Movement or ellipsis: What’s the difference?!

Lobke Aelbrecht
GIST / Ghent Universiteit
lobke.aelbrecht@ugent.be
http://www.gist.ugent.be/members/lobkeaelbrecht

OUTLINE OF THE TALK

1 BACKGROUND: ONE SYNTACTIC CONDITION ON EMPTY ELEMENTS
2 JOHNSON (2001): ELLIPSIS SITES ARE (LIKE) TRACES
3 DIFFERENCES BETWEEN VP ELLIPSIS AND VP FRONTING
4 ANALYSIS: TRACES ARE (LIKE) ELLIPSIS SITES
5 TECHNICAL IMPLEMENTATION: LICENSING SILENCE VIA AGREE
6 EXTENDING THE ANALYSIS: POTENTIAL PROBLEMS
7 CONCLUSION AND FURTHER ISSUES

Main claims
1 Both VP ellipsis and VP fronting are syntactically licensed by the same syntactic mechanism. This explains the similarities between the two phenomena.

2 In both VP ellipsis and VP fronting the specific syntactic environment licenses the non-pronunciation at PF of a VP: VP ellipsis involves non-pronunciation of the original VP VP fronting involves non-pronunciation of the lower copy of VP. Movement traces are (like) ellipsis sites.

3 The differences between VP ellipsis and VP fronting are due to the fact that fronting involves movement and ellipsis does not.

4 A way of capturing this syntactic licensing condition is by claiming that ellipsis (and by extension deletion of the lower copy in movement) is licensed by Agree (Aelbrecht 2010).

1 BACKGROUND: ONE SYNTACTIC CONDITION ON EMPTY ELEMENTS

Rizzi (1986: 518) argues for a separation of the recovery condition and the formal licensing condition of empty elements.

① Recovery condition = how traces, PRO, ellipsis sites etc. are identified.
   ➔ discourse structural/semantic/pragmatic

   ➔ syntactic condition on ellipsis

Research Questions:

➔ One single licensing condition for ellipsis and movement?
➔ How to do this in a Minimalist framework?

2 JOHNSON (2001): ELLIPSIS SITES ARE (LIKE) TRACES

Main focus of this talk: VP ellipsis (VPE) and VP fronting (VPF) in English.

(1) a. Ryan said he would write a book and he did [write a book]. [VPE]
    b. Ryan said he would write a book and [write a book] he did t. [VPF]

• VP Fronting (VPF) and VP ellipsis (VPE) exhibit parallel syntactic behaviour (Johnson 2001; see also Zagona 1982).

① They occur in the same environments: Both an elided VP and the trace left by a fronted VP must be governed by an Aux (Johnson 2001).

(2) a. * Alice told Julia to be eating fish, so [eating fish] she started t.
    b. Alice told Julia to be eating fish, so [eating fish] she should be t.
    c. * No-one suspected Drew wanted to leave, but [to leave] he wanted t.
    d. No-one suspected Drew wanted to leave, but [leave] he wanted to t.
3 Differences between VP Ellipsis and VP Fronting

- This prediction is not borne out: there are environments disallowing VPF, but VPE is still possible (see also Aelbrecht & Haegeman 2011).

  VPF is a main clause phenomenon: It cannot occur with factive main predicates, sentential subjects or temporal clauses (Hooper & Thompson 1973; Green 1976; Haegeman to appear; see also Emonds 1969).

(7) a. * Christina plans for Tim to marry her and it bothers me that [marry her] he will.
     b. * Jonathan said he’d win that girl’s heart and that [win her heart] he did.
     c. * Jeneen went to the supermarket after [go to the supermarket] I did.

VPE is fine in such contexts.

(8) a. Christina plans for Tim to marry her and it bothers me that he will.
     b. Jonathan said he’d win that girl’s heart and that he did.
     c. Jeneen went to the supermarket after I did.

VPF is island-sensitive, whereas VPE is not:

(9) a. * Gerald didn’t travel to Denmark, but [travel to Denmark], I know a.
     b. Gerald didn’t travel to Denmark, but I know a.

→ VPE cannot be licensed through VPF. Ellipsis sites are not the result of movement, i.e. they are not (like) traces.

→ But what about the similarities?

Prediction: Whenever VPF is disallowed, VPE should be equally impossible.
ANALYSIS: TRACES ARE (LIKE) ELLIPSIS SITES

4.1 Movement as ellipsis of the lower copy

Main hypothesis

Both VPE and VPF are syntactically licensed by the same syntactic mechanism. This explains the similarities between the two phenomena.

In both VPE and VPF the specific syntactic environment licenses the non-pronunciation at PF of a VP:
- VPE involves non-pronunciation of the original VP
- VPF involves non-pronunciation of the lower copy of the VP.

⇒ Movement traces are (like) ellipsis sites.

4.2 Explaining the differences between VPE and VPF

① VPF is impossible in complement clauses of factive predicates, sentential subjects and temporal adjuncts, unlike VPE.

⇒ Emonds (1970, 1976), Hooper & Thompson (1973) and Green (1976) classify VP fronting as a main clause phenomenon (MCP).

Other cases of MCP (examples taken from Hooper & Thompson 1973: 467):

(10) a. [Never in my life] have I seen such a crowd. [Negative Constituent Preposing]
b. [This book], you should read. [Argument Fronting]
c. [On the wall] hangs a portrait of Mao. [Locative Inversion]

⇒ MCP are restricted to main clauses (see (10)) and certain embedded clauses:

(11) a. I exclaimed that [never in my life] had I seen such a crowd.
b. The inspector explained that [each part] he had examined carefully.
c. The scout reported that [beyond the next hill] stood a large fortress.

(12) a. * He was surprised that [never in my life] had I seen a hippopotamus
b. * I regret that [each part] he had to examine carefully.
c. * The guide regretted that [beyond the next hill] stood a large fortress.

Haegeman & Ürögdi (2010) explain this restriction in the following way:

The environments that disallow MCP involve operator movement in the embedded clause. Since MCP involves movement, they are excluded from these contexts because of intervention effects.

② VPF is island-sensitive, unlike VPE.

(13) a. * Gerald didn’t travel to Denmark, but [travel to Denmark] I know a [guy [who did t]].
b. Gerald didn’t travel to Denmark, but I know a [guy [who did [travel to Denmark]]].

Explanation for the differences with VPE: VPF involves movement of the VP, whereas VPE does not.

5 TECHNICAL IMPLEMENTATION: LICENSING SILENCE VIA AGREE

Overview

5.1 Licensing VPE via Agree (Aelbrecht 2010)
5.1.1 Licensing ellipsis: Merchant (2001)
5.1.2 Why Agree? Material between the licensor and the ellipsis site
5.1.3 How Agree?
5.1.4 VP ellipsis and Agree

5.2 Licensing VP fronting via Agree
5.1 Licensing ellipsis via Agree

5.1.1 Licensing ellipsis: Merchant (2001)

- Sluicing:

  (14) Addie was reading something, but I don’t know what [she was reading].

  Sluicing = licensed by an ellipsis-feature [E] that occurs on the licensing head and triggers deletion at PF of its complement.

  (15) a. The syntax of Eₜ: Eₜ [uŋh*, uQ*] → Interrogative C head
    b. The phonology of Eₜ: φTP → Ø/Eₜ
    c. The semantics of Eₜ: [Eₜ] = λp : e-GIVEN (p) [p]

- Example:

  (16) [CAT [E [uŋh,uQ]]] [wh, Q] [INFL [uΦ]:_] [SEL [...] [Addie was reading t]]

  \( \rightarrow \) licensor and ellipsis site in head-complement relation

5.1.2 Why Agree? Material between the licensor and the ellipsis site


  (17) a. He said he wouldn’t buy me a coffee, but he **did**.
    b. I’m going to take Italian classes and she **should** too.
    c. * I hadn’t been thinking about it, but I recall Diana **having been**.
    d. * Kim having shown up at the game and Alice not **having** was a surprise to everyone.

- The finite auxiliary and the VP ellipsis site are not always adjacent:

  (17) I hadn’t been thinking about it, but I **should have been** thinking about it.

  \( \rightarrow \) Ellipsis cannot be licensed via a head-complement relation.

  **Claim**: ellipsis is licensed via Agree (Aelbrecht 2010)

3.1.3 How Agree?

- Merchant’s [E]-feature: Both ellipsis site and licensor are identified at once because they are adjacent.

  \( \rightarrow \) Because this is impossible if they are not adjacent, I propose a more complex [E]-feature.

- I propose heads are feature bundles with the following feature structure:

  (18) \( \langle \text{CAT [...]} \rangle \rightarrow \text{specifies the category of the head} \)
    \( \langle \text{INFL [...]} \rangle \rightarrow \text{uninterpretable INFL-features have to be checked} \)
    \( \langle \text{SEL [...]} \rangle \rightarrow \text{specifies the selectional criteria of the head} \)

  (19) a. Ryan is smart.
    b. [CAT Ryan] [INFL [N [Φ: 3sg]]] [T [TP [pres]]] [SEL [uΦ:]] [SEL [...] [INFL [uΦ:]]] [SEL [...] [INFL [uΦ:]]]
5.1.4 VP ellipsis and Agree

• The syntax of [E] (in general):

\[
\begin{align*}
E & \leftarrow \text{CAT} \ [E/X] \\
& \text{INFL} \ [uF] \\
& \text{SEL} \ [X] \\
\end{align*}
\]

\[
\begin{align*}
\Rightarrow & \ [uF]-\text{feature, to be checked against the licensor} \\
\Rightarrow & \ \text{specifies the head on which [E] can occur}
\end{align*}
\]

\[
\begin{align*}
L & \Rightarrow \text{licensor of category F} \\
\Rightarrow & \ [E] \text{ has an uninterpretable [F]-feature that has to be checked against L via Agree}
\end{align*}
\]

\Rightarrow \text{Ellipsis: licensed via Agree}

5.2 Licensing VP Fronting via Agree

• In the same discourse structure only certain VPs can be fronted:

\[
\begin{align*}
(24) & \begin{cases}
\text{a.} & * \text{Alice told Julia to be eating fish, so [eating fish] she started} \ t. \\
\text{b.} & \text{Alice told Julia to be eating fish, so [eating fish] she should be} \ t. \\
\text{c.} & * \text{No-one suspected Drew wanted to leave, but [to leave] he wanted} \ t. \\
\text{d.} & \text{No-one suspected Drew wanted to leave, but [leave] he wanted to} \ t.
\end{cases}
\end{align*}
\]

\[
(25) & \begin{cases}
\text{a.} & * \text{Julia hadn’t eaten fish, but Alice claimed that [have eaten fish] she should} \ t. \\
\text{b.} & \text{Julia hadn’t eaten fish, but Alice claimed that [eaten fish] she should have} \ t.
\end{cases}
\]

\Rightarrow \text{The movement trace or copy has to be syntactically licensed in the same way as VPE.}

• VP ellipsis is licensed by an Agree relation between T and an [E]-feature on Voice.

\Rightarrow \ I \text{claim that VPF is licensed by an Agree relation with the T head as well.}
Movement or ellipsis: What’s the difference?!

VPF is only possible in clauses with a finite auxiliary or infinitival to, not with non-finite auxiliaries:

(26) a. He feared that he wouldn’t make enough progress, and indeed, his main problem was [having made less progress than was expected].
   b. * He feared that he wouldn’t make enough progress, and indeed, [made less progress than was expected] his main problem was having t.
   c. I do not see it having made a difference.
   d. * … [made a difference] I could not see it having t.

Nonfinite auxiliaries can intervene between the licensor and the moved copy:

(27) They told us that Lou had left early, and [left early] he might have t.

This leads to the structure in (28): An Agree relation is established between T and Voice, licensing the empty element (trace or deleted copy of the VP) in Voice’s complement.

(28)

6  EXTENDING THE ANALYSIS: POTENTIAL PROBLEMS

Overview

6.1  Beyond the verb phrase

6.2  Beyond English

6.1  Beyond the verb phrase

① TP/NP ellipsis, but no TP/NP fronting

• TPs and NPs can be elided as well as VPs:

(29) a. Miffy bought something, but I don’t know what [TP Miffy bought t].
   b. Miffy didn’t like Aggie’s shoes, but she liked Melanie’s [NP shoes].

Like VPE, sluicing and NP ellipsis are restricted to certain syntactic environments:

(30) a. * Miffy said she had bought a present, but I don’t know whether [TP Miffy bought a present], actually.
   b. * Miffy likes the shoes and I liked the [NP shoes], as well.

→ Sluicing requires the presence of an interrogative C head [+wh, +Q] (see Merchant 2001).

= Explanation for why (30)a is ungrammatical

NP ellipsis (NPE) requires the presence of a possessive D head (or a D that agrees with its specifier, see Lobeck 1995; Saito & Murasugi 1999) (oversimplification!)

= Explanation for why (30)b is ungrammatical.

→ These restrictions can be captured by an Agree relation with these licensing heads as well (see also Merchant 2001, Aelbrecht 2010)
• Potential problem: TP fronting and NP fronting are not allowed at all (Saito and Murasugi 1999; Johnson 2001):

(31)  a. * [Miffy bought] I don’t know what $t_i$
    b. * [Miffy bought something] I didn’t know that $t_i$
    c. * [Shoes] Miffy likes Melanie’s $t_i$
    d. * [Shoes] Miffy likes the $t_i$

Solution (Saito and Murasugi 1999):
The ban on TP fronting/NP fronting in contexts that allow sluicing/NP ellipsis is due to Relativized Minimality (Rizzi 1990).

• TP fronting:

(32)  a. * [Miffy bought] I don’t know what $t_i$
    b. * [Miffy bought something] I didn’t know that $t_i$

In (32)a the moved TP has to skip a potential A’ landing site [Spec, CP] because it is occupied by the wh-element:

(33)  * [TP Miffy bought $t_{what}$] I don’t know [CP what [C- C $t_{TP}$]].

= violation of relativized minimality

!! This does not happen in (32)b, because there is no element in [Spec, CP], but in this case, the fronting is not syntactically licensed, parallel to sluicing:

(34)  * [TP Miffy bought something] I didn’t know [CP $t_{TP}$].

→ The Agree relation is only established in wh-questions, parallel to sluicing, but this implies that the moved TP violates relativized minimality.

→ We still need a syntactic licensing condition (Agree) to rule out (32)b.

• NP fronting:

(35)  a. * [Shoes] Miffy likes Melanie’s $t_i$
    b. * [Shoes] Miffy likes the $t_i$

In (35)a the moved NP has to skip a potential A’ landing site [Spec, DP] because it is occupied by the possessor, violating relativized minimality:

(36)  *[NP Shoes] Miffy likes [DP Melanie [D-’s $t_{NP}$]].

This does not happen in (35)b because there is no element in [Spec, DP], but in this case, the fronting is not syntactically licensed, parallel to NP ellipsis:

(37)  * [NP Shoes] Miffy likes [DP $t_{NP}$].

Moreover, Cinque (2004) argues that NP can move DP-internally in Romanian and observes a parallel between such movement and NPE: both trigger the full form of the demonstrative.

(38)  a. copii $\{ace\'\text{\c{s}}ti\{\text{ace\'\text{\c{s}}}ti\} doi buni$ (NP movement)
    b. {ace\'\text{\c{s}}ti\{\text{ace\'\text{\c{s}}}ti\} doi buni $t_{NP}$ (NP Ellipsis)

→ TP fronting and NP fronting can be licensed in principle, but the movement operation would violate relativized minimality, accounting for the ungrammaticality. TP ellipsis and NP ellipsis do not involve movement and are allowed.

→ In crossing [Spec, TP] VP fronting does not violate relativized minimality because [Spec, TP] is an A position and therefore not a potential landing site for the verb phrase.
PP/DP movement, but no PP/DP ellipsis

- **Problem:** PP fronting and DP fronting are allowed, but PP ellipsis and DP ellipsis are not (Johnson 2001: 444).

(39) a. [PP To Mag Wildwood] Joe said that Holly can talk toPP.
   b. * Joe can talk to Mag Wildwood and Holly can talk to Mag Wildwood, too.
   c. [DP This book] I like toDP.
   d. * You told me about this book, and I read this book.

→ It is unclear to me at this point why PP/DP ellipsis is illicit and how PP/DP fronting would be licensed.

Potential solutions (to be worked out):

- **PP ellipsis/fronting**
  2. Italian might display some cases of PP ellipsis (Guglielmo Cinque, p.c.):

(40) Io _ho_ mandato a Carlo una lettera e Maria ha mandato a Carlo una cartolina.
  Carlo a postcard
  ‘I have sent a letter to Carlo and Maria has sent a postcard.’

- **DP ellipsis/fronting**
  1. DP ellipsis: can null subjects in prodrop languages such as Spanish and Italian be considered cases of DP ellipsis? And cases of object drop?

(41) a. (Io) _vado_ al mare! [Italian]
  _I go.ISG_ to.the sea
  ‘I’m going to the sea.’

b. (Yo) no hablo _Español_. [Spanish]
  _I not speak.ISG_ Spanish
  ‘I don’t speak Spanish.’

(42) a. He wrote that book himself. – Yes, I know (that).
   b. Je dois travaill, tu comprends? [French]
  _I must work_ you _understand_
  ‘I have to work, you understand?’

→ Ban on (wider) DP ellipsis could be due to identification (recoverability condition)?

Rizzi (1986): difference between object drop and subject drop in Italian
Identification of null objects: only for human, plural, generic objects
Identification of null subjects: through Phi-features (no generic!)

→ This differs in different languages!
  See also Gavarró (1992): differences between languages concerning null subjects and null objects are due to recoverability, not to syntactic licensing

→ How exactly DP ellipsis (if it exists) is constrained by identification in a stricter way than ellipsis of the lower copy of a moved DP, is unclear to me at this point. To be worked out!

6.2 Beyond English

- **Problem:** If VPE and VPF are licensed by the same Agree relation, why don’t all languages that can front a verb phrase allow VP ellipsis?

→ Dutch: VPF, but no VPE

(43) a. Hij _zei_ dat _hij zou dansen, en_ [gedanst] heeft hij _t._
  _he said_ that _he would dance and danced has he_
  ‘He said he would dance, and dance he did.’

1 Thanks to Guglielmo Cinque for pointing this out to me.
b. Hij zei dat hij zou dansen en hij heeft *[gedanst].
   he said that he would dance and he has danced
   INTENDED: ‘He said he would dance, and he did.’

→ The distribution of VPE in other languages, as well as the conditions on VPF, need further examination.

→ Cross-linguistic research project with Irene Franco, Anikó Lipták and Andrés Saab at Leiden University:
   • No (English-like)VPF nor VPE in Spanish
   • No VPF nor VPE in Icelandic

   • To what extent is VP Fronting the same in different languages?

   Dutch: preference for presence of dat (resumptive pronoun of contrastive left dislocation?)

(44) Hij zei dat hij zou dansen, en gedanst, dat heeft hij.
   he said that he would dance and danced that has he
   ‘He said that he would dance and danced he has.’

7 CONCLUSION AND FURTHER ISSUES

7.1 Further issues

① The trigger for movement

• Important note: Licensing is not the same as triggering movement or ellipsis.

→ A sentence with a salient antecedent in which ellipsis is syntactically licensed does not always contain an ellipsis site. Ellipsis is optional.

→ Even if fronting of a VP is licensed and in the right discourse structure, the VP is not always fronted. The fronting itself is triggered by something else, possibly a Top(icalization) feature on the verb phrase itself (Repel movement or foot-driven movement, see Platzack 1996; van Craenenbroeck 2006).

Problem: If the fronting itself is triggered by a feature, why can’t this act as syntactic licensing? Why does a movement trace/ellipsis site need to be syntactically licensed independent from the actual trigger?

② The Agree relation

• What does T agree with in VPF? What is the nature of the Agree relation?

→ In the slightly longer run, we would like to get rid of an [E]-feature for ellipsis and capture the Agree relation in VPE and VPF (and possibly other phenomena, such as VP proforms do it and do so) in a different way.

Problem: At the point when T establishes an Agree relation to license VPF, the verb phrase is not an empty element yet, so it does not need licensing yet.

Possible solution: The verb phrase has already moved to the edge of the clause-internal phase. If the empty element (or unpronounced lower copy) is not licensed by T later on, the derivation will crash.

7.2 Conclusion

Main claims ① Both VPE and VPF are syntactically licensed by the same syntactic mechanism, explaining the similarities between the two.

② In both VPE and VPF the specific syntactic environment licenses the non- pronunciation at PF of a VP:
   VPE involves non- pronunciation of the original VP
   VPF involves non- pronunciation of the lower copy of the VP.

   → Movement traces are like ellipsis sites.

③ The differences between VPE and VPF in English are due to the fact that VPF involves movement and VPE does not.

④ A way of capturing this syntactic licensing condition is by claiming that ellipsis (and by extension deletion of the lower copy in movement) is licensed by Agree.
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Lobke Aelbrecht (GIST / Ghent University)
Muinkkaai 42, 9000 Ghent (Belgium)
lobke.aelbrecht@ugent.be
http://www.gist.ugent.be/members/lobkeaelbrecht

Research funded by FWO