

WHEN NEGATION GOES MAD: ON THE PUZZLE OF EXPLETIVE NEGATION

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The starting point

- Observation: negation in Hebrew does not always make a straightforward contribution to meaning: **EXPLETIVE** negation (ExN)
- This is puzzling on the assumption that negative morphemes bring about interpreted negative operators.

Which contexts license expletive negation?

(1) Free relatives (FRs)

a. Quantificational FRs

- mi Se (lo) yaSav b-a-xacer kibel ugiya*
who that NEG sat in-the-yard received cookie
'Whoever was sitting in the yard got a cookie.'
- ma Se miri (lo) kar'a b-a-kurs haya me'anyen*
what that M. NEG read in-the-course was interesting
'Whatever Miri read in the course was interesting.'

b. Constituent unconditionals

eyze uga Se lo naxin, nekabel maxma'ot
which cake that NEG prepare.2PL, will get.2PL compliments
'Whichever cake we make, we'll get compliments.'

c. Cleft-FRs

miri dibra im mi Se (ze) lo yihiye Se ca'ak b-a-xuc
M. talked with who that it NEG will be that yelled in-the-out
'Miri talked with whoever it was that yelled outside.'

(2) Embedded polar questions

- bo nivdok im ha-oxel (lo) muxan (kvar)*
come.IMP check.2PL if the-food NEG prepared (already)
'Let's check if the food is ready.'
- miri tahata im yoni (lo) nimca b-a-bayit*
M. wondered if Y. NEG present in-the-house
'Miri wondered whether Yoni was at home.'

(3) Until-clauses

yonit yaSan ad Se ha-Sxenim (lo) hidliku muzika
Y. slept until that the-neighbors NEG lit music
'Yoni was asleep until the neighbors turned some music on.'

Also under
before and
without,
but non-
standard.

Additional observations

- ExN does not license negative concord items. NCIs force interpreted negation.

- (4) *mi Se lo diber im af exad yoSev Sam*
who that NEG talked with no one sits there
Only: 'Whoever did **not** talk to anyone is sitting there.'

- Embedded **epistemic bias** arises in polar questions with ExN (2).
- Inference from ExN in *until*-clauses (3): **interruption of the matrix eventuality**.
- ExN is obligatory only in constituent unconditionals (1b) and cleft-FRs (1c).
- ExN cannot bear contrastive stress (Eilam, 2007); interpretation is forced.

The height requirement

Claim A necessary condition for ExN licensing is that negation be **high**.

Non-verbal present tense Hebrew sentences are allowed without a copula or with a pronominal copula (Greenberg 2002 and references therein). According to Greenberg and others, the pronominal copula is the spellout of φ -features in T.

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| (5) <i>yonit ayef</i>
Y. tired
'Yoni is tired.' | (6) <i>yonit hu rofe</i>
Y. he doctor
'Yoni is a doctor' |
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Moreover, negation is post-copular only in sentences with a pronominal copula:

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| (7) <i>yonit lo kotev</i>
Y. NEG writes
'Yoni isn't writing' | (8) <i>yonit lo haya rofe</i>
Y. NEG was doctor
'Yoni wasn't a doctor.' |
| (9) <i>yonit hu lo rofe</i>
Y. he NEG doctor
'Yoni is not a doctor' | (10) * <i>yonit lo hu rofe</i>
Y. NEG he doctor |

Idea Null-copular sentences (5) are matrix small clauses, lacking a T node. Thus, negation in such sentences is low, similarly to pronominal cases (9).

Interestingly, FRs prohibit pronominal-copulas and allow null-copulas. However, negation in such cases is **not** expletive. If the idea above is on the right track, this leads to the conclusion that **to be expletive, negation must be high**.

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| (11) <i>mi Se xole yetupal kodem</i>
who that sick treated.FUT before
'Whoever is ill will be treated first.' | (12) * <i>mi Se hu xole yetupal kodem</i>
who that he sick treated.FUT before |
| (13) <i>mi Se lo xole yetupal kodem</i>
who that NEG sick treated.FUT before
Only: 'Whoever is not ill will be treated first.' | |

Further support: Neg-y/n-Qs and light negation

- Romero & Han, Han & Romero (2004) (see also Büring (2012)) observe, following Ladd (1981) and Büring & Gunlogson (2000), that PREPOSED negation in matrix polar questions gives rise to an EPISTEMIC BIAS (EB):

- (14) Isn't Mary coming (too)?

EB: the speaker was expecting Mary to come and has confronted conflicting evidence. They analyze **preposed** negation as **taking scope over** a VERUM epistemic operator, according to which the attitude holder believes that the prejacent should be added to the common ground (CG). For them, this means that the question in (14) induces the partition $\{that\ we\ \underline{should\ add\ to\ the\ CG\ that\ Mary\ is\ coming},\ that\ we\ \underline{should\ not\ add\ to\ the\ CG\ that\ Mary\ is\ coming}\}$.

- Hebrew: EB in **embedded** Neg-y/n-Qs (2) provides further support for the idea that VERUM operators have syntactic reality.
- Schwarz & Bhatt (2004) analyze the phenomenon of RESCUING, whereby positive polarity items cease to be anti-licensed in the immediate scope of negation in certain contexts (Ladusaw 1979). They provide syntactic evidence from German demonstrating that this LIGHT negation differs from ordinary negation and **obligatorily takes wide scope**.

Tackling strategies

- The initial assumption of a transparent syntax-semantics for negation needs to give way. There are several potential directions:

I. **Ambiguity:** stipulating two homophones, one negative $\llbracket lo_- \rrbracket = \lambda p_{st}. \neg p$, and the other – the identity function $\llbracket lo_ = \rrbracket = \lambda p_{st}. p$.

II. **Uniformity:** insisting on a single meaning; independent properties of the contexts in (1)–(3) give rise to the anomalous interpretation. Variants:

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| (a) $\llbracket lo \rrbracket = \llbracket lo_- \rrbracket$ | (b) $\llbracket lo \rrbracket = \llbracket lo_ = \rrbracket$ |
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- Strategy (I.): Ladusaw (1979); Schwarz & Bhatt (2004) for RESCUING: **lo_ is an NPI**. This partially accounts for the distribution of light negation in German.
- A different case of (I.) is that of Eilam (2007), who argues that the interpretive contribution of ExN in FRs militates against $lo_ =$. He analyzes ExN as having the von Fintel (2000) semantics for **wh-ever**.
- Rubinstein & Doron (2015):
 - The obligatory quantificational reading in (1b) is available without ExN.
 - ExN is a vacuous element which agrees with the *wh*-word.
- A way to use (II.b) is to implement Zeijlstra's (2004, 2008) analysis of strict NC languages such as Hebrew as having an abstract negation Op_- at LF. He argues that items like *lo* agree with Op_- and are semantically vacuous. It is then possible that *lo* might **agree with operators other than negation**, since in ExN-cases, there is no semantic negation (this idea is first discussed in Preminger 2010).
- One example of strategy (II.a) is found in Abels (2005), who proposes a meaning for Russian *until* which makes it equivalent to **while**. This makes negation contentful in Russian counterparts of (3). For (2), he argues that standard analyses of polar questions predict that negative and positive polar questions be **equivalent**.
- A different variant of (II.a) is found in Romero & Han, Han & Romero (2004) and Büring (2012). Concerned with (14), they assume **covert, high epistemic operators** in polar questions, and can thus account for (14) with ordinary negation.

Evaluation

- Unexplained: the **height** requirement and ExN's **obligatoriness** in (1b), (1c).
- NPI-hood overgenerates: ExN is bad in most NPI-licensing environments.
- The idea of $lo_ =$ predicts no semantic contribution of ExN whatsoever, contrary to the EB in (2) and the interruption inference in (3)
- If ExN simply agrees with *wh*-words, it should have surfaced in **matrix wh-questions** and shouldn't have surfaced in (3).
- If ExN agrees with operators, which should we choose? If (i) FRs are analyzed as **questions** (Hirsch 2015), and (ii) *until*-clauses are FRs over times (Eilam 2007), it is tempting to take *lo* to agree with Q-operators. But: *[ExN in *wh*-questions].
- Büring & Gunlogson: the **EB** caused by negated polar questions is unexpected given a standard semantics for questions. Moreover, examples like (2) obey the **height requirement**, which supports the claim that *lo* there is ExN.
- Can there be an extension of the literature on neg-y/n-Qs, maintaining a compositional, uniform negation? One would need to posit **covert intervening operators**. This may explain the height requirement and the non-licensing of NCIs in terms of NC locality. Justification for all environments? Cross-linguistic variation?