

Sometimes, Smaller is Better: Gapping, Sluicing, and Semantic Identity

Introduction This study attempts to show that in certain ellipsis constructions, sometimes a smaller, rather than a larger constituent serves as an antecedent of an elided site. To establish this claim, I will look at examples of sluicing in adjunct clauses ((1a)) and so-called determiner sharing under gapping ((1b)) ([1,2,3]). In the course of the discussion, I will show that semantic identity, specifically thematic identity established in the VP-level, licenses IP ellipsis in these constructions ([4]). So far, only a few studies have recognized cases in which a smaller constituent serves as an antecedent for IP-ellipsis. One example comes from the case of so-called SWIPING in (2) ([4]). It is argued that the licensing condition on ellipsis can only be satisfied if a VP rather than an IP serves as an antecedent for the elided site in (2) ([4]). What I will show here is that the same holds true for the cases in (1).

Phenomena Consider the basic characteristics of these two constructions. A fundamental property of (1a) is that under the standard assumption that sluicing is IP ellipsis ([5,6,7,8]), it is inevitably trapped in an infinite regress, i.e., this is an example of ACD (to the best of my knowledge, no case of ACD other than VP-deletion has been reported in the literature). The structure of this example is in (3a). It is in infinite regress because the PP containing the ellipsis site is attached to VP and the elided constituent is an IP that contains all the materials in VP ((3)). The position for this PP can be shown through various constituency tests ((4)). Second, when an antecedent clause of the sluiced IP contains negation, the sluiced site does not contain the negation under the most natural interpretation ((5)). Next let us turn to (1b). First, the negation is absent in the gapped conjunct, even though it is present in the antecedent clause ([1,2,3]). Thus, (6a) can be interpreted as (6b) but not as (6c). This property looks quite similar to that of sluicing in (5). Second, a gapping survivor becomes an island as in (7a), thus indicating the movement of a complement phrase ([9,10]). Finally, P-stranding is not allowed ((8)), as in the cases of standard gapping constructions ([9,10]).

Proposals To capture the properties of these two constructions, I would like to propose the following. First, semantic identity, rather than formal identity, is responsible for licensing ellipsis in these constructions ([6]). Second, it is specifically the thematic identity that licenses the ellipsis of IP. Finally, the thematic identity is established with the trace of the subject left in VP-spec, i.e., VP constitutes a full proposition ([11,12,13]). Schematically this can be represented as in (9) where the boxed portion (the VP) in the CP₁, serves as the antecedent for the elided IP in CP₂. Let us see the benefits of this analysis. First, with thematic identity, we can easily understand how a sentence like (1a) escapes infinite regress. Given that the antecedent for the elided IP is a thematically identical VP, the VP that excludes the PP adjunct becomes available (see [14] on adjunct ACD). Thus, the PP is no longer within the antecedent, and the infinite regress does not take place. Second because it is VP, a smaller constituent than the actually elided structure that serves for an antecedent of elided IP, it does not contain higher functional projections such as IP, CP or NegP. Thus, both in (1a) and in (1b), the negation is kicked out of the elided portion. The representations of these examples are something like in (10). In this way, given the thematic identity, we can capture properties of these two constructions naturally. As for (1b), there is one potential alternative approach. In the literature, it is proposed that an example like (1b) has the structure of VP-coordination, and derived by the across-the-board V movement as in (11) ([1,2,3]) (ATB analysis). Under this analysis, the negation is not contained in the second conjunct in (6) because VP is coordinated, and negation ranges over these two VPs. This analysis, however, cannot capture one of the basic properties of gapping, i.e., the islandhood of the gapping remnant. This is so because, a complement phrase is not supposed to move in ATB analysis and thus, there is no reason that the complement PP becomes an island as in (7). Jayaseelan and Lasnik & Saito analyze gapping as rightward movement and IP-deletion ([9,10]). Their analyses account for the islandhood, and the ban on P-stranding. A moved phrase becomes an island ([15]) and a rightward movement disallows P-stranding. Adopting their analyses and NegP and AgrP analysis, thematic identity can correctly capture the properties of determiner sharing under gapping. This is represented as in (12).

Finally, I will point out some remaining problems with my analysis. First, this analysis does not offer the actual mechanism of how the determiners are shared ([2]). Rather, my intention is to capture a peculiar property of gapping with determiner sharing. However, the most serious problem that remains is the treatment of tense. If a thematically complete VP can antecede an IP-deletion, tense should not be contained in the elided site in both constructions. Here, I would like to speculate that they are legitimate when the tense is shared. But I will to leave this issue open.

Conclusions In this study I show that the thematic identity condition on ellipsis can capture seemingly puzzling properties of two constructions, sluicing in adjunct clauses and determiner sharing under gapping. I show that by adopting the thematic identity analysis, peculiar properties of these two constructions (avoiding an infinite regress and absence of negation), can be naturally explained. Although a few problems remain, this study provides considerable support for semantic parallelism approach to ellipsis ([6]).

- (1) a. John kisses someone without knowing who.
 b. Few dogs eat Whiskas or cats Alpo.
- (2) She fixed it with something, but God only knows *what with*.
- (3) a. $[_{IP1} \text{ John } [_{\text{VP}} [_{\text{VP}} \text{ kissing someone}] [_{\text{PP}} \text{ without } [_{\text{CP}} [_{\text{IP2}} \text{ PRO } [_{\text{VP}} \text{ knowing } [_{\text{CP}} \text{ who } [_{\text{IP3}} \text{ e }]]]]]]]]]]]]$
 b. $[_{IP1} \text{ John } [_{\text{VP}} [_{\text{VP}} \text{ kissing someone}] [_{\text{PP}} \text{ without } [_{\text{CP}} [_{\text{IP2}} \text{ PRO } [_{\text{VP}} \text{ knowing } [_{\text{CP}} \text{ who } [_{\text{IP1}} \text{ John } [_{\text{VP}} [_{\text{VP}} \text{ kissing someone}]]]]]]]]]]]]]]]]]]]]]$
- (4) a. *VP-proposing*: John was kissing someone without knowing who and [kissing someone without knowing who, Bill was too].
 b. *Do so substitution*: John was kissing someone without knowing who and Mary was doing so (= kiss someone without knowing who) too.
 c. *Ellipsis/Deletion*: John was kissing someone without knowing who, and Mary was ~~kissing someone without knowing who~~ too.
- (5) John will not kiss anyone without knowing
 a. $[_{\text{CP}} [_{\text{IP}} \text{ he } \text{t}_{\text{who}} \text{ kisses } \text{t}_{\text{who}}}]$.
 b. $[_{\text{CP}} [_{\text{IP}} \text{ he } \text{will not kiss } \text{t}_{\text{who}}}]$.
- (6) a. The girls can't eat caviar and boys eat beans.
 b. It can't be the case that the girls eat caviar and/while the boys eat beans.
 c. The girls can't eat caviar and the boys can't eat beans.
- (7) a. *I wonder who few boys talked about t and girls talked about t too.
 b. I wonder who few boys talked about t and girls talked about t too.
- (8) a. *Few boys talked about Mary, and girls talked about John.
 b. Few boys talked about Mary, and girls talked about John.
- (9) $[_{\text{CP1}} \dots [_{\text{IP}} \text{ NP}_1 [_{\text{VP}} \text{ t}_{\text{NP1}} [_{\text{V}} \text{ V NP}]]]] \dots [_{\text{CP2}} \dots [_{\text{IP}} \text{ NP}_2 [_{\text{VP}} \text{ t}_{\text{NP2}} [_{\text{V}} \text{ V NP}]]]]]$
- (10) a. $[_{IP1} \text{ John}_1 [_{\text{VP}} [_{\text{VP}} \text{ t}_{\text{John}} [_{\text{V}} \text{ kissing someone}]]] [_{\text{PP}} \text{ without } [_{\text{CP}} [_{\text{IP2}} \text{ PRO}_1 [_{\text{VP}} \text{ knowing } [_{\text{CP}} \text{ who } [_{\text{IP3}} \text{ he}_1 [_{\text{VP}} \text{ t}_{\text{he}} [_{\text{V}} \text{ kiss someone}]]]]]]]]]]]]]$
 b. $[_{IP1} \text{ Few dogs } [_{\text{VP}} \text{ t}_{\text{few dogs}} [_{\text{V}} \text{ eat Whiskas}]]] \text{ or } [_{\text{IP2}} \text{ cats } [_{\text{VP}} \text{ t}_{\text{cats}} [_{\text{V}} \text{ eat Alpo}]]]$.
- (11) $[_{\text{IP}} \text{ Few dogs } [_{\text{I}'} \text{ eat } [_{\text{VP}} [_{\text{VP}} \text{ t}_{\text{few dogs}} [_{\text{V}} \text{ t}_{\text{eat}} \text{ Whiskas}]]] \& [_{\text{VP}} \text{ cats } [_{\text{V}} \text{ t}_{\text{eat}} \text{ Alpo}]]]]]$
- (12) $[_{\text{NegP}} \text{ the girls } [_{\text{Neg}'} \text{ cannot } [_{\text{AgrP}} \text{ t}_{\text{the girls}} [_{\text{IP}} \text{ t}_{\text{the girls}} [_{\text{I}'} \text{ t}_{\text{can}} [_{\text{VP}} \text{ t}_{\text{the girls}} [_{\text{V}} \text{ eat caviar}]]]]]]]]]$ and
 $[_{\text{AgrP}} \text{ boys } [_{\text{IP}} \text{ t}_{\text{boys}} [_{\text{VP}} \text{ t}_{\text{boys}} [_{\text{V}} \text{ eat t}_{\text{beans}}]]]]] [_{\text{NP}} \text{ beans}]]]$

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