

When Variable Re-binding Bleeds Antecedent-Contained Deletion

1. Overview. Ross (1967) discovered that a pronoun elided under VP-Ellipsis (VPE) may be resolved with *strict identity* (1a) or *sloppy identity* (1b). This paper is concerned with the observation that sloppy identity is more restricted in Antecedent-Contained Deletion (ACD) configurations (2) than in standard VPE contexts. To my knowledge, this observation has not previously been discussed in the literature.

- (1) Kim₁ expects her₁ kids to read the book and you₂ also do Δ.
 - a. ✓ *strict* : Δ = expect **her₁** kids to read the book
 - b. ✓ *sloppy* : Δ = expect **your₂** kids to read the book
- (2) Kim₁ expects her₁ kids to read the book that you₂ also do Δ.
 - a. ✓ *strict* : Δ = expect **her₁** kids to read the book
 - b. * *sloppy* : Δ = expect **your₂** kids to read the book

I offer an analysis of (1) and (2) based on the insight from Takahashi & Fox (2005) that the variable re-binding responsible for sloppy anaphora extends the domain over which the LF-identity condition on ellipsis must hold. The effect is that the Quantifier Raising (QR) operation that licenses ACD (e.g., Fiengo & May 1994, Fox 2002) cannot escape antecedent-containment. The remainder of the paper confirms some predictions of this analysis and uses sloppy interpretations of pronouns in ACD configurations as a diagnostic to probe the constituency of ditransitive constructions.

2. Background. The analysis of sloppy anaphora comes from Sag (1976) and Williams (1977) and interprets the elided constituent as a λ-expression. The strict reading emerges when the elided pronoun is referential (3a). The sloppy reading results when the elided pronoun is a bound variable (3b).

- (3) Kim expects her kids to read the book and you also do Δ.
 - a. *strict* : $\llbracket \Delta \rrbracket^g = \lambda x.x$ expect y's kids to read the book
 - b. *sloppy* : $\llbracket \Delta \rrbracket^g = \lambda x.x$ expect x's kids to read the book

I also adopt from Rooth (1992) the idea that an elided constituent (EC) must be properly contained within some potentially larger domain over which the LF-identity condition on ellipsis must hold (*parallelism domain* (PD)). Takahashi & Fox (2005) suggest further that a variable *re-bound* from outside the EC requires extending the PD to include the binder. In order to ensure that LF-identity can be established, the antecedent constituent (AC) must similarly be expanded to match the PD.

These mechanics, alongside a principle requiring deletion of the largest deletable constituent in the PD (Merchant 2008), provide an account of the following contrast. On the strict interpretation of the elided pronoun in (4), there are two possible PDs, each providing a different EC. On the sloppy interpretation in (5), which involves re-binding of the elided pronoun, the only available PD is the one containing the binder λ2 under *Kim*. Because the largest deletable constituent must be elided, (5b) is ruled out in favor of (5a).

- (4) a. ✓ Sam₁ [_{AC} said I kissed him₁] and Kim₂ [_{PD} did ~~⟨_{EC} say I kissed him₁ ⟩~~] too.
 - b. ✓ Sam₁ said I [_{AC} kissed him₁] and Kim₂ said I did [_{PD} ~~⟨_{EC} kiss him₁ ⟩~~] too.
- (5) a. ✓ Sam [_{AC} λ1 said I kissed him₁] and Kim [_{PD} λ2 did ~~⟨_{EC} say I kissed her₂ ⟩~~] too.
 - b. * Sam [_{AC} λ1 said I kissed him₁] and Kim [_{PD} λ2 said I did ~~⟨_{EC} kiss her₂ ⟩~~] too.

3. Bleeding ACD with Re-binding. In (6) is the LF representation for (2a). The matrix clause is on top with the ACD host *the book...* in the locus of QR. On bottom is the relative clause domain containing the EC. (For exposition I suppress subject traces here, but the base-position of the subject is relevant for the formal analysis.) Because the elided pronoun is referential, the only bound variable in the EC is the trace of the relative clause head *book*. I assert this variable is re-bound from an intermediate trace of *book*, which also defines the PD. Because the AC does not contain the PD and the LFs are identical, ellipsis is licensed.

- (6) ✓ Kim DP [_{AC} λ1 expects her₇ kids to read x₁]
 the book that you do book [_{PD} ~~⟨_{EC} λ1 expect her₇ kids to read x₁ ⟩~~]

