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Draft, comments welcome!

All sluiced up, but no alleviation in sight...¹

This paper argues for the following properties of sluicing constructions (Ross 1967, Merchant 2001, Fox & Lasnik, 2003):

1. a. Sluicing does not require syntactic parallelism (Fox and Lasnik 2003), but it does require semantic parallelism (Merchant 2001).
- b. Apparent Island violation alleviation in sluicing is a reflex of the fact that speakers utilize alternative but semantically parallel endings of sluice that do not violate any Island constraints.
- c. It will be argued that semantic parallelism has its limits (no new denotation can be introduced). However, the degree of absolute parallelism will be left open for further research.

This paper is organized as follows. In section 1 I discuss the interaction of preposition stranding and sluicing and will show that in languages like Polish, German the preposition can be stranded in a sluice (contrary to Merchant 2001). In section 2, I discuss multiple wh-sluicing in Polish and its interaction with p-stranding. In section 3, it will be shown that multiple wh-sluicing in Polish does not alleviate Island effects as compared to single wh-sluicing. This will be argued to result from the fact that a cleft/resumptive construction in multiple wh-sluices is impossible. In section 4, I discuss further evidence that the interpretation of the sluice can involve a semantically parallel continuation that can but does not have to utilize clefts (Merchant 2001). In section 5, I discuss the possibility of resumptive pronouns playing a role in sluice continuations. In section 6, I discuss the differences and similarities between sluicing and VP ellipsis. I will argue that a cleft ending is impossible for VP ellipsis and hence the apparent inability of VP ellipsis to alleviate Island effects.

1. Sluicing and Preposition stranding.

Merchant (2001) reports that in languages where preposition stranding is impossible in wh-movement it is also impossible to strand a preposition in a sluice. Consider the following examples.

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2. *a. Kogo Cartman podszedł do t_1 (Polish)
 who Cartman walked to
 ‘Who did Cartman walk up to?’
- *b. Anna tańczyła z kimś ale nie wiem *(z) kim
 Ann danced with someone but not know with whom
 ‘Ann danced with someone but I do not know who’
3. *a. Wen hat Michael einen Brief an t geschrieben? (German)
 who has Michael a letter to written
 ‘Who did Michael write a letter to?’
- b. Anna hat mit jemandem gesprochen, aber ich weiss nicht *(mit)
 Anna has with someone spoken but I know not with
 wem
 who

This provides support for the claim in Merchant (2001) that sluicing involves wh-movement and subsequent deletion of the IP.

- 4 *a. Anna tańczyła z kimś ale nie wiem kim₁ ~~ona tańczyła z t_1~~
 Ann danced with someone but not know whom she danced with
 ‘Ann danced with someone but I do not know who’
- *b. Anna hat mit jemandem gesprochen, aber ich weiss nicht
 Anna has with someone spoken but I know not
 wem₁ she danced with t_1
 who she danced with

However, the data is more complicated. In Polish, D-linked wh-phrases can participate in a sluice where the preposition is omitted.²

² The same holds for Russian, also a preposition non-stranding language (Evelina Fedorenko (p.c.)). Consider the following example:

- (i) Anna tan’cowała z odnym muzhchinoi no ne znaju (z) kotorym
 Ann danced with one man but not know with which
 ‘Ann danced with one man but I do not know which’

5. Anna tańczyła z jednym mężczyzną ale nie wiem (z) którym
 Ann danced with one man but not know with which
 ‘Ann danced with one man but I do not know which’

It is hard to account for this within a wh-movement analysis proposed by Merchant (2000) since D-linked wh-phrases cannot strand a preposition in simple wh-movement.³

6. *a. Którym₁ Anna tańczyła z t₁ mężczyzną
 Which Ann danced with man
 ‘Which man Ann danced with’
- *b [Którym mężczyzną]₁ Anna tańczyła z t₁
 Which man Ann danced with
 ‘Which man Ann danced with’

This data suggests that in cases of sluicing with D-linked wh-phrases an alternative to the wh-movement derivation is available for languages like Polish and Russian. I propose that in D-linked wh-phrases have an alternative continuation of the sluice that allows the preposition to be stranded. This construction is a cleft. Consider the following continuation of (5):

7. Anna tańczyła z jednym mężczyzną ale nie wiem którym₂ ~~to~~
 Ann danced with one man but not know which it
 [~~z t₂ mężczyzną~~]₁ (ona) tańczyła t₁
 with man (she) danced
 ‘Ann danced with one man but I do not know which man it was that she danced with’

The deleted continuation of (7) is a perfectly grammatical sentence in Polish:

8. Którym₂ to [z t₂ mężczyzną]₁ (ona) tańczyła t₁
 which it with man (she) danced
 ‘With wich man it was that she danced’

³ Barbara Citko (p.c.) has pointed out that there are also cases of possible p-stranding in non d-linked wh-phrases in sluicing:

- (i) Ania zaniósła do kogoś książkę, ale nie wiem kogo
 Anne brought to someone book but not know who
 ‘Anne bought a book for someone but I do not know who’

These cases seem to rely on the ‘heaviness’ of the preposition (suggesting maybe that maybe focus plays a role here, Ivan Sag (p.c.)). I have no account of these exceptions. Crucially however, unlike in the above cases, it is always the case that a d-linked wh-phrase can have preposition stranding in sluicing. This suggests to me that the non-d-linked exceptions to preposition stranding are a reflex of some other phenomena.

It will be argued that the PP containing the wh-phrase is first raised via wh-movement and the wh-phrase: ‘which’ is clefted. Note that a non-D linked wh phrase cannot participate in such a derivation, the ungrammaticality of (9) is due to the fact that a classical wh-movement derivation (9b) is impossible as well as a cleft one (9a):

9. *a. Anna tańczyła z jednym mężczyzną ale nie wiem kim₂ ~~to~~
 Ann danced with one man but not know who it
~~[z t₂]₁ ona tańczyła t₁~~
 with she danced
 ‘Ann danced with one man but I do not know who it was that she danced with’
- *b. Anna tańczyła z jednym mężczyzną ale nie wiem kim₁
 Ann danced with one man but not know who
~~ona tańczyła z t₁~~
 she danced with
 ‘Ann danced with one man but I do not know who it was that she danced with’

The deleted continuations of the sluice are also ungrammatical by themselves:

10. *a. Kim₂ to [z t₂]₁ ona tańczyła t₁
 who it with she danced
 ‘Who it was that she danced with’
- *b. Kim₁ ona tańczyła z t₁
 Who she danced with
 ‘Who did she dance with’

The above data strongly indicates that in cases when there is a possible derivation of the sluice continuation involving a cleft that can strand a preposition, then deletion of that preposition in a sluice is also possible. This implies that sluicing cannot alleviate preposition stranding (Merchant 2001). However, this new data suggests that sluicing can be derived not only via wh-movement but also via a cleft construction in Polish. In cases of d-linked wh-phrases this leads to the ability of having the preposition omitted in the non-sluiced ending. Note that if this reasoning is correct, the premise that sluicing requires syntactic identity (Fox and Lasnik 2003) will have to be revised in favor of a model where semantic identity with the antecedent is sufficient (Merchant 2001).

German provides an interesting contrast to Polish. Like Polish it does not allow preposition stranding. Merchant (2001) claims that sluices where the preposition is omitted are ungrammatical. This is correct. However, this only holds when the wh-phrase

has its case licensed by the preposition. When the wh-phrase is in the nominative, preposition stranding is possible. Consider the following example:⁴

11. Anna hat mit jemandem gesprochen, aber ich weiss nicht wer/*wem ~~es war, mit~~
Mary has to someone spoken but I know not whoNom/Dat ~~it was with~~
~~dem sie gesprochen hat~~
~~whom she talked has~~
'Mary talked to someone but I do not know with whom'

German data provides additional support that omission of the preposition is possible when a cleft continuation of the sluice can contain the preposition. Thus Polish and German data suggests that sluicing does not have to involve the deletion of a syntactically parallel phrase.

2. Multiple wh-movement and p-stranding

In this section I will discuss constructions involving sluices with multiple wh-phrases. It will be argued that multiple wh-sluices cannot involve semantically parallel cleft endings, but have to involve straight wh-movement with no clefting.

Polish allows multiple wh-movement, consider the following example:

12. Kto komu dał książkę
Who whom gave book
'Who gave a book to whom'

Also, sluicing with multiple wh-phrases is possible:

13. Jan dał jednemu mężczyźnie jakąś książkę ale nie wiem komu
Jan gave one man some book but not know whom
którą
which
'*Jan gave one man some book but I do not know who which'

Multiple wh –sluices are interesting in that Polish does not allow multiple cleft constructions (14a). In example (14b) it appears that one wh-word has been clefted and the top one wh-moved, this still appears to be ungrammatical.

14. *a. Co to było komu to ona dała
what it was who it she gave
'*It was what it was to whom that she gave'

⁴ This data is subject to variation; some speakers do not accept this structure. I will discuss the nature of this variation in more detail in later sections.

??b. Co komu to ona dała
 what who it she gave
 ‘* What it was to whom that she gave’

Consequently, in multiple wh-sluiques the continuation of the sluice (i.e. the deleted part) can only involve a multiple wh-movement construction. Consider the derivation of the sluice in (13):

15. Jan dał jednemu mężczyźnie jakąś książkę ale nie wiem komu₁
 Jan gave one man some book but not know whom
 która₂ Jan dał t₁ [t₂ książkę]
 which Jan gave book
 ‘*Jan gave one man some book but I do not know who which’

Multiple wh-sluiques in Polish can be thus used to contrast the behavior of sluiques derived via overt wh-movement (the only possible derivation for multiple wh-sluiques) and sluiques that can be derived by cleft/resumptive constructions as well as overt-wh movement.

One obvious prediction is that if we force the sluice to be derived via overt wh-movement and not clefting then we should expect preposition stranding to be impossible. This prediction turns out to be correct. Consider the following:

16 Jan napisał jakiś list do jakiegoś ucznia ale nie wiem który
 Jan wrote some letter to some student but not know which
 *(do) którego
 (to) which
 ‘*Jan wrote some letter to some student but I do know which to whom’

In example (16) the Preposition cannot be omitted since it cannot be stranded due to the fact that a multiple cleft derivation of the deleted item is not possible:

17 *Jan napisał jakiś list do jakiegoś ucznia ale nie wiem który
 Jan wrote some letter to some student but not know which
 którego to było ucznia to był list że (on) napisał go do niego
 which it was student it was letter that (he) wrote it to him
 ‘*Jan wrote some letter to some student but I do know which to whom’

Multiple wh-sluiques cannot alleviate p-stranding islands even when the wh-phrases are d-linked. How about other types of Islands? Let us consider constructions where if the sluice were derived via straightforward wh-movement it would be an island violation when pronounced.

3. Multiple wh-movement and other Islands

Polish, like English, seems to have the property that the sluice is grammatical even when the unpronounced part of the sluice would generate an Island violation if derived via

simple wh-movement. However, I will argue that sluicing never alleviates Island effects. This will imply that the elided part in a sluicing construction cannot be ungrammatical when pronounced. Let us consider first the classical paradigm of Island alleviation (Ross 1967, Merchant 2001):

Relative clause/CNP islands

- 18 They want to hire someone who speaks a Balkan language, but I don't remember which ~~Balkan language they want to hire someone who speaks~~.

Adjunct CP islands

- 19 Ben left the party because one of the guests insulted him, but he wouldn't tell me which ~~of the guests did Ben leave the party because _ insulted him~~

Sentential Subject islands

- 20 That certain countries would vote against the resolution has been widely reported, but I'm not sure which ones ~~has [that _ would vote against the resolution] been widely reported~~

Two alternate hypotheses have been entertained, one that only truncated endings are available in these cases, and, as a consequence, the island part is omitted (Merchant 2000), or that cyclic movement is not required in sluices and thus there is no Island violation (Fox and Lasnik 2003).

I will argue that sluicing does violate Island constraints. What we have to control for is the availability of alternate endings.

Let us examine the endings in Polish for all three types of islands. The (a) examples below show the full construction with the sluiced ending struck over. The (b) examples show that the elided structure is ungrammatical when it is produced.

Relative Clause/CNP islands

- 21 a. Oni chcą wynająć kogoś kto mówi dialektem bałkańskim, ale nie
They want hire someone who speaks dialect Balkan but not
wiem [którym dialektem]_i oni chcą wynająć kogoś kto mowi t_i
know which dialect they want hire someone who speak
'They want to hire someone who speaks in Balkan dialect, but I do not know which'
- *b [Którym dialektem]_i oni chcą wynająć kogoś kto mowi t_i
which dialect they want hire someone who speaks
'*Which dialect they want to hire someone who speaks'

Adjunct/CP Islands:

- 22 a. Janek opuścił przyjęcie bo jeden z gości go obraził ale on nie chciał powiedzieć [który z gości]_i Janek opuścił przyjęcie bo t_i go obraził
 Janek left party since one of guests him insulted but he not want say which of guests Janek left party because him insulted
 ‘Janek left the party because one of the guests insulted him, but he wouldn’t tell me which’
- *b. [Który z gości]_i Janek opuścił przyjęcie bo t_i go obraził
 which of guests Janek left party because him insulted
 ‘*Which of the guests Janek left the party because insulted him’

Sentential Subject Islands:

- 23 a. To że niektóre państwa będą głosowały przeciw rezolucji było szeroko omawiane
 It that some countries will vote against resolution was widely talked
 ale nie wiem [które państwa]_i było szeroko omawian że t_i będą głosowały przeciwko rezolucji
 but not know which countries was widely discussed that will vote against resolution
 ‘That certain countries would vote against the resolution has been widely reported, but I’m not sure which ones’
- *b. [Które państwa]_i było szeroko omawian że t_i będą głosowały przeciwko rezolucji
 which countries was widely discussed that will vote against resolution
 ‘*Which countries it was widely discussed that will vote against the resolution’

There are two obvious solutions to the problem that unpronounced parts of the sluice construction are ungrammatical when pronounced, but the construction is fine when the ungrammatical string is elided. One is that not pronouncing the construction somehow alleviates Island constraints, the other is that elided string is not of the form that satisfies both syntactic and semantic parallelism with the antecedent. In other words, the elided structures have a different constituent structure than that shown in (21-23). The possibility proposed by Merchant (2001) is that we have truncated clefts in these constructions.

24. They want to hire someone who speaks a Balkan language, but I don’t remember which language it was.

This would explain why the sluiced construction is grammatical – the elided part does not violate any Island constraints. There is a problem however with analysis. First of all, in Polish, such a truncated cleft would have to involve a case mismatch.

- 25 *a. Oni chcą wynająć kogoś kto mówi dialektem bałkańskim, ale nie
 They want hire someone who speaks dialect Balkan(DAT) but not
 wiem [który dialekt]_i to był t_i
 know which dialect(ACC) it was
 ‘They want to hire someone who speaks in Balkan dialect, but I do not know which’

- b [Który dialekt]_i / *[którym dialektem]_i to był t_i
 which dialect(ACC)/ which dialect (DAT) it was
 ‘Which dialect it was’

It is hard to see how truncated clefts can account for apparent Island alleviation in Polish sluices. Another problem with the proposal in Merchant (2001) has been pointed out by Fox and Lasnik (2003). They argue that in sluicing constructions, where the elided ending seems to alleviate Island effects, the deleted string cannot be a truncated cleft since this would not give us the proper binding effects. Consider the example below:

- 26 Every linguist_i met a philosopher who criticized some of his_i work, but I'm not sure [how much of his_i work ~~{every linguist_i met a philosopher who criticized t_i}]]~~

In the above example, if we had a truncated cleft being elided we would not have the ability to reconstruct the pronoun to a position where it can be properly bound.

The same holds for examples in Polish:

- 27 Każdy lingwista_i poznał filozofa który skrytykował część jego_i
 Every linguist met philosopher who criticized part his
 książki, ale nie wiem którą część jego książki_{i/i} każdy lingwista_i
 book but not know which part his book every linguist
~~poznał filozofa który skrytykował t_i~~
 met philosopher who criticized
 ‘Every linguist met a philosopher who criticized part of his book but I do not know which part of his book’

It seems that the proposal in Merchant (2001) that truncated clefts are the elided parts of sluices that seem to alleviate Island effects gives us the wrong prediction. The problem with the alternative analysis in Fox and Lasnik (2003) is that it does not provide an account for the preposition stranding data in Polish and German. In their account, preposition-stranding Islands cannot be alleviated via deletion. However, that does not seem to be correct as pointed out in previous sections.

Instead, I propose that sluicing does not alleviate Islands of any kind. What appears as Island alleviation, be it p-stranding Islands, adjunct Islands, sentential subjects islands or relative clause islands, is a manifestation of the ability to have an alternative ending of the sluice, either via cleft/resumptive pronoun constructions or other constructions that satisfy semantic parallelism with the antecedent. Consider for example the examples of apparent Island alleviation in Polish. The examples discussed above have alternative endings (the deleted part) that do not violate any Island effects. In the (a) examples below I provide the form of the whole sluice construction (strikethrough indicates deletion), in the (b) examples I show that the elided part is grammatical as a stand alone construction.

Relative Clause/CNP islands

- 28 a. Oni chcą wynająć kogoś kto mówi dialektem bałkańskim, ale nie
They want hire someone who speaks dialect Balkan but not
wiem którym ~~to dialektem co on nim mówi oni chcą kogoś wynająć~~
know which it dialect that he it speak they want someone hire
'They want to hire someone who speaks in Balkan dialect, but I do not know which'
- b. Którym to dialektem co on nim mówi oni chcą kogoś wynająć
which it dialect that he it speaks they want someone hire
'*Which dialect it is that he speaks it they want to hire'

Adjunct/CP Islands:

- 29 a. Janek opuścił przyjęcie bo jeden z gości go obraził ale on nie chciał
Janek left party since one of guests him insulted but he not want
powiedzieć który ~~to z gości był że Janek opuścił przyjęcie bo on go obraził~~
say who it of guests was that Janek left party because he him insulted
'Janek left the party because one of the guests insulted him, but he wouldn't tell me
which'
- b. Który to z gości, był że Janek opuścił przyjęcie bo on go obraził
Which it of guests was that Janek left party because he him insulted
'*Which of the guests it was that Janek left the party because he insulted him'

Sentential Subject Islands:

- 30 a. To że niektóre państwa będą głosowały przeciw rezolucji było szeroko omawiane
It that some countries will vote against resolution was widely talked
ale nie wiem które ~~to państwa że będą głosowały przeciwko rezolucji było szeroko~~
but not know which it countries that will vote against resolution was widely
~~omawiane~~
discussed
'That certain countries would vote against the resolution has been widely reported, but
I'm not sure which ones'
- b. Które to państwa że będą głosowały przeciwko rezolucji było szeroko omawiane
which it countries that will vote against resolution was widely discussed
'*Which countries it was widely discussed that will vote against the resolution was idely
discussed'

The above data provides a simple solution to the problem why sluicing seems to alleviate Island conditions. This is because we have the option of generating an elided structure that does not violate Island effects, and which at the same time is semantically parallel to the antecedent. Note, we can also provide a grammatical ending to structures where reconstruction is necessary to capture the correct binding effects. Consider again the example from Fox and Lasnik (2003) where they argue that that the deleted part of the sluiced construction has to be in Island violation in order to obtain the right binding effects:

- 31 a. Każdy lingwista_i poznał filozofa który skrytykował część jego_i
 Every linguist met philosopher who criticized part his
 książki, ale nie wiem którą część jego książki_{1/i} ~~każdy lingwista_i~~
 book but not know which part his book every linguist
~~poznał filozofa który skrytykował t_i~~
 met philosopher who criticized
 ‘Every linguist met a philosopher who criticized part of his book but I do
 not know which part of his book’
- *b. którą część jego książki_{1/i} ~~każdy lingwista_i~~
 which part his book every linguist
~~poznał filozofa który skrytykował t_i~~
 met philosopher who criticized
 ‘*Which part of his_i book every linguist_i met a philosopher who criticized’

However, in Polish another possible continuation (the elided part) is possible. It also allows us to capture the correct binding effects and yet there is no Island violation. Consider the example below:

- 32 a. Każdy lingwista_i poznał filozofa który skrytykował część jego_i
 Each linguist met philosopher who criticized part his
 książki, ale nie wiem którą część jego książki_{1/i} ~~ten filozof~~
 book but not know which part his book the philosopher
~~którego każdy lingwista_i poznał skrytykował t_i~~
 who each linguist met criticized
 ‘Every linguist met a philosopher who criticized part of his book but I do
 not know which part of his book’
- b. którą część jego książki_{1/i} ten filozof
 book but not know which part his book the philosopher
 którego każdy lingwista_i poznał skrytykował t_i
 who each linguist met criticized

The above example indicates that if we allow the elided part of the sluice not to be syntactically parallel to the antecedent but only semantically parallel (say along the lines of Merchant 2001), for which there are independent arguments from the interaction of p-stranding and sluicing in Polish and German, then we do not have to argue that sluicing alleviates Island effects.

The above analysis predicts that when alternative continuations of the elided part are not possible then we should find sluicing constructions with elided island violating continuations to be ungrammatical. Let me return to multiple wh-sluices in Polish. As shown in previous sections, a cleft continuation is not possible in multiple wh-

constructions in Polish. This would predict that multiple wh-slucices couldn't alleviate Island effects. This turns out to be precisely the case. Consider the following examples (again, the (a) examples show the whole sluice construction and the (b) examples show the elided continuation):

Relative Clause/CNP islands

- 33 *a. Oni chcą wynająć kłoregoś tłumacza co mówi jakimś dialektem
 They want hire some translator who speaks some dialect
 bałkańskim, ale nie wiem kłorego którym ~~to dialektem to tłumacza oni~~
 Balkan but not know which ~~which it dialect it translator they~~
~~chcą wynająć co on nim mówi~~
~~want hire that he it speak~~
 ‘*They want to hire some translator who speaks in Balkan dialect, but I do not know who which’
- *b. kłorego którym ~~to dialektem to tłumacza oni chcą wynająć co on nim mówi~~
 which which it dialect it translator they want hire that he it speak
 ‘Who which it was dialect it was translated that they wanted to hire that he it speaks’

Adjunct/CP Islands:

- 34 *a. Janek opuścił jakieś przyjęcie bo jeden z gości go obraził ale on nie
 Janek left some party because one of guests him insulted but he not
 chciał powiedzieć który które ~~to z gości był to przyjęcie było że Janek~~
 wanted say which what it of guests was it party was that Janek
~~opóścił je bo on go obraził~~
~~left it because he him insulted~~
 ‘*Janek left some because one of the guests insulted him, but he wouldn't tell me which which’
- *b. który które ~~to z gości był to przyjęcie było że Janek opuścił je bo on go obraził~~
 which what it of guests was it party was that Janek left it because he him insulted
 ‘Which what it was of guests it was party that Janek left it because he insulted him’

Sentential Subject Islands:

- 35 *a. To że niektóre państwa będą głosowały przeciw jakiejś rezolucji
 It that some countries will vote against some resolution
 było szeroko omawiane, ale nie wiem które przeciw której ~~to państwa~~
 was widely discussed but not know which against which ~~it countries~~
~~to rezolucji że będą głosowały przeciwko jej było szeroko omawiane~~
~~it resolution that will vote against her was widely discussed~~
 ‘*That certain countries would vote against some resolution has been widely reported, but I'm not sure which ones against which’
- *b. Które przeciw której to państwa to rezolucji że będą głosowały przeciwko jej było
 which against which it countries it resolution that will vote against her was
 szeroko omawiane
 widely discussed
 ‘Which against which it was countries it was a resolution that will vote againsts it was widely discussed’

As we can see from the above examples, sluicing does not alleviate Island conditions in the case of multiple wh-slucices. One could argue that multiple wh-movement in Polish involves two landing sites, the CP for the highest wh-word and some lower projection for the second wh-word (Rudin 1988). Thus it could be that not all offending traces are eliminated via deletion. Not going into details how this technically could be achieved, this explanation would fail to account for the interaction of p-stranding and multiple wh-movement. As was shown in previous sections, p-stranding is impossible even in d-linked wh-phrases when the sluice contains more than one wh-phrase. The amount of structure deleted cannot play a factor in p-stranding islands since there is no offending trace to be eliminated. Consequently, the logical conclusion is that the inability to have apparent island alleviation effects in multiple wh-slucices is not a result of how much structure is deleted, but rather a result of the fact that a semantically parallel ending is not available.

The situation is similar for German where we see the alleviation of island effects in sluicing. It will be shown however that there are semantically parallel endings that do not violate islands. Consider the following examples (again, the (a) examples have an ungrammatical continuation of the sluice, whereas the (b) examples have a semantically parallel and grammatical continuation of the sluice):

Relative Clause/CNP islands

- 36 *a. Sie wollen jemanden einstellen, der einen bulgarischen Film gemacht hat,
 they want someone hire.INF who a Bulgarian film made has
 aber ich weiß nicht, welchen bulgarischen Film sie jemanden einstellen
 but I know not which.ACC Bulgarian film they someone hire
~~wollen, der gemacht hat t.~~
 want who made has
 ‘They want to hire someone, who has done a Bulgarian film, but I don’t know which.’
- b. Sie wollen jemanden einstellen, der einen bulgarischen Film gemacht hat,
 they want someone hire.INF who a Bulgarian film made has
 aber ich weiß nicht, welchen bulgarischen Film derjenige, den sie einstellen
 but I know not which.ACC Bulgarian film the one who they hire.Inf
~~wollen, gemacht t haben soll.~~
 want done have.Inf should
 ‘They want to hire someone, who has done a Bulgarian movie, but I don’t which’

Adjunct/CP Islands:

- 37 *a. Ben verließ die Party, weil einer der Gäste ihn beleidigte,
 Ben left the party because one the guests.Gen he.Acc insulted
 aber er wollte nicht sagen, welcher der Gäste ~~Ben die Party~~ verließ,
 but he wanted not say.Inf which the guests.Gen Ben the party left,
~~weil t ihn beleidigte.~~
 because he.Acc insulted
 ‘Ben left the party because one of the guests insulted him, but he wouldn’t tell me which’

- b. Ben verließ die Party, weil einer der Gäste ihn beleidigte,
 Ben left the party because one the guests.Gen he.Acc insulted
 aber er wollte nicht sagen, welcher ~~Gast~~ ~~ihn~~ ~~beleidigt~~ ~~hatte~~,
 but he wanted not say.INF which guest.NOM he.ACC insulted has
~~so dass er die Party verließ.~~
 so that he the party left
 ‘Ben left the party because one of the guests insulted him, but he wouldn’t tell
 me which’

Sentential Subject Islands⁵:

- 38 *a. Dass gewisse Länder gegen die Resolution stimmen würden, wurde
 that certain countries against the resolution vote.Inf would was
 vorhergesagt, aber ich bin nicht sicher, welche Länder ~~wurde~~
 predicted but I am not sure which countries was
~~vorhergesagt, dass gegen die Resolution stimmen würden.~~
 predicted that against the resolution vote would
 ‘That certain countries would vote against the resolution has been widely
 reported, but I’m not sure which ones’
- b. Dass gewisse Länder gegen die Resolution stimmen würden, wurde
 that certain countries against the resolution vote.Inf would was
 vorhergesagt, aber ich bin nicht sicher, welche Länder ~~man vorhergesagt hat,~~
~~predicted~~ but I am not sure which countries ~~one predicted has,~~
~~dass gegen die Resolution stimmen würden.~~
~~that against the resolution vote would~~
 ‘That certain countries would vote against the resolution has been widely
 reported, but I’m not sure which ones’

The above data indicates that like in the case of Polish, German sluicing constructions need not to have ungrammatical continuations. Once we drop the requirement for syntactic parallelism, a grammatical and semantically parallel construction becomes possible. This strongly indicates that, like in Polish, German sluicing does not alleviate islands simply because the elided part is not ungrammatical.

⁵ For some speakers the grammatical ending in (b) is awkward, consider a slightly different sentence that exhibits the same Island violation but has a less awkward grammatical continuation (Clemens Mayr p.c.):

- (i) Dass irgendein Tief angenommen wird, morgen Österreich zu erreichen.
 that some bad weather assumed is, tomorrow Austria to reach
 ist klar, aber ich weiß nicht welches Tief angenommen wird, morgen Österreich
 is clear, but I know not which bad weather assumed is, tomorrow Austria
 zu erreichen.
 to reach

4. Additional evidence for cleft/alternative sluice ending constructions

One direct piece of evidence for the possibility of having a cleft ending has been already discussed in the section on p-stranding in German. For some speakers of German it is possible delete the preposition provided the wh-is in the nominative as opposed to the dative.

39. Anna hat mit jemandem gesprochen, aber ich weiss nicht wer/*wem es war,~~mit dem sie gesprochen hat~~
Mary has to someone spoken but I know not whoNom/Dat it was ~~with whom she talked has~~
'Mary talked to someone but I do not know with who'

There is variation among speakers as to the acceptability of the above construction. However, even speakers who do not fully accept the sluice with the Nominative wh still prefer it over the one with the Dative wh when both are without a preposition.⁶ Moreover, those speakers who do not like the sluice with a Nominative wh find it acceptable when the cleft is pronounced. Consider the following example:

40. Anna hat mit jemandem gesprochen, aber ich weiss nicht wer es war,~~mit dem sie gesprochen hat~~
Mary has to someone spoken but I know not whoNom it was ~~with whom she talked has~~
'Mary talked to someone but I do not know with who it was'

The above data suggests that in German you can omit the preposition provided you use a cleft construction.

Polish case cannot be used as direct evidence for alternative sluice endings. However, I have provided circumstantial evidence suggesting that alternative endings are possible in Polish: (i) the interaction between d-linking and the ability to omit the preposition, (ii) the interaction between multiple wh-movement and the inability to omit the preposition, and finally, (iii) the contrast in island alleviation between multiple wh-sluices and single wh-sluices. Let me examine the properties of cleft constructions in Polish in more detail, following Merchant's (2001) discussion of cleft constructions in sluicing.

Merchant (2001) discusses the properties of sluices; one of the generalizations he makes is the Sluicing-Comp generalization:

- 41 In sluicing, no non-operator material may appear in COMP.

⁶ Stressing the bare Nominative wh also seems to improve their judgments (Kathy Gerlach, Clemens Mayr (p.c)). I have no account for this contrast. My suspicion is that it is somehow connected to the fact that in forms of ellipsis in German avoiding the verb is impossible, for example in ACD constructions.

It will be shown that in Polish this generalization does not hold. Support for this claim comes from the interaction of sluicing and cliticization in Polish. Polish has auxiliary clitics that are subject-verb person/number/gender agreement markers in the past tense (Borsley and Rivero 1994, Szczegielniak 2005). These auxiliaries can be cliticized onto the verb, or hosted by any X/XP preceding the verb. Consider the following examples from Szczegielniak (2005):

- 42
- a. (Ty) zobaczyłaś Janka
you saw+affix-2nd.sg. John
'You saw John'
 - b. Tyś zobaczyła Janka
you+aux-2nd.sg. saw John
'You saw John'
 - c. Tyś Janka zobaczyła
you+aux-2nd.sg. John saw
'You saw John'
 - d. (Ty) Jankaś zobaczyła
you John+aux-2nd.sg. saw
'You saw John'
 - e. (Ty) Janka zobaczyłaś
you John saw+affix-2nd.sg.
'You saw John'
 - f. *Ty zobaczyła Jankaś
you saw John+aux-2nd.sg.
'You saw John'
 - g. *Zobaczyła tyś Janka
saw you+aux-2nd.sg. John
'You saw John'
 - h. Zobaczyłaś (ty) Janka
saw+affix-2nd.sg. you John
'You saw John'
 - i. *Ś zobaczyła Janka
aux-2nd.sg. saw John
'You saw John'

The auxiliary can 'climb' with the wh-word in regular wh-movement:

- 43 Któregos+ś ty sfotografował mężczyznę
 which₁+aux you photographed t₁ man
 ‘Which man did you photograph?’

Clitic climbing is also possible in Cleft constructions:

- 44 Którego+ś to mężczyznę ty sfotografował
 which₁+aux it man you photographed
 ‘Which man it was that you photographed?’

Interestingly enough, when the wh-phrase is part of a PP this is not possible. Consider:

- 45 ??a. Którego+ś to do t₁ mężczyzny ty podszedł
 which₁_aux it to man you approached
 ‘Which it was man that you approached?’
- b. Którego to do t₁ mężczyzny+ś ty podszedł
 which₁ it to man+aux you approached
 ‘Which it was man that you approached’

The reason behind this asymmetry is not exactly clear. What is interesting is that this asymmetry surfaces in sluicing constructions. Consider the following contrasts:

- 46 a. Tyś dał książkę jednemu chłopcu, ale nie wiem któremu+ś
 You gave book one boy but not know whom+aux
 ‘You gave a book to one boy, but I do not know which’
- ??b. Tyś wysłał książkę do jednego chłopca, ale nie wiem którego+ś
 You sent book o one boy but not know whom+aux
 ‘You sent a book to one boy, but I do not know which’

This correlation between the inability of clitic climbing in clefts and the inability to omit the preposition in a sluice when the wh-word is hosting a clitic provides further evidence that when a preposition is omitted a cleft ending of the sluice has to be used.

The data suggests also that the sluicing-COMP generalization does not hold for Polish.⁷

Another piece of evidence suggesting that clefts cannot be used as sluicing continuations comes from Merchant (2001) who argues that aggressively non-D-linked phrases cannot occur in sluices in English.

- 47 Someone dented my car last night__

⁷ The word *ktoremuś* is ambiguous between which+aux and ‘some’. However, the judgments apply to the interpretation of the wh-word as a question word, and not an indefinite.

- a. I wish I knew who
- b. I wish I knew who the hell it was
- c. * I wish I knew who the hell

However, they can occur in clefts:

48 Who the HELL do you think you are??

However, in Polish aggressively non-D-linked phrases are possible in sluices and clefts. Consider the following examples:

49 Ktoś ukradł mój samochód wczoraj_
 someone stole my car yesterday
 ‘Someone stole my car yesterday’

- a. Chciałbym wiedzieć kto
 Wanted know who
 ‘I would like to know who’
- b. Chciałbym wiedzieć kto do diabła to był
 Wanted know who to devil it was
 ‘I would like to know who the hell it was’
- c. Chciałbym wiedzieć kto do diabła
 Wanted want who to devil
 ‘*I would like to know who the hell’

The above data indicates that the disassociation between clefting and sluicing does not hold for Polish. Note, however, that Polish clefts allow for the clefted noun to preserve case even when used in isolation. This means that case parallelism cannot be used as a test for the existence of cleft endings of sluices in Polish (unlike in German, where we see the lack of case parallelism in at least some dialects).

5. Do we need resumptive pronouns?

Merchant (2001) provides a convincing argument that the continuations of sluices cannot employ a resumption strategy. For example, *wh*-remnants like *when*, *where* and the amount *how* do not employ resumptives. Consider the following examples:

*50 Where does he want to find a person who camped there

This is true for Polish. Consider the following example:

- *51 Gdzie on chce spotkać osobę która tam śpi
 where he wants meet person who there sleeps
 ‘Where does he want to find a person who sleeps there’

Consider the following sluiced construction:

- 52 He wants to meet a person who sleeps somewhere, but I do not know where ~~he wants to meet a person that sleeps~~

The continuation of the sluice is ungrammatical if we use a syntactically parallel ending.

- *53 Where₁ he wants to meet a person that sleeps t₁

The most obvious continuation is the following:

- 54 He wants to meet a person who sleeps somewhere, but I do not know where₁ ~~that person sleeps ₁ who he wants to meet~~

This is a semantically parallel continuation, but not a syntactically parallel one. The same holds for Polish, consider the following sentence:

- 55 a. On chce spotkać osobę która śpi w jakimś miejscu, ale nie wiem gdzie
 He wants meet person who sleeps in some place but not know where
~~ta osoba — śpi — którą on chce spotkać~~
 that person sleeps who he wants meet
 ‘He wants to meet a person who sleeps in some place but I do not know
 where that person sleeps who he wants to meet’

It seems fair to suggest that in cases when the wh-remnants is *when*, *where* and the amount *how* the continuation cannot employ a resumptive, but a semantically parallel reading is still possible. This suggests that the grammar provides for the ability to utilize syntactically parallel continuations. These continuations do not have to be uniform across structures. The speaker/hearer attempts to utilize the most syntactically parallel continuation, in case of sluicing this would involve straight wh-movement, if that fails to produce a grammatical continuation, other structures that are semantically parallel are then utilized.⁸

6. Why does VP ellipsis not alleviate Island effects?

It has been noted in the literature (starting with Ross 1967) that VP ellipsis, unlike sluicing, does not alleviate Island effects. Consider the following contrasts between

⁸ My suspicion is that all the semantically parallel alternate continuations are not entertained simultaneously. The most likely scenario is that the speaker/hearer assumes a syntactically parallel continuation, if that fails; she adopts the most frequent structurally semantically equivalent continuation.

sluicing and VP-ellipsis (for exposition purposes let us just consider relative clause Islands):

Relative clause/CNP islands

- 56 *a. They would want to hire someone who speaks a Balkan language, but I don't remember which Balkan language they would ~~want to hire someone who speaks~~.
- b. They would want to hire someone who speaks a Balkan language, but I don't remember which ~~Balkan language they want to hire someone who speaks~~.

Polish:

- 57 *a. Oni będą chcieli wynająć kogoś kto mówi dialektem bałkańskim, ale nie
They will want hire someone who speaks dialect Balkan but not
wiem [którym dialektem]_i oni będą ~~chcieli wynająć kogoś kto mówi t_i~~
know which dialect they will want hire someone who speak
'*They will want to hire someone who speaks in Balkan dialect, but I do not know which they will'
- b. Oni będą chcieli wynająć kogoś kto mówi dialektem bałkańskim, ale nie
They will want hire someone who speaks dialect Balkan but not
wiem [którym dialektem]_i oni będą ~~chcieli wynająć kogoś kto mówi t_i~~
know which dialect they will want hire someone who speak
'They will want to hire someone who speaks in Balkan dialect, but I do not know which'

In Fox and Lasnik (2003) it has been argued that the asymmetry between VP ellipsis and Sluicing as far as Island alleviation is a result of the fact that the deletion site in VP ellipsis is not high enough in the structure and does not remove all the offending traces of wh-movement. However, as has been pointed out in previous sections the fact that certain preposition stranding constructions in Polish can be alleviated via sluicing suggests that the ability to alleviate Islands has nothing to do with the size of the deletion site. Moreover, preposition stranding seems to interact with multiple wh-sluicing in Polish, it is impossible to have preposition stranding with multiple wh-sluices even in cases when it is possible with single wh-sluices. There is another possibility why VP ellipsis does not seem to alleviate Island violations in the deleted segment, namely that, unlike in sluicing, there is no possible semantically parallel and yet grammatical structure for the elided part. Note that we cannot use cleft constructions for the elided VP, whereas we can for the sluice.

- 58 *a. Oni będą chcieli wynająć kogoś kto mówi dialektem bałkańskim, ale nie
They will want hire someone who speaks dialect Balkan but not
wiem [którym dialektem]_i oni będą ~~to chcieli wynająć kogoś kto mówi t_i~~
know which dialect they will it want hire someone who speak
'*They will want to hire someone who speaks in Balkan dialect, but I do not know which they will'

- b. Oni będą chcieli wynająć kogoś kto mówi dialektem bałkańskim, ale nie
 They will want hire someone who speaks dialect Balkan but not
 wiem którym ~~to dialektem~~ ~~co on nim mówi~~ oni będą chcieli kogoś wynająć
 know which it dialect that he it speak they will want someone hire
 ‘They will want to hire someone who speaks in Balkan dialect, but I do not know which’

Consequently, it will be argued that the inability to assign a grammatical string that is semantically parallel to the VP antecedent is the cause for VP ellipsis to behave differently from sluicing as far as apparent Island violations are concerned.

One interesting prediction from this analysis is that if VP elided structures cannot be clefts in Polish the preposition stranding should not be possible in VP ellipsis even with d-linked wh-phrases. This is precisely what happens in Polish. The (a) example below shows a p-stranding sluice with a cleft continuation that has been elided, the (b) examples shows VP ellipsis with p-stranding using a standard syntactically parallel continuation, and the (c) example shows that VP ellipsis cannot license p-stranding even if we try to use a cleft.

59. a. Maria mogła zadzwonić do jakiejś koleżanki ale nie wiem której ~~to~~
 Mary could call to some friend but not know which it
~~do koleżanki ona mogła zadzwonić~~
 to friend she could call
 ‘Mary could call a friend but I do not know which’
- *b. Maria mogła zadzwonić do jakiejś koleżanki ale nie wiem której ona
 Mary could call to some friend but not know which she
 mogła ~~zadzwonić do koleżanki~~
 could call to friend
 ‘Mary could call a friend but I do not know which one she could’
- *c. Maria mogła zadzwonić do jakiejś koleżanki ale nie wiem której ona
 Mary could call to some friend but not know which she
 mogła ~~to zadzwonić do koleżanki~~
 could it call to friend
 ‘Mary could call a friend but I do not know which one she could’

It will be argued that English is no different from Polish and German in that sluiced constructions can have semantically parallel continuations that do not alleviate Islands.

Consider again the classical Island alleviation paradigm in English. As with the Polish examples, the (a) examples are re marked ungrammatical since they have an island ending (that is deleted), whereas the (b) examples have a grammatical ending. As can be seen below the grammatical continuations involve cleft constructions and resumptive pronouns.

Relative clause/CNP islands

- 60 *a. They want to hire someone who speaks a Balkan language, but I don't remember which ~~Balkan language they want to hire someone who speaks~~.
- b. They want to hire someone who speaks a Balkan language, but I don't remember which ~~Balkan language it was they want to hire someone who speaks it~~.

Adjunct CP islands

- 61 *a. Ben left the party because one of the guests insulted him, but he wouldn't tell me which ~~of the guests did Ben leave the party because _ insulted him~~
- b. Ben left the party because one of the guests insulted him, but he wouldn't tell me which ~~of the guests it was that Ben left the party because he insulted him~~

Sentential Subject islands

- 62 *a. That certain countries would vote against the resolution has been widely reported, but I'm not sure which ones ~~has [that _ would vote against the resolution] been widely reported~~
- b. That certain countries would vote against the resolution has been widely reported, but I'm not sure which ones ~~it has been widely reported [that they would vote against the resolution]~~

The above examples show that there exist continuations of sluices that are semantically parallel, and, in contrast to the syntactically parallel continuations, they are grammatical. It has to be noted that the proposal in this paper does not eliminate the use of syntactically parallel continuations. In fact, I assume that by default the hearer attempts to assign a meaning to the sluice with the help of a syntactically parallel continuation. Only when that fails, does she or he resort to a assigning a syntactic structure to the continuation that satisfies semantic parallelism.

Let me explore whether can we find examples in English where a semantically parallel and grammatical continuation is unavailable. In such cases, the prediction is that sluicing should not appear to alleviate Island effects.

Triple *wh*-questions are known to not violate Superiority (Bolinger 1978)

63. a. Who t took what where?

- b. What did who take __ where?
- c. Where did who take what __ ?

If Island alleviation is a result of simplified clefts (Merchant 2001), or due to the fact that offending traces are deleted, we should also be able to observe it in triple wh-sluiques. This is not the case. Consider the following pair of sentences where in the (a) example we have a sluice whose ending violates Adjunct islands, the (b) example shows that (a) is not due to a superiority violation.

- 64. *a. The sheriff wondered who answered the phone before emailing what girl about some party, but he also did not know which exactly ~~it was party that the sheriff wondered who called who about it~~
- b. The sheriff wondered who answered the phone before emailing what girl about some party, but he also did not know about which party exactly ~~it was that the sheriff wondered who called who~~

I will argue that the contrast between (a) and (b) is a result of the fact that an alternate semantically parallel yet grammatical ending for (a) is not available, whereas it is for (b).

Another prediction of the proposed here analysis is that the alleviation of Island violations should be impaired when the antecedent of the sluice is already clefted, since having two clefts of the same XP in a clause is degraded.

- 65. ?a. It was before talking to someone that John answered the phone, but I do not know who
- ?b. It was before talking to someone that John answered the phone but I do not know who it was that John answered the phone before talking to her

Note the degradation disappears when there is no Island violation

- 66. It was some book that John gave Mary, but I do not know which

This is because the speaker/hearer can utilize in (66) a continuation that involves simple wh-movement:

- 67. It was some book that John gave Mary, but I do not know which ~~book John gave to Mary~~

7. Conclusion

I have argued that sluicing is no different from VP ellipsis as far as Island alleviation is concerned. Speaker/hearers cannot alleviate island effects but not pronouncing the offending string. Sluicing is different from VP ellipsis in that it can utilize a wider set of semantically parallel constructions, specifically clefts and resumptives. In this model, an

elided structure is initially interpreted as involving a syntactically parallel structure (this could be a result of processing due to syntactic priming (Bock 1986), or some sort of economy condition). When that interpretation is infelicitous, the speaker/hearer than attempts to interpret the string utilizing a semantically parallel ending. I have shown cases where sluicing cannot alleviate Island effects and have argued that this is because there is no semantically parallel continuation of the sluice. It remains an open question what are the boundaries of semantic parallelism. The fact that sluicing in Polish is not always grammatical seems to imply that a pragmatically parallel context (Culicover Jackendoff 2005) is not sufficient to recover the structure. The question is how to delimit the range of possible continuations of an elided structure, something that I leave for future research.

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