Multidominance meets morphology

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Main topic: the interaction between multidominance, morphology and VP-ellipsis (VPE)

Main observation: a negative indefinite in object position cannot scope out of a VPE-site

Main claims:

- negative indefinites do not undergo QR or Agree/feature checking, but are the result of fusion under adjacency with a polarity head
- fusion under adjacency between Pol and D comes about under multidominance in combination with cyclic spell-out/linearization
- ellipsis can block this kind of fusion
- the Lipták/Saab (2010)-generalization that lowering operations, but not raising ones, are blocked under ellipsis can be derived under this analysis

Outline:

1 Negative indefinites under ellipsis: syntax vs. morphology

1.1 Observation: negative indefinites cannot scope out of VP-ellipsis sites

1.1.1 Background: polarity switches under ellipsis

observation: polarity items and indefinites are interchangeable under ellipsis (cf. Sag 1976; Hardt 1993; Johnson 2001; Merchant 2010)

from ***any*** to ***some***

(1) John didn't see **any**one, but Mary did <~~see *anyone/**some**one~~>. (Sag 1976:157f.)

from ***some*** to ***any***

(2) John saw **some**one, but Mary didn't <~~see *someone/**any**one~~>. (Sag 1976:157f.)

from ***no*** to ***a***

(3) I could find **no** solution, but Holly might <~~find *no/**a** solution~~>. (Johnson 2001:107)

next section: a closer look at polarity switches involving negative indefinites

1.1.2 Any-no *switches under VP-ellipsis*

from ***any*** to ***any***: **allowed**

(4) a. I didn't loose **any** weight. My mom didn't <~~loose **any** weight~~> either.
b. Honestly, I didn't see **any** difference. He said he didn't <~~see **any** difference~~> either.
c. I didn't feel **any** closure. Obviously they didn't <~~feel **any** closure~~> either.
d. I couldn't find **any** supplies for rabbits. Employees couldn't <~~find **any** supplies~~> either.
e. "The traditional family won't see **any** change," says Burlison. "A single-parent family won't <~~see **any** change~~> either."

from ***no*** to ***any***: **allowed**

(5) a. The press pulled **no** punches. Leaf didn't <~~pull **any** punches~~> either.
b. I have **no** idea who he was. She probably didn't <~~have **any** idea who he was~~> either.
c. One reviewer said it had **no** volume. Mine didn't <~~have **any** volume~~> either.
d. Sticking to your line of thinking, if Bush has **no** moral authority, then Clinton surely didn't <~~have **any** moral authority~~> either.

from ***any*** to ***no***: **disallowed**

observation: in simple Q/A-pairs with VP-ellipsis in the A, *any* cannot antecede the ellipsis of *no*:

(6) [context: the film festival of Cannes]
Q: Who didn't like **any** movie?
A: a. Quentin Tarantino didn't like **any** movie.
b. Quentin Tarantino liked **no** movie.
c. Quentin Tarantino didn't <~~like **any** movie~~>.
d. * Quentin Tarantino did <~~like **no** movie~~>.

note: the ill-formedness of (6Ad) is not due to the presence of a stressed auxiliary, as the effect persists in infinitival VPE with a focused subject:

(7) I know PETER didn't offer **any** help …
a. … and I also don't expect JOHN to offer **any** help.
b. … and I also expect JOHN to offer **no** help.
c. … and I also don't expect JOHN to <~~offer **any** help~~>.
d. * … and I also expect JOHN to <~~offer **no** help~~>.

from ***no*** to ***no***: **mixed results**

(8) Q: Who liked **no** movie?
A: ? Quentin Tarantino did <~~like **no** movie~~>.

(9) I know PETER offered **no** help, and I also expect JOHN to <~~offer **no** help~~>.

however: if *no* outscopes an element outside of the ellipsis site, *no*/*no*-interchangeability fails

example #1: Neg>Mod-modals (cf. Cormack & Smith 2002; Iatridou & Sichel 2010)

can typically scopes below negation:

(10) a. John cannot go to this party. $(\neg > \Diamond, {}^{\%}\Diamond > \neg)$
b. John can do no homework tonight. $(\neg > \Diamond, {}^{\%}\Diamond > \neg)$

in VPE licensed by *can*, *no* cannot outscope the modal:

(11) Q: Who can offer **no** help?
A: % Quentin Tarantino can <~~offer **no** help~~>. $({}^{*}\neg > \Diamond, {}^{\%}\Diamond > \neg)$

example #2: high PP-scope

the example in (12) famously has two readings (cf. Jackendoff 1972):

(12) Mary looks good with no clothes.
= Mary doesn't look good with any clothes. (the unfortunate dresser reading)
= Mary looks good naked. (the nudity reading)

Haegeman (1995), Svenonius (2002): these two readings correlate with two different scope positions for *no*: high in the case of the unfortunate dresser, low in the case of nudity

under VP-ellipsis only the nudity reading survives:

(13) You say MARY looks good in **no** clothes, but I say JULIE does <~~look good in **no** clothes~~>. (*unfortunate dresser, ^{ok}nudity)

conclusion: *no* cannot take high scope in the context of VPE

The VPE/NI-Generalization
a negative indefinite (NI) in object position cannot scope out of a VP-ellipsis site

1.2 Possible syntactic analyses for negative indefinites & their interaction with VPE

note: there are two common syntactic analyses for allowing an NI in object position to take clausal scope

(i) **Quantifier Raising:** a NI QRs to the scope position of sentential negation (cf. Zeijlstra 2007; Iatridou & Zeijlstra 2010)

(ii) **Agree/feature checking:** the sentential polarity head undergoes Agree/feature checking with the NI in object position (cf. Zeijlstra 2004; Penka & Zeijlstra 2005; Penka 2007; Tubau 2008; De Clercq 2010; Haegeman & Lohndahl 2010)

however: neither of these processes is blocked by VP-ellipsis

(i) VPE does not block QR, provided Parallelism and Scope Economy are respected (cf. Fox 2000)

Definitions

a. *(A consequence of)* Parallelism (Fox 2000:32)
In an ellipsis construction, the scopal relationship among the elements in the antecedent must be identical to the scopal relationship among the parallel elements in the ellipsis site.

b. The Ellipsis Scope Generalization (Fox 2000:83)
In an ellipsis construction, inverse scope is possible only if it is semantically distinct from surface scope both in the sentence that includes the ellipsis site and in the sentence that includes the antecedent.

(14) Some girl watched every movie, and some boy did <~~watch every movie~~> too. (Ha 2007:160)

a. $\exists > \forall$ & $\exists > \forall$ (both conjuncts take surface scope)
b. $\forall > \exists$ & $\forall > \exists$ (both conjuncts take inverse scope)
c. * $\exists > \forall$ & $\forall > \exists$ (*Parallelism)
d. * $\forall > \exists$ & $\exists > \forall$ (*Parallelism)

(15) Mary watched every movie, and some boy did <~~watch every movie~~> too.

a. $\exists > \forall$ & $\exists > \forall$ (both conjuncts take surface scope)
b. * $\forall > \exists$ & $\forall > \exists$ (*Scope Economy)
c. * $\exists > \forall$ & $\forall > \exists$ (*Parallelism)
d. * $\forall > \exists$ & $\exists > \forall$ (*Parallelism)

note: in the illicit example in (16), both Parallelism and Scope Economy would be respected and hence QR should be allowed:

(16) Q: Who can offer no help? ($\neg > \Diamond$)
A: * Quentin Tarantino can <~~offer no help~~>. ($\neg > \Diamond$)

(ii) VPE does not block Agree/feature checking, e.g. T can agree with the elided associate of a *there*-expletive

(17) a. Jim said there wouldn't be many people at the party, but there **were** <~~many people at the party~~>.
b. Jim said there wouldn't be a linguist at the party, but there **was** <~~a linguist at the party~~>.

conclusion: syntactic analyses of negative indefinites cannot account for their interaction with VPE

1.3 A morphological analysis for negative indefinites & its interaction with VPE

observation: ellipsis can block morphological processes (cf. Fuß 2008; Lipták & Saab 2010; Schoorlemmer & Temmerman 2010; Boone 2011; Stjepanović 2011)

example: English T-to-V lowering (cf. Embick & Noyer 2001:586; Lipták & Saab 2010)

(18) John [$_{TP}$ t_{ed} [$_{VP}$ destroy+*ed* the opposition]]

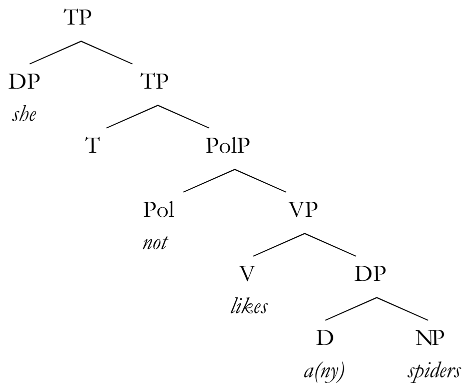
→ blocked under VPE; *do*-insertion is necessary to rescue stranded affix violation

(19) a. * John destroyed the opposition and Pete t_{ed} <~~destroy+*ed* the opposition~~> too.
b. John destroyed the opposition and Pete **did** <~~destroy the opposition~~> too.

→ the interaction between morphology and ellipsis suggests that NIs are also the result of a morphological operation, i.e. a process of fusion/amalgamation/incorporation between a clausal polarity head and the determiner of the object DP (cf. Rullman 1995)

problem: morphological relations typically require a higher degree of locality than exists between the polarity head and the determiner

(20) She likes no spiders. (= *She doesn't like (any) spiders.*)

(21)


Possible DM candidates for a morphological analysis:

1. Lowering (Marantz 1988; Halle & Marantz 1993; Embick & Noyer 2001)
2. Fusion (Halle & Marantz 1993; Halle 1997; Kandybowicz 2006,2007; Parrott 2006)
3. Local Dislocation (Embick & Noyer 2001,2007; Embick 2007)

Lowering: head-to-head adjunction under immediate locality (relation between a head and the head of its complement) (cf. Embick & Noyer 2001:586)

(22) *Lowering of X to Y*
[$_{XP}$ X … [$_{YP}$ … Y …]] → [$_{XP}$ … [$_{YP}$ … [$_{Y}$ Y + X] …]]

however: D is not the head of the complement of Pol in (21)

Fusion: takes two discrete terminal nodes that are sisters under a single category node and collapses them into a single terminal node; the result of Fusion to feature sets A,B is the union of A and B (cf. Halle & Marantz 1993:116; Cable 2005:73)

(23) *Fusion of X and Y*
[X[a,b,c,d] + Y[e,f,g,h]]$_Z$ → [a,b,c,d,e,f,g,h]$_Z$

however: Pol and D are not sisters under a single category node in (21). Moreover, head movement from D to Pol is disallowed, so they cannot become sisters either.

Local Dislocation: a head that is linearly adjacent to a following constituent is adjoined to the linear head (peripheral zero-element) of that constituent; the result of Local Dislocation is affixation (cf. Harley & Noyer 1999:6; Embick & Noyer 1999:270-1)

(24) *Local Dislocation of X to Y*
[X*[Y*Z]] → [[Y+X]$_Y$ * Z] *or* [[X+Y]$_Y$ * Z]

however: *not* (VI in Pol) and *a(ny)* (VI in D) are not linearly adjacent
(cf. *she * not * likes * a(ny) * spiders*)

Conclusion
The fact that high-scoping negative indefinites are blocked by VP-ellipsis suggests that such negative indefinites are the result of a morphological—rather than a syntactic—operation between the clausal Pol-head and the D-head of the object DP. However, none of the existing DM operations fit the bill because all of them are too local.

2 Prerequisite for the analysis: adjacency under multidominance

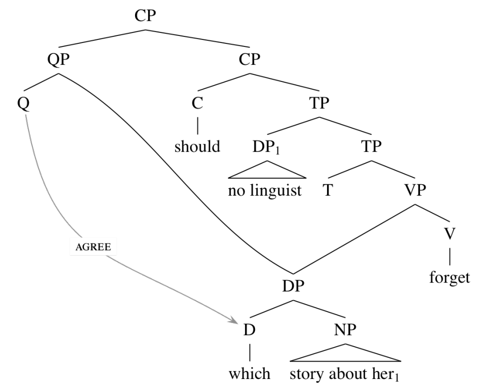
this section in a nutshell: the locality required for morphologically combining the Pol-head and the D-head is established under multidominance

2.1 Background: a multidominant analysis of *wh*-movement and Quantifier Raising (Johnson 2010a)

***wh*-movement**

(25) Which story about her$_1$ should no linguist$_1$ forget?

(26)

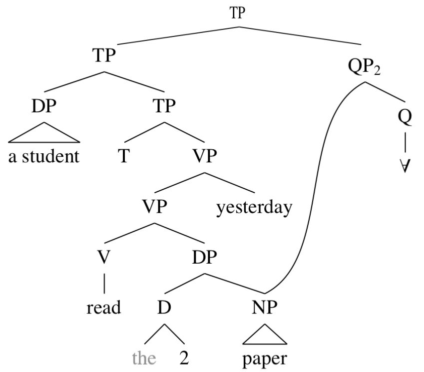


key ingredients:
- the question morpheme Q combines semantically with CP, but morphologically with D(P) (cf. also Cable 2007,2010)
- there is an Agree-relation between Q and D as a result of which D is spelled out in an agreeing form, i.e. as *which*

Quantifier Raising

(27) A student read every paper yesterday.

(28)

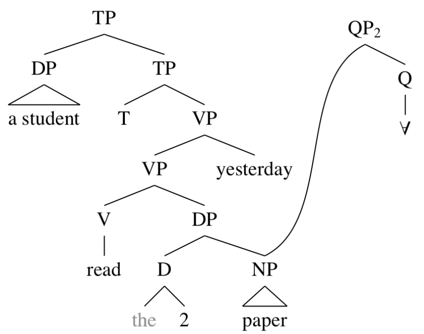


key ingredients:
- the universal quantifier Q combines semantically with NP and TP, but morphologically with D
- there is no c-command relation between Q and D, and hence no Agree; instead, Q and D undergo what Johnson (2010a:23) calls 'fusion', i.e. a morphological process that allows two adjacent terminal nodes to be combined into (i.e. expressed by) one single vocabulary item
→ we will call this **fusion under adjacency**

problem: Q and D do not appear to be adjacent in (28)

Johnson (2010a): the morphological requirements of Q force (cyclic) linearization to take place prior to the merger of TP and QP:

(29)



(30) a. The ordering table of TP is:

a < student	student < T	read < D	D < paper	paper < yesterday
a < T	student < read	read < paper	D < yesterday	
a < read	student < D	read < yesterday		
a < D	student < paper			
a < paper	student < yesterday			
a < yesterday				

b. The ordering table of QP is:
∀ < paper

note: at this point in the derivation nothing intervenes between Q and D, i.e. ¬∃ x. Q < x & x < D (and vice versa)
→ Johnson defines adjacency based on such ordering tables

(31) **Adjacency** (Johnson 2010a:25n22)
Two lexical items α and β are adjacent iff the linearization algorithm puts nothing in between them.

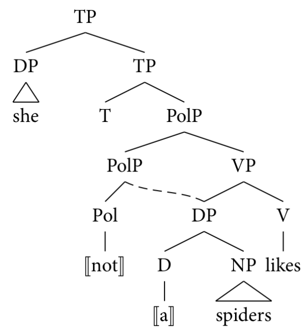
at this point fusion under adjacency takes place, coalescing D and ∀ into *every*

more generally: the multidominant analysis in (29)-(31) allows two seemingly non-local elements to be adjacent ⇒ this is exactly what is required in the case of negative indefinites

2.2 Negative indefinites involve multidominance (Johnson 2010b)

(32) She likes no spiders. (= *She doesn't like (any) spiders.)*

(33)



(Johnson 2010b)

key ingredients: - the polarity head Pol combines semantically with VP, but morphologically with D(P)
- there is an Agree-relation between Pol and D as a result of which D is spelled out in an agreeing form, i.e. as *no*

our proposal: Pol does not undergo Agree with D; instead, they undergo fusion under adjacency

supporting evidence:

(i) In many languages, the combination of negation and an indefinite is recognizable in NIs (cf. Sauerland 2000)

(34) a. Jan heeft **niets** gekocht.
John has nothing bought
'John bought nothing.'

b. Dat is **niet iets** wat Jan heeft gekocht.
that is not something what John has bought
'That is not something John has bought.' (Dutch)

(ii) An Agree-analysis would predict Pol and D to be able to be spelled out simultaneously (cf. Cable 2007,2010 on Tlingit, where Q and the WH-form of D co-occur), *quod non* (cf. (35)) >< an analysis in terms of fusion under adjacency (correctly) predicts the two to be in complementary distribution

(35) * John did not buy nothing. (* under the single negation reading)

Conclusion

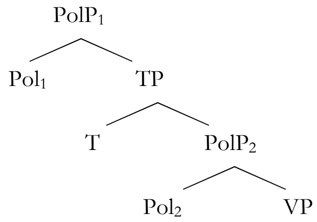
Negative indefinites are the result of fusion under adjacency of Pol and D. This adjacency comes about under multidominance in combination with cyclic spell-out and concomitant linearization.

3 The analysis: VP-ellipsis and the scope of negative indefinites

three basic assumptions:

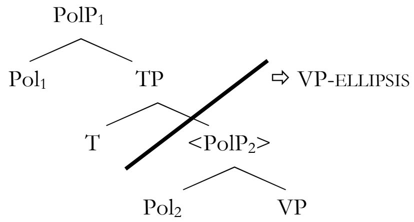
1. 2 PolPs (NegPs), one dominating and one dominated by TP
cf. Robbers 1992; Zanuttini 1997; Van Kemenade 2000; Barbiers 2002; Cormack & Smith 2002; Haegeman 2002; Butler 2003; Holmberg 2003; Van Craenenbroeck 2010

(36)



2. VP-ellipsis = ellipsis of the complement of T
cf. Zagona 1982,1988; Lobeck 1995; Johnson 2001

(37)



3. ellipsis of α involves the non-pronunciation of any terminal element dominated by α and the deletion from the Ordering Table of all statements referring to terminal elements dominated by α (Fox & Pesetsky 2003,2004)

recall:

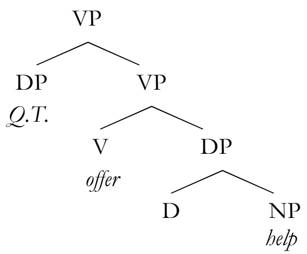
(38) **The VPE/NI-Generalization** (section 1.1):
a negative indefinite in object position cannot scope out of a VP-ellipsis site

(39) *A negative indefinite with high scope*
Q: Who can offer no help?
A: * Quentin Tarantino can <~~offer~~ **~~no~~** ~~help~~>. (*¬ > ◇)

(40) *A negative indefinite with low scope*
Q: Who liked no movie?
A: ? Quentin Tarantino did <~~like~~ **~~no~~** ~~movie~~>.

derivation of the high-scoping NI in (39):

step 1: merger of VP

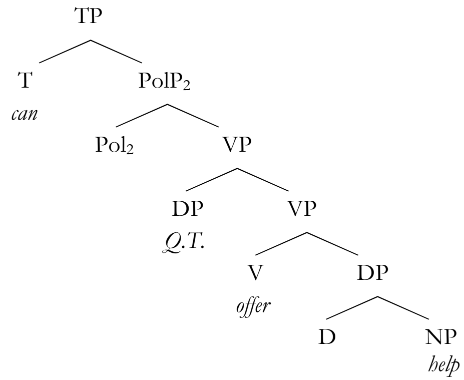
(41)


step 2: spell-out of VP

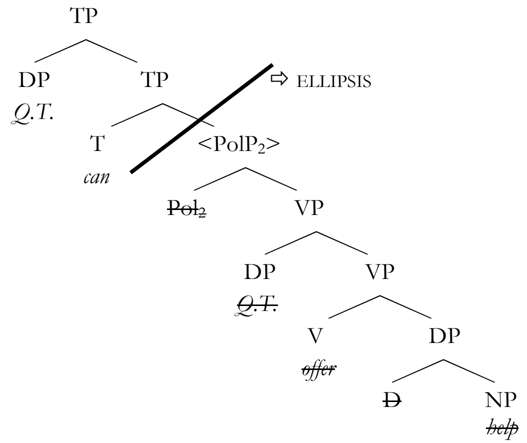
(42) The ordering table of VP is:

Q.T. < offer	offer < D	D < help
Q.T. < D	offer < help	
Q.T. < help		

step 3: merger of Pol_2 and T

(43)


step 4: T attracts the subject and triggers deletion of its complement

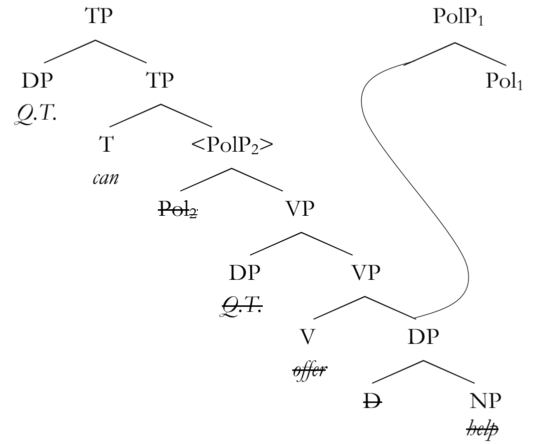
(44)


(45) The ordering table of $PolP_2$ is:

~~Pol_2 < Q.T~~	~~Q.T. < offer~~	~~offer < D~~	~~D < help~~
~~Pol_2 < offer~~	~~Q.T. < D~~	~~offer < help~~	
~~Pol_2 < D~~	~~Q.T. < help~~		
~~Pol_2 < help~~			

step 5: Pol$_1$ merges with DP

(46)



note: this is the point in the derivation where Pol$_1$ and D would normally undergo fusion under adjacency (right before the merger of PolP$_1$ and TP)

however: at this point, D has already been elided, which means there is nothing to fuse with ⇒ fusion under adjacency is blocked and Pol$_1$ can only be spelled out as an independent lexical item (i.e. as *not* or *n't*)

conclusion: the derivation in (41)-(46) is spelled out as (47); the example in (48) can – in the intended reading – not be derived by our system

(47) Quentin Tarantino can't <~~offer (any) help~~>. (¬ > ◇)

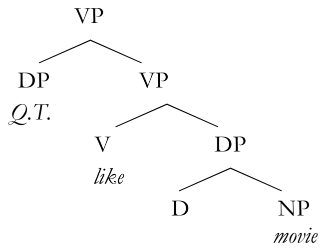
(48) * Quentin Tarantino can <~~offer no help~~>. (*¬ > ◇)

derivation of the low-scoping NI in (40):

(40) Q: Who liked no movie?
A: ? Quentin Tarantino did <~~like **no** movie~~>.

step 1: merger of VP

(49)



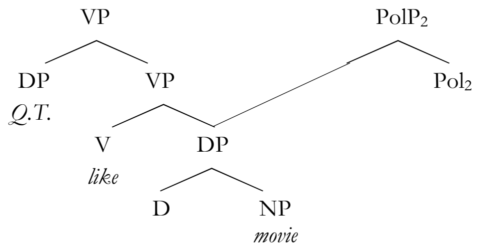
step 2: spell-out of VP

(50) The ordering table of VP is:

Q.T. < like	like < D	D < movie
Q.T. < D	like < movie	
Q.T. < movie		

step 3: Pol$_2$ merges with DP

(51)



step 4: the fusion requirement of Pol$_2$ triggers spell-out and linearization at this point

(52) The ordering table of VP is:

Q.T. < like	like < D	D < movie
Q.T. < D	like < movie	
Q.T. < movie		

(53) The ordering table of PolP$_2$ is:

Pol$_2$ < D	D < movie
Pol$_2$ < movie	

step 5: Pol$_2$ and D are adjacent and undergo fusion under adjacency into *no*

(54) The ordering table of VP is:

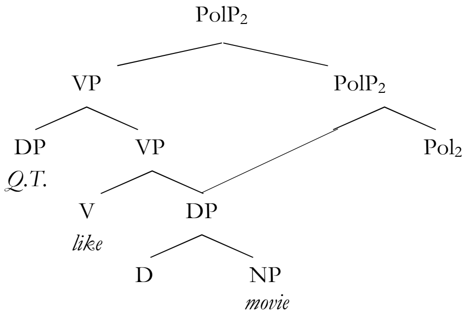
Q.T. < like like < no no < movie
Q.T. < no like < movie
Q.T. < movie

(55) The ordering table of PolP$_2$ is:

no < movie

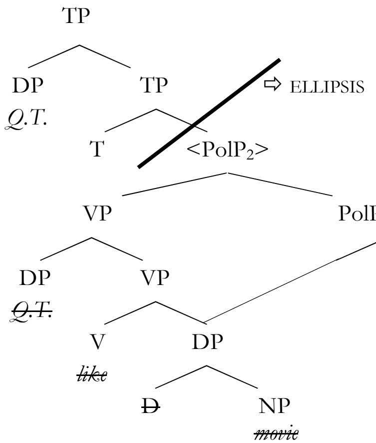
step 6: VP and PolP$_2$ are merged

(56)



step 7: T attracts the subject and triggers deletion of its complement

(57)



(58) The ordering table of PolP$_2$ is:

~~Q.T. < like like < no no < movie~~
~~Q.T. < no like < movie~~
~~Q.T. < movie~~

step 8: the rest of the structure is merged (Pol$_1$, C, ...) and the derivation is spelled out as (40)

(40) ? Quentin Tarantino did <~~like no movie~~>.

conclusion: if fusion under adjacency takes place prior to ellipsis (i.e. if D merges with Pol$_2$ rather than Pol$_1$), the derivation converges and the VP-ellipsis site can contain an object-NI

Aside

This line of reasoning suggests that if *any* were licensed by Pol$_2$, it should be able to antecede the ellipsis of *no* even in VP-ellipsis contexts. A relevant example would be the one in (i).

(i) [context: There's an eating contest and both John and Mary want to end last in the contest. Peter and Julie are discussing this.]
Peter: So can John forfeit the game?
Julie: Well, he COULD not eat anything, I guess.
Peter: But then, Mary could <~~eat nothing~~> too.

The problem with these kinds of examples, though, is that there is no way of telling if the ellipsis site contains a negative indefinite (as a result of fusion under adjacency between D and Pol$_2$) or an NPI licensed by Pol$_2$.

Conclusion

Fusion under adjacency between Pol and D is only allowed if it takes place prior to ellipsis. This implies that NIs can only scope below (modals in) T under VP-ellipsis.

4 Extension of the analysis: deriving the Lipták/Saab (2010)-generalization

this section in a nutshell: our Johnson (2010a,b)-based multidominant account of the interaction between morphological operations and ellipsis straightforwardly derives a restriction on such interactions pointed out by Lipták & Saab (2010)

4.1 The Lipták/Saab (2010)-generalization

(59) RAISING/LOWERING GENERALIZATION ON ELLIPSIS (Lipták & Saab 2010:4)
Descending (morphological) operations, but not raising ones, are blocked under ellipsis.

raising operations: not blocked by ellipsis

A-movement

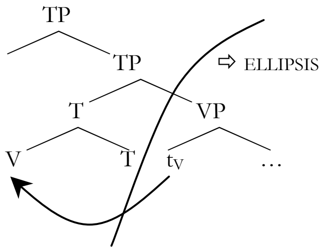
(60) John seems to be happy and Mary does < ~~seem t_{Mary} to be happy~~ > too.

A'-movement

(61) I know which books you like and which ones you don't < ~~like $t_{which\ ones}$~~ >.

head movement

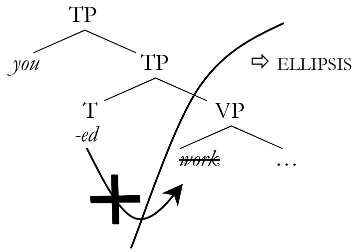
(62) Quando a Ana pôs os óculos na mesa,
when the Ana put the glasses on table
a Maria também pôs <VP ~~$t_{pôs}$ os óculos na mesa~~ >.
the Maria too put the glasses on table
'When Ana put the glasses on the table, Maria did too.' (Portuguese, Cyrino & Matos 2002:6)

(63)


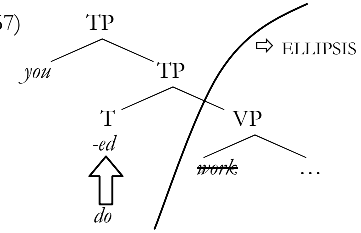
lowering operations: blocked by ellipsis ⇒ languages resort to 'repair' strategies to circumvent violations of the stranded affix filter

T-to-V lowering in English: blocked by ellipsis ((64)-(65)),
repaired via *do*-support ((66)-(67))

(64) * John worked hard because you t_{ed} <VP ~~work+*ed* hard~~ >.

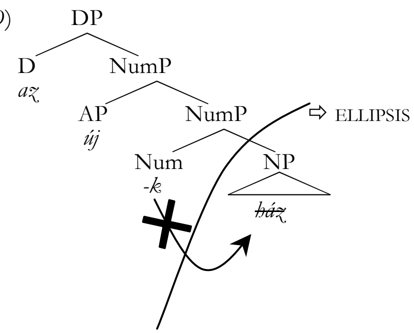
(65)


(66) John worked hard because you did < VP ~~work hard~~ >.

(67)


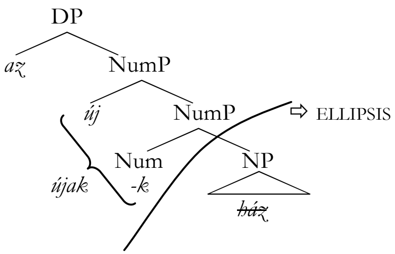
Num-to-N lowering in Hungarian: blocked by ellipsis ((68)-(69)), repaired via Local Dislocation between A and Num ((70)-(72))

(68) * (Mari a régi házakat látta.) Én az új.
*Mari the old house.*PL.ACC *saw I the new*
INTENDED: 'Mari saw the old houses. I saw the new ones.'

(69)


(70) (Mari a régi házakat látta.) Én az újakat.
*Mari the old house.*PL.ACC *saw I the new.*PL.ACC
'Mari saw the old houses. I saw the new ones.'

(71) [*Adj*] * [-*k*] → [*Adj* [-*k*]] (string vacuous) Local Dislocation

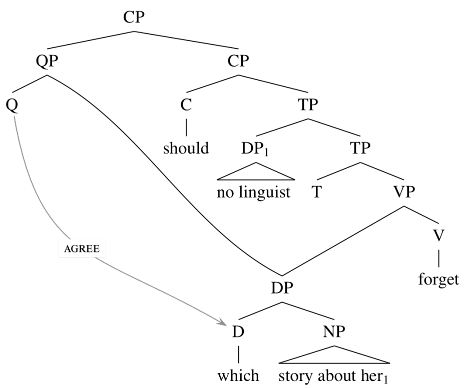
(72)


4.2 Johnson (2010a) on the linearization of multidominant structures

Johnson (2010a): the difference between Agree and fusion under adjacency accounts for differences in linearization between WH-movement (overt in English, covert in other languages) and QR (possibly universally covert)

wh-movement

(73) Which story about her$_1$ should no linguist$_1$ forget?

(74)


note: this structure leaves the linearization algorithm with a choice: the WH-phrase is spelled out either in the high position (specCP) or in the low position (complement of V). In simple WH-questions, English chooses the former option (Johnson 2010a:18).

(75) The ordering table of CP is:

Q < wsah	wsah < should	should < no linguist	no linguist < T	T < forget
Q < should	wsah < no linguist	should < T	no linguist < forget	T < wsah
Q < no linguist	wsah < T	should < forget	no linguist < wsah	forget < wsah
Q < T	wsah < forget	should < wsah		
Q < forget	wsah < wsah			
Q < wsah				

→ this ordering table contains as a subset the total, antisymmetric ordering in (76) ⇒ the phrase marker in (74) is spelled out as (73)

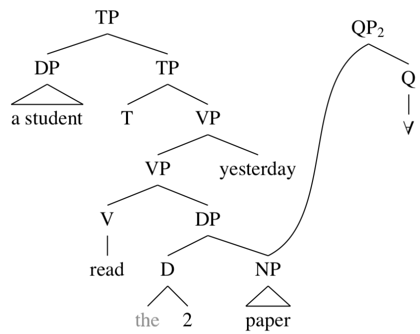
(76)

Q < wsah	wsah < should	should < no linguist	no linguist < T	T < forget
Q < should	wsah < no linguist	should < T	no linguist < forget	
Q < no linguist	wsah < T	should < forget		
Q < T	wsah < forget			
Q < forget				

Quantifier Raising

(77) A student read every paper yesterday.

recall: the morphological requirements of Q force (cyclic) linearization to take place prior to the merger of TP and QP:

(78)


(79) a. The ordering table of TP is:

a < student	student < T	read < D	D < paper	paper < yesterday
a < T	student < read	read < paper	D < yesterday	
a < read	student < D	read < yesterday		
a < D	student < paper			
a < paper	student < yesterday			
a < yesterday				

b. The ordering table of QP is:
∀ < paper

at this point fusion under adjacency takes place, coalescing D and ∀ into *every*

(80) a. The ordering table of TP is:

a < student	student < T	read < every	every < paper	paper < yesterday
a < T	student < read	read < paper	every < yesterday	
a < read	student < every	read < yesterday		
a < every	student < paper			
a < paper	student < yesterday			
a < yesterday				

b. The ordering table of QP is:
every < paper

note: the resulting ordering tables yield a total, antisymmetric ordering ⇒ the fused ∀+D-form is necessarily spelled out in the position of D (= *in situ*)

conclusion: the intermediate linearization required by the morphological properties of Q forces a QRed phrase to be spelled out *in situ*; WH-movement doesn't require such intermediate spell-out and as a result can be spelled out in the landing site

4.3 Putting two and two together: Johnson (2010a) meets Lipták & Saab (2010)

recall:

(81) RAISING/LOWERING GENERALIZATION ON ELLIPSIS (Lipták & Saab 2010:4)
Descending (morphological) operations, but not raising ones, are blocked under ellipsis.

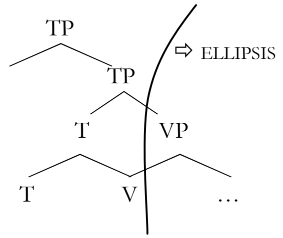
(82) Johnson (2010a)
Fusion under adjacency is always spelled out *in situ,* i.e. in the lower of the two positions.

this means: any morphological relation the locality requirements of which trigger intermediate spell-out and linearization is spelled out *in situ*, i.e. it is a case of lowering ⇒ raising operations are never dependent on a local morphological relation

hence: a PF-operation like ellipsis can bleed lowering but not raising

example 1: V-stranding VP-ellipsis

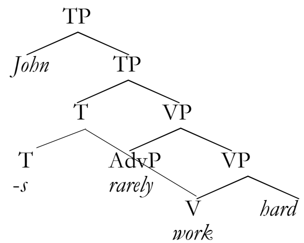
(83) Quando a Ana pôs os óculos na mesa,
when the Ana put the glasses on table
a Maria também pôs < $_{VP}$ ~~$t_{pôs}$ os óculos na mesa~~> .
the Maria too put the glasses on table
'When Ana put the glasses on the table, Maria did too.' (Portuguese, Cyrino & Matos 2002:6)

(84)


→ finite verbs are spelled out in T in Portuguese ⇒ there is a syntactic relation between V and T (head movement triggered by Agree) ⇒ this syntactic relation cannot be bled by a post-syntactic deletion operation ⇒ raising is not bled by ellipsis (= part two of the Lipták/Saab-generalization)

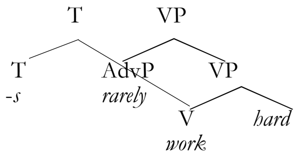
example 2: T-to-V lowering in English

(85) John t_{-s} rarely [$_{VP}$ work+*s* hard].

(86)


→ finite verbs are spelled out in V in English ⇒ there is a morphological relation between T and V, not a syntactic one ⇒ the adjacency requirement on this relation forces spell-out and linearization to take place before the two root nodes are combined:

(87)



(88) a. The ordering table of VP is:
rarely < work   work < hard
rarely < hard

b. The ordering table of T is:
work < -s

→ at this point V and T are adjacent and can undergo fusion under adjacency:

(89) a. The ordering table of VP is:
rarely < works   works < hard
rarely < hard

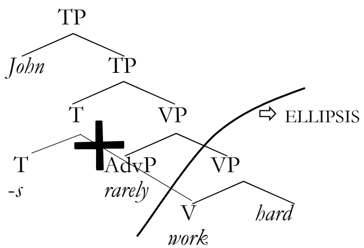
b. The ordering table of T is:
works < works

→ the resulting ordering tables have as a subset a total, antisymmetric ordering ⇒ the form *works* is necessarily spelled out *in situ*

however: when the VP is marked for deletion, fusion under adjacency is blocked, because T has nothing to fuse with

(90) * I often work hard because John $t_{\text{-s}}$ rarely < $_{\text{VP}}$ ~~work+*s* hard~~ >.

(91)



as a result T-to-V lowering in English is blocked by ellipsis and the language resorts to a repair mechanism (*do*-support) (= part one of the Lipták/Saab-generalization)

4.4 Counterexamples to the Lipták/Saab-generalization & possible solutions

→ there are a number of cases reported in the literature of raising operations that are blocked by ellipsis

4.4.1 The sluicing-COMP generalization (Merchant 2001)

→ sluicing seems to bleed head movement to C, both of finite verbs and of second position clitics (Merchant 2001):

(92) A: Max has invited someone. B: Really? Who (*has)?

(93) a. Peter se je sprasheval, [$_{\text{CP}}$ kako$_1$ je$_2$ [$_{\text{TP}}$ Shpela t_2 popravila t_1]].
Peter REFL AUX *asked what* AUX *Shpela fixed*
'Peter wondered what Shpela fixed.'

b. Shpela je popravila nekako, a nisem vprashal, [$_{\text{CP}}$ kako (*je) <>].
Shpela AUX fixed something but NEG.I.AUX asked what AUX
'Shpela fixed something, but I didn't ask what.' (Slovene)

→ to the extent that these (and comparable) examples are really instances of ellipsis bleeding raising, they are problematic for the Lipták/Saab-generalization (and hence for the present account)

however: (i) the sluicing-COMP generalization applies not only to elements involving movement, but also to elements traditionally assumed to be base-generated in the COMP-domain such as complementizers and complementizer agreement:

(94) Cheannaigh sé leabhar inteacht ach níl fhios agam céacu ceann (*a/*ar).
bought he book some but not.is knowledge at.me which one C_{trace}/C_{pro}
'He bought a book, but I don't know which.' (Irish)

(95) a. Du woidd-st doch kumma, owa mia wissn ned wann-st (du) kumma woidd-st.
you wanted-2sg PRT *come but we know not when-2sg you come wanted-2sg*
'You wanted to come, but we don't know when you wanted to come.'

b. Du woidd-st doch kumma, owa mia wissn ned wann(*-st).
you wanted-2sg PRT *come but we know not when-2sg*
'You wanted to come, but we don't know when. (Bavarian)

(ii) there are other, non-movement-bleeding accounts of the sluicing-COMP generalization: Thoms (2010) argues that sluicing deletes C' rather than TP, while Baltin (2010) claims that the projection hosting the verb/clitic/complementizer/agreement is not the same as the one hosting the WH-phrase (cf. Rizzi 1997) and that sluicing only targets the former

4.4.2 Yes/no-focus sluicing in Hungarian (Van Craenenbroeck & Lipták 2008)

→ Hungarian yes/no-questions are formed by attaching the suffix *-e* to the finite verb:

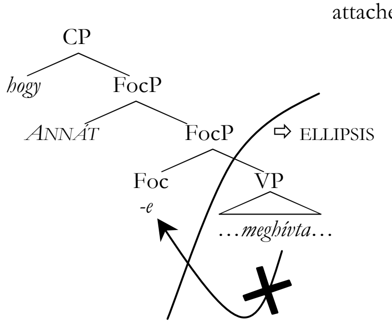
(96) Kiváncsi vagyok, hogy János elment*(-e) iskolába.
curious I.am COMP *János* PV*.went*(-*Q*) school-to*
'I wonder if János left for school.'

(97) a. * Kiváncsi vagyok, hogy János-e elment.
curious I.am COMP *János-*Q PV*.went*
INTENDED: 'I wonder if János left.'
b. * Kiváncsi vagyok, hogy JÁNOS-e ment el.
curious I.am COMP *János-*Q *went* PV
INTENDED: 'I wonder if it was János who left.'

however: in elliptical yes/no-questions, *-e* obligatorily attaches to a focused XP:

(98) János meghívott egy lányt, de nem tudom hogy ANNÁT*(-e).
John invited a girl but not I.know COMP *Anna-*Q
'John invited a girl, but I don't know if it was Anna.'

Van Craenenbroeck & Lipták (2008): ellipsis bleeds V-to-Foc-movement, thus stranding the affix *-e* in Foc. As a repair mechanism, Hungarian attaches *-e* to the focused XP in specFocP.

(99)


note: a Thoms/Baltin-style account is not an option here, as the head representing the landing site of the movement is overtly spelled out

so: given that the relation between the finite verb and the *e*-suffix is in no obvious way morphological, these facts suggest that the raising-portion (i.e. part two) of the Lipták/Saab (2010)-generalization still needs some tweaking

→ this seems corroborated by Baltin (2006,2007,to appear) and Aelbrecht (2009), who present cases of A'-movement blocked by verbal ellipsis

5 Summary and conclusions

5.1 Summary

- A negative indefinite in object position cannot scope out of a VP-ellipsis site.
- Negative indefinites do not undergo QR or Agree/feature checking, but are the result of fusion under adjacency with a Pol-head.
- Fusion under adjacency between Pol and D comes about under multidominance (in combination with cyclic spell-out/linearization).
- Ellipsis can block this kind of fusion.
- The Lipták/Saab (2010)-generalization that lowering operations, but not raising ones, are blocked under ellipsis can be derived from Johnson's (2010a) view on linearization under multidominance.

5.2 Implications and prospects

- If Johnson (2010a) is correct in analyzing QR as involving fusion under adjacency, then the fact that QR is not blocked by ellipsis suggests that QR targets a low/VP-adjoined position (Fox & Nissenbaum 1999).
- The hypothesis that multidominance can feed fusion under adjacency forces us to consider the possibility of non-local morphological relations elsewhere in the grammar as well.
- The introduction of fusion under (multidominant) adjacency in the PF-branch of the grammar has the potential of replacing DM-Lowering, DM-Fusion and DM-Local Dislocation by a single operation, thus leading to increased theoretical parsimony.
- Our theory predicts there is no overt Neg-shift. This seems corroborated by the fact that many proposed instances of Neg-shift are parasitic on independently attested movement operations, e.g. scrambling in continental West-Germanic (Haegeman 1995) and object shift in Scandinavian (Svenonius 2002).

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