

# Clausal ellipsis: deletion or selective spell-out?

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## Three approaches to clausal ellipsis:

- (A) **Movement-and-deletion approach (MDA)**: Deletion of an extended verbal projection (TP) from which the remnants of ellipsis are removed by (sometimes exceptional) A'-movement into the left periphery of the clause.
- (B) **Selective spell-out approach (SSA)**: Regular A'-movement of the remnants into the specifiers of specific semantically relevant functional projections (CP, FocusP, NegP, etc), which are subsequently selected for spell-out.
- (C) **In-situ approach (ISA)**: Ellipsis applies to run-of-the-mill syntactic structures and deletes the familiar/given information from the propositional domain of the clause. No (exceptional) A'-movement is needed.

## Organization of the talk:

- Part I: Introduction of the three approach  
Reasons to reject the MDA
- Part II: Comparison of the two alternatives to the MDA to clausal ellipsis  
Reasons for rejecting the ISA
- Part III: Reasons for not accepting Ott & Struckmeier's argument against the MDA, which might also be used against the SSA.

## Part I: Three approaches to clausal ellipsis

**A. Movement-and-deletion approach (MDA)**; cf. Merchant (2001; 2004) for sluicing and Boone (2014) for gapping (among many others).

- (1) [CP ... XP\*<sub>i</sub> ... [TP ~~TP~~]], where XP\* stands for one or more remnants

**Advantage:** ellipsis affects a single, continuous phrase (TP).

### Problems:

- (a) **Exceptional A'-movement** and the *ad hoc* stipulations needed to license it, especially the postulation of E-features.
- (2) a. Iedereen gaf Marie een cadeau maar ik weet niet [wie wat].  
everyone gave Marie a present but I know not who what  
b. ... [wie <\*wat> Marie <wat> gaf].  
who what Marie gave  
'... but I do not know who gave what to Marie.'

- (b) **Finite-verb restriction.** Special provisos needed to account for the fact that verbs (and complementizers) do not survive clausal ellipsis; cf. (3). This is especially problematic for V2 languages like Dutch and German, as it is normally assumed that finite verbs occur in the head of CP in main clauses and are therefore expected to survive deletion of TP in, e.g., gapping constructions.

- (3) [[Jan heeft het boek gelezen] en [Marie het artikel]],  
Jan has the book read and Marie the article  
'Jan has read the book and Marie the article.'

## B. Selective Spell-out Approach (SSA); cf. (Broekhuis 2018)

### I. Analysis gapping:

- (4) [[JAN is [<sub>AP</sub> erg boos op Marie]] en [ELS is [<sub>AP</sub> ~~erg boos~~ op PETER]]].  
Jan is very angry with Marie and Els is very angry with Peter  
'Jan is very angry with Marie and Els is angry with Peter.'

- (a) A'-movement of *Els* to SpecCP  
(b) A'-Movement of *op Peter* to SpecFocP  
(c) Selective spell-out of SpecCP and SpecFocP  
(d) **Differences with MDA:**  
(i) **No Exceptional A'-movement;**  
A'-movements to SpecCP and SpecFocP are independently motivated.  
(ii) **Finite-verb restriction follows:**  
Finite verb is not in an A'-specifier designated for selective spell-out.

### II. Analysis Sluicing:

- (5) Iedereen is [<sub>AP</sub> erg boos op iemand]] maar ik weet niet ...  
Everyone is very angry with someone but I know not  
a. [Op WIE ~~iedereen erg boos is~~].  
with whom everyone very angry is  
'Everyone is very angry with someone but I don't know with whom.'  
b. [WIE ~~erg boos~~ op WIE ~~is~~].  
who very angry with whom is  
'Everyone is very angry with someone but I don't know who with whom.'

#### Regular sluicing (5a):

- (a) A'-movement of *op wie* to SpecCP  
(b) Selective spell-out of SpecCP  
(c) **No specific advantages compared to MDA**

#### Multiple Sluicing (5b):

- (a) A'-movement of *wie* to SpecCP  
(b) A'-movement of *op wie* to SpecFocP  
(c) Selective spell-out of SpecCP and SpecFocP  
(d) **Differences with MDA: No Exceptional A'-movement**

**Conclusion:** SSA provides a unified account for sluicing and gapping in Dutch without the need of stipulating exceptional movement of the sort postulated by the MDA. SSA further accounts for the following core properties of gapping (cf. Broekhuis 2018):

- gapping must elide the finite verb and the complementizer of the target clause (if present) as these do not occupy A'-specifiers; see also §1 and §3
- gapping remnants must be able to undergo A'-movement in non-reduced clauses and are prototypically contrastively accented; see also §2.
- focus markers such as *ook* 'also' may occur as gapping remnants without there being a correlate in the antecedent clause; we return to this later; see also §4.
- the polarity marker *niet* 'not' cannot be elided, not even if *niet* is present in the antecedent clause, because *niet* occupies SpecNegP; see also §4.

On the assumption (still to be substantiated in future work) that the SSA is able to account in an equally elegant way for clausal ellipsis in other languages, this approach is clearly superior to the MDA.

### C. *In-Situ Approach (ISA)*; cf. Ott & Struckmeier (2018)

**Empirical motivation:** German discourse particle (DiP) *denn* found in questions; see also Bayer & Obenauer (2011) and Bayer (2012; 2017; 2018).

- (6) a. Wer hat *denn* Zwiebeln gekauft? [Wh-question]  
 who has DiP onions bought  
 'Who bought onions, I wonder?'
- b. Hast du *denn* Zwiebeln gekauft? [yes-no question]  
 Have you DiP onions bought  
 'Did you happen to buy onions?'
- (a) **DiPs are immobile:** they cannot be A'-moved into sentence-initial position. This cannot be shown for *denn* in (6) as this particle occurs in interrogative clauses only, but it can easily be shown for DiPs like *wohl* and *ja* in (7).
- (7) a. Peter hat *wohl/ja* ein paar Leute eingeladen.  
 Peter has DiP/ DiP a couple people invited  
 '(Probably/As you know), Peter has invited a couple of people.'
- b. \**Wohl/ja* hat Peter ein paar Leute eingeladen.  
 DiP/DiP has Peter a few people invited
- (b) **DiPs survive clausal ellipsis despite their immobility.** The acceptability of (8b) follows from the assumption given earlier that clausal ellipsis affects the given information from the *propositional domain of the clause* only; because DiPs do not contribute to the propositional content at all, they survive deletion.
- (8) a. A. Peter invited a couple of people.  
 b. B. Wen *denn*? 'Who?'
- (c) **DiPs are heads.** The fact that DiPs are immobile was one of the reasons for Bayer (2012; 2018; 2019) to assume that they are functional heads. Given that heads do not undergo A/A'-movement, Ott & Struckmeier conclude that the MDA to clausal ellipsis should be rejected and be replaced by the ISA.

### Summary Part I

	EXCEPTIONAL A'-MOVEMENT	SELECTIVE SPELL-OUT	DELETION TARGETS DISCONTINUOUS STRINGS
MDA	+	—	—
SSA	—	+	—
ISA	—		+

### Part II: Comparison of the two alternatives to the MDA to clausal ellipsis

#### 1. Four arguments against the *in-situ* approach

##### (a) Number of gapping remnants

Languages differ in the number of gaping remnants they allow; English is often claimed not to allow more than two remnants, while Dutch and German allow up to four or even five remnants; cf. Neijt (1979). This difference would be unexpected if the common ground fully determines which elements survive ellipsis.

##### (b) Gapping remnants are major constituents

Gapping remnants are prototypically major constituents; cf. Hankamer (1971/1979). The Dutch examples in (9) show that while direct objects can be remnants of clausal ellipsis, PPs embedded in a direct object cannot. In a context where Jan and Els have both bought a house, the grammaticality contrast in (9) is precisely the opposite of what the ISA predicts: (9a) should be unacceptable as the gapped clause provides known information (namely that the thing that Els bought is a house). The unacceptability of examples such as (9b) follows under the MDA and SSA as a result of the island-sensitivity of A'-movement.

- (9) a. [[JAN kocht [het huis op het PLEIN]] en [ELS ~~kocht~~ [het huis bij het PARK]]].  
 b. \*[[JAN kocht [het huis op het PLEIN]] en [ELS ~~kocht~~ [~~het huis~~ bij het PARK]]].  
 Jan bought the house on the square and Els bought the house near the park  
 ‘Jan bought the house on the square and Els the house near the park.’

**Remark:** This objection does not apply to *in-situ* approaches such as the Q-based approach to sluicing, which requires that the meaning of a clausal ellipsis site be recoverable from a *syntactically derived* question that is part of the set of Questions Under Discussion (QUD); cf. Griffiths’ (2019). This approach also provides a good account of the fact that sluicing is insensitive to certain island effects without appealing to so-called island repair. We incorporate the basic insights from the Q-based approach by assuming that the sluiced clause *itself* must be a QUD.

##### (c) Finite-verb/complementizer restriction

Finite verbs (and complementizers) do not survive ellipsis: cf. (10). The unacceptability of (10b) under the intended transitive reading is a problem for the ISA because the finite verb in the gapped clause is not part of the common ground, and is therefore predicted to survive ellipsis.

- (10) a. [[JAN las EEN BOEK] en [MARIE las EEN ARTIKEL]].  
 Jan read a book and Marie read an article  
 ‘Jan read a book and Marie an article.’  
 b. \*[[JAN LAS een boek] en [MARIE SCHREEF een boek]].  
 Jan read a book and Marie wrote a book  
 Intended reading: ‘Jan read a book and Marie wrote a book.’

**(d) Contrast**

Gapping requires the remnants to be contrasted with their correlates in the antecedent clause; information available in the common ground does therefore not fully determine whether ellipsis is possible. The ISA is incomplete when extended to gapping.

**2. Selective spell-out approach: the role of contrast**

- (a) Contrastive phrases are like Neg-phrases in that they are often A'-moved into the specifier of CP or of a focus/topicP in the middle field of the clause in languages like Dutch.

- (11) a. dat Jan [AP erg boos op Peter] is.  
 that Jan very angry with Peter is  
 ‘that Jan is very angry with Peter.’  
 b. dat Jan [NegP op niemand<sub>i</sub> Neg [VP ... [AP erg boos t<sub>i</sub>] is]].  
 that Jan with nobody very angry is  
 ‘that Jan isn’t very angry with anybody.’  
 c. dat Jan [FocP op PETER<sub>i</sub> Foc [VP ... [AP erg boos t<sub>i</sub>] is]].  
 that Jan with Peter very angry is  
 ‘that Jan is very angry with Peter.’

- (b) **A'-movement restriction:** Contrastive phrases can be remnants iff they can be moved in non-reduced clauses; cf. Neijt’s (1979) *wh*-movement correlation restriction.

- (12) a. [[Jan is [AP erg boos op Marie]] en [ELS is [AP ~~erg boos~~ op PETER]]].  
 Jan is very angry with Marie and Els is very angry with Peter  
 ‘Jan is very angry with Marie and Els with Peter.’  
 b. Op Peter<sub>i</sub> is Els [AP erg boos t<sub>i</sub>].  
 with Peter is Els very angry

Broekhuis (2018) revised the *wh*-movement correlation restriction in three ways:

- (i) the restriction is rephrased in terms of A'-movement;
- (ii) gapping remnants are actually A'-moved into the specifier positions of CP, NegP, FocusP, TopicP, etc.
- (iii) clausal ellipsis is not ellipsis but selective spell-out of the A'-specifiers of the functional projections mentioned above, as in (13), with selective spell-out of the bold phrases.

- (13) ... en [CP ELS<sub>i</sub> [C is] [TP t<sub>i</sub> ... [FocP **op PETER**<sub>i</sub> Foc [VP ... [AP erg boos t<sub>i</sub>] ...]].

- (c) **Recoverability:** Selective spell-out of A'-specifiers may be derived from the special phonological properties of such specifiers (such as contrastive accent) by assuming a recoverability condition on phonological information.

**Remark:** An appeal to recoverability seems to fit in well with the Q-based approach to clausal ellipsis proposed in Griffiths (2019); material left unpronounced in sluiced and gapped clauses should be recoverable from the set of QUDs. This is trivial for sluiced clauses if they are QUDs themselves. The unpronounced material in gapped clauses should be recoverable from the QUDs triggered by the use of e.g. focus accents.

### 3. The superiority of the selective spell-out approach; cf. Section 1

#### (a) Number of gapping remnants

We expect that languages may differ in the number of gapping remnants they allow because it is an established fact that languages may differ with respect to the types of overt A'-movement they allow; the fact that English allows a smaller number of gapping remnants than Dutch can therefore be related to the fact that English has a more rigid word order (less A'-movement types) than Dutch.

**Remark I:** English allows gapping with two remnants but seems to resist focus movement. This problem can be countered by claiming that English does have focus movement but that the word order effect of it is undone by subsequent leftward VP-movement across the focus position; cf. Den Dikken (1995) and Kayne (1998)].

**Remark II:** Language with (apparent) sluicing but *wh*-in-situ should be taken to have some other form of A'-movement licensing ellipsis (cf. Bhattacharya and Simpson, 2012, who argue that Bangla and Hindi have A'-movement to a clause-internal position), or to have ellipsis of some other sort.

#### (b) Gapping remnants are major constituents

This follows from the fact that overt A'-movement precedes selective spell-out; this accounts for the acceptability contrast between the two examples in (9), repeated here.

- (9) a. [[JAN kocht [het huis op het PLEIN]] en [ELS ~~kocht~~ [het huis bij het PARK]]].  
 b. \*[[JAN kocht [het huis op het PLEIN]] en [ELS ~~kocht~~ [~~het huis~~ bij het PARK]]].  
 Jan bought the house on the square and Els bought the house near the park  
 'Jan bought the house on the square and Els the house near the park.'

#### (c) Finite-verb/complementizer restriction

Finite verbs (and complementizers) are heads and cannot occur in A'-specifiers; this accounts for the acceptability contrast between the two examples in (10), repeated here.

- (10) a. [[JAN las EEN BOEK] en [MARIE ~~las~~ EEN ARTIKEL]].  
 Jan read a book and Marie read an article  
 'Jan read a book and Marie an article.'  
 b. \*[[JAN LAS een boek] en [MARIE SCHREEF ~~een boek~~]].  
 Jan read a book and Marie wrote a book  
 Intended reading: 'Jan read a book and Marie wrote a book.'

**(d) Phonological/semantic restrictions**

Remnants of clausal ellipsis exhibit semantic and information-structural properties associated with the *independently motivated* functional heads in the language; remnants in, e.g., Dutch are prototypically *wh*-phrases, contrastive topics/foci or negative phrases, that is, phrases that can be shown to occupy a specific SpecFP in the functional domain of the clause.

**4. More evidence for the Selective Spell-out Approach**

**Focus particles:** gapping remnants normally have a correlate in the antecedent clause, but this does not hold for focus particles such as *ook* ‘also’; cf. Van der Heijden & Klein (1995:33).

- (14) a. [[JAN houdt van MARIE] en [MARIE ~~houdt~~ ook van JAN]].  
 Jan loves of Marie but Marie loves also of Jan  
 ‘Jan loves Marie and Marie loves Jan too.’

The focus particle *ook* ‘also’ must be located in the designated focus position SpecFocP (or SpecCP) with its contrastively accented associate *op HEM*; it cannot occur in the base position of its associate; cf. Broekhuis & Corver (2016:§13.3.2).

- (15) a. dat Jan ook op *HEM* boos is.  
 that Jan also with him angry is  
 ‘that Jan is also angry with him.’  
 b. \*dat Jan boos ook op *HEM* is.  
 that Jan angry also with him is

Because the complete A’-specifier of FocusP will be selectively spelled out, the SSA correctly predicts that gapping examples such as (14a) are acceptable with *ook* ‘also’ despite the fact that the particle is not contrastive.

**Negation:** Assume that the SSA entails that all elements occupying a designated A’-position survive gapping; they do not elide even if they have an identical correlate in the antecedent clause. This is indeed what we find in negative clauses such as (16); cf. Van der Heijden & Klein (1995:33), Neijt (1979:66) and De Vries (1992:§3.9).

- (16) a. [[Jan heeft Els niet gezien] en [Peter heeft Marie niet gezien]].  
 Jan has Els not seen and Peter has Marie not seen  
 ‘Jan hasn’t seen Els and Peter hasn’t seen Marie.’  
 b. [[JAN heeft ELS niet gezien] en [PETER ~~heeft~~ MARIE niet/\*niet gezien]].  
 Jan has Els not seen and Peter has Marie not/not seen

## 5. The distribution of German discourse particles

- (a) **German DiPs are immobile heads** but may occur in fragment questions such as (17b); cf. Ott & Struckmeier (2018). This is also a potential problem for the SSA.
- (17) a. A. Peter invited a couple of people.  
 b. B. Wen *denn*? ‘Oh, who then?’
- (b) **The DiP *denn* can form a constituent with its associate *wh*-phrase.** Although *denn* cannot occur in sentence-initial position as such, it can occupy this position together with its associate *wh*-phrase; cf. Bayer & Obenauer (2011), Bayer (2017; 2018; 2019).
- (18) a. [Wer *denn*] soll befehlen?  
 who DENN should command  
 b. [Warum *bloß*] ist ein Rauschenberg so teuer?  
 why BLOß is a Rauschenberg so expensive  
 c. [Von wem *schon*] kann man das sagen?  
 of who SCHON can one that say
- (c) **The DiP *denn* is similar to the focus particles** in this respect, which are likewise able to form a constituent with their associate focus phrase; cf. (19) with the Dutch/German focus particle *alleen/nur* ‘only’.
- (19) a. [Alleen vandaag] is dat nog mogelijk.  
 b. [Heute nur] ist das noch möglich.  
 only today is that still possible
- (d) **Informal Analysis:** The fact that DiPs can form a constituent with, and be pied piped by *wh*-movement of its associate provides a simple account for the acceptability of the fragment question in (17b).

**I could have stopped here but there is a dispute about  
 the status of DiP examples such as (18):**

Ott & Struckmeier (2018) dismiss examples of this sort as irrelevant because these “combinations are *not productive* [...] and are *downright ungrammatical* in most cases” (fn.7).

- (e) **The status of examples like (18):** Ott & Struckmeier’s dismissal does not do justice to the fact that these examples are frequently found in speech as well as writing; there is no *a priori* reason for assuming that the questions in (18) have a different status than the fully acceptable declaratives in (19).
- I. Focus particles may occur together with their associate in a single phrase, may be used as a stand-alone in the middle field of the clause, and some varieties of Dutch can combine both uses in a single clause; cf. Barbiers (2010; 2014).



- (20) a. [Maar één student] ken ik —.  
 b. — Eén student ken ik maar.  
 c. [Maar één student] ken ik maar.  
 only one student know I only  
 ‘I know only one student.’

II. DiPs exhibit the same variation. The internet examples in (21) show that they can also be doubled; more attested examples in Bayer (2018; 2019).

- (21) a. [Vor was *denn*] ist er *denn* geflüchtet?  
 from what DENN is he DENN fled  
 ‘what did he flee from, I wonder?’  
 b. [Warum *nur*] seid ihr *nur* sooo gehässig?  
 why NUR are you<sub>pl</sub> NUR so bitchy  
 ‘Why on earth are you so bitchy?’

(f) **Formal Analysis of (21a) which allows DiPs to end up in the specifier of CP** (or any other functional projection) despite the fact that they are immobile themselves; cf. Bayer & Obenauer (2011) and Bayer (2017; 2018).

- (22) [CP ...C [... [PrtP ... *denn*<sub>2</sub> [... [V/vP ... [SPrtP ... *denn*<sub>1</sub> [Vor was]] geflüchtet]]]]

- (i) movement of the PP *vor was* is moved into the specifier of SPrtP in order to check the unvalued features of *denn*<sub>1</sub>;  
 (ii) movement of SPrtP itself into the specifier of PrtP in order to check unvalued features of *denn*<sub>2</sub> and;  
 (iii) subsequently movement into the specifier of CP in order to check the unvalued Q-feature in C by the *wh*-phrase *vor was*.

(g) **Conclusion:** The proposed analysis voids Ott & Struckmeier’s empirical motivation for the ISA and solves the problem for SSA (as well as MDA).

### Appendix: An (apparent) problem with Dutch *dan*

The spell-out of the two occurrences of the DIP is subject to language-specific constraints: some varieties prefer spell-out of *denn*<sub>1</sub>, other varieties prefer spell-out of *denn*<sub>2</sub>, while still other varieties allow the two types to co-occur.

- (23) a. Voor wie is hij *dan* gevluht? [Standard Dutch]  
 b. ?[Voor wie *dan*] is hij gevluht?  
 c. \*[Voor wie *dan*] is hij *dan* gevluht?  
 from who DENN is he DENN fled  
 ‘Who did he flee from, I wonder?’

SSA seems to predict that Standard Dutch differs from the German varieties discussed by Bayer & Obenauer in that it does not allow *dan* to occur in fragment clauses: the DiP *dan* in (23a) is the head of PrtP and can therefore not be spelled-out in (24b).

- (24) a. A. Peter invited a couple of people.  
 b. B. Wie *dan*? ‘Who?’

**Solution:**

- (a) If structure (21) is also available in Dutch, language-specific spell-out of particles in non-reduced clauses must be a matter of preference: Dutch simply prefers spell-out of *dan*<sub>2</sub> (the head of the PrtP) over spell-out of *dan*<sub>1</sub> (the head of SPrtP).
- (b) When spell-out of *dan*<sub>2</sub> is impossible for some independent reason, Dutch may take recourse to spell-out of *dan*<sub>1</sub> in order to avoid a violation of recoverability (along lines familiar from optimality theory).
- (c) This is what happens in the case of clausal ellipsis: *dan*<sub>2</sub> cannot be spelled out as part of the fragment clause because it is the head of PrtP, so the second best option of spelling out *dan*<sub>1</sub> is selected in order to satisfy recoverability, as in fragment clause (24b).

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