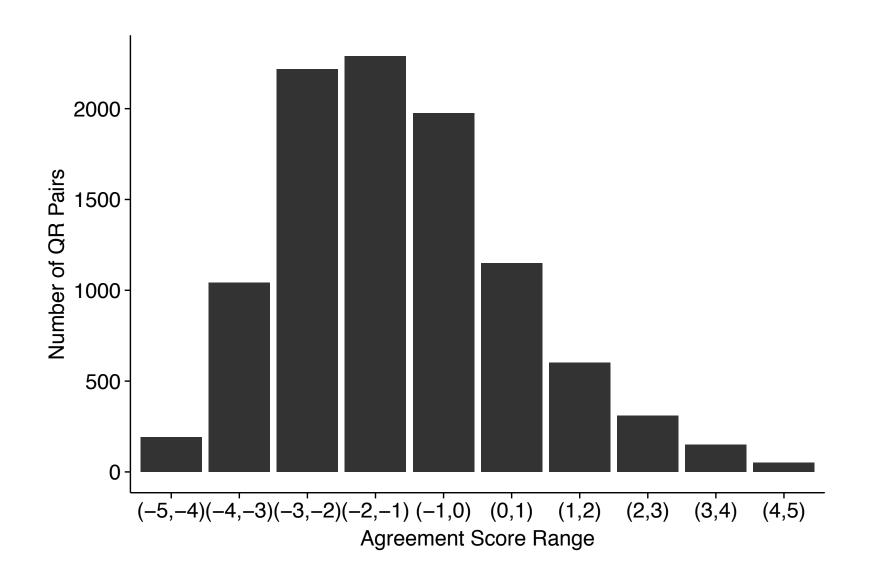
[Walker et al. 2012]

Q: God doesn't take away sinful desires. You've never had sinful desires? I know I have.

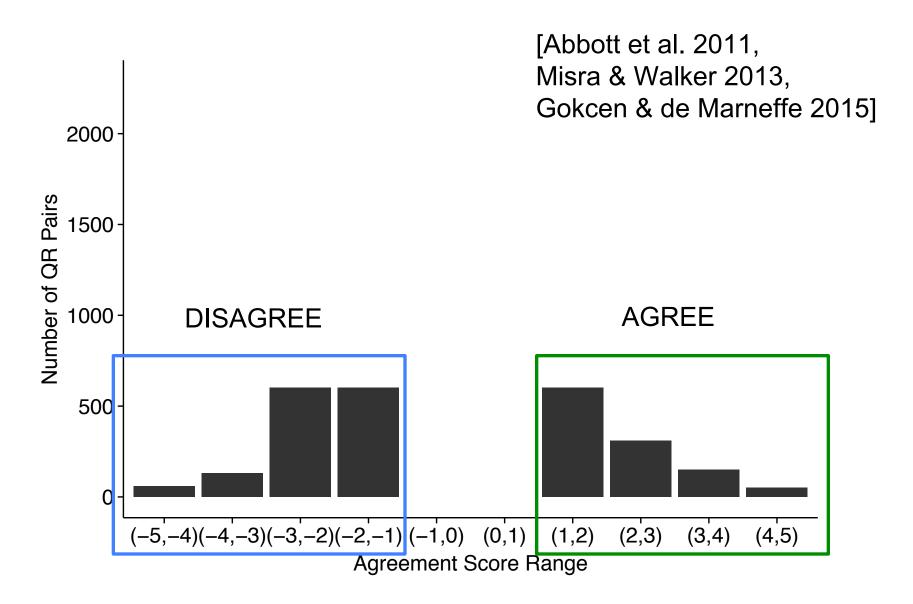
R: Yes, God does take away sinful desires. (If you ask Him.) I'm not saying that it doesn't take any work on your part, though.

Agreement score: -1.4

#### IAC is skewed towards disagreement



# Data people work with: binary labels



#### Leveraging monolingual alignment

[Gokcen & de Marneffe 2015]

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

# Improvement in disagreement recall

	Agreement		Disagr	Disagreement	
	Р	R	Р	R	
Baseline	70.64	74.77	73.21	68.92	
Align+	76.04	74.32	74.89	76.58	

## 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!