

Individual differences at the Right Frontier

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The position of referents in the discourse structure appears to influence whether these referents are available to be picked up by reduced referring expressions: only referents in segments at the Right Frontier (RF) of the discourse (the most recent segment or any segments discourse-structurally superordinate to the most recent discourse segment, e.g., [1-3]) have been proposed to be accessible. Although empirical studies on the Right Frontier constraint (RFC) are limited, the few experimental studies that have tested this constraint suggest that the RFC is indeed a principle influencing the accessibility of content in a discourse, albeit one that can be violated ([4-5]). In this study, we aim to contribute to evidence on the cognitive reality of the RFC, while asking two novel questions: 1) are people equally sensitive to the RFC, and if not, can we explain any differences between language users?; and 2) how does the RFC interact with other features of the discourse that have been shown to impact the prominence of referents, specifically topicality?

In a Dutch forced choice experiment, we measure the rate at which comprehenders interpret an ambiguous pronoun to refer to one of two possible antecedents in a preceding sentence. We compare three discourse-structural variations that vary in where referents are located with respect to the Right Frontier, see example item in (1). In condition (a), both referents are at the RF, but in separate clauses: Ref2 (the hunter in the example) appears in the most recent clause, Ref1 (the king) appears the clause before that. In condition (b), both referents are at the RF, both in the most recent clause. In condition (c), only Ref1 is at the RF. In addition, we manipulate topicality by varying, between items, whether a referent has been mentioned in the preceding context. In half of the items, Ref1 has been mentioned as a subject in the context preceding the RF manipulation, as in the example item in (1). In the other half of the items, neither referent is mentioned in the preceding context. The final sentence in each item contains an ambiguous pronoun (he), followed by a copular verb and ellipsis (...). Participants are then asked who the pronoun refers to: Who is 'he'?

Data collection is still ongoing, but will be completed by the time of the conference (150 participants). We will model the binary outcome of whether the ambiguous pronoun is resolved to Ref1. The RFC predicts the highest proportion of Ref1 interpretations in condition (c). While the RFC predicts no difference between conditions (a) and (b), other features are expected to influence the prominence, and thus the proportion of interpretations, to Ref1: on the one hand, in condition (b), Ref1 occurs in the most recent clause, which could mean that the proportion of Ref1 interpretations is lower in (b) than in (a); on the other hand, [6] have shown that the more integrated the most recent clause is perceived to be with the preceding clause, the smaller the prominence-lending effect of recency becomes. In a separate analysis excluding condition (c), we assess the effect of topicality on the prominence of referents. In line with previous studies (e.g., []), we expect the proportion of Ref1 interpretations to be bigger if Ref1 was mentioned in the preceding context.

In addition to the forced-choice responses, we collect two individual differences measures: print exposure, as measured by the Dutch Author Recognition Test [7], and working memory updating capacity, as measured by the Keep Track Task [8]. We hypothesize that participants with more print exposure are more sensitive to the RFC and topicality. In addition, if we conceive of the accessibility and prominence of referents as a dynamic process in which the relative status of referents changes throughout a discourse, and assume that both the RFC and topicality contribute to the accessibility and prominence of referents, we might expect that participants with a better working memory updating capacity are better at keeping track of the accessibility and relative prominence of referents, and therefore also more sensitive to the RFC and topicality.

(1) **Er is veel te doen in het koninkrijk. De koning onderneemt van alles en nog wat met zijn vrienden.**

‘There is lots to do in the kingdom. The king does all sorts of activities with his friends.’

- a. **De koning was gisteren op een evenement met de jager, die een grote tas had meegenomen.**

‘The king was yesterday at an event with the hunter, who had brought a large bag’

- b. **De koning, die een grote tas meegenomen had, was gisteren op een evenement met de jager.**

‘The king, who had brought a large bag, was yesterday at an event with the hunter’

- c. **De koning, die gisteren op een evenement was met de jager, had een grote tas meegenomen.**

‘The king, who was yesterday at an event with the hunter, had brought a large bag,’

Hij was... // Wie is ‘hij’? De koning / De jager

‘He was...’ // ‘Who is ‘he’?’ The king / The hunter

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