Can German demonstrative pronouns really be bound?

Hinterwimmer and Brocher (2016; to appear) have provided empirical evidence for the claim made by Hinterwimmer (2015) that German demonstrative pronouns of the *der/die/das* paradigm (DPros) can be bound, which was contrary to the claim in Wiltschko (1998). Using self-paced reading and acceptability rating studies, they show that DPros can be bound not only by clause mate referential expressions, but also by universally quantified DPs if the respective binders are not grammatical subjects but rather direct or indirect objects. Consequently, they concluded that DPros receive bound variable-like interpretations in the same way as personal pronouns (PPros), with their anti-subject bias being a result of their status as the marked pronoun variant (see Patel-Grosz and Grosz 2017 for discussion). However, it is well-known that universal quantifiers can not only bind PPros in standard binding configurations requiring c-command, but also allow for so-called *telescoping* across sentence boundaries; in contrast, negative quantifiers only allow standard binding and no telescoping (see (1) from Roberts 1989 for a contrast between the two quantifiers).

(1) Each / #No degree candidate walked up to the stage. He took his diploma from the Dean and returned to his seat.

Hence, in order to conclude that DPros give rise to bound variable-like interpretations in the same way as PPros, one would therefore have to show that there is no relevant difference between DPros and PPros with respect to reading times in sentences where the only available binder is a negative quantifier: They should be read equally fast, and just as fast as in parallel sentences with universally quantified DPs. On the other hand, if DPros are read slower than PPros in sentences with negative quantifiers, while they don't differ with universal quantifiers, this would provide evidence that DPros are not bound in the same way as personal pronouns, but rather by a different, more constrained mechanism such as telescoping.

In order to test these predictions we conducted a self-paced reading study (n=46) in which participants were presented with target sentences such as in (2a-d). These target sentences were preceded by an introductory sentence, same across four conditions, to set up a sound context for the use of these two types of quantifier. In each case, only the quantificational object DP was in principle available as binder, due to matching gender features.

We found no significant difference in reading times between (2a), (2b) and (2c) in the target or the spillover region. But there was a slowdown in the spillover region for (2d), where the only available binder for the DPro was a negative quantifier. Our results therefore provide preliminary evidence that DPros are not bound in the standard way, but rather by a more constrained mechanism such as telescoping.

(2) **Prelude**: In der Grundschule, in der die Lehrerin arbeitete, wurde auch eine Hausaufgabenbetreuung angeboten.

In the elementary school in which the teacher_FEM worked, after-school homework supervision was offered.

[a-b] Die Lehrerin lobte **jeden** Jungen, der fleißig war, vor **seiner / dessen** Klasse, weil die anderen Kinder sich daran ein Beispiel nehmen konnten.

The teacher_FEM praised every boy who was diligent in front of **his** / **his**_{DPro} class, because the other children should follow his example.

[c-d] Die Lehrerin lobte **keinen** Jungen, der fleißig war, vor **seiner / dessen Klasse**, weil die anderen Kinder sich gleichbehandelt fühlen sollten.

The teacher_FEM praised no boy who was diligent in front of **his** / **his**_{DPro} class, because the other children should feel treated equal.