

## NEG-RAISING

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*Abstract: NEG-Raising is a cognitive phenomenon which has long been an object of study and comment. In NEG-Raising, the negation found in the matrix clause is interpreted as negating the complement clause. The present paper aims at approaching the phenomenon from different perspectives.*

*Keywords: NP predicates, embedded sentences, matrix clause, scope of negation, Negation-absorption rule.*

NEG-Raising (NR, for short), also known as *Transferred Negation*, *Neg(ative) Raising*, or *Negative Transportation* represents a movement rule meant to explain a phenomenon that is by no means new in English and its peculiarities have attracted the attention of linguists. It was first proposed by Charles Fillmore (1964) in order to account for the synonymy contrast between, for example, the pair (a,b) and the pair (c,d) (where ‘ $\approx$ ’ means *is roughly synonymous with*, and ‘ $\neq$ ’ means *has a meaning clearly different from*).

- (a) *John thinks Bill doesn't like Harriet.*
- (b)  $\approx$  *John doesn't think Bill likes Harriet.*
- (c) *John claims Bill doesn't like Harriet.*
- (d)  $\neq$  *John doesn't claim Bill likes Harriet.*

NEG-Raising is a rather special category, which shows the extension of scope beyond clause boundaries. In some respects, it can be regarded as a consequence of the Neg-First Principle, in that a negative element belonging to a subordinate clause is ‘raised’ and attached to the verb of a preceding main clause (Horn 1978a: 129).

Therefore, NEG-Raising “is a lexically governed rule that transports the negative constituent *not* (occasionally *never*) from an embedded complement clause into the main clause” (Cornilescu 1986: 34).

The issue of the scope of negation arises in a particularly acute way in the following examples:

- (1) *I think he won't like her.*
- (2) *I don't think he will like her.*
- (3) *It's likely that he won't come here until after the game.*
- (4) *It's not likely that he will come here until after the game.*
- (5) *John knows they aren't here.*
- (6) *John doesn't know they're here.*

According to Klima (1964), (1), (3) and (5) contain sentence negation in the embedded clause (the subordinate), unlike (6) where negation focuses on the main clause:

- (7) *John doesn't know they are at home and neither does Mary.*

In (2) and (4), Klima claims that there is inherent negation both in the main clause and the subordinate one. It should be noted that in (4), *until after the game* could not appear as such if the subordinate were affirmative. It is necessary that *until* be under the scope of negation. The same phenomenon occurs with terms like *need* and *help*:

- (8) *I don't suppose I need say this again.*
- (9) *I don't think John can help his bad manners.*

In (8) and (9) one should not think that *need* or *can* is part of an affirmative subordinate due to the strong attraction between these modal verbs and negation in these contexts. One can compare:

- \* *I need say this again.*
- \* *John can help his bad manners.*

with:

- (10) *I needn't say this again.*
- (11) *John can't help his bad manners.*

According to Klima (1964), the negation of the subordinate clause would then be absorbed by the negation of the main clause (*Negation-absorption rule*). But the mere assumption that there are two negatives in the deep structure is not going to pose any problems even within the transformational theory to which it adheres.

If the meaning of the final sentence is determined by the deep structure, then the two negatives in the deep structure will radically oppose (2) to (1), which has only one negative marker, as well as (4) to (3), (8) to (12) and (9) to (13):

- (8) *I don't suppose I need say this again.*
- (12) *I suppose I needn't say this again.*
- (9) *I don't think John can help his bad manners.*
- (13) *I think John can't help his bad manners.*

Now, these findings go against the intuition of the English speakers, who consider these pairs as being equivalent or at least very close. On the other hand, the absorption rule of negation by the main clause is only justified by the needs of a formal construction. Carol & Paul Kiparsky (1971) agree upon the equivalences between (1) and (2), (3) and (4), (8) and (12), (9) and (13). However, they point out that this rule does not apply in the presence of the factive verbs in the main clause. We cannot change:

- (14) *It bothers me that he won't lift a finger until it's too late.*
- into: (15) \* *It doesn't bother me that he will lift a finger until it's too late.*

But even non-factive verbs can prevent the re-ascent of negation. The following pairs are not equivalent:

- (16) *I claimed that I wasn't right.*
- (17) *I didn't claim that I was right.*
- and (18) *I was sure that you weren't speaking on the phone.*
- (19) *I wasn't sure that you were speaking on the phone.*

Therefore, it should be found an additional constraint to separate, as exceptions, the non-factive verbs which do not allow the re-ascent of negation towards the main clause. The list can also go on with *assume, conclude, maintain, assert, be convinced, be positive, be certain, realize, admit*. Lakoff (1965) proposes a rule that differs only in name (*not-transportation rule*) and raises the same objections. The difficulties encountered by these theoreticians are understandable as the objections thus raised will very quickly lead to the slippery slope of semantics. Due to the relationships between negation and the specific properties of the verbs in the main clause, we might easily forget the narrow framework of the syntactic constructions that might lead to the analysis of the semantico-syntactic properties of the verbs that had been dealt with so far.

Being aware of the fact that a purely syntactic approach might not serve his purposes, Jackendoff (1969) rejects the hypothesis of the re-ascent of negation and suggests the following counterexamples:

- (20) *I doubt that John will be here until five.*
- (21) *Bill is afraid to leave until his mother comes.*
- (22) *Scarcely anybody expected him to be there until after four.*

The rule of the re-ascent of negation is far from being clearly noticed as here negation is lexicalized and a more detailed analysis of the lexical relations is needed, which would involve, for example, the concepts of contrast and linguistic counterpart. But then this would presuppose engaging in the quicksand of the semantico-syntactic networks, well off

the beaten track of pure syntax. It is appropriate to propose tentative dichotomies, such as *doubt* / *believe* which draw oppositions (*doubt* = *not believe*), negative inferences (*he is afraid, so he will not leave until his mother comes*) or reassuring reductions (*scarcely anybody* = *not anybody*), but most importantly is to recover negation from subjective appreciation. Lindholm (1969) puts forward some sensitive examples with *until*:

- (23) *I didn't realize that I had to do it until tomorrow.*
- (24) *I realized that I didn't have to do it until tomorrow.*
- (25) *I didn't claim that I'd finish the paper until Friday.*
- (26) *I claimed that I wouldn't finish the paper until Friday.*
- (27) *It isn't clear that he'll leave until next week.*
- (28) *It's clear that he won't leave until next week.*
- (29) *I can't believe that he'd take the exam until he was ready.*
- (30) *I can believe that he wouldn't take the exam until he was ready.*

The pairs (23) / (24), (25) / (26), (27) / (28), (29) / (30) are not in a periphrastic relation, which requires the establishment of new constraints on *until* and seriously complicates the transfer rule of negation (*Negation – transportation rule*), to such an extent that R. Jackendoff (1971) suggests that it should be eliminated.

Lakoff (1969), who wants to define the problem of displacement of negation within an exclusively syntactic framework, proposes distributional tests to identify the traces of negativity that the subordinate was supposed to have before applying the (optional) rule of the re-ascent of negation. Therefore, we can mention:

- the positive interrogative resumption of the subordinate clause:  
*I don't suppose the Royals will win, will they?*
- the pronominalization of the sentence:  
*I don't think Bill visited his parents and Mary is quite sure of it. (it = that he did not visit his parents).*
- sluicing<sup>1</sup>:  
*I don't think he's going to accept this and I can guess why not (\* why).*
- the incorporation of negation:  
*Nobody would suppose anymore that the war was worth it.*

R. Lakoff (1963) suggests that:

*I don't suppose they'll come, will they?*  
is derived from:

*I suppose they won't come, will they?*

But Jackendoff (1971) points out that if we replaced *suppose* with *think* or *believe* in the examples above, we would get very surprising results:

*I don't think /? believe they'll come, will they?*

would be derived from:

*I \* think /?\* believe they won't come, will they?*

by means of the transfer rule of negation from the subordinate clause to the main one, which seems unacceptable to him:

<sup>1</sup> *Sluicing* is the name given by John Robert Ross (1969) to the ellipsis construction in brackets. See the examples below:

- a. *The children are playing somewhere, but I'm not sure [where \_].*
- b. *The girls are crying, but I don't know [why \_].*

In these constructions, an interrogative phrase appears stranded where one might have expected to find a complete constituent question.

[...] I believe it has been shown that Lakoff's proposal, although fascinating, breaks down with additional evidence. Hence there remain no compelling syntactic arguments for Not-Transportation. (1971: 76)

It was better to abandon the hypothesis of the re-ascent of negation. But Jackendoff at least had the merit of highlighting the real challenge of the analysis, namely the inextricable links between syntax and semantics and the dangers of reductionism at all costs, at the risk of being criticized for having failed to comply with some syntactic rigour.

Linebarger alternately considers the hypothesis of the *Neg-raising rule* and that of the *Neg-lowering rule* to account for sentences like *I don't think that p*. She rejects the *Neg-raising rule* which does not allow to generate all the sentences of the type *I don't think that p because X*:

(31) *I don't think that he \* will budge an inch / \* has written the paper yet / has resigned because he has any aspirations for higher office.*

She rejects the *Neg-lowering rule* mainly due to the lack of synonymy between:

(32) *I think that Bill doesn't beat his cat because he loves it.*

and (33) *I don't think that Bill beats his cat because he loves it.*

In so doing, she justifies her position:

The two sentences share one reading: the reading in which the speaker claims to believe that Bill beats the cat but for some reason other than love, i.e. the reading in which the *because* clause is negated. However (32) has another meaning: the speaker believes that the reason why Bill doesn't beat his cat is that he loves the cat, i.e. the reading in which the *because* clause is not negated. Sentence (33) does not have this reading: that is, the *because* clause in (33) is obligatorily negated. This is not only another argument against syntactic *Neg-raising*: it also creates a problem for the *Neg-lowering rule*, which is, of course, *Neg-raising* in reverse. There is no way to explain why sentence (33) does not have this reading in which the *because* clause is not negated, since presumably (32) and (33) have the form (32) when the *neg-scope rule* applies. Thus the *Neg-lowering rule* must be abandoned. (1981: 78)

This rule of displacement of negation has been widely discussed by many linguists, claiming to be more or less in favour of generative grammar. Among the best known and, in alphabetical order, these are: Barstch (1973), Cattel (1973), Cornulier (1973), Horn (1978), Jackendoff (1971), Klima (1964), Lakoff (1969), Lindholm (1969), Linebarger (1981), Partee (1973), Prince (1976), Seuren (1974), Sheintuch and Wise (1976).

If negation is a troublesome issue for linguists and undermines the most firmly established beliefs, it is because of its mobility as it operates at all levels and can modify all structures. If negation is the Achilles' heel of transformational theories, then it is also due to the excessive concern with formalization. Negation is less considered an essential operation in the process of linguistic communication than a module that could be attached to such a syntactic structure, with the possibility of changing its position, without substantially altering the existing relationships. It is overlooked the fact that negation is primarily an operation of assertion whose function is not to convey some mathematical logic but to acquire its real meaning through successive combinations with other operators. For this reason, the analysis of the scope of negation is an essential prerequisite for the study of negation, although it seems difficult to separate it from the other discourse markers in the context and the prosodic markers as well. How can one account for statements such as *I think that non-p because X* or *I don't think that p because X* without at least talking about intonation that can, in most cases, disambiguate by specifying the scope of negation?

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