Quirky interactions between ellipsis and negation

Jeroen van Craenenbroeck
CRiSSP/HUB/FUSL/Brussels
van.craenenbroeck.jeroen@gmail.com

Tanja Temmerman
LUCL/Leiden
tanja.temmerman@gmail.com

Main topic: the interaction between ellipsis and negation

Main claims:
• negative indefinites do not undergo QR or Agree/feature checking, but are the result of fusion with a Pol°-head
• fusion between Pol° and D° comes about under multidominance
• ellipsis can block this kind of fusion

Outline:

1 Any/no interchangeability under ellipsis: empirical generalizations
1.1 Background: polarity switches under ellipsis
observation: polarity items and indefinites are interchangeable under ellipsis (cf. Sag 1976; Harlt 1993; Johnson 2001; Merchant 2010)

from any to some
(1) John didn’t see anyone, but Mary did see <someone/anyone>. (Sag 1976:157f.)

from some to any
(2) John saw someone, but Mary didn’t <see some/anyone>. (Sag 1976:157f.)

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

this talk: a closer look at polarity switches involving negative indefinites

1.2 From any to no: clausal vs. verbal ellipsis
1.2.1 Clausal ellipsis: any can antecede the ellipsis of no
question: how can we tell if a clausal ellipsis site contains any or no?

(4) Q: Who didn’t eat any cookies?
      b. Mary <stem cookies>.

answer: by looking at subject NPIs

(5) [context: the TV show American Idol]
   Q: Which song didn’t anyone like?
      b. Katie’s song. Guess why!

note: the non-elliptical variants of (5) are ill-formed due to violations of NPI-licensing

(6) a. * Katie’s song anyone didn’t like.
    b. * Guess why anyone didn’t like Katie’s song!

collection: the example in (5) shows that any can antecede the ellipsis of no in clausal ellipsis
option #2: any judge in specTP
(13) [\(\textcolor{red}{\text{cp}}\) Katie’s song [\(\text{c}: C^* < [\text{tp} \quad [r \quad T \quad [\text{v} \quad \text{[\(\textcolor{red}{\text{intensive-like}}\])}] > ]]] \)] > ]
→ this ellipsis site is ruled out due to the ISC (\(\neg \neg > V > \text{NPI}\))

option #3: no judge in specTP
(14) [\(\textcolor{red}{\text{cp}}\) Katie’s song [\(\text{c}: C^* < [\text{tp} \quad [r \quad T \quad [\text{v} \quad \text{[\(\textcolor{red}{\text{any}}\)]}] > ]]] \)] > ]
→ this ellipsis site doesn’t violate any principles and leads to a converging derivation

option #4: no judge in specTP
(15) [\(\textcolor{red}{\text{cp}}\) Katie’s song [\(\text{c}: C^* < [\text{tp} \quad [r \quad T \quad [\text{v} \quad \text{[\(\textcolor{red}{\text{any}}\)]}] > ]]] \)] > ]
→ this ellipsis site doesn’t violate any principles and leads to a converging derivation (cf. Merchant 2001 on covert phrasal A-movement leading to the correct scope inside sluicing sites)

Aside
Two other options include (i) short QR of the NPI subject \textit{any judge} to a position in between \textit{\emph{any}} and \textit{always}, and (ii) ellipsis ‘repairing’ the ISC or the NPI-licensing violation. The former would falsely predict (10) to be grammatical (with anything undergoing QR to a position in between \textit{\emph{didn’t}} and \textit{\emph{always}}). The latter is unlikely in light of the fact that both the ISC and the condition on NPI licensing have a prominent LF-component (cf. Merchant 2001; Moscati 2006); it is well known that ellipsis cannot repair LF-violations (cf. e.g. Sauerland 1996).

\textbf{conclusion:} the ISC-example in (11) shows that in clausal ellipsis \textit{any} can antecede the ellipsis of \textit{no}

\subsection*{1.2.2 Verbal ellipsis: any cannot antecede the ellipsis of no}

\textit{observation:} in simple Q/A-pairs with VP-ellipsis in the A, \textit{any} cannot antecede the ellipsis of \textit{no}.

(16) [\textcolor{red}{\text{context: the film festival of Cannes}}\]
\textbf{Q:} Who didn’t like \textit{any} movie?
\textbf{A:} a. Quentin Tarantino didn’t like \textit{any} movie.
   b. Quentin Tarantino liked \textit{no} movie.
   c. Quentin Tarantino didn’t \textit{like} \textit{any} movie.
   d. * Quentin Tarantino did \textit{\textcolor{red}{\text{like}}} \textit{no} movie.

\textit{note:} the ill-formedness of (16A\textit{d}) is not due to the presence of a stressed auxiliary, as the effect persists in infinitival VPE with a focused subject.
(17) 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.

conclusion: the data in (16)-(17) show that in verbal ellipsis any cannot antecede the ellipsis of no

1.3 From no to no under verbal ellipsis

note: the data in section 1.2.2 only represent one of the four types of any/no-interaction under VP-ellipsis; let's try to paint a more complete picture:

from any to no: disallowed (see above, section 1.2.2)

from any to any: allowed (attested data)

(18) a. I didn’t loose any weight. My mom didn’t <lose 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 Burlson. “A single-parent family won’t <see any change> either.”

from no to any: allowed (attested data)

(19) 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 no to no: mixed results

(20) Q: Who liked no movie?
   A: ? Quentin Tarrantino did <like no movie>.

(21) 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:

(22) a. John cannot go to this party.  (¬ > ◇, ◇ > ¬)
  b. John can do no homework tonight. (¬ > ◇, ◇ > ¬)

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

(23) Q: Who can offer no help?
   A: % Quentin Tarrantino can <offer no help>. (%¬ > ◇, ◇ > ¬)

example #2: high PP-scope

the example in (24) famously has two readings (cf. Jackendoff 1972):

(24) a. Mary looks good with no clothes. (the unfortunate dresser reading)
    b. 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 naked reading survives:

(25) You say MARY looks good in no clothes, but I say JULIE does <look good in no clothes>.
    (*unable to, *nudity)

conclusion: no cannot take scope outside of a VPE-site

Generalization #2
a negative indefinite in object position cannot scope out of a VP-ellipsis site
2 Background for the analysis

2.1 Possible analyses for negative indefinites and their interaction with VP-ellipsis

note: both generalizations crucially concern negative indefinites

let’s start from generalization #2, i.e. a negative indefinite in object position cannot scope out of a VP-ellipsis site

→ there are various possible ways of allowing a negative indefinite (NI) in object position to take clausal scope:

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


(iii) Fusion/amalgamation/incorporation: a NI in object position is the result of a (fairly superficial) process of fusion/amalgamation/incorporation between a clausal polarity head and the determiner of the object DP (cf. Rullman 1995)

question: which of these processes can be blocked by VP-ellipsis?

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

Note
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.

(26) Some girl watched every movie, and some boy did <watch every movie> too.
(3a) Jim said there wouldn’t be many people at the party, but there were <many people at the party>. (both conjuncts take surface scope)
(b) Jim said there wouldn’t be a linguist at the party, but there was <a linguist at the party>.

C onclusion: an analysis of object NIs based on QR or Agree/feature checking cannot account for the blocking effect of VP-ellipsis → we pursue an analysis in terms of fusion instead

Two questions:
- how can an NI in object position be the result of fusion given that Pol and the object are arguably not adjacent?
- how exactly does VP-ellipsis block fusion?
2.2 A multidominance analysis of wh-movement and Quantifier Raising (Johnson 2010a)

**wh-movement**

(30) Which story about her should no linguist forget?

(31) A student read every paper yesterday.

**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
- the multiply dominated WH-phrase can in principle be spelled out in the high (moved) or the low (in situ) position

**Quantifier Raising**

(32) A student read every paper yesterday.

(33) A student read every paper yesterday.

**key ingredients:**
- the universal quantifier Q combines semantically with NP and TP, but morphologically with D(P)
- there is no c-command between Q and D, and hence no Agree-relation; instead, Q and D undergo fusion, i.e. a morphological process that allows two adjacent terminals to be combined into one vocabulary item

**problem:** Q and D do not appear to be adjacent

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

(34) The linearization of TP is:
- a < student < read < D < paper < yesterday
- D < student < read < paper < yesterday
- a < read < student < paper < yesterday
- a < paper < student < yesterday
- a < yesterday

(35) The linearization 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 linearizations

(36) **Adjacency** (Johnson 2010a:25n22)
- Two lexical items α and β are adjacent iff the linearization algorithm puts nothing in between them.
3 The analysis: ellipsis blocks fusion

3.1 The core of the analysis: negative indefinites involve multidominance (Johnson 2010b)

(37) She likes no spiders. (= She doesn’t like (any) spiders)

(38)

\[
\begin{array}{c}
\text{TP} \\
\text{DP} \\
\Delta \text{she} \\
\text{T} \\
\text{PolP} \\
\text{Pol} \\
\text{VP} \\
\text{[not]} \\
\text{D} \\
\text{NP likes} \\
\text{[s]} \\
\text{spiders}
\end{array}
\]

(Johnson 2010b)

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

our proposal: Polº does not undergo Agree with Dº; instead, they undergo fusion

supporting evidence:

(i) In many languages, NIs transparently consist of two morphemes (negation and indefinite) (cf. Sauerland 2008)

(39) a. Jan heeft niets gekocht. ‘John bought nothing.’
    b. Dat is niet iets wat Jan heeft gekocht. ‘That is not something John has bought.’ (Dutch)

(ii) An Agree-analysis would predict Polº and Dº to be able to be spelled out simultaneously (cf. Cable 2007, 2010 on Tlingit, where Qº and the Wh-form of Dº co-occur), quod non (cf. (40)) $\Rightarrow$ an analysis in terms of fusion (correctly) predicts the two to be in complementary distribution

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

conclusion: negative indefinites in object position are the result of fusion Polº and Dº

3.2 Returning to generalization #2: VP-ellipsis and the scope of no

three central assumptions:

1. 2 PolPs (NegPs), one dominating and one dominated by TP

(41)

\[
\begin{array}{c}
\text{PolP}_1 \\
\text{PolP}_2 \\
\text{TP} \\
\text{VP}
\end{array}
\]

2. VP-ellipsis = ellipsis of the complement of Tº

(42)

\[
\begin{array}{c}
\text{PolP}_1 \\
\text{PolP}_2 \\
\Rightarrow \text{VP-ellipsis}
\end{array}
\]

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:

(43)  **Generalization #2:**
      a negative indefinite in object position cannot scope out of a VP-ellipsis site

(44)  Q:  Who can offer no help?
      A:  * Quentin Tarrantino can offer no help.  (¬ ◇)

(45)  Q:  Who liked no movie?
      A:  ? Quentin Tarrantino did like no movie.

derivation of (44):

**step 1**: merger of VP

(46)  VP
      DP  VP
      Q.T.  offer  Dº  NP  help

**step 2**: spell-out of VP

(47)  The linearization of VP is:
      Q.T. < offer  offer < D  D < help
      Q.T. < D  offer < help
      Q.T. < help

**step 3**: merger of Polº and Tº

(48)  TP
      Tº  PolPº
      Polº  VP
      DP  VP
      Q.T.  offer  Dº  NP  help

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

(49)  TP
      DP  TP
      Q.T.  Tº  offer  PolPº
      Polº  VP
      DP  VP
      Q.T.  offer  Dº  NP  help

(50)  The linearization of PolPº is:
      Polº < Q.T  Q.T < offer  offer < D  D < help
      Polº < offer  Q.T < D  offer < help
      Polº < D  Q.T < help
      Polº < help
**Step 5:** Pol₁º merges with DP

\[(51)\]

\[\begin{array}{c}
\text{TP} \\
\text{DP} \\
\text{Q.T.} \\
\end{array} \quad <\text{PolP}_2>
\]

\[\begin{array}{c}
\text{PolP}_1 \\
\end{array} \quad <\text{PolP}_2>
\]

\[\begin{array}{c}
\text{Pol}_1º \\
\text{Vº} \\
\text{DP} \\
\end{array} \quad \text{TP}
\]

**Note:** This is the point in the derivation where Pol₁º and Dº would normally fuse (right before the merger of PolP₁ and TP).

**However:** At this point, Dº has already been elided, which means there is nothing to fuse with → fusion is blocked and Pol₁º can only be spelled out as an independent lexical item (i.e. as not or n’t).

**Conclusion:** The derivation in (46)-(51) is spelled out as (52); the example in (53) can—in the intended reading—not be derived by our system.

\[(52)\quad \text{Quentin Tarrantino can’t <offe (any) help>.}\]

\[(53)\quad * \text{Quentin Tarrantino can <offe (any) help>.}\]

**Derivation of (54):**

\[(54)\quad \text{Q: Who liked no movie?} \quad \text{A: ? Quentin Tarrantino did <like no movie>.}\]

**Step 1:** Merger of VP

\[(55)\]

\[\begin{array}{c}
\text{VP} \\
\text{DP} \\
\text{Q.T.} \\
\end{array} \quad <\text{Vº}>
\]

\[\begin{array}{c}
\text{Dº} \\
\text{NP} \\
\text{movie}
\end{array}
\]

\[\begin{array}{c}
\text{like}
\end{array}
\]

**Step 2:** Spell-out of VP

\[(56)\quad \text{The linearization of VP is:} \quad \text{Q.T. < like < D < movie}>\]

**Step 3:** Polº merges with DP

\[(57)\]

\[\begin{array}{c}
\text{VP} \\
\text{DP} \\
\text{Q.T.} \\
\end{array} \quad <\text{Vº}>
\]

\[\begin{array}{c}
\text{Dº} \\
\text{NP} \\
\text{movie}
\end{array}
\]

\[\begin{array}{c}
\text{like}
\end{array}
\]
step 4: the fusion requirement of Pol² and D° triggers linearization at this point

(58) The linearization of VP is:
Q.T. < like < D < movie
Q.T. < D < like < movie
Q.T. < movie

(59) The linearization of PolP₂ is:
Pol² < D < movie
Pol² < movie

step 5: Pol² and D° are adjacent and undergo fusion into no

(60) The linearization of VP is:
Q.T. < like < no < movie
Q.T. < no < like < movie
Q.T. < movie

(61) The linearization of PolP₂ is:
no < movie

step 6: VP and PolP₂ are merged

(62)

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

(63)

step 8: the rest of the structure is merged (Pol¹, C°, etc.) and the derivation is spelled out as

(65) ? Quentin Tarrantino did <like no movie>.

conclusion: if fusion takes place prior to ellipsis (i.e., if D° merges with Pol² rather than Pol¹), the derivation converges and the VP-ellipsis site can contain an object-NI
3.3 Returning to generalization #1: clausal vs. verbal ellipsis

recall:
(66) Generalization #1: while in clausal ellipsis any can antecede the ellipsis of no, in verbal ellipsis this polarity switch is disallowed

clausal ellipsis
(67) Q: Which song didn’t any judge always vote for?
A: @ Katie’s song $<$no judge always voted for$>$.  

verbal ellipsis
(68) Q: Who didn’t like any movie?
A: * Quentin Tarantino did $<$like no movie$>$.  

general idea: the ellipse site properly contains both PolP$_1$ and PolP$_2$
- fusion always precedes ellipsis
- negative indefinites are allowed regardless of whether the indefinite merges with Pol$^a$ or Pol$^b$

analysis of (67):
1. the contracted negation (i.e. n’t) of the antecedent is the spell-out of Pol$^a$ (cf. Cormack & Smith 2002)

(69) $<$n’t $<$TP $<$vP $<$[n’t $<$CP $<$Who $<$[n’t $<$TP $<$vP $<$[n’t $<$CP $<$[v like any movie$]>$]$>$]$>$]$>

2. Scope Parallelism requires that the negation in the ellipse site also be of the PolP$_1$-type
3. Ellipsis of PolP$_2$ blocks fusion of Pol$^b$ and D$^a$ and the example in (68) cannot be derived

Aside
This line of reasoning suggests that if any were licensed by Pol$^a$, any should be able to antecede the ellipsis of no even in VP-ellipsis contexts. A relevant example would be the one in (69).

(69) [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 COULDN’T eat anything, I guess.
Peter: But then, Mary could $<$sleep$>$ too.
The problem with these kinds of examples, though, is that there is no way of telling if the ellipse site contains a (fused) negative indefinite or an NPI licensed by Pol$^b$.

analysis of (67):
1. the negative indefinite in subject position fuses with a Pol$^a$-head (presumably Pol$^a$ given that negation outscopes always)
2. ellipsis of the complement of C$^a$ (i.e. PolP$_1$ or some higher projection) yields the fragment in (67)

conclusion: an ellipse site can contain negative indefinites only if it properly contains the polarity head responsible for creating the indefinite; for clausal ellipses this is always the case, for verbal ellipses this only holds for the lower polarity projection

4 Broader implications:
Elded subject NPIs constitute no new argument for EPP-violation-repair

claim: clausal ellipsis suspends the Extended Projection Principle (EPP), i.e. the requirement that subjects raise to specTP (cf. Den Dikken et al. 2000; Merchant 2001; Van Craenenbroeck & Den Dikken 2006; Van Craenenbroeck 2010)

(70) A biography of one of the Marx brothers is going to appear this year.  
5 Summary and conclusions

5.1 Summary

- While in clausal ellipsis any can antecede the ellipsis of no, in verbal ellipsis this polarity switch is disallowed.
- 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 with a Pol^h-head.
- Fusion between Pol^a and D^b comes about under multidominance.
- Ellipsis can block this kind of fusion.

5.2 Implications and prospects

- Subject NPIs do not provide conclusive evidence that clausal ellipsis suspends the EPP.
- The facts discussed here fit into a broader set of distinctions between ‘high’ and ‘low’ ellipses. Clausal ellipsis contains two members of a grammatical dependency, whereas verbal ellipsis only contains one, leading to differences in grammaticality (cf. Merchant 2007, 2010).
- 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).
- How does the fusion operation described here relate to existing (DM and non-DM) accounts of Fusion (cf. Halle & Marantz 1993; Embick & Noyer 2001; Kandybowicz 2006; Parron 2006; Radkevich 2010)?
- How do negative indefinite formation and QR interact, given that both of these operations require D^b to fuse with a higher functional head?

References


