

Deletion in *as*-parentheticals: Subject pseudogapping? ¹

Nicholas LaCara

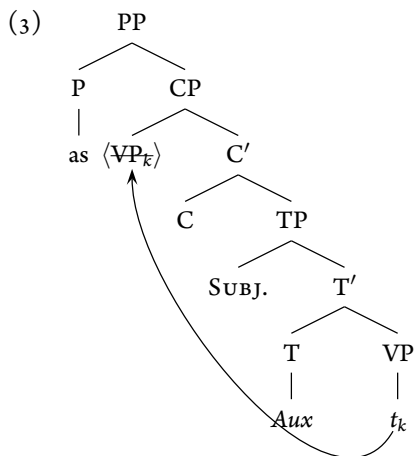
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1 Introduction

Today's talk will focus on the syntax of predicate *as*-parentheticals—the boxed constituents in (1) and (2). Potts (2002a,b) discusses these constructions at length. Predicate *as*-parentheticals contain gaps in the position of some predicate-denoting phrase (represented with $__$), and the interpretation of this gap is dependent on material elsewhere in the discourse. For example, the gaps in the examples below are both resolved by the antecedent VP *kiss a pig*.

- (1) Harvey will kiss a pig, as Mary also will $__$.
- (2) Harvey will kiss a pig, as will Mary $__$.

- Potts argues these gaps are created by the movement of a syntactically empty VP operator into the CP layer of the *AS*-clause.
- In my own work, I show that there must be a full VP with internal syntactic structure in order to account for a broader range of data. This requires that the missing VPs delete at PF.
- The evidence for movement and PF deletion suggests a hybrid analysis. The emerging picture looks a lot like comparative deletion as proposed by Kennedy (2002): A VP moves into the CP layer of the clause where it must undergo deletion. This is the analysis I will assume in the coming talk.



1.1 The question for today:

There are, as shown above, two different kinds of *as*-parenthetical.

- In (1), the subject precedes the auxiliary and has normal word order. These I call **NON-INVERTING** *as*-parentheticals.
- In (2), however, the stranded auxiliary *will* precedes the subject *Mary*. I call these **INVERTING** *as*-parentheticals.

¹ Many people deserve my thanks, including Kyle Johnson, Lisa Green, Bern Samko, Anie Thompson, the members of the 2nd year seminar here at UMass, and all the speakers whose judgments I have used in this work. All errors are my own.

This phrase can be of any category—verbal, adjectival, nominal, or prepositional. I will concentrate on verbal phrases today for ease of discussion.

This follows work in Feria 2010 and McCloskey 2011, whose work was made in different contexts.

It turns out that there are several other differences too. I won't be addressing all of them here.

Our MacGuffin: Where is the subject sitting in (2)? Does the subject a) remain where it is initially merged, b) raise to SpecTP, or c) appear in some other mysterious place?

- In order to do this, we will need to have a better understanding of how the internal structures of (1) and (2) differ.
- Since the picture in (3) is fairly simplistic, we will need to figure out exactly what phrase is moved in both cases.
- We'll see that that it moves out of its initial position, but that it never makes it to SpecTP. It seems to undergo a process similar to pseudogapping.

The last point raises a more curious question: Why does the subject never make it to SpecTP? This one is hard to answer.

1.2 Roadmap

- In §2, we will use argument structure mismatches between *as*-parentheticals and their antecedents as a way to explore what constituent goes missing.
- In §3, I will introduce data from Feria (2010) that shows that subjects can't be in SpecTP in inverting *as*-parentheticals (and some associated mysteries).
- In §4, I will argue that the analysis of inverting *as*-parentheticals can be analyzed as a kind of pseudogapping where the subject is the remnant.
- In §5, I conclude.

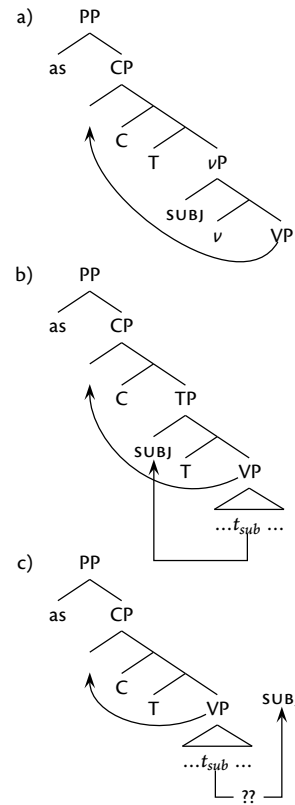
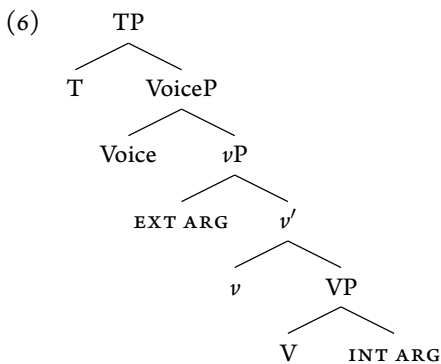
2 The size of the gap and inverting subjects

2.1 Voice and Ellipsis

One of the interesting properties of deletion anaphora is that deletion is sensitive to the argument structure of the antecedent. For example, verb phrase ellipsis (VPE) tolerates a mismatch in voice, but not mismatch in transitivity.

- (4) The janitor must remove the trash whenever it is apparent that it should be.
- (5) *John closed the door, and the window did too.
(≠ The window closed.)

Merchant (2007) uses a split-*v*P hypothesis in order to explain facts like these.

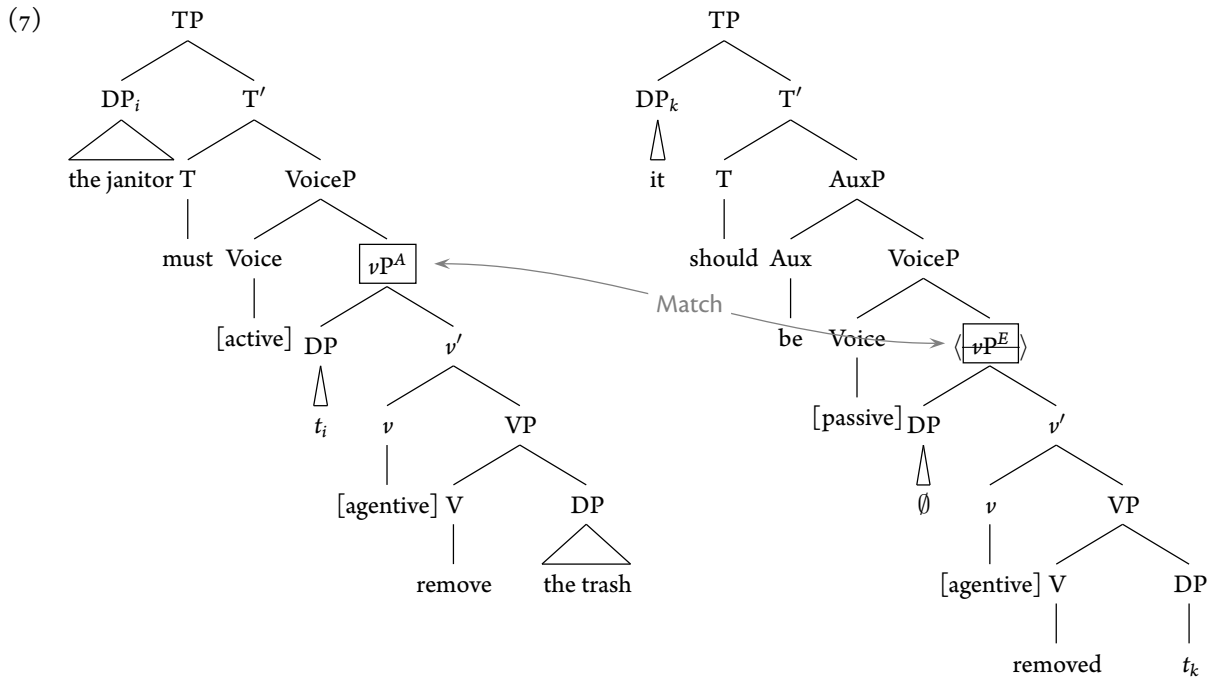


This is not the traditional assumption about voice mismatches. For instance, Sag (1976), among others, argued that voice mismatch was not possible in VPE. However, it has become clear in the years since that this is not so. See Merchant (2007) for discussion.

See Frazier (2008) for an alternative approach.

- *v*P is the locus of transitivity, and introduces external arguments.
- VoiceP is responsible for the voice of the clause.

*v*PE permits voice mismatch, but does not permit transitivity mismatches. Since it is insensitive to voice, but it is sensitive to transitivity, *v*PE may delete *v*P to the exclusion of VoiceP (7).



- Although Voice° is different in each clause, *v*PA and *v*PE match, so the ellipsis goes through.
- A central idea of this approach is that ellipsis processes can vary with respect to the smallest constituent they may delete.

Merchant assumes, as do I, that a syntactic identity requirement holds over the antecedent and elided constituent. In order for this to work, implicit agents must be syntactically represented. The trouble with that is that implicit agents in passives do not have the same properties as overt arguments, behaving more like PRO_{arb} (Baker et al. 1989:228–229). This may, however, be a broader problem for the identity requirement on ellipsis, and not just Merchant’s approach.

See also Aelbrecht 2010 and Baltin 2011 for more recent extensions of this approach.

2.2 Mismatches in *as*-parentheticals

Non-inverting parentheticals seem to permit voice mismatch, much like *v*PE does. Inverting *as*-parentheticals, on the other hand, do not.

(8) Non-inverting *as*-parentheticals

- The janitor must remove the trash, as I told you it should be.
- It should be noted, as Dennett does, that ...
(Sag (1976:75, fn. 2), cited in Potts (2002a))

(9) Inverting *as*-parentheticals

- *? The janitor should remove those bins, as were the others.
- * It should be noted, as will/does Dennett, that freshmen are often foolish.

Transitivity mismatches are generally bad in both conditions.

- (10) a. *Mary froze the water, as I said the wine did.
(≠ The wine froze.)
b. *The water froze, as I said Mary did.
(≠ Mary froze the water.)
- (11) a. *John closed the door, as did the window.
(≠ The window closed.)
b. *The door closed, as did John.
(≠ John closed the door.)

- Non-inverting *as*-parentheticals act just like *vPE* in this regard, so it too seems to target *vP*.
- Inverting *as*-parentheticals, on the other hand, must match in Voice. Following Merchant, inverting *as*-parentheticals target VoiceP, and not just *vP*.

2.3 Where's the subject?

Given the clausal model in (6), external arguments are introduced in Spec*vP*. The data above shows us that they cannot stay there.

- For non-inverting *as*-parentheticals, this isn't surprising. Since they appear to have normal word order, we expect subjects to appear in SpecTP.

However, a possibility for the inverting *as*-parentheticals was that their subjects remain in their first-merge position (Spec*vP*) and that some lower phrase goes missing.

- This is untenable. The phrase in which verbal arguments are introduced is moved and deleted. Therefore, subjects must move from their base positions to escape deletion.

The observations above are apparently corroborated by data where multiple auxiliaries are required in the *as*-parenthetical for the proper interpretation:

- (12) Mary has been captured by the police, as has John.
= John has ~~been captured by the police~~.

- Under Merchant's theory, auxiliaries are stacked above VoiceP. Accordingly, *have* may be stranded while *be* is deleted.

If we want to pursue an analysis where both inverting and non-inverting *as*-parentheticals had maximally similar derivations (and this is something I want), then it seems reasonable to hypothesize that subjects move to SpecTP in both cases.

- The differences would be that inverting *as*-parentheticals target VoiceP, as opposed to *vP*, and that inverting *as*-parentheticals contain subject auxiliary inversion (SAI)—that is, T°-to-C° movement.

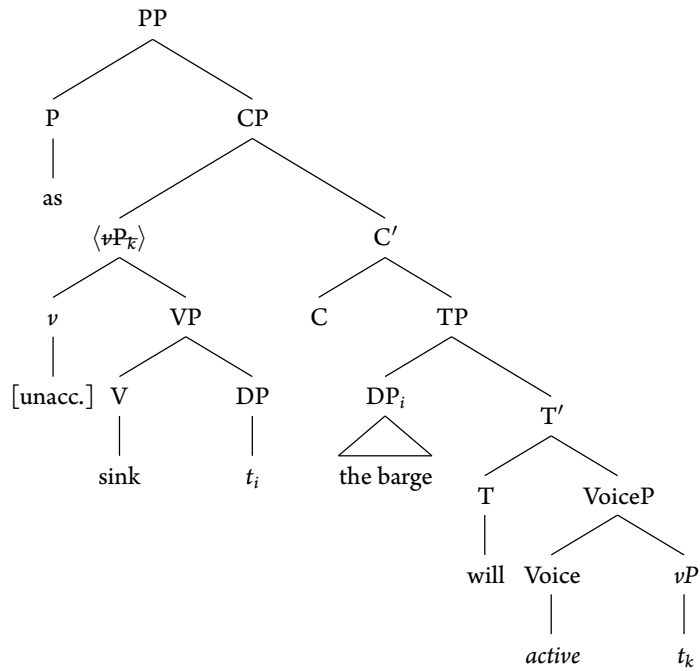
Following this, I propose Hypothesis A:

- (13) *Hypothesis A:*
Subjects in inverting *as*-parentheticals are in SpecTP. The inversion is caused by T°-to-C° movement.

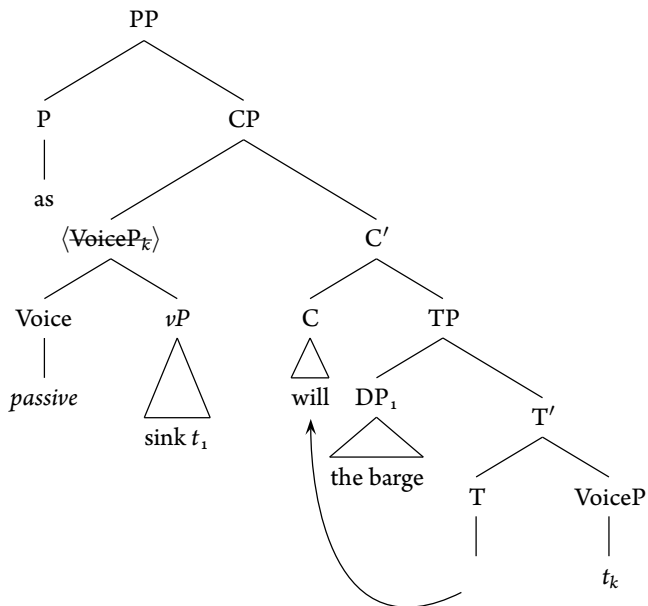
It's worth mentioning here that Ferial (2010) does not rule this possibility out, since he eschews the *vP*/*VP* distinction.

Recall that Merchant's approach only identifies the smallest constituent that may be targeted. Larger deletions are also possible.

(14) The ship sank, as the barge also will.



(15) The ship sank, as will the barge. (Following (13))



2.4 Summary

- I used Merchant's (2007) approach to voice mismatch in ellipsis to identify the size of the gaps in *as*-parentheticals.
- I showed that subjects in inverting *as*-parentheticals move out of their base positions, suggesting the land in SpecTP.

Now let's test this hypothesis.

3 Hypothesis A is wrong

Hypothesis A gets into some trouble. It is possible to strand more than one auxiliary in inverting *as*-parentheticals, which is incompatible with T°-to-C° movement, and expletives (both *it* and *there*) are precluded from the subject position of inverting *as*-parentheticals (Feria 2010).

3.1 Multiple auxiliary stranding

Feria (2010) adduces a number of examples showing that inverting *as*-parentheticals permit multiple auxiliaries to be stranded.

Not all speakers accept all (or any) of these examples, but they are well-attested.

- (16) % The US trade deficit could be an issue, as could be the fact that much of China's economy is still fuelled by exports.
- (17) % What this means is that the Celts could well have been a tribe of this copper-skinned peoples, as could have been the early Egyptians.
- There is no easy way to explain this as involving T°-to-C° movement, on the assumption that only one auxiliary can appear in C° or T°.
 - This is Feria's primary motivation for claiming that subjects in inverting *as*-parentheticals are not in SpecTP.

Although we can apparently strand more than one auxiliary, voice mismatch is still bad in these cases. This points toward VoiceP still being the constituent which inverting *as*-parentheticals target.

- (18) * The janitor should take out these bins, as should be those bags.
- (19) * It should be noted, as might have Dennett, that freshmen are often foolish.

The non-inverting counterparts are comparatively good.

- (20) ? The janitor should take out these bins, as those bags should also be.
- (21) It should be noted, as Dennett might have, that freshmen are often foolish.

3.2 Expletives

Expletive subjects, as Feria (2010) notes, seem to be completely banned from inverting *as*-parentheticals, which he presents as evidence that subjects are not in SpecTP.

- (22) a. * There might be a show tomorrow, as might (be) there on Friday.
b. * There came a time in my life, as might there in yours, when moving to Reykjavík seem liked a good idea.
- (23) a. * It will rain tonight, as will it tomorrow.
b. * It is likely that Alice hates Tom after he forgot their anniversary last week, as is it given his behavior last night.

They are sometimes a little odd in in the non-inverted counterparts, but the contrast is apparent.

- (24) a. ? There might be a show tomorrow, as there might also be on Friday.
 b. There came a time in my life, as there might in yours, when moving to Reykjavík seem liked a good idea..
- (25) a. It will rain tonight, as it will tomorrow.
 b. ? It is likely that Alice hates Tom after he forgot their anniversary last week, as it is given his behavior last night.

Feria interprets this as meaning that there is no *EPP* active on T° in inverting *as*-parentheticals. This is meant to explain why expletives do not appear and why subjects never make it to *SpecTP*.

- This explanation isn't sufficient, though. If the *EPP* is responsible for the appearance of expletives and there is no *EPP* on T° , then why do (22) and (23) stay bad when the expletives are taken out?

- (26) a. * There might be a show tomorrow, as will on Friday.
 b. * It will rain tonight, as will tomorrow.

The facts about expletives here look like facts about expletives in V_2 contexts in Germanic. As Vikner (1995:70) discusses, expletives are barred from appearing in some V_2 contexts in German and Icelandic.

- That is, when the verb precedes the subject position in the string order, expletives may not appear.
- It may be productive to think of the apparent inversion in *as*-parentheticals as some sort of residual V_2 phenomena.

- (27) *Es/*pro* ist ein Junge gekommen.
 it is a boy come
 'There has come a boy.'
- (28) Gestern ist *pro/*es* ein junge gekommen.
 yesterday is it a boy come
 'Yesterday a boy came.'

This is a bit superficial, though. Assuming expletives in these languages occupy *SpecCP* and not *SpecTP* (Vikner 1995), the German facts can easily be explained. English doesn't work the same way, so it's not clear whether these superficial observations should have the same explanation.

- One idea might be that the complementizer in inverting *as*-parentheticals has some influence on whether material is licensed in *SpecTP* or not.

Another idea comes from the observation that subjects in inverting *as*-parentheticals seem to require focal stress (but they don't in non-inverting ones):

- (29) Mary kissed a pig, as will I_F. *inverting*
- (30) *Mary wants to kiss a pig, as will_F she. *inverting*
- (31) Mary wants to kiss a pig, as she will_F. *non-inverting*

- Expletives resist focus stress, so maybe the reason they're bad is derived from this explanation.
- The trouble here is that it doesn't explain why nothing seems to make it into SpecTP.

Mysteries remain. Subjects do not seem to make it to SpecTP, though, and with this in mind we can start to worry about where they do go.

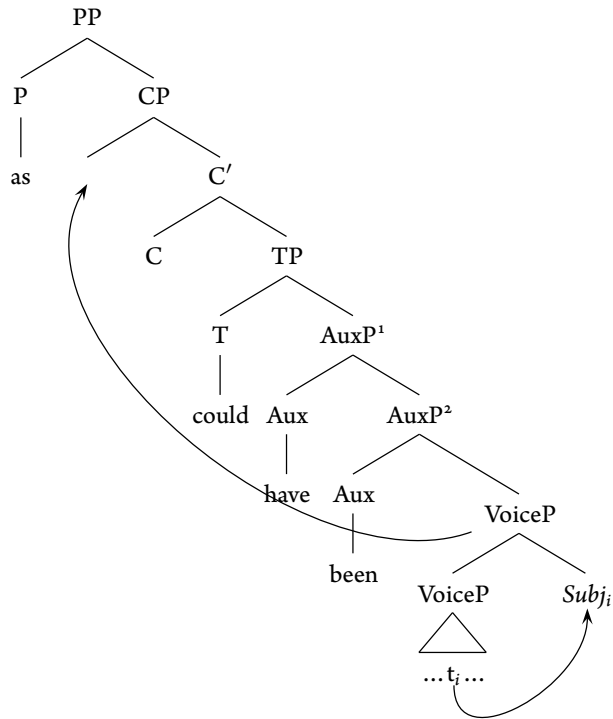
4 Subject Pseudogapping

If subjects neither remain in their base position nor move to SpecTP, they must be somewhere else. Feria (2010) reckons that they move just a short way out of the clause to adjoin to the VP they moved out of.

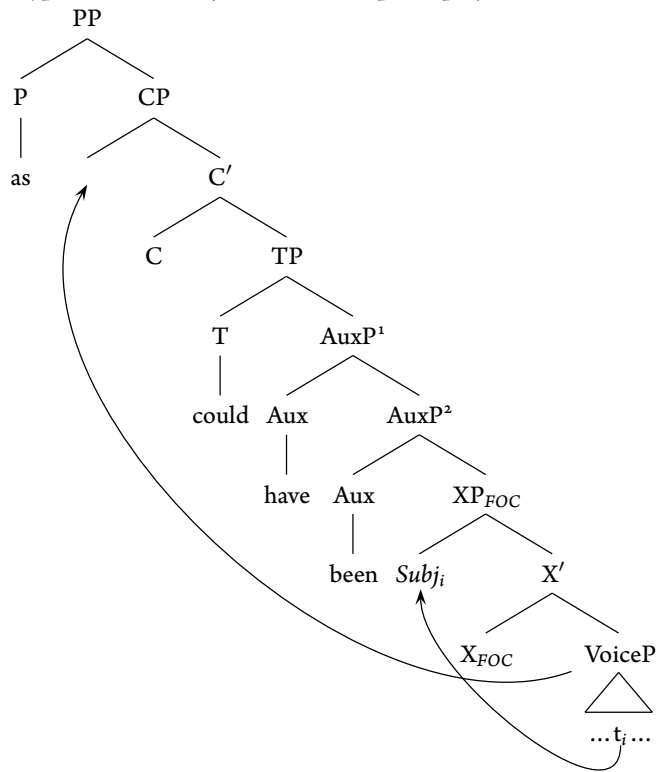
Again, recall that Feria eschews the *vP*/*VP* distinction.

- There are, I think, two ways of adjusting his view to the assumptions I have made.

(32) Hypothesis B 1: Subjects adjoin



(33) Hypothesis B2: Subjects move to a special projection.



I reckon that one of these hypotheses should be viable.

- Both of these configurations call to mind pseudogapping, which generally seems to require movement of an argument out of a VP to some position nearby.

(34) Mary hasn't dated Bill, but she has __ Harry.

- Jayaseelan (1990) proposes that the necessary stress on pseudogapping remnants (*Harry*, above) is evidence of heavy shift, and that this element is right-adjoined to VP.
- Merchant (2007) suggests that pseudogapping remnants move to a special clause-medial focus position, and that this is why there is stress.

As I noted above, the subjects in inverting *as*-parentheticals need some sort of focus stress, so this is consistent with these observations.

Even more intriguing is the fact that pseudogapping, like inverting *as*-parentheticals, does not tolerate voice mismatch (Merchant 2007):

(35) *Hundertwasser's ideas are respected by scholars more than most people do __ his actual work.

Exactly which of these hypotheses is better remains to be seen.

This leaves open the reason why subjects don't make it to SpecTP.

- We still need to understand why subjects stop where they do.

A wrinkle, though, is that pseudogapping is generally degraded when more than one auxiliary is stranded, though perhaps not crashingly so. Aelbrecht (2010:181–182) notes this, but adduces several examples reasonably acceptable. Perhaps this is related to why some speakers reject multiple auxiliary stranding in inverting *as*-parentheticals.

5 Summary

Subjects in inverting *as*-parentheticals are not in SpecTP. This is in contrast to the non-inverting counterparts, where subjects occur in SpecTP.

1. We saw that non-inverting *as*-parentheticals permit voice mismatch but inverting ones do not. Following Merchant (2007), I accounted for this fact by assuming that the constructions target different phrases.
2. I presented data from Feria (2010) that showed that subjects do not make it to SpecTP in inverting *as*-parentheticals. I didn't find much of an explanation for this, though, rejecting the idea that it has only to do with the EPP. I also rejected Hypothesis A—that *as*-parentheticals contain SAI.
3. I presented the idea that subjects in inverting *as*-parentheticals could be likened to pseudogapping remnants.

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