1 Introduction

A known difference between Negative Indefinites (NIs) such as English nobody, and Negative Polarity Items (NPIs) such as anybody is that only the former may occur as fragments \cite{Giannakidou 2000; Merchant 2004}. This holds regardless of the polarity of the Wh-Q antecedent.

\begin{enumerate}
\item a. Who did Mary see?  
\hspace{1cm} b. Nobody. / ‘Anybody. ‘There is nobody that she saw.’
\item a. Who didn’t Mary see?  
\hspace{1cm} b. Nobody. / ‘Anybody. ‘There is nobody that she didn’t see’ = ‘She saw everyone.’
\end{enumerate}

Our focus is on fragments involving NIs (henceforth NI fragments), across a variety of antecedent types. For Wh-question (\textit{wh}-Q) antecedents, the interpretation of the response varies with the polarity of the question.

How do these interpretations arise and what do they tell us about the structure of fragments, the composition of NIs, and the parallelism that holds between an ellided TP and its antecedent?

We assume that fragments in this context are derived via a fronting operation plus TP ellipsis \cite{Giannakidou 1998,2000; Merchant 2001,2004}.  

\begin{enumerate}
\item Nobody $\llbracket$ \text{TP} she saw nobody $\rrbracket$
\end{enumerate}

Earlier work on NIs has suggested that they involve two separate ingredients, sentential negation and an existential quantifier \cite{Jacobs 1980; Rullmann 1995; Potts 2002; Zeijlstra 2004; Penka 2007,2011; Iatridou and Sichel 2011}.

\begin{enumerate}
\item Nobody $\llbracket$ \text{the neg saw $\exists$} $\rrbracket$
\end{enumerate}

Accounts that assume some sort of ellipsis in negative fragment answers postulate a negation outside of the TP-ellipsis site, in a CP-level negative projection $\Sigma$ \cite{Laka 1990}, shown in (6) \cite{Vicente 2006} analysis of \textit{[neg XP]} fragments, illustrated for English in (5).

\begin{enumerate}
\item a. Who did Mary see?  
\hspace{1cm} b. Not John. (Mary didn’t see anybody.)
\end{enumerate}

With $\Sigma P$ as a possible source for the negative component of the NI, the interpretations in (1)-(2) derive from the polarity of the elided TP and its antecedent, plus the negation contributed by the NI outside of the ellipsis site. Combined with a positive TP, the fragment receives a negative interpretation (1); combined with a negative TP, the fragment receives a positive interpretation (2). The negation outside of the ellipsis site reverses the polarity of the antecedent.

However, a reversing interpretation for an NI fragment with a negative antecedent is not always possible. NI fragments can also follow up on negative declaratives. But, they can only be interpreted as negative, with the same polarity as the antecedent.

\begin{enumerate}
\item a. Mary didn’t see anybody.  
\hspace{1cm} b. Nobody (at all). (Mary saw everybody.)
\end{enumerate}

Interpretation of NI fragments with different antecedents
\begin{itemize}
\item Negative \textit{wh}-Question antecedent $\to$ polarity reversal
\item Negative declarative antecedent $\to$ no polarity reversal
\end{itemize}

Our first question is therefore the following:

Q1: Why are reversing readings available for NIs with negative Wh-antecedents but not with negative declarative antecedents?

We will consider the behavior of NIs with declarative antecedents in the context of Polarity Particles (PolParts), like yes and no. The English negative PolPart \textit{no} may be used to agree with a negative antecedent (8-a) or to disagree with it, and reverse its polarity (8-b) \cite{Pope 1972; Farkas and Bruce 2010; Roelofsen and Farkas 2015}.

\begin{enumerate}
\item a. Mary didn’t see anybody.  
\hspace{1cm} b. No (she didn’t).
\item a. No (she didn’t).  
\hspace{1cm} b. No, she did.
\end{enumerate}

Given the availability of reversing and non-reversing uses of the (English) negative PolPart \textit{no}, our second question is the following:

Q2: In the context of negative declarative antecedents, why are positive readings not available for NIs, though they are available for negative PolParts?
We motivate the following patterns and generalizations:

P1: In contrast to PolParts, bare fragments (positive and NI fragments) with declarative antecedents can only be interpreted with the same polarity as the antecedent clause.

P2: In contrast to English NI fragments in response to wh-questions, where polarity is reversed, English NI fragments with declarative antecedents can only be interpreted with the same polarity as the antecedent.

P3: Responses to Polar questions share interpretive properties with responses to wh-questions, and they also share some distributional properties with declaratives.

2 Fragments and PolParts in response to declaratives and PQs

2.1 Declarative antecedents

2.1.1 Positive declaratives

Polarity particles

(9) Mary read something.
   a. Same polarity:  Yes, she did. / *No, she did.
   b. Reversal:  *Yes, she didn’t. / No, she didn’t.

• yes can only be used with the same polarity as the antecedent
• no can only be used with the opposite polarity from the antecedent

Bare Fragments

(10) Mary read something.
   a. Aspects
   b. #Nothing.

• Positive fragments are licensed, subject to certain constraints
• NI fragments are not acceptable with positive declarative antecedents

Fragments with PolParts

(11) Mary read something.
   a. Yes, Aspects.
   b. ?No, nothing.

• A positive fragment may be combined with a positive PolP
• Adding a negative PolPart to an NI fragment doesn’t improve the acceptability

2.1.2 Negative declaratives

Polarity particles

(12) Mary didn’t read anything.
   a. Yes, she didn’t. / No she didn’t.
   b. Yes, she DID. / No, she DID.

• Particles can be used to indicate absolute polarity (positive/negative), or relative polarity, i.e. (reversing/non-reversing).

Bare Fragments

(13) Mary didn’t read anything.
   a. Nothing.
   b. ??Aspects. Intended: ‘Mary read Aspects.’

• Negative fragments are licensed, subject to constraints.
• Positive fragment less acceptable, mixed judgments.

Fragments with PolParts

(14) Mary didn’t read anything.
   a. No, nothing.
   b. Yes, Aspects. Intended: ‘Mary read Aspects.’

• A negative fragment may be combined with a negative PolP
• A positive PolPart combined with a positive fragment (and contradiction prosody) can facilitate a reversal interpretation.

¹Positive reversing responses require special intonation (R&F 2015, Goodhue and Wagner (2018))
2.1.3 Interim summary

- Bare fragments in response to declaratives cannot reverse the polarity of the antecedent, in contrast to PolParts.
- As we will see below, this sets this context apart, not only from Wh-question antecedents, but also from Polar Q antecedents. At first glance, however, the behavior of fragments with Polar Q antecedents seems similar to their behavior with declaratives.

2.2 Polar Question antecedents

2.2.1 Positive Polar Questions

Polarity particles

(15) Did Mary read anything?
   a. Same polarity: Yes, she did. / No, she didn’t.
   b. Reversal: *Yes, she didn’t. / No, she didn’t.

- In response to positive polar questions, yes can be used to affirm and no can be used to reject, the same pattern that we observed for positive declaratives.

Bare Fragments

(16) Did Mary read anything?
   a. *Aspects
   b. ??Nothing (at all).

- The judgments are mixed, but negative fragments seem to be worse here than positive ones.

Fragments with PolParts

(17) Did Mary read anything?
   a. Yes, Aspects.
   b. *No, nothing.

- Positive fragment with positive PolPart is good
- The addition of the negative PolPart to the NI fragment facilitates reversal, though still not optimal; would be better if the clause included a verb.

So far: Fragments in response to positive polar Qs are no different from fragments in response to positive declaratives: they cannot be used to disagree/reverse.

2.2.2 Negative Polar Questions

Polarity particles

(18) Did Mary not read anything?
   a. Yes, she didn’t. / No she didn’t.
   b. Yes, she DID. / No, she DID.

- In response to negative polar questions (with low negation), either particle can be used to agree or disagree, exactly as with negative declaratives.

Bare Fragments

(19) Did Mary not read anything?
   a. *Nothing. ‘Mary didn’t read anything.’
   b. ??Aspects. Intended: ‘Mary read Aspects.’

- Bare fragments might not be licensed in response to PQs without signaling affirmation or rejection with a PolPart.
- The judgments are mixed, but it seems that positive fragments are worse here than negative ones.

Fragments with PolParts

(20) Did Mary not read anything?
   a. No, nothing. ‘Mary didn’t read anything.’
   b. Yes, Aspects. (with contradiction prosody)
      ‘Mary read Aspects.’

- Both reversing and non-reversing fragments are available with accompanying PolParts

2.3 Summary

- PolParts can reverse polarity, whereas bare fragments (positive and negative) cannot.
- This generalization seems, at first glance, to support the following division [declaratives + polar Qs] vs. Wh-Qs.
- This recalls the similarity of these contexts with respect to positive and negative PolParts: they can both be used to disagree
- However, as we will now show, a closer look at NI fragment responses to polar questions puts them on the side of Wh-questions. Thus: [Wh-Qs + PQs] vs. declaratives
3 Polarity reversal and scope parallelism

3.1 An argument for the significance of scope

What is the source of the difference in NI fragment interpretation? Is it about the speech acts involved or something else? We argue that, in part, differences in interpretation are a product of different scope configurations, combined with Parallelism (Fiengo and May (1994); Fox (2000); Griffiths and Lipták (2014)).

(21) Variables in the antecedent and in the elided clause are bound from parallel positions.

Our hypothesis:

(22) Polarity reversal depends on scope position, determined by the position of the correlate in the antecedent. It arises in responses to Wh-questions because, by parallelism, the fragment must be interpreted in the left-periphery. When the correlate is non-wh, interpreted in-situ, below sentential negation, reversal is impossible.

Support for this hypothesis comes from a subject-object asymmetry in responses to polar questions (PQs). When the correlate is a subject, outside of the scope of sentential negation, the fragment reverses polarity; when the correlate is an object, the fragment does not reverse.

(23) Polar question antecedents:
   a. Did Mary not eat anything? (\neg > \exists)
      No, nothing. (There is nothing that Mary ate.)
   b. Did anyone not see Mary? (\exists > \neg)
      No, nobody. (There is nobody who didn’t see Mary.)

   Compare this to the situation with wh-phrase correlates. It doesn’t matter whether the correlate is a subject or object; the fragment always produces a reading on a par with (23-b). We attribute this to the placement of the wh-phrase correlate in the antecedent, outside the scope of negation.

(24) Wh-question antecedents:
   a. Who didn’t Mary see? Nobody. (There is nobody that she didn’t see.)
   b. Who didn’t see Mary? Nobody. (There is nobody that didn’t see Mary.)

→ We take it as non-accidental that a subject correlate, in (23-b), behaves like a wh-correlate.

→ The interpretive difference highlights the significance of the syntax of the antecedent, and the role of scope parallelism in the calculation of fragment interpretations.

3.2 Derivations

Assumptions

1. Negative indefinites: nothing, nobody, etc. are composed out of a negation and an existential, i.e. Neg > ∃
2. Clausal negation:
   There are two clausal negations:
   • TP-internal negation, a.k.a sentential negation, i.e. Neg of NegP
   • TP-external negation, i.e. Sigma.
3. Clausal ellipsis:
   Fragments involve clausal ellipsis of the complement of a focus projection.
   We assume here that the polarity of the elided part (i.e. the polarity of PolP/NegP) must be identical to the polarity of the antecedent.
4. Scope parallelism (as above)

How far can these assumptions take us towards understanding the differences in the availability of NI fragment polar reversal across clause types?

In a nutshell:

• They give us a (partial) handle on interrogatives (both kinds) but it doesn’t extend to declaratives.
• If it did, we’d expect the subject correlates in negative declaratives to produce reversal / disagreement, on a par with the subject correlates in negative polar Q’s seen above, in (23-b).
Negative Indefinite Fragments and (Dis)agreement

Lisa Hofmann & Ivy Sichel

3.2.1 Negative Polar Questions

(25) Object correlate
   a. Did Mary not read anything?
   b. Nothing (at all).

(26)

- The correlate anything takes scope from the object position
- The fragment nobody has to do the same
- The negative component can be hosted in Neg
→ Introducing high $\Sigma_{Neg}$ is not motivated

(27) Subject correlate
   a. Did anybody not see Mary?
   b. (No) Nobody.

(28)

- The correlate anybody takes scope over from the focus position
- The fragment nobody has to do the same
→ The negative component has to be hosted in high $\Sigma_{Neg}$

3.2.2 Negative wh-Questions

(29) Object wh-phrase
   a. Who didn’t she see?
   b. Nobody.

(30)

- The correlate who takes scope over from the focus position
- The fragment nobody has to do the same
→ The negative component has to be hosted in high $\Sigma_{Neg}$

(31) a. Who didn’t see her?
    b. Nobody.

(32) Subject wh-phrase

- With these assumptions, we can derive the fact that NI fragments in response to wh-questions always reverse
3.2.3 Positive Polar Questions

(33) Object correlate:
   a. Did Mary eat anything?
   b. ?(No,) nothing. (=There is nothing that she ate.)

(34) 

- \[ \Sigma \]
  - FP
    - nothing
    - \[ TP \]
      - Mary
      - \[ VP \]
        - Mary eat nothing

- With no, we get a reversing interpretation, but bare NI fragments are degraded here
- We might expect the fragment to introduce a high negation here.
- So why is it ruled out with a bare fragment?

The same issue arises with subject correlate PQs:

(35) Subject correlate:
   a. Did anyone see Mary?
   b. ?(No,) nobody. (=There is nobody who saw her.)

(36) 

- \[ \Sigma \]
  - FP
    - nobody
    - \[ TP \]
      - nobody
      - \[ VP \]
        - nobody see Mary

- With no, we get a reversing interpretation, but bare NI fragments are degraded
- So why is it ruled out?

→ Scope parallelism alone couldn’t account for why reversing interpretations of bare fragments aren’t possible here.

3.2.4 Negative Declaratives

(37) Object correlate:
   a. She didn’t see anybody.
   b. Nobody (at all). (=She saw nobody.)

(38) 

- \[ \Sigma \]
  - FP
    - nobody
    - \[ TP \]
      - she
      - NegP
        - Neg
        - \[ VP \]
          - she see nobody

- Same-polarity interpretation required by Scope Parallelism, on par with NPQ with object correlate above (26).

(39) Subject correlate:
   a. Somebody didn’t see her.
   b. #(No,) nobody (at all).

(40) 

- \[ \Sigma \]
  - FP
    - nobody
    - \[ TP \]
      - nobody
      - NegP
        - Neg
        - \[ VP \]
          - nobody see her

- Correlate outside of the scope of sentential negation
- We might expect fragment to introduce high negation
- But it doesn’t work, even in combination with a PolPart
3.2.5 Tentative Interim Conclusions

- Scope parallelism can account for:
  - The subject-object-asymmetry found in NPQs
  - Only reversing interpretations with wh-antecedents
- Scope parallelism cannot account for unavailability of reversing uses for:
  - Bare fragments with PQ antecedents
  - Fragments with declarative antecedents
- We suggest that scope parallelism nevertheless is on the right track, but we need a separate mechanism to rule out certain reversing uses.

4 Licensing of reversing fragments

4.1 Expressing reversal

We have seen that bare fragments cannot reverse the polarity of a declarative antecedent:

(41) Mary saw somebody.
    a. Agatha
    b. #Nobody.
(42) Mary didn’t see anybody.
    a. #Agatha.
    b. Nobody.

Similarly, bare fragment answers to PQs are less than perfect. Reversing fragments are even worse.

(43) Did Mary see anybody?
    a. ?Agatha.
    b. ??Nobody.
(44) Did Mary not see anybody?
    a. ??Agatha.
    b. ?Nobody.

In combination with PolParts, however, all of (43) + (44) seem good.

(45) Did Mary see anybody?
    a. Yes, Agatha.
    b. No, nobody.
(46) Did Mary not see anybody?
    a. Yes, Agatha.
    b. No, nobody.

Hypotheses:
- The PolPart helps to address the PQ
- The PolPart helps to express reversal
- Both answerhood to a polar question and reversal introduce a pressure to be expressed
- A bare fragment isn’t able to do that

Expressing reversal:
- Roelofsen and Farkas (2015):
  - Verum focus is obligatory in positive reversing responses
  - PolParts can express reversal
- Goodhue and Wagner (2018): A rise-fall contour corresponding to VF can be found on both positive and negative responses

Why would a bare fragment not be able to express reversal? Is it not able to bear VF? There is an open question here.

- An explanation might account for the unavailability of bare reversing fragments

4.2 Licensing reversal

However, that’s still not the whole picture:

- The presence of a PolPart alone doesn’t guarantee the availability of a reversing fragment.

(47) Mary saw somebody.
    a. Yes, Agatha.
    b. #No, nobody.
(48) Mary didn’t see anybody.
    a. Yes, Agatha.
    b. No, nobody.

In the presence of reversal marking:

- Positive fragments can be used to disagree with a declarative assertion
- Negative fragments cannot.

Upshot:
- NI fragments can have reversing uses with PQ antecedents, if the question is answered and reversal is expressed
- NI fragments cannot have reversing uses with declarative antecedents, even if reversal is expressed

... and NI fragments with wh-Q antecedents have reversing uses

This indicates that

- In addition to the generalizations about the scope of the correlate
- The licensing of reversing NI fragments depends on the antecedent type
- To account for this, we might look to different alternatives introduced by wh-Qs vs. PQs vs. declarative assertions
5 Conclusion

We presented data motivating the following generalizations about NI fragments:

- English NI fragments always have reversing readings in response to wh-questions
- English NI fragments never have reversing readings in response to declaratives

We suggested that the availability of reversing uses of fragments depends on multiple factors:

1. The relative scope of the correlate and negation in the antecedent: this allows us to group together the interpretations in response to both types of questions.
2. The presence of reversal marking (/marking of PQ answerhood)
3. The antecedent type

Open questions

- Why can bare fragments not express reversal (vs. how can it be expressed?); What is the relation to VF / PolParts?
- Why do only some antecedent types allow for reversing fragments? How does this relate to the alternatives introduced?

With regards to the correlate scope in the antecedent, we illustrated:

- That the availability of a reversing NI fragment is contingent on the scope of the correlate
- That scope parallelism can account for part, but not all of our generalizations

References


