Indirect Speech Acts Do Not Change FTOs in Conversation

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Introduction

We know that indirect speech acts are often used and easily recognized in conversation.

We do not know the underlying cognitive mechanisms used to interpret indirect speech acts.

Direct and Indirect Speech Acts

	Declarative	Interrogative
Statement	I am married	Are you nuts
Question	You are married	What is your name

Competing Theories

Hypothesis 1
First, applicability of direct speech act is assessed. If not applicable, alternative speech acts are considered.

Hypothesis 2
Speech acts are recognized early independent of their linguistic form.

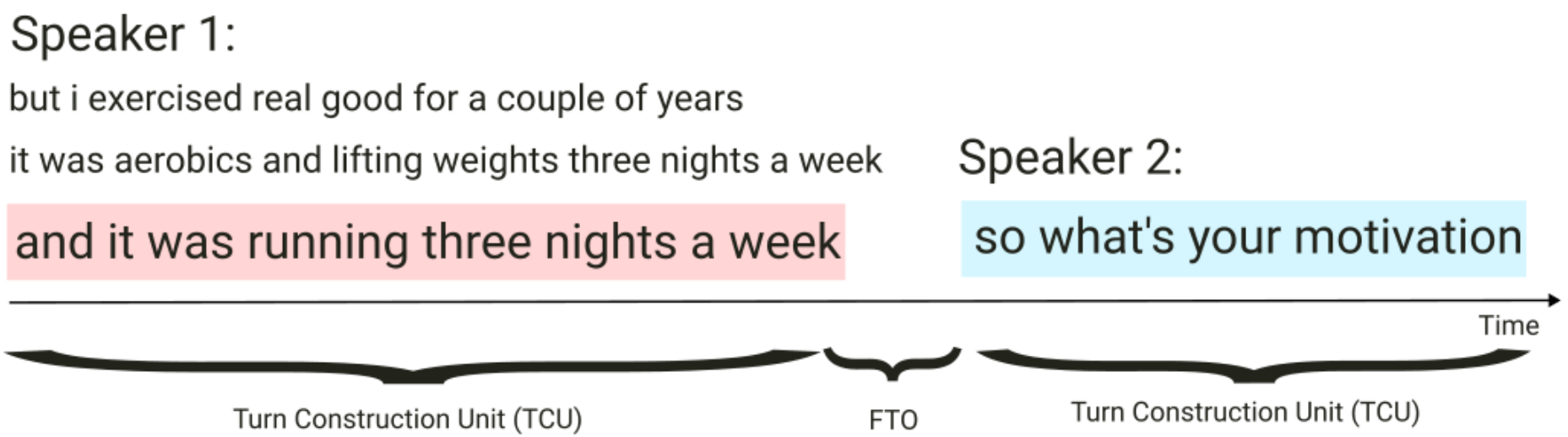
Research Question

Is there evidence of extra cognitive processing of indirect speech acts in natural conversation?

Approach

If response bias is longer for indirect speech acts than for direct speech acts, this may be evidence for a re-appraisal cognitive mechanisms.

Data Details



Declarative: 0.703

Interrogative: 0.051

Function: statement

Experiment 1: Data

1930 TCUs were categorized as:

- Declarative or Interrogative Sentence Type
- Statement or Question Speech Acts

and had an FTO following the TCU.

Experiment 1: Analysis

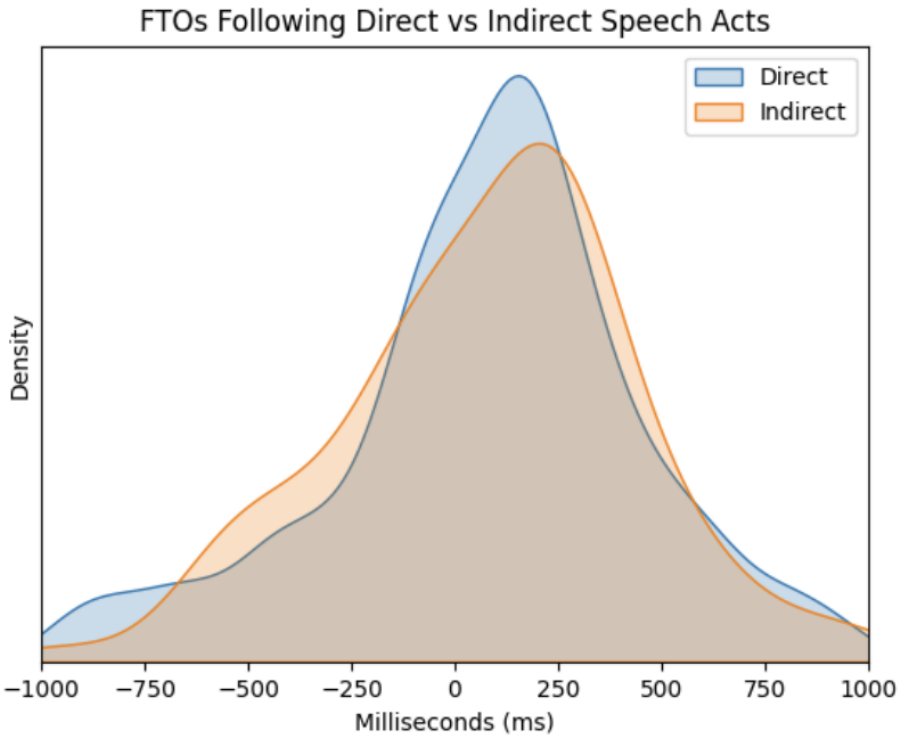
We compared linear mixed effects regression models.

We incrementally added fixed effect of sentence type, speech act, and interaction effect.

All models included a random effect of conversation ID.

We found that the data were maximally likely under a model that included only speech acts.

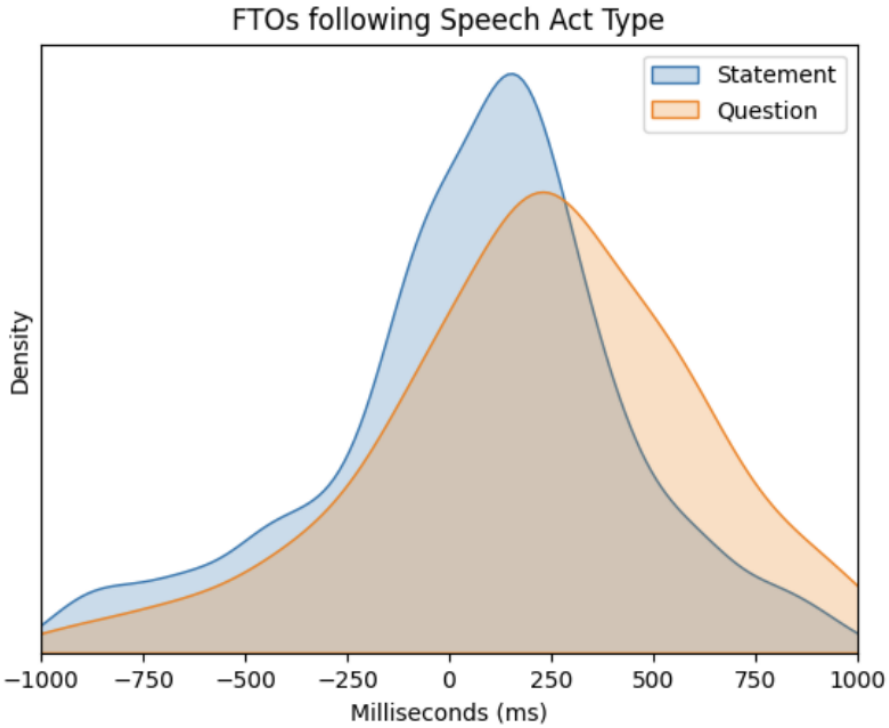
Indirect Speech Act Results



We found that FTO length is not dependent on the directness of the speech act.

$$BF_{01} = 4270$$

Speech Act Results



The data were maximally likely under a model that included only speech act as a fixed effect.

Experiment 2: Data

In experiment 1, directness was a discrete variable. In this experiment, we use the continuous probabilities of directness instead.

2465 TCUs were annotated as:

- Percent probability of Declarative or Interrogative Sentence Type
- Categorization of Statement or Question Speech Act

and had an FTO following the TCU.

Experiment 2: Results

Our linear mixed effects regression found that the data were 5.7 times more likely under the null model than the model including probability of directness.

This constitutes further evidence that speech act directness does not predict FTOs.

Conclusion

In natural conversation, we found no evidence of extra cognitive processing for indirect speech acts.

We did find evidence that FTO duration changes in response to the previous speech act, but not the directness thereof.