

Implicativity in Interaction: Effects of conversational context and lexical meaning

Fahima Ayub Khan¹, Eleni Gregoromichelaki, Christine Howes, Robin Cooper
University of Gothenburg

Inferences derived from utterances including presupposition triggers reflect public commitments (de Marneffe et al, 2019; Cornillie, 2018) whose negotiation in dialogue can be taken as an alternative basis for grounding interaction coordination instead of communicating Gricean intentions (see, e.g., Gregoromichelaki et al, 2010; Geurts, 2019). As such, the particular presupposition triggers available in a language can be taken as conventional resources (*affordances*, Gregoromichelaki et al, 2020) for establishing common commitments in interaction. In contrast, Annamalai and Levinson (1992) claim that presupposition triggers and their conversational behaviour are parallel across languages, e.g., the defeasibility properties of all presupposition triggers are similar between English and Tamil, revealing some kind of universal conceptual basis for pragmatic inference. However, their presentation does not cover the full range of presupposition triggers, especially in the category of *implicative verbs*, i.e., verbs which entail the truth of the complement clause while carrying presuppositions constraining the context of utterance (Karttunen, 1971). Nadathur (2023) accounts for such entailments and contextual constraints under a causal model which links the lexical content of the verb to the set of inferences eventually licensed by the sentence. On the other hand, White (2019) points out the contribution of the syntactic and morphological features of particular languages in implicative constructions and argues that the causal framework does not fully account for predicates such as ‘remember’ and ‘forget’ since the implicative entailments are rather *actuality entailments* realised by the modal presupposition of these verbs (i.e., ‘obligation’). While these studies mostly focus on implicative presuppositions (*not-at-issue*) and entailments (*at-issue*) triggered by lexical items at the individual level, very little is known about how such inferences are co-constructed and processed in interactive contexts where agency and responsibility for common commitments are distributed between interlocutors.

As a preliminary to an investigation of the whole range of factors predicting inferences resulting from the use of implicative constructions, the present study examines how individuals process at-issue implicative inferences (so-called “entailments”) in English and Tamil. Specifically, we assume that implicative verbs such as ‘remember’, ‘manage’, ‘forget’, and ‘fail’ display variable implicative inferences cross-linguistically depending on contextual and lexicogrammatical constraints (cf. Levinson & Annamalai, 1992). For example, we have observed that affirmative assertions involving *remember* in English generally commit the speaker to the truth of the sentential complement (as in (1)), whereas, in Tamil (2), this is not the case, in fact, there is no necessary implication to the truth of complement:

(1) She remembered to lock the door → *She locked the door*

(2) Aval-ukku kadhav-ai poot-a nyabagam-irundha-dhu
she-DAT door-ACC lock-INF memory-have-3.SG.PST.N
She remembered to lock the door →? *She locked the door*

On the other hand, (1) also involves a speaker commitment to the fact that the subject of the main clause was under some obligation or constraint to lock the door, which also holds in Tamil. The speaker's commitment to the truth of the complement of the implicative verb can become the target of a question-answering pair (as in (3) and (4)):

(3) A: Did she remember to lock the door?
B: Yes(, she did lock the door).

(4) A: Avalukku kadhavai poota nyabagam irundhadha?
she-DAT door-ACC lock-INF memory-have-3.SG.PST.Q
Did she remember to lock the door?

¹ fahima.ayub.khan@gu.se

B: Aama, nyabagam irundhadhu
Yes, memory-have-3.SG.PST
Yes, (she) remembered

Unlike the presentation of isolated sentences in a monological context, this use of the implicative construction in dialogical interaction in Tamil has an impact on the potential inferences that can be generated. The inference to the truth of the complement now becomes much more likely.

To investigate such variable inferences, we implemented a judgement task to test the inferential profile of the verbs *remember*, *manage*, *forget* and *fail* in English and Tamil. We recruited 20 native English speakers and 20 native Tamil speakers between the ages of 18 to 75 as participants. The speakers of each language were presented with target items where each implicative verb appeared in an assertion (*monological context*) or in a question-and-answer within a conversation (*conversational context*). This target item is followed by a polar question (see Fig. 1 & 2) where subjects are asked to select an appropriate response with ‘yes’, ‘maybe’, and ‘no’ as the options. Responses were analysed using a mixed-effects logistic regression model.

Our findings reveal that speaker commitment to the truth of the complement was stronger in English in both monological and conversational contexts in comparison to Tamil. However, especially in the case of ‘remember’ and ‘manage’, targeting the truth of the complement in questions and through sentential ellipsis (*yes*) in the conversational context results in stronger inferences about its truth in Tamil. This indicates that perceived speaker commitments can vary not only due to the semantic/conceptual content encapsulated in implicative triggers and constructions but also depending on perceived speaker goals in a conversation. Thus, the results provide preliminary evidence that an appropriate account of the processing conditions of such verbs requires not only a fine-grained account of their conceptual structure and the particular syntactic constructions in which they appear but also taking into account the influence of constraints arising from the structure of a fine-grained conversational model. We model cross-linguistic inferences of implicative verbs using the framework of DS-TTR (Gregoromichelaki, 2018) which provides the appropriate contextualisation of lexicogrammatical constraints within a dialogue processing model while taking speaker commitments and goals into consideration.

Supplementary materials

Text: Ellen remembered to lock the door

Question: Did Ellen lock the door?

Yes

No

Maybe

Text

Martin: Did you remember to call the doctor yesterday?

Sara: Yes

Question: Did Sara call the doctor?

Yes

Maybe

No

Fig 1. Monological context – English

Fig 2. Conversational context – English

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