Are metadiscourse dialogue acts a category on their own?

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Abstract

Annotation of dialogue acts was stimulated by computational work in building dialogue systems, even though theoretically the notion has its roots in the pragmatic speech act theory. We will be dealing with a special type of dialogue acts that cannot be described in terms of expressed intention, and can be described as non-topical linguistic material, for example, acts like *Well listen* or *I don't know how to say this*. We propose to use the cover term metadiscourse dialogue acts for this type of acts. We present empirical experiences from dialogue act annotation on Slovenian data.

1 Introduction

The meanings of utterances can be interpreted in terms of their functions, like, for example:

- A: *Omake še imaš kaj?* 'Do you have some more sauce?' can be interpreted as eliciting information or as a request for more sauce,
- B: *Ja.* 'Yes,' can be interpreted as confirmation,
- B: *Eee Ana saj je žlica tam pa si vzemi.* 'Uhm the spoon is there, Ana, take some,' can be interpreted as directive, etc.

One of the most known and early theories that has drawn attention to this level of meaning was Austin's (1975) speech act theory, in which an illocutionary act is considered as the "performance of an act in saying something" (Austin 1975: 99); for example, apologising, offering help, stating information, etc. However, when faced with real-life data, the five basic speech act categories of the speech act theory—representatives, directives, commissives, expressives, declarations—(Searle 1979) turned-out to be insufficient (Levinson 2017). In data annotation, alternative classifications like DAMSL (Allen, Core, 1997), SWBD-DAMSL (Jurafsky et al. 1997), AMI (2005), ISO 24617-2 (2012) and DART (Weisser 2019b) have therefore developed. Along with that the term changed from speech act to dialogue act, and the core notion was expanded significantly (Jurafsky 2004). Dialogue acts are, nowadays, usually defined in terms of dialogue functions (Jurafsky 2004) or communicative functions (ISO 24617-2 2012: 13) that an utterance performs. However, the existing schemes suffer drawbacks such as ambiguous distinction between the semantic and pragmatic meaning of utterances, lack of appropriate tags, poor informativeness of very general tags such as inform, and unsystematic annotation of metadiscourse acts (Verdonik 2022).

2 Data and methodology

Our approach is corpus-based. We have selected data for annotating dialogue acts in the total length of one hour. The data were selected mainly from the Slovene reference speech corpus (Verdonik et al. 2013) and represent diverse communicative settings. Detailed information on the data is provided in Table 1. The data were annotated by two independent annotators, both linguists. They have annotated the main dialogue act categories as identified in Verdonik (2022): information-providing acts, information-seeking acts, action acts, social acts and metadiscourse acts.

Both corpus annotators worked independently. The units of annotation were pre-annotated in order to avoid different interpretations of what is the basic unit of annotation. A minimal semantic and prosodic unit in the given context was annotated as the basic unit. The notion of context is crucial here, and it includes non-verbal, especially prosodic aspects, which we find most important for any interpretation of spoken language use.

Speech event	Duration h:mm:ss
TV news	0:02:05
Lecture	0:09:37
Telephone sale	0:09:27
Family conversation at lunch	0:09:51
At home, friends planning a common vacation	0:10:03
Online counselling in the form of an interview	0:06:05
Entertaining TV talk show, three participants, humour	0:13:00
Total	**1:00:08**

Table 1: Data for annotation.

3 Metadiscourse dialogue acts annotation

Based on the annotated data we have identified typical metadiscourse dialogue acts which are very frequent, and the annotators had no problem recognizing them:

- signalling comprehension, e.g., backchannels like *ja* 'yeah', *mhm* or *aha* both 'mhm'

- signalling attention, e.g., Ja? 'Yes?'

- signalling production processes, e.g., *Aaa kako naj rečem.* 'Uhm, how should I say this.' or A: *Eee n() mislim.* 'Uhm n() I mean.' or *Kaj jaz vem.* 'I don't know.' or *Ne vem kako bi ti rekla.* 'I don't know how to say this.'

- closings and transmissions, e.g., *No to je to.* 'Well this is it.', or *Ja no prav.* 'Yes okay right.', or *Dobro.* 'Alright.', or *In to je bistvo ne.* 'And that's the point, y'know.'

- initiations, e.g., *Veš kaj.* 'You know what.', or *No v glavnem glej.* 'Well look.'

- referring backward, e.g., A: *Kot si rekel.* 'As you've said.'

- referring forward, e.g, *Glej jaz bom tako rekel.* 'Look I will say like this.', or *No pa še enega imam za vas.* 'Well, there is one more thing.'

The listed examples can be recognised fully for their dialogue act functions in the context of their use. Here, we do not have enough space to describe the context in detail. Furthermore, the functions of these acts in the context are typically more complex than, e.g. "signalling comprehension", since such an act can, at the same time, be signalling attention, interest, agreement, etc. Nevertheless, differences between the defined types are significant and all types can be recognised.

Along with the defined metadiscourse dialogue act types borderline cases were identified in our data. Those were:

- Expression of attitude or emotion towards the discourse content with (a) Phrases such as: *Huhu, super je*! 'Wow, it's awesome!', or *Kaj si ti nor, ej!* 'Is this crazy or what!' *Fenomenalno*! 'Phenomenal!' *Fajn!* 'Nice!', (b) Laugh, (c) Non-verbal sounds like *mmm*, expressing pleasure when the speaker eats something very tasty, (d) Swear words.

- Checking the collocutor's comprehension, e.g., *You understand what I mean?* or checking one`s own comprehension, e.g., *Like this?*

- Discussing discourse flow with subtypes (a) Committing the speaker's future discourse behaviour or dialogue act, e.g., *I will explain it to you later;* (b) Directing the collocutor`s discourse behaviour or dialogue act, e.g., *Comeon, be quiet!,* (c) Consulting the discourse flow, e.g., *Do we now have a serious moment?*, (d) Evaluating the discourse flow, e.g., *I said to myself that I will practice how to pronounce this. | But I'm not doing very well.*

- Repetitions can be a subtype of signalling comprehension type if their primary function is to express how the speaker comprehends the collocutor, or a subtype of expression of attitude or emotion type.

- Rhetorical questions can be a subtype of referring forward type.

The data we have used for the present research were limited in their size, and we should expect additional types and subtypes of metadiscourse dialogue acts when annotating more data.

Acknowledgments

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