

Re-Binding and the Derivation of Parallelism Domains

The Re-Binding Generalization. (Takahashi and Fox, 2005) address the following contrast, observed by (Sag, 1976):

- (1) John said Mary hit him. Bill did too. *said Mary hit Bill*
- (2) John said Mary hit him. Bill said she did too. **hit Bill*

Sag argues that the sloppy reading is unavailable in (2), because sloppy readings require a controller local to the VP ellipsis. Takahashi and Fox take issue with this, noting that such *re-binding* is sometimes acceptable, as in (3):

- (3) Every sailor thinks Sally loves him, while every SOLDIER thinks MARY does. *love him*

Takahashi and Fox propose that the sloppy reading is ruled out in (2) by *MaxElide* – a constraint that requires maximal ellipsis within a given *Parallelism Domain* (PD). In (2), on the sloppy reading, the only PD is [*Bill said she did too. (hit him)*] – within this domain, a larger constituent could have been elided. With (3), no larger constituent could have been elided, because of contrastive focus on MARY. However, the MaxElide account incorrectly rules out a sloppy reading in (4):

- (4) Nearly EVERY boy said Mary hit him. But BILL didn't say she did. *hit Bill*

In other cases, MaxElide incorrectly *permits* re-binding, as in this example from (Bach and Partee, 1980):

- (5) Bill₁ believes that Sally₂ will marry him₁, but everyone knows that she won't. [*marry him*]

MaxElide permits the sloppy reading here – no larger constituent can be elided, because of the contrastive *won't*. With the following variant of (5), the sloppy reading becomes acceptable.

- (6) Everyone₁ HOPES that Sally₂ will marry him₁, but Bill KNOWS that she will. [*marry him*]

I propose the following *Re-Binding Generalization*: re-binding is possible only when necessary to satisfy parallelism. In (2) and (5), the strict reading is available to satisfy parallelism. This rules out re-binding. In (3), (4), and (6), the strict reading is ruled out, making re-binding available.

The Proposal. As soon as a PD can be identified during a bottom-up derivation, *indexation* takes place, and cannot be modified later in the derivation. A constituent E is a PD if there is an antecedent A such that there is a *valid indexing* E' of E such that E' is semantically identical to A, modulo focus marked constituents. This is based on the definition in (Takahashi and Fox, 2005), except that pronouns in E are not indexed initially – the indexation is determined at the stage in which the PD is identified. A valid indexing must respect Familiarity (Heim, 1982): a pronoun must have an index *i*, such that $i \in \text{Dom}(F)$, where *F* is the File representing the current state of the discourse. (This is equivalent to the *accessibility* requirement in the DRT literature (Kamp and Reyle, 1993)). Finally, a PD must contain some pronounced material. In this system, the Re-Binding Generalization is derived.

Good and Bad Re-Binding.

Bad Re-binding:

- (7) John₁ said Mary₂ hit him₁. Bill said she did. [*hit him*]

We begin with the smallest potential PD, [*did hit him*]. This is indeed a PD, with valid indexing [*did hit him*]. Thus the strict reading results, and re-binding is not possible.

Good Re-binding:

- (8) Nearly EVERY boy₁ said Mary₂ hit him₁. But BILL didn't say she did. [*hit him*]

Again, we begin with [*did hit him*]. Here, this fails to be a PD, since Familiarity rules out the indexing [*did hit him*]. The derivation continues until we have constructed [BILL [λ x.x didn't say she did *hit him*]]. This constituent is a PD, with the pronoun *him* bound by the lambda operator. Thus we correctly derive re-binding in this case. In a similar way, we capture all the above observations.

References

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