P-STRANDING OUT OF PLACE:

The bleeding effect of ellipsis on Dutch P-stranding

James Griffiths, U. Tübingen
Güliz Güneş, U. Tübingen
Anikó Lipták, Leiden University
Jason Merchant, U. Chicago

GLOW 44, 16 April 2021

1. Introduction: The preposition-stranding generalization (PSG)

- One of the strongest arguments for the existence of unpronounced syntactic structure inside an ellipsis site:

Preposition stranding generalisation (**PSG**) (Merchant 2001, p.92)

(1) A language L will allow preposition stranding under sluicing only if L allows preposition stranding under regular *wh*-movement.

(2) a. Who did John talk **about**? *regular wh-movement*

b. I know John talked about someone, but I don't know …
[who$_1$ [$_{TP}$ John talked **about** t_1]]. *sluicing*

Table 1. Patterns of P-stranding under wh-movement and sluicing

	conforming to PSG		ellipsis **repairs** P-stranding violations[1]	ellipsis **bleeds** P-stranding
P-stranding in wh-movement	✓	✗	✗	✓
P-stranding in sluicing	✓	✗	✓	✗
languages	English, Swedish, Norwegian, Danish	French, Persian, Czech, Basque, Hungarian	Spanish, Polish, Russian, Indonesian	Dutch German

[1] Vicente 2008, Rodrigues et al. 2009, Szczegielniak 2008, Sato 2011, Leung 2014, Pilippova 2014, Stigliano 2019, Ionova 2020, among others

2. Dutch: ellipsis bleeds P-stranding

- Dutch P-stranding: only possible under '*R*-pronominalization'
  - (**non-human**) complement of P is **obligatorily** realised as a **locative adverbial** pro-form (van Riemsdijk 1978)

(3) Waar$_R$ kijkt hij [$_{PP}$ **naar** t] ? subscript $_R$ = R-pronoun
where looks he at
'*What* does he look at?' lit. '*Where* does he look at?'

- R-pronouns must **precede** their preposition

(4) Hij kijkt overal$_R$**naar** / ***naar** overal$_R$.
he looks everywhere.at at everywhere
'He looks at everything.'

- R-pronouns cannot strand a preposition in an ellipsis site (such as sluicing, fragments, stripping, gapping) Merchant 2001 (p. 95), Zwart 2011, Hoeksema 2014, Kluck 2015

(5) Jan zit in zijn kamer. Hij kijkt ergens$_R$naar, maar ik weet niet waar$_R$ < hij [$_{PP}$ **naar** *t*] kijkt>.
Jan sits in his room he looks somewhere.at but I know not where he at looks
'Jan is in his room. * He is looking at something, but I don't know what.'
He is looking at something, but I don't know where.'

R-pronouns can pied-pipe their preposition out of an ellipsis site:

(6) Jan zit in zijn kamer. Hij kijkt ergens$_R$naar, maar ik weet niet [$_{PP}$waar$_R$**naar**]<hij t_{PP} kijkt>.
'Jan is in his room. He is looking at something, but I don't know at what.'

• the effect is very **robust**:

- online acceptability judgement task
N=91; 1-7 Likert scale, 7 = fully acceptable
lexicalisations with: *naar* 'at', *op* 'on', *aan* 'to', mee 'with'

- P-stranding vs. pied-piping: statistically significant difference ($p<.001$)

- P-stranding vs. clefting (cf. 7): statistically significant difference ($p<.001$)

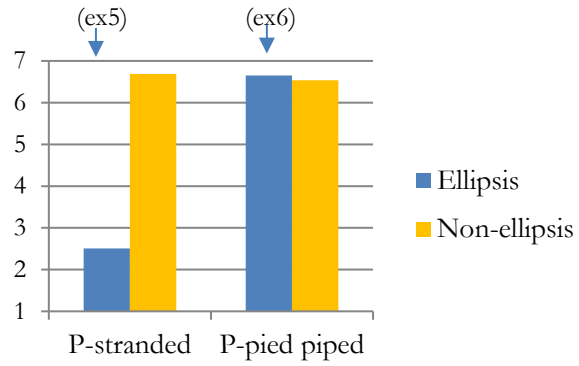


Figure 1. Average scores of P-stranding vs. pied-piping

(7) ?* Jan zit in zijn kamer. Hij kijkt ergens$_R$naar, maar ik weet niet waar$_R$ het naar is. *cleft*
Jan sits in his room he looks somewhere.at but I know not where it at is
'Jan is in his room. He is looking at something, but I don't know what it is.'

3. P-stranding has the right prosodic profile for ellipsis to occur

- for ellipsis to be licensed in P-stranding contexts, …

(8) … but I don't know WH$_R$ < … preposition … >.

… we expect that: can bear non-contrastive **accent** | can be **deaccented**

- both expectations are fulfilled:

Figure 2. F0 contour of an accented R-pronoun (sentence-level nuclear accent)

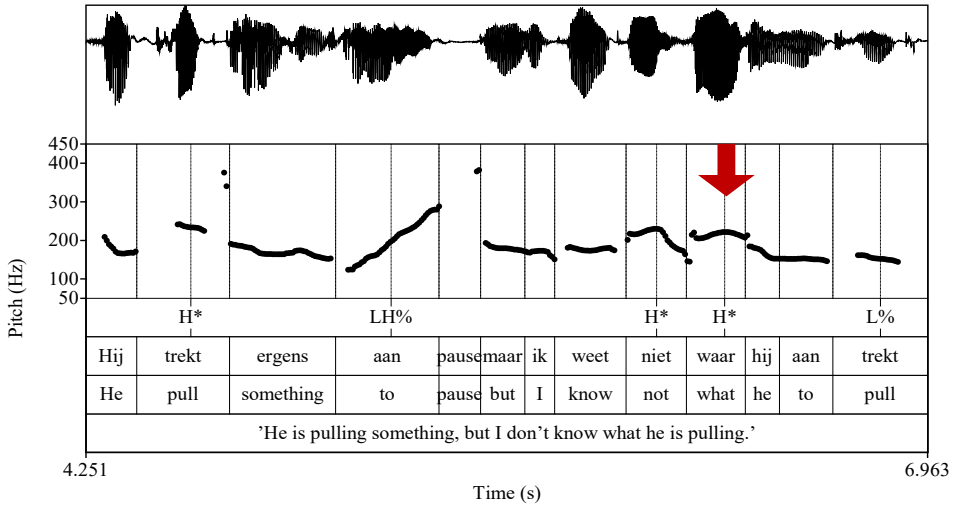
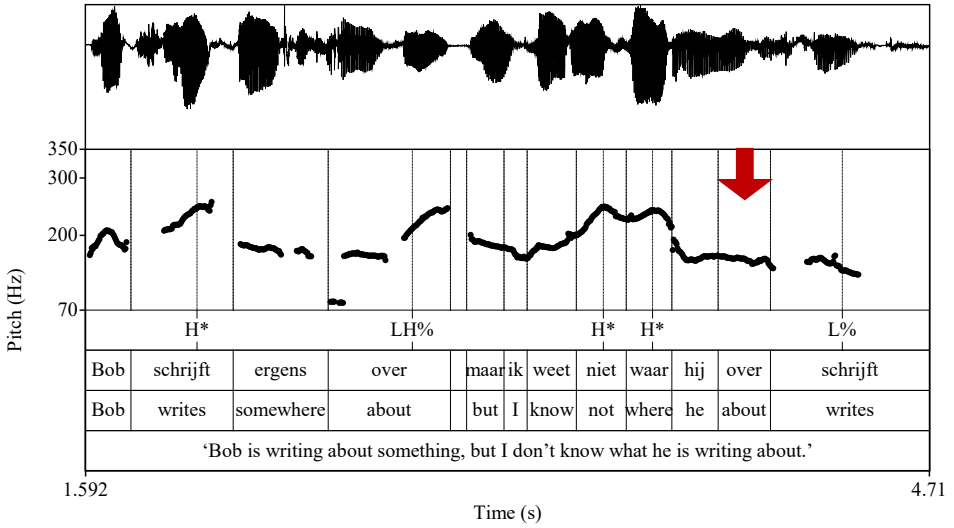


Figure 3. F0 contour of a stranded deaccented preposition



- R-pronouns are prosodically suitable ellipsis remnants (*contra* Merchant 2001).
- Stranded prepositions are prosodically suitable items to undergo deletion.

4. Our analysis

4.1. Ingredient 1: Bleeding EPP-driven movement under sluicing

- Merchant (2001), van Craenenbroeck & Den Dikken (2006), and Den Dikken (2013) claim that A-movement to SpecTP is bled under sluicing

- This is utilized to explain why
  - The Subject Condition (Chomsky 1973) appears not to apply under sluicing:

(9) a. * [Which Marx brother]$_1$ is [a biography of t_1] going to be published this year?
b. A biography of a Marx brother is going to be published this year, guess which one!

- Subject NPIs are licensed under sluicing:

(10) A: What didn't work?
B: Any of the printing equipment.

- In those varieties of Dutch with complementizer agreement, agreement is absent under sluicing:

(11) [No ellipsis; complementizer agreement when subject occupies SpecTP]

a. … darr-**e** **wiej** allichte de wedstrijd winne zölt. *Hellendoorn Dutch*
*that-**AGR*** ***we*** *probably the game win will*

b. … darr(*-**e**) allichte **wiej** de wedstrijd winne zölt.
*that-**AGR*** *probably* ***we*** *the game win will*
'… that we will probably win the game.'

(12) [Ellipsis; no complementizer agreement obligatorily absent]

Wiej hebt 'r ene ezeen, en Jan weet niet wie(*-**e**). *Hellendoorn Dutch*
*we have there someone seen and Jan knows not who-**AGR***
'We have seen someone there, and Jan doesn't know who.'

- A-movement to SpecTP in English occurs to satisfy the Extended Projection Principle (EPP) (Chomsky 1981)
- Chomsky (1995): EPP is a description of STRONG features on certain heads. Agree relations involving STRONG elements yields overt movement.

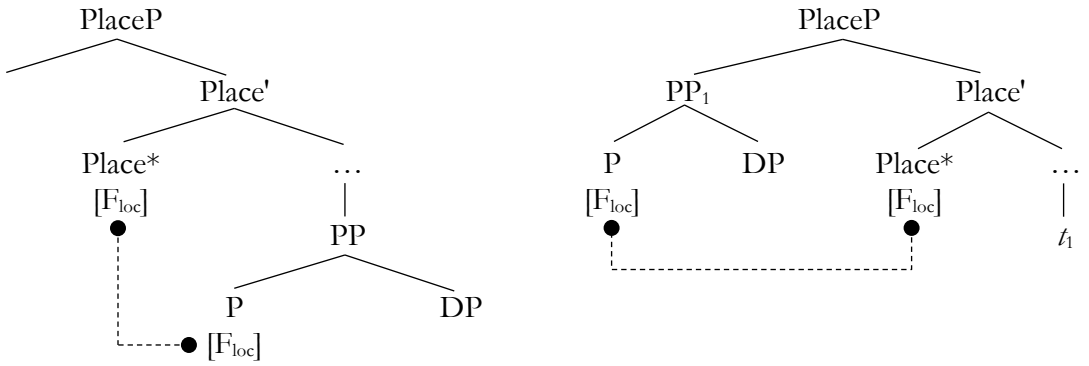
(13) **Bleeding EPP-driven movement under sluicing**
A TP-ellipsis site contains only WEAK heads.

- Other features identified 'EPP-features':[1]
  - Q on C (Cable 2010)
  - STRONG feature on PlaceP in the articulated PP domain (Koopman 2000, Den Dikken 2010)

4.2. Ingredient 2: The syntax of the Dutch PP domain

- **Based on:** van Riemsdijk (1978), Koopman (2000), Den Dikken (2010)
- See Griffiths et al. (2021) for a technical implementation

(14) a. **Standard PP, before movement** b. **Standard PP, after movement**



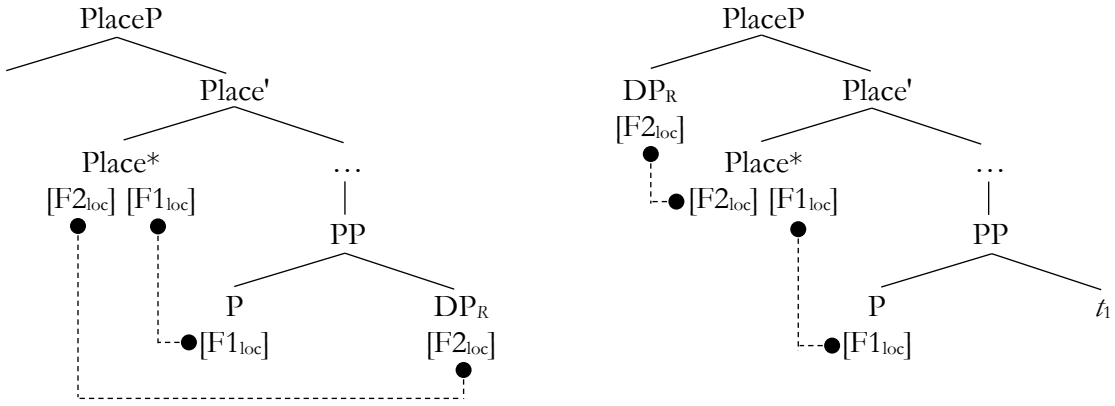
- **Status of PlaceP**[2]
  - PlaceP is highest projection in PP domain
  - SpecPlaceP is the **escape hatch** for movement from the PP domain
  - Place is a STRONG head (F*)
- **Interaction between Place* and PP**
  - An agreement relation is established between Place* and P via a locative feature
  - PP undergoes overt movement to SpecPlaceP
  - PP becomes island for extraction (no P-stranding)

[1] We contend that the *edge features* that are needed to derive successive-cyclic movement in Chomsky's (2008) system should be excluded from the group of EPP-features proper (i.e., STRONG features) for the following reasons. First, there are WEAK counterparts of the STRONG features, with the variant observed being subject to cross-linguistic variation. The presence/absence of edge-features is not subject to cross-linguistic variation, however. Second, the movement driven by STRONG features is encapsulated: the moved item need not necessarily move further. Conversely, items moved by edge-features always move further, as edge-features attract items into intermediate positions in an A'-chain. Third, while EPP features proper satisfy a PF-demand, edge-features satisfy computational demands: they are only present in a derivation when needed to enforce successive-cyclic movement, unlike the STRONG features we are dealing with. For these reasons, we believe that STRONG features and edge-features do not form a natural class, and consequently there is no expectation that they should behave similarly under ellipsis.

[2] Although they concur that movement to SpecPlaceP is EPP-driven movement, both Koopman (2000) and Den Dikken (2010) claim that, in the PP domain, PlaceP is dominated by at least one additional functional projection (FP), and that the highest projection functions as the escape hatch for movement from the PP domain. This proposal is based on word permutations involving R-pronouns and degree / deictic locative modifiers. The claim makes a number of predictions that, according to our investigations, are not borne out. Thus, we refrain from adopting their proposal here. See Griffiths et al. (2021, fn. 16) for details.

NB: PP-pied-piping = movement of PlaceP

(15) a. **R-pronoun case, before movement** b. **R-pronoun case, after movement**



- **Interaction between Place* and R-pronoun**
  - Nonhuman pronouns are defective in Dutch
  - Defectiveness repaired via interaction with specific higher heads; Place* in PP domain
  - Place* confers formal LOC value to DP_R = realized as a locative pronoun
- **Interaction between PP and R-pronoun**
  - PP and R-pronoun compete to fulfil the EPP requirement on Place*
  - R-pronoun **always** wins competition, accounting for obligatory DP_R > P word order
  - DP_R occupies escape hatch, therefore either
    - DP_R escapes PP domain alone (P-standing)
    - Entire PlaceP moves (PP-pied-piping)

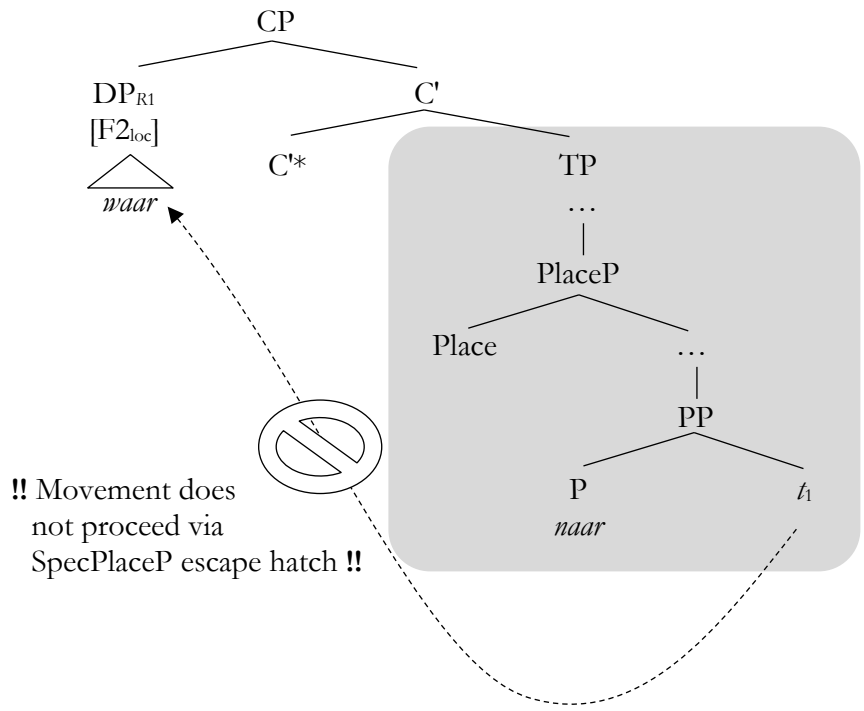
4.3. The result: sluicing bleeds P-standing with R-pronouns

- If Place is a STRONG head, it becomes weak when contained in an ellipsis site.
- Movement to SpecPlaceP, the escape hatch of the PP domain, becomes impossible
- The PP domain becomes opaque for movement

(16) **Attempting to P-strand under sluicing in R-pronoun context**

a. * Dirk zit in de woonkamer. Hij kijkt ergens naar, maar ik weet
Dirk sits in the living.room he looks something at but I know
niet [$_{CP}$ waar$_R$ [$_{TP}$ kijkt hij naar t_2]].
not where looks he at

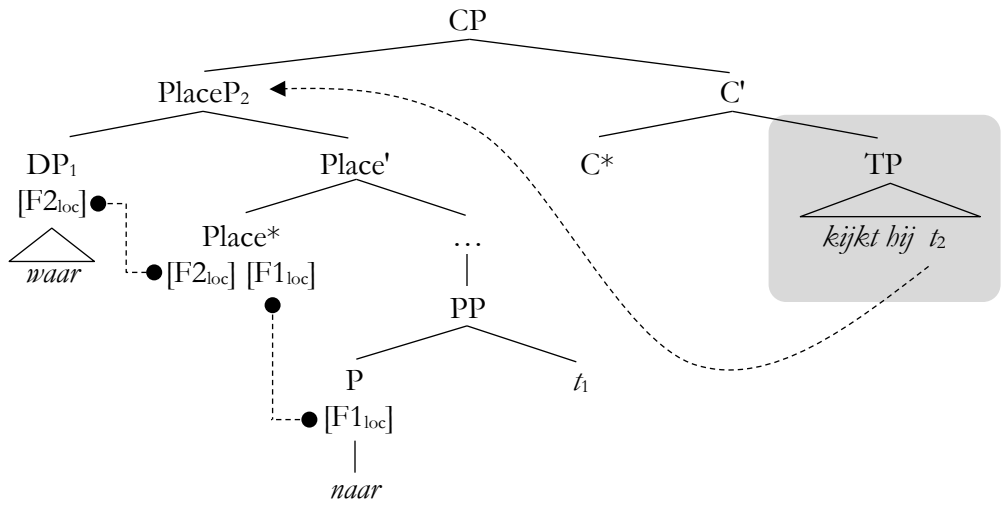
b.



(17) **PP-pied-piping under sluicing in R-pronoun context**

a. Dirk zit in de woonkamer. Hij kijkt ergens naar, maar ik weet
Dirk sits in the living.room he looks something at but I know
niet [$_{CP}$ waar$_R$naar$_2$ [$_{TP}$ kijkt hij t_2]].
not where.at looks he

b.



5. Summary

- Sluicing closes and locks the escape hatch required for P-stranding with R-pronouns, yielding a bleeding effect.
- If we are correct, then we have new support for the notion of EPP-bleeding under sluicing.

References

Cable, Seth. 2010. *The Grammar of Q: Q-Particles, Wh-Movement and Pied-Piping*. Oxford: Oxford University Press.

Chomsky, Noam. 1973. Conditions on Transformations. In *A festschrift for Morris Halle*, ed. Stephen Anderson, and Paul Kiparsky, 232–285. New York: Holt, Rinehart, and Winston.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. Robert Freiden, Carlos Otero & Maria Luisa Zubizarreta, 133-166. Cambridge, MA: MIT Press.

van Craenenbroeck, Jeroen, and Marcel den Dikken. 2006. Ellipsis and EPP repair. *Linguistic Inquiry* 37(4): 653–664.

Den Dikken, Marcel. 2010. On the functional structure of locative and directional PPs. In *Mapping spatial PPs. The cartography of syntactic structures 6*, ed. Guglielmo Cinque, and Luigi Rizzi, 74–126. Oxford: Oxford University Press.

Den Dikken, Marcel. 2013. Prepare and Repair: On pre-emptive strikes and post-hoc patches. In *Repairs*, ed. Patrick Brandt, and Eric Fuß, 131–53. Berlin: Walter de Gruyter.

Griffiths, James, Güliz Güneş, Anikó Lipták & Jason Merchant. 2021. Dutch preposition stranding and ellipsis: 'Merchant's Wrinkle' ironed out. To appear in *Journal of Comparative Germanic Linguistics*. (For a copy, please email one of us!)

Hoeksema, Jack. 2014. Sluicing in Dutch: a problem for PF-deletion approaches. *Skase* 11(2): 30–41.

Ionova, Anastasiia. 2020. *The unbearable lightness of clitics*. Doctoral thesis, Leiden University. LOT Publications 550.

Kluck, Marlies. 2015. Merchant's Wrinkle: The Ban on Dutch Bare R-Pronoun Ellipsis Remnants. In *Proceedings of the 32nd West Coast Conference on Formal Linguistics*, ed. Ulrike Steindl, Thomas Borer, Huilin Fang, Alfredo García Pardo, Peter Guekguezian, Brian Hsu, Charlie O'Hara, and Iris C. Ouyang, 248–257. Somerville, MA: Cascadilla Proceedings Project.

Koopman, Hilda. 2000. Prepositions, postpositions, cirucmpositions and particles: The structure of Dutch PPs. In *The syntuax of specifiers and heads*, ed. Hilda Kooprman, 204–260. London: Routledge.

Leung, Tommi. 2014. The preposition stranding generalization and conditions on sluicing: evidence from Emirati Arabic. *Linguistic Inquiry* 45 (2): 332–340.

Merchant, Jason. 2001. *The Syntax of Silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Philippova, Tatjana. 2014. P-omission under sluicing, [P clitic] and the nature of p-stranding. In *ConSOLE XXII: Proceedings of the 22nd Conference of the Student Organisation of Linguistics in Europe*, ed. Martin Kohlberger, Kate Bellamy, and Eleanor Dutton, 133–155. Leiden: LUCL.

van Riemsdijk, Henk. 1978. *A case study in syntactic markedness: the binding nature of prepositional phrases*. Dordrecht: Foris.

Rodrigues, Cilene, Andrew Nevins, and Luis Vicente. 2009. Cleaving the interactions between sluicing and P-stranding. In *Romance languages and linguistic theory* 2006, ed. Danièle Torck and Leo Wetzels, 245–270. Amsterdam: John Benjamins.

Sato, Yosuke. 2011. P-stranding under sluicing and repair by ellipsis: why is Indonesian (not) special? *Journal of East Asian Languages* 20: 339–382.

Stigliano, Laura. 2019. P-stranding in ellipsis in Spanish does not arise from copular sources: evidence from non-exhaustive readings. In *NELS49: Proceedings of the 49th Annual Meeting of the North East Linguistic Society*, ed. Maggie Baird, and Jonathan Pesetsky, 183–192. Amherst, MA: Graduate Student Linguistic Association.

Stjepanović, Sandra. 2008. P-stranding under sluicing in a non-P-stranding language? *Linguistic Inquiry* 39: 179–90.

Stjepanović, Sandra. 2012. Two cases of violation repair under sluicing. In *Sluicing: cross-linguistic perspectives*, ed. Jason Merchant, and Andrew Simpson, 68–82. Oxford: Oxford University Press.

Szczegielniak, Adam. 2008. Islands in sluicing in Polish. In *Proceedings of the 27th West Coast Conference on Formal Linguistics*, ed. Natasha Abner, and Jason Bishop, 404–412. Somerville, MA: Cascadilla Proceedings Project.

Zwart, Jan-Wouter. 2011. *The Syntax of Dutch*. Cambridge, Cambridge University Press.