1. The puzzle: A well-known puzzle is the ability of N-words to appear as fragment answers to positive WH questions, resulting in a negative interpretation of the answer. This seems to be at odds with their inability to convey negation on their own or appear without a sentential negation marker in declarative sentences (e.g. Giannakidou, 2006; Watanabe, 2004). This puzzle is exemplified by the behavior of the Hebrew N-word *af exad* (‘anyone/no one’), which cannot appear without the sentential negation marker *lo* in a declarative sentence ((1)), and does not seem to contribute a negation of its own; However, in fragment answers to positive WH questions *af exad* can appear on its own and does seem to contribute negation ((2A)):

(1) af-exad *(lo)* ba la-mesiba
    ‘No one came to the party.’

(2) Q: mi ba la-mesiba?
    who come.PAST-3SM to-the-party ‘who came to the party?’
    A: af-exad
    ‘No one (came to the party)’

If *af exad* needs a licensing negation, why is it that it is acceptable in (2A) where seemingly there is no licenser? An additional interesting fact, that up to date has been overlooked in the literature, is that when *af exad* is used as a fragment answer to a negative question, an ambiguity arises. The fragment answer ((3A)) could either have the meaning of a single negation (‘there is no one who did X’) or that of a double negation (‘there is no one who did not do X’), while a fully pronounced answer can only have the meaning of the declarative sentence in (1), namely a single negation.

(3) Q: mi lo ba la-mesiba?
    who no come.PAST-3SM to-the-party ‘Who didn’t come to the party?’
    A: af-exad
    single negation reading: ‘No one came to the party.’
    double negation reading: ‘Everyone came to the party.’

However, for some negative questions *af exad* as a fragment answer yields only a double negation reading, as is the case when *lo* is embedded under *adayin* (‘still/yet’) ((4A1)). Here, too, a full answer with *af exad* only has the meaning of a single negation ((4A2)):

(4) Q: mi adayin lo hegi’a la-mesiba?
    who still no arrive.PAST-3SM to-the-party ‘Who hasn’t arrived at the party yet?’
    A1: af-exad
    ‘There is no one that hasn’t arrived at the party yet.’
    A2: af-exad adayin lo hegi’a la-mesiba ‘No one has arrived at the party yet.’

The data in (1)-(4) raises intriguing questions: how is it that *af exad* needs a negative marker to license it in full sentences but not in fragment answers? Why can it not contribute negation of its own in declarative sentences but can all of a sudden do so in fragment answers? And crucially – why are fragment answers to negative questions sometimes ambiguous? Previous attempts to account for N-words in fragment answers have not attended to the facts in (3A,4A1) and do not predict them. In our work, we show that the facts in (3,4) oblige us to certain assumptions about the licensing of n-words and about negation in general, and they also compel us to look at fragment answers in a new way.

2. The solution: We take fragment answers to involve sluicing, and more specifically TP ellipsis (Merchant, 2005). Following Zeijlstra (2008), we assume that in strict NC (negative concord) languages such as Hebrew the sentential negation marker (*’lo’*) does not convey
negation on its own but rather carries an uninterpretable negation feature ([uNeg]) which is licensed via feature agreement with a covert negative operator carrying an interpretable negation feature ([iNeg]); N-words like *af exad* also carry a [uNeg] feature and must be licensed by a covert negative operator. We further assume that there is a polarity projection (PolP) within the TP (Laka, 1990) in which sentential negation markers are situated. We then suggest the following principles:

(5a) Unelided [iNeg] must be phonologically realized, either by the element carrying it or by a [uNeg] element that agrees with it.

b. In strict NC languages, an unelided PolP c-commanded by an [iNeg] element must be phonologically realized by a polarity head (meaning a sentential negation marker).

(5b) forces us to pronounce the negative marker *lo* in full sentences ((1)). To account for the possibility of an added negation causing the fragment to be of reverse polarity than the question ((2A,3A,4A1)), we assume that in such cases the fragment answer contains its own negative operator. The structure for the fragment in (2A) is thus the following (for ease of the reader we present the structure with all Hebrew words but *af exad* translated to English):

\[ \text{[op}^\sim\text{[iNeg]} \text{af-exad}_1 \text{[uNeg]} \text{TP} \text{[TP} \text{[PolP]} \text{[VP came to the party]]}] \]

*af exad* moves from within the TP to a topicalized position, following which the TP is elided. There is a covert negative operator in the fragment licensing *af exad*, and the pronunciation of *af exad* fulfills the requirement in (5a). Since the TP is elided, the PolP within the TP is elided and thus (5b) is trivially satisfied. This is why *af exad* can be used as a fragment answer to a positive WH question. We now turn to the negative questions (3, 4). Following Ladd (1981), Romero & Han (2002) and Holmberg (2013), we posit a scopal ambiguity for a negative operator with high scope in negative questions, which could either be inside the TP in the question or outside of it. This means that the question in (3Q) is structurally ambiguous:

(7a) [who] \[\text{[op}^\sim\text{[iNeg]} \text{TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP came to the-party]]}] \]

b. [who] \[\text{[TP} \text{[op}^\sim\text{[iNeg]} \text{TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP came to the-party]]}] \]

The ambiguity in (7) makes it possible to satisfy the parallelism constraint between the TP sluice and the antecedent for each reading in (3A), respectively:

(8a) [op] \[\text{[iNeg]} \text{af-exad}_1 \text{[uNeg]} \text{TP} \text{[TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP came to the-party]]}] \]

b. [op] \[\text{[iNeg]} \text{af-exad}_1 \text{[uNeg]} \text{TP} \text{[TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP came to the-party]]}] \]

The ambiguity in (3A) results from combining the fragment structure (6) with each of the possible antecedents for the negative question (7). The double negation meaning is achieved when using the structure in (8b) in which there are two interpretable negations, one in the elided part and one in the fragment. In (8a) the negative operator inserted in the fragment licenses both *af exad* and the elided *lo*, and the meaning is that of a single negation.

The lack of ambiguity in (4A1) is also derived. The elided TP in the fragment answer must contain *adayin* (‘still’) due to parallelism, and since negation is embedded under *adayin* there is no structural ambiguity in (4Q). The resulting structures in (4) are:

(9) Q: [who] \[\text{[TP} \text{[TP still op}^\sim\text{[iNeg]} \text{TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP arrived to-the-party]]}] \]

A: [op] \[\text{[iNeg]} \text{af-exad}_1 \text{[uNeg]} \text{TP} \text{still op}^\sim\text{[iNeg]} \text{TP} \text{[TP} \text{[TP} \text{[PolP no][uNeg]]} \text{[VP arrived to-the-party]]}] \]

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1 We assume that elided uninterpretable features also require checking, and therefore structure (7a) does not over-generate: answering *kulam* (‘everyone’) to the question ‘who did not come to the party’ can only mean that everyone did *not* come to the party -

* kulam [no [uNeg] came to the party] (* ‘everyone came to the party’)
* kulam [op [iNeg] no [uNeg] came to the party] (* ‘everyone did not come to the party’)

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