

## NEGATIVE RAISING REVISITED

Wim Klooster

**Abstract.** An attempt is made to show that arguments put forward in favour of an account of the relationship between sentences like *I don't think John will leave* and *I think John won't leave* in terms of movement of the negative element from the subordinate clause to the higher clause (Negative Raising, NR) are faulty. It is argued that the subordinate clauses in purported NR constructions are covertly negative, and that they undergo abstract movement to the higher clause, where they adjoin to the negative operator, after which the latter is eliminated through Negative Absorption. Data concerning the licensing of Negative Polarity Items (NPIs) and data on Basque 'NR' sentences and constructions with inherently negative predicates (*doubt*, *deny* etc.) suggest that a grammatical account is to be preferred over one in terms of Speech Act Theory. 'NR' sentences are to be distinguished from other types, in which the negative element is a negative constituent other than 'not', and from pseudo-NR sentences with 'not' of a type in which the subordinate clause cannot contain 'strict' NPIs.

**Key words:** *Covert negation, Negative Absorption, Negative Raising, Pleonastic negation.*

### 0. Introduction

This paper is a report on work in progress concerning negation. As such, it may be considered to be a provisional draft of part of a chapter exploring the hypothesis of the existence of covertly negative clauses.

Elsewhere I have attempted to show what is/was wrong in Semantic Syntax views<sup>1</sup> on Negative Raising (NR, for short), a movement rule meant to explain a phenomenon that has long been an object of study and comment<sup>2</sup>. Neg(ative) Raising, or Negative Transportation, as it was called for a time, apparently was first proposed by Charles Fillmore (1963), in order to account for the synonymy contrast between, for example, the pair (1a,b) and the pair (2a,b) (where '≈' means 'is roughly synonymous with', and '≠' means 'has a meaning clearly different from').

(1)	a	John thinks Bill doesn't like Harriet	(2)	a	John claims Bill doesn't like Harriet
≈ b		John doesn't think Bill likes Harriet	≠ b		John doesn't claim Bill likes Harriet

NR is also assumed, for instance, by Progovac (1988). I myself assumed it as well (1979). In the following, I will first briefly characterise NR verbs and sentences, summarise arguments that have been presented in support of NR, summarise my critique of NR in Semantic Syntax, present arguments against NR in a Minimalist framework, and propose an alternative solution along the lines of the Minimalist program (Chomsky 1995). Throughout, I will use the term 'NR' to refer to the phenomenon in question, even though I will argue that no such raising, in the sense intended, takes place.

### 1. Characteristics of NR Verbs and NR sentences

#### 1.1. NR Verbs. The 'black and white' effect

NR verbs belong either to the class of verbs of judgement (such as *reckon*, *think*, *advise* and also *seem*, *be likely* and *ought*) or to that of verbs of intention (*plan*, *intend*, *want*). They can be taken together under the heading 'positive attitude with respect to a hypothetical state's or event's be(com)ing fact'.<sup>3</sup> The meaning of NR verbs can furthermore be characterised as

<sup>1</sup> 'Semantic Syntax' is the name chosen by, among others, Seuren to characterise work by linguists like James D. McCawley, George Lakoff, Robin Lakoff and Pieter A.M. Seuren. See, for instance, Seuren (ed., 1974) and (1996). My article discussing NR in Semantic Syntax is to appear in the Festschrift for Kazimierz Sroka.

<sup>2</sup> Among many others who have discussed it are Jespersen (1922), Wackernagel (1931), Bech (1951), who referred to the phenomenon as 'negatio obliqua', and Klima (1964). A noted advocate of NR is Seuren (e.g. 1985).

<sup>3</sup> Horn (2001) distinguishes six classes: 'opinion' (*think*, *expect*), 'perception' (*seem*, *look like*), 'probability' (*be likely*, *figure to*), 'intention/volition' (*want*, *choose*), 'judgement/(weak) obligation' (*ought*, *advise*).

pertaining to ‘structural facts’ (as opposed to ‘accidental facts’, or events); they denote attitudes rather than actions, and are non-factive.

The ‘structural/accidental’ distinction is illustrated in (3):

- (3) a I don’t suppose John will castle on the queen’s side (will he?) - ‘structural’  
≈ I suppose John won’t castle on the queen’s side
- b I am not supposing that John will castle on the queen’s side (\*will he?) - ‘accidental’  
≠ I am supposing that John won’t castle on the queen’s side

The *a* sentence describes something (more or less) ‘structural’, *viz.* the state of mind of the person mentioned by the subject, but the *b* sentence does not. The progressive prohibits a ‘structural’ reading of the *b* sentence, which rather constitutes the denial of an event, the event being the putting forward of a supposition, whether to oneself or someone else. The *a* sentence exhibits the NR phenomenon, whereas the *b* sentence does not. (Notice that the subordinate clause in the case of NR can take a positive tag question, while this is not possible in the other case.) Similarly, ‘structural’ readings, at least in Dutch, do not combine with the present perfect, because it forces an event reading, as is illustrated in (4).

- (4) a Ik raad je niet aan [te verkopen] - *imperfect, NR-effect*  
I advise you not *Prt* [to sell] ‘I advise against selling’
- b Ik heb je niet aangeraden te verkopen - *present perfect, no NR-effect*  
I have you not *Prt-advised* to sell ‘I haven’t recommended selling’

NR verbs seem to refer exclusively to attitudes that are not negative: they never, in themselves, imply rejection in any sense of the event or state of affairs described in the sentential complement, or its negation. Thus we have such NR verbs as *think*, *consider*, *believe*, but not *fear* or *doubt*.

Verbs like *think* in NR sentences share with subjective adjectives, such as *beautiful*, *smart* or *difficult*, the characteristic of producing, when negated, not the negation but the opposite of their meanings (just as they share with *think* etc. the notion of judgement). Take, for instance, the Dutch NR verb *aanraden* ‘advise, recommend’. *Ik raad je niet aan* in (4a) does not simply constitute the negation of *Ik raad je aan*. Rather, it should be paraphrased by means of the verb’s antonym: *Ik raad je af* ‘I advise against’. Similarly, *not smart* is not just the negation of the adjective *smart*, but has the opposite meaning, ‘stupid’. Elsewhere (Klooster 1984), I have called this the ‘black and white effect’: with regard to concepts like ‘thinking/not thinking that *p*’ or ‘being/not being smart’ there tends to be a dichotomy: either one thinks that *p*, or one thinks that not-*p*, one either is smart or stupid; there is no branching beyond the binary, neither is there a continuum. Still, in certain contexts, it is possible to interpret *don’t think* plus sentential complement literally, as simply the negation of *think* plus sentential complement, just as, in certain contexts, *not smart* may leave open the possibility of ‘average’ or ‘neither smart nor stupid’. In other words, it is possible to cancel the black and white effect.

Negated NR verbs (henceforth ‘NR predicates’) do not, or not directly, evaluate the described events or states of affairs, but signify non-acceptance solely with regard to their becoming – or possibly being – reality. In this respect, they can be contrasted with other ‘dichotomous’ predicates, as can be seen from a comparison of sentences like (5)-(7) with sentences like (8)-(10). The members of the first group (the NR group) express the subject’s or speaker’s dismissal or rejection in one way or other of some event’s or state’s becoming or being reality. It is this property which makes them non-factive.

‘Black and white’; dismissal or rejection of (present or future) reality of some event or state (non-factive):

- (5) He doesn’t want you to leave yet (‘His wish is for you not to leave yet’)

- (6) He doesn't expect you to leave ('He expects you not to leave')
- (7) It is not probable that he will leave ('It is probable that he will not leave')

The sentences (8)-(10), by contrast, express the unacceptability – to the person mentioned in the higher clause – of the described event or state of affairs itself. In addition, they presuppose its being actual fact.

'Black and white'; rejection of an actual state of affairs or process (factive):

- (8) He doesn't approve of your leaving ( $\neq$  'He approves of your not leaving')
- (9) He is not pleased that you're leaving ( $\neq$  'He is pleased that you're not leaving')
- (10) He doesn't accept their leaving the house ( $\neq$  'He accepts their not leaving the house')

These examples illustrate that it is their non-factivity, among other things, that distinguishes 'Negative Raisers' from negated dichotomous predicates that imply the rejection of what is described in the complement itself.<sup>4</sup>

Interestingly, the *de re - de dicto* distinction appears relevant in connection with the possible occurrence of Negative Polarity Items (NPIs) in the complements of negated verbs like *think* and *believe*. Thus, for instance, at least to me, a sentence like (11a),

- (11) a Electra doesn't believe Orestes is saying anything to her (*de dicto, NR*),

with the NPI *anything*, would imply that Electra actually knows – contrary to what is the case in the play – that it is Orestes who is standing before her. Somehow it does not sound appropriate in a context where the speaker knows Electra to be wrong in thinking it isn't Orestes who is addressing her. A sentence like (11b),

- (11) b Electra doesn't believe Orestes is saying something to her (*de re, no NR*)

which does not contain an NPI, would seem more acceptable. There are more concrete linguistic data that confirm this intuition, as we will see later on.

As remarked above, verbs like *think* or *want* tend to be 'dichotomous'. In a sentence containing a matrix verb of the type in question, its contrary can thus (indirectly) be expressed simply by introducing negation. That is, where P is an NR verb, x the subject, and p the complement clause, the following seems to hold:

- (12)  $\neg P(x,p)$  iff  $P(x, \neg p)$

However, as we saw, the meaning of verbs of the type under consideration strictly speaking does not warrant dichotomy in the above sense. A truly dichotomous predicate (in a two-valued system) would be *be true*: if it is not true that p, then it is true that  $\neg p$  and vice versa. But if x does not believe that p, it does not necessarily follow that he believes that  $\neg p$ : x may simply want to reserve his judgement on p. On the other hand, it will always be the case that if x believes that  $\neg p$ , he does not believe that p. It is this asymmetry,  $\neg P(x,p)$  if  $P(x, \neg p)$  but not the other way round, that would seem to be at the root of the feeling, often expressed (e.g. G. Lakoff 1968, Lindholm 1969, note 1), that pairs like (1a,b) are 'not perfectly synonymous' and that the sentences with negation in the matrix are somehow 'weaker' or 'less certain' than their counterparts. They are sometimes felt to express the affirmative by means of the negation of the contrary (in other words, to be instances of litotes; cf. Klooster 1984), thus intimating rather than directly expressing the intended meaning.

---

<sup>4</sup> See, for a richly informative discussion of the various aspects of the meaning of NR verbs discussed here, Horn (2001) and the references therein.

Yet, in a discourse where judgements and intentions are relevant, but reserving or deferring them are not, verbs of the considered type are easily interpreted as dichotomous. The feeling of understatement is only there to the extent that content or context leaves room for it.

The class of verbs to which NR is purported to be applicable is more or less the same in each language, although there is some idiosyncratic variation among languages. Thus for instance English *hope* is not a ‘Neg Raiser’ (though constructions with *never hope to* seem to suggest otherwise, but see § 1.2) whereas Dutch *hopen* is, as is illustrated in (13) and (14):

- (13) I do not hope [I will flunk]  $\neq$  I hope [I will not flunk]  
 (14) Ik hoop niet [dat ik zak] / niet [te zakken]  $\approx$  Ik hoop [dat ik niet zak] / [niet te zakken]  
 ‘It is not to be hoped that I will flunk’

Apparently, all languages that have been examined in this respect, have such pairs as (1a,b). They may diverge in their morphosyntax, however. Negation may be morphologically incorporated in verbs or adjectives, as the Lithuanian examples in (15) illustrate:



(These examples are taken from Bernini and Ramat 1996.)

## 1.2. Quasi- and pseudo-NR

True NR sentences, it seems, always contain a ‘not’ (in the shape of a word, a reduced element like *n’t* or a bound morpheme) in the higher clause, never a complex negative element like *no-one*, *nothing*, *never*, *nowhere* or their equivalents in other languages. A sentence like *No-one expects John to turn a hair* obviously does not have as a source *Some people / someone expect(s) John not to turn a hair*. Nor, however, does *Everyone expects John not to turn a hair* seem a plausible source – not just because that would imply a mechanism too powerful and complex to countenance, but also for other reasons, to be given below in this subsection. Let us call sentences that contain negation in the higher clause and are interpreted as if they were NR sentences, but lack a plausible non-NR source ‘quasi-NR sentences’.

There are also sentences with ‘not’ in the higher clause which at first glance have as a source a plausible synonymous counterpart with ‘downstairs’ negation, but which upon closer consideration turn out not to be NR sentences. An example would be the pair *It is not true that John will leave tomorrow* and *It is true that John will not leave tomorrow*. The reason why such pairs are not considered to be related by NR is that the former type does not allow strict NPIs in its subclause: \**It is not true that John will leave until tomorrow*. (By ‘strict’ I mean licensed only by ‘strong’ negation, such as expressed in *n*-words like *not*, *nothing* etc. See also section 5.1, below (50) and (51)). Let us call sentences with negative matrix clauses that seem to be derivable by simply shifting the negative element (but really are not) ‘pseudo-NR sentences’.

Another pseudo-NR example is the second of Gelett Burgess' famous lines *I never saw a purple cow, I never hope to see one*. This sentence looks like being derived by NR from *I hope never to see one*. But it would take an inordinately ad hoc device in the grammar to be able to derive it. Normally, *never* does not enter NR, and the same goes for its Dutch counterpart *nooit*, as the following examples demonstrate:

- (16) a Ik hoop nooit [dat ik zak] / nooit [te zakken] ≠ Ik hoop [dat ik nooit zak] / [nooit te zakken]  
     'I never hope I will flunk' – 'I hope I will never flunk'  
     *cf.* (14)

- b He never advised me to go there ≠ He advised me never to go there  
*cf.* He did not advise me to go there ≈ He advised me not to go there
- c Ik geloof nooit dat hij ziek is ≠ Ik geloof dat hij nooit ziek is  
 ‘I’ll never believe he is ill’ – ‘I believe he is never ill’  
*cf.* Ik geloof niet dat hij ziek is ≈ Ik geloof dat hij niet ziek is  
 ‘I don’t believe he is ill’ – ‘I believe is not ill’

I submit that *never hope to*, meaning ‘hope never to’, is an idiom, just as *I never thought*, as in e.g. *I never thought you’d ask* (and just as *I thought you’d never ask* as a whole, for that matter).

The task of finding clear examples of quasi-NR sentences that do not allow strict NPIs in the subclause (and hence are not NR sentences) is complicated by the fact that here, too, we find idioms, which have the negative force of real NR constructions. Let me give some non-idiomatic examples first:

- (17) a ?Niemand raad je aan *een duimbreed* te wijken  
 ?No-one advises you to budge an inch
- b ?Ik raad niemand aan *een duimbreed* te wijken  
 ?I advise no-one to budge an inch  
*(cf.* Ik raad je niet aan (‘I don’t advise you’) *een duimbreed* te wijken (OK))
- (18) ?Niemand verwacht dat dat *al te best* zal vallen  
 No-one expects that that all too well will fall  
 ‘No-one expects that will go down too well’  
*(cf.: Ik verwacht niet (‘I don’t expect’) dat dat *al te best* zal vallen (OK))*

Sentences like the examples in (17) and (18) are OK with subordinate clauses lacking NPIs.

Quasi-NR sentences that do allow strict NPIs are given in (19) and (20):

- (19) Niemand gelooft dat hij *een bal* heeft uitgevoerd  
 No-one believes he did a stroke of work
- (20) Niemand denkt dat het je *een rooie cent* oplevert  
 No-one thinks it will earn you a single penny

The expression *niemand gelooft / no-one believes* is an idiom meaning ‘it is totally implausible’ (like the rhetorical *Who will believe that...*), and has the force of the NR construction *I don’t believe*. Similarly, *niemand denkt dat p / no-one thinks that p* is idiomatic, having the same force. In fact, all quasi-NR sentences allowing NPIs in their subclauses turn out to contain idioms with the force of strong negation in their matrix clauses.

There are other types of quasi-NR sentences. English has such synonymous pairs as *able to make nothing of it – unable to make anything of it*, and, just as weird to the non-native speaker, *it was possible to do nothing about it – it was impossible to do anything about it*. No doubt analyses can be arrived at explicating the semantic relation such pairs exhibit, but it seems doubtful that any transformational relation could be established.

I will return to quasi-NR sentences with *n*-words like *no-one* and *nothing* in section 5.2.

## 2. Why Neg Raising?

Robin Lakoff (1969) has argued that certain tag question phenomena can be accounted for if we assume a rule of NR. The positive tag in, for instance,

- (21) a I don’t suppose the Yankees will win, will they?

indicates, according to Lakoff, that the lower sentence is negative at a deeper level. On the other hand, in

- (21) b John doesn’t think the Yankees will win, does he?

the tag is on the higher sentence. One of her assumptions was that ‘tag formation’ does not apply unless the sentence to be tagged has a (surface or abstract) ‘I’ + performative verb (‘suppose’, ‘think’ etc., but not, presumably, ‘swear’ or ‘declare’) directly above it. NR may apply if the verb is an NR verb and the sentence immediately above it contains (abstract or surface) ‘I suppose’, or if the NR verb itself is *suppose*. Lakoff took abstract SUPPOSE to be present immediately above *think* in (21b), roughly as in (22), while underlying (21a), we would have something like (23):

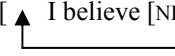
- (22) [I SUPPOSE] *Sentence*  
           John thinks *Sentence*  
           NEG the Yankees will win

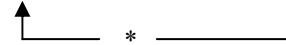
- (23) I suppose *Sentence*  
           NEG the Yankees will win

On (23), first a rule of tag formation will operate, giving the intermediate structure *I suppose the Yankees won’t win, will they?* Next, NR applies, yielding (21a).

On the lowest sentence in (22), tag formation does not apply, for the sentence on top of it does not contain ‘I’ + performative verb. But NR in the next cycle can apply, since *think* is an NR verb, and has abstract I SUPPOSE immediately above it. Thus, (22) is turned into [*I SUPPOSE [John doesn’t think [the Yankees will win]]*]. Now tag formation, triggered by SUPPOSE, can take place, giving (21b). The verb involved, being negated, causes the tag to be positive. (Since the highest verb ‘suppose’ is abstract, NR cannot take place again – though it might if it were a real verb, in that case yielding *I don’t suppose John thinks the Yankees will win, does he?*) If we want systematically to explain the phenomena considered, Lakoff concluded, the assumption of NR is hard to avoid.

Seuren (1985:169) cites as an argument in support of NR the oft-repeated claim that all NPIs freely occur in such clauses. He also calls attention to the differences between *can* and *may*. Consider, for instance, (24) and (25) with the NPI *yet*:

- (24) I don’t believe she can have arrived yet  
       [ I believe [NEG [POSSIBLE [she has arrived yet]]]]

- (25) \*I don’t believe she may have arrived yet  
       [ I believe [POSSIBLE [NEG [she has arrived yet]]]]

With NR, we predict that (24) is a grammatical sentence, meaning ‘I believe that it is not possible that she has arrived yet’, whereas (25) must be ungrammatical “because it takes the embedded clause as having the possibility operator as the highest predicate, and \*She may have arrived yet is ungrammatical”.

### 3. Why no Negative Raising

#### 3.1. Semantic Syntax

However, if one accepts the Semantic Syntax framework, one should in fact reject NR. In this sub-section, I will first give a brief summary of arguments to that effect, which I presented in slightly more elaborate form elsewhere.<sup>5</sup> In the next subsection I will discuss NR from a minimalist viewpoint.

As to ‘tag formation’, the pattern seems to be that no clauses containing NR verbs with the subject *I* receive tags (since it would be odd to ask about one’s own judgement or intention), whereas their highest embedded clause may. In all other cases only the matrix clause, when declarative, can receive the tag. Tag formation, as far as the choice between

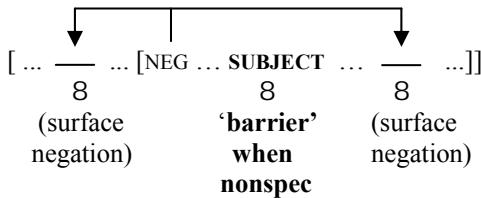
<sup>5</sup> Klooster, to appear.

positive or negative is concerned, does not seem to belong to the grammar proper. Tags are, after all, sentences in their own right, even if in one respect, VP deletion, they are grammatically dependent upon their ‘host sentence’. NR concerns sentence grammar; not principles regarding sequences of sentences, i.e. discourse. The conditions of choice between positive and negative tags are to do with textual cohesion more than grammatical well-formedness. Whatever its precise nature, the choice of tags is governed by the presence or absence of negative elements in the proper positions of the preceding sentences. Among others, verbs of judgement with *I* as subject, constitute a special case. Here, the matrix clause as a whole can count as an assertive or negative element – as the case may be – of the embedded clause, which may then ‘receive’ a tag question accordingly.

The NR phenomena in (15)-(23) appear susceptible of explanation without the positing of an abstract performative ‘suppose’. The condition that the matrix verb should be an NR verb obviously is a necessary one, but it is not at all clear that the presence of a higher verb ‘suppose’ should be.

In a framework such as Lakoff’s or Seuren’s we should probably assume the negative operator to occupy, underlyingly (that is, in the semantic representation), a left-peripheral position. The placement of the negative element could be arranged in such a way that the negative operator will ultimately move to the canonical surface position, to be turned, in English, into the form *not* or *n’t*, in either its own clause or, optionally, in the higher clause if it contains an NR verb. (Cf. (26).)

(26) ‘neg placement’



(No movement ‘upstairs’ unless V in the higher clause is an NR verb in the simple past or present. No movement to the right unless the ‘nonspecific’ barrier is absent.)

Nonspecific subjects in the embedded sentence would thus have to constitute, in effect, a barrier to lowering the negative element, but in all other cases, *modulo* the ‘upstairs’ condition, it would be free to move to the canonical surface position in either its own clause or the higher clause. If we allow Neg Placement to be prelexical and make suitable lexical arrangements, for example, for Dutch *geen* ‘no’ and *niet + een* (‘not’ + ‘a’) to occur in the correct environments we could also account for pairs like (27a,b).

- |        |   |   |  |
|--------|---|---|--|
| (27) a | Ik geloof dat <i>geen levende ziel</i> Jan kende<br>I believe that <i>no living soul</i> John knew<br>‘I think not a living soul knew John’ | b | Ik geloof <i>niet dat een levende ziel</i> Jan kende<br>I believe not that <i>a living soul</i> John knew<br>‘I don’t think a living soul knew John’ |
|--------|---|---|--|

Neg Placement, however, would still require some barrier or other provision involving nonspecific NPs, in order to rule out sentences like *\*I think [a living soul didn’t know John]*. This means that, in the framework of Seuren’s proposals (1996), we must somehow block the last step in a derivation of the following form: *I think [s<sup>0</sup> not [s<sup>0</sup> PAST [s<sup>0</sup> Ø [s<sup>0</sup> know [NP a living soul<sub>NPI</sub>] [NP John]]]]] => I think [s<sup>0</sup> not [s<sup>0</sup> a living soul<sub>NPI</sub>] [s<sup>0</sup> [v Aff<sub>PAST</sub> [v Ø know]] [NP John]]]] => \*I think [s<sup>0</sup> [a living soul<sub>NPI</sub>] [s<sup>0</sup> not [v Aff<sub>PAST</sub> [v Ø know]] [NP John]]]]* (where the string *Aff<sub>PAST</sub> Ø* is Aux). The movement of the negative element ‘upstairs’ (i.e. NR) would be subject, of course, to the condition that it is only possible in the case of NR verbs, and in the absence of the progressive form or the perfect tense. A grammar with such various

constraints and provisions, many of which, it must be feared, will have to be stated separately, would seem to be less than attractive.

Let us return briefly now to the observations involving (24) and (25). When we omit the NPI *yet* in (25), we still have the unacceptable sentence (28) (unacceptable in the NR reading, at any rate):

- (28) \*I don't believe she *may* have arrived

The explanation must lie in the fact that something in the meaning of epistemic *may*, which expresses the admissibility of a supposition, prevents it from being negated. *May*, in other words, is a Positive Polarity Item. Contrary to what Seuren seems to suggest, (25) is bad for the same reason.

PPIs are also not allowed in clauses under inherently negative predicates (or, as Baker 1972 has called them, ‘adversative predicates’, such as *doubt*, *be surprised*, and *deny*). As such predicates do not license NPIs by themselves but allow them in their complement clauses (\**I doubt a damn thing* vs. *I doubt if he could see a damn thing*)<sup>6</sup>, the latter presumably contain a NEG operator. (This point will be further elaborated below). This, then, would explain why a sentence like (29) is also bad:

- (29) \*I doubt that she *may* have arrived (yet)

It is a well-known fact that *than*-clauses in comparative constructions are covertly negative. This raises the question why epistemic *may*, like other PPIs, can nevertheless occur in them (cf. (30)).

- (30) a Bill is richer than anyone after him *may* ever be  
 b Under the circumstances, I'd rather be sick than *fit as a fiddle*

But PPIs are only prohibited when in the immediate scope of negation. As has been shown by several authors, along with a NEG operator, *than*-clauses also contain a WH operator.<sup>7</sup> It is this WH operator, intervening between NEG and the rest of the clause, which prevents *may* and other PPIs being in the immediate scope of NEG, thus saving sentences like (30a,b).

The behaviour of inherently negative matrix predicates runs parallel to that shown by NR predicates with respect to PPIs and NPIs. Since we will also have to explain the unacceptability of (29), we might as well seek an account covering both inherently negative predicate constructions and those with NR predicates. At the end of the next subsection, I will suggest such an account, which will be elaborated in § 4.

### 3.2. The Minimalist approach

Before going on, let me briefly outline some of my assumptions insofar as they are relevant to the syntax of negation in a (roughly) Minimalist framework.

I will take NegP to be the functional category necessarily present in overtly negated sentences (certain idioms excepted). It is assumed here to be directly on top of TP. In Dutch, West Flemish (henceforth WF) and German the phrase constituting or comprising the

---

<sup>6</sup> There are apparent exceptions, which are explained by the propositional nature, in those cases, of the content of the NPI-containing DP complements, for instance, *He denied any involvement* ('that he had been involved at any time or in any way').

<sup>7</sup> E.g. Chomsky (1977), Den Besten (1989:101-35), Hazout (1995). In some languages and dialects the *Wh* element is phonologically present in comparative constructions (Italian: *Gianni è più grande di quanto non sia Enzo* (G. is more tall than how much *neg* be Enzo; *non* is not the operator, which in this case is abstract and precedes *quanto*, but the negative head corresponding to it, like French *ne*); Hebrew: *Dan axal yoter tapuxim mi ma Se Dina axla* (Dan ate more apples than what Dina ate) 'Dan ate more apples than Dina').

negative operator (e.g. *niet* / *nie* / *nicht* ‘not’, *geen mens* (Dutch and WF) / *keine lebende Seele* ‘not a living soul’) must be in [Spec,NegP] before Spell-Out (the Neg Criterion, Haegeman 1995). Thus, for instance, although [AP *beleefd* [PP *tegen niemand*]] ‘polite to no-one’ is the basic order in Dutch, possible in positive sentences, we do not have \**Je hoeft beleefd tegen niemand te zijn* for ‘You needn’t be polite to anyone’; the correct order is *Je hoeft tegen niemand beleefd te zijn*: the negative constituent *tegen niemand* must move upward to [Spec,NegP]. The head of NegP, Neg, is phonologically null in English and languages like the ones just mentioned, but in other languages, for example French, Italian, Romanian and WF, it corresponds to a particle (*ne*, *non*, *nu*, *en*, respectively), which typically is adjoined to the left of the finite verb. NPIs, when not verbs, are licensed in overt structure by the c-commanding negative constituent (for this reason, they cannot precede the operator at PF, except in some cases where they are part of the negative constituent itself, as in Dutch *in jaren niet* ‘not for donkey’s years’). NPI verbs, such as e.g. *budge*, bear a feature that must be checked at the head of NegP (Klooster 1994).

I will assume that in (substandard) Dutch, as in WF (Haegeman 1995), in the case of Negative Concord negative constituents must overtly move to the left of *nie(t)*. They move to [Spec,NegP], adjoining to *nie(t)* or to whatever negative constituent moved there before them. (Adjunction to a maximal projection will be assumed here to be admitted, a departure from Kayne 1993.) In certain cases however they must move from there to positions further leftward, so that between negative constituents there may occur non-negative ones.<sup>8</sup> At the stage of abstract syntax, negative operators, separately represented as NEG, are adjoined in a left-peripheral scope position and subsequently reduced to a single negative operator (Neg Absorption). The abstract negative operator, NEG, must be, or end up, at the position directly to the left of the string over which it takes scope.

I will now discuss some arguments against NR from a Minimalist perspective.

In a grammar organised along the lines of the Minimalist program, sentences containing negative words like Dutch *geen* – ‘no’: *niet + een* (‘not’ + ‘a’), or *niet + Ø* (zero article) –, *meer* ‘anymore’ and *nog* ‘still’ would present a problem for any NR account, as I will now attempt to show.

Consider, first, the following pair of examples, in which the non-NR paraphrase contains *geen*:

- |        |   |                                      |
|--------|---|--------------------------------------|
| (31) a | Ik geloof dat hij geen rooie cent heeft gehad     | ‘I believe he didn’t get a red cent’ |
|        | I believe that he no red cent has had             |                                      |
| b      | Ik geloof niet dat hij een rooie cent heeft gehad | ‘I don’t believe he got a red cent’  |
|        | I believe not that he a red cent has had          |                                      |

Suppose we assume an NR relationship between (31a) and (31b). The rule purportedly relating them would have to apply before Spell-Out. Some special phonological process (‘late insertion’) would be required, ‘fusing’ the lexical items *niet* ‘not’ and (non-specific or generic) *een* ‘a’ or Ø and turning them into *geen*. We would need similar operations relating, for instance, *not + ever* to *never*, or *niet + iets* to *niets* (‘not’ + ‘anything/something’ to ‘nothing’), and so on.

Now consider (32):

---

<sup>8</sup> I believe the obstacle of improper movement pointed out by Haegeman (1995) is not real. In my view, the movement of subject and object DPs out of [Spec,NegP] is not case-driven. Movement to AGRsP can be argued to be driven by Phi features but not Case; scrambling of [+ Presuppositional] DPs (e.g. definite DPs moving to the left of WF and Dutch *nie(t)*) is probably motivated by the latter feature, which makes it plausible that scrambling is to Ā positions rather than A-positions. The strict IO-DO order (e.g. WF *dat er geen mens niemand da geld nie getoogd en-eet*, lit., that there no-one<sub>SU</sub> no-one<sub>IO</sub> that money<sub>DO</sub> not shown *en-has*) giving rise in the cited case to a mingling of negative and non-negative constituents, arguably is due to their being part of a single constituent (Pijnenburg 1991), which moves as a whole to [Spec,NegP] if at least one of its DPs is negative.

- (32) a Ik geloof dat hij niet meer gewapend is  
 I believe that he not anymore armed is  
 'I believe he is not armed anymore'

b (i) ?Ik geloof niet dat hij **meer** gewapend is  
 I believe not that he anymore armed is  
 (ii) Ik geloof niet dat hij **nog** gewapend is  
 I believe not that he still armed is  
 'I don't believe he is armed anymore'

The dubious status of (32b(i)) is caused by the fact that *meer*, in the sense indicated, should only – or at least, preferably – occur as part of a (continuous) negative constituent<sup>9</sup>, except for those cases in which *meer* is preceded by an XP involving degree or quantity, or an XP bearing focus: here the constituent itself need not be negative (though negation is still necessary), as is illustrated in (33).

- (33) Ik denk niet dat het **lang meer** duurt 'I don't think it will take much longer'  
 I think not that it long anymore lasts  
 dat er **veel mensen meer** zijn '... there are many people anymore'  
 that there many people anymore are  
 dat ik **het ANTWOORD meer** weet '... I know the ANSWER anymore'  
 that I the answer anymore know

Given the semantic relation between (32a) and (32b(ii)), it would seem that a process relating *meer* and *nog* will be needed, should we wish to preserve the NR hypothesis. But while this might be feasible in certain cases, it would be problematic in the case of, for instance, (34):

- (34) a Ik geloof dat ik geen geld meer heb  
           Ik believe that I no money anymore have  
       'I believe I don't have money anymore'

      b Ik geloof niet dat ik nog geld heb  
       I believe not that I still money have  
       cf. ?Ik geloof niet dat ik geld meer heb  
           I believe not that I money anymore have  
       'I don't believe I have money anymore'

The difficulty of course is not just that the phonological component should pick the right forms (*meer* or *nog*, Ø or *geen*), but that there appears to be movement involved: while *meer* must follow *geen geld* in (34a), *nog* must precede Ø *geld*. This, if acceptable at all as a PF device, would seem to introduce unnecessary complications, serving, at that, to account for a relationship that could plausibly be argued not to have anything to do with phonology.

Second, there is the observation that, in Basque, clauses under inherently negative predicates as well as clauses under negated NR verbs have negative complementisers (Laka 1990). This suggests that in either case the subordinate clause contains an (abstract) negative operator in [Spec,CP], reflected in the presence of the [+negative] C, rather than the trace of a raised negative operator<sup>10</sup>. Basque has the declarative complementiser *ela*, whose distribution is more or less like that of English *that*. It also has a *Wh* complementiser *en*. The negative one is *enik* (in which the initial vowel may assimilate to a preceding vowel), as in (35a,b), with the inherently negative predicate ‘deny’:

<sup>9</sup> Another Dutch example of a negation-containing string which cannot be broken up is *beter (nog) niet* ‘better not (yet)’, with the PPI *beter*: \**Ik denk niet dat je 't beter (nog) kunt noemen* ‘I don't think you better mention it yet’ (I found the English sentence in Philip Pullman, 1995, *The golden compass*, New York, N.Y.: Ballantine Books, p. 300.)

<sup>10</sup> It does not seem likely that these negative complementisers are a reflex, somehow, of the trace in [Spec,CP] of a raised negative operator: if NR exists, it probably does not take place via [Spec,CP]. Shlonsky (1989) has presented evidence from Hebrew that it could not, and Haegeman (1995) offers an argument from French to the same effect.

- (35) a Amaia [inork gorrotoa dionik] ukatu du  
          Amaia anyone hatred has-that denied has   ‘Amaia denied that anybody hated her’  
      b Lekukoek [gau hartan inor jauregira hurbildu zenik] ukatu dute  
          witnesses night that anyone castle-to near was-that denied have  
          ‘The witnesses denied that anyone got near the castle that night’

(36) is an example in which the negative complementiser is selected by an NR verb:

- (36) Iñigok ez du sinisten [lurrik eztanda egingo duenik]  
Iñigo no has believed earth explode do will-that  
'Iñigo does not believe that the earth will explode'

Note, meanwhile, that the predicates under consideration will select the declarative complementiser *ela* in cases where the truth of the content of the embedded clause is nevertheless presupposed by the speaker. This is illustrated in (37).

- (37) a Galileok ez zuen sinisten [eguzkia lurrari inguruka zebilenik] (*de dicto*)  
          Galileo no had believed sun-the earth-to turns-in went-that  
          ‘Galileo did not believe that the sun revolved around the earth’  
      b Galileok ez zuen sinisten [eguzkia lurrari inguruka zebilela] (*de re*)  
          (idem)

(37a) does not presuppose or entail that what Galileo didn't believe was true. When saying (37b), on the other hand, we take it for a fact that the sun turns around the earth, while indicating that Galileo did not believe that. The choice of the complementiser is connected to the possibility of NPIs occurring in the embedded clause. A sentence such as (38), for instance, with the declarative *ela* combined with an NPI, would not be correct:

- (38) \*Galileok ez zuen sinisten [ezerk lurraldi inguruka zibilela]  
           Galileo no had believed anything earth-to turns-in went-that

This must mean that the *de re - de dicto* distinction is relevant with respect to the possibility of NPIs in the subclause under negated *believe*-type verbs. Clearly, moreover, only in the NR reading will a negative complementiser be selected.

It is not clear how the negative C in the Basque NR sentences (and, presumably though not visibly, in similar constructions in languages lacking distinct negative complementisers) could be accounted for by assuming that the negative CP is somehow selected during MERGE by virtue of the presence of a negative operator in the higher clause. Rather, the choice of the type of subordinate clause is determined by the matrix verb (e.g. *if*-clauses by verbs like *ask*, *that*-clauses by verbs like *declare*, *if* or *that* by, for instance, *know*). Selection is a head-head relationship (Chomsky 1986), the ‘selecting’ head being on top of the ‘selected’ head. Thus, for instance, the presence of *enik* in (34) is due, presumably, to a property of the verb ‘deny’ in the higher clause. In the case of NR constructions, it would have to be the negated NR verb which causes the complementiser of the subordinate CP to be [+negative]. Below (section 5), I will return to this matter in more detail. In this paper I will have little to say on the structure of covertly negative infinitival clauses. I will tacitly assume, though, that, in essence, what is said with regard to CPs here, also holds for other types of subordinate clauses.

If the negation in NR sentences is not the result of raising, could it perhaps license NPIs across clause boundaries? One reason to believe that in general negative operators are unable to do so lies in the difference between (39) and (40):

- (39) He didn't move because he was afraid - narrow or wide scope of negation  
 (40) He didn't move a muscle because he was afraid - narrow scope of negation

Under the wide scope interpretation of (39), the *because*-CP is part of the whole complex CP. It carries focus, hence negation associates with it<sup>11</sup>; therefore it must perforce be under the scope of negation. In the case of narrow scope, the *because*-CP is not part of the CP containing the negative operator, but the second member of an (asyndetic) specifying coordination, paraphrasable as '(and he didn't move) because was afraid'.<sup>12</sup> The difference between (39) and (40) is mirrored in the contrast between (41) and (42):

- (41) He didn't move because he was afraid (but because he wanted to do as the others)  
 (42) \*He didn't move a muscle because he was afraid (but because he wanted to do as the others)<sup>13</sup>

In (41) and (42), the presence of the *but* clause forces the wide scope interpretation, i.e. the reading with the scope including *because he was afraid*. Assuming that the scope of negation covers at least its overt syntactic domain (the part of its clause c-commanded by the operator), the examples suggest that the negative operator cannot license NPIs in its syntactic domain if that domain exceeds the clause in which it resides. If a negative operator can never license NPIs in its scope if that scope exceeds its own clause, it will not be able to license NPIs across clause boundaries.

We may assume, then, that if 'downstairs' NPIs are not licensed by the 'upstairs' negative, there has to be an abstract NEG in the subordinate clause. Thus, only if the NR hypothesis is rejected can we readily explain why, in the Basque examples, the possibility of NPIs in the subclause depends on the presence of [+ neg] complementisers. This further strengthens the case against NR.

As a final argument against NR, consider the following. The occurrence of NPIs in the clausal complements of inherently negative predicates, is most plausibly explained, as we saw, by the presence of an abstract NEG operator in the complement itself, specifically, in [Spec, CP]. Recall that in English inherently negative predicates themselves do not within their own clauses license NPIs. Neither do their equivalents in Basque or Dutch; cf. (43) and (44).

- (43) \*Josebak ezer ukatu du (Basque) (44) \*Joseba ontkende ook maar iets (Dutch)  
 Joseba anything denied has Joseba denied anything at all

Therefore it must be a negative operator separate from the predicates in question, rather than one incorporated in them, which licenses NPIs. Presumably, then, the verb constituting (or being part of) the inherently negative predicate selects a CP with a [+ negative] head, which in turn gives rise to the abstract negative operator in [Spec, CP], by virtue of an inverted version of 'dynamic agreement'. Dynamic agreement (Rizzi 1992, Haegeman 1995) states that an operator can endow its accompanying head with the operator feature under agreement (see also Sportiche's Clitic Criterion (1992), cited in Haegeman 1995). Adapting this principle to the notion of selection as a head-head relation, we may transform it into the requirement that, after MERGE, a clausal head bearing an operator feature ([+neg], in our case) endow its Specifier – in the absence of a lexical negative operator – with the corresponding abstract operator.

<sup>11</sup> Association with focus is expressed at LF and can be defined as follows. A NEG operator is associated with focus iff (i) at LF the focus constituent has moved to the position immediately to the left of the clause (the 'focus part'), (ii) the NEG operator is, in relation to the focus part, the left-most element, and (iii) between the NEG operator and the focus part, there is at most an operator or quantifier with its variable(s) plus the restricting set. (Klooster 2001).

<sup>12</sup> See, on specifying coordination, Kraak en Klooster 1968:257-63, Koster 1995, Rijkhoek 1998, De Vries 1999, Klooster 2002:260-61)

<sup>13</sup> A similar example is given in Linebarger (1987): \*He didn't budge an inch because he was pushed (but because he fell).

We hypothesise, then, that inherently negative verbs, and verbs that are heads of complex inherently negative predicates, when taking CPs, always select CPs containing NEG in [Spec,CP], whether or not (depending on the language) this is reflected in a phonological form distinct from *Wh* complementisers or other types.

But if *enik* is a truly negative complementiser, then consistency requires we assume that the complements of NR constructions contain NEG as well, given the data cited above. (As said, the question of how the selection of negative clauses by NR verbs should be accounted for will be discussed in section 4.)

If we accept the foregoing, we must conclude that the NR hypothesis should be discarded.

#### 4. An alternative to Negative Raising

##### 4.1. Interpretation of the higher negation and selection of NEG clauses

As was established in the previous section, a plausible alternative to NR must include the assumption of the presence of an abstract NEG operator in scope position in the clause subordinate to an NR construction. (For brevity, I will call such clauses ‘NEG clauses’.) The two main questions we must now deal with are, (a) if NR constructions take NEG clauses, how do we interpret the overt negation in the matrix clause, and (b) how is the selection of NEG clauses by negated NR verbs to be accounted for? After attempting to answer these questions, I will devote the next subsection to a brief discussion of the status of quasi-NR sentences.

How do we interpret the higher negation in NR sentences? Such sentences clearly are not instances of double negation, in the sense that the negations semantically eliminate each other. Since NR sentences are interpreted as single negations, this leaves us with the alternative diagnosis: they represent something very much like Negative Concord. There are at least two differences with what we usually consider to be instances of Negative Concord: first, one of the negations is not phonologically realised, and second, the negations are not within the same clause. Nevertheless, there are examples of multiple occurrences of negation, not within the same simplex clause yet sharing properties with Negative Concord. Fischer (1999) cites some cases in Old English<sup>14</sup>.

She also offers examples where the negative operator is explicitly present in the clause under an inherently negative predicate like ‘doubt’, and Early Modern English examples with, for instance, ‘not-want’, such as (45) and (46), respectively:

- (45) Forðœm ne þearf nœnne wisne mon **tweogan**, þ[œ]t ða yflan **nœbbēn** eac ecu edlean hiora yfles  
Therefore *ne* need no wise man doubt that the evil not-have also eternal rewards of-their evil  
‘Therefore no wise man need doubt that also the evil ones will suffer eternal punishment for their evil deeds’ (Boethius 113.21; Mitchell 1985: §2044)
- (46) **Nulle** ich þet **nan** iseo ow bute he habbe ... speiale leauie  
Not-will I that none see you but he have special leave  
‘I want that no one sees you / I don’t want anyone to see you, unless...’ (*Ancrene wisse* 33, Tolkien 1962)

Fischer cites the following example as part of the evidence that loss of Negative Concord could have led to the emergence of NR:

- (47) **Ne** mahte ich wene ham **namon** nomeliche nemppin  
*Ne* could I think them no-man by-name mention  
‘I do not think that anyone could enumerate them all’ (*Ancrene wisse* 116, Tolkien 1962)

---

<sup>14</sup> For example, *ac he ne com na to dememe mancynn ... ac to ...*, lit., but he not came not to judge mankind ... but to ... (ÆCHom I, 22.320.5, Traugott 1992: 270). I interpret *ne* preceding the verb as the head of NegP, corresponding to e.g. French *ne* and WF and Middle and Early Modern Dutch *en*. In some languages and in certain cases, among which the one cited, it may occur unaccompanied by an overt operator. *Na* here cannot be read as part of a bipartite negation (*ne...na*), because in that case *ac to* etc. would become uninterpretable.

The idea that NR constructions do not contain one but two negations was first proposed in Klima (1964). Klima's representation of the structure underlying e.g. *I don't think John will leave until tomorrow* is as in (48):

- (48) I neg think [ John neg will leave until tomorrow]<sub>Comp</sub>

Klima proposed to derive the correct form from (48) via a transformation he called *neg absorption*. Neg Absorption, but of a different sort, has also been proposed in connection with Negative Concord. The reduction to one single negation is necessary in order to account for the fact that NR sentences are interpreted as single negations (at LF).

I propose that the subordinate, covertly negative clause under negated NR verbs undergoes abstract adjunction to the negative operator in the matrix clause, as illustrated in (49), for English and Dutch.

- (49) a I do [NegP [ [CP NEG [.....] ] not ] [Neg' Neg think *t<sub>CP</sub>* ]]  
 b Ik denk [NegP [ [CP NEG [.....] ] niet ] [Neg' Neg *t<sub>CP</sub>* ]]

Negative Absorption applies after *not* (represented as NEG after Spell-Out) has been left-adjoined to the NEG in the moved NEG clause, and subsequently eliminated. Presumably, *think* in (49a) will take up the position of *do*, so that we will get, ultimately, something like *I think* [NEG [.....]]. The NEG clause thus is moved covertly. This is contrary to what might be expected, since, at least in languages like WF and (substandard) Dutch, movement of the negative constituents to [Spec,NegP] in the case of Negative Concord must apply before Spell-Out. But an important difference with Negative Concord is that the moved negative constituent in (49) is not a phrase but a clause, and that the negation is covert.

Since all movement is feature-driven, it follows that under the Negative Concord reading the negative constituents must be marked by some feature, say [+NC], causing them to adjoin to the first negative element that, by virtue of the Neg Criterion, has moved to [Spec,NegP] (or to the element that was generated in that position), or else to some previously adjoined constituent, as the case may be. But NR sentences are not instances of Negative Concord proper. What motivates abstract adjunction of NEG clauses to the pleonastic negative element in [Spec, NegP] cannot be the feature [+NC]; it must be some other feature, say [+Pleonastic NEG Absorption], or [+PNA].

The only *n*-word in the lexicon that may carry the feature [+PNA] is the word expressing NEG (i.e. *not*, *niet* etc.). The reason for this is that, in abstract PNA-type representations like the ones under consideration, existential quantifiers in the higher clause cannot be stripped of their negation with impunity. All *n*-words except *not* (*never*, *no-one*, *nowhere* etc.) in their semantic representations contain such quantifiers, preceded by negation. Thus e.g. if *No-one expects John to leave* were to undergo PNA, this would lead to an interpretation we can represent as *Some people / Someone expect(s) John not to leave*, which is not synonymous with the original sentence. Requiring PNA somehow to apply to *No-one expects John to leave*, to yield the interpretation *Everyone expects John not to leave*, would among other things imply, wrongly I believe, that the lexical item *no-one* semantically contains a universal quantifier followed by negation.

There are sentences with negated matrix verbs that are not NR verbs, but also allow subordinate clauses containing NPIs (cf. (50) and (51)).

- (50) I didn't realise that he admired her *at all*

- (51) He didn't know that *anything* had happened

They do not, however, allow minimisers (strict NPIs like *a damn thing*, *an iota*, (*lift*) *a finger*, *a red cent* etc.), which means that, unlike what is the case in NR sentences, the covert negation in the subordinate clause is not ‘strong negation’, i.e. equivalent to ‘ $\neg$ ’, but rather has a negative force similar to that of , for instance, *only with difficulty* (*Only with difficulty could he see her at all / anything*, but not *?Only with difficulty could he see a damn thing / earn a red cent*). Clearly, sentences of this type cannot be treated in the same way as NR sentences. Further research will be necessary to reveal what is going on here. Non-idiomatic quasi-NR predicates, too, allow only non-strict NPIs in their subordinate clauses (e.g. *No-one advised me to write any letters*).

We now turn to the second question posed at the beginning of this section, How is the selection of NEG clauses by negated NR verbs to be accounted for? As we saw in the case of inherently negative verbs, the selecting verb is not negative in the sense of being able to license NPIs by itself. But like words such as *without* and comparative *than*, it takes NEG clauses. Since verbs of the type of *think* and *believe* select NEG clauses depending on the sense in which they are used, we assume that a formal distinction is to be made between NR-verbs and their phonologically identical non-NR counterparts. NR verbs, then, bear at least one feature that non-NR verbs do not. It must be assumed that the selection of a NEG clause cannot take place if the matrix lacks a negative head for the NR verb to check. I use the more general term ‘negative head’ in this connection, instead of ‘head of NegP’, because NR verbs are also possible in NEG clauses, which lack NegP but do have a negative head, thus making NR recursion possible, as in [*I don't suppose [John thinks [the Yankees will win]]*], and sentences like (52)-(53), with a strict NPI in the lowest clause:

- (52) I don't think [CP NEG Mary believes [CP NEG that John expects [NEG to be *too* happy about the divorce]]]
- (53) Ik neem niet aan [CP NEG dat je denkt [CP NEG dat Dik van plan was [NEG een vinger uit te steken]]]  
I take not *Prt* that you think that Dik of plan was a finger out to stick  
'I don't suppose you think Dik was going to lift a finger'

Neg Absorption in cases like these involves abstract adjunction of the complex subclause to the operator in NegP of the highest clause, successive adjunctions and absorptions of the lower NEGs to the higher ones and subsequent left-adjoining and absorption of the original NegP operator (*n't* in (52), *niet* in (53)).

In this paper, as I indicated earlier, I will not go into the details of the treatment of infinitival clauses under NR verbs. Clearly, though, it will be essentially the same as that of finite subclauses. It is worthwhile noting, meanwhile, that there is at least one verb in Dutch (*hoeven*, equivalent to *need* without *to*) which takes infinitivals but does not select NEG clauses, and bears a feature similar or identical to the one distinguishing NR verbs from their non-NR counterparts: it must be checked at a negative head, which in this way ‘licenses’ the verb in question. For ease of reference let us call this a ‘matching feature’. The infinitival complement of *hoeven* does not seem to contain a barrier to licensing NPIs by the operator whose negative head ‘licenses’ the occurrence of *hoeven* by virtue of its matching feature. There are other verbs (which are sometimes part of idioms) that bear this feature but which do not take infinitivals. The earlier mentioned NPI verb *budge* would be an example in English; Dutch examples are *talen (naar)* ‘care (for)’ and *malen (om)* ‘be concerned (about)’. These verbal NPIs do not select NEG clauses. Hence there are two possibilities: (1) the matching feature excluding them from non-negative contexts is different from the one borne by NR verbs in that the latter, in addition, causes the verb to select a NEG clause, or (2) NR verbs are distinguished from their phonologically identical counterparts not by one but by two features, one causing them to select NEG clauses, the other – identical to the matching feature carried by NPI verbs – causing them to be ‘licensed’ by a negative head. The presence of the selecting feature should then be dependent on the presence of the matching feature, though

not required by virtue of it, as will become clear directly. It should also be dependent on the presence of a feature expressing the ‘structural fact’ character discussed earlier, without which no NR is possible. I propose to choose the option of having two separate features distinguishing NR verbs from their phonologically identical counterparts. One reason not to express in one single feature the properties of both selecting NEG clauses and matching at Neg is that a feature expressing the former property is needed anyway for inherently negative predicates, which do not need a matching feature. More importantly, we should distinguish between features that function during MERGE and those that drive movement. Provisionally, I will represent the two features as, respectively, [+NEG cl] (selecting NEG clauses) and [+[Neg]] (to be checked at a negative head).

All verbs (except perhaps verbal PPIs such as *swarm (with)* or *burst (with)*) freely occur in negative contexts. Their features must therefore be nondistinct from or else compatible with negative heads. In this way we can account for the ambiguity of sentences like (1b) *John doesn't think Bill likes Harriet* and the difference between, for example, the Basque sentences (37a) and (37b), both translated as ‘Galileo did not believe that the sun revolved around the earth’ (corresponding to the *de re - de dicto* distinction): the non-NR versions of ‘think’ or ‘want’ verbs simply lack the feature [+[Neg]] and hence the feature [+NEG cl].

Summarising, we assume that clauses under negated NR verbs start with a covert negative operator NEG, and we interpret NR sentences as cases of pleonastic negation, similar but not identical to Negative Concord. The negations are reduced to a single one by Neg Absorption after abstract movement of the NEG clause to [Spec,NegP], where it is adjoined to the *not* operator, and where the latter in turn is adjoined to the negative operator of the subclause. NR verbs are distinct from their phonologically identical counterparts by virtue of two features that, respectively, license them in negative contexts and cause them to select covertly negative clausal complements ([+][Neg]] and [+NEG cl]).

#### 4.2. Quasi-NR sentences

Quasi-NR sentences, in particular those allowing strict NPIs in the subclause, like e.g. *No-one believes John will get a red cent*, at first glance may seem to constitute a problem for the proposal exemplified in (49). But as we saw, the matrix clause of sentences like the one just cited contains an idiom introducing ‘strong’ negative force. Such idioms, presumably not supported by a NegP, are like inherently negative predicates in this respect. We can explain their allowing strict NPIs in the subclause if we assume that the verb part of the idioms in question selects a NEG clause.

The fact that non-idiomatic quasi-NR sentences do not allow strict NPIs (cf. (17) and (18), above) can now be understood as a consequence of the fact that the ‘NR’ reading crucially requires that the negative element be simplex (‘not’ instead of ‘no-one’ etc.). Of course, in non-idiomatic quasi-NR sentences with *no-one* or *nothing* as subject, the negative constituent has to move further leftward, out of [Spec,NegP], precluding Absorption even if it were possible. Hence such sentences cannot contain NEG clauses and therefore no subclauses with strict NPIs. But even should the negative constituent stay in [Spec,NegP], as may be the case for instance if it is an object of *advise* (cf. (17b)), the NEG clause could not be adjoined to it, because complex negative elements like *no-one* never carry the PNA feature, as argued above.

#### 4.3. Why a grammatical account?

If it is true that NR sentences are felt to be ‘weaker’ or ‘less certain’ than their non-NR counterparts, then there is a discrepancy between the LF representation of NR sentences proposed above and their actual interpretation. Could it be that, as Horn (2001) argues, the reading of NR sentences should not be accounted for in the grammar but in Speech Act

Theory, as a conventionalised understanding of  $\neg P(x,p)$  as  $P(x, \neg p)$ ? The difficulty with that approach, as far as I can see, lies in the licensing of strict NPIs in the subclause of NR sentences, which seems to be a matter of grammar entirely. This, in combination with the Basque data, tips the balance in favour of a grammatical account. What may have started as a ‘guarded’, litotic turn of phrase, has been completely grammaticalised.

Then how should we deal with the discrepancy? As has been observed in connection with abstract lexical representations, where the problem is essentially the same, a given linguistic form does not really *mean* what its formal representation purports it to mean (Hale and Keyser 1992:123). Thus *put flowers in a vase* has the standard interpretation of ‘put flowers still connected to their (cut) stems in a vase (normally filled with water), which stands in its canonical upright position, with the flowers sticking out’, although ‘literally’, i.e. on the basis of its formal representation, the expression could also be applied, for example, to the stuffing of stemless flowers in an empty vase lying on its side. Similarly, the location verb *saddle* does not refer to putting any old saddle on any old thing or animal in any old way. Such discrepancies are analogous to the discrepancy between the LF representation of NR sentences and their ‘indirectness’, the fact that their meaning is sometimes felt to be merely inferred from what on the surface they seem to convey:  $\neg P(x,p)$ . From the *flowers* and the *saddle* examples I believe we may draw the conclusion that the ‘äußere Form’ of an expression does play an independent, additional part in its interpretation, a part governed by conventions, quite separate from the grammar. The flavour of NR ‘indirectness’, actually not always perceived (especially not with NPIs), can thus be explained in terms outside the realm of grammar.

## 5. Summary

The phenomenon that has come to be known as Negative Raising obtains in sentences with negated non-factive verbs expressing, together with their negation, a negative attitude towards a hypothetical state's or event's being or becoming fact. Arguments presented in the Semantic Syntax framework in support of Negative Raising, it is argued, will ultimately lead to unattractively complicated devices. The parallel behaviour, with respect to polarity items, of inherently negative predicates (*doubt*, *deny* etc.) and NR predicates, together with data from Basque, suggest that both types take subordinate clauses containing a covert negative operator (NEG clauses). The overt negation in NR sentences is taken to be pleonastic. In a Minimalist approach, abstract raising of the NEG clause and adjunction to the operator in [Spec,NegP] is proposed, after which through Neg Absorption the higher operator is eliminated, giving an LF structure conforming to the pattern ‘ $P(x, \neg p)$ ’, where  $P$  is a verb like *believe*,  $x$  is the subject, and  $\neg p$  corresponds to the subordinate clause. NEG clause raising and Pleonastic NEG absorption (PNA) only apply in the case of true NR sentences. Apparent NR sentences (basically, sentences with NR verbs but with negative constituents other than ‘not’, or sentences seemingly derived by shifting the *n*-word leftward, but in which no strict NPIs are allowed) are shown to be either idiomatic or lacking a NEG clause, and are excluded from PNA. Treating the NR phenomenon outside the grammar as a conventionalised understanding ‘ $P(x, \neg p)$ ’ of sentences of the form  $\neg P(x, p)$  is rejected on the grounds that it would be hard to account for the presence of negative complementisers in the subclauses in Basque NR sentences and the licensing of strict NPIs in the subclause of NR sentences in general on the basis of principles that are not part of the grammar.

Thus in a sense we still have a kind of Neg Raising. Covert negation is raised, but together with the clause over which it takes scope.

## Bibliography

- Baker, C.L: 1970, ‘Double Negatives’, *Linguistic Inquiry* 1, no. 2, 169-186.  
 Bech, Gunnar: 1951, *Grundzüge der semantischen Entwicklungsgeschichte der hochdeutschen Modalverba*,

- Kongelige Danske videnskabernes selskab Historisk-filologiske meddelelser XXXII, 6, I kommission hos Munksgaard, København.
- Bernini, Giuliano, and Paolo Ramat: 1996, *Negative sentences in the languages of Europe. A typological approach*, Mouton de Gruyter, Berlin-New York.
- Chomsky, Noam: 1977, 'On Wh movement', in Culicover *et al.* (eds.), *Formal syntax*, Academic Press, New York/San Francisco/London, 71-132.
- Chomsky, Noam: 1986, *Barriers*, Cambridge, MIT Press, Mass.
- Chomsky, Noam: 1995, *The Minimalist Program*, MIT Press, Cambridge, Mass.
- Den Besten, Hans: 1989, *Studies in West Germanic syntax*, Dissertation Katholieke Universiteit Brabant, Rodopi, Amsterdam.
- De Vries, Mark: 1999, 'Extraposition of relative clauses as specifying coordination', in T. Cambier-Langeveld et al. (eds.), *Proceedings of ConSole VII*, SOLE, Leiden, 293-309.
- Fillmore, Charles J: 1963, 'The Position of Embedding Transformations in a Grammar', *Word*, vol. 19: 208-31.
- Fischer, Olga: 1999, 'On Negative Raising in the history of English', in Ingrid Ticken-Boon van Ostade, Gunnell Tottie and Wim van der Wurff (eds.), *Negation in the history of English. Topics in English Linguistics 26*, Mouton de Gruyter, Berlin, 55-100.
- Haegeman, Liliane: 1995, *The Syntax of Negation*, CUP, Cambridge.
- Hale, Ken, and Samuel Jay Keyser: 1992, 'The syntactic character of thematic structure', in I.M. Roca (ed.), 1992, *Thematic structure. Its role in grammar*, Linguistic Models 16, Foris, Dordrecht, 107-43.
- Hazout, Ilan: 1995, 'Comparative ellipsis and logical form', *Natural Language and Linguistic Theory* 13, 1-37.
- Horn, Laurence R.: 2001, *A Natural History of Negation*, Stanford: Center for the Study of Language and Information. (Originally published 1989, University of Chicago Press, Chicago).
- Jespersen, Otto: 1917, *Negation in English and other languages*, A.F. Høst, Copenhagen.
- Klima, Edward S: 1964, 'Negation in English', in Jerry A. Fodor and Jerrold J. Katz (eds.), *The structure of language. Readings in the philosophy of language*, Prentice-Hall, Englewood Cliffs, N.J., 246-323.
- Kayne, Richard S: 1994, *The antisymmetry of syntax*, MIT Press, Cambridge, Mass.
- Klooster, Wim: 1979, 'Opmerkingen over de comparatief', *Handelingen van het XXXIIe Vlaams Filologencongres*, Louvain, 197-205.
- Klooster, Wim: 1984, 'Ontkenning en noodzakelijkheid. Observaties met betrekking tot negatie en moeten', *GLOT* 7, 63-120.
- Klooster, Wim: 1994, 'Syntactic differentiation in the licensing of polarity items', *HIL Manuscripts* Vol. 2, Issue 1, HIL, Leiden, 43-56.
- Klooster, Wim: 2001, 'Geen. Over verplaatsing, negatie en focus', *Nederlandse Taalkunde* 6, no. 1, 54-84
- Klooster, Wim, 2002, 'A Note on 'Postposed' Adverbial Phrases in Dutch', in Fabrice Cavoto (ed.), *The Linguist's Linguist: A Collection of Papers in Honour of Alexis Manaster Ramer* [2 volumes], Lincom Europa, München, Vol. II, 247-63.
- Klooster, Wim: To appear, 'Against Negative Raising', in *Festschrift for Kazimierz A.Sroka*.
- Koster, J: 1995, 'Extraposition as coordination', handout, Rijksuniversiteit Groningen.
- Kraak A. and W.G. Klooster: 1968, *Syntaxis*, Culemborg/Keulen: Stam-Robijns (2nd edition 1972).
- Laka Mugarza, Miren Itziar: 1990, *Negation in Syntax: On the Nature of Functional Categories and Projections*, Cambridge, Mass., MIT Working Papers in Linguistics.
- Lakoff, George: 1968, 'Pronominalization, negation, and the analysis of adverbs', in *Linguistic Institute Packet of Papers*, Urbana.
- Lakoff, Robin: 1969, 'A Syntactic Argument for Negative Transportation', in Robert Binnick et al. (eds.), *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, Department of Linguistics Chicago, 140-7. Reprinted in Seuren (ed.) 1974, 174-182.
- Lindholm, James M: 1969, 'Negative Raising and sentence pronominalization', in Robert Binnick et al. (eds.), *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, Department of Linguistics, Chicago, 148-158.
- Linebarger, M: 1987, 'Negative Polarity and Grammatical Representation', *Linguistics and Philosophy* 10, 325-87.
- Mitchell, Bruce: 1985, *Old English syntax*, Vols. I-II, Clarendon Press, Oxford.
- Pijnenburg, Hans: 1991, *Datives in French*, Doctoral Dissertation, Amsterdam Studies in Generative Grammar 3, HIL-UvA, Amsterdam.
- Progovac, Liljana: 1988, *A Binding Approach to Polarity Sensitivity*, Doctoral dissertation, University of Southern California.
- Rijkhoek, P: 1998, *On degree phrases and result clauses*, Doctoral dissertation, Rijksuniversiteit Groningen.
- Rizzi, L: 1992, 'Arguments/Adjunct (A)symmetries', in K. Broderick (ed.), *Proceedings of NELS 22*.
- Seuren, Pieter A.M. (ed.): 1974, *Semantic Syntax*, Oxford Readings in Philosophy, Oxford University Press, Oxford.
- Seuren, Pieter A.M: 1985, *Discourse semantics* [With an appendix by A. Weijters], Blackwell, Oxford.

- Seuren, Pieter A.M: 1996, *Semantic Syntax*, Blackwell, Oxford.
- Shlonsky, U: 1989, 'A note on Neg Raising', *Linguistic Inquiry* 19, 710-17.
- Sportiche, D: 1988, 'Critic Constructions', MS UCLA.
- Tolkien, J.R.R.: 1962, *The English text of the Ancrene Riwle*, Early English Text Society, London.
- Traugott, Elizabeth Closs: 1992, 'Syntax', in Richard M. Hogg (ed.), 1992, *The Cambridge history of the English language*, Vol. I: *The beginnings to 1066*, Cambridge University Press, Cambridge, 168-289.
- Wackernagel, Jacob: 1926, *Vorlesungen über Syntax*, 2. Ausgabe 1957, Birkhäuser, Basel.