1 Ellipsis and Gender Mismatches

Since at least Ross (1967), we have observed that sloppy readings of bound pronouns can occur in VP ellipsis despite a clash of gender features:

(1) Every girl accompanied her mother and every boy did too.
Sloppy: every boy accompanied his own mother
Strict: every boy accompanied same girl's mother

Johnson (2014) uses the Minimal Pronoun account of Kratzer (2009) to account for such cases:

(2) Every girl, λ accompanied / mother and every boy did too.

The antecedent VP contains no φ-features, enabling the gender mismatch.

Gender features are not inherent to bound pronouns; they are transmitted via binding, and spellout dictates the final form

2 self-Pronouns and one-anaphora

Kratzer uses this to derive Condition A effects:

(3) Josh, λ embarrassed i. ⇒ himself

[3,φ,M,Refl]

self-pronouns are made of a combination of features from the binder and antecedent

But, self-pronouns are not only found in co-argument contexts:

(4a) Tom found a new job by himself (and Claire did too).
(4b) Hannah is afraid of spiders herself (and Arnold is too).

And, there is debate over whether one-anaphora is equally tolerant of gender-mismatched antecedents:

(5) Mae wanted an expensive portrait of her kids, and Allan wanted a cheap one.

If (3) - (5) are also tolerant of gender mismatch in sloppy readings, then a feature transmission via binding analysis is motivated

3 Study Design

A study containing several different ellipsis-sensitive constructions was constructed. All trials were contextual felicity tasks: participants were given a short written scenario, followed by a target sentence with VP-ellipsis. Contexts were manipulated to control for independent variables:

Object self (3)
Gender (Match vs Mismatch) X Reading (Sloppy vs Strict)

by-Phrase self (4a)
Gender (Match vs Mismatch) X Reading (Parallel vs Disjoint)

one-Anaphora (5)
Gender (Match vs Mismatch) X Reading (Sloppy vs Strict)

Adverbial self (4b)
Gender (Match vs Mismatch)

40 L1 English-speaking participants saw three of each condition spread across counterbalanced lists. The task was to rate the felicity of sentences in the given context on a 7-point Likert scale. They saw 82 trials in total, including sentences testing for unrelated scope effects, and simple control fillers.

4 Results by Construction

All results were presented as an average rating out of 7. Statistics were calculated using the lmek package in R:

<table>
<thead>
<tr>
<th>Object self</th>
<th>Sloppy</th>
<th>Strict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mismatch</td>
<td>6.09</td>
<td>4.09</td>
</tr>
<tr>
<td>Match</td>
<td>6.09</td>
<td>3.71</td>
</tr>
</tbody>
</table>

Significant (p<0.001) effect of Reading

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sloppy</th>
<th>Strict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mismatch</td>
<td>5.86</td>
<td>6.17</td>
</tr>
<tr>
<td>Match</td>
<td>6.47</td>
<td>6.39</td>
</tr>
</tbody>
</table>

Significant (p<0.01) effect of Gender

<table>
<thead>
<tr>
<th>by-Phrase self</th>
<th>Parallel</th>
<th>Disjoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mismatch</td>
<td>6.60</td>
<td>2.56</td>
</tr>
<tr>
<td>Match</td>
<td>6.21</td>
<td>2.44</td>
</tr>
</tbody>
</table>

Significant (p<0.001) effect of Reading

<table>
<thead>
<tr>
<th>Adverbial self</th>
<th>Sloppy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mismatch</td>
<td>5.93</td>
</tr>
<tr>
<td>Match</td>
<td>6.04</td>
</tr>
</tbody>
</table>

No Significant Effect

5 Analysis and Discussion

Object self:
Kratzer’s analysis is verified; the self reflexive does not inherently contain gender features.

by-Phrase self:
Results suggest this is also a semantically bound variable. An antecedent VP that did not contain the by-phrase was not available to participants, suggesting this PP is below the merge position of the agent, with the same binder.

one-Anaphora:
Availability of both readings suggests multiple mechanisms at play. Uneven distribution of low ratings across participants is reminiscent of Merchant (2014) speculation that some Greek speakers assign a richer semantics to the antecedent of NP ellipsis, such as requiring the possessor in (5) to be a mother.

Adverbial self:
No Gender effect suggests a binding analysis, but we need clear evidence that the adverb is interpreted as part of the ellipsis. If binding is on the right track, the Gast (2006) analysis of adverbials is called into question:

(6) Hannah, i [is afraid of spiders], j [is afraid of tomatoes].

In this analysis, the adverbial is derived as an adnominal stranded at the specifier of VP, ruling out gender mismatch.

6 Conclusion and Next Steps

One Anaphora appears to be a distinct phenomenon. More care needs to be taken with the adverbials, as their interpretation varies according to predicate:

(7a) Tom cooked the dinner himself. (exclusive, only Tom)
(7b) Hannah is afraid of spiders herself. (inclusive, also Hannah)

Unexpected debriefing questions: Does the gender of the name matter? What if it’s a gender-neutral name like “Sam”?

References and Acknowledgements