

Parasitism, secondary triggering, and depth of embedding

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ABSTRACT

The aim of this paper is to argue that the stringent licensing conditions on (i) the direct licensing of strictly local and strictly negative polarity items (PIs) can be lifted under (ii) ‘PARASITIC LICENSING’ by having the strict PI parasitise on the licensing dependency of a more lenient PI (subject to the anti-c-command condition familiar from parasitic gap constructions), but that these conditions reassert themselves, even in the presence of an additional PI, in contexts of (iii) ‘SECONDARY TRIGGERING’ (Horn 1996), a case of direct licensing (under c-command) by an abstract Neg⁰-head. The discussion argues that, in embedded CPs, parasitic licensing succeeds only if the additional PI on which the parasitic PI seeks to piggy-back establishes a licensing dependency with a C_[NEG]-head. This derives the empirical generalisation that parasitic licensing depends on a clausemate licenser and is sensitive to DEPTH OF EMBEDDING: it succeeds if negation is in the next clause up but fails if the physical negation is two clauses away, in which case only scenario (iii) applies.

1 Introduction*

In Den Dikken (2002), I present what is to my knowledge the first detailed discussion in the literature of the peculiar properties of a Dutch polarity item, the word *heel*, a cognate of English *whole*, illustrated in (1a).

- (1) a. ik ken die *hele* vent *(niet)
I know that whole bloke not
‘I don’t know that bloke at all’
b. die (**hele*) vent kent me niet
that whole bloke knows me not

I argue there that ‘polar-*heel*’ is dependent for its direct licensing on a sentential negation that does not scope over it, as becomes evident from a comparison of the triplets in (2) and (3). In this respect, polar-*heel* fits in the same slot in the typology of polarity-sensitive expressions that is also occupied by a particular subspecies of ‘n-words’ — specifically, those that, as Giannakidou (2000) has shown in detail, behave ‘as polarity sensitive universal quantifiers which need negation in order to be licensed, but must raise above negation in order to yield the scoping $\forall > \neg$ ’ (Giannakidou 2000:457).

- (2) a. ik wil met die hele vent niet praten
I want with that whole bloke not talk
b. *ik wil niet met die hele vent praten
I want not with that whole bloke talk
c. ?ik wil niet praten met die hele vent
I want not talk with that whole bloke
‘I don’t want to talk to that bloke at all’
- (3) a. ik wil met al die mensen niet praten $\forall > \neg$
I want with all those people not talk
b. ik wil niet met al die mensen praten $\neg > \forall$
I want not with all those people talk
c. ik wil niet praten met al die mensen $\neg > \forall / \forall > \neg$
I want not talk with all those people
‘I don’t want to talk to all those people’

Den Dikken (2002) shows furthermore that polar-*heel* must not be separated from its licensing negation by a clause boundary, and that it cannot be inserted in noun phrases which are prevented from undergoing A'-movement. Arguing that these restrictions follow from an analysis of the direct licensing of polar-*heel* that involves A'-movement of the noun phrase containing polar-*heel* into SpecNegP in overt syntax, I provide a straightforward explanation for the fact that polar-*heel* cannot be directly licensed in the subject of the negated clause (cf. (1b)), for the clausemate restriction on the direct licensing of polar-*heel* (cf. (4)), and for the ban on embedding polar-*heel* in the indirect object (cf. (5b)).

- (4) a. *ik geloof niet dat ik die *hele* vent ken
 I believe not that I that whole bloke know
 'I don't believe I know that bloke at all'
- b. *ik geloof niet dat die *hele* vent me kent
 I believe not that that whole bloke me knows
- (5) a. hij wil die student die (*hele*) constructie niet uitleggen
 he wants that student that whole construction not explain
 'he doesn't want to explain that construction to that student at all'
- b. hij wil die (?**hele*) student die constructie niet uitleggen
 he wants that whole student that construction not explain

The ill-formedness of (1b) is a reflex of the illegitimacy of downgrading movement from SpecTP into SpecNegP (with NegP being below TP in Dutch; cf. Haegeman & Zanuttini 1991 and subsequent work).¹ The ungrammaticality of (4) follows from the fact that both conceivable derivations of these sentences fail: fell-swoop movement of polar-*heel*'s container across CP into the matrix SpecNegP violates subadjacency, and successive-cyclic movement through the embedded SpecCP, while in accordance with subadjacency, violates Müller & Sternefeld's (1993) Principle of Unambiguous Binding, constituting an 'improper movement' effect of sorts.² And the fact that polar-*heel* cannot be embedded in the indirect object (cf. (5b)) is a consequence of the general ban on A'-movement of indirect objects.³

Interestingly, however, the ungrammaticality of sentences that violate the conditions on direct licensing of polar-*heel* can often be lifted if an additional polarity item is included in the structure, with the otherwise offending token of polar-*heel* 'piggy-backing' on that additional polarity item. Thus, while (5b) is ungrammatical, (5c) is perfectly well-formed. The difference between (5b) and (5c) is precisely the fact that (5c) contains an additional token of polar-*heel* (underscored in the example) inside the direct object, where, as we know from (5a), polar-*heel* is legitimately licensed. Apparently the presence of this additional polar-*heel* helps out the otherwise illegitimate polar-*heel* in the indirect object. This effect is part and parcel of a more general phenomenon which, in Den Dikken (2002), I dubbed 'parasitic licensing' of polar-*heel*. Some more examples of this are provided in (6), where systematically the result is grammatical only if the additional polarity item (once again underscored) is included in the sentence. Parasitic polar-*heel* can be embedded in an indirect object, as in (5c), or in a subject, as in (6b), and it does not depend on a clausemate negation: in (6a,b), polar-*heel* is separated from the negation in the matrix clause by a CP boundary, but it does not seem to care. In fact, parasitically licensed polar-*heel* does not even depend on a negative morpheme: though conditionals and downward-entailing verbs like *betwijfelen* 'doubt' do not license polar-*heel* directly, (6c,d) are grammatical if they include an additional PI (*ooit* 'ever') that *is* legitimately licensed in these contexts.

- (5c) hij wil die *hele* student die hele constructie niet uitleggen
 he wants that whole student that whole construction not explain
 'he doesn't want to explain that construction to that student at all'

- (6) a. ik geloof niet dat ik die *hele* vent *(ooit) gezien heb
 I believe not that I that whole bloke ever seen have
- b. ik geloof niet dat die *hele* vent *(ook maar iets) tegen me gezegd heeft
 I believe not that that whole bloke also but anything to me said has
- c. als je die *hele* vent *(ooit) bezoekt, kijk ik je nooit meer aan
 if you that whole bloke ever visit look I you never anymore PRT
- d. ik betwijfel of ik die *hele* vent *(ooit) gezien heb
 I doubt if I that whole bloke ever seen have

Parasitic licensing of polar-*heel* is severely restricted, in ways that mimic the restrictions on the more familiar instance of parasitism in syntax, the licensing of parasitic gaps: both obey an anti-c-command condition (the parasite must not be c-commanded by what it aims to piggy-back on) and an S-structure licensing condition.⁴

The preceding paragraphs summarise the key ingredients of the analysis of direct and parasitic polarity item licensing laid out in Den Dikken (2002). In the present paper, I will take a closer look at the restrictions on parasitic licensing of polar-*heel*. On the basis of an investigation of novel data that show that depth of embedding is an important restrictor of parasitic licensing, I will argue for a distinction between PARASITIC LICENSING and SECONDARY TRIGGERING (cf. Horn 1996). In the course of that discussion, I will invoke and support a key ingredient of Postal's (2000) recent perspective on the syntax of polarity: the idea that negation can originate within the projection of the polarity item.

2 Two depth-of-embedding restrictions on parasitism

The analysis of polar-*heel* licensing outlined in Den Dikken (2002) predicts that, as long as there is some other polarity item that is licensed and to which polar-*heel* can legitimately link up (in conformity with the anti-c-command condition and the S-structure licensing condition), parasitic licensing should make all restrictions on the licensing of polar-*heel* disappear. But there are at least two contexts in which parasitic licensing of polar-*heel* is unsuccessful: (i) it is impossible for polar-*heel* to be parasitically licensed by another polarity item if the two are in a clause that is more than one clause-boundary removed from the licensing negation, and (ii) it is also impossible for polar-*heel* and the additional polarity item themselves to be separated by a clause-boundary: i.e., polar-*heel* can only piggy-back on a clause-mate 'helper', even if that helper is further down the tree than *heel* (so that anti-c-command is ensured) and is itself perfectly legitimate in this deeply embedded position. These are two contexts in which depth of embedding plays a key role in the licensing of polar-*heel* — unexpectedly, on the analysis presented in Den Dikken (2002).

2.1 Restriction I: The licensing negation must not be more than one clause boundary away

Let me start by addressing the first problem: the fact that it is impossible for polar-*heel* to piggy-back on another polarity item if the two are in a clause that is more than one clause-boundary removed from the licensing negation.

2.1.1 The facts

That this is the case is shown by a comparison of the examples in (7), (8) and (9). In the monoclausal examples in (7), we find the familiar split between polar-*heel* in the direct object, on the one hand, and polar-*heel* embedded in the indirect object or the subject on the other: while (7a) is perfect, (7b,c) are degraded.

- (7) a. ik heb [die (*hele*) vent]_{DO} nooit gemogen [1–CLAUSAL]
 I have that whole bloke never liked
 ‘I have never liked that bloke at all’
- b. ik zal [die (?**hele*) vent]_{IO} die constructie niet uitleggen
 I will that whole bloke that construction not explain
 ‘I won’t explain that construction to that bloke at all’
- c. [die (**hele*) vent]_{SU} heeft nooit met me gesproken
 that whole bloke has never with me spoken
 ‘that bloke has never spoken to me at all’

This follows straightforwardly from the fact that in (7) only direct licensing is possible, where ‘direct licensing’, on Den Dikken’s (2002) analysis, means overt-syntactic A’-movement of the container of polar-*heel* to SpecNegP — the ungrammaticality of (7b) follows from the general ban on A’-movement of indirect objects (recall fn. 3), and (7c) is bad because movement to SpecNegP starting from the subject position would involve downgrading movement.

The well-formedness of all three examples in (8) shows, once again, that these restrictions on the licensing of polar-*heel* are lifted in parasitic licensing contexts: throughout (8a–c), polar-*heel* can link up to the licensing dependency of the other polarity item, *ooit*, which is legitimately licensed by a non-clausemate negation.

- (8) ik denk niet dat ... [2–CLAUSAL]
 I think not that
 ‘I don’t think that...’
- a. ... ik [die (*hele*) vent]_{DO} ooit heb gemogen
 I that whole bloke ever have liked
- b. ... ik [die (*hele*) vent]_{IO} ooit die constructie zal uitleggen
 I that whole bloke ever that construction will explain
- c. ... [die (*hele*) vent]_{SU} ooit met me gesproken heeft
 that whole bloke ever with me spoken has

When we now look at (9), we see that, in tricausal constructions where both polarity items are two clause-boundaries removed from the licensing negation, we get back the single-clause asymmetry between direct objects on the one hand, and indirect objects and subjects on the other.⁵

- (9) ik denk niet dat ze zullen geloven dat ... [3–CLAUSAL]
 I think not that they will believe that
 ‘I don’t think that they will believe that...’
- a. ... ik [die (?**hele*) vent]_{DO} ooit heb gemogen
 I that whole bloke ever have liked
- b. ... ik [die (?**hele*) vent]_{IO} ooit die constructie zal uitleggen
 I that whole bloke ever that construction will explain
- c. ... [die (**hele*) vent]_{SU} ooit met me gesproken heeft
 that whole bloke ever with me spoken has

The facts in (9) pose two immediate questions:

- (i) how come parasitic licensing of polar-*heel* fails here while it succeeded perfectly well in (8)?
- (ii) how does the polar-*heel* inside the direct object of the most deeply embedded clause in (9a) still manage to get licensed, while (9b) and (9c) are ungrammatical?

The most deeply embedded clause in (9) gives us precisely the same asymmetry that we see in monoclausal (7) — the most deeply embedded clause in (9) behaves as though it were the only clause in the structure, and, moreover, as though it were negative.

2.1.2 Two types of negative polarity items: Negative NPIs and non-negative NPIs

I would like to argue that the constellation of facts seen in (7)–(9) can be made to follow if we make a distinction between two types of negative polarity items, following the essence of Postal’s (2000) work on the syntax of polarity.⁶ Postal’s work is motivated by the desire to uphold ‘[t]he maximum and boldest generalization’, viz. ‘that negative polarity items are licensed *only* by negations as tradition, the terminology and a few previous researchers including Linebarger (1980, 1987) would have it, but that this is obscured by the invisibility of many negations of relevance’ (Postal 2000: 15). He accomplishes this by assuming, contrary to Klima (1964), that ‘all so-called negative polarity *any* forms underlyingly occur with Determiner-internal negations. *Any* forms occur when the negation in closest combination with the non-negative part of the determiner raises out of it’ (p. 17). Specifically, he proposes that *any*-NPIs come in two varieties, represented as (10a) and (10b). Of the two structures, (10a) is formally negative, downward entailing and anti-additive;⁷ (10b), on the other hand, is non-negative (the two negations on D cancel each other out in the semantics), upward entailing.⁸

- (10) a. $[_{DP} [_D \text{ NEG1} [_D \text{ some}]] [_{NP} \dots \text{N} \dots]]$
 b. $[_{DP} [_D \text{ NEG2} [_D \text{ NEG1} [_D \text{ some}]]] [_{NP} \dots \text{N} \dots]]$

This two-way typology of negative polarity items is motivated by contrasts of the type seen in (11a’,b’), presented in Postal (2000:22). Polarity items of type (10a) are licensed only in anti-additive contexts, and, in virtue of being formally negative, can trigger negative inversion in embedded contexts; non-negative, upward entailing NPIs of type (10b), on the other hand, cannot bring about negative inversion. The fact that *not every juror*, the licensor of *any* in (11b,b’), is not anti-additive (unlike *no juror* in (11a,a’)) ensures that in the b-examples only the non-negative, upward entailing NPI can be chosen, which in turn guarantees that negative inversion is unsuccessful.

- (11) a. no jurors believed that she had described any detail correctly
 a’. no jurors believed that any detail had she described correctly
 b. not every juror believed that she had described any detail correctly
 b’. *not every juror believed that any detail had she described correctly

In this paper I adopt Postal’s insight that some negative polarity items are formally negative. But I deviate from Postal’s assumptions reflected in (10) in a number of ways, bringing them more in line with a minimalist syntax and allowing them to transparently accommodate the polar-*heel* facts. My most significant departure from Postal (2000) is that I do not assume that *any* is the suppletive lexicalisation of an indefinite D that has lost a negative *morpheme* (i.e., the spell-out of the ‘leftover’ of *not (not) some*); instead, I take *any*, in its negative incarnation, to be a D specified for the abstract *feature* [NEG] — an *uninterpretable* formal feature that needs to be checked by a matching [NEG] feature in some DP-external Neg⁰ in the course of the syntactic derivation.⁹

With (10a) recast in terms of an abstract [NEG] feature (as in (12a)) and with the negation originating DP-externally, there is no place in the analysis for a representation of the type in (10b): viewed as abstract, uninterpretable [NEG] features, the two negations in D in Postal's (10b) would check against each other and delete within DP; as a result, this would be indistinguishable from a representation that has zero negations in D. I therefore analyse non-negative, upward entailing NPIs as simple indefinites that depend on a local licenser (a downward entailing (Ladusaw 1979) or nonveridical (Giannakidou 1998) element; the choice between these two will be immaterial here), with no negation raising out of them (cf. (12b)). This paper thus adopts what could be characterised as a blend of the classic Klima (1964) approach to NPIs, appropriately updated (instantiated here by (12b)), and Postal's (2000) alternative analysis (represented by (12a)).

- (12) a. formally negative polarity items, with a [NEG]-feature in D launched to a higher [NEG]-head
 b. indefinite polarity items, dependent on a clausemate downward entailing/nonveridical licenser

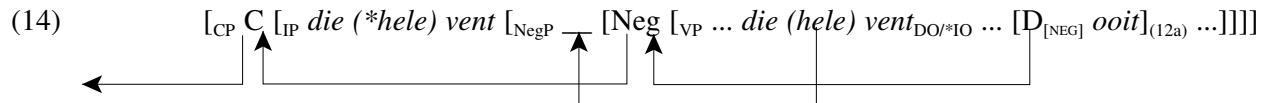
The typology in (12) predicts that polarity items of the type in (12b) can be embedded no deeper than a CP directly embedded under a negative. For the C-head of a CP immediately embedded below a negative, Laka (1990) and Progovac (1988) have argued that it possesses a [NEG] feature (a licenser in the sense of (12b)) assigned under selection from the matrix negation. They base this claim on the contrast between examples such as (13a) and (13b) (the former ill-formed on a polarity reading of *anything*, though not on a free-choice interpretation, irrelevant here): for Laka and Progovac, the [NEG] feature on the C-head of the clause embedded under *doubt* (imposed on that C-head by the matrix verb) licenses the *any*-NPI in (13b). But the C-head of a more deeply embedded CP cannot be assigned a [NEG] feature because it is not itself selected by a negation. Since a CP that is twice removed from a negation does not have its C-head specified for the feature [NEG], it follows that any polarity item that is successfully licensed within such a CP (as in (13c), or Uribe-Etxebarria's 1994 Spanish examples of the same type featuring *n*-words) must itself be a *negative* constituent, of type (12a). That is to say, such polarity items must themselves possess a [NEG]-specified head, and launch that head up the tree (in line with the analysis that Postal gives for [NEG]-specified polarity items), into the clause that harbours the negation.

- (13) a. *I doubt anything/any claims
 b. I doubt that anything will happen
 c. I doubt that he thinks that anything will happen

2.1.3 The tricausal cases

With this as background, let me return to the Dutch facts in (8) and (9), on which the typology in (12) affords us an interesting perspective. If we assume that Dutch polarity items like *ooit* 'ever' are themselves lexically ambiguous between polarity items of types (12a) and (12b), this means that *ooit* has the option but not the obligation to be marked for the feature [NEG]. Its [NEG]-specified incarnation is perfectly allowed to be embedded two clauses down from the negation that will license its abstract [NEG] feature: the [NEG] feature can make its way up to its licenser (the Neg-head in the matrix clause) via successive-cyclic head movement (cf. below for more details, and also Troseth 2004), thereby circumventing any phase boundaries in between. And given that an *ooit* that is two clauses removed from the negation must be a *negative* constituent of type (12a) (since local licensing in keeping with (12b) would fail in such a context), it comes to play an instrumental role in helping out polar-*heel* in the most deeply embedded clause of the tricausal examples in (9). The polar-*heel* in the direct object in (9a) will in fact end up being legitimate as a result of *direct* licensing by a *secondary* Neg-head — whence the label 'secondary triggering' (borrowed from Horn 1996).¹⁰ Let me spell this out in more detail.

The *ooit* in the most deeply embedded clause in (9) is a negatively specified polarity item of type (12a). Its abstract, uninterpretable [NEG] feature is in need of checking, against the [NEG] feature borne by the matrix Neg⁰; but a direct Agree relationship between the matrix Neg⁰ and the NPI in the embedded clause is unestablishable: at least two strong phase boundaries (the embedded CP and the matrix vP) are in between. The bearer of the uninterpretable [NEG] feature of the polarity item (its D–head) hence has to be launched up the tree, first to the C–head of the embedded clause. But fell-swoop movement to the embedded C is prohibited: it would violate the locality conditions on head movement. Movement therefore has to proceed via a succession of smaller steps. First, the abstract [NEG]–specified head of the polarity item raises to the Neg–head of the most deeply embedded clause;¹¹ that Neg–head will subsequently raise to the C–head of the most deeply embedded CP, and so forth.¹² The thing to note here is that, in order to reach the root Neg–head, the [NEG] feature of the polarity item in the most deeply embedded clause must minimally be able to reach the Neg–head of its own clause. Once it is there, it will enable that secondary Neg–head to *directly* license polar-*heel* by attracting the container of polar-*heel* to its specifier, as in the single-clause examples in (7).¹³ The relevant part of the structure of the sentences in (9) is shown in (14).



The successful licensing of polar-*heel* in (9a) now falls out as a case of ‘secondary triggering’ similar in its essentials to what we find in something like (15) (cf. Horn 1996, Postal 2000), where *in weeks* is licensed by the presence of a secondary negation — the [NEG] feature of (12a)-type *anybody*.

(15) I’m surprised { *John/✓anybody } has been here *in weeks*

With (9a) being a case of secondary direct licensing of polar-*heel*, we expect the distribution of polar-*heel* in this doubly-embedded context to match that of a polar-*heel* licensed directly by a clausemate negation. And this is precisely what we find: the sentences in (9b) and (9c) are ill-formed, exactly on a par with those in (7b,c). The deviance of these examples follows from the fact that direct licensing of polar-*heel* involves pied-piping A’–movement into the clausemate SpecNegP, which is impossible here. That parasitic licensing fails here as well will become clear after we have analysed the examples in (8), to which I now turn.

2.1.5 The biclausal cases

That the single-embedding paradigm in (8) suspends the asymmetries found in (7) and (9) is because, in that particular context but not in (7) and (9), parasitic licensing is successful. That parasitic licensing is available in (8) follows from the fact that the *ooit* ‘ever’ in the single-embedding, biclausal examples in (8) does not have to be a negative constituent but can also be a polarity item of type (12b) — that is, a non-negative indefinite establishing a local dependency relationship with a clausemate downward entailing/nonveridical element (here C_[NEG]), as shown in (16). It is this dependency relationship between C_[NEG] and *ooit* that polar-*heel* successfully parasitises on in *all* of the sentences in (8). Since parasitic licensing does not involve A’–movement of the container of polar-*heel*, and since polar-*heel* can legitimately link up to the dependency between the structurally higher C_[NEG]–head and *ooit*, we do not expect to find any asymmetries between direct objects on the one hand, and indirect objects and subjects on the other — and indeed, no such asymmetries are found in (8).

(16) [CP C_[NEG] [IP die (hele) vent ... [VP ... die (hele) vent_{DO/IO} ... [ooit]_(12b) ...]]

Parasitic licensing fails in (9). Even though the C–head in (14), above, comes to harbour a [NEG] feature in the course of successive-cyclic raising of $D_{[NEG]}$, the fact that this [NEG] feature entertains a *movement* dependency with the D–head of *ooit* ‘ever’, not a licensing dependency of the type referred to in (12b), makes it impossible for *polar-heel* to link up with this dependency and be licensed parasitically as a result. Parasitism is highly sensitive to the kind of dependency that the parasite is to piggy-back on. From the domain of parasitic gaps, we are familiar with the fact that these link up with *A’–movement* dependencies, not *A’–binding* dependencies (cf. the contrast in *this article*_p, *I filed t_i/*it_i without reading pg_i*). But parasitic *polar-heel* is not a gap and does not move; as a consequence, it cannot parasitise on a movement dependency but instead requires, for its parasitic licensing to be successful, that there be a local head (Neg or C) with its *own* [NEG] feature engaging in a licensing dependency with a (12b)-type polarity item in its c-command domain. Since there is no such head in (14), parasitic licensing of *polar-heel* is not possible there.

To summarise the discussion of (7)–(9), what we have seen is that parasitic licensing of *polar-heel* succeeds only in contexts in which the C–head of the clause containing *polar-heel* and the additional polarity item that it seeks to piggy-back on is specified for the feature [NEG] thanks to being the head of the CP–complement immediately embedded under a negated clause. In other contexts, *polar-heel* can only survive if it can be licensed directly, via movement of its container to SpecNegP. Such direct licensing itself comes in two types: *primary* direct licensing, by the Neg–head of a clause that is itself negated by a physical negation, and *secondary* direct licensing, by a Neg–head (or ‘ Σ ’–head; cf. fn. 11) that has the [NEG]–specified head of a (12a)-type NPI raise through it and thus receives an abstract [NEG] feature.

2.1.6 Licensing *polar-heel* under negative verbs

Before moving on to the second depth-of-embedding restriction on parasitic licensing of *polar-heel*, let me briefly examine two further issues that come up under the rubric of secondary triggering *vs* parasitic licensing. Recall first of all that the fact that in (8) parasitic licensing is successful is thanks to the presence of a [NEG] feature on the C–head of the clause embedded under the matrix negation. Recall also that Laka (1990) and Progovac (1988) motivated this $C_{[NEG]}$ on the basis of the distribution of polarity items in the complement of verbs such as *doubt*, as shown in (13). A natural question to ask at this point, therefore, is what happens with *polar-heel* in the complement of such verbs. What we predict is that it should not be licensed via primary direct licensing (since there is no NegP in the complement CP), and that it should be able to be licensed parasitically in the CP immediately embedded under the *doubt*-type verb but not in a CP embedded within *doubt*’s own complement. We have already seen that the former prediction is correct: (6d) is ungrammatical without *ooit*. The fact that it becomes perfect with *ooit* inserted tells us that parasitic licensing does indeed work here. The examples in (17a,b) reproduce this effect. To probe what happens under further embedding, we need to compare biclausal (17b) and tricolausal (17c). The contrast between these sentences confirms that parasitic licensing of *polar-heel* under verbs like *doubt* is indeed restricted in the expected way.

- (17) a. ik betwijfel of ik die (*hele) vent ken (cf. (6d))
 I doubt if I that whole bloke know
 ‘I doubt that I know that bloke at all’
- b. ik betwijfel of die (hele) vent ook maar iemand zal groeten
 I doubt if that whole bloke alsbut anyone will greet
 ‘I doubt that that bloke will greet anyone at all’
- c. ik betwijfel of ze zullengeloven dat die (*hele) vent ook maar iemand zal groeten
 I doubt if they will believe that that whole bloke also but anyone will greet
 ‘I doubt that they will believe that that bloke will greet anyone at all’

- d. ik betwijfel of ze zullengeloven dat ik die ([?]hele) vent ooit gemogen heb
 I doubt if they will believe that I that whole bloke ever liked have
 ‘I doubt that they will believe that I have ever liked that bloke at all’

In (17b,c) I chose subjects as containers of polar-*heel* to make sure that only parasitic licensing could ever help *heel* out. These examples, therefore, do not allow us to check whether secondary direct licensing could succeed two clauses down. To verify this, I added (17d), which predictably fails as an instance of parasitic licensing (because the local C–head is not [NEG]–specified in the most deeply embedded CP) but which, in view of the fact that it is acceptable with polar-*heel* included, does converge as an instance of ‘secondary triggering’: (12a)-type *ooit* ‘ever’ launches its [NEG] feature up to its ultimate licenser,¹⁴ via successive cyclic movement, stopping by at the Neg–head (or Σ –head) of its own clause, which can then take care of direct licensing of polar-*heel*.

2.1.7 Licensing polar-heel in conditional clauses

Finally, let us ask what happens in non-negative environments such as conditional clauses. In (6c) we saw that parasitic licensing of polar-*heel* is successful in a conditional. But it should break down once an additional clause is inserted between *als* ‘if’ and polar-*heel*’s container. And indeed, it does: while (18a,b) are both fine with *hele* included, we find a contrast between (19a) and (19b), the latter being ungrammatical due to the fact that parasitic licensing fails in the context at hand because (12b)-type *ooit* cannot establish a local dependency with a clausemate downward entailing/nonveridical element in this context.

- (18) a. als je die (*hele*) vent ooit zou bezoeken, kijk ik je nooit meer aan (cf. (6c))
 if you that whole bloke ever would visit look I you never more PRT
 ‘if you ever were to visit that bloke at all, I would never look you in the eye again’
 b. als die (*hele*) vent me ooit zou bezoeken, zou ik hem direct de deur uitgooien
 if that whole bloke me ever would visit would I him directly the door out-throw
 ‘if that bloke were to ever visit me at all, I would throw him out the door immediately’
- (19) a. als je denkt dat ik die ([?]hele) vent ooit zou bezoeken, heb je het mis
 if you think that I that whole bloke ever would visit have you it wrong
 ‘if you think that I would ever visit that bloke at all, you’re wrong’
 b. als je denkt dat die (^{*}hele) vent me ooit zou bezoeken, heb je het mis
 if you think that that whole bloke me ever would visit have you it wrong
 ‘if you think that that bloke would ever visit me at all, you’re wrong’

That (19a) is acceptable is because direct-object contained polar-*heel* can be licensed via ‘secondary triggering’ here: the [NEG] feature launched successive cyclically from (12a)-type *ooit* enables polar-*heel* to be licensed directly by a secondary NegP in its own clause.¹⁵ The analysis thus makes the right predictions in the context of negative matrix verbs and conditional clauses as well.

2.2 Restriction II: The parasite and its helper must be clausemates

The division of labour between primary direct licensing, secondary direct licensing and parasitic licensing gives polarity items like polar-*heel* an abundance of opportunities to survive in all sorts of syntactic contexts. But it is plain that there are plenty of contexts in which polar-*heel* can be licensed neither through secondary triggering nor through parasitic licensing. We have already come across several such contexts. In this subsection I would like to address another, illustrated by the example in (20), first noted in Hoeksema (2003).¹⁶

- (20) ik denk niet dat die *hele* vent (*geloofde dat ze) hem ooit gemogen heeft
 I think not that that whole bloke believed that she him ever liked has
 ‘I don’t think that that bloke (believed that she) ever liked him at all’

Hoeksema’s example shows that in order for parasitic licensing of polar-*heel* to be successful, the additional polarity item that polar-*heel* is to piggy-back on must be a clausemate of polar-*heel*: (20) is well-formed if the doubly-underscored middle clause is absent, which tells us that it is apparently impossible for polar-*heel* and the additional polarity item *ooit* ‘ever’ to be constituents of different clauses. The ungrammaticality of the tricausal version of (20) follows from the fact that polar-*heel* in this example can be licensed neither through secondary triggering nor through parasitic licensing, as I will now show.

It should be immediately clear that, regardless of whether the doubly-underscored portion is included or not, direct licensing of subject-contained polar-*heel* in (20) will always fail. All direct licensing, whether primary or secondary, involves pied-piping movement of the container of polar-*heel* into SpecNegP, and such movement would of necessity be downgrading movement if launched from the clausemate SpecTP. So there is no hope of direct licensing of polar-*heel* in (20), no matter whether polar-*heel* and *ooit* are clausemates or not.¹⁷ But now notice that the question of whether polar-*heel* and its helper *ooit* are clausemates or not does become highly relevant when it comes to the alternative licensing strategy for polar-*heel*: parasitic licensing. In successful cases of parasitic licensing, polar-*heel* piggy-backs on the licensing of another polarity item — an *ooit* of type (12b) in the case at hand. Now, *ooit* in (20) can only be legitimately of type (12b) in the biclausal version of the sentence, where it can locally depend on a [NEG]-specified C-head. In the tricausal variant, the lowest CP is not [NEG]-specified since it neither contains an overt negation nor serves as a complement clause immediately embedded below a negation. As a result, (12b)-type *ooit* is not licensable in (20) if the doubly-underscored part is included, and with (12b)-type *ooit* ruled out in tricausal (20), it follows (since secondary direct licensing had already been eliminated independently) that there is no chance of survival for polar-*heel* in the version of (20) that has the doubly-underscored part included.

3 The S-structure condition on parasitism revisited

Finally, I would like to return to something I noted in passing in the introduction (cf. the text below (6): the fact that parasitic licensing of polar-*heel* has to be established at S-structure. This was demonstrated and discussed in Den Dikken (2002) on the basis of the examples in (21).

- (21) a. [dat ze die (**hele*) vent ook maar een cent meer salaris zouden geven]
 that they that whole bloke also but a cent more salary would give
 was tijdens de vergadering niet besproken
 was during the meeting not discussed
 ‘that they would give that bloke a penny more in salary at all wasn’t discussed in the meeting’
 b. [een dokter die die (**hele*) vent ook maar enigszins kon helpen] was niet te vinden
 a doctor who that whole bloke also but in.any.way could help was not to find
 ‘a doctor who could help that bloke in any way at all was nowhere to be found’

In these sentences, licensing of the underlined *ook maar*-NPIs inside the bracketed constituents is successful, under reconstruction at LF (*à la* Uribe-Etxebarria 1994; cf. also Linebarger 1980). But LF-licensing of the *ook maar*-NPIs apparently does not help out polar-*heel* in these examples: it comes too late, parasitism being an S-structure affair (cf. the familiar ungrammaticality of (22b)).

- (22) a. *which article* did you file *t* without reading *pg*?
 b. *who filed *which article* without reading *pg*?

3.1 Raising to subject versus topicalisation and the role of $C_{[NEG]}$

With this as background (and see Den Dikken 2002 for more detailed discussion), consider the fact that the sentences in (23b,c) are perfectly grammatical, and contrast markedly with the ungrammatical variant of (21a) with *hele* included.¹⁸ The example in (23c) is particularly instructive: the fact that polar-*heel* here is subject-contained tells us unequivocally that we are dealing with parasitic licensing, not secondary triggering.

- (23) a. [dat we die (**hele*) vent toen hebben uitgenodigd] kan ik nu niet meer begrijpen
 that we that whole bloke then have invited can I now not more understand
 ‘that we invited that bloke at all back then, I can no longer understand’
 b. [dat we die (*hele*) vent ooit hebben uitgenodigd] kan ik nu niet meer begrijpen
 that we that whole bloke ever have invited can I now not more understand
 ‘that we ever invited that bloke at all, I can no longer understand’
 c. [dat die (*hele*) vent ons ooit heeft uitgenodigd] kan ik nu niet meer begrijpen
 that that whole bloke us ever has invited can I now not more understand
 ‘that that bloke ever invited us at all, I can no longer understand’

The key difference between (21a) on the one hand, and (23b,c) on the other, seems to be that (23b,c) are cases of topicalisation while (21a) has the bracketed clause function as a subject. But while subject vs topic is indeed an important distinction, it cannot be the whole story, for (21b) cannot be similarly ‘rescued’: (24a–c) are bad if *hele* is included.

- (24) a. [dokters die die (**hele*) vent ook maar enigszins kunnen helpen] vindje nergens
 doctors who that whole bloke also but in.any.way can help find you nowhere
 b. [dokters die die (**hele*) vent ook maar iets kunnen toedienen] vindje nergens
 doctors who that whole bloke also but anything can serve find you nowhere
 c. [dokters die die (**hele*) vent ook maar enigszins vertrouwt] vindje nergens
 doctors who that whole bloke also but in.any.way trusts find you nowhere

Regardless of whether *die hele vent* ‘that bloke’ is the direct object (as in (24a)), the indirect object (24b) or the subject (24c) within the relative clause, the output of topicalisation of the relativised noun phrase crashes.¹⁹ The facts in (23) and (24) and their relationship with (21) raise important questions that need to be addressed. If (21a,b) are bad because licensing of the *ook maar*-NPIs under reconstruction comes too late to rescue polar-*heel*, then how can (23b,c) be grammatical while (24a–c) continue to crash?

Let me start with the contrast between (21a) and (23b,c). These examples involve a CP embedded in a negative clause. For such CPs, the foregoing discussion had adopted (from Progovac 1988 and Laka 1990) the idea that its C-head is equipped with a [NEG] feature that can license clausemate NPIs of type (12b) under c-command. Let us assume, plausibly, that the [NEG] feature of a C-head embedded under a matrix negation is uninterpretable and needs to be checked against a matching [NEG] feature of Neg⁰; and let us further assume that in order for a dependency between a [NEG]-specified head and a (12b)-type polarity item to be able to parasitically license polar-*heel*, that dependency itself must have been fully established, with all uninterpretable features erased. For a CP that serves as the complement of a transitive verb, which is separated from Neg by a vP phase boundary, this means that CP must minimally raise to a position

on the edge of the *vP* phase within which it is embedded to allow parasitic licensing of polar-*heel* to happen — such licensing must, moreover, happen in overt syntax since parasitic licensing in general never happens covertly. Now, in (23) we are dealing with topicalisation. As an instance of *A'*-movement, this should be allowed to proceed via intermediate *A'*-positions, including an adjunction position to *vP*. With CP adjoined to *vP*, an Agree relationship between *Neg*⁰ and the [NEG] feature of the C-head is established, as a result of which C's [NEG] feature is checked against the matching [NEG] feature in the matrix *Neg*⁰, and the dependency between (12b)-type *ooit* and the interpretable [NEG] feature of the matrix clause is fully established. On this dependency, polar-*heel* then parasitises in (23b,c). Notice, crucially, that the parasitic licensing of polar-*heel* in this example is thus effectuated already at S-structure, thanks to overt raising of the CP to a *vP*-adjoined on its way up to the topic position.²⁰

In the example in (21a), a [NEG] feature on the C-head of the left-peripheral CP cannot be overtly checked, however. In line with Koster's (1978) argument to the effect that subject sentences do not exist, I will take the 'subject-CP' in (21a) to be base-generated in a position in the left periphery, linked to a pronoun (optionally spelled out in Dutch as a so-called *d*-word, as shown in (25)) originating in the θ -position and making its way up to SpecTP. Since the CP's overt-syntactic position, high up in the left periphery, is not one from which an Agree relationship can be established with *Neg*, it follows that this CP's head cannot be equipped with an uninterpretable [NEG] feature: if it had possessed such a feature, the failure of getting it checked would have resulted in a Full Interpretation violation. No NPIs of any kind can be licensed inside the physical CP in (21a), therefore. That (12b)-type NPIs nonetheless do survive in this context is due to the fact that the base copy of the (null) *d*-word to which the physical CP is associated gets replaced at LF by a full (though silent) copy of its associate CP.²¹ Unlike the physical CP in the left periphery, this VP-internal copy *can* be equipped with a [NEG] specification: this feature can be checked at LF as a result of feature movement to *Neg*. At LF, therefore, the [NEG] feature of the C-head of the silent VP-internal copy of the 'subject-CP' can license a (12b)-type polarity item, as desired: (21a) and (25) are grammatical so long as polar-*heel* is not included. That polar-*heel* cannot be included in these examples follows from the fact that the licensing of the (12b)-type NPIs in examples of the type in (21a)/(25) cannot be established prior to LF, and as a result cannot facilitate parasitic licensing of polar-*heel*, which (like all parasitism) has to be accomplished in overt syntax.

- (25) [dat ze die (*hele) vent ook maar een cent meer salaris zouden geven], **dat**
 that they that whole bloke also but a cent more salary would give that (*d*-word)
 was tijdens de vergadering niet besproken
 was during the meeting not discussed
 'that they would give that bloke a penny more in salary at all wasn't discussed in the meeting'

That the examples in (21b) and (24) are all ungrammatical with polar-*heel* included can now be understood as well. Parasitic licensing in these examples is dependent on the establishment of a licensing relationship between a (12b)-type NPI and a local [NEG] feature. The [NEG] feature local to the *ook maar*-NPIs inside the relative clauses in (21b) and (24) would have to be hosted by the C-head of the relative clause.²² Suppose, therefore, that this C⁰ has a [NEG] specification — how would that uninterpretable [NEG] feature be checked? The fact that it is separated from the *Neg*-head of the matrix clause by a DP node, combined with the fact that DP is arguably a phase,²³ tells us that it C's [NEG] feature could only be checked if this feature first made its way up to the head of the relativised DP. In other words, the licensing of (12b)-type NPIs within a relativised noun phrase is dependent on LF feature movement. That is fine as far as these NPIs themselves are concerned; but of course it wreaks havoc for their chances of facilitating the parasitic licensing of polar-*heel* in the examples in (21b) and (24): since they themselves are not licensed until LF, they cannot help polar-*heel* out because parasitism must be established by spell-out.

Notice that the account of (21b) and (24) outlined in the previous paragraph predicts that *even with the relativised noun phrase in object position* it should be impossible to get polar-*heel* licensed parasitically by a (12b)-type NPI that depends for its licensing on the $C_{[NEG]}$ of the relative clause. This is correct: (26a) is ungrammatical with *hele* included.

- (26) a. ik kon nergens [een dokter [die die (**hele*) vent ook maar enigszins kon helpen]]
I could nowhere a doctor who that whole bloke also but in.any.way could help
vinden
find
- b. ik kon nergens een dokter vinden [die die (*hele*) vent ook maar enigszins kon helpen]
I could nowhere a doctor find who that whole bloke also but in.any.way could help
help
'nowhere could I find a doctor who could help that bloke in any way at all'

Interestingly, however, (26b) is well-formed with polar-*heel*. And this, too, is as predicted. What has happened here is that the relative clause has been extraposed from its containing noun phrase, which, basically regardless of one's assumptions concerning the details of relative clause extraposition,²⁴ means that CP is not dominated by a DP or vP phase boundary in this example. That, in turn, means that an uninterpretable [NEG] feature on the C-head of the relative clause, licensing the (12b)-type NPI *ook maar enigszins*, can in fact be checked in overt syntax, under an Agree relationship with Neg⁰. And with the licensing of *ook maar enigszins* fully established in overt syntax, parasitic licensing of polar-*heel* is successful in (26b), as desired.

3.2 Negatively polar *hoeven* 'need', Verb Second, and S-structure parasitism

In the context of the S-structure licensing condition on parasitism, the behaviour of the negatively polar verb *hoeven* 'need' (see Van der Wouden 2001 and references cited there) is also of great interest. This verb, similar to English auxiliary *need* in key respects, is dependent on a negation (or nonveridical context; note, though, that *hoeven* is legitimate only in a subset of nonveridical contexts and is more restrictive than English auxiliary *need*, as Van der Wouden notes explicitly). The licensing negation can but does not have to be a clausemate of *hoeven*: in Neg-raising contexts such as (27a), *niet* can be placed either in the matrix or in the embedded clause. And surprisingly, the negation does not have to c-command *hoeven* at S-structure: in (27b,c), *hoef(t)* has raised to the highest functional head in the clause (to which I will refer as the C-head), producing a Verb Second construction; despite having raised past both the negation *niet* and the abstract functional head Neg⁰, (27b,c) come out perfectly grammatical.

- (27) a. ik denk <niet> dat je dat <niet> hoeft te doen
I think not that you that not need to do
'I don't think you need to do that'
- b. je hoeft dat niet te doen
you need that not to do
'you needn't do that'
- c. dat hoef je niet te doen
that need you not to do
'that you needn't do'

One could conceivably argue that in Verb Second constructions of the type in (27b,c), *hoeven* is licensed under reconstruction, at LF. But the facts of parasitic licensing of polar-*heel* in sentences featuring negatively polar *hoeven* show that the dependency between *hoeven* in C and the negation further down provide is in fact syntactically real already at S-structure, despite its apparent ‘backwardness’ at that point. The key fact here is that the examples in (28) are grammatical.²⁵ These involve polar-*heel* embedded in the indirect object and the subject, respectively — positions in which, for reasons laid out in Den Dikken (2002) and briefly recapitulated above, direct licensing of polar-*heel* is systematically impossible. That polar-*heel* is not being licensed directly in these examples is evident also from the fact that its legitimacy is dependent on the presence of negatively polar *hoeven* ‘need’. It thus appears that it is *hoeven* that helps out polar-*heel* in these examples, the latter somehow parasitising on the former’s dependency on the sentential negation.

- (28) a. je hoeft die (*hele*) vent die constructie niet uit te leggen
 you need that whole bloke that construction not PRT to explain
 ‘you needn’t explain that bloke that construction at all’
 b. die constructie hoeft die (*hele*) vent me niet uit te leggen
 that construction need that whole bloke me not PRT to explain
 ‘that construction, that bloke needn’t explain to me at all’

But that dependency seems to be ‘backwards’ at S-structure, with the dependent higher up than the negation. It does not *have to* be backwards: in the Neg-raising examples in (29), the matrix negation c-commands *hoeft* perfectly straightforwardly, and parasitic licensing of polar-*heel* is as expected. But interestingly, if the negation is a clausemate of *hoeven* and the negatively polar verb does not raise to C, as in (30), polar-*heel* fails to be licensed parasitically, polar-*heel* cannot parasitise on the licensing relationship between *niet* and the *in situ* verb *hoeven*.

- (29) a. ik denk niet dat je die (*hele*) vent die constructie hoeft uit te leggen
 I think not that you that whole bloke that construction need PRT to explain
 b. ik denk niet dat die (*hele*) vent me die constructie hoeft uit te leggen
 I think not that that whole bloke me that construction need PRT to explain
 (30) a. ik denk dat je die (**hele*) vent die constructie niet hoeft uit te leggen
 I think that you that whole bloke that construction not need PRT to explain
 b. ik denk dat die (**hele*) vent me die constructie niet hoeft uit te leggen
 I think that that whole bloke me that construction not need PRT to explain

The grammaticality of (29) and the ill-formedness of (30) with *hele* included are both straightforward from the point of view of the analysis of parasitic licensing of polar-*heel* outlined in Den Dikken (2002) and summarised above. In (29), the licensing relationship between *niet* in the matrix clause and *hoeven* in the embedded clause is such that polar-*heel* can legitimately ‘latch on’ to it in keeping with connectedness — (31a) attempts to bring this out graphically, with the larger box indicating the structure covered by the licensing relationship between *niet* and *hoeven* and the smaller box identifying the parasite: the latter is contained in the former, and parasitism is successful. In (30), on the other hand, the two boxes do not connect, as (31b) tries to show.

- (31) a.

niet ... [_{CP} ... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="padding: 2px 5px;">die hele vent</td></tr></table> ... hoeft ...]	die hele vent
die hele vent	

- b. $[_{CP} \dots \boxed{\text{die hele vent}} \dots \boxed{\text{niet hoeft}} \dots]$

When we now look back at (28), and graphically represent these examples as in (32), we see that it is in a real sense analogous to (31a), with the polar-heel box once again fully contained in the box indicating the licensing dependency between *hoeven* and the negation. The fact that (28) patterns with (29) is thus unsurprising in that respect: these facts fit in perfectly with the connectedness account of parasitic licensing espoused in Den Dikken (2002).

- (32) $[_{CP} XP \boxed{\text{hoeft}_i \dots \boxed{\text{die hele vent}} \dots \text{niet } t_i \dots}]$

What *is* surprising, however, is that the dependency marked by the large box in (32) is the reverse, both linearly and hierarchically, of the corresponding dependency in (31a). Polar-heel really does not care whether the dependent, *hoeven*, is structurally lower or higher than the negation that licenses it: all that it cares about is that there be a dependency relationship involving polarity item licensing that it can piggy-back on.

For our purposes in this paper, this conclusion is sufficient. It lends support to the connectedness approach to parasitism, *and* it shows that, despite the fact that there is no S-structure c-command between *hoeven* and its licensing negation in Verb Second constructions of the type in (28), the dependency between the two has already been established prior to verb fronting,²⁶ and is extended, as a result of V-to-C raising, all the way up to the CP. On this extended dependency, polar-heel manages to parasitise in (28) — at S-structure, as desired.

Much more could be said about *hoeven* ‘need’ and its role in the parasitic licensing of polar-heel, and about the structures sketched in (31) and (32). But for the purposes of this paper, the remarks in the previous paragraphs will suffice. I will leave questions raised by these remarks for some future occasion.

4 Theoretical results

Let me conclude by listing the main theoretical results of the foregoing discussion. I have argued that parasitic licensing and secondary triggering are independent and fundamentally different phenomena: the former is of the same type as the parasitic licensing of gaps, a finding which shows that parasitism in syntax is not confined to parasitic gap phenomena; the latter involves direct licensing by a secondary negation, which remains abstract. Confirming Postal’s (2000) central claim, the analysis of parasitic licensing and secondary triggering of polar-heel outlined here has made a distinction within the class of polarity items between formally negative (12a)-type polarity items, dependent on a local Neg⁰ (which itself may raise out of the clause, thus creating apparent long-distance dependencies) and (12b)-type polarity items, dependent on a clausemate C_[NEG] (and thus supporting the Laka/Progovac approach to polarity item licensing in CPs immediately embedded under negation). Both (12a)-type and (12b)-type polarity items are licensed locally on my account. Thus, if the analysis of primary and secondary direct licensing and parasitic licensing of polarity items presented in this paper stands up to scrutiny, it leads to the general (and desirable) conclusion that all polarity item licensing is local.

Notes

* Most of the material for this paper was first developed presented as part of a seminar on the syntax of negation and polarity items that I taught at the CUNY Graduate Center in the fall of 2003. An earlier version of this paper (not containing section 3.2, and featuring a rudimentary precursor of the discussion in section 3.1) was presented at the Georgetown University Round Table on Comparative and Cross-linguistic Research in Syntax, Semantics and Computational Linguistics (Washington, DC, 26 March 2004). I thank the participants of the seminar and the GURT conference for their invaluable feedback. Special thanks are due to Bob Frank, Elena Herburger, Paul Postal, Erika Troseth and Raffaella Zanuttini for their written comments on an earlier version of this paper. Mine alone is the responsibility for the final product.

1 For those assuming an AgrSP/TP split (*contra* Chomsky 1995:Chapter 4 *et passim*), NegP (the higher NegP of Haegeman 2002, Van Craenenbroeck 2004) is between AgrS and TP, again below the licensing position of the subject. The problem posed by (1b) cannot be avoided by launching the subject to SpecNegP from its vP/VP-internal base position. Though that would not be an instance of downgrading movement, it would ultimately lead to ‘improper movement’: after landing in SpecNegP, the subject would still need to raise on to SpecTP to satisfy the EPP (which I assume is in effect in Dutch; this is particularly evident if subject-initial root clauses in Dutch are TPs, as argued forcefully in Zwart 1997); but movement from an A-position to a higher A-position via a touch-down in an intermediate A'-position is illicit.

2 To be specific, raising the container of polar-*heel* to a position in the C-domain (the embedded SpecCP) will henceforth destine this phrase uniquely for positions in the C-domain; movement from a position in the C-domain into a position that is not in the C-domain is ‘improper’, regardless of whether the latter position is an A- or A'-position.

3 See Baker’s (1988) Non-Oblique Trace Filter for the ban on A'-movement of the indirect object; cf. also Den Dikken (1995:Chapter 4). While literal A'-extraction of the indirect object under overt-syntactic category movement is ungrammatical, construal of an indirect object in a surface A'-position with a *pro* in the corresponding θ -position (*à la* Cinque 1990) is possible. It is via this strategy, irrelevant here, that apparent counterevidence to the ban on A'-extraction of indirect objects (such as Dutch *wie heb je dat boek gegeven?* ‘who have you that book given’) can be accommodated. See Den Dikken (2002:section 1.6).

4 I refer the reader to Den Dikken (2002) for detailed illustration and discussion of these two constraints on parasitic licensing. On the requirement that parasitic licensing of polar-*heel* be established at S-structure, see also section 3, below.

5 I should note that in (9) even the a-example, featuring direct-object contained polar-*heel*, is less than perfect (whence the question mark on *hele* in (9a)). There seems to be a general negative effect of distance on the felicity of polar-*heel*, which may be rooted in extra-syntactic restrictions on the parser. For some speakers this distance effect is so strong that none of the examples in (9) sound acceptable to them. I will be concentrating the discussion on those speakers for whom (9a) is relatively acceptable (but who still reject (9b,c), for reasons discussed in the text).

6 Szabolcsi (2004) has recently extended Postal’s (2000) analysis to cover *positive* polarity items, too.

7 A functor is anti-additive iff $f(X \text{ or } Y) \neg f(X) \text{ and } f(Y)$.

8 It is important to realise that the semantic non-negativity/upward-entailingness of NPIs of type (10b) *themselves* leaves unaffected the well-known fact that their licensing is dependent on a negative/downward-entailing *context*. Just as in (10a), in (10b) the NEG–D raises out of the DP on Postal’s analysis, and is realised DP–externally as the negation on which, on the standard dependency-based approach to NPI licensing, the NPI depends.

9 Paul Postal (p.c.) asks how the language learner/user can recognise the abstract [NEG] feature of negative, downward entailing NPIs. Since [NEG] is not morphophonologically instantiated, the only way the language user can diagnose it is on the basis of the syntactic behaviour of the NPI in question — in particular, by its licensing environments. I will illustrate this for Dutch in the remainder of this paper. While I realise that the learnability questions raised by my variant of the ‘two *anys*’ story are potentially more serious than those raised by Postal’s (2000), it should be said that very similar questions arise for Szabolcsi’s (2004) extension of Postal’s analysis to positive polarity items, where there are multiple ways in which *some* can be represented: the two listed in Szabolcsi (2004:441), which both involve the structure in (10b), plus a simple indefinite structure in which *some* is in D all by itself.

10 Horn (1996) points out that the discovery of ‘secondary triggering’ dates back at least to unpublished work by himself, John Lawler and Paul Neubauer from the early nineteen-seventies.

11 If one should have reservations about the inclusion of a NegP in the structure of the most deeply embedded clause in (9), one should feel free to read ‘NegP’ here as Laka’s (1990) ‘ Σ P’; the net result will be identical: a Σ –head that receives a [NEG] feature will become syntactically equivalent to a NegP.

12 The details of the derivation do not particularly concern me here, though they are not necessarily trivial. I will assume that successive-cyclic head movement of the type circumscribed in the text is legal, as it clearly must be if Postal’s (2000) analysis is on the right track. It may well be significant that the matrix verbs in the Dutch examples are Neg-raising verbs; an analysis of ‘Neg-raising’ along the lines of the text discussion would be straightforward. Whether the [NEG]–specified head of a (12a)-type NPI ultimately raises all the way up to the Neg–head that checks its uninterpretable [NEG] feature or stops in the head of the first phase below that Neg–head (which will be sufficient when it comes to establishment of an Agree relationship) is a question I cannot settle on the basis of the empirical evidence available at this time; I will leave the matter open for now.

13 The fact that the [NEG] feature of the (12a)-type NPI is itself uninterpretable does not mean that it cannot be multiply checked; on the lifespan of uninterpretable features marked for deletion, see in particular Pesetsky & Torrego (2001).

14 The ultimate licenser of this [NEG] feature is either the $C_{[NEG]}$ of the clause embedded under *betwijfelen* ‘doubt’ or, if negative verbs project a NegP in their own clause (cf. Den Dikken 2002:43–45), an (abstract) Neg–head in the root clause.

15 The licenser of (12a)-type *ooit*’s [NEG] feature in the conditional matrix clause is the conditional complementiser *als* ‘if’ itself, which is apparently endowed with a [NEG] feature of its own. I have no insights to offer with respect to the question of why Dutch *als* apparently does, but English conditional *if* evidently does not possess a [NEG] feature. The latter can be deduced from Paul Postal’s (p.c.) observation that when it comes to the behaviour of polar-*heel* and the ways in which it can be licensed, there are echoes in the

domain of English taboo–NPIs such as *squat* (see Postal 2000 for detailed discussion), but only to a certain extent. Thus, *squat* is like polar-*heel* in being unable to appear as a finite subject or indirect object (cf. (ia,b); these are ungrammatical on an NPI–reading for *squat*); and it can also be licensed via secondary triggering, once again like polar-*heel* (cf. (ic)). But unlike polar-*heel*, parasitic licensing in, for instance, a conditional *if*-clause fails completely: (id) is impossible, unlike (18).

- (i) a. *I don't think that *squat* happened at the meeting
- b. *he never gives *squat* his undivided attention
- c. I did not testify that he *(ever) said *squat*
- d. *if you (ever) learn *squat*, I will never make fun of you anymore

This is interesting in light of Postal's (2000) conclusion that NPI-*squat* is always of his type (10a), never of type (10b) (based on the fact that in contexts in which *any*-NPIs of type (10b) are impossible, and hence exceptives are blocked, NPI-*squat* is impossible as well; cf. (ii)). Updated from the point of view of (12), this means that NPI-*squat* always has an uninterpretable [NEG] feature that must be checked against a matching [NEG] feature higher up in the structure. This is arguably responsible for the failure of (id): if *if* lacks a [NEG] feature, it does manage to license (12b)-type NPIs (*ever* in (id)) thanks to being downward entailing/nonveridical, but it cannot license *squat* directly, nor can the dependency relationship between *if* and *ever* be piggy-backed on by *squat* in the hopes of getting its [NEG] feature checked; as a result, (id) crashes as a Full Interpretation violation.

- (ii) a. she never said anything (but nonsense)/*squat*
- b. nobody said anything (but nonsense)/*squat* at the meeting
- c. not every professor said anything (*but nonsense)/**squat* at the meeting
- d. it is evil to say anything (*but nonsense)/**squat* about this during a cabinet meeting
- e. did she say anything (*but nonsense)/**squat*?
- f. who did she say anything (*but nonsense)/**squat* to?
- g. who would say anything (*but nonsense)/**squat* to him?

16 Hoeksema in fact notes solely that tricausal (20) is ungrammatical. He does not explicitly contrast it with its biclausal counterpart, which is well-formed as a garden-variety case of parasitic licensing: polar-*heel* in that case can piggy-back effortlessly on the dependency relationship between *ooit* and the [NEG]-specified C-head of the clause embedded under the matrix negation.

17 Unfortunately, there does not appear to be a way of embedding a polar-*heel* in the middle clause of a tricausal construction inside a container that could, on independent grounds, legitimately move into SpecNegP, thereby effecting direct licensing of polar-*heel*: in the middle clause, the only two positions available for polar-*heel*'s container would be the subject and indirect object positions, and we know independently (cf. section 1, above) that direct licensing of polar-*heel* contained in subjects and indirect objects fails. The fact, then, that (i) is ungrammatical is entirely on a par with the fact that (ii) is as well. Therefore, there does not seem to be a way of testing whether secondary direct licensing could ever take place in the middle clause of a tricausal construction facilitated by the presence of a (12a)-type polarity item in the most deeply embedded clause. (Of course, (i) contrasts minimally with (iii), which is perfectly well-formed thanks to the fact that parasitic licensing of polar-*heel* by the dependency relationship between the $C_{[NEG]}$ of the middle clause and the clausemate *ooit* of type (12b) is successful here, as it is in biclausal (20).)

- (i) *ik denk niet [dat ik die *hele* vent verteld heb [dat ik hem ooit gemogen heb]]
 I think not that I that whole bloke told have that I him ever liked have
- (ii) ?*ik heb die *hele* vent niet verteld dat ik hem verafschuw
 I have that whole bloke not told that I him despise
- (iii) ik denk niet [dat ik die *hele* vent ooit verteld heb [dat ik hem verafschuw]]
 I think not that I that whole bloke ever told have that I him despise

18 A variant of (23b) was originally pointed out to me by Jack Hoeksema (p.c.), who started me thinking about the difference between subject sentences and topicalised clauses.

19 At the end of this subsection, I will turn to the question of what happens to (24) if one forgoes topicalisation of the relativised noun phrase.

20 In an earlier version of this paper, I assumed that CP transits through SpecNegP and has its [NEG] feature checked at that point, under Spec–Head agreement. An Agree-based analysis makes movement through SpecNegP superfluous, so in keeping with Occam’s Razor I will assume here that it does not take place. It is ultimately an empirical question, of course, whether CP does or does not transit through SpecNegP when it topicalises. One thing that potentially bears on this question is the fact that CP–topicalisation does not result in *direct* licensing of polar-*heel*: (23a) is bad with *hele*. This is straightforwardly guaranteed by the text analysis. If, on the other hand, CP were to transit through SpecNegP, the deviance of (23a) with *hele* would seem to be unexpected. It could be blamed, though, on the general fact (addressed in detail in Den Dikken 2002:section 2.2) that polar-*heel* must not be too deeply embedded within the container phrase that raises to SpecNegP. This, combined with the fact that direct licensing fails within the bracketed clause as well (because this clause lacks a NegP into whose specifier position polar-*heel*’s container could raise) and that there is no additional polarity item on which polar-*heel* might piggy-back either, may ensure that (23a) bars *heel* even if CP does transit through SpecNegP on its way up to the topic position. The ban on *heel* in (23a) thus does not appear to be fatal for the raising-through-SpecNegP analysis. I cannot at this time think of any empirical evidence that would allow one to settle the question of whether a touch-down in SpecNegP is made.

21 The same operation will take care of the binding facts catalogued in Grohmann (2003:149–51) as well as the fact that the left-peripheral topic in *d*-word left-dislocations can form an idiom together with material in the matrix clause (Grohmann 2003:151–52), given that idiomatic fixing is an LF affair (cf. Chomsky 1995:Chapter 3). See De Vries (2001), Grohmann (2003:Chapter 4), Van Craenenbroeck (2004:Chapter 3) and references cited there for detailed discussion of *d*-word and other topicalisation and left-dislocation strategies in the West-Germanic languages. Van Craenenbroeck opts for a base-generation approach similar to the one adopted in the main text (though he does not address the NPI–connectivity effect and leaves open precisely how reconstruction would come about). De Vries has the left dislocate and the *d*-word form a constituent (an asyndetic coordination: [_{&P} [XP] [&(=∅) *dat/die*]]) that moves as a unit, from the θ-position to the topic position. Grohmann’s analysis takes the *d*-word to be a reduced copy of the left-dislocated constituent itself. For *d*-word left-dislocation constructions *not* involving a subject sentence, movement analyses à la De Vries or Grohmann are in principle available alongside the text base-generation approach (though see Van Craenenbroeck 2004:48–49 for an interesting non-subject case for which movement accounts would be difficult to uphold). The fact that the examples in (23b,c) can be adorned with a *d*-word (cf. (i)) while still allowing polar-*heel* to be parasitically licensed indicates that in these examples, the (12b)-type NPI (*ooit* ‘ever’) *can* be licensed in overt syntax even in the presence of a *d*-word. A Grohmann or De Vries style movement analysis can ensure this; the text approach in terms of base-generation will not extend to (i). For

d-word left-dislocations featuring a *subject sentence* in left-peripheral position, however, Grohmann’s analysis would conflict with the general ban on CPs in subject positions (Koster 1978); and though De Vries’s analysis does not strictly speaking violate that ban (because it postulates a coordination structure of which CP is merely the first conjunct), it, too, should be ruled out for the derivation of *d*-word left-dislocations featuring a subject sentence — the failure of polar-*heel* parasitism in (21a) shows clearly that there can be no point in the overt-syntactic derivation at which the (12b)-type NPI could be licensed. For *d*-word left-dislocations with a subject sentence in left-peripheral position, therefore, only a base-generation analysis (*cum* LF-replacement of the *d*-word by its associate) of the type presented in the main text is available.

- (i) a. [dat we die (*hele*) vent ooit hebben uitgenodigd] **dat** kan ik nu niet meer begrijpen
 that we that whole bloke ever have invited that can I now not more understand
 b. [dat die (*hele*) vent ons ooit heeft uitgenodigd] **dat** kan ik nu niet meer begrijpen
 that that whole bloke us ever has invited that can I now not more understand

22 Even if one were to extend the local domain up to the relativised DP, this would not help out: it can independently be shown to be impossible to base-generate a [NEG] feature in D (cf. the ungrammaticality of **I doubt (the) claims about anything*, alongside (13b): if the D-head of *claims about anything* could host a [NEG] feature, it ought to be possible license (12b)-type *anything* in this environment, *quod non*). That morphologically and semantically non-negative D, unlike C, cannot host an uninterpretable [NEG] presumably has something to do with the fact that there exist morphologically and semantically negative Ds (cf. English *no*) while morphologically and semantically negative Cs are much less common (English *lest* might be a candidate).

23 The question of whether DP is a phase is complex, but both general and specific considerations lead one to assume that DP, like CP, is indeed a strong phase. The general considerations that suggest that DP is a phase include the fact that DP is arguably ‘propositional’, and that there are systematic syntactic parallels between DP and CP, as shown by Abney (1986) and especially Szabolcsi (1994); more specific considerations supporting the status of DP as a phase are the fact that SpecDP, like SpecCP, is employed as an escape hatch for extraction (cf. e.g. Szabolcsi’s 1994 discussion of ‘runaway’ possessors in Hungarian) and, concomitantly, the fact that a DP with a filled specifier is an island for extraction, on a par with a CP whose specifier is occupied. See Chomsky (2001:14) for brief remarks that go in the same direction: ‘the general typology should include among phases nominal categories ... Phases are then (close to) functionally headed XPs. Like TP, NP cannot be extracted, stranding its functional head’. Matushansky (2003) denies that DP is a phase, however, and does so precisely by attacking the above considerations. Several of her claims in this connection are open to debate (consider, for instance, the assertion that ‘propositional’ in Chomsky’s 2000 sense should translate as ‘having the semantic type <t>’; this seems straightforwardly false in view of the phasehood of *vP*), but this is not the place to enter into a discussion of the pros and cons of DP as a phase. The text discussion will simply *assume* that DP is a phase and will, if the account based on it is successful, lend support to this assumption.

24 That is, regardless of whether one assumes a movement or base-generation account, and if the former, whether movement is rightward or leftward. The only thing that has to be crucially assumed is that the extraposed CP is not dominated by DP or *vP*.

25 These sentences contrast with those in (i), which crash with *hele* included — though they may improve with heavy stress on *probeert*. The stressed variants of (i) then mimic the pattern in (28), in two

ways: (i) in (28) as well, *hoeft* is typically heavily stressed, and (ii) when stressed in this way, *probeert* in (i) becomes dependent on the presence of a negation: *je PROBEERT die vent die constructie *(niet eens) uit te leggen!* ‘you’re *(not even) TRYING to explain that bloke that construction’. Assuming that heavily stressed *probeert* does indeed pattern with negatively polar *hoeven* ‘need’ in its syntactic behaviour, the text account of (26) will carry over to the stressed variants of (i).

- (i) a. je probeert die (*hele) vent die constructie niet uit te leggen
 you try that whole bloke that construction not PRT to explain
 b. die constructie probeert die (*hele) vent me niet uit te leggen
 that construction tries that whole bloke me not PRT to explain

26 This will obviate the need for an analysis that seeks to ‘undo’ the ‘backwardness’ of the relationship between *hoeven* and *niet* in (28) by reconstructing *hoeven* into a position c-commanded by the negation at LF. Note also that it is only verbs that do actually depend on negation for their licensing that will create an extended dependency when raising to C: for verbs that do not need a licensing negation, V-to-C does not create a negation-based dependency on which polar-*heel* can then piggy-back. That this is as desired is shown by the ungrammaticality, with *hele* included, of the examples in (i) in fn. 25.

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