Some thoughts about copy deletion

Kenyon Branan

July 5, 2022

1   Introduction

- This talk sketches a theory of copy deletion, and presents empirical motivation for it.

- The basic idea: the copy deletion mechanism makes reference only to features on the heads of maximal projections of the copies.

- Evidence for this: cases where movement of one nominal across another is blocked when the heads of their maximal projections bear the same features.

- This ends up dovetailing with contemporary approaches to syntactic parallelism in ellipsis in a pleasing way.

- **Roadmap**

    - Minimality and the puzzling effect
    - A theory of copy deletion as a solution
    - Some discussion of ellipsis and its relationship to copy deletion
    - An extension to verb-stranding VPE and verb-stranding VP-fronting
    - Conclusions, prospects for the project, etc.

2   A minimality effect

- Minimality effects are cases where only the higher of two elements of the same sort are accessible to syntactic operations.

    - For instance: cases where movement of one element "across" another of the same sort is impossible.

- A number of languages seem to be exempt from the minimality effect for a variety of types of movement (promotion to subject for Icelandic, A-scrambling for Korean, Ā-scrambling for Tagalog and Pangasinan).

    - A number of proposals have been made to account for this sort of exemption. We won't get into that here.

(1) **Passives of Icelandic ditransitives**   Zaenen, Maling, and Thráinsson (1985)

    a.   Konunginum voru gefnar ____ ambáttir
          king.DAT   was given   maidservants.NOM

    b.   Ambáttir   voru gefnar konunginum ____
          maidservants.NOM was given   king.DAT

    "The king was given slaves."

(2) **Scrambling of Korean ditransitives**   L. Kim (2008)

    a.   John-eykey Mary-ka   ____ enmwul-ul   cwu-ess-ta
          John-DAT   Mary-NOM   present-ACC give-PST-DEC

    b.   enmwul-ul   Mary-ka   John-eykey ____ cwu-ess-ta
          present-ACC Mary-NOM John-DAT   give-PST-DEC

    "Mary gave a present to John."

(3) **Scrambling in Tagalog transitives**   Richards (2017)

    a.   Lumunon   ang ina   ng mani
          AV.swallowed NOM mother GEN peanut

    b.   Lumunon   ng mani   ang ina
          AV.swallowed GEN peanut NOM mother

    "The mother swallowed a peanut."

(4) **Scrambling in Pangasinan transitives**   Lim and Erlewine (2020a)

    a.   Man-lu-luto   may laki la   sira
          AV-IMPF-cook NOM male GEN fish

    b.   Man-lu-luto   la   sira may laki
          AV-IMPF-cook GEN fish NOM male

    "The man cooked the fish."

- Note that the arguments in question bear different case values.

- In some contexts in these languages, we can make the arguments bear the same case value.

- In these contexts, a minimality effect emerges: only the higher of the two arguments may undergo movement.

(5) **Icelandic DAT-DAT ditransitives**   Zaenen, Maling, and Thráinsson (1985)

    a.   Henni   var   skilað   ____   peningunum
         she.DAT was   returned   money.DAT

         "She was returned money."

    b. *Peningunum var   skilað   henni   ____
         money.DAT   was returned she.DAT

(6) **Korean multiple accusative constructions**   Lee (2008)

    a.   etten   salam-i   ku eyca-luli   pal-ul   capakkul-ess-ta
         certain person-NOM the woman-ACC arm-ACC pull-PST-DCL

         "A certain person pulled the woman's arm."

    b. *pal-ul   etten   salam-i   ku eyca-luli   ____   capakkul-ess-ta
         arm-ACC certain person-NOM the woman-ACC   pull-PST-DCL

(7) **Tagalog recent perfective**   Guilfoyle, Hung, and Travis (1992)
    Kakakain ng   leon ng   tigre
    RP-ate   GEN lion GEN tiger

    ✓"The lion ate the tiger."
    * "The tiger ate the lion."

(8) **Pangasinan argument apposition**   Lim and Erlewine (2021)
    P\<in\>uniti=to   may bie may laki
    hit.PV=GEN.3SG DEM girl DEM boy

    ✓"The girl hit the boy."
    * "The boy hit the girl."

- Note that it really does seem to be the *case* of the arguments in question that matters, and not just a property of the constructions in question.

- **Manipulation 1:** Korean discourse particles.

- At least some discourse particles in Korean take the place of accusative case markers, as in (9).

(9) **Case-replacing discourse particle**   Han (1996)

    a.   John-i Mary-lul coah-n-ta
         J.-NOM M.ACC   like-PRES-C

         "John likes Mary."

    b.   John-i Mary-nun coah-n-ta
         J.-NOM M.TOP   like-PRES-C

         "John likes Mary$_{top}$."

- If the focus marker replaces the accusative case marker of the lower argument in a double accusative construction, scrambling of the lower argument against the higher is fine.[1]

(10) **Scrambling of lower argument with case-replacing discourse particle**   C. Chung (1993)

kaci-nun	Mary-ka	ku	namwu-lul	____	cal-ass-ta
branch-TOP	M.-NOM	the	tree-ACC		cut-PST-C

"As for branches, Mary cut the ones belonging to the tree."

- Suggesting that it's not a property of these double accusatives that disallow movement of the lower argument outside of the relative case values of the two arguments in question.

- **Manipulation 2**: Pangasinan determiners.

- Pangasinan morphologically encodes number in the same head that encodes case.

  – When two arguments bear the same case, but differ in number, scrambling once again becomes available.

(11) **Scrambling possible with number mismatch**   Lim and Erlewine (2021)

a.
Lu-luto-en=da	ra-may	lakin	ugaw	may	sira
IMPF-cook-PV=3PL	PL-NOM	male	child	NOM	fish

b.
Lu-luto-en=da	may	sira	ra-may	lakin	ugaw	____
IMPF-cook-PV=3PL	NOM	fish	PL-NOM	male	child	

"The boys cooked the fish."

- Suggesting, as stated above, that it's the features of the highest head in the extended projection that matter, rather than (just) case.

- So we end up with the following generalization about (certain types of) movement in these languages.

(12) **Matching head generalization:**
Movement of one argument across another is impossible when the highest heads in their maximal projections match.

- This is puzzling:

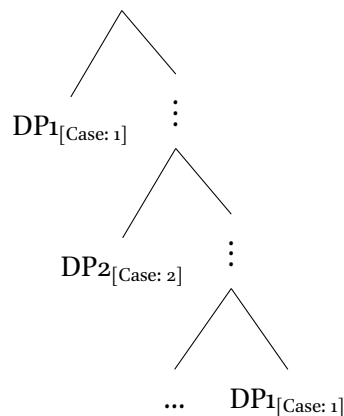 – For the Ā-movement cases, it's not clear at all why the case values of the two arguments should matter.[2]

– For the A-movement cases, it's also not clear. All of the theories of minimality obviation in A-movement that I'm aware of (McGinnis 1998; Doggett 2004; Collins 2005; Branan 2021; Newman 2021) shouldn't make a distinction between arguments that match in case and arguments that don't.

· **Summing up**:

– In a number of languages we see something that looks like a minimality effect.

– This effect arises only when the two arguments match for case.

– This is probably not the sort of thing that we want to attribute to the availability of fine-grained attracting probes, since allowing these makes pernicious predictions about possible languages.[3]
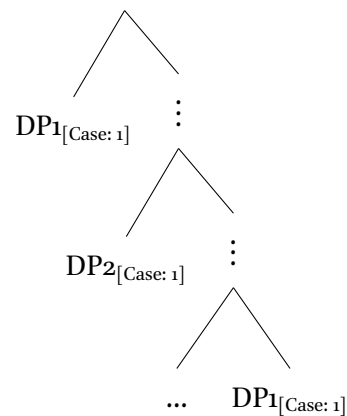
3 A solution

· Idea: moving one element across a *morphosyntactically indistinct* element of the same sort causes a problem for copy deletion.

· In other words, the minimality effect we saw before isn't because there is a problem moving the lower element across the higher.

· It's that there's a problem deleting the lower copy of the lower element in these particular contexts.

· Background:

– The copy theory of movement (Chomsky 1995 and much subsequent work) proposes that movement involves copying (or internal Merge) of the element undergoing movement, followed by subsequent deletion of the lower copy.

– Evidence for this: PF pressures forcing spell-out of a lower copy (Boskovic and Nunes 2007), "backwards" dependencies (raising, Potsdam and Polinsky 2012; topicalization, Polinsky and Potsdam 2001), partial pronunciation of moved elements (Bondarenko and Davis 2019), pronunciation of multiple copies in a movement chain (Gould 2021), accounts of connectivity and anti-connectivity effects (Chomsky 1995).

· More general puzzle: given that copy deletion takes place well after internal Merge of a copy, how does deletion know what to delete?

· Proposal: copy deletion requires the tree to be searched for an element to delete.

– Step 1: the sister of a movement-triggering head is searched for something to move.

– Step 2 (which need not be immediately subsequent to step 1): the sister of a moved phrase is searched for something to delete.

– Step 2 makes reference only the features on the head of the moved phrase, and deletes a maximal projection heading some sort of match.

· Underlying metaphysics:

– The syntax is strictly derivational: information relevant to prior operations isn't present at subsequent stages of the derivation.

– Any sort of dependency involves searching through the tree for a specified match (with the structure of the tree determining the order of this search, see Branan and Erlewine (2021) for some discussion).

– Minimality effects arise when one element of the same sort is found before the other.

– Movement and copy deletion take place at separate stages of the derivation, and thus require two instances of search.

· Running through the cases discussed before, where the lower of two arguments moves above the higher.

(13)

$DP1_{[Case:\ 1]}$

$DP2_{[Case:\ 2]}$

... $DP1_{[Case:\ 1]}$

(14)

$DP1_{[Case:\ 1]}$

$DP2_{[Case:\ 1]}$

... $DP1_{[Case:\ 1]}$

· In (13), the heads of DP1 and DP2 bear distinct case values.

· The deletion algorithm will search the tree for elements bearing both [D] and [Case: 1] to delete, starting at the sister of the higher instance of DP1.

· The lower copy of DP1 will be subject to deletion, but the higher will not.[4]

· In (14), the heads of DP1 and DP2 bear identical case values.

· As before, the deletion algorithm will search the tree for elements bearing [D] and [Case: 1] to delete, starting at the sister of the higher instance of DP1.

· DP2 will be subject to deletion, contrasting with the case in (13).

· A choice point here (remarked on, not committing to any particular choice here):

– The copy deletion algorithm stops after deleting one copy — e.g. a classic minimality effect. Ungrammaticality arises here since two copies of the same element end up surfacing.

– The copy deletion algorithm stops after deleting all matching copies. Ungrammaticality arises here since the higher argument is pronounced in all of the relevant strings, when it should have been subject to deletion.

- Could be distinguished — scrambling of the lower accusative argument in Korean multiple accusative constructions should be fine if the higher argument is subject to argument ellipsis — but the legwork needs to be done.

· **Summing up:**

- We can account for the puzzling pattern we saw at the outset of this talk as a minimality effect.

- But only if we think of this as a minimality restriction on *deletion*, rather than *attraction*.

- Consequence: movement involves two instances of search/probing: one to find something to move, and another to find something to delete.

4 Interlude

· What I've said here might seem like a lot.

· I don't think it is — I think it's basically trying to bring in line the technology used for copy deletion with what contemporary theories of syntactic ellipsis licensing look like.[5]

- In other words, reevaluating a choice point made in Chomsky (1995) in light of decades of subsequent work on ellipsis.

· From S. Chung (2013), Thoms (2010), and Rudin (2019): there is a syntactic parallelism on VP ellipsis, but it's fairly weak, and cares mostly about identity between a limited number of heads in the extended projection of VP.

· The theory sketched above does something similar: copy identification hinges on the features only of certain privileged heads in the extended projection of the noun

· From Lasnik (1999) and Aelbrecht (2010): ellipsis involves some sort of a long-distance dependency — Agree, for Aelbrecht, feature checking, for Lasnik — between the elided constituent and a higher licensing head.

· Deletion on the theory sketched here behaves in much the same way: it involves the same search process that underlies more familiar long-distance dependencies like agreement and movement.

· There is, at first blush, a clear difference between processes like VP ellipsis and copy deletion, in that VP-ellipsis is known to generally allow imperfect matches between the head of the antecedent and the head of the elided constituent.

· I suspect the difference will ultimately boil down to something like the following:

- Mismatches of the VP-ellipsis sort involve partial sharing of features — there's enough shared between the two for one to be identified as an antecedent for the other.

- Mismatches don't often arise in cases of copy deletion, since direct copying of one constituent precludes the possibility of mismatch.

· That aside, there *are* cases where messing around with the head of a constituent can preclude it from being elided.

· Counterexample 1: English auxiliaries don't allow these mismatches (Warner 1986; Lasnik 1995).

(15) a. John slept and Mary will <sleep>, too   lexical mismatch
      b. *John was here and Mary will <be here>, too   auxiliary mismatch

    – Presumably the explanation for this would be that auxiliaries inflect in a fundamentally way than lexical verbs, at least in English.

    – For the system at hand: mismatched auxiliaries wouldn't be tolerated, since a search for one will never return the other.

· Counterexample 2: Suprasegmental adverbs in Italian Sign Language (LIS).

    – Two ways of expressing "quickly": either as a separate sign (16a), or by performing the sign for the predicate quickly, exaggeratedly, and repeatedly.

(16) a. MARIO MEAT EAT QUICKLY
      b. MARIO MEAT EAT-QUICKLY

    "Mario eats meat quickly."   Cecchetto et al. (2015)

    – LIS has a process of predicate ellipsis that behaves a lot like more familiar processes of VP-ellipsis.

    – The "separate sign" manner adverb need not be present in the ellipsis site, (17a), but the incorporated must, (17b).

(17) a. MARIO MEAT EAT QUICKLY. GIANNI SAME SLOWLY
      b. *MARIO MEAT EAT-QUICKLY. GIANNI SAME SLOWLY

    "Mario eats meat quickly. Gianni does that, slowly."   Cecchetto et al. (2015)

    – Follows, as Cecchetto et al. (2015) suggest, if the head of the ellipsis site needs to be formally identical to the head of its antecedent.

· **Summing up:**

    – What I've proposed is basically in line with what everyone wants.

    – Minimalist considerations would lead us to prefer one deletion operation over two.

    – Contemporary theories of ellipsis propose a long-distance dependency between a licensing head and elided constituent, which is part of the theory of copy deletion suggested above.[6]

    – Contemporary theories of ellipsis propose a limited syntactic parallelism requirement between antecedent and ellipsis, which crucial for capturing the case-based minimality effect discussed before.

5   An extension: deleting headless phrases

- An expectation, mentioned before: if you mess around with the properties of heads in a domain where ellipsis takes place, surprising things might happen.
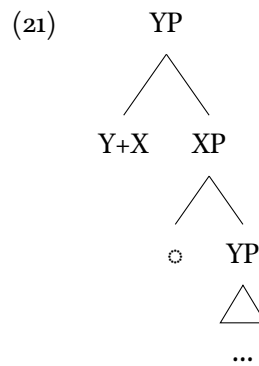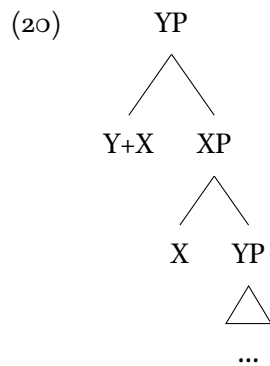
- X-stranding XP-ellipsis:

(18)
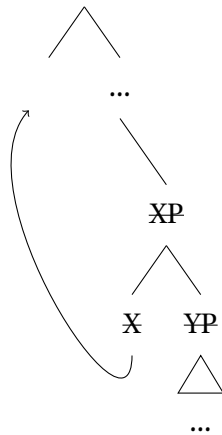
- Much recent work on this (Lipták and Van Craenenbroeck 2008; Thoms 2015; Sailor 2018; Landau 2020a; Gribanova 2020). A conclusion: languages need *more* than X-raising and XP-ellipsis to license X-stranding XP-ellipsis.

- Observation, from Sailor (2018) and Landau (2020b): X-raising and XP-ellipsis need to happen around the same time in the derivation.

    – The trigger for ellipsis and (final) landing site for head movement have to be relatively close to each other.

    – Sailor and Landau come to slightly different conclusions, because their empirical picture is different (Sailor assumes Modern Hebrew has VSVPE, Landau argues vehemently against this).

(19)   **Landau's Generalization:**
If X-movement crosses a spellout domain, XP cannot be the target for ellipsis.

- We can capture this using the same technology proposed for copy deletion earlier, given certain assumptions about head movement (which I believe Landau needs to make as well).[7]

· Specifically: head movement — whatever it is — actually alters or erases[8] the trace of the moved head, at least by certain points in the derivation, e.g. Landau's spellout domains.[9]

(20)
```
        YP
       /  \
    Y+X    XP
          /  \
         X    YP
              /\
             /__\
              …
```

(21)
```
        YP
       /  \
    Y+X    XP
          /  \
         ○    YP
              /\
             /__\
              …
```

· Walking through it:

· Suppose ellipsis takes place for a sentence with (20) as a partial representation, prior to erasure of X, with the target for ellipsis being a phrase headed by X.

· The tree will be subject to search for X, and XP will be found.[10]

· Suppose next that ellipsis takes place for a sentence with (21) as a partial representation, after X has been erased at spellout, with the target for ellipsis again being a phrase headed by X.

· The tree will be subject to search for X, but no such element can be found: the head has been subject to erasure.

· Since the phrase can't be found by search, it can't be elided, since ellipsis is contingent on successful search.

· What we see, then, is that the approach to ellipsis vis-a-vis copy deletion is able to account for facts that we'd want a theory of ellipsis to be able to do any way.

· As far as I can tell, the theories of ellipsis that are meant to account for these facts aren't able to account for the odd minimality effect discussed at the outset of this talk.

6   Conclusions & avenues for future work

· What we've seen:

  – A solution to a puzzling minimality effect, where scrambling only of identically case-marked elements gives rise to the effect.

  – The solution: the minimality effect isn't for attraction (which we presumably *don't* want to be able to make fine-grained reference to the features of a nominal it attracts), it's for deletion.

- – Deletion involves the same technology used for formation of other dependencies: an underlying mechanism for search.

- · One consequence of interest: ellipsis (under the name of copy deletion) is subject to minimality effects. Are there others?

  - – We might wonder if MaxElide effects of the following sort could be accounted for as a sort of A-over-A effect.

(22) a. Mary was reading something, but I don't know what <she was reading>.
      b. *Mary was reading something, but I don't know what she was <reading>.

  - – We might also wonder if restrictions on null arguments in ditransitives that have been attributed to VSVPE (Ngonyani 2000; Goldberg 2005) arise instead from a minimality effect.
  - – Briefly: one internal argument can't delete unless the other also does.
  - – Recall the choice point discussed around page 6, for copy deletion.

- · More broadly: ellipsis involves some sort of syntactic dependency between a triggering head and a target.

  - – Nicely in line with analyses of null objects (Huang 1982) and VP ellipsis that have been argued to involve movement of some sort of null operator.
  - – Similarities presumably arise because movement involves ellipsis.
  - – Differences presumably arise because ellipsis doesn't involve creation of a higher copy.
  - – Lots of questions: does probing for an ellipsis site interact with other syntactic features in the way A and Ā features interact with each other (Urk 2015; Baier 2018)? Are the licensing heads for ellipsis as arbitrary as the hosts for probes for [φ] (Julien 2002)? ...

- · More narrowly: a puzzle involving argument ellipsis.

  - – Suppose argument ellipsis involves search for a phrase with a head matching its antecedent, as is the case for copy deletion under the theory proposed here.
  - – Facts like the following are somewhat surprising: the sloppy reading suggests that argument ellipsis is available in Korean, but the case of the antecedent need not match the case of the elided constituent.

(23) **Sloppy reading available with case mismatch**   S. Kim (1999)
      a. John-un caki-uy kay-wa kotcal sanpo-lul ha-n-ta
          J.-TOP   self-GEN dog-WA often walk-ACC do-PRES-C

          "John$_i$ often takes a walk with his$_i$ dog..."
      b. Kulena Bill-un   Δ ttayli-n-ta
          but   Bill-TOP   beat-PRES-C

          "But Bill often beats John's dog."
          "But Bill often beats his own dog."

Thanks!

References

Aelbrecht, Lobke. 2010. *The Syntactic Licensing of Ellipsis.* Vol. 10. John Benjamins Publishing Company Amsterdam.

Baier, Nico. 2018. "Anti-Agreement," University of California, Berkeley.

Bondarenko, Tatiana, and Colin Davis. 2019. "Parasitic Gaps Diagnose Concealed Pied-Piping in Russian." In *Proceedings of North East Linguistic Society,* vol. 49.

Boskovic, Zeljko, and Jairo Nunes. 2007. "The Copy Theory of Movement." *The copy theory of movement* 107:13.

Branan, Kenyon. 2021. "Locality and Anti-Locality: The Logic of Conflicting Requirements." *Linguistic Inquiry* https://doi.org/10.1162/ling_a_00436.

Branan, Kenyon, and Michael Yoshitaka Erlewine. 2021. "Locality and Minimal Search."

Cecchetto, Carlo, Alessandra Checchetto, Carlo Geraci, Mirko Santoro, and Sandro Zucchi. 2015. "The Syntax of Predicate Ellipsis in Italian Sign Language (LIS)." *Lingua* 166:214–235.

Chomsky, Noam. 1995. *The Minimalist Program.* MIT Press.

Chung, Chan. 1993. "A Lexical Approach to Inalienable Possession Constructions in Korean."

Chung, Sandra. 2013. "Syntactic Identity in Sluicing: How Much and Why." *Linguistic Inquiry* 44 (1): 1–44.

Collins, Chris. 2005. "A Smuggling Approach to the Passive in English." *Syntax* 8 (2): 81–120.

Doggett, Teal Bissell. 2004. "All Things Being Unequal: Locality in Movement," Massachusetts Institute of Technology.

Goldberg, Lotus Madelyn. 2005. "Verb-Stranding VP Ellipsis: A Cross-Linguistic Study."

Gould, Isaac. 2021. "On Wh-Copying in Mon." *Journal of East Asian Linguistics* 30 (4): 357–385.

Gribanova, Vera. 2020. "Predicate Formation and Verb-Stranding Ellipsis in Uzbek." *Glossa: a journal of general linguistics* 5 (1).

Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. "Spec of IP and Spec of VP: Two Subjects in Austronesian Languages." *Natural Language & Linguistic Theory* 10 (3): 375–414.

Han, Chung-hye. 1996. "Asymmetric Quantification: The Case of the Korean Topic Marker-(n) Un."

Henderson, Brent. 2007. "Matching and Raising Unified." *Lingua* 117 (1): 202–220.

Huang, Cheng-Teh James. 1982. "Logical Relations in Chinese and the Theory of Grammar," Massachusetts Institute of Technology.

Hunter, Tim, and Masaya Yoshida. 2016. "A Restriction on Vehicle Change and Its Interaction with Movement." *Linguistic Inquiry* 47 (3): 561–571.

Julien, Marit. 2002. *Syntactic Heads and Word Formation.* Oxford University Press on Demand.

Kayne, Richard S. 1994. *The Antisymmetry of Syntax.* 25. MIT Press.

Kim, Lan. 2008. "The Ditransitive Construction in Korean." PhD diss., Dept. of Linguistics-Simon Fraser University.

Kim, Soowon. 1999. "Sloppy/Strict Identity, Empty Objects, and NP Ellipsis." *Journal of East Asian Linguistics* 8 (4): 255–284.

Landau, Idan. 2020a. "Constraining Head-Stranding Ellipsis." *Linguistic Inquiry* 51 (2): 281–318.

———. 2020b. "Constraining Head-Stranding Ellipsis." *Linguistic Inquiry* 51 (2): 281–318.

Lasnik, Howard. 1995. "Verbal Morphology: Syntactic Structures Meets the Minimalist Program." *Evolution and revolution in linguistic theory: Studies in honor of Carlos P. Otero,* 251–275.

———. 1999. "On Feature Strength: Three Minimalist Approaches to Overt Movement." *Linguistic inquiry* 30 (2): 197–217.

Lee, Eunsuk. 2008. "A Single Restriction on Scrambling in Korean." *Linguistics* 16:73–90.

Lim, Joey, and Michael Yoshitaka Erlewine. 2020a. "Word Order and Disambiguation in Pangasinan." In *Slides from the 22nd Seoul International Conference on Generative Grammar. Gyeongsang National University.*

———. 2020b. "Word Order and Disambiguation in Pangasinan," accessed March 12, 2022. https://mitcho.com/research/talk-sicogg2020/.

———. 2021. "Argument Apposition in Pangasinan," accessed April 18, 2022. https://mitcho.com/research/talk-afla2021/.

Lipták, A. K., and Jeroen Van Craenenbroeck. 2008. "On the Interaction between Verb Movement and Ellipsis: New Evidence from Hungarian." In *Proceedings of the 26th West Coast Conference on Formal Linguistics,* 138–146. Cascadilla Proceedings Project.

McGinnis, Martha. 1998. "Locality in A-Movement," Massachusetts Institute of Technology.

Newman, Elise Sophia Bershad. 2021. "The (in) Distinction between Wh-Movement and c-Selection," Massachusetts Institute of Technology.

Ngonyani, Deo. 2000. "The Constituent Structure of Kindendeule Applicatives." *Advances in African Linguistics* 4:61–76.

Polinsky, Maria, and Eric Potsdam. 2001. "Long-Distance Agreement and Topic in Tsez." *Natural Language & Linguistic Theory* 19 (3): 583–646.

Potsdam, Eric, and Maria Polinsky. 2012. "Backward Raising." *Syntax* 15 (1): 75–108.

Richards, Norvin. 2017. "Some Notes on Tagalog Prosody and Scrambling." *Glossa: a journal of general linguistics.*

Rudin, Deniz. 2019. "Head-Based Syntactic Identity in Sluicing." *Linguistic Inquiry* 50 (2): 253–283.

Safir, Ken. 1999. "Vehicle Change and Reconstruction in Ā-chains." *Linguistic inquiry* 30 (4): 587–620.

Sailor, Craig. 2018. "The Typology of Head Movement and Ellipsis." *Natural Language & Linguistic Theory* 36 (3): 851–875.

Thoms, Gary. 2010. "'Verb Floating'and VP-ellipsis: Towards a Movement Account of Ellipsis Licensing." *Linguistic variation yearbook* 10 (1): 252–297.

———. 2015. "Syntactic Identity, Parallelism and Accommodated Antecedents." *Lingua* 166:172–198.

Urk, Coppe van. 2015. "A Uniform Syntax for Phrasal Movement: A Case Study of Dinka Bor," Massachusetts Institute of Technology.

Warner, Anthony R. 1986. "Ellipsis Conditions and the Status of the English Copula."

Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. "Case and Grammatical Functions: The Icelandic Passive." *Natural Language & Linguistic Theory* 3 (4): 441–483.

Notes

[1] It's worth noting that *-nun*, in these particular contexts, is compatible only with a contrastive topic reading, as noted explicitly in C. Chung (1993). Absent this, scrambling of a *-nun* marked second accusative is out. To my knowledge, a contrastive focus interpretation on a scrambled argument with accusative marking in these contexts is also bad.

[2] Although see Lim and Erlewine (2020b) for a theory where case does matter in the relevant way, at least for Pangasinan. It's not clear to me whether it is desirable to extend such an analysis to cases like Icelandic.

[3] To wit: a language with a dedicated subject position that must be filled either by a plural argument, or, failing that, an expletive.

[4] At least two possibilities here. One is that something like BPS is correct, and there's no formal distinction between D and DP. Another is that ellipsis behaves much like more well-known pied-piping effects, where deletion targets the minimal structure that would lead to an interpretable output; deletion of DP is motivated since deletion of D on its own would lead to an uninterpretable output.

[5] As far as I know, this isn't a road commonly taken: there's not a lot of work that explicitly tries to draw parallels between copy deletion and ellipsis processes. See Safir (1999) and Henderson (2007) for some cases where this parallel is made explicit, and Hunter and Yoshida (2016) for an explicit argument that traces and elided constituents should be treated differently.

[6] Or element nearby the elided constituent, following Aelbrecht (2010).

[7] Another advantage of this system: Landau's approach to ellipsis involves a somewhat baroque system of ellipsis triggering features and conditions on their percolation. As far as I can tell the theory of deletion developed here

[8] No commitment yet to whether this is erasure in the sense of Chomsky (1995), to be contrasted with deletion.

[9] I'll set aside the question of whether or not head movement involves the same sort of deletion algorithm as phrasal movement. A topic for future research.

[10] We'll want the higher X+Y head to be skipped. At least two possibilities here. One would be that X+Y is formally distinct from X, and the search algorithm skips over it, Another would be that the structure of the complex X+Y head is such that the search algorithm is unable to find X. See Kayne (1994) for some discussion of the adjunct-like status of heads in derived positions.