

1 Overview

- *Problem:*
There's multiple sluicing in English, but no multiple *wh*-movement.
- *Why it's a problem:*
If sluicing is fed by *wh*-movement and we only have motivation for single *wh*-movement, then we need an explanation for how to get the extra *wh*-phrase out of the ellipsis site.
- *Previous literature:*
Richards (2001) and Merchant (2001) propose analyses where multiple sluicing is the result of a repair. Excess movement introduces trace/copies that cannot normally be interpreted at PF, but ellipsis deletes them.
- *Lasnik says:*
If you look closely, the second sluicing remnant does not behave like the first. In fact, it appears to share properties with rightward focus movement: PPs are preferred to DPs, and they obey the Right Roof Constraint. No extra *wh*-movement is necessary, and there is no repair.
- *Impact:*
This is one less phenomenon we need to place under the rubric of repair. We don't need to posit special *wh*-movement just for multiple sluicing.

I've left out, for various reasons, Lasnik's discussion of Fox and Pesetsky 2003.

2 Background: Repair

- This discussion is cast against the background of repair by ellipsis.
- Island violations appear to be ameliorated by sluicing.
- There appears to also be at least one case where otherwise necessary movement is bled by sluicing: T^0 -to- C^0 movement in root questions.
- Lasnik's point of departure will be that since sluicing appears to ameliorate island violations and repair material that fails to move, it might also have the power repair extra movement.

This is not totally clear at the outset, but he will argue against the view that multiple sluicing involves repair.

2.1 Islands

- Sluicing, as we know, appears to ameliorate island violations (Ross 1969):
 - (1) *Complex-NP constraint:*
 - a. I believe the claim that he bit someone, but they don't know who_i I believe the claim that he bit t_i .
 - b. I believe the claim that he bit someone, but they don't know who.

2.2 Lack of movement

- Lasnik discusses the lack of T° -to- C° (or subject–auxiliary inversion) movement with sluicing as a possible kind of repair.
- In root clauses in (mainstream varieties of) English, auxiliaries must move to C° .
- With sluicing, however, this does not happen.

(2) Mary will see someone.

- Who $\{_{TP}$ she will see $t\}$?
- *Who will $\{_{TP}$ she see $t\}$?

- This is framed as a repair. A normally obligatory movement (T° -to- C° movement) fails to occur, but sluicing repairs the lack of movement.

- Assume that a strong feature on C° triggers movement of T° .
- To avoid a malformed PF object, either the matching feature on T° must pied-pipe T° , or sluicing must delete the malformed PF object.

- This is an aside, but I have two criticisms of this point:

i. This falls under Merchant's (2001:62) Sluicing–COMP Generalization.

- Basically, this is the observation that anything other than the *wh*-element that normally appears in CP in questions cannot appear in sluicing.
- This is not about movement: Even in languages where the complementizer is overt in *wh*-movement, it cannot appear in sluices.
- Therefore, we cannot conclude that sluicing is repairing the lack of T° -to- C° movement here.

This bears great resemblance to his analysis of pseudogapping in Lasnik 1999.

To be fair, the Sluicing–COMP Generalization does not, to my knowledge, have a generally accepted explanation. Some recent work has suggested that sluicing actually targets the complement of the *wh*-element rather than the complement of C° .

ii. This is not a repair the way that island amelioration is a repair. T° -to- C° movement is simply impossible here, as shown in (2b).

- If this were just a repair, we expect that T° -to- C° movement should still be possible – there would be nothing to repair.
- That is, sluicing should be possible regardless of whether T° -to- C° movement has occurred. But T° -to- C° is blocked entirely.
- One might try to be charitable and say that economy considerations mean that ellipsis will preclude the need to pied-pipe T° , so you should only do one or the other. Recall, however, the problems with this view introduced by verb-stranding VPE in Lasnik 1999.

Lasnik does not discuss examples like (2b).

Of course, there are differences here: V° -to- T° movement might be driven by the need for affixes to receive support, and failing to move the verb would result in a violation of the Stray Affix Filter. C°_Q is not (obviously) affixal.

- My point here is that I'm not totally sure this should be characterized as a repair. It looks like there might be something else going on here.

3 Repairing excess movement?

- Languages with multiple *wh*-fronting allow multiple sluicing. This is not particularly surprising.

(3) *Serbo-Croatian:*

Stjepanović 2003

Neko je vidio nekog, ali ne znam ko kogo je vidio
 someone is seen someone, but not I.know who whom is seen

- What is surprising is that English should allow this, too.

(4) *English:*

Bolinger 1978

I know that in each instance one of the girls got something from one of the boys.

?But which from which?

- Multiple *wh*-movement is categorically ungrammatical in English.

(5) *They didn't tell me which from which got something.

- It is not obvious how to explain how this happens.

- Lasnik first considers the proposal of Richards (2001), which proposes that multiple sluicing involves PF repair of excess *wh*-movement.

Lasnik also briefly discusses a slightly different idea, from Merchant 2001, that overt movement that could have been covert leaves some feature on traces that must be deleted.

- However, he will argue that the second *wh*-remnant does not display the true properties of *wh*-movement.

3.1 Richards & repair

- Richards (1997, 2001) proposes that multiple sluicing repairs excess movement.

- He posits the following:

a. PF must receive unambiguous instructions about which part of a chain to pronounce (and only a single member of the chain will be pronounced).

b. A strong feature instructs PF to pronounce the copy in a chain in which it is in a feature-checking relation.

- Under this view, a weak feature can overtly attract an element, but if it does so this will normally lead to ambiguous instructions about which part of the chain to pronounce, leading to a PF crash.

- Deleting conflicting parts of the chain, however, will effectively disambiguate the instructions to PF, since ellipsis is an order not to pronounce material.

- If we assume that some of the features driving *wh*-movement are weak, we can explain multiple sluicing as a case of a weak feature overtly attracting a *wh*-element, and ellipsis disambiguating which elements to pronounce.

The feature driving the first *wh*-element must be strong.

- This fits under the rubric of repair: Movement creates a PF problem, and ellipsis fixes it.

3.2 An alternative to *wh*-movement?

- Nishigauchi (1998) proposes that multiple sluicing is not really sluicing, but a form of gapping.
 - Indeed, what we find is that there are two remnants and nothing else left, just like we see in gapping.
 - Richards (2001) argues against this point, noting that multiple sluicing is not constrained by the need to appear only in coordinate structures.
 - Lasnik points out, however, that this does not mean that multiple sluicing requires the second remnant to undergo *wh*-movement.
 - And in fact, there are ways in which the second remnant does not behave like it has undergone *wh*-movement.
- i. The clausemate condition: ‘One striking fact about multiple sluices [...] is that they tend not to be separated by a tensed clause boundary’ (Merchant 2001:113).
 - ii. PPs make better second remnants than DPs (in English).

I'm borrowing Abels and Dayal's (2017) name for this out of convenience.

3.2.1 *The clausemate condition*

- The first of these is a prediction about what should be possible if this is really *wh*-movement.
 - Both *wh*-elements must originate in the same finite clause.
- (6) *One of the students said that Mary spoke to one of the professors, but I don't know which student to which professor.
- This does not follow from anything Richards says – if both *wh*-phrases are undergoing normal *wh*-movement, then this should be grammatical.
 - Critically, Serbo-Croatian, which allows overt multiple *wh*-movement, is not subject to this limitation:

(7) *Serbo-Croatian:*

- a. Neko misli da je Ivan nesto pojeo.
 someone thinks that is Ivan something ate
 ‘Someone thinks that Ivan ate something.’
- b. ?Pitam se ko sta.
 ask self who what
 ‘I wonder who what.’

One speaker who rejected (7b) also rejected multiple overt movement out of separate clauses.

- Lasnik thus concludes that the clausemate condition is not a constraint on multiple sluicing *per se*, but a constraint on whatever is happening in English.
- *Wh*-movement Serbo-Croatian works the way we expect it to, which suggests that what is happening in English is not run-of-the-mill *wh*-movement.

3.2.2 *PP* >> *DP*: Part I

- The second *wh*-element strongly prefers to be a *PP* and not a *DP*.
- (8) a. ?Someone talked about something, but I can't remember who about what.
b. *?Someone saw something, but I can't remember who what.
- (9) a. *Mary showed something to someone, but I don't know exactly what to whom.
b. *?Mary showed someone something, but I don't know exactly who what.
- Lasnik does not say it explicitly, but the implication is that if this is *wh*-movement, then there should be no reason that moving a *wh*-*PP* is better than moving a *wh*-*DP*. The category should not matter.

Intriguingly, English speakers typically do not pied-pipe prepositions in *wh*-questions in normal registers.

4 Extraposition

- The two properties above suggest that it is not the case that both remnants undergo *wh*-movement.
- Lasnik's proposal is that the second remnant undergoes some form of extraposition – *i.e.*, rightward focus movement.
- Here he tries to show that the second remnant is subject to Ross's (1967) Right Roof Constraint; roughly, rightward movement is clause-bounded.

This is eerily similar to Jayaseelan's (1990) proposal for gapping.

4.1 *PP* >> *DP*: Part II

- First, Lasnik aims to explain why *PP*s make better second remnants than *DP*s.
 - He observes that it is easier to move *PP*s rightward than it is to move *DP*s.
- (10) a. Some students spoke yesterday to some professors.
b. *Some students saw yesterday some professors.
- (11) a. Some students met yesterday with some professors.
b. *Some students met yesterday some professors.
- Lasnik claims that this correlates with what makes a good second remnant:
- (12) a. Who was talking yesterday to who?
b. Someone was talking (yesterday) to someone, but I don't know who to who.
- (13) a. *?Who bought yesterday what?
b. *?Someone bought something, but I don't know who what.
- *DP*s that move rightward generally have to be heavy. He claims that heavier *DP*s make better second remnants:

Judgments aside here, it is quite odd that he does not reference either HNPS or Jayaseelan 1990 at this point.

- (14) a. Which linguist criticized yesterday which paper about sluicing?
 b. ?Some linguist criticized (yesterday) some paper about sluicing, but I don't know which linguist which paper about sluicing.

- This suggests that the second remnant is moved rightward.

4.2 The right roof constraint

- If the second element is moved rightward, then it should be subject to the right roof constraint.
- Rightward movement can only move to the right-edge of the clause it started in and not to the right edge of a higher clause.

- (15) a. Some students spoke yesterday to some professors.
 b. *Some students said [_{CP} that Mary will speak t_i] yesterday [_{PP} to some professors] _{i} .

- Control clauses appear to be an exception to this, as do embedded finite clauses with bound subjects.

- (16) ?Mary wanted [_{TP} to go t_k] until yesterday [_{PP} to the public lecture] _{k} .

- (17) Everybody _{i} claims [_{CP} they _{i} brought t_k to the potluck], when I ask, [something delicious from an ex-French colony] _{k} .

I changed this example a bit from Lasnik's to make the tense different in the two clauses.

- Multiple sluicing appears to track these exemptions:

- (18) a. *Some of the students wanted John to go to some of the lectures, but I'm not sure which to which.
 b. ?Some of the students wanted to go to some of the lectures, but I'm not sure which to which.

- (19) ?Some of the students thought they would go to some of the lectures, but I'm not sure which to which

- Again, this falls out if the second *wh*-element moves rightward instead of under-going *wh*-movement.

4.3 Summary

- This all suggests that the second *wh*-phrase in multiple sluicing constructions has actually undergone extraposition rather than *wh*-movement.
- If so, there is no evidence that overtly moving an item not normally movable is a repairable violation.

5 A closing problem

- Is it possible to leave behind a non-*wh* second remnant?

(20) (*)I know who Mary talked to yesterday about phonology, but I don't know who about semantics.

- Based on what Lasnik says, this should be grammatical. He seems to indicate that it is not.
- One idea: The “normal” rightward focus site is not high enough to escape deletion under sluicing and only a *wh*-element can move high enough.

What he says about the judgment is *super* ambiguous, but the discussion seems to indicate he thinks it is ungrammatical.

6 Questions

- This analysis looks strikingly like Jayaseelan's (1990) analysis of gapping.
 - Of course, one of the issues with that analysis is that Jayaseelan (1990) does not even attempt to account for the requirement that gapping occur in a coordinate structure.
 - But do Lasnik's (1999) criticisms of Jayaseelan apply here?
 - There's a bit of a conundrum in that many of Lasnik's (1999) crucial examples come from double object constructions, but the second remnant of a multiple sluice prefers to be a PP.
- Where is the second remnant going?
 - Lasnik suggests that it must be quite high; indeed, for this to be clausal ellipsis, it must be at the TP layer or above.
 - But independent evidence suggests that rightward focus movement (or at least, HNPS) targets somewhere in the middle field (Overfelt 2015).
 - We need some sort of rightward focus movement that that goes exceptionally high.
- PPs seem to make better pseudogapping remnants than DPs, similar to multiple sluicing.
 - Is there a connection here? Can there be on this analysis?
 - The answer to this depends on where you think the remnants go.
- What about not-English?
 - For instance, Japanese has (what looks like) multiple sluicing (Merchant 1998; Nishigauchi 1998), but to my knowledge it does not have rightward phrasal movement.

Maybe the thing to look at here are the 'reanalyzed' verb+preposition cases.

Can we go higher than just because we're going ellipsis? That seems to go against the spirit of this analysis.

I realize that I'm not totally sure who, if anybody, has claimed this, but I still have the feeling it is true.

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