

G I S T
Generative Initiatives in Syntactic Theory



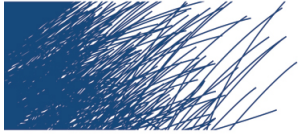
It wasn't elided, but it could have been: Optional deletion of auxiliaries in VP ellipsis

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Chicago Linguistic Society (CLS 49)

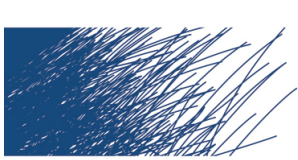
April 18-20, 2013





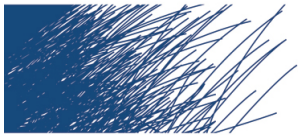
Overview

1. Introduction: the pattern
2. Preliminaries: The verbal structure
3. Analysis, Part I: The ellipsis site
4. Analysis, Part II: Auxiliary ellipsis
5. Extending the analysis: VP fronting
6. Digging deeper: Predicate ellipsis?
7. Conclusion and further issues



Introduction: the pattern (1)

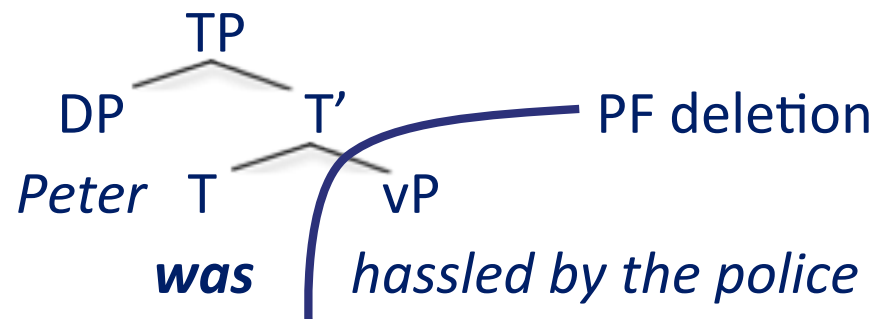
- VP ellipsis (VPE) = non-pronunciation of the verb phrase
- (1) Betsy was hassled by the police, and Peter was, too.
= ... and Peter was [~~hassled by the police~~], too.
- Finite auxiliary remains overt.
→ (English) main verb is always deleted, even when finite.
- (2) Betsy ate an apple, and Peter **did**, too.
= ... and Peter [ate an apple], too.

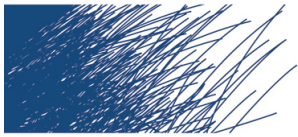


Introduction: the pattern (2)

→ Standardly:

Under a deletion approach to ellipsis, VPE is analysed as PF deletion of VP, or more recently vP, licensed by the auxiliary or the T head (Johnson 2001, 2004; Merchant 2001; Gengel 2007 and many others)





Introduction: the pattern (4)

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

- (4) Betsy must have been being hassled by the police, and...
- a. * Peter must ~~have been being~~ hassled by the police, too.
 - b. Peter must have ~~been being~~ hassled by the police, too.
 - c. Peter must have been ~~being~~ hassled by the police, too.
 - d.* Peter must have been being hassled by the police, too.

Introduction: the pattern (5)

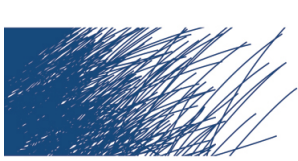
Akmajian & Wasow (1975), Sag (1976):

- 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

	Modal/ finite aux	Have	Be	Been	Being	Lexical V
Elided	*	*	(✓)	(✓)	✓	✓

→ Aim: explore and explain this observation

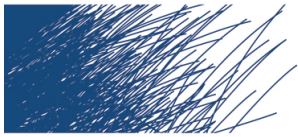
!! Discussion on deletion of *have*: see later



Introduction: the pattern (6)

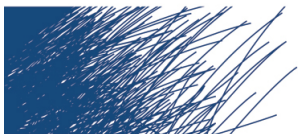
Main claims of this talk:

- 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
- VPE = predicate ellipsis



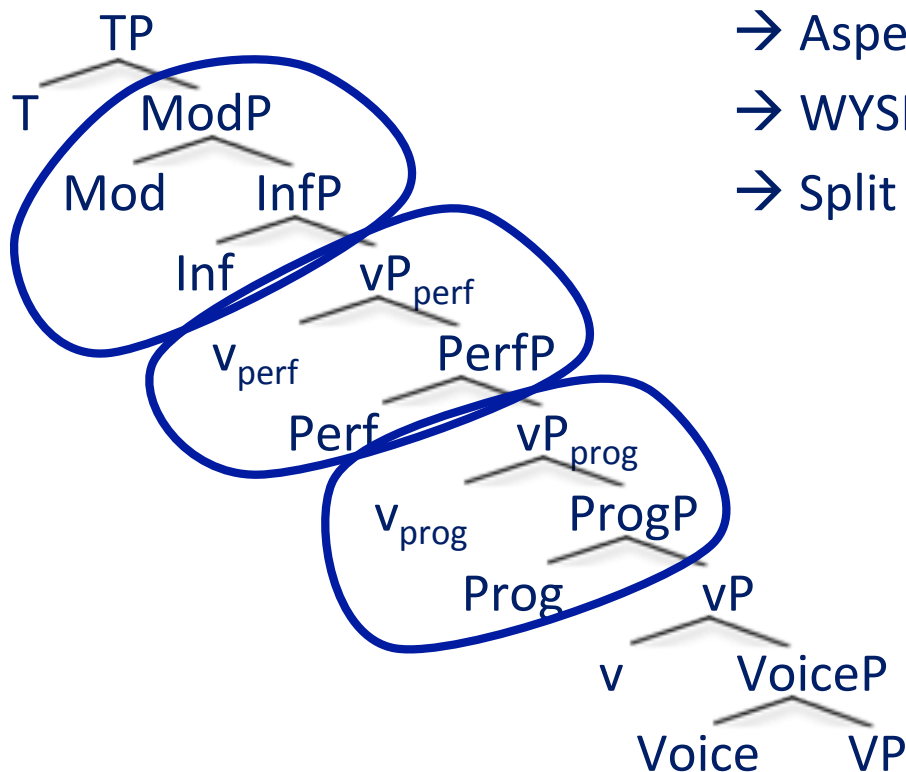
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Preliminaries: The verbal structure (1)

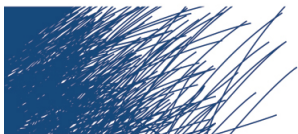
Bošković (2012), Cinque (1999), Harwood (2011):



→ Aspectual layer + vP shell with auxiliary

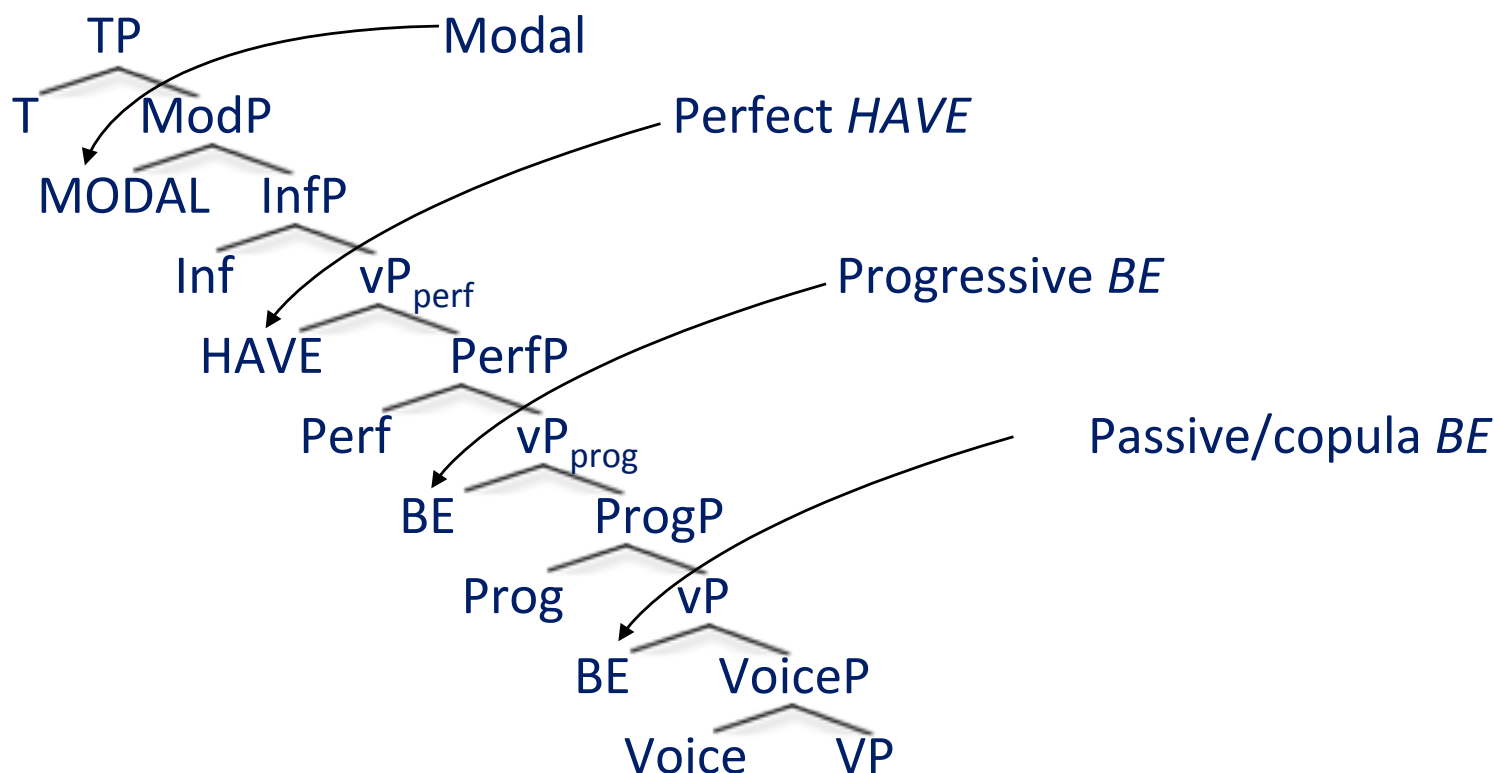
→ WYSIWYG approach

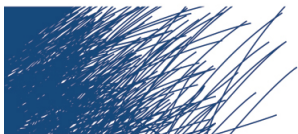
→ Split layers = necessary for auxiliary raising



Preliminaries: The verbal structure (2)

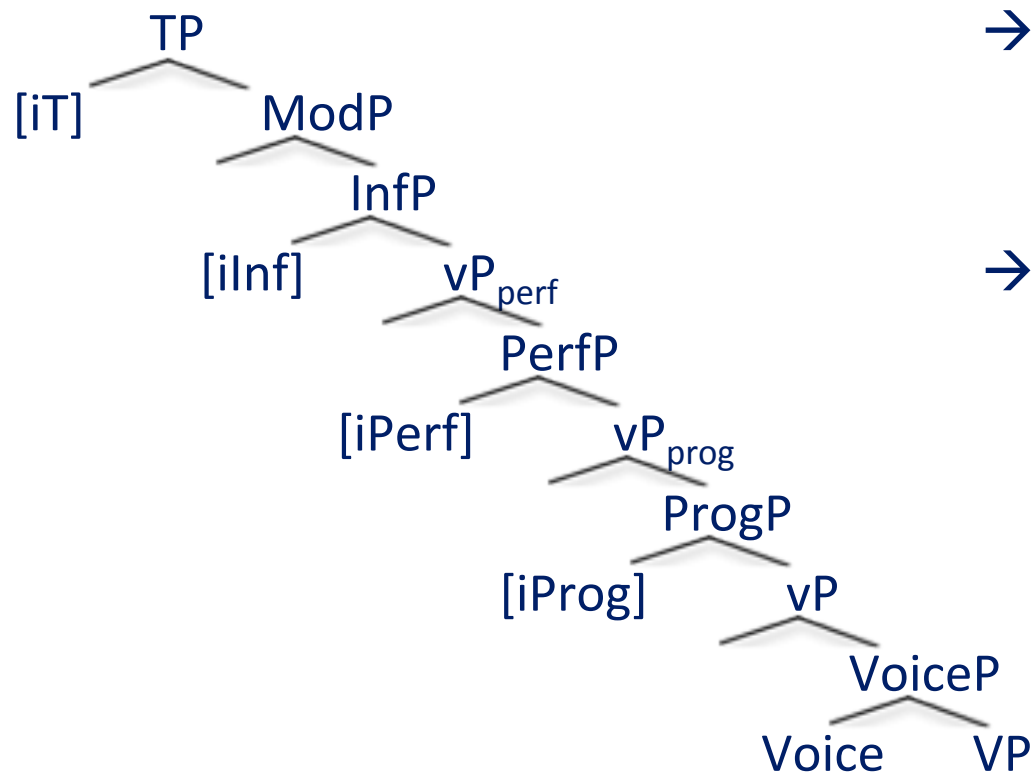
Base positions:





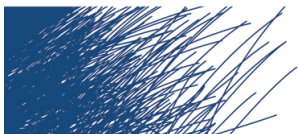
Preliminaries: The verbal structure (3)

Lasnik (1995): Auxiliary raising for feature checking

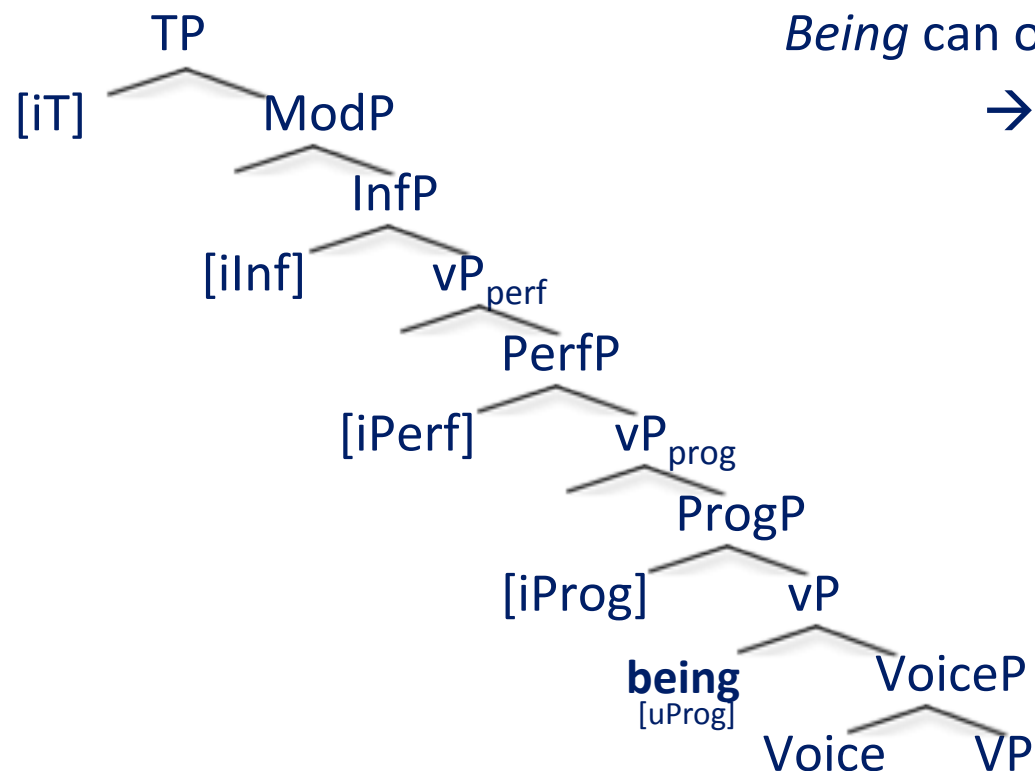


→ Each aspectual head bears an interpretable inflectional feature (Bjorkman 2012, Lasnik 1995)

→ Auxiliaries are merged inflected, but their morphological form has to be licensed by checking of a PF feature against the relevant aspectual head (Chomsky 1993, Lasnik 1995)

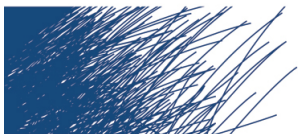


Preliminaries: The verbal structure (4)

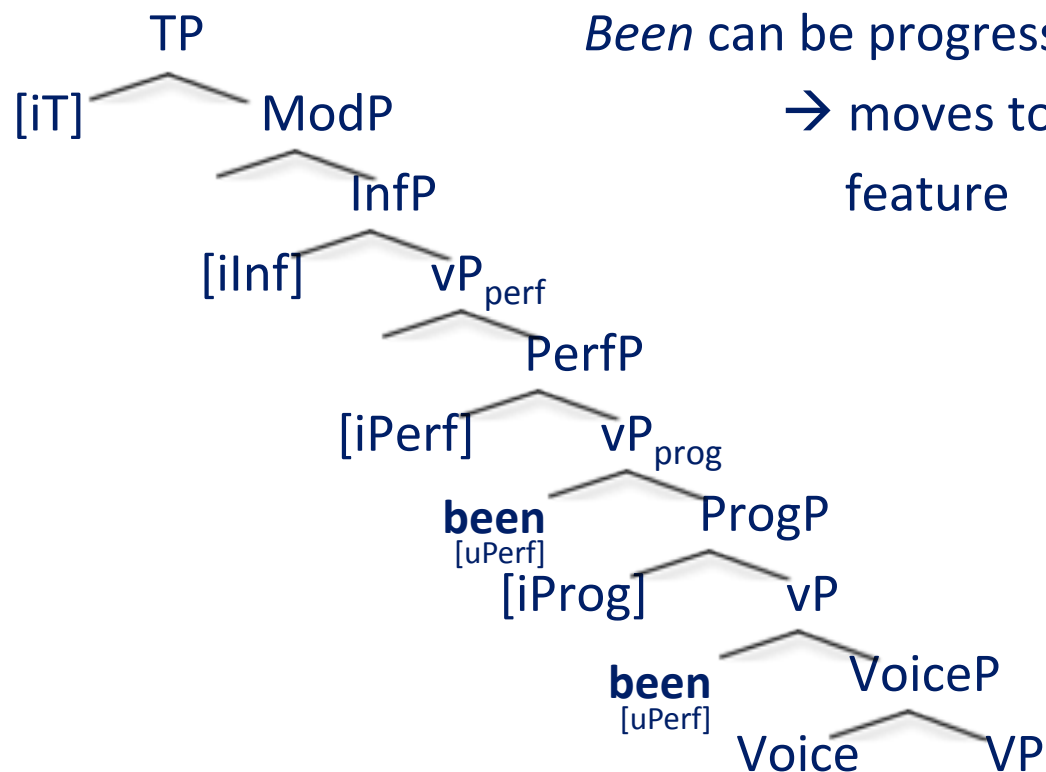


Being can only be copular or passive BE.

→ moves to Prog to check its inflectional feature and license its morphological form

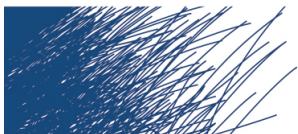


Preliminaries: The verbal structure (5)

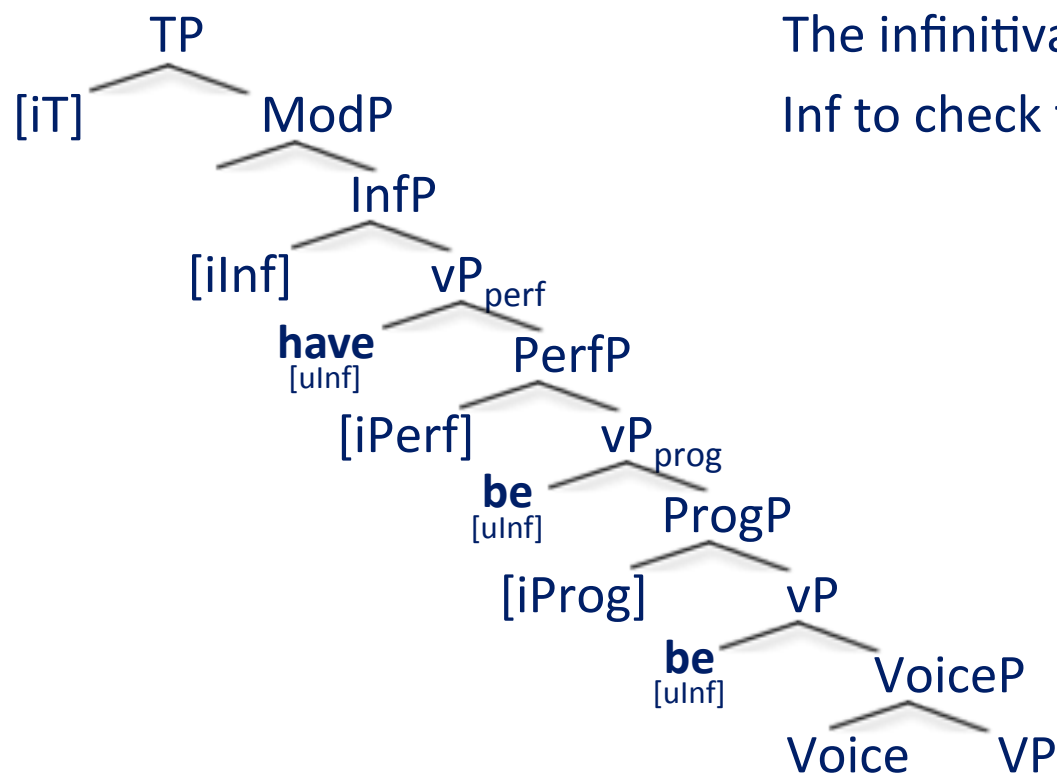


Been can be progressive, passive or copular BE.

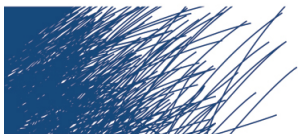
→ moves to Perf to check its inflectional feature



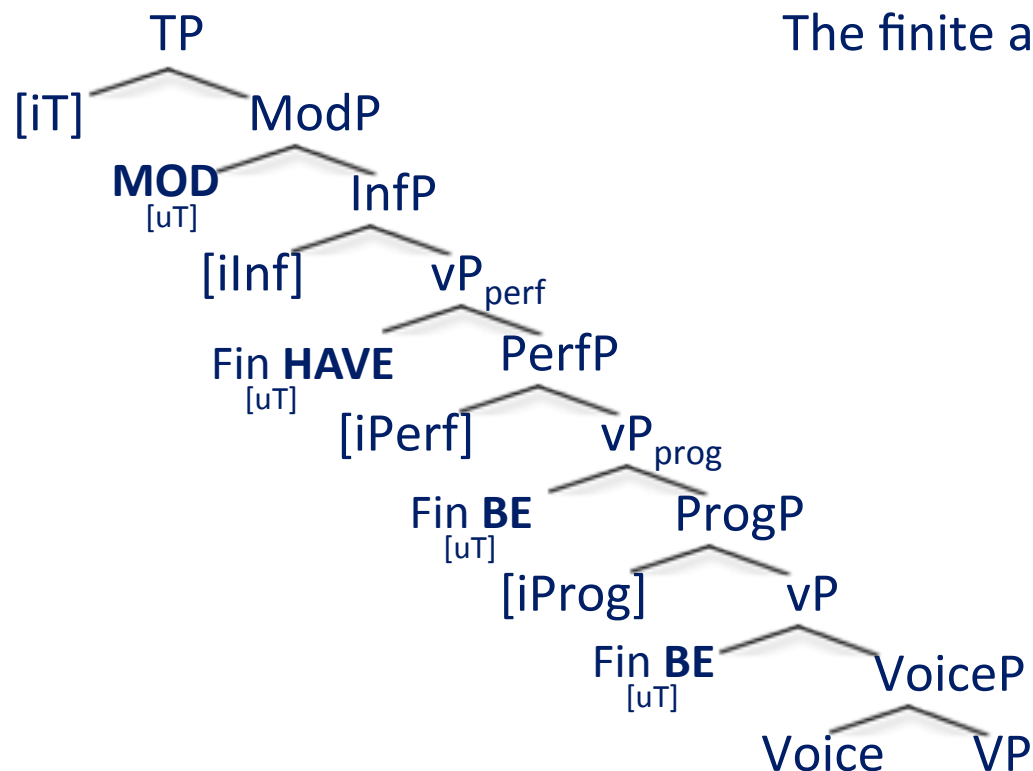
Preliminaries: The verbal structure (6)



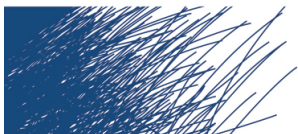
The infinitival forms *have* and *be* move to Inf to check their features.



Preliminaries: The verbal structure (7)

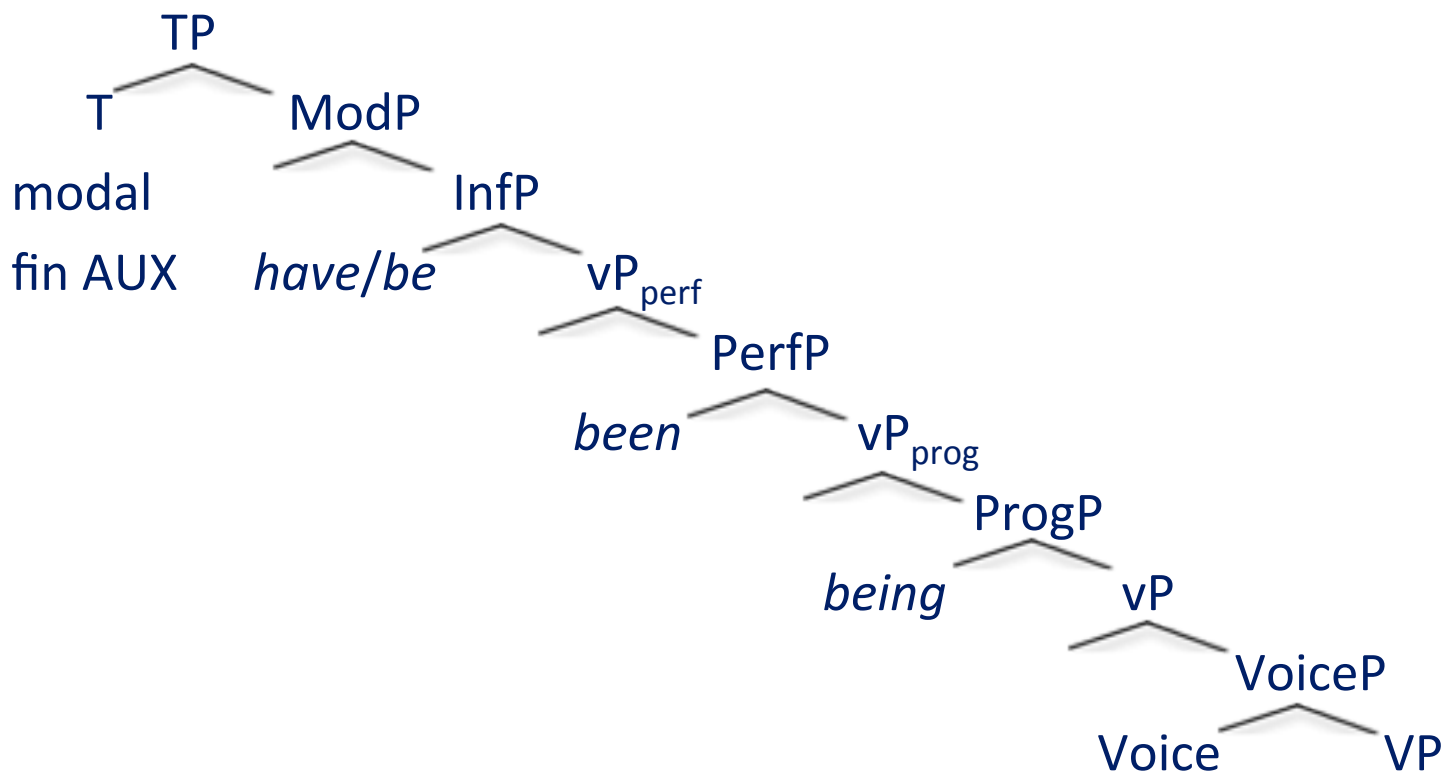


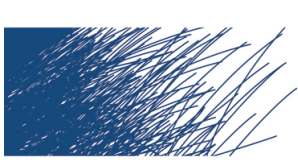
The finite auxiliaries move to T.



Preliminaries: The verbal structure (8)

Surface positions:





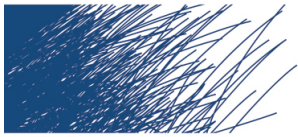
Preliminaries: The verbal structure (9)

IMPORTANT: The overt movement of auxiliaries is a concern for PF.

Auxiliaries could potentially move covertly to check inflectional features at LF, BUT...

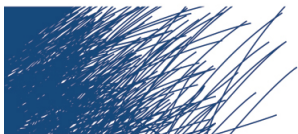
No overt movement/checking = crash at PF.

(See Chomsky 1993, 1995; Lasnik 1995; Roberts 1998)



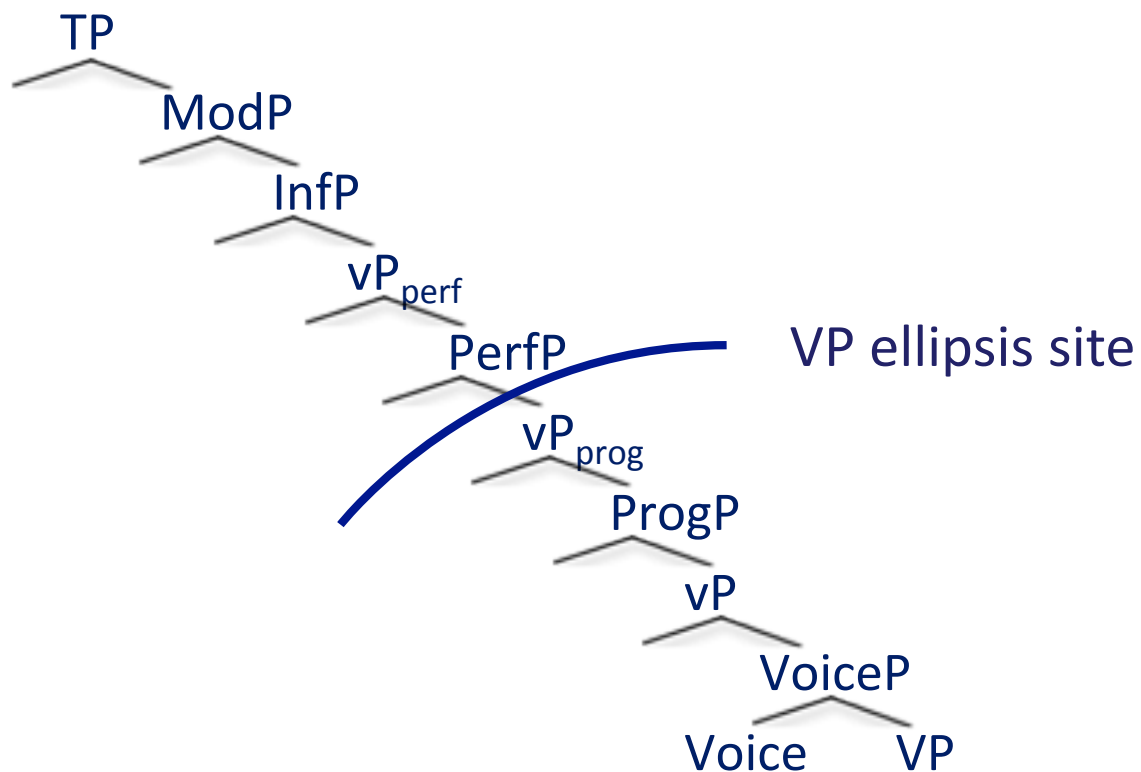
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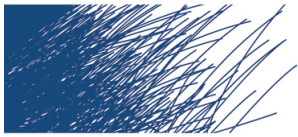
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Analysis, part I: The ellipsis site (1)

Our claim: VPE elides as much as the progressive layer (vP_{prog}), if present.





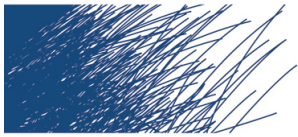
Analysis, part I: The ellipsis site (2)

Argumentation behind this claim:

Only auxiliaries generated inside the ellipsis site can ever be elided.

→ Two basic accounts for optional auxiliary ellipsis:

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

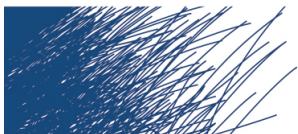


Analysis, part I: The ellipsis site (3)

→ Consensus: auxiliaries can only be elided if they are at some point contained within the ellipsis site.

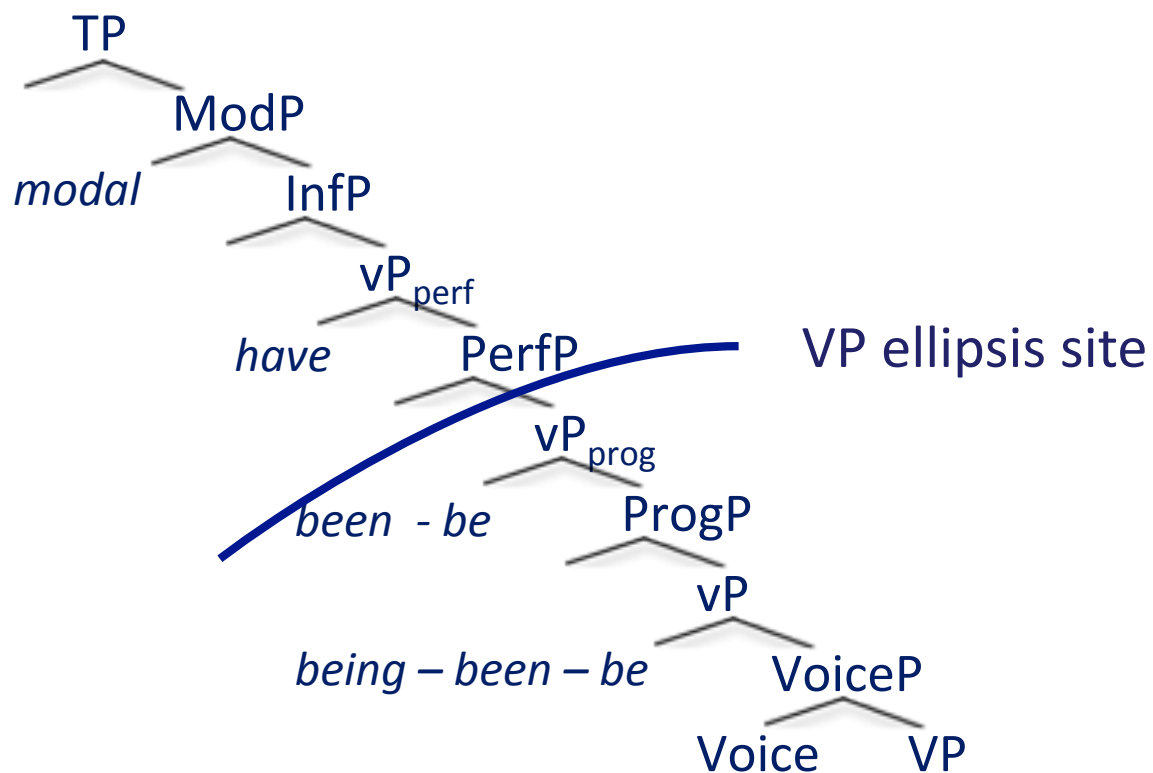
In other words: if an auxiliary can be elided, its base position needs to be included in the ellipsis site.

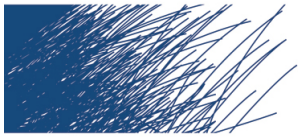
(The opposite does not necessarily hold: if an auxiliary is not elided, it can still be base-generated in the ellipsis site.)



Analysis, part I: The ellipsis site (4)

Base positions of the auxiliaries:





Analysis, part I: The ellipsis site (5)

We show that all auxiliaries generated within or below the progressive aspectual layer can be elided

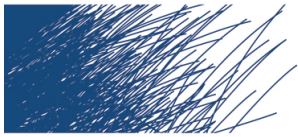
→ VPE targets vP_{prog}

- Copular *BE* can be elided:

(5) a. John has been in Chicago, and Mary has (**been**) ~~in Chicago~~, too.
b. John will be in Chicago, and Mary will (**be**) ~~in Chicago~~, too.

- Passive *BE* can be elided:

(6) a. John has been arrested, and Mary has (**been**) ~~arrested~~, too.
b. John might be arrested, and Mary might (**be**) ~~arrested~~, too.



Analysis, part I: The ellipsis site (6)

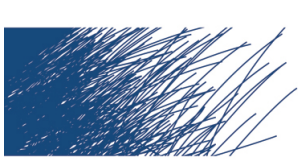
- Progressive *BE* can be elided

- (7) a. John may be questioning our motives, but Peter won't (**be**) ~~questioning our motives~~.
- b. John may have been questioning our motives, but Peter hasn't (**been**) ~~questioning our motives~~.

!! There is a mismatch interpretation available without progressive *BE*:

- (8) a. ...Peter won't ~~question our motives~~.
- b. ...Peter hasn't ~~questioned our motives~~.

→ How can we be sure the progressive auxiliary is ever actually elided?

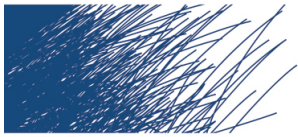


Analysis, part I: The ellipsis site (7)

Can we find contexts that show whether progressive *be* can genuinely be elided?

→ Our answer: YES, and they show it can be elided.

- **Ellipsis and existential constructions**
- Ellipsis and idiomatic expressions

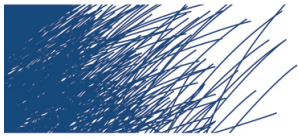


Analysis, part I: The ellipsis site (8)

Ellipsis and existential constructions

Unergative and transitive existentials depend on progressive aspect (Milsark 1974; Aissen 1975; Burzio 1986; Ward & Birner 1996; Deal 2009; Harwood 2011):

- (9)
- a. There was a clown dancing at my birthday party.
 - b. * There has a clown danced at my birthday party.
 - c. * There might a clown dance at my birthday party.
 - d. * There danced a clown at my birthday party.



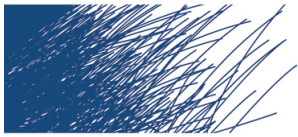
Analysis, part I: The ellipsis site (9)

If we apply ellipsis to these existentials, no mismatch interpretation without the progressive will be available.

Results: All our informants accepted deletion of progressive *be* in these existentials.

- (10) John said there had been a clown dancing at his birthday party, even though we all knew there hadn't (**been**) ~~a clown dancing at his birthday party~~.
- (11) John said there would be a clown dancing at his birthday party, even though we all knew there wouldn't (**be**) ~~a clown dancing at his birthday party~~.

→ Progressive *be* is optionally elided.

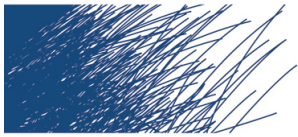


Analysis, part I: The ellipsis site (9')

Ellipsis and idiomatic expressions

Certain idioms are dependent upon progressive aspect:

- a. John is dying to meet you. = He is keen to meet you.
- b. #John has died to meet you.
- c. #John will die to meet you.
- d. #John died to meet you.



Analysis, part I: The ellipsis site (9')

If we apply ellipsis, a mismatch interpretation without the progressive would not result in an idiomatic interpretation.

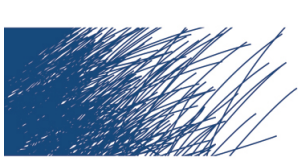
Results: All our informants retained the idiomatic reading when *be/been* was not pronounced.

John has been dying to meet you, even though he says he hasn't **(been)** ~~dying to meet you~~.

Q: Are you sure Bob will be dying to meet George Lucas?

A: He most certainly will **(be)** ~~dying to meet George Lucas~~.

→ Progressive *be* is optionally elided.



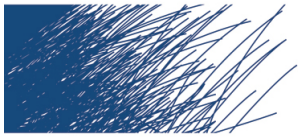
Analysis, part I: The ellipsis site (10)

Recapitulating:

- Passive *be/been* can be elided.
- Copula *be/been* can be elided.
- Progressive *be/been* can be elided.
- Perfect *have* is never elided.
- Modals and other finite auxiliaries are never elided.

! However: there has been some discussion as to whether or not perfect *have* can be elided:

- *Have* cannot be elided: Sag (1976), Lobeck (1987), Johnson (2001), Sailor (2012), Bošković (2012), Wurmbrand (2012)
- *Have* can be elided: Akmajian, Steele & Wasow (1979), Thoms (2011)



Analysis, part I: The ellipsis site (11)

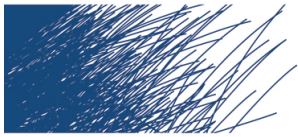
Akmajian, Steele & Wasow (1979), Thoms (2011): *have* can be elided!

(12) John couldn't have studied Spanish, but Bill could.

(Akmajian, Steele & Wasow 1979:15, example 48)

! Wurmbrand (2012): the acceptability of (12) is due to the available mismatch reading in which perfect aspect is altogether absent from the elided constituent:

(13) John couldn't have studied Spanish, but Bill could [study Spanish].



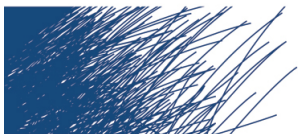
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Analysis, part I: The ellipsis site (12)

Can we find contexts that show whether *have* can genuinely be elided or not?

- **Ellipsis and fixed expressions**
- Ellipsis and identity requirements

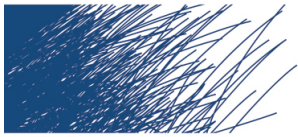


Analysis, part I: The ellipsis site (13)

Ellipsis and fixed expressions

Certain expressions are dependent on perfect aspect:

- (14)
- a. We have been to Rome.
 - b. * We are being to Rome.
 - c. * We will be to Rome.
 - d. * We are to Rome.
- (15)
- a. Sarah has been around the block a few times.
 - b. * Sarah is being around the block a few times.
 - c. * Sarah will be around the block a few times.
 - d. * Sarah was around the block a few times.



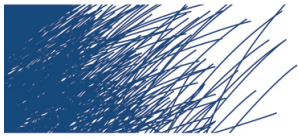
Analysis, part I: The ellipsis site (14)

If VPE is applied to these expressions, no mismatch interpretation without the perfect aspect will be available.

→ This context shows whether perfect *have* can be elided.

Result: 80% of our (British English) informants rejected ellipsis of *have* in these cases.

- (16) * This time next year Jon will have been to Rome, and I will **have** ~~been to Rome~~, as well.
- (17) * I thought Sarah might have been around the block a few times, and indeed she might **have** ~~been around the block a few times~~.



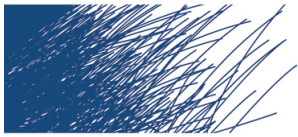
Analysis, part I: The ellipsis site (15)

Ellipsis and identity requirements

Auxiliaries can only be elided if they have an identical antecedent

= Syntactic Identity condition; see Lasnik (1995), Warner (1986)

- (18)a. Sue has **been** eaten by cannibals, and Rob might *(**be**), too.
b. First Sue will **be** eaten by cannibals, and then Rob will (**be**).
c. Sue **was** eaten by cannibals after Rob had *(**been**).
d. Sue has **been** eaten by cannibals, and Rob has (**been**), too.



Analysis, part I: The ellipsis site (16)

In a sentence with *been* in the antecedent clause, VPE can only elide *been* if the ellipsis clause contains perfect aspect, otherwise *been* would not be identical in form to its antecedent.

→ This context shows whether *have* can be elided or not.

Result: Our informants unanymously rejected deletion of *have*. (Contra Thoms 2011)

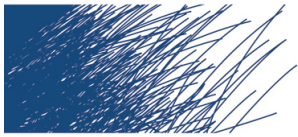
(19) a. John might have **been** fired, and Ted might have (**been**) fired, too.

b.* John might have **been** fired, and Ted might, too.

= Ted might have ~~been~~ fired, too.

= Ted might ~~be~~ fired, too.

→ Although there still is some discussion, and there might be some dialectal variation involved, we take ellipsis of *have* to be impossible.



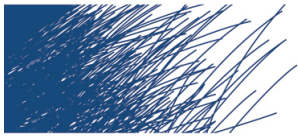
Analysis, part I: The ellipsis site (17)

Recapitulating:

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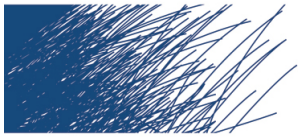
→ The ellipsis site must include at least the base position of progressive *BE*.

→ Claim: VPE elides vP_{prog} .



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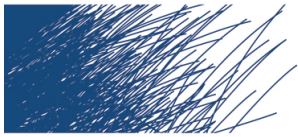


Analysis, part II: Auxiliary ellipsis (1)

Reminder

	Modal/ finite aux	Have	Be	Been	Being	Lexical V
Elided	*	*	(✓)	(✓)	✓	✓

- Ellipsis site = vP_{prog}
- Auxiliaries raise to the relevant tense/aspectual head to license their morphological form (by checking a PF feature).

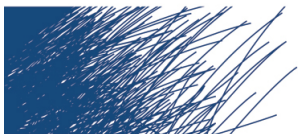


G I S T
Generative Initiatives in Syntactic Theory



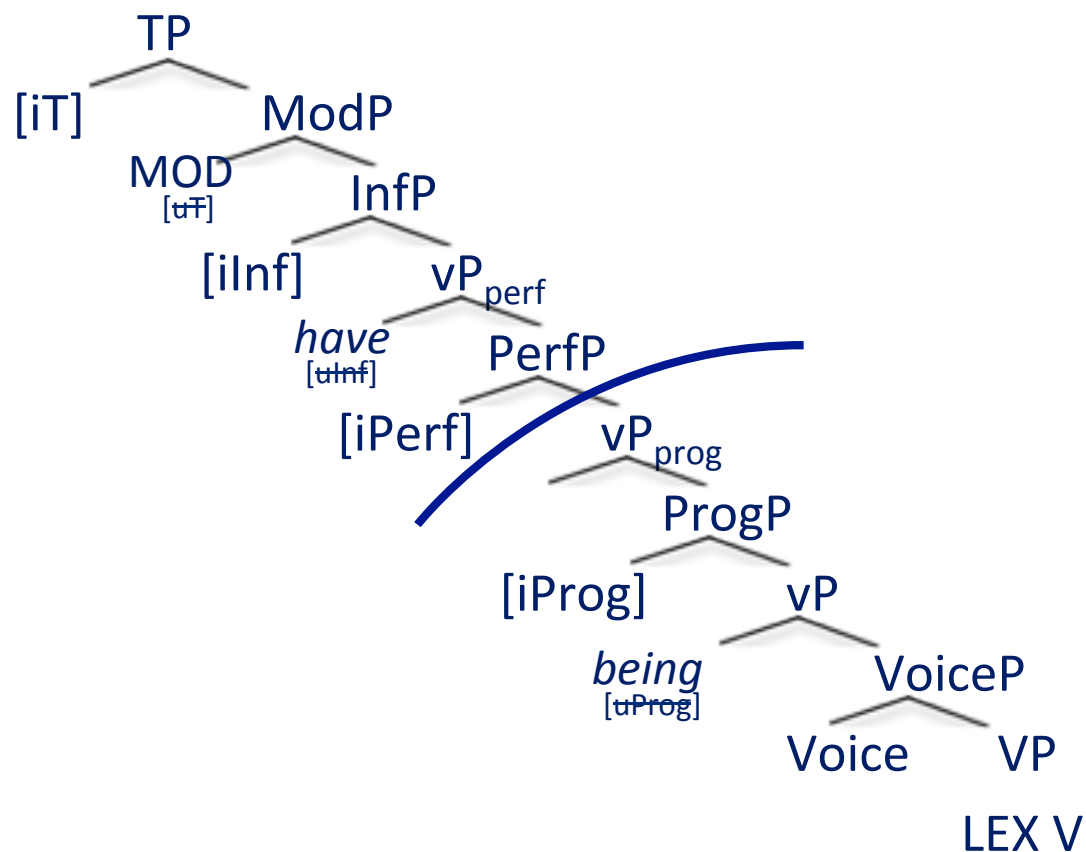
Analysis, part II: Auxiliary ellipsis (2)

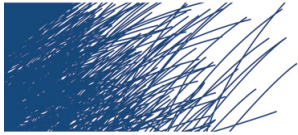
- A. Modals/*have* and *being*/lexical V
- B. *Be* and *been*



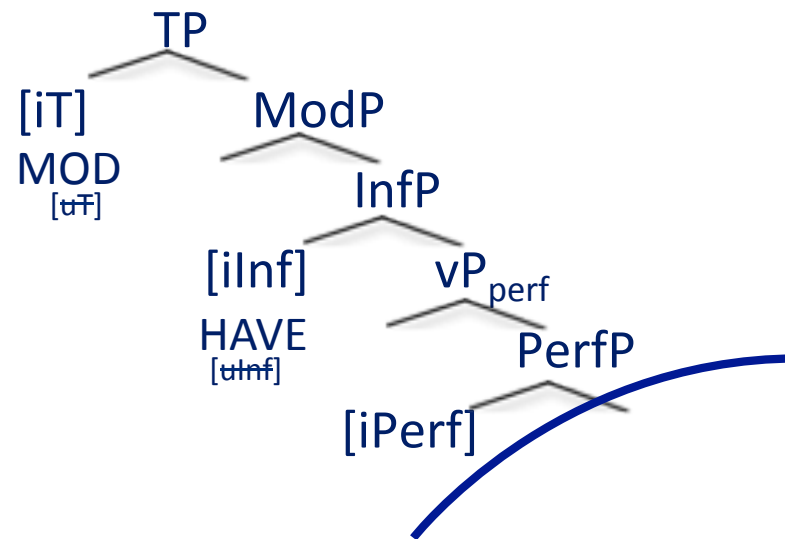
Analysis, part II: Auxiliary ellipsis (3)

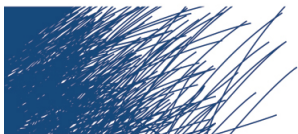
A. Modals/*have* and lexical V/*being*





Analysis, part II: Auxiliary ellipsis (4)





Analysis, part II: Auxiliary ellipsis (5)

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

MODAL

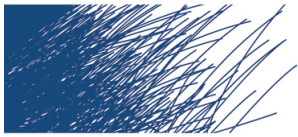
HAVE

VPE

BEING

Lex V





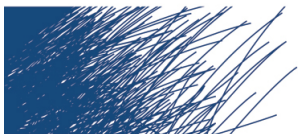
Analysis, part II: Auxiliary ellipsis (6)

B. *Be* and *been*

Be/been are merged inside the ellipsis site and raise out of the ellipsis site for feature checking.

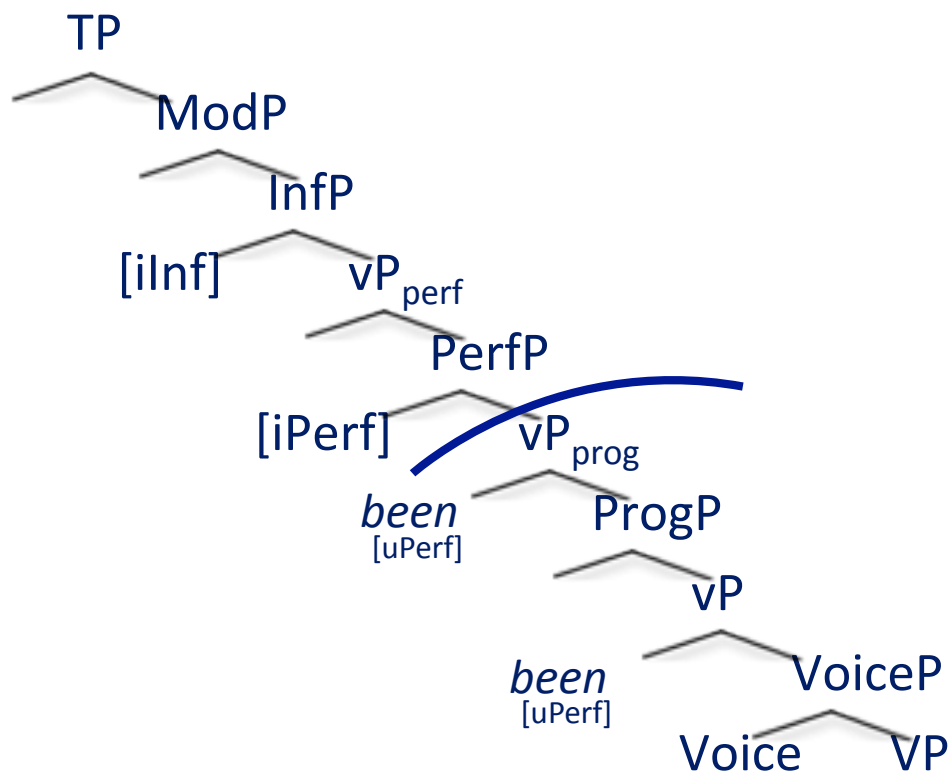
▶ Two options available:

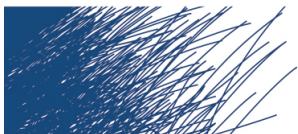
1. Raise and check = survive ellipsis
2. Remain within the ellipsis site and be deleted via ellipsis, thereby removing the problematic PF features from the derivation



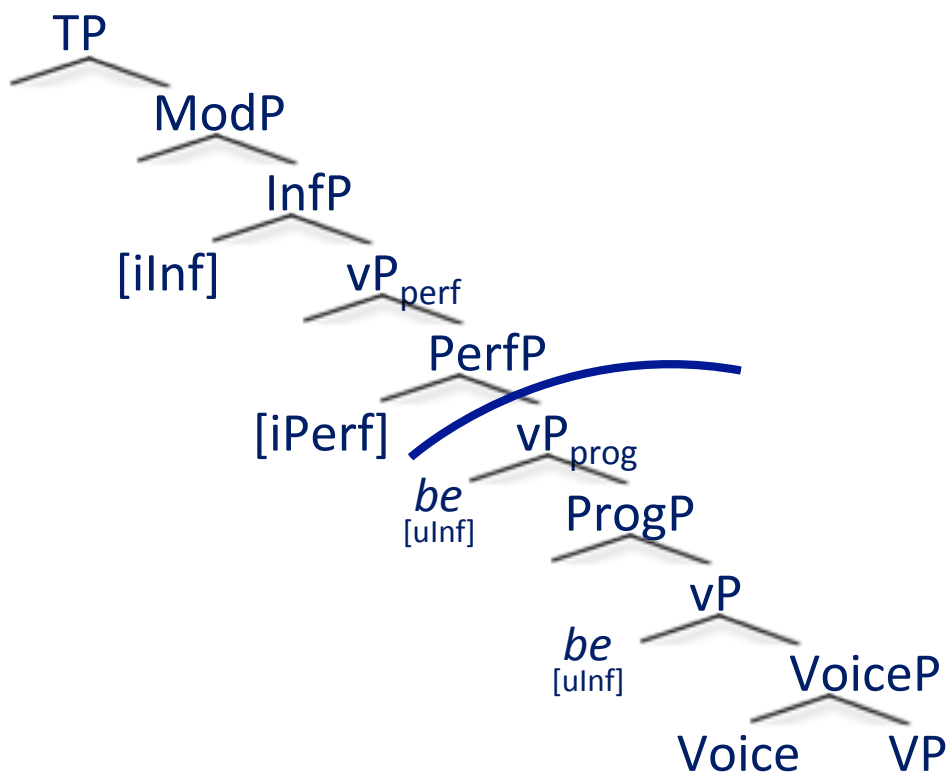
Analysis, part II: Auxiliary ellipsis (7)

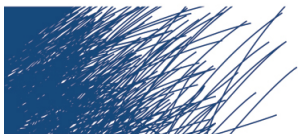
Non-ellipsis of *be/been*



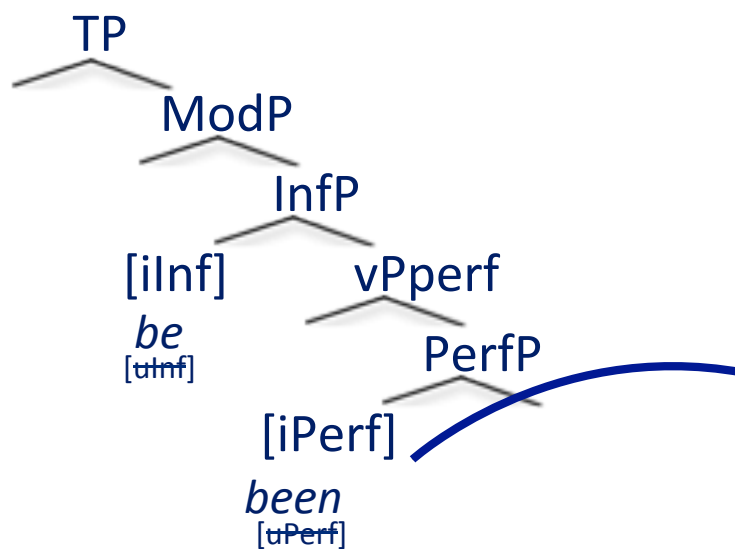


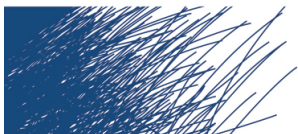
Analysis, part II: Auxiliary ellipsis (8)





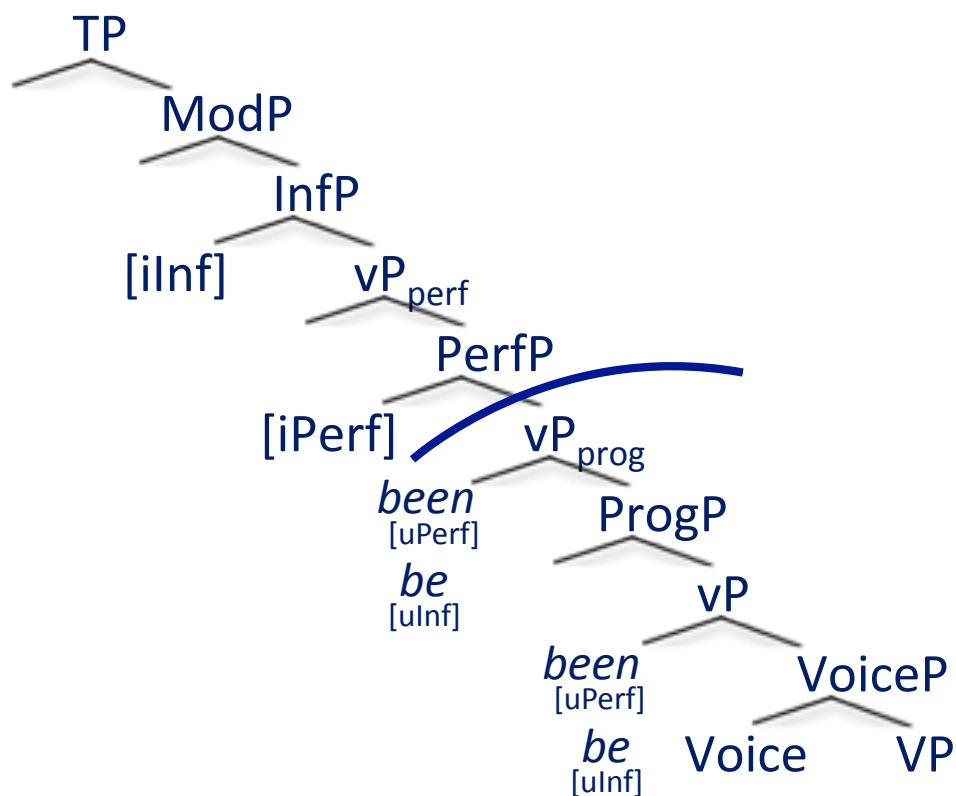
Analysis, part II: Auxiliary ellipsis (9)

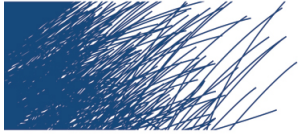




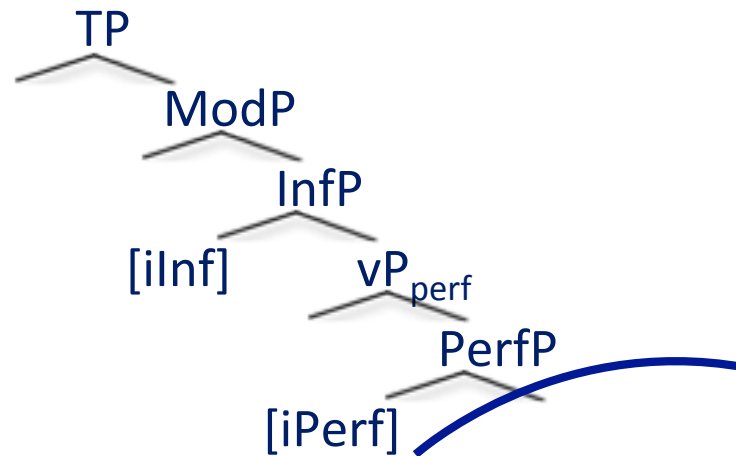
Analysis, part II: Auxiliary ellipsis (10)

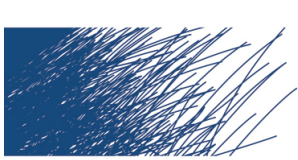
Ellipsis of *be/been*





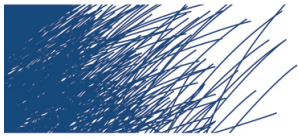
Analysis, part II: Auxiliary ellipsis (11)





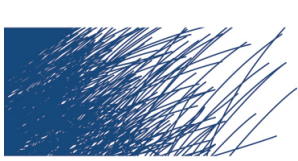
Analysis, part II: Auxiliary ellipsis (12)

- 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

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4. Analysis, Part II: Auxiliary ellipsis
5. **Extending the analysis: VP fronting**
6. Digging deeper: Predicate ellipsis?
7. Conclusion and further issues

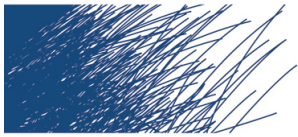


Extending the analysis: VP fronting (1)

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



Extending the analysis: VP fronting (2)

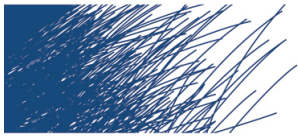
- Lexical verb and *being*: always fronted

(20) a.* If John says he has eaten fish, then [fish] he has **eaten**.

b. If John says he has eaten fish, then [**eaten** fish] he has.

c.* If John says he was being seduced, then [seduced] he was **being**.

d. If John says he was being seduced, then [**being** seduced] he was.

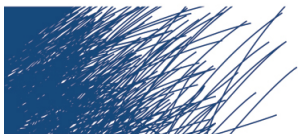


Extending the analysis: VP fronting (3)

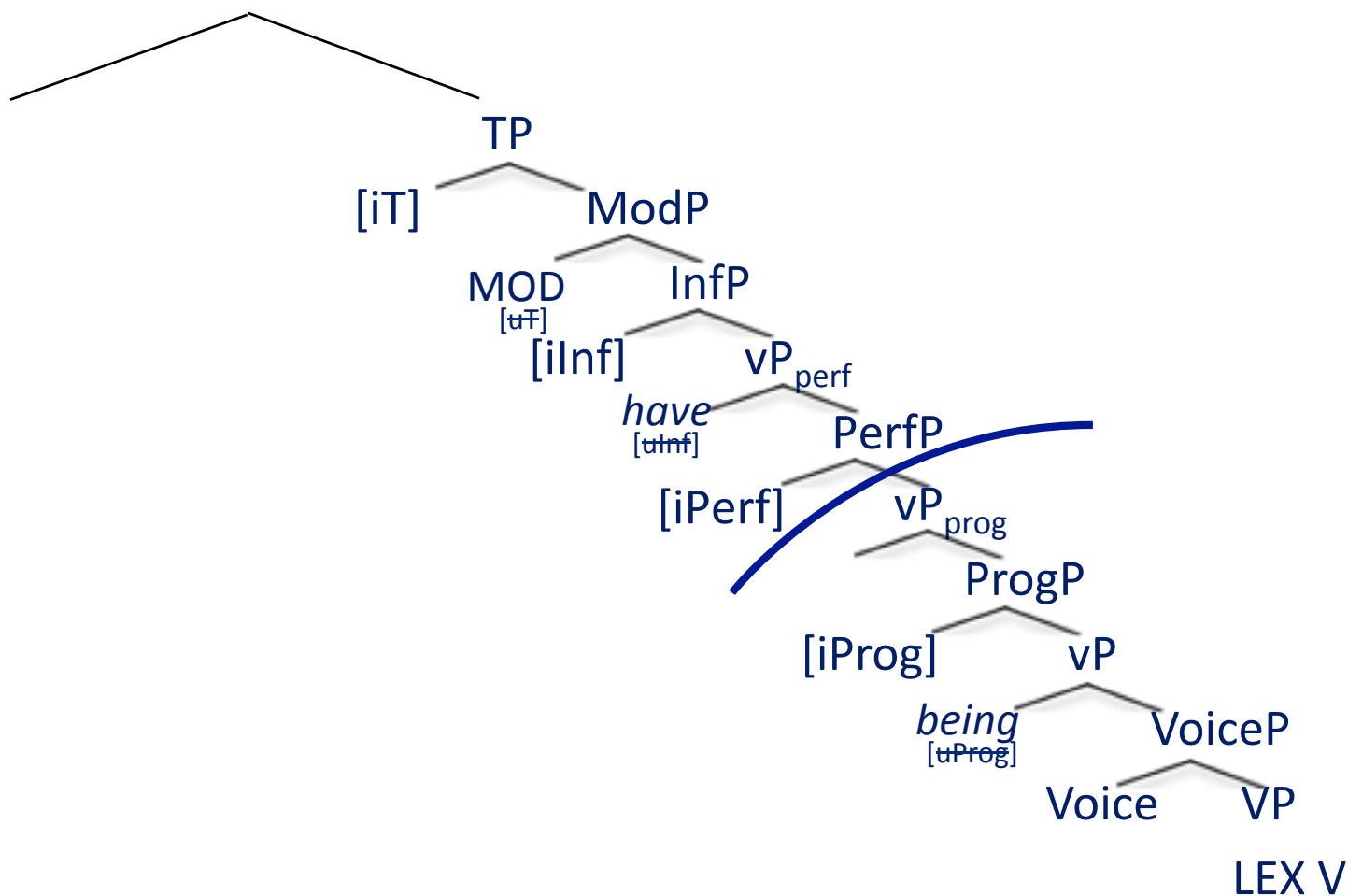
- Modals and *have*: never fronted

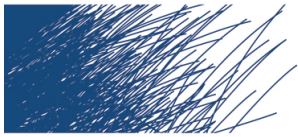
- (21) a. If John says he may have eaten fish, then [eaten fish] he may **have**.
b.* If John says he may have eaten fish, then [**have** eaten fish] he may.
c. If John says he will eat fish, then [eat fish] he **will**.
d.* If John says he will eat fish, then [**will** eat fish] he.

- Explanation: VPF targets same constituent as VPE: vP_{prog} !



Extending the analysis: VP fronting (4)





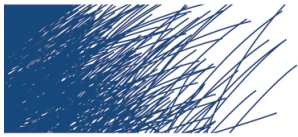
Extending the analysis: VP fronting (5)

- Akmajian, Steele & Wasow (1979) and Roberts (1998): *be/been* can never be fronted, not even optionally:

- (22) a. If John says he'll be working late, then [working late] he will **be**.
b.* If John says he'll be working late, then [**be** working late] he will.
c. If John says he has been working late, then [working late] he has **been**.
d.* If John says he has been working late, then [**been** working late] he has.

= remarkable contrast with VP ellipsis

→ This can easily be explained by our analysis.



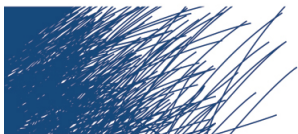
Extending the analysis: VP fronting (6)

Fronted constituent same as ellipsis site: vP_{prog}

→ *Be/been* are generated inside the fronted constituent.

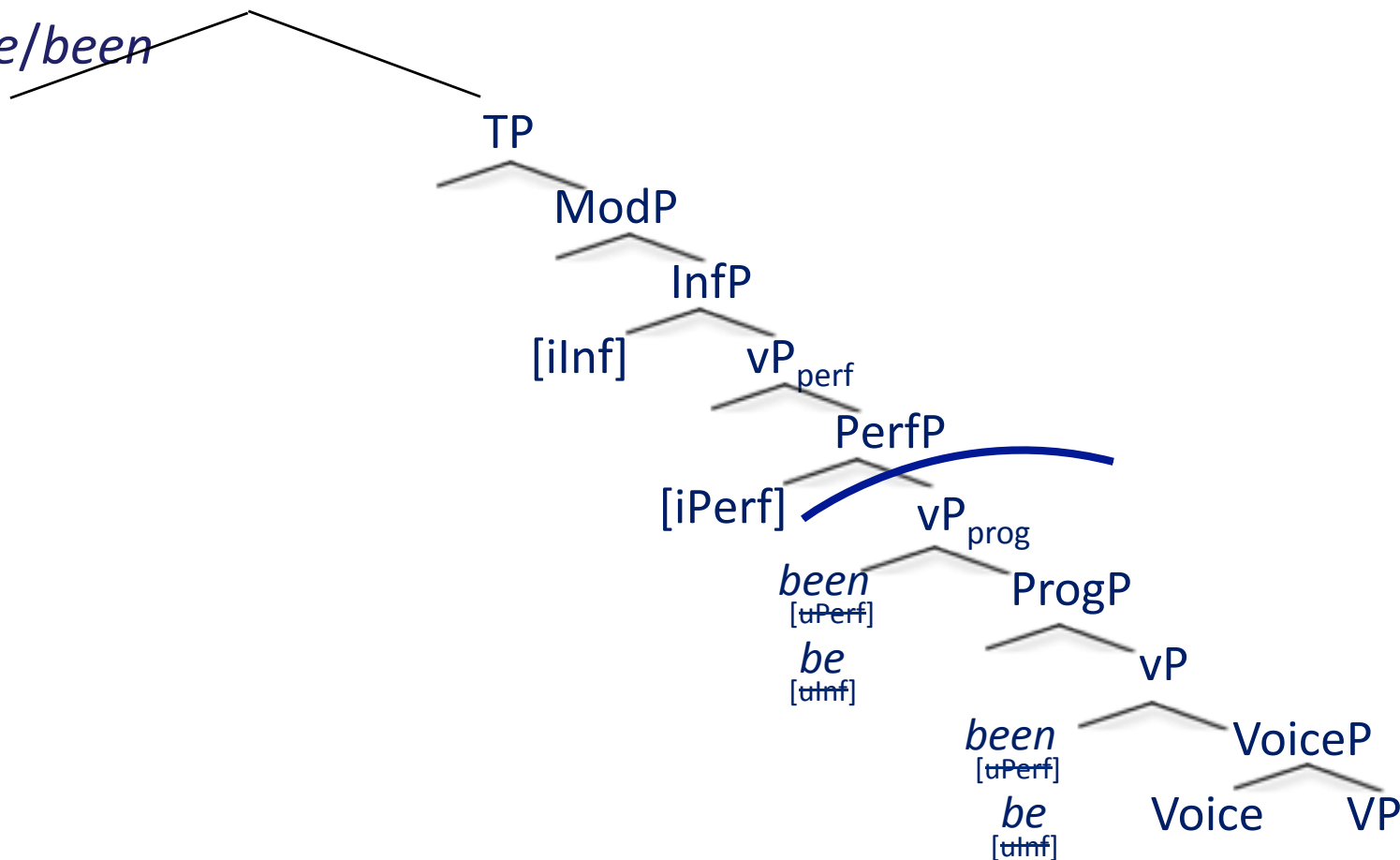
▶ Two options for *be/been*:

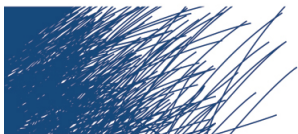
- *Be/been* raise out of VPF site to $\text{Perf}^\circ/\text{Inf}^\circ$ to check features.
 - ▶ Not fronted, derivation fine.
- *Be/been* do not raise and remain in the VPF site, but no ellipsis occurs to rescue the derivation.
 - ▶ The unchecked features remain and the derivation crashes.



Extending the analysis: VP fronting (7)

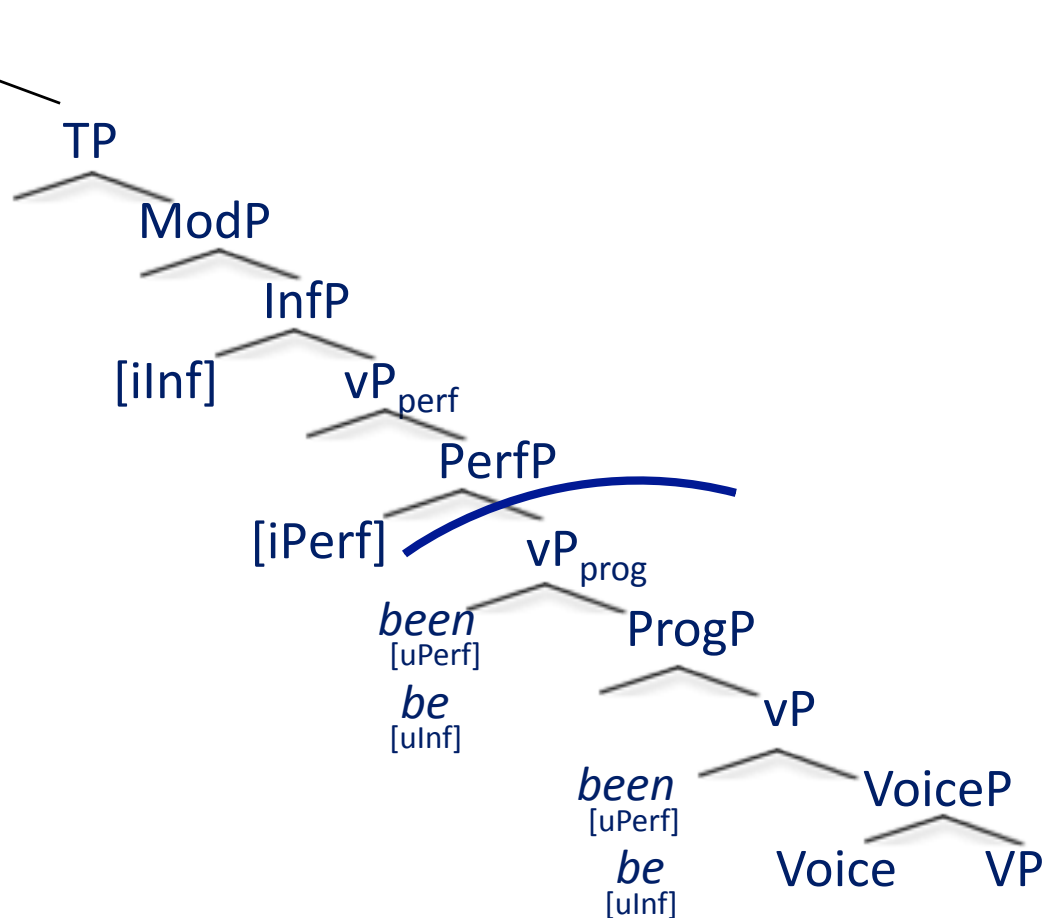
✓ Raising of *be/been*

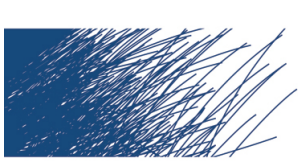




Extending the analysis: VP fronting (8)

*Non-raising of *be/been*





Extending the analysis: VP fronting (9)

Extending the data set even more:

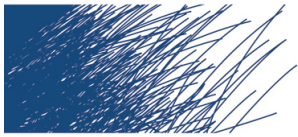
We expect other phenomena that make use of either VPE or movement of the verb phrase to exhibit the same pattern.

→ Phenomena involving VPE: optional deletion of *be/been*.

→ Phenomena involving movement: obligatory stranding of *be/been*.

This prediction is potentially borne out in:

- Tag questions in American English (involving VPE)
- Specificational pseudo-clefts (involving VPF)
- Predicate inversion (involving VPF)



Extending the analysis: VP fronting (10)

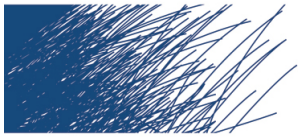
- Tag questions in American English

Akmajian & Wasow (1975), Bošković (2004): AmE tags parallel VPE

Lexical verb and *being* → always absent from tag questions

Non-finite *have* → always present (if the sentence being tagged contains perfect aspect, naturally)

- (i) a. Ted was being eaten by a gorilla, wasn't he (***being**) (***eaten**) ~~by a gorilla~~.
- b. Ted should have become a hot air balloon pilot, shouldn't he ***(have)**?



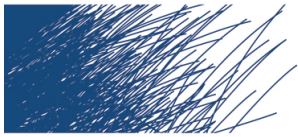
Extending the analysis: VP fronting (12)

- Specificational pseudoclefts

Such pseudoclefts involve fronting of the verb phrase (Blom & Daalder 1977, Declerck 1988, Den Dikken 1995, Heggie 1988, Heycock 1994, Higgins 1979, Moro 1997 & Verheugd 1990).

Sailor (2012): *being* is always included in the pseudocleft.

- (iii) Ted should be being praised. – No, ***<being>** criticised is what he should be **<*being>**.

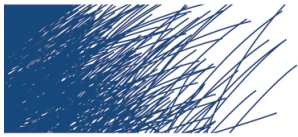


Extending the analysis: VP fronting (13)

Sailor (2012): *been* and *be* are never included in the pseudocleft, not even optionally (and neither is *have*).

- (iv) a. Ted should be praised. – No, <***be**> criticised is what he should ***<be>**.
- b. Ted should have been praised. – No, <***been**> criticised is what he should have ***<been>**.

→ Conforming with our prediction: Auxiliaries only have the option of not raising in ellipsis contexts, in which their unchecked PF features can be deleted via ellipsis.



Extending the analysis: VP fronting (14)

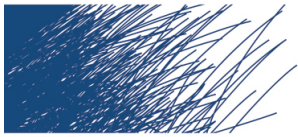
- Predicate Inversion

Hooper & Thompson (1973), Emonds (1976), Heycock & Kroch (1999) and Haegeman (2008) have analysed predicate inversion contexts as involving fronting of the predicate.

→ *being* is always included in the inversed predicate:

(v) [Also **being** loud and obnoxious today] is my old friend Bugs Bunny.

(vi) * [Also loud and obnoxious today] is **being** my old friend Bugs Bunny.



Extending the analysis: VP fronting (15)

→ *Be* and *been* are never included in the inversed predicate:

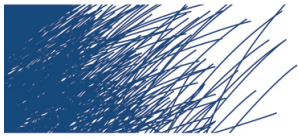
(vii) a. [Also with us in the studio today] will **be** my old friend Bugs Bunny.

b. * [Also **be** with us in the studio today] will my old friend Bugs Bunny.

(viii) a. [Also with us in the studio today] has **been** my old friend Bugs Bunny.

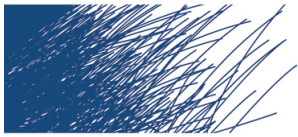
b.* [Also **been** with us in the studio today] has my old friend Bugs Bunny.

→ This is captured by our analysis: obligatory raising in non-ellipsis.



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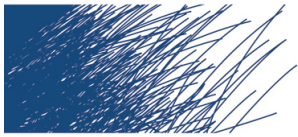


Digging deeper: Predicate ellipsis (1)

Our claim: VPE elides as much as vP_{prog} .

! If progressive aspect is absent from the structure \rightarrow VPE elides vP .
= 'variable ellipsis site'

(Note: 'variable' depending on what is present in the structure, not in the sense of Akmajian, Steele & Wasow 1979 and Bošković 2012, for whom VPE can optionally elide more or less, and who explain the optional deletion of *be* and *been* in this way.)



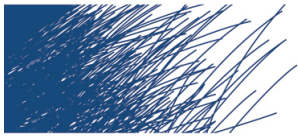
Digging deeper: Predicate ellipsis (2)

Problem: If the constituent being targetted by VPE varies, it is harder to formalise how ellipsis is licensed.

For instance, if the ellipsis site is recognised as ‘the constituent bearing the E-feature’ (Merchant 2001), does the E-feature sometimes occur on v_{prog} and sometimes on v ?

→ How to formalise the licensing of ellipsis, and more specifically, how to determine the size of the ellipsis site formally?

Our (speculative) solution: VPE is predicate ellipsis.



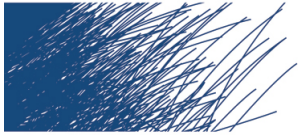
Digging deeper: Predicate ellipsis (3)

Our suggestion:

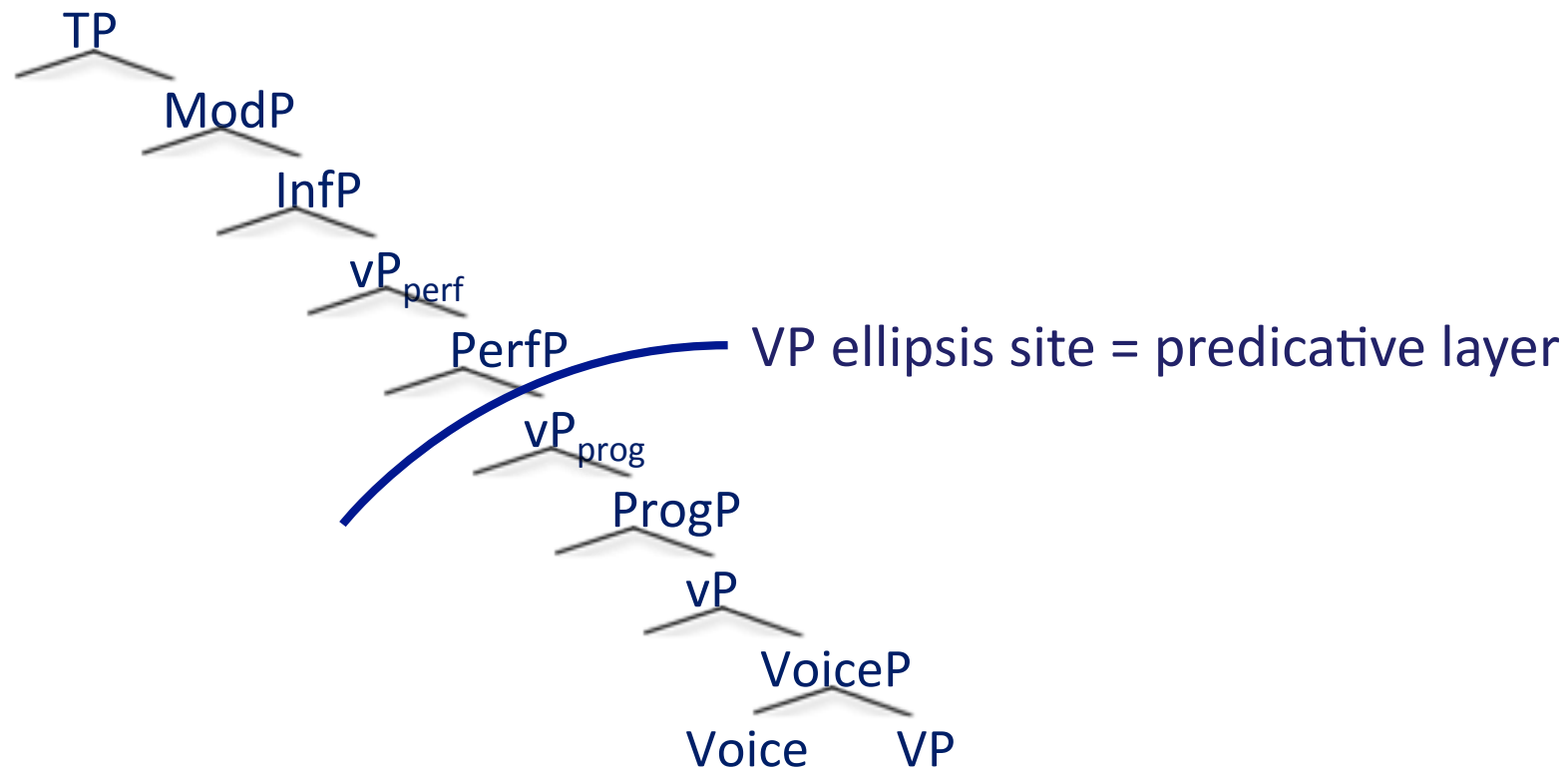
VPE targets the highest projection in the predicate layer of the clause.

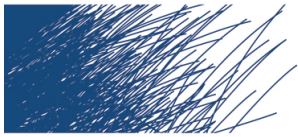
What is included in this predicate?

- Lexical VP/DP/PP/AP
- The internal and external arguments of this lexical predicate
- Little v projection: determines some lexical properties, such as agentivity, causality etc.
- (According to us) the progressive projection



Digging deeper: Predicate ellipsis (4)





Digging deeper: Predicate ellipsis (i)

Why would the progressive be part of the predicate layer, and not perfect aspect? Why would it be more lexical?

○ Progressive is sensitive to lexical restrictions, unlike perfect aspect:

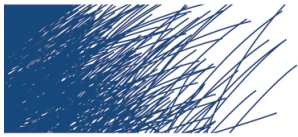
- (i) a. * I am knowing French. → progressive not with stative Vs
b. I have known him for years. → perfect fine with all kinds of Vs

○ Morphological form of progressive = nominalisation in several languages

(ii) 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.)



Digging deeper: Predicate ellipsis (ii)

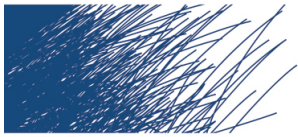
- Progressive and passive auxiliary is *BE* in English, just like the copular auxiliary in predicate constructions, and unlike perfect aspect *HAVE*:

- (iii) a. He was swimming/drunk/in the garden/arrested/a doctor.
b. He has eaten the dolphin sandwich.

!! Whether this is a correlation, is easy to test:

- Serbo-Croatian uses *BE* for perfect aspect as well.
- There are several English dialects (Hiberno-English, Shetland English, Newfoundland English) which use *BE* as the perfect aspect auxiliary

→ We should test whether this perfect *BE* can be elided or not.



Digging deeper: Predicate ellipsis (iii)

- Progressive aspect can be included in lexical idioms

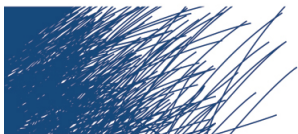
Idioms typically include the predicate and one or all of its arguments

- (iv)a. The boy was thrown/*tossed to the wolves/*hyenas.
- b. The shit/*dirt will hit the fan/*radiator.

→ Some idioms include progressive aspect as well:

- (v) John <is pushing>/<#has pushed>/<#will push> up daisies.

→ If idioms target predicate projections (Svenonius 2005), then progressive aspect is part of the predicate layer.



Digging deeper: Predicate ellipsis (iv)

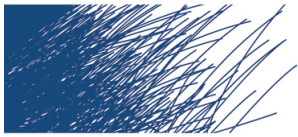
Perfect aspect is not included in idioms, so not in the predicate layer.

! Some potential counterexamples

- (vi) a. The cat has got your tongue.
- b. He has been to Rome before.

BUT: (vi)a is not dependent on perfect:

- (vii) a. The cat got your tongue.
- b. The cat has your tongue.

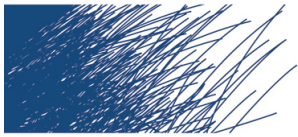


Digging deeper: Predicate ellipsis (v)

BUT: (vi)b behaves differently from idioms.

If perfect aspect is absent, the sentence is ungrammatical; it does not simply lose the idiom reading (unlike actual idioms):

- (viii)a. * I am to Rome tomorrow.
- b. * He will be to Rome soon.
- c. # John pushed up daisies.
- d. # John will push up daisies

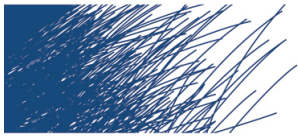


Digging deeper: Predicate ellipsis (vi)

Moreover, other languages have this construction too, with or without the perfect restriction, and it is not considered an idiom:

- (ix) a. Ik ben naar Rome. b. J'ai été à Rome. / *Je suis à Rome.
I am to Rome *I have been to Rome* *I am to Rome*
'I am going to Rome.' (Dutch) 'I have been to R./*I am to R.' (French)

- Our hunch is that these perfect constructions, which do not involve a lexical verb (always with main *BE*), are not idioms in the sense we are considering idioms for the predicate layer.
- Perfect aspect is not part of the predicate layer in Standard English.



Digging deeper: Predicate ellipsis (5)

Our tentative proposal: Divide between progressive and perfect aspect in English

→ Predicative layer: up to vP_{prog}

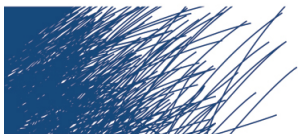
Functional verbal layer: from PerfP up to TP/FinP

(Will's work: vP_{prog} constitutes the clause-internal phase.)

→ VPE targets the predicative layer, but nothing higher:

vP_{prog} when it is present

vP otherwise



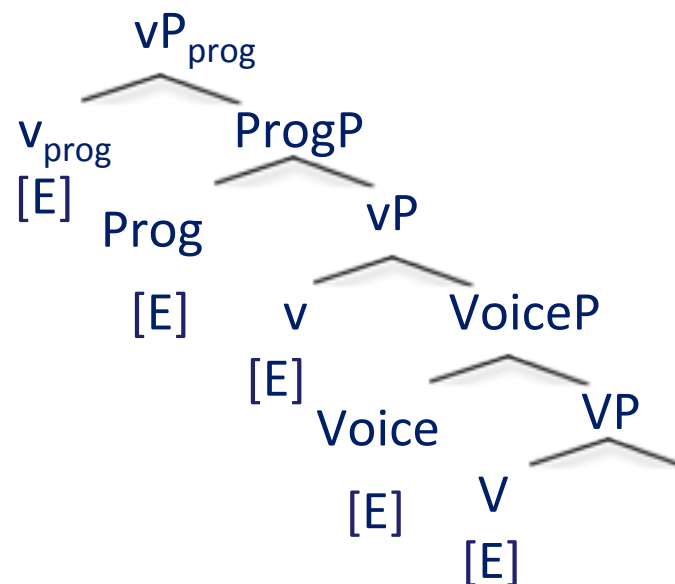
Digging deeper: Predicate ellipsis (6)

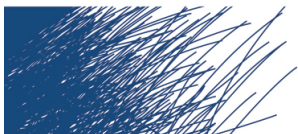
How to formalise this?

Merchant (2001, 2004): E-feature

Suppose: E-feature starts out on V, and percolates up to every next head of the predicative layer

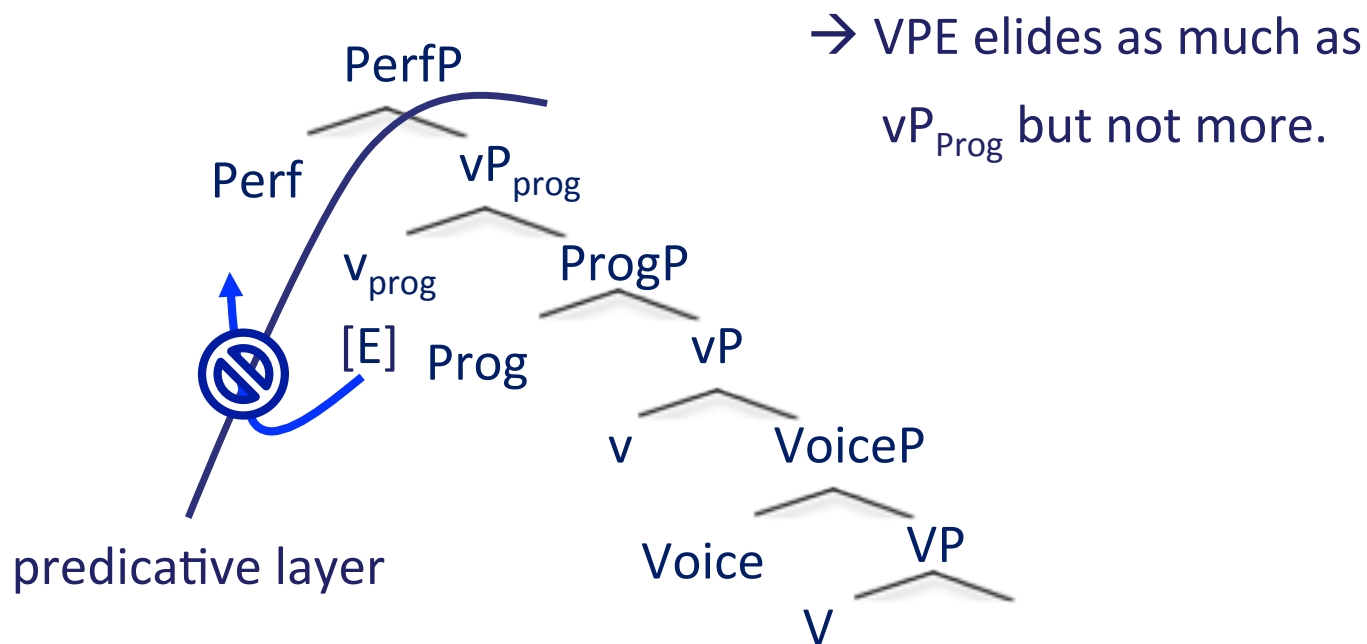
(See Grimshaw's 2005
extended projections)

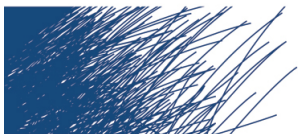




Digging deeper: Predicate ellipsis (7)

It cannot be transferred to a projection higher than the predicative layer in Standard English: E for predicate ellipsis is only compatible with heads that are part of the predicative layer (see Grimshaw's 2005 Extended Domains).



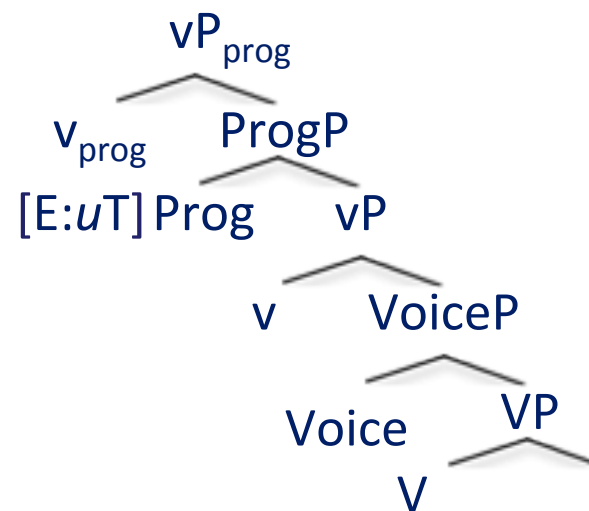


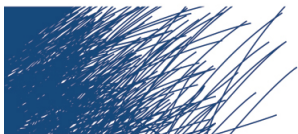
Digging deeper: Predicate ellipsis (8)

Note: E-feature marks the ellipsis site; it is not on the licensing head of the ellipsis (contra Merchant)

→ This approach is compatible with my own account of ellipsis licensing (Aelbrecht 2010):

E-feature with uninterpretable Tense





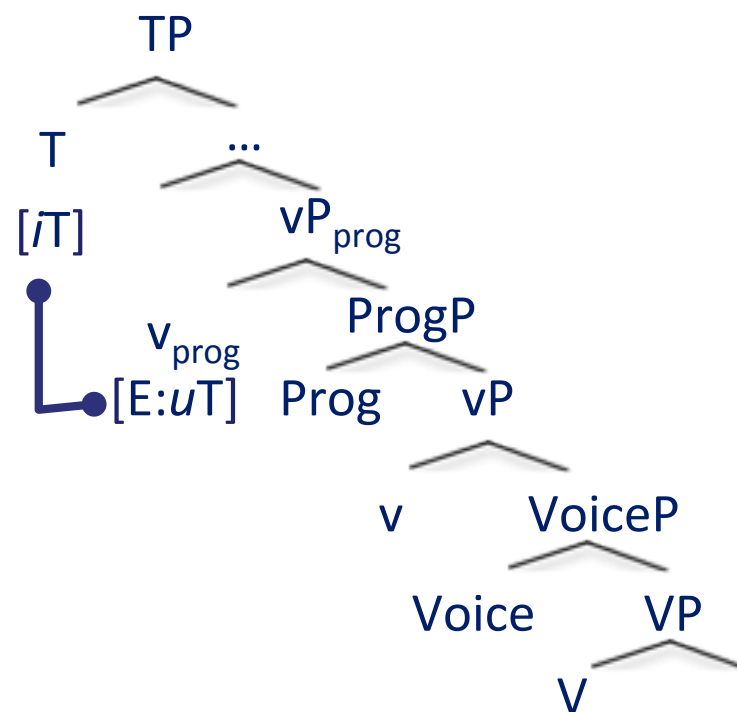
Digging deeper: Predicate ellipsis (9)

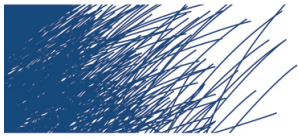
Aelbrecht (2010): Ellipsis is licensed via an Agree relationship between the licensing head and the E-feature marking the ellipsis site lower down.

VPE is licensed by T head

→ T checks E and triggers ellipsis

of vP_{prog} .





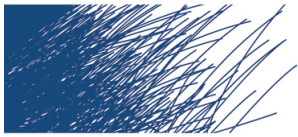
Digging deeper: Predicate ellipsis (i)

! This might give us a solution to the *being* problem.

Recall that *being* is normally obligatorily elided, but has to survive ellipsis if it is not recoverable from the antecedent:

- (i) Bill was punished this morning, and now Ted is **being** punished.
- (ii) Bill was **being** punished this morning, and now Ted is (***being**) punished.

→ *Being* only survives when it's not recoverable from the antecedent (unlike *be(en)*).



Digging deeper: Predicate ellipsis (ii)

Suppose:

E obligatorily percolates up to the next head up until it gets to the highest predicative projection (see Grimshaw's extended domains).

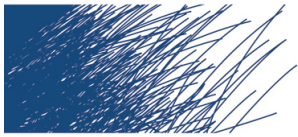
= 'Elide as much of the predicate as possible'

! When *being* is not recoverable, ProgP cannot be elided because of the recoverability condition on ellipsis.

+ 'Elide as much of the predicate as **possible**'

→ The E on *v* is checked instead of that on vP_{prog} and VPE targets vP (nothing more).

→ VPE targets the predicative layer, but only the part that is recoverable.



Digging deeper: Predicate ellipsis (iii)

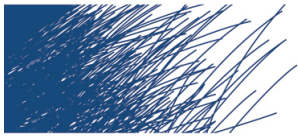
Potential evidence for this claim: interaction with associates of existential constructions.

Derived associate must precede *being*, but follows *been*:

- (iii) a. John says there are <many people> **being** <*many people> arrested.
- b. John says that there have <*many people> **been** <many people> arrested.

→ The derived associate must have risen out of the complement of V to some position in the progressive aspectual layer which precedes *being*.

been – associate – *being* – V



Digging deeper: Predicate ellipsis (iv)

When VPE ellipsis is applied to the *being* sentences, the associate and *being* are typically obligatorily elided:

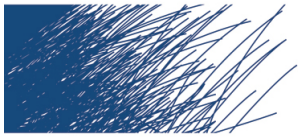
- (iv) John says there are many people being arrested, and indeed there are ~~many people being arrested~~.

However, when *being* is not recoverable, it can survive ellipsis:

- (v) John says there will be more people arrested tomorrow than there are being [~~people arrested~~], now.

→ **Proposal:** VPE targets vP here, not the progressive layer due to recoverability.

→ **Prediction:** The associate, which usually raises to a position within the progressive layer, should also be able to survive ellipsis when it occupies this position, despite being recoverable itself.



Digging deeper: Predicate ellipsis (v)

→ To the extent that *being* can be stranded, this prediction is borne out:

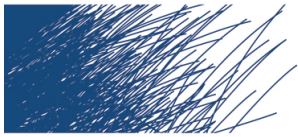
(vi) John says there will be more people arrested tomorrow than there are [_{VP_{prog}} people being [_{VP} ~~t_{people}~~ arrested]] now.

→ Like *be(en)*, the associate raises to check its features.

When VPE targets vP instead of vP_{prog} (when *being* is not recoverable), the associate has two options:

- raise to the progressive layer, check its feature and survive ellipsis, despite being recoverable
- remain in VP, not check its feature and get rescued by ellipsis.

→ This data shows that when *being* escapes ellipsis, it is because the progressive layer isn't targeted by VP ellipsis, but vP is.



Digging deeper: Predicate ellipsis (vi)

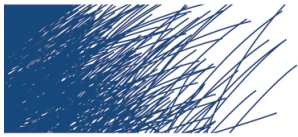
- Remaining problem:

(vii) If Ted wasn't being difficult, then who WAS (being)?

We do not know how to deal with this example yet, but it is a rare exception.
Maybe it should be considered a fixed expression?

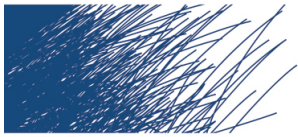
- Extra application: British English *do*?

Do sits in little *v* head and is not recoverable → Ellipsis of VP only



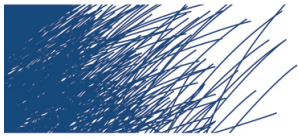
Overview

1. Introduction: the pattern
2. Preliminaries: The verbal structure
3. Analysis, Part I: The ellipsis site
4. Analysis, Part II: Auxiliary ellipsis
5. Extending the analysis: VP fronting
6. Digging deeper: Predicate ellipsis?
7. **Conclusion and further issues**



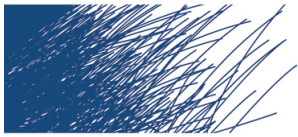
Conclusion and further issues (1)

- VPE and VPF target vP_{prog} .
- 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/been* 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/been* may remain in the ellipsis site and be elided, having their unchecked features deleted at PF
 - *Be/been* must raise in fronting contexts because there is no ellipsis operation to alternatively delete their features.



Conclusion and further issues (2)

- VPE targets the predicative layer, which includes the progressive projections, but not the perfect.
- VPE targets as much of this predicate as possible.
- This can be formalized using the E-feature (Merchant 2001; Aelbrecht 2010) and Extended Projections (Grimshaw 2005).



Conclusion and further issues (3)

Further issues

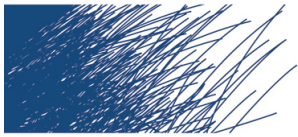
- Finite *BE*

In our analysis as it stands, finite *BE* has the option to not raise as well, contrary to fact.

→ Possible solution: T has a feature to be checked as well, it needs to be filled.

Auxiliaries have the option to raise, so in this case, they **have** to.

Lexical verbs never raise, and in that case, dummy *do* is inserted (as a last resort PF operation, more costly than auxiliary raising).



Conclusion and further issues (4)

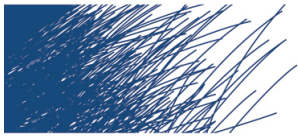
Further issues

- Voice mismatches

Merchant (2007, 2008): Voice mismatches between antecedent and ellipsis clause are possible under VPE.

- (23)a. The janitor must remove the trash whenever it is apparent that it should be [~~removed~~]. (Act-Pass)
- b. The system can be used by anyone who wants to [~~use it~~]. (Pass-Act)

→ Merchant: Voice is not included in the ellipsis site, and therefore not subject to the recoverability condition.



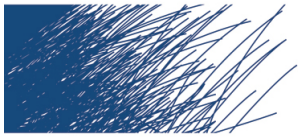
Conclusion and further issues (5)

! Under our approach, Voice *is* included in the ellipsis site, whether VPE deletes either vP or vP_{prog}.

→ We predict Voice mismatches to be illicit (if we adhere to the syntactic identity requirement), contrary to fact.

→ Possible solution:

Perhaps speakers who allow for these mismatches, allow for the ellipsis site to be smaller in these cases (on a par with our solution for the survival of *being* when it is not recoverable – see handout).



Conclusion and further issues (6)

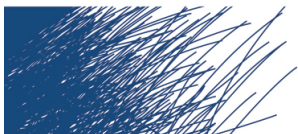
Potential supporting evidence:

When the sentence contains progressive aspect (i.e., when the ellipsis site is vP_{prog}), Voice mismatches are not allowed:

- (24) * The system can't be used by just anyone, even though Mary has been [~~using the system~~] all year.

Such mismatches are allowed with perfect aspect:

- (25) The system can't be used by just anyone, even though Mary has [~~used the system~~] twice already.



G I S T
Generative Initiatives in Syntactic Theory



Thank You!

