

# Pseudogapping, prosody, and the typology of ellipsis<sup>1</sup>

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## 1. Introduction

- Work on ellipsis typically investigates properties of the ellipsis site; that is, properties of the elided material.
- Specifically, such work investigates its syntactic, semantic, and pragmatic properties:
  - Is the ellipsis site a syntactic constituent, does it have to be given, can it contain a trace, how is identity calculated, *etc.*
- I am developing a model that relies on the (mainly) prosodic characteristics of the material *left behind* by ellipsis:
  - e.g.: how big is it, where are the boundaries, how does it interact with f-marking, *etc.* The only precedents I can find for this are Hartmann (2000) on right node raising, and Booij (1985) on word-internal RNR.
- In this model, ellipsis targets prosodic domains, and it targets the elements that are retained, not those that are deleted.
- Perhaps it is best to think of ellipsis not as deletion under identity, but as retention under focus (and the associated intonation).

## 2. Pseudogapping

- Pseudogapping is a type of non-constituent ellipsis in (perhaps only) English, exemplified in (1).

(1) I support freedom of speech before I do \_ any president.

- Pseudogapping constructions contain a contrastive remnant on the right, like gapping constructions. But they also strand an auxiliary on the left, like VP ellipsis. An arbitrary amount of non-constituent material is elided in between.
- The remnant is frequently a DP (as in (1)). However, (overlooked in much literature on the subject) it may be many other things, including PPs (2), CPs (3), (predicative) adjectives (4), adverbs (5), and non-finite TPs (6).

(2) I looked at her as I might have \_ at a stranger

(3) I am as sure you did not hide the uniform there as I am \_ that you are a good cook.

(4) Fish and chips are as authentically British as ceviche is \_ Peruvian.

(5) Della Vida, for example, excited him more politically than he did \_ academically.

(6) he latterly loved far more to be among his farm improvements and his Southdowns, than he did \_ to go to Glenfiddich...

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<sup>1</sup> So far I would like to thank Jorge Hankamer for his very helpful input and Jack Hoeksema for his very helpful corpora. All remaining errors are just the liquor talking. Pseudogapping examples are attested unless otherwise noted.

- Pseudogapping may be found in coordinate structures (7), *as*-clauses (8), *like*-clauses (9), comparatives (10), conditionals (11), and even intersententially in discourse (12).

(7) You can't cut off that branch, but you could \_ these two.

(8) People will tap our minds as easily as they do \_ phone lines

(9) you don't gotta prune 'em like you do \_ trees and shrubs

(10) I'm afraid the jury pays more attention to the questions than they do \_ the answers.

(11) listen to reason, if you will not \_ to pity

(12) 'That name must certainly propitiate the abstinent gods.' - 'At least it does \_ Father Hart.'

- The antecedent clause may even be embedded in the left context of ellipsis, leading to antecedent-contained pseudogapping:

(13) seeing as we seem to dress similar, I think what would help me would \_ her too.

- Comparatives and *as*-clauses are by far the most frequent, and tend to correlate with the best native speaker judgements, in particular out of context (see Bowers 1998), but you can find pseudogapping basically any time you see two clauses in a row.
- Pseudogapping is attested in every sort of source; novels, non-fiction, academic writing, journalism, and spoken English of every register.
- However, there can be vast interspeaker differences in acceptability for any given example, in particular in cases of what Ross (1967) called *deprepositionalization* (such as (10)).
- Most writers in the linguistic literature have reported their own judgements, for sentences they have invented, with chaotically contradictory results (see for instance, Bowers 1998 and his evaluation of the judgements in Lasnik 1995).
- I stick to attested examples whenever possible, both spoken and literary. I supply examples from Jack Hoeksema's (mostly literary) corpus of about 250 sentences (but some of which is Nancy Levin's corpus of spoken examples). I also supply examples from my own smaller corpus.

### 3. Syntactic accounts, and why they're wrong about remnant movement

- Previous attempts to explain pseudogapping syntactically have frequently attempted to reduce it to a subcase of verb-phrase ellipsis, involving deletion of the entire VP.
- Such accounts usually claim that the remnant is something that has been extracted out of the ellipsis site (the VP) prior to deletion.
- Sag (1976) and others like Jayaseelan (1990) proposed heavy NP-shift as a way to move the remnant. Lasnik (1995, 1999) proposed object shift to Spec, AgrO. Takahashi (2004) proposed both. Bowers (1998) and Jayaseelan (1999) proposed

focus movement to the specifier of an F position, in the functional hierarchy just under T.

- Let's see how these hypotheses stack up.

#### *Is it heavy NP-shift?*

- Doesn't just target heavy NPs:

(14) Obey them as you would \_ me.

- Doesn't just target NPs (see(2-6)) (though other categories are subject to heavy shift)
- May disobey the right roof constraint (see Hankamer & Depiante 2005)

#### *Is it object shift?*

- English doesn't have object shift.
- Since remnants are stranded, but not main verbs, it seems this object shift would violate Holmberg's generalization.
- Doesn't just target objects; may target nominals that already have case, like objects of prepositions (10, 15) and possibly possessors (16). These are not eligible for object shift, even in languages that have it.

(15) He throws the ball better from the stretch than he does \_ the windup.

(16) Why don't you put a bullet in his head like you did \_ that man out there?

- May target non-DPs, which do not need case at all and have no business in Spec, AgrO (see (2-6), (11)).

#### *Is it focus movement?*

- Does target only contrastively interpretable material:

(17) \*I gave Bill more nickels than John did \_ nickels.<sup>2</sup>

- Note also that the remnant obligatorily bears a contrastive focal pitch accent, as noted by Bowers (1998).
- If the F position is just under T, then only one auxiliary should ever be tolerated in pseudogapping (as claimed in Levin (1980)). However, multiple auxiliaries (which seem to necessitate multiple embedded VPS), occur frequently in corpora:

(18) I looked at her as I might have \_ at a stranger. (also (2))

(19) The Colonel, though disclaiming all pretensions to connoisseurship, warmly admired the screens, as he would have done \_ any thing painted by Miss Dashwood.

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<sup>2</sup> Made up by me.

(20) Jones swallowed a large mess of chicken, or rather cock, broth with a very good appetite, as indeed he would have done the cock it was made of.

(21) We shall feast as high with the blood of Burgundy as we have done with its wine

*Do we need any kind of movement at all?*

- Why does the remnant move when other focal material stays in situ? Since ellipsis is always optional, as Hankamer and Depiante (2005) point out, we should be able to see the movement independent of ellipsis.

(22) \*I do freedom of speech support before I do any president \_\_.<sup>3</sup>

- Do we really need to move the remnant out of the VP to create a syntactic constituent that can be the domain for ellipsis? Couldn't the ellipsis site be a syntactic non-constituent?
- I will argue that it is.

*Aside: is pseudogapping really like VPE apart from the remnant?*

- Pseudogapping can't strand infinitive 'to,' but VPE can:

(23) I wrote his dissertation, but I did not want to \_\_.

(24) \*I wrote his papers, but I did not want to \_\_ his dissertation  
(from Levin 1980)

- Pseudogapping can't elide copular 'be,' but VPE can:

(25) The one they choose might be Gail, but it might not \_\_.

(26) \*The one they choose might be Gail, but it won't \_\_ me.  
(from Levin 1980)

- Pseudogapping can't go backwards, but VPE can (see (33), fn. 6, 7).
- Pseudogapping has preferences not found in VPE, for example for comparatives or *as*-clauses and for same-subject structures.
- VPE tolerates voice mismatches, and pseudogapping doesn't, according to Merchant (2008).
- Pseudogapping is island-sensitive, unlike VPE:

(27) Since tornados petrify Harold, I can't for the life of me figure out why he's so surprised about the fact that hurricanes do \_\_, too.

(28) \*Since tornados petrify Harold, I can't for the life of me figure out why he's so surprised about the fact that they do \_\_ me, too  
(from Hoeksema 2006)

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<sup>3</sup> Made up based on the Gore Vidal quote in (1). Also consider \*'I support freedom of speech before I do any president support.'

- All of these are cases where the distribution of pseudogapping is more restricted than that of VPE. There don't appear to be any cases of the opposite.
- In fact, pseudogapping's distribution is a (proper) subset of VPE's distribution.
- If some of the restrictions on the distribution of pseudogapping can be reduced to independent restrictions on the distribution of the remnant on the right, we might have something close to equivalent distributions.

#### 4. 'Constituent' vs. 'non-constituent' ellipsis

- Jorge's typology:
  - Type A: constituent ellipsis – VPE, sluicing, NPE.
  - Type B: non-constituent ellipsis – gapping, comparative deletion, stripping.
  - don't ask about RNR. I'll have something later.
- constituent ellipsis:
  - elides a constituent (VP, NP, C'(?)).
  - occurs in a broad distribution of clause types.
  - may go backwards, including ACD cases:

(29) Anyone who can \_ should kill that gorilla.

- may be embedded:

(30) I cheated and I think he did \_ too.

- non-constituent ellipsis:
  - elides a non-constituent (duh).
  - can't go backwards:

(31) \*John, \_ beans, and I ate sauerkraut.'

- can't be embedded:

(32) \*I was more shocked than I think Sue \_.

- occurs in a highly restricted environment; comparatives for comparative deletion, and coordinate structures for stripping and gapping<sup>4</sup>.
- pseudogapping:
  - elides a nonconstituent (like NCE).
  - can't go backwards<sup>5</sup> (like NCE):

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<sup>4</sup> This is probably not entirely true. In corpus data I have found that a small proportion (4.6%) of gapping examples actually do occur in comparatives and *as*-clauses, such as 'I suspect they have more to fear from us than we from them.'

(33) \* You could \_ these two, but you can't cut off that branch.<sup>6</sup>

- can be embedded (like CE):

(34) It would make me feel better, and I'm sure it would \_ him \_, too.

- occurs in a broad range of clause types (see (7-13))(like CE).

- So which type is it? Pseudogapping exhibits mixed behavior with respect to syntactic diagnostics.

## 5. Prosodic characteristics of ellipsis

- The foregoing characterizations all rely on the constituency vs. non-constituency of the ellipsis site. In fact, all the literature I can find on ellipsis is about the properties of the ellipsis site.
- I will investigate the properties of the material left behind, specifically its prosodic properties.
- Type A (constituent) ellipsis leaves what I am calling a 'left context.'
- Left contexts:
  - always start at the beginning of the clause.
  - may be syntactic non-constituents.
  - may contain multiple contrastive foci, with associated pitch accents.
  - may also be devoid of contrastive foci or pitch accents at all, in which case they may be entirely deaccented.
  - end at a fixed position in the clause, typically a spellout domain boundary.
- Type B (non-constituent) ellipsis involves what I am calling 'remnants.'
- Remnants:
  - may start and end anywhere in the clause.
  - are syntactic constituents (as far as I can tell; I'd love a counterexample)<sup>7</sup>.
  - can be any element of a clause except the finite verb, as far as I can tell.
  - are obligatorily contrastively interpreted.

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<sup>5</sup> I have some attestations of pseudogapping *as*-clauses being used as parentheticals and being placed somewhere within the antecedent ('Jon Lester, just as Beckett did Burnett and Buchholz did Sabathia, [matched] Pettitte frame for frame,' or 'the acceptance of regularity of sound change forces us, as it did Moller and Fick, to posit distinct sources for the two long vowels'). There seems to be nothing like clearly cataphoric use, however, particularly like that in (26). \*'What would \_ her would help me too': judgements, please.

<sup>6</sup> Made up based on (7), which is from Nancy Levin's dissertation. A reviewer for Hoeksema (2006) called a sentence like this 'pretty okay,' but see the previous footnote.

<sup>7</sup> One possibility I've been looking at is pseudogapping in attributive adjective comparatives, where one potential reading has a nonconstituent remnant: 'He'd make a much better DNC Chair than he would \_ a \_ senator.' But there are other potential views. There's also a potentially nonconstituent remnant on the right in a gapping construction from Shakespeare: 'CLA: Death is a fearful thing. ISAB: And *shamed life* \_ a *hateful* \_.'

- obligatorily contain a pitch accent associated with contrastive focus.
- must be the smallest domain containing the focal material...?<sup>8</sup>

*CE leaves a left context:*

- Constituent ellipses like VPE and sluicing contain only a left context. Let's look just at VPE, since that's the relevant case for pseudogapping:
  - The VPE left context always starts at the beginning of the clause and obligatorily contains the subject (in finite clauses) and highest auxiliary; this is obvious enough that I can't even imagine what a good starred example would look like.
  - The VPE left context is always a non-constituent; the subject and auxiliary do not form a syntactic constituent separate from TP-internal material.
  - The VPE left context may contain multiple contrastive foci:

(35) BILL WOULDN'T buy a Lamborghini Espada, but JOHN WOULD \_.

- The VPE left context may be devoid of contrastive foci:

(36) 'Did you kill that gorilla?' 'I did \_.'

- The VPE left context ends at a fixed position; there is always an auxiliary stranded by VPE. (\*'John lost the watch, and I found \_') The complement of an auxiliary is a VP, which is the spellout domain of the vP phase.
- Evidence that left contexts are prosodically, rather than syntactically delimited, comes from my work on Irish VPE.

*NCE leaves remnants (in italics):*

- Gapping contains two remnants.
    - Gapping remnants can be basically any category except the finite verb:
- (37) What's Hecuba to him, or *he \_ to Hecuba?* (DP \_ PP)  
 (38) One report claimed that the drug was effective, *the other \_ that it was not.* (DP \_ CP)  
 (39) The omens were excellent and *the weather \_ fair.* (DP \_ A)  
 (40) In their conversations she is at pains to assure him that all is well on the farm, *he \_ to give the impression that he does not doubt her.* (DP \_ TP)  
 (41) They are OK for PWC, *\_ terrible for RJ.* (\_ A PP)
- Gapping remnants don't have to start at the beginning of the clause:

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<sup>8</sup> This might take some convincing, given the potential for remnants like the following: 'you like arguing more than you do patiently working out the spiritual problems of some poor, dumb, infinitely piteous human being that comes to you for help, and that doesn't care a hoot whether you advocate Zoroastrianism, or Seventh-Day Adventism.'

- (42) One has to admire a fellow who says no to Shakespeare but \_ *yes to a cartoon*.
- Gapping remnants must be contrastively interpreted, and bear a pitch accent.
- (43) \*I gave Bill a NICKEL and \_ *Bill a DIME*.
- Evidence that remnants are prosodically delimited, rather than syntactic ‘major constituents’ (Hankamer 1973):
    - Gapping remnants in German can’t be complements of prepositions:<sup>9</sup>
- (44) \*Martha geht über die Strasse, und *Peter* \_ *den Fluss*.  
 ‘Martha goes across the street, and Peter the river.  
 (from Hartmann 2000)
- But they can be complements of postpositions:
- (45) Martha geht die Treppe hinauf, und *Peter* \_ *die Rampe* \_.  
 ‘Martha goes up the stairs, and Peter the slope.’  
 (from Hartmann 2000)
- Prepositions are adjoined to the prosodic word headed by the noun.
- (46) [über[die[Strasse]]]  
 (Ito & Mester 2009)
- Postpositions head their own prosodic words.
- (47) [die[Rampe]][hinauf]
- The remnant is the maximal prosodic word containing the noun, regardless of syntactic category.
- Comparative deletion and stripping each contain one remnant.
- (48) The king, or hero, is three times larger than *the other figures* \_.  
 (49) I have had many males tell me I am intimidating, but never \_ *a woman* \_.
- Actually, since negation can be a remnant (‘Some days he’s here, *some* \_ *not* \_’), negative stripping might just be gapping with negation as the first remnant.

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<sup>9</sup> The same has been said of English, though I have found a number of attestations of pseudogapping remnants with deprepositionalization, such as (10) and (15), and two examples of deprepositionalization in gapping.



- It doesn't matter, because on this view, gapping, comparative deletion, and stripping are just different words for entirely the same phenomenon; the only difference is the context and the number of remnants.
- This is why they all pattern together with respect to the NCE diagnostics above.
- How the prosodic structures get built is a part of the model that's still under development.

*Pseudogapping as a hybrid:*

- Pseudogapping contains one left context (very similar to the one associated with VPE), and one remnant.
  - The left context starts at the beginning of the clause and contains the subject and highest auxiliary.
  - The left context is a syntactic non-constituent.
  - The left context may be devoid of contrastive material and may be entirely deaccented:

(50) she likes him better than she does \_ *Mr Rochester*.

- The remnant on the right must be contrastive:

(51) \*They MIGHT have fooled me, but they DIDN'T \_ *me*.  
(from Hoeksema 2006)

- We've already seen (2-6) that the remnant can be any category but the finite verb, just like NCE remnants.

- Pseudogapping contains a mix of the types of material typically associated with the two types of ellipsis.
- If the syntactic locality conditions given in section 4 are associated particularly with left contexts or remnants, this could explain the mixed behavior of pseudogapping.
  - Remnants can't precede the ellipsis antecedent (possibly because of the left-to-right direction of the necessary contrastive focus).
  - Left contexts are necessary for embedding, because they are associated with the left clause boundary.
  - Left contexts may occur in any clause type, presumably for the same reason.
- So pseudogapping, because it contains a left context, can be embedded and can appear in a variety of clause types, but because it contains a remnant, cannot occur backwards.

## 6. Conclusion

- (At least some) target conditions for ellipsis are not expressed in terms of the ellipsis site, but rather in terms of what's left behind, in particular its prosodic status.
- This is parallel to Geert Booij's (1985) work on word-internal coordination deletion. (*pre- and post-recession economies*, etc.), where a word can be split up as long as what is left behind can form a prosodic word.
- Ultimately ellipsis is probably a case of prosody acting as a filter on syntactic outputs.
- Ellipsis of the types considered may leave behind two different sorts of strings, characterized semantically, prosodically, and syntactically.
- Pseudogapping's hybrid behavior with respect to diagnostics for constituent vs. non-constituent ellipsis is due to its hybrid construction, with one left context (typical of constituent ellipsis), and one remnant (typical of non-constituent ellipsis).

## 7. Issues

- Why is pseudogapping island-sensitive if there isn't any movement involved? If the presence of a remnant blocks binding of traces in the ellipsis site, we get this fact as well as the ban on remnants in sluicing contexts, but then remnants in comparatives are all surprising.
- Why the restrictions on infinitive 'to' and copular 'be'? Why the restriction on voice mismatches?
- Why can't finite verbs be remnants? Is it because they are not XPs in the syntax, and therefore don't match phonological phrases? The same is usually true of pronouns, and they can be remnants...
- Restrictions to the *particular* environments involved in NCEs. They're not my problem in this chapter, and I think they don't really exist, but they could represent an ugly stipulation.
- Adverbials can do strange things as remnants, and can show up alongside remnants even when non-contrastive. Related: how can we tell the difference between potentially non-contrastive remnants in pseudogapping and partial VPE? ('When the Pakistani cricket team loses, as it did \_ to Sri Lanka, Indian bookies are to blame.')
- RNR seems to involve remnants, but they have some very odd characteristics.

## References

- Booij, Geert 1985. Conjunction reduction in complex words: a case for prosodic phonology. In *Advances in non-linear phonology*, eds. Harry van der Hulst, and Norval Smith, 143-160. Dordrecht: Foris.
- Bowers, J. (1998). On Pseudogapping. ms. Cornell University.
- Hankamer, J. and M. Depiante (2005). Non-constituent Ellipsis. ms, UC Berkeley/UC Santa Cruz.
- Hartmann, Katharina (2000). Right Node Raising and Gapping: Interface conditions on prosodic deletion. Philadelphia : Benjamins.

- Hoeksema, J. (2006). Pseudogapping: its syntactic analysis and cumulative effects on its acceptability. *Research on Language and Computation*, doi: 10.1007/s11168-006-9023-x.
- Jayaseelan, K. A. (1990). Incomplete VP deletion and gapping. *Linguistic Analysis*, 20, 64–81.
- Jayaseelan, K. A. (1999). IP-Internal Topic and Focus Phrases. ms. University of Hyderabad
- Lasnik, H. (1995). A note on pseudogapping. In *Proc. MITWPL 27*, Cambridge, MA. pp. 143–163.
- Lasnik, H. (1999). Pseudogapping puzzles. In S. Lappin, & E. Benmamoun (Eds.), *Fragments: Studies in ellipsis and gapping*. Oxford: Oxford University Press.
- Levin, Nancy (1980). Main verb ellipsis in spoken english. In A. M. Zwicky (Ed.), *Clitics and ellipsis*. pp. 65–165. Columbus: The Ohio State University.
- Merchant, J. (2008). An asymmetry in voice mismatches in VP-ellipsis and pseudogapping. *Linguistic Inquiry* 39:1 pp. 169-179.
- Sag, I. (1976). *Deletion and logical form*. Doctoral dissertation, Dept. of Linguistics, MIT.
- Takahashi, S. (2004). Pseudogapping and cyclic linearization. In *Proc. NELS 34*, GLSA Publications: Amherst, MA. pp. 571–585.

## Appendix: attestation sources

- (1) Gore Vidal, Burr, p. 516
- (2) Primary Colors, p. 279
- (3) Agatha Christie, Murder on the Orient Express, p 161
- (4) <http://languageoffood.blogspot.com/2009/11/ceviche-and-fish-chips.html> 12/13/2009
- (5) Robert F. Barsky, Noam Chomsky - A Life of Dissent
- (6) Forres to Fochabers, 1912
- (7) Nancy S. Levin, Main Verb Ellipsis in Spoken English, p 77
- (8) Wired, May 2000, p. 57
- (9) Carl Hiaasen, Skinny Dip, Alfred A. Knopf, New York, 2004, p 179
- (10) CNN, 31-3-1993
- (11) Ann Radcliffe, The mysteries of Udolpho, p 264
- (12) Elizabeth George, A great deliverance, p. 113
- (13) some message board post that is now lost, unfortunately...
- (14) The Wizard of Oz
- (15) citation lost, but I'm pretty sure it was an interview with Bruce Bochy about Barry Zito in 2008.
- (16) episode of the X-Files
- (18) see (2)
- (19) Jane Austen, Sense and Sensibility, p 169
- (20) Henry Fielding, Tom Jones, p 321
- (21) Sir Walter Scott, Quentin Durward, p. 318
- (34) <http://www.reidaboutit.com/2005/12/resolver.html> 12/13/2009
- (37) Shakespeare, Hamlet, Act III, Scene 2
- (38) Bill Bryson, Notes from a big country, p. 274
- (39) Gore Vidal, Julian, p 244
- (40) J.M. Coetzee, Disgrace, p 196
- (41) P.W. Culicover and Ray Jackendoff, Simpler Syntax, p 294
- (42) The New York Times, August 19, 2005, E26
- (48) <http://www.gutenberg.org/files/13755/13755.txt> 12/18/2009
- (49) lost blogit.com citation
- (50) Charlotte Bronte, Jane Eyre, p 154