To be or not to be elided

Lobke Aelbrecht & Will Harwood (GIST/Ghent University)

New Researchers Forum in Linguistics,
Manchester
2 November 2012
Observation (1)

- More than just VP/vP is targeted by VPE (Akmajian & Wasow 1975, Sag 1976):

(1) Betsy must have been being hassled by the police, and...
   a. * Peter must, too.
   b. Peter must have, too.
   c. Peter must have been, too.
   d. * Peter must have been being too.
Observation (2)
Akmajian & Wasow (1975), Sag (1976):
- Lexical verb obligatorily elided under VPE
- *Being* obligatorily elided under VPE
- *Have*, modals and finite auxiliaries never elided under VPE
- *Be/been* optionally elided under VPE

<table>
<thead>
<tr>
<th></th>
<th>Modal/finite aux</th>
<th>Have</th>
<th>Be</th>
<th>Been</th>
<th>Being</th>
<th>Lexical V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elided</td>
<td>*</td>
<td>*</td>
<td>(✓)</td>
<td>(✓)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

→ Aim: explore and explain this observation
Main claims

- VP Ellipsis targets the progressive aspectual layer (when it is present in the derivation).
- Optional auxiliary ellipsis = optional raising of auxiliaries out of the ellipsis site + rescue by PF deletion of the non-raised auxiliaries
Overview

1. Preliminary assumptions
2. Determining the ellipsis site
3. Auxiliary ellipsis
4. VP fronting
5. Further evidence
Preliminaries: The IP layer (1)


```
TP
  T
  ModP
    Mod
    InfP
      Inf
      vPperf
      vperf
      Perf
      vPprog
      vprog
      Prog
      v
      Voice
      VoiceP
```
Preliminaries: The IP layer (1)


```
TP -> Modal
<table>
<thead>
<tr>
<th>T</th>
<th>ModP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODAL</td>
<td>InfP</td>
</tr>
<tr>
<td>Inf</td>
<td>vPperf</td>
</tr>
<tr>
<td>HAVE</td>
<td>PerfP</td>
</tr>
<tr>
<td>Perf</td>
<td>vPprog</td>
</tr>
<tr>
<td>BE</td>
<td>ProgP</td>
</tr>
<tr>
<td>BE</td>
<td>VoiceP</td>
</tr>
<tr>
<td>Voice</td>
<td>VP</td>
</tr>
</tbody>
</table>
```

Progressive be

Perfect have

Passive/copula be
Lasnik (1995):

```
TP
  [iT]
    ModP
      InfP
        [iInf]
          vP
            PerfP
              [iPerf]
                vP
                  ProgP
                    [iProg]
                      vP
                        VoiceP
                          Voice
                            VP
```
Preliminaries: The IP layer (2)

Lasnik (1995):

TP

[iT] ModP

InfP

[iInf] vPperf

PerfP

[iPerf] vPprog

ProgP

[iProg] VP

[Voice] VoiceP
Preliminaries: The IP layer (2)

Lasnik (1995):

TP

[iT]

ModP

InfP

[vPperf]

[ilInf]

PerfP

[iPerf]

[vPprog]

BEEN [uPerf]

ProgP

[iProg]

[vP]

VoiceP

Voice

VP
Preliminaries: The IP layer (2)

Lasnik (1995):

```
[ iT ]
TP
  ModP
    [ iInf ]
    InfP
      [ iPerf ]
      vP\perp
        PerfP
          vP\progs
            ProgP
              VP
                VoiceP
                  Voice
                  VP
```

```
[ iInf ]
HAVE
  [ ulInf ]
  [ iPerf ]
  BE
    [ ulInf ]
    [ iProg ]
    BE
      [ ulInf ]
      [ iProg ]
      vP
        Voice
        VP
```
Preliminaries: The IP layer (2)

Lasnik (1995):

```
TP
  \_ iT
    MOD [uT]
      InfP
        [iInf]
          vPperP
            [iPerP]
              vPproP
                [iProP]
                  Fin BE [uT]
                    [iProP]
                      Fin BE [uT]
                        [iProP]
                          Fin HAVE [uT]
                            [iProP]
                              MOD [uT]
                                InfP
                                  [iInf]
                                    vPperP
                                      [iPerP]
                                        vPproP
                                          [iProP]
                                            Fin HAVE [uT]
                                              [iProP]
                                                TP
                                                  iT
```
Preliminaries: The IP layer (3)

- IMPORTANT: The overt movement of auxiliaries is a concern for PF only.
- Auxiliaries could potentially move covertly to check inflectional features at LF, BUT...
- No overt movement/checking = crash at PF
Overview

1. Preliminary assumptions
2. Determining the ellipsis site
3. Auxiliary ellipsis
4. VP fronting
5. Further evidence
Determining the ellipsis site (1)
Determining the ellipsis site (2)

Evidence:

1. Auxiliary Ellipsis: only auxiliaries generated within or below the progressive aspectual layer can be elided
2. Aspectual mismatches (see Lasnik 1995 for data)
Determining the ellipsis site (3)

Two basic accounts for optional auxiliary ellipsis:

1. Optional extension of ellipsis site (Akmajian, Steele & Wasow 1979, Boskovic 2012)
2. Optional raising of auxiliaries (Sailor 2012, Thoms 2012)

→ Consensus: auxiliaries can only be elided if they are at some point contained within the ellipsis site
Determining the ellipsis site (4)

We argue that only auxiliaries generated within or below the progressive aspectual layer can be elided

= VPE targets vPprog

• Copula *be/been* can be elided:
  (2) John has been in the garden, and Mary has *(been)* in the garden, too.
  (3) John will be in the garden, and Mary will *(be)* in the garden, too.

• Passive *be/been* can be elided:
  (4) John has been arrested, and Mary has *(been) arrested*, too.
  (5) John might be arrested, and Mary might *(be) arrested*, too.
Determining the ellipsis site (5)

- Progressive *be/been* can be elided:
  (6) John has been eating offal, and Mary has *(been)* eating offal, too.
  (7) John might be eating offal, and Mary might *(be)* eating offal, too.

BUT: a mismatch interpretation is also possible:
(8) John has been eating offal, and Mary has *(eaten)* offal, too.
(9) John might be eating offal, and Mary might *(eat)* offal, too.

➡️ The mismatch interpretation masks whether or not the progressive auxiliary can genuinely be elided.
Determining the ellipsis site (6)

Can the progressive auxiliary genuinely be elided?

→ Our answer: YES

Evidence: ellipsis and existentials, ellipsis and idioms.
Determining the ellipsis site (7)

1. Unergative, transitive and ditransitive existentials in English are dependent upon progressive aspect:

(10) There was a clown dancing at my birthday party.
(11)* There has a clown danced at my birthday party.
(12)* There might a clown dance at my birthday party.
(13)* There danced a clown at my birthday party.
Determining the ellipsis site (8)

If ellipsis is applied to such constructions, no potential aspectual mismatch interpretation may interfere.

(14) John said there had been a clown dancing at his birthday party, even though we all knew that there hadn’t (been) a clown dancing...

(15) John said there would be a clown dancing at his birthday party, even though we all knew that there wouldn’t (be) a clown dancing...

Ellipsis of the progressive auxiliary is indeed possible.
Determining the ellipsis site (9)

2. Certain idioms are dependent upon progressive aspect:

(16) John is dying to meet you = John is keen to meet you.
(17) John has died to meet you ≠ John has been keen to meet you.
(18) John will die to meet you ≠ John will be keen to meet you.
(19) John died to meet you ≠ John was keen to meet you.
Determining the ellipsis site (10)

If ellipsis is applied to such constructions, and the idiom remains intact, no potential aspectual mismatch interpretation may interfere.

(20) John has been dying to meet you, even though he says that he hasn’t (been) dying to meet you.

(21) John will be dying to meet you, even though he’ll say that he won’t (be) dying to meet you.

Ellipsis of the progressive auxiliary is indeed possible.
Determining the ellipsis site (11)

Recapitulating so far:
- Passive *be/been* can be elided.
- Copula *be/been* can be elided.
- Progressive *be/been* can be elided.

- How about perfect *have*?
- How about modals?
Determining the ellipsis site (12)

- Perfect *have* can be elided:

(22) John might have eaten offal, and Mary might *(have)* eaten offal, too.

BUT: a mismatch interpretation is also possible:

(23) John might have eaten offal, and Mary might *eat* offal, too.

- The mismatch interpretation masks whether or not the perfect auxiliary can genuinely be elided.
Determining the ellipsis site (13)

Can the perfect auxiliary genuinely be elided?

→ Our answer: NO

Evidence: ellipsis and idioms, ellipsis and been.
Determining the ellipsis site (14)

1. Certain constructions are dependent upon perfect aspect:

(24) John has been to Rome.
(25)* John is being to Rome.
(26)* John will be to Rome.
(27)* John is to Rome.

(28) John has been around the block a few times.
(29)* John is being around the block a few times.
(30)* John will be around the block a few times.
(31)* John was around the block a few times.
Determining the ellipsis site (15)

If ellipsis is applied to such constructions, no potential aspectual mismatch interpretation may interfere.

(32) This time next year, John will have been to Rome, and Mary will *(have) been to Rome, too.
(33) Mary thinks that John might have been around the block a few times, and indeed he might *(have) been around the block...

Ellipsis of the perfect auxiliary is in fact impossible.
Determining the ellipsis site (16)

2. Auxiliaries can only be elided if they have an identical antecedent (Lasnik 1995, Warner 1986):

(34) Sue has **been** eaten by cannibals, and Rob might *(be), too.
(35) Sue **was** eaten by cannibals, and Rob might *(be), too.
(36) Sue might **be** eaten by cannibals now that Rob has *(been).
(37) Sue **was** eaten by cannibals after Rob had *(been).
Determining the ellipsis site (17)

- In the following sentence, the elided passive auxiliary *been* is dependent upon perfect aspect in order to be identical to its antecedent:

(38) John might have been fired, and Morag might have *(been)* fired, too.
(Thoms 2010)

If *have* is elided in such constructions, no potential aspecual mismatch interpretation may interfere.

(39) John might have been fired, and Morag might *(have) been fired, too.*

Ellipsis of the perfect auxiliary is in fact **impossible**.
Determining the ellipsis site (18)

- As standardly assumed, modals can never be elided:

(40) John might not be fired, but Morag *(might) be fired.

**Conclusion:**
- Progressive, passive and copular auxiliaries can be elided.
- The perfect auxiliary and modal cannot be elided.

▶ The progressive aspectual layer is targeted by ellipsis!
Overview

1. Preliminary assumptions
2. Determining the ellipsis site
3. Auxiliary ellipsis
4. VP fronting
5. Further evidence
# Auxiliary ellipsis (1)

- **Reminder**

<table>
<thead>
<tr>
<th></th>
<th>Modal/finite aux</th>
<th>Have</th>
<th>Be</th>
<th>Been</th>
<th>Being</th>
<th>Lexical V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elided</td>
<td>*</td>
<td>*</td>
<td>(√)</td>
<td>(√)</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Auxiliary ellipsis: verb/being/have/modals
Auxiliary ellipsis: verb/being/have/modals
Auxiliary ellipsis: verb/being/have/modals (3)

**Elided**
Lexical verb: merged inside the ellipsis site and never raises out
Being: merged inside the ellipsis site and only raises to Prog°, INSIDE the ellipsis site

**Not elided**
Have: merged outside the ellipsis site
Modals: merged outside the ellipsis site
Auxiliary ellipsis: be/been (4)

*Be/been* are merged inside the ellipsis site
They raise out of the ellipsis site for checking

▶ Two options available:

1. Raise and check = survive ellipsis
2. Remain within the ellipsis site and be deleted via ellipsis, thereby removing the problematic PF features from the derivation
Auxiliary ellipsis: be/been - not elided (5)
Auxiliary ellipsis: be/been - not elided (5)
Auxiliary ellipsis: be/been - not elided (5)
Auxiliary ellipsis: be/been - elided (6)
Auxiliary ellipsis: be/been - elided (6)
 Auxiliary ellipsis: be/been (7)

- If *be/been* raise out of the ellipsis site to check their features, they survive ellipsis.
- If *be/been* do not raise and remain in the ellipsis site, their uninterpretable features are elided along with them, so the derivation does not crash at PF.

▷ Optional raising only made possible by rescue via ellipsis

▷ Prediction: auxiliary raising obligatory in all other contexts.

→ Relevant data: VP fronting.
Overview

1. Preliminary assumptions
2. Determining the ellipsis site
3. Auxiliary ellipsis
4. VP fronting
5. Further evidence
VP fronting (1)

VPF targets the same chunk of structure as VPE

(Zagona 1982; Johnson 2001; Kim 2003; Aelbrecht & Haegeman 2012; Funakoshi 2012; Aelbrecht 2012)

- The lexical verb is fronted
- *Being* is fronted
- *Have* is never fronted
- Modals are never fronted
VP fronting (2)

- Lexical verb and *being*: always fronted

(44)* If John says he has eaten fish, then [fish] he has eaten.
(45) If John says he has eaten fish, then [eaten fish] he has.
(46)* If John says he was being seduced, then [seduced] he was being.
(47) If John says he was being seduced, then [being seduced] he was.
VP fronting (3)

• Modals and *have*: never fronted

(41) If John says he may have eaten fish, then [eaten fish] he may have.
(42)* If John says he may have eaten fish, then [have eaten fish] he may.
(43) If John says he will eat fish, then [eat fish] he will.
(44)* If John says he will eat fish, then [will eat fish] he.

▶ Explanation: VPF targets same constituent as VPE: vPprog!
VP fronting (5)

- Akmajian, Steele & Wasow (1979) and Roberts: be/been can never be fronted, not even optionally:

(49) If John says he’ll be working late, then [working late] he will be.
(50)* If John says he’ll be working late, then [be working late] he will.
(51) If John says he has been working late, then [working late] he has been.
(52)* If John says he has been working late, then [been working late] he has.
VP fronting (6)

Fronted constituent same as ellipsis site: vPprog

*Be/been* are generated inside fronted constituent

- Two options for *be/been*:
  - *Be/been* raise out of VPF site to Perf°/Inf° to check features.
    - Not fronted, derivation fine.
  - *Be/been* do not raise and remain in the VPF site, but no ellipsis occurs to rescue the derivation.
    - The unchecked features remain and the derivation crashes.
Conclusion

- VPE and VPF target vPprog.
- Lexical verb never raises out of this site: never escapes ellipsis or fronting
- *Being* raises to Prog°, within the VPE/VPF site: never escapes ellipsis or fronting
- *Have* and modals are merged outside of the VPE/VPF site: never elided or fronted
- *Be/ben* are merged inside of the VPE/VPF site but raise out to check inflectional features:
  - If they raise in ellipsis contexts, they escape ellipsis.
  - Alternatively, *be/ben* may remain in the ellipsis site and be elided, having their unchecked features deleted at PF
  - *Be/ben* must raise in fronting contexts because there is no ellipsis operation to alternatively delete their features.
Thank You!