

## NOT-transportation as downwards movement

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NOT-transportation, known today as NEG-raising, was originally formulated as a cyclic syntactic rule which yielded overt reordering of a negative operator in multi-clausal structures while maintaining a low-NEG interpretation. Relevant examples are like (1) and (2) (from Fillmore, 1963: 220), where the (b) sentences are the output of NEG-raising applied to the (a) sentences:

- 1) (a) I think that he will not come → NEG-raising  
(b) I don't think that he will ~~not~~ come
- 2) (a) I want him not to come → NEG-raising  
(b) I don't want him ~~not~~ to come

This presentation is concerned with the derivation of English sentences in which negation (NEG) surfaces in a matrix predicate, but is interpreted as if it were in a lower position. The cases we are interested in allow NEG to be interpreted as having scope over a quantified subject NP in an embedded clause (a NEG-Q reading) or over the verbal predicate in the same embedded clause (a NEG-V reading), as in (3-6)

- 3) I don't think every Japanese likes sushi → I think [NEG every Japanese] likes sushi
- 4) I don't think most Japanese like sushi → I think most Japanese [NEG like sushi]
- 5) I don't think a Japanese likes sushi → NEG-V raising only if *de dicto* (i.e., 'I think that any Japanese does not like sushi'). If *de re*, NEG-Q 'I think NEG a Japanese likes sushi'
- 6) I don't think Bill/he likes sushi → I think Bill/he [NEG likes sushi] (cf. \*I think NEG Bill/he likes sushi)

The puzzle we are faced with is the following: *some quantified NPs in subject position seem to 'absorb' the scope of NEG*, such that a classical NEG-raising interpretation (in which NEG has raised cyclically from the embedded V predicate to the matrix V predicate; Collins & Postal, 2014) is not available: this is the case of *every N* in (3) and *a N* in the *de re* interpretation in (6). This is unexpected because in the cases in which NEG has scope over subjects, it does not seem to affect the embedded predicate. The puzzle has two parts:

- A. If NEG originated in the embedded predicate and moved cyclically towards the matrix one; how can it ever stop at the embedded subject position?, and
- B. When NEG has scope over the subject, it does not appear to reconstruct at the embedded predicate at all; how is this possible under a traditional formulation of NEG-raising?

We will show that the derivations allowed in an upwards-only approach to movement either yield derivations where independently motivated locality constraints are violated or they undergenerate in terms of the readings allowed for the sentences (only allowing for a NEG-V

or only allowing for a NEG-Q reading, where in some cases *both* are allowed). In other words, we will argue for the empirical inadequacy of derivations (7) and (8):

- 7) a. [S<sub>1</sub> ...think... [S<sub>2</sub> [QP] ...NEG like sushi]] →  
 b. [S<sub>1</sub> ...NEG think... [S<sub>2</sub> [QP] ...*t*<sub>NEG</sub> like sushi]]
- 8) a. [S<sub>1</sub> ...think... [S<sub>2</sub> [QP NEG Q] ... like sushi]] →  
 b. [S<sub>1</sub> ...NEG think... [S<sub>2</sub> [QP *t*<sub>NEG</sub> Q] ...like sushi]]

Derivation (7) corresponds to *classical NEG raising*, and cannot generate NEG-Q only readings, as required e.g. in (3) (since NEG should reconstruct in the embedded VP); derivation (8) violates Ross' (1967) Left Branch Condition, and cannot generate NEG-V only readings (since NEG should reconstruct in the embedded subject QP; there is no way to have an occurrence of NEG in the embedded VP).

Given the problems posed by an upwards-movement approach to NOT-transportation, we will explore the possibility that in the cases (3-8) NEG does not generate in the most embedded predicate, but as a higher predicate (Klima, 1964; McCawley, 1970; Rivero, 1994). Furthermore, we propose that the grammar contains a cyclic, optional, lexically-governed lowering rule, which we call *NEG lowering* (NL; Krivochen, 2020, 2021), and which lowers NEG, Chomsky-adjointing it to VPs or QPs along the way. *Optionality* in this case means that the rule is not required to yield a well-formed string or syntactic representation; *lexical governance* means that some quantifiers allow for only one of the readings (NEG-Q; NEG-V) and some only for one of these: just like not all verbal predicates allow for NEG-raising, not all quantifiers allow for a NEG-Q interpretation. For example, *every* is a quantifier that absorbs NEG, not allowing for a NEG-V interpretation. Under NL assumptions, the derivation of (3) would be as in (9):

- 9) I don't think every Japanese likes sushi  
 (a) NEG [I think every Japanese likes sushi]  
 (b) [S I [VP NEG [VP think every Japanese likes sushi]]]  
 (c) [S I [VP think [S [QP NEG [QP every Japanese]] likes sushi]]] → NL stops here

In contrast, a proper name or a pronoun cannot appear under the scope of or form a constituent with NEG, which forces NEG to lower until the embedded VP:

- 10) I don't think John like sushi  
 (a) NEG [I think John likes sushi]  
 (b) [S I [VP NEG [VP think John likes sushi]]]  
 (c) \*[S I [VP think [[NP NEG [NP John]] likes sushi]]] → NL cannot stop here  
 (d) [S I [VP think [[NP John] [VP NEG [VP likes sushi]]]]

We will characterise the rule of NL, and show how it can provide an adequate account of the dynamics of NEG in multi-clausal structures with quantified NPs in embedded subject position while avoiding the island violation phenomena that seems inevitable under NR assumptions.

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