

Piecing together the ellipsis puzzle Towards identifying and unifying ellipsis licensors*

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MAIN GOAL OF THIS PAPER

To move towards a (both cross-linguistically and intra-linguistically) more unified account of ellipsis licensing.

CENTRAL DATA

- Clausal ellipsis phenomena in Hungarian/English/Dutch
- Verbal ellipsis phenomena in Germanic/Romance/Irish/Hebrew

THEORETICAL CLAIMS

- Ellipsis licensing is a by-product of movement (Thoms 2010).
- Ellipsis has **core licensors** and **derived licensors**: the former are cross-linguistically uniform, the latter a by-product of independently attested syntactic differences between the languages in question.

GUIDING HYPOTHESIS THROUGHOUT THE TALK

Ellipsis is cross-linguistically uniform. Surface variation in elliptical phenomena is the result of independent syntactic differences between the languages in question.

ROADMAP

- 1 Two conundrums: Too Many Ellipses and Too Many Languages
- 2 The two problems linked: relative deletion in Hungarian
- 3 Eliding the [E]-feature: ellipsis licensing via movement (Thoms 2010)
- 4 Extending the scope of the analysis: VP-ellipsis and its kin
- 5 Conclusions and prospects

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1 Two conundrums: Too Many Ellipses and Too Many Languages

1.1 Too Many Ellipses

→ a brief, non-exhaustive introduction into the Wondrous World of Ellipsis:

sluicing

- (1) John has invited someone, but I don't know who.

VP-ellipsis

- (2) I don't eat tomatoes, but Billy-Bob does.

NP-ellipsis

- (3) John's green bike is more beautiful than Mary's.

gapping

- (4) Gonzo wants to eat lasagna, and Lola carrots.

stripping

- (5) John can play the guitar, and Mary too.

comparative ellipsis

- (6) Bill ate more zucchinis than Jane.

pseudogapping

- (7) I rolled up a newspaper and Lynn did a magazine.

fragment answers

- (8) A: What did Gonzo eat?
B: A banana.

null complement anaphora

- (9) I asked John to help me, but he refused.

swiping

- (10) John gave a talk, but I don't know what about.

spading

- (11) A: Pierre eeft iemand gezien.
 Pierre has someone seen
 B: Ah, wie da?
 oh who that
 'A: Pierre saw someone. B: Really, who?' (Brabant Dutch)

right node raising

- (12) John likes, and Mary dislikes chicken liver with peas and onions.

conjunction reduction

- (13) John will talk to Cassandra and give a present to his little boy.

conjugated 'yes' and 'no'

- (14) Q: Eè-n ze gewonnen?
 have-PL they won
 A: Ja-n-s.
 yes-PL-they_{clitic}
 'Q: Have they won? A: Yes.' (Waregem Dutch)

reduced conditionals

- (15) Wenn der Hans wen besucht, dann den Peter.
 if the Hans someone visits, then the Peter
 'If Hans visits someone, then it's Peter.' (German)

specificational pseudoclefts

- (16) a. What they didn't buy was any wine.
 b. What they didn't buy was ~~they didn't buy~~ any wine.

clausal comparative deletion

- (17) Jones published more papers than Smith expected.

modal complement ellipsis

- (18) Ik wil Karel helpen, maar ik kan niet.
 I want Karel help but I can not
 'I want to help Karel, but I can't.' (Dutch)

(19) **Too Many Ellipses**
 Our current understanding of ellipsis is too fragmented, taxonomical, and construction-oriented.

→ reminds one of early transformation rules:

- (20) The Passive Transformation (Chomsky 1976:112)
- | | | | | | | | |
|----------------------|----|---|---------|---|---|---|------|
| | NP | - | Aux | - | V | - | NP |
| structural analysis: | 1 | | 2 | | 3 | | 4 |
| structural change: | 4 | | 2+be+en | | 3 | | by+1 |

→ we need to move ellipsis into the Move α -era

1.2 Too Many Languages

→ a quick, non-exhaustive look at some cross-linguistic aspects of ellipsis

VP-ellipsis: ✓ in English, but * in Dutch

- (21) John has eaten carrots, but Lola hasn't.
 (22) * Jan heeft wortels gegeten, maar Lola heeft niet.
 John has carrots eaten but Lola has not (Dutch)

swiping: ✓ in Danish, but * in Swedish

- (23) Per er gået i biografen, men jeg ved ikke hvem med.
 Per is gone to cinema but I know not who with
 'Per has gone to the cinema, but I don't know who with.' (Danish)
 (24) * Per gick på bio, men jag vet inte vem med.
 Per went to cinema but I know not who with (Swedish)

NP-ellipsis with possessives: ✓ in English, but * in Dutch

- (25) John's bike is prettier than Mary's.
 (26) * Jans fiets is mooier dan Maries.
 John's bike is prettier than Mary's (Dutch)

(27) **Too Many Languages**
 Ellipsis is a hotbed of cross-linguistic variation, thus leading to further fragmentation of the ellipsis landscape.

1.3 The broader picture: recoverability vs. licensing

→ ellipsis is subject to both recoverability and licensing

recoverability: the ellipsis site needs to have an appropriate antecedent

(28) [Out-of-the-blue-context:]
 # I do [_{VP} e], too.

→ this instance of VP-ellipsis is syntactically licit (= licensed), but non-recoverable

licensing: the ellipsis site needs to be in an appropriate syntactic context

(29) * John bought a red book, and I also bought a red [_{NP} e].

→ this instance of NP-ellipsis is recoverable ([_{NP} e] = *book*), but not syntactically licensed

→ Too Many Ellipses and Too Many Languages are crucially related to licensing:

- the fact that there are so many different elliptical constructions (Too Many Ellipses) is a reflection of the fact that there are many different ellipsis licensors:

- e.g. sluicing → interrogative C°
- VP-ellipsis → overt T°
- NP-ellipsis → (certain types of) D°
- ...

- the fact that ellipsis is cross-linguistically very diversified (Too Many Languages) is a reflection of the fact that different languages have different ellipsis licensors:

- e.g. T° is an ellipsis licensor in English, but not in Dutch
- possessive D° is an ellipsis licensor in English, but not in Dutch
- ...

2 The two problems linked: relative deletion in Hungarian¹

2.1 Introduction: a new type of ellipsis in Hungarian

(30) Kornél AZT A LÁNYT hívta meg, akit ZOLTÁN.
 Kornél that-A the girl-A invited PV who-A Zoltán
 'The girl who Kornél invited was the one who Zoltán did.'

→ in this example a relative clause is deleted except for the relative pronoun and one more constituent:

(31) Kornél AZT A LÁNYT hívta meg, akit ZOLTÁN hívott meg.
 Kornél that-A the girl-A invited PV who-A Zoltán invited PV
 'The girl who Kornél invited was the one who Zoltán did.'

→ the example in (30) is a prime example of the two problems noted above:

Too Many Ellipses: the construction in (30) is NOT:

- sluicing, because it doesn't involve wh-movement
- VP-ellipsis, because T° is not expressed
- NP-ellipsis, because the ellipsis site includes the main V
- gapping, because the ellipsis site is embedded
- ...

→ the data in (30) seem to represent a new type of ellipsis that should be added to the taxonomy (call it 'swerving': **Super-Weird Ellipsis in Relatives In Non-Germanic**), i.e. a new ellipsis licensor is required

Too Many Languages: the construction in (30) is ✓ in Hungarian, but * in:

- English: * John invited the girl who Bill.
- Dutch: * Jan heeft het meisje uitgenodigd dat Bill.
- French: * Jean a invité la fille que Bill.
- Italian: * Gianni ha invitato la ragazza che Bill
- ...

→ whatever licenses the ellipsis in (30) is apparently not an appropriate ellipsis licensor in English/Dutch/French/Italian

¹ This section is based on joint work with Anikó Lipták, see Van Craenenbroeck & Lipták 2005, 2006, 2009.

alternative approach: we try to reduce (the licensing of) Hungarian relative deletion to (the licensing of) an already existing ellipsis phenomenon

→ obvious suspect: VP-ellipsis

2.2 Relative deletion ≠ VP-ellipsis

→ a VP-ellipsis analysis of relative deletion:

(32) ..., [CP akit [TP Zoltán T° [_{VP} hívott ~~meg~~]]]
 who-A Zoltán invited PV

assumptions needed:

- Hungarian has no *do*-support
- a non-filled T° does not lead to a violation of the Stray Affix Filter

basic idea of this section:

relative deletion (RD) deletes a larger chunk of the clausal structure than merely VP (or a VP-related projection; for VP-ellipsis in Hungarian, see Bartos 2000). Hence, RD ≠ VPE.

→ VPE does not delete auxiliaries, but RD does:

RD

(33) Kornél meg szokta hívni azt a lányt, akit Zoltán.
 Kornél PV HABIT invite that-A the girl who-A Zoltán
 'Kornél usually invites the same girl that Zoltán does.'

VPE

(34) Kornél meg szokta hívni azt a lányt, akit
 Kornél PV HABIT invite that-A the girl who-A
 Zoltán szokott.
 Zoltán HABIT
 'Kornél usually invites the same girl that Zoltán does.'

note: Hungarian has no auxiliary drop in non-elliptical contexts

(35) Kornél meg szokta hívni azt a lányt, akit Zoltán
 Kornél PV HABIT invite that-A the girl who-A Zoltán
 *(szokott) hívni.
 HABIT invite
 'Kornél usually invites the same girl that Zoltán invites.'

→ VPE allows for adverbial modification, but RD does not:

RD

(36) Kornél fel szokta hívni azt a lányt,
 Kornél PV HABIT invite that-A the girl-A
 akit Zoltán is <??naponta >.
 who-A Zoltán also daily
 'Kornél usually invites the girl whom Zoltán invites daily.'

VPE

(37) Kornél fel szokta hívni azt a lányt, akit Zoltán
 Kornél PV HABIT invite that-A the girl-A who-A Zoltán
 is <naponta> fel szokott <naponta>.
 also daily PV HABIT daily
 'Kornél usually invites the girl whom Zoltán invites daily.'

→ With non-contrasting tenses, RD is preferred over VPE (cf. MAXELIDE):

(38) Kornél AZT A LÁNYT hívta meg, akit Zoltán fog.
 Kornél that-A the girl-A invited PV who-A Zoltán FUT
 'The girl who Kornél invited was the one who Zoltán will.'

(39) Kornél AZT A LÁNYT fogja meghívni,
 Kornél that-A the girl-A FUT invite-PV
 akit Zoltán (?? fog).
 who-A Zoltán FUT
 'The girl who Kornél will invite is the one who Zoltán will.'

(40) a. They studied a language, but I don't know which [*e*].
 b. ?? They studied a language, but I don't know which they did [*e*].

(Merchant 2008)

→ VPE allows for strict and sloppy readings, but RD only for strict:

(41) János szokott mesélni az anyjának arról a lányról,
 János HABIT tell -INF the mother-D that-ABOUT the girl-ABOUT
 akiről Béla is szokott.
 who-ABOUT Béla also HABIT
 'János usually tells his mother about the girl, whom Béla also usually tells
 János' mother about.'
 'János usually tells his mother about the girl, whom Béla also usually tells
 Béla's mother about.'

(42) János szokott mesélni az anyjának arról a lányról,
 János HABIT tell -INF the mother-D that-ABOUT the girl-ABOUT
 akiről Béla is.
 who-ABOUT Béla also
 'János usually tells his mother about the girl, whom Béla also usually tells
 János' mother about.'
 #'János usually tells his mother about the girl, whom Béla also usually tells
 Béla's mother about.'

conclusion: Hungarian RD is not a instance of VPE

2.3 Relative deletion = sluicing

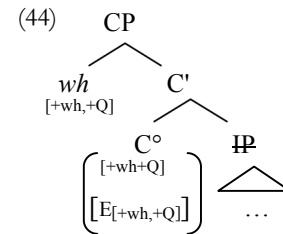
→ section 2.2: RD involves clausal (i.e. TP-)deletion rather than VP-deletion → this means it is more like sluicing than like VPE

problem for such an analysis: sluicing is licensed by *wh*-movement (its licenser is the null interrogative C° found in constituent questions, cf. Lobeck 1995:54-62, Merchant 2001:54-61) → RD does not contain the appropriate licensing configuration

solution: re-examine ellipsis licensing from a cross-linguistic perspective

Merchant (2001, 2004) on ellipsis licensing: the syntax of [E] in sluicing

- (43) a. the syntax of [E]: $E_{[wh^*, nQ^*]}$
 b. the phonology of [E]: $\varphi_{IP} \rightarrow \emptyset / E _$
 c. the semantics of [E]: $\llbracket E \rrbracket = \lambda p : e\text{-GIVEN } (p) [p]$



→ the syntax of the [E]-feature (cf. (43)a) ensures that sluicing only targets the IP-complement of the null C° found in constituent questions → it states that the null C° found in constituent questions is the licenser of sluicing

question: is the characterization in (43)a absolute or relative?

- absolute: the syntax of [E] in sluicing is $E_{[wh^*, nQ^*]}$ for all languages
- relative: the syntax of [E] in sluicing tracks *wh*-movement in all languages

testing ground: *wh*-movement in Hungarian

→ *wh*-movement in Hungarian targets not specCP, but specFocP (= a focus position in the high middle field of the clause) (É. Kiss 1987) → a *wh*-phrase in Hungarian doesn't (overtly) check [+wh, +Q], but rather [+Op]

(45) Nem tudom [CP hogy [FocP kit hívott meg.]]
 not know.1SG that who-A invited.3SG PV
 'I don't know who he invited.'

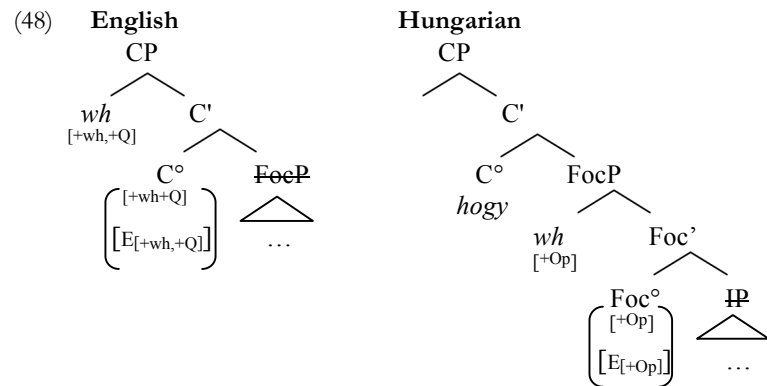
prediction: if Merchant's characterization in (43)a is absolute, Hungarian should not have English-style sluicing; if it's relative, sluicing should take place in FocP rather than CP

testing the prediction

- (46) János meghívott egy lányt, de nem tudom kit.
 John invited a girl-A but not know-1SG who-A
 'John invited a girl, but I don't know who.'

note: the fact that a sluiced *wh*-phrase can be preceded by the complementizer *hogy* 'that' confirms that Hungarian sluicing targets a lower projection than its English counterpart (in particular, the complement of *Foc*^o):

- (47) János meghívott egy lányt, de nem tudom [CP *hogy* [FocP *kit* [TP *e*]]].
 John invited a girl-A but not know.1SG that who-A
 'John invited a girl, but I don't know who.'



conclusion: the behavior of *wh*-elements in simple constituent questions determines the syntactic properties of [E]

- (49) a. the syntax of [E] in English: $E_{[wh^*,e,Q^*]}$
 b. the syntax of [E] in Hungarian: $E_{[Op^*]}$

corollary: although English and Hungarian sluicing are both licensed by *wh*-movement, the characterization in (49)b predicts that other, non-*wh*-elements should be able to license sluicing as well

É. Kiss (2001): only operator/variable-dependencies can license parasitic gaps in Hungarian

wh-phrases

- (50) Milyen könyveket_i dobott el János t_i [mielőtt elolvasott volna *pg*].
 what.kind books-A threw PV János before read.PST.3SG COND
 'What kind of books did János throw away before reading?'

foci

- (51) A KÖNYVEKET_i dobta el János t_i [mielőtt elolvasta volna *pg*].
 the books-A threw PV János before read.PST.3SG COND
 'It was the books that János threw away before reading.'

quantifiers

- (52) János minden könyvet_i eldobott t_i [mielőtt elolvasott volna *pg*].
 János every book-A PV-threw before read.PST.3SG COND
 'János threw away every book before reading.'

is 'also, even'-phrases

- (53) János a könyveket is_i eldobta t_i [mielőtt elolvasta volna *pg*].
 János the books-A also PV-threw before read.PST.3SG COND
 'János also threw the books away before reading.'

topics

- (54) * János a könyveket_i eldobta t_i [mielőtt elolvasta volna *pg*].
 János the books-A PV-threw before read.3SG.PST COND
 INTENDED: 'János threw away the books before reading.'

→ if the characterization in (49)b is correct, there should be a correlation between phrases checking a [+Op]-feature and phrases licensing sluicing

wh-phrases

- (55) János meghívott egy lányt, de nem tudom kit.
 John invited a girl-A but not know-1SG who-A
 'John invited a girl, but I don't know who.'

foci

(56) János meghívott valakit és azt hiszem, hogy Bélát.
 János PV-invited someone-A and that-A think that Béla-A
 'János invited someone and I think it was Béla whom he invited.'

quantifiers

(57) Tudtam, hogy János meghívott néhány embert,
 knew that János PV-invited some people-A
 de nem tudtam, hogy mindenkit.
 but not knew that everyone-A
 'I knew that János invited some people, but I didn't know that he invited everyone.'

is 'also, even'-phrases

(58) Tudtam, hogy János meghívott néhányembert, de nem
 knew that János PV-invited some people-A but not
 tudtam, hogy Mari is
 knew that Mari-A also
 'I knew that János invited some people, but I didn't know that he invited Mari, too.'

topics (apostrophe indicates even accentuation, absence of pitch accent)

(59) * Tudtam, hogy János meghívott néhányembert, de nem
 knew that János PV-invited some people-A but not
 tudtam, hogy 'Mari.
 knew that Mari-A
 'I knew that János invited some people, but I didn't know that he invited Mari (among others).'

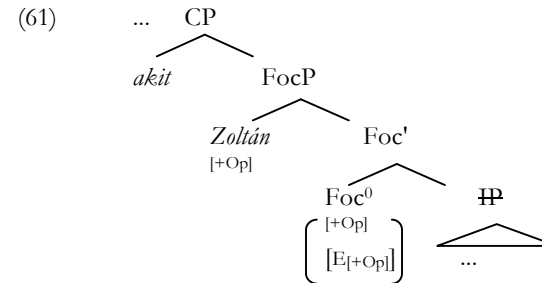
	[+Op]-driven movement	sluicing licenser
wh-phrases	✓	✓
foci	✓	✓
quantifiers	✓	✓
is 'also, even'-phrases	✓	✓
topics	*	*

taking stock: we need to make a distinction between **CORE** and **DERIVED** licensers. Both in English and in Hungarian, sluicing is licensed by wh-movement (core licenser). In Hungarian, however, due to ellipsis-independent differences in wh-movement, other licensers parasitically show up (derived licensers).

(60) **Sluicing licensers in English and Hungarian** (first version)

	core licensers	derived licensers
English	wh-movement	-
Hungarian	wh-movement	focus movement is-movement quantifier movement

note: relative deletion in Hungarian can now straightforwardly be analyzed as focus-triggered sluicing inside a relative clause:



support for the claim that the remnant in relative deletion is focused:

- it necessarily receives focal stress/pitch accent
- in the non-elliptical version it necessarily triggers verb/preverb-inversion

(62) Kornél AZT A LÁNYT hívta meg,
 Kornél that-A the girl-A invited PV
 akít ZOLTÁN { hívott meg / * meghívott }.
 who-A Zoltán invited PV PV.invited
 'The girl who Kornél invited was the one who Zoltán invited.'

- the focus on the remnant triggers focus percolation: it forces the head of the relative clause to be focused as well (cf. Van Craenenbroeck & Lipták 2006 for details)

CONCLUSION: Relative deletion is a subtype of sluicing in Hungarian. The fact that it doesn't occur in English is due to ellipsis-independent differences in *wh*-movement between the two languages.

note: this analysis addresses the two ellipsis-related conundrums discussed earlier:

- **Too Many Ellipses:** relative deletion does not warrant the introduction of a new subtype of ellipsis or a new ellipsis licenser
- **Too Many Languages:** the fact that Hungarian features a slew of clausal ellipses that are absent in English is the result of the interaction between the cross-linguistically uniform syntax of ellipsis and independently attested syntactic differences between the two languages

2.4 Extending the analysis cross-linguistically

prediction: languages with *wh*-movement to specFocP should be languages that allow for non-*wh*-sluicing

prime example: multiple *wh*-movement languages

Bošković (2002): in multiple *wh*-movement languages, only the first *wh*-phrase moves to check a [wh]-feature. The others move for a different reason, typically to check a [focus]-feature (cf. also Stjepanović 2003).

Romanian (Hoyt & Theodorescu to appear)

(63) Am aflat că cineva a plecat, dar nu
 past.1SG learned that someone past.3SG left but no
 știu dacă Ion.
 know.1SG if Ion
 'I found out that someone left, but I don't know if it was Ion.'

Russian (Grebenyova 2006)

(64) A: Ty skazala čto on budet uvažat' Mašu?
 you said that he will respect Maša-A
 'Did you say that he will respect Maša?'
 B: Net. Ja skazala čto IVANA.
 no I said that Ivan-A
 'No. I said that (he will respect) IVAN.'

Polish (K. Migdalski p.c.)

(65) Wiedziałem, że Janek kogoś zaprosił ale nie
 know.PART.M.SG that J. someone invited but not
 wiedziałem że Billa.
 know.PART.M.SG that B-A
 'I knew Janek invited someone, but I didn't know that it was Bill.'

Czech (R. Šimík p.c.)

(66) Věděl jsem, že Honza někoho pozval, ale
 knew aux.1SG that H. someone-A invited but
 nevěděl jsem, že Martina.
 not.knew aux.1SG that M-A
 'I knew Honza invited someone, but I didn't know it was Martin.'

Serbo-Croatian (B. Arsenijević p.c., Tanja Milicev p.c., M. Marelj p.c.)

(67) Jovan je pozvao nekog. Mislim da je Billa.
 Jovan aux invited someone think.1SG that aux B-A
 'Jovan invited someone. I think that it was Bill.'

more generally: the present approach predicts there to be three major types of languages:

type of wh-movement	type of [E]-feature	sluicing with a wh-remnant (wh-sluicing)	sluicing with a focus remnant (focus sluicing)	sample language
movement to specCP	$E_{[wh^*,\#Q^*]}$	✓	*	English
movement to specFocP	$E_{[\#Op^*]}$	✓	✓	Hungarian
wh- <i>in-situ</i>	/	*	*	Japanese

(68) **THE WH/SLUICING-CORRELATION**

The syntactic features that the [E]-feature has to check in a certain language are identical to the strong features a *wh*-phrase has to check in a regular constituent question in that language.

Type I: English

wh-sluicing

(69) Someone read that book, but I don't know who.

focus sluicing

(70) * John fired someone and I think that Bill.

Type II: Hungarian

wh-sluicing

(71) Valaki olvasta azt a könyvet, de nem tudom ki.
 someone read that the book-A but not I.know who
 'Someone read that book, but I don't know who.'

focus sluicing

(72) János kirugott valakit, és azt hiszem hogy Béla-t.
 J. fired someone and that I.think that Béla-A
 'János fired someone and I think it was Bill.'

Type III: Japanese

wh-sluicing

(73) Dareka-ga sono hon-o yon-da ga, watashi-wa dare ka
 someone-N that book-A read-PST but I-TOP who C_{Q°
 wakaranai.
 know.not
 'Someone read that book, but I don't know who.'

focus sluicing

(74) John-ga dareka-o kubinisita rasii kedo, boku-wa Bill
 John-N someone-A fired seem but I-TOP Bill
 to omou.
 that C° think
 'It seems John fired someone and I think it was Bill.'

→ Merchant (1998:110): "Japanese 'sluicing' data (..) instantiate elliptical clefts and not sluicing of the English variety." (cf. also Fukaya and Hoji 1999) → (73) is not derived as in (75), but rather as in (76):

(75) ... [CP dare_i [~~IP t_i sono hon-o yon-da~~] ka]
 who that book-A read-PST C_{Q°
 '... who read that book.'

(76) ... [CP [~~IP pro dare da/de-aru~~] ka]
 who be-PRES C_{Q°
 '...who it is.'

2.5 Extending the analysis language-internally

prediction: if within one and the same language *wh*-movement behaves differently in one context compared to another, we might expect ellipsis/sluicing to track that difference as well

Den Dikken (2003): *wh*-movement in English targets specCP in embedded clauses, but specFocP in matrix clauses (cf. also Den Dikken & Giannakidou 2002)

- (77) a. ? To Mary, what should we give?
 b. * What to Mary should we give?
- (78) a. * I don't know to Mary what we should give.
 b. ? I don't know what to Mary, we should give.

→ according to the wh/sluicing-correlation, this should yield the following syntactic characterization for [E] in English:

- (79) a. the syntax of embedded [E] in English: $E_{[wh^*,Q^*]}$
 b. the syntax of main clause [E] in English: $E_{[Op^*]}$

result: non-*wh*-sluicing in English should be allowed in main but not embedded clauses → this explains why fragment answers are allowed in main, but not in embedded clauses:

- (80) Q: What did Gonzo eat?
 A: a. Two bananas.
 b. * Kermit said (that) two bananas.

(81) **Sluicing licensers in English and Hungarian** (final version)

	core licensers	derived licensers
English	wh-movement	focus movement (main clauses)
Hungarian	wh-movement	focus movement <i>ži</i> -movement quantifier movement

Temmerman (2009): this approach can be further extended to Dutch, which does allow both main and embedded fragment answers:

- (82) Q: Wie dacht Jan dat de wedstrijd zou winnen?
 who thought John that the race would win
 A: a. Eva.
 Eva
 b. Hij had gedacht Eva.
 he had thought Eva
 'Q: Who did John think would win the race? A: (He thought) Eva (would win).'

→ this suggests that in Dutch embedded *wh*-questions, *wh*-phrases (can) move to specFocP instead of all the way up to specCP → corroborated by doubly filled COMP-data from Dutch (cf. Van Craenenbroeck 2010:30-33):

→ the two C°-heads can both be spelled out:

- (83) Ik vraag me af [_{CP} wie_k [_{C°} of] [_{FocP} t_k [_{Foc°} dat] [_{TP} je t_k zoekt]]]
 I ask me PRT who if that you look.for
 'I wonder who you are looking for.' (colloquial standard Dutch)

→ moved wh-phrases can occur in the spec of the lower head:

- (84) Ik weet nie [_{CP} [_{C°} of] [_{FocP} met wie_k [_{Foc°} dat] [_{TP} Jan
 I know not if with who that John
 oan et t_k proate was]]]
 on it talk was
 'I don't know who John was talking to.' (Strijen Dutch)

2.6 Interim summary: taking stock

main characteristics of the current approach:

- A cross-linguistically refined theory of ellipsis allows for a unification of different types of ellipsis, both within languages (Too Many Ellipses) and between languages (Too Many Languages).
- The central hypothesis is that ellipsis is cross-linguistically uniform (i.e. every language has the same set of core licensers), and that surface differences in elliptical behavior are due to the interaction with independently attested syntactic differences (leading to a differing set of derived licensers).

questions left open so far:

- What does ellipsis have to do with *overt* movement (cf. the reference to “strong features” in the wh/slucing-generalization)? What is the role/nature of the [E]-feature?
→ addressed in section 3
- To what extent is this story specific to slucing/clausal ellipsis? Can it be extended to other ellipsis types?
→ addressed in section 4

3 Eliding the [E]-feature: ellipsis licensing via movement (Thoms 2010)

- goals of this section:**
- eliminate the [E]-feature from the account by adopting Thoms’ analysis of ellipsis licensing
 - show how the present account attempts to address the overgeneration problem noted in Thoms (2010)
 - set the scene for the discussion of VP-ellipsis and its kin in the next section

3.1 The basic proposal: ellipsis as a repair strategy for lack of copy deletion

- correlation:** verbs that license VP-ellipsis in English are verbs that can undergo overt movement

(i) verb movement

American English

auxiliaries

(85) Have you seen John?

modals

(86) Can you help John?

main verb *be*

(87) Are you lonesome tonight?

possessive *have*

(88) * Have you any money left?

food consumption *have*

(89) * Have you steak for dinner on special occasions?

British English

auxiliaries

(90) Have you seen John?

modals

(91) Can you help John?

main verb *be*

(92) Are you lonesome tonight?

possessive *have*

(93) Have you any money left?

food consumption *have*

(94) * Have you steak for dinner on special occasions?

(ii) VP-ellipsis

American English

auxiliaries

(95) You haven't seen John, but I have.

modals

(96) You can't help John, but I can.

main verb *be*

(97) You aren't lonesome tonight, but I am.

possessive *have*

(98) * John has a copy of *Lolita* and Mary has too.

food consumption *have*

(99) * You have steak for dinner and I have too.

British English

auxiliaries

(100) You haven't seen John, but I have.

modals

(101) You can't help John, but I can.

main verb *be*

(102) You aren't lonesome tonight, but I am.

possessive *have*

(103) John has a copy of *Lolita* and Mary has too.

food consumption *have*

(104) * You have steak for dinner and I have too.

	American English		British English	
	V-raising	VP-ellipsis	V-raising	VP-ellipsis
auxiliaries	✓	✓	✓	✓
modals	✓	✓	✓	✓
main verb <i>be</i>	✓	✓	✓	✓
possessive <i>have</i>	*	*	✓	✓
food consumption <i>have</i>	*	*	*	*

Thoms (2010): this correlation indicates that movement plays a crucial role in ellipsis licensing

(105) Ellipsis licensing generalization

Ellipsis is licensed only by A'-movement [= non-A-movement, jvc].

idea behind this analysis:

Ellipsis is a repair strategy to avoid incurring a linearization failure in a movement chain with multiple undeleted copies:

“[E]llipsis occurs at the edge of a moved element when the base element in the movement chain is not deleted locally (.). When the element is moved into its new position, deletion of the entire complement is required to ensure that the structure can be linearized, since otherwise the higher copy will c-command the undeleted lower copy.” (Thoms 2010:42)

net result for the account developed in the previous section:

- the Ellipsis licensing generalization explains why the wh/slucing-generalization makes explicit reference to *overt* movement chains: only overt movement chains can induce a linearization failure at PF and hence trigger ellipsis as a repair strategy
- the (theoretically non-trivial) [E]-feature can be elided from the account

3.2 The overgeneration problem

problem: many cases of non-A-movement do not seem to license ellipsis

(106) John said that flowers; *(Sue would never buy t_i).

(107) Are_i *(you t_i lonesome tonight)?

(108) Ik kijk_i *(niet t_i naar *Lost*).
I watch not at *Lost*
'I don't watch *Lost*.' (Dutch)

Thoms (2010:45): “why do some kinds of movement that license ellipsis in some languages not license ellipsis in other languages?”

answer: because the elements moving out of the ellipsis site in these cases are neither core nor derived ellipsis licensers → for (106) see section 2, for (107)/(108) see section 4

4 Extending the scope of the analysis: VP-ellipsis and its kin

4.1 The traditional view

received wisdom: English-style VP-ellipsis (VPE) is cross-linguistically rare

- it is absent in its closest Germanic and Romance relatives (Lobeck 1995, Dagnac 2008)

(109) John has seen Lola, but Mary hasn't.

Dutch

(110) * Jan heeft Lola gezien, maar Mary heeft niet.
John has Lola seen but Mary has not

German

(111) * Jan hat Lola gesehen, aber Marie hat nicht.
John has Lola seen but Mary has not

French

(112) * Jean a vu Lola, mais Marie n'a pas.
John has seen Lola but Mary NEG.has not

Spanish

(113) * Juan ha visto Lola, pero María no ha.
John has seen Lola but Mary not has

Italian

(114) * Gianni ha visto a Lola, ma Maria non ha.
John has seen to Lola but Mary not has

- it occurs in Irish and Hebrew, but there it can strand a main verb, unlike in English (McCloskey 1991, Doron 1999, Goldberg 2005)

(115) Q: Šalaxt etmol et ha-yeladim le-beit-ha-sefer?
send.2SG yesterday ACC the-children to-house-the-book
A: Šalaxti.
send.1SG
'Q: Did you send the children to school yesterday? A: I did.' (Hebrew)

(116) Dúirt mé go gceannóinn é agus cheannaigh.
said I that buy it and bought
'I said I would buy it and I did.' (Irish)

4.2 A near-substitute for VPE: Modal Complement Ellipsis

Dagnac (2008), Aelbrecht (2009): non-VPE-languages like Dutch, German, Italian, French and Spanish feature a VPE-lookalike in which the infinitival complement of a modal is elided → Modal Complement Ellipsis (MCE)

Dutch (Aelbrecht 2009:16)

(117) Jelle zal wel betalen, maar Johan kan niet.
Jelle willPRT pay but Johan can not
'Jelle will pay, but Johan can't.'

German (Sag 1976:53)

(118) Walter muss nicht gehen, aber Peter muss.
Walter must not go but Peter must
'Walter needn't go, but Peter must.'

French (Dagnac 2008:2)

(119) Tom a pu voir Lee, mais Marie n'a pas pu.
Tom has can see Lee but Marie NEG.has not could
'Tom could see Lee, but Mary couldn't.'

Spanish (Dagnac 2008:2)

(120) Tom pudo ver a Lee, pero María no pudo.
Tom could see to Lee but Marie not could
'Tom could see Lee, but Mary couldn't.'

Italian (Dagnac 2008:2)

(121) Tom ha potuto veder Lee, ma Maria non ha potuto.
Tom has can see Lee but Marie not has can
'Tom could see Lee, but Mary couldn't.'

note: the data in (117)-(121) are genuine cases of ellipsis (rather than intransitive use of modals)

supporting evidence: extraction out of the ellipsis site

passives (Aelbrecht 2009:63)

(122) Die broek moet nog niet gewassen worden, maar hij mag
 those pants must yet not washed become but he may
 wel al.
 PRT already
 ‘Those pants don’t have to be washed yet, but they can be.’ (Dutch)

unaccusatives (Aelbrecht 2009:63)

(123) Erik is al langsgelopen, maar Jenneke moet nog.
 Erik is already stopped.by but Jenneke must still
 ‘Erik has already stopped by, but Jenneke still has to.’ (Dutch)

wh-movement (Dagnac 2008:4)

(124) Je sais quels livres Lea peut lire et je sais aussi
 I know which books Lea can read and I know also
 quels livres Ben ne peut pas.
 which books Ben NEG can not
 ‘I know which books Lea can read and I also know which books Ben can’t.’
 (French)

relativization (ACD) (Dagnac 2008:7)

(125) Maria legge tutti i libri chi può.
 Mary reads all the books that can.3SG
 ‘Mary reads every book she can.’ (Italian)

analysis: existing analyses of MCE treat this construction as distinct from VPE in English. More specifically, the two elliptical constructions have different licensors (modals in MCE, T^o in VPE).

however: a non-unified account of MCE and VPE leads to further fragmentation of the ellipsis landscape and seems to be missing a generalization

4.3 Towards a unified account of verbal ellipses: modals as core licensors

goal of this section: a unified account of the ‘verbal ellipses’ discussed in the previous section along the lines laid out in the first part of the talk

taking stock: there are three types of languages at stake:

- (i) **type I: ‘regular’ VP-ellipsis:** English
- (ii) **type II: V-stranding VP-ellipsis:** Hebrew, Irish
- (iii) **type III: Modal Complement Ellipsis:** Dutch, German, French, Italian, Spanish

→ these three types differ in the ellipsis licensors they allow:

auxiliaries

type I: ✓

(126) You haven’t seen John, but I have.

type II: ✓²

(127) Shíl an Taoiseach go raibh an toghachán buaite
 thought the Prime.Minister that was the election won
 aige agus shíl an tUachtarán fosta go raibh.
 by.him and thought the President also that was
 ‘The Prime Minister thought that he had won the election and the
 President also thought that he had.’ (Irish, McCloskey 1991:276)

type III: *

(128) *Juan ha visto Lola, pero María no ha.
 John has seen Lola but Mary not has (Spanish)

² This category cannot be tested for Standard Hebrew, as this language doesn’t seem to possess any auxiliaries (O. Preminger p.c.).

modals

type I: ✓

(129) You can't help John, but I can.

type II: ✓

(130) Lo yaxol-ti le-naceax ba-meruc, aval Dina yaxl-a.
 NEG can.1SG INF-win in.the-race but Dina can.3SG
 'I couldn't have won the race, but Dina could.' (Hebrew, O. Preminger p.c.)

type III: ✓

(131) Walter muss nicht gehen, aber Peter muss.
 Walter must not go but Peter must
 'Walter needn't go, but Peter must.' (German, Sag 1976:53)

main verb *be*

type I: ✓

(132) You aren't lonesome tonight, but I am.

type II: ✓

(133) Dúirt Ciarán go raibh sé breoite agus dúirt Eoghnaí fosta
 said Ciarán that was he ill and said Eoghnaí also
 go raibh.
 that was
 'Ciarán said that he was ill, and Eoghnaí said that he was too.'

type III: * (Irish, McCloskey 1990:276)

(134) *Jan is ziek en Karel is ook.
 John is ill and Carl is too
 'John is ill and Carl is too.' (Dutch)

lexical main verbs

type I: *

(135) *John saw Bill and Mary saw too.

type II: ✓

(136) Dúirt mé go gceannóinn é agus cheannaigh.
 said I that buy it and bought
 'I said I would buy it and I did.' (Irish)

type III: *

(137) *Jan zag Piet en Marie zag ook.
 John saw Pete and Mary saw also (Dutch)

	auxiliaries	modals	main verb <i>be</i>	lexical main V
type I: VPE	✓	✓	✓	*
type II: V-raising VPE	✓	✓	✓	✓
type III: MCE	*	✓	*	*

recall: there is a difference between core and derived licensers; core licensers represent the smallest common denominator of a set of ellipsis phenomena and their licensers → the table suggests that modals are the core licensers of verbal ellipsis:

	core licenser	derived licensers
type I: VPE	modals	auxiliaries main verb <i>be</i>
type II: V-raising VPE	modals	auxiliaries main verb <i>be</i> lexical main verbs
type III: MCE	modals	-

→ this predicts that modals should be featurally related to auxiliaries/*be* in type I-languages, to auxiliaries/*be*/lexical verbs in type II-languages, and to no other verbs in type III-languages

note: modals in English/Hebrew/Irish (types I and II) differ from their counterparts in Dutch/German/French/Italian/Spanish (type III) in that the former are necessarily finite, while the latter are not:

Types I & II

(138) *I hope to can go there.

(139) *Dan roce {li-xol/la-xelet} le-naceax ba-meruc.³
 Dan wants INF-can/INF-can INF-win in.the-race
 INTENDED: 'Dan wants to be able to win the race.' (Hebrew, O. Preminger p.c.)

(140) McQuillan (2009:88): modals in Irish have no non-finite forms

³ Note that *li-xol* and *la-xelet* are conjectured, hypothetical forms indicating what the infinitive of *y-x-l* 'can' could have looked like had it existed.

Type III

- (141) Ik hoop te kunnen slapen in die kamer.
I hope to can sleep in that room
'I hope to be able to sleep in that room.' (Dutch)
- (142) Je pensais ne pas pouvoir dormir dans cette chambre.
I thought NEG not can sleep in this room
'I thought I wouldn't be able to sleep in this room.'

analysis: assume that the difference between (138)-(140) and (141)/(142) shows that while modals in Type I/II-languages necessarily check a [+Fin(ite)]-feature, modals in Type III-languages check a [+Mod(al)]-feature

consequence:

- in type I/II-languages, any verb that overtly moves to check a [+Fin]-feature can license verbal ellipsis:
 - type I: auxiliaries and main verb *be*
 - type II: auxiliaries and all main verbs
- in type III-languages, any verb that overtly moves to check a [+Mod]-feature can license verbal ellipsis → only modals, no derived licensers

conclusion: the licensing theory developed for Hungarian sluicing straightforwardly carries over to verbal ellipsis under the assumption that modals are the core licensers of this type of ellipsis

4.4 Prediction of the analysis: Middle English

prediction: if the syntax of verbal ellipsis is dependent on the syntax of modals, then a diachronic change in the latter should lead to a diachronic change in the former

modals in Middle English (pre-16th C)

→ at the beginning of the 16th C, English modals undergo a rapid change from (quasi-)lexical verbs to the functional elements we know from modern English; prior to that change, Middle English modal verbs were very much comparable to their modern Dutch counterparts (cf. Gergel 2009:122-123 and references mentioned there)

non-finite forms of modals

- (143) I shall not konne answeere.
I shall not can answer
'I will not be able to answer.' (ME (1386), Roberts 1993:312)
- (144) They are doumbe dogges, not mowende berken.
they are dumb dogs not being.able.to bark
'They are dumb dogs, unable to bark.' (ME (1380), Roberts 1993:312)

modals taking a non-clausal object

- (145) Now fel J, that my herte moot atwo.
now feel I that my heart must in.two
'Now I feel that my heart must break in two.' (ME (1475), Gergel 2009:129)
- (146) euerych bakere of þe town shal to þe clerke of þe town a penny
every baker of the town shall to the clerk of the town a penny
'Every baker owes the clerk of the town one penny.' (ME (1400), Roberts 1993:313)

compare: Modern Dutch (cf. also Barbiers 1995)

- (147) Jan moet mij nog drie euro.
John must me still three euro
'John still owes me three euros.'
- (148) Die fles moet leeg.
that bottle must empty
'That bottle must be emptied.'

VP-ellipsis in Middle English (pre-16th C)

Gergel (2009:135): ca. 99% of all verbal ellipsis prior to 1500 is licensed by modals

- (149) And whils þou may, do pryve penance.
and as.long.as you may do private penance
'and do private penance as long as you may.' (ME, Gergel 2009:143)
- (150) he ordeyned a statute þat euery pope myte resigne if he would
he ordained a statute that every pope might resign if he would
'He ordained a statute that every pope might resign if he wanted to.'
(ME, Gergel 2009:144)

note: the data in (149)-(150) are genuine cases of ellipsis (rather than intransitive use of modals)

supporting evidence: extraction out of the ellipsis site

- (151) þei sent hir fro þe kyngis coferes what þei wold.
 they sent her from the king's coffers what they would
 'They sent her what they wanted from the king's coffers.' (ME, Gergel 2009:145)
- (152) Late hir sey what sche wyl.
 let her say what she wants
 'Let her say what she wants.' (ME, Gergel 2009:145)

note: surrounding context of (152) confirms that intended interpretation is *what she wants to say*:

- (153) seyð þis creatur "I pray 3ow, ser, 3eue me leue to tellyn 3ow a tale"
 þan the pepyl seyð to þe monke, "Late hir sey what sche wyl"
 And þan sche seyð, "þer was onys a man..."

conclusion: both in terms of its modal syntax and in terms of its verbal ellipsis, Middle English resembled Modern Dutch: modals weren't necessarily finite (i.e. checked a [+Mod]-feature), and as a result Middle English only featured Modal Complement Ellipsis (i.e. there were no derived ellipsis licensors)

4.5 Problems and questions

4.5.1 VP-ellipsis in infinitivals

the problem: VP-ellipsis in English is not only licensed by finite T^o, but also by infinitival *to* (Johnson 2001, Lobeck 1995, Zagona 1988)

- (154) Mag Wildwood wants to read Fred's story, and I also want to.
 (155) John wants to go on vacation, but he doesn't know when to.
 (156) You shouldn't play with rifles because it's dangerous to.

Thoms (2010): the ellipsis illustrated in (154)-(156) is not necessarily the same phenomenon as VPE in finite clauses:

- (i) there is no pseudogapping variant of infinitival VPE
- (157) * Although I didn't expect him to eat steak, I did expect him to pizza.
- (ii) there is no optional inclusion of auxiliaries in the ellipsis site
- (158) I expect Rab to be fired, and I expect Bill to *(be), as well.
 (159) I would have expected Rab to have been promoted by now, and I would have expected Morag to ?*(have been), as well.

compare:

- (160) Rab should be fired, and Morag should (be), too.
 (161) Rab might have been fired, and Morag might (have (been)), too.

(iii) there is no infinitival VPE with copular *be* or (in British English) possessive *have*

- (162) * I expected Rab's friends to be fools, and I expected Morag's to be as well.
 (163) * I expected Rab to have a red car, and I expected Morag to have as well.

(iv) Hebrew, another VPE-language, has no infinitival variant of this construction:

- (164) * Dan ratza lishlo'ach et hayeladim le-beit-ha-sefer
 Dan want-3SG send.INF ACC children to-house-the-book,
 mookdam, ve-ani ratziti lishlo'ach
 and-I want1SG send.INF
 INTENDED: 'Dan wanted to send the kids to school early, and I also wanted to.'

note: if the infinitival ellipsis in (154)-(156) belongs to a different category than VPE, it will have a different (core or derived) licensor

4.5.2 Negation as VPE-licenser

the problem: VP-ellipsis in English is not only licensed by finite T°, but also by negation (Johnson 2001, Lobeck 1995, Zagana 1988)

- (165) a. * Mary's not excited, but I'm.
 b. Mary's excited, but I'm not.

tentative solution: examples like (165)b are part of a larger set of ellipsis phenomena in which polarity acts as an ellipsis licenser, i.e. polarity is presumably another core licenser

- (166) Q: Eè-n ze gewonnen?
 have-PL they won
 A: Ja-n-s.
 yes-PL-they_{clitic}
 'Q: Have they won? A: Yes.' (Waregem Dutch)

- (167) Jan heeft een boek gekocht, maar Piet niet.
 John has a book bought but Pete not.
 'John bought a book, but not Pete.' (Dutch)

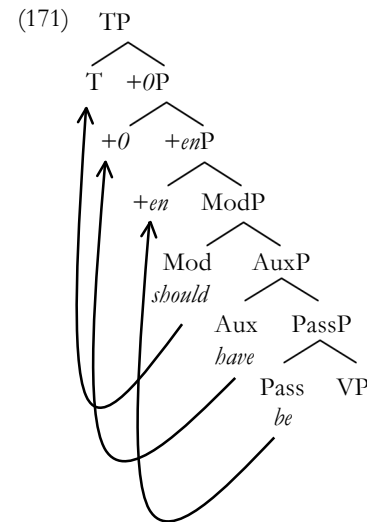
- (168) Ted hoped to vacation in Liberia but his agent recommended that he not.
 (Potsdam 1997)

4.5.3 VPE with multiple remnants

the problem: apart from the finite verb, various non-finite verbs can also 'survive' the ellipsis process in VPE, thus suggesting that the licenser and the ellipsis site are not adjacent

- (169) Caroline wasn't thinking about her homework, but she should have been.
 (170) Smith didn't actually say that, but he might have.

Thoms' solution: in such examples VPE is licensed by movement of the non-finite verb to the position of its affix, i.e. the licenser is non-finite



however:

- the verb movements in (171) violate the HMC
- non-finite verb forms seem unable to license VPE in the absence of a higher finite T°:

- (172) a. * I hadn't been thinking about it, but I remember Morgan having been.
 b. * Sarah hated him having been late for dinner, and I hated him having been too. (Aelbrecht 2009:180-181, though see also Sag 1976:26)

possible alternatives:

- licenser and ellipsis site needn't be adjacent (Aelbrecht 2009)
- examples such as (169)-(170) involve multiple adjunction to T° (Lobeck 1995:149-150)

4.5.4 Epistemic modals

the problem: epistemic modals license neither VP-ellipsis nor Modal Complement Ellipsis

- (173) * Bob must wash his car every day, and Peter must too. (Gergel 2009)
 (174) * Arne zegt dat hij niet de hele taart heeft opgegeten,
 Arne says that he not the whole pie has eaten
 maar hij moet wel.
 but he must AFF

solution: epistemic modals are base-generated either in or above T° (cf. Gergel 2009, Thoms 2010 and references mentioned there); as a result they cannot license ellipsis

5 Conclusions and prospects

- the syntax of ellipsis is cross-linguistically uniform (cf. the core licensers); differences in elliptical behavior (cf. the derived licensers) are reducible to independently attested syntactic differences between the languages in question
- the core licenser responsible for sluicing and fragment answers (possibly clausal ellipsis in general) is *wh*-movement
- the core licenser responsible for verbal ellipsis is modal verb movement
- ellipsis licensing is a repair strategy to prevent a linearization failure caused by undeleted movement copies
- a cross-linguistically refined theory of ellipsis allows for a unification of elliptical constructions (both within and across languages), for a reduction of the set of (core) licensers, and thus brings us closer to answering:

(175) The Million Dollar Question

What is the unifying feature/property/characteristic of ellipsis licensing?

References

- Aelbrecht, L. (2009) *You have the right to remain silent. The licensing requirements of ellipsis*. PhD. Dissertation, Hogeschool-Universiteit Brussel.
- Barbiers, S. (1995) *The syntax of interpretation*. PhD. Dissertation, University of Leiden.
- Bartos, H. (2000) VP ellipsis and verbal inflection in Hungarian. *Acta Linguistica Hungarica* 47. 3-23.
- Bošković, Ž. (2002) On multiple wh-fronting. *Linguistic Inquiry* 33:351-383.
- Chomsky, N. (1976) *Syntactic structures (12th imprint)*. Mouton.
- Craenenbroeck, J. van (2010) *The syntax of ellipsis. Evidence from Dutch dialects*. New York: OUP.
- Craenenbroeck, J. van & A. Lipták (2005) Ellipsis in Hungarian and the typology of sluicing. In Kiyong Choi and Changguk Yim (eds.), *Ellipsis in Minimalism. Proceedings of the 7th Seoul International Conference on Generative Grammar*. Seoul: Hankook. 103-133.
- Craenenbroeck, J. van & A. Lipták (2009) What sluicing can do, what it can't and in which language. On the cross-linguistic syntax of ellipsis. To appear in: L. Cheng & N. Corver (eds.) *Diagnosing syntax*.
- Craenenbroeck, J. van & A. Lipták (2006) The cross-linguistic syntax of sluicing: evidence from Hungarian relatives. *Syntax* 9:248-274.
- Dagnac, A. (2008) Modal Ellipsis in French, Spanish and Italian: evidence for a TP-deletion analysis. To appear in: *Selected Proceedings of LSRIL 38* (Linguistic Symposium on Romance Languages, U. of Illinois at Urbana-Champaign, April 2008), Benjamins.
- Dikken, M. den (2003) On the morphosyntax of *wh*-movement. In C. Boeckx and K. Grohmann (eds), *Multiple Wh-Fronting*. Amsterdam: John Benjamins, 77-98.
- Dikken & Giannakidou (2002) From Hell to Polarity: "Aggressively non-D-linked wh-phrases" as Polarity Items. *Linguistic Inquiry* 33, 31-61.
- Doron, E. (1999) V-Movement and VP Ellipsis. In *Fragments: Studies in Ellipsis and Gapping*, S. Lappin and E. Benmamoun (eds.), pp 124-140. Oxford and New York: Oxford U. Press.
- É. Kiss, K. (1987) *Configurationality in Hungarian*. Budapest: Akadémiai Kiadó.
- É. Kiss, K. (2001) Parasitic chains revisited. In: Culicover, P.W. and P.M. Postal, (eds.), *Parasitic Gaps*. MIT Press, Cambridge, MA, pp. 99-124.
- Fukaya, T. and H. Hoji (1999) Stripping and sluicing in Japanese and some implications. *Proceedings of WCCFL 18*.
- Gergel, R. (2009) *Modality and ellipsis. Diachronic and synchronic evidence*. Berlin: Mouton.
- Goldberg, L. (2005) V-Stranding VP Ellipsis: A Cross-Linguistic Study. Ph.D. Dissertation, McGill U., Montreal.
- Grebenyova, L. (2006) *Sluicing puzzles in Russian*. Ms. University of Maryland.
- Hoyt, F. & A. Theodorescu (to appear) How many kinds of sluicing, and why? Single and multiple sluicing in Romanian, English and Japanese. In: J. Merchant (ed.) *Sluicing: cross-linguistic perspectives*. John Benjamins, Amsterdam.
- Johnson, K. (2001) What VP Ellipsis Can Do, and What it Can't, but not Why. *The Handbook of Contemporary Syntactic Theory* ed. by Mark Baltin and Chris Collins. 439-479. Blackwell Publishing.
- Lobeck, A. (1995) *Ellipsis: functional heads, licensing and identification*. Oxford: OUP.
- McCloskey, J. (1991) Clause Structure, Ellipsis and Proper Government in Irish. *Lingua* 85: 259-302.
- McQuillan, P. (2009) Modals in Irish. In: B. Hansen & F. de Haan (eds). *Modals in the languages of Europe. A reference work*. Berlin: Mouton. 71-105.
- Merchant, J. (1998). 'Pseudosluicing': Elliptical clefts in Japanese and English. A. Alexiadou et al. (eds.) *ZAS Working Papers in Linguistics 10*. Zentrum für Allgemeine Sprachwissenschaft. 88-112.
- Merchant, J. (2001) *The syntax of silence*. Oxford studies in theoretical linguistics 1. Oxford: OUP.
- Merchant, J. (2003). *Remarks on stripping*. Ms. University of Chicago.
- Merchant, J. (2004) Fragments and ellipsis. *Linguistics and Philosophy* 27, 661-738.
- Merchant, J. (2008) Variable island repair under ellipsis. In K. Johnson (ed.), *Topics in ellipsis*. Cambridge: CUP. 132-153.
- Potsdam, E. (1997) NegP and Subjunctive Complements in English. *Linguistic Inquiry* 28:533-541.
- Roberts, I. (1993) *Verbs and Diachronic Syntax*. Dordrecht: Kluwer Publications.
- Sag, I. (1976) *Deletion and logical form*. PhD. Dissertation, Massachusetts Institute of Technology.
- Stjepanovic, S. (2003) Multiple wh-fronting in Serbo-Croatian matrix questions and the matrix sluicing construction. In Boeckx, C. and K. Grohmann (eds) *Multiple wh-fronting*. Amsterdam: John Benjamins.
- Temmerman, T. (2009) Fragment answers in Dutch and English: a TP-ellipsis account. Talk presented at CGSW24, Brussels, May 2009.
- Thoms, G. (2010) 'Verb floating' and VP-ellipsis: towards a movement account of ellipsis licensing. Ms. University of Strathclyde.
- Zagona, K. (1988) *Verb Phrase Syntax: A Parametric Study of English and Spanish*. Dordrecht: Kluwer Academic Publishers.