

Sluicing and its remnants: A squibón for Hagit

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Abstract

I discuss some documented exceptions to Merchant's Sluicing-Comp Generalization and argue that at least some of them can be explained if the non-wh remnant is merged higher than the fronted wh and the constituent containing the wh then moves above it.

Keywords sluicing, stripping, focus movement, discourse particles

Sluicing is characterized by deletion of a whole clause except a *wh* expression (Ross 1969; Merchant 2001).

(1) John talked to someone, but I can't remember who.

If fronted *wh* expressions are in a left peripheral Spec/FocusP (Rizzi 1997 and much subsequent work), then Sluicing can be defined as ellipsis of the complement of Focus^o.

This characterization of sluicing - which goes back to Baltin (2010) - predicts that if a language has an overt focus head, it should not be included in a sluice and should survive deletion. This prediction, let us call it Baltin's Conjecture, appears to be valid crosslinguistically, although a more thorough study is needed.

Focus particles, as the morphemes that co-occur with *wh* and with focused constituents are descriptively called, are found in many languages. A subset of them should probably be analyzed as heads of FocusP, hosting a *wh* element or a focus-fronted phrase in their specifier.¹ Aboh (2004) and in subsequent work, has argued that the Gungbe particle *wè* is such a head and Baltin (2010) showed that *wè* survives Sluicing. Aboh (2010) is the source of example (2) (see also Lipták & Aboh 2013).

(2) a. Súrù yró médè bɔ̀ ùn kànbís d̥ɔ̀ ménù *(wè)
Suru call someone and I ask that who FOC
'Suru called someone and I asked who.'

Focus particles are quite common in Niger-Congo and Chadic languages but the literature on sluicing in these languages is scant. I have recently come across evidence for Baltin's Conjecture in Tuki (Bassong & Biloa 2015), Basaa (op cit.) and Nupe (Mendes & Kandybowicz 2021).

Mutatis mutandis, the obligatory (universal?) absence of "low" complementizers that follow *wh* in non-sluiced interrogatives, in e.g., Irish, Brazilian Portuguese, many North Italian dialects and Germanic varieties means that these elements merge no higher than Focus^o's complement, since they delete in Sluicing. By similar reasoning, tensed verbs moved over the subject in *wh* interrogatives, which also elide in Sluicing, move no higher than this lower head. Baltin 2010 proposed that this head is Fin^o.

Intriguing questions arise here. What *prevents* a tensed verb from moving on from Fin^o to Foc^o? If T-to-C movement culminates in the lowest head of the left periphery, Fin^o, why must the fronted verb be adjacent to *wh*? In other words, why can't "low" topics or fronted modifiers appear between *wh* in Spec/FocusP and a fronted auxiliary in English (or, for that matter, in Hungarian, where *wh* is adjacent to V but V deletes in sluicing)? Moreover, the interaction of quantified subjects and negation and of modals and quantificational adverbs in sluicing lead Landau (2020) to doubt whether Subject-Aux Inversion ever takes place in elided clauses. I do not further address these and related questions in this squibette. In what follows, I discuss the inverse situation, namely that of

¹ In quite a few languages, focus particles *precede* Focus and *wh*. In some cases, such formatives realize a head that selects Focus^o, and thus appears to the left of whatever constituent sits in Spec/FocusP. See Shlonsky (to appear).

constituents that Baltin’s Generalization predicts should delete but nevertheless survive Sluicing.

Marušič et al (2015; 2016) study a variety of particles in Slovenian that fail to delete in sluicing.

- (3) a. Peter je videl nekoga. Koga pa?
 Peter AUX saw someone. Who PTCL
 ‘Peter saw someone. Who <did he see>?’
- b. Vid je srečal nekoga. Koga že?
 Vid AUX met someone. Who PTCL
 ‘Vid met someone. Remind me, who <did he meet>?’
- c. Vid je srečal nekoga. Koga to?
 Vid AUX met someone. Who PTCL
 ‘Vid met someone. Who <did he meet>?’

According to Marušič et al., *pa* and perhaps also *to*, are Focus heads in (3a) and (3c). Their retention after sluicing is then predicted, for the same reason that it is in (2). The particle *že* in (3b) “indicates that the speaker knows the answer to the question but does not remember it.”, Marušič et al (2016: 199).

Že is a discourse particle par excellence, conveying information that concerns the epistemic state of the speaker with respect to the content of the wh question. Informally, we can say that it “scopes” higher than the wh. While the position of *že* is relatively flexible in Slovenian, it is conceivable that it merges higher than FocusP and that the order wh-*že* is derived through movement. Moreover, if wh is in Spec/FocusP, and *že* merges *below* Focus°, and if sluicing targets the complement of Focus°, *že* should not survive sluicing. The fact that it is not deleted is difficult to explain without giving up Baltin’s Generalization.

Let us then, entertain the hypothesis that *že* in (3b) merges above FocusP, not below Focus°. Merge of *že* is followed by fronting of FocusP above it. Deletion then targets FinP, the complement of Focus°. Only wh and *že* survive sluicing and are pronounced, in that order. Movement of FocusP above *že* is obligatory: this particle can never precede wh.

If movement of FocusP depends on the merge of *že*, as seems natural, it should also occur in unsluiced wh interrogatives. As given, the derivation would then yield the incorrect word order: *že* would occur clause-finally whereas, in fact, it follows wh in unsluiced interrogatives, (4).

- (4) a. Kdo že je napisal Vojno in mir?
 who PTCL AUX write War and peace
 ‘(I need to remember) who wrote War and Peace?’

To derive (4) under the hypothesis that *že* merges above wh, one must countenance more structure and more steps of movement. Suppose that another phrase is merged between *že* and FocusP. The head of this phrase, call it X, is null in Slovenian, and attracts the complement of Focus° to its specifier. Then, FocusP – which now only contains wh – moves above *že*, perhaps to its specifier. What I have in mind is the following derivation:

- (5) a. Merge Foc° , project FocusP and move wh to its specifier:
 $[\text{FocusP wh Foc}^\circ [\text{FinP} [\text{TP} \dots t_{\text{wh}} \dots]]]$
- b. Merge X, project XP, and move FinP, namely Foc° 's complement, to Spec/XP:
 $[\text{XP} [\text{FinP} [\text{TP} \dots t_{\text{wh}} \dots]] \text{X}^\circ [\text{FocusP wh Foc}^\circ t_{\text{FinP}}]]$
- c. Merge ξ_e and move FocusP above it:
 $[\text{FocusP wh Foc}^\circ t_{\text{FinP}}] \dots \xi_e [\text{XP} [\text{FinP} [\text{TP} \dots t_{\text{wh}} \dots]] \text{X}^\circ t_{\text{FocP}}]$

The difference between (4) and its sluicing counterpart (3b) boils down to whether the phrase in Spec/XP is pronounced or deleted, as both options are available in Slovenian. When FinP is pronounced at the output of (5), (4) surfaces. When it deletes, we have (3b).

French *déjà* is interestingly different. Like ξ_e , it is fundamentally an aspectual adverb, meaning ‘already’ and, again like ξ_e , it doubles as a discourse particle, in which case it contributes a “remind me” reading. Unlike ξ_e in (4), however, it cannot immediately follow wh in unsluiced wh interrogatives, as shown in (6a), (although it is marginally acceptable when preceded and followed by pauses, Laure Ermacora, p.c.). *Déjà* most naturally occurs clause-finally: in (6b), with moved wh as well as in (6c), with wh in situ.

- (6) a. (Rappelle-moi) *où déjà tu habites?
 (remind-me) where DEJA you live
 ‘(Remind me) where do you live?’
- b. (Rappelle-moi) où tu habites déjà?
 (remind-me) where you live DEJA
 ‘(Remind me) where do you live?’
- c. (Remind me) tu habites où déjà?
 you live where DEJA
 ‘(Remind me,) where do you live?’

Under Sluicing, French *déjà* is pronounced after wh, as in Slovenian.

- (7) A: Tu m’avais dit que tu habitais dans le sud-ouest.
 you me-had told that you lived in the Southwest
 ‘You told me that you lived in the Southwest.’
- B: (Rappelle-moi) où déjà?
 (remind-me) where DEJA?
 ‘(Remind me) where?’

On the assumption that *déjà*, like its counterpart ξ_e in Slovenian, is merged above FocP, we can account for the French pattern and express the difference between the grammars of French and Slovenian with a parametrization of two properties of X° , namely, whether X° attracts a constituent to its specifier and whether it forces the deletion of its specifier. Consider (8).

(8) Properties of X°

	“EPP”	Deletion of the specifier
Slovenian	obligatory	optional
French	optional	obligatory

In French, movement of FinP to Spec/XP is optional. In the examples in (6), it does not take place. X° is merged and projects, but it does not attract FinP. *Déjà* then merges and FocusP is moved above it. For the sake of simplicity, I assume that the difference between in situ and ex situ wh in French has to do with whether movement is covert or overt, targeting Spec/FocusP in both cases.

In the Sluicing example (7B), FinP is attracted to Spec/XP and is then obligatorily elided.² Wh and *déjà* survive deletion and are pronounced, in that order.

Central to the analysis sketched in the preceding paragraphs is the idea that sluicing involves prior movement of the constituent targeted for ellipsis above the wh remnant (to Spec/XP as in the steps detailed in (5b)). Such a movement + deletion approach was proposed in Johnson (2001) for VP ellipsis, exploiting the similarities between VP topicalization and VP ellipsis, (though see the criticism in Aelbrecht & Haegeman 2012). I suggest we consider extending and adapting that proposal to Sluicing.

I now consider extending the hypothesis that FocusP fronts over discourse particles to a construction that Nevins (2008) calls Sluicing + Stripping. The Hebrew example in (9), from Landau (2020), illustrates one subcase of Sluicing + Stripping that Ortega-Santos et al (2014) and Yoshida et al (2015) name Wh-stripping.

(9) A: Ani ekax et Ronit la-rofe be-yom šeni.
I will.take.1SG ACC Ronit to.the-doctor in-day second
'I'll take Ronit to the doctor on Monday.'

B: Ve-matay et axot-a? / Ve-et axot-a matay
and-when ACC sister-her and-ACC sister-her when
'And when will you take her sister to the doctor?'

The cited authors take the non-wh remnant to undergo Stripping. For Ortega-Santos et al. (2014) this means that it is focus-fronted to a FocusP projected below wh, following which, TP is deleted. It seems to me, however, that the non-wh remnant can be thought of as a contrastive topic both in (9), and in the Spanish example in (10), adapted from Ortega-Santos et al (2014).

(10) A: Alguno de estos tíos comió la tortilla.
one of these guys ate the tortilla
'One of these guys ate the tortilla.'

B: Y cuál de ellos la paella?
and which of them the paella
'And which one of them the paella?'

² Perhaps related to the second parameter is the fact that although French has Stripping, Dagnac (2018), an ellipsis operation which presumably involves focus-fronting followed by deletion, Depiante (2000), it has very restricted focus fronting outside of Stripping

Moreover, in non-sluiting interrogatives, the combination of a *wh* and a fronted focus is ungrammatical, at least in Romance.³

Arguably, then, the non-*wh* remnant merges in Spec/TopicP above FocusP. The derivation of *Wh* stripping in (9B) and (10B) proceeds as follows:

- (11) a. *Wh* moves to Spec/FocusP, X° is merged, projecting XP, and FinP moves to its specifier, where it subsequently undergoes deletion.
 $[_{XP} [_{FinP} \dots] X^\circ [_{FocusP} \textit{wh} \textit{Foc}^\circ \textit{t}_{FinP}]]$
- b. \textit{Top}° is merged and the non-*wh* remnant is merged in TopicP above XP.
 $[_{TopicP} \textit{non-wh remnant} \textit{Top}^\circ [_{XP} [_{FinP} \dots] X^\circ [_{FocusP} \textit{wh} \textit{Foc}^\circ \textit{t}_{FinP}]]]$
- c. In Hebrew, the derivation can stop at this point, yielding the order non-*wh* remnant - *wh*, one of the two options in (9B). The order *wh* - non-*wh* remnant, schematized below, is derived by further movement of FocusP, above TopicP.
 $[_{FocusP} \textit{wh} \textit{Foc}^\circ \textit{t}_{FinP}] \dots [_{TopicP} \textit{non-wh remnant} \textit{Top}^\circ [_{XP} [_{FinP} \dots] X^\circ \textit{t}_{FocusP}]]]$

The difference between Hebrew and Spanish, like those between French and Slovenian discussed above, resides in properties of functional heads. In the case of *Wh*-stripping, it is the head which attracts FocusP above TopicP which has optional “EPP” in Hebrew and obligatory “EPP” in Spanish.

This said, Nevins (2008) and Ortega-Santos et al (2014) argue that non-*wh* remnants bear the signature of constituents moved rightwards (no movement from an embedded clause, no preposition stranding, etc.). The FocusP that hosts the stripping remnant is merged on the right, in their view. The non-*wh* remnant also differs in various ways from a Romance clitic left or right dislocated topic.

I believe that rightward movement should, as a matter of principle, be thought of as leftwards movement followed by remnant “topicalization”, as in Kayne (1994). In the least, a derivation constrained by the LCA should be considered and evaluated since it cannot be ruled-out non-arbitrarily. Factors relating to heaviness might then be at work in *Wh* stripping, constraining leftward FocusP fronting over the topic, much as in Heavy NP Shift (or light VP fronting, cf. Larson (1988)) and related constructions. There are also many puzzles concerning movement out of or binding into sluices that need to be confronted before the Nevins and Ortega-Santos et al. data can be fully understood.

Can the approach discussed here be extended to other documented exceptions to Merchant’s Sluicing-Comp Generalization? First, one must determine whether the constructions at hand instantiate genuine sluicing, as opposed to superficially similar-looking but derivationally distinct ellipses (cf. Rodrigues et al. (2009)). In a recent conference paper, Temmerman (2019) cites 5 types of elements that survive deletion to the right of a *wh* remnant (including the ‘stripping’ remnants discussed above and van Craenenbroeck’s (2010) post-*wh* demonstratives, found in some Dutch dialects). It remains to be determined whether these can be handled by a minimally-simple theory of sluicing, in which the *wh* is in Spec/FocusP and the target of deletion is the complement of \textit{Focus}° , or whether the sluice can sometimes be a smaller constituent (for example, the

³ Rizzi & Bocci (2017) show that in Italian, a focus-fronted argument can marginally precede *wh*, but only in indirect questions. The order *wh*-focus is ungrammatical.

complement of Rizzi's Modifier^o head – see Rizzi & Bocci (2017) - or of a Topic^o merged below focus).

In conclusion, some systematic exceptions to Merchant's Sluicing-Comp generalization can be naturally expressed by adopting Baltin's (2010) hypothesis that the target of ellipsis in Sluicing is FinP, the complement of Focus^o, and taking various non-wh survivors of Sluicing to be merged above FocP, in the cartographic space between Force^o and FinP. In addition, there seems to be indirect evidence that sluicing does not apply to FinP in situ. Rather, ellipsis involves prior movement of the to-be-elided constituent to the specifier of a category merged above the wh remnant.

Hagit and I have rarely disagreed on world and Mideast politics, on the nature and practice of Zionism and of the need to combat it ideologically and in practice as Israeli socialists. We have, however regularly disagreed on scientific questions. I hope this contribution will provide us with new material to argue about.

References

- Aboh, Enoch Olade. 2004. *The Morphosyntax of complement-head sequences: Clause structure and word order patterns in Kwa*. New York: Oxford University Press.
- Aboh, Enoch Oladé. 2010. Information structuring begins with the numeration. *Iberia* 2(1). 12–42.
- Aelbrecht, Lobke & Liliane Haegeman. 2012. VP-Ellipsis Is Not Licensed by VP-Topicalization. *Linguistic Inquiry* 43(4). 591–614.
- Baltin, Mark. 2010. The Nonreality of Doubly Filled Comps. *Linguistic Inquiry* 41(1). 331–335.
- Bassong, Paul Roger & Edmond Biloa. 2015. Sluicing and functional heads in Bantu. In *Cartography and antisymmetry. Essays on the nature and structure of the C and I domains*. <https://afranaphproject.afranaphdatabase.com/images/stories/downloads/general/CartographyManuscript.pdf>.
- Craenenbroeck, Jeroen van. 2010. *The syntax of ellipsis: evidence from Dutch dialects*. Oxford ; New York: Oxford University Press.
- Dagnac, Anne. 2018. French. In Jeroen van Craenenbroeck & Tanja Temmerman (eds.), *The Oxford Handbook of Ellipsis*, 784–814. Oxford: Oxford University Press.
- Depiante, Marcela Andrea. 2000. *The syntax of deep and surface anaphora: A study of null complement anaphora and stripping/bare argument ellipsis*. University of Connecticut Ph.D. dissertation.
- Johnson, Kyle. 2001. What VP ellipsis can do, and what it can't but not why. In Mark Baltin & Chris Collins (eds.), *The handbook of contemporary syntactic theory*, 439–479. Oxford: Blackwell.
- Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.
- Landau, Idan. 2020. A Scope Argument against T-to-C Movement in Sluicing. *Syntax* 23(4). 375–393.
- Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19(3). 335–391.

- Lipták, Anikó & Enoch O. Aboh. 2013. Sluicing inside relatives: The case of Gungbe. *Linguistics in the Netherlands* 30(1), 102–118. Amsterdam: John Benjamins.
- Marušič, Franc, Petra Mišmaš, Vesna Plesničar, Tina Razboršek & Tina Šuligoj. 2015. On a potential counter-example to Merchant's Sluicing-COMP generalization. *Grazer linguistische Studien* 83(1). 47–65.
- Marušič, Franc, Petra Mišmaš, Vesna Plesničar & Tina Šuligoj. 2016. Surviving sluicing. In Denisa Lenertová, Roland Meyer, Radek Šimík & Luka Szucsich (eds.), *Advances in formal Slavic linguistics 2016*, 193–215. Berlin: Language Science Press.
- Mendes, Gesoel & Jason Kandybowicz. 2021. Salvation by Deletion in Nupe. *Linguistic Inquiry* 1-47.
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands and identity in ellipsis*. Oxford: Oxford University Press.
- Nevins, Andrew. 2008. Sluicing ≠ stripping: evidence from P-stranding. In *3rd Annual Moscow Student Conference on Linguistics*, Moscow.
- Ortega-Santos, Iván, Masaya Yoshida & Chizuru Nakao. 2014. On ellipsis structures involving a wh-remnant and a non-wh-remnant simultaneously. *Lingua* 138. 55–85.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of grammar: A handbook of generative syntax*, 281–337. Dordrecht: Kluwer.
- Rizzi, Luigi & Giuliano Bocci. 2017. Left Periphery of the Clause: Primarily Illustrated for Italian. In Martin Everaert & Henk van Riemsdijk (eds.), *The Companion to Syntax*, 1–30. Hoboken, NJ: Wiley.
- Rodrigues, Cilene, Andrew Ira Nevins & Luis Vicente. 2009. Cleaving the interactions between sluicing and P-stranding. In Danièle Torck & Leo Wetzels (eds.), *Romance Languages and Linguistic Theory 2006: Selected papers from 'Going Romance', Amsterdam, 7–9 December 2006*, 175–198. Amsterdam: John Benjamins.
- Ross, John Robert. 1969. Guess who? In Robert I. Binnick, A. Davidson, Georgia M. Green & Jerry Morgan (eds.), *Papers from the fifth regional meeting of the Chicago Linguistic Society*, 252–286. Chicago: Chicago Linguistic Society.
- Shlonsky, Ur. To appear. From Bantu subject-object reversal to inverted copular sentences: How “low” focalization and smuggling circumvent Relative Minimality violations. *Festschrift for X*.
- Temmerman, Tanja. 2019. When the sluice is not alone: On the syntax of WH+non-WH sluicing in Dutch. In *Sluicing and Ellipsis at 50*. University of Chicago.
- Yoshida, Masaya, Chizuru Nakao & Iván Ortega-Santos. 2015. The syntax of Why-Stripping. *Natural Language & Linguistic Theory* 33(1). 323–370.