Marking discourse prominence or marking a shift in attention? The case of Bulgarian differential object indexing

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Recent accounts on differential object marking (DOM) relate the special marking of a particular argument or referent to "the speaker's assessment of its saliency" [1] and attribute it to deviances with respect to its discourse status [2]. This perspective can be systematized by the application of the notion of *discourse prominence* [3] that captures the tracking and (dynamic) ranking of several referents in discourse in a non-categorical way.

We show that this perspective is particularly suited for the description and explanation of differential object indexing (DOI; traditionally known as object reduplication or clitic doubling) in Bulgarian. DOI is a subtype of DOM and consists of a bound element on the verb cross-indexing a co-nominal element (e.g. NP) in the sentence. We challenge previous accounts assigning a pure topic-marking function to DOI in Bulgarian by presenting natural examples and experimental evidence. For example, DOI sometimes co-occurs with focal elements or is used to (re-)active a previously prominent element whose status became obscure [4]. These examples suggest that DOI is not marking the topicality of the referent but rather related to a particular (medium-level) activation of a referent.

To investigate this further, we conducted a web-based experiment combining comprehension questions, acceptability judgment and reaction time measurement. In each trial, a discourse topic was established by repeated mention in the discourse (e.g. *Peter* in the example stimuli below) and a second referent (*the woman*) introduced right before the critical sentence. In the target sentence, the most prominent element was referred to as object with or without DOI. This was contrasted with target sentences either presenting the second (less prominent) referent as object or a discourse-new (not prominent but inferable) referent, both with DOI. Among the DOI conditions, cross-indexing less prominent referents yielded the strongest behavioural response in comparison to indexing the most prominent or the non-prominent referent (see figures below). Responses to the comprehension question were more accurate, the reaction times quicker and the acceptability judgment higher for the referent with a medium prominence level (except for reaction time, all these effects were significant – both in an interaction as well as a group-level analysis). These results support the idea that DOI is sensitive to fine-grained prominence differences and serves as a prominence-lending cue for referents that initially have a medium-level discourse prominence rank based on the previous context.

It is less clear however if DOI serves as a marker of a particular prominence level or rather as an attentional cue indicating to the listener that there is a substantial (less predictable) shift in the prominence ranking of the referents that are currently accessible in the common ground. To some extent, this resembles the recent discussion of (unbound) demonstrative pronouns in German that are associated with re-orientation towards less prominent referents — thereby expressing a certain aspect of contrast or shift in attention [5]. We elaborate on the validity of postulating a prominence-related attention marking function with respect to the findings presented above and discuss potential targets for future research on this issue.

Example stimuli for the four conditions (object index and co-nominal in bold):

Context (translated): The next story is about Peter. Yesterday, Peter was at a party and Ø talked to a beautiful woman for a long time. Suddenly, ...

a. Most prominent referent (and discourse topic) without DOI

ženatagocelunalawoman-ART.SG.F3.SG.M.ACCkiss-PTCP.SG.F'the woman kissed him.'

b. Most prominent referent (and discourse topic) with DOI

ženatagocelunalaPetăr.woman-ART.SG.F3.SG.M.ACCkiss-PTCP.SG.F Peter'the women kissed Peter.'

c. Less prominent referent with DOI

Petăr ja celunal ženata.

Peter 3.SG.F.ACC kiss-PTCP.SG.M woman-ART.SG.F

'Peter kissed the woman.'

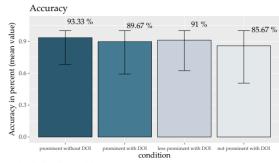
d. Not prominent (but inferable) referent with DOI

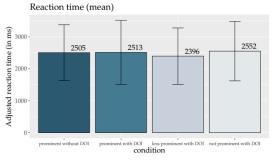
Petăr ja celunal domakinjata.
Peter 3.SG.F.ACC kiss-PTCP.SG.M host-ART.SG.F
'Peter kissed the (female) host.'

Plots for the relevant domains measured in the experiment

oxplot of mean accuracy

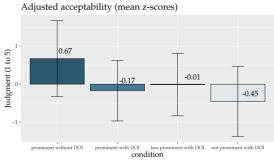
Boxplot of (adjusted) mean reaction tin

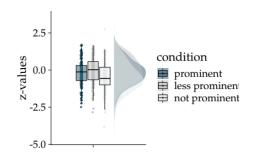




Boxplot of (adjusted) acceptability z-scores

Raincloudplot of z-values





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