

Recoverability and Identity are Dissociable in Double Ellipsis

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0 Introduction

0.1 Ellipsis

- (1) a. John bought something, but I don't know what <he bought t_{what} >. *TP ellipsis*
 b. John bought a book, and Mary did too <buy a book>. *VP ellipsis*
 c. John bought one book, while Mary bought four <books>. *NP ellipsis*

- <Ellipsis> (1) might seem to undermine form-meaning mapping – missing form, understood meaning.
- But meaning is recovered from spoken form, subject to identity (Hankamer 1971, Sag 1976, Williams 1977).

0.2 Recoverability

- Recoverability – Fiengo & Lasnik (1972):

ON NONRECOVERABLE
 DELETION IN SYNTAX
Robert Fiengo,
MIT
Howard Lasnik,
MIT

0.3 Identity

- Further to recoverability, ellipsis requires identity (though cf. 1).

- E.g. sluicing requires identity in voice (Merchant 2013) – match (2) vs. mismatch (3):

- | | | | |
|-----|----|---|----------------------|
| (2) | a. | <u>Someone saved Alex</u> , but we don't know who $\langle t_{\text{who}} \text{ saved Alex} \rangle$. | <i>act. = act.</i> |
| | b. | <u>Alex was saved</u> , but we don't know by whom $\langle \text{Alex was saved} \rangle$. | <i>pass. = pass.</i> |
| (3) | a. | * <u>Someone saved Alex</u> , but we don't know by whom $\langle \text{Alex was saved} \rangle$. | <i>act. ≠ pass.</i> |
| | b. | * <u>Alex was saved</u> , but we don't know who $\langle t_{\text{who}} \text{ saved Alex} \rangle$. | <i>pass. ≠ act.</i> |

0.4 Recoverability ~ identity?

- Assumption that recoverability and identity go hand-in-hand:

“... the question of recoverability: To what extent and in what way is the abstract elliptical structure identical to the overt syntax of the ellipsis antecedent?” (Craenenbroeck & Merchant 2013: 710)

- But must ellipsis be identical with the same material from which it is recoverable?¹

¹Insofar as active and passive are truth-conditionally equivalent, recoverability is satisfied in (3) just as much as in (2). The further requirement for identity – as met in (2) but failed in (3) – is thus already dissociated from recoverability in the sense of being additional. The dissociation argued for here is more radical: ellipsis sites do not need to establish identity with the same material from which their meaning is recovered.

0.5 Dissociation in double ellipsis

- Today: recoverability (\uparrow) and identity ($=$) are dissociable in cases of ‘double ellipsis’.
- Survey cases where a lone ellipsis is bad for violating identity (4) . . .

(4) Spoken material
 $\uparrow, *=$
 bad <ellipsis>

- . . . but the very same ellipsis becomes good after adding a second, intermediate ellipsis (5):

(5) Spoken material
 \uparrow
 intermediate <ellipsis>
 $=$
 previously bad <ellipsis> becomes good

\uparrow Recover from spoken material. $=$ Identity between the two ellipses.

0.6 Outline

- | | | |
|--|-------------------------------------|-----------------|
| 1. Voice mismatch | 4. Elliptical answers | |
| 2. Other argument structure alternations | 5. No (overt) linguistic antecedent | |
| 3. Dahl's many clauses puzzle | 6. Conclusion | (7. Appendices) |

1 Voice mismatch

- Merchant (2013): sluicing requires structural identity in voice; e.g. (6) = (3a):

(6) * Someone saved Alex, but we don't know by whom <Alex was saved>. *act. ≠ pass.*

1.1 Counterexamples

- However, Nakamura (2016) observes (7):

1.2 Double ellipsis

- Notice first that both examples in (7) involve double ellipsis (9):³

- (9) a. . . . , but how? And by whom?
b. . . . how much or by whom.

- Double ellipsis is in fact crucial to (7). With single ellipsis, the active-passive mismatches laid out in (8) are ungrammatical in (10):

- (10) a. * Not so much whether to teach the Bible in public schools, but by whom?
b. * They use them from time to time, but they were not sure by whom.

³See Citko & Gračanin-Yuksek (2020) for robust argumentation that coordinated and disjoined sluices involve two separate instances of clausal ellipsis.

1.3 Analysis

- Proposal: dissociate recoverability (\uparrow) from identity (=)

\uparrow recover meaning from the spoken active material

– this meaning can be syntactically represented with passive structure

= the two ellipses are identical with one another as passive; mutually licensing for identity

(11) Applied to (7a):

teach(bible)
 \uparrow
 how <the Bible should be taught>
 =
 by whom <the Bible should be taught>

(12) Applied to (7b): \uparrow *use(hotels)(they)* how much <they are used> = by whom <they are used>

1.4 Point of order

- Potential problem: order is crucial.
 - Reversing the order from (7) to place the passive sluice first is unacceptable (13):
- (13) a. * Not so much whether to teach the Bible in public schools, but by whom? And how?
b. * They use them from time to time, but they were not sure by whom or how much.
- This unacceptability can be attributed to local, intermediate ungrammaticality.
 - In (13), the combination of active spoken material and passive first sluice is ungrammatical:
 - give up at **by whom*, unacceptable
 - Whereas in (7), the combination of active spoken material and the first sluice is grammatical:
 - parse the first sluice initially as active → the passive second sluice forces reanalysis of the first to be passive
→ grammatical after reanalysis

- In support of this explanation, the acceptability of ‘passive sluice first’ (13) improves when local ungrammaticality doesn’t have chance to arise.
- In backwards ellipsis (14), the active spoken material follows both ellipses:

(14) While they weren’t exactly sure by whom or how often, the company admitted to using extended stay hotels from time to time.

- And using *either* (15) presages the coming of a second clause which might satisfy identity:

(15) ? They use them from time to time, but they were not sure either by whom or how much.

1.5 Constructed examples

- The empirical point does not depend on any peculiarities of the naturally occurring examples in (7) – intermediate sluices with *how*; PRO (a) and bound *they* (b) subjects.
- Constructed examples avoiding these features (16)-(18) pattern the same way:

(16) ? The university appoints vice chancellors, but the regulations don’t say *(when, or) by whom.
 ↑ *appoint(VCs)(uni)* when <VCs are appointed> = by whom <VCs are appointed>

(17) ? Somebody hacked our computer network, but we've no idea *(why, or) by whom.
 $\uparrow \exists x.hack(net)(x)$ why <our network was hacked> = by whom <our network was hacked>

- Voice mismatch in the other direction (18):

(18) ? Vice chancellors are appointed, but the regulations don't say *(when, or) which committee.
 $\uparrow \exists x.appt(VCs)(x)$ when <someone appoints VCs> = which committee <t appoints VCs>

1.6 Interim conclusion

- Narrow conclusion regarding voice mismatch: structural identity conditions on ellipsis can be maintained in the face of apparent counterexamples.
- Broad conclusion regarding ellipsis: double ellipsis mediates mismatches that are impossible in single ellipsis, because recoverability and identity are dissociable.

\uparrow Recover meaning from spoken material. = Identity between mutually licensing ellipses.

- The rest of this talk: other cases where recoverability and identity come apart in double ellipsis.

2 Other argument structure alternations

2.1 Double ellipsis can help

- Further to voice, sluicing disallows ditransitive diathesis (19) and alternations between null arguments and PPs (20) (Merchant 2013).
- Such mismatches are much improved when bridged by an intermediate sluice:

- (19) ? They served someone milk, but I don't know *(why, or) to whom.
 ↑ $\exists x. \text{serve}(m.)(x)(\text{they})$ why <they served milk to someone> = to whom <they served milk t >
- (20) ? John was arguing, but I can't reveal *(when, or) who.
 ↑ $\text{argue}(j)$ when <John was arguing with someone> = who <John was arguing with t >

- As before, dissociating identity from recoverability allows structural identity conditions on ellipsis to be maintained in the face of apparent argument structure mismatches.
- But double ellipsis has its limits: structural and lexical identity.

2.2 Limits

↑ Recover meaning from spoken material. = Identity between mutually licensing ellipses.

- How far removed can the ellipses be from recovered material?
 - active vs. passive, ditransitive diathesis, null arguments \sim PPs, . . .
- Truth-conditional equivalence?
- No – still a role for structural and lexical identity.
- Structural identity – (21) manipulates the *spray~load* alternation to place conflicting requirements on the elided structure; non-identity results in ungrammaticality:⁴

(21) * Mary loaded some stuff onto some vehicle, but I don't know (onto which vehicle, or) with what stuff.

↑ *load(stuff)(vehicle)(m)*

onto which vehicle <she loaded some stuff *t*> *≠ or with what stuff <she loaded the vehicle *t*>.

⁴See Appendix 2 for another potential example involving Left Branch Extraction.

- Lexical identity – relational opposites (cf. Hartman 2009) cannot be recovered (*↑):

– *be beaten* ~ *lose to* (22); *borrow* ~ *lend* (23):

(22) * Someone beat Roger at tennis, but I don't know (how, or) to whom.

*↑ *lose*(*r*) how <he lost at tennis> = to whom <he lost at tennis>

(23) * John borrowed a hundred pounds, but he won't tell me (on what terms, or) who.

*↑ $\exists x.lend(100)(j)(x)$ on what terms <someone lent it to him> = who <*t* lent it to him>.

2.3 Interim summary

- So far: double ellipsis mediates argument structure mismatches in sluicing that are impossible with single ellipsis – within the limits of structural identity and lexical recoverability.
- The rest: three further case studies in verb phrase ellipsis (VPE).

3 Dahl's many clauses puzzle

3.1 Strict vs. sloppy

- Consider (24), fixing *he* to mean *John*. The single ellipsis has two readings:

(24) John realises that he_(John) is a fool, though Sam doesn't < >.

- a. Strict reading, referential (\rightarrow) pronoun:

John realises that he \rightarrow John is a fool, though Sam doesn't <realise that John is a fool>.

- b. Sloppy reading, bound (x) pronoun:

John_x realises that he_x is a fool, though Sam_x doesn't <realise that x=Sam is a fool>.

- c. * Disjoint reference:

* John realises that he_(John) is a fool, though Sam doesn't <realise that Bill is a fool>.

- There is no third reading taking the pronoun to point to someone else, e.g. Bill:
- Yet double ellipsis supports such a third reading (Schiebe 1973, via Dahl 1973).

3.2 The mixed reading

- (25) adds an intermediate elliptical clause to (24).
- Now a third ‘mixed’ reading is available (c):

(25) John realises that he_(John) is a fool, and Bill does too < >, though Sam doesn’t < >.

- Both strict: John realises that he_{→John} is a fool,
and Bill does too <realise that John is a fool>,
though Sam doesn’t <realise that John is a fool>.
- Both sloppy: John_x realises that he_x is a fool,
and Bill_x does too <realise that x=Bill is a fool>,
though Sam_x doesn’t <realise that x=Sam is a fool>.
- Mixed reading: John_x realises that he_x is a fool,
sloppy ↗ and Bill_x does too <realise that x=Bill is a fool>,
strict ↗ though Sam doesn’t <realise that Bill is a fool>.

- Mixed reading: the pronoun seems to be sloppy for the first ellipsis, but strict for the second.

3.3 Puzzle

- (25) c. Mixed reading: John_x realises that he_x is a fool,
 sloppy ↗ and Bill_x does too <realise that x=Bill is a fool>,
 strict ↗ though Sam doesn't <realise that Bill is a fool>.
- The mixed reading is a problem to the extent that recoverability and identity are intertwined:
 - each ellipsis independently establishes identity with the recoverable spoken material
 - the structure of the recoverable spoken material must be fixed as either strict (a) or sloppy (b)
 - structure cannot oscillate between its ambiguities, as apparently needed for (c) (see Hardt 2021: 6)

3.4 Analysis

- The mixed reading is not a problem if recoverability is dissociated from identity:
 - ↑ the 'Bill meaning' can be recovered sloppily from the spoken material
 - this meaning can be syntactically represented with a referential pronoun rather than binding
 - i.e. [$\lambda x. x$ thinks x is a fool](b) = b thinks b is a fool (cf. Dalrymple et al. 1991: 424f.)
 - = the representation with a referential pronoun allows for identity with a 'strict' second ellipsis

- (25) c. Mixed reading: John_x realises that he_x is a fool,
 sloppy ↗ and Bill_x does too <realise that x=Bill is a fool>,
 strict ↗ though Sam doesn't <realise that Bill is a fool>.

- (26) $[\lambda x. x \text{ thinks } x \text{ is a fool}]$
 \uparrow
 and Bill does too <realise that Bill is a fool>
 =
 though Sam doesn't <realise that Bill is a fool>

- A 'reverse mixed' reading (27) is correctly predicted to be unavailable, since John \neq Sam:

- (27) *Reverse mixed: John realises that he_{→John} is a fool,
 strict and Bill does too <realise that John is a fool>,
 sloppy though Sam_x doesn't <realise that x=Sam is a fool>.

- In sum: double ellipsis supports mixed readings that are not available with single ellipsis.
- Mixed readings cease to be puzzling once recoverability and identity are dissociated.

4 Elliptical answers

- In answer to a polar (28) or subject (29) question, verb phrase ellipsis (VPE) (a) is good (vs. fully pronounced (b) controls, SMALL CAPS = focus):

(28) Did John go shopping? a. He DID <go shopping>. b. He DID go shopping.

(29) Who went shopping? a. SAM did <go shopping>. b. SAM went shopping.

- But in answer to an adjunct question (30), VPE (a) is bad:⁵

(30) Where did John go shopping?

a. * He did <go shopping> in PARIS. b. He went shopping in PARIS

⁵I don't know why single ellipsis is bad in (30) – see Kuno (1975), Levin (1979), Stockwell (2020: sect. 5.7) for discussion.

- Yet VPE becomes good in answer to the same question when combined with another elliptical clause with contrasting polarity:⁶

(31) Where did John go shopping?

- a. He DIDN'T <go shopping> in PARIS; but he DID <go shopping> in LONDON. b. He DIDN'T go shopping in PARIS, but he DID go shopping in LONDON.

- Double ellipsis is good (31) where single ellipsis is bad (30) since recoverability and identity are dissociable (32):⁷

(32) $\uparrow \{shop'(j) \text{ in } x \in D_{loc}\}$ he DIDN'T <go shopping> in PARIS = he DID <go shopping> in LONDON

⁶The same goes for alternative questions (i):

(i) Did John recommend Mary with a phone call or with a letter?

- a. * He did <recommend her> with a LETTER. b. He recommended her with a LETTER.
 c. He DIDN'T <recommend her> with a PHONE CALL; d. He DIDN'T recommended her with a PHONE CALL;
 he DID <recommend her> with a LETTER. he DID recommend her with a LETTER.

⁷The elliptical constituents are identical up to focus: *DIDN'T* vs. *DID*, *PARIS* vs. *LONDON*. In the terminology of Stockwell (2020, 2022), building on Rooth (1992a,b), the elliptical constituents are 'proper alternatives' to each other.

5 No (overt) linguistic antecedent

- Lesson from double ellipsis: elided material need not establish identity with *overt* linguistic material.
- ↑ Recover meaning from spoken material. = Identity between mutually licensing ellipses.
- Empirical payoff: one class of VPE apparently without linguistic antecedents (though see appendix 3)

5.1 Other antecedent-less VPE

- Lexicalised idioms (33) (Hankamer 1978):⁸
- (33) Don't! You didn't! You mustn't! I really shouldn't. Oh, you shouldn't have! Shall we? May I? Please do. How could you? Oh no you don't! You wouldn't! Must you? Should I? Not in my X, you don't!
- Split antecedents (34) (Webber 1978):
- (34) Wendy is eager to sail around the world and Bruce is eager to climb Kilimanjaro, but neither of them can < > because money is too tight.

⁸Compiled from Schachter (1977), Hankamer & Sag (1976: 409f., fn. 19), Hankamer (1978: 69) and Pullum (2000). Still, Miller & Pullum (2013) argue that antecedent-less ellipsis is not limited to fixed idioms. They emphasise the role of p versus ¬p alternatives, whether explicitly stated or raised to salience by contexts of permission or direction. For further discussion, see Poppels (2022: sect. 3.2.1).

5.2 Double ellipsis

- Antecedent-less ellipsis is not usually possible (35) (Hankamer & Sag 1976: 392, ex. 6):

(35) (Context: Sag produces a cleaver and prepares to hack off his left hand.)

- Hankamer: #Don't be alarmed . . . he never actually does < >.
- Hankamer: Don't be alarmed . . . he never actually does it.

'surface' ellipsis
'deep' pro-form

- Antecedent-less double ellipsis can be much better (36)-(38):

– (a) example, (b) contrast with single ellipsis, (c) analysis here

↑ recoverability from non-linguistic context

= identity between non-overt linguistic material

(36) (Context: same as (35).)

- He wouldn't, would he? (cf. Jacobson 2022: ex. 21)
- # He wouldn't. / # Would he?
- ↑ *cut(hand)(s)* he wouldn't <cut his hand off> = would he <cut his hand off>

- (37) (Tagline of a Clariol hair dye advert.) (Schachter 1977)
- a. Does she or doesn't she?
 - b. # Does she?
 - c. \uparrow *colour(hair)(she)* does she <colour her hair> = doesn't she <colour her hair>
- (38) (Context: I see two people clearly thinking about whether to jump into a very cold pool of water at the bottom of a rock formation while hiking. I turn to you and say:)
- a. You know what? I kind of think that he will if she does. (Jacobson 2022: ex. 19)⁹
 - b. # You know what? I kind of think that he will.
 - c. \uparrow $\lambda x. \textit{jump}(x)$ he will <jump> = she does <jump>
- Such ellipses are 'exophoric' (Miller & Pullum 2013) – pointing outside the linguistic discourse to the world – only with respect to recoverability.
 - Double ellipsis provides sentence-internal, if non-overt, linguistic material for identity between the two ellipses.

⁹Cf. earlier examples involving *I* and *you*: *I will if you will* (Jacobson 2009: 86, ex. 4a); *If you can, so can I* (Schachter 1977: note 2, attrib. Susumu Kuno).

6 Conclusion

6.1 Summary

- Recoverability and identity are dissociable in double ellipsis.
- A lone ellipsis that fails identity can become possible with respect to the same preceding material if it is bridged by an intermediate ellipsis with which it establishes identity.
- In abstract, recall (4) vs. (5):

(4)	Spoken material $\uparrow, *=$ bad <ellipsis>		(5)	Spoken material \uparrow intermediate <ellipsis> = previously bad <ellipsis> becomes good
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- Structural identity conditions on ellipsis can be maintained in the face of apparent counterexamples.
- Clausal ellipsis: voice and other argument structure mismatches, within limits.
- VPE: Dahl's puzzling mixed reading, elliptical answers to questions, 'missing' antecedents.

6.2 Status of <ellipsis>

- Broader conclusion: there is syntactic structure inside ellipsis sites.
- Opposing view (e.g. Dalrymple et al. 1991, Hardt 1993, Ginzburg & Sag 2000) could enforce identity as part of recoverability as long as the two are intertwined.
- But if identity can be satisfied with respect to ellipsis sites in double ellipsis, then there must be structure inside them to evaluate for identity.

7 Appendices

7.1 Acknowledgements

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7.2 Left Branch Extraction

- Another potential limiting case on using double ellipsis to circumvent mismatches – further to §2.2
- Sluices whose *wh*-remnant has been extracted from a left branch, e.g. adjectives, necessitate ‘short sources’ (Barros et al. 2014, Abels 2018).
- Of the candidates in (39), only the copula predication structure in (d) is grammatical:

- (39) The government makes frequent use of outside consultants, but it won't say how frequent <???.>
- | | | |
|----|---|---------------------|
| a. | * ... [how frequent] <it makes <i>t</i> use of outside consultants>. | <i>active</i> |
| b. | * ... [how frequent <use of outside consultants] it makes <i>t</i> >. | <i>pied piping</i> |
| c. | * ... [how frequent] < <i>t</i> use of outside consultants is made>. | <i>passive</i> |
| d. | ... [how frequent] <it is <i>t</i> >. | <i>short source</i> |

- Since LBE sluices do not contain ‘full source’ structure, they should not be able to bridge voice mismatch in double ellipsis.

- (40) is thus predicted to be ungrammatical due to the inequality of (a) and ungrammaticality of (b), in minimal contrast with an example like (41):

(40) (*) The government makes frequent use of outside consultants, but it won't say how frequent, or by which departments.

- how frequent <it is> *≠ by which departments <consultants are used>
- *... by which departments <it was>.

(41) The government makes use of outside consultants, but it won't say how frequently, or by which departments.

- Further empirical work required.

7.3 More on antecedent-less double ellipsis

- Another case of double ellipsis (42) – tag question (cf. 37):

(42) (Context: I see my friend Chris, about to ski down Inferno on cross-country skis, and say:)
He's not really going to <ski down there>, is he <going to ski down there>? (cf. Jacobson 2009: 86, ex.4b)

- Double ellipsis (43):

(43) (Context: I point to one batch of cookies and say:)

These, you may <eat *t*>.

(Pointing to a second batch I say:)

Those, you can't <eat *t*>

(cf. Jacobson 2003: 79, ex. 32; 2008: 58, ex. 41a; 2022: ex. 24)

– at least not until they cool down.

- But is the second ellipsis necessary in (43)? It's absent in (44):

(44) (Context: I see you about to grab some cookies:)

Not those, you don't < >.

(Jacobson 2003: 79, ex. 31)

– but is a second ellipsis present by strong implication? Cf. stopping at the semicolon in (31a): *Where did John go shopping? He DIDN'T in PARIS. . .*

– or is (44) idiomatic, lexicalised? Akin to Hankamer & Sag's (409f., fn. 19): *Not in my wastebasket, you don't!*

- Double ellipsis across speakers (45)? – “not perfect, but not horrendous” (informant work needed here)” (Jacobson 2022: ex. 20):

- (45) (Scenario: I see my friend Chris at the top of a double diamond ski slope, and I know he is only a beginner skier. You are concerned and say:) Do you think he really might $< >?$
 (I turn to you and say:) No don't worry. I don't think he really will $< >.$
- (46) is definitely a problem (Jacobson 2022: ex.25):
- (46) (Scenario: Dad is with two of his kids, Keela and Zack. Keela (the older) has been trying to tell Dad for quite some time that she is very independent and doesn't need help typing her shoes. But Dad is a creature of habit, so he reaches down to help Keela – who says:)
- a. Keela: Dad. Please! Stop! I DON'T WANT you to!!!
- (Dad then reaches down to help Zack. But Zack likes to copy his big sister and so says:)
- b. Zack (after Dad tries to help him): And I don't want you to either!!!!
- (Moreover, can elaborate to add in some more kids all of whom want to be independent. Leah – one of the younger kids – then says:
- c. Leah: Yeah Dad, don't you get it? None of us want you to.
- (a) is fine on it's own – other speakers' ellipses not necessary
 - (a) is also fine without *Stop!* – so regardless of any possible double ellipsis in there

- Potential double ellipsis in (47), though only “marginally possible” (Jacobson 2008: 58, ex. 41b):

(47) (Context: Bill is at a dog park, and is trying to pet each dog. Most of the dogs are quite unsocialized, and don't like to be petted – with the exception of Kolya. So, as he tries to pet Mitka, I turn to him and say:
?? Better not (< >) – I think Kolya is the only one who would actually like you to < >.

7.4 Identity glitches elsewhere

- Case matching in free relative clauses.
- Case conflicts are tolerated so long as they are not morphologically expressed.
- van Riemsdijk (2017: exx. 19, 20):

- The case of a free relative (FR) must match with the case of the *wh*-word that forms it; e.g. German (48):
 - (a) grammatical: the nominative *wh*-word is the subject of the FR, which is the subject of the sentence
 - (b) ungrammatical: the *wh*-word needs to be accusative inside the FR, but the FR as a whole needs to be nominative as the subject of the sentence

- (48) a. [_{DP_{NOM}} Wer_{NOM} nicht stark ist] muss klug sein.
 who not strong is must clever be.
 ‘Who is not strong must be clever.’
- b. * [_{DP_{NOM}} { ^{Wen_{ACC}} / _{Wer_{NOM}} } Gott schwach geschaffen hat] muss klug sein.
 who God weak created has must clever be.
 ‘Who God has created weak must be clever.’

- Syncretism supports mismatching case (49) – *was* is syncretic for nominative and accusative:

- (49) [_{DP_{NOM}} Was_{ACC} du gekocht hast] ist schimmelig.
 What you cooked have is moldy.
 ‘What you have cooked is moldy.’

- Satisfying identity by taking { case morphology ~ ellipsis } in two ways.

References

- Abels, Klaus. 2018. Movement and islands. In *The oxford handbook of ellipsis*, Oxford University Press.
- Anand, Pranav, Daniel Hardt & James McCloskey. 2021. The domain of matching in sluicing. Ms., University of California, Santa Cruz and Copenhagen Business School: <https://people.ucsc.edu/~mcclosk/PDF/ahm2.pdf>.
- Barros, Matthew, Patrick Elliot & Gary Thoms. 2014. There is no island repair. Ms., Rutgers, UCL, University of Edinburgh.
- Citko, Barbara & Martina Gračanin-Yukseš. 2020. Conjunction saves multiple sluicing: How *(and) why? *Glossa* 5. 92.
- Craenenbroeck, Jeroen van & Jason Merchant. 2013. Ellipsis phenomena. In Marcel den Dikken (ed.), *The Cambridge handbook of generative syntax*, 701–745. Cambridge: Cambridge University Press.
- Dahl, Östen. 1973. On so-called ‘sloppy identity’. *Synthese* 26. 81–112.
- Dalrymple, Mary, Stuart Shieber & Fernando Pereira. 1991. Ellipsis and higher-order unification. *Linguistics and Philosophy* 14(4). 399–452.
- Fiengo, Robert & Howard Lasnik. 1972. On nonrecoverable deletion in syntax. *Linguistic Inquiry* 3. 528.
- Ginzburg, Jonathan & Ivan Sag. 2000. *Interrogative investigations*. Stanford, CA: CSLI.
- Hankamer, Jorge. 1971. *Constraints on deletion in syntax*. New Haven, CT: Yale University dissertation.
- Hankamer, Jorge. 1978. On the nontransformational derivation of some null VP anaphors. *Linguistic Inquiry* 9. 66–74.
- Hankamer, Jorge & Ivan A Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7. 391–426.

- Hardt, Daniel. 1993. *Verb phrase ellipsis: Form, meaning, and processing*. Philadelphia, PA: University of Pennsylvania dissertation.
- Hardt, Daniel. 2021. Ellipsis and identity. In Daniel Gutzmann, Lisa Matthewson, Cécile Meier, Hotze Rullmann & Thomas Ede Zimmermann (eds.), *The wiley blackwell companion to semantics, first edition*, 1–15. Hoboken, NJ: John Wiley & Sons.
- Hartman, Jeremy. 2009. When eGIVENness overpredicts identity. Paper presented at Brussels Conference in Generative Linguistics 4, Brussels.
- Jacobson, Pauline. 2003. Binding without pronouns (and pronouns without binding). In G.-J. M. Kruijff & R. T. Oehrle (eds.), *Resource-sensitivity, binding and anaphora*, 57–96. Dordrecht: Kluwer.
- Jacobson, Pauline. 2008. Direct compositionality and variable-free semantics: The case of antecedent contained deletion. In Kyle Johnson (ed.), *Topics in ellipsis*, 30–68. Cambridge: Cambridge University Press.
- Jacobson, Pauline. 2009. Do representations matter or do meanings matter: The case of antecedent containment. In E. Hinrichs & J. Nerbonne (eds.), *Theory and evidence in semantics*, 81–107. Stanford, CA: CSLI Publications.
- Jacobson, Polly. 2022. No I'm not on mute: I actually didn't say anything. You're on Mute Workshop, 6 May.
- Kuno, Susumu. 1975. Conditions for verb phrase deletion. *Foundations of Language* 13. 161–175.
- Levin, Nancy Sue. 1979. *Main-verb ellipsis in spoken English*. Columbus, OH: The Ohio State University dissertation.
- Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44(1). 77–108.
- Miller, Philip & Geoffrey K. Pullum. 2013. Exophoric VP ellipsis. In Philip Hofmeister & Elisabeth Norcliffe (eds.), *The*

- core and the periphery: Data-driven perspectives on syntax inspired by Ivan A. Sag*, CSLI.
- Nakamura, Masanori. 2016. On MaxElide. In *Humanities annual report 46*, 103–130. Senshu University.
- Poppels, Till. 2022. Explaining ellipsis without identity. *The Linguistic Review* 39(3). 341–400.
- Pullum, Geoffrey. 2000. Hankamer was! In Sandra Chung, James McCloskey & Nathan Sanders (eds.), *Jorge Hankamer WebFest*, <https://babel.ucsc.edu/jorgewebfest/pullum.html>.
- van Riemsdijk, Henk. 2017. Free relatives. In Martin Everaert & Henk van Riemsdijk (eds.), *The wiley blackwell companion to syntax*, John Wiley & Sons.
- Rooth, Mats. 1992a. A theory of focus interpretation. *Natural Language Semantics* 1. 75–116.
- Rooth, Mats. 1992b. Ellipsis redundancy and reduction redundancy. In Berman & Hestvik (eds.), *The Stuttgart Ellipsis Workshop*, SFB 340.
- Sag, Ivan. 1976. *Deletion and logical form*. Cambridge, MA: MIT dissertation.
- Schachter, Paul. 1977. Does she or doesn't she? *Linguistic Inquiry* 8. 763–767.
- Schiebe, Traugott. 1973. Zum problem der grammatisch relevanten identität. In F. Kiefer & N. Ruwet (eds.), *Generative grammar in Europe*, 482–527. Dordrecht: D. Reidel Publishing Company.
- Stockwell, Richard. 2020. *Contrast and verb phrase ellipsis: Triviality, symmetry, and competition*. Los Angeles, CA: University of California dissertation.
- Stockwell, Richard. 2022. Contrast and verb phrase ellipsis: the case of tautologous conditionals. *Natural Language Semantics* 30. 77–100.

- Webber, Bonnie L. 1978. *A formal approach to discourse anaphora*. Cambridge, MA: Harvard University dissertation.
Published 1979 by Garland Publishing, New York.
- Williams, Edwin. 1977. Discourse and logical form. *Linguistic Inquiry* 8. 101–139.