***T******o be or not to be elided: VP Ellipsis Revisited***

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**outline of the talk**

1Introduction: The Puzzle

2 Preliminary ingredients for the analysis

3 The Analysis, part I: A well-defined ellipsis site

4 The Analysis, part II: Optional raising

5 Digging deeper: Implementations and issues

6 Conclusions

1. **Introduction: The Puzzle**

• VP ellipsis (VPE) in English:

 The verb phrase (lexical verb and objects) is unpronounced.

 A finite auxiliary (or dummy *do*) remains.

1. a. An elephant can’t fly, but maybe a rhino \*(could) [~~fly~~].

 b. I thought the auxiliary hadn’t disappeared, but it \*(had) [~~disappeared~~].

 c. I thought the auxiliary wouldn’t disappear, but it \*(did) [~~disappear~~].

**Question**: What happens when there is more than one auxiliary?

Do non-finite auxiliaries remain (parallel to the finite one)?

 Or are they elided together with the lexical verb?

• Maximal range of auxiliaries in English

1. a. He could have been being arrested.

 b. finite modal > perfective *have* > progressive *be* > passive *be* > lexical verb

🡪 These auxiliaries do not behave alike:

➀ Nonfinite *have* is never elided (parallel to finite auxiliary)

1. The pizza guy should have called, and the governor should **\*(have)** [~~called~~] too

➁ *Being* is always elided, just like the lexical verb.

1. a. Ted was being [eaten by a gorilla] and Robin was **(\*being)** [~~eaten by a gorilla~~] too. (passive *be*)

 b. If Ted wasn’t being difficult, then who was **(\*being)** ~~difficult~~?

 (copular *be*)

➂ *Be* and *been* are optionally elided.

1. a. Ted shouldn’t be chasing gorillas, and you shouldn’t (**be**) [~~chasing gorillas~~] either. (progressive *be*)

 b. If Ted shouldn’t be prosecuted, then who should (**be**) [~~prosecuted~~]? (passive *be*)

 c. Ted should be home by now, and Barney should (**be**) [~~home by now~~] too. (copular *be*)

1. a. Ted had been chasing gorillas, and Robin had (**been**) [~~chasing gorillas~~] too. (progressive *be*)

 b. Ted said Robin had been eaten by a gorilla, but in fact she hadn’t (**been**) [~~eaten by a gorilla~~]. (passive *be*)

 c. If Robin hasn’t been the noisy one, then who has (**been**) [~~the noisy one~~]? (copular *be*)

**🡪** The pattern to account for (see also Bošković 2012; Thoms 2011; Sailor 2012):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **modal/finite aux** | ***have*** | ***be*** | ***been*** | ***being*** | **lexical V** |
| elided | \* | \* | ✓ | ✓ | ✓ | ✓ |
| remaining | ✓ | ✓ | ✓ | ✓ | \* | \* |

 Table 1: Deletion of verbal elements under VP ellipsis

1. **Preliminary ingredients for the analysis**

2.1 The structure of the verb phrase

2.2 Verbal inflections

*2.1 The structure of the verb phrase*

• Base position of the auxiliaries (based on Cinque 1999):

 modal: in vPmod 🡪 selects an InfP

 perfective *have*: in vPperf 🡪 selects a PerfP

 progressive *be*: in vPprog 🡪selects a ProgP

 passive *be* and copular *be*: base-generated in vP(voice) (Baker 1997; Eide and Åfarli 1997; Bowers 2002; Bošković 2004, 2012; Bjorkman 2011) 🡪 select a VoiceP

1. a. Ted should have been being trained by a lion tamer.

 TP

 

 *Ted* T’

 

 T° vPmod

 

 vmod InfP

 *should* 

 Inf° vPperf

 

 vperf PerfP

 *have* 

 Perf° vPprog

 

 vprog ProgP

 *be* 

 Prog° vP(voice)

 

 v° VoiceP

 *be* 

 Voice° VP

 

 V°

 *train*

 b.

• **Important**:

 If a certain aspect is not expressed in the clause, the vP which would introduce the aspectual auxiliary, and the aspectual phrase selected by it are absent.

*2.2 Verbal inflections*

• Lasnik (1995b) + Bjorkman (2011) + Boskovic (2007):

Auxiliaries have an uninterpretable inflectional (PF) feature: they probe down, but don’t find the interpretable counterpart to check it.

 🡪 They raise to the next projection and probe again (= foot-driven movement).

 🡪 The feature gets checked on the corresponding inflectional head.

This means for the maximal structure that:

 **modal** with **[*u*T]** raises to **T°** and gets its feature checked by [*i*T].

 ***have*** with **[*u*Inf]** raises to **Inf°** and gets its feature checked by [*i*Inf].

***been*** with **[*u*Perf]** raises to **Perf°** and gets its feature checked by [*i*Perf].

***being*** with **[*u*Prog]** raises to **Prog°** and gets its feature checked by [*i*Prog].

The uninterpretable features on the auxiliaries have to be checked before spell-out: otherwise the derivation crashes at PF.

Lexical verbs enter the derivation bare and get their affixes through linearization (Lasnik 1995b; Baker 2003).

• This gives us the structures below:

 TP

 

*Ted* T’

 

 T° [*i*T] vPmod

 

 vmod° InfP

 *should* [*u*T] 

 Inf° [*i*Inf] vPperf

 

 vperf° PerfP

 *have* [*u*Inf] 

 Perf° [*i*Perf] vPprog

 

 vprog° ProgP

 *been* [*u*Perf] 

 Prog° [*i*Prog] vP

 

 v° VoiceP

 *being* [*u*Prog] 

 Voice° VP

 [-*ed*] 

 V°

 *train*

1.
2.

 TP

 

*Ted* T’

 

 T° [*i*T] vPmod

 *should* [*~~u~~*~~T~~] 

 vmod° InfP

 t*should* 

 Inf° [*i*Inf] vPperf

 *have* [*~~u~~*~~Inf~~] 

 vperf° PerfP

 t*have* 

 Perf° [*i*Perf] vPprog

 *been* [*~~u~~*~~Perf~~] 

 vprog° ProgP

 t*been* 

 Prog° [*i*Prog] vP

 *being* [*~~u~~*~~Prog~~] 

 v° VoiceP

 t*being* 

 Voice° VP

 [-*ed*] 

 V°

 *train*

• Additionally:

 Finite auxiliaries with [*u*T] raise to T° and get their features checked by [*i*T].

 *be* with [*u*Inf] raises to Inf° and gets its feature checked by [*i*Inf].

• **Important**: **Inflectional features are a concern for PF only, not LF** (Chomsky 1993; Lasnik 1995b)

 Aspectual interpretation: determined by presence of aspectual projections (Adger 2003; Bjorkman 2011; Cinque 1999), not auxiliaries.

 Taiwanese: no aspectual auxiliaries, but aspectual markers (Sailor & Kuo 2010)

1. a. A-Ying kho-leng u chhih kau. (modal>perf)

A-Ying might perf feed dog

‘A-Ying might have fed the dog.’

 b. A-ha u teh hoo mama pak thau-chang

 (perf>prog>pass)

 A-Ha perf prog pass mother put.up hair

 ‘A-Ha is having her hair put up (on her) by her mother.’

 🡪 Auxiliaries do not contribute to the aspectual meaning of a sentence - they are semantically vacuous (Bjorkman 2011).

 🡪 In languages like English, auxiliaries seem to only be a formal requirement of the syntax; they have no effect at **LF**.

🡺 **Consequence**: If inflectional feature is not checked, the derivation crashes at PF.

1. **The analysis, Part I: A well-defined ellipsis site**

• Standardly: VPE elides VP or vP (Lasnik 1995a,b; Johnson 2001, 2004; Merchant 2001, 2007, 2008; Gengel 2007)

 **Our claim: VPE targets vPprog**

3.1 Aspectual mismatches

3.2 Existential constructions

*3.1 Aspectual mismatches*

• Quirk et al (1972), Sag (1976), Lasnik (1995b), Warner (1986):

 contrast between lexical verbs and auxiliaries wrt to mismatches under ellipsis.

 deleted lexical verb: no identical verb form needed in the antecedent (cf. (12))

 auxiliaries: require an identical verb form in the antecedent (cf. (13))

1. a. Ted **ate** a bunny burger and Robin will [**~~eat~~** ~~a …~~], too.

 b. Ted will **eat** a bunny burger because Robin has [**~~eaten~~** ~~a …~~].

1. a. Ted **is** eating a bunny burger and Robin might \*(**be**) [~~eating a …~~] too.

 b. Ted could **be** eating a bunny burger and Robin might (**be**) [~~eating a bunny burger~~] too.

 c. Ted **is** eating a bunny burger and Robin has \*(**been**) [~~eating a …~~] too.

 d. Ted has **been** eating a bunny burger and Robin has (**been**) [~~eating a …~~] too.

• Lasnik’s (1995b) proposal:

 Lexical verbs enter the derivation bare and get their inflection attached to them.

 Auxiliaries are introduced inflected and need to check an inflectional feature.

 **+**

 Ellipsis is subject to a syntactic identity condition between antecedent and ellipsis site.

 🡪 The lexical verb in the ellipsis site has a counterpart in the antecedent which was identical in form at one point during the derivation, unlike auxiliaries.

• However: progressive lexical verbs behave differently.

 **Generalisation:**

 antecedent with progressive verb + non-progressive ellipsis site 🡪 VPE = ok

 non-progressive antecedent + ellipsis of progressive lexical verb 🡪 VPE = \*

1. a. Ted is **eating** a bunny burger, but at least Robin won’t [**~~eat~~** ~~…~~].

 b. Ted may be **eating** a bunny burger, but Robin hasn’t [**~~eaten~~**  ~~…~~].

 c. \* Ted might **eat** a bunny burger, but Robin won’t be [**~~eating~~** ~~a …~~].

 d. \* Ted might have **eaten** a bunny burger, Robin hasn’t been [**~~eating~~** ~~a …~~].

• Lasnik’s solution:

the –*ing* affix is outside the ellipsis site and the lexical verb is inside.

🡪 The affix is left without anything to attach to, so the derivation crashes ((15)).

1. \* Ted will eat a bunny burger because Robin is ***-ing*** [~~eat a …~~].

• **Problem 1**: Why does the derivation not crash when the perfective *–en/ed* affix is supposedly stranded? (see Lasnik 1995b)

1. Ted will eat a bunny burger because Robin has -***en*** [~~eat a …~~].

**Problem 2**: The unacceptability of (14)c,d, is explained through the *–ing* inflection not having a host 🡪 prediction: all instances of VPE are ungrammatical when the progressive affix is stranded by ellipsis, even when there is a progressive lexical verb in the antecedent. This is not the case:

1. Ted has been eating a bunny burger and Robin has been -*ing* [~~eat a …~~] too.

• Our solution:

 Ellipsis site = vPprog 🡪 including Prog° which checks the [*u*Prog] (or in the case of a lexical verb, bears the –*ing* inflection)

 !! Only if progressive aspect is present; otherwise the ellipsis site is vP !!

 **+**

 Syntactic identity condition (Lasnik 1995b, Merchant 2008)

🡺 progressive antecedent + non-progressive ellipsis site: antecedent is bigger than the ellipsis site 🡪 the ellipsis site is fully recoverable = ok (see (18)).

🡺 non-progressive antecedent + progressive ellipsis site: antecedent is smaller than the ellipsis site 🡪 the ellipsis site is NOT fully recoverable = \* (see (19)).

1. a. Ted is **eating** a bunny burger, and Robin will [**~~eat~~** ~~a …~~] too.

 b. Antecedent: Ellipsis site:

 TP

 

*Ted* T’

 

 T° vPprog

  *is* 

 vprog° ProgP

 t*is* 

 Prog° vP

 [*i*Prog] 

 v° VoiceP

 

 Voice° VP

 

 V° DP

 *eat*

 TP

 

*Robin* T’

 

 T° vPmod

  *will* 

 vmod° InfP

 t*will* 

 Inf° vP

 [*i*Inf] 

 v° VoiceP

 

 Voice° VP

 

 V° DP

 *eat*

1. a. \* Ted will **eat** a bunny burger because Robin is [**~~eating~~** ~~a …~~].

 b. Antecedent: Ellipsis site:

 TP

 

*Ted* T’

 

 T° vPmod

 *will* 

 vmod° InfP

 t*will* 

 Inf° vP

 [*i*Inf] 

 v° VoiceP

 

 Voice° VP

 

 V° DP

 *eat*

 TP

 

*Robin* T’

 

 T° vPprog

  *is* 

 vprog° ProgP

 t*is* 

 Prog° vP

 [*i*Prog] 

 v° VoiceP

 

 Voice° VP

 

 V° DP

 *eating*

🡺 Prog° is included in the ellipsis site

• Sailor & Kuo (2010; henceforth S&K): same conclusion based on Taiwanese VPE.

 🡪 Taiwanese VPE does not target perfective markers and modals:

1. A-Ying ai u sai cchiab, A-Ha ma **ai** **u** [ ~~sai cchiab~~].

 A-Ying should perf drive car A-Ha also should perf drive car

 ‘A-Ying should have driven, and A-Ha also should have.’

🡪 The progressive particle *teh* cannot survive Taiwanese VPE:

1. A-Ying b-o teh cchih kau, tan-si A-Ha u (\* **teh**)[ ~~cchih …~~].

A-Ying neg-perf prog feed dog but A-Ha perf prog feed dog

‘A-Ying hadn’t been feeding the dog, but A-Ha had been.’ (S&K: (15))

🡺 The Progressive Prohibition: “VP Ellipsis necessarily elides at least the maximal projection of progressive morphology. That is, VP ellipsis is actually at least *ProgP* ellipsis” (Sailor & Kuo 2010: 4).

*3.2 Existential constructions*

**Claim**: vPprog, the base position of progressive *be* is also included in the ellipsis site.

**Argument**: existential constructions show that progressive *be* is also optionally elided

 🡪 Its base position needs to be in the ellipsis site.

• With progressive *be* it is less straightforward to show it is actually interpreted and present in the elided material:

1. John may be questioning our motives, but Peter won’t [~~be questioning our motives~~ / ~~question our motives~~].

• Existentials give us a way of showing that progressive *be* is elided:

 Unaccusative verbs can occur in all kinds of aspect, but transitive and unergative verbs are only allowed in the progressive form (Deal 2009; Harwood 2011):

1. a. There **arrived** a crocodile in the mail this morning. [unaccusat]

b. There **had arrived** a crocodile in the mail this morning.

c. There **will be** a crocodile **arriving** in the mail this morning.

1. a. \* There **ate** a crocodile a chocolate this afternoon. [transitive]

b. \* There **has** a crocodile **eaten** a chocolate this afternoon.

c. There **was** a crocodile **eating** a chocolate this afternoon.

1. a. \* There **danced** a crocodile in the garden this evening. [unergat]

b. \* There **has danced** a crocodile in the garden this evening.

c. There **was** a crocodile **dancing** in the garden this evening.

🡪 If we apply VPE to an existential with a transitive or unergative verb, progressive *be* is optionally present.

1. a. He said there has been a crocodile eating chocolates, but there hasn’t (**been**) [~~a crocodile eating chocolates~~].

 b. He said there shouldn’t be a crocodile dancing in the garden, but I think there should (**be**) [~~a crocodile dancing in the garden~~].

 🡺 At least the base position of progressive *be* is included in the ellipsis site.

 🡺 VPE deletes vPprog

1. **The analysis, part II: Optional raising**

The pattern we want to account for:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **modal/finite aux** | ***have*** | ***be*** | ***been*** | ***being*** | **lexical V** |
| elided | \* | \* | ✓ | ✓ | ✓ | ✓ |
| remaining | ✓ | ✓ | ✓ | ✓ | \* | \* |

 4.1 Always or never elided: *being* and *have*

 4.2 Optionally elided: *be* and *been*

4.3 Extending the analysis beyond English VPE

*4.1 Always or never elided:* being *and* have

• *Have*: base position = vPperf

 landing site = T° (finite) or Inf° (*have*)

 *Being*: base position = vP(voice)

 landing site = Prog°

• Our proposal: VPE targets vPprog

 🡪 Both the base position and landing sites of *have* are **outside** the ellipsis site.

 Both the base position and landing site of *being* are **inside** the ellipsis site.

🡺 *Have* is never elided.

 *Being* is always elided.

 TP

 

 T’

 

 T° vPmod

 (*has*)  

 vmod° InfP

 

 Inf° vPperf

 (*have*) 

 vperf° PerfP

 t*have* 

 Perf° vPprog

  

 vprog° ProgP

 

 Prog° [*i*Prog] vP

 *being* [*~~u~~*~~Prog~~] 

 v° VoiceP

 t*being* 

 Voice° VP

 

 V°

*4.2 Optionally elided:* be *and* been

• Non-ellipsis:

 *be* carries an uninterpretable [Inf] feature 🡪 moves to Inf° to check it

 *been* carries an uninterpretable [Perf] feature 🡪 moves to Perf° to check it

1. a. Ted will **be** eating a dolphin sandwich.

 b. [TP Ted will [ModP twill [InfP Inf°+*be*[*~~u~~*~~Inf~~] [vP(Prog) tbe [ProgP …]]]]]

1. a. Ted has **been** eating a dolphin sandwich.

 b. [TP Ted has [vP(Perf) thas [PerfP Perf°+*been*[*~~u~~*~~Perf~~] [vP(Prog) tbeen [ProgP …]]]]]

🡪 *Be/been* has to move out of its base position to check its PF feature, otherwise the derivation crashes because of a PF violation.

• Ellipsis (reminiscent of Lasnik 1995a, 2001)

**Our proposal** :

If an auxiliary raises out of the ellipsis site, it is able to check its features and survive ellipsis, but if it does not raise and remains in the ellipsis site, the auxiliary and (crucially) its unchecked feature are deleted by ellipsis, and no PF violation occurs.

1. a. Ted will be eating a dolphin sandwich and Robin will (be), too.

 b. Deletion of *be*  Non-deletion of *be*

 TP TP

  

*Robin* T’ *Robin* T’

  

 T° vPmod  T° vPmod

 *will*  *will *

 vmod° InfP vmod° InfP

  

 Inf° [*i*Inf] vPprog Inf° [*i*Inf] vPprog

  *be* [*~~u~~*~~Inf~~] 

 vprog° ProgP vprog° ProgP

 *be* [*u*Inf]  t*be* 

 Prog° vP Prog° vP

  

 *eating a … eating a …*

🡺 This captures the optional deletion of *be*/*been*:

 If *be/been* raises, the feature is checked and *be/been* survives the ellipsis.

 If *be/been* does not raise, the feature is not checked, but is deleted together with the auxiliary by VPE.

*4.3 Extending the analysis beyond English VPE*

• Tag Questions (Sailor 2009)

In American English tag questions, *being* is always absent and *have* is always present, just as with VPE:

1. a. Ted was being eaten by a gorilla, wasn’t he (\*being)?

 b. The pizza guy should have called by now, shouldn’t he \*(have)?

 🡪 Sailor: tag questions can be analysed as another instance of VPE.

Under American English tag questions, *be* and *been* are also optionally elided:

a. Ted has been eating dolphin sandwiches, hasn’t he (been)?

 b. Ted will be eating dolphin sandwiches, won’t he (be)?

 🡪 Our analysis can account for these data in a similar way to the VPE data.

However: In British English, all verbs but the finite aux are deleted (also *have*!).

a. Ted has been eating dolphin sandwiches, hasn’t he (\*been)?

 b. Ted will be eating dolphin sandwiches, won’t he (\*be)?

 c. The pizza guy should have called by now, shouldn’t he (\*have)?

 🡪 At present we have no means of analysing this data.

• VP fronting (VPF)

 VPE and VP fronting exhibit parallel syntactic behaviour (see Zagona 1982; Johnson 2001; Kim 2003; Aelbrecht & Haegeman to appear; Funakoshi to appear).

 ➀ 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: 444).

1. a. \* I never thought I’d see Jess become a sea lion trainer, but I saw [~~Jess become a sea lion trainer~~].

 b. \* I never thought I’d see Jess become a sea lion trainer, but [Jess become a sea lion trainer] I saw *t*.

1. a. I never thought I’d see Jess become a sea lion trainer, but I **did** [~~see Jess become a sea lion trainer~~].

 b. I never thought I’d see Jess become a sea lion trainer, but [see Jess become a sea lion trainer] I **did** *t*.

➁ VPE and VPF generally target the same chunk of the verb phrase: the perfective auxiliary *have* cannot be elided nor fronted, see (37).

1. a. \* Julia hadn’t eaten fish, but Peter claimed that [**have** eaten fish] she should *t*.

 b. Julia hadn’t eaten fish, but Peter claimed that [eaten fish] she should **have** *t*.

VPE obligatorily deletes progressive *being*. Similarly, VPF cannot leave *being* behind, see (38).

1. a. Will thought he was being seduced by his colleague and [**being** seduced by his colleague] he was.

 b. \* Will thought he was being seduced by his colleague and [seduced by his colleague] he was **being**.

🡺 VPF targets vPprog, just like VPE.

However: VPF never includes *be* or *been* in the fronted VP.

1. a. \* If he said he would be working all night then [**be** working all night] he would.

 b. If he said he would be working all night then [working all night] he would **be**.

 c. \* If he said he had been working all night, then [**been** working all night] he had.

 d. If he said he had been working all night, then [working all night] he had **been**.

🡪 This contrast can be captured under our analysis:

 *Be/been* can only be fronted if they do not raise, but that implies that their [*u*F] features remain unchecked in the (moved) higher copy of the verb phrase

 🡺 **Optional fronting** of *be/been* under VPF is **impossible**.

1. a. \* Ted said he would be working all night and indeed [vP(prog) **be[*u*Inf]** [working all night]] [TP he [would [InfP Inf°[*i*Inf] tvP(prog)]]].

 b. Ted said he would be working all night and indeed [vP(prog) **t*be*** [working all night]] [TP he [would [InfP Inf°[*i*Inf]+*be*[*~~u~~***~~Inf]~~** tvP(prog)]]].

• Pseudoclefting (Sailor 2012)

 Under pseudo-clefting, *being* is included in the moved verb phrase, whereas *be* and *been* never are, not even optionally ((41)), parallel to VPF, but unlike VPE.

1. a. Ted should be praised. – No, (\*be) criticised is what Ted should \*(be).

b. Ted should have been praised. – No, (\*been) criticised is what Ted should have \*(been).

c. Ted should be being praised. – No, \*(being) criticised is what Ted should be (\*being).

🡪 Our analysis can account for these data in a similar way to the VPF data.

1. **Digging deeper: issues and implementations**

5.1 VPE = predicate ellipsis

5.2 Mismatches: Voice versus progressive

5.3 The lexical and the finite verb

*5.1 VPE = predicate ellipsis*

• Problem for our analysis: what is targeted by VPE?

 If the sentence contains progressive aspect: vPprog

 If the sentence does not contain progressive aspect: vP(voice)

🡪 It is hard to formalise this and determine the ellipsis site.

 Potential solution:

 Determine the ellipsis site not by the projection that is deleted, but by the head that has its complement deleted, whatever that complement is.

 For instance: [E] feature (Merchant 2001) on a certain head triggers ellipsis of that head’s complement.

However: This does not solve the problem.

 If the sentence contains perfective aspect: complement of Perf°

 If the sentence does not contain perfective aspect: complement of Inf° or T°

🡺 Our proposal:

 VPE targets the highest projection of the clausal predicate.

 **VPE = predicate ellipsis**

• VPE does not only delete verbal structures:

1. a. The door was green, but the window wasn’t [~~green~~]. (AP)

b. Marshall could have been a hot air balloon pilot and Lily could have been [~~a hot air balloon pilot~~] too. (NP)

c. The chickens were in the garden, but unfortunately the crocodile was [~~in the garden~~] too. (PP)

 **Question**: what is included in the predicate?

 **Answer**: the lexical layer with the verb/adjective/noun/preposition

 the progressive (and passive?) layer

 NOT: the perfective layer, modals and tense

• Arguments for including the progressive (and passive?) in the predicate, but not the perfective:

➀ Idioms

 Idioms can include the lexical verb and an internal argument, the lexical verb and both internal and external arguments, but also the progressive aspect:

1. a. Throw someone to the wolves (verb + internal argument)

 b. # Throw someone to the hyenas

 c. The shit {hit/will hit/has hit} the fan. (verb + all arguments)

 d. # The shit hit the radiator.

 e. # The dirt hit the fan.

 f. Something {is/was/might be} eating Will (+progressive)

 g. # Something {has eaten/ate/eats} Will.

 If an idiom includes anything above progressive aspect, the whole clause is part of the idiom:

1. a. Is the Pope Catholic? (whole clause, including clause type)

 b. # The Pope is Catholic.

 c. Has the cat got your tongue?

 d. # The cat has got your tongue.

🡺 Idioms can target only predicate projections, or a whole clause (Svenonius 2005).

 Progressive aspect constitutes a predicative projection, unlike perfective.

➁ Lexical restrictions on progressive

 Not every verb can occur with progressive aspect, unlike with perfective.

 🡪 This information is lexically determined.

 🡪 Progressive aspect is more lexical than perfective aspect.

1. a. I {know/\*am knowing} French. [stative verbs: \*progr]

 b. I am running a marathon. [dynamic verbs: progr]

 c. I have known/loved that song for years. [stative verbs: perf]

 d. I have run a marathon. [dynamic verbs: perf]

➂ Morphological form of progressive

 Progressive in many languages differs in morphology from the other verb forms: it looks like a nominalisation (see Chomsky 1970 for English).

1. a. Ted(‘s) growing (of) a beard was the worst idea ever.

 b. De krokodil was aan het dansen. [Dutch]

 the crocodile was on the dance.inf

 ‘The crocodile was dancing.’

➃ Auxiliary

 Both the passive and the progressive use *be* as their auxiliary, which is the same auxiliary that is used in predicative constructions.

 Perfective aspect uses *have* as its auxiliary.

 Prediction (not tested yet): languages like Serbo-Croatian which have VPE but use *be* also for perfective might behave differently and include the perfective auxiliary in their ellipsis site.

🡺 We claim that the clausal predicate goes up to the progressive projection, but not higher.

 **Claim**: VPE targets the highest predicate projection.

 VPE elides vPprog when present and vP otherwise

 **🡪 VPE = predicate ellipsis**

*5.2 Mismatches: Voice versus progressive*

• Voice and progressive aspect behave differently with respect to VPE.

 Voice allows for mismatches between antecedent and ellipsis site (see Merchant 2007, 2008):

1. a. The janitor must remove the trash whenever it is apparent that it should be [~~removed~~]. (active-passive)

 b. The system can be used by anyone who wants to [~~use it~~].

 (passive-active)

 However: progressive aspectual mismatches are not allowed (in the ellipsis site):

1. a. \* Ted might **eat** a dolphin sandwich, but Robin definitely won’t be [**~~eating~~** ~~a dolphin sandwich~~].

 b. \* Ted might have **eaten** a dolphin sandwich, Robin hasn’t been [**~~eating~~** ~~a dolphin sandwich~~].

 c. \* First Ted **ate** a dolphin sandwich, and now Robin is [**~~eating~~** ~~a dolphin sandwich~~].

• Merchant (2007, 2008) about Voice mismatches: Voice is not included in the ellipsis site E 🡪 It is not subject to the recoverability condition and so can differ from the Voice of the antecedent A.

 = **Problem** for our account: Voice is lower than vPprog (our ellipsis site).

🡪 Is our account proven wrong already?

**Not necessarily**

Extra piece of data: Voice mismatches are disallowed when there is progressive aspect in E.

1. \* I thought he was being arrested by those police men, but in fact they weren’t [~~arresting him~~].

 🡪 This sentence would have to delete vPprog including VoiceP according to us.

🡺 This contrast between voice and aspect mismatches highlights the uniqueness of progressive aspect: interesting avenue for future research.

*5.3 The lexical and the finite verb*

• There is a categorial difference between lexical verbs and auxiliaries (Akmaijan, Steele & Wasow 1979; Steele 1981; Kayne 1989, Wexler 1994): lexical verbs can never raise to receive their inflection, but receive inflection through linearization (see Lasnik 1995b).

 🡪 If the verb cannot receive its inflection (in NICE contexts), the finite inflection appears to need another host to be overtly realized: dummy *do* is inserted.

• Our analysis of optional *be/been* deletion: *be* is base-generated inside vPprog and optionally raises up to form *be* or *been*.

**Problem**: Finite forms of *be* apparently do not have the option of not raising and letting their uninterpretable feature be deleted via ellipsis (unlike *be* and *been*). Why is dummy *do* insertion not available here?

 Potential solution: Dummy *do* insertion is a last resort operation. It is more costly than the raising of finite *be* to T°.

 🡪 Therefore this last resort solution is not available for *be*, because *be* can raise.

🡺 The big question remains: Why can’t lexical verbs raise? Why is there this distinction between lexical verbs and auxiliaries? Why does T° need a host but no other inflectional projections?

1. **Conclusions**

➊ We take the following approach to the verbal and tense layer of a clause:

1. TP > ModP > InfP > vPperf > PerfP > vPprog > ProgP > vP(voice) > VoiceP > VP

 VPE can elide as much as vPprog (if present).

➋ We assume that auxiliaries raise to check their uninterpretable [*u*F] feature (see Lasnik 1995), otherwise the derivation crashes at PF.

➌ This captures the obligatory deletion of *being* and the fact that auxiliary *have* is never elided:

 *being* has its base position and landing site (Prog°) in the ellipsis site.

 *have* is base generated in vperf, higher than the ellipsis site.

It also captures the optional deletion of *be* and *been*:

 *be/been* raises from vprog or lower inside the ellipsis site to Inf°/Perf° outside the ellipsis site.

However, under VPE they can also refrain from raising: ellipsis deletes their uninterpretable features and prevents the derivation from crashing.

 We have extended this approach to tag questions, VPF and pseudoclefts, and showed that tag questions can be analysed on a par with VPE. We also explained that in VPF and pseudoclefts, the auxiliaries have to raise out of the targeted constituent because there is no ellipsis to delete the unchecked feature.

➍ We argue that vPprog is part of the clausal predicate, which creates a boundary between the (predicative) verbal zone going up to vPprog and the TP zone.

➎ We argue that VPE could be formalised as predicate ellipsis: the ellipsis site is always the highest projection of the clausal predicate.

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